Central Valley Dairy
Representative Monitoring Program
Year 1 Annual Report (2012), Phase 1

Part III of IV

April 1, 2013

LUHDORFF & SCALMANINI
CONSULTING ENGINEERS

Attachment B

Attachment B1.	Well Installation Reports – Pre-Existing Monitoring Wells
Attachment B2.	Land Surveyors' Reports
Attachment B3.	Field Sheets from Monthly Monitoring Campaigns, 2012
Attachment B4.	Laboratory Reports, 2012
Attachment B5.	USDA NRCS SSURGO Soil Data Reports (incl. data descriptions)

Attachment B1

Well Installation Reports – Pre-Existing Monitoring Wells

JAMES J. STEVINSON CORP
DAIRY DRMP

SOILS ENGINEERING, INC.

April 22, 1994

File No:92-6812

California Regional Water Quality Control Board
Central Valley Region
3443 Routler Road, Suite A
Sacramento, CA. 95827-3098

10 Pages

Attention: Ms. Wendy Wyels, Ag Regulatory Unit.

Subject: Monitoring Wells Construction and Sampling Program for the Stevinson Dairy, Newman, CA.

Dear Wendy,

Per your conditional waiver to the Stevinson Corporation dated April 2 nd, 1993, we have constructed four (4) monitoring wells per your attachment 1 of the waiver .

Our field program consisted of constructing these wells at the outside midpoints of each side of the existing two lagoons.

The two (2.0) inch diameter wells were extended to at least ten (10.0) feet below the first encountered groundwater and were constructed in accordance with the diagram submitted to us with the waiver mentioned previously.

Prior to placing the bentonite seal, the wells were purged to at least three (3) well volumes and water samples were obtained with a bailer three (3) hours after the wells were sealed.

The construction and sampling procedures were performed in accordance with the guidelines of the U.S. EPA's Standard Methods and the "Practical Handbook of Groundwater Monitoring" by David M. Nielsen.

The bailer was decontaminated prior and after each sampling procedure.

Retrieved samples were contained in plastic bottles and a slightly acidified bottle (with $H_2 SO_4$) were used for for one (1) sample for testing nitrogen forms.

The samples were delivered to B.C. Laboratories, Inc.to comply with the testing program outlined in attachment 1 of your waiver.

4700 DISTRICT BLVD. • BAKERSFIELD, CALIFORNIA 93313 • PHONE (805) 831-5100 • FAX: (805) 831-2111

Depth to groundwater was measured, after three (3) hours that the wells were sealed from the top of the casing and are recorded on our logs (attached).

The boring were drilled using a C.M.E. 75 drill rig with a 4.25" I.D. hollow stem auger to a depth ranging from twenty-nine to thirty-four (29.0-34.0) feet below existing ground surface. Monitoring Wells 1 and 3 were drilled within a distance of ten (10.0) feet beyond the outside toe of the pond levees.

Ten (10.0) feet of screen with slot size of 0.020" schedule 40 were installed from two to five (2.0-5) feet below groudwater level. An end cap was installed on each well and the depth of the collapsed hole ranged from four (4 .0-5.0) feet. Number 3 sand was used as a sand packfrom the bottom of the casing to a distance greater than five (5.0) feet from the top of the well sreen. An average of three (3.0) feet of bentonite seal was constructed on top of the sand pack. The concrete grout was then placed on top of the bentonite seal to three to six (3.0-6.0) inches above ground surface where the well cap was installed.

Attached are the boring logs for wells, the laboratory test results, and the site plan showing the well locations and elevations.

We hope this report fulfills all the rmonitoring wells contruction and sampling requirements outlined in the conditional waiver mentioned above. If you have any questions or need further information, feel free to contact us.

Respectfully submitted,
SOILS ENGINEERING, INC.

Tony Frangie, P.E.
R.C.E. 39549

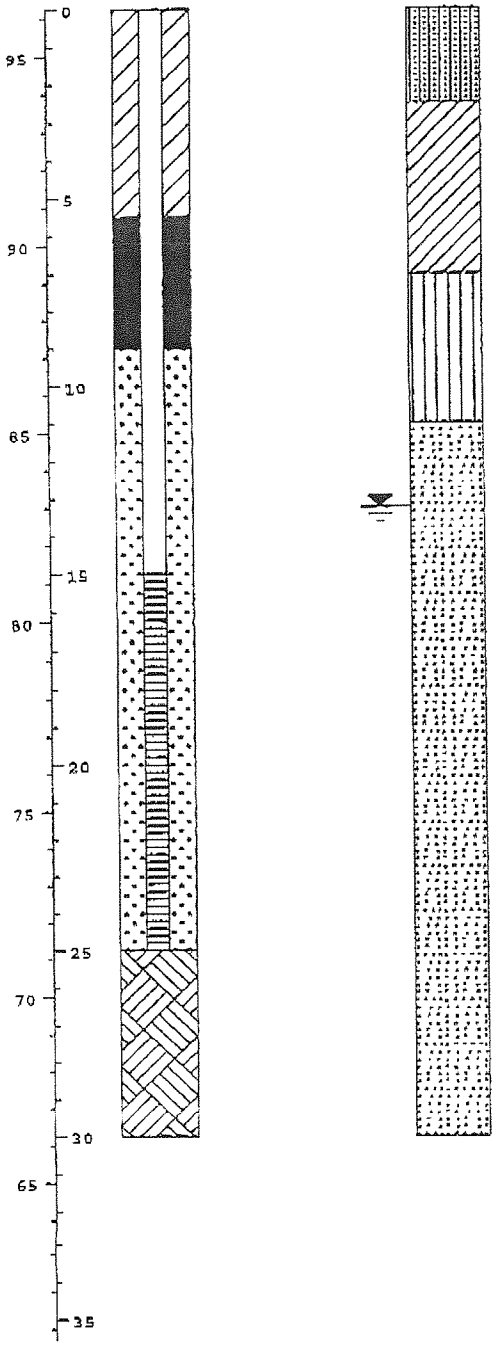
TF:hk
attachments: Site Plan, Figure 1
Test Boring Logs, Figures 2 through 5
B.C. Laboratories, Inc. Test Results of Water Analaysis for General Chemistry and Metals

cc: Stevinson Corporation, Attn: Mr. Bob Kelley
Valley Management, Inc., Attn: Marty Levine

LOG OF MONITOR WELL INSTALLATION
WELL NO. MW-1

PROJECT: *STEVINSON DAIRY, NEWMAN, CALIFORNIA.*
BORING DATE: *4/20/94*
BORING LOCATION: *Refer to site plan, Figure 1.*
DRILL METHOD: *4 1/4 I.D.Hollow stem auger.*
DESCRIPTION: *Monitoring wells construction and sampling program.*
DEPTH TO WATER - ▼ : *13.25* CAVING - ▶ : *N/A*

FILE NO: *92-6812*
ELEV.: *96.25'*
START: *3/29/94*
FINISH: *3/29/94*
LOGGER: *D.Torii*



ELEVATION/ DEPTH (feet)	Monitor Well Installation	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Description	Density pcf	Moisture %
			SM	Silty sand-yellowish brown;non plastic;fine to med. moist;poorly graded; non plastic.		
			CL	Sandy clay-yellowish brown;very moist;fine sand fraction.		
			ML	Clayey silt-reddish brown;very moist;moderately plastic.		
			sp	Poorly graded sand-yellowish brown;fine to medium;saturated.		

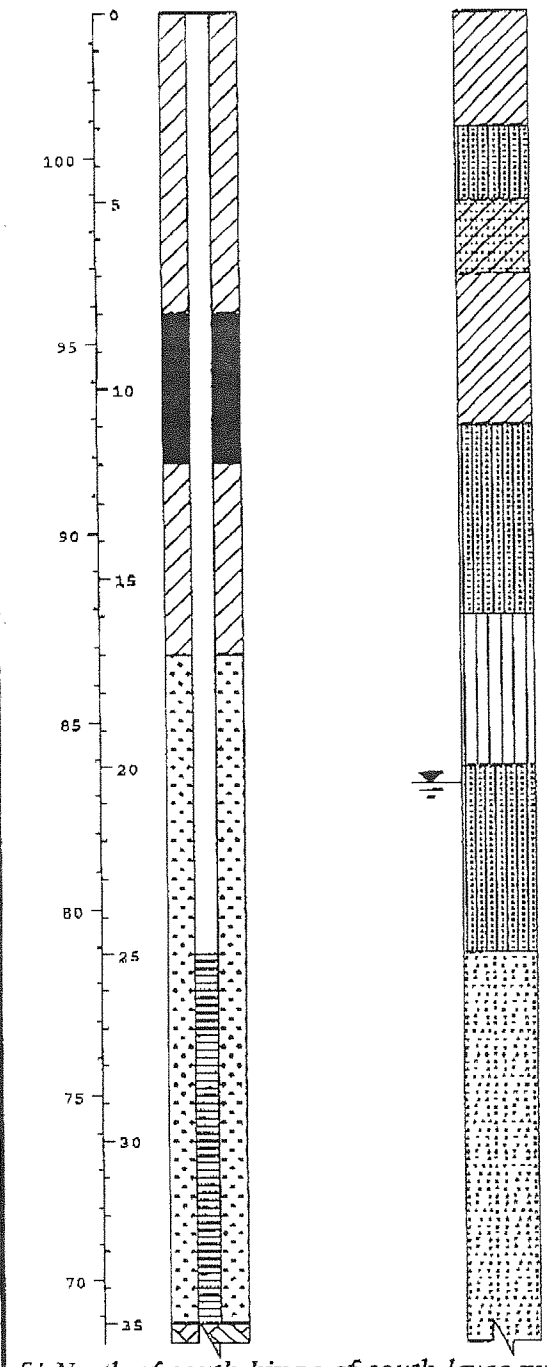
500'South of north end of west pond at toe of west levee of west pond.

Figure Number 2

LOG OF MONITOR WELL INSTALLATION
WELL NO. MW-2

PROJECT: *STEVINSON DAIRY, NEWMAN, CALIFORNIA.*
BORING DATE: *4/20/94*
BORING LOCATION: *Refer to site plan, Figure 1.*
DRILL METHOD: *4 1/4" I.D. Hollow Stem Auger.*
DESCRIPTION: *Monitoring wells construction and sampling program.*
DEPTH TO WATER - ▽ : *20.50* CAVING - ▶ : *N/A*

FILE NO: *92-6812*
ELEV.: *103.80'*
START: *3/29/94*
FINISH: *3/29/94*
LOGGER: *D.Torii*



USCS	Description	Density pcf	Moisture %
CL	Sandy clay-yellowish brown;very moist;fine sand fraction.		
SM	Silty sand-yellowish brown; moist;fine to medium;poorly graded;non plastic.		
SC			
CL	Clayey sand-reddish brown;moist;fine to medium;plastic.		
SM	Sandy clay-yellowish brown;very moist;fine sand fraction. Silty sand-yellowish brown; fine;slightly plastic.		
ML	Clayey silt-yellowish brown;very moist;plastic.		
SM	Silty sand-yellowish brown;moist;fine to medium;poorly graded;non plastic.		
SP	Poorly graded sand-yellowish brown;fine to medium;saturated.		

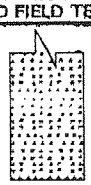
5' North of south hinge of south levee midway between ponds.

Figure Number 3

LOG OF MONITOR WELL INSTALLATION
WELL NO. MW-2

PROJECT: *STEVINSON DAIRY, NEWMAN, CALIFORNIA.*
BORING DATE: *4/20/94*
BORING LOCATION: *Refer to site plan, Figure 1.*
DRILL METHOD: *4 1/4" I.D. Hollow Stem Auger.*
DESCRIPTION: *Monitoring wells construction and sampling program.*
DEPTH TO WATER - ⚳ : *20.50* CAVING - ▶ : *N/A*

FILE NO: *92-6812*
ELEV.: *103.80'*
START: *3/29/94*
FINISH: *3/29/94*
LOGGER: *D.Torii*

ELEVATION/ DEPTH (feet)	Monitor Well Installation	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Description	Density pcf	Moisture %
65 / 40						
60 / 45						
55 / 50						
50 / 55						
45 / 60						
40 / 65						
35 / 70						

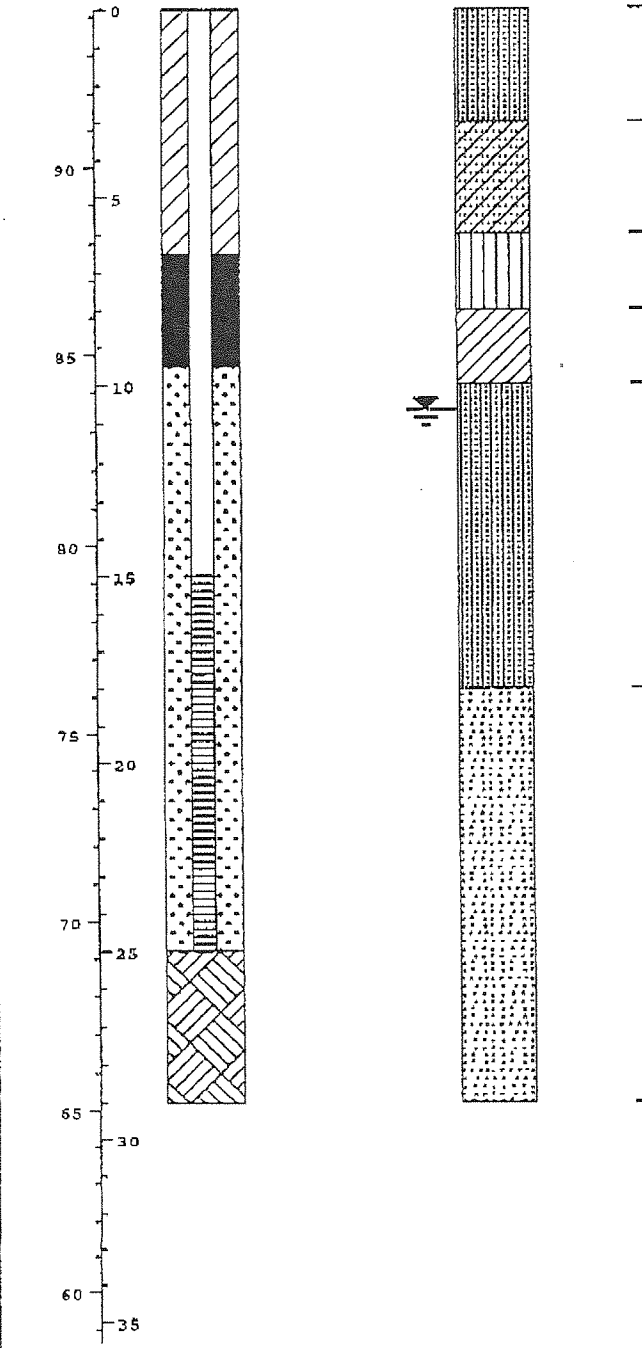
5' North of south hinge of south levee midway between ponds.

Figure Number 3

LOG OF MONITOR WELL INSTALLATION
WELL NO. MW-3

PROJECT: *STEVINSON DAIRY, NEWMAN, CALIFORNIA.*
BORING DATE: *4/20/94*
BORING LOCATION: *Refer to site plan, Figure 1.*
DRILL METHOD: *4 1/4" I.D. Hollow Stem Auger.*
DESCRIPTION: *Monitoring wells construction and sampling program.*
DEPTH TO WATER - ▽ : *10.66* CAVING - ▶ : *N/A*

FILE NO: *92-6812*
ELEV.: *94.20'*
START: *3/29/94*
FINISH: *3/29/94*
LOGGER: *D.Torii*



USCS	Description	Density pcf	Moisture %
SM	Silty sand-yellowish brown; moist;fine to medium;poorly graded;non plastic.		
SC	Clayey sand-reddish brown;moist;fine to medium;plastic.		
ML	Sandy silt-brownish yellow;very moist;fine sand fraction;semi plastic.		
CL	Sandy clay-yellowish brown;very moist;fine sand fraction.		
SM	Silty sand-yellowish brown; fine;slightly plastic.		
SP	Poorly graded sand-yellowish brown;fine to medium;saturated.		

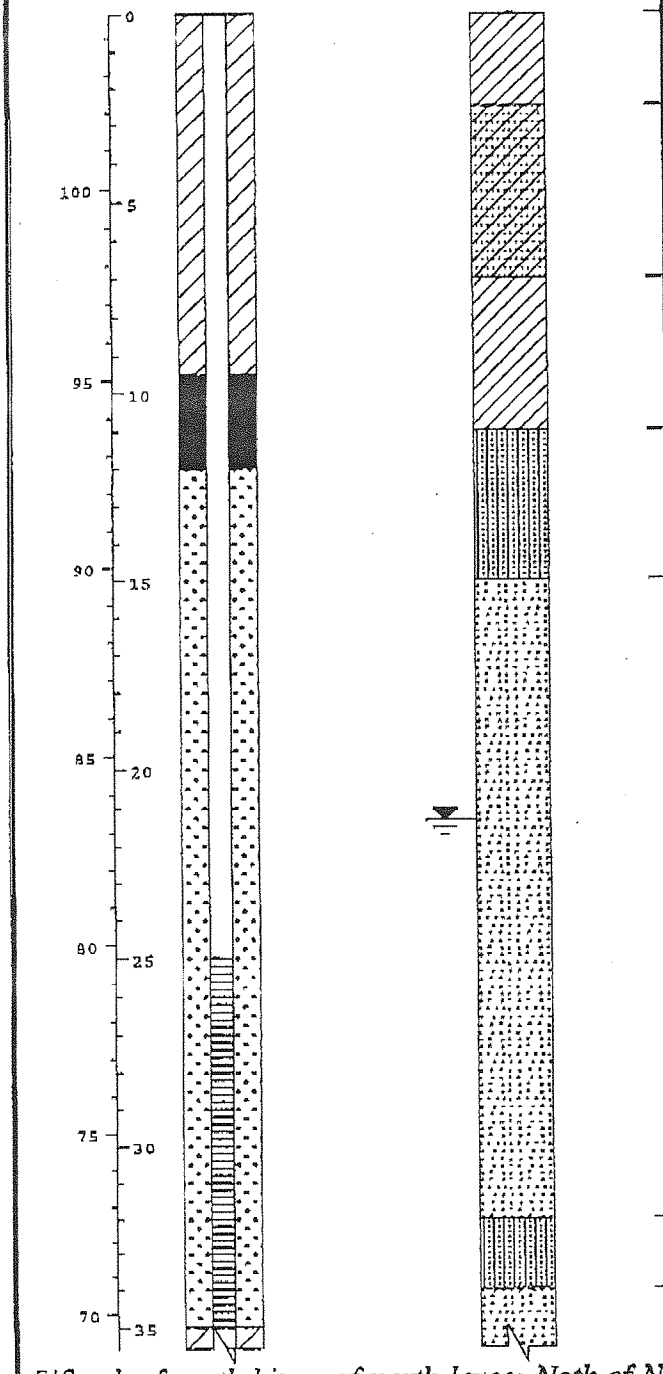
10' East of east toe of east levee; 550' North of south end of east pond.

Figure Number 4

LOG OF MONITOR WELL INSTALLATION
WELL NO. MW-4

PROJECT: *STEVINSON DAIRY, NEWMAN, CALIFORNIA.*
BORING DATE: *4/20/94*
BORING LOCATION: *Refer to site plan, Figure 1.*
DRILL METHOD: *4 1/4" I.D. Hollow Stem Auger.*
DESCRIPTION: *Monitoring wells construction and sampling program.*
DEPTH TO WATER - ▼ : *21.33* CAVING - ▶ : *N/A*

FILE NO: *92-6812*
ELEV.: *104.65'*
START: *3/29/94*
FINISH: *3/29/94*
LOGGER: *D.Torii*



USCS	Description	Density pcf	Moisture %
CL	Sandy clay-reddish brown; moist;fine sand fraction.		
SC	Clayey sand-reddish brown;moist;fine to medium;plastic.		
CL	Sandy clay-olive brown;very moist;fine sand fraction.		
SM	Silty sand-dark brown; moist; fine;non plastic.		
SP	Poorly graded sand-yellowish brown;fine to medium;saturated.		
SM	Silty sand-olive brown;saturated;fine; slightly plastic.		
SP			

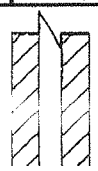
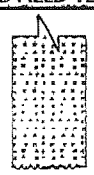
5'South of north hinge of north levee; Noth of N.W. corner of east pond.

Figure Number 5

LOG OF MONITOR WELL INSTALLATION
WELL NO. MW-4

PROJECT: *STEVINSON DAIRY, NEWMAN, CALIFORNIA.*
BORING DATE: *4/20/94*
BORING LOCATION: *Refer to site plan, Figure 1.*
DRILL METHOD: *4 1/4" I.D. Hollow Stem Auger.*
DESCRIPTION: *Monitoring wells construction and sampling program.*
DEPTH TO WATER - ▼ : *21.33* CAVING - ▶ : *N/A*

FILE NO: *92-6812*
ELEV.: *104.65'*
START: *3/29/94*
FINISH: *3/29/94*
LOGGER: *D.Torii*

ELEVATION/ DEPTH (feet)	Monitor Well Installation	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Description	Density pcf	Moisture %
				Poorly graded sand-saturated; fine to medium; yellowish brown.		
65 / 40						
60 / 45						
55 / 50						
50 / 55						
45 / 60						
40 / 65						
35 / 70						

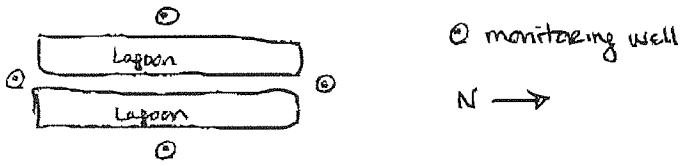
5'South of north hinge of north levee; Noth of N.W. corner of east pond.

Figure Number 5

ATTACHMENT 1
STEVINSON CORPORATION WAIVER

Monitoring well location:

The wells shall be placed at the outside mid-points of each side of the lagoons, as shown below.



Monitoring well design:

The wells shall extend at least 10' below the first encountered groundwater, and shall be constructed in the manner shown on the attached diagram.

Surveying:

A licensed surveyor shall establish a standard elevation reference point (bench mark), and shall survey the monitoring wells relative to that bench mark. This information shall be submitted with the well installation information.

Sampling Procedure:

1. The depth to groundwater in each well shall be determined to the nearest 0.1 foot, and recorded for submittal. A standard reference elevation point shall be used.

2. Prior to sampling, each well shall be purged a minimum of three well volumes, or until the temperature, electrical conductivity, and pH have stabilized.

3. The initial sample shall be analyzed for general minerals and nutrients (total dissolved solids, chloride, sulfate, nitrate, bicarbonate alkalinity, carbonate alkalinity, calcium, magnesium, potassium, sodium, pH, hardness, boron, ammonia, total Kjeldahl nitrogen, and phosphate).

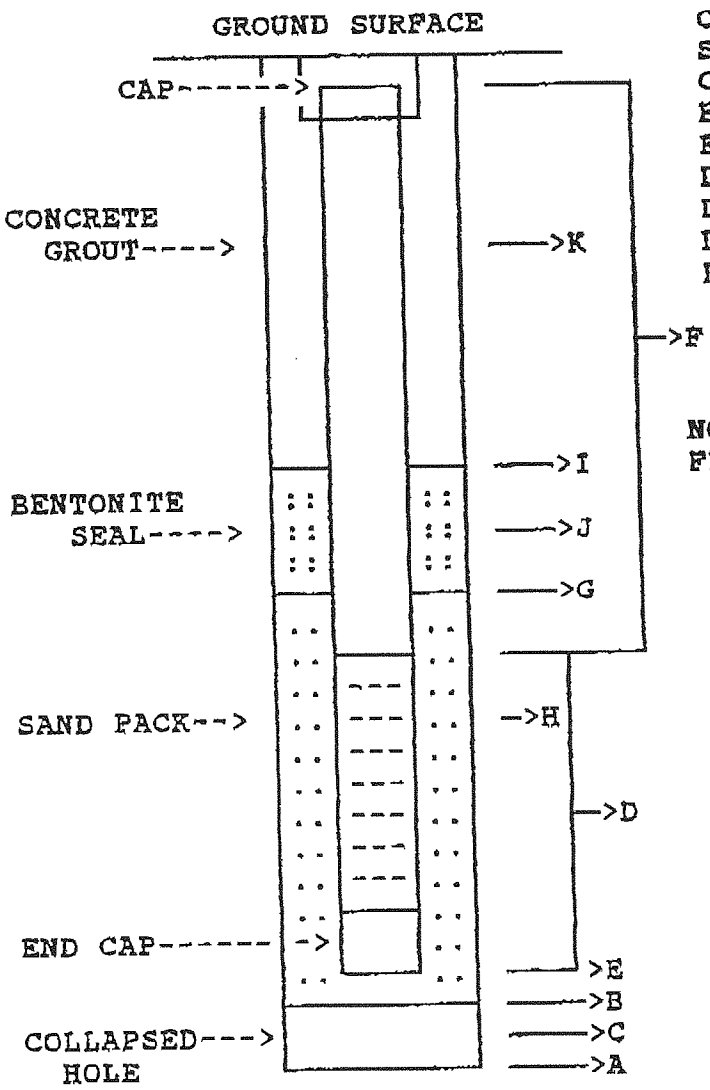
4. All subsequent samples shall be analyzed for nitrate, total Kjeldahl nitrogen, and total dissolved solids. The depth to groundwater shall be measured as described above.

5. The method of sampling, including containers used, preservatives needed, transportation, sample holding times, and sample analysis shall be in accordance with the U.S. EPA's Standard Methods.

MONITORING WELL CONSTRUCTION DIAGRAM

WELL # MW1 PROJECT # 101592 DATE CONSTRUCTED 08/25/92

BORING DIAM. 6.75"
CASING SIZE 2" OD
SLOT SIZE .020"
CASING TYPE SCH. 40
BAGS OF SAND 4
ELEVATION
DEPTH TO WATER 24'
DEPTH TO FFP N/A
DEPTH OF FFP N/A
DATE MEAS. 08/25/92



NOTE: FFP= FREE FLOATING PRODUCT

End Document

A. TOTAL DEPTH DRILLED	A. 40'
B. DEPTH OF OPEN HOLE	B. 40'
C. FOOTAGE OF HOLE COLLAPSED	C. 0.0'
D. LENGTH OF SLOTTED CASING	D. 25'
E. DEPTH TO BOTTOM OF CASING	E. 40'
F. LENGTH OF BLANK CASING	F. 15'
G. DEPTH TO TOP OF SAND PACK	G. 10'
H. FOOTAGE OF SAND PACK	H. 30'
I. DEPTH TO TOP OF BENTONITE SEAL	I. 3'
J. FOOTAGE OF BENTONITE SEAL	J. 7'
K. FOOTAGE OF CONCRETE GROUT	K. 3'

THE TWINING LABORATORIES, INC.

ANALYTICAL CHEMISTRY • ENVIRONMENTAL SERVICES
GEOTECHNICAL ENGINEERING • SAMPLING SERVICES
CONSTRUCTION INSPECTION & MATERIALS TESTING

ASSESSMENT OF SHALLOW GROUNDWATER AND SAMPLING OF SEPARATION PONDS SOILS

MOONSHINE DAIRY

22922 KILBURN ROAD

CROWS LANDING, CALIFORNIA

Excerpt

Prepared For:

Rich and Jacquie Dyt
23419 Kilburn Road
Crows Landing, California 95360

18 Pages

Prepared By:

The Twining Laboratories, Inc.
2527 Fresno Street
Fresno, California 93721

December 2, 2003

B76301.01

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ASSESSMENT OF SHALLOW GROUNDWATER AND SAMPLING OF SEPARATION PONDS SOILS

MOONSHINE DAIRY
22922 KILBURN ROAD
CROWS LANDING, CALIFORNIA

1.0 INTRODUCTION

The Twining Laboratories, Inc. has prepared this report to document information collected on the separation ponds and shallow groundwater at the site of a dairy currently under construction which will include two separation ponds and a lagoon proposed for the disposal of dairy wastes. The dairy is located at 22922 Kilburn Road, Crows Landing, California, northeast of the intersection of Kilburn Road and L B Crow Road east of Crows Landing, California. This report was prepared to summarize an assessment of groundwater levels beneath the dairy site, the sampling of the separation ponds sidewalls and bottoms to verify a minimum clay content of 10% and the installation and sampling of four monitor wells at the site. This report was prepared at the request of Rich and Jacquie Dyt.

2.0 BACKGROUND

The site and project description, regional geologic and hydrogeologic characteristics and project description are summarized in the following subsections.

2.1 Site and Project Description

The dairy is located southeast of Crows Landing, California within section 19 of Township 6S Range 9E, Mount Diablo Baseline and Meridian. The elevation of the site is approximately 70 feet above mean sea level. Drawing 1 is a site location map.

The owner of the property is currently constructing a diary at the site, including free stall barns, heifer corrals, a milking facility and waste handling facilities including two separation ponds and a lagoon. The proposed project will include the operation of a dairy which will be supported by up to 3,500 cows and support stock. The separation ponds and lagoon have been constructed at the site. The ponds are approximately 10 to 12 feet deep with the top of the ponds approximately 2 to 5 feet above adjacent land surface grades. The ponds comprise a total of approximately 15.5 acres. Drawing 2 is a site map showing the location of the disposal ponds and proposed dairy structures.

2.2 Geology

The site is in the northern portion of the San Joaquin Valley within the central portion of the Great Valley geomorphic province of California. The Great Valley is a nearly flat northwest- to southeast-trending structural basin approximately 450 miles long by 50 miles wide. The Great Valley has been

filled with a sequence of older to younger alluvium of Pliocene to Holocene age which overlies sedimentary rocks of Cretaceous to Tertiary age. These sedimentary units in turn overlie a crystalline basement of Paleozoic and Mesozoic metamorphic and igneous rocks. The shallow subsurface geology in the site vicinity is a heterogeneous mix of clay, silts and sands (Hackel, 1966).

The San Jose Sheet of the Geologic Map of California, prepared by the Division of Mines and Geology, State of California, was consulted regarding the surface geology of the site. According to the above referenced map, the surface geology at the site is composed of Recent Quaternary Great Valley fan deposits composed of grey sands and silts.

2.3 Regional Hydrogeology

According to the Spring 2001 Groundwater Elevation Map prepared by the State of California Department of Water Resources (DWR), groundwater in the vicinity of the site flows generally to the northeast. The Central California Irrigation District (CCID) has three shallow piezometers located in the vicinity of the vicinity of the proposed ponds. Depth-to-water measurements from 1993 to 2002 have ranged from 5 ½ feet to 18 feet below ground surface (bgs). Copies of the CCID hydrographs for these wells are included in Attachment A.

CCID has analyzed water samples from observation wells 284 and 285 for electrical conductivity and boron. Twining obtained water quality information for these wells for 1998 through 2001. Observation well 284 had electrical conductivities ranging from 919 to 1,458 umhos/cm and boron concentrations ranging from 0.48 to 2.57 mg/l. Observation well 285 had electrical conductivities ranging from 1,236 to 1,920 umhos/cm and boron concentrations ranging from 0.53 to 0.81 mg/l.

2.4 Soils

The Soil Survey of Stanislaus County, California, Western Part was consulted regarding soils at the site. Soil on the site is Vernalis Loam, 0 to 2 percent. The soil is described as well drained with moderate permeability. A typical profile includes:

0 to 20 inches	brown loam
20 to 62 inches	yellowish brown and light yellowish brown clay loam

2.5 Site History

At the time of Twining's first visit to the site, two separation ponds and a lagoon had been constructed at the site. Diary facilities including the free stall barns and milking facility were under construction and fields surrounding the dairy were planted in crops for use at the dairy facility. Twining visited the site to observe site features, surrounding land usage and to map and sample the separation ponds and lagoon. The separation ponds and lagoon when originally constructed were approximately 10 to 12 feet deep with the bottom of the ponds 8 to 10 feet below natural grade. The ponds and lagoon are approximately 1400 feet long with the lagoon 340 feet wide and the separation ponds each 60 feet wide.

Twining visited the site during May 2003 to describe and sample the sidewalls and bottoms of the separation ponds and lagoon. At this time, Twining also attempted to hand-auger five borings to a depth of five feet below the bottom of the ponds and lagoon to confirm separation depth between the pond bottoms and first encountered groundwater. Groundwater was encountered in four of the five borings at a depth of two to three feet below the bottom of the lagoon and separation ponds. One boring advanced to a depth of five feet in the lagoon did not encounter groundwater due to the presence of a thick clay in the area of the boring. The bottom of the lagoon at that time was surveyed and the elevation of the lagoon bottom was 59.01 feet above mean sea level (amsl).

A drill rig was brought in and two borings advanced using hollow-stem augers to confirm the depth of groundwater. The two borings were drilled in the lagoon and groundwater was encountered at a depth of two feet in one boring and three feet below lagoon bottom in the second boring. Based on these findings, historical data on shallow groundwater depths measured by CCID was researched.

2.6 Depth to Groundwater Assessment

Central California Irrigation District (CCID) maintains and regularly measures a network of shallow groundwater observation wells to monitor shallow groundwater conditions which includes the vicinity of the subject site. Twining obtained shallow groundwater depth-to-water data from CCID for three shallow observation wells located 2,000 to 3,000 feet from the dairy separation ponds and lagoon. Data from CCID observation wells No. 284, No. 285 and No. 3N was used to prepare groundwater elevation maps for the dairy property. Measuring points of each of the wells were surveyed using the same benchmark used for surveying of the separation ponds and lagoon. Twining reviewed the available historical data and prepared groundwater elevation maps for 6 time periods having the highest groundwater levels: July 1993, March 1995, April 1997, August 1999, November 2000 and November 2002. Copies of each of these maps and the CCID depth-to-water data are included in Appendix A.

Based on groundwater elevation maps prepared by Twining from the CCID depth-to-water data, groundwater elevations were interpolated for the subject site. The highest groundwater elevation during the period of record of the CCID data was elevation 60 feet in the area in which the ponds and lagoon are located.

3.0 FIELD ACTIVITIES

Field activities conducted at the subject site included delineation of soil types exposed on the sides and bottoms of the separation ponds and lagoon, and the installation and sampling of four onsite monitor wells. In addition, depth-to-water measurements from the new monitor wells were used to construct a groundwater elevation map for the site.

3.1 Separation Ponds

The RWQCB has required that Moonshine Dairy have a five foot separation between the bottom of the separation ponds and lagoon and first encountered groundwater. As noted in a preceding section, CCID historical shallow groundwater data and groundwater elevation maps prepared by Twining indicate that the highest groundwater elevation during the period between 1993 and 2002 was elevation 60 feet amsl. Based on this elevation, Moonshine Dairy has raised the bottoms of the separation ponds from an elevation of about 59 feet amsl to a minimum of elevation 65 feet amsl. A copy of the survey map of the separation ponds is included in Appendix B. The owners of the diary have indicated that soil from nearby crop lands will be used to raise the bottom of the lagoon to the 65 foot elevation as soon as crops are harvested from that land. The crops are anticipated to be harvested by the middle of October 2003. The separation ponds will be used for handling of animal and other dairy wastes until the bottom of the lagoon is raised and it is confirmed that the bottom and sidewalls of the lagoon consist of at least 10% clay.

During August 2003, Twining geologists logged the sediments comprising the sidewalls of the two separation ponds proposed for disposal of dairy wastes. Geologic traverses were made at the locations shown on Drawing 3. Soils were exposed in the sidewalls by shoveling approximately one foot below the surface of the pond wall along each traverse. A geologic log was constructed for each traverse. Sediments encountered and described by the field geologists included silty sand, silt and clay. Geologic logs of the traverses are included in Appendix C. Descriptions of the ponds are included in the laboratory analyses sheets for the pond bottom samples.

Twelve soil samples were selected as representative of the soils exposed in the pond sidewalls and bottoms and were submitted to Sierra Testing Laboratories, Inc. for sieve analysis and determination of clay content. The results of the laboratory analyses are summarized in Table 1. The laboratory data sheets are included in Appendix C. Sample locations are shown on Drawing 3.

TABLE 1 SOIL SAMPLE GRAIN SIZE DISTRIBUTION Samples Analyzed by Sierra Testing Laboratories, Inc.		
Sample Number	Field Description	Clay Content (%)*
B-1	Clayey Silt	19.0
B-2	Clayey Silt	18.8
B-3	Clayey Silt	18.5
B-6	Clayey Silt	18.4
B-7	Clayey Silt	20.5
B-8	Clayey Silt	18.4
T-7	Clayey Silt	38.6
T-8	Sandy Silt	17.5
T-9	Sandy Silt	16.2
T-10	Clayey Silt	25.3
T-12	Sandy Silt	11.7
T-14	Sandy Silt	13.0

* 0.005 millimeters used as the upper size for clay

3.2 Groundwater Monitor Well Installation, Development and Sampling

Twining installed four monitor wells at the site during the week of September 8, 2003. Borings for the monitor wells were drilled using a truck-mounted hollow stem auger drill rig. Soils encountered were logged by the onsite geologist and copies of the geologic logs are included in Appendix D. The wells were constructed with four inch diameter schedule 40 PVC with factory flush threaded joints. The screened section of the monitor wells was constructed with factory perforated 0.02 inch slots. The annulus opposite the casing was filled with Lonestar Number 3 sand gravel from the bottom of the boring to one foot above the top of the perforations and a three foot bentonite seal was placed on top of the gravel pack and hydrated. The remaining annulus was filled with a sand-cement slurry. The tops of the monitor wells were protected with either a flush mounted traffic rated vault or a stand pipe with locking lid. Construction details of the monitor wells are summarized in Table 2. The measuring point of each monitor well was surveyed by a licensed surveyor.

TABLE 2
MONITOR WELL CONSTRUCTION DETAILS

Well No.	Total Depth (feet)	Perforated Interval (feet)	Gravel Pack Interval (feet)	Seal Depth Interval (feet)
MW-1	25	5 - 25	4 - 25	0 - 4
MW-2	29	9 - 29	8 - 29	0 - 8
MW-3	25	5 - 25	4 - 25	0 - 4
MW-4	25	5 - 25	4 - 25	0 - 4

The monitor wells at the site were sampled on September 16, 2003. Depth-to-water measurements were made in all monitor wells prior to purging. A summary of the depth-to-water measurements and groundwater elevations is included in Table 3. The groundwater elevations were used to construct a groundwater elevation for the site (Drawing 4).

The wells were purged first by hand bailing and then using a submersible pump. A minimum of 5 well casing volumes of water was removed from each well prior to sampling. Water samples were collected using a pre-cleaned disposable bailer. Water samples for metals were filtered in the field with a 0.45 micron filter prior to being placed in laboratory prepared sample containers. The water samples were delivered under chain-of-custody to The Twining Laboratories, Inc., a State of California approved laboratory, for analyses.

In addition to the monitor wells, Twining also collected water samples from two diary supply wells near the dairy and one domestic well to the northeast of the lagoon. The locations these wells, referred to as DW-1, DW-2 and DW-3 are shown on Drawing 1. The wells were pumped a minimum of 15 minutes prior to sampling. Groundwater samples were collected from faucets near the pressure tanks at each well.

TABLE 3 GROUNDWATER DEPTH TO WATER AND ELEVATION DATA			
Monitoring Well Number	**Depth-to-Water (bsg)**	**Wellhead Elevation (AMSL)**	**Groundwater Elevation (AMSL)**
September 15, 2003 Monitoring Event: Flow southeast; Gradient 24 feet per mile			
MW-1	16.11	75.58	59.47
MW-2	20.89	73.01	52.12
MW-3	16.71	72.08	55.37
MW-4	15.67	74.28	58.61

3.3 Laboratory Analyses

Water samples collected from the monitor wells and water supply wells were analyzed at Twining's State of California laboratory. Results of the analyses are summarized in Table 4.

TABLE 4
SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS

Analytical Results	September 16, 2003 Results in milligrams per liter (mg/L) except EC, which is uS/cm						
	MW-1	MW-2	MW-3	MW-4	DW-1	DW-2	DW-3
Total Dissolved Solids	1800	2400	1400	1800	680	790	750
Specific Conductance (EC)	2700	3100	2000	2600	980	1200	1200
Chloride	290	520	210	290	100	130	120
Sulfate	310	400	250	420	90	120	120
Bicarbonate	920	860	700	690	350	380	380
Carbonate	<1	<1	<1	<1	<1	<1	<1
Calcium	73	96	78	84	100	120	120
Magnesium	160	120	110	140	52	61	61
Sodium	340	520	230	310	46	50	49
Potassium	7.6	20	5.2	8.0	4.0	4.4	4.3
pH	7.2	7.2	7.1	7.1	7.5	7.5	7.5
Hardness	850	750	660	770	470	550	540
Iron	0.12	<0.1	<0.1	1.1	<0.1	<0.1	<0.1
Langlier Index	0.27	0.26	0.15	0.11	0.48	0.57	0.58
Alkalinity	750	710	570	570	290	310	310
Zinc	<0.05	<0.05	<0.05	<0.05	0.15	67	<0.05
Manganese	<0.03	<0.03	<0.03	0.041	<0.03	<0.03	<0.03
Nitrate (NO_3)	66	69	33	20	33	40	41
Ammonia	<1	<1	<1	<1	<1	<1	<1
Total Kjeldahl Nitrogen	<1	<1	<1	<1	<1	<1	<1

4.0 EVALUATION

Twining's evaluation of site conditions noted during the investigation is detailed in the following sections.

4.1 Separation Ponds

Twelve soil samples collected from the bottom and sides of the separation ponds were analyzed by Sierra Testing Laboratories, Inc, and all samples were found to contain more than 10 % clay. Soils sampled were described as sandy to clayey silts. An elevation survey of three locations in the bottom of each separation pond by McDougal and Sons Surveying of Riverdale, California indicated that the separation pond bottoms are at elevation 65 amsl or above. A review of historic CCID shallow groundwater data indicates that the highest groundwater elevation during the period of record (1993 to 2002) was elevation 60 amsl.

4.2 Shallow Groundwater

Four monitor wells were installed in the vicinity of the Moonshine Dairy, one upgradient and three down or side gradient from the dairy facilities and/or separation ponds and lagoon. Groundwater flow during the September sampling event was to the southeast at a gradient of 24 feet per mile.

Analytical results of groundwater samples from the monitor wells indicates that the shallow groundwater is of the sodium bicarbonate type with total dissolved solids (TDS) concentrations ranging from 1,400 to 2,400 milligrams per liter (mg/l) (above the secondary drinking water standards of 500 and 1,000 mg/l). Nitrate concentrations in the upgradient monitor well and one downgradient well were above the drinking water standard of 45 mg/l while the remaining two downgradient monitor wells had nitrate concentrations of 33 and 20 mg/l. Considering that the dairy was not in operation at the time the monitor wells were sampled, the aforementioned analytical results are considered as representative of background water quality.

4.3 Domestic and Dairy Water Supply Wells

Two wells located at the dairy facility and one well located to the east of the dairy lagoon were sampled and analyzed for the same constituents as the monitor wells. The water from these wells was of the calcium bicarbonate type with TDS concentrations ranging from 680 to 790 mg/l and nitrate concentrations ranging from 33 to 41 mg/l.

5.0 CONCLUSIONS

Twining makes the following conclusions regarding the groundwater and separation ponds at the subject site:

- CCID depth-to-groundwater records, recorded from 1993 to 2002, indicate that the historic high depth-to-water beneath the vicinity of the separation ponds and lagoon was elevation 60 amsl;

- Surveyed elevations of the bottoms of the separation ponds indicate that they are at elevation 65 amsl or higher giving a separation between the pond bottoms and the historic high groundwater level of at least five feet, based on the above sited CCID data;

- Soils comprising the top one foot of the separation ponds were sampled and tested and determined to have a minimum of 10% clay; and

- Groundwater samples collected from four onsite monitor wells prior to the start of dairy operations showed that groundwater quality is of generally poor quality and does not meet State of California primary drinking water standards for nitrate and secondary standards for nitrate, total dissolved solids, chloride and sulfate.

6.0 RECOMMENDATIONS

Twining makes the following recommendations regarding the proposed use of the subject site for a dairy operation:

- The bottom of the lagoon should be raised to a minimum elevation of 65 feet amsl and the bottom and sides sampled and tested to confirm a clay content of 10% prior to being used for dairy waste water;

- Depth-to-water in the onsite monitor wells should be measured periodically (as required by the CRWQCB) to verify separation between the bottom of the ponds and the groundwater and to assess groundwater flow direction and gradient. Groundwater samples should be collected from the monitor wells and analyzed periodically (on a schedule set by the CRWQCB) for constituents typically found in dairy effluent. Results from the above monitoring should be summarized and reported to the CRWQCB.

7.0 LIMITATIONS

Findings and recommendations presented in this report are based on the assumption that subsurface conditions and chemical concentrations do not deviate from those disclosed in the field and laboratory testing. If variations from these findings are found, Twining should be notified so that supplemental conclusions and recommendations may be provided.

The scope of this investigation was proposed in a Twining work plan dated August 12, 2003 and approved by the CRWQCB in a letter dated September 3, 2003 as well as in telephone calls with Twining and the CRWQCB. The purpose of an environmental study is to reasonably characterize existing site conditions based on the soil conditions and the geology/hydrogeology of the area. In performing such a study, it is understood that a balance must be struck between a reasonable inquiry into the site conditions and an exhaustive analysis of each conceivable environmental characteristic. No investigation is thorough enough to describe all geologic/hydrogeologic conditions of interest at a given site.

Environmental conditions may exist at the site that cannot be identified by visual observation. Where subsurface work is performed, our professional opinions are based in part on interpretation of data from discrete sampling locations on a particular day that may not represent actual conditions at unsampled locations or later dates. If conditions are not identified during the study, such a finding should not be construed as a guarantee of the absence of such conditions at the site, but rather as the result of the services performed within the scope, limitations, and cost of the work performed.

The work was performed for the sole use of Twining's client and appropriate regulatory agencies. Any reliance on this report by a third party is at such party's sole risk.

Twining's professional services were performed, findings obtained, and recommendations prepared in accordance with generally-accepted engineering and hydrogeologic principles and practices in Stanislaus County at the time the work was accomplished. This warranty is in lieu of all other warranties either expressed or implied.

8.0 CLOSING

Twining appreciates the opportunity to be of service to you on this project. If you should have any questions, please do not hesitate to contact our office at (559) 268-7021.

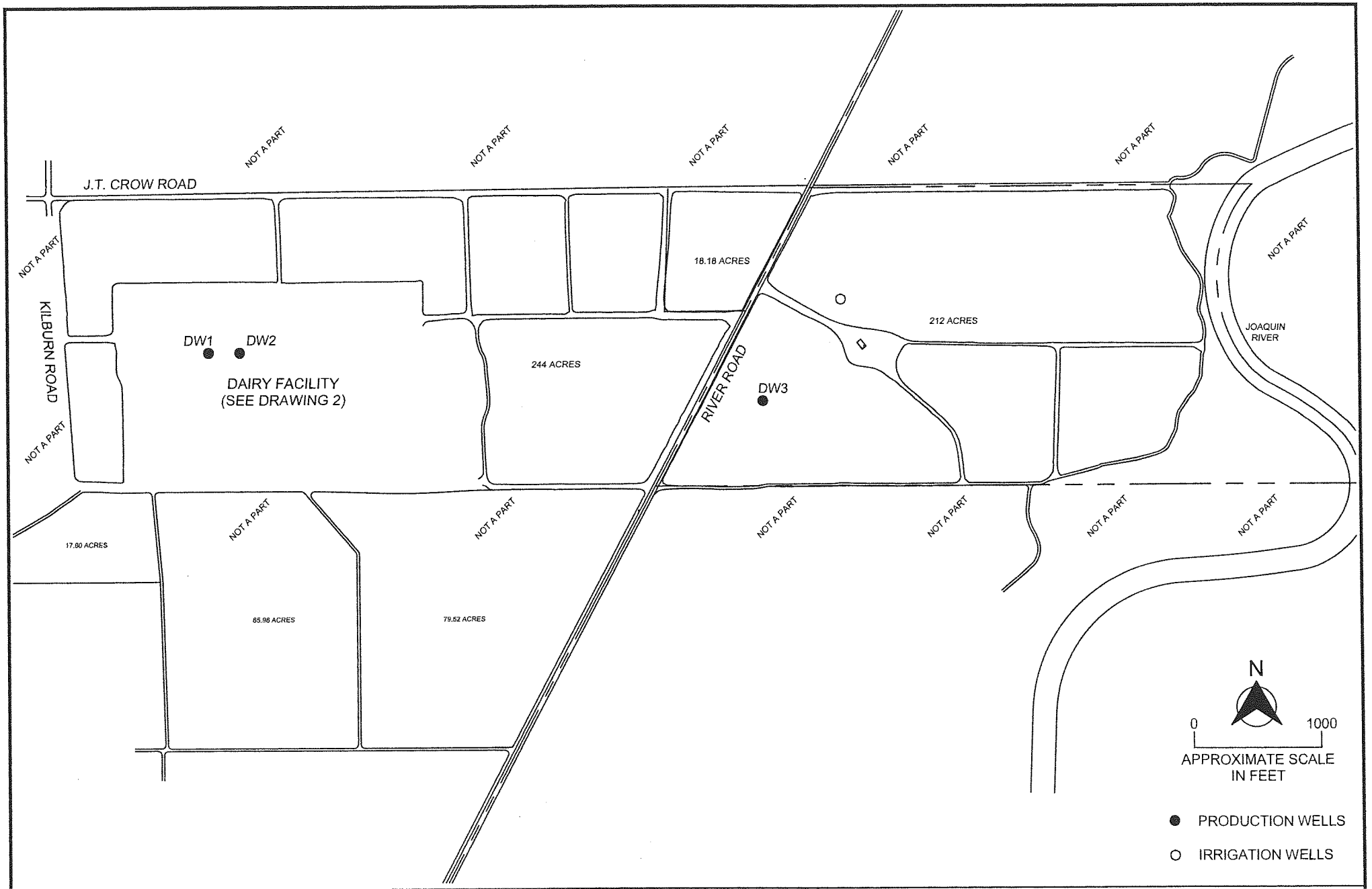
Sincerely,

THE TWINING LABORATORIES, INC.
Environmental and Geological Services Division

Jan Alfson RG No. 4435 CHG No. 205
Senior Hydrogeologist
Jana/grndwtrprg/deboer/reportrvsd1-8-02

Kenneth J. Clark CEG No. 1864
Engineering Geologist
J:\misc\Moonshine Dairy\Rpt.wpd

DRAWINGS



SITE LOCATION MAP
MOONSHINE DAIRY
22922 KILBURN ROAD
CROWS LANDING, CALIFORNIA

FILE NO. 76301-02	DATE DRAWN: 08/25/03
DRAWN BY: WME	APPROVED BY:
PROJECT NO. B76301.01	DRAWING NO. 1

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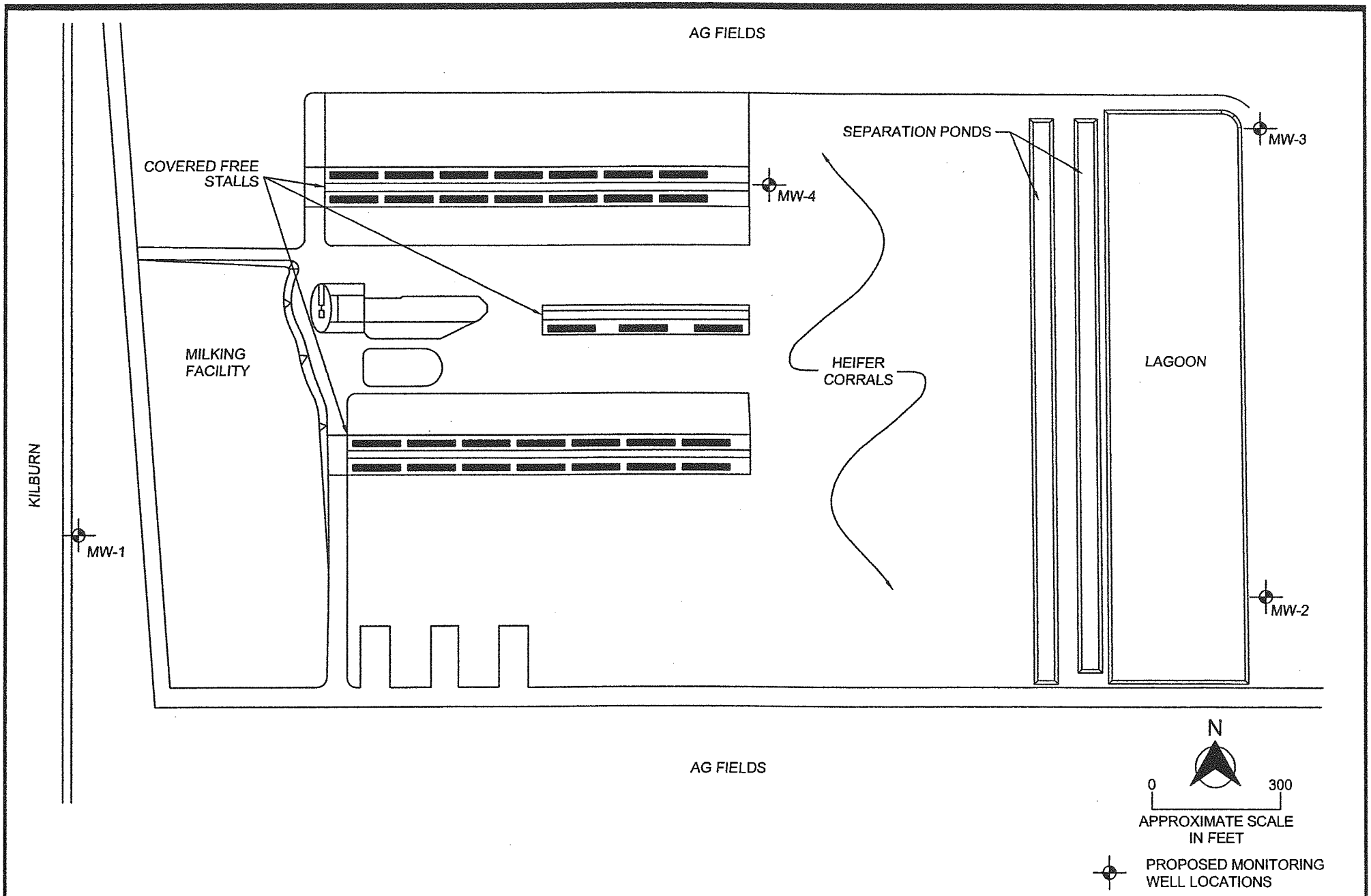

PROPOSED MONITORING WELL LOCATION MAP
MOONSHINE DAIRY
22922 KILBURN ROAD
CROWS LANDING, CALIFORNIA

FILE NO. 76301-01	DATE DRAWN: 08/08/03
DRAWN BY: WME	APPROVED BY:
PROJECT NO. B76301.01	DRAWING NO. 2

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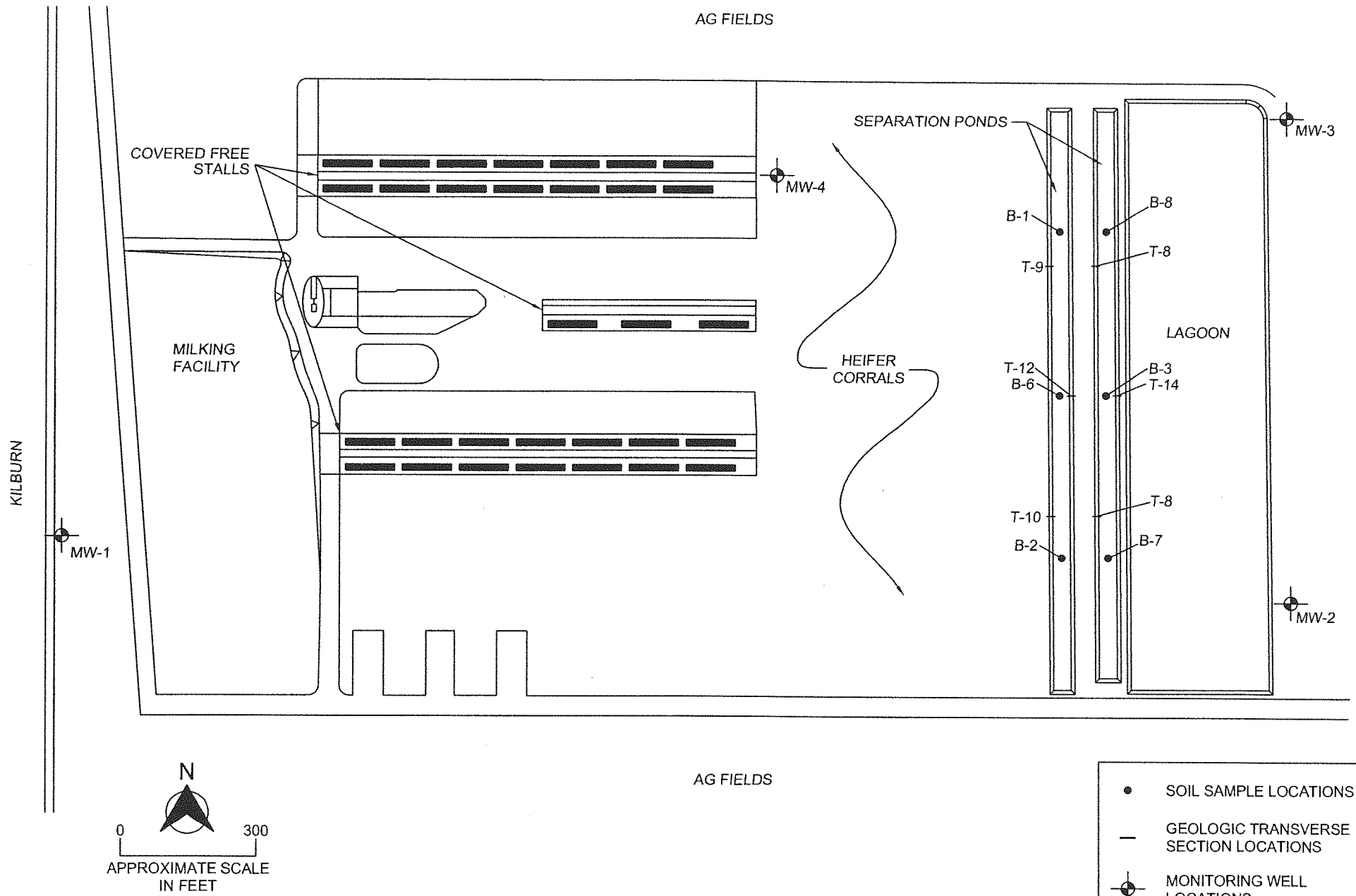

SOIL SAMPLING LOCATIONS
MOONSHINE DAIRY
22922 KILBURN ROAD
CROWS LANDING, CALIFORNIA

FILE NO. 76301-03	DATE DRAWN: 08/08/03
DRAWN BY: WME	APPROVED BY:
PROJECT NO. B76301.01	DRAWING NO. 3

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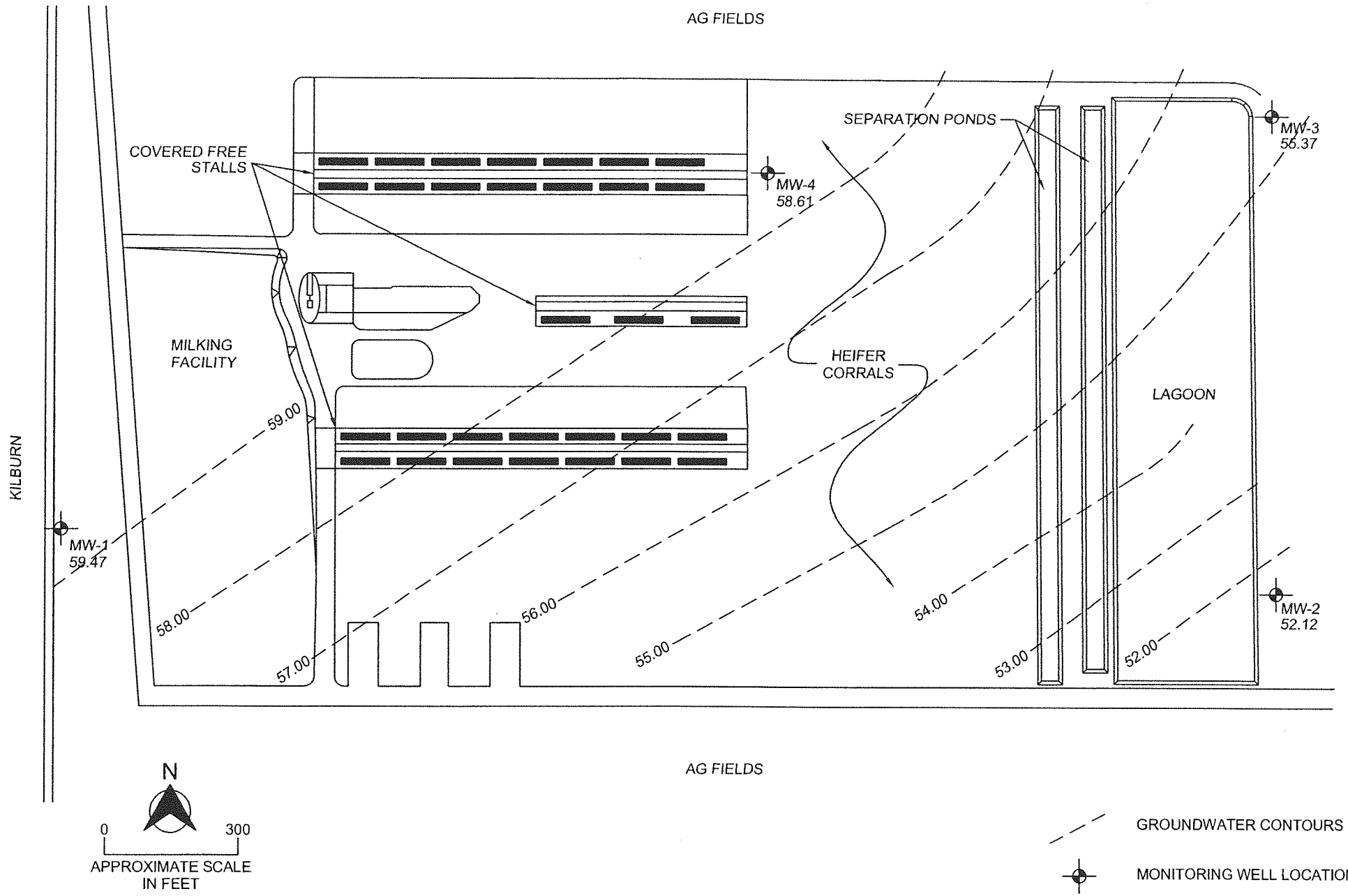

GROUNDWATER ELEVATION MAP, SEPTEMBER 15, 2003
MOONSHINE DAIRY
22922 KILBURN ROAD
CROWS LANDING, CALIFORNIA

FILE NO. 76301-04	DATE DRAWN: 10/13/03
DRAWN BY: WME	APPROVED BY:
PROJECT NO. B76301.01	DRAWING NO. 4

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APPENDIX D

SOIL BORING LOGS AND WELL COMPLETION DIAGRAMS

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LOG OF SOIL BORING

BORING MW-1

Project: Moonshine Dairy

Project Number: B76301.01

Location: 22922 Kilburn Road, Crows Landing, CA

Date Started: 9/10/03

Logged By: J. East

Date Completed: 9/10/03

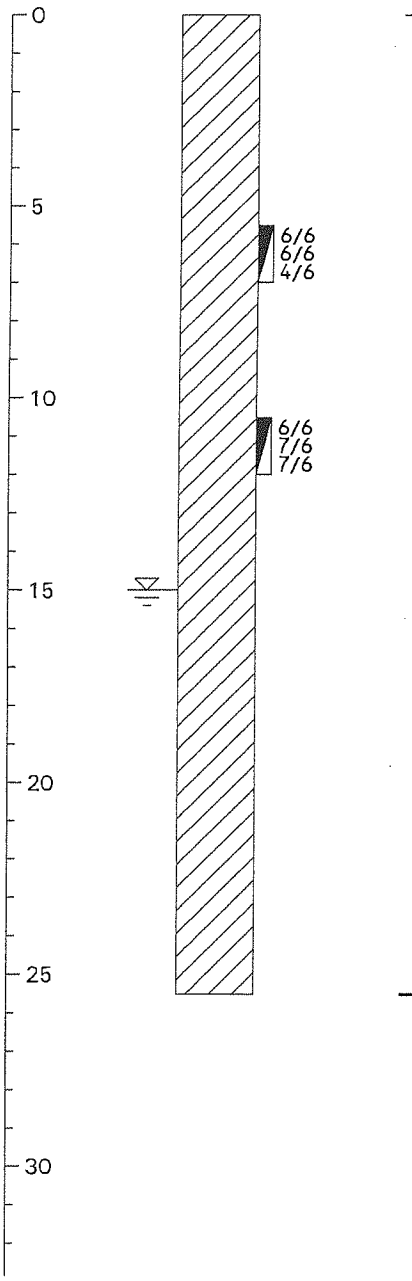
Drilled By: Twining Laboratories

Drill Type: CME 75

Auger Type: Hollow Stem Auger

Depth to Groundwater: 15 feet

Elevation: N/A



DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Blows per foot	Remarks
		CL	LEAN CLAY, Silty; soft, moist, dark brown, low plasticity		
			At 3.5 feet- Red-brown, some fine grained sand, ≤10% very moist, stiff	10	
			At 8.5 feet- Decrease in clay, increase in silt, brown	14	
			At 15.5 feet- Saturated		
			At 20.5 feet- Medium plastic, very moist, decrease in silt, gray-green		
			Bottom of Boring at 25.5 feet		

Notes:

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LOG OF SOIL BORING

BORING MW-2

Project: Moonshine Dairy

Project Number: B76301.01

Location: 22922 Kilburn Road, Crows Landing, CA

Date Started: 9/9/03

Logged By: J. East

Date Completed: 9/9/03

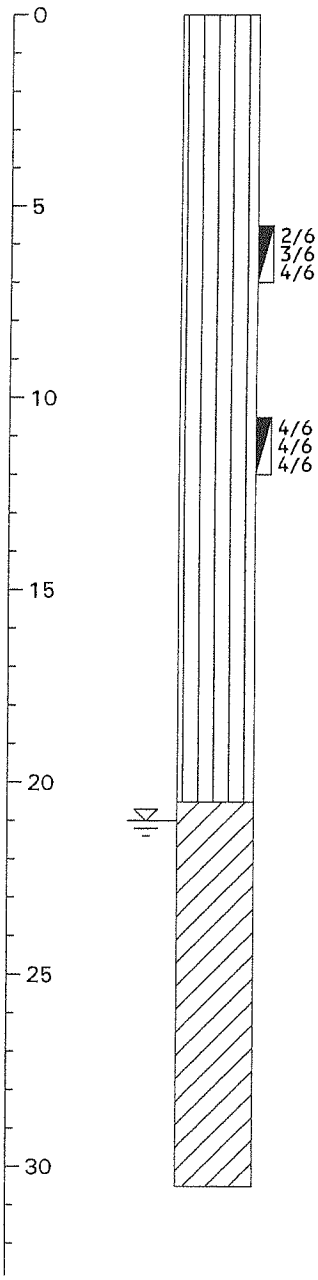
Drilled By: Twining Laboratories

Drill Type: CME 75

Auger Type: Hollow Stem Auger

Depth to Groundwater: 21 feet

Elevation: N/A



DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Blows per foot	Remarks
		ML	SILT, Sandy; stiff, dry, light tan		
			At 2.5 feet- Slightly moist, some low plasticity clay, light brown		
			At 5.5 feet- Some gravel, ≤5% and few coarse grained sand, ≤5% medium stiff	7	
			At 8 feet- No gravel or sand, gray-brown		
			At 10.5 feet- Increase in clay, ≤5% coarse sand, dark brown	8	
		CL	At 20.5 feet- LEAN CLAY; sandy, silty, low plasticity, very moist, orange-brown, some to coarse grained sand At 21.5 feet- Saturated		
			Bottom of Boring at 30.5 feet		

Notes:

THE TWINING LABORATORIES, INC. EST. 1898

LOG OF SOIL BORING

BORING MW-3

Project: Moonshine Dairy

Project Number: B76301.01

Location: 22922 Kilburn Road, Crows Landing, CA

Date Started: 9/9/03

Logged By: J. East

Date Completed: 9/9/03

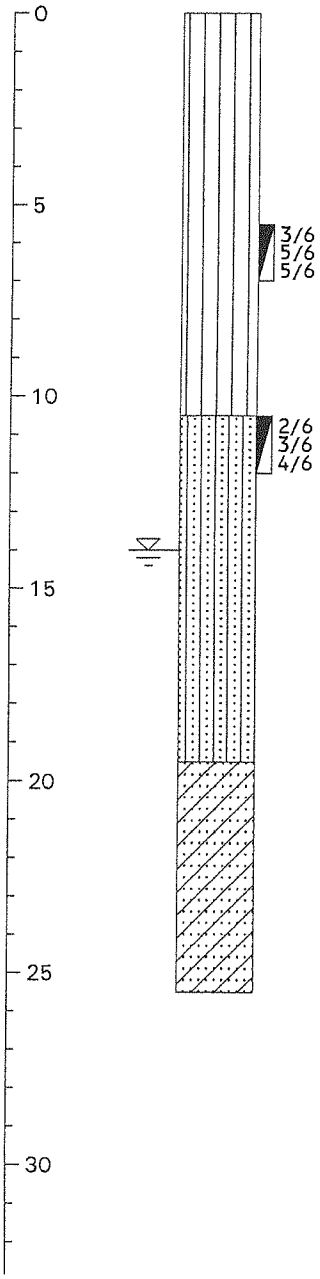
Drilled By: Twining Laboratories

Drill Type: CME 75

Auger Type: Hollow Stem Auger

Depth to Groundwater: 14 feet

Elevation: N/A



DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Blows per foot	Remarks
		ML	SILT, Sandy; very little coarse grained sand, soft, dry, light brown		
			At 5.5 feet- Increase in sand to approximately 30%, fine grained, stiff, moist, orange-brown	10	
		SM	At 10.5 feet- SAND, Silty; loose, moist, very fine grained, orange-brown	7	
			At 14.5 feet- Saturated, some low plasticity clay		
		SC	At 19.5 feet- SAND, Clayey; medium plastic clay, saturated, fine grained sand, orange-brown		
			Bottom of Boring at 25.5 feet		

Notes:

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LOG OF SOIL BORING

BORING MW-4

Project: Moonshine Dairy

Project Number: B76301.01

Location: 22922 Kilburn Road, Crows Landing, CA

Date Started: 9/10/03

Logged By: J. East

Date Completed: 9/10/03

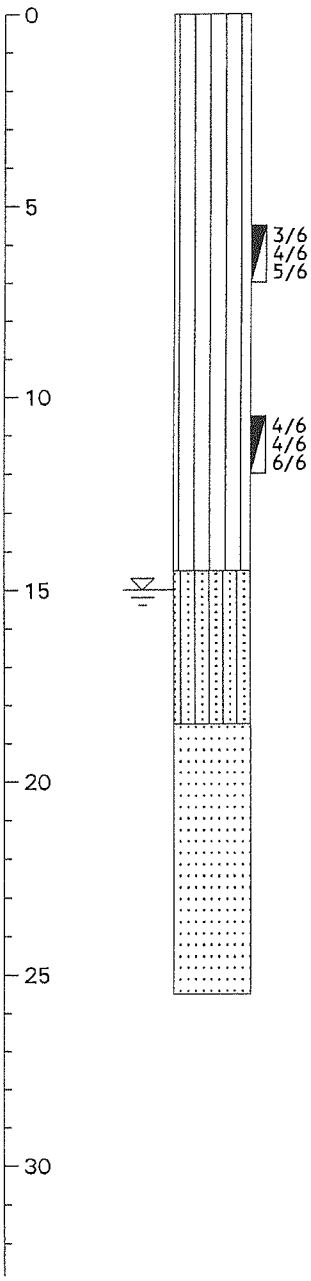
Drilled By: Twining Laboratories

Drill Type: CME 75

Auger Type: Hollow Stem Auger

Depth to Groundwater: 15 feet

Elevation: N/A



DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	Blows per foot	Remarks
		ML	SILT, Sandy; hard, dry, gray		
			At 3.5 feet- color to light brown		
			At 6 feet- ≤5% gravel and coarse grained sand, slightly moist	9	
			At 11.5 feet- Saturated, increase in sand, groundwater surface 11.5 feet from grade	10	
		SM	At 14.5 feet- SAND, Silty; medium dense, moist, approximately 30% gravel, fine to coarse grained sand, dark brown		
		SW	At 18.5 feet- SAND, Well Graded; some gravel and cobbles, fine to coarse sand, and clay, dark brown		
			At 22.5 feet- Approximately 20% cobbles ≤3 inches		
			At 24 feet- Increase in clay		
			Bottom of Boring at 25.5 feet		

Notes:

KEY TO SYMBOLS

Symbol Description

Strata symbols

LEAN CLAY (CL)

SILT, Sandy (ML)

SAND, Silty (SM)

SAND, Clayey (SC)

SAND, Well Graded (SW)

Misc. Symbols

Water table during drilling

Soil Samplers

Standard penetration test

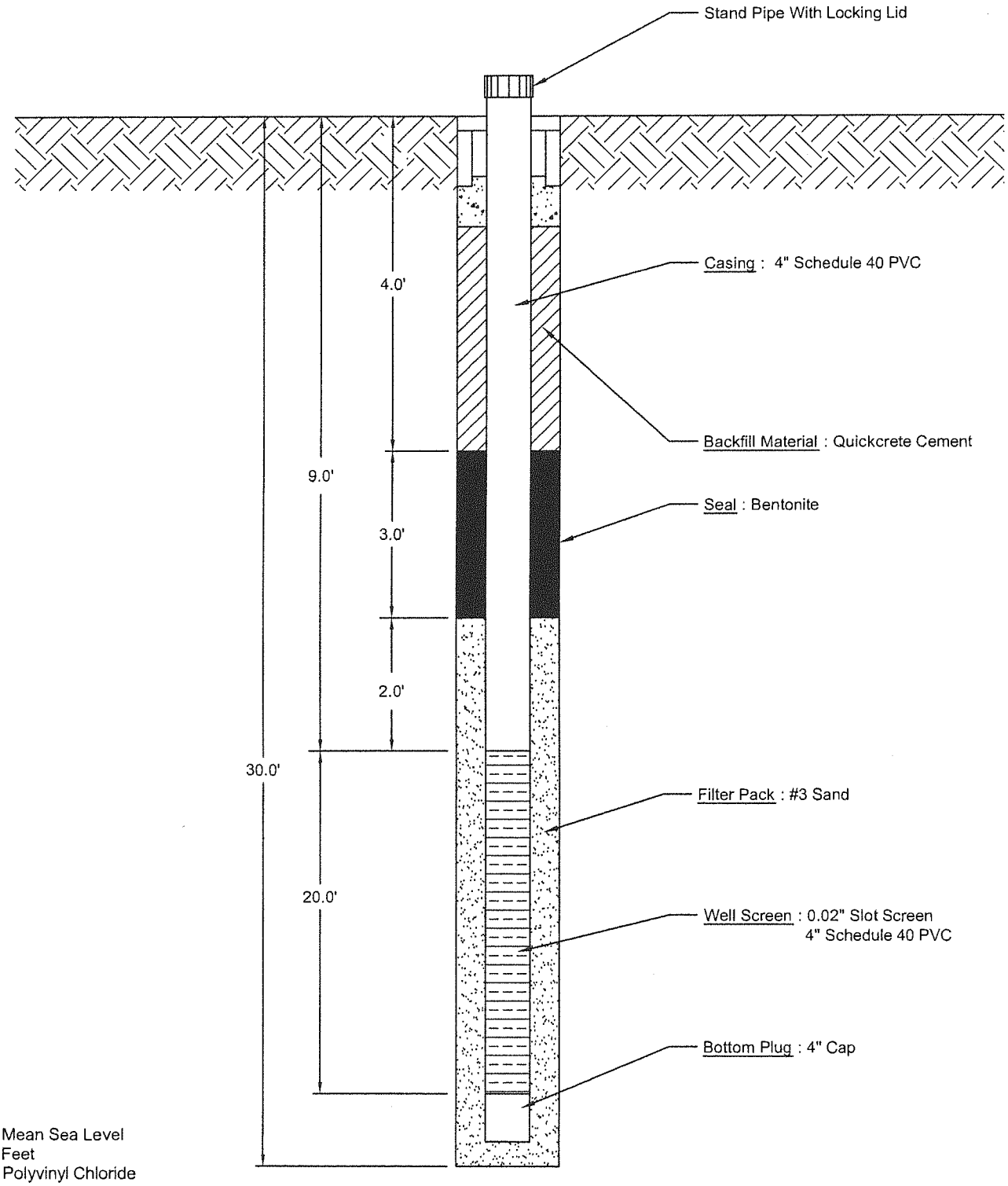
Notes:

1. Test borings were drilled on 9/9/03 and 9/10/03 using a CME 75 equipped with a Hollow Stem Auger.
2. Groundwater was not encountered during drilling operations.
3. Boring locations were located by measuring wheel with reference to the existing site features.
4. These logs are subject to the limitations, conclusions, and recommendations in this report.
5. Results of these conducted on samples recovered are reported on the logs. Abbreviations used are:

DD = Natural dry density
UC = Unconfined compression (psf)
- 4 = Percent passing #4 sieve (%)
- 200 = Percent passing #200 sieve (%)
SR = Soil resistivity (ohm-cm)
c = Cohesion (psf)
TS = Field Torvane Shear Strength test (tsf)

LL = Liquid limit (%)
PI = Plasticity index (%)
pH = Soil pH
SS = Soluble sulfates (%)
Cl = Soluble chlorides (%)
ø = Angle of internal friction (degrees)
N/A = Not applicable
N/E = None encountered

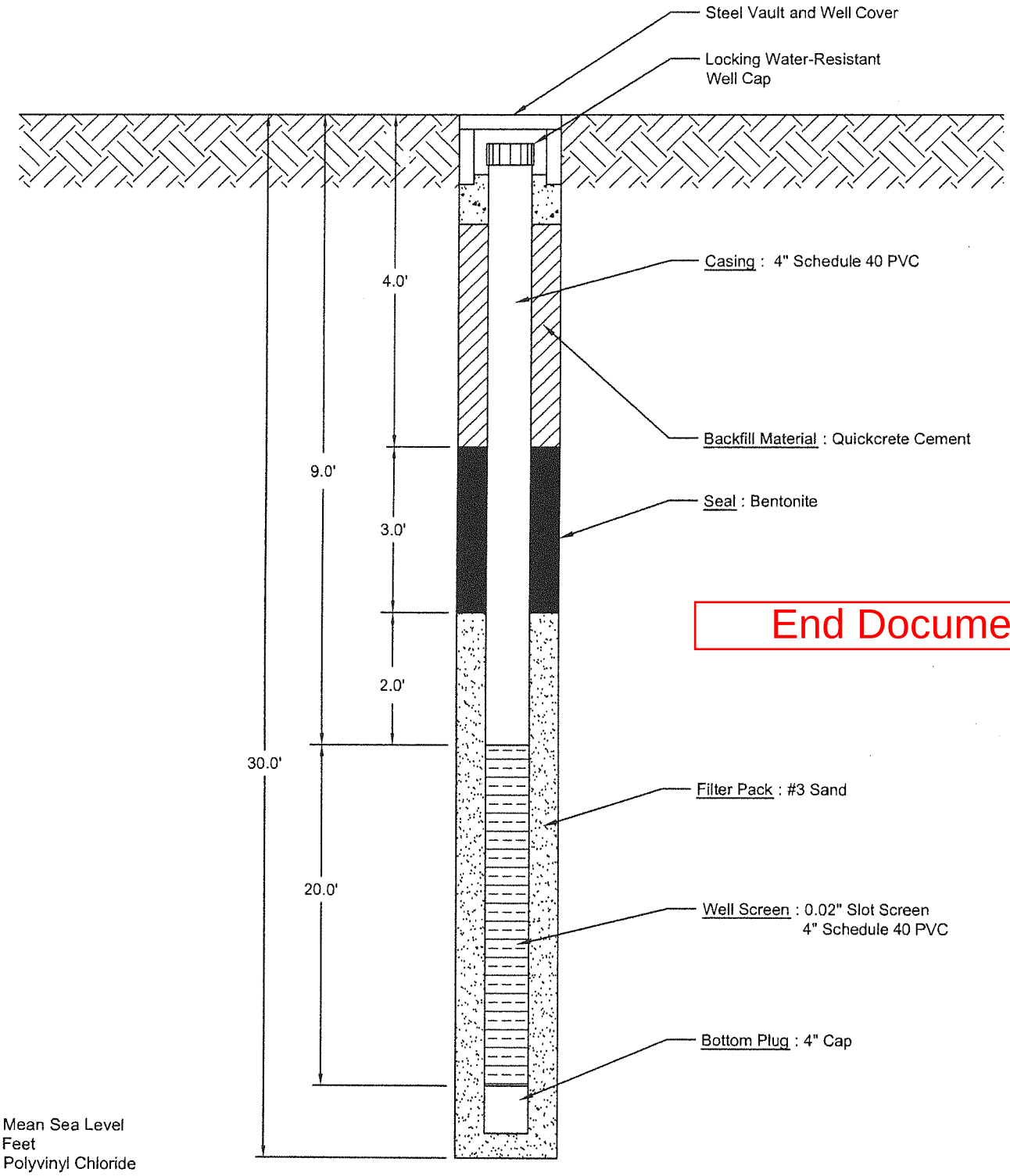
MONITORING WELL MW-2
CONSTRUCTION DIAGRAM



MSL = Mean Sea Level
' = Feet
PVC = Polyvinyl Chloride

MONITORING WELL CONSTRUCTION DIAGRAM MW-2 MOONSHINE DAIRY 22922 KILBURN ROAD CROWS LANDING, CALIFORNIA	FILE NO.: 76301-MW	DATE: 08/25/03	THE TWINING LABORATORIES, INC. EST. 1898 FRESNO/MODESTO/VISALIA/BAKERSFIELD/MONTEREY
	DRAWN BY: WME	APPROVED BY:	
	PROJECT NO. B76301.01	DRAWING NO. -	

MONITORING WELL MW-2
CONSTRUCTION DIAGRAM



End Document

MSL = Mean Sea Level
' = Feet
PVC = Polyvinyl Chloride

MONITORING WELL CONSTRUCTION DIAGRAM MW-2 MOONSHINE DAIRY 22922 KILBURN ROAD CROWS LANDING, CALIFORNIA	FILE NO.: 76301-MW	DATE: 08/25/03	THE TWINING LABORATORIES, INC. EST.1898 FRESNO/MODESTO/VISALIA/BAKERSFIELD/MONTEREY
	DRAWN BY: WME	APPROVED BY:	
	PROJECT NO. B76301.01	DRAWING NO. -	

ENVIRONMENTAL CONTROL ASSOCIATES, INC.

Filed for Ewell

Excerpt

Includes November Report (initial)

December 29, 2004

Ms. Jo Anne L. Kipps
California Regional Water Quality Control Board
– Central Valley Region
1685 "E" Street
Fresno, California 93706-2020

24 Pages

RE: Monitoring Well Installation Report
Gallo Cattle Company Cottonwood Dairy
10561 State Route 140
Atwater, California 95301

Dear Ms. Kipps:

On behalf of Gallo Cattle Company, Environmental Control Associates, Inc. (ECA) is submitting this monitoring well installation report documenting the installation and sampling of ten new groundwater monitoring wells at the referenced site. This work was performed in general accordance with the "*Revised Work Plan for Monitoring Well Installation, Gallo Cattle Company Cottonwood Dairy, 10561 State Route 140, Atwater, California,*" dated August 2, 2004.

BACKGROUND

Site Location

The Gallo Cattle Company Cottonwood Dairy is located on the south side of State Route 140, about 9 miles west of Merced, California (Figure 1). The site is irregularly shaped, measuring roughly 3,000 feet east west by 6,000 feet north south (Figure 2). A dairy farming operation, cheese processing facility, and electricity-producing methane digester system are located on the site.

Holding Pond Information

The Cottonwood Dairy operation contains four wastewater holding ponds with a total capacity of 155,008,258 gallons. Additional information about each wastewater holding pond follows:

North Lagoon
This pond, located just north of the dairy corrals (Figure 2), was constructed in 1980. Its dimensions are 1,000 feet long by 150 feet wide by 10 feet deep. The side slopes are 1:1 (horizontal:vertical). The pond is clay lined. Not including a 2-foot freeboard, its capacity is 8,159,425 gallons. The primary use of the North Lagoon is to collect rainwater runoff from the dairy corrals in the winter. Collected water is then either pumped to the digester lagoon or to the fields for irrigation. It is also available for backup storage of dairy flush water in the

3011 Twin Palms Drive • Aptos, CA 95003 • (831) 662-8178 Business
P.O. Box 52 • Tahoe City, CA 96145 • (530) 581-0380
(530) 581-0389 Fax

event of a power failure disabling the north solids separator pump. Part of the North Lagoon is sometimes used for fresh water storage in the summer.

South Lagoon

This pond, similar to the North Lagoon and located just south of the dairy corrals (Figure 2), was constructed in 1980. Its dimensions are 1,000 feet long by 150 feet wide by 10 feet deep. The side slopes are 1:1 (horizontal:vertical). The pond is clay lined. Not including a 2-foot freeboard, its capacity is 8,159,425 gallons. The primary use of the South Lagoon is to collect rainwater runoff from the dairy corrals in the winter. Collected water is then either pumped to the digester lagoon or to the fields for irrigation. It is also available for backup storage of dairy flush water in the event of a power failure disabling the south solids separator pump. Part of the South Lagoon is sometimes used for fresh water storage in the summer.

Digester Lagoon

This pond, located east of the dairy (Figure 2), was constructed in 2003-2004 to meet the specifications of the Merced County Confined Animal Facility Ordinance. Its dimensions are 1,200 feet long by 250 feet wide by 24 feet deep. The side slopes are 1:1 (horizontal:vertical). The pond is clay lined, with a permeability of less than 0.000001 centimeters per second. Not including a 2-foot freeboard, its capacity is 44,225,015 gallons. The Digester Lagoon is completely covered with a specially engineered black plastic material, and the pond functions as a methane digester to partially process the wastewater in the pond.

The Digester Lagoon collects wastewater from the cheese plant complex and the dairy. The cheese plant wastewater is first collected in holding tanks at the plant site, then the wastewater is pumped to the dairy to flush feed and freestall lanes. Some fresh water is also used at the dairy for milking barn flushing and other purposes. This wastewater is pumped across one of three inclined screen solids separators, then the wastewater flows on to the digester lagoon.

Overflow Lagoon

This pond, located just east of the digester lagoon (Figure 2), was constructed in 2003-2004 to meets the specifications of the Merced County Confined Animal Facility Ordinance. Its dimensions are 1,200 feet long by 540 feet wide by 24 feet deep. The side slopes are 2:1 (horizontal:vertical). The pond is clay lined, with a permeability of less than 0.000001 centimeters per second. Not including a 2-foot freeboard, its capacity is 94,464,393 gallons. The Overflow Lagoon collects and stores water running out of the digester lagoon before it is land applied for irrigation.

Groundwater Monitoring and Reporting Program

Gallo Cattle Company and the California Regional Water Quality Control Board – Central Valley Region (RWQCB) negotiated the scope of a Groundwater Monitoring and Reporting Program for the Cottonwood Dairy facility. Subsequently, ten groundwater monitoring wells (MW-1 through MW-10) were installed at the site on September 21 and 22, 2004 (Figure 2). The groundwater monitoring wells were installed for the following purposes:

- Three wells (MW-1, MW-2, and MW-3) to establish background water quality;
- One well (MW-4) directly upgradient of the anaerobic lagoon;

- Two wells (MW-5 and MW-6) downgradient of the anaerobic lagoon;
- One well (MW-7) inside the proposed discharge area; and
- Three wells (MW-8, MW-9, and MW-10) along the downgradient edge of the proposed discharge area.

This report documents the installation and sampling of the monitoring well network.

MONITORING WELL INSTALLATIONS

Monitoring wells MW-1 through MW-10 (Figure 2) were installed on September 21 and 22, 2004. Prior to the well installations, ECA obtained well construction permits from the County of Merced Division of Environmental Health. Copies of the well construction permits are included in Attachment A of this report.

Exploration Geoservices, Inc. installed all of the wells using a Mobile Drill B-40L22 drill rig equipped with 8-inch hollow-stem augers. ECA senior engineering geologist Peter Castro directed the well installations in the field. During drilling, soil samples were typically collected at 5-foot intervals from each well boring using a 2-inch (outside) diameter by 18-inch long Standard Penetration Split Spoon Sampler. Recovered soil samples were used to observe soil strata and prepare boring logs.

Monitoring well construction details are shown on the boring/well logs included in Attachment B of this report. Monitoring wells were constructed with 2-inch diameter polyvinyl chloride (PVC) well screen and casing. The total depths of the monitoring wells ranged from 20 to 30 feet below ground surface, depending on soil and groundwater conditions encountered in the field. Factory-slotted well screen with 0.010-inch slots was installed in each monitoring well and #2/12 RMC Pacific Materials graded silica sand was installed to about 2 feet over the screened interval. The silica sand was followed by about 3 feet of hydrated bentonite "chips." The monitoring wells were then sealed with neat cement to the ground surface. The monitoring wells were completed with an aboveground PVC stickup and were secured with locking expansion plugs. Gallo personnel subsequently installed protective bollards around the monitoring wells.

Soil Conditions

The well borings encountered a variety of granular and fine-grained soil units, including: silty sand, clayey sand, sandy silt, clayey silt, and silty clay. Sandy soil units were commonly encountered in all of the well borings. Due to the size of the project area, however, EC did not attempt to correlate soil stratigraphy across the site.

Well Locations And Well Survey

The new monitoring wells were surveyed on November 12, 2004 by Condor Earth Technologies, Inc. (Condor). The survey report is presented in Attachment C of this report. Well locations depicted on Figures 2 and 3 of this report used coordinates provided by Condor.

Most of the well locations proposed in the August 2, 2004 "*Revised Work Plan for Monitoring Well Installation, Gallo Cattle Company Cottonwood Dairy, 10561 State Route 140, Atwater, California*" were moved slightly to road shoulders or other protected areas to avoid potential future damage due to farming activities. Monitoring well MW-10 was moved about 800 feet

north-northwest to a more protected location. Given the very large size of the Cottonwood Dairy site, the differences between the proposed and actual monitoring well locations are not expected to materially affect the Groundwater Monitoring and Reporting Program for the site.

Well Development

Groundwater monitoring wells MW-1 through MW-10 were developed on October 6, 2004. The wells were developed by surging the screened interval with a surge block, followed by bailing. Groundwater removed from the monitoring wells during well development was disposed on the ground surface. Bailing continued until slight turbidity and low sand production were observed. Monitoring well MW-3 exhibited poor recharge during well development; however, water produced from this well became very clear after approximately 8 gallons were removed. ECA well development forms documenting monitoring well development are included in Attachment D of this report.

MONITORING WELL SAMPLING

Groundwater monitoring wells MW-1 through MW-10 were sampled on November 2, 2004. Prior to collecting each groundwater sample the monitoring well was opened and the groundwater elevation was measured using an electric water level indicator. All groundwater measurements were referenced to top of well casing measuring points. After measuring and recording water levels, the wells were purged using single-use disposable polyvinyl chloride (PVC) bailers. Physical parameters (temperature, pH, and electrical conductivity) were measured and recorded at the end of the well purging process.

Groundwater samples were subsequently collected and placed into containers supplied by the analytical laboratory. The groundwater samples were not field filtered; therefore, the samples were collected in unpreserved containers. The samples were sealed, labeled, logged onto chain-of-custody documents, stored in an iced cooler, and transported to the laboratory with 24 hours with a request to immediately filter and then preserve the sample. Sample storage and shipment followed ECA chain-of-custody procedures. ECA field forms documenting sample collection activities are presented in Attachment E of this report.

Groundwater Sample Analyses

Groundwater sample analyses included the analytes listed in the Constituent/Parameter table provided to the Gallo Cattle Company on March 17, 2004. The analytical results are summarized on Tables 1A, 1B, and 1C. The analytical reports and chain-of-custody documents for the November 2, 2004 groundwater samples are included in Attachment F of this report.

Groundwater Flow Direction And Gradient

Groundwater elevation data for November 2, 2004, along with groundwater elevations measured by ECA on October 6, 2004 during well development, are presented in Table 2. The November 2004 groundwater elevation measurements were used to construct a groundwater elevation contour map (Figure 3). Based on the November 2, 2004 water level data, a groundwater high appears to be centered along monitoring wells MW-5, MW-6, and MW-7. Groundwater appears to flow radially away from this groundwater high with flow gradients ranging from about 0.0007 feet per foot to about 0.0009.

CONCLUSIONS AND RECOMMENDATIONS

Ten groundwater monitoring wells have been installed, developed, and sampled in general accordance with the "*Revised Work Plan for Monitoring Well Installation, Gallo Cattle Company Cottonwood Dairy, 10561 State Route 140, Atwater, California,*" dated August 2, 2004. Additional groundwater elevations measurements and groundwater sample analyses will be required to establish a pattern of groundwater flow directions, groundwater flow gradients, and groundwater quality.

Please contact Mr. Mark Vidensek at (209) 394-1188 extension 411 if you have any questions concerning this project.

Sincerely,

Environmental Control Associates, Inc.

Tim Tyler
Project Manager

Peter J. Castro, C.E.G. #1993
Project Geologist

REGISTERED GEOLOGIST
PETER J. CASTRO
No. 1993
CERTIFIED ENGINEERING GEOLOGIST
expires 8-31-05
STATE OF CALIFORNIA

Attachments:

- Table 1A – Summary of Groundwater Analytical Data: Miscellaneous Parameters
- Table 1B – Summary of Groundwater Analytical Data: General Minerals
- Table 1C – Summary of Groundwater Analytical Data: Metals
- Table 2 – Summary of Groundwater Elevation Data
- Figure 1 – Vicinity Map
- Figure 2 – Site Map
- Figure 3 – Groundwater Elevation Contour Map
- Attachment A – Well Construction Permits
- Attachment B – Boring/Well Logs
- Attachment C – Condor Earth Technologies, Inc. Survey Site Safety Plan
- Attachment D – ECA Well Development Forms (October 6, 2004)
- Attachment E – ECA Well Development Forms (November 2, 2004)
- Attachment F – Laboratory Analytical Reports and Chain-Of-Custody Document

Cc: Gallo Cattle Company
Merced County Health Department

Boring/Well Log

Drilling Contractor: Exploration Geoservices
Drilling Equipment: Hollow Stem Auger
Sampling Equipment: SPT
Latitude: 37.3007035
Longitude: -120.6726678
Measuring Point Elevation: 113.99

Boring/Well No: **MW-1** Page 1 of
Boring Depth: 30 Feet
Boring Diameter: 8 Inches
Casing depth: 30 Feet
Casing Diameter: 2 Inches

Locking Well Cap / PVC Stickup	PID Reading	Blow Counts	Sample	Depth (feet)	Lithology	Soil Type	Description
Grout to Ground Surface				1, 2, 3		SM	SILTY SAND (SM), Moderate Yellowish Brown (10YR5/4), Loose, Slightly Moist. 60%fine sand. 40% non-plastic silt.
2-Inch Sch. 40 PVC Blank Well Casing		3 3 5		4, 5, 6, 7			
Neat Cement Grout		23 12 8		8, 9, 10, 11, 12, 13		CL CH	SILTY CLAY (CL/CH), Light Olive Gray (5Y5/2), Dry, Very Stiff. 100% high to moderate plasticity clay. Trace silt. Thinly bedded to laminated. Some calcareous nodules.
Bentonite Pellets (Hydrated)							Contact approximate/gradational
#2/12 RMC Pacific Materials Graded Silica Sand		9 20 23		14, 15, 16, 17		SM	SILTY SAND (SM), Moderate Yellowish Brown (10YR5/4), Dense, Moist. 55% fine to medium sand. 45% moderate to low plasticity silt with clay. Upper 2 feet has $CaCO_3$ inclusions, horizons, nodules, and/or low-moderate cementation decreasing by 14 feet.
2-Inch Sch 40 PVC Well Screen with 0.010-Inch Slots							Contact approximate
		10 12 13		18, 19, 20		SM	SILTY SAND (SM), Moderate Yellowish Brown (10YR5/4), Medium Dense, Wet. 65% medium to fine sand. 35% non-plastic silt. Trace muscovite mica.

ENVIRONMENTAL CONTROL ASSOCIATES, INC.
P.O. Box 52, Tahoe City, California 96145
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Project: Gallo Cattle Company Cottonwood Dairy
Logged By: Peter Castro, C.E.G. #1993
Drilling Date: 9/21/2004

Boring/Well Log

Drilling Contractor: Exploration Geoservices
Drilling Equipment: Hollow Stem Auger
Sampling Equipment: SPT
Latitude: 37.3007035
Longitude: -120.6726678
Measuring Point Elevation: 113.99

Boring/Well No: **MW-1**
Boring Depth: 30 Feet
Boring Diameter: 8 Inches
Casing depth: 30 Feet
Casing Diameter: 2 Inches

Well Construction	PID Reading	Blow Counts	Sample	Depth (feet)	Lithology	Soil Type	Description
#2/12 RMC Pacific Materials Graded Silica Sand				21		SM	SILTY SAND (SM), Moderate Yellowish Brown (10YR5/4), Medium Dense, Wet. 65% medium to fine sand. 35% non-plastic silt. Trace muscovite mica.
				22			
				23			
2-Inch Sch 40 PVC Well Screen with 0.010-Inch Slots		12 18 26		24			As above. Wet, Dense. Sand is medium to fine, rounded to subrounded.
				25			
				26			
				27			
				28			
		13 15 23		29			As above.
Threaded End Cap				30			
				31			Boring Terminated at 30 Feet.
				32			
				33			
				34			
				35			
				36			
				37			
				38			
				39			
				40			

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Logged By: Peter Castro, C.E.G. #1993
Drilling Date: 9/21/2004

Boring/Well Log

Drilling Contractor: Exploration Geoservices
Drilling Equipment: Hollow Stem Auger
Sampling Equipment: SPT
Latitude: 37.3017689
Longitude: -120.6555658
Measuring Point Elevation: 115.37

Boring/Well No: **MW-2**
Boring Depth: 35 Feet
Boring Diameter: 8 Inches
Casing depth: 35 Feet
Casing Diameter: 2 Inches

Locking Well Cap / PVC Stickup	PID Reading	Blow Counts	Sample	Depth (feet)	Lithology	Soil Type	Description
Grout to Ground Surface				1, 2, 3		SM	SILTY SAND (SM), Moderate Yellowish Brown (10YR5/4), Medium Dense, Moist. 60% fine to medium sand. 30-35% low plasticity silt 5-10% clay
2-Inch Sch. 40 PVC Blank Well Casing		8, 7, 4		4, 5, 6, 7			
Neat Cement Grout		5, 8, 12		8, 9, 10, 11		SM	SILTY SAND (SM), Moderate Yellowish Brown (10YR5/4), Medium Dense, Slightly Moist. 55% fine to medium sand. 40% non-plastic silt. Trace clay.
				12			Contact approximate
		7, 15, 16		13, 14, 15		SM	SILTY SAND (SM), Light Olive Gray (5Y6/1), Dense, Moist. 55% fine to medium sand. 40% non-plastic silt.
Bentonite Pellets (Hydrated)				16, 17, 18			
#2/12 RMC Pacific Materials Graded Silica Sand		6, 6, 7		19, 20			As above. Medium Dense.
2-Inch Sch 40 PVC Well Screen with 0.010-Inch Slots							

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Project: Gallo Cattle Company Cottonwood Dairy
Logged By: Peter Castro, C.E.G. #1993
Drilling Date: 9/21/2004

Boring/Well Log

Drilling Contractor: Exploration Geoservices
Drilling Equipment: Hollow Stem Auger
Sampling Equipment: SPT
Latitude: 37.3017689
Longitude: -120.6555658
Measuring Point Elevation: 115.37

Boring/Well No: **MW-2**
Boring Depth: 35 Feet
Boring Diameter: 8 Inches
Casing depth: 35 Feet
Casing Diameter: 2 Inches

Well Construction	PID Reading	Blow Counts	Sample	Depth (feet)	Lithology	Soil Type	Description
#2/12 RMC Pacific Materials Graded Silica Sand				21			
				22			
				23		SM	SILTY SAND (SM), Light Olive Gray (5Y6/1), Medium Dense, Moist to Very Moist. 60% fine sand. 40% non-plastic silt. Conspicuous dark grains in sand.
2-Inch Sch 40 PVC Well Screen with 0.010-Inch Slots		9 12 16		24			
				25			
				26			
				27			
				28			
		16 30 48		29			As above. Very Dense, Wet.
				30			
				31			
				32			
				33		SM	SILTY SAND (SM), Light Olive Gray (5Y6/1) to Brownish Gray (5YR4/1), Dense, Wet. 60% fine to medium sand. 40% non-plastic silt.
End Cap		8 18 30		34			
				35			Boring Terminated at 35 Feet.
				36			
				37			
				38			
				39			
				40			

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Project: Gallo Cattle Company Cottonwood Dairy
Logged By: Peter Castro, C.E.G. #1993
Drilling Date: 9/21/2004

Boring/Well Log

Drilling Contractor: Exploration Geoservices
Drilling Equipment: Hollow Stem Auger
Sampling Equipment: SPT
Latitude: 37.2857674
Longitude: -120.6550041
Measuring Point Elevation: 112.78

Boring/Well No: **MW-3**
Boring Depth: 30 Feet
Boring Diameter: 8 Inches
Casing depth: 30 Feet
Casing Diameter: 2 Inches

Locking Well Cap / PVC Stickup	PID Reading	Blow Counts	Sample	Depth (feet)	Lithology	Soil Type	Description
Grout to Ground Surface				1, 2, 3		SM	SILTY SAND (SM), Moderate Yellowish Brown (10YR5/4), Medium Dense, Moist. 55% fine sand. 45% low plasticity silt and clay.
2-Inch Sch. 40 PVC Blank Well Casing		3 3 2		4, 5, 6			Contact gradational
Neat Cement Grout			5 5 6	7, 8, 9, 10		ML MH	CLAYEY SILT (ML/MH), Moderate Yellowish Brown (10YR5/4), Stiff, Moist. Trace-10% fine sand. 90-100% moderate plasticity silt with clay. Some carbonaceous granules. Trace $CACO_3$ as thin horizons.
Bentonite Pellets (Hydrated)			7 8 10	11, 12, 13, 14			Contact gradational from 13.5-14.5 feet
#2/12 RMC Pacific Materials Graded Silica Sand				15, 16		SM	SILTY SAND (SM), Moderate Yellowish Brown (10YR5/4), Medium Dense, Moist. 65% fine sand. 35% non-plastic silt.
2-Inch Sch 40 PVC Well Screen with 0.010-Inch Slots			12 20 34	17, 18, 19, 20		SC	CLAYEY SAND (SC), Mottled: Light Olive Gray (5Y5/2) to Moderate Brown (5YR4/4), Medium Dense, Very Moist to Wet. 50% fine sand. 50% moderate plasticity silt and clay.
						SC	CLAYEY SAND (SC), Light Olive Gray (5Y5/2), Very Dense, Moist. 50% fine sand. 50% low plast. silt & clay.

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Project: Gallo Cattle Company Cottonwood Dairy
Logged By: Peter Castro, C.E.G. #1993
Drilling Date: 9/22/2004

Boring/Well Log

Drilling Contractor: Exploration Geoservices
Drilling Equipment: Hollow Stem Auger
Sampling Equipment: SPT
Latitude: 37.2857674
Longitude: -120.6550041
Measuring Point Elevation: 112.78

Boring/Well No: **MW-3**
Boring Depth: 30 Feet
Boring Diameter: 8 Inches
Casing depth: 30 Feet
Casing Diameter: 2 Inches

Well Construction	PID Reading	Blow Counts	Sample	Depth (feet)	Lithology	Soil Type	Description
#2/12 RMC Pacific Materials Graded Silica Sand				21			Gradational from above
				22		ML	CLAYEY SILT (ML), Light Olive Gray (5Y5/2), Stiff, Very Moist to Wet. 20% fine sand. 80% low plasticity silt with clay.
				23			
2-Inch Sch 40 PVC Well Screen with 0.010-Inch Slots		6 6 4		24			
				25			
				26			
				27			Contact approximate
				28		SM	SILTY SAND (SM) Light Olive Gray (5Y5/2), Dense, Wet. 60% fine to medium sand. 40% non-plastic silt.
		8 18 21		29			
End Cap				30			Boring Terminated at 30 Feet.
				31			
				32			
				33			
				34			
				35			
				36			
				37			
				38			
				39			
				40			

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Project: Gallo Cattle Company Cottonwood Dairy
Logged By: Peter Castro, C.E.G. #1893
Drilling Date: 9/22/2004

Boring/Well Log

Drilling Contractor: Exploration Geoservices
Drilling Equipment: Hollow Stem Auger
Sampling Equipment: SPT
Latitude: 37.2937527
Longitude: -120.6604318
Measuring Point Elevation: 112.48

Boring/Well No: **MW-4**
Boring Depth: 25 Feet
Boring Diameter: 8 Inches
Casing depth: 25 Feet
Casing Diameter: 2 Inches

Locking Well Cap / PVC Stickup	PID Reading	Blow Counts	Sample	Depth (feet)	Lithology	Soil Type	Description
Grout to Ground Surface				1		SM	SILTY SAND (SM), Moderate Yellowish Brown (10YR5/4), Medium Dense, Dry. 50% fine to medium sand. 50% non-plastic silt.
2-Inch Sch. 40 PVC Blank Well Casing				2			
				3			
Neat Cement Grout		9 25		4		ML	SANDY SILT (ML), Dark Yellowish Brown (10YR4/2), Hard, Dry. 35% fine sand. 65% non-plastic silt. Trace-5% clay.
				5			
Bentonite Pellets (Hydrated)				6			
				7			
				8		ML	SANDY SILT (ML), Dark Yellowish Brown (10YR4/2), mottled with Grayish Orange (10YR7/4), Hard, Slightly Moist. 45% fine sand. 55% low to moderate plasticity silt. 5% clay. Sand fine to coarse at 10 feet.
		8 18 27		9			
				10			
				11			
#2/12 RMC Pacific Materials Graded Silica Sand				12			Contact approximate
				13		ML	SANDY SILT (ML), Moderate Yellowish Brown (10YR5/4), Very Stiff, Slightly Moist to Moist. 40% fine sand. 60% low to moderate plasticity silt with trace clay. Color very uniform.
		9 9 8		14			
				15			
2-Inch Sch 40 PVC Well Screen with 0.010-Inch Slots				16			Contact approximate
				17		SM	SILTY SAND (SM), Moderate Yellowish Brown (10YR5/4), Medium Dense, Wet. 60% medium to fine sand. 40% non-plastic silt.
				18			
		7 8 10		19			
				20			

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Project: Gallo Cattle Company Cottonwood Dairy
Logged By: Peter Castro, C.E.G. #1993
Drilling Date: 9/21/2004

Boring/Well Log

Drilling Contractor: Exploration Geoservices
Drilling Equipment: Hollow Stem Auger
Sampling Equipment: SPT
Latitude: 37.2937527
Longitude: -120.6604318
Measuring Point Elevation: 112.48

Boring/Well No: **MW-4** Page 2 of 2
Boring Depth: 25 Feet
Boring Diameter: 8 Inches
Casing depth: 25 Feet
Casing Diameter: 2 Inches

Well Construction	PID Reading	Blow Counts	Sample	Depth (feet)	Lithology	Soil Type	Description
#2/12 RMC Pacific Materials Graded Silica Sand 2-Inch Sch 40 PVC Well Screen with 0.010-Inch Slots Threaded End Point		6 8 9		21 22 23 24 25		SM	SILTY SAND (SM), Moderate Yellowish Brown (10YR5/4), Medium Dense, Wet. 60% medium to fine sand. 40% non-plastic silt. Silt layer in SPT "shoe."
				26 27 28 29 30 31 32 33 34 35 36 37 38 39 40			Boring Terminated at 25 Feet.

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Project: Gallo Cattle Company Cottonwood Dairy
Logged By: Peter Castro, C.E.G. #1993
Drilling Date: 9/21/2004

Boring/Well Log

Drilling Contractor: Exploration Geoservices
Drilling Equipment: Hollow Stem Auger
Sampling Equipment: SPT
Latitude: 37.2892631
Longitude: -120.6635925
Measuring Point Elevation: 109.67

Boring/Well No: **MW-5**
Boring Depth: 23 Feet
Boring Diameter: 8 Inches
Casing depth: 23 Feet
Casing Diameter: 2 Inches

Locking Well Cap / PVC Stickup	PID Reading	Blow Counts	Sample	Depth (feet)	Lithology	Soil Type	Description
Grout to Ground Surface Neat Cement Grout 2-Inch Sch. 40 PVC Blank Well Casing				1, 2, 3		SM	SILTY SAND (SM), Moderate Brown (5YR4/4 to 5YR3/4) Medium Dense, Moist. 65% medium to fine sand. 35% non-plastic silt. Trace clay.
Bentonite Pellets (Hydrated)		5, 6, 7		4, 5, 6		SM	SILTY SAND (SM), Mottled: Dark Yellowish Orange (10YR6/6) to Moderate Yellowish Brown (10YR5/4), Medium Dense, Moist. 50% fine to medium sand. 50% low plasticity silt. Trace clay.
		12, 8, 6		7, 8, 9, 10, 11		SM	SILTY SAND (SM), Mottled: Light to Moderate Brown (5YR5/6 to 5YR4/4) Medium Dense, Moist. 60% fine to medium sand. 40% non-plastic silt.
#2/12 RMC Pacific Materials Graded Silica Sand				12, 13			
		6, 7, 6		14, 15		SM	SILTY SAND (SM), Moderate Yellowish Brown (10YR5/4) Medium Dense, Wet. 60% fine to medium sand. 40% non-plastic silt.
2-Inch Sch 40 PVC Well Screen with 0.010-Inch Slots				16, 17			
		5, 10, 14		18, 19, 20		SM	SILTY SAND (SM), Moderate Yellowish Brown to Light Olive Gray (10YR5/4 to 5Y5/2), Medium Dense, Wet. 55% fine to medium sand. 45% low plasticity silt. Trace clay.

ENVIRONMENTAL CONTROL ASSOCIATES, INC.
P.O. Box 52, Tahoe City, California 96145
(530) 581-0380 (530) 581-0389 FAX

Project: Gallo Cattle Company Cottonwood Dairy
Logged By: Peter Castro, C.E.G. #1993
Drilling Date: 9/21/2004

Boring/Well Log

Drilling Contractor: Exploration Geoservices
Drilling Equipment: Hollow Stem Auger
Sampling Equipment: SPT
Latitude: 37.2892631
Longitude: -120.6635925
Measuring Point Elevation: 109.87

Boring/Well No: **MW-5**
Boring Depth: 23 Feet
Boring Diameter: 8 Inches
Casing depth: 23 Feet
Casing Diameter: 2 Inches

Well Construction	PID Reading	Blow Counts	Sample	Depth (feet)	Lithology	Soil Type	Description
2-Inch Sch 40 PVC Well #2/12 RMC Pacific Materials Graded Silica Sand Threaded End Point				21 22 23		SM	SILTY SAND (SM), Moderate Yellowish Brown to Light Olive Gray (10YR5/4 to 5Y5/2), Medium Dense, Wet. 55% fine to medium sand. 45% low plasticity silt. Trace clay.
				24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40			Boring Terminated at 23 Feet.

ENVIRONMENTAL CONTROL ASSOCIATES, INC.
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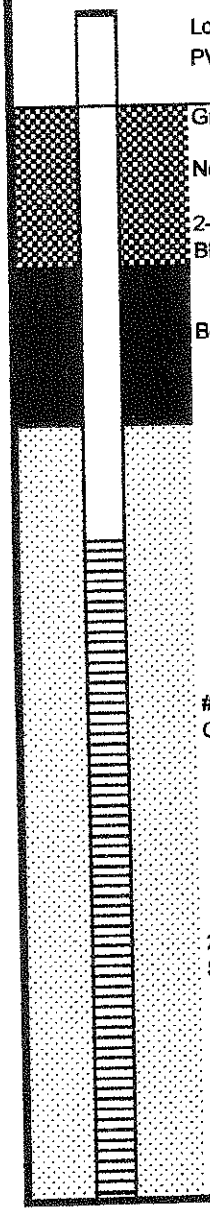
Project: Gallo Cattle Company Cottonwood Dairy
Logged By: Peter Castro, C.E.G. #1993
Drilling Date: 9/21/2004

Boring/Well Log

Drilling Contractor: Exploration Geoservices
Drilling Equipment: Hollow Stem Auger
Sampling Equipment: SPT
Latitude: 37.2882137
Longitude: -120.6646109
Measuring Point Elevation: 109.22

Boring/Well No: **MW-6**
Boring Depth: 23 Feet
Boring Diameter: 8 Inches
Casing depth: 23 Feet
Casing Diameter: 2 Inches



PID Reading	Blow Counts	Sample	Depth (feet)	Lithology	Soil Type	Description
			1, 2, 3		ML	SANDY SILT (ML) Moderate to Dark Yellowish Brown (10YR5/4 to 10YR4/2), Hard, Moist. 40% fine to medium sand. 60% low to moderate plasticity silt. Trace clay.
	8, 15, 20		4, 5			
			6			Contact approximate
			7, 8		SM	SILTY SAND (SM), Moderate Yellowish Brown (10YR5/4) Medium Dense, Moist. 60% medium to fine sand. 40% non-plastic silt. Trace clay.
	9, 10, 14		9, 10, 11			
			12			Contact approximate
			13		ML	SANDY SILT (ML), Moderate Yellowish Brown to Light Olive Gray (10YR5/4 to 5Y5/2), Very Stiff, Moist. 45% fine to medium sand. 55% low to moderate plasticity silt with clay.
	15, 17, 12		14, 15, 16			
			17			Contact approximate
			18		SM	SILTY SAND (SM), Moderate Yellowish Brown 910yr5/4), Medium Dense, Wet. 60% fine to medium sand. 40% non-plastic silt. Trace clay.
	5, 10, 10		19, 20			

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Project: Gallo Cattle Company Cottonwood Dairy
Logged By: Peter Castro, C.E.G. #1993
Drilling Date: 9/21/2004

Boring/Well Log

Drilling Contractor: Exploration Geoservices
Drilling Equipment: Hollow Stem Auger
Sampling Equipment: SPT
Latitude: 37.2882137
Longitude: -120.6646109
Measuring Point Elevation: 109.22

Boring/Well No: **MW-6**
Boring Depth: 23 Feet
Boring Diameter: 8 Inches
Casing depth: 23 Feet
Casing Diameter: 2 Inches

Well Construction	PID Reading	Blow Counts	Sample	Depth (feet)	Lithology	Soil Type	Description
2-Inch Sch 40 PVC Well #2/12 RMC Pacific Materials Graded Silica Sand Slip Cap with Screw				21 22 23		SM	SILTY SAND (SM), Moderate Yellowish Brown 910yr5/4), Medium Dense, Wet. 60% fine to medium sand. 40% non-plastic silt. Trace clay.
				24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40			Boring Terminated at 23 Feet.

ENVIRONMENTAL CONTROL ASSOCIATES, INC.
P.O. Box 52, Tahoe City, California 96145
(530) 581-0380 (530) 581-0389 FAX

Project: Gallo Cattle Company Cottonwood Dairy
Logged By: Peter Castro, C.E.G. #1993
Drilling Date: 9/21/2004

Boring/Well Log

Drilling Contractor: Exploration Geoservices
Drilling Equipment: Hollow Stem Auger
Sampling Equipment: SPT
Latitude: 37.2792611
Longitude: -120.6700421
Measuring Point Elevation: 108.36

Boring/Well No: **MW-7**
Boring Depth: 25 Feet
Boring Diameter: 8 Inches
Casing depth: 25 Feet
Casing Diameter: 2 Inches

Locking Well Cap / PVC Stickup	PID Reading	Blow Counts	Sample	Depth (feet)	Lithology	Soil Type	Description
Grout to Ground Surface				1		SM	SILTY SAND (SM), Moderate Yellowish Brown to Dark Yellowish Orange (10YR5/4 to 10YR6/6), Medium Dense, Dry. 55% fine to very fine sand. 45% non-plastic silt.
Neat Cement Grout				2			
2-Inch Sch. 40 PVC Blank Well Casing				3			
		3 3 20		4			
				5			
				6			
Bentonite Pellets (Hydrated)				7		SM	SILTY SAND (SM), Moderate Yellowish Brown (10YR5/4) Medium Dense, Moist. 55% fine to medium sand. 45% low to moderate plasticity silt. Trace clay.
				8			
		13 12 10		9			
				10			
				11			
#2/12 RMC Pacific Materials Graded Silica Sand				12			
				13			
		8 7 8		14		SM	SILTY SAND (SM), Moderate Yellowish Brown (10YR5/4) Medium Dense, Very Moist. 55% fine to medium sand. 45% low plasticity silt. Wet below 14.5 feet.
				15			
2-Inch Sch 40 PVC Well Screen with 0.010-Inch Slots				16			
				17			
				18			
		13 14 14		19			As above. Moist below 19.5 feet.
				20			

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Project: Gallo Cattle Company Cottonwood Dairy
Logged By: Peter Castro, C.E.G. #1993
Drilling Date: 9/22/2004

Boring/Well Log

Drilling Contractor: Exploration Geoservices
Drilling Equipment: Hollow Stem Auger
Sampling Equipment: SPT
Latitude: 37.2792611
Longitude: -120.6700421
Measuring Point Elevation: 108.36

Boring/Well No: **MW-7**
Boring Depth: 25 Feet
Boring Diameter: 8 Inches
Casing depth: 25 Feet
Casing Diameter: 2 Inches

Well Construction	PID Reading	Blow Counts	Sample	Depth (feet)	Lithology	Soil Type	Description
2-Inch Sch 40 PVC Well				21		SM	SILTY SAND (SM), Moderate Yellowish Brown (10YR5/4) Medium Dense, Wet. 60% fine sand. 40% non-plastic silt.
#2/12 RMC Pacific Materials Graded Silica Sand				22			
				23		ML SM	SANDY SILT/SILTY SAND (ML/SM), Moderate Yellowish Brown (10YR5/4) with Light Brown Stringers (5YR5/6). Hard, Moist. 45-50% fine sand. 50-55% low plast. Silt
		14 24 36		24			
Slip Cap with Screw				25			Boring Terminated at 25 Feet.
				26			
				27			
				28			
				29			
				30			
				31			
				32			
				33			
				34			
				35			
				36			
				37			
				38			
				39			
				40			

ENVIRONMENTAL CONTROL ASSOCIATES, INC.
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(530) 581-0380 (530) 581-0389 FAX

Project: Gallo Cattle Company Cottonwood Dairy
Logged By: Peter Castro, C.E.G. #1993
Drilling Date: 9/22/2004

Boring/Well Log

Drilling Contractor: Exploration Geoservices
Drilling Equipment: Hollow Stem Auger
Sampling Equipment: SPT
Latitude: 37.2847739
Longitude: -120.6803056
Measuring Point Elevation: 107.47

Boring/Well No: **MW-8** Page 1 of 2
Boring Depth: 22 Feet
Boring Diameter: 8 Inches
Casing depth: 22 Feet
Casing Diameter: 2 Inches

Locking Well Cap / PVC Stickup	PID Reading	Blow Counts	Sample	Depth (feet)	Lithology	Soil Type	Description
Grout to Ground Surface Neat Cement Grout 2-Inch Sch. 40 PVC Blank Well Casing		5 6 9		1 2 3 4 5		SM	SILTY SAND (SM), Moderate Yellowish Brown to Dark Yellowish Orange (10YR5/4 to 10YR6/6). Medium Dense, Moist. 60% fine sand. 40% non-plastic silt.
Bentonite Pellets (Hydrated)		8 13 16		6 7 8 9		CL CH	SILTY CLAY (CL/CH), Pale Yellowish Brown (10YR6/2) and Very Pale Orange (10YR8/2). Stiff, Moist. 20% fine sand. 80% moderate plasticity silt with clay.
#2/12 RMC Pacific Materials Graded Silica Sand				10 11 12 13		SM	SILTY SAND (SM), Moderate Yellowish Brown (10YR5/4), Medium Dense, Moist. 60% fine to medium sand. 40% non-plastic silt. Contact gradational
2-Inch Sch 40 PVC Well Screen with 0.010-Inch Slots		3 4 9		14 15 16 17		SC	CLAYEY SAND (SC), Moderate Yellowish Brown (10YR5/4). Medium Dense, Very Moist. 60% fine sand. 40% moderate plasticity silt and clay. Contact approximate
		8 17 18		18 19 20		MH SC	CLAYEY SILT (MH), Dusky Yellow (5Y6/4), Hard, Moist to Wet. Trace sand. 100% moderate to high plasticity silt with clay. CLAYEY SAND (SC), Moderate Yellowish Brown (10YR5/4). Dense, Very Moist to Wet.

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Project: Gallo Cattle Company Cottonwood Dairy
Logged By: Peter Castro, C.E.G. #1993
Drilling Date: 9/22/2004

Boring/Well Log

Drilling Contractor: Exploration Geoservices
Drilling Equipment: Hollow Stem Auger
Sampling Equipment: SPT
Latitude: 37.2847739
Longitude: -120.6803056
Measuring Point Elevation: 107.47

Boring/Well No: **MW-8**
Boring Depth: 22 Feet
Boring Diameter: 8 Inches
Casing depth: 22 Feet
Casing Diameter: 2 Inches

Well Construction	PID Reading	Blow Counts	Sample	Depth (feet)	Lithology	Soil Type	Description
2-inch Sch 40 PVC Well #2/12 RMC Pacific Materials Graded Silica Sand Slip Cap with Screw				21		SC	CLAYEY SAND (SC), Moderate Yellowish Brown (10YR5/4). Dense, Very Moist to Wet. 55% fine sand. 45% moderate plasticity silt and clay.
				22			Boring Terminated at 22 Feet.
				23			
				24			
				25			
				26			
				27			
				28			
				29			
				30			
				31			
				32			
				33			
				34			
				35			
				36			
				37			
				38			
				39			
				40			

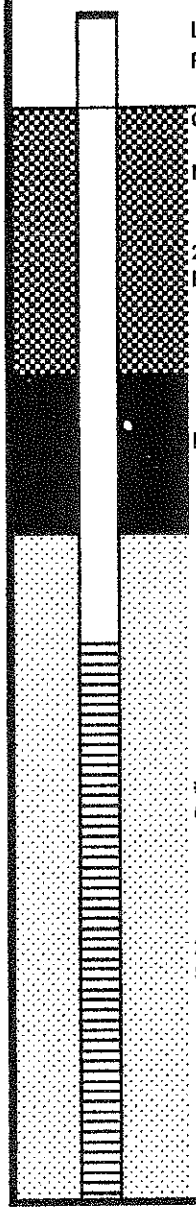
ENVIRONMENTAL CONTROL ASSOCIATES, INC.
P.O. Box 52, Tahoe City, California 96145
(530) 581-0380 (530) 581-0389 FAX

Project: Gallo Cattle Company Cottonwood Dairy
Logged By: Peter Castro, C.E.G. #1993
Drilling Date: 9/22/2004

Boring/Well Log

Drilling Contractor: Exploration Geoservices
Drilling Equipment: Hollow Stem Auger
Sampling Equipment: SPT
Latitude: 37.2696449
Longitude: -120.6652536
Measuring Point Elevation: 107.88

Boring/Well No: **MW-9**
Boring Depth: 25 Feet
Boring Diameter: 8 Inches
Casing depth: 25 Feet
Casing Diameter: 2 Inches



PID Reading	Blow Counts	Sample	Depth (feet)	Lithology	Soil Type	Description
			1, 2, 3, 4		CH / MH	SILTY CLAY (CH) to CLAYEY SILT (MH), Dusky Yellowish Brown (10YR2/2), Very Stiff to Hard, Moist. Trace sand. 100% high plasticity silt and clay. 60% fine sand. 40% non-plastic silt. Increasing sand with depth.
	7, 19, 18		5, 6, 7		SM / SC	SILTY SAND/CLAYEY SAND (SM/SC), Light Brown (5YR5/6), Medium Dense, Moist. 50% fine sand. 50% silt with clay (low plasticity). Contact gradational/approximate
	3, 3, 18		8, 9, 10, 11, 12, 13, 14		SM	SILTY SAND (SM), Moderate Yellowish Brown (10YR5/4), Medium Dense, Very Moist. 60% fine to medium sand. 40% non-plastic silt.
	7, 10, 12		15, 16, 17		ML	SANDY SILT (ML), Dark Yellowish Brown (10YR4/2), Stiff, Moist. 40% fine sand. 60% low plasticity silt with clay. Trace $CaCO_3$. Contact approximate
	5, 6, 7		18, 19, 20		ML / MH	CLAYEY SILT (ML/MH), Mottled: Very Pale Orange to Grayish Orange (10YR8/2 to 10YR7/4), Stiff, Moist. 10% fine sand. 90% moderate plasticity silt and clay.

ENVIRONMENTAL CONTROL ASSOCIATES, INC.
P.O. Box 52, Tahoe City, California 96145
(530) 581-0380 (530) 581-0389 FAX

Project: Gallo Cattle Company Cottonwood Dairy
Logged By: Peter Castro, C.E.G. #1993
Drilling Date: 9/22/2004

Boring/Well Log

Drilling Contractor: Exploration Geoservices
Drilling Equipment: Hollow Stem Auger
Sampling Equipment: SPT
Latitude: 37.2696449
Longitude: -120.6652536
Measuring Point Elevation: 107.88

Boring/Well No: **MW-9**
Boring Depth: 25 Feet
Boring Diameter: 8 Inches
Casing depth: 25 Feet
Casing Diameter: 2 Inches

Well Construction	PID Reading	Blow Counts	Sample	Depth (feet)	Lithology	Soil Type	Description
2-Inch Sch 40 PVC Well				21		ML MH	CLAYEY SILT (ML/MH), Mottled: Very Pale Orange to Grayish Orange (10YR8/2 to 10YR7/4), Stiff, Moist. 10% fine sand. 90% moderate plasticity silt and clay. Contact approximate
				22			
#2/12 RMC Pacific Materials Graded Silica Sand		6 8 8		23		SM	SILTY SAND (SM), Pale Yellowish Brown (10YR6/2), Medium Dense, Wet. 65% fine sand. 35% moderate plasticity silt
Slip Cap with Screw				24			
				25			Boring Terminated at 25 Feet.
				26			
				27			
				28			
				29			
				30			
				31			
				32			
				33			
				34			
				35			
				36			
				37			
				38			
				39			
				40			

ENVIRONMENTAL CONTROL ASSOCIATES, INC.
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Project: Gallo Cattle Company Cottonwood Dairy
Logged By: Peter Castro, C.E.G. #1993
Drilling Date: 9/22/2004

Boring/Well Log

Drilling Contractor: Exploration Geoservices
Drilling Equipment: Hollow Stem Auger
Sampling Equipment: SPT
Latitude: 37.2685595
Longitude: -120.6847843
Measuring Point Elevation: 103.17

Boring/Well No: **MW-10** Page 1 of 1
Boring Depth: 20 Feet
Boring Diameter: 8 Inches
Casing depth: 20 Feet
Casing Diameter: 2 Inches

Locking Well Cap / PVC Stickup	PID Reading	Blow Counts	Sample	Depth (feet)	Lithology	Soil Type	Description
Grout to Ground Surface							
Neat Cement Grout				1, 2		CL / CH	SILTY CLAY (CH), Dark Yellowish Brown (10YR4/2), Soft, Dry. 5% fine sand. 95% moderate to high plasticity silt and clay.
2-Inch Sch. 40 PVC Blank Well Casing				3			
		3, 1, 1		4, 5			
Bentonite Pellets (Hydrated)				6			
				7, 8		SM	SILTY SAND (SM), Moderate Yellowish Brown (10YR5/4), Medium Dense, Very Moist. 65% fine sand. 35% non-plastic to low plasticity silt.
		6, 8, 10		9, 10			
				11			Contact approximate
#2/12 RMC Pacific Materials Graded Silica Sand				12, 13		ML / MH	CLAYEY SILT (ML/MH), Grayish Orange (10YR7/4) to Dark Yellowish Orange (10YR6/6). Stiff, Moist. Trace sand. 100% moderate to high plasticity silt and clay Some $CaCO_3$ horizons and inclusions.
		4, 7, 10		14, 15			
2-Inch Sch 40 PVC Well Screen with 0.010-Inch Slots				16		SC	CLAYEY SAND (SC), Moderate Yellowish Brown (10YR5/4), Medium Dense, Moist. 55% fine sand. 45% low plasticity silt and clay.
				17			Contact approximate
				18		SM	SILTY SAND (SM), Moderate Yellowish Brown (10YR5/4), Medium Dense, Wet. 60% fine to medium sand. 40% non-plastic silt.
		5, 8, 9		19			
Threaded End Point				20			Boring terminated at 20 feet.

ENVIRONMENTAL CONTROL ASSOCIATES, INC.
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(530) 581-0380 (530) 581-0389 FAX

Project: Gallo Cattle Company Cottonwood Dairy
Logged By: Peter Castro, C.E.G. #1993
Drilling Date: 9/22/2004

End Document

Attachment B2

Land Surveyors' Reports

Project:	Moonshine Dairy, 22922 Kilburn Road, Crows Landing CA	**Coordinate System:**	US State Plane 1983
Client:	Luhdorff & Scalmanini Consulting Engineers	**Datum:**	NAD 1983 (Conus)
Consultant:	Epic Land Surveying, Inc., Ryan Schiess, PLS	**Zone:**	California Zone 3 0403
Survey Date:	12/14/2012	**Geoid:**	2007
Report Date:	1/18/2013	**Vertical Datum:**	NAVD 1988
		Survey Instruments/Methods:	Trimble R8 GNSS, Trimble DiNi Digital Level/RTK (Horizontal), Differential Leveling (Vertical)

Point List

Point ID	Northing	Easting	Elevation	Feature Code	Latitude(Global)	Longitude(Global)
4001	1967636.849	6412171.43	73.957	N.T.O.C. MOO-MW1	N37°23'51.20785"	W121°00'52.68231"
3002	1966963.304	6412958.349	75.579	N.T.O.C. MOO-MW2	N37°23'44.59111"	W121°00'42.88463"
3003	1966797.08	6411259.815	76.893	N.T.O.C. MOO-MW3	N37°23'42.85525"	W121°01'03.92208"
3004	1965040.324	6411055.118	78.197	N.T.O.C. MOO-MW4	N37°23'25.47479"	W121°01'06.33814"

The horizontal coordinates of each monitoring well listed were surveyed on the above date within +/- one-foot lateral accuracy. The elevation of each monitoring well was surveyed within an absolute accuracy of +/- 0.5 foot and a relative accuracy between monitoring wells of +/- 0.01 of a foot.

LICENSED LAND SURVEYOR
RYAN J. SCHIESS
No. 8366
Exp. 12-31-13
STATE OF CALIFORNIA

Project:	Anchor J. Dairy, 24507 First Ave., Stevinson CA	**Coordinate System:**	US State Plane 1983
Client:	Luhdorff & Scalmanini Consulting Engineers	**Datum:**	NAD 1983 (Conus)
Consultant:	Epic Land Surveying, Inc., Ryan Schiess, PLS	**Zone:**	California Zone 3 0403
Survey Date:	12/7/2013	**Geoid:**	2007
Report Date:	1/14/2013	**Vertical Datum:**	NAVD 1988
		Survey Instruments/Methods:	Trimble R8 GNSS, Trimble DiNi Digital Level/RTK (Horizontal), Differential Leveling (Vertical)

Point List

Point ID	Northing	Easting	Elevation	Feature Code	Latitude(Global)	Longitude(Global)
3001	1945611.757	6434257.495	72.819	N.T.O.C.ANCJ MW1	N37°20'14.55410"	W120°56'17.69765"
3002	1945080.407	6434471.316	80.298	N.T.O.C.ANCJ MW2	N37°20'09.31043"	W120°56'15.01919"
3003	1945575.382	6434719.012	70.748	N.T.O.C.ANCJ MW3	N37°20'14.21578"	W120°56'11.98070"
3004	1946138.915	6434512.712	81.269	N.T.O.C.ANCJ MW4	N37°20'19.77802"	W120°56'14.56787"

The horizontal coordinates of each monitoring well listed were surveyed on the above date within +/- one-foot lateral accuracy. The elevation of each monitoring well was surveyed within an absolute accuracy of +/- 0.5 foot and a relative accuracy between monitoring wells of +/- 0.01 of a foot.

Project:	Gallo Cattle Company Cottonwood Dairy, 10561 Hwy. 140, Atwater CA	**Coordinate System:**	US State Plane 1983
Client:	Luhdorff & Scalmanini Consulting Engineers	**Datum:**	NAD 1983 (Conus)
Consultant:	Epic Land Surveying, Inc., Ryan Schiess, PLS	**Zone:**	California Zone 3 0403
Survey Date:	12/13/2013	**Geoid:**	2007
Report Date:	1/14/2013	**Vertical Datum:**	NAVD 1988
		Survey Instruments/Methods:	Trimble R8 GNSS, Trimble DiNi Digital Level/RTK (Horizontal), Differential Leveling (Vertical)

Point List

Point ID	Northing	Easting	Elevation	Feature Code	Latitude(Global)	Longitude(Global)
3001	1932007.46	6511443.046	115.608	N.T.O.C.@COT MW1	N37°18'02.53578"	W120°40'21.60812"
3002	1932386.63	6516418.317	117.096	N.T.O.C.@COT MW2	N37°18'06.37101"	W120°39'20.03806"
3003	1926560.091	6516571.894	114.872	N.T.O.C.@COT MW3	N37°17'08.76480"	W120°39'18.01781"
3004	1929470.27	6514997.949	114.485	N.T.O.C.@COT MW4	N37°17'37.51238"	W120°39'37.55603"
3005	1927837.259	6514075.602	112.273	N.T.O.C.@COT MW5	N37°17'21.35053"	W120°39'48.93533"
3006	1927455.63	6513778.713	111.334	N.T.O.C.@COT MW6	N37°17'17.57211"	W120°39'52.60098"
3007	1924198.868	6512192.755	110.285	N.T.O.C.@COT MW7	N37°16'45.34348"	W120°40'12.15353"
3008	1926211.552	6509210.421	108.767	N.T.O.C.@COT MW8	N37°17'05.18829"	W120°40'49.10262"
3009	1920695.061	6513579.898	109.573	N.T.O.C.@COT MW9	N37°16'10.72486"	W120°39'54.91354"
3010	1920310.5	6507895.855	104.803	N.T.O.C.@COT MW10	N37°16'06.81748"	W120°41'05.22506"

The horizontal coordinates of each monitoring well listed were surveyed on the above date within +/- one-foot lateral accuracy. The elevation of each monitoring well was surveyed within an absolute accuracy of +/- 0.5 foot and a relative accuracy between monitoring wells of +/- 0.01 of a foot.

LICENSED LAND SURVEYOR
RYAN J. SCHIESS
No. 8366
Exp. 12-31-13
STATE OF CALIFORNIA

Attachment B3

Field Sheets from Monthly Monitoring Campaigns, 2012

Depth-to-Water Measurements 2012

January

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Albert Mendes Dairy

1100 Ruble Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR

Instrumentation: SOLINST

Monitoring Well Name	Date mm/dd/yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MEN-MW1s	01/29/2012	8:57 AM	8.77	DEL	
MEN-MW1d	01/29/2012	9:00 AM	8.90	DEL	
MEN-MW2s	01/29/2012	9:07 AM	8.89	DEL	
MEN-MW2d	01/29/2012	9:10 AM	8.77	DEL	
MEN-MW3s	01/29/2012	9:14 AM	8.70	DEL	
MEN-MW3d	01/29/2012	9:15 AM	8.52	DEL	
MEN-MW4s	01/29/2012	9:20 AM	8.02	DEL	
MEN-MW4d	01/29/2012	9:21 AM	7.84	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Albert Mendes Dairy

1100 Ruble Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR

Instrumentation: SOLINST

Monitoring Well Name	Date mm/dd/yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MEN-MW5s	01/29/2012	9:24 AM	8.19	DEL	
MEN-MW5d	01/29/2012	9:25 AM	8.07	DEL	
MEN-MW6s	01/29/2012	9:27 AM	8.70	DEL	
MEN-MW6d	01/29/2012	9:28 AM	8.63	DEL	
MEN-MW7s	01/29/2012	9:30 AM	4.34	DEL	PONDING WATER NEXT TO WELL IN FIELD.
MEN-MW7d	01/29/2012	9:32 AM	4.32	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Anchor J. Dairy

24507 First Ave., Stevinson, CA 95374

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ANC-MW1	01/30/2012	2:13 PM	12.58	AL	FLUSH / NO WATERRA
ANC-MW2	01/30/2012	2:16 PM	19.85	AL	FLUSH / NO WATERRA
ANC-MW3	01/30/2012	2:20 PM	10.00	AL	FLUSH / NO WATERRA
ANC-MW4	01/30/2012	2:09 PM	20.70	AL	FLUSH / NO WATERRA
ANC-MW5s	01/30/2012	2:00 PM	15.39	AL	
ANC-MW5d	01/30/2012	2:03 PM	15.75	AL	
ANC-MW6s	01/30/2012	2:30 PM	13.72	AL	
ANC-MW6d	01/30/2012	2:33 PM	13.62	AL	
ANC-MW7s	01/30/2012	2:40 PM	13.13	AL	
ANC-MW7d	01/30/2012	2:42 PM	13.04	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Bettencourt and Marson Dairy

18128 American Ave., Hilmar, CA 95324

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
BET-MW1s	01/29/2012	9:58 AM	10.05	DEL	
BET-MW1d	01/29/2012	9:58 AM	9.55	DEL	
BET-MW2s	01/29/2012	10:02 AM	11.42	DEL	
BET-MW2d	01/29/2012	10:04 AM	11.10	DEL	
BET-MW3s	01/29/2012	10:06 AM	10.10	DEL	
BET-MW3d	01/29/2012	10:06 AM	9.92	DEL	
BET-MW4s	01/29/2012	9:50 AM	9.19	DEL	
BET-MW4d	01/29/2012	9:51 AM	8.31	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Bettencourt and Marson Dairy

18128 American Ave., Hilmar, CA 95324

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
BET-MW5s	01/29/2012	10:08 AM	10.62	DEL	
BET-MW5d	01/29/2012	10:09 AM	10.42	DEL	
BET-MW6s	01/29/2012	10:11 AM	11.10	DEL	
BET-MW6d	01/29/2012	10:11 AM	10.87	DEL	
BET-MW7s	01/29/2012	10:14 AM	11.96	DEL	
BET-MW7d	01/29/2012	10:15 AM	11.70	DEL	
BET-MW8s	01/29/2012	10:17 AM	12.39	DEL	
BET-MW8d	01/29/2012	10:17 AM	12.20	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Frank J. Gomes Dairy #1

5301 N. DeAngelis Rd., Stevinson, CA 95374

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
FG1-MW1s	01/30/2012	12:25 PM	16.44	AL	
FG1-MW1d	01/30/2012	12:27 PM	16.14	AL	
FG1-MW2s	01/30/2012	12:37 PM	DRY	AL	
FG1-MW2d	01/30/2012	12:40 PM	20.04	AL	
FG1-MW3s	01/30/2012	12:31 PM	17.55	AL	
FG1-MW3d	01/30/2012	12:33 PM	17.90	AL	
FG1-MW4s	01/30/2012	12:45 PM	16.45	AL	
FG1-MW4d	01/30/2012	12:47 PM	16.11	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Frank J. Gomes Dairy #1

5301 N. DeAngelis Rd., Stevinson, CA 95374

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
FG1-MW5s	01/30/2012	1:13 PM	16.05	AL	
FG1-MW5d	01/30/2012	1:15 PM	15.85	AL	
FG1-MW6s	01/30/2012	1:23 PM	19.52	AL	
FG1-MW6d	01/30/2012	1:25 PM	19.31	AL	
FG1-MW7s	01/30/2012	12:55 PM	18.69	AL	
FG1-MW7d	01/30/2012	12:57 PM	18.41	AL	
FG1-MW8s	01/30/2012	1:05 PM	18.29	AL	
FG1-MW8d	01/30/2012	1:08 PM	18.02	AL	
FG1-MW9s	01/30/2012	1:36 PM	16.95	AL	ONLY ACCESS THIS WELL FROM THE WEST.
FG1-MW9d	01/30/2012	1:38 PM	17.08	AL	ROADWAY FROM THE EAST IS WASHED OUT.

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Bear Creek

15751 W. Hwy. 140, Livingston, CA 95334

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
BEA-MW1s	01/30/2012	1:00 PM	21.85	TA	
BEA-MW1d	01/30/2012	1:02 PM	21.53	TA	
BEA-MW2s	01/30/2012	1:08 PM	19.59	TA	
BEA-MW2d	01/30/2012	1:08 PM	19.64	TA	
BEA-MW3s	01/30/2012	1:14 PM	17.30	TA	
BEA-MW3d	01/30/2012	1:15 PM	17.43	TA	
BEA-MW4s	01/30/2012	1:28 PM	20.73	TA	
BEA-MW4d	01/30/2012	1:30 PM	20.55	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Cottonwood

10561 Hwy. 140, Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
COT-MW1	01/30/2012	10:40 AM	30.35	TA	
COT-MW2	01/30/2012	10:41 AM	24.61	TA	
COT-MW3	01/30/2012	10:43 AM	17.39	TA	
COT-MW4	01/30/2012	10:47 AM	21.29	TA	
COT-MW5	01/30/2012	10:50 AM	16.64	TA	
COT-MW6	01/30/2012	10:51 AM	16.24	TA	
COT-MW7	01/30/2012	10:55 AM	12.19	TA	
COT-MW8	01/30/2012	10:56 AM	14.01	TA	
COT-MW9	01/30/2012	10:59 AM	10.62	TA	
COT-MW10	01/30/2012	11:02 AM	6.84	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Cottonwood

10561 Hwy. 140, Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
COT-MW11s	01/30/2012	11:04 AM	23.83	TA	
COT-MW11d	01/30/2012	11:07 AM	23.60	TA	
COT-MW12s	01/30/2012	11:14 AM	24.10	TA	
COT-MW12d	01/30/2012	11:15 AM	23.89	TA	
COT-MW13s	01/30/2012	11:17 AM	25.33	TA	
COT-MW13d	01/30/2012	11:19 AM	25.19	TA	
COT-MW14s	01/30/2012	11:24 AM	25.30	TA	
COT-MW14d	01/30/2012	11:28 AM	24.98	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Santa Rita

91 S. Bert Crane Rd., Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
SAN-MW1s	01/30/2012	11:45 AM	22.36	TA	
SAN-MW1d	01/30/2012	11:46 AM	22.10	TA	
SAN-MW2s	01/30/2012	11:50 AM	DRY	TA	
SAN-MW2d	01/30/2012	11:52 AM	29.29	TA	
SAN-MW3s	01/30/2012	11:55 AM	DRY	TA	
SAN-MW3d	01/30/2012	12:10 PM	29.87	TA	
SAN-MW4s	01/30/2012	12:12 PM	30.14	TA	
SAN-MW4d	01/30/2012	12:18 PM	29.75	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Santa Rita

91 S. Bert Crane Rd., Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
SAN-MW5s	01/30/2012	12:20 PM	26.05	TA	
SAN-MW5d	01/30/2012	12:25 PM	25.90	TA	
SAN-MW6s	01/30/2012	12:27 PM	13.20	TA	
SAN-MW6d	01/30/2012	12:30 PM	13.04	TA	
SAN-MW9s	01/30/2012	12:37 PM	14.33	TA	
SAN-MW9d	01/30/2012	12:40 PM	14.26	TA	
SAN-MW10s	01/30/2012	12:43 PM	16.12	TA	
SAN-MW10d	01/30/2012	12:45 PM	15.83	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

P. & L. Souza Dairy

20633 Crane Ave., Hilmar, CA 95324

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
PLS-MW1s	01/30/2012	11:50 AM	10.83	AL	
PLS-MW1d	01/30/2012	11:52 AM	10.55	AL	
PLS-MW2s	01/30/2012	11:57 AM	9.55	AL	
PLS-MW2d	01/30/2012	12:00 PM	9.41	AL	
PLS-MW3s	01/30/2012	11:30 AM		AL	COULD NOT LOOSEN BOLTS, NEED BIGGER WRENCH
PLS-MW3d	01/30/2012	11:30 AM		AL	COULD NOT LOOSEN BOLTS, NEED BIGGER WRENCH
PLS-MW4s	01/30/2012	12:04 PM	10.08	AL	
PLS-MW4d	01/30/2012	12:06 PM	9.68	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

P. & L. Souza Dairy

20633 Crane Ave., Hilmar, CA 95324

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
PLS-MW5s	01/30/2012	12:10 PM		AL	COULD NOT LOOSEN BOLTS, NEED BIGGER WRENCH
PLS-MW5d	01/30/2012	12:12 PM		AL	COULD NOT LOOSEN BOLTS, NEED BIGGER WRENCH
PLS-MW6s	01/30/2012	11:35 AM	7.95	AL	
PLS-MW6d	01/30/2012	11:37 AM	8.52	AL	
PLS-MW7s	01/30/2012	11:41 AM	9.29	AL	
PLS-MW7d	01/30/2012	11:43 AM	9.53	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Paul Caetano Dairy

9436 Griffith Ave., Delhi, CA 95315

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
CAE-MW1s	01/29/2012	10:33 AM	11.48	DEL	LOCK IS HARD TO OPEN.
CAE-MW1d	01/29/2012	10:34 AM	11.02	DEL	
CAE-MW2s	01/29/2012	10:37 AM	11.55	DEL	
CAE-MW2d	01/29/2012	10:38 AM	11.30	DEL	
CAE-MW3s	01/29/2012	10:44 AM	11.22	DEL	
CAE-MW3d	01/29/2012	10:45 AM	11.12	DEL	
CAE-MW4s	01/29/2012	10:47 AM	12.12	DEL	
CAE-MW4d	01/29/2012	10:47 AM	11.90	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Paul Caetano Dairy

9436 Griffith Ave., Delhi, CA 95315

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
CAE-MW5s	01/29/2012	10:49 AM	8.73	DEL	
CAE-MW5d	01/29/2012	10:50 AM	8.32	DEL	NO WATERRA
CAE-MW6s	01/29/2012	10:53 AM	11.00	DEL	NO WATERRA
CAE-MW6d	01/29/2012	10:53 AM	10.85	DEL	NO WATERRA

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Robert Gioletti and Sons Dairy

118 N. Blaker Rd., Turlock, CA 95380

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ROB-MW1s	01/29/2012	11:32 AM	11.86	DEL	
ROB-MW1d	01/29/2012	11:32 AM	11.54	DEL	
ROB-MW2s	01/29/2012	11:36 AM	12.47	DEL	
ROB-MW2d	01/29/2012	11:37 AM	12.25	DEL	
ROB-MW3s	01/29/2012	11:40 AM	10.65	DEL	
ROB-MW3d	01/29/2012	11:41 AM	10.55	DEL	
ROB-MW4s	01/29/2012	11:22 AM	10.12	DEL	
ROB-MW4d	01/29/2012	11:23 AM	9.98	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Robert Gioletti and Sons Dairy

118 N. Blaker Rd., Turlock, CA 95380

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ROB-MW5s	01/29/2012	11:28 AM	10.61	DEL	
ROB-MW5d	01/29/2012	11:28 AM	10.48	DEL	
ROB-MW6s	01/29/2012	11:45 AM	12.05	DEL	
ROB-MW6d	01/29/2012	11:47 AM	11.92	DEL	
ROB-MW7s	01/29/2012	11:50 AM	10.75	DEL	
ROB-MW7d	01/29/2012	11:51 AM	10.86	DEL	
ROB-MW8s	01/29/2012	11:54 AM	10.47	DEL	
ROB-MW8d	01/29/2012	11:54 AM	10.56	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Antone L. Gomes and Sons Dairy

515 E. Stuhr Rd., Newman, CA 95360

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ANT-MW1s	01/30/2012	10:45 AM	20.38	AL	
ANT-MW1d	01/30/2012	10:47 AM	20.29	AL	
ANT-MW2s	01/30/2012	10:11 AM	20.68	AL	
ANT-MW2d	01/30/2012	10:14 AM	20.28	AL	
ANT-MW3s	01/30/2012	10:33 AM	20.73	AL	
ANT-MW3d	01/30/2012	10:36 AM	20.74	AL	
ANT-MW4s	01/30/2012	10:22 AM	20.77	AL	
ANT-MW4d	01/30/2012	10:25 AM	20.65	AL	NO WATERRA

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Antone L. Gomes and Sons Dairy

515 E. Stuhr Rd., Newman, CA 95360

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ANT-MW5s	01/30/2012	10:52 AM	23.83	AL	
ANT-MW5d	01/30/2012	10:54 AM	23.99	AL	
ANT-MW6s	01/30/2012	10:58 AM	18.45	AL	
ANT-MW6d	01/30/2012	11:01 AM	18.47	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Correia Family Dairy Farms

26380 W. Fahey Rd., Gustine, CA 95322

Weather Conditions: CLOUDY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
COR-MW1s	01/30/2012	4:10 PM	6.65	TA	
COR-MW1d	01/30/2012	4:10 PM	6.51	TA	
COR-MW2s	01/30/2012	4:15 PM	6.10	TA	
COR-MW2d	01/30/2012	4:15 PM	5.87	TA	
COR-MW3s	01/30/2012	4:20 PM	7.25	TA	
COR-MW3d	01/30/2012	4:20 PM	7.10	TA	
COR-MW4s	01/30/2012	4:30 PM	6.19	TA	
COR-MW4d	01/30/2012	4:30 PM	6.07	TA	
COR-MW5s	01/30/2012	4:40 PM	6.49	TA	
COR-MW5d	01/30/2012	4:40 PM	6.34	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Frank J. Gomes Dairy #2

890 Kniebes Rd., Gustine, CA 95322

Weather Conditions: CLOUDY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
FG2-MW1s	01/30/2012	9:34 AM	5.59	AL	
FG2-MW1d	01/30/2012	9:35 AM	5.29	AL	
FG2-MW2s	01/30/2012	9:40 AM	9.03	AL	
FG2-MW2d	01/30/2012	9:40 AM	9.01	AL	
FG2-MW3s	01/30/2012	9:48 AM	9.65	AL	
FG2-MW3d	01/30/2012	9:49 AM	9.21	AL	
FG2-MW4s	01/30/2012	10:03 AM	10.05	AL	
FG2-MW4d	01/30/2012	10:05 AM	9.60	AL	
FG2-MW5s	01/30/2012	10:07 AM	9.65	AL	
FG2-MW5d	01/30/2012	10:08 AM	9.21	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Godinho Dairy

12710 S. Wilson Rd., Los Banos, CA 93635

Weather Conditions: CLOUDY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
GOD-MW1s	01/30/2012	3:33 PM	8.71	TA	
GOD-MW1d	01/30/2012	3:33 PM	8.64	TA	
GOD-MW2s	01/30/2012	3:40 PM	10.99	TA	
GOD-MW2d	01/30/2012	3:40 PM	10.90	TA	
GOD-MW3s	01/30/2012	3:43 PM	11.55	TA	
GOD-MW3d	01/30/2012	3:43 PM	11.44	TA	
GOD-MW4s	01/30/2012	12:00 AM	11.93	TA	
GOD-MW4d	01/30/2012	3:50 PM	11.58	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Godinho Dairy

12710 S. Wilson Rd., Los Banos, CA 93635

Weather Conditions: CLOUDY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
GOD-MW5s	01/30/2012	3:55 PM	6.12	TA	STANDING H20 AROUND WELL.
GOD-MW5d	01/30/2012	3:55 PM	5.86	TA	
GOD-MW6s	01/30/2012	4:00 PM	6.84	TA	
GOD-MW6d	01/30/2012	4:00 PM	6.74	TA	
GOD-MW7s	01/30/2012	4:05 PM	5.79	TA	
GOD-MW7d	01/30/2012	4:05 PM	5.75	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

John Machado Dairy

22495 W. China Camp Rd., Los Banos, CA 93635

Weather Conditions: CLOUDY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MAC-MW1s	01/30/2012	3:05 PM	6.87	TA	
MAC-MW1d	01/30/2012	3:05 PM	6.79	TA	
MAC-MW2s	01/30/2012	3:10 PM	6.04	TA	
MAC-MW2d	01/30/2012	3:10 PM	5.82	TA	
MAC-MW3s	01/30/2012	3:15 PM	6.10	TA	
MAC-MW3d	01/30/2012	3:15 PM	6.00	TA	
MAC-MW4s	01/30/2012	3:20 PM	6.01	TA	
MAC-MW4d	01/30/2012	3:20 PM	5.95	TA	
MAC-MW5s	01/30/2012	3:25 PM	5.23	TA	
MAC-MW5d	01/30/2012	3:25 PM	5.04	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Jose Nunes Dairy

22484 W. China Camp Rd., Los Banos, CA 93635

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
NUN-MW1s	01/30/2012	2:30 PM	7.76	TA	
NUN-MW1d	01/30/2012	2:30 PM	7.50	TA	
NUN-MW2s	01/30/2012	2:40 PM	8.02	TA	WELL SAYS MW2 / PAINT ON CONC SAYS MW-1
NUN-MW2d	01/30/2012	2:40 PM	7.86	TA	WELL SAYS MW2 / PAINT ON CONC SAYS MW-1
NUN-MW3s	01/30/2012	2:50 PM	5.91	TA	
NUN-MW3d	01/30/2012	2:50 PM	5.84	TA	
NUN-MW4s	01/30/2012	3:00 PM	7.04	TA	
NUN-MW4d	01/30/2012	3:00 PM	6.98	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Moonshine Dairy

22922 Kilburn Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MOO-MW1	01/30/2012	9:06 AM	13.15	AL	NO WATERRA
MOO-MW2	01/30/2012	9:12 AM	18.68	AL	NO WATERRA / FLUSH
MOO-MW3	01/30/2012	8:36 AM	11.77	AL	NO WATERRA
MOO-MW4	01/30/2012	8:56 AM	12.32	AL	PONDING AROUND WELL
MOO-MW5s	01/30/2012	8:45 AM	12.11	AL	
MOO-MW5d	01/30/2012	8:48 AM	13.63	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Moonshine Dairy

22922 Kilburn Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MOO-MW6s	01/30/2012	9:24 AM	20.00	AL	
MOO-MW6d	01/30/2012	9:27 AM	21.85	AL	
MOO-MW7s	01/30/2012	9:33 AM	17.79	AL	
MOO-MW7d	01/30/2012	9:37 AM	17.76	AL	
MOO-MW8s	01/30/2012	9:44 AM	18.54	AL	
MOO-MW8d	01/30/2012	9:46 AM	18.28	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Tony L. Lopes Dairy LP

27500 Bunker Rd., Gustine, CA 95322

Weather Conditions: CLOUDY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
TON-MW1s	01/30/2012	4:33 PM	7.53	AL	
TON-MW1d	01/30/2012	4:34 PM	7.19	AL	
TON-MW2s	01/30/2012	4:37 PM	6.73	AL	
TON-MW2d	01/30/2012	4:40 PM	6.55	AL	
TON-MW3s	01/30/2012	4:44 PM	9.83	AL	
TON-MW3d	01/30/2012	4:45 PM	9.75	AL	
TON-MW4s	01/30/2012	4:47 PM	8.98	AL	
TON-MW4d	01/30/2012	4:50 PM	8.68	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Tony L. Lopes Dairy LP

27500 Bunker Rd., Gustine, CA 95322

Weather Conditions: CLOUDY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
TON-MW5s	01/30/2012	4:52 PM	8.65	AL	
TON-MW5d	01/30/2012	4:55 PM	8.48	AL	
TON-MW6s	01/30/2012	4:55 PM	9.00	AL	
TON-MW6d	01/30/2012	5:03 PM	8.50	AL	
TON-MW7s	01/30/2012	5:05 PM	7.65	AL	
TON-MW7d	01/30/2012	5:07 PM	7.33	AL	
TON-MW8s	01/30/2012	5:09 PM	9.79	AL	
TON-MW8d	01/30/2012	5:11 PM	9.25	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

February

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Albert Mendes Dairy

1100 Ruble Rd., Crows Landing, CA 95313

Weather Conditions: OVERCAST

Instrumentation: SOLINST

Monitoring Well Name	Date mm/dd/yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MEN-MW1s	02/07/2012	5:25 PM	7.12	TA	
MEN-MW1d	02/07/2012	5:26 PM	6.98	TA	
MEN-MW2s	02/07/2012	5:11 PM	7.04	TA	
MEN-MW2d	02/07/2012	5:12 PM	6.90	TA	
MEN-MW3s	02/07/2012	4:05 PM	6.85	TA	
MEN-MW3d	02/07/2012	4:06 PM	6.65	TA	
MEN-MW4s	02/07/2012	3:47 PM	6.32	TA	
MEN-MW4d	02/07/2012	3:48 PM	6.20	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Albert Mendes Dairy

1100 Ruble Rd., Crows Landing, CA 95313

Weather Conditions: OVERCAST

Instrumentation: SOLINST

Monitoring Well Name	Date mm/dd/yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MEN-MW5s	02/07/2012	3:26 PM	7.72	TA	
MEN-MW5d	02/07/2012	3:27 PM	7.64	TA	
MEN-MW6s	02/07/2012	4:50 PM	5.79	TA	
MEN-MW6d	02/07/2012	4:51 PM	5.70	TA	
MEN-MW7s	02/07/2012	4:25 PM	4.26	TA	
MEN-MW7d	02/07/2012	4:26 PM	4.14	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICTA SUPPORT SERVICES

Monitoring Well Field Log

Anchor J. Dairy

24507 First Ave., Stevinson, CA 95374

Weather Conditions: OVERCAST / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's InitiTAs	Observations & Comments
ANC-MW1	02/12/2012	4:41 PM	12.25	DEL	
ANC-MW2	02/12/2012	5:03 PM	20.26	DEL	
ANC-MW3	02/12/2012	5:19 PM	10.23	DEL	
ANC-MW4	02/12/2012	5:40 PM	20.90	DEL	
ANC-MW5s	02/12/2012	4:13 PM	15.50	DEL	
ANC-MW5d	02/12/2012	4:14 PM	15.50	DEL	
ANC-MW6s	02/12/2012	3:47 PM	14.05	DEL	
ANC-MW6d	02/12/2012	3:48 PM	13.94	DEL	
ANC-MW7s	02/12/2012	3:20 PM	13.67	DEL	
ANC-MW7d	02/12/2012	3:21 PM	13.58	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Bettencourt and Marson Dairy

18128 American Ave., Hilmar, CA 95324

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
BET-MW1s	02/08/2012	12:56 PM	10.00	DEL	
BET-MW1d	02/08/2012	12:57 PM	9.40	DEL	
BET-MW2s	02/08/2012	1:14 PM	11.38	DEL	
BET-MW2d	02/08/2012	1:15 PM	11.08	DEL	
BET-MW3s	02/08/2012	1:24 PM	10.07	DEL	
BET-MW3d	02/08/2012	1:25 PM	9.90	DEL	
BET-MW4s	02/08/2012	1:46 PM	8.58	DEL	
BET-MW4d	02/08/2012	1:47 PM	7.78	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Bettencourt and Marson Dairy

18128 American Ave., Hilmar, CA 95324

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
BET-MW5s	02/09/2012	11:25 AM	11.00	DEL	
BET-MW5d	02/09/2012	11:26 AM	10.82	DEL	
BET-MW6s	02/09/2012	10:56 AM	11.46	DEL	
BET-MW6d	02/09/2012	10:57 AM	11.23	DEL	
BET-MW7s	02/09/2012	2:16 PM	12.20	DEL	
BET-MW7d	02/09/2012	2:17 PM	12.00	DEL	
BET-MW8s	02/09/2012	12:09 PM	12.72	DEL	
BET-MW8d	02/09/2012	12:10 PM	12.57	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICTA SUPPORT SERVICES

Monitoring Well Field Log

Frank J. Gomes Dairy #1

5301 N. DeAngelis Rd., Stevinson, CA 95374

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's InitiTAs	Observations & Comments
FG1-MW1s	02/12/2012	12:00 PM	16.62	DEL	
FG1-MW1d	02/12/2012	12:01 PM	16.30	DEL	
FG1-MW2s	02/12/2012	12:25 PM	DRY	DEL	
FG1-MW2d	02/12/2012	12:26 PM	20.18	DEL	
FG1-MW3s	02/12/2012	12:46 PM	DRY	DEL	
FG1-MW3d	02/12/2012	12:47 PM	18.08	DEL	
FG1-MW4s	02/12/2012	1:10 PM	15.58	DEL	
FG1-MW4d	02/12/2012	1:11 PM	16.23	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICTA SUPPORT SERVICES

Monitoring Well Field Log

Frank J. Gomes Dairy #1

5301 N. DeAngelis Rd., Stevinson, CA 95374

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's InitiTAs	Observations & Comments
FG1-MW5s	02/12/2012	2:00 PM	16.22	DEL	
FG1-MW5d	02/12/2012	2:01 PM	16.03	DEL	
FG1-MW6s	02/12/2012	1:43 PM	19.32	DEL	
FG1-MW6d	02/12/2012	1:44 PM	19.10	DEL	
FG1-MW7s	02/12/2012	1:23 PM	18.82	DEL	
FG1-MW7d	02/12/2012	1:24 PM	18.55	DEL	
FG1-MW8s	02/12/2012	2:36 PM	18.45	DEL	
FG1-MW8d	02/12/2012	2:37 PM	18.20	DEL	
FG1-MW9s	02/12/2012	2:50 PM	17.21	DEL	
FG1-MW9d	02/12/2012	2:51 PM	17.28	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Bear Creek

15751 W. Hwy. 140, Livingston, CA 95334

Weather Conditions: OVERCAST

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
BEA-MW1s	02/13/2012	10:37 AM	21.86	TA	
BEA-MW1d	02/13/2012	10:38 AM	21.73	TA	
BEA-MW2s	02/13/2012	9:30 AM	20.04	TA	
BEA-MW2d	02/13/2012	9:31 AM	20.16	TA	
BEA-MW3s	02/13/2012	10:19 AM	17.92	TA	
BEA-MW3d	02/13/2012	10:20 AM	17.77	TA	
BEA-MW4s	02/13/2012	9:56 AM	21.96	TA	
BEA-MW4d	02/13/2012	9:57 AM	21.74	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Cottonwood

10561 Hwy. 140, Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
COT-MW1	02/16/2012	11:45 AM	DRY	DEL	
COT-MW2	02/16/2012	3:55 PM	24.37	DEL	
COT-MW3	02/16/2012	3:08 PM	17.45	DEL	
COT-MW4	02/16/2012	3:34 PM	21.42	DEL	
COT-MW5	02/16/2012	2:41 PM	17.00	DEL	
COT-MW6	02/16/2012	2:16 PM	16.53	DEL	
COT-MW7	02/16/2012	12:41 PM	11.80	DEL	
COT-MW8	02/16/2012	1:43 PM	14.87	DEL	
COT-MW9	02/16/2012	12:11 PM	8.56	DEL	
COT-MW10	02/16/2012	1:09 PM	5.14	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Cottonwood

10561 Hwy. 140, Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
COT-MW11s	02/13/2012	1:25 PM	24.12	DEL	
COT-MW11d	02/13/2012	1:26 PM	23.95	DEL	
COT-MW12s	02/13/2012	2:00 PM	24.44	DEL	
COT-MW12d	02/13/2012	2:01 PM	24.26	DEL	
COT-MW13s	02/13/2012	2:43 PM	25.10	DEL	
COT-MW13d	02/13/2012	2:44 PM	25.03	DEL	
COT-MW14s	02/13/2012	3:25 PM	26.16	DEL	
COT-MW14d	02/13/2012	3:26 PM	24.85	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Santa Rita

91 S. Bert Crane Rd., Atwater, CA 95301

Weather Conditions: OVERCAST / RAINY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
SAN-MW1s	02/13/2012	1:55 PM	23.52	TA	
SAN-MW1d	02/13/2012	1:56 PM	23.53	TA	
SAN-MW2s	02/13/2012	12:31 PM	DRY	TA	
SAN-MW2d	02/13/2012	12:32 PM	29.26	TA	
SAN-MW3s	02/13/2012	1:00 PM	DRY	TA	
SAN-MW3d	02/13/2012	1:01 PM	30.36	TA	
SAN-MW4s	02/13/2012	1:29 PM	30.11	TA	
SAN-MW4d	02/13/2012	1:30 PM	29.72	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Santa Rita

91 S. Bert Crane Rd., Atwater, CA 95301

Weather Conditions: OVERCAST / RAINY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
SAN-MW5s	02/16/2012	9:51 AM	25.53	TA	
SAN-MW5d	02/16/2012	9:52 AM	25.40	TA	
SAN-MW6s	02/16/2012	11:28 AM	13.81	TA	
SAN-MW6d	02/16/2012	11:29 AM	13.65	TA	
SAN-MW7s	02/16/2012	11:00 AM	14.81	TA	
SAN-MW7d	02/16/2012	11:01 AM	14.75	TA	
SAN-MW8s	02/16/2012	10:35 AM	16.56	TA	
SAN-MW8d	02/16/2012	10:36 AM	16.41	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

P. & L. Souza Dairy

20633 Crane Ave., Hilmar, CA 95324

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
PLS-MW1s	02/08/2012	4:32 PM	10.90	TA	
PLS-MW1d	02/08/2012	4:33 PM	10.66	TA	
PLS-MW2s	02/08/2012	5:00 PM	9.65	TA	
PLS-MW2d	02/08/2012	5:01 PM	9.49	TA	
PLS-MW3s	02/08/2012	3:13 PM	8.39	TA	
PLS-MW3d	02/08/2012	3:14 PM	8.24	TA	
PLS-MW4s	02/08/2012	3:33 PM	10.26	TA	
PLS-MW4d	02/08/2012	3:34 PM	9.85	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

P. & L. Souza Dairy

20633 Crane Ave., Hilmar, CA 95324

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
PLS-MW5s	02/08/2012	4:02 PM	8.93	TA	
PLS-MW5d	02/08/2012	4:03 PM	8.83	TA	
PLS-MW6s	02/08/2012	2:52 PM	8.06	TA	
PLS-MW6d	02/08/2012	2:53 PM	8.97	TA	
PLS-MW7s	02/08/2012	5:23 PM	9.60	TA	
PLS-MW7d	02/08/2012	5:24 PM	10.30	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Paul Caetano Dairy

9436 Griffith Ave., Delhi, CA 95315

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
CAE-MW1s	02/08/2012	1:08 PM	11.40	TA	
CAE-MW1d	02/08/2012	1:09 PM	10.96	TA	
CAE-MW2s	02/08/2012	12:29 PM	11.53	TA	
CAE-MW2d	02/08/2012	12:30 PM	11.33	TA	
CAE-MW3s	02/08/2012	12:46 PM	11.20	TA	
CAE-MW3d	02/08/2012	12:47 PM	11.07	TA	
CAE-MW4s	02/08/2012	1:35 PM	12.14	TA	
CAE-MW4d	02/08/2012	1:36 PM	11.91	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Paul Caetano Dairy

9436 Griffith Ave., Delhi, CA 95315

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
CAE-MW5s	02/08/2012	1:58 PM	8.83	TA	
CAE-MW5d	02/08/2012	1:59 PM	8.42	TA	
CAE-MW6s	02/09/2012	9:50 AM	11.15	TA	
CAE-MW6d	02/09/2012	9:51 AM	11.03	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Robert Gioletti and Sons Dairy

118 N. Blaker Rd., Turlock, CA 95380

Weather Conditions: CLOUDY / RAIN

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ROB-MW1s	02/07/2012	1:38 PM	11.30	TA	
ROB-MW1d	02/07/2012	1:39 PM	10.98	TA	
ROB-MW2s	02/07/2012	1:17 PM	11.70	TA	
ROB-MW2d	02/07/2012	1:18 PM	11.54	TA	
ROB-MW3s	02/07/2012	1:00 PM	10.65	TA	
ROB-MW3d	02/07/2012	1:01 PM	10.52	TA	
ROB-MW4s	02/07/2012	12:47 PM	10.70	TA	
ROB-MW4d	02/07/2012	12:48 PM	9.81	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Robert Gioletti and Sons Dairy

118 N. Blaker Rd., Turlock, CA 95380

Weather Conditions: CLOUDY / RAIN

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ROB-MW5s	02/07/2012	12:23 PM	10.52	TA	
ROB-MW5d	02/07/2012	12:24 PM	10.42	TA	
ROB-MW6s	02/07/2012	2:48 PM	12.01	TA	
ROB-MW6d	02/07/2012	2:49 PM	11.91	TA	
ROB-MW7s	02/07/2012	2:25 PM	10.73	TA	
ROB-MW7d	02/07/2012	2:26 PM	10.74	TA	
ROB-MW8s	02/07/2012	2:00 PM	10.34	TA	
ROB-MW8d	02/07/2012	2:01 PM	10.79	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Antone L. Gomes and Sons Dairy

515 E. Stuhr Rd., Newman, CA 95360

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ANT-MW1s	02/09/2012	3:56 PM	20.70	DEL	
ANT-MW1d	02/09/2012	3:57 PM	20.62	DEL	
ANT-MW2s	02/09/2012	4:23 PM	21.92	DEL	
ANT-MW2d	02/09/2012	4:24 PM	20.64	DEL	
ANT-MW3s	02/09/2012	5:02 PM	21.02	DEL	
ANT-MW3d	02/09/2012	5:03 PM	21.06	DEL	
ANT-MW4s	02/09/2012	4:41 PM	21.12	DEL	
ANT-MW4d	02/09/2012	4:42 PM	21.02	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Antone L. Gomes and Sons Dairy

515 E. Stuhr Rd., Newman, CA 95360

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ANT-MW5s	02/09/2012	3:36 PM	24.02	DEL	
ANT-MW5d	02/09/2012	3:37 PM	24.22	DEL	
ANT-MW6s	02/09/2012	5:19 PM	18.62	DEL	
ANT-MW6d	02/09/2012	5:20 PM	18.73	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Correia Family Dairy Farms

26380 W. Fahey Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
COR-MW1s	02/10/2012	10:23 AM	6.82	TA	
COR-MW1d	02/10/2012	10:24 AM	6.70	TA	
COR-MW2s	02/10/2012	8:59 AM	4.93	TA	
COR-MW2d	02/10/2012	9:00 AM	4.71	TA	
COR-MW3s	02/10/2012	9:20 AM	6.55	TA	
COR-MW3d	02/10/2012	9:21 AM	6.39	TA	
COR-MW4s	02/10/2012	10:02 AM	5.61	TA	
COR-MW4d	02/10/2012	10:03 AM	5.49	TA	
COR-MW5s	02/10/2012	9:40 AM	6.08	TA	
COR-MW5d	02/10/2012	9:41 AM	5.92	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Frank J. Gomes Dairy #2

890 Kniebes Rd., Gustine, CA 95322

Weather Conditions: OVERCAST / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
FG2-MW1s	02/10/2012	3:21 PM	5.71	TA	
FG2-MW1d	02/10/2012	3:22 PM	5.42	TA	
FG2-MW2s	02/10/2012	4:06 PM	9.22	TA	
FG2-MW2d	02/10/2012	4:07 PM	9.10	TA	
FG2-MW3s	02/10/2012	3:45 PM	9.70	TA	
FG2-MW3d	02/10/2012	3:46 PM	9.26	TA	
FG2-MW4s	02/10/2012	2:56 PM	10.22	TA	
FG2-MW4d	02/10/2012	2:57 PM	9.76	TA	
FG2-MW5s	02/10/2012	2:34 PM	5.91	TA	
FG2-MW5d	02/10/2012	2:35 PM	5.70	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Godinho Dairy

12710 S. Wilson Rd., Los Banos, CA 93635

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
GOD-MW1s	02/09/2012	10:54 AM	8.66	TA	
GOD-MW1d	02/09/2012	10:56 AM	8.59	TA	
GOD-MW2s	02/09/2012	11:42 AM	11.14	TA	
GOD-MW2d	02/09/2012	11:43 AM	11.02	TA	
GOD-MW3s	02/09/2012	11:21 AM	11.74	TA	
GOD-MW3d	02/09/2012	11:22 AM	11.64	TA	
GOD-MW4s	02/09/2012	10:28 AM	11.32	TA	
GOD-MW4d	02/09/2012	10:29 AM	10.91	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Godinho Dairy

12710 S. Wilson Rd., Los Banos, CA 93635

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
GOD-MW5s	02/09/2012	12:58 PM	6.18	TA	
GOD-MW5d	02/09/2012	12:59 PM	5.92	TA	
GOD-MW6s	02/09/2012	12:09 PM	7.07	TA	
GOD-MW6d	02/09/2012	12:10 PM	6.97	TA	
GOD-MW7s	02/09/2012	12:31 PM	6.06	TA	
GOD-MW7d	02/09/2012	12:32 PM	6.02	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

John Machado Dairy

22495 W. China Camp Rd., Los Banos, CA 93635

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MAC-MW1s	02/09/2012	3:14 PM	7.61	TA	
MAC-MW1d	02/09/2012	3:15 PM	7.51	TA	
MAC-MW2s	02/09/2012	2:53 PM	6.71	TA	
MAC-MW2d	02/09/2012	2:54 PM	6.46	TA	
MAC-MW3s	02/09/2012	4:05 PM	5.34	TA	
MAC-MW3d	02/09/2012	4:06 PM	5.36	TA	
MAC-MW4s	02/09/2012	3:45 PM	6.52	TA	
MAC-MW4d	02/09/2012	3:46 PM	6.43	TA	
MAC-MW5s	02/09/2012	3:30 PM	5.90	TA	
MAC-MW5d	02/09/2012	3:31 PM	5.70	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Jose Nunes Dairy

22484 W. China Camp Rd., Los Banos, CA 93635

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
NUN-MW1s	02/09/2012	2:29 PM	6.74	TA	
NUN-MW1d	02/09/2012	2:30 PM	6.78	TA	
NUN-MW2s	02/09/2012	1:21 PM	8.00	TA	
NUN-MW2d	02/09/2012	1:22 PM	7.81	TA	
NUN-MW3s	02/09/2012	2:06 PM	5.37	TA	
NUN-MW3d	02/09/2012	2:07 PM	5.36	TA	
NUN-MW4s	02/09/2012	1:49 PM	7.12	TA	
NUN-MW4d	02/09/2012	1:50 PM	7.03	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Moonshine Dairy

22922 Kilburn Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MOO-MW1	02/26/2012	1:42 PM	13.15	DEL	
MOO-MW2	02/26/2012	2:39 PM	17.90	DEL	
MOO-MW3	02/26/2012	3:43 PM	12.02	DEL	
MOO-MW4	02/26/2012	4:36 PM	12.57	DEL	
MOO-MW5s	02/26/2012	2:06 PM	11.96	DEL	
MOO-MW5d	02/26/2012	2:07 PM	13.54	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Moonshine Dairy

22922 Kilburn Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MOO-MW6s	02/09/2012	1:03 PM	19.17	DEL	
MOO-MW6d	02/09/2012	1:04 PM	21.87	DEL	
MOO-MW7s	02/09/2012	12:46 PM	18.06	DEL	
MOO-MW7d	02/09/2012	12:57 PM	18.03	DEL	
MOO-MW8s	02/09/2012	12:24 PM	18.75	DEL	
MOO-MW8d	02/09/2012	12:25 PM	18.51	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Tony L. Lopes Dairy LP

27500 Bunker Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
TON-MW1s	02/10/2012	12:42 PM	7.58	TA	
TON-MW1d	02/10/2012	12:43 PM	7.45	TA	
TON-MW2s	02/10/2012	12:24 PM	5.64	TA	
TON-MW2d	02/10/2012	12:25 PM	5.45	TA	
TON-MW3s	02/10/2012	1:41 PM	8.13	TA	
TON-MW3d	02/10/2012	1:42 PM	8.01	TA	
TON-MW4s	02/10/2012	1:02 PM	9.26	TA	
TON-MW4d	02/10/2012	1:03 PM	8.92	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Tony L. Lopes Dairy LP

27500 Bunker Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
TON-MW5s	02/10/2012	1:20 PM	8.67	TA	
TON-MW5d	02/10/2012	1:21 PM	8.59	TA	
TON-MW6s	02/10/2012	11:00 AM	8.33	TA	
TON-MW6d	02/10/2012	11:01 AM	8.10	TA	
TON-MW7s	02/10/2012	11:57 AM	8.42	TA	
TON-MW7d	02/10/2012	11:58 AM	8.12	TA	
TON-MW8s	02/10/2012	11:36 AM	9.71	TA	
TON-MW8d	02/10/2012	11:37 AM	9.17	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

March

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Albert Mendes Dairy

1100 Ruble Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR

Instrumentation: SOLINST

Monitoring Well Name	Date mm/dd/yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MEN-MW1s	03/05/2012	3:40 PM	8.66	TA	
MEN-MW1d	03/05/2012	3:41 PM	8.56	TA	
MEN-MW2s	03/05/2012	3:43 PM	8.55	TA	
MEN-MW2d	03/05/2012	3:44 PM	8.53	TA	
MEN-MW3s	03/05/2012	3:47 PM	8.19	TA	
MEN-MW3d	03/05/2012	3:48 PM	8.05	TA	
MEN-MW4s	03/05/2012	3:50 PM	7.80	TA	
MEN-MW4d	03/05/2012	3:52 PM	7.67	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Albert Mendes Dairy

1100 Ruble Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR

Instrumentation: SOLINST

Monitoring Well Name	Date mm/dd/yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MEN-MW5s	03/05/2012	3:55 PM	8.61	TA	
MEN-MW5d	03/05/2012	3:56 PM	8.51	TA	
MEN-MW6s	03/05/2012	3:58 PM	8.45	TA	
MEN-MW6d	03/05/2012	4:00 PM	8.39	TA	
MEN-MW7s	03/05/2012	4:03 PM	6.38	TA	
MEN-MW7d	03/05/2012	4:05 PM	6.26	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Anchor J. Dairy

24507 First Ave., Stevinson, CA 95374

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ANC-MW1	03/05/2012	9:25 AM	13.19	AL	
ANC-MW2	03/05/2012	9:28 AM	20.80	AL	
ANC-MW3	03/05/2012	9:31 AM	10.73	AL	
ANC-MW4	03/05/2012	9:21 AM	21.23	AL	
ANC-MW5s	03/05/2012	9:19 AM	15.98	AL	
ANC-MW5d	03/05/2012	9:18 AM	15.93	AL	
ANC-MW6s	03/05/2012	9:38 AM	14.73	AL	
ANC-MW6d	03/05/2012	9:37 AM	14.60	AL	
ANC-MW7s	03/05/2012	9:35 AM	14.30	AL	
ANC-MW7d	03/05/2012	9:34 AM	14.18	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Bettencourt and Marson Dairy

18128 American Ave., Hilmar, CA 95324

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
BET-MW1s	03/05/2012	2:12 PM	10.67	TA	
BET-MW1d	03/05/2012	2:13 PM	10.17	TA	
BET-MW2s	03/05/2012	2:15 PM	11.89	TA	
BET-MW2d	03/05/2012	2:16 PM	11.59	TA	
BET-MW3s	03/05/2012	2:19 PM	10.70	TA	
BET-MW3d	03/05/2012	2:20 PM	10.50	TA	
BET-MW4s	03/05/2012	2:22 PM	10.19	TA	
BET-MW4d	03/05/2012	2:23 PM	9.60	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Bettencourt and Marson Dairy

18128 American Ave., Hilmar, CA 95324

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
BET-MW5s	03/05/2012	2:26 PM	10.16	TA	
BET-MW5d	03/05/2012	2:27 PM	9.96	TA	
BET-MW6s	03/05/2012	2:31 PM	10.23	TA	
BET-MW6d	03/05/2012	2:33 PM	10.00	TA	
BET-MW7s	03/05/2012	2:36 PM	11.34	TA	
BET-MW7d	03/05/2012	2:38 PM	11.13	TA	
BET-MW8s	03/05/2012	2:40 PM	11.73	TA	
BET-MW8d	03/05/2012	2:41 PM	11.55	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Frank J. Gomes Dairy #1

5301 N. DeAngelis Rd., Stevinson, CA 95374

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
FG1-MW1s	03/05/2012	12:56 PM	16.31	AL	
FG1-MW1d	03/05/2012	12:55 PM	16.02	AL	
FG1-MW2s	03/05/2012	1:01 PM	DRY	AL	
FG1-MW2d	03/05/2012	1:00 PM	19.81	AL	
FG1-MW3s	03/05/2012	12:58 PM	17.50	AL	
FG1-MW3d	03/05/2012	12:57 PM	17.73	AL	
FG1-MW4s	03/05/2012	12:51 PM	16.13	AL	
FG1-MW4d	03/05/2012	12:49 PM	15.75	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Frank J. Gomes Dairy #1

5301 N. DeAngelis Rd., Stevinson, CA 95374

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
FG1-MW5s	03/05/2012	1:13 PM	16.10	AL	
FG1-MW5d	03/05/2012	1:12 PM	15.93	AL	
FG1-MW6s	03/05/2012	1:09 PM	19.00	AL	
FG1-MW6d	03/05/2012	1:08 PM	18.78	AL	
FG1-MW7s	03/05/2012	1:06 PM	17.42	AL	
FG1-MW7d	03/05/2012	1:05 PM	17.12	AL	
FG1-MW8s	03/05/2012	1:20 PM	17.80	AL	
FG1-MW8d	03/05/2012	1:19 PM	17.53	AL	
FG1-MW9s	03/05/2012	1:28 PM	14.91	AL	
FG1-MW9d	03/05/2012	1:27 PM	15.90	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Bear Creek

15751 W. Hwy. 140, Livingston, CA 95334

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
BEA-MW1s	03/05/2012	11:30 AM	21.91	TA	
BEA-MW1d	03/05/2012	11:32 AM	21.82	TA	
BEA-MW2s	03/05/2012	11:34 AM	20.55	TA	
BEA-MW2d	03/05/2012	11:35 AM	20.90	TA	
BEA-MW3s	03/05/2012	11:37 AM	18.55	TA	
BEA-MW3d	03/05/2012	11:39 AM	18.50	TA	
BEA-MW4s	03/05/2012	11:41 AM	26.58	TA	
BEA-MW4d	03/05/2012	11:43 AM	26.53	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Cottonwood

10561 Hwy. 140, Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
COT-MW1	03/05/2012	11:55 AM	30.49	TA	
COT-MW2	03/05/2012	11:57 AM	24.32	TA	
COT-MW3	03/05/2012	12:00 PM	17.36	TA	
COT-MW4	03/05/2012	12:05 PM	20.71	TA	
COT-MW5	03/05/2012	12:06 PM	16.57	TA	
COT-MW6	03/05/2012	12:08 PM	16.36	TA	
COT-MW7	03/05/2012	12:11 PM	12.35	TA	
COT-MW8	03/05/2012	12:12 PM	15.31	TA	
COT-MW9	03/05/2012	12:14 PM	8.80	TA	
COT-MW10	03/05/2012	12:18 PM	5.44	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Cottonwood

10561 Hwy. 140, Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
COT-MW11s	03/05/2012	12:21 PM	24.24	TA	
COT-MW11d	03/05/2012	12:25 PM	24.15	TA	
COT-MW12s	03/05/2012	12:27 PM	25.09	TA	
COT-MW12d	03/05/2012	12:30 PM	24.90	TA	
COT-MW13s	03/05/2012	12:33 PM	26.15	TA	
COT-MW13d	03/05/2012	12:39 PM	26.01	TA	
COT-MW14s	03/05/2012	12:41 PM	25.94	TA	
COT-MW14d	03/05/2012	12:45 PM	25.61	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Santa Rita

91 S. Bert Crane Rd., Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
SAN-MW1s	03/05/2012	12:55 PM	23.46	TA	
SAN-MW1d	03/05/2012	12:56 PM	24.02	TA	
SAN-MW2s	03/05/2012	12:59 PM	DRY	TA	
SAN-MW2d	03/05/2012	1:01 PM	30.42	TA	
SAN-MW3s	03/05/2012	1:05 PM	DRY	TA	
SAN-MW3d	03/05/2012	1:06 PM	31.62	TA	
SAN-MW4s	03/05/2012	1:10 PM	30.86	TA	
SAN-MW4d	03/05/2012	1:11 PM	30.51	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Santa Rita

91 S. Bert Crane Rd., Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
SAN-MW5s	03/05/2012	1:15 PM	27.10	TA	
SAN-MW5d	03/05/2012	1:16 PM	26.98	TA	
SAN-MW6s	03/05/2012	1:20 PM	15.06	TA	
SAN-MW6d	03/05/2012	1:22 PM	14.95	TA	
SAN-MW9s	03/05/2012	1:26 PM	17.91	TA	
SAN-MW9d	03/05/2012	1:27 PM	17.95	TA	
SAN-MW10s	03/05/2012	1:29 PM	17.30	TA	
SAN-MW10d	03/05/2012	1:30 PM	17.13	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

P. & L. Souza Dairy

20633 Crane Ave., Hilmar, CA 95324

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
PLS-MW1s	03/05/2012	2:10 PM	11.45	AL	
PLS-MW1d	03/05/2012	2:11 PM	11.19	AL	
PLS-MW2s	03/05/2012	2:13 PM	10.23	AL	
PLS-MW2d	03/05/2012	2:14 PM	10.09	AL	
PLS-MW3s	03/05/2012	1:52 PM	9.33	AL	
PLS-MW3d	03/05/2012	1:53 PM	9.18	AL	
PLS-MW4s	03/05/2012	2:08 PM	10.93	AL	
PLS-MW4d	03/05/2012	2:07 PM	10.53	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

P. & L. Souza Dairy

20633 Crane Ave., Hilmar, CA 95324

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
PLS-MW5s	03/05/2012	2:18 PM	9.58	AL	
PLS-MW5d	03/05/2012	2:19 PM	9.37	AL	
PLS-MW6s	03/05/2012	1:55 PM	8.89	AL	
PLS-MW6d	03/05/2012	1:56 PM	8.63	AL	
PLS-MW7s	03/05/2012	1:59 PM	11.78	AL	
PLS-MW7d	03/05/2012	2:00 PM	11.55	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Paul Caetano Dairy

9436 Griffith Ave., Delhi, CA 95315

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
CAE-MW1s	03/05/2012	2:45 PM	12.40	TA	
CAE-MW1d	03/05/2012	2:47 PM	11.94	TA	
CAE-MW2s	03/05/2012	2:49 PM	11.76	TA	
CAE-MW2d	03/05/2012	2:52 PM	11.56	TA	
CAE-MW3s	03/05/2012	2:53 PM	11.71	TA	
CAE-MW3d	03/05/2012	2:57 PM	11.61	TA	
CAE-MW4s	03/05/2012	2:58 PM	12.37	TA	
CAE-MW4d	03/05/2012	2:59 PM	12.14	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Paul Caetano Dairy

9436 Griffith Ave., Delhi, CA 95315

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
CAE-MW5s	03/05/2012	3:03 PM	8.90	TA	
CAE-MW5d	03/05/2012	3:05 PM	8.52	TA	
CAE-MW6s	03/05/2012	3:08 PM	11.47	TA	
CAE-MW6d	03/05/2012	3:10 PM	11.37	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Robert Gioletti and Sons Dairy

118 N. Blaker Rd., Turlock, CA 95380

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ROB-MW1s	03/05/2012	4:11 PM	11.00	TA	
ROB-MW1d	03/05/2012	4:12 PM	10.87	TA	
ROB-MW2s	03/05/2012	4:15 PM	12.65	TA	
ROB-MW2d	03/05/2012	4:16 PM	12.63	TA	
ROB-MW3s	03/05/2012	4:19 PM	11.20	TA	
ROB-MW3d	03/05/2012	4:20 PM	12.70	TA	
ROB-MW4s	03/05/2012	4:23 PM	11.62	TA	
ROB-MW4d	03/05/2012	4:24 PM	12.17	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Robert Gioletti and Sons Dairy

118 N. Blaker Rd., Turlock, CA 95380

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ROB-MW5s	03/05/2012	4:29 PM	DRY	TA	
ROB-MW5d	03/05/2012	4:30 PM	19.16	TA	
ROB-MW6s	03/05/2012	4:36 PM	14.56	TA	
ROB-MW6d	03/05/2012	4:38 PM	14.60	TA	
ROB-MW7s	03/05/2012	4:41 PM	11.08	TA	
ROB-MW7d	03/05/2012	4:43 PM	10.96	TA	
ROB-MW8s	03/05/2012	4:55 PM	10.48	TA	
ROB-MW8d	03/05/2012	4:59 PM	10.27	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Antone L. Gomes and Sons Dairy

515 E. Stuhr Rd., Newman, CA 95360

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ANT-MW1s	03/05/2012	10:08 AM	16.68	AL	
ANT-MW1d	03/05/2012	10:09 AM	16.58	AL	
ANT-MW2s	03/05/2012	9:56 AM	18.85	AL	
ANT-MW2d	03/05/2012	9:57 AM	18.48	AL	
ANT-MW3s	03/05/2012	10:04 AM	17.28	AL	
ANT-MW3d	03/05/2012	2:05 PM	16.78	AL	
ANT-MW4s	03/05/2012	10:00 AM	18.70	AL	
ANT-MW4d	03/05/2012	10:01 AM	18.63	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Antone L. Gomes and Sons Dairy

515 E. Stuhr Rd., Newman, CA 95360

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ANT-MW5s	03/05/2012	10:14 AM	22.10	AL	
ANT-MW5d	03/05/2012	10:15 AM	22.19	AL	
ANT-MW6s	03/05/2012	10:21 AM	15.02	AL	
ANT-MW6d	03/05/2012	10:22 AM	14.36	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Correia Family Dairy Farms

26380 W. Fahey Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
COR-MW1s	03/05/2012	10:40 AM	6.51	TA	
COR-MW1d	03/05/2012	10:41 AM	6.39	TA	
COR-MW2s	03/05/2012	10:43 AM	5.67	TA	
COR-MW2d	03/05/2012	10:44 AM	5.43	TA	
COR-MW3s	03/05/2012	10:46 AM	7.22	TA	
COR-MW3d	03/05/2012	10:47 AM	7.06	TA	
COR-MW4s	03/05/2012	10:50 AM	6.14	TA	
COR-MW4d	03/05/2012	10:51 AM	6.01	TA	
COR-MW5s	03/05/2012	10:55 AM	6.47	TA	
COR-MW5d	03/05/2012	10:57 AM	6.53	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Frank J. Gomes Dairy #2

890 Kniebes Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
FG2-MW1s	03/05/2012	10:57 AM	6.11	AL	
FG2-MW1d	03/05/2012	10:58 AM	5.85	AL	
FG2-MW2s	03/05/2012	10:46 AM	8.58	AL	
FG2-MW2d	03/05/2012	10:49 AM	8.48	AL	
FG2-MW3s	03/05/2012	10:53 AM	9.58	AL	
FG2-MW3d	03/05/2012	10:54 AM	9.88	AL	
FG2-MW4s	03/05/2012	11:01 AM	8.11	AL	
FG2-MW4d	03/05/2012	11:02 AM	7.70	AL	
FG2-MW5s	03/05/2012	11:09 AM	5.43	AL	
FG2-MW5d	03/05/2012	11:10 AM	5.23	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Godinho Dairy

12710 S. Wilson Rd., Los Banos, CA 93635

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
GOD-MW1s	03/05/2012	9:15 AM	7.21	TA	STANDING H20 AROUND WELL.
GOD-MW1d	03/05/2012	9:16 AM	7.31	TA	STANDING H20 AROUND WELL.
GOD-MW2s	03/05/2012	9:19 AM	10.71	TA	
GOD-MW2d	03/05/2012	9:20 AM	10.59	TA	
GOD-MW3s	03/05/2012	9:22 AM	11.81	TA	
GOD-MW3d	03/05/2012	9:23 AM	11.72	TA	
GOD-MW4s	03/05/2012	9:25 AM	11.42	TA	
GOD-MW4d	03/05/2012	9:26 AM	11.06	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Godinho Dairy

12710 S. Wilson Rd., Los Banos, CA 93635

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
GOD-MW5s	03/05/2012	9:30 AM	4.39	TA	STANDING H20 AROUND WELL.
GOD-MW5d	03/05/2012	9:31 AM	4.11	TA	
GOD-MW6s	03/05/2012	9:33 AM	5.79	TA	
GOD-MW6d	03/05/2012	9:35 AM	5.74	TA	
GOD-MW7s	03/05/2012	9:43 AM	3.51	TA	
GOD-MW7d	03/05/2012	9:45 AM	3.67	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

John Machado Dairy

22495 W. China Camp Rd., Los Banos, CA 93635

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MAC-MW1s	03/05/2012	10:07 AM	4.96	TA	
MAC-MW1d	03/05/2012	10:08 AM	4.87	TA	
MAC-MW2s	03/05/2012	10:10 AM	3.66	TA	
MAC-MW2d	03/05/2012	10:10 AM	3.42	TA	
MAC-MW3s	03/05/2012	10:12 AM	4.55	TA	
MAC-MW3d	03/05/2012	10:13 AM	4.42	TA	
MAC-MW4s	03/05/2012	10:15 AM	4.65	TA	
MAC-MW4d	03/05/2012	10:16 AM	4.67	TA	
MAC-MW5s	03/05/2012	10:19 AM	3.87	TA	
MAC-MW5d	03/05/2012	10:21 AM	3.63	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Jose Nunes Dairy

22484 W. China Camp Rd., Los Banos, CA 93635

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
NUN-MW1s	03/05/2012	9:50 AM	6.79	TA	
NUN-MW1d	03/05/2012	9:51 AM	6.49	TA	
NUN-MW2s	03/05/2012	9:54 AM	7.62	TA	
NUN-MW2d	03/05/2012	9:55 AM	7.40	TA	
NUN-MW3s	03/05/2012	9:58 AM	5.04	TA	
NUN-MW3d	03/05/2012	10:00 AM	4.96	TA	
NUN-MW4s	03/05/2012	10:03 AM	6.56	TA	
NUN-MW4d	03/05/2012	10:05 AM	6.43	TA	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Moonshine Dairy

22922 Kilburn Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MOO-MW1	03/05/2012	2:47 PM	13.28	AL	
MOO-MW2	03/05/2012	2:49 PM	18.30	AL	
MOO-MW3	03/05/2012	2:56 PM	12.14	AL	
MOO-MW4	03/05/2012	3:00 PM	12.45	AL	
MOO-MW5s	03/05/2012	2:53 PM	12.53	AL	
MOO-MW5d	03/05/2012	2:52 PM	14.18	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Moonshine Dairy

22922 Kilburn Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MOO-MW6s	03/05/2012	3:03 PM	19.90	AL	
MOO-MW6d	03/05/2012	3:05 PM	22.03	AL	
MOO-MW7s	03/05/2012	3:10 PM	18.73	AL	
MOO-MW7d	03/05/2012	3:11 PM	18.63	AL	
MOO-MW8s	03/05/2012	3:15 PM	18.99	AL	
MOO-MW8d	03/05/2012	3:16 PM	18.80	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Tony L. Lopes Dairy LP

27500 Bunker Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
TON-MW1s	03/05/2012	12:05 PM	6.53	AL	
TON-MW1d	03/05/2012	12:04 PM	6.40	AL	
TON-MW2s	03/05/2012	12:02 PM	5.56	AL	
TON-MW2d	03/05/2012	12:01 PM	5.36	AL	
TON-MW3s	03/05/2012	11:58 AM	9.58	AL	
TON-MW3d	03/05/2012	11:57 AM	9..50	AL	
TON-MW4s	03/05/2012	11:49 AM	8.82	AL	
TON-MW4d	03/05/2012	11:48 AM	8.52	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Tony L. Lopes Dairy LP

27500 Bunker Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
TON-MW5s	03/05/2012	11:54 AM	7.98	AL	
TON-MW5d	03/05/2012	11:53 AM	7.88	AL	
TON-MW6s	03/05/2012	12:09 PM	9.80	AL	
TON-MW6d	03/05/2012	12:08 PM	9.26	AL	
TON-MW7s	03/05/2012	12:21 PM	8.62	AL	
TON-MW7d	03/05/2012	12:20 PM	8.30	AL	
TON-MW8s	03/05/2012	12:17 PM	9.80	AL	
TON-MW8d	03/05/2012	12:16 PM	9.30	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

April

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Albert Mendes Dairy

1100 Ruble Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR

InstrumenCLtion: SOLINST

Monitoring Well Name	Date mm/dd/yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments A = DISTANCE FROM TOP OF SHALLOW WELL CASING TO THE TOP OF STEEL MONUMENT B = DISTANCE FROM THE TOP OF CEMENT PAD TO THE TOP OF THE STEEL WELL MONUMENT
MEN-MW1s	04/05/2012	1:12 PM	8.25	CL	**A = 0.24' / B= 1.56'**
MEN-MW1d	04/05/2012	1:12 PM	8.15	CL	
MEN-MW2s	04/05/2012	1:18 PM	8.21	CL	**A = 0.45' / B= 2.05'**
MEN-MW2d	04/05/2012	1:19 PM	8.16	CL	
MEN-MW3s	04/05/2012	1:58 PM	7.90	CL	**A = 0.35' / B= 2.04'**
MEN-MW3d	04/05/2012	1:59 PM	7.77	CL	
MEN-MW4s	04/05/2012	1:53 PM	7.44	CL	**A = 0.17' / B= 2.04'**
MEN-MW4d	04/05/2012	1:54 PM	7.31	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Albert Mendes Dairy

1100 Ruble Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR

InstrumenCLtion: SOLINST

Monitoring Well Name	Date mm/dd/yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments A = DISTANCE FROM TOP OF SHALLOW WELL CASING TO THE TOP OF STEEL MONUMENT B = DISTANCE FROM THE TOP OF CEMENT PAD TO THE TOP OF THE STEEL WELL MONUMENT
MEN-MW5s	04/05/2012	2:02 PM	8.47	CL	**A = 0.17' / B= 1.49'**
MEN-MW5d	04/05/2012	2:03 PM	8.35	CL	
MEN-MW6s	04/05/2012	1:28 PM	7.77	CL	**A = 0.24' / B= 2.08'**
MEN-MW6d	04/05/2012	1:29 PM	7.71	CL	
MEN-MW7s	04/05/2012	1:44 PM	5.86	CL	**A = 0.32' / B= 1.89'**
MEN-MW7d	04/05/2012	1:45 PM	5.74	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICDEL SUPPORT SERVICES

Monitoring Well Field Log

Anchor J. Dairy

24507 First Ave., Stevinson, CA 95374

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments A = DISTANCE FROM TOP OF SHALLOW WELL CASING TO THE TOP OF STEEL MONUMENT B = DISTANCE FROM THE TOP OF CEMENT PAD TO THE TOP OF THE STEEL WELL MONUMENT
ANC-MW1	04/05/2012	4:23 PM	13.05	DEL	**A = 0.23' / FLUSH**
ANC-MW2	04/05/2012	4:18 PM	20.34	DEL	**A = 0.40' / FLUSH**
ANC-MW3	04/05/2012	4:38 PM	10.74	DEL	**A = 0.55' / FLUSH**
ANC-MW4	04/05/2012	4:31 PM	21.12	DEL	**A = 0.33' / FLUSH**
ANC-MW5s	04/05/2012	4:41 PM	16.21	DEL	**A = 0.19' / B = 2.21'**
ANC-MW5d	04/05/2012	4:41 PM	16.16	DEL	
ANC-MW6s	04/05/2012	5:01 PM	14.05	DEL	**A = 0.13' / B = 1.73'**
ANC-MW6d	04/05/2012	5:00 PM	14.53	DEL	
ANC-MW7s	04/05/2012	4:49 PM	14.53	DEL	**A = 0.13' / B = 1.78'**
ANC-MW7d	04/05/2012	4:49 PM	14.45	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Bettencourt and Marson Dairy

18128 American Ave., Hilmar, CA 95324

Weather Conditions: CLEAR / WARM

InstrumenDELtion: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments A = DISTANCE FROM TOP OF SHALLOW WELL CASING TO THE TOP OF STEEL MONUMENT B = DISTANCE FROM THE TOP OF CEMENT PAD TO THE TOP OF THE STEEL WELL MONUMENT
BET-MW1s	04/05/2012	12:50 PM	10.37	DEL	**A = 0.44' / B = 2.23'**
BET-MW1d	04/05/2012	12:51 PM	9.89	DEL	
BET-MW2s	04/05/2012	12:53 PM	11.43	DEL	**A = 0.55' / B = 2.72'**
BET-MW2d	04/05/2012	12:55 PM	11.13	DEL	
BET-MW3s	04/05/2012	12:58 PM	10.22	DEL	**A = 0.85' / B = 2.42'**
BET-MW3d	04/05/2012	1:00 PM	10.05	DEL	
BET-MW4s	04/05/2012	1:10 PM	8.52	DEL	**A = 0.20' / B = 2.01'**
BET-MW4d	04/05/2012	1:11 PM	9.45	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Bettencourt and Marson Dairy

18128 American Ave., Hilmar, CA 95324

Weather Conditions: CLEAR / WARM

InstrumenDELtion: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments A = DISTANCE FROM TOP OF SHALLOW WELL CASING TO THE TOP OF STEEL MONUMENT B = DISTANCE FROM THE TOP OF CEMENT PAD TO THE TOP OF THE STEEL WELL MONUMENT
BET-MW5s	04/05/2012	1:15 PM	11.59	DEL	**A = 0.24' / B = 2.23'**
BET-MW5d	04/05/2012	1:16 PM	11.38	DEL	
BET-MW6s	04/05/2012	1:20 PM	12.10	DEL	**A = 0.52' / B = 1.99'**
BET-MW6d	04/05/2012	1:22 PM	11.87	DEL	
BET-MW7s	04/05/2012	1:28 PM	12.82	DEL	**A = 0.65' / B = 2.60'**
BET-MW7d	04/05/2012	1:30 PM	12.04	DEL	
BET-MW8s	04/05/2012	1:33 PM	13.49	DEL	**A = 0.14' / B = 2.01'**
BET-MW8d	04/05/2012	1:35 PM	13.30	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Bear Creek

15751 W. Hwy. 140, Livingston, CA 95334

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments A = DISTANCE FROM TOP OF SHALLOW WELL CASING TO THE TOP OF STEEL MONUMENT B = DISTANCE FROM THE TOP OF CEMENT PAD TO THE TOP OF THE STEEL WELL MONUMENT
BEA-MW1s	04/09/2012	11:34 AM	22.21	AL	**A = 0.50' / B = 1.79'**
BEA-MW1d	04/09/2012	11:33 AM	22.20	AL	
BEA-MW2s	04/09/2012	11:16 AM	20.19	AL	**A = 0.22' / B = 1.88'**
BEA-MW2d	04/09/2012	11:15 AM	21.58	AL	
BEA-MW3s	04/09/2012	11:30 AM	19.02	AL	**A = 0.23' / B = 1.13'**
BEA-MW3d	04/09/2012	11:29 AM	19.01	AL	
BEA-MW4s	04/09/2012	11:26 AM	25.60	AL	**A = 0.10' / B = 1.77'**
BEA-MW4d	04/09/2012	11:25 AM	25.36	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Cottonwood

10561 Hwy. 140, Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments A = DISTANCE FROM TOP OF SHALLOW WELL CASING TO THE TOP OF STEEL MONUMENT B = DISTANCE FROM THE TOP OF CEMENT PAD TO THE TOP OF THE STEEL WELL MONUMENT
COT-MW1	04/09/2012	12:47 PM	30.63	AL	**NO POST MONUMENT**
COT-MW2	04/09/2012	12:50 PM	24.31	AL	**NO POST MONUMENT**
COT-MW3	04/09/2012	12:55 PM	18.10	AL	**NO POST MONUMENT**
COT-MW4	04/09/2012	12:42 PM	21.12	AL	**NO POST MONUMENT**
COT-MW5	04/09/2012	12:37 PM	16.70	AL	**NO POST MONUMENT**
COT-MW6	04/09/2012	12:35 PM	16.73	AL	**NO POST MONUMENT**
COT-MW7	04/09/2012	1:03 PM	11.98	AL	**NO POST MONUMENT**
COT-MW8	04/09/2012	1:08 PM	15.34	AL	**NO POST MONUMENT**
COT-MW9	04/09/2012	1:15 PM	12.23	AL	**NO POST MONUMENT**
COT-MW10	04/09/2012	1:12 PM	7.28	AL	**NO POST MONUMENT**

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Cottonwood

10561 Hwy. 140, Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments A = DISTANCE FROM TOP OF SHALLOW WELL CASING TO THE TOP OF STEEL MONUMENT B = DISTANCE FROM THE TOP OF CEMENT PAD TO THE TOP OF THE STEEL WELL MONUMENT
COT-MW11s	04/09/2012	12:01 PM	25.66	AL	**A = 0.32' / B = 2.27'**
COT-MW11d	04/09/2012	12:00 PM	25.55	AL	
COT-MW12s	04/09/2012	12:06 PM	26.79	AL	**A = 0.15' / B = 2.10'**
COT-MW12d	04/09/2012	12:05 PM	26.78	AL	
COT-MW13s	04/09/2012	12:13 PM	27.49	AL	**A = 0.28' / B = 2.31'**
COT-MW13d	04/09/2012	12:12 PM	27.49	AL	
COT-MW14s	04/09/2012	12:28 PM	27.08	AL	**A = 0.20' / B = 2.73'**
COT-MW14d	04/09/2012	12:27 PM	26.87	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Santa Rita

91 S. Bert Crane Rd., Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments A = DISTANCE FROM TOP OF SHALLOW WELL CASING TO THE TOP OF STEEL MONUMENT B = DISTANCE FROM THE TOP OF CEMENT PAD TO THE TOP OF THE STEEL WELL MONUMENT
SAN-MW1s	04/09/2012	1:51 PM	24.90	AL	**A = 0.20' / B = 1.67'**
SAN-MW1d	04/09/2012	1:50 PM	25.54	AL	
SAN-MW2s	04/09/2012	2:29 PM	DRY	AL	**A = 0.43' / B = 1.71'**
SAN-MW2d	04/09/2012	2:28 PM	30.96	AL	
SAN-MW3s	04/09/2012	2:06 PM	DRY	AL	**A = 0.20' / B = 1.79'**
SAN-MW3d	04/09/2012	2:05 PM	32.16	AL	
SAN-MW4s	04/09/2012	2:10 PM	30.48	AL	**A = 0.28' / B = 1.85'**
SAN-MW4d	04/09/2012	2:09 PM	30.15	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Santa Rita

91 S. Bert Crane Rd., Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments A = DISTANCE FROM TOP OF SHALLOW WELL CASING TO THE TOP OF STEEL MONUMENT B = DISTANCE FROM THE TOP OF CEMENT PAD TO THE TOP OF THE STEEL WELL MONUMENT
SAN-MW5s	04/09/2012	1:57 PM	28.00	AL	**A = 0.42' / B = 1.77'**
SAN-MW5d	04/09/2012	1:56 PM	27.96	AL	
SAN-MW6s	04/09/2012	1:34 PM	14.63	AL	**A = 0.22' / B = 2.02'**
SAN-MW6d	04/09/2012	1:33 PM	14.48	AL	
SAN-MW7s	04/09/2012	1:39 PM	18.88	AL	**A = 0.42' / B = 0.79'**
SAN-MW7d	04/09/2012	1:38 PM	18.88	AL	
SAN-MW8s	04/09/2012	1:44 PM	20.78	AL	**A = 0.32' / B = 1.46'**
SAN-MW8d	04/09/2012	1:43 PM	20.78	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

P. & L. Souza Dairy

20633 Crane Ave., Hilmar, CA 95324

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments A = DISTANCE FROM TOP OF SHALLOW WELL CASING TO THE TOP OF STEEL MONUMENT B = DISTANCE FROM THE TOP OF CEMENT PAD TO THE TOP OF THE STEEL WELL MONUMENT
PLS-MW1s	04/05/2012	2:07 PM	11.48	DEL	**A = 0.30' / B = 2.13'**
PLS-MW1d	04/05/2012	2:09 PM	11.20	DEL	
PLS-MW2s	04/05/2012	2:12 PM	10.20	DEL	**A = 0.54' / B = 1.96'**
PLS-MW2d	04/05/2012	2:14 PM	10.05	DEL	
PLS-MW3s	04/05/2012	2:30 PM	9.40	DEL	**A = 0.37' / FLUSH**
PLS-MW3d	04/05/2012	2:32 PM	9.28	DEL	
PLS-MW4s	04/05/2012	2:20 PM	10.94	DEL	**A = 0.18' / B = 2.84'**
PLS-MW4d	04/05/2012	2:21 PM	10.53	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

P. & L. Souza Dairy

20633 Crane Ave., Hilmar, CA 95324

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments A = DISTANCE FROM TOP OF SHALLOW WELL CASING TO THE TOP OF STEEL MONUMENT B = DISTANCE FROM THE TOP OF CEMENT PAD TO THE TOP OF THE STEEL WELL MONUMENT
PLS-MW5s	04/05/2012	2:26 PM	9.72	DEL	**A = 0.36' / FLUSH**
PLS-MW5d	04/05/2012	2:27 PM	9.62	DEL	
PLS-MW6s	04/05/2012	1:59 PM	8.12	DEL	**A = 0.55' / B = 2.93'**
PLS-MW6d	04/05/2012	2:02 PM	9.55	DEL	
PLS-MW7s	04/05/2012	1:55 PM	10.37	DEL	**A = 0.26' / B = 2.02'**
PLS-MW7d	04/05/2012	1:57 PM	11.23	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Paul Caetano Dairy

9436 Griffith Ave., Delhi, CA 95315

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments A = DISTANCE FROM TOP OF SHALLOW WELL CASING TO THE TOP OF STEEL MONUMENT B = DISTANCE FROM THE TOP OF CEMENT PAD TO THE TOP OF THE STEEL WELL MONUMENT
CAE-MW1s	04/05/2012	12:19 PM	11.85	DEL	**A = 0.23' / B = 2.16'**
CAE-MW1d	04/05/2012	12:21 PM	11.40	DEL	
CAE-MW2s	04/05/2012	12:15 PM	12.19	DEL	**A = 0.13' / B = 1.92'**
CAE-MW2d	04/05/2012	12:16 PM	11.97	DEL	
CAE-MW3s	04/05/2012	12:10 PM	11.70	DEL	**A = 0.65' / B = 1.92'**
CAE-MW3d	04/05/2012	12:12 PM	11.57	DEL	
CAE-MW4s	04/05/2012	12:25 PM	12.78	DEL	**A = 0.47' / B = 2.68'**
CAE-MW4d	04/05/2012	12:27 PM	12.57	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Paul Caetano Dairy

9436 Griffith Ave., Delhi, CA 95315

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments A = DISTANCE FROM TOP OF SHALLOW WELL CASING TO THE TOP OF STEEL MONUMENT B = DISTANCE FROM THE TOP OF CEMENT PAD TO THE TOP OF THE STEEL WELL MONUMENT
CAE-MW5s	04/05/2012	12:30 PM	9.55	DEL	**A = 0.13' / B = 2.00'**
CAE-MW5d	04/05/2012	12:31 PM	9.13	DEL	
CAE-MW6s	04/05/2012	12:36 PM	11.82	DEL	**A = 0.70' / B = 2.67'**
CAE-MW6d	04/05/2012	12:37 PM	11.70	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Robert Gioletti and Sons Dairy

118 N. Blaker Rd., Turlock, CA 95380

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments A = DISTANCE FROM TOP OF SHALLOW WELL CASING TO THE TOP OF STEEL MONUMENT B = DISTANCE FROM THE TOP OF CEMENT PAD TO THE TOP OF THE STEEL WELL MONUMENT
ROB-MW1s	04/05/2012	12:40 PM	DRY	CL	**A = 0.56' / B = 2.51'**
ROB-MW1d	04/05/2012	12:41 PM	18.44	CL	
ROB-MW2s	04/05/2012	12:35 PM	14.14	CL	**A = 0.24' / B = 1.91'**
ROB-MW2d	04/05/2012	12:36 PM	14.50	CL	
ROB-MW3s	04/05/2012	12:25 PM	10.77	CL	**A = 0.53' / B = 2.29'**
ROB-MW3d	04/05/2012	12:26 PM	10.63	CL	
ROB-MW4s	04/05/2012	12:20 PM	9.87	CL	**A = 0.17' / B = 2.06'**
ROB-MW4d	04/05/2012	12:22 PM	9.65	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Robert Gioletti and Sons Dairy

118 N. Blaker Rd., Turlock, CA 95380

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments A = DISTANCE FROM TOP OF SHALLOW WELL CASING TO THE TOP OF STEEL MONUMENT B = DISTANCE FROM THE TOP OF CEMENT PAD TO THE TOP OF THE STEEL WELL MONUMENT
ROB-MW5s	04/05/2012	12:54 PM	10.99	CL	**A = 0.30' / FLUSH**
ROB-MW5d	04/05/2012	12:55 PM	10.87	CL	
ROB-MW6s	04/05/2012	12:03 PM	12.38	CL	**A = 0.90' / B = 2.52'**
ROB-MW6d	04/05/2012	12:03 PM	12.25	CL	
ROB-MW7s	04/05/2012	11:55 AM	10.20	CL	**A = 0.45' / B = 2.13'**
ROB-MW7d	04/05/2012	11:57 AM	11.14	CL	
ROB-MW8s	04/05/2012	12:11 PM	11.02	CL	**A = 0.17' / B = 2.38'**
ROB-MW8d	04/05/2012	12:12 PM	11.39	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Antone L. Gomes and Sons Dairy

515 E. Stuhr Rd., Newman, CA 95360

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments A = DISTANCE FROM TOP OF SHALLOW WELL CASING TO THE TOP OF STEEL MONUMENT B = DISTANCE FROM THE TOP OF CEMENT PAD TO THE TOP OF THE STEEL WELL MONUMENT
ANT-MW1s	04/09/2012	10:12 AM	17.84	AL	**A = 0.44' / B = 2.31'**
ANT-MW1d	04/09/2012	10:11 AM	17.75	AL	
ANT-MW2s	04/09/2012	9:43 AM	19.95	AL	**A = 0.30' / B = 2.19'**
ANT-MW2d	04/09/2012	9:44 AM	19.57	AL	
ANT-MW3s	04/09/2012	9:53 AM	18.22	AL	**A = 0.20' / B = 1.60'**
ANT-MW3d	04/09/2012	9:52 AM	18.67	AL	
ANT-MW4s	04/09/2012	9:50 AM	19.68	AL	**A = 0.32' / B = 1.92'**
ANT-MW4d	04/09/2012	9:49 AM	19.58	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Antone L. Gomes and Sons Dairy

515 E. Stuhr Rd., Newman, CA 95360

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
					A = DISTANCE FROM TOP OF SHALLOW WELL CASING TO THE TOP OF STEEL MONUMENT B = DISTANCE FROM THE TOP OF CEMENT PAD TO THE TOP OF THE STEEL WELL MONUMENT
ANT-MW5s	04/09/2012	10:06 AM	21.74	AL	**A = 0.25' / B = 2.40'**
ANT-MW5d	04/09/2012	10:05 AM	22.76	AL	
ANT-MW6s	04/09/2012	9:59 AM	15.72	AL	**A = 0.22' / B = 2.21'**
ANT-MW6d	04/09/2012	9:58 AM	16.27	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Correia Family Dairy Farms

26380 W. Fahey Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments A = DISTANCE FROM TOP OF SHALLOW WELL CASING TO THE TOP OF STEEL MONUMENT B = DISTANCE FROM THE TOP OF CEMENT PAD TO THE TOP OF THE STEEL WELL MONUMENT
COR-MW1s	04/09/2012	11:22 AM	6.20	CL	**A = 0.13' / B = 2.02'**
COR-MW1d	04/09/2012	11:23 AM	6.07	CL	
COR-MW2s	04/09/2012	11:28 AM	5.85	CL	**A = 0.18' / B = 2.03'**
COR-MW2d	04/09/2012	11:29 AM	5.61	CL	
COR-MW3s	04/09/2012	11:33 AM	6.77	CL	**A = 0.44' / B = 2.21'**
COR-MW3d	04/09/2012	11:34 AM	6.61	CL	
COR-MW4s	04/09/2012	11:13 AM	5.73	CL	**A = 0.74' / B = 2.41'**
COR-MW4d	04/09/2012	11:14 AM	5.74	CL	
COR-MW5s	04/09/2012	11:09 AM	6.08	CL	**A = 0.24' / B = 1.94'**
COR-MW5d	04/09/2012	11:10 AM	5.92	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Frank J. Gomes Dairy #2

890 Kniebes Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments A = DISTANCE FROM TOP OF SHALLOW WELL CASING TO THE TOP OF STEEL MONUMENT B = DISTANCE FROM THE TOP OF CEMENT PAD TO THE TOP OF THE STEEL WELL MONUMENT
FG2-MW1s	04/09/2012	10:41 AM	6.92	AL	**A = 0.23' / B = 2.08'**
FG2-MW1d	04/09/2012	10:40 AM	6.58	AL	
FG2-MW2s	04/09/2012	10:34 AM	9.43	AL	**A = 0.20' / B = 2.19'**
FG2-MW2d	04/09/2012	10:33 AM	9.34	AL	
FG2-MW3s	04/09/2012	10:38 AM	10.38	AL	**A = 0.18' / B = 2.13'**
FG2-MW3d	04/09/2012	10:37 AM	9.56	AL	
FG2-MW4s	04/09/2012	10:46 AM	10.61	AL	**A = 0.18' / B = 2.23'**
FG2-MW4d	04/09/2012	10:45 AM	10.14	AL	
FG2-MW5s	04/09/2012	10:52 AM	6.83	AL	**A = 0.45' / FLUSH**
FG2-MW5d	04/09/2012	10:51 AM	6.65	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Godinho Dairy

12710 S. Wilson Rd., Los Banos, CA 93635

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments A = DISTANCE FROM TOP OF SHALLOW WELL CASING TO THE TOP OF STEEL MONUMENT B = DISTANCE FROM THE TOP OF CEMENT PAD TO THE TOP OF THE STEEL WELL MONUMENT
GOD-MW1s	04/09/2012	1:43 PM	7.06	CL	**A = 0.33' / B = 2.35'**
GOD-MW1d	04/09/2012	1:44 PM	6.98	CL	
GOD-MW2s	04/09/2012	1:24 PM	10.23	CL	**A = 0.46' / B = 1.91'**
GOD-MW2d	04/09/2012	1:25 PM	10.02	CL	
GOD-MW3s	04/09/2012	1:31 PM	10.61	CL	**A = 0.20' / B = 2.21'**
GOD-MW3d	04/09/2012	1:32 PM	10.48	CL	
GOD-MW4s	04/09/2012	1:36 PM	11.25	CL	**A = 0.49' / B = 2.57'**
GOD-MW4d	04/09/2012	1:37 PM	10.91	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Godinho Dairy

12710 S. Wilson Rd., Los Banos, CA 93635

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments A = DISTANCE FROM TOP OF SHALLOW WELL CASING TO THE TOP OF STEEL MONUMENT B = DISTANCE FROM THE TOP OF CEMENT PAD TO THE TOP OF THE STEEL WELL MONUMENT
GOD-MW5s	04/09/2012	1:08 PM	5.06	CL	**A = 0.35' / B = 1.94'**
GOD-MW5d	04/09/2012	1:09 PM	4.80	CL	
GOD-MW6s	04/09/2012	1:18 PM	6.58	CL	**A = 0.32 / FLUSH**
GOD-MW6d	04/09/2012	1:19 PM	6.48	CL	
GOD-MW7s	04/09/2012	1:12 PM	5.14	CL	**A = 0.22 / FLUSH**
GOD-MW7d	04/09/2012	1:13 PM	5.06	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

John Machado Dairy

22495 W. China Camp Rd., Los Banos, CA 93635

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments A = DISTANCE FROM TOP OF SHALLOW WELL CASING TO THE TOP OF STEEL MONUMENT B = DISTANCE FROM THE TOP OF CEMENT PAD TO THE TOP OF THE STEEL WELL MONUMENT
MAC-MW1s	04/09/2012	12:40 PM	7.51	CL	**A = 0.14' / B = 1.92'**
MAC-MW1d	04/09/2012	12:41 PM	7.42	CL	
MAC-MW2s	04/09/2012	12:44 PM	6.56	CL	**A = 0.75' / B = 1.98'**
MAC-MW2d	04/09/2012	12:45 PM	6.33	CL	
MAC-MW3s	04/09/2012	12:19 PM	6.51	CL	**A = 0.66' / B = 2.10'**
MAC-MW3d	04/09/2012	12:20 PM	6.35	CL	
MAC-MW4s	04/09/2012	12:25 PM	6.78	CL	**A = 0.15' / B = 1.63'**
MAC-MW4d	04/09/2012	12:26 PM	6.72	CL	
MAC-MW5s	04/09/2012	12:30 PM	6.03	CL	**A = 0.57' / B = 1.61'**
MAC-MW5d	04/09/2012	12:31 PM	5.87	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Jose Nunes Dairy

22484 W. China Camp Rd., Los Banos, CA 93635

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments A = DISTANCE FROM TOP OF SHALLOW WELL CASING TO THE TOP OF STEEL MONUMENT B = DISTANCE FROM THE TOP OF CEMENT PAD TO THE TOP OF THE STEEL WELL MONUMENT
NUN-MW1s	04/09/2012	11:58 AM	7.47	CL	**A = 0.41' / B = 1.57'**
NUN-MW1d	04/09/2012	11:59 AM	7.18	CL	
NUN-MW2s	04/09/2012	12:05 PM	8.12	CL	**A = 0.15' / B = 1.96'**
NUN-MW2d	04/09/2012	12:06 PM	7.91	CL	
NUN-MW3s	04/09/2012	12:04 PM	5.76	CL	**A = 0.45 / FLUSH**
NUN-MW3d	04/09/2012	12:05 PM	5.71	CL	
NUN-MW4s	04/09/2012	11:52 AM	7.20	CL	**A = 0.29 / FLUSH**
NUN-MW4d	04/09/2012	11:53 AM	7.11	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Moonshine Dairy

22922 Kilburn Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments A = DISTANCE FROM TOP OF SHALLOW WELL CASING TO THE TOP OF STEEL MONUMENT B = DISTANCE FROM THE TOP OF CEMENT PAD TO THE TOP OF THE STEEL WELL MONUMENT
MOO-MW1	04/05/2012	3:03 PM	19.40	CL	**A = 0.31' / FLUSH**
MOO-MW2	04/05/2012	3:14 PM	14.03	CL	**A = 0.06' / FLUSH**
MOO-MW3	04/05/2012	2:48 PM	12.67	CL	**A = 0.08' / B = 2.61'**
MOO-MW4	04/05/2012	2:31 PM	12.91	CL	**A = 0.78' / B = 1.27'**
MOO-MW5s	04/05/2012	2:56 PM	13.10	CL	**A = 0.08' / B = 2.40'**
MOO-MW5d	04/05/2012	2:57 PM	14.72	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Moonshine Dairy

22922 Kilburn Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments A = DISTANCE FROM TOP OF SHALLOW WELL CASING TO THE TOP OF STEEL MONUMENT B = DISTANCE FROM THE TOP OF CEMENT PAD TO THE TOP OF THE STEEL WELL MONUMENT
MOO-MW6s	04/05/2012	3:22 PM	20.89	CL	**A = 0.13' / B = 1.57'**
MOO-MW6d	04/05/2012	3:23 PM	22.51	CL	
MOO-MW7s	04/05/2012	3:35 PM	19.18	CL	**A = 0.15' / B = 1.76'**
MOO-MW7d	04/05/2012	3:36 PM	19.16	CL	
MOO-MW8s	04/05/2012	3:39 PM	19.32	CL	**A = 0.18' / B = 1.91'**
MOO-MW8d	04/05/2012	3:40 PM	19.13	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Tony L. Lopes Dairy LP

27500 Bunker Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments A = DISTANCE FROM TOP OF SHALLOW WELL CASING TO THE TOP OF STEEL MONUMENT B = DISTANCE FROM THE TOP OF CEMENT PAD TO THE TOP OF THE STEEL WELL MONUMENT
TON-MW1s	04/09/2012	10:24 AM	7.04	CL	**A = 0.34' / B = 2.88'**
TON-MW1d	04/09/2012	10:25 AM	6.92	CL	
TON-MW2s	04/09/2012	10:52 AM	6.68	CL	**A = 0.63' / B = 2.51'**
TON-MW2d	04/09/2012	10:53 AM	6.54	CL	
TON-MW3s	04/09/2012	10:38 AM	9.44	CL	**A = 0.44' / B = 2.81'**
TON-MW3d	04/09/2012	10:39 AM	9.35	CL	
TON-MW4s	04/09/2012	10:29 AM	8.88	CL	**A = 0.76' / B = 2.48'**
TON-MW4d	04/09/2012	10:30 AM	8.60	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Tony L. Lopes Dairy LP

27500 Bunker Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments A = DISTANCE FROM TOP OF SHALLOW WELL CASING TO THE TOP OF STEEL MONUMENT B = DISTANCE FROM THE TOP OF CEMENT PAD TO THE TOP OF THE STEEL WELL MONUMENT
TON-MW5s	04/09/2012	10:45 AM	8.37	CL	**A = 1.06' / B = 2.47'**
TON-MW5d	04/09/2012	10:46 AM	8.25	CL	
TON-MW6s	04/09/2012	10:15 AM	9.97	CL	**A = 0.47' / B = 2.20'**
TON-MW6d	04/09/2012	10:16 AM	9.40	CL	
TON-MW7s	04/09/2012	10:00 AM	8.85	CL	**A = 0.20' / B = 1.94'**
TON-MW7d	04/09/2012	10:00 AM	8.55	CL	
TON-MW8s	04/09/2012	10:07 AM	9.71	CL	**A = 0.48' / B = 2.21'**
TON-MW8d	04/09/2012	10:08 AM	9.23	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

May

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Albert Mendes Dairy

1100 Ruble Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR

Instrumentation: SOLINST

Monitoring Well Name	Date mm/dd/yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MEN-MW1s	05/08/2012	3:56 PM	9.05	CL	
MEN-MW1d	05/08/2012	3:58 PM	8.90	CL	
MEN-MW2s	05/08/2012	3:03 PM	8.54	CL	
MEN-MW2d	05/08/2012	3:03 PM	8.36	CL	
MEN-MW3s	05/08/2012	5:30 PM	8.24	CL	
MEN-MW3d	05/08/2012	5:33 PM	7.58	CL	
MEN-MW4s	05/08/2012	5:49 PM	7.63	CL	
MEN-MW4d	05/08/2012	5:50 PM	7.45	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Albert Mendes Dairy

1100 Ruble Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR

Instrumentation: SOLINST

Monitoring Well Name	Date mm/dd/yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MEN-MW5s	05/08/2012	5:05 PM	9.79	CL	
MEN-MW5d	05/08/2012	5:06 PM	9.69	CL	
MEN-MW6s	05/08/2012	4:15 PM	7.36	CL	
MEN-MW6d	05/08/2012	4:16 PM	7.30	CL	
MEN-MW7s	05/08/2012	4:43 PM	3.09	CL	
MEN-MW7d	05/08/2012	4:45 PM	2.96	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Anchor J. Dairy

24507 First Ave., Stevinson, CA 95374

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ANC-MW1	05/11/2012	2:48 PM	13.43	AL	
ANC-MW2	05/11/2012	2:20 PM	20.68	AL	
ANC-MW3	05/11/2012	2:08 PM	10.93	AL	
ANC-MW4	05/11/2012	3:06 PM	21.00	AL	
ANC-MW5s	05/11/2012	3:47 PM	17.65	AL	
ANC-MW5d	05/11/2012	3:48 PM	17.35	AL	
ANC-MW6s	05/11/2012	1:33 PM	14.73	AL	
ANC-MW6d	05/11/2012	1:35 PM	14.63	AL	
ANC-MW7s	05/11/2012	1:20 PM	14.95	AL	
ANC-MW7d	05/11/2012	1:21 PM	14.85	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Bettencourt and Marson Dairy

18128 American Ave., Hilmar, CA 95324

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
BET-MW1s	05/10/2012	1:08 PM	13.36	DEL	
BET-MW1d	05/10/2012	1:09 PM	12.90	DEL	
BET-MW2s	05/10/2012	1:25 PM	13.79	DEL	
BET-MW2d	05/10/2012	1:26 PM	13.49	DEL	
BET-MW3s	05/10/2012	1:40 PM	12.34	DEL	
BET-MW3d	05/10/2012	1:42 PM	12.18	DEL	
BET-MW4s	05/10/2012	12:45 PM	14.15	DEL	
BET-MW4d	05/10/2012	12:45 PM	14.72	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Bettencourt and Marson Dairy

18128 American Ave., Hilmar, CA 95324

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
BET-MW5s	05/10/2012	3:00 PM	11.83	DEL	
BET-MW5d	05/10/2012	3:01 PM	11.63	DEL	
BET-MW6s	05/10/2012	2:42 PM	12.20	DEL	
BET-MW6d	05/10/2012	2:44 PM	11.96	DEL	
BET-MW7s	05/10/2012	2:00 PM	12.95	DEL	
BET-MW7d	05/10/2012	2:01 PM	12.77	DEL	
BET-MW8s	05/10/2012	2:22 PM	13.93	DEL	
BET-MW8d	05/10/2012	2:22 PM	13.72	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Frank J. Gomes Dairy #1

5301 N. DeAngelis Rd., Stevinson, CA 95374

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
FG1-MW1s	05/14/2012	11:35 AM	15.58	AL	
FG1-MW1d	05/14/2012	11:36 AM	15.28	AL	
FG1-MW2s	05/14/2012	12:03 PM	DRY	AL	
FG1-MW2d	05/14/2012	12:04 PM	17.89	AL	
FG1-MW3s	05/14/2012	11:50 AM	16.53	AL	
FG1-MW3d	05/14/2012	11:51 AM	16.28	AL	
FG1-MW4s	05/14/2012	12:20 PM	14.93	AL	
FG1-MW4d	05/14/2012	12:22 PM	14.58	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Frank J. Gomes Dairy #1

5301 N. DeAngelis Rd., Stevinson, CA 95374

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
FG1-MW5s	05/14/2012	1:03 PM	14.43	AL	
FG1-MW5d	05/14/2012	1:03 PM	14.23	AL	
FG1-MW6s	05/14/2012	12:47 PM	17.88	AL	
FG1-MW6d	05/14/2012	12:47 PM	17.68	AL	
FG1-MW7s	05/14/2012	12:33 PM	17.49	AL	
FG1-MW7d	05/14/2012	12:34 PM	17.20	AL	
FG1-MW8s	05/14/2012	1:21 PM	16.28	AL	
FG1-MW8d	05/14/2012	1:21 PM	16.02	AL	
FG1-MW9s	05/14/2012	11:14 AM	14.68	AL	
FG1-MW9d	05/14/2012	11:15 AM	15.47	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Bear Creek

15751 W. Hwy. 140, Livingston, CA 95334

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
BEA-MW1s	05/14/2012	2:50 PM	24.03	AL	
BEA-MW1d	05/14/2012	2:51 PM	24.09	AL	
BEA-MW2s	05/14/2012	1:58 PM	23.03	AL	
BEA-MW2d	05/14/2012	1:59 PM	23.63	AL	
BEA-MW3s	05/14/2012	2:35 PM	21.48	AL	
BEA-MW3d	05/14/2012	2:36 PM	21.52	AL	
BEA-MW4s	05/14/2012	2:12 PM	28.63	AL	
BEA-MW4d	05/14/2012	2:14 PM	28.35	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Cottonwood

10561 Hwy. 140, Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
COT-MW1	05/15/2012	11:45 AM	DRY	AL	
COT-MW2	05/15/2012	11:52 AM	25.00	AL	
COT-MW3	05/15/2012	12:14 PM	18.79	AL	
COT-MW4	05/15/2012	11:35 AM	21.29	AL	
COT-MW5	05/15/2012	11:19 AM	17.41	AL	
COT-MW6	05/15/2012	11:07 AM	17.24	AL	
COT-MW7	05/15/2012	12:33 PM	13.42	AL	
COT-MW8	05/15/2012	12:45 PM	11.12	AL	
COT-MW9	05/15/2012	1:22 PM	11.01	AL	
COT-MW10	05/15/2012	1:00 PM	7.32	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Cottonwood

10561 Hwy. 140, Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
COT-MW11s	05/15/2012	9:49 AM	25.38	AL	
COT-MW11d	05/15/2012	9:50 AM	25.30	AL	
COT-MW12s	05/15/2012	10:06 AM	26.27	AL	
COT-MW12d	05/15/2012	10:07 AM	26.03	AL	
COT-MW13s	05/15/2012	10:30 AM	27.63	AL	
COT-MW13d	05/15/2012	10:32 AM	27.43	AL	
COT-MW14s	05/15/2012	10:49 AM	27.47	AL	
COT-MW14d	05/15/2012	10:50 AM	27.15	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Santa Rita

91 S. Bert Crane Rd., Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
SAN-MW1s	05/15/2012	12:57 PM	23.70	DEL	
SAN-MW1d	05/15/2012	12:58 PM	24.35	DEL	
SAN-MW2s	05/15/2012	12:07 PM	DRY	DEL	
SAN-MW2d	05/15/2012	12:08 PM	31.23	DEL	
SAN-MW3s	05/15/2012	12:21 PM	DRY	DEL	
SAN-MW3d	05/15/2012	12:21 PM	32.13	DEL	
SAN-MW4s	05/15/2012	12:36 PM	31.56	DEL	
SAN-MW4d	05/15/2012	12:47 PM	31.20	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Santa Rita

91 S. Bert Crane Rd., Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
SAN-MW5s	05/15/2012	3:35 PM	26.85	DEL	
SAN-MW5d	05/15/2012	3:36 PM	26.78	DEL	
SAN-MW6s	05/15/2012	1:33 PM	14.48	DEL	
SAN-MW6d	05/15/2012	1:33 PM	14.29	DEL	
SAN-MW7s	05/15/2012	1:59 PM	13.90	DEL	
SAN-MW7d	05/15/2012	2:00 PM	14.28	DEL	
SAN-MW8s	05/15/2012	2:29 PM	17.06	DEL	
SAN-MW8d	05/15/2012	2:30 PM	17.16	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

P. & L. Souza Dairy

20633 Crane Ave., Hilmar, CA 95324

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
PLS-MW1s	05/10/2012	7:28 PM	11.03	DEL	
PLS-MW1d	05/10/2012	7:30 PM	10.80	DEL	
PLS-MW2s	05/10/2012	5:45 PM	9.67	DEL	
PLS-MW2d	05/10/2012	5:46 PM	9.49	DEL	
PLS-MW3s	05/10/2012	4:54 PM	9.38	DEL	
PLS-MW3d	05/10/2012	4:55 PM	9.23	DEL	
PLS-MW4s	05/10/2012	7:00 PM	10.78	DEL	
PLS-MW4d	05/10/2012	7:01 PM	10.35	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

P. & L. Souza Dairy

20633 Crane Ave., Hilmar, CA 95324

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
PLS-MW5s	05/10/2012	5:25 PM	9.39	DEL	
PLS-MW5d	05/10/2012	5:26 PM	9.23	DEL	
PLS-MW6s	05/10/2012	6:20 PM	8.74	DEL	
PLS-MW6d	05/10/2012	6:22 PM	9.11	DEL	
PLS-MW7s	05/10/2012	6:40 PM	9.89	DEL	
PLS-MW7d	05/10/2012	6:41 PM	9.24	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Paul Caetano Dairy

9436 Griffith Ave., Delhi, CA 95315

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
CAE-MW1s	05/10/2012	10:40 AM	14.16	DEL	
CAE-MW1d	05/10/2012	10:41 AM	13.74	DEL	
CAE-MW2s	05/10/2012	11:20 AM	13.34	DEL	
CAE-MW2d	05/10/2012	11:21 AM	13.15	DEL	
CAE-MW3s	05/10/2012	11:40 AM	13.61	DEL	
CAE-MW3d	05/10/2012	11:41 AM	13.55	DEL	
CAE-MW4s	05/10/2012	10:55 AM	13.67	DEL	
CAE-MW4d	05/10/2012	10:55 AM	13.50	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Paul Caetano Dairy

9436 Griffith Ave., Delhi, CA 95315

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
CAE-MW5s	05/10/2012	10:18 AM	9.50	DEL	
CAE-MW5d	05/10/2012	10:20 AM	9.13	DEL	
CAE-MW6s	05/10/2012	10:00 AM	11.64	DEL	
CAE-MW6d	05/10/2012	10:00 AM	11.53	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Robert Gioletti and Sons Dairy

118 N. Blaker Rd., Turlock, CA 95380

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ROB-MW1s	05/08/2012	12:33 PM	12.19	CL	
ROB-MW1d	05/08/2012	12:34 PM	11.89	CL	
ROB-MW2s	05/08/2012	12:52 PM	12.47	CL	
ROB-MW2d	05/08/2012	12:53 PM	12.31	CL	
ROB-MW3s	05/08/2012	1:19 PM	11.13	CL	
ROB-MW3d	05/08/2012	1:19 PM	11.03	CL	
ROB-MW4s	05/08/2012	1:37 PM	10.29	CL	
ROB-MW4d	05/08/2012	1:38 PM	10.10	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Robert Gioletti and Sons Dairy

118 N. Blaker Rd., Turlock, CA 95380

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ROB-MW5s	05/08/2012	2:01 PM	11.40	CL	
ROB-MW5d	05/08/2012	2:02 PM	11.27	CL	
ROB-MW6s	05/08/2012	11:38 AM	13.61	CL	
ROB-MW6d	05/08/2012	11:39 AM	13.53	CL	
ROB-MW7s	05/08/2012	10:56 AM	11.07	CL	
ROB-MW7d	05/08/2012	10:56 AM	12.56	CL	
ROB-MW8s	05/08/2012	12:06 PM	11.33	CL	
ROB-MW8d	05/08/2012	12:07 PM	11.72	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Antone L. Gomes and Sons Dairy

515 E. Stuhr Rd., Newman, CA 95360

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ANT-MW1s	05/10/2012	11:05 AM	20.13	CL	
ANT-MW1d	05/10/2012	11:06 AM	20.03	CL	
ANT-MW2s	05/10/2012	9:10 AM	21.17	CL	
ANT-MW2d	05/10/2012	9:11 AM	20.75	CL	
ANT-MW3s	05/10/2012	9:56 AM	20.38	CL	
ANT-MW3d	05/10/2012	9:57 AM	20.68	CL	
ANT-MW4s	05/10/2012	9:34 AM	21.09	CL	
ANT-MW4d	05/10/2012	9:35 AM	21.00	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Antone L. Gomes and Sons Dairy

515 E. Stuhr Rd., Newman, CA 95360

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ANT-MW5s	05/10/2012	11:33 AM	23.52	CL	
ANT-MW5d	05/10/2012	11:34 AM	24.42	CL	
ANT-MW6s	05/10/2012	10:39 AM	18.03	CL	
ANT-MW6d	05/10/2012	10:40 AM	18.39	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Correia Family Dairy Farms

26380 W. Fahey Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
COR-MW1s	05/11/2012	3:00 PM	7.52	DEL	
COR-MW1d	05/11/2012	3:01 PM	7.40	DEL	
COR-MW2s	05/11/2012	2:45 PM	7.79	DEL	
COR-MW2d	05/11/2012	2:46 PM	7.55	DEL	
COR-MW3s	05/11/2012	2:30 PM	8.63	DEL	
COR-MW3d	05/11/2012	2:31 PM	8.45	DEL	
COR-MW4s	05/11/2012	3:40 PM	7.65	DEL	
COR-MW4d	05/11/2012	3:41 PM	7.55	DEL	
COR-MW5s	05/11/2012	3:22 PM	7.84	DEL	
COR-MW5d	05/11/2012	3:22 PM	7.70	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Frank J. Gomes Dairy #2

890 Kniebes Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
FG2-MW1s	05/10/2012	1:52 PM	4.42	CL	
FG2-MW1d	05/10/2012	1:53 PM	4.40	CL	
FG2-MW2s	05/10/2012	12:34 PM	8.13	CL	
FG2-MW2d	05/10/2012	12:34 PM	8.02	CL	
FG2-MW3s	05/10/2012	1:22 PM	10.33	CL	
FG2-MW3d	05/10/2012	1:23 PM	9.87	CL	
FG2-MW4s	05/10/2012	2:14 PM	10.80	CL	
FG2-MW4d	05/10/2012	2:15 PM	10.34	CL	
FG2-MW5s	05/10/2012	2:38 PM	6.30	CL	
FG2-MW5d	05/10/2012	2:38 PM	6.10	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Godinho Dairy

12710 S. Wilson Rd., Los Banos, CA 93635

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
GOD-MW1s	05/09/2012	5:23 PM	7.70	DEL	
GOD-MW1d	05/09/2012	5:24 PM	7.60	DEL	
GOD-MW2s	05/09/2012	4:32 PM	10.80	DEL	
GOD-MW2d	05/09/2012	4:33 PM	10.71	DEL	
GOD-MW3s	05/09/2012	5:00 PM	11.35	DEL	
GOD-MW3d	05/09/2012	5:00 PM	11.22	DEL	
GOD-MW4s	05/09/2012	5:44 PM	11.14	DEL	
GOD-MW4d	05/09/2012	5:45 PM	10.79	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Godinho Dairy

12710 S. Wilson Rd., Los Banos, CA 93635

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
GOD-MW5s	05/09/2012	6:44 PM	8.57	DEL	
GOD-MW5d	05/09/2012	6:44 PM	8.25	DEL	
GOD-MW6s	05/09/2012	6:08 PM	9.10	DEL	
GOD-MW6d	05/09/2012	6:09 PM	8.88	DEL	
GOD-MW7s	05/09/2012	6:33 PM	9.40	DEL	
GOD-MW7d	05/09/2012	6:34 PM	9.25	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

John Machado Dairy

22495 W. China Camp Rd., Los Banos, CA 93635

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MAC-MW1s	05/11/2012	11:48 AM	6.04	DEL	
MAC-MW1d	05/11/2012	11:49 AM	5.95	DEL	
MAC-MW2s	05/11/2012	12:00 PM	5.32	DEL	
MAC-MW2d	05/11/2012	12:01 PM	5.10	DEL	
MAC-MW3s	05/11/2012	10:26 AM	5.00	DEL	
MAC-MW3d	05/11/2012	10:27 AM	4.73	DEL	
MAC-MW4s	05/11/2012	10:50 AM	5.65	DEL	
MAC-MW4d	05/11/2012	10:52 AM	5.58	DEL	
MAC-MW5s	05/11/2012	11:20 AM	4.80	DEL	
MAC-MW5d	05/11/2012	11:21 AM	4.60	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Jose Nunes Dairy

22484 W. China Camp Rd., Los Banos, CA 93635

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
NUN-MW1s	05/11/2012	1:00 PM	7.65	DEL	
NUN-MW1d	05/11/2012	1:01 PM	7.35	DEL	
NUN-MW2s	05/11/2012	1:26 PM	7.97	DEL	
NUN-MW2d	05/11/2012	1:27 PM	7.75	DEL	
NUN-MW3s	05/11/2012	12:44 PM	5.92	DEL	
NUN-MW3d	05/11/2012	12:45 PM	5.89	DEL	
NUN-MW4s	05/11/2012	12:30 PM	7.12	DEL	
NUN-MW4d	05/11/2012	12:30 PM	7.05	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Moonshine Dairy

22922 Kilburn Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MOO-MW1	05/11/2012	11:16 AM	14.70	AL	
MOO-MW2	05/11/2012	11:35 AM	20.28	AL	
MOO-MW3	05/11/2012	11:55 AM	13.02	AL	
MOO-MW4	05/11/2012	12:36 PM	12.55	AL	
MOO-MW5s	05/11/2012	12:19 PM	13.48	AL	
MOO-MW5d	05/11/2012	12:20 PM	13.50	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Moonshine Dairy

22922 Kilburn Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MOO-MW6s	05/11/2012	10:58 AM	22.73	AL	
MOO-MW6d	05/11/2012	10:59 AM	22.98	AL	
MOO-MW7s	05/11/2012	10:42 AM	19.52	AL	
MOO-MW7d	05/11/2012	10:43 AM	19.48	AL	
MOO-MW8s	05/11/2012	10:29 AM	20.00	AL	
MOO-MW8d	05/11/2012	10:30 AM	19.83	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Tony L. Lopes Dairy LP

27500 Bunker Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
TON-MW1s	05/10/2012	3:52 PM	7.84	CL	
TON-MW1d	05/10/2012	3:53 PM	7.73	CL	
TON-MW2s	05/10/2012	5:26 PM	6.56	CL	
TON-MW2d	05/10/2012	5:27 PM	6.40	CL	
TON-MW3s	05/10/2012	4:35 PM	10.77	CL	
TON-MW3d	05/10/2012	4:35 PM	10.69	CL	
TON-MW4s	05/10/2012	4:13 PM	9.75	CL	
TON-MW4d	05/10/2012	4:14 PM	9.45	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Tony L. Lopes Dairy LP

27500 Bunker Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
TON-MW5s	05/10/2012	4:52 PM	9.60	CL	
TON-MW5d	05/10/2012	4:55 PM	9.50	CL	
TON-MW6s	05/10/2012	5:46 PM	8.99	CL	
TON-MW6d	05/10/2012	5:47 PM	8.53	CL	
TON-MW7s	05/10/2012	5:25 PM	6.14	CL	
TON-MW7d	05/10/2012	5:25 PM	5.81	CL	
TON-MW8s	05/10/2012	5:08 PM	10.14	CL	
TON-MW8d	05/10/2012	5:10 PM	9.63	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

June

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Albert Mendes Dairy

1100 Ruble Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR

InstrumenCLtion: SOLINST

Monitoring Well Name	Date mm/dd/yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MEN-MW1s	06/18/2012	9:48 AM	9.15	AL	
MEN-MW1d	06/18/2012	9:47 AM	9.00	AL	
MEN-MW2s	06/18/2012	9:51 AM	9.13	AL	
MEN-MW2d	06/18/2012	9:50 AM	9.03	AL	
MEN-MW3s	06/18/2012	9:55 AM	9.16	AL	
MEN-MW3d	06/18/2012	9:54 AM	9.03	AL	
MEN-MW4s	06/18/2012	9:58 AM	8.73	AL	
MEN-MW4d	06/18/2012	9:57 AM	8.60	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Albert Mendes Dairy

1100 Ruble Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR

InstrumenCLtion: SOLINST

Monitoring Well Name	Date mm/dd/yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MEN-MW5s	06/18/2012	10:01 AM	9.75	AL	
MEN-MW5d	06/18/2012	10:00 AM	9.65	AL	
MEN-MW6s	06/18/2012	10:08 AM	5.44	AL	
MEN-MW6d	06/18/2012	10:07 AM	5.31	AL	
MEN-MW7s	06/18/2012	10:04 AM	6.97	AL	
MEN-MW7d	06/18/2012	10:03 AM	6.84	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Anchor J. Dairy

24507 First Ave., Stevinson, CA 95374

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ANC-MW1	06/18/2012	11:41 AM	12.85	AL	
ANC-MW2	06/18/2012	11:44 AM	20.00	AL	
ANC-MW3	06/18/2012	11:47 AM	10.21	AL	
ANC-MW4	06/18/2012	11:39 AM	20.82	AL	
ANC-MW5s	06/18/2012	11:51 AM	15.70	AL	
ANC-MW5d	06/18/2012	11:50 AM	15.83	AL	
ANC-MW6s	06/18/2012	11:58 AM	13.78	AL	
ANC-MW6d	06/18/2012	11:57 AM	13.68	AL	
ANC-MW7s	06/18/2012	11:55 AM	13.48	AL	
ANC-MW7d	06/18/2012	11:54 AM	13.38	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Bettencourt and Marson Dairy

18128 American Ave., Hilmar, CA 95324

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
BET-MW1s	06/18/2012	1:59 PM	14.93	AL	
BET-MW1d	06/18/2012	1:58 PM	14.48	AL	
BET-MW2s	06/18/2012	1:56 PM	14.85	AL	
BET-MW2d	06/18/2012	1:55 PM	14.55	AL	
BET-MW3s	06/18/2012	1:53 PM	13.35	AL	
BET-MW3d	06/18/2012	1:52 PM	13.18	AL	
BET-MW4s	06/18/2012	2:06 PM	13.70	AL	
BET-MW4d	06/18/2012	2:05 PM	14.40	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Bettencourt and Marson Dairy

18128 American Ave., Hilmar, CA 95324

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
BET-MW5s	06/18/2012	2:16 PM	10.83	AL	
BET-MW5d	06/18/2012	2:16 PM	10.63	AL	
BET-MW6s	06/18/2012	2:19 PM	10.82	AL	
BET-MW6d	06/18/2012	2:18 PM	10.60	AL	
BET-MW7s	06/18/2012	2:24 PM	11.33	AL	
BET-MW7d	06/18/2012	2:23 PM	11.15	AL	
BET-MW8s	06/18/2012	2:28 PM	10.47	AL	
BET-MW8d	06/18/2012	2:27 PM	10.33	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Frank J. Gomes Dairy #1

5301 N. DeAngelis Rd., Stevinson, CA 95374

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
FG1-MW1s	06/18/2012	12:38 PM	16.20	AL	
FG1-MW1d	06/18/2012	12:37 PM	15.89	AL	
FG1-MW2s	06/18/2012	12:42 PM	DRY	AL	
FG1-MW2d	06/18/2012	12:41 PM	19.85	AL	
FG1-MW3s	06/18/2012	12:40 PM	DRY	AL	
FG1-MW3d	06/18/2012	12:39 PM	17.33	AL	
FG1-MW4s	06/18/2012	12:46 PM	14.35	AL	
FG1-MW4d	06/18/2012	12:45 PM	14.00	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Frank J. Gomes Dairy #1

5301 N. DeAngelis Rd., Stevinson, CA 95374

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
FG1-MW5s	06/18/2012	12:59 PM	16.35	AL	
FG1-MW5d	06/18/2012	12:58 PM	16.15	AL	
FG1-MW6s	06/18/2012	12:53 PM	18.76	AL	
FG1-MW6d	06/18/2012	12:52 PM	18.53	AL	
FG1-MW7s	06/18/2012	12:50 PM	17.65	AL	
FG1-MW7d	06/18/2012	12:49 PM	17.35	AL	
FG1-MW8s	06/18/2012	1:02 PM	18.48	AL	
FG1-MW8d	06/18/2012	1:01 PM	18.22	AL	
FG1-MW9s	06/18/2012	12:34 PM	16.28	AL	
FG1-MW9d	06/18/2012	12:33 PM	16.95	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Bear Creek

15751 W. Hwy. 140, Livingston, CA 95334

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
BEA-MW1s	06/21/2012	6:20 PM	DRY	DEL	
BEA-MW1d	06/21/2012	6:21 PM	29.87	DEL	
BEA-MW2s	06/21/2012	6:14 PM	DRY	DEL	
BEA-MW2d	06/21/2012	6:15 PM	29.40	DEL	
BEA-MW3s	06/21/2012	6:08 PM	DRY	DEL	
BEA-MW3d	06/21/2012	6:10 PM	26.96	DEL	
BEA-MW4s	06/21/2012	6:05 PM	32.02	DEL	
BEA-MW4d	06/21/2012	6:06 PM	31.73	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Cottonwood

10561 Hwy. 140, Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
COT-MW1	06/21/2012	5:44 PM	DRY	DEL	
COT-MW2	06/21/2012	5:50 PM	25.96	DEL	
COT-MW3	06/21/2012	5:38 PM	18.08	DEL	
COT-MW4	06/21/2012	5:10 PM	21.64	DEL	
COT-MW5	06/21/2012	5:07 PM	16.77	DEL	
COT-MW6	06/21/2012	5:05 PM	17.20	DEL	
COT-MW7	06/21/2012	4:57 PM	21.26	DEL	
COT-MW8	06/21/2012	4:54 PM	11.97	DEL	
COT-MW9	06/21/2012	5:00 PM	13.05	DEL	
COT-MW10	06/21/2012	4:50 PM	9.00	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Cottonwood

10561 Hwy. 140, Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
COT-MW11s	06/21/2012	5:22 PM	24.75	DEL	
COT-MW11d	06/21/2012	5:22 PM	24.66	DEL	
COT-MW12s	06/21/2012	5:24 PM	25.47	DEL	
COT-MW12d	06/21/2012	5:25 PM	25.60	DEL	
COT-MW13s	06/21/2012	5:27 PM	27.08	DEL	
COT-MW13d	06/21/2012	5:28 PM	27.10	DEL	
COT-MW14s	06/21/2012	5:30 PM	27.93	DEL	
COT-MW14d	06/21/2012	5:30 PM	27.66	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Santa Rita

91 S. Bert Crane Rd., Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
SAN-MW1s	06/21/2012	4:08 PM	DRY	DEL	
SAN-MW1d	06/21/2012	4:08 PM	27.30	DEL	
SAN-MW2s	06/21/2012	4:17 PM	DRY	DEL	
SAN-MW2d	06/21/2012	4:18 PM	34.16	DEL	
SAN-MW3s	06/21/2012	4:15 PM	DRY	DEL	
SAN-MW3d	06/21/2012	4:15 PM	35.82	DEL	
SAN-MW4s	06/21/2012	4:11 PM	DRY	DEL	
SAN-MW4d	06/21/2012	4:12 PM	35.66	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Santa Rita

91 S. Bert Crane Rd., Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
SAN-MW5s	06/21/2012	4:00 PM	26.85	DEL	
SAN-MW5d	06/21/2012	4:00 PM	26.78	DEL	
SAN-MW6s	06/21/2012	4:36 PM	14.48	DEL	
SAN-MW6d	06/21/2012	4:40 PM	14.29	DEL	
SAN-MW7s	06/21/2012	4:30 PM	19.76	DEL	
SAN-MW7d	06/21/2012	4:32 PM	19.63	DEL	
SAN-MW8s	06/21/2012	4:22 PM	20.00	DEL	
SAN-MW8d	06/21/2012	4:23 PM	19.79	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Santa Rita

91 S. Bert Crane Rd., Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
SAN-MW9s	06/21/2012	4:30 PM	19.70	DEL	
SAN-MW9d	06/21/2012	4:32 PM	19.63	DEL	
SAN-MW10s	06/21/2012	4:22 PM	20.00	DEL	
SAN-MW10d	06/21/2012	4:23 PM	19.79	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

P. & L. Souza Dairy

20633 Crane Ave., Hilmar, CA 95324

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
PLS-MW1s	06/18/2012	1:29 PM	10.95	AL	
PLS-MW1d	06/18/2012	1:28 PM	10.68	AL	
PLS-MW2s	06/18/2012	1:32 PM	9.51	AL	
PLS-MW2d	06/18/2012	1:31 PM	9.38	AL	
PLS-MW3s	06/18/2012	1:21 PM	9.06	AL	
PLS-MW3d	06/18/2012	1:20 PM	8.93	AL	
PLS-MW4s	06/18/2012	1:26 PM	10.63	AL	
PLS-MW4d	06/18/2012	1:25 PM	10.25	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

P. & L. Souza Dairy

20633 Crane Ave., Hilmar, CA 95324

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
PLS-MW5s	06/18/2012	1:36 PM	9.43	AL	
PLS-MW5d	06/18/2012	1:35 PM	9.30	AL	
PLS-MW6s	06/18/2012	1:40 PM	8.47	AL	
PLS-MW6d	06/18/2012	1:39 PM	9.33	AL	
PLS-MW7s	06/18/2012	1:43 PM	10.00	AL	
PLS-MW7d	06/18/2012	1:42 PM	10.94	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Paul Caetano Dairy

9436 Griffith Ave., Delhi, CA 95315

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
CAE-MW1s	06/20/2012	2:34 PM	14.66	CL	
CAE-MW1d	06/20/2012	2:35 PM	14.20	CL	
CAE-MW2s	06/20/2012	2:26 PM	13.90	CL	
CAE-MW2d	06/20/2012	2:27 PM	13.73	CL	
CAE-MW3s	06/20/2012	2:23 PM	14.53	CL	
CAE-MW3d	06/20/2012	2:24 PM	14.46	CL	
CAE-MW4s	06/20/2012	2:31 PM	14.00	CL	
CAE-MW4d	06/20/2012	2:32 PM	13.79	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Paul Caetano Dairy

9436 Griffith Ave., Delhi, CA 95315

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
CAE-MW5s	06/20/2012	2:41 PM	8.26	CL	
CAE-MW5d	06/20/2012	2:42 PM	7.27	CL	
CAE-MW6s	06/20/2012	2:44 PM	9.83	CL	
CAE-MW6d	06/20/2012	2:45 PM	9.73	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Robert Gioletti and Sons Dairy

118 N. Blaker Rd., Turlock, CA 95380

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ROB-MW1s	06/18/2012	9:12 AM	11.83	AL	
ROB-MW1d	06/18/2012	9:11 AM	11.51	AL	
ROB-MW2s	06/18/2012	9:10 AM	12.32	AL	
ROB-MW2d	06/18/2012	9:09 AM	12.17	AL	
ROB-MW3s	06/18/2012	9:17 AM	12.09	AL	
ROB-MW3d	06/18/2012	9:16 AM	11.93	AL	
ROB-MW4s	06/18/2012	9:21 AM	11.50	AL	
ROB-MW4d	06/18/2012	9:20 AM	11.28	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Robert Gioletti and Sons Dairy

118 N. Blaker Rd., Turlock, CA 95380

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ROB-MW5s	06/18/2012	9:27 AM	12.23	AL	
ROB-MW5d	06/18/2012	9:26 AM	12.10	AL	
ROB-MW6s	06/18/2012	9:37 AM	15.00	AL	
ROB-MW6d	06/18/2012	9:36 AM	14.90	AL	
ROB-MW7s	06/18/2012	9:34 AM	12.93	AL	
ROB-MW7d	06/18/2012	9:33 AM	13.58	AL	
ROB-MW8s	06/18/2012	9:04 AM	12.57	AL	
ROB-MW8d	06/18/2012	9:05 AM	12.67	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Antone L. Gomes and Sons Dairy

515 E. Stuhr Rd., Newman, CA 95360

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ANT-MW1s	06/18/2012	11:19 AM	19.63	AL	
ANT-MW1d	06/18/2012	11:18 AM	19.53	AL	
ANT-MW2s	06/18/2012	10:59 AM	22.10	AL	
ANT-MW2d	06/18/2012	10:58 AM	21.75	AL	
ANT-MW3s	06/18/2012	11:05 AM	19.14	AL	
ANT-MW3d	06/18/2012	11:04 AM	19.58	AL	
ANT-MW4s	06/18/2012	11:02 AM	20.68	AL	
ANT-MW4d	06/18/2012	11:01 AM	20.58	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Antone L. Gomes and Sons Dairy

515 E. Stuhr Rd., Newman, CA 95360

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ANT-MW5s	06/18/2012	11:15 AM	22.95	AL	
ANT-MW5d	06/18/2012	11:14 AM	24.00	AL	
ANT-MW6s	06/18/2012	11:10 AM	16.30	AL	
ANT-MW6d	06/18/2012	11:09 AM	16.59	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Correia Family Dairy Farms

26380 W. Fahey Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
COR-MW1s	06/20/2012	11:16 AM	7.47	CL	
COR-MW1d	06/20/2012	11:17 AM	7.34	CL	
COR-MW2s	06/20/2012	11:22 AM	6.89	CL	
COR-MW2d	06/20/2012	11:23 AM	6.67	CL	
COR-MW3s	06/20/2012	11:26 AM	7.10	CL	
COR-MW3d	06/20/2012	11:27 AM	6.94	CL	
COR-MW4s	06/20/2012	11:10 AM	6.63	CL	
COR-MW4d	06/20/2012	11:10 AM	6.72	CL	
COR-MW5s	06/20/2012	11:07 AM	6.63	CL	
COR-MW5d	06/20/2012	11:08 AM	6.48	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Frank J. Gomes Dairy #2

890 Kniebes Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
FG2-MW1s	06/20/2012	9:42 AM	4.39	CL	
FG2-MW1d	06/20/2012	9:43 AM	4.18	CL	
FG2-MW2s	06/20/2012	9:33 AM	7.41	CL	
FG2-MW2d	06/20/2012	9:34 AM	7.28	CL	
FG2-MW3s	06/20/2012	9:36 AM	9.64	CL	
FG2-MW3d	06/20/2012	9:37 AM	9.19	CL	
FG2-MW4s	06/20/2012	9:46 AM	10.12	CL	
FG2-MW4d	06/20/2012	9:47 AM	9.69	CL	
FG2-MW5s	06/20/2012	9:23 AM	6.85	CL	
FG2-MW5d	06/20/2012	9:24 AM	6.63	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Godinho Dairy

12710 S. Wilson Rd., Los Banos, CA 93635

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
GOD-MW1s	06/20/2012	1:24 PM	7.05	CL	
GOD-MW1d	06/20/2012	1:25 PM	6.97	CL	
GOD-MW2s	06/20/2012	1:41 PM	10.15	CL	
GOD-MW2d	06/20/2012	1:42 PM	10.06	CL	
GOD-MW3s	06/20/2012	1:36 PM	11.17	CL	
GOD-MW3d	06/20/2012	1:37 PM	11.07	CL	
GOD-MW4s	06/20/2012	1:31 PM	11.63	CL	
GOD-MW4d	06/20/2012	1:32 PM	11.27	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Godinho Dairy

12710 S. Wilson Rd., Los Banos, CA 93635

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
GOD-MW5s	06/20/2012	12:47 PM	6.28	CL	
GOD-MW5d	06/20/2012	12:48 PM	5.98	CL	
GOD-MW6s	06/20/2012	1:14 PM	6.24	CL	
GOD-MW6d	06/20/2012	1:15 PM	6.15	CL	
GOD-MW7s	06/20/2012	1:08 PM	5.31	CL	
GOD-MW7d	06/20/2012	1:09 PM	5.32	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

John Machado Dairy

22495 W. China Camp Rd., Los Banos, CA 93635

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MAC-MW1s	06/20/2012	12:25 PM	6.74	CL	
MAC-MW1d	06/20/2012	12:26 PM	6.66	CL	
MAC-MW2s	06/20/2012	12:31 PM	3.98	CL	
MAC-MW2d	06/20/2012	12:32 PM	3.75	CL	
MAC-MW3s	06/20/2012	12:12 PM	6.50	CL	
MAC-MW3d	06/20/2012	12:13 PM	6.33	CL	
MAC-MW4s	06/20/2012	12:18 PM	6.01	CL	
MAC-MW4d	06/20/2012	12:19 PM	5.96	CL	
MAC-MW5s	06/20/2012	12:20 PM	5.21	CL	
MAC-MW5d	06/20/2012	12:21 PM	5.02	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Jose Nunes Dairy

22484 W. China Camp Rd., Los Banos, CA 93635

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
NUN-MW1s	06/20/2012	11:52 AM	7.50	CL	
NUN-MW1d	06/20/2012	11:53 AM	7.18	CL	
NUN-MW2s	06/20/2012	12:05 PM	7.98	CL	
NUN-MW2d	06/20/2012	12:06 PM	7.81	CL	
NUN-MW3s	06/20/2012	11:47 AM	5.75	CL	
NUN-MW3d	06/20/2012	11:48 AM	5.69	CL	
NUN-MW4s	06/20/2012	11:42 AM	6.90	CL	
NUN-MW4d	06/20/2012	11:43 AM	6.80	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Moonshine Dairy

22922 Kilburn Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MOO-MW1	06/18/2012	10:32 AM	14.79	AL	
MOO-MW2	06/18/2012	10:30 AM	20.58	AL	
MOO-MW3	06/18/2012	10:25 AM	12.85	AL	
MOO-MW4	06/18/2012	10:20 AM	12.90	AL	
MOO-MW5s	06/18/2012	10:24 AM	13.36	AL	
MOO-MW5d	06/18/2012	10:23 AM	15.37	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Moonshine Dairy

22922 Kilburn Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MOO-MW6s	06/18/2012	10:36 AM	22.42	AL	
MOO-MW6d	06/18/2012	10:35 AM	24.18	AL	
MOO-MW7s	06/18/2012	10:39 AM	19.78	AL	
MOO-MW7d	06/18/2012	10:38 AM	19.73	AL	
MOO-MW8s	06/18/2012	10:42 AM	20.26	AL	
MOO-MW8d	06/18/2012	10:41 AM	20.10	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Tony L. Lopes Dairy LP

27500 Bunker Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
TON-MW1s	06/20/2012	10:26 AM	9.56	CL	
TON-MW1d	06/20/2012	10:27 AM	9.43	CL	
TON-MW2s	06/20/2012	10:49 AM	7.32	CL	
TON-MW2d	06/20/2012	10:50 AM	7.16	CL	
TON-MW3s	06/20/2012	10:38 AM	12.63	CL	
TON-MW3d	06/20/2012	10:39 AM	12.55	CL	
TON-MW4s	06/20/2012	10:31 AM	15.03	CL	
TON-MW4d	06/20/2012	10:32 AM	14.72	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Tony L. Lopes Dairy LP

27500 Bunker Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
TON-MW5s	06/20/2012	10:42 AM	13.33	CL	
TON-MW5d	06/20/2012	10:43 AM	13.27	CL	
TON-MW6s	06/20/2012	10:18 AM	8.23	CL	
TON-MW6d	06/20/2012	10:19 AM	8.09	CL	
TON-MW7s	06/20/2012	10:09 AM	6.51	CL	
TON-MW7d	06/20/2012	10:10 AM	6.21	CL	
TON-MW8s	06/20/2012	10:13 AM	10.00	CL	
TON-MW8d	06/20/2012	10:14 AM	9.51	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

July

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Albert Mendes Dairy

1100 Ruble Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR

Instrumentation: SOLINST

Monitoring Well Name	Date mm/dd/yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MEN-MW1s	07/09/2012	10:01 AM	8.75	AL	
MEN-MW1d	07/09/2012	10:00 AM	8.60	AL	
MEN-MW2s	07/09/2012	10:04 AM	8.72	AL	
MEN-MW2d	07/09/2012	10:03 AM	8.58	AL	
MEN-MW3s	07/09/2012	10:07 AM	8.20	AL	
MEN-MW3d	07/09/2012	10:06 AM	8.04	AL	
MEN-MW4s	07/09/2012	10:11 AM	7.71	AL	
MEN-MW4d	07/09/2012	10:11 AM	7.60	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Albert Mendes Dairy

1100 Ruble Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR

Instrumentation: SOLINST

Monitoring Well Name	Date mm/dd/yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MEN-MW5s	07/09/2012	10:16 AM	8.81	AL	
MEN-MW5d	07/09/2012	10:15 AM	8.70	AL	
MEN-MW6s	07/09/2012	10:29 AM	4.83	AL	
MEN-MW6d	07/09/2012	10:28 AM	4.77	AL	
MEN-MW7s	07/09/2012	10:23 AM	6.02	AL	
MEN-MW7d	07/09/2012	10:22 AM	5.88	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Anchor J. Dairy

24507 First Ave., Stevinson, CA 95374

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ANC-MW1	07/09/2012	1:49 PM	11.66	AL	
ANC-MW2	07/09/2012	1:46 PM	12.20	AL	
ANC-MW3	07/09/2012	1:44 PM	10.40	AL	
ANC-MW4	07/09/2012	1:52 PM	20.58	AL	
ANC-MW5s	07/09/2012	1:55 PM	15.82	AL	
ANC-MW5d	07/09/2012	1:55 PM	16.08	AL	
ANC-MW6s	07/09/2012	1:41 PM	13.83	AL	
ANC-MW6d	07/09/2012	1:41 PM	13.73	AL	
ANC-MW7s	07/09/2012	1:39 PM	12.69	AL	
ANC-MW7d	07/09/2012	1:38 PM	12.60	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Bettencourt and Marson Dairy

18128 American Ave., Hilmar, CA 95324

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
BET-MW1s	07/11/2012	9:21 AM	16.18	AL	
BET-MW1d	07/11/2012	9:20 AM	15.70	AL	
BET-MW2s	07/11/2012	9:17 AM	13.85	AL	
BET-MW2d	07/11/2012	9:17 AM	13.54	AL	
BET-MW3s	07/11/2012	9:15 AM	12.20	AL	
BET-MW3d	07/11/2012	9:15 AM	12.00	AL	
BET-MW4s	07/11/2012	9:26 AM	14.77	AL	
BET-MW4d	07/11/2012	9:26 AM	15.23	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Bettencourt and Marson Dairy

18128 American Ave., Hilmar, CA 95324

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
BET-MW5s	07/11/2012	9:30 AM	9.07	AL	
BET-MW5d	07/11/2012	9:30 AM	8.88	AL	
BET-MW6s	07/11/2012	9:34 AM	8.57	AL	
BET-MW6d	07/11/2012	9:34 AM	8.34	AL	
BET-MW7s	07/11/2012	9:40 AM	11.28	AL	
BET-MW7d	07/11/2012	9:40 AM	11.13	AL	
BET-MW8s	07/11/2012	9:37 AM	9.50	AL	
BET-MW8d	07/11/2012	9:37 AM	9.35	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Frank J. Gomes Dairy #1

5301 N. DeAngelis Rd., Stevinson, CA 95374

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
FG1-MW1s	07/09/2012	2:15 PM	16.30	AL	
FG1-MW1d	07/09/2012	2:15 PM	15.98	AL	
FG1-MW2s	07/09/2012	2:21 PM	DRY	AL	
FG1-MW2d	07/09/2012	2:20 PM	19.38	AL	
FG1-MW3s	07/09/2012	2:18 PM	DRY	AL	
FG1-MW3d	07/09/2012	2:18 PM	17.48	AL	
FG1-MW4s	07/09/2012	2:23 PM	11.88	AL	
FG1-MW4d	07/09/2012	2:23 PM	11.31	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Frank J. Gomes Dairy #1

5301 N. DeAngelis Rd., Stevinson, CA 95374

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
FG1-MW5s	07/09/2012	2:38 PM	16.67	AL	
FG1-MW5d	07/09/2012	2:38 PM	16.50	AL	
FG1-MW6s	07/09/2012	2:35 PM	16.18	AL	
FG1-MW6d	07/09/2012	2:34 PM	16.00	AL	
FG1-MW7s	07/09/2012	2:27 PM	15.11	AL	
FG1-MW7d	07/09/2012	2:26 PM	14.90	AL	
FG1-MW8s	07/09/2012	2:30 PM	18.77	AL	
FG1-MW8d	07/09/2012	2:30 PM	18.50	AL	
FG1-MW9s	07/09/2012	2:12 PM	15.82	AL	
FG1-MW9d	07/09/2012	2:11 PM	17.01	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Bear Creek

15751 W. Hwy. 140, Livingston, CA 95334

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
BEA-MW1s	07/11/2012	10:35 AM	DRY	AL	
BEA-MW1d	07/11/2012	10:35 AM	31.86	AL	
BEA-MW2s	07/11/2012	10:22 AM	DRY	AL	
BEA-MW2d	07/11/2012	10:22 AM	31.52	AL	
BEA-MW3s	07/11/2012	10:31 AM	27.03	AL	
BEA-MW3d	07/11/2012	10:31 AM	29.63	AL	
BEA-MW4s	07/11/2012	10:27 AM	35.22	AL	
BEA-MW4d	07/11/2012	10:27 AM	35.22	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Cottonwood

10561 Hwy. 140, Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
COT-MW1	07/11/2012	10:47 AM	DRY	AL	
COT-MW2	07/11/2012	11:32 AM	27.15	AL	
COT-MW3	07/11/2012	11:37 AM	19.55	AL	
COT-MW4	07/11/2012	11:25 AM	22.12	AL	
COT-MW5	07/11/2012	11:18 AM	16.23	AL	
COT-MW6	07/11/2012	11:16 AM	16.48	AL	
COT-MW7	07/11/2012	11:41 AM	22.09	AL	
COT-MW8	07/11/2012	11:50 AM	12.84	AL	
COT-MW9	07/11/2012	11:59 AM	14.72	AL	
COT-MW10	07/11/2012	11:55 AM	11.04	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Cottonwood

10561 Hwy. 140, Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
COT-MW11s	07/11/2012	10:52 AM	DRY	AL	
COT-MW11d	07/11/2012	10:51 AM	23.48	AL	
COT-MW12s	07/11/2012	10:54 AM	24.87	AL	
COT-MW12d	07/11/2012	10:54 AM	24.97	AL	
COT-MW13s	07/11/2012	10:57 AM	25.72	AL	
COT-MW13d	07/11/2012	10:57 AM	25.67	AL	
COT-MW14s	07/11/2012	11:11 AM	27.25	AL	
COT-MW14d	07/11/2012	11:11 AM	26.95	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Santa Rita

91 S. Bert Crane Rd., Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
SAN-MW1s	07/11/2012	12:24 PM	DRY	AL	
SAN-MW1d	07/11/2012	12:24 PM	28.00	AL	
SAN-MW2s	07/11/2012	12:36 PM	DRY	AL	
SAN-MW2d	07/11/2012	12:35 PM	34.89	AL	
SAN-MW3s	07/11/2012	12:29 PM	DRY	AL	
SAN-MW3d	07/11/2012	12:29 PM	36.19	AL	
SAN-MW4s	07/11/2012	12:32 PM	DRY	AL	
SAN-MW4d	07/11/2012	12:31 PM	36.08	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Santa Rita

91 S. Bert Crane Rd., Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
SAN-MW5s	07/11/2012	12:20 PM	27.00	AL	
SAN-MW5d	07/11/2012	12:20 PM	26.90	AL	
SAN-MW6s	07/11/2012	12:08 PM	14.94	AL	
SAN-MW6d	07/11/2012	12:08 PM	14.78	AL	
SAN-MW7s	07/11/2012	12:12 PM	20.11	AL	
SAN-MW7d	07/11/2012	12:12 PM	20.01	AL	
SAN-MW8s	07/11/2012	12:15 PM	20.81	AL	
SAN-MW8d	07/11/2012	12:14 PM	20.64	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

P. & L. Souza Dairy

20633 Crane Ave., Hilmar, CA 95324

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
PLS-MW1s	07/09/2012	3:16 PM	9.55	AL	
PLS-MW1d	07/09/2012	3:15 PM	9.41	AL	
PLS-MW2s	07/09/2012	3:12 PM	8.16	AL	
PLS-MW2d	07/09/2012	3:12 PM	8.00	AL	
PLS-MW3s	07/09/2012	2:58 PM	8.44	AL	
PLS-MW3d	07/09/2012	2:57 PM	8.09	AL	
PLS-MW4s	07/09/2012	3:09 PM	9.12	AL	
PLS-MW4d	07/09/2012	3:09 PM	8.89	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

P. & L. Souza Dairy

20633 Crane Ave., Hilmar, CA 95324

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
PLS-MW5s	07/09/2012	3:21 PM	8.30	AL	
PLS-MW5d	07/09/2012	3:21 PM	8.11	AL	
PLS-MW6s	07/09/2012	3:00 PM	5.87	AL	
PLS-MW6d	07/09/2012	3:00 PM	7.37	AL	
PLS-MW7s	07/09/2012	3:03 PM	8.43	AL	
PLS-MW7d	07/09/2012	3:03 PM	9.23	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Paul Caetano Dairy

9436 Griffith Ave., Delhi, CA 95315

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
CAE-MW1s	07/11/2012	9:53 AM	15.38	AL	
CAE-MW1d	07/11/2012	9:53 AM	14.92	AL	
CAE-MW2s	07/11/2012	9:47 AM	14.43	AL	
CAE-MW2d	07/11/2012	9:47 AM	14.27	AL	
CAE-MW3s	07/11/2012	9:45 AM	15.50	AL	
CAE-MW3d	07/11/2012	9:45 AM	16.38	AL	
CAE-MW4s	07/11/2012	9:50 AM	14.45	AL	
CAE-MW4d	07/11/2012	9:50 AM	14.28	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Paul Caetano Dairy

9436 Griffith Ave., Delhi, CA 95315

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
CAE-MW5s	07/11/2012	9:58 AM	8.22	AL	
CAE-MW5d	07/11/2012	9:58 AM	7.85	AL	
CAE-MW6s	07/11/2012	10:00 AM	9.85	AL	
CAE-MW6d	07/11/2012	10:00 AM	9.74	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Robert Gioletti and Sons Dairy

118 N. Blaker Rd., Turlock, CA 95380

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ROB-MW1s	07/09/2012	9:29 AM	DRY	AL	
ROB-MW1d	07/09/2012	9:28 AM	19.10	AL	
ROB-MW2s	07/09/2012	9:26 AM	14.93	AL	
ROB-MW2d	07/09/2012	9:25 AM	14.95	AL	
ROB-MW3s	07/09/2012	9:34 AM	12.36	AL	
ROB-MW3d	07/09/2012	9:33 AM	12.25	AL	
ROB-MW4s	07/09/2012	9:37 AM	11.26	AL	
ROB-MW4d	07/09/2012	9:36 AM	11.11	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Robert Gioletti and Sons Dairy

118 N. Blaker Rd., Turlock, CA 95380

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ROB-MW5s	07/09/2012	9:40 AM	12.42	AL	
ROB-MW5d	07/09/2012	9:39 AM	12.28	AL	
ROB-MW6s	07/09/2012	9:50 AM	14.50	AL	
ROB-MW6d	07/09/2012	9:49 AM	14.42	AL	
ROB-MW7s	07/09/2012	9:45 AM	13.20	AL	
ROB-MW7d	07/09/2012	9:44 AM	14.10	AL	
ROB-MW8s	07/09/2012	9:21 AM	13.33	AL	
ROB-MW8d	07/09/2012	9:20 AM	13.73	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Antone L. Gomes and Sons Dairy

515 E. Stuhr Rd., Newman, CA 95360

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ANT-MW1s	07/09/2012	11:38 AM	13.35	AL	
ANT-MW1d	07/09/2012	11:37 AM	13.20	AL	
ANT-MW2s	07/09/2012	11:21 AM	19.33	AL	
ANT-MW2d	07/09/2012	11:20 AM	18.90	AL	
ANT-MW3s	07/09/2012	11:27 AM	16.69	AL	
ANT-MW3d	07/09/2012	11:27 AM	16.63	AL	
ANT-MW4s	07/09/2012	11:25 AM	19.11	AL	
ANT-MW4d	07/09/2012	11:24 AM	18.98	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Antone L. Gomes and Sons Dairy

515 E. Stuhr Rd., Newman, CA 95360

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ANT-MW5s	07/09/2012	11:43 AM	14.34	AL	
ANT-MW5d	07/09/2012	11:42 AM	17.05	AL	
ANT-MW6s	07/09/2012	11:33 AM	8.81	AL	
ANT-MW6d	07/09/2012	11:33 AM	11.00	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Correia Family Dairy Farms

26380 W. Fahey Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
COR-MW1s	07/11/2012	3:30 PM	8.77	AL	
COR-MW1d	07/11/2012	3:29 PM	8.63	AL	
COR-MW2s	07/11/2012	3:06 PM	7.94	AL	
COR-MW2d	07/11/2012	3:06 PM	7.81	AL	
COR-MW3s	07/11/2012	3:01 PM	8.09	AL	
COR-MW3d	07/11/2012	3:00 PM	7.92	AL	
COR-MW4s	07/11/2012	3:14 PM	7.22	AL	
COR-MW4d	07/11/2012	3:14 PM	7.30	AL	
COR-MW5s	07/11/2012	3:19 PM	7.19	AL	
COR-MW5d	07/11/2012	3:19 PM	7.03	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Frank J. Gomes Dairy #2

890 Kniebes Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
FG2-MW1s	07/09/2012	12:11 PM	4.61	AL	
FG2-MW1d	07/09/2012	12:10 PM	4.50	AL	
FG2-MW2s	07/09/2012	12:01 PM	7.39	AL	
FG2-MW2d	07/09/2012	12:00 PM	7.26	AL	
FG2-MW3s	07/09/2012	12:06 PM	9.12	AL	
FG2-MW3d	07/09/2012	12:05 PM	8.68	AL	
FG2-MW4s	07/09/2012	12:15 PM	9.63	AL	
FG2-MW4d	07/09/2012	12:15 PM	9.22	AL	
FG2-MW5s	07/09/2012	12:20 PM	6.74	AL	
FG2-MW5d	07/09/2012	12:19 PM	6.55	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Godinho Dairy

12710 S. Wilson Rd., Los Banos, CA 93635

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
GOD-MW1s	07/11/2012	1:28 PM	8.19	AL	
GOD-MW1d	07/11/2012	1:28 PM	8.08	AL	
GOD-MW2s	07/11/2012	1:17 PM	11.11	AL	
GOD-MW2d	07/11/2012	1:17 PM	10.98	AL	
GOD-MW3s	07/11/2012	1:20 PM	12.06	AL	
GOD-MW3d	07/11/2012	1:20 PM	11.88	AL	
GOD-MW4s	07/11/2012	1:24 PM	12.23	AL	
GOD-MW4d	07/11/2012	1:24 PM	12.12	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Godinho Dairy

12710 S. Wilson Rd., Los Banos, CA 93635

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
GOD-MW5s	07/11/2012	1:01 PM	7.30	AL	
GOD-MW5d	07/11/2012	1:01 PM	6.85	AL	
GOD-MW6s	07/11/2012	1:13 PM	7.41	AL	
GOD-MW6d	07/11/2012	1:13 PM	7.30	AL	
GOD-MW7s	07/11/2012	1:09 PM	6.27	AL	
GOD-MW7d	07/11/2012	1:09 PM	6.25	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

John Machado Dairy

22495 W. China Camp Rd., Los Banos, CA 93635

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MAC-MW1s	07/11/2012	2:35 PM	7.66	AL	
MAC-MW1d	07/11/2012	2:35 PM	7.55	AL	
MAC-MW2s	07/11/2012	2:32 PM	5.00	AL	
MAC-MW2d	07/11/2012	2:31 PM	4.81	AL	
MAC-MW3s	07/11/2012	2:49 PM	7.48	AL	
MAC-MW3d	07/11/2012	2:49 PM	7.30	AL	
MAC-MW4s	07/11/2012	2:43 PM	7.26	AL	
MAC-MW4d	07/11/2012	2:43 PM	7.14	AL	
MAC-MW5s	07/11/2012	2:40 PM	6.18	AL	
MAC-MW5d	07/11/2012	2:40 PM	6.09	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Jose Nunes Dairy

22484 W. China Camp Rd., Los Banos, CA 93635

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
NUN-MW1s	07/11/2012	1:47 PM	8.00	AL	
NUN-MW1d	07/11/2012	1:47 PM	7.72	AL	
NUN-MW2s	07/11/2012	1:58 PM	8.26	AL	
NUN-MW2d	07/11/2012	1:57 PM	8.14	AL	
NUN-MW3s	07/11/2012	1:50 PM	6.16	AL	
NUN-MW3d	07/11/2012	1:50 PM	6.07	AL	
NUN-MW4s	07/11/2012	1:54 PM	7.34	AL	
NUN-MW4d	07/11/2012	1:53 PM	7.23	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Moonshine Dairy

22922 Kilburn Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MOO-MW1	07/09/2012	10:56 AM	14.09	AL	
MOO-MW2	07/09/2012	10:54 AM	20.14	AL	
MOO-MW3	07/09/2012	10:46 AM	12.04	AL	
MOO-MW4	07/09/2012	10:40 AM	11.93	AL	
MOO-MW5s	07/09/2012	10:44 AM	12.95	AL	
MOO-MW5d	07/09/2012	10:43 AM	16.60	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Moonshine Dairy

22922 Kilburn Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MOO-MW6s	07/09/2012	11:01 AM	21.72	AL	
MOO-MW6d	07/09/2012	11:00 AM	25.70	AL	
MOO-MW7s	07/09/2012	11:06 AM	19.96	AL	
MOO-MW7d	07/09/2012	11:05 AM	19.93	AL	
MOO-MW8s	07/09/2012	11:09 AM	20.18	AL	
MOO-MW8d	07/09/2012	11:08 AM	20.03	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Tony L. Lopes Dairy LP

27500 Bunker Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
TON-MW1s	07/09/2012	12:44 PM	11.43	AL	
TON-MW1d	07/09/2012	12:43 PM	11.33	AL	
TON-MW2s	07/09/2012	12:47 PM	6.85	AL	
TON-MW2d	07/09/2012	12:47 PM	6.70	AL	
TON-MW3s	07/09/2012	12:56 PM	13.60	AL	
TON-MW3d	07/09/2012	12:56 PM	13.52	AL	
TON-MW4s	07/09/2012	12:40 PM	16.28	AL	
TON-MW4d	07/09/2012	12:39 PM	16.00	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Tony L. Lopes Dairy LP

27500 Bunker Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
TON-MW5s	07/09/2012	12:53 PM	13.20	AL	
TON-MW5d	07/09/2012	12:52 PM	13.11	AL	
TON-MW6s	07/09/2012	1:02 PM	7.42	AL	
TON-MW6d	07/09/2012	1:02 PM	7.75	AL	
TON-MW7s	07/09/2012	1:12 PM	8.47	AL	
TON-MW7d	07/09/2012	1:12 PM	8.05	AL	
TON-MW8s	07/09/2012	1:08 PM	9.90	AL	
TON-MW8d	07/09/2012	1:08 PM	9.43	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

August

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Albert Mendes Dairy

1100 Ruble Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR

Instrumentation: SOLINST

Monitoring Well Name	Date mm/dd/yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MEN-MW1s	08/14/2012	7:56 AM	7.36	CL	
MEN-MW1d	08/14/2012	7:57 AM	7.36	CL	
MEN-MW2s	08/14/2012	7:59 AM	7.25	CL	
MEN-MW2d	08/14/2012	8:00 AM	7.30	CL	
MEN-MW3s	08/14/2012	8:26 AM	8.48	CL	
MEN-MW3d	08/14/2012	8:27 AM	8.25	CL	
MEN-MW4s	08/14/2012	8:23 AM	7.67	CL	
MEN-MW4d	08/14/2012	8:24 AM	7.57	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Albert Mendes Dairy

1100 Ruble Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR

Instrumentation: SOLINST

Monitoring Well Name	Date mm/dd/yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MEN-MW5s	08/14/2012	8:18 AM	9.10	CL	
MEN-MW5d	08/14/2012	8:19 AM	9.00	CL	
MEN-MW6s	08/14/2012	8:05 AM	6.45	CL	
MEN-MW6d	08/14/2012	8:06 AM	6.33	CL	
MEN-MW7s	08/14/2012	8:14 AM	3.81	CL	
MEN-MW7d	08/14/2012	8:15 AM	3.69	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Anchor J. Dairy

24507 First Ave., Stevinson, CA 95374

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ANC-MW1	08/16/2012	10:01 AM	12.98	AL	
ANC-MW2	08/16/2012	9:58 AM	20.38	AL	
ANC-MW3	08/16/2012	9:55 AM	10.43	AL	
ANC-MW4	08/16/2012	10:05 AM	20.48	AL	
ANC-MW5s	08/16/2012	10:07 AM	16.30	AL	
ANC-MW5d	08/16/2012	10:07 AM	16.74	AL	
ANC-MW6s	08/16/2012	9:50 AM	13.89	AL	
ANC-MW6d	08/16/2012	9:50 AM	13.82	AL	
ANC-MW7s	08/16/2012	9:45 AM	12.39	AL	
ANC-MW7d	08/16/2012	9:46 AM	12.29	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Bettencourt and Marson Dairy

18128 American Ave., Hilmar, CA 95324

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
BET-MW1s	08/14/2012	10:44 AM	15.69	DEL	
BET-MW1d	08/14/2012	10:44 AM	15.20	DEL	
BET-MW2s	08/14/2012	10:46 AM	12.60	DEL	
BET-MW2d	08/14/2012	10:46 AM	12.23	DEL	
BET-MW3s	08/14/2012	10:50 AM	10.90	DEL	
BET-MW3d	08/14/2012	10:52 AM	10.70	DEL	
BET-MW4s	08/14/2012	10:40 AM	13.26	DEL	
BET-MW4d	08/14/2012	10:40 AM	13.79	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Bettencourt and Marson Dairy

18128 American Ave., Hilmar, CA 95324

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
BET-MW5s	08/14/2012	10:36 AM	8.28	DEL	
BET-MW5d	08/14/2012	10:36 AM	8.10	DEL	
BET-MW6s	08/14/2012	10:26 AM	7.45	DEL	
BET-MW6d	08/14/2012	10:27 AM	7.23	DEL	
BET-MW7s	08/14/2012	10:30 AM	8.29	DEL	
BET-MW7d	08/14/2012	10:31 AM	8.07	DEL	
BET-MW8s	08/14/2012	10:24 AM	7.94	DEL	
BET-MW8d	08/14/2012	10:24 AM	7.80	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Frank J. Gomes Dairy #1

5301 N. DeAngelis Rd., Stevinson, CA 95374

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
FG1-MW1s	08/15/2012	4:22 PM	16.37	DEL	
FG1-MW1d	08/15/2012	4:22 PM	16.08	DEL	
FG1-MW2s	08/15/2012	4:25 PM	DRY	DEL	
FG1-MW2d	08/15/2012	4:25 PM	19.47	DEL	
FG1-MW3s	08/15/2012	4:29 PM	DRY	DEL	
FG1-MW3d	08/15/2012	4:29 PM	17.62	DEL	
FG1-MW4s	08/15/2012	4:20 PM	11.75	DEL	
FG1-MW4d	08/15/2012	4:20 PM	11.30	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Frank J. Gomes Dairy #1

5301 N. DeAngelis Rd., Stevinson, CA 95374

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
FG1-MW5s	08/15/2012	4:10 PM	16.92	DEL	
FG1-MW5d	08/15/2012	4:10 PM	16.70	DEL	
FG1-MW6s	08/15/2012	4:13 PM	13.97	DEL	
FG1-MW6d	08/15/2012	4:13 PM	13.84	DEL	
FG1-MW7s	08/15/2012	4:16 PM	13.83	DEL	
FG1-MW7d	08/15/2012	4:17 PM	13.63	DEL	
FG1-MW8s	08/15/2012	4:05 PM	18.50	DEL	
FG1-MW8d	08/15/2012	4:06 PM	18.22	DEL	
FG1-MW9s	08/15/2012	4:00 PM	15.88	DEL	
FG1-MW9d	08/15/2012	4:01 PM	16.93	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Bear Creek

15751 W. Hwy. 140, Livingston, CA 95334

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
BEA-MW1s	08/16/2012	12:38 PM	DRY	AL	
BEA-MW1d	08/16/2012	12:38 PM	34.58	AL	
BEA-MW2s	08/16/2012	12:50 PM	DRY	AL	
BEA-MW2d	08/16/2012	12:51 PM	31.49	AL	
BEA-MW3s	08/16/2012	12:41 PM	DRY	AL	
BEA-MW3d	08/16/2012	12:41 PM	33.03	AL	
BEA-MW4s	08/16/2012	12:47 PM	37.65	AL	
BEA-MW4d	08/16/2012	12:47 PM	37.57	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Cottonwood

10561 Hwy. 140, Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
COT-MW1	08/16/2012	11:00 AM	DRY	DEL	
COT-MW2	08/16/2012	11:04 AM	DRY	DEL	
COT-MW3	08/16/2012	11:08 AM	19.05	DEL	
COT-MW4	08/16/2012	11:40 AM	23.00	DEL	
COT-MW5	08/16/2012	11:33 AM	15.50	DEL	
COT-MW6	08/16/2012	11:30 AM	16.16	DEL	
COT-MW7	08/16/2012	11:22 AM	19.69	DEL	
COT-MW8	08/16/2012	11:19 AM	9.20	DEL	
COT-MW9	08/16/2012	11:11 AM	13.06	DEL	
COT-MW10	08/16/2012	11:14 AM	7.99	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Cottonwood

10561 Hwy. 140, Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
COT-MW11s	08/16/2012	11:44 AM	22.20	DEL	
COT-MW11d	08/16/2012	11:44 AM	22.61	DEL	
COT-MW12s	08/16/2012	11:48 AM	23.80	DEL	
COT-MW12d	08/16/2012	11:48 AM	23.68	DEL	
COT-MW13s	08/16/2012	11:52 AM	26.19	DEL	
COT-MW13d	08/16/2012	11:52 AM	25.98	DEL	
COT-MW14s	08/16/2012	11:59 AM	27.60	DEL	
COT-MW14d	08/16/2012	11:59 AM	27.27	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Santa Rita

91 S. Bert Crane Rd., Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
SAN-MW1s	08/16/2012	11:47 AM	DRY	AL	
SAN-MW1d	08/16/2012	11:47 AM	29.73	AL	
SAN-MW2s	08/16/2012	11:30 AM	DRY	AL	
SAN-MW2d	08/16/2012	11:30 AM	40.09	AL	
SAN-MW3s	08/16/2012	11:37 AM	DRY	AL	
SAN-MW3d	08/16/2012	11:37 AM	41.49	AL	
SAN-MW4s	08/16/2012	11:34 AM	DRY	AL	
SAN-MW4d	08/16/2012	11:34 AM	41.10	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Santa Rita

91 S. Bert Crane Rd., Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
SAN-MW5s	08/16/2012	11:42 AM	DRY	AL	
SAN-MW5d	08/16/2012	11:43 AM	37.90	AL	
SAN-MW6s	08/16/2012	11:51 AM	14.47	AL	
SAN-MW6d	08/16/2012	11:51 AM	14.50	AL	
SAN-MW7s	08/16/2012	11:54 AM	28.40	AL	
SAN-MW7d	08/16/2012	11:54 AM	28.40	AL	
SAN-MW8s	08/16/2012	11:58 AM	DRY	AL	
SAN-MW8d	08/16/2012	11:58 AM	29.10	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

P. & L. Souza Dairy

20633 Crane Ave., Hilmar, CA 95324

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
PLS-MW1s	08/15/2012	9:03 AM	9.40	DEL	
PLS-MW1d	08/15/2012	9:03 AM	9.15	DEL	
PLS-MW2s	08/15/2012	9:00 AM	8.20	DEL	
PLS-MW2d	08/15/2012	9:00 AM	8.00	DEL	
PLS-MW3s	08/15/2012	8:55 AM	7.72	DEL	
PLS-MW3d	08/15/2012	8:55 AM	7.57	DEL	
PLS-MW4s	08/15/2012	9:06 AM	8.88	DEL	
PLS-MW4d	08/15/2012	9:06 AM	8.43	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

P. & L. Souza Dairy

20633 Crane Ave., Hilmar, CA 95324

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
PLS-MW5s	08/15/2012	8:50 AM	7.67	DEL	
PLS-MW5d	08/15/2012	8:50 AM	6.54	DEL	
PLS-MW6s	08/15/2012	9:12 AM	5.80	DEL	
PLS-MW6d	08/15/2012	9:12 AM	7.53	DEL	
PLS-MW7s	08/15/2012	9:09 AM	8.19	DEL	
PLS-MW7d	08/15/2012	9:10 AM	9.33	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Paul Caetano Dairy

9436 Griffith Ave., Delhi, CA 95315

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
CAE-MW1s	08/14/2012	4:02 PM	15.30	DEL	
CAE-MW1d	08/14/2012	4:02 PM	14.88	DEL	
CAE-MW2s	08/14/2012	4:07 PM	14.75	DEL	
CAE-MW2d	08/14/2012	4:07 PM	14.60	DEL	
CAE-MW3s	08/14/2012	4:04 PM	15.75	DEL	
CAE-MW3d	08/14/2012	4:05 PM	15.62	DEL	
CAE-MW4s	08/14/2012	4:00 PM	14.59	DEL	
CAE-MW4d	08/14/2012	4:00 PM	14.29	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Paul Caetano Dairy

9436 Griffith Ave., Delhi, CA 95315

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
CAE-MW5s	08/14/2012	4:10 PM	8.20	DEL	
CAE-MW5d	08/14/2012	4:11 PM	7.83	DEL	
CAE-MW6s	08/14/2012	4:13 PM	10.04	DEL	
CAE-MW6d	08/14/2012	4:14 PM	9.92	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Robert Gioletti and Sons Dairy

118 N. Blaker Rd., Turlock, CA 95380

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ROB-MW1s	08/13/2012	10:32 AM	DRY	CL	
ROB-MW1d	08/13/2012	10:33 AM	25.24	CL	
ROB-MW2s	08/13/2012	10:35 AM	DRY	CL	
ROB-MW2d	08/13/2012	10:36 AM	21.41	CL	
ROB-MW3s	08/13/2012	10:39 AM	14.93	CL	
ROB-MW3d	08/13/2012	10:40 AM	14.82	CL	
ROB-MW4s	08/13/2012	10:42 AM	14.03	CL	
ROB-MW4d	08/13/2012	10:43 AM	13.85	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Robert Gioletti and Sons Dairy

118 N. Blaker Rd., Turlock, CA 95380

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ROB-MW5s	08/13/2012	10:50 AM	DRY	CL	
ROB-MW5d	08/13/2012	10:51 AM	15.31	CL	
ROB-MW6s	08/13/2012	10:20 AM	16.25	CL	
ROB-MW6d	08/13/2012	10:21 AM	16.27	CL	
ROB-MW7s	08/13/2012	10:15 AM	15.85	CL	
ROB-MW7d	08/13/2012	10:16 AM	18.30	CL	
ROB-MW8s	08/13/2012	10:27 AM	17.05	CL	
ROB-MW8d	08/13/2012	10:28 AM	17.88	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Antone L. Gomes and Sons Dairy

515 E. Stuhr Rd., Newman, CA 95360

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ANT-MW1s	08/15/2012	9:58 AM	13.89	CL	
ANT-MW1d	08/15/2012	9:59 AM	13.80	CL	
ANT-MW2s	08/15/2012	9:29 AM	19.20	CL	
ANT-MW2d	08/15/2012	9:30 AM	18.75	CL	
ANT-MW3s	08/15/2012	9:41 AM	15.01	CL	
ANT-MW3d	08/15/2012	9:42 AM	16.00	CL	
ANT-MW4s	08/15/2012	9:37 AM	18.37	CL	
ANT-MW4d	08/15/2012	9:38 AM	18.44	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Antone L. Gomes and Sons Dairy

515 E. Stuhr Rd., Newman, CA 95360

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ANT-MW5s	08/15/2012	9:59 AM	17.71	CL	
ANT-MW5d	08/15/2012	10:00 AM	19.93	CL	
ANT-MW6s	08/15/2012	9:46 AM	10.85	CL	
ANT-MW6d	08/15/2012	9:47 AM	12.89	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Correia Family Dairy Farms

26380 W. Fahey Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
COR-MW1s	08/17/2012	8:40 AM	7.82	AL	
COR-MW1d	08/17/2012	8:40 AM	7.69	AL	
COR-MW2s	08/17/2012	8:44 AM	8.50	AL	
COR-MW2d	08/17/2012	8:44 AM	8.27	AL	
COR-MW3s	08/17/2012	8:49 AM	9.34	AL	
COR-MW3d	08/17/2012	8:49 AM	9.25	AL	
COR-MW4s	08/17/2012	8:36 AM	8.54	AL	
COR-MW4d	08/17/2012	8:36 AM	8.43	AL	
COR-MW5s	08/17/2012	8:30 AM	8.67	AL	
COR-MW5d	08/17/2012	8:30 AM	8.53	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Frank J. Gomes Dairy #2

890 Kniebes Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
FG2-MW1s	08/15/2012	1:36 PM	4.40	CL	
FG2-MW1d	08/15/2012	1:37 PM	4.38	CL	
FG2-MW2s	08/15/2012	1:13 PM	6.07	CL	
FG2-MW2d	08/15/2012	1:14 PM	5.94	CL	
FG2-MW3s	08/15/2012	1:17 PM	8.57	CL	
FG2-MW3d	08/15/2012	1:18 PM	8.12	CL	
FG2-MW4s	08/15/2012	1:25 PM	8.17	CL	
FG2-MW4d	08/15/2012	1:26 PM	7.70	CL	
FG2-MW5s	08/15/2012	12:56 PM	3.83	CL	
FG2-MW5d	08/15/2012	12:57 PM	3.66	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Godinho Dairy

12710 S. Wilson Rd., Los Banos, CA 93635

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
GOD-MW1s	08/20/2012	3:10 PM	6.23	DEL	
GOD-MW1d	08/20/2012	3:11 PM	6.18	DEL	
GOD-MW2s	08/20/2012	3:18 PM	10.23	DEL	
GOD-MW2d	08/20/2012	3:18 PM	10.15	DEL	
GOD-MW3s	08/20/2012	3:14 PM	11.77	DEL	
GOD-MW3d	08/20/2012	3:14 PM	11.68	DEL	
GOD-MW4s	08/20/2012	3:06 PM	12.16	DEL	
GOD-MW4d	08/20/2012	3:07 PM	11.80	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Godinho Dairy

12710 S. Wilson Rd., Los Banos, CA 93635

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
GOD-MW5s	08/20/2012	3:28 PM	6.42	DEL	
GOD-MW5d	08/20/2012	3:28 PM	6.16	DEL	
GOD-MW6s	08/20/2012	3:21 PM	6.29	DEL	
GOD-MW6d	08/20/2012	3:21 PM	6.16	DEL	
GOD-MW7s	08/20/2012	3:24 PM	5.45	DEL	
GOD-MW7d	08/20/2012	3:24 PM	5.44	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

John Machado Dairy

22495 W. China Camp Rd., Los Banos, CA 93635

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MAC-MW1s	08/17/2012	10:29 AM	6.28	AL	
MAC-MW1d	08/17/2012	10:29 AM	6.17	AL	
MAC-MW2s	08/17/2012	10:31 AM	5.05	AL	
MAC-MW2d	08/17/2012	10:31 AM	4.82	AL	
MAC-MW3s	08/17/2012	10:20 AM	5.28	AL	
MAC-MW3d	08/17/2012	10:20 AM	5.08	AL	
MAC-MW4s	08/17/2012	10:24 AM	5.44	AL	
MAC-MW4d	08/17/2012	10:24 AM	5.35	AL	
MAC-MW5s	08/17/2012	10:27 AM	4.65	AL	
MAC-MW5d	08/17/2012	10:27 AM	4.50	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Jose Nunes Dairy

22484 W. China Camp Rd., Los Banos, CA 93635

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
NUN-MW1s	08/17/2012	11:50 AM	6.94	AL	
NUN-MW1d	08/17/2012	11:50 AM	6.67	AL	
NUN-MW2s	08/17/2012	11:56 AM	7.58	AL	
NUN-MW2d	08/17/2012	11:55 AM	7.38	AL	
NUN-MW3s	08/17/2012	11:47 AM	4.79	AL	
NUN-MW3d	08/17/2012	11:47 AM	4.74	AL	
NUN-MW4s	08/17/2012	11:42 AM	5.60	AL	
NUN-MW4d	08/17/2012	11:42 AM	5.57	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Moonshine Dairy

22922 Kilburn Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MOO-MW1	08/14/2012	12:28 PM	13.18	CL	
MOO-MW2	08/14/2012	12:20 PM	19.73	CL	
MOO-MW3	08/14/2012	12:11 PM	11.06	CL	
MOO-MW4	08/14/2012	12:01 PM	11.37	CL	
MOO-MW5s	08/14/2012	12:14 PM	12.10	CL	
MOO-MW5d	08/14/2012	12:15 PM	16.48	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Moonshine Dairy

22922 Kilburn Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MOO-MW6s	08/14/2012	12:33 PM	18.88	CL	
MOO-MW6d	08/14/2012	12:34 PM	25.70	CL	
MOO-MW7s	08/14/2012	12:42 PM	19.85	CL	
MOO-MW7d	08/14/2012	12:43 PM	19.81	CL	
MOO-MW8s	08/14/2012	12:45 PM	19.49	CL	
MOO-MW8d	08/14/2012	12:46 PM	19.35	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Tony L. Lopes Dairy LP

27500 Bunker Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
TON-MW1s	08/16/2012	10:11 AM	11.24	CL	
TON-MW1d	08/16/2012	10:12 AM	11.11	CL	
TON-MW2s	08/16/2012	9:40 AM	4.66	CL	
TON-MW2d	08/16/2012	9:40 AM	4.50	CL	
TON-MW3s	08/16/2012	10:18 AM	15.75	CL	
TON-MW3d	08/16/2012	10:19 AM	15.65	CL	
TON-MW4s	08/16/2012	10:14 AM	17.92	CL	
TON-MW4d	08/16/2012	10:15 AM	17.62	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Tony L. Lopes Dairy LP

27500 Bunker Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
TON-MW5s	08/16/2012	10:23 AM	12.96	CL	
TON-MW5d	08/16/2012	10:24 AM	12.88	CL	
TON-MW6s	08/16/2012	9:49 AM	8.70	CL	
TON-MW6d	08/16/2012	9:50 AM	8.70	CL	
TON-MW7s	08/16/2012	9:59 AM	7.07	CL	
TON-MW7d	08/16/2012	10:00 AM	6.75	CL	
TON-MW8s	08/16/2012	9:53 AM	9.78	CL	
TON-MW8d	08/16/2012	9:54 AM	9.23	CL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

September

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Albert Mendes Dairy

1100 Ruble Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR

Instrumentation: SOLINST

Monitoring Well Name	Date mm/dd/yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MEN-MW1s	09/17/2012	11:11 AM	8.12	AL	
MEN-MW1d	09/17/2012	11:10 AM	8.03	AL	
MEN-MW2s	09/17/2012	11:13 AM	8.12	AL	
MEN-MW2d	09/17/2012	11:13 AM	8.09	AL	
MEN-MW3s	09/17/2012	11:16 AM	8.96	AL	
MEN-MW3d	09/17/2012	11:16 AM	8.78	AL	
MEN-MW4s	09/17/2012	11:18 AM	8.50	AL	
MEN-MW4d	09/17/2012	11:18 AM	8.40	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Albert Mendes Dairy

1100 Ruble Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR

Instrumentation: SOLINST

Monitoring Well Name	Date mm/dd/yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MEN-MW5s	09/17/2012	11:20 AM	9.88	AL	
MEN-MW5d	09/17/2012	11:20 AM	9.78	AL	
MEN-MW6s	09/17/2012	11:27 AM	7.19	AL	
MEN-MW6d	09/17/2012	11:27 AM	7.10	AL	
MEN-MW7s	09/17/2012	11:23 AM	6.12	AL	
MEN-MW7d	09/17/2012	11:23 AM	5.97	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Anchor J. Dairy

24507 First Ave., Stevinson, CA 95374

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ANC-MW1	09/17/2012	12:56 PM	13.03	AL	
ANC-MW2	09/17/2012	12:54 PM	20.23	AL	
ANC-MW3	09/17/2012	12:51 PM	10.30	AL	
ANC-MW4	09/17/2012	12:59 PM	20.84	AL	
ANC-MW5s	09/17/2012	1:03 PM	15.53	AL	
ANC-MW5d	09/17/2012	1:02 PM	15.37	AL	
ANC-MW6s	09/17/2012	12:49 PM	13.85	AL	
ANC-MW6d	09/17/2012	12:49 PM	13.75	AL	
ANC-MW7s	09/17/2012	12:47 PM	13.10	AL	
ANC-MW7d	09/17/2012	12:47 PM	13.00	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Bettencourt and Marson Dairy

18128 American Ave., Hilmar, CA 95324

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
BET-MW1s	09/18/2012	8:55 AM	14.74	AL	
BET-MW1d	09/18/2012	8:55 AM	14.22	AL	
BET-MW2s	09/18/2012	8:52 AM	13.40	AL	
BET-MW2d	09/18/2012	8:52 AM	13.07	AL	
BET-MW3s	09/18/2012	8:50 AM	11.31	AL	
BET-MW3d	09/18/2012	8:50 AM	11.09	AL	
BET-MW4s	09/18/2012	9:00 AM	13.37	AL	
BET-MW4d	09/18/2012	9:00 AM	13.77	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Bettencourt and Marson Dairy

18128 American Ave., Hilmar, CA 95324

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
BET-MW5s	09/18/2012	9:05 AM	9.38	AL	
BET-MW5d	09/18/2012	9:05 AM	9.18	AL	
BET-MW6s	09/18/2012	9:08 AM	9.62	AL	
BET-MW6d	09/18/2012	9:08 AM	9.38	AL	
BET-MW7s	09/18/2012	9:14 AM	9.77	AL	
BET-MW7d	09/18/2012	9:14 AM	9.65	AL	
BET-MW8s	09/18/2012	9:11 AM	10.52	AL	
BET-MW8d	09/18/2012	9:11 AM	10.33	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Frank J. Gomes Dairy #1

5301 N. DeAngelis Rd., Stevinson, CA 95374

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
FG1-MW1s	09/17/2012	1:14 PM	16.53	AL	
FG1-MW1d	09/17/2012	1:14 PM	16.23	AL	
FG1-MW2s	09/17/2012	1:20 PM	DRY	AL	
FG1-MW2d	09/17/2012	1:20 PM	19.80	AL	
FG1-MW3s	09/17/2012	1:17 PM	DRY	AL	
FG1-MW3d	09/17/2012	1:17 PM	17.78	AL	
FG1-MW4s	09/17/2012	1:23 PM	16.44	AL	
FG1-MW4d	09/17/2012	1:23 PM	16.08	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Frank J. Gomes Dairy #1

5301 N. DeAngelis Rd., Stevinson, CA 95374

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
FG1-MW5s	09/17/2012	1:40 PM	16.70	AL	
FG1-MW5d	09/17/2012	1:40 PM	16.53	AL	
FG1-MW6s	09/17/2012	1:36 PM	19.74	AL	
FG1-MW6d	09/17/2012	1:36 PM	19.52	AL	
FG1-MW7s	09/17/2012	1:27 PM	18.52	AL	
FG1-MW7d	09/17/2012	1:27 PM	18.25	AL	
FG1-MW8s	09/17/2012	1:30 PM	18.83	AL	
FG1-MW8d	09/17/2012	1:30 PM	18.58	AL	
FG1-MW9s	09/17/2012	1:10 PM	17.38	AL	
FG1-MW9d	09/17/2012	1:10 PM	17.58	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Bear Creek

15751 W. Hwy. 140, Livingston, CA 95334

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
BEA-MW1s	09/20/2012	12:33 PM	DRY	AL	
BEA-MW1d	09/20/2012	12:33 PM	34.77	AL	
BEA-MW2s	09/20/2012	12:48 PM	DRY	AL	
BEA-MW2d	09/20/2012	12:48 PM	30.69	AL	
BEA-MW3s	09/20/2012	12:39 PM	DRY	AL	
BEA-MW3d	09/20/2012	12:39 PM	33.00	AL	
BEA-MW4s	09/20/2012	12:43 PM	36.66	AL	
BEA-MW4d	09/20/2012	12:43 PM	36.60	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Cottonwood

10561 Hwy. 140, Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
COT-MW1	09/20/2012	1:04 PM	29.81	AL	
COT-MW2	09/20/2012	1:38 PM	28.90	AL	
COT-MW3	09/20/2012	1:41 PM	19.00	AL	
COT-MW4	09/20/2012	1:33 PM	22.88	AL	
COT-MW5	09/20/2012	1:29 PM	15.20	AL	
COT-MW6	09/20/2012	1:27 PM	15.95	AL	
COT-MW7	09/20/2012	1:45 PM	19.54	AL	
COT-MW8	09/20/2012	1:54 PM	9.00	AL	
COT-MW9	09/20/2012	1:49 PM	13.55	AL	
COT-MW10	09/20/2012	1:52 PM	9.11	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Cottonwood

10561 Hwy. 140, Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
COT-MW11s	09/20/2012	1:09 PM	21.13	AL	
COT-MW11d	09/20/2012	1:09 PM	21.14	AL	
COT-MW12s	09/20/2012	1:12 PM	20.13	AL	
COT-MW12d	09/20/2012	1:12 PM	20.12	AL	
COT-MW13s	09/20/2012	1:17 PM	24.08	AL	
COT-MW13d	09/20/2012	1:17 PM	23.87	AL	
COT-MW14s	09/20/2012	1:21 PM	25.39	AL	
COT-MW14d	09/20/2012	1:21 PM	25.17	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Santa Rita

91 S. Bert Crane Rd., Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
SAN-MW1s	09/20/2012	2:29 PM	DRY	AL	
SAN-MW1d	09/20/2012	2:29 PM	30.00	AL	
SAN-MW2s	09/20/2012	2:48 PM	DRY	AL	
SAN-MW2d	09/20/2012	2:48 PM	40.13	AL	
SAN-MW3s	09/20/2012	2:40 PM	DRY	AL	
SAN-MW3d	09/20/2012	2:40 PM	41.59	AL	
SAN-MW4s	09/20/2012	2:44 PM	DRY	AL	
SAN-MW4d	09/20/2012	2:44 PM	41.18	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Santa Rita

91 S. Bert Crane Rd., Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
SAN-MW5s	09/20/2012	2:34 PM	DRY	AL	
SAN-MW5d	09/20/2012	2:34 PM	38.00	AL	
SAN-MW6s	09/20/2012	2:13 PM	14.59	AL	
SAN-MW6d	09/20/2012	2:13 PM	14.57	AL	
SAN-MW7s	09/20/2012	2:18 PM	28.50	AL	
SAN-MW7d	09/20/2012	2:18 PM	28.51	AL	
SAN-MW8s	09/20/2012	2:23 PM	DRY	AL	
SAN-MW8d	09/20/2012	2:23 PM	29.25	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

P. & L. Souza Dairy

20633 Crane Ave., Hilmar, CA 95324

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
PLS-MW1s	09/20/2012	3:50 PM	10.33	AL	
PLS-MW1d	09/20/2012	3:50 PM	10.18	AL	
PLS-MW2s	09/20/2012	3:47 PM	9.09	AL	
PLS-MW2d	09/20/2012	3:47 PM	9.00	AL	
PLS-MW3s	09/20/2012	3:23 PM	8.14	AL	
PLS-MW3d	09/20/2012	3:23 PM	8.09	AL	
PLS-MW4s	09/20/2012	3:41 PM	9.41	AL	
PLS-MW4d	09/20/2012	3:41 PM	9.27	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

P. & L. Souza Dairy

20633 Crane Ave., Hilmar, CA 95324

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
PLS-MW5s	09/20/2012	3:55 PM	8.44	AL	
PLS-MW5d	09/20/2012	3:55 PM	8.07	AL	
PLS-MW6s	09/20/2012	3:30 PM	6.55	AL	
PLS-MW6d	09/20/2012	3:30 PM	6.48	AL	
PLS-MW7s	09/20/2012	3:34 PM	8.68	AL	
PLS-MW7d	09/20/2012	3:34 PM	8.70	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Paul Caetano Dairy

9436 Griffith Ave., Delhi, CA 95315

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
CAE-MW1s	09/18/2012	9:29 AM	15.26	AL	
CAE-MW1d	09/18/2012	9:29 AM	14.83	AL	
CAE-MW2s	09/18/2012	9:23 AM	14.77	AL	
CAE-MW2d	09/18/2012	9:23 AM	14.57	AL	
CAE-MW3s	09/18/2012	9:20 AM	15.42	AL	
CAE-MW3d	09/18/2012	9:20 AM	15.31	AL	
CAE-MW4s	09/18/2012	9:26 AM	14.79	AL	
CAE-MW4d	09/18/2012	9:26 AM	14.60	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Paul Caetano Dairy

9436 Griffith Ave., Delhi, CA 95315

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
CAE-MW5s	09/18/2012	9:34 AM	9.14	AL	
CAE-MW5d	09/18/2012	9:34 AM	8.78	AL	
CAE-MW6s	09/18/2012	9:37 AM	10.98	AL	
CAE-MW6d	09/18/2012	9:37 AM	10.88	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Robert Gioletti and Sons Dairy

118 N. Blaker Rd., Turlock, CA 95380

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ROB-MW1s	09/17/2012	10:43 AM	DRY	AL	
ROB-MW1d	09/17/2012	10:43 AM	18.98	AL	
ROB-MW2s	09/17/2012	10:41 AM	DRY	AL	
ROB-MW2d	09/17/2012	10:41 AM	19.52	AL	
ROB-MW3s	09/17/2012	10:48 AM	17.49	AL	
ROB-MW3d	09/17/2012	10:48 AM	17.33	AL	
ROB-MW4s	09/17/2012	10:51 AM	16.58	AL	
ROB-MW4d	09/17/2012	10:51 AM	16.42	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Robert Gioletti and Sons Dairy

118 N. Blaker Rd., Turlock, CA 95380

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ROB-MW5s	09/17/2012	10:56 AM	DRY	AL	
ROB-MW5d	09/17/2012	10:55 AM	16.16	AL	
ROB-MW6s	09/17/2012	11:03 AM	17.33	AL	
ROB-MW6d	09/17/2012	11:03 AM	17.27	AL	
ROB-MW7s	09/17/2012	11:00 AM	17.32	AL	
ROB-MW7d	09/17/2012	11:00 AM	17.68	AL	
ROB-MW8s	09/17/2012	10:36 AM	18.09	AL	
ROB-MW8d	09/17/2012	10:36 AM	18.10	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Antone L. Gomes and Sons Dairy

515 E. Stuhr Rd., Newman, CA 95360

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ANT-MW1s	09/17/2012	12:31 PM	14.88	AL	
ANT-MW1d	09/17/2012	12:31 PM	14.81	AL	
ANT-MW2s	09/17/2012	12:15 PM	22.00	AL	
ANT-MW2d	09/17/2012	12:15 PM	21.61	AL	
ANT-MW3s	09/17/2012	12:20 PM	18.91	AL	
ANT-MW3d	09/17/2012	12:20 PM	19.69	AL	
ANT-MW4s	09/17/2012	12:17 PM	21.50	AL	
ANT-MW4d	09/17/2012	12:17 PM	21.55	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Antone L. Gomes and Sons Dairy

515 E. Stuhr Rd., Newman, CA 95360

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ANT-MW5s	09/17/2012	12:27 PM	21.45	AL	
ANT-MW5d	09/17/2012	12:27 PM	22.47	AL	
ANT-MW6s	09/17/2012	12:23 PM	15.71	AL	
ANT-MW6d	09/17/2012	12:23 PM	16.88	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Correia Family Dairy Farms

26380 W. Fahey Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
COR-MW1s	09/18/2012	10:28 AM	8.18	AL	
COR-MW1d	09/18/2012	10:28 AM	8.08	AL	
COR-MW2s	09/18/2012	10:23 AM	7.25	AL	
COR-MW2d	09/18/2012	10:23 AM	7.03	AL	
COR-MW3s	09/18/2012	10:20 AM	7.81	AL	
COR-MW3d	09/18/2012	10:20 AM	7.64	AL	
COR-MW4s	09/18/2012	10:31 AM	7.30	AL	
COR-MW4d	09/18/2012	10:31 AM	7.20	AL	
COR-MW5s	09/18/2012	10:35 AM	7.34	AL	
COR-MW5d	09/18/2012	10:35 AM	7.20	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Frank J. Gomes Dairy #2

890 Kniebes Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
FG2-MW1s	09/20/2012	11:57 AM	5.00	AL	
FG2-MW1d	09/20/2012	11:58 AM	4.92	AL	
FG2-MW2s	09/20/2012	11:44 AM	6.88	AL	
FG2-MW2d	09/20/2012	11:44 AM	6.76	AL	
FG2-MW3s	09/20/2012	11:47 AM	8.96	AL	
FG2-MW3d	09/20/2012	11:48 AM	8.83	AL	
FG2-MW4s	09/20/2012	11:51 AM	8.67	AL	
FG2-MW4d	09/20/2012	11:52 AM	8.49	AL	
FG2-MW5s	09/20/2012	11:40 AM	4.13	AL	
FG2-MW5d	09/20/2012	11:40 AM	4.00	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Godinho Dairy

12710 S. Wilson Rd., Los Banos, CA 93635

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
GOD-MW1s	09/20/2012	9:18 AM	7.12	AL	
GOD-MW1d	09/20/2012	9:18 AM	6.98	AL	
GOD-MW2s	09/20/2012	9:27 AM	11.12	AL	
GOD-MW2d	09/20/2012	9:27 AM	11.03	AL	
GOD-MW3s	09/20/2012	9:22 AM	12.33	AL	
GOD-MW3d	09/20/2012	9:22 AM	12.25	AL	
GOD-MW4s	09/20/2012	9:14 AM	12.74	AL	
GOD-MW4d	09/20/2012	9:14 AM	12.44	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Godinho Dairy

12710 S. Wilson Rd., Los Banos, CA 93635

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
GOD-MW5s	09/20/2012	9:41 AM	6.94	AL	
GOD-MW5d	09/20/2012	9:41 AM	6.72	AL	
GOD-MW6s	09/20/2012	9:33 AM	6.87	AL	
GOD-MW6d	09/20/2012	9:33 AM	6.55	AL	
GOD-MW7s	09/20/2012	9:36 AM	6.00	AL	
GOD-MW7d	09/20/2012	9:37 AM	5.97	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

John Machado Dairy

22495 W. China Camp Rd., Los Banos, CA 93635

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MAC-MW1s	09/20/2012	10:43 AM	6.95	AL	
MAC-MW1d	09/20/2012	10:43 AM	6.84	AL	
MAC-MW2s	09/20/2012	10:47 AM	5.74	AL	
MAC-MW2d	09/20/2012	10:47 AM	5.49	AL	
MAC-MW3s	09/20/2012	10:29 AM	5.81	AL	
MAC-MW3d	09/20/2012	10:29 AM	5.63	AL	
MAC-MW4s	09/20/2012	10:32 AM	5.96	AL	
MAC-MW4d	09/20/2012	10:32 AM	5.87	AL	
MAC-MW5s	09/20/2012	10:37 AM	4.98	AL	
MAC-MW5d	09/20/2012	10:37 AM	4.82	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Jose Nunes Dairy

22484 W. China Camp Rd., Los Banos, CA 93635

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
NUN-MW1s	09/20/2012	10:03 AM	7.19	AL	
NUN-MW1d	09/20/2012	10:03 AM	7.04	AL	
NUN-MW2s	09/20/2012	10:05 AM	7.92	AL	
NUN-MW2d	09/20/2012	10:05 AM	7.78	AL	
NUN-MW3s	09/20/2012	10:00 AM	5.09	AL	
NUN-MW3d	09/20/2012	10:00 AM	5.00	AL	
NUN-MW4s	09/20/2012	9:56 AM	5.91	AL	
NUN-MW4d	09/20/2012	9:56 AM	5.80	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Moonshine Dairy

22922 Kilburn Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MOO-MW1	09/17/2012	11:51 AM	13.13	AL	
MOO-MW2	09/17/2012	11:48 AM	19.02	AL	
MOO-MW3	09/17/2012	11:45 AM	11.19	AL	
MOO-MW4	09/17/2012	11:40 AM	12.20	AL	
MOO-MW5s	09/17/2012	11:43 AM	11.60	AL	
MOO-MW5d	09/17/2012	11:43 AM	15.50	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Moonshine Dairy

22922 Kilburn Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MOO-MW6s	09/17/2012	11:55 AM	20.85	AL	
MOO-MW6d	09/17/2012	11:55 AM	24.84	AL	
MOO-MW7s	09/17/2012	11:59 AM	19.55	AL	
MOO-MW7d	09/17/2012	11:58 AM	19.52	AL	
MOO-MW8s	09/17/2012	12:01 PM	19.57	AL	
MOO-MW8d	09/17/2012	12:01 PM	19.39	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Tony L. Lopes Dairy LP

27500 Bunker Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
TON-MW1s	09/20/2012	11:14 AM	12.13	AL	
TON-MW1d	09/20/2012	11:14 AM	12.01	AL	
TON-MW2s	09/20/2012	11:11 AM	5.03	AL	
TON-MW2d	09/20/2012	11:11 AM	4.89	AL	
TON-MW3s	09/20/2012	11:07 AM	16.01	AL	
TON-MW3d	09/20/2012	11:07 AM	15.94	AL	
TON-MW4s	09/20/2012	10:58 AM	18.11	AL	
TON-MW4d	09/20/2012	10:58 AM	18.00	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Tony L. Lopes Dairy LP

27500 Bunker Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
TON-MW5s	09/20/2012	11:01 AM	13.13	AL	
TON-MW5d	09/20/2012	11:01 AM	13.04	AL	
TON-MW6s	09/20/2012	11:19 AM	8.98	AL	
TON-MW6d	09/20/2012	11:19 AM	8.95	AL	
TON-MW7s	09/20/2012	11:26 AM	7.66	AL	
TON-MW7d	09/20/2012	11:26 AM	7.35	AL	
TON-MW8s	09/20/2012	11:22 AM	10.09	AL	
TON-MW8d	09/20/2012	11:22 AM	9.91	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

October

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Albert Mendes Dairy

1100 Ruble Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR

Instrumentation: SOLINST

Monitoring Well Name	Date mm/dd/yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MEN-MW1s	10/19/2012	11:11 AM	8.44	EN	TRASH SURROUNDING WELL
MEN-MW1d	10/19/2012	11:11 AM	8.35	EN	TRASH SURROUNDING WELL
MEN-MW2s	10/19/2012	11:08 AM	8.32	EN	
MEN-MW2d	10/19/2012	11:08 AM	8.23	EN	
MEN-MW3s	10/19/2012	10:40 AM	8.41	EN	
MEN-MW3d	10/19/2012	10:40 AM	8.19	EN	
MEN-MW4s	10/19/2012	10:43 AM	7.81	EN	
MEN-MW4d	10/19/2012	10:43 AM	7.64	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Albert Mendes Dairy

1100 Ruble Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR

Instrumentation: SOLINST

Monitoring Well Name	Date mm/dd/yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MEN-MW5s	10/19/2012	10:47 AM	9.65	EN	
MEN-MW5d	10/19/2012	10:47 AM	9.56	EN	
MEN-MW6s	10/19/2012	11:03 AM	6.91	EN	
MEN-MW6d	10/19/2012	11:03 AM	6.84	EN	
MEN-MW7s	10/19/2012	10:51 AM	5.52	EN	
MEN-MW7d	10/19/2012	10:51 AM	5.39	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Anchor J. Dairy

24507 First Ave., Stevinson, CA 95374

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ANC-MW1	10/19/2012	1:55 PM	13.05	AL	
ANC-MW2	10/19/2012	1:52 PM	20.00	AL	
ANC-MW3	10/19/2012	1:50 PM	10.22	AL	
ANC-MW4	10/19/2012	1:57 PM	21.10	AL	
ANC-MW5s	10/19/2012	2:00 PM	15.45	AL	
ANC-MW5d	10/19/2012	2:00 PM	15.67	AL	
ANC-MW6s	10/19/2012	1:42 PM	13.22	AL	
ANC-MW6d	10/19/2012	1:42 PM	13.11	AL	
ANC-MW7s	10/19/2012	1:40 PM	12.19	AL	
ANC-MW7d	10/19/2012	1:40 PM	12.10	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Bettencourt and Marson Dairy

18128 American Ave., Hilmar, CA 95324

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
BET-MW1s	10/19/2012	12:57 PM	13.80	EN	
BET-MW1d	10/19/2012	12:57 PM	13.29	EN	
BET-MW2s	10/19/2012	1:03 PM	13.27	EN	
BET-MW2d	10/19/2012	1:03 PM	12.97	EN	
BET-MW3s	10/19/2012	1:06 PM	11.73	EN	
BET-MW3d	10/19/2012	1:06 PM	11.55	EN	
BET-MW4s	10/19/2012	12:50 PM	11.50	EN	
BET-MW4d	10/19/2012	12:50 PM	10.71	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Bettencourt and Marson Dairy

18128 American Ave., Hilmar, CA 95324

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
BET-MW5s	10/19/2012	1:13 PM	9.67	EN	
BET-MW5d	10/19/2012	1:13 PM	9.47	EN	
BET-MW6s	10/19/2012	1:22 PM	10.09	EN	
BET-MW6d	10/19/2012	1:22 PM	9.87	EN	
BET-MW7s	10/19/2012	1:18 PM	10.61	EN	
BET-MW7d	10/19/2012	1:18 PM	10.37	EN	
BET-MW8s	10/19/2012	1:27 PM	11.30	EN	
BET-MW8d	10/19/2012	1:27 PM	11.09	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Bear Creek

15751 W. Hwy. 140, Livingston, CA 95334

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
BEA-MW1s	10/20/2012	11:49 AM	DRY	AL	
BEA-MW1d	10/20/2012	11:49 AM	34.68	AL	
BEA-MW2s	10/20/2012	11:35 AM	DRY	AL	
BEA-MW2d	10/20/2012	11:35 AM	30.05	AL	
BEA-MW3s	10/20/2012	11:43 AM	DRY	AL	
BEA-MW3d	10/20/2012	11:43 AM	32.82	AL	
BEA-MW4s	10/20/2012	11:39 AM	35.77	AL	
BEA-MW4d	10/20/2012	11:39 AM	35.76	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Cottonwood

10561 Hwy. 140, Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
COT-MW1	10/20/2012	12:02 PM	29.75	AL	
COT-MW2	10/20/2012	12:29 PM	28.77	AL	
COT-MW3	10/20/2012	12:35 PM	20.10	AL	
COT-MW4	10/20/2012	12:27 PM	22.65	AL	
COT-MW5	10/20/2012	12:24 PM	15.21	AL	
COT-MW6	10/20/2012	12:21 PM	15.18	AL	
COT-MW7	10/20/2012	12:40 PM	9.75	AL	
COT-MW8	10/20/2012	12:58 PM	9.11	AL	
COT-MW9	10/20/2012	12:46 PM	13.72	AL	
COT-MW10	10/20/2012	12:51 PM	10.23	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Cottonwood

10561 Hwy. 140, Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
COT-MW11s	10/20/2012	12:06 PM	18.64	AL	
COT-MW11d	10/20/2012	12:06 PM	18.59	AL	
COT-MW12s	10/20/2012	12:09 PM	18.24	AL	
COT-MW12d	10/20/2012	12:09 PM	18.16	AL	
COT-MW13s	10/20/2012	12:11 PM	20.68	AL	
COT-MW13d	10/20/2012	12:11 PM	20.52	AL	
COT-MW14s	10/20/2012	12:16 PM	22.45	AL	
COT-MW14d	10/20/2012	12:16 PM	22.12	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Santa Rita

91 S. Bert Crane Rd., Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
SAN-MW1s	10/20/2012	1:24 PM	DRY	AL	
SAN-MW1d	10/20/2012	1:24 PM	30.11	AL	
SAN-MW2s	10/20/2012	1:42 PM	DRY	AL	
SAN-MW2d	10/20/2012	1:42 PM	40.09	AL	
SAN-MW3s	10/20/2012	1:34 PM	DRY	AL	
SAN-MW3d	10/20/2012	1:34 PM	41.55	AL	
SAN-MW4s	10/20/2012	1:38 PM	DRY	AL	
SAN-MW4d	10/20/2012	1:38 PM	41.21	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Santa Rita

91 S. Bert Crane Rd., Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
SAN-MW5s	10/20/2012	1:29 PM	DRY	AL	
SAN-MW5d	10/20/2012	1:29 PM	38.14	AL	
SAN-MW6s	10/20/2012	1:11 PM	15.32	AL	
SAN-MW6d	10/20/2012	1:11 PM	15.22	AL	
SAN-MW7s	10/20/2012	1:16 PM	28.88	AL	
SAN-MW7d	10/20/2012	1:16 PM	28.84	AL	
SAN-MW8s	10/20/2012	1:19 PM	DRY	AL	
SAN-MW8d	10/20/2012	1:19 PM	29.39	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

P. & L. Souza Dairy

20633 Crane Ave., Hilmar, CA 95324

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
PLS-MW1s	10/19/2012	2:56 PM	11.03	EN	
PLS-MW1d	10/19/2012	2:56 PM	10.79	EN	
PLS-MW2s	10/19/2012	3:00 PM	9.70	EN	
PLS-MW2d	10/19/2012	3:00 PM	9.52	EN	
PLS-MW3s	10/19/2012	2:45 PM	9.45	EN	
PLS-MW3d	10/19/2012	2:45 PM	9.32	EN	
PLS-MW4s	10/19/2012	2:50 PM	10.69	EN	
PLS-MW4d	10/19/2012	2:50 PM	10.26	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

P. & L. Souza Dairy

20633 Crane Ave., Hilmar, CA 95324

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
PLS-MW5s	10/19/2012	3:04 PM	9.43	EN	
PLS-MW5d	10/19/2012	3:04 PM	9.33	EN	
PLS-MW6s	10/19/2012	3:10 PM	7.82	EN	
PLS-MW6d	10/19/2012	3:10 PM	8.72	EN	
PLS-MW7s	10/19/2012	3:17 PM	9.50	EN	
PLS-MW7d	10/19/2012	3:17 PM	9.50	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Paul Caetano Dairy

9436 Griffith Ave., Delhi, CA 95315

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
CAE-MW1s	10/19/2012	1:50 PM	14.80	EN	
CAE-MW1d	10/19/2012	1:50 PM	14.35	EN	
CAE-MW2s	10/19/2012	1:45 PM	14.57	EN	
CAE-MW2d	10/19/2012	1:45 PM	14.37	EN	
CAE-MW3s	10/19/2012	1:40 PM	14.99	EN	
CAE-MW3d	10/19/2012	1:40 PM	14.88	EN	
CAE-MW4s	10/19/2012	1:56 PM	14.76	EN	
CAE-MW4d	10/19/2012	1:56 PM	14.54	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Paul Caetano Dairy

9436 Griffith Ave., Delhi, CA 95315

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
CAE-MW5s	10/19/2012	2:00 PM	9.71	EN	
CAE-MW5d	10/19/2012	2:00 PM	9.31	EN	
CAE-MW6s	10/19/2012	2:05 PM	11.55	EN	
CAE-MW6d	10/19/2012	2:05 PM	11.42	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Robert Gioletti and Sons Dairy

118 N. Blaker Rd., Turlock, CA 95380

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ROB-MW1s	10/19/2012	10:15 AM	17.97	EN	
ROB-MW1d	10/19/2012	10:15 AM	17.68	EN	
ROB-MW2s	10/19/2012	10:12 AM	DRY	EN	
ROB-MW2d	10/19/2012	10:12 AM	18.61	EN	
ROB-MW3s	10/19/2012	9:57 AM	18.18	EN	
ROB-MW3d	10/19/2012	9:57 AM	18.09	EN	
ROB-MW4s	10/19/2012	9:53 AM	17.59	EN	
ROB-MW4d	10/19/2012	9:53 AM	17.40	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Robert Gioletti and Sons Dairy

118 N. Blaker Rd., Turlock, CA 95380

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ROB-MW5s	10/19/2012	10:08 AM	DRY	EN	
ROB-MW5d	10/19/2012	10:08 AM	18.29	EN	
ROB-MW6s	10/19/2012	10:26 AM	18.77	EN	
ROB-MW6d	10/19/2012	10:26 AM	18.62	EN	
ROB-MW7s	10/19/2012	10:20 AM	17.49	EN	
ROB-MW7d	10/19/2012	10:20 AM	17.45	EN	
ROB-MW8s	10/19/2012	9:48 AM	17.90	EN	
ROB-MW8d	10/19/2012	9:48 AM	17.78	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Antone L. Gomes and Sons Dairy

515 E. Stuhr Rd., Newman, CA 95360

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ANT-MW1s	10/19/2012	1:30 PM	24.55	AL	
ANT-MW1d	10/19/2012	1:30 PM	24.42	AL	
ANT-MW2s	10/19/2012	1:10 PM	24.52	AL	
ANT-MW2d	10/19/2012	1:10 PM	24.13	AL	
ANT-MW3s	10/19/2012	1:14 PM	22.61	AL	
ANT-MW3d	10/19/2012	1:14 PM	22.89	AL	
ANT-MW4s	10/19/2012	1:12 PM	24.22	AL	
ANT-MW4d	10/19/2012	1:12 PM	24.10	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Antone L. Gomes and Sons Dairy

515 E. Stuhr Rd., Newman, CA 95360

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ANT-MW5s	10/19/2012	1:22 PM	24.25	AL	
ANT-MW5d	10/19/2012	1:22 PM	25.44	AL	
ANT-MW6s	10/19/2012	1:17 PM	19.62	AL	
ANT-MW6d	10/19/2012	1:17 PM	19.63	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Correia Family Dairy Farms

26380 W. Fahey Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
COR-MW1s	10/19/2012	9:39 AM	9.00	AL	
COR-MW1d	10/19/2012	9:39 AM	8.88	AL	
COR-MW2s	10/19/2012	9:35 AM	8.81	AL	
COR-MW2d	10/19/2012	9:35 AM	8.60	AL	
COR-MW3s	10/19/2012	9:32 AM	9.57	AL	
COR-MW3d	10/19/2012	9:32 AM	9.38	AL	
COR-MW4s	10/19/2012	9:41 AM	8.75	AL	
COR-MW4d	10/19/2012	9:41 AM	8.65	AL	
COR-MW5s	10/19/2012	9:43 AM	8.83	AL	
COR-MW5d	10/19/2012	9:43 AM	8.69	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Frank J. Gomes Dairy #2

890 Kniebes Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
FG2-MW1s	10/19/2012	12:51 PM	5.32	AL	
FG2-MW1d	10/19/2012	12:51 PM	5.10	AL	
FG2-MW2s	10/19/2012	12:45 PM	8.48	AL	
FG2-MW2d	10/19/2012	12:45 PM	8.35	AL	
FG2-MW3s	10/19/2012	12:48 PM	9.59	AL	
FG2-MW3d	10/19/2012	12:48 PM	9.15	AL	
FG2-MW4s	10/19/2012	12:55 PM	10.06	AL	
FG2-MW4d	10/19/2012	12:55 PM	9.63	AL	
FG2-MW5s	10/19/2012	1:00 PM	11.11	AL	
FG2-MW5d	10/19/2012	1:00 PM	11.03	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Godinho Dairy

12710 S. Wilson Rd., Los Banos, CA 93635

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
GOD-MW1s	10/19/2012	10:52 AM	9.12	AL	
GOD-MW1d	10/19/2012	10:52 AM	9.07	AL	
GOD-MW2s	10/19/2012	10:41 AM	12.22	AL	
GOD-MW2d	10/19/2012	10:41 AM	12.15	AL	
GOD-MW3s	10/19/2012	10:48 AM	12.96	AL	
GOD-MW3d	10/19/2012	10:48 AM	12.83	AL	
GOD-MW4s	10/19/2012	10:55 AM	13.08	AL	
GOD-MW4d	10/19/2012	10:55 AM	12.80	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Godinho Dairy

12710 S. Wilson Rd., Los Banos, CA 93635

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
GOD-MW5s	10/19/2012	10:30 AM	9.14	AL	
GOD-MW5d	10/19/2012	10:30 AM	8.81	AL	
GOD-MW6s	10/19/2012	10:38 AM	9.76	AL	
GOD-MW6d	10/19/2012	10:38 AM	9.68	AL	
GOD-MW7s	10/19/2012	10:33 AM	9.83	AL	
GOD-MW7d	10/19/2012	10:33 AM	9.75	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

John Machado Dairy

22495 W. China Camp Rd., Los Banos, CA 93635

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MAC-MW1s	10/19/2012	10:00 AM	5.68	AL	
MAC-MW1d	10/19/2012	10:00 AM	5.58	AL	
MAC-MW2s	10/19/2012	9:57 AM	5.23	AL	
MAC-MW2d	10/19/2012	9:57 AM	5.00	AL	
MAC-MW3s	10/19/2012	10:07 AM	5.75	AL	
MAC-MW3d	10/19/2012	10:07 AM	5.42	AL	
MAC-MW4s	10/19/2012	10:04 AM	5.15	AL	
MAC-MW4d	10/19/2012	10:04 AM	5.09	AL	
MAC-MW5s	10/19/2012	10:02 AM	4.28	AL	
MAC-MW5d	10/19/2012	10:02 AM	4.11	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Jose Nunes Dairy

22484 W. China Camp Rd., Los Banos, CA 93635

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
NUN-MW1s	10/19/2012	10:18 AM	6.55	AL	
NUN-MW1d	10/19/2012	10:18 AM	6.25	AL	
NUN-MW2s	10/19/2012	10:15 AM	7.58	AL	
NUN-MW2d	10/19/2012	10:15 AM	7.38	AL	
NUN-MW3s	10/19/2012	10:21 AM	6.38	AL	
NUN-MW3d	10/19/2012	10:21 AM	6.20	AL	
NUN-MW4s	10/19/2012	10:26 AM	6.77	AL	
NUN-MW4d	10/19/2012	10:26 AM	6.59	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Moonshine Dairy

22922 Kilburn Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MOO-MW1	10/19/2012	11:45 AM	14.35	EN	
MOO-MW2	10/19/2012	11:56 AM	20.42	EN	
MOO-MW3	10/19/2012	11:40 AM	12.40	EN	
MOO-MW4	10/19/2012	11:28 AM	12.92	EN	
MOO-MW5s	10/19/2012	11:33 AM	12.70	EN	
MOO-MW5d	10/19/2012	11:33 AM	15.94	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Moonshine Dairy

22922 Kilburn Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MOO-MW6s	10/19/2012	12:12 PM	22.30	EN	
MOO-MW6d	10/19/2012	12:12 PM	24.61	EN	
MOO-MW7s	10/19/2012	12:05 PM	20.17	EN	
MOO-MW7d	10/19/2012	12:05 PM	20.17	EN	
MOO-MW8s	10/19/2012	12:00 PM	20.55	EN	
MOO-MW8d	10/19/2012	12:00 PM	20.38	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Tony L. Lopes Dairy LP

27500 Bunker Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
TON-MW1s	10/19/2012	12:12 PM	11.45	AL	
TON-MW1d	10/19/2012	12:12 PM	11.38	AL	
TON-MW2s	10/19/2012	12:29 PM	10.58	AL	
TON-MW2d	10/19/2012	12:29 PM	10.23	AL	
TON-MW3s	10/19/2012	12:34 PM	7.15	AL	
TON-MW3d	10/19/2012	12:34 PM	6.83	AL	
TON-MW4s	10/19/2012	12:31 PM	9.93	AL	
TON-MW4d	10/19/2012	12:31 PM	9.45	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Tony L. Lopes Dairy LP

27500 Bunker Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
TON-MW5s	10/19/2012	12:22 PM	7.77	AL	
TON-MW5d	10/19/2012	12:22 PM	7.60	AL	
TON-MW6s	10/19/2012	12:20 PM	6.98	AL	
TON-MW6d	10/19/2012	12:20 PM	6.79	AL	
TON-MW7s	10/19/2012	12:14 PM	13.11	AL	
TON-MW7d	10/19/2012	12:14 PM	13.03	AL	
TON-MW8s	10/19/2012	12:10 PM	14.51	AL	
TON-MW8d	10/19/2012	12:10 PM	14.22	AL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

December (early)

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Albert Mendes Dairy

1100 Ruble Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR

Instrumentation: SOLINST

Monitoring Well Name	Date mm/dd/yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MEN-MW1s	12/06/2012	10:24 AM	9.20	EN	TRASH SURROUNDING WELL
MEN-MW1d	12/06/2012	10:24 AM	9.09	EN	TRASH SURROUNDING WELL
MEN-MW2s	12/06/2012	10:20 AM	9.15	EN	
MEN-MW2d	12/06/2012	10:20 AM	9.03	EN	
MEN-MW3s	12/06/2012	10:16 AM	9.23	EN	
MEN-MW3d	12/06/2012	10:16 AM	9.04	EN	
MEN-MW4s	12/06/2012	10:12 AM	8.87	EN	
MEN-MW4d	12/06/2012	10:12 AM	8.75	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Albert Mendes Dairy

1100 Ruble Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR

Instrumentation: SOLINST

Monitoring Well Name	Date mm/dd/yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MEN-MW5s	12/06/2012	10:09 AM	10.10	EN	
MEN-MW5d	12/06/2012	10:09 AM	10.00	EN	
MEN-MW6s	12/06/2012	9:58 AM	8.70	EN	
MEN-MW6d	12/06/2012	9:58 AM	8.64	EN	
MEN-MW7s	12/06/2012	10:01 AM	6.96	EN	
MEN-MW7d	12/06/2012	10:01 AM	6.82	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Anchor J. Dairy

24507 First Ave., Stevinson, CA 95374

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ANC-MW1	12/06/2012	12:30 PM	13.37	EN	
ANC-MW2	12/06/2012	12:32 PM	20.61	EN	
ANC-MW3	12/06/2012	12:38 PM	10.87	EN	
ANC-MW4	12/06/2012	12:35 PM	21.58	EN	
ANC-MW5s	12/06/2012	12:46 PM	16.18	EN	
ANC-MW5d	12/06/2012	12:46 PM	16.54	EN	
ANC-MW6s	12/06/2012	12:40 PM	14.65	EN	
ANC-MW6d	12/06/2012	12:40 PM	14.58	EN	
ANC-MW7s	12/06/2012	12:42 PM	14.34	EN	
ANC-MW7d	12/06/2012	12:42 PM	14.22	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Bettencourt and Marson Dairy

18128 American Ave., Hilmar, CA 95324

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
BET-MW1s	12/07/2012	11:09 AM	13.80	EN	
BET-MW1d	12/07/2012	11:09 AM	13.29	EN	
BET-MW2s	12/07/2012	11:04 AM	13.27	EN	
BET-MW2d	12/07/2012	11:04 AM	12.97	EN	
BET-MW3s	12/07/2012	11:00 AM	11.73	EN	
BET-MW3d	12/07/2012	11:00 AM	11.55	EN	
BET-MW4s	12/07/2012	10:57 AM	11.50	EN	
BET-MW4d	12/07/2012	10:57 AM	10.71	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Bettencourt and Marson Dairy

18128 American Ave., Hilmar, CA 95324

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
BET-MW5s	12/07/2012	10:54 AM	9.67	EN	
BET-MW5d	12/07/2012	10:54 AM	9.47	EN	
BET-MW6s	12/07/2012	10:50 AM	10.09	EN	
BET-MW6d	12/07/2012	10:50 AM	9.87	EN	
BET-MW7s	12/07/2012	10:47 AM	10.61	EN	
BET-MW7d	12/07/2012	10:47 AM	10.37	EN	
BET-MW8s	12/07/2012	10:43 AM	11.30	EN	
BET-MW8d	12/07/2012	10:43 AM	11.09	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Frank J. Gomes Dairy #1

5301 N. DeAngelis Rd., Stevinson, CA 95374

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
FG1-MW1s	12/11/2012	1:31 PM	17.03	EN	
FG1-MW1d	12/11/2012	1:31 PM	16.73	EN	
FG1-MW2s	12/11/2012	1:26 PM	DRY	EN	
FG1-MW2d	12/11/2012	1:26 PM	20.03	EN	
FG1-MW3s	12/11/2012	1:29 PM	DRY	EN	
FG1-MW3d	12/11/2012	1:29 PM	18.17	EN	
FG1-MW4s	12/11/2012	1:22 PM	16.47	EN	
FG1-MW4d	12/11/2012	1:22 PM	16.13	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Frank J. Gomes Dairy #1

5301 N. DeAngelis Rd., Stevinson, CA 95374

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
FG1-MW5s	12/11/2012	12:51 PM	15.85	EN	
FG1-MW5d	12/11/2012	12:51 PM	15.66	EN	
FG1-MW6s	12/11/2012	12:54 PM	19.48	EN	
FG1-MW6d	12/11/2012	12:54 PM	19.27	EN	
FG1-MW7s	12/11/2012	1:00 PM	18.83	EN	
FG1-MW7d	12/11/2012	1:00 PM	18.54	EN	
FG1-MW8s	12/11/2012	12:57 PM	18.01	EN	
FG1-MW8d	12/11/2012	12:57 PM	17.76	EN	
FG1-MW9s	12/11/2012	12:45 PM	17.29	EN	
FG1-MW9d	12/11/2012	12:45 PM	17.26	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Bear Creek

15751 W. Hwy. 140, Livingston, CA 95334

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
BEA-MW1s	12/09/2012	3:48 PM	DRY	DEL	
BEA-MW1d	12/09/2012	3:48 PM	34.25	DEL	
BEA-MW2s	12/09/2012	3:58 PM	DRY	DEL	
BEA-MW2d	12/09/2012	3:58 PM	29.00	DEL	
BEA-MW3s	12/09/2012	3:55 PM	DRY	DEL	
BEA-MW3d	12/09/2012	3:55 PM	31.49	DEL	
BEA-MW4s	12/09/2012	3:51 PM	32.22	DEL	
BEA-MW4d	12/09/2012	3:51 PM	32.05	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICEN SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Cottonwood

10561 Hwy. 140, Atwater, CA 95301

Weather Conditions: OVERCAST / COLD

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's InitiENs	Observations & Comments
COT-MW1	12/09/2012	10:02 AM	31.43	EN	
COT-MW2	12/09/2012	10:09 AM	31.21	EN	
COT-MW3	12/09/2012	9:35 AM	22.63	EN	
COT-MW4	12/09/2012	10:14 AM	24.90	EN	
COT-MW5	12/09/2012	10:19 AM	18.93	EN	
COT-MW6	12/09/2012	10:22 AM	17.31	EN	
COT-MW7	12/09/2012	9:41 AM	11.39	EN	
COT-MW8	12/09/2012	9:55 AM	14.37	EN	
COT-MW9	12/09/2012	9:46 AM	15.27	EN	
COT-MW10	12/09/2012	9:50 AM	10.15	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICEN SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Cottonwood

10561 Hwy. 140, Atwater, CA 95301

Weather Conditions: OVERCAST / COLD

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's InitiENs	Observations & Comments
COT-MW11s	12/09/2012	10:41 AM	19.14	EN	
COT-MW11d	12/09/2012	10:41 AM	19.14	EN	
COT-MW12s	12/09/2012	10:37 AM	19.06	EN	
COT-MW12d	12/09/2012	10:37 AM	18.88	EN	
COT-MW13s	12/09/2012	10:33 AM	21.04	EN	
COT-MW13d	12/09/2012	10:33 AM	20.91	EN	
COT-MW14s	12/09/2012	10:28 AM	22.29	EN	
COT-MW14d	12/09/2012	10:28 AM	21.99	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Santa Rita

91 S. Bert Crane Rd., Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
SAN-MW1s	12/09/2012	9:10 AM	DRY	EN	
SAN-MW1d	12/09/2012	9:10 AM	29.19	EN	
SAN-MW2s	12/09/2012	9:05 AM	DRY	EN	
SAN-MW2d	12/09/2012	9:05 AM	34.85	EN	
SAN-MW3s	12/09/2012	9:17 AM	DRY	EN	
SAN-MW3d	12/09/2012	9:17 AM	36.43	EN	
SAN-MW4s	12/09/2012	9:14 AM	DRY	EN	
SAN-MW4d	12/09/2012	9:14 AM	36.15	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Santa Rita

91 S. Bert Crane Rd., Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
SAN-MW5s	12/09/2012	9:20 AM	DRY	EN	
SAN-MW5d	12/09/2012	9:20 AM	30.33	EN	
SAN-MW6s	12/09/2012	9:24 AM	16.39	EN	
SAN-MW6d	12/09/2012	9:24 AM	16.24	EN	
SAN-MW7s	12/09/2012	9:27 AM	21.47	EN	
SAN-MW7d	12/09/2012	9:27 AM	21.37	EN	
SAN-MW8s	12/09/2012	9:30 AM	23.70	EN	
SAN-MW8d	12/09/2012	9:30 AM	23.50	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

P. & L. Souza Dairy

20633 Crane Ave., Hilmar, CA 95324

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
PLS-MW1s	12/11/2012	9:50 AM	12.57	EN	
PLS-MW1d	12/11/2012	9:50 AM	12.34	EN	
PLS-MW2s	12/11/2012	9:48 AM	11.24	EN	
PLS-MW2d	12/11/2012	9:48 AM	11.11	EN	
PLS-MW3s	12/11/2012	10:04 AM	10.79	EN	
PLS-MW3d	12/11/2012	10:04 AM	10.65	EN	
PLS-MW4s	12/11/2012	9:53 AM	12.13	EN	
PLS-MW4d	12/11/2012	9:53 AM	11.71	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

P. & L. Souza Dairy

20633 Crane Ave., Hilmar, CA 95324

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
PLS-MW5s	12/11/2012	9:44 AM	10.88	EN	
PLS-MW5d	12/11/2012	9:44 AM	10.77	EN	
PLS-MW6s	12/11/2012	10:00 AM	9.25	EN	
PLS-MW6d	12/11/2012	10:00 AM	10.06	EN	
PLS-MW7s	12/11/2012	9:57 AM	10.96	EN	
PLS-MW7d	12/11/2012	9:57 AM	10.92	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Paul Caetano Dairy

9436 Griffith Ave., Delhi, CA 95315

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
CAE-MW1s	12/04/2012	2:18 PM	13.69	DEL	
CAE-MW1d	12/04/2012	2:18 PM	13.26	DEL	
CAE-MW2s	12/04/2012	2:12 PM	13.85	DEL	
CAE-MW2d	12/04/2012	2:12 PM	13.66	DEL	
CAE-MW3s	12/04/2012	2:15 PM	13.53	DEL	
CAE-MW3d	12/04/2012	2:15 PM	13.41	DEL	
CAE-MW4s	12/04/2012	2:09 PM	14.39	DEL	
CAE-MW4d	12/04/2012	2:09 PM	14.17	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Paul Caetano Dairy

9436 Griffith Ave., Delhi, CA 95315

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
CAE-MW5s	12/04/2012	2:24 PM	10.56	DEL	
CAE-MW5d	12/04/2012	2:24 PM	10.19	DEL	
CAE-MW6s	12/04/2012	2:21 PM	12.74	DEL	
CAE-MW6d	12/04/2012	2:21 PM	12.61	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Robert Gioletti and Sons Dairy

118 N. Blaker Rd., Turlock, CA 95380

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ROB-MW1s	12/04/2012	11:55 AM	15.20	EN	
ROB-MW1d	12/04/2012	11:55 AM	14.91	EN	
ROB-MW2s	12/04/2012	11:57 AM	15.79	EN	
ROB-MW2d	12/04/2012	11:57 AM	15.66	EN	
ROB-MW3s	12/04/2012	12:00 PM	16.52	EN	
ROB-MW3d	12/04/2012	12:00 PM	16.41	EN	
ROB-MW4s	12/04/2012	12:02 PM	16.10	EN	
ROB-MW4d	12/04/2012	12:02 PM	15.93	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Robert Gioletti and Sons Dairy

118 N. Blaker Rd., Turlock, CA 95380

Weather Conditions: CLEAR / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ROB-MW5s	12/04/2012	12:05 PM	DRY	EN	
ROB-MW5d	12/04/2012	12:05 PM	16.44	EN	
ROB-MW6s	12/04/2012	11:47 AM	16.54	EN	
ROB-MW6d	12/04/2012	11:47 AM	16.37	EN	
ROB-MW7s	12/04/2012	11:50 AM	15.84	EN	
ROB-MW7d	12/04/2012	11:50 AM	15.47	EN	
ROB-MW8s	12/04/2012	11:52 AM	15.60	EN	
ROB-MW8d	12/04/2012	11:52 AM	15.38	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Antone L. Gomes and Sons Dairy

515 E. Stuhr Rd., Newman, CA 95360

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ANT-MW1s	12/10/2012	1:24 PM	DRY	EN	
ANT-MW1d	12/10/2012	1:24 PM	21.57	EN	
ANT-MW2s	12/10/2012	1:40 PM	25.16	EN	
ANT-MW2d	12/10/2012	1:40 PM	24.74	EN	
ANT-MW3s	12/10/2012	1:37 PM	22.87	EN	
ANT-MW3d	12/10/2012	1:37 PM	23.10	EN	
ANT-MW4s	12/10/2012	1:33 PM	24.76	EN	
ANT-MW4d	12/10/2012	1:33 PM	24.66	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Antone L. Gomes and Sons Dairy

515 E. Stuhr Rd., Newman, CA 95360

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ANT-MW5s	12/10/2012	1:27 PM	25.62	EN	
ANT-MW5d	12/10/2012	1:27 PM	25.14	EN	
ANT-MW6s	12/10/2012	1:30 PM	18.78	EN	
ANT-MW6d	12/10/2012	1:30 PM	19.74	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Correia Family Dairy Farms

26380 W. Fahey Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
COR-MW1s	12/07/2012	1:37 PM	7.84	DEL	
COR-MW1d	12/07/2012	1:37 PM	7.75	DEL	
COR-MW2s	12/07/2012	1:33 PM	7.27	DEL	
COR-MW2d	12/07/2012	1:33 PM	7.05	DEL	
COR-MW3s	12/07/2012	1:30 PM	8.23	DEL	
COR-MW3d	12/07/2012	1:30 PM	8.03	DEL	
COR-MW4s	12/07/2012	1:28 PM	7.24	DEL	
COR-MW4d	12/07/2012	1:28 PM	7.13	DEL	
COR-MW5s	12/07/2012	1:25 PM	7.45	DEL	
COR-MW5d	12/07/2012	1:25 PM	7.30	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Frank J. Gomes Dairy #2

890 Kniebes Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
FG2-MW1s	12/06/2012	10:31 AM	5.24	DEL	
FG2-MW1d	12/06/2012	10:31 AM	5.00	DEL	
FG2-MW2s	12/06/2012	10:25 AM	7.70	DEL	
FG2-MW2d	12/06/2012	10:25 AM	8.55	DEL	
FG2-MW3s	12/06/2012	10:28 AM	9.93	DEL	
FG2-MW3d	12/06/2012	10:28 AM	8.50	DEL	
FG2-MW4s	12/06/2012	10:36 AM	8.85	DEL	
FG2-MW4d	12/06/2012	10:36 AM	8.30	DEL	
FG2-MW5s	12/06/2012	10:21 AM	5.12	DEL	
FG2-MW5d	12/06/2012	10:21 AM	4.92	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Godinho Dairy

12710 S. Wilson Rd., Los Banos, CA 93635

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
GOD-MW1s	12/03/2012	1:27 PM	9.86	DEL	
GOD-MW1d	12/03/2012	1:27 PM	9.79	DEL	
GOD-MW2s	12/03/2012	1:33 PM	12.94	DEL	
GOD-MW2d	12/03/2012	1:33 PM	12.85	DEL	
GOD-MW3s	12/03/2012	1:30 PM	13.40	DEL	
GOD-MW3d	12/03/2012	1:30 PM	13.29	DEL	
GOD-MW4s	12/03/2012	1:24 PM	13.67	DEL	
GOD-MW4d	12/03/2012	1:24 PM	13.33	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Godinho Dairy

12710 S. Wilson Rd., Los Banos, CA 93635

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
GOD-MW5s	12/03/2012	1:41 PM	9.22	DEL	
GOD-MW5d	12/03/2012	1:41 PM	8.91	DEL	
GOD-MW6s	12/03/2012	1:35 PM	10.30	DEL	
GOD-MW6d	12/03/2012	1:35 PM	10.17	DEL	
GOD-MW7s	12/03/2012	1:38 PM	9.92	DEL	
GOD-MW7d	12/03/2012	1:38 PM	9.88	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

John Machado Dairy

22495 W. China Camp Rd., Los Banos, CA 93635

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MAC-MW1s	12/03/2012	3:44 PM	5.62	DEL	
MAC-MW1d	12/03/2012	3:44 PM	5.52	DEL	
MAC-MW2s	12/03/2012	3:47 PM	6.05	DEL	
MAC-MW2d	12/03/2012	3:47 PM	5.85	DEL	
MAC-MW3s	12/03/2012	3:55 PM	4.94	DEL	
MAC-MW3d	12/03/2012	3:55 PM	4.72	DEL	
MAC-MW4s	12/03/2012	3:52 PM	4.62	DEL	
MAC-MW4d	12/03/2012	3:52 PM	4.60	DEL	
MAC-MW5s	12/03/2012	3:49 PM	4.07	DEL	
MAC-MW5d	12/03/2012	3:49 PM	3.86	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Jose Nunes Dairy

22484 W. China Camp Rd., Los Banos, CA 93635

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
NUN-MW1s	12/04/2012	1:07 PM	7.15	DEL	
NUN-MW1d	12/04/2012	1:07 PM	6.85	DEL	
NUN-MW2s	12/04/2012	1:09 PM	7.20	DEL	
NUN-MW2d	12/04/2012	1:09 PM	7.24	DEL	
NUN-MW3s	12/04/2012	1:03 PM	5.60	DEL	
NUN-MW3d	12/04/2012	1:03 PM	5.53	DEL	
NUN-MW4s	12/04/2012	1:00 PM	6.94	DEL	
NUN-MW4d	12/04/2012	1:00 PM	6.87	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Moonshine Dairy

22922 Kilburn Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MOO-MW1	12/10/2012	9:48 AM	14.85	EN	
MOO-MW2	12/10/2012	9:50 AM	21.51	EN	
MOO-MW3	12/10/2012	9:58 AM	13.52	EN	
MOO-MW4	12/10/2012	9:55 AM	14.29	EN	
MOO-MW5s	12/10/2012	10:00 AM	14.03	EN	
MOO-MW5d	12/10/2012	10:00 AM	16.38	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Moonshine Dairy

22922 Kilburn Rd., Crows Landing, CA 95313

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MOO-MW6s	12/10/2012	9:45 AM	22.83	EN	
MOO-MW6d	12/10/2012	9:45 AM	23.88	EN	
MOO-MW7s	12/10/2012	9:42 AM	20.92	EN	
MOO-MW7d	12/10/2012	9:42 AM	20.88	EN	
MOO-MW8s	12/10/2012	9:39 AM	20.83	EN	
MOO-MW8d	12/10/2012	9:39 AM	20.71	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Tony L. Lopes Dairy LP

27500 Bunker Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
TON-MW1s	12/06/2012	2:11 PM	9.10	DEL	
TON-MW1d	12/06/2012	2:11 PM	9.00	DEL	
TON-MW2s	12/06/2012	2:13 PM	7.57	DEL	
TON-MW2d	12/06/2012	2:13 PM	7.38	DEL	
TON-MW3s	12/06/2012	2:05 PM	11.32	DEL	
TON-MW3d	12/06/2012	2:05 PM	11.22	DEL	
TON-MW4s	12/06/2012	2:00 PM	12.81	DEL	
TON-MW4d	12/06/2012	2:00 PM	12.47	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Tony L. Lopes Dairy LP

27500 Bunker Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
TON-MW5s	12/06/2012	2:09 PM	11.43	DEL	
TON-MW5d	12/06/2012	2:09 PM	11.35	DEL	
TON-MW6s	12/06/2012	2:20 PM	10.96	DEL	
TON-MW6d	12/06/2012	2:20 PM	10.48	DEL	
TON-MW7s	12/06/2012	2:14 PM	9.07	DEL	
TON-MW7d	12/06/2012	2:14 PM	8.75	DEL	
TON-MW8s	12/06/2012	2:17 PM	9.80	DEL	
TON-MW8d	12/06/2012	2:17 PM	9.37	DEL	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

December (late)

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Albert Mendes Dairy

1100 Ruble Rd., Crows Landing, CA 95313

Weather Conditions: OVERCAST / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm/dd/yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MEN-MW1s	12/28/2012	10:08 AM	6.65	EN	TRASH SURROUNDING WELL
MEN-MW1d	12/28/2012	10:09 AM	6.57	EN	TRASH SURROUNDING WELL
MEN-MW2s	12/28/2012	10:12 AM	6.75	EN	
MEN-MW2d	12/28/2012	10:13 AM	6.67	EN	
MEN-MW3s	12/28/2012	10:24 AM	7.78	EN	
MEN-MW3d	12/28/2012	10:25 AM	7.53	EN	
MEN-MW4s	12/28/2012	10:28 AM	7.46	EN	
MEN-MW4d	12/28/2012	10:29 AM	7.35	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Albert Mendes Dairy

1100 Ruble Rd., Crows Landing, CA 95313

Weather Conditions: OVERCAST / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm/dd/yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MEN-MW5s	12/28/2012	10:19 AM	9.12	EN	
MEN-MW5d	12/28/2012	10:20 AM	9.02	EN	
MEN-MW6s	12/28/2012	10:33 AM	6.24	EN	
MEN-MW6d	12/28/2012	10:34 AM	6.19	EN	
MEN-MW7s	12/28/2012	10:16 AM	5.17	EN	
MEN-MW7d	12/28/2012	10:17 AM	5.03	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Anchor J. Dairy

24507 First Ave., Stevinson, CA 95374

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ANC-MW1	12/28/2012	12:56 PM	13.15	EN	
ANC-MW2	12/28/2012	1:00 PM	20.16	EN	
ANC-MW3	12/28/2012	12:48 PM	10.58	EN	
ANC-MW4	12/28/2012	12:52 PM	21.45	EN	
ANC-MW5s	12/28/2012	1:03 PM	16.16	EN	
ANC-MW5d	12/28/2012	1:04 PM	16.19	EN	
ANC-MW6s	12/28/2012	12:47 PM	14.33	EN	
ANC-MW6d	12/28/2012	12:48 PM	14.24	EN	
ANC-MW7s	12/28/2012	12:43 PM	14.27	EN	
ANC-MW7d	12/28/2012	12:44 PM	14.15	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Bettencourt and Marson Dairy

18128 American Ave., Hilmar, CA 95324

Weather Conditions: OVERCAST / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
BET-MW1s	12/28/2012	2:16 PM	12.38	EN	
BET-MW1d	12/28/2012	2:17 PM	11.87	EN	
BET-MW2s	12/28/2012	2:09 PM	13.78	EN	
BET-MW2d	12/28/2012	2:10 PM	13.48	EN	
BET-MW3s	12/28/2012	2:06 PM	12.52	EN	
BET-MW3d	12/28/2012	2:07 PM	12.33	EN	
BET-MW4s	12/28/2012	2:22 PM	9.88	EN	
BET-MW4d	12/28/2012	2:23 PM	9.19	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Bettencourt and Marson Dairy

18128 American Ave., Hilmar, CA 95324

Weather Conditions: OVERCAST / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
BET-MW5s	12/28/2012	2:26 PM	12.43	EN	
BET-MW5d	12/28/2012	2:28 PM	12.23	EN	
BET-MW6s	12/28/2012	2:32 PM	13.35	EN	
BET-MW6d	12/28/2012	2:33 PM	13.12	EN	
BET-MW7s	12/28/2012	2:37 PM	13.65	EN	
BET-MW7d	12/28/2012	2:38 PM	13.44	EN	
BET-MW8s	12/28/2012	2:42 PM	14.64	EN	
BET-MW8d	12/28/2012	2:43 PM	14.43	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Frank J. Gomes Dairy #1

5301 N. DeAngelis Rd., Stevinson, CA 95374

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
FG1-MW1s	12/28/2012	11:49 AM	16.88	EN	
FG1-MW1d	12/28/2012	11:50 AM	16.55	EN	
FG1-MW2s	12/28/2012	11:56 AM	DRY	EN	
FG1-MW2d	12/28/2012	11:57 AM	19.72	EN	
FG1-MW3s	12/28/2012	11:53 AM	17.54	EN	
FG1-MW3d	12/28/2012	11:54 AM	17.90	EN	
FG1-MW4s	12/28/2012	12:15 PM	16.28	EN	
FG1-MW4d	12/28/2012	12:16 PM	15.93	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Frank J. Gomes Dairy #1

5301 N. DeAngelis Rd., Stevinson, CA 95374

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
FG1-MW5s	12/28/2012	12:00 PM	14.05	EN	
FG1-MW5d	12/28/2012	12:01 PM	13.87	EN	
FG1-MW6s	12/28/2012	12:05 PM	19.25	EN	
FG1-MW6d	12/28/2012	12:06 PM	19.06	EN	
FG1-MW7s	12/28/2012	12:11 PM	18.67	EN	
FG1-MW7d	12/28/2012	12:12 PM	18.39	EN	
FG1-MW8s	12/28/2012	12:16 PM	17.02	EN	
FG1-MW8d	12/28/2012	12:17 PM	16.74	EN	
FG1-MW9s	12/28/2012	12:20 PM	16.63	EN	
FG1-MW9d	12/28/2012	12:21 PM	16.37	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Bear Creek

15751 W. Hwy. 140, Livingston, CA 95334

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
BEA-MW1s	12/31/2012	1:30 PM	27.58	EN	
BEA-MW1d	12/31/2012	1:31 PM	32.88	EN	
BEA-MW2s	12/31/2012	1:15 PM	DRY	EN	
BEA-MW2d	12/31/2012	1:16 PM	28.15	EN	
BEA-MW3s	12/31/2012	1:40 PM	DRY	EN	
BEA-MW3d	12/31/2012	1:41 PM	29.57	EN	
BEA-MW4s	12/31/2012	1:36 PM	30.88	EN	
BEA-MW4d	12/31/2012	1:37 PM	30.71	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICEN SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Cottonwood

10561 Hwy. 140, Atwater, CA 95301

Weather Conditions: OVERCAST / COLD

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's InitiENs	Observations & Comments
COT-MW1	12/31/2012	1:55 PM	31.09	EN	
COT-MW2	12/31/2012	2:09 PM	30.82	EN	
COT-MW3	12/31/2012	2:23 PM	22.35	EN	
COT-MW4	12/31/2012	2:05 PM	24.71	EN	
COT-MW5	12/31/2012	2:20 PM	18.74	EN	
COT-MW6	12/31/2012	2:15 PM	17.06	EN	
COT-MW7	12/31/2012	2:34 PM	11.30	EN	
COT-MW8	12/31/2012	2:47 PM	14.64	EN	
COT-MW9	12/31/2012	2:30 PM	14.75	EN	
COT-MW10	12/31/2012	2:42 PM	9.51	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICEN SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Cottonwood

10561 Hwy. 140, Atwater, CA 95301

Weather Conditions: OVERCAST / COLD

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's InitiENs	Observations & Comments
COT-MW11s	12/31/2012	2:00 PM	18.86	EN	
COT-MW11d	12/31/2012	2:01 PM	19.04	EN	
COT-MW12s	12/31/2012	2:54 PM	19.42	EN	
COT-MW12d	12/31/2012	2:55 PM	19.25	EN	
COT-MW13s	12/31/2012	2:51 PM	21.32	EN	
COT-MW13d	12/31/2012	2:52 PM	21.20	EN	
COT-MW14s	12/31/2012	3:05 PM	22.26	EN	
COT-MW14d	12/31/2012	3:06 PM	21.95	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Santa Rita

91 S. Bert Crane Rd., Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
SAN-MW1s	12/31/2012	3:24 PM	DRY	EN	
SAN-MW1d	12/31/2012	3:25 PM	28.03	EN	
SAN-MW2s	12/31/2012	3:45 PM	DRY	EN	
SAN-MW2d	12/31/2012	3:46 PM	33.14	EN	
SAN-MW3s	12/31/2012	3:38 PM	DRY	EN	
SAN-MW3d	12/31/2012	3:39 PM	34.39	EN	
SAN-MW4s	12/31/2012	3:30 PM	DRY	EN	
SAN-MW4d	12/31/2012	3:31 PM	33.90	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Gallo Cattle Company Santa Rita

91 S. Bert Crane Rd., Atwater, CA 95301

Weather Conditions: SUNNY

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
SAN-MW5s	12/31/2012	3:29 PM	DRY	EN	
SAN-MW5d	12/31/2012	3:29 PM	29.54	EN	
SAN-MW6s	12/31/2012	3:14 PM	15.70	EN	
SAN-MW6d	12/31/2012	3:15 PM	15.53	EN	
SAN-MW7s	12/31/2012	3:19 PM	20.70	EN	
SAN-MW7d	12/31/2012	3:19 PM	20.68	EN	
SAN-MW8s	12/31/2012	3:21 PM	22.51	EN	
SAN-MW8d	12/31/2012	3:21 PM	22.39	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

P. & L. Souza Dairy

20633 Crane Ave., Hilmar, CA 95324

Weather Conditions: OVERCAST / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
PLS-MW1s	12/28/2012	1:32 PM	12.79	EN	
PLS-MW1d	12/28/2012	1:33 PM	12.56	EN	
PLS-MW2s	12/28/2012	1:35 PM	11.49	EN	
PLS-MW2d	12/28/2012	1:36 PM	11.32	EN	
PLS-MW3s	12/28/2012	1:24 PM	10.70	EN	
PLS-MW3d	12/28/2012	1:25 PM	10.56	EN	
PLS-MW4s	12/28/2012	1:30 PM	12.26	EN	
PLS-MW4d	12/28/2012	1:31 PM	11.85	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

P. & L. Souza Dairy

20633 Crane Ave., Hilmar, CA 95324

Weather Conditions: OVERCAST / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
PLS-MW5s	12/28/2012	1:43 PM	11.08	EN	
PLS-MW5d	12/28/2012	1:44 PM	10.95	EN	
PLS-MW6s	12/28/2012	1:49 PM	8.69	EN	
PLS-MW6d	12/28/2012	1:50 PM	9.70	EN	
PLS-MW7s	12/28/2012	1:56 PM	10.91	EN	
PLS-MW7d	12/28/2012	1:57 PM	10.84	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Paul Caetano Dairy

9436 Griffith Ave., Delhi, CA 95315

Weather Conditions: OVERCAST / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
CAE-MW1s	12/28/2012	3:00 PM	13.29	EN	
CAE-MW1d	12/28/2012	3:01 PM	12.84	EN	
CAE-MW2s	12/28/2012	2:56 PM	13.39	EN	
CAE-MW2d	12/28/2012	2:57 PM	13.19	EN	
CAE-MW3s	12/28/2012	2:50 PM	12.99	EN	
CAE-MW3d	12/28/2012	2:51 PM	12.87	EN	
CAE-MW4s	12/28/2012	3:07 PM	13.97	EN	
CAE-MW4d	12/28/2012	3:08 PM	13.76	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Paul Caetano Dairy

9436 Griffith Ave., Delhi, CA 95315

Weather Conditions: OVERCAST / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
CAE-MW5s	12/28/2012	3:13 PM	10.30	EN	
CAE-MW5d	12/28/2012	3:14 PM	9.90	EN	
CAE-MW6s	12/28/2012	3:18 PM	12.55	EN	
CAE-MW6d	12/28/2012	3:19 PM	12.44	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Robert Gioletti and Sons Dairy

118 N. Blaker Rd., Turlock, CA 95380

Weather Conditions: OVERCAST / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ROB-MW1s	12/28/2012	9:20 AM	14.98	EN	
ROB-MW1d	12/28/2012	9:21 AM	15.39	EN	
ROB-MW2s	12/28/2012	9:56 AM	15.79	EN	
ROB-MW2d	12/28/2012	9:57 AM	15.61	EN	
ROB-MW3s	12/28/2012	9:50 AM	14.92	EN	
ROB-MW3d	12/28/2012	9:51 AM	14.51	EN	
ROB-MW4s	12/28/2012	9:46 AM	14.71	EN	
ROB-MW4d	12/28/2012	9:47 AM	14.45	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Robert Gioletti and Sons Dairy

118 N. Blaker Rd., Turlock, CA 95380

Weather Conditions: OVERCAST / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
ROB-MW5s	12/28/2012	9:27 AM	14.19	EN	
ROB-MW5d	12/28/2012	9:28 AM	13.89	EN	
ROB-MW6s	12/28/2012	9:30 AM	14.88	EN	
ROB-MW6d	12/28/2012	9:31 AM	14.70	EN	
ROB-MW7s	12/28/2012	9:41 AM	15.64	EN	
ROB-MW7d	12/28/2012	9:42 AM	15.52	EN	
ROB-MW8s	12/28/2012	9:37 AM	15.14	EN	
ROB-MW8d	12/28/2012	9:38 AM	14.98	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Antone L. Gomes and Sons Dairy

515 E. Stuhr Rd., Newman, CA 95360

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
		8:20			
ANT-MW1s	12/31/2012	8:19 AM	DRY	EN	
ANT-MW1d	12/31/2012	8:20 AM	23.16	EN	
ANT-MW2s	12/31/2012	8:03 AM	25.94	EN	
ANT-MW2d	12/31/2012	8:06 AM	25.51	EN	
ANT-MW3s	12/31/2012	8:10 AM	24.53	EN	
ANT-MW3d	12/31/2012	8:11 AM	24.52	EN	
ANT-MW4s	12/31/2012	8:13 AM	25.65	EN	
ANT-MW4d	12/31/2012	8:14 AM	25.53	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Antone L. Gomes and Sons Dairy

515 E. Stuhr Rd., Newman, CA 95360

Weather Conditions: CLEAR SKIES / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
		8:20			
ANT-MW5s	12/31/2012	8:47 AM	26.44	EN	
ANT-MW5d	12/31/2012	8:48 AM	26.59	EN	
ANT-MW6s	12/31/2012	8:52 AM	20.22	EN	
ANT-MW6d	12/31/2012	8:53 AM	20.99	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Correia Family Dairy Farms

26380 W. Fahey Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
COR-MW1s	12/31/2012	10:48 AM	7.02	EN	
COR-MW1d	12/31/2012	10:49 AM	6.89	EN	
COR-MW2s	12/31/2012	10:35 AM	6.80	EN	
COR-MW2d	12/31/2012	10:36 AM	6.56	EN	
COR-MW3s	12/31/2012	10:32 AM	7.76	EN	
COR-MW3d	12/31/2012	10:33 AM	7.61	EN	
COR-MW4s	12/31/2012	10:40 AM	6.74	EN	
COR-MW4d	12/31/2012	10:41 AM	6.61	EN	
COR-MW5s	12/31/2012	10:43 AM	6.94	EN	
COR-MW5d	12/31/2012	10:44 AM	6.81	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Frank J. Gomes Dairy #2

890 Kniebes Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
FG2-MW1s	12/31/2012	9:15 AM	5.24	EN	
FG2-MW1d	12/31/2012	9:16 AM	5.00	EN	
FG2-MW2s	12/31/2012	8:55 AM	7.70	EN	
FG2-MW2d	12/31/2012	8:56 AM	8.55	EN	
FG2-MW3s	12/31/2012	9:05 AM	9.93	EN	
FG2-MW3d	12/31/2012	9:06 AM	8.50	EN	
FG2-MW4s	12/31/2012	9:21 AM	8.85	EN	
FG2-MW4d	12/31/2012	9:22 AM	8.30	EN	
FG2-MW5s	12/31/2012	N/A	N/A	EN	WELL WAS UNDER WATER AND COULD NOT COLLECT A DTW READING
FG2-MW5d	12/31/2012	N/A	N/A	EN	WELL WAS UNDER WATER AND COULD NOT COLLECT A DTW READING

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Godinho Dairy

12710 S. Wilson Rd., Los Banos, CA 93635

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
GOD-MW1s	12/31/2012	12:07 PM	9.70	EN	
GOD-MW1d	12/31/2012	12:08 PM	9.63	EN	
GOD-MW2s	12/31/2012	11:58 AM	12.90	EN	
GOD-MW2d	12/31/2012	11:59 AM	12.82	EN	
GOD-MW3s	12/31/2012	12:02 PM	13.28	EN	
GOD-MW3d	12/31/2012	12:03 PM	13.14	EN	
GOD-MW4s	12/31/2012	12:12 PM	13.51	EN	
GOD-MW4d	12/31/2012	12:13 PM	13.14	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Godinho Dairy

12710 S. Wilson Rd., Los Banos, CA 93635

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
GOD-MW5s	12/31/2012	12:30 PM	9.38	EN	
GOD-MW5d	12/31/2012	12:32 PM	9.06	EN	
GOD-MW6s	12/31/2012	12:20 PM	10.25	EN	
GOD-MW6d	12/31/2012	12:21 PM	10.15	EN	
GOD-MW7s	12/31/2012	12:25 PM	9.89	EN	
GOD-MW7d	12/31/2012	12:26 PM	9.84	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

John Machado Dairy

22495 W. China Camp Rd., Los Banos, CA 93635

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MAC-MW1s	12/31/2012	11:11 AM	6.15	EN	
MAC-MW1d	12/31/2012	11:12 AM	6.05	EN	
MAC-MW2s	12/31/2012	11:06 AM	6.22	EN	
MAC-MW2d	12/31/2012	11:07 AM	5.98	EN	
MAC-MW3s	12/31/2012	11:24 AM	4.48	EN	
MAC-MW3d	12/31/2012	11:25 AM	4.24	EN	
MAC-MW4s	12/31/2012	11:19 AM	5.32	EN	
MAC-MW4d	12/31/2012	11:20 AM	5.27	EN	
MAC-MW5s	12/31/2012	11:15 AM	4.70	EN	
MAC-MW5d	12/31/2012	11:16 AM	4.54	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Moonshine Dairy

22922 Kilburn Rd., Crows Landing, CA 95313

Weather Conditions: OVERCAST / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MOO-MW1	12/28/2012	11:04 AM	14.87	EN	
MOO-MW2	12/28/2012	11:00 AM	21.23	EN	
MOO-MW3	12/28/2012	10:52 AM	13.81	EN	
MOO-MW4	12/28/2012	11:25 AM	14.18	EN	
MOO-MW5s	12/28/2012	10:55 AM	14.30	EN	
MOO-MW5d	12/28/2012	10:56 AM	16.42	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Moonshine Dairy

22922 Kilburn Rd., Crows Landing, CA 95313

Weather Conditions: OVERCAST / COOL

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
MOO-MW6s	12/28/2012	11:09 AM	22.02	EN	
MOO-MW6d	12/28/2012	11:10 AM	23.53	EN	
MOO-MW7s	12/28/2012	11:13 AM	21.11	EN	
MOO-MW7d	12/28/2012	11:14 AM	21.06	EN	
MOO-MW8s	12/28/2012	11:17 AM	21.05	EN	
MOO-MW8d	12/28/2012	11:18 AM	20.93	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Tony L. Lopes Dairy LP

27500 Bunker Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
TON-MW1s	12/31/2012	9:59 AM	7.95	EN	
TON-MW1d	12/31/2012	10:00 AM	7.81	EN	
TON-MW2s	12/31/2012	10:06 AM	6.87	EN	
TON-MW2d	12/31/2012	10:07 AM	6.69	EN	
TON-MW3s	12/31/2012	9:48 AM	9.17	EN	
TON-MW3d	12/31/2012	9:49 AM	9.08	EN	
TON-MW4s	12/31/2012	9:55 AM	9.95	EN	
TON-MW4d	12/31/2012	9:56 AM	9.65	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

DEL-TECH GEOTECHNICAL SUPPORT SERVICES

Monitoring Well Field Log

Tony L. Lopes Dairy LP

27500 Bunker Rd., Gustine, CA 95322

Weather Conditions: CLEAR SKIES / WARM

Instrumentation: SOLINST

Monitoring Well Name	Date mm-dd-yyyy	Clock Time hh:mm (am/pm)	Depth-to-Water Reading (feet)	Technician's Initials	Observations & Comments
TON-MW5s	12/31/2012	9:52 AM	9.47	EN	
TON-MW5d	12/31/2012	9:53 AM	9.38	EN	
TON-MW6s	12/31/2012	10:10 AM	10.58	EN	
TON-MW6d	12/31/2012	10:11 AM	10.06	EN	
TON-MW7s	12/31/2012	10:16 AM	8.81	EN	
TON-MW7d	12/31/2012	10:17 AM	8.49	EN	
TON-MW8s	12/31/2012	10:20 AM	9.74	EN	
TON-MW8d	12/31/2012	10:21 AM	9.21	EN	

Depth-to-water readings are made from the top of the well casing (clear marking or north side).

Purging Records 2012

2012Q1 East Side

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

ALBERT MENDES DAIRY
1100 RUBLE ROAD
CROWS LANDING, CA.
February 7, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MEN-MW 1S **DATE:** 2/7/2012

PROJECT NAME:	ALBERT MENDES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	1100 RUBLE ROAD	**SAMPLE TIME:**	17:39
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	7.12	FEET	**CALC. PURGE VOL.:**	1.73	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.70	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		10.58	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
17:28	0	0	7.12	0.5 GPM	7.11	5258	17.5	137	1.5	
17:31	1.73	2		"	6.93	5435	17.6	146	1.6	
17:35	3.45	4		"	6.95	5476	18.3	148	1.6	
17:39	5.18	6	9.35	"	6.93	5339	18.5	151	1.4	480
17:39	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	8.15'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MEN-MW 1D / DTW: 6.98'**		
WEATHER:	OVERCAST / COLD.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MEN-MW	2S	**DATE:**	2/7/2012

PROJECT NAME:	ALBERT MENDES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	1100 RUBLE ROAD	**SAMPLE TIME:**	17:26
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	7.04	FEET	**CALC. PURGE VOL.:**	1.71	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.50	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		10.46	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
17:15	0	0	7.04	0.5 GPM	7.28	4300	16.3	138	1.6	
17:18	1.71	2		"	7.11	4330	17.0	145	1.6	
17:22	3.41	4		"	7.14	4306	17.2	148	1.6	
17:26	5.12	6	12.05	"	7.16	4320	17.7	149	1.7	225
17:26	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.48'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MEN-MW 2D / DTW: 6.90'**		
WEATHER:	OVERCAST / COLD.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MEN-MW	3S	**DATE:**	2/7/2012

PROJECT NAME:	ALBERT MENDES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	1100 RUBLE ROAD	**SAMPLE TIME:**	16:20
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	6.85	FEET	**CALC. PURGE VOL.:**	1.80	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.90	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		11.05	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
16:08	0	0	6.85	0.5 GPM	6.95	2579	16.6	190	2.1	
16:11	1.80	2		"	6.88	2785	17.1	190	1.8	
16:15	3.61	4		"	7.16	2835	17.0	177	1.8	
16:20	5.41	6	7.02	"	6.95	2845	17.2	177	1.7	85
16:20	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	6.95'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MEN-MW 3D / DTW: 6.65'**		
WEATHER:	OVERCAST / COLD.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MEN-MW	4S	**DATE:**	2/7/2012

PROJECT NAME:	ALBERT MENDES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	1100 RUBLE ROAD	**SAMPLE TIME:**	16:02
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	6.32	FEET	**CALC. PURGE VOL.:**	1.87	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.80	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		11.48	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:51	0	0	6.32	0.5 GPM	7.14	1984	16.4	189	2.0	
15:54	1.87	2		"	6.96	2398	16.9	193	2.1	
15:58	3.75	4		"	6.95	2424	17.3	192	2.2	
16:02	5.62	6	11.51	"	6.97	2407	16.6	190	2.2	1000+
16:02	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.77'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MEN-MW 4D / DTW: 6.20'**		
WEATHER:	OVERCAST / COLD.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MEN-MW	5S	**DATE:**	2/7/2012

PROJECT NAME:	ALBERT MENDES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	1100 RUBLE ROAD	**SAMPLE TIME:**	15:43
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	7.72	FEET	**CALC. PURGE VOL.:**	1.55	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.20	FEET	**TOTAL VOLUME PURGED:**	4.5	GAL.
STANDING WATER COLUMN:		9.48	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:30	0	0	7.72	0.5 GPM	7.31	1995	17.1	192	2.8	
15:35	1.55	1.5		"	7.07	1869	17.4	195	1.8	
15:39	3.09	3		"	7.03	1809	17.8	194	1.8	
15:43	4.64	4.5	8.61	"	7.05	1791	17.9	192	1.8	33
15:43	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	7.98'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MEN-MW 5D / DTW: 7.64'**		
WEATHER:	OVERCAST / COLD.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MEN-MW	6S	**DATE:**	2/7/2012

PROJECT NAME:	ALBERT MENDES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	1100 RUBLE ROAD	**SAMPLE TIME:**	17:04
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	5.79	FEET	**CALC. PURGE VOL.:**	3.02	GAL.
DEPTH OF WELL:	**(feet.100th's)**	24.30	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		18.51	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
16:54	0	0	5.79	0.5 GPM	7.10	3039	16.2	173	1.6	
16:57	3.02	3		"	7.02	3035	16.8	178	1.5	
17:00	6.04	6		"	7.01	3041	16.8	179	1.5	
17:04	9.06	9	6.92	"	7.00	3057	17.1	179	1.6	12
17:04	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	6.11'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MEN-MW 6D / DTW: 5.70'**		
WEATHER:	OVERCAST / COLD.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MEN-MW	7S	**DATE:**	2/7/2012

PROJECT NAME:	ALBERT MENDES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	1100 RUBLE ROAD	**SAMPLE TIME:**	16:40
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	4.26	FEET	**CALC. PURGE VOL.:**	3.09	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.20	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		18.94	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
16:28	0	0	4.26	0.5 GPM	7.21	2712	16.4	140	1.2	
16:31	3.09	3		"	7.16	2563	17.2	156	1.4	
16:35	6.18	6		"	7.15	2530	17.5	157	1.4	
16:40	9.27	9	4.40	"	7.15	2521	17.6	159	1.5	22
16:40	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	4.32'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MEN-MW 7D / DTW: 4.14'**		
WEATHER:	OVERCAST / COLD.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

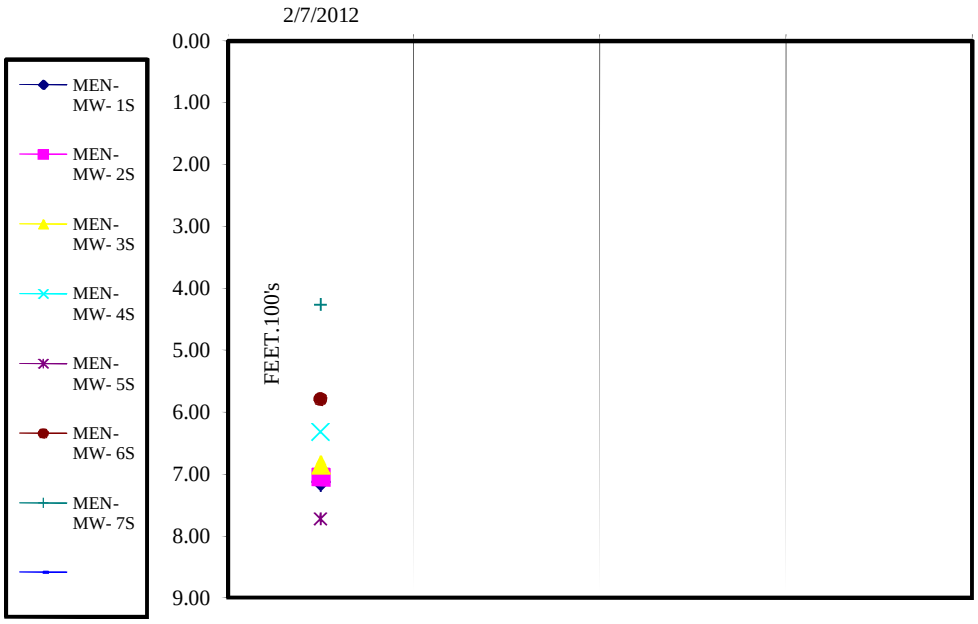
DEL-TECH GEOTECHNICAL SUPPORT, INC.

(209) 847-8757 (OFFICE) * (209) 847-7744 (FAX) * deltech1@pacbell.net (Email)

ALBERT MENDES DAIRY
CROWS LANDING, CA.

MONITORING WELL FIELD SUMMARY LOG 2012
DEPTH TO WATER MEASUREMENTS

	QTR. 1	QTR. 2	QTR. 3	QTR. 4	TOTAL
DATE	2/7/12				DEPTH
LOCATION					
MEN-MW- 1S	7.12				17.70'
MEN-MW- 2S	7.04				17.50'
MEN-MW- 3S	6.85				17.90'
MEN-MW- 4S	6.32				17.80'
MEN-MW- 5S	7.72				17.20'
MEN-MW- 6S	5.79				24.30'
MEN-MW- 7S	4.26				23.20'



D.T.W. CHART

COMBO- 3260

NOTE:
ALL MEASUREMENTS ARE MADE FROM THE NORTH SIDE AND TOP EDGE OF THE WELL CASING. THE TOP OF CASING WITH A NOTCH OR PERMENANT MARKINGS, WHICH EVER ONE CONDITION IS APPROPRIATE.

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

ANCHOR J. DAIRY
24507 FIRST AVENUE
STEVINSON, CA.
February 12, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANC-MW 1 **DATE:** 2/12/2012

PROJECT NAME:	ANCHOR J. DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	24507 FIRST AVENUE	**SAMPLE TIME:**	16:59
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	12.25	FEET	**CALC. PURGE VOL.:**	1.95	GAL.
DEPTH OF WELL:	**(feet.100th's)**	24.22	FEET	**TOTAL VOLUME PURGED:**	8	GAL.
STANDING WATER COLUMN:		11.97	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
16:43	0	0	12.25	0.5 GPM	7.34	2046	18.7	158	1.6	
16:47	1.95	2		"	7.04	1520	18.9	166	1.7	
16:51	3.91	4		"	7.00	1513	19.0	169	1.7	
16:55	5.86	6		"	7.00	1521	19.0	163	1.7	
16:59	7.81	8	12.36	"	7.00	1518	19.0	164	1.7	12
16:59	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	12.31'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**INSTALLED WATERRA TUBING.**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANC-MW	2	**DATE:**	2/12/2012

PROJECT NAME:	ANCHOR J. DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	24507 FIRST AVENUE	**SAMPLE TIME:**	17:20
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	20.26	FEET	**CALC. PURGE VOL.:**	2.47	GAL.
DEPTH OF WELL:	**(feet.100th's)**	35.37	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		15.11	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:42	0	0	17.90	0.5 GPM	7.04	1965	18.6	65	0.7	
14:44	2.47	2.5		"	6.82	2403	19.6	92	0.8	
14:46	4.93	5		"	6.88	2435	19.4	83	0.8	
14:48	7.40	7.5	20.10	"	6.84	2424	19.7	85	0.9	3
15:00	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	19.41'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**INSTALLED WATERRA TUBING.**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANC-MW	3	**DATE:**	2/12/2012

PROJECT NAME:	ANCHOR J. DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	24507 FIRST AVENUE	**SAMPLE TIME:**	17:36
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	10.23	FEET	**CALC. PURGE VOL.:**	2.45	GAL.
DEPTH OF WELL:	**(feet.100th's)**	25.26	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		15.03	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
17:21	0	0	10.23	0.5 GPM	7.20	1881	19.5	37	0.2	
17:26	2.45	2.5		"	7.17	1805	20.3	50	0.4	
17:31	4.91	5		"	7.23	1792	20.2	42	0.4	
17:36	7.36	7.5	10.25	"	7.24	1789	20.1	35	0.4	2
17:36	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.24'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**INSTALLED WATERRA TUBING.**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANC-MW	4	**DATE:**	2/12/2012

PROJECT NAME:	ANCHOR J. DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	24507 FIRST AVENUE	**SAMPLE TIME:**	17:54
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	20.90	FEET	**CALC. PURGE VOL.:**	2.08	GAL.
DEPTH OF WELL:	**(feet.100th's)**	33.65	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		12.75	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
17:42	0	0	20.90	0.5 GPM	6.91	1735	18.6	70	0.9	
17:46	2.08	2		"	6.72	1676	19.5	102	1.1	
17:50	4.16	4		"	6.73	1670	19.5	119	1.1	
17:54	6.24	6	20.98	"	6.74	1669	19.5	130	1.2	15
17:54	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	20.95'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**INSTALLED WATERRA TUBING.**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANC-MW	5S	**DATE:**	2/12/2012

PROJECT NAME:	ANCHOR J. DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	24507 FIRST AVENUE	**SAMPLE TIME:**	16:33
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	15.50	FEET	**CALC. PURGE VOL.:**	2.09	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.30	FEET	**TOTAL VOLUME PURGED:**	8	GAL.
STANDING WATER COLUMN:		12.80	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
16:17	0	0	15.50	0.5 GPM	7.68	3300	18.4	170	1.5	
16:21	2.09	2		"	7.78	3305	18.9	165	1.4	
16:25	4.18	4	DRY	"	7.98	3306	19.2	180	1.4	
16:29	6.27	6		"	7.89	3227	19.7	177	1.5	
16:33	8.36	8	27.10	"	7.92	3330	19.5	178	1.5	1000+
16:33	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	25.12'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ANC-MW 5D / DTW: 15.50'**		
	SLOW RECHARGE.		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANC-MW	6S	**DATE:**	2/12/2012

PROJECT NAME:	ANCHOR J. DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	24507 FIRST AVENUE	**SAMPLE TIME:**	16:10
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	14.05	FEET	**CALC. PURGE VOL.:**	2.24	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.80	FEET	**TOTAL VOLUME PURGED:**	10	GAL.
STANDING WATER COLUMN:		13.75	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:50	0	0	14.05	0.5 GPM	6.96	1930	19.7	177	1.9	
15:55	2.24	2.5		"	6.84	2051	20.3	176	1.9	
16:00	4.49	5		"	6.88	2050	20.1	179	1.9	
16:05	6.73	7.5		"	6.90	2035	20.0	183	1.9	
16:10	8.98	10	14.10	"	6.89	2047	20.0	189	2.0	4
16:10	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	14.06'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ANC-MW 6D / DTW: 13.94'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANC-MW	7S	**DATE:**	2/12/2012

PROJECT NAME:	ANCHOR J. DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	24507 FIRST AVENUE	**SAMPLE TIME:**	15:45
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	13.67	FEET	**CALC. PURGE VOL.:**	2.29	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.70	FEET	**TOTAL VOLUME PURGED:**	10	GAL.
STANDING WATER COLUMN:		14.03	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:25	0	0	13.67	0.5 GPM	7.45	1410	18.7	167	1.2	
15:30	2.29	2.5		"	7.24	1422	20.2	165	1.5	
15:35	4.58	5		"	7.26	1404	20.1	162	1.5	
15:40	6.87	7.5		"	7.25	1383	19.5	164	1.5	
15:45	9.16	10	13.88	"	7.24	1381	19.5	164	1.6	9
15:45	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	13.71'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ANC-MW 7D / DTW: 13.58'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

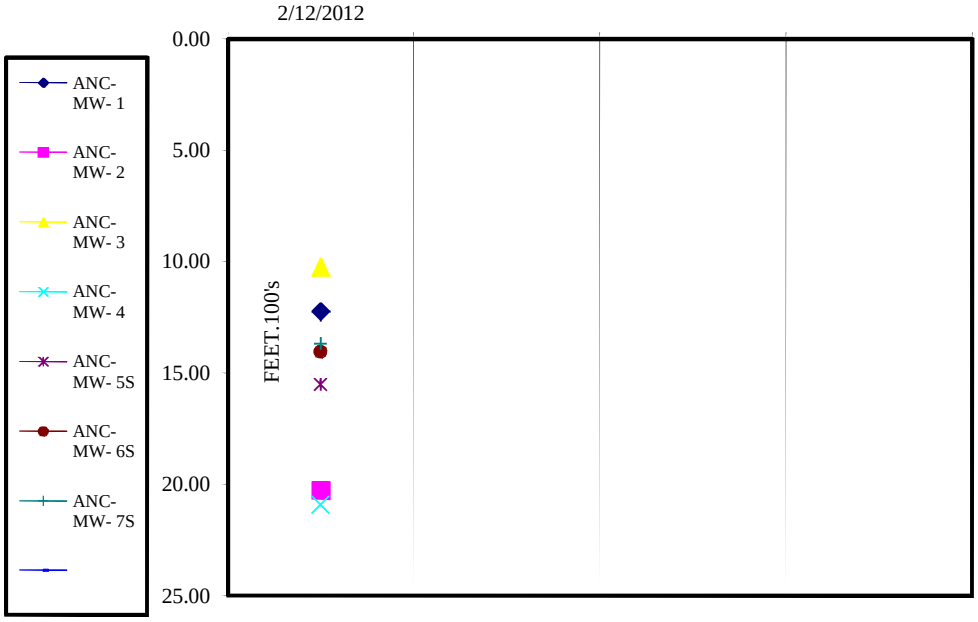
DEL-TECH GEOTECHNICAL SUPPORT, INC.

(209) 847-8757 (OFFICE) * (209) 847-7744 (FAX) * deltech1@pacbell.net (Email)

ANCHOR J. DAIRY
STEVINSON, CA.

MONITORING WELL FIELD SUMMARY LOG 2012
DEPTH TO WATER MEASUREMENTS

	QTR. 1	QTR. 2	QTR. 3	QTR. 4	TOTAL
DATE	2/12/12				DEPTH
LOCATION					
ANC-MW- 1	12.25				24.22'
ANC-MW- 2	20.26				35.37'
ANC-MW- 3	10.23				25.26'
ANC-MW- 4	20.90				33.65'
ANC-MW- 5S	15.50				28.30'
ANC-MW- 6S	14.05				27.80'
ANC-MW- 7S	13.67				27.70'



D.T.W. CHART

COMBO- 3260

NOTE:
ALL MEASUREMENTS ARE MADE FROM THE NORTH SIDE AND TOP EDGE OF THE WELL CASING. THE TOP OF CASING WITH A NOTCH OR PERMENANT MARKINGS, WHICH EVER ONE CONDITION IS APPROPRIATE.

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

BETTENCOURT AND MARSON DAIRY
18128 AMERICAN AVENUE
HILMAR, CA.
2/8 & 2/9/2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BET-MW 1S **DATE:** 2/8/2012

PROJECT NAME:	BETTENCOURT AND MARSON DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	13:15
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	10.00	FEET	**CALC. PURGE VOL.:**	2.06	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.60	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		12.60	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:00	0	0	10.00	0.5 GPM	6.38	628	19.2	308	2.8	
13:05	2.06	2		"	6.22	611	19.1	310	2.8	
13:10	4.11	4		"	6.22	610	19.1	310	2.9	
13:15	6.17	6	10.56	"	6.21	610	19.0	309	2.9	20
13:15	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.38'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BET-MW 1D / DTW: 9.47'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BET-MW	2S	**DATE:**	2/8/2012

PROJECT NAME:	BETTENCOURT AND MARSON DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	13:24
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	11.38	FEET	**CALC. PURGE VOL.:**	0.97	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.30	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		5.92	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:18	0	0	11.38	0.5 GPM	6.30	809	18.1	306	2.8	
13:20	0.97	1		"	6.26	817	18.2	306	2.8	
13:22	1.93	2		"	6.26	819	18.2	306	2.5	
13:24	2.90	3	11.80	"	6.25	820	18.2	305	2.6	15
13:24	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.42'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BET-MW 2D / DTW: 11.08'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BET-MW	3S	**DATE:**	2/8/2012

PROJECT NAME:	BETTENCOURT AND MARSON DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	13:40
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	10.07	FEET	**CALC. PURGE VOL.:**	1.26	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.80	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		7.73	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:28	0	0	10.07	0.5 GPM	6.20	1074	18.5	305	2.6	
13:31	1.26	1.25		"	6.02	1047	18.8	309	2.5	
13:34	2.52	2.5		"	6.09	1025	18.8	309	2.5	
13:37	3.78	3.75		"	6.11	1026	18.8	308	2.6	
13:40	5.05	5.0	10.65	"	6.12	1022	18.7	308	2.5	14
13:40	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.35'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BET-MW 3D / DTW: 9.90'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BET-MW	4S	**DATE:**	2/8/2012

PROJECT NAME:	BETTENCOURT AND MARSON DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	14:10
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	8.58	FEET	**CALC. PURGE VOL.:**	2.39	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.20	FEET	**TOTAL VOLUME PURGED:**	10	GAL.
STANDING WATER COLUMN:		14.62	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:50	0	0	8.58	0.5 GPM	6.61	1343	18.4	317	2.7	
13:55	2.39	2.5		"	6.62	1499	19.2	315	2.5	
14:00	4.77	5		"	6.63	1569	19.2	313	2.6	
14:05	7.16	7.5		"	6.64	1568	19.3	312	2.6	
14:10	9.54	10	9.11	"	6.64	1572	19.3	311	2.6	209
14:10	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	8.61'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BET-MW 4D / DTW: 7.78'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BET-MW	5S	**DATE:**	2/9/2012

PROJECT NAME:	BETTENCOURT AND MARSON DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	11:49
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	11.00	FEET	**CALC. PURGE VOL.:**	2.73	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.70	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		16.70	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:30	0	0	11.00	0.5 GPM	6.81	914	20.6	169	1.4	
11:37	2.73	3		"	6.82	846	20.9	168	1.4	
11:43	5.45	6		"	6.82	840	21.0	165	1.3	
11:49	8.18	9	11.05	"	6.84	838	21.0	162	1.3	26
11:49	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.00'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BET-MW 5D / DTW: 10.82'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BET-MW 6S **DATE:** 2/9/2012

PROJECT NAME:	BETTENCOURT AND MARSON DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	11:16
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	11.46	FEET	**CALC. PURGE VOL.:**	2.37	GAL.
DEPTH OF WELL:	**(feet.100th's)**	26.00	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		14.54	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:00	0	0	11.46	0.5 GPM	6.43	514	20.4	163	1.3	
11:05	2.37	2.5		"	6.39	513	20.1	156	1.2	
11:10	4.75	5		"	6.40	511	20.1	150	1.2	
11:16	7.12	7.5	11.50	"	6.40	510	20.1	152	1.1	17.5
11:16	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.47'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BET-MW 6D / DTW: 11.23'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BET-MW	7S	**DATE:**	2/8/2012

PROJECT NAME:	BETTENCOURT AND MARSON DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	14:40
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	12.20	FEET	**CALC. PURGE VOL.:**	2.45	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.20	FEET	**TOTAL VOLUME PURGED:**	10	GAL.
STANDING WATER COLUMN:		15.00	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:20	0	0	12.20	0.5 GPM	6.28	488	19.0	315	2.5	
14:25	2.45	2.5		"	5.75	476	18.9	319	2.5	
14:30	4.90	5		"	5.79	474	18.9	320	2.7	
14:35	7.34	7.5		"	5.81	474	18.9	320	2.7	
14:40	9.79	10	12.20	"	5.81	473	18.9	323	2.6	4
14:40	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	12.20'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BET-MW 7D / DTW: 12.00'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BET-MW	8S	**DATE:**	2/9/2012

PROJECT NAME:	BETTENCOURT AND MARSON DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	12:29
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	12.72	FEET	**CALC. PURGE VOL.:**	2.38	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.30	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		14.58	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:14	0	0	12.72	0.5 GPM	6.50	584	18.9	184	2.0	
12:19	2.38	2.5		"	6.86	498	19.4	170	2.0	
12:24	4.76	5		"	6.64	495	19.2	155	1.6	
12:29	7.14	7.5	12.85	"	6.62	491	19.2	156	1.5	26
12:29	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	12.75'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BET-MW 8D / DTW: 12.57'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

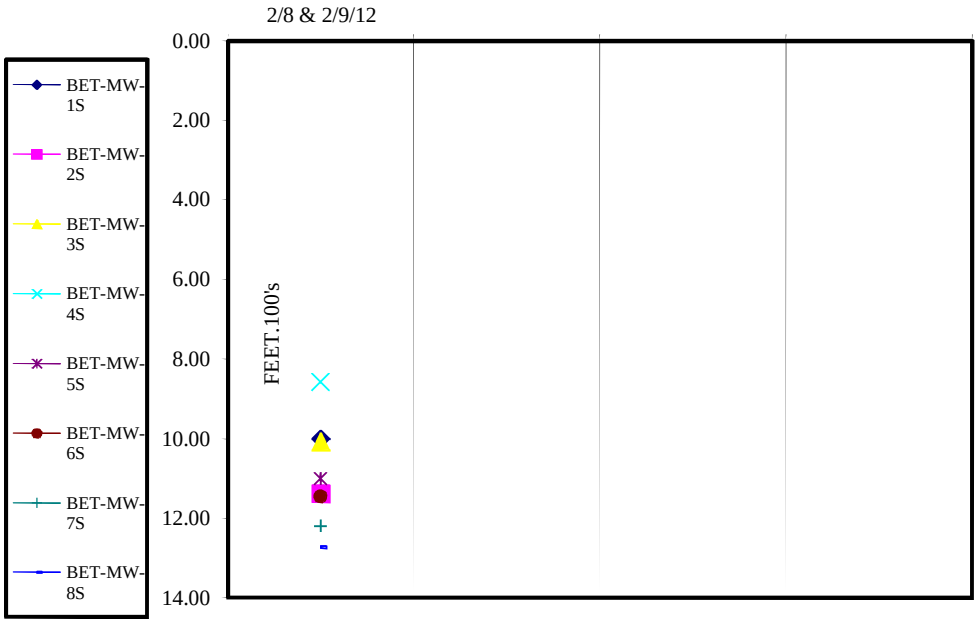
DEL-TECH GEOTECHNICAL SUPPORT, INC.

(209) 847-8757 (OFFICE) * (209) 847-7744 (FAX) * deltech1@pacbell.net (Email)

BETTENCOURT AND MARSON DAIRY
HILMAR, CA.

MONITORING WELL FIELD SUMMARY LOG 2012
DEPTH TO WATER MEASUREMENTS

	QTR. 1	QTR. 2	QTR. 3	QTR. 4	TOTAL
DATE	2/8 & 2/9/12				DEPTH
LOCATION					
BET-MW- 1S	10.00				22.60'
BET-MW- 2S	11.38				17.30'
BET-MW- 3S	10.07				17.80'
BET-MW- 4S	8.58				23.20'
BET-MW- 5S	11.00				27.70'
BET-MW- 6S	11.46				26.00'
BET-MW- 7S	12.20				27.20'
BET-MW- 8S	12.72				27.30'



D.T.W. CHART

COMBO- 3260

NOTE:
ALL MEASUREMENTS ARE MADE FROM THE NORTH SIDE AND TOP EDGE OF THE WELL CASING. THE TOP OF CASING WITH A NOTCH OR PERMENANT MARKINGS, WHICH EVER ONE CONDITION IS APPROPRIATE.

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

FRANK J. GOMES DAIRY #1
5301 N. DEANGELIS ROAD
STEVINSON, CA.
February 12, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG1-MW 1D **DATE:** 2/12/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	12:28
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	16.30	FEET	**CALC. PURGE VOL.:**	2.30	GAL.
DEPTH OF WELL:	**(feet.100th's)**	30.40	FEET	**TOTAL VOLUME PURGED:**	10	GAL.
STANDING WATER COLUMN:		14.10	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:08	0	0	16.30	0.5 GPM	6.99	1405	18.7	198	2.4	
12:13	2.30	2.5		"	7.05	1413	19.0	132	1.6	
12:18	4.60	5		"	7.05	1409	19.2	115	1.4	
12:23	6.90	7.5		"	7.11	1408	19.3	108	1.4	
12:28	9.20	10	16.34	"	7.12	1409	19.3	105	1.2	4
12:28	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	16.33'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE FG1-MW-1S / WELL WENT DRY.**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG1-MW	2D	**DATE:**	2/12/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	12:46
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	20.18	FEET	**CALC. PURGE VOL.:**	1.67	GAL.
DEPTH OF WELL:	**(feet.100th's)**	30.40	FEET	**TOTAL VOLUME PURGED:**	8	GAL.
STANDING WATER COLUMN:		10.22	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:30	0	0	20.18	0.5 GPM	7.25	1240	19.9	187	1.8	
12:34	1.67	2		"	6.90	1197	21.3	168	1.7	
12:38	3.34	4		"	6.90	1196	21.3	169	1.7	
12:42	5.00	6		"	6.86	1200	21.2	169	1.5	
12:46	6.67	8	20.20	"	6.87	1203	21.2	169	1.5	420
12:46	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	20.18'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE FG1-MW-2S / WELL WENT DRY.**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG1-MW 3D **DATE:** 2/12/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	13:02
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	18.08	FEET	**CALC. PURGE VOL.:**	2.01	GAL.
DEPTH OF WELL:	**(feet.100th's)**	30.40	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		12.32	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:50	0	0	18.08	0.5 GPM	7.08	2052	21.1	175	2.1	
12:54	2.01	2		"	7.04	2050	21.1	180	1.7	
12:58	4.02	4		"	7.07	2059	21.5	177	1.4	
13:02	6.03	6	27.15	"	7.15	2072	21.5	173	1.5	1000+
13:02	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	25.12'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE FG1-MW-3S / WELL WENT DRY.**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG1-MW	4S	**DATE:**	2/12/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	13:26
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	15.58	FEET	**CALC. PURGE VOL.:**	1.18	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.80	FEET	**TOTAL VOLUME PURGED:**	4	GAL.
STANDING WATER COLUMN:		7.22	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:14	0	0	15.58	0.5 GPM	6.61	614	21.4	193	2.6	
13:17	1.18	1		"	6.32	663	21.3	215	2.8	
13:20	2.36	2		"	6.24	682	21.3	212	2.7	
13:23	3.53	3		"	6.25	679	21.4	204	2.7	
13:26	4.71	4	17.42	"	6.23	679	21.4	201	2.4	370
13:26	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	16.88'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG1-MW 4D / DTW: 16.23'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG1-MW	5S	**DATE:**	2/12/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	14:15
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	16.22	FEET	**CALC. PURGE VOL.:**	1.02	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.50	FEET	**TOTAL VOLUME PURGED:**	4	GAL.
STANDING WATER COLUMN:		6.28	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:07	0	0	16.22	0.5 GPM	6.86	628	20.4	187	1.5	
14:09	1.02	1		"	6.83	608	20.3	178	1.3	
14:11	2.05	2		"	6.85	607	20.2	171	1.3	
14:13	3.07	3		"	6.83	607	20.1	167	1.4	
14:15	4.10	4	16.30	"	6.81	607	20.2	163	1.4	8.5
14:15	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	16.27'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG1-MW 5D / DTW: 16.03'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG1-MW 6S **DATE:** 2/12/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	13:54
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	19.32	FEET	**CALC. PURGE VOL.:**	0.65	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.30	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		3.98	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:48	0	0	19.32	0.5 GPM	6.78	375	22.3	186	1.4	
13:50	0.65	1		"	6.62	386	22.3	190	1.6	
13:52	1.30	2		"	6.63	398	22.4	192	1.6	
13:54	1.95	3	19.40	"	6.62	404	22.3	192	1.7	11
13:54	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	19.37'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG1-MW 6D / DTW: 19.10'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG1-MW	7S	**DATE:**	2/12/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	13:40
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	18.82	FEET	**CALC. PURGE VOL.:**	1.35	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.10	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		8.28	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:28	0	0	18.82	0.5 GPM	6.49	685	21.8	197	2.4	
13:31	1.35	1.5		"	6.44	629	21.3	199	2.5	
13:34	2.70	3		"	6.50	623	21.8	198	2.5	
13:37	4.05	4.5		"	6.47	622	21.9	193	2.2	
13:40	5.41	6	19.20	"	6.47	621	21.9	189	2.2	39
13:40	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	19.03'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG1-MW 7D / DTW: 18.55'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG1-MW	8S	**DATE:**	2/12/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	14:48
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	18.45	FEET	**CALC. PURGE VOL.:**	0.61	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.20	FEET	**TOTAL VOLUME PURGED:**	4	GAL.
STANDING WATER COLUMN:		3.75	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:40	0	0	18.45	0.5 GPM	7.03	1045	18.9	169	1.9	
14:42	0.61	1		"	6.49	1058	19.2	144	1.5	
14:44	1.22	2		"	6.51	1064	19.3	130	1.5	
14:46	1.84	3		"	6.50	1060	19.3	119	1.3	
14:48	2.45	4	18.62	"	6.51	1061	19.2	111	1.4	12
14:48	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	18.50'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG1-MW 8D / DTW: 18.20'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG1-MW	9S	**DATE:**	2/12/2012

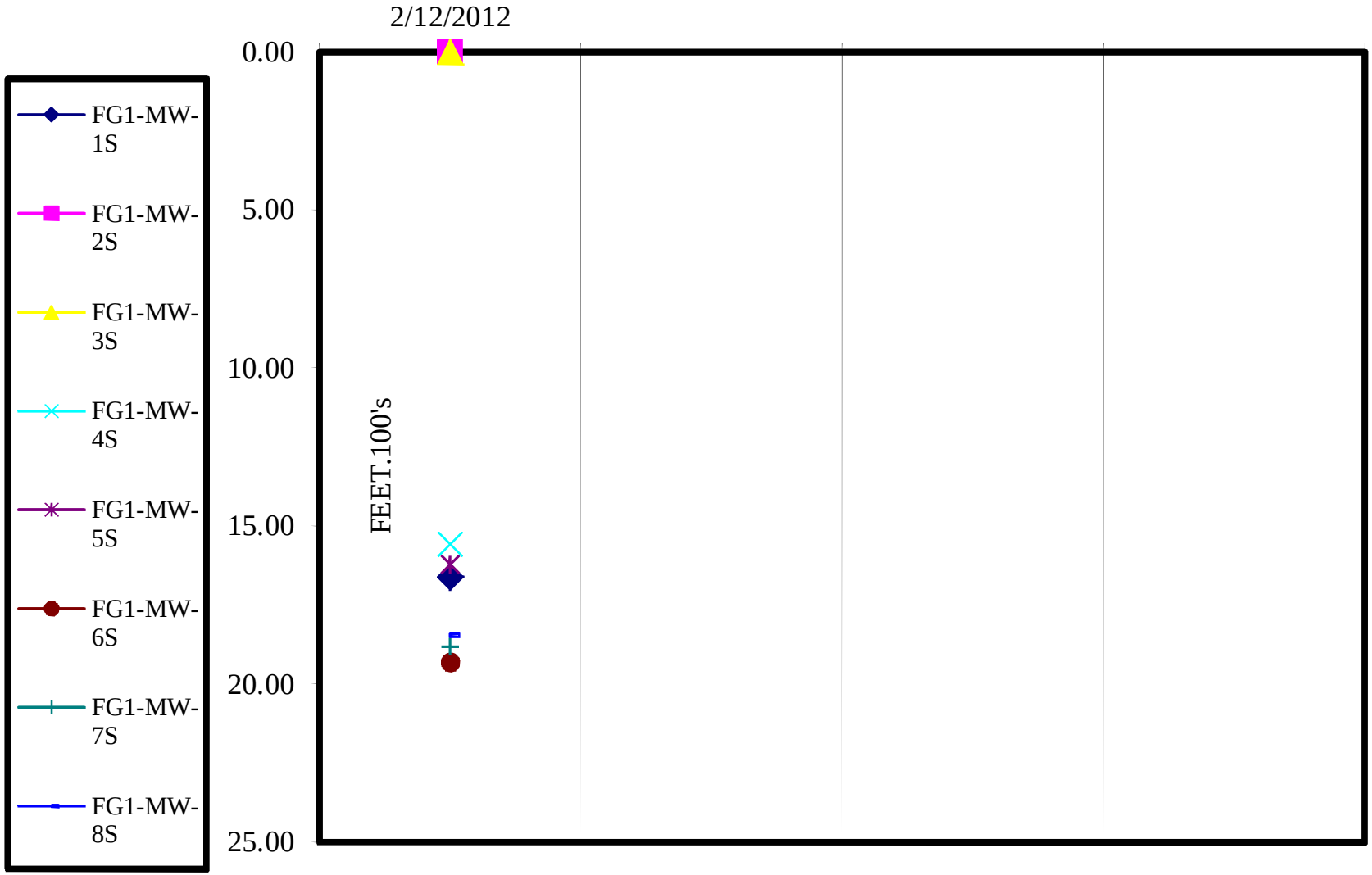
PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	15:02
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	17.21	FEET	**CALC. PURGE VOL.:**	0.99	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.30	FEET	**TOTAL VOLUME PURGED:**	4	GAL.
STANDING WATER COLUMN:		6.09	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:40	0	0	17.21	0.5 GPM	7.41	750	17.7	125	0.8	
14:54	0.99	1		"	7.27	709	17.5	124	0.8	
14:56	1.99	2		"	7.24	701	18.2	125	1.1	
14:58	2.98	3		"	7.21	695	18.4	127	1.2	
15:02	3.98	4	20.12	"	7.20	694	18.5	127	1.2	740
15:02	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	17.12'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG1-MW 8D / DTW: 17.28'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	


2/12/2012
0.00
5.00
10.00
15.00
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25.00
FEET.100's
FG1-MW-1S
FG1-MW-2S
FG1-MW-3S
FG1-MW-4S
FG1-MW-5S
FG1-MW-6S
FG1-MW-7S
FG1-MW-8S

D.T.W. CHART

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

GALLO CATTLE COMPANY BEAR CREEK
15751 W. HWY 140
LIVINGSTON, CA.
February 13, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BEA-MW 1S **DATE:** 2/13/2012

PROJECT NAME:	GALLO CATTLE COMPANY BEAR CREEK	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	15751 W. HWY 140	**SAMPLE TIME:**	10:52
CITY, STATE:	LIVINGSTON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Tim Avila			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	21.86	FEET	**CALC. PURGE VOL.:**	0.95	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.70	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		5.84	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:41	0	0	21.86	0.5 GPM	6.86	4023	19.4	194	2.4	
10:43	0.95	1		"	6.77	3688	20.6	212	2.1	
10:47	1.91	2		"	6.74	3680	20.8	211	2.1	
10:52	2.86	3	23.91	"	6.74	3688	19.8	193	2.0	1000+
10:52	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	22.44'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BEA-MW 1D / DTW: 21.73'**		
WEATHER:	OVERCAST / COOL.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BEA-MW	2S	**DATE:**	2/13/2012

PROJECT NAME:	GALLO CATTLE COMPANY BEAR CREEK	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	15751 W. HWY 140	**SAMPLE TIME:**	9:45
CITY, STATE:	LIVINGSTON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	20.04	FEET	**CALC. PURGE VOL.:**	1.17	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.20	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		7.16	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
9:35	0	0	20.04	0.5 GPM	6.57	1886	17.3	280	3.4	
9:37	1.17	1		"	7.04	884	19.3	257	2.9	
9:41	2.34	2		"	6.91	759	20.7	261	2.7	
9:45	3.51	3	22.05	"	7.05	708	21.6	254	2.7	612
9:45	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	21.22'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BEA-MW 2D / DTW: 20.16'**		
WEATHER:	OVERCAST / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BEA-MW	3S	**DATE:**	2/13/2012

PROJECT NAME:	GALLO CATTLE COMPANY BEAR CREEK	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	15751 W. HWY 140	**SAMPLE TIME:**	10:34
CITY, STATE:	LIVINGSTON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	17.92	FEET	**CALC. PURGE VOL.:**	1.51	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.20	FEET	**TOTAL VOLUME PURGED:**	4.5	GAL.
STANDING WATER COLUMN:		9.28	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:22	0	0	17.92	0.5 GPM	7.06	3982	18.7	252	2.7	
10:25	1.51	1.5		"	6.91	4504	20.1	256	2.5	
10:29	3.03	3		"	6.90	4660	20.3	254	2.6	
10:34	4.54	4.5	18.45	"	6.90	4675	19.6	253	2.6	13
10:34	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	18.18'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BEA-MW 3D / DTW: 17.77'**		
WEATHER:	OVERCAST / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BEA-MW	4S	**DATE:**	2/13/2012

PROJECT NAME:	GALLO CATTLE COMPANY BEAR CREEK	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	15751 W. HWY 140	**SAMPLE TIME:**	10:14
CITY, STATE:	LIVINGSTON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	21.96	FEET	**CALC. PURGE VOL.:**	2.83	GAL.
DEPTH OF WELL:	**(feet.100th's)**	39.30	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		17.34	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:00	0	0	21.96	0.5 GPM	7.43	1508	18.4	255	2.8	
10:03	2.83	3		"	7.43	1915	20.2	244	2.7	
10:08	5.66	6		"	7.46	1983	20.1	234	2.5	
10:14	8.49	9	21.92	"	7.51	2059	19.9	233	2.5	35
10:14	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	21.96'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BEA-MW 4D / DTW: 21.74'**		
WEATHER:	OVERCAST / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

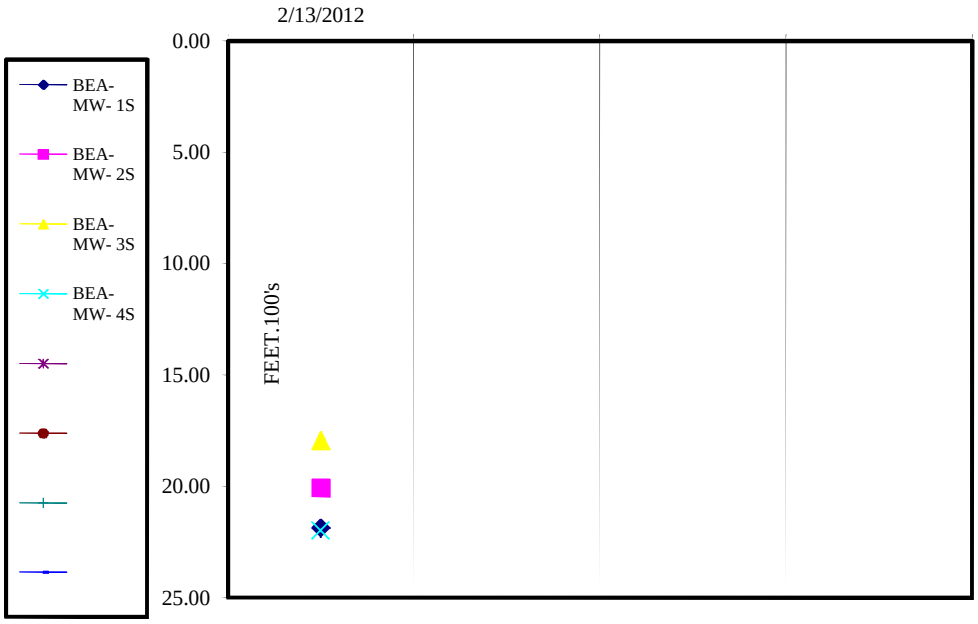
DEL-TECH GEOTECHNICAL SUPPORT, INC.

(209) 847-8757 (OFFICE) * (209) 847-7744 (FAX) * deltech1@pacbell.net (Email)

GALLO CATTLE COMPANY BEAR CREEK
LIVINGSTON, CA.

MONITORING WELL FIELD SUMMARY LOG 2012
DEPTH TO WATER MEASUREMENTS

	QTR. 1	QTR. 2	QTR. 3	QTR. 4	TOTAL
DATE	2/13/12				**DEPTH**
LOCATION					
BEA-MW- 1S	21.86				27.70'
BEA-MW- 2S	20.04				27.20'
BEA-MW- 3S	17.92				27.20'
BEA-MW- 4S	21.96				39.30'



D.T.W. CHART

COMBO- 3260

NOTE:
ALL MEASUREMENTS ARE MADE FROM THE NORTH SIDE AND TOP EDGE OF THE WELL CASING. THE TOP OF CASING WITH A NOTCH OR PERMENANT MARKINGS, WHICH EVER ONE CONDITION IS APPROPRIATE.

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

GALLO CATTLE COMPANY COTTONWOOD
10561 HWY 140
ATWATER, CA.
2/13 & 2/16/2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW	1	**DATE:**	2/16/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	N/A
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	N/A	
DEPTH TO WATER:	**(feet.100th's)**	32.33	FEET	**CALC. PURGE VOL.:**	0.00	GAL.
DEPTH OF WELL:	**(feet.100th's)**	32.33	FEET	**TOTAL VOLUME PURGED:**	0	GAL.
STANDING WATER COLUMN:		0.00	FEET	**LOCATION OF PUMP:**	N/A	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
	0									
	0.00									
	0.00									
	0.00									
	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	N/A
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**WELL WAS DRY / NO SAMPLE TAKEN**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW	2	**DATE:**	2/16/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	16:10
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Tim Avila			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	24.37	FEET	**CALC. PURGE VOL.:**	1.54	GAL.
DEPTH OF WELL:	**(feet.100th's)**	33.80	FEET	**TOTAL VOLUME PURGED:**	4.5	GAL.
STANDING WATER COLUMN:		9.43	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:58	0	0	24.37	0.5 GPM	7.34	2299	17.1	271	2.2	
16:01	1.54	1.5		"	7.26	2547	17.7	271	2.1	
16:05	3.08	3		"	7.27	2589	17.6	272	2.1	
16:10	4.62	4.5	24.40	"	7.26	2596	17.8	271	2.0	250
16:10	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	24.39'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW	3	**DATE:**	2/16/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	15:24
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:		TILL ANGERMAN		**MONUMENT:**	POST	
SAMPLER:		DEL-TECH / TIM AVILA		**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:		GROUNDWATER		**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	17.45	FEET	**CALC. PURGE VOL.:**	2.20	GAL.
DEPTH OF WELL:	**(feet.100th's)**	30.90	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		13.45	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:11	0	0	17.45	0.5 GPM	7.50	2795	17.5	256	2.1	
15:15	2.20	2		"	7.31	2721	18.0	258	2.7	
15:19	4.39	4		"	7.27	2685	18.1	259	2.7	
15:24	6.59	6	17.52	"	7.30	2693	17.8	261	2.6	1000+
15:24	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	17.48'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW	4	**DATE:**	2/16/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	15:45
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	21.42	FEET	**CALC. PURGE VOL.:**	0.97	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.38	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		5.96	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:38	0	0	21.42	0.5 GPM	7.25	1809	17.9	266	3.0	
15:40	0.97	1		"	7.12	1778	18.4	267	2.8	
15:42	1.95	2		"	7.11	1771	18.7	268	2.8	
15:45	2.92	3	21.73	"	7.09	1791	18.9	268	2.7	280
15:45	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	21.62'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW	5	**DATE:**	2/16/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	14:54
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	17.00	FEET	**CALC. PURGE VOL.:**	1.16	GAL.
DEPTH OF WELL:	**(feet.100th's)**	24.08	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		7.08	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:45	0	0	17.00	0.5 GPM	7.13	2712	18.5	256	2.8	
14:48	1.16	1		"	7.10	2678	18.3	261	2.5	
14:51	2.31	2		"	7.10	2673	18.4	262	2.5	
14:54	3.47	3	17.91	"	7.09	2666	18..3	263	2.5	418
14:54	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	17.52'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW	6	**DATE:**	2/16/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	14:30
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	16.53	FEET	**CALC. PURGE VOL.:**	1.25	GAL.
DEPTH OF WELL:	**(feet.100th's)**	24.21	FEET	**TOTAL VOLUME PURGED:**	4.5	GAL.
STANDING WATER COLUMN:		7.68	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:20	0	0	16.53	0.5 GPM	7.05	3106	18.0	237	2.7	
14:23	1.25	1.5		"	6.88	3152	18.3	240	2.2	
14:26	2.51	3		"	6.88	3114	18.4	241	2.0	
14:30	3.76	4.5	17.00	"	6.89	3095	18.4	242	2.0	640
14:30	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	16.64'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW	7	**DATE:**	2/16/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	12:55
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	11.80	FEET	**CALC. PURGE VOL.:**	1.88	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.35	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		11.55	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:45	0	0	11.80	0.5 GPM	7.05	2044	19.7	235	2.5	
12:48	1.88	2		"	6.94	2115	19.7	238	2.5	
12:51	3.77	4		"	6.89	2164	19.5	238	2.6	
12:55	5.65	6	12.07	"	6.88	2170	19.7	238	2.6	88
12:55	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.89'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW	8	**DATE:**	2/16/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	13:57
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	14.87	FEET	**CALC. PURGE VOL.:**	1.47	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.90	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		9.03	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:47	0	0	14.87	0.5 GPM	7.19	1751	20.1	242	2.6	
13:50	1.47	1.5	DRY	"	7.07	1885	22.0	245	2.1	
13:53	2.95	3	DRY	"	7.05	1876	20.7	248	2.1	
13:57	4.42	4.5	17.30	"	7.04	1874	21.1	247	1.8	361
13:57	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	17.15'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW	9	**DATE:**	2/16/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	12:33
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	8.56	FEET	**CALC. PURGE VOL.:**	3.09	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.50	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		18.94	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:15	0	0	8.56	0.5 GPM	7.05	1814	20.9	239	2.8	
12:21	3.09	3		"	6.91	1801	20.1	238	2.4	
12:27	6.18	6		"	6.91	1801	20.0	235	2.2	
12:33	9.27	9	9.15	"	6.89	1802	20.2	233	2.2	10
12:33	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	8.78'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW 10 **DATE:** 2/16/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	13:30
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Tim Avila			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	5.14	FEET	**CALC. PURGE VOL.:**	2.80	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.29	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		17.15	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:12	0	0	5.14	0.5 GPM	7.33	1176	19.7	222	2.0	
13:18	2.80	3		"	7.12	1105	19.9	219	2.2	
13:24	5.60	6		"	7.13	1062	20.0	222	2.2	
13:30	8.40	9	5.70	"	7.14	1045	20.0	217	2.3	10
13:30	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	5.36'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW 11D **DATE:** 2/13/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	13:53
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	23.95	FEET	**CALC. PURGE VOL.:**	2.68	GAL.
DEPTH OF WELL:	**(feet.100th's)**	40.40	FEET	**TOTAL VOLUME PURGED:**	12	GAL.
STANDING WATER COLUMN:		16.45	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:29	0	0	23.95	0.5 GPM	6.88	1820	18.9	273	2.9	
13:35	2.68	3		"	6.78	1667	19.8	258	3.0	
13:41	5.37	6		"	6.80	1657	19.8	249	2.4	
13:47	8.05	9		"	7.02	1662	19.7	239	2.2	
13:53	10.74	12	26.17	"	7.03	1660	19.7	237	2.1	9
13:53	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	25.12'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE MW- 11S / WELL WENT DRY.**		
WEATHER:	OVERCAST / RAINING.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT -MW 12S **DATE:** 2/13/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	14:15
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	24.44	FEET	**CALC. PURGE VOL.:**	1.10	GAL.
DEPTH OF WELL:	**(feet.100th's)**	31.20	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		6.76	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:05	0	0	24.44	0.5 GPM	7.13	1473	19.4	237	2.1	
14:07	1.10	1		"	7.06	1397	20.1	236	2.1	
14:09	2.21	2		"	7.06	1395	19.7	233	2.0	
14:11	3.31	3		"	7.07	1390	19.7	230	2.0	
14:13	4.41	4		"	7.10	1382	19.8	225	1.8	
14:15	5.52	5	26.37	"	7.10	1379	19.8	223	1.7	4.5
14:15	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	26.11'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**COT-MW 12D / DTW: 24.26'**		
WEATHER:	OVERCAST / RAINING.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW	13S	**DATE:**	2/13/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	15:00
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	25.10	FEET	**CALC. PURGE VOL.:**	1.31	GAL.
DEPTH OF WELL:	**(feet.100th's)**	33.10	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		8.00	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:48	0	0	25.10	0.5 GPM	6.94	2193	20.9	231	1.8	
14:51	1.31	1.5		"	7.12	2192	20.8	219	1.7	
14:54	2.61	3		"	6.99	2209	21.2	220	1.7	
14:57	3.92	4.5		"	6.97	2195	21.5	217	1.5	
15:00	5.22	6	25.28	"	6.99	2197	21.5	215	1.5	5.5
15:00	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	25.22'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**COT-MW 13D / DTW: 25.03'**		
WEATHER:	OVERCAST / RAINING.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW	14S	**DATE:**	2/13/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	15:37
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	25.16	FEET	**CALC. PURGE VOL.:**	1.18	GAL.
DEPTH OF WELL:	**(feet.100th's)**	32.40	FEET	**TOTAL VOLUME PURGED:**	4	GAL.
STANDING WATER COLUMN:		7.24	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:29	0	0	25.16	0.5 GPM	6.98	1362	20.1	212	1.4	
15:31	1.18	1		"	6.99	1370	20.2	217	1.4	
15:33	2.36	2		"	6.95	1370	20.5	220	1.7	
15:35	3.54	3		"	6.94	1372	20.5	221	1.5	
15:37	4.73	4	26.88	"	6.87	1385	21.0	222	1.7	13
15:37	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	26.41'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**COT-MW 14D / DTW: 24.85'**		
WEATHER:	OVERCAST / RAINING.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

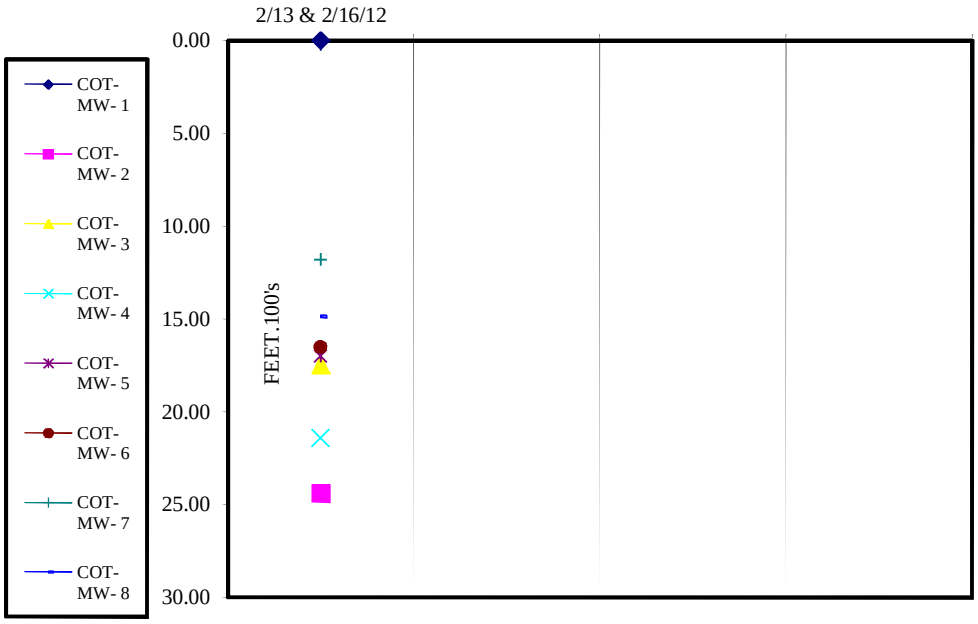
DEL-TECH GEOTECHNICAL SUPPORT, INC.

(209) 847-8757 (OFFICE) * (209) 847-7744 (FAX) * deltech1@pacbell.net (Email)

GALLO CATTLE COMPANY COTTONWOOD
ATWATER, CA.

MONITORING WELL FIELD SUMMARY LOG 2012
DEPTH TO WATER MEASUREMENTS

	QTR. 1	QTR. 2	QTR. 3	QTR. 4	TOTAL
DATE	2/13 & 2/16/12				DEPTH
LOCATION					
COT-MW- 1	DRY				32.33'
COT-MW- 2	24.37				33.80'
COT-MW- 3	17.45				30.90'
COT-MW- 4	21.42				27.38'
COT-MW- 5	17.00				24.08'
COT-MW- 6	16.53				24.21'
COT-MW- 7	11.80				23.35'
COT-MW- 8	14.87				23.90'
COT-MW- 9	8.56				27.50'
COT-MW- 10	5.14				22.29'
COT-MW- 11S	24.12				26.80'
COT-MW- 12S	24.44				31.20'
COT-MW- 13S	25.10				33.10'
COT-MW- 14S	25.16				32.40'



D.T.W. CHART

COMBO- 3260

NOTE:
ALL MEASUREMENTS ARE MADE FROM THE NORTH SIDE AND TOP EDGE OF THE WELL CASING. THE TOP OF CASING WITH A NOTCH OR PERMENANT MARKINGS, WHICH EVER ONE CONDITION IS APPROPRIATE.

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

GALLO CATTLE COMPANY SANTA RITA
91 S. BERT CRANE ROAD
ATWATER, CA.
2/13 & 2/16/2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / SAN-MW 1D **DATE:** 2/13/2012

PROJECT NAME:	GALLO CATTLE COMPANY SANTA RITA	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	91 S. BERT CRANE ROAD	**SAMPLE TIME:**	14:14
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	23.53	FEET	**CALC. PURGE VOL.:**	3.54	GAL.
DEPTH OF WELL:	**(feet.100th's)**	45.20	FEET	**TOTAL VOLUME PURGED:**	11	GAL.
STANDING WATER COLUMN:		21.67	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:00	0	0	23.53	0.5 GPM	7.27	2793	16.9	125	1.0	
14:04	3.54	3.5		"	7.09	2836	17.4	157	1.2	
14:09	7.07	7		"	7.11	2897	17.5	176	1.2	
14:14	10.61	10.6	23.53	"	7.13	2914	17.8	138	1.0	146
14:14	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	23.53'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE SAN-MW-1S / WELL WENT DRY.**		
WEATHER:	OVERCAST / RAINING.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / SAN-MW 2D **DATE:** 2/13/2012

PROJECT NAME:	GALLO CATTLE COMPANY SANTA RITA	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	91 S. BERT CRANE ROAD	**SAMPLE TIME:**	12:51
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Tim Avila			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	29.26	FEET	**CALC. PURGE VOL.:**	2.57	GAL.
DEPTH OF WELL:	**(feet.100th's)**	45.00	FEET	**TOTAL VOLUME PURGED:**	8	GAL.
STANDING WATER COLUMN:		15.74	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:36	0	0	29.26	0.5 GPM	7.07	2094	17.0	239	2.1	
12:40	2.57	2.5		"	7.07	2008	17.0	225	2.1	
12:45	5.14	5		"	7.05	2006	16.8	222	2.0	
12:51	7.71	7.5	29.36	"	7.15	2004	16.6	217	2.0	1000+
12:51	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	29.29'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE SAN-MW-2S / WELL WENT DRY.**		
WEATHER:	OVERCAST / RAINING.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / SAN-MW	3D	**DATE:**	2/13/2012

PROJECT NAME:	GALLO CATTLE COMPANY SANTA RITA	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	91 S. BERT CRANE ROAD	**SAMPLE TIME:**	13:21
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	30.36	FEET	**CALC. PURGE VOL.:**	2.42	GAL.
DEPTH OF WELL:	**(feet.100th's)**	45.20	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		14.84	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:06	0	0	30.36	0.5 GPM	7.02	1948	17.4	217	2.6	
13:10	2.42	2.5		"	6.91	1901	18.9	220	2.5	
13:15	4.84	5		"	6.90	1862	18.8	224	2.5	
13:21	7.27	7.5	30.45	"	6.92	1861	18.8	227	2.5	80
13:21	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	30.40'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE SAN-MW-3S / WELL WENT DRY.**		
WEATHER:	OVERCAST / RAINING.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / SAN-MW	4D	**DATE:**	2/13/2012

PROJECT NAME:	GALLO CATTLE COMPANY SANTA RITA	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	91 S. BERT CRANE ROAD	**SAMPLE TIME:**	13:48
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	29.72	FEET	**CALC. PURGE VOL.:**	4.14	GAL.
DEPTH OF WELL:	**(feet.100th's)**	55.10	FEET	**TOTAL VOLUME PURGED:**	12	GAL.
STANDING WATER COLUMN:		25.38	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:32	0	0	29.72	0.5 GPM	7.20	1765	17.6	230	2.6	
13:37	4.14	4		"	6.84	1751	18.1	243	2.7	
13:42	8.28	8		"	6.82	1752	18.3	247	2.7	
13:48	12.43	12	30.11	"	6.83	1740	17.7	251	2.7	383
13:48	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	29.92'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE SAN-MW-4S / WELL WENT DRY.**		
WEATHER:	OVERCAST / RAINING.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / SAN-MW	5S	**DATE:**	2/16/2012

PROJECT NAME:	GALLO CATTLE COMPANY SANTA RITA	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	91 S. BERT CRANE ROAD	**SAMPLE TIME:**	10:03
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	25.53	FEET	**CALC. PURGE VOL.:**	1.19	GAL.
DEPTH OF WELL:	**(feet.100th's)**	32.80	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		7.27	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
9:55	0	0	25.33	0.5 GPM	6.87	1963	14.7	254	2.7	
9:57	1.19	1		"	6.97	1840	16.6	251	2.7	
10:00	2.37	2		"	6.98	1835	16.6	251	2.8	
10:03	3.56	3	28.83	"	7.03	1828	16.7	247	2.8	1000+
10:03	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	12.00'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**SAN-MW 5D / DTW: 25.40'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / SAN-MW	6S	**DATE:**	2/16/2012

PROJECT NAME:	GALLO CATTLE COMPANY SANTA RITA	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	91 S. BERT CRANE ROAD	**SAMPLE TIME:**	11:58
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	13.81	FEET	**CALC. PURGE VOL.:**	2.41	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.60	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		14.79	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:31	0	0	13.81	0.5 GPM	7.05	1797	20.6	246	2.5	
11:40	2.41	2.5		"	6.99	1827	21.6	246	2.6	
11:49	4.83	5		"	7.00	1840	22.1	242	2.6	
11:58	7.24	7.5	14.45	"	7.01	1844	22.0	235	2.5	225
11:58	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	14.00'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**SAN-MW 6D / DTW: 13.65'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / SAN-MW	7S	**DATE:**	2/16/2012

PROJECT NAME:	GALLO CATTLE COMPANY SANTA RITA	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	91 S. BERT CRANE ROAD	**SAMPLE TIME:**	11:22
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	14.81	FEET	**CALC. PURGE VOL.:**	2.51	GAL.
DEPTH OF WELL:	**(feet.100th's)**	30.20	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		15.39	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:04	0	0	14.81	0.5 GPM	6.97	1702	20.2	243	2.8	
11:10	2.51	2.5		"	6.90	1708	20.0	246	2.3	
11:16	5.02	5		"	6.90	1716	20.1	250	2.4	
11:22	7.53	7.5	16.71	"	6.91	1719	20.3	251	2.4	643
11:22	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	15.22'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**SAN-MW 7D / DTW: 14.75'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / SAN-MW	8S	**DATE:**	2/16/2012

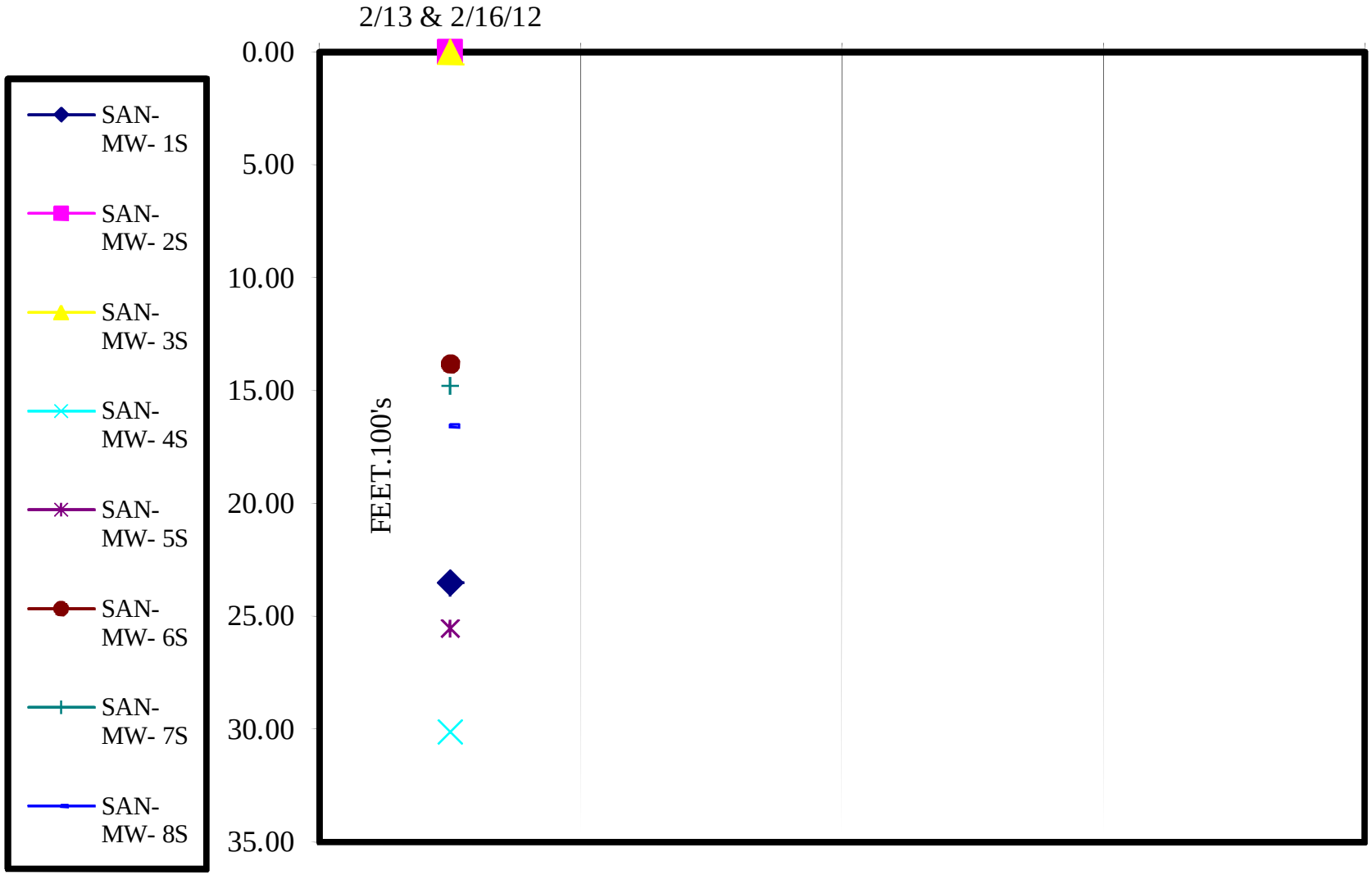
PROJECT NAME:	GALLO CATTLE COMPANY SANTA RITA	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	91 S. BERT CRANE ROAD	**SAMPLE TIME:**	10:50
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	16.56	FEET	**CALC. PURGE VOL.:**	1.43	GAL.
DEPTH OF WELL:	**(feet.100th's)**	25.30	FEET	**TOTAL VOLUME PURGED:**	4.5	GAL.
STANDING WATER COLUMN:		8.74	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:40	0	0	16.56	0.5 GPM	7.45	1596	19.6	261	2.9	
10:43	1.43	1.5		"	6.96	1682	19.1	252	2.1	
10:46	2.85	3		"	6.95	1679	19.2	244	2.0	
10:50	4.28	4.5	19.56	"	6.91	1673	19.3	242	2.0	603
10:50	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	17.12'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**SAN-MW 8D / DTW: 16.41'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	


2/13 & 2/16/12
0.00
5.00
10.00
15.00
20.00
25.00
30.00
35.00
FEET.100's
SAN-MW- 1S
SAN-MW- 2S
SAN-MW- 3S
SAN-MW- 4S
SAN-MW- 5S
SAN-MW- 6S
SAN-MW- 7S
SAN-MW- 8S

D.T.W. CHART

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

P. & L. SOUZA DAIRY
20633 CRANE ROAD
HILMAR, CA.
February 8, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / PLS-MW 1S **DATE:** 2/8/2012

PROJECT NAME:	P. & L. SOUZA DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	20633 CRANE ROAD	**SAMPLE TIME:**	16:48
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Tim Avila			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	10.90	FEET	**CALC. PURGE VOL.:**	0.98	GAL.
DEPTH OF WELL:	**(feet.100th's)**	16.90	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		6.00	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
16:37	0	0	10.90	0.5 GPM	7.07	2295	17.9	160	1.3	
16:39	0.98	1		"	7.05	2421	18.0	161	1.4	
16:43	1.96	2		"	6.99	2710	18.3	162	1.4	
16:48	2.94	3	15.30	"	7.02	2817	19.2	164	1.5	79
16:48	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	13.11'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**PLS-MW 1D / DTW: 10.66'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / PLS-MW	2S	**DATE:**	2/8/2012

PROJECT NAME:	P. & L. SOUZA DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	20633 CRANE ROAD	**SAMPLE TIME:**	17:16
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	9.65	FEET	**CALC. PURGE VOL.:**	1.12	GAL.
DEPTH OF WELL:	**(feet.100th's)**	16.50	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		6.85	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
17:05	0	0	9.65	0.5 GPM	7.24	2397	17.1	176	2.0	
17:07	1.12	1		"	6.97	2288	17.5	177	1.9	
17:11	2.24	2		"	6.91	2350	17.6	170	1.9	
17:16	3.35	3	9.95	"	6.90	2365	17.5	170	1.8	766
17:16	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.75'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**PLS-MW 2D / DTW: 9.49'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / PLS-MW	3S	**DATE:**	2/8/2012

PROJECT NAME:	P. & L. SOUZA DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	20633 CRANE ROAD	**SAMPLE TIME:**	15:27
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	8.39	FEET	**CALC. PURGE VOL.:**	1.19	GAL.
DEPTH OF WELL:	**(feet.100th's)**	15.70	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		7.31	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:18	0	0	8.39	0.5 GPM	7.35	1588	18.7	158	1.6	
15:20	1.19	1		"	6.98	1438	18.4	154	1.4	
15:23	2.39	2		"	6.96	1381	18.6	135	1.2	
15:27	3.58	3	10.20	"	7.01	1353	18.8	126	1.1	20
15:27	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.37'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**PLS-MW 3D / DTW: 8.24'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / PLS-MW	4S	**DATE:**	2/8/2012

PROJECT NAME:	P. & L. SOUZA DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	20633 CRANE ROAD	**SAMPLE TIME:**	15:50
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	10.26	FEET	**CALC. PURGE VOL.:**	2.13	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.30	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		13.04	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:37	0	0	10.26	0.5 GPM	6.90	4350	19.0	139	1.2	
15:41	2.13	2		"	6.91	5057	19.1	143	1.5	
15:45	4.26	4		"	6.90	5231	19.2	145	1.5	
15:50	6.38	6	11.56	"	7.02	5230	19.0	151	1.7	17
15:50	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.71'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**PLS-MW 4D / DTW: 9.85'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / PLS-MW	5S	**DATE:**	2/8/2012

PROJECT NAME:	P. & L. SOUZA DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	20633 CRANE ROAD	**SAMPLE TIME:**	16:20
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	8.93	FEET	**CALC. PURGE VOL.:**	1.04	GAL.
DEPTH OF WELL:	**(feet.100th's)**	15.30	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		6.37	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
16:08	0	0	8.93	0.5 GPM	7.20	3130	18.8	171	1.9	
16:10	1.04	1		"	7.14	2261	20.0	170	2.0	
16:14	2.08	2		"	7.10	1971	20.3	159	1.6	
16:20	3.12	3	11.99	"	6.98	1931	20.1	161	1.5	1000+
16:20	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.76'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**PLS-MW 5D / DTW: 8.83'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / PLS-MW	6S	**DATE:**	2/8/2012

PROJECT NAME:	P. & L. SOUZA DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	20633 CRANE ROAD	**SAMPLE TIME:**	15:08
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	8.06	FEET	**CALC. PURGE VOL.:**	2.29	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.10	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		14.04	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:56	0	0	8.06	0.5 GPM	7.56	2217	19.5	127	0.9	
14:59	2.29	2		"	7.55	2248	19.4	123	1.1	
15:03	4.58	4		"	7.60	2249	19.0	124	1.2	
15:08	6.87	6	8.23	"	7.65	2251	18.8	130	1.2	52
15:08	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	8.17'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**PLS-MW 6D / DTW: 8.97'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / PLS-MW	7S	**DATE:**	2/8/2012

PROJECT NAME:	P. & L. SOUZA DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	20633 CRANE ROAD	**SAMPLE TIME:**	17:42
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	9.60	FEET	**CALC. PURGE VOL.:**	2.11	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.50	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		12.90	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
17:28	0	0	9.60	0.5 GPM	7.28	2371	17.2	171	2.1	
17:32	2.11	2		"	7.09	2299	17.8	169	2.0	
17:37	4.21	4		"	7.08	2308	17.8	162	2.0	
17:52	6.32	6	10.30	"	7.04	2312	17.6	157	1.8	21
17:52	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.89'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**PLS-MW 7D / DTW: 10.30'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

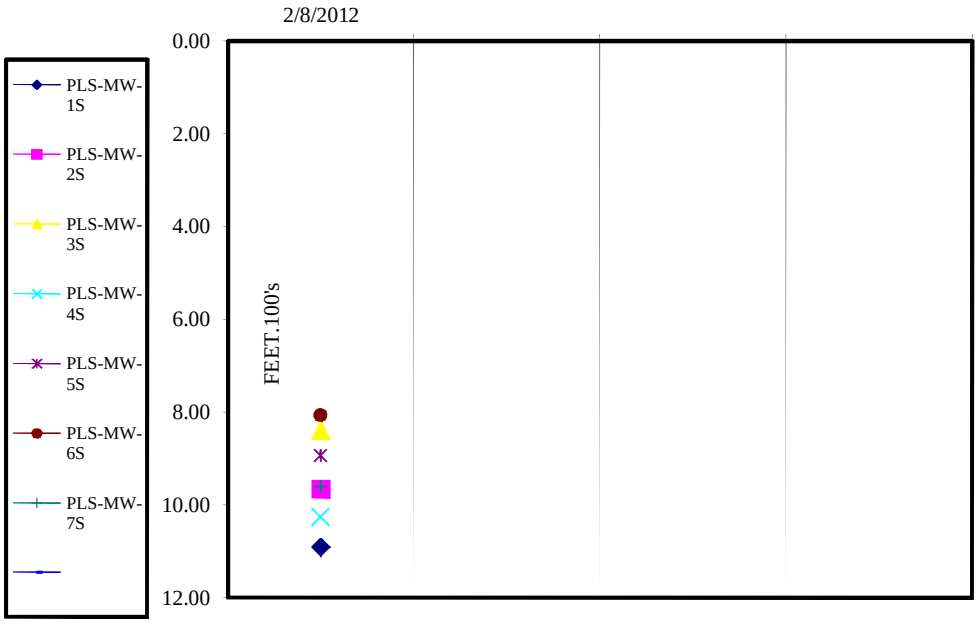
DEL-TECH GEOTECHNICAL SUPPORT, INC.

(209) 847-8757 (OFFICE) * (209) 847-7744 (FAX) * deltech1@pacbell.net (Email)

P. & L. SOUZA DAIRY
HILMAR, CA.

MONITORING WELL FIELD SUMMARY LOG 2012
DEPTH TO WATER MEASUREMENTS

	QTR. 1	QTR. 2	QTR. 3	QTR. 4	TOTAL
DATE	2/8/12				DEPTH
LOCATION					
PLS-MW- 1S	10.90				16.90'
PLS-MW- 2S	9.65				16.50'
PLS-MW- 3S	8.39				15.70'
PLS-MW- 4S	10.26				23.30'
PLS-MW- 5S	8.93				15.30'
PLS-MW- 6S	8.06				22.10'
PLS-MW- 7S	9.60				22.50'



D.T.W. CHART

COMBO- 3260

NOTE:
ALL MEASUREMENTS ARE MADE FROM THE NORTH SIDE AND TOP EDGE OF THE WELL CASING. THE TOP OF CASING WITH A NOTCH OR PERMENANT MARKINGS, WHICH EVER ONE CONDITION IS APPROPRIATE.

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

PAUL CAETANO DAIRY
9436 GRIFFITH AVENUE
DELHI, CA.
2/8 & 2/9/2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / CAE-MW	1S	**DATE:**	2/8/2012

PROJECT NAME:	PAUL CAETANO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	9436 GRIFFITH AVENUE	**SAMPLE TIME:**	13:21
CITY, STATE:	DELHI, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Tim Avila			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	11.40	FEET	**CALC. PURGE VOL.:**	0.90	GAL.
DEPTH OF WELL:	**(feet.100th's)**	16.90	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		5.50	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:12	0	0	11.40	0.5 GPM	6.80	3225	19.6	-43	0.3	
13:14	0.90	1		"	6.83	3513	20.4	-49	0.4	
13:17	1.80	2		"	6.83	3693	20.2	-51	0.4	
13:21	2.69	3	11.45	"	6.86	3818	20.2	-52	0.5	9.5
13:21	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.41'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**CAE-MW 1D / DTW: 10.96'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / CAE-MW	2S	**DATE:**	2/8/2012

PROJECT NAME:	PAUL CAETANO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	9436 GRIFFITH AVENUE	**SAMPLE TIME:**	12:41
CITY, STATE:	DELHI, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	11.53	FEET	**CALC. PURGE VOL.:**	0.99	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.60	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		6.07	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:32	0	0	11.53	0.5 GPM	6.65	2445	18.8	246	2.2	
12:35	0.99	1		"	6.81	2047	19.4	218	2.0	
12:38	1.98	2		"	6.79	2036	19.6	203	2.0	
12:41	2.97	3	13.05	"	6.85	2072	19.8	193	1.7	51
12:41	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	12.08'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**CAE-MW 2D / DTW: 11.33'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / CAE-MW 3S **DATE:** 2/8/2012

PROJECT NAME:	PAUL CAETANO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	9436 GRIFFITH AVENUE	**SAMPLE TIME:**	13:00
CITY, STATE:	DELHI, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	11.20	FEET	**CALC. PURGE VOL.:**	0.98	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.20	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		6.00	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:50	0	0	11.20	0.5 GPM	6.95	2668	20.0	193	1.8	
12:52	0.98	1		"	6.87	2447	20.1	194	1.8	
12:55	1.96	2		"	6.84	2382	20.0	194	1.8	
13:00	2.94	3	12.10	"	6.83	2374	20.2	196	1.7	9.5
13:00	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.47'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**CAE-MW 3D / DTW: 11.07'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / CAE-MW	4S	**DATE:**	2/8/2012

PROJECT NAME:	PAUL CAETANO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	9436 GRIFFITH AVENUE	**SAMPLE TIME:**	13:52
CITY, STATE:	DELHI, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	12.14	FEET	**CALC. PURGE VOL.:**	1.82	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.30	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		11.16	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:40	0	0	12.14	0.5 GPM	7.16	1553	18.4	19	0.7	
13:43	1.82	2		"	6.60	1450	18.5	62	0.8	
13:47	3.64	4		"	6.81	1402	18.6	74	0.8	
13:52	5.46	6	12.50	"	6.57	1411	18.6	87	0.9	9
13:52	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	12.33'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**CAE-MW 4D / DTW: 11.91'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / CAE-MW	5S	**DATE:**	2/8/2012

PROJECT NAME:	PAUL CAETANO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	9436 GRIFFITH AVENUE	**SAMPLE TIME:**	14:15
CITY, STATE:	DELHI, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	8.83	FEET	**CALC. PURGE VOL.:**	2.26	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.70	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		13.87	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:02	0	0	8.83	0.5 GPM	6.99	1509	19.7	118	1.0	
14:06	2.26	2.5		"	7.10	1588	19.0	119	0.8	
14:10	4.53	5		"	6.91	1422	19.5	106	0.8	
14:15	6.79	7.5	9.80	"	6.93	1336	19.4	107	0.7	29.5
14:15	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.19'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**CAE-MW 5D / DTW: 8.42'**		
	INSTALLED WATERRA IN MW-5D ON 2/9/2012		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / CAE-MW	6S	**DATE:**	2/9/2012

PROJECT NAME:	PAUL CAETANO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	9436 GRIFFITH AVENUE	**SAMPLE TIME:**	10:10
CITY, STATE:	DELHI, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	11.15	FEET	**CALC. PURGE VOL.:**	1.53	GAL.
DEPTH OF WELL:	**(feet.100th's)**	20.50	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		9.35	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
9:57	0	0	11.15	0.5 GPM	7.06	2267	21.7	174	1.4	
10:00	1.53	1.5		"	7.05	2113	21.2	163	1.2	
10:04	3.05	3		"	7.04	2043	21.1	153	1.2	
10:07	4.58	4.5		"	7.04	2040	21.1	150	1.1	
10:10	6.10	6	11.38	"	7.04	2040	21.0	147	1.1	44
10:10	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.22'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**CAE-MW 6D / DTW: 11.03'**		
	INSTALLED WATERRA TUBING IN BOTH MW- 6S & 6D.		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

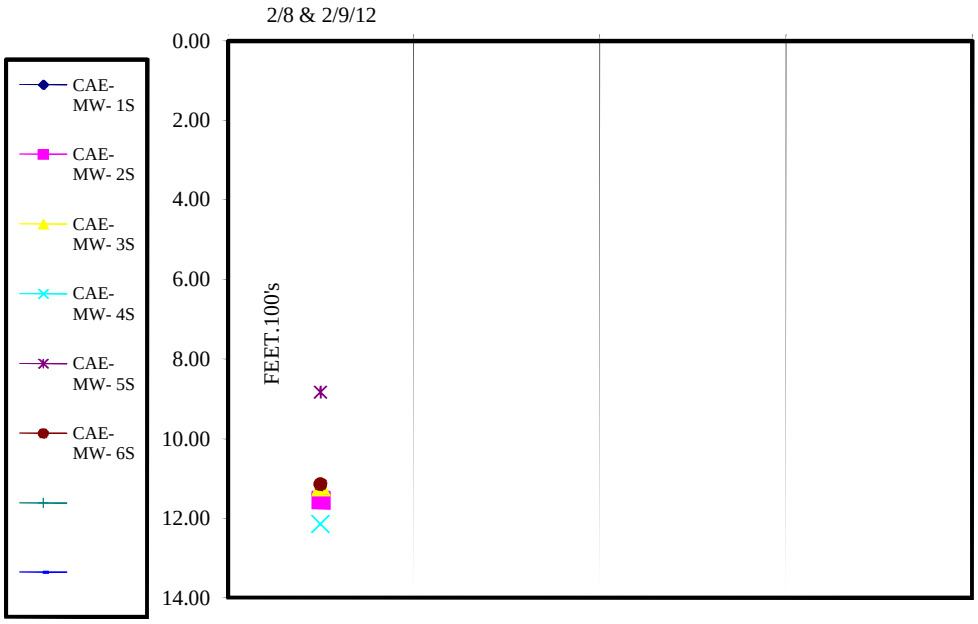
DEL-TECH GEOTECHNICAL SUPPORT, INC.

(209) 847-8757 (OFFICE) * (209) 847-7744 (FAX) * deltech1@pacbell.net (Email)

PAUL CAETANO DAIRY
DELHI, CA.

MONITORING WELL FIELD SUMMARY LOG 2012
DEPTH TO WATER MEASUREMENTS

	QTR. 1	QTR. 2	QTR. 3	QTR. 4	TOTAL
DATE	2/8 & 2/9/12				DEPTH
LOCATION					
CAE-MW- 1S	11.40				16.90'
CAE-MW- 2S	11.53				17.60'
CAE-MW- 3S	11.20				17.20'
CAE-MW- 4S	12.14				23.30'
CAE-MW- 5S	8.83				22.70'
CAE-MW- 6S	11.15				20.50'



D.T.W. CHART

COMBO- 3260

NOTE:
ALL MEASUREMENTS ARE MADE FROM THE NORTH SIDE AND TOP EDGE OF THE WELL CASING. THE TOP OF CASING WITH A NOTCH OR PERMENANT MARKINGS, WHICH EVER ONE CONDITION IS APPROPRIATE.

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

ROBERT GIOLETTI AND SONS DAIRY
118 N. BLAKER ROAD
TURLOCK, CA.
February 7, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ROB-MW 1S **DATE:** 2/7/2012

PROJECT NAME:	ROBERT GIOLETTI AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	118 N. BLAKER ROAD	**SAMPLE TIME:**	13:51
CITY, STATE:	TURLOCK, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Tim Avila			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	11.30	FEET	**CALC. PURGE VOL.:**	1.14	GAL.
DEPTH OF WELL:	**(feet.100th's)**	18.30	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		7.00	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:41	0	0	11.30	0.5 GPM	6.74	3086	18.1	165	1.6	
13:44	1.14	1		"	6.69	2999	18.1	165	1.6	
13:47	2.28	2		"	6.68	2964	18.3	167	1.5	
13:51	3.43	3	12.22	"	6.66	2985	18.4	168	1.5	851
13:51	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.79'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ROB-MW 1D / DTW: 10.98'**		
WEATHER:	OVERCAST / RAINING.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ROB-MW 2S **DATE:** 2/7/2012

PROJECT NAME:	ROBERT GIOLETTI AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	118 N. BLAKER ROAD	**SAMPLE TIME:**	13:30
CITY, STATE:	TURLOCK, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	11.70	FEET	**CALC. PURGE VOL.:**	1.01	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.90	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		6.20	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:20	0	0	11.70	0.5 GPM	6.82	2908	18.3	151	1.2	
13:23	1.01	1		"	6.74	3160	18.5	159	1.4	
13:26	2.02	2		"	6.75	3315	19.3	165	1.5	
13:30	3.04	3	12.85	"	6.79	3374	19.2	124	1.4	367
13:30	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.94'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ROB-MW 2D / DTW: 11.54'**		
WEATHER:	OVERCAST / RAINING.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ROB-MW 3S **DATE:** 2/7/2012

PROJECT NAME:	ROBERT GIOLETTI AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	118 N. BLAKER ROAD	**SAMPLE TIME:**	13:15
CITY, STATE:	TURLOCK, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	10.65	FEET	**CALC. PURGE VOL.:**	1.33	GAL.
DEPTH OF WELL:	**(feet.100th's)**	18.80	FEET	**TOTAL VOLUME PURGED:**	4.5	GAL.
STANDING WATER COLUMN:		8.15	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:07	0	0	10.65	0.5 GPM	7.08	1876	18.0	229	1.8	
13:10	1.33	1.5		"	6.99	1750	18.8	211	1.7	
13:13	2.66	3		"	7.00	1743	19.0	200	1.7	
13:15	3.99	4.5	10.70	"	7.01	1743	19.1	191	1.6	5
13:15	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.67'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ROB-MW 3D / DTW: 10.52'**		
WEATHER:	OVERCAST / RAINING.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ROB-MW	4S	**DATE:**	2/7/2012

PROJECT NAME:	ROBERT GIOLETTI AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	118 N. BLAKER ROAD	**SAMPLE TIME:**	12:58
CITY, STATE:	TURLOCK, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	10.70	FEET	**CALC. PURGE VOL.:**	1.18	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.90	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		7.20	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:50	0	0	10.70	0.5 GPM	6.96	2400	18.1	242	1.8	
12:52	1.18	1		"	6.80	2426	18.8	232	1.8	
12:55	2.35	2		"	6.81	2421	19.2	220	1.7	
12:58	3.53	3	10.39	"	6.81	2413	19.4	215	1.7	7.5
12:58	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.71'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ROB-MW 4D / DTW: 9.81'**		
WEATHER:	OVERCAST / RAINING.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ROB-MW	5S	**DATE:**	2/7/2012

PROJECT NAME:	ROBERT GIOLETTI AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	118 N. BLAKER ROAD	**SAMPLE TIME:**	12:34
CITY, STATE:	TURLOCK, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	10.52	FEET	**CALC. PURGE VOL.:**	0.73	GAL.
DEPTH OF WELL:	**(feet.100th's)**	15.00	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		4.48	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:28	0	0	10.52	0.5 GPM	6.67	2385	18.5	241	1.7	
12:30	0.73	1		"	6.77	2279	18.7	224	1.5	
12:32	1.46	2		"	6.77	2260	19.0	215	1.5	
12:34	2.19	3	10.57	"	6.77	2257	19.3	203	1.3	30.5
12:34	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.52'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ROB-MW 5D / DTW: 10.42'**		
WEATHER:	OVERCAST / RAINING.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ROB-MW	6S	**DATE:**	2/7/2012

PROJECT NAME:	ROBERT GIOLETTI AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	118 N. BLAKER ROAD	**SAMPLE TIME:**	15:00
CITY, STATE:	TURLOCK, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	12.01	FEET	**CALC. PURGE VOL.:**	2.64	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.20	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		16.19	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:51	0	0	12.01	0.5 GPM	7.17	1979	18.0	191	1.3	
14:54	2.64	2		"	6.93	2130	17.9	188	1.3	
14:57	5.28	4		"	6.97	2127	17.9	182	1.2	
15:00	7.93	6	12.02	"	6.93	2131	18.1	182	1.1	6
15:00	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	12.01'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ROB-MW 6D / DTW: 11.91'**		
WEATHER:	OVERCAST / RAINING.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ROB-MW 7S **DATE:** 2/7/2012

PROJECT NAME:	ROBERT GIOLETTI AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	118 N. BLAKER ROAD	**SAMPLE TIME:**	14:20
CITY, STATE:	TURLOCK, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	10.73	FEET	**CALC. PURGE VOL.:**	2.87	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.30	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		17.57	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:28	0	0	10.73	0.5 GPM	7.07	2020	18.0	182	1.7	
14:31	2.87	3		"	7.14	1954	18.3	186	1.7	
14:35	5.73	6		"	7.08	1911	18.6	196	1.8	
14:40	8.60	9	10.82	"	7.01	1887	18.6	201	1.8	2
14:40	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.77'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ROB-MW 7D / DTW: 10.74'**		
WEATHER:	OVERCAST / RAINING.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ROB-MW	8S	**DATE:**	2/7/2012

PROJECT NAME:	ROBERT GIOLETTI AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	118 N. BLAKER ROAD	**SAMPLE TIME:**	14:15
CITY, STATE:	TURLOCK, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	10.34	FEET	**CALC. PURGE VOL.:**	2.87	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.90	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		17.56	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:04	0	0	10.34	0.5 GPM	6.95	2338	18.6	177	1.5	
14:07	2.87	2		"	6.95	2105	19.1	181	1.6	
14:11	5.73	4		"	6.96	2080	19.3	183	1.6	
14:15	8.60	6	10.61	"	6.96	2074	19.1	183	1.6	284
14:15	SAMPLED									

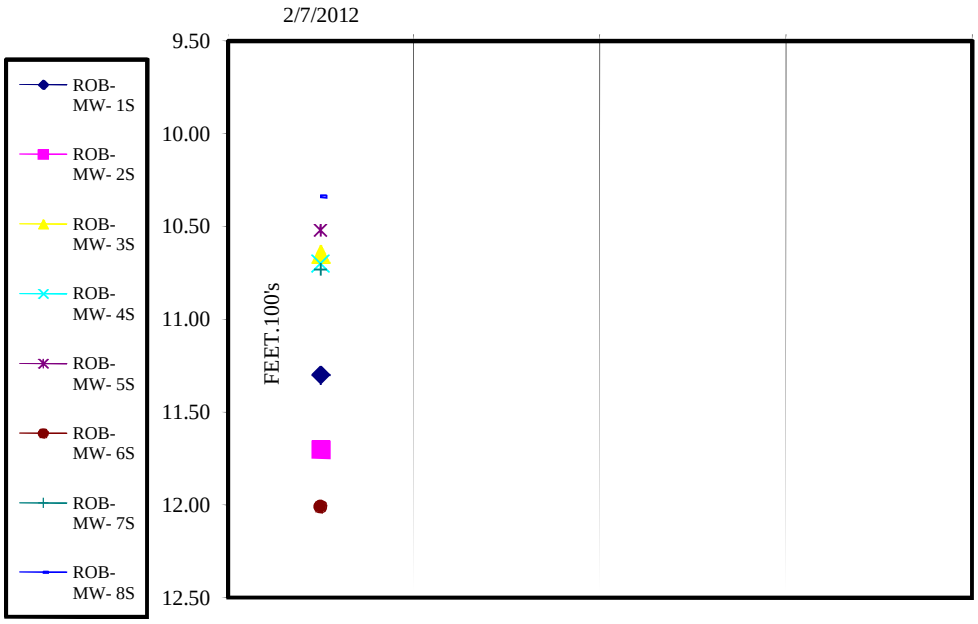
PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.47'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ROB-MW 8D / DTW: 10.39'**		
WEATHER:	OVERCAST / RAINING.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT, INC.
(209) 847-8757 (OFFICE) * (209) 847-7744 (FAX) * deltech1@pacbell.net (Email)

ROBERT GIOLETTI AND SONS DAIRY
TURLOCK, CA.

MONITORING WELL FIELD SUMMARY LOG 2012
DEPTH TO WATER MEASUREMENTS

	QTR. 1	QTR. 2	QTR. 3	QTR. 4	TOTAL
DATE	2/7/12				DEPTH
LOCATION					
ROB-MW- 1S	11.30				18.30'
ROB-MW- 2S	11.70				17.90'
ROB-MW- 3S	10.65				18.80'
ROB-MW- 4S	10.70				17.90'
ROB-MW- 5S	10.52				15.00'
ROB-MW- 6S	12.01				28.20'
ROB-MW- 7S	10.73				28.30'
ROB-MW- 8S	10.34				27.90'



D.T.W. CHART

COMBO- 3260

NOTE:
ALL MEASUREMENTS ARE MADE FROM THE NORTH SIDE AND TOP EDGE OF THE WELL CASING. THE TOP OF CASING WITH A NOTCH OR PERMENANT MARKINGS, WHICH EVER ONE CONDITION IS APPROPRIATE.

2012Q1 West Side

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

ANTONE L. GOMES AND SONS DAIRY
515 E. STUHR ROAD
NEWMAN, CA.
February 9, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANT-MW 1D **DATE:** 2/9/2012

PROJECT NAME:	ANTONE L. GOMES AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	16:15
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	20.62	FEET	**CALC. PURGE VOL.:**	2.56	GAL.
DEPTH OF WELL:	**(feet.100th's)**	36.30	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		15.68	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
16:00	0	0	20.62	0.5 GPM	6.91	2106	20.2	167	1.4	
16:05	2.56	2.5		"	6.87	2136	20.2	175	1.6	
16:10	5.12	5		"	6.88	2139	20.2	174	1.6	
16:15	7.68	7.5	20.70	"	6.87	2136	20.1	174	1.6	289
16:15	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	20.65'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE ANT-MW 1S / WELL WENT DRY.**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANT-MW	2S	**DATE:**	2/9/2012

PROJECT NAME:	ANTONE L. GOMES AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	16:42
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	21.92	FEET	**CALC. PURGE VOL.:**	1.82	GAL.
DEPTH OF WELL:	**(feet.100th's)**	33.10	FEET	**TOTAL VOLUME PURGED:**	8	GAL.
STANDING WATER COLUMN:		11.18	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
16:26	0	0	21.92	0.5 GPM	6.97	3782	21.2	177	1.8	
16:30	1.82	2		"	7.02	3099	21.1	180	1.9	
16:34	3.65	4		"	7.09	2938	21.1	177	1.9	
16:38	5.47	6		"	7.03	2874	21.1	179	1.7	
16:42	7.30	8	22.33	"	7.03	2803	21.1	180	1.8	170
16:42	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	22.08'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ANT-MW 2D / DTW: 20.64'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANT-MW 3S **DATE:** 2/9/2012

PROJECT NAME:	ANTONE L. GOMES AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	17:19
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	21.02	FEET	**CALC. PURGE VOL.:**	2.02	GAL.
DEPTH OF WELL:	**(feet.100th's)**	33.40	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		12.38	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
17:07	0	0	21.02	0.5 GPM	6.95	1648	19.7	187	1.9	
17:11	2.02	2		"	6.97	1652	19.8	185	1.7	
17:15	4.04	4		"	6.99	1651	19.9	182	1.7	
17:19	6.06	6	21.90	"	6.99	1652	19.9	180	1.6	152
17:19	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	21.40'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ANT-MW 3D / DTW: 21.06'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANT-MW	4S	**DATE:**	2/9/2012

PROJECT NAME:	ANTONE L. GOMES AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	16:57
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	21.12	FEET	**CALC. PURGE VOL.:**	2.07	GAL.
DEPTH OF WELL:	**(feet.100th's)**	33.80	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		12.68	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
16:45	0	0	21.12	0.5 GPM	6.97	2298	20.6	189	2.0	
16:49	2.07	2		"	6.95	2295	20.6	190	1.8	
16:53	4.14	4		"	6.94	2292	20.6	190	1.8	
16:57	6.21	6	25.40	"	6.94	2290	20.5	194	1.9	990
16:57	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	22.59'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ANT-MW 4D / DTW: 21.02'**		
	ANT-MW 4D NEEDS WATERRA TUBING.		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANT-MW	5S	**DATE:**	2/9/2012

PROJECT NAME:	ANTONE L. GOMES AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	15:56
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	24.02	FEET	**CALC. PURGE VOL.:**	1.56	GAL.
DEPTH OF WELL:	**(feet.100th's)**	33.60	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		9.58	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:40	0	0	24.02	0.5 GPM	7.12	1399	20.6	161	1.2	
15:44	1.56	1.5		"	7.02	1395	20.5	171	1.3	
15:48	3.13	3		"	7.00	1397	20.5	172	1.3	
15:52	4.69	4.5		"	6.99	1397	20.5	171	1.4	
15:56	6.25	6	24.20	"	6.99	1395	20.5	170	1.4	350
15:56	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	24.15'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ANT-MW 5D / DTW: 24.22'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANT-MW 6S **DATE:** 2/9/2012

PROJECT NAME:	ANTONE L. GOMES AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	17:37
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	18.62	FEET	**CALC. PURGE VOL.:**	2.36	GAL.
DEPTH OF WELL:	**(feet.100th's)**	33.10	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		14.48	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
17:22	0	0	18.62	0.5 GPM	7.26	1474	19.2	130	1.1	
17:27	2.36	2.5		"	7.25	1444	19.1	153	1.1	
17:32	4.73	5		"	7.22	1440	19.1	166	1.3	
17:37	7.09	7.5	19.00	"	7.21	1434	19.2	170	1.3	152
17:37	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	18.76'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ANT-MW 6D / DTW: 18.73'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

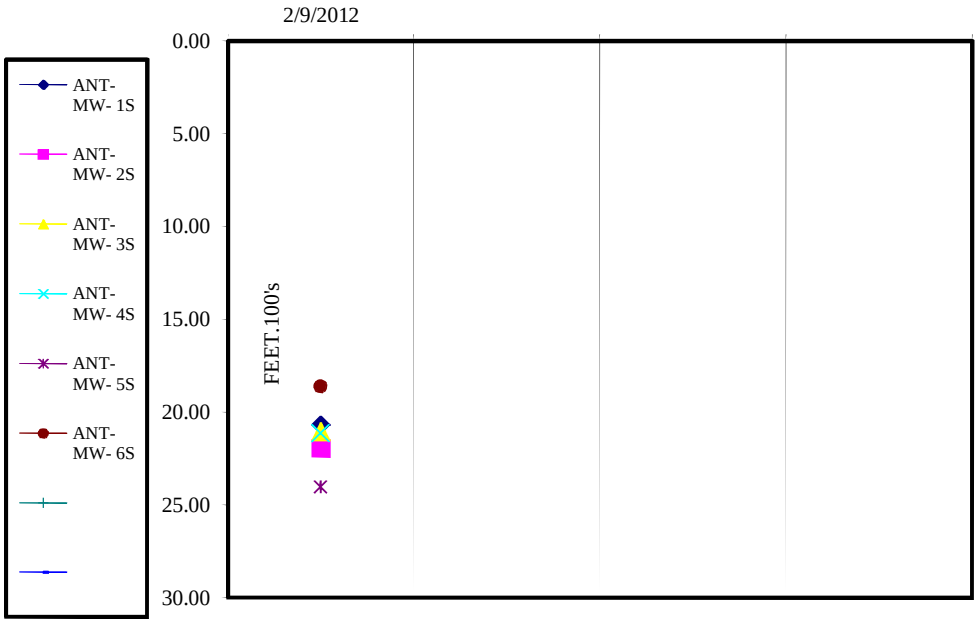
DEL-TECH GEOTECHNICAL SUPPORT, INC.

(209) 847-8757 (OFFICE) * (209) 847-7744 (FAX) * deltech1@pacbell.net (Email)

ANTONE L. GOMES AND SONS DAIRY
NEWMAN, CA.

MONITORING WELL FIELD SUMMARY LOG 2012
DEPTH TO WATER MEASUREMENTS

	QTR. 1	QTR. 2	QTR. 3	QTR. 4	TOTAL
DATE	2/9/12				DEPTH
LOCATION					
ANT-MW- 1S	20.70				21.20'
ANT-MW- 2S	21.92				33.10'
ANT-MW- 3S	21.02				33.40'
ANT-MW- 4S	21.12				33.80'
ANT-MW- 5S	24.02				33.60'
ANT-MW- 6S	18.62				33.10'



D.T.W. CHART

COMBO- 3260

NOTE:
ALL MEASUREMENTS ARE MADE FROM THE NORTH SIDE AND TOP EDGE OF THE WELL CASING. THE TOP OF CASING WITH A NOTCH OR PERMENANT MARKINGS, WHICH EVER ONE CONDITION IS APPROPRIATE.

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

CORREIA FAMILY DAIRY
26380 W. FAHEY ROAD
GUSTINE, CA.
February 10, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COR-MW 1S **DATE:** 2/10/2012

PROJECT NAME:	CORREIA FAMILY DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	26380 W. FAHEY ROAD	**SAMPLE TIME:**	10:41
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Tim Avila			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	6.82	FEET	**CALC. PURGE VOL.:**	1.84	GAL.
DEPTH OF WELL:	**(feet.100th's)**	18.10	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		11.28	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:27	0	0	6.82	0.5 GPM	7.52	2703	19.0	156	1.2	
10:31	1.84	2		"	7.28	3426	19.3	168	1.4	
10:35	3.68	4		"	7.23	3435	19.3	168	1.4	
10:41	5.52	6	7.00	"	7.26	3408	19.0	170	1.5	68
10:41	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	6.85'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**COR-MW 1D / DTW: 6.70'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COR-MW	2S	**DATE:**	2/10/2012

PROJECT NAME:	CORREIA FAMILY DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	26380 W. FAHEY ROAD	**SAMPLE TIME:**	9:16
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	4.93	FEET	**CALC. PURGE VOL.:**	1.99	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.10	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		12.17	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
9:03	0	0	4.93	0.5 GPM	6.70	2147	16.6	235	2.4	
9:07	1.99	2		"	7.36	1735	17.8	199	1.8	
9:11	3.97	4		"	7.31	1651	18.0	174	1.8	
9:16	5.96	6	4.96	"	7.33	1640	17.9	162	1.5	8
9:16	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	4.93'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**COR-MW 2D / DTW: 4.71'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COR-MW	3S	**DATE:**	2/10/2012

PROJECT NAME:	CORREIA FAMILY DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	26380 W. FAHEY ROAD	**SAMPLE TIME:**	9:36
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	6.55	FEET	**CALC. PURGE VOL.:**	1.82	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.70	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		11.15	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
9:23	0	0	6.55	0.5 GPM	7.50	1601	18.2	139	1.6	
9:27	1.82	2		"	7.48	1514	19.4	147	1.3	
9:31	3.64	4		"	7.48	1503	19.5	146	1.3	
9:36	5.46	6	6.55	"	7.47	1498	19.6	144	1.3	3.5
9:36	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	6.55'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**COR-MW 3D / DTW: 6.39'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COR-MW	4S	**DATE:**	2/10/2012

PROJECT NAME:	CORREIA FAMILY DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	26380 W. FAHEY ROAD	**SAMPLE TIME:**	10:19
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	5.61	FEET	**CALC. PURGE VOL.:**	1.89	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.20	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		11.59	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:06	0	0	5.61	0.5 GPM	7.48	1791	20.8	152	1.1	
10:10	1.89	2		"	7.32	2009	19.6	155	1.5	
10:14	3.78	4		"	7.33	2027	19.5	150	1.5	
10:19	5.67	6	5.67	"	7.29	2009	19.4	147	1.5	5.5
10:19	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	5.62'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**COR-MW 4D / DTW: 5.49'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COR-MW	5S	**DATE:**	2/10/2012

PROJECT NAME:	CORREIA FAMILY DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	26380 W. FAHEY ROAD	**SAMPLE TIME:**	9:57
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	6.08	FEET	**CALC. PURGE VOL.:**	1.91	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.80	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		11.72	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
9:44	0	0	6.08	0.5 GPM	7.58	1504	19.5	148	1.8	
9:48	1.91	2		"	7.46	1499	19.8	153	2.0	
9:52	3.83	4		"	7.40	1525	20.1	152	2.0	
9:57	5.74	6	6.60	"	7.36	1577	20.2	149	1.9	26.5
9:57	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	6.21'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**COR-MW 5D / DTW: 5.92'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

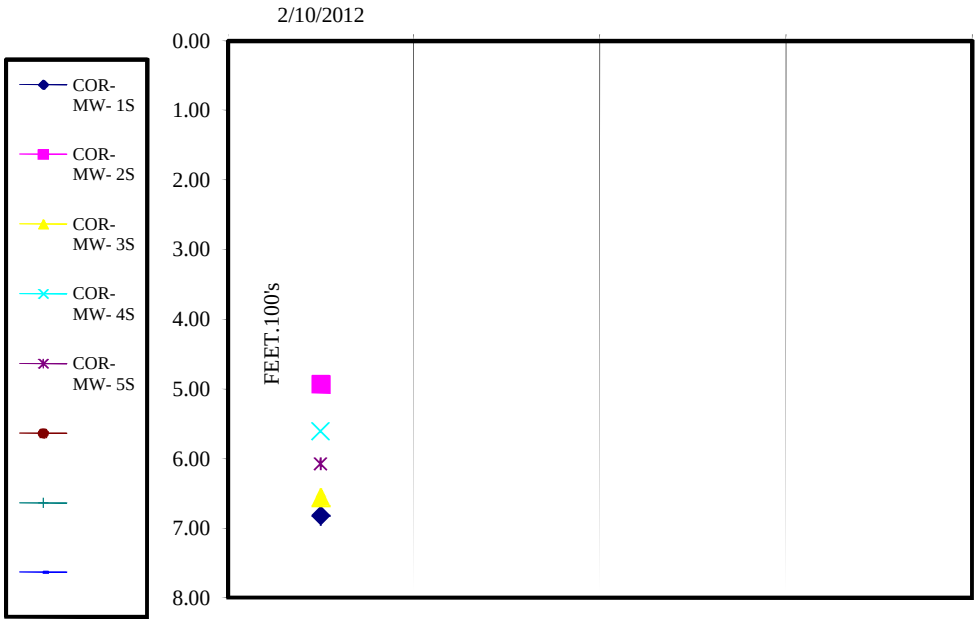
DEL-TECH GEOTECHNICAL SUPPORT, INC.

(209) 847-8757 (OFFICE) * (209) 847-7744 (FAX) * deltech1@pacbell.net (Email)

CORREIA FAMILY DAIRY
GUSTINE, CA.

MONITORING WELL FIELD SUMMARY LOG 2012
DEPTH TO WATER MEASUREMENTS

	QTR. 1	QTR. 2	QTR. 3	QTR. 4	TOTAL
DATE	2/10/12				DEPTH
LOCATION					
COR-MW- 1S	6.82				18.10'
COR-MW- 2S	4.93				17.10'
COR-MW- 3S	6.55				17.70'
COR-MW- 4S	5.61				17.20'
COR-MW- 5S	6.08				17.80'



D.T.W. CHART

COMBO- 3260

NOTE:
ALL MEASUREMENTS ARE MADE FROM THE NORTH SIDE AND TOP EDGE OF THE WELL CASING. THE TOP OF CASING WITH A NOTCH OR PERMENANT MARKINGS, WHICH EVER ONE CONDITION IS APPROPRIATE.

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

FRANK J. GOMES DAIRY #2
890 KNIEBES ROAD
GUSTINE, CA.
February 10, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG2-MW 1S **DATE:** 2/10/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #2	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	890 KNIEBES ROAD	**SAMPLE TIME:**	15:39
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	5.71	FEET	**CALC. PURGE VOL.:**	2.66	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.00	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		16.29	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:25	0	0	5.71	0.5 GPM	7.24	6746	20.4	249	2.7	
15:29	2.66	2.5		"	7.13	6713	19.6	244	2.5	
15:34	5.32	5		"	7.07	6409	19.5	220	2.5	
15:39	7.98	7.5	6.65	"	7.07	6248	19.4	209	2.2	9
15:39	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	5.90'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG2-MW 1D / DTW: 5.42'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG2-MW	2S	**DATE:**	2/10/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #2	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	890 KNIEBES ROAD	**SAMPLE TIME:**	16:23
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Tim Avila			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	9.22	FEET	**CALC. PURGE VOL.:**	2.30	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.30	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		14.08	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
16:10	0	0	9.22	0.5 GPM	7.35	4155	19.8	240	2.6	
16:14	2.30	2.5		"	7.24	3906	19.1	247	2.7	
16:18	4.60	5		"	7.19	3728	19.0	250	2.7	
16:23	6.89	7.5	10.91	"	7.17	3587	18.9	253	2.8	216
16:23	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.74'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG2-MW 2D / DTW: 9.10'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG2-MW	3S	**DATE:**	2/10/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #2	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	890 KNIEBES ROAD	**SAMPLE TIME:**	16:02
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	9.70	FEET	**CALC. PURGE VOL.:**	2.94	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.70	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		18.00	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:49	0	0	9.70	0.5 GPM	7.22	5641	20.1	214	2.0	
15:53	2.94	3		"	7.12	5324	20.4	224	2.1	
15:57	5.88	6		"	7.08	5331	20.4	227	2.1	
16:02	8.81	9	10.15	"	7.12	5327	20.3	234	2.2	3
16:02	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.92'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG2-MW 3D / DTW: 9.26'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG2-MW	4S	**DATE:**	2/10/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #2	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	890 KNIEBES ROAD	**SAMPLE TIME:**	15:13
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	10.22	FEET	**CALC. PURGE VOL.:**	3.06	GAL.
DEPTH OF WELL:	**(feet.100th's)**	29.00	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		18.78	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:00	0	0	10.22	0.5 GPM	7.42	4539	20.4	247	2.5	
15:04	3.06	3		"	7.23	4690	20.5	253	2.7	
15:08	6.13	6		"	7.22	4558	20.7	250	2.7	
15:13	9.19	9	10.20	"	7.19	4518	20.7	250	2.6	4
15:13	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.22'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG2-MW 4D / DTW: 9.76'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG2-MW 5S **DATE:** 2/10/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #2	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	890 KNIEBES ROAD	**SAMPLE TIME:**	14:51
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	5.91	FEET	**CALC. PURGE VOL.:**	2.43	GAL.
DEPTH OF WELL:	**(feet.100th's)**	20.80	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		14.89	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:38	0	0	5.91	0.5 GPM	7.38	3239	21.0	249	2.7	
14:42	2.43	2.5		"	7.20	4205	20.1	262	2.8	
14:46	4.86	5		"	7.19	4379	19.8	255	2.8	
14:51	7.29	7.5	5.91	"	7.23	4403	19.7	251	2.8	18
14:51	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	5.91'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG2-MW 5D / DTW: 5.70'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

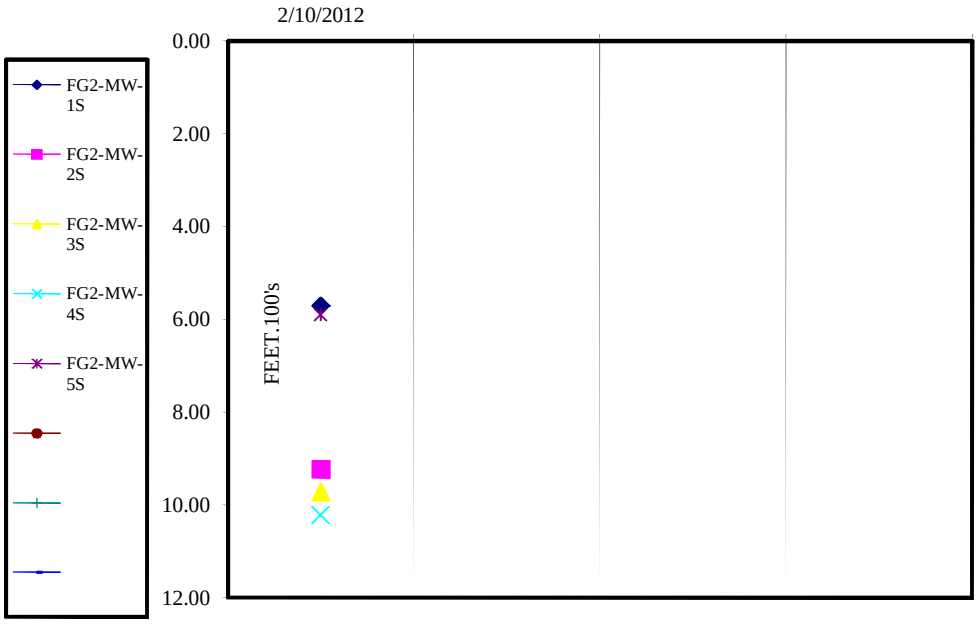
DEL-TECH GEOTECHNICAL SUPPORT, INC.

(209) 847-8757 (OFFICE) * (209) 847-7744 (FAX) * deltech1@pacbell.net (Email)

FRANK J. GOMES DAIRY #2
GUSTINE, CA.

MONITORING WELL FIELD SUMMARY LOG 2012
DEPTH TO WATER MEASUREMENTS

	QTR. 1	QTR. 2	QTR. 3	QTR. 4	TOTAL
DATE	2/10/12				DEPTH
LOCATION					
FG2-MW- 1S	5.71				22.00'
FG2-MW- 2S	9.22				23.30'
FG2-MW- 3S	9.70				27.70'
FG2-MW- 4S	10.22				29.00'
FG2-MW- 5S	5.91				20.80'



D.T.W. CHART

COMBO- 3260

NOTE:
ALL MEASUREMENTS ARE MADE FROM THE NORTH SIDE AND TOP EDGE OF THE WELL CASING. THE TOP OF CASING WITH A NOTCH OR PERMENANT MARKINGS, WHICH EVER ONE CONDITION IS APPROPRIATE.

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

GODINHO DAIRY
12710 S. WILSON ROAD
LOS BANOS, CA.
February 9, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / GOD-MW 1S **DATE:** 2/9/2012

PROJECT NAME:	GODINHO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	12710 S. WILSON ROAD	**SAMPLE TIME:**	11:18
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	8.66	FEET	**CALC. PURGE VOL.:**	2.39	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.30	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		14.64	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:58	0	0	8.66	0.5 GPM	7.75	3211	20.7	170	1.5	
11:03	2.39	2.5		"	7.42	3174	19.9	167	1.4	
11:10	4.78	5		"	7.42	3119	20.4	155	1.4	
11:18	7.17	7.5	8.90	"	7.43	3114	20.4	155	1.3	7
11:18	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	8.74'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**GOD-MW 1D / DTW: 8.59'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / GOD-MW	2S	**DATE:**	2/9/2012

PROJECT NAME:	GODINHO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	12710 S. WILSON ROAD	**SAMPLE TIME:**	12:01
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	11.14	FEET	**CALC. PURGE VOL.:**	2.67	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.50	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		16.36	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:46	0	0	11.14	0.5 GPM	7.70	2017	21.8	138	1.1	
11:50	2.67	2.5		"	7.76	2937	22.0	141	1.2	
11:55	5.34	5		"	7.74	3264	22.0	135	1.1	
12:01	8.01	7.5	11.26	"	7.75	3320	22.5	137	1.1	2
12:01	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.21'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**GOD-MW 2D / DTW: 11.02'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / GOD-MW	3S	**DATE:**	2/9/2012

PROJECT NAME:	GODINHO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	12710 S. WILSON ROAD	**SAMPLE TIME:**	11:40
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	11.74	FEET	**CALC. PURGE VOL.:**	1.79	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.70	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		10.96	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:25	0	0	11.74	0.5 GPM	7.59	2434	21.0	157	1.8	
11:29	1.79	2		"	7.48	1780	21.0	161	1.5	
11:34	3.58	4		"	7.48	1585	21.1	151	1.5	
11:40	5.37	6	11.85	"	7.45	1549	21.3	147	1.3	5
11:40	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.79'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**GOD-MW 3D / DTW: 11.64'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / GOD-MW	4S	**DATE:**	2/9/2012

PROJECT NAME:	GODINHO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	12710 S. WILSON ROAD	**SAMPLE TIME:**	10:45
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	11.32	FEET	**CALC. PURGE VOL.:**	1.94	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.20	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		11.88	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:31	0	0	11.32	0.5 GPM	6.67	3447	18.0	245	1.9	
10:35	1.94	2		"	7.58	3324	20.6	189	1.7	
10:40	3.88	4		"	7.66	3295	20.9	172	1.7	
10:45	5.82	6	11.80	"	7.65	3276	21.1	147	1.5	10
10:45	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.55'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**GOD-MW 4D / DTW: 10.91'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / GOD-MW	5S	**DATE:**	2/9/2012

PROJECT NAME:	GODINHO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	12710 S. WILSON ROAD	**SAMPLE TIME:**	13:17
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	6.18	FEET	**CALC. PURGE VOL.:**	3.46	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.40	FEET	**TOTAL VOLUME PURGED:**	10.5	GAL.
STANDING WATER COLUMN:		21.22	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:01	0	0	6.18	0.5 GPM	7.60	2583	20.5	155	1.2	
13:06	3.46	3.5		"	7.73	2216	19.8	166	1.4	
13:11	6.93	7		"	7.48	2152	19.7	169	1.4	
13:17	10.39	10.5	6.27	"	7.48	2135	19.6	168	1.5	2
13:17	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	6.20'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**GOD-MW 5D / DTW: 5.92'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / GOD-MW	6S	**DATE:**	2/9/2012

PROJECT NAME:	GODINHO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	12710 S. WILSON ROAD	**SAMPLE TIME:**	12:26
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	7.07	FEET	**CALC. PURGE VOL.:**	2.88	GAL.
DEPTH OF WELL:	**(feet.100th's)**	24.70	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		17.63	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:11	0	0	7.07	0.5 GPM	7.67	3632	23.0	144	1.1	
12:16	2.88	3		"	7.82	4002	21.3	152	1.4	
12:21	5.75	6		"	7.47	4009	21.3	149	1.4	
12:26	8.63	9	8.02	"	7.50	4008	21.4	147	1.4	2
12:26	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	7.23'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**GOD-MW 6D / DTW: 6.97'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / GOD-MW	7S	**DATE:**	2/9/2012

PROJECT NAME:	GODINHO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	12710 S. WILSON ROAD	**SAMPLE TIME:**	12:51
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	6.06	FEET	**CALC. PURGE VOL.:**	3.12	GAL.
DEPTH OF WELL:	**(feet.100th's)**	25.20	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		19.14	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:35	0	0	6.06	0.5 GPM	7.64	4095	21.6	148	1.0	
12:40	3.12	3		"	7.54	4195	21.1	151	1.2	
12:45	6.25	6		"	7.55	4205	21.1	151	1.2	
12:51	9.37	9	6.50	"	7.53	4194	21.2	151	1.3	1
12:51	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	6.22'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**GOD-MW 7D / DTW: 6.02'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT, INC.

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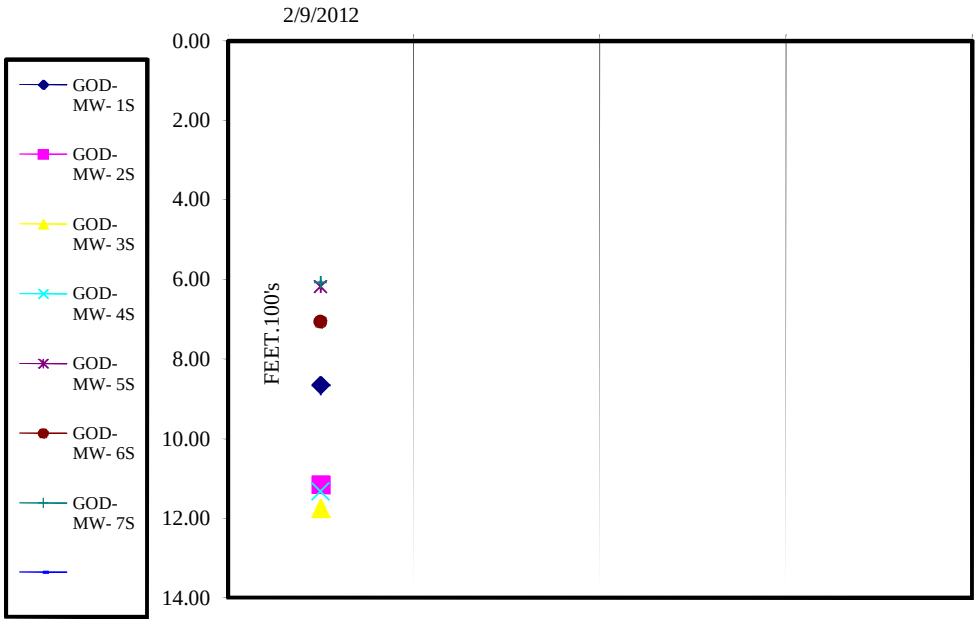
GODINHO DAIRY
LOS BANOS, CA.

MONITORING WELL FIELD SUMMARY LOG 2012
DEPTH TO WATER MEASUREMENTS

	QTR. 1	QTR. 2	QTR. 3	QTR. 4	TOTAL
DATE	2/9/12				DEPTH
LOCATION					
GOD-MW- 1S	8.66				23.30'
GOD-MW- 2S	11.14				27.50'
GOD-MW- 3S	11.74				22.70'
GOD-MW- 4S	11.32				23.20'
GOD-MW- 5S	6.18				27.40'
GOD-MW- 6S	7.07				24.70'
GOD-MW- 7S	6.06				25.20'



D.T.W. CHART

COMBO- 3260

NOTE:
ALL MEASUREMENTS ARE MADE FROM THE NORTH SIDE AND TOP EDGE OF THE WELL CASING. THE TOP OF CASING WITH A NOTCH OR PERMENANT MARKINGS, WHICH EVER ONE CONDITION IS APPROPRIATE.

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

JOHN MACHADO DAIRY
22495 W. CHINA CAMP ROAD
LOS BANOS, CA.
February 9, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MAC-MW 1S **DATE:** 2/9/2012

PROJECT NAME:	JOHN MACHADO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22495 W. CHINA CAMP ROAD	**SAMPLE TIME:**	15:30
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Tim Avila			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	7.61	FEET	**CALC. PURGE VOL.:**	1.63	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.60	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		9.99	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:18	0	0	7.61	0.5 GPM	7.34	2700	19.7	134	1.1	
15:20	1.63	2		"	7.32	2513	18.9	143	1.2	
15:24	3.26	4		"	7.40	2599	19.1	118	1.2	
15:30	4.89	6	8.60	"	7.31	2516	19.2	123	1.2	3
15:30	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	7.79'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MAC-MW 1D / DTW: 7.51'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MAC-MW 2S **DATE:** 2/9/2012

PROJECT NAME:	JOHN MACHADO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22495 W. CHINA CAMP ROAD	**SAMPLE TIME:**	15:08
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	6.71	FEET	**CALC. PURGE VOL.:**	1.79	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.70	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		10.99	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:57	0	0	6.71	0.5 GPM	7.85	6290	19.5	23	0.4	
14:59	1.79	2		"	7.48	3160	19.8	85	0.7	
15:03	3.59	4		"	7.37	3063	19.8	105	0.7	
15:08	5.38	6	6.80	"	7.25	2987	19.9	116	0.9	5.5
15:08	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	6.75'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MAC-MW 2D / DTW: 6.46'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MAC-MW	3S	**DATE:**	2/9/2012

PROJECT NAME:	JOHN MACHADO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22495 W. CHINA CAMP ROAD	**SAMPLE TIME:**	16:25
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	5.34	FEET	**CALC. PURGE VOL.:**	3.70	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.00	FEET	**TOTAL VOLUME PURGED:**	12	GAL.
STANDING WATER COLUMN:		22.66	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
16:10	0	0	5.34	0.5 GPM	7.29	7495	19.3	155	1.4	
16:14	3.70	4		"	7.20	9165	18.7	162	1.5	
16:19	7.40	8		"	7.19	9881	18.0	161	1.5	
16:25	11.09	12	8.51	"	7.16	9911	18.3	159	1.5	105
16:25	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	6.52'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MAC-MW 3D / DTW: 5.36'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MAC-MW 4S **DATE:** 2/9/2012

PROJECT NAME:	JOHN MACHADO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22495 W. CHINA CAMP ROAD	**SAMPLE TIME:**	16:05
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	6.52	FEET	**CALC. PURGE VOL.:**	1.74	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.20	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		10.68	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:50	0	0	6.52	0.5 GPM	7.53	4105	20.1	128	1.3	
15:54	1.74	2		"	7.42	3902	20.1	136	1.4	
15:59	3.49	4		"	7.43	3910	19.9	136	1.4	
16:05	5.23	6	6.79	"	7.44	3911	20.0	140	1.5	4
16:05	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	6.61'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MAC-MW 4D / DTW: 6.43'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MAC-MW	5S	**DATE:**	2/9/2012

PROJECT NAME:	JOHN MACHADO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22495 W. CHINA CAMP ROAD	**SAMPLE TIME:**	15:48
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	5.90	FEET	**CALC. PURGE VOL.:**	3.46	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.10	FEET	**TOTAL VOLUME PURGED:**	10.5	GAL.
STANDING WATER COLUMN:		21.20	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:33	0	0	5.90	0.5 GPM	7.52	2991	19.9	123	1.1	
15:37	3.46	3.5		"	7.60	4301	19.8	130	1.1	
15:42	6.92	7		"	7.60	4425	19.9	128	1.3	
15:48	10.38	10.5	6.00	"	7.61	4505	19.9	127	1.2	10
15:48	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	5.92'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MAC-MW 5D / DTW: 5.70'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT, INC.

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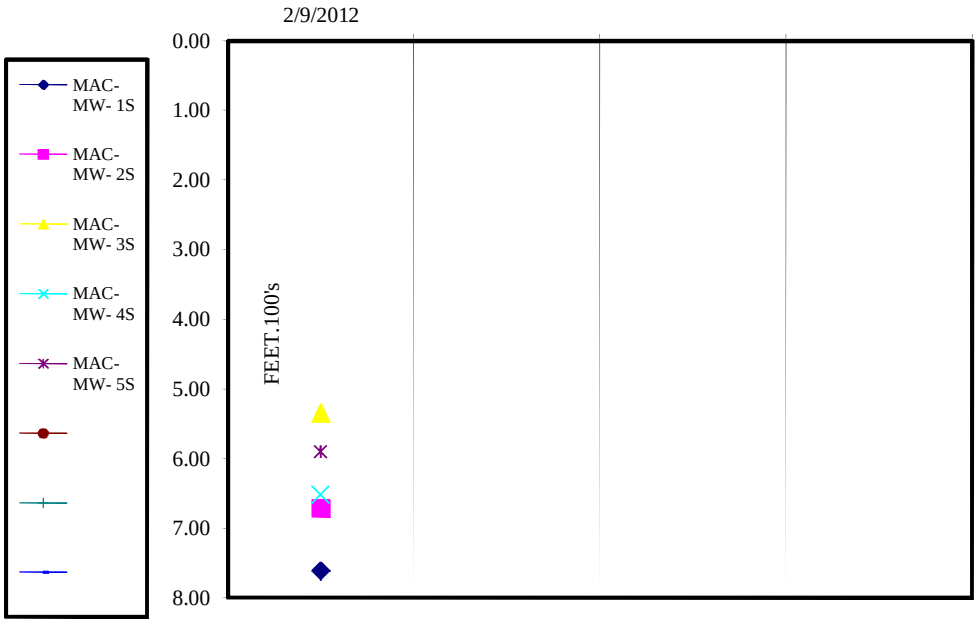
JOHN MACHADO DAIRY
LOS BANOS, CA.

MONITORING WELL FIELD SUMMARY LOG 2012
DEPTH TO WATER MEASUREMENTS

	QTR. 1	QTR. 2	QTR. 3	QTR. 4	TOTAL
DATE	2/9/12				DEPTH
LOCATION					
MAC-MW- 1S	7.61				17.60'
MAC-MW- 2S	6.71				17.70'
MAC-MW- 3S	5.34				28.00'
MAC-MW- 4S	6.52				27.50'
MAC-MW- 5S	5.90				27.10'



D.T.W. CHART

COMBO- 3260

NOTE:
ALL MEASUREMENTS ARE MADE FROM THE NORTH SIDE AND TOP EDGE OF THE WELL CASING. THE TOP OF CASING WITH A NOTCH OR PERMENANT MARKINGS, WHICH EVER ONE CONDITION IS APPROPRIATE.

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

JOSE NUNES DAIRY
22484 W. CHINA CAMP ROAD
LOS BANOS, CA.
February 9, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / NUN-MW 1S **DATE:** 2/9/2012

PROJECT NAME:	JOSE NUNES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22484 W. CHINA CAMP ROAD	**SAMPLE TIME:**	14:45
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	6.74	FEET	**CALC. PURGE VOL.:**	1.75	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.46	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		10.72	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:31	0	0	6.74	0.5 GPM	7.40	6733	21.0	134	1.0	
14:34	1.75	2		"	7.40	6675	20.7	136	1.2	
14:39	3.50	4		"	7.37	6669	20.2	134	1.2	
14:45	5.25	6	6.98	"	7.36	6638	20.4	132	1.1	6.5
14:45	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	6.82'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**NUN-MW 1D / DTW: 6.78'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / NUN-MW	2S	**DATE:**	2/9/2012

PROJECT NAME:	JOSE NUNES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22484 W. CHINA CAMP ROAD	**SAMPLE TIME:**	13:43
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	8.00	FEET	**CALC. PURGE VOL.:**	3.26	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.95	FEET	**TOTAL VOLUME PURGED:**	10.5	GAL.
STANDING WATER COLUMN:		19.95	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:25	0	0	8.00	0.5 GPM	7.65	3939	19.8	181	1.5	
13:31	3.26	3.5		"	7.55	3935	18.9	169	1.3	
13:37	6.51	7		"	7.47	3840	18.9	151	1.3	
13:43	9.77	10.5	8.60	"	7.45	3833	18.9	130	1.1	1
13:43	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	8.15'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**NUN-MW 2D / DTW: 7.81'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / NUN-MW	3S	**DATE:**	2/9/2012

PROJECT NAME:	JOSE NUNES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22484 W. CHINA CAMP ROAD	**SAMPLE TIME:**	14:22
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	5.37	FEET	**CALC. PURGE VOL.:**	1.60	GAL.
DEPTH OF WELL:	**(feet.100th's)**	15.18	FEET	**TOTAL VOLUME PURGED:**	4.5	GAL.
STANDING WATER COLUMN:		9.81	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:10	0	0	5.37	0.5 GPM	7.32	9809	20.8	148	1.2	
14:13	1.60	1.5		"	7.11	7176	20.6	141	1.0	
14:17	3.20	3		"	7.15	6976	20.6	136	0.9	
14:22	4.80	4.5	5.40	"	7.21	6850	21.2	132	0.9	27.5
14:22	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	5.37'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**NUN-MW 3D / DTW: 5.36'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / NUN-MW	4S	**DATE:**	2/9/2012

PROJECT NAME:	JOSE NUNES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22484 W. CHINA CAMP ROAD	**SAMPLE TIME:**	14:03
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	7.12	FEET	**CALC. PURGE VOL.:**	1.30	GAL.
DEPTH OF WELL:	**(feet.100th's)**	15.06	FEET	**TOTAL VOLUME PURGED:**	4.5	GAL.
STANDING WATER COLUMN:		7.94	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:52	0	0	7.12	0.5 GPM	7.46	8745	20.3	131	1.2	
13:54	1.30	1.5		"	7.22	8722	19.7	136	1.4	
13:58	2.59	3		"	7.21	8719	19.9	136	1.4	
14:03	3.89	4.5	10.70	"	7.21	8715	20.2	137	1.5	243
14:03	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	8.24'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**NUN-MW 4D / DTW: 7.03'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

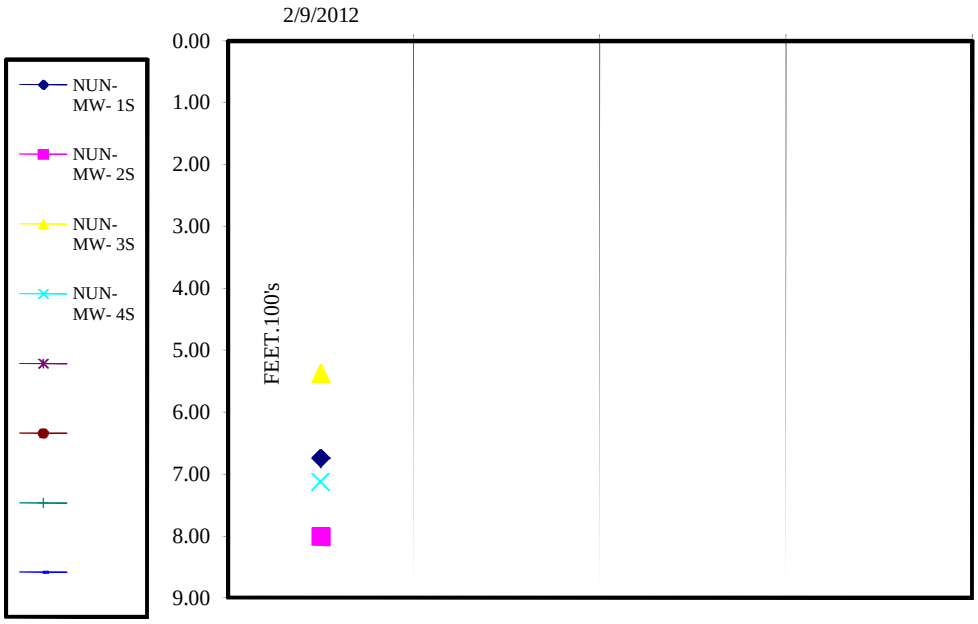
DEL-TECH GEOTECHNICAL SUPPORT, INC.

(209) 847-8757 (OFFICE) * (209) 847-7744 (FAX) * deltech1@pacbell.net (Email)

JOSE NUNES DAIRY
LOS BANOS, CA.

MONITORING WELL FIELD SUMMARY LOG 2012
DEPTH TO WATER MEASUREMENTS

	QTR. 1	QTR. 2	QTR. 3	QTR. 4	TOTAL
DATE	2/9/12				DEPTH
LOCATION					
NUN-MW- 1S	6.74				17.46'
NUN-MW- 2S	8.00				27.95'
NUN-MW- 3S	5.37				15.18'
NUN-MW- 4S	7.12				15.06'



D.T.W. CHART

COMBO- 3260

NOTE:
ALL MEASUREMENTS ARE MADE FROM THE NORTH SIDE AND TOP EDGE OF THE WELL CASING. THE TOP OF CASING WITH A NOTCH OR PERMENANT MARKINGS, WHICH EVER ONE CONDITION IS APPROPRIATE.

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

MOONSHINE DAIRY
22922 KILBURN ROAD
CROWS LANDING, CA
2/9 & 2/26/2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MOO-MW 1 **DATE:** 2/26/2012

PROJECT NAME:	MOONSHINE DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22922 KILBURN ROAD	**SAMPLE TIME:**	13:50
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	4" /	0.6528
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	13.15	FEET	**CALC. PURGE VOL.:**	6.50	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.10	FEET	**TOTAL VOLUME PURGED:**	19	GAL.
STANDING WATER COLUMN:		9.95	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:46	0	0	13.15	5.0 GPM	6.81	3224	17.4	161	0.8	
13:47	6.50	6.5		"	7.02	2908	18.0	97	0.7	
13:48	12.99	13		"	7.03	2893	18.1	85	0.6	
13:49	19.49	19.5	14.10	"	7.04	2888	18.2	73	0.6	240
13:50	SAMPLED									

PURGE METHOD:	3" GRUNDFOS SUBMERSIBLE PUMP.		
SAMPLE METHOD:	3" GRUNDFOS SUBMERSIBLE PUMP.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	13.81'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**WELL REQUIRED RE-DEVELOPMENT PRIOR TO LOGGING**		
	~200 GAL PUMPED DURING DEVELOPMENT PHASE		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MOO-MW	2	**DATE:**	2/26/2012

PROJECT NAME:	MOONSHINE DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22922 KILBURN ROAD	**SAMPLE TIME:**	15:00
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	4" /	0.6528
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	POND
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	17.90	FEET	**CALC. PURGE VOL.:**	7.12	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.80	FEET	**TOTAL VOLUME PURGED:**	21	GAL.
STANDING WATER COLUMN:		10.90	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:42	0	0	17.90	5.0 GPM	7.15	3370	17.9	131	0.7	
14:44	7.12	7		"	7.00	3485	18.8	132	0.7	
14:46	14.23	14	DRY	"	7.00	3480	18.8	130	0.5	
14:48	21.35	21	DRY	"	6.96	3491	18.7	127	0.5	340
15:00	SAMPLED									

PURGE METHOD:	3" GRUNDFOS SUBMERSIBLE PUMP.		
SAMPLE METHOD:	3" GRUNDFOS SUBMERSIBLE PUMP.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	22.50'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**WELL REQUIRED RE-DEVELOPMENT PRIOR TO LOGGING**		
	POOR RECHARGE / ~40 GAL PURGED DURING DEVELOPMENT PHASE		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MOO-MW	3	**DATE:**	2/26/2012

PROJECT NAME:	MOONSHINE DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22922 KILBURN ROAD	**SAMPLE TIME:**	15:55
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	4" /	0.6528
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	12.02	FEET	**CALC. PURGE VOL.:**	10.43	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.00	FEET	**TOTAL VOLUME PURGED:**	31.5	GAL.
STANDING WATER COLUMN:		15.98	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:47	0	0	12.02	5.0 GPM	7.20	2258	16.8	162	1.1	
15:49	10.43	10.5		"	7.06	2274	17.4	155	0.8	
15:51	20.86	21		"	7.05	2298	17.5	157	0.8	
15:53	31.30	31.5	15.11	"	7.06	2306	17.4	160	0.7	80
15:55	SAMPLED									

PURGE METHOD:	3" GRUNDFOS SUBMERSIBLE PUMP.		
SAMPLE METHOD:	3" GRUNDFOS SUBMERSIBLE PUMP.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	14.88'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**WELL REQUIRED RE-DEVELOPMENT PRIOR TO LOGGING**		
	~200 GAL PUMPED DURING DEVELOPMENT PHASE		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MOO-MW	4	**DATE:**	2/26/2012

PROJECT NAME:	MOONSHINE DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22922 KILBURN ROAD	**SAMPLE TIME:**	16:47
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:		TILL ANGERMAN		**MONUMENT:**	POST	
SAMPLER:		DEL-TECH / DONALD LIGHT		**WELL CASING MATERIAL :**	PVC	
SIGNED:		Don Light		**WELL CASING DIA. :**	4" /	0.6528
SAMPLE MEDIA:		GROUNDWATER		**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	12.57	FEET	**CALC. PURGE VOL.:**	9.22	GAL.
DEPTH OF WELL:	**(feet.100th's)**	26.70	FEET	**TOTAL VOLUME PURGED:**	27	GAL.
STANDING WATER COLUMN:		14.13	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
16:40	0	0	12.57	5.0 GPM	7.12	2345	17.9	176	1.0	
16:42	9.22	9		"	7.09	2422	18.1	166	0.8	
16:44	18.45	18		"	7.05	2420	18.4	162	0.8	
16:46	27.67	27	13.92	"	7.07	2423	18.5	159	0.9	115
16:47	SAMPLED									

PURGE METHOD:	3" GRUNDFOS SUBMERSIBLE PUMP.		
SAMPLE METHOD:	3" GRUNDFOS SUBMERSIBLE PUMP.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	13.38'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**WELL REQUIRED RE-DEVELOPMENT PRIOR TO LOGGING**		
	~200 GAL PUMPED DURING DEVELOPMENT PHASE		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MOO-MW	5S	**DATE:**	2/9/2012

PROJECT NAME:	MOONSHINE DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22922 KILBURN ROAD	**SAMPLE TIME:**	14:40
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	11.96	FEET	**CALC. PURGE VOL.:**	3.35	GAL.
DEPTH OF WELL:	**(feet.100th's)**	32.50	FEET	**TOTAL VOLUME PURGED:**	14	GAL.
STANDING WATER COLUMN:		20.54	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:10	0	0	11.96	0.5 GPM	7.47	2125	20.5	197	1.4	
14:17	3.35	3.5		"	7.23	2150	19.9	180	1.3	
14:24	6.70	7		"	7.23	2152	19.9	176	1.3	
14:32	10.06	10.5		"	7.22	2150	19.9	172	1.2	
14:40	13.41	14	12.55	"	7.24	2151	19.9	169	1.1	48
14:40	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	12.00'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MOO-MW 5D / DTW: 13.54'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MOO-MW	6S	**DATE:**	2/9/2012

PROJECT NAME:	MOONSHINE DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22922 KILBURN ROAD	**SAMPLE TIME:**	13:27
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	19.17	FEET	**CALC. PURGE VOL.:**	2.35	GAL.
DEPTH OF WELL:	**(feet.100th's)**	33.60	FEET	**TOTAL VOLUME PURGED:**	10	GAL.
STANDING WATER COLUMN:		14.43	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:07	0	0	19.17	0.5 GPM	7.08	2047	20.6	190	1.3	
13:12	2.35	2.5		"	7.06	2191	20.3	168	1.1	
13:17	4.71	5		"	7.06	2219	20.5	163	1.1	
13:22	7.06	7.5		"	7.06	2230	20.4	163	1.1	
13:27	9.42	10	21.85	"	7.06	2232	20.4	160	1.0	1000+
13:27	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	20.44'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MOO-MW 6D / DTW: 21.87'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MOO-MW	7S	**DATE:**	2/9/2012

PROJECT NAME:	MOONSHINE DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22922 KILBURN ROAD	**SAMPLE TIME:**	13:02
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:		TILL ANGERMAN		**MONUMENT:**	POST	
SAMPLER:		DEL-TECH / DONALD LIGHT		**WELL CASING MATERIAL :**	PVC	
SIGNED:		Don Light		**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:		GROUNDWATER		**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	18.06	FEET	**CALC. PURGE VOL.:**	1.67	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.30	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		10.24	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:50	0	0	18.06	0.5 GPM	8.23	2753	20.0	76	0.6	
12:54	1.67	1.5		"	7.28	2920	20.5	130	0.9	
12:58	3.34	3		"	7.19	2947	20.3	137	1.1	
13:02	5.01	4.5	21.10	"	7.16	2969	20.1	134	1.1	166
13:02	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	19.26'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MOO-MW 7D / DTW: 18.03'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MOO-MW	8S	**DATE:**	2/9/2012

PROJECT NAME:	MOONSHINE DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22922 KILBURN ROAD	**SAMPLE TIME:**	12:40
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	18.75	FEET	**CALC. PURGE VOL.:**	1.31	GAL.
DEPTH OF WELL:	**(feet.100th's)**	26.80	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		8.05	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:27	0	0	18.75	0.5 GPM	7.12	2751	20.0	185	2.2	
12:30	1.31	1.5		"	7.15	2511	19.5	184	2.1	
12:34	2.63	3		"	7.15	2516	19.5	182	1.8	
12:37	3.94	4.5		"	7.16	2510	19.4	180	1.7	
12:40	5.26	6	21.17		7.14	2518	19.5	186	1.8	80
12:40	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	19.70'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MOO-MW 8D / DTW: 18.51'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

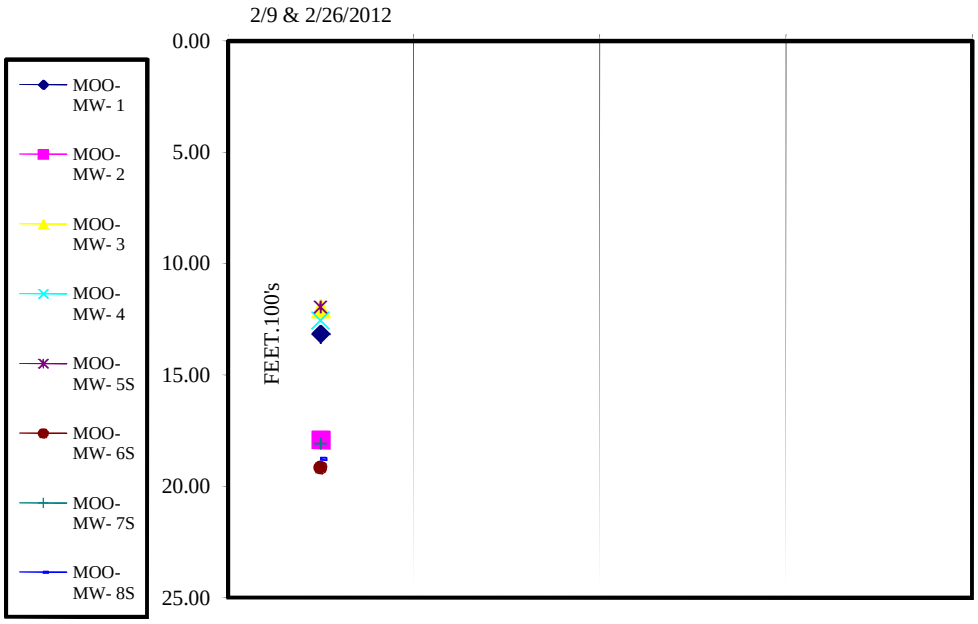
DEL-TECH GEOTECHNICAL SUPPORT, INC.

(209) 847-8757 (OFFICE) * (209) 847-7744 (FAX) * deltech1@pacbell.net (Email)

MOONSHINE DAIRY
CROWS LANDING, CA.

MONITORING WELL FIELD SUMMARY LOG 2012
DEPTH TO WATER MEASUREMENTS

	QTR. 1	QTR. 2	QTR. 3	QTR. 4	TOTAL
DATE	2/9 & 2/26/2012				DEPTH
LOCATION					
MOO-MW- 1	13.15				23.10'
MOO-MW- 2	17.90				28.80'
MOO-MW- 3	12.02				28.00'
MOO-MW- 4	12.57				26.70'
MOO-MW- 5S	11.96				32.50'
MOO-MW- 6S	19.17				33.60'
MOO-MW- 7S	18.06				28.30'
MOO-MW- 8S	18.75				26.80'



D.T.W. CHART

COMBO- 3260

NOTE:
ALL MEASUREMENTS ARE MADE FROM THE NORTH SIDE AND TOP EDGE OF THE WELL CASING. THE TOP OF CASING WITH A NOTCH OR PERMENANT MARKINGS, WHICH EVER ONE CONDITION IS APPROPRIATE.

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

TONY L. LOPES DAIRY LP
27500 BUNKER ROAD
GUSTINE, CA.
February 10, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / TON-MW	1S	**DATE:**	2/10/2012

PROJECT NAME:	TONY L. LOPES DAIRY LP	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	27500 BUNKER ROAD	**SAMPLE TIME:**	12:59
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Tim Avila			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	7.58	FEET	**CALC. PURGE VOL.:**	2.66	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.90	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		16.32	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:46	0	0	7.58	0.5 GPM	7.20	4113	21.0	247	2.8	
12:50	2.66	2.5		"	7.07	3772	20.1	242	2.8	
12:54	5.33	5		"	7.04	3776	20.2	227	2.5	
12:59	7.99	7.5	7.80	"	7.03	3776	20.9	228	2.4	6.5
12:59	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	7.59'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**TON-MW 1D / DTW: 7.45'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPTONE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / TON-MW	2S	**DATE:**	2/10/2012

PROJECT NAME:	TONY L. LOPES DAIRY LP	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	27500 BUNKER ROAD	**SAMPLE TIME:**	12:41
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	5.64	FEET	**CALC. PURGE VOL.:**	2.90	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.40	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		17.76	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:28	0	0	5.64	0.5 GPM	7.31	3662	21.2	245	2.8	
12:32	2.90	3		"	7.17	4612	20.2	258	2.9	
12:36	5.80	6		"	7.17	4595	20.3	259	2.9	
12:41	8.70	9	5.77	"	7.15	4568	20.4	257	3.0	9.5
12:41	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	5.69'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**TON-MW 2D / DTW: 5.45'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPTONE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / TON-MW	3S	**DATE:**	2/10/2012

PROJECT NAME:	TONY L. LOPES DAIRY LP	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	27500 BUNKER ROAD	**SAMPLE TIME:**	13:58
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	8.13	FEET	**CALC. PURGE VOL.:**	2.51	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.50	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		15.37	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:45	0	0	8.13	0.5 GPM	7.27	2907	20.0	236	2.4	
13:49	2.51	2.5		"	7.24	2579	19.8	240	2.5	
13:53	5.02	5		"	7.22	2578	19.8	228	2.5	
13:58	7.53	7.5	8.25	"	7.21	2578	19.9	232	2.6	2.5
13:58	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	8.17'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**TON-MW 3D / DTW: 8.01'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPTONE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / TON-MW	4S	**DATE:**	2/10/2012

PROJECT NAME:	TONY L. LOPES DAIRY LP	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	27500 BUNKER ROAD	**SAMPLE TIME:**	13:19
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	9.26	FEET	**CALC. PURGE VOL.:**	2.21	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.80	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		13.54	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:06	0	0	9.26	0.5 GPM	7.14	3802	21.8	233	2.6	
13:10	2.21	2		"	7.41	3633	21.5	240	2.6	
13:14	4.42	4		"	7.14	3569	21.4	243	2.6	
13:19	6.63	6	9.30	"	7.13	3544	21.2	243	2.7	5.5
13:19	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.38'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**TON-MW 4D / DTW: 8.92'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / TON-MW	5S	**DATE:**	2/10/2012

PROJECT NAME:	TONY L. LOPES DAIRY LP	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	27500 BUNKER ROAD	**SAMPLE TIME:**	13:38
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	8.67	FEET	**CALC. PURGE VOL.:**	2.31	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.80	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		14.13	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:24	0	0	8.67	0.5 GPM	7.24	3277	20.7	231	2.4	
13:28	2.31	2.5		"	7.15	3172	20.8	234	2.4	
13:33	4.61	5		"	7.16	3158	20.9	231	2.3	
13:38	6.92	7.5	9.55	"	7.14	3151	20.7	236	2.4	5.5
13:38	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	8.82'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**TON-MW 5D / DTW: 8.59'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPTONE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / TON-MW	6S	**DATE:**	2/10/2012

PROJECT NAME:	TONY L. LOPES DAIRY LP	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	27500 BUNKER ROAD	**SAMPLE TIME:**	11:21
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	8.33	FEET	**CALC. PURGE VOL.:**	3.24	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.20	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		19.87	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:06	0	0	8.33	0.5 GPM	7.75	2847	19.2	244	2.7	
11:10	3.24	3		"	7.43	2841	19.0	253	2.7	
11:15	6.49	6		"	7.49	2781	19.4	246	2.5	
11:21	9.73	9	8.64	"	7.55	2767	19.7	237	2.4	12
11:21	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	8.59'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**TON-MW 6D / DTW: 8.10'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPTONE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / TON-MW	7S	**DATE:**	2/10/2012

PROJECT NAME:	TONY L. LOPES DAIRY LP	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	27500 BUNKER ROAD	**SAMPLE TIME:**	12:13
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	8.42	FEET	**CALC. PURGE VOL.:**	3.23	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.20	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		19.78	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:00	0	0	8.42	0.5 GPM	7.53	3220	20.1	257	2.6	
12:04	3.23	3		"	7.90	1908	20.8	247	2.5	
12:08	6.46	6		"	7.97	1504	21.3	232	2.5	
12:13	9.68	9	8.73	"	7.97	1389	21.9	229	2.4	20
12:13	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	8.51'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**TON-MW 7D / DTW: 8.12'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPTONE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / TON-MW	8S	**DATE:**	2/10/2012

PROJECT NAME:	TONY L. LOPES DAIRY LP	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	27500 BUNKER ROAD	**SAMPLE TIME:**	11:53
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	9.71	FEET	**CALC. PURGE VOL.:**	2.94	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.70	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		17.99	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:40	0	0	9.71	0.5 GPM	7.31	4829	20.5	270	2.8	
11:44	2.94	3		"	7.21	5700	19.4	272	2.8	
11:48	5.87	6		"	7.16	5832	19.3	270	2.8	
11:53	8.81	9	11.65	"	7.16	5834	19.3	267	2.7	277
11:53	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.47'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**TON-MW 8D / DTW: 9.17'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPTONE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

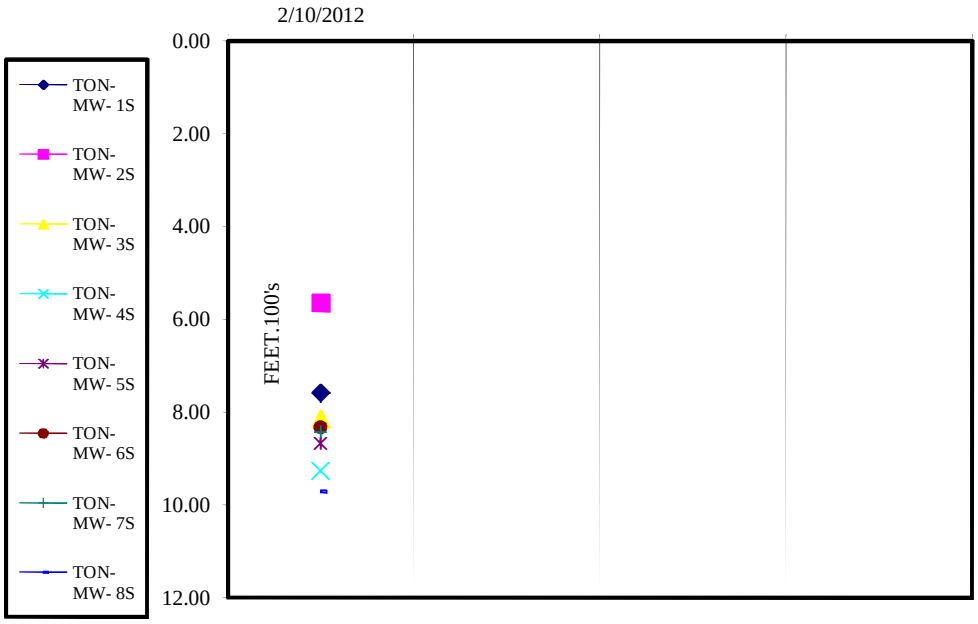
DEL-TECH GEOTECHNICAL SUPPORT, INC.

(209) 847-8757 (OFFICE) * (209) 847-7744 (FAX) * deltech1@pacbell.net (Email)

TONY L. LOPES DAIRY LP
GUSTINE, CA.

MONITORING WELL FIELD SUMMARY LOG 2012
DEPTH TO WATER MEASUREMENTS

	QTR. 1	QTR. 2	QTR. 3	QTR. 4	TOTAL
DATE	2/10/12				DEPTH
LOCATION					
TON-MW- 1S	7.58				23.90'
TON-MW- 2S	5.64				23.40'
TON-MW- 3S	8.13				23.50'
TON-MW- 4S	9.26				22.80'
TON-MW- 5S	8.67				22.80'
TON-MW- 6S	8.33				28.20'
TON-MW- 7S	8.42				28.20'
TON-MW- 8S	9.71				27.70'



D.T.W. CHART

COMBO- 3260

NOTE:
ALL MEASUREMENTS ARE MADE FROM THE NORTH SIDE AND TOP EDGE OF THE WELL CASING. THE TOP OF CASING WITH A NOTCH OR PERMENANT MARKINGS, WHICH EVER ONE CONDITION IS APPROPRIATE.

2012Q2 East Side

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

ALBERT MENDES DAIRY
1100 RUBLE ROAD
CROWS LANDING, CA.
May 8, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MEN-MW 1S **DATE:** 5/8/2012

PROJECT NAME:	ALBERT MENDES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	1100 RUBLE ROAD	**SAMPLE TIME:**	16:08
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	9.05	FEET	**CALC. PURGE VOL.:**	1.41	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.70	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		8.65	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:56	0	0	12.02	0.5 GPM	7.13	4991	22.0	120	2.1	
15:59	1.41	1.5		"	6.93	5100	19.5	140	1.8	
16:02	2.82	3		"	6.91	5168	19.5	149	1.8	
16:05	4.24	4.5	13.70	"	6.88	5221	19.5	156	2.1	882
16:08	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	13.30'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MEN-MW 1D / DTW: 8.90'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MEN-MW 2S **DATE:** 5/8/2012

PROJECT NAME:	ALBERT MENDES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	1100 RUBLE ROAD	**SAMPLE TIME:**	15:13
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	8.54	FEET	**CALC. PURGE VOL.:**	1.46	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.50	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		8.96	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:03	0	0	11.90	1.5 GPM	7.08	4670	20.9	176	1.9	
15:04	1.46	1.5		"	7.04	4700	19.2	185	2.0	
15:05	2.92	3		"	7.04	4617	20.2	186	5.5	
15:06	4.39	4.5	15.10	"	7.05	4620	20.1	188	5.8	654
15:13	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.10'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MEN-MW 2D / DTW: 8.36'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MEN-MW	3S	**DATE:**	5/8/2012

PROJECT NAME:	ALBERT MENDES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	1100 RUBLE ROAD	**SAMPLE TIME:**	17:43
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	8.24	FEET	**CALC. PURGE VOL.:**	1.58	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.90	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		9.66	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
17:31	0	0	9.41	0.5 GPM	6.95	3043	20.0	201	2.1	
17:34	1.58	1.5		"	6.81	3017	18.5	207	1.8	
17:37	3.15	3		"	6.83	3025	18.3	210	1.8	
17:40	4.73	4.5	9.56	"	6.87	3061	17.8	214	1.8	48
17:43	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.21'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MEN-MW 3D / DTW: 7.58'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MEN-MW	4S	**DATE:**	5/8/2012

PROJECT NAME:	ALBERT MENDES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	1100 RUBLE ROAD	**SAMPLE TIME:**	17:58
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	7.63	FEET	**CALC. PURGE VOL.:**	1.66	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.80	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		10.17	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
17:49	0	0	9.73	1.0 GPM	7.08	2300	19.2	227	1.9	
17:51	1.66	2		"	7.23	2271	18.5	224	2.0	
17:53	3.32	4		"	7.15	2302	18.3	233	1.8	
17:55	4.98	6	11.84	"	7.03	2302	18.2	231	1.6	56
17:58	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.54'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MEN-MW 4D / DTW: 7.45'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MEN-MW	5S	**DATE:**	5/8/2012

PROJECT NAME:	ALBERT MENDES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	1100 RUBLE ROAD	**SAMPLE TIME:**	17:18
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	9.79	FEET	**CALC. PURGE VOL.:**	1.21	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.20	FEET	**TOTAL VOLUME PURGED:**	4.5	GAL.
STANDING WATER COLUMN:		7.41	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
17:05	0	0	10.64	0.5 GPM	7.08	1955	21.1	199	2.1	
17:08	1.21	1.5		"	7.00	1958	19.7	205	2.3	
17:11	2.42	3		"	6.99	1963	19.6	207	3.1	
17:16	3.63	4.5	10.66	"	6.97	1962	19.5	208	2.6	9
17:18	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.60'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MEN-MW 5D / DTW: 9.69'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MEN-MW	6S	**DATE:**	5/8/2012

PROJECT NAME:	ALBERT MENDES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	1100 RUBLE ROAD	**SAMPLE TIME:**	16:26
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	7.36	FEET	**CALC. PURGE VOL.:**	2.76	GAL.
DEPTH OF WELL:	**(feet.100th's)**	24.30	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		16.94	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
16:15	0	0	10.76	1.5 GPM	7.05	3116	19.0	159	2.3	
16:17	2.76	3		"	6.95	3157	17.8	171	2.4	
16:19	5.53	6		"	6.92	3219	17.7	178	2.2	
16:21	8.29	9	11.15	"	6.91	3224	17.9	183	1.7	17
16:26	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.08'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MEN-MW 6D / DTW: 7.30'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MEN-MW	7S	**DATE:**	5/8/2012

PROJECT NAME:	ALBERT MENDES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	1100 RUBLE ROAD	**SAMPLE TIME:**	16:57
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	3.09	FEET	**CALC. PURGE VOL.:**	3.28	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.20	FEET	**TOTAL VOLUME PURGED:**	11	GAL.
STANDING WATER COLUMN:		20.11	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
16:43	0	0	5.21	1.0 GPM	7.07	2642	20.6	181	3.2	
16:47	3.28	3.5		"	7.08	2671	19.5	187	1.7	
16:51	6.56	7		"	7.08	2689	18.6	192	1.6	
16:55	9.85	10.5	5.25	"	7.07	2696	18.6	196	1.6	63
16:57	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	3.23'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MEN-MW 7D / DTW: 2.96'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

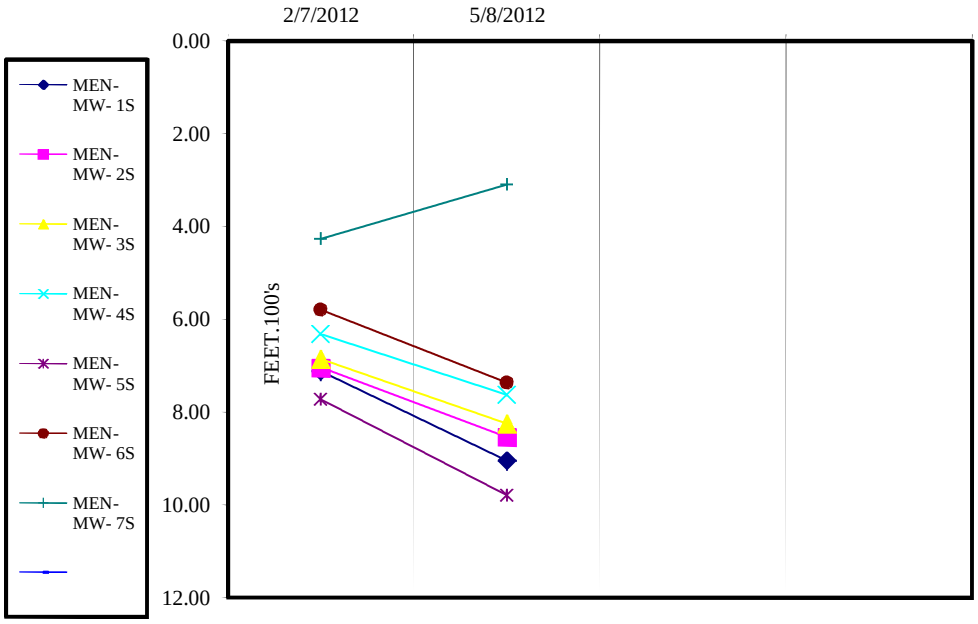
DEL-TECH GEOTECHNICAL SUPPORT, INC.

(209) 847-8757 (OFFICE) * (209) 847-7744 (FAX) * deltech1@pacbell.net (Email)

ALBERT MENDES DAIRY
CROWS LANDING, CA.

MONITORING WELL FIELD SUMMARY LOG 2012
DEPTH TO WATER MEASUREMENTS

	QTR. 1	QTR. 2	QTR. 3	QTR. 4	TOTAL
DATE	2/7/12	5/8/12			DEPTH
LOCATION					
MEN-MW- 1S	7.12	9.05			17.70'
MEN-MW- 2S	7.04	8.54			17.50'
MEN-MW- 3S	6.85	8.24			17.90'
MEN-MW- 4S	6.32	7.63			17.80'
MEN-MW- 5S	7.72	9.79			17.20'
MEN-MW- 6S	5.79	7.36			24.30'
MEN-MW- 7S	4.26	3.09			23.20'



D.T.W. CHART

COMBO- 3260

NOTE:
ALL MEASUREMENTS ARE MADE FROM THE NORTH SIDE AND TOP EDGE OF THE WELL CASING. THE TOP OF CASING WITH A NOTCH OR PERMENANT MARKINGS, WHICH EVER ONE CONDITION IS APPROPRIATE.

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

ANCHOR J. DAIRY
24507 FIRST AVENUE
STEVINSON, CA.
May 11, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANC-MW 1 **DATE:** 5/11/2012

PROJECT NAME:	ANCHOR J. DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	24507 FIRST AVENUE	**SAMPLE TIME:**	15:00
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	13.43	FEET	**CALC. PURGE VOL.:**	1.76	GAL.
DEPTH OF WELL:	**(feet.100th's)**	24.22	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		10.79	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:48	0	0	13.80	0.5 GPM	6.71	1765	22.2	180	1.2	
14:52	1.76	2		"	6.63	1780	20.8	181	0.6	
14:56	3.52	4		"	6.65	1785	20.5	193	0.9	
15:00	5.28	6	13.87	"	6.63	1792	20.7	201	0.9	4
15:00	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	13.85'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANC-MW 2 **DATE:** 5/11/2012

PROJECT NAME:	ANCHOR J. DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	24507 FIRST AVENUE	**SAMPLE TIME:**	14:35
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	20.68	FEET	**CALC. PURGE VOL.:**	2.40	GAL.
DEPTH OF WELL:	**(feet.100th's)**	35.37	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		14.69	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:20	0	0	20.85	0.5 GPM	6.93	2439	23.5	135	1.1	
14:25	2.40	2.5		"	6.63	2507	21.6	146	0.5	
14:30	4.79	5		"	6.63	2500	22.0	149	0.5	
14:35	7.19	7.5	20.96	"	6.64	2490	22.4	157	0.5	86
14:35	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	20.91'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANC-MW	3	**DATE:**	5/11/2012

PROJECT NAME:	ANCHOR J. DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	24507 FIRST AVENUE	**SAMPLE TIME:**	14:14
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	10.93	FEET	**CALC. PURGE VOL.:**	2.34	GAL.
DEPTH OF WELL:	**(feet.100th's)**	25.26	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		14.33	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:08	0	0	11.59	0.5 GPM	6.97	1909	23.1	135	1.7	
14:10	2.34	2.5		"	6.94	1847	20.8	142	1.1	
14:12	4.68	5		"	6.94	1840	20.8	145	0.9	
14:14	7.02	7.5	11.64	"	6.97	1850	21.0	146	0.8	3
14:14	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.59'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANC-MW	4	**DATE:**	5/11/2012

PROJECT NAME:	ANCHOR J. DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	24507 FIRST AVENUE	**SAMPLE TIME:**	15:18
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	21.00	FEET	**CALC. PURGE VOL.:**	2.06	GAL.
DEPTH OF WELL:	**(feet.100th's)**	33.65	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		12.65	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:06	0	0	21.12	0.5 GPM	6.46	5142	21.9	218	1.0	
15:10	2.06	2		"	6.42	1547	20.5	223	1.0	
15:14	4.13	4		"	6.43	1552	20.5	221	1.2	
15:18	6.19	6	21.25	"	6.44	1560	20.6	220	1.1	16
15:18	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	21.15'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**DUPLICATE #4 TAKEN HERE.**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANC-MW	5S	**DATE:**	5/11/2012

PROJECT NAME:	ANCHOR J. DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	24507 FIRST AVENUE	**SAMPLE TIME:**	15:39
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	17.65	FEET	**CALC. PURGE VOL.:**	1.74	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.30	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		10.65	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:47	0	0	19.66	0.5 GPM	7.44	3423	20.2	189	1.0	
15:31	1.74	2		"	7.56	3604	20.4	179	0.64	
15:35	3.48	4		"	7.54	3596	20.1	180	0.6	
15:39	5.21	6	22.36	"	7.52	3590	19.9	181	0.6	328
15:39	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	22.00'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ANC-MW 5D / DTW: 17.35'**		
	SLOW RECHARGE.		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANC-MW	6S	**DATE:**	5/11/2012

PROJECT NAME:	ANCHOR J. DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	24507 FIRST AVENUE	**SAMPLE TIME:**	13:39
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	14.73	FEET	**CALC. PURGE VOL.:**	2.13	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.80	FEET	**TOTAL VOLUME PURGED:**	10	GAL.
STANDING WATER COLUMN:		13.07	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:33	0	0	15.00	1.0 GPM	6.67	1947	22.3	163	0.8	
13:35	2.13	2		"	6.67	1968	21.3	169	0.7	
13:37	4.27	4		"	6.60	1974	20.9	178	0.8	
13:39	6.40	6	15.00	"	6.64	1984	21.0	183	1.0	4
13:39	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	14.88'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ANC-MW 6D / DTW: 14.63'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANC-MW	7S	**DATE:**	5/11/2012

PROJECT NAME:	ANCHOR J. DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	24507 FIRST AVENUE	**SAMPLE TIME:**	13:26
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	14.95	FEET	**CALC. PURGE VOL.:**	2.08	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.70	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		12.75	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:20	0	0	15.31	0.5 GPM	7.33	1451	24.0	148	2.0	
13:22	2.08	2		"	7.08	1374	20.7	154	2.2	
13:24	4.16	4		"	7.02	1372	20.4	154	2.1	
13:26	6.24	6	15.38	"	7.05	1364	21.4	151	1.8	6
13:26	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	15.29'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ANC-MW 7D / DTW: 14.85'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

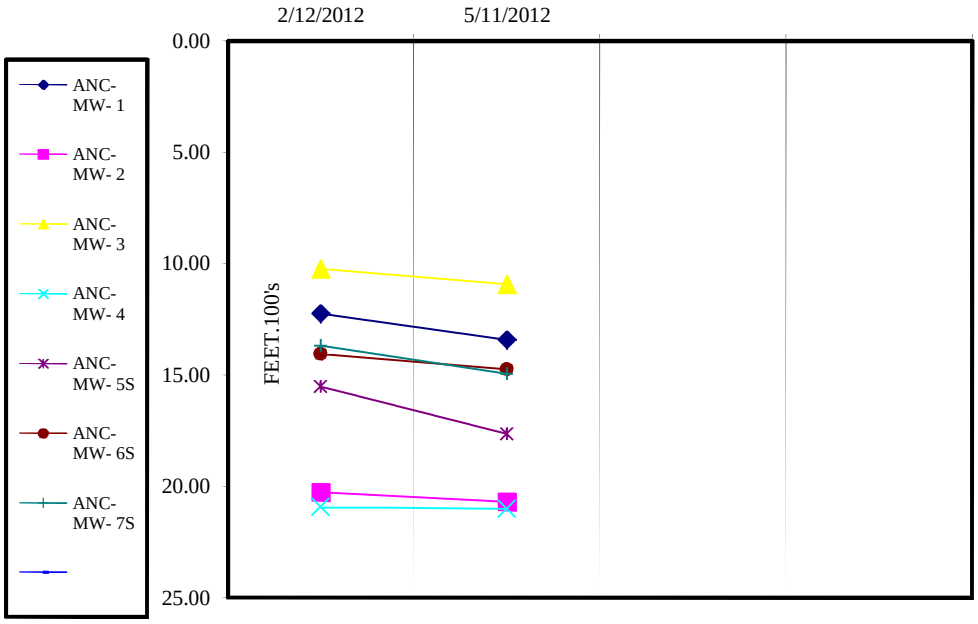
DEL-TECH GEOTECHNICAL SUPPORT, INC.

(209) 847-8757 (OFFICE) * (209) 847-7744 (FAX) * deltech1@pacbell.net (Email)

ANCHOR J. DAIRY
STEVINSON, CA.

MONITORING WELL FIELD SUMMARY LOG 2012
DEPTH TO WATER MEASUREMENTS

	QTR. 1	QTR. 2	QTR. 3	QTR. 4	TOTAL
DATE	2/12/12	5/11/12			**DEPTH**
LOCATION					
ANC-MW- 1	12.25	13.43			24.22'
ANC-MW- 2	20.26	20.68			35.37'
ANC-MW- 3	10.23	10.93			25.26'
ANC-MW- 4	20.90	21.00			33.65'
ANC-MW- 5S	15.50	17.65			28.30'
ANC-MW- 6S	14.05	14.73			27.80'
ANC-MW- 7S	13.67	14.95			27.70'



D.T.W. CHART

COMBO- 3260

NOTE:
ALL MEASUREMENTS ARE MADE FROM THE NORTH SIDE AND TOP EDGE OF THE WELL CASING. THE TOP OF CASING WITH A NOTCH OR PERMENANT MARKINGS, WHICH EVER ONE CONDITION IS APPROPRIATE.

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

BETTENCOURT AND MARSON DAIRY
18128 AMERICAN AVENUE
HILMAR, CA.
May 10, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BET-MW	1S	**DATE:**	5/10/2012

PROJECT NAME:	BETTENCOURT AND MARSON DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	13:20
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	13.36	FEET	**CALC. PURGE VOL.:**	1.51	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.60	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		9.24	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:08	0	0	13.36	0.5 GPM	6.90	924	20.5	179	1.8	
13:12	1.51	1.5		"	6.15	780	19.5	192	1.7	
13:16	3.02	3		"	6.16	766	19.5	188	1.5	
13:20	4.52	4.5	14.52	"	6.15	760	19.4	183	1.5	30
13:20	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	14.22'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BET-MW 1D / DTW: 12.90'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BET-MW	2S	**DATE:**	5/10/2012

PROJECT NAME:	BETTENCOURT AND MARSON DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	13:32
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	13.79	FEET	**CALC. PURGE VOL.:**	0.57	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.30	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		3.51	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:25	0	0	13.79	0.5 GPM	6.50	705	20.4	163	1.7	
13:27	0.57	1		"	6.48	754	19.6	172	1.9	
13:29	1.15	2		"	6.37	760	19.3	170	1.2	
13:32	1.72	3	14.53	"	6.37	755	19.3	161	1.2	12
13:32	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	14.09'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BET-MW 2D / DTW: 13.49'**		
	SILTY		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BET-MW	3S	**DATE:**	5/10/2012

PROJECT NAME:	BETTENCOURT AND MARSON DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	13:46
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	12.34	FEET	**CALC. PURGE VOL.:**	0.89	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.80	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		5.46	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:40	0	0	12.34	0.5 GPM	6.02	1236	19.3	190	2.6	
13:42	0.89	1		"	5.97	1214	19.5	188	2.5	
13:44	1.78	2		"	5.96	1207	19.3	188	2.2	
13:46	2.67	3	14.80	"	5.94	1200	19.3	186	2.1	23
13:46	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	13.56'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BET-MW 3D / DTW: 12.18'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BET-MW	4S	**DATE:**	5/10/2012

PROJECT NAME:	BETTENCOURT AND MARSON DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	12:53
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	14.15	FEET	**CALC. PURGE VOL.:**	1.48	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.20	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		9.05	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:45	0	0	14.15	0.5 GPM	6.67	3036	19.9	190	0.7	
12:48	1.48	1.5		"	6.73	2591	20.2	188	1.1	
12:51	2.95	3		"	6.67	2410	19.9	184	1.1	
12:53	4.43	4.5	18.20	"	6.67	2402	19.9	180	1.0	75
12:53	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	15.52'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BET-MW 4D / DTW: 14.72'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BET-MW	5S	**DATE:**	5/10/2012

PROJECT NAME:	BETTENCOURT AND MARSON DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	15:15
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	11.83	FEET	**CALC. PURGE VOL.:**	2.59	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.70	FEET	**TOTAL VOLUME PURGED:**	8	GAL.
STANDING WATER COLUMN:		15.87	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:00	0	0	11.83	0.5 GPM	6.91	893	19.3	159	2.2	
15:05	2.59	2.5		"	6.52	899	19.0	162	2.3	
15:10	5.18	5		"	6.55	892	18.9	157	2.1	
15:15	7.77	7.5	12.18	"	6.57	890	18.8	155	2.1	16
15:15	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	12.04'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BET-MW 5D / DTW: 11.63'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BET-MW	6S	**DATE:**	5/10/2012

PROJECT NAME:	BETTENCOURT AND MARSON DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	14:57
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	12.20	FEET	**CALC. PURGE VOL.:**	2.25	GAL.
DEPTH OF WELL:	**(feet.100th's)**	26.00	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		13.80	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:42	0	0	12.20	0.5 GPM	6.34	525	20.3	159	2.0	
14:47	2.25	2.5		"	6.30	510	19.5	157	1.8	
14:52	4.50	5		"	6.30	510	19.5	155	1.8	
14:57	6.76	7.5	12.43	"	6.28	506	19.4	156	1.7	12
14:57	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	12.33'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BET-MW 6D / DTW: 11.96'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BET-MW	7S	**DATE:**	5/10/2012

PROJECT NAME:	BETTENCOURT AND MARSON DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	14:15
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	12.95	FEET	**CALC. PURGE VOL.:**	2.33	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.20	FEET	**TOTAL VOLUME PURGED:**	8	GAL.
STANDING WATER COLUMN:		14.25	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:00	0	0	12.95	0.5 GPM	6.03	439	20.0	167	1.6	
14:05	2.33	2.5		"	5.88	438	19.7	180	1.7	
14:10	4.65	5		"	5.80	438	19.6	217	1.8	
14:15	6.98	7.5	13.00	"	5.67	437	19.6	210	1.9	8
14:15	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	12.97'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BET-MW 7D / DTW: 12.77'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BET-MW	8S	**DATE:**	5/10/2012

PROJECT NAME:	BETTENCOURT AND MARSON DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	14:37
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	13.93	FEET	**CALC. PURGE VOL.:**	2.18	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.30	FEET	**TOTAL VOLUME PURGED:**	6.0	GAL.
STANDING WATER COLUMN:		13.37	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:22	0	0	13.93	0.5 GPM	6.60	536	19.6	162	1.6	
14:27	2.18	2		"	6.38	507	18.9	157	1.6	
14:32	4.36	4		"	6.38	503	18.7	159	1.5	
14:37	6.55	6	14.80	"	6.37	500	18.7	155	1.5	12
14:37	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	14.55'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BET-MW 8D / DTW: 13.72'**		
	DUPLICATE # 3 TAKEN HERE.		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

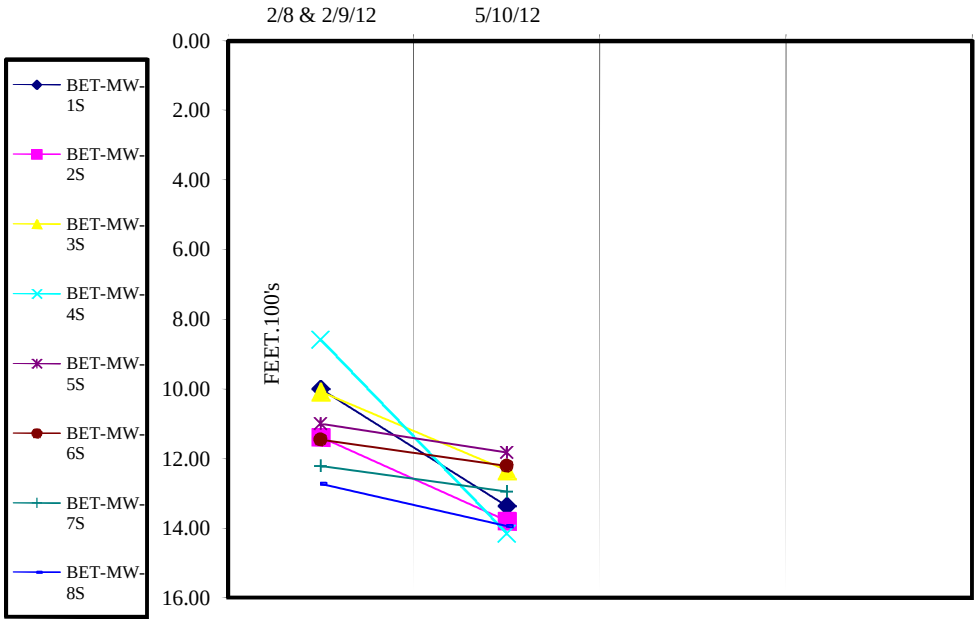
DEL-TECH GEOTECHNICAL SUPPORT, INC.

(209) 847-8757 (OFFICE) * (209) 847-7744 (FAX) * deltech1@pacbell.net (Email)

BETTENCOURT AND MARSON DAIRY
HILMAR, CA.

MONITORING WELL FIELD SUMMARY LOG 2012
DEPTH TO WATER MEASUREMENTS

	QTR. 1	QTR. 2	QTR. 3	QTR. 4	TOTAL
DATE	2/8 & 2/9/12	5/10/12			DEPTH
LOCATION					
BET-MW- 1S	10.00	13.36			22.60'
BET-MW- 2S	11.38	13.79			17.30'
BET-MW- 3S	10.07	12.34			17.80'
BET-MW- 4S	8.58	14.15			23.20'
BET-MW- 5S	11.00	11.83			27.70'
BET-MW- 6S	11.46	12.20			26.00'
BET-MW- 7S	12.20	12.95			27.20'
BET-MW- 8S	12.72	13.93			27.30'



D.T.W. CHART

COMBO- 3260

NOTE:
ALL MEASUREMENTS ARE MADE FROM THE NORTH SIDE AND TOP EDGE OF THE WELL CASING. THE TOP OF CASING WITH A NOTCH OR PERMENANT MARKINGS, WHICH EVER ONE CONDITION IS APPROPRIATE.

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

FRANK J. GOMES DAIRY #1
5301 N. DEANGELIS ROAD
STEVINSON, CA.
May 14, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG1-MW 1S **DATE:** 5/14/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	11:41
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	15.58	FEET	**CALC. PURGE VOL.:**	0.36	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.80	FEET	**TOTAL VOLUME PURGED:**	2	GAL.
STANDING WATER COLUMN:		2.22	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:35	0	0	16.29	0.5 GPM	6.90	1196	18.8	193	3.4	
11:37	0.36	0.5		"	6.90	1404	19.2	188	3.8	
11:39	0.72	1		"	6.90	1426	19.0	191	3.9	
11:41	1.09	1.5	16.61	"	6.84	1430	18.7	192	3.6	309
11:41	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	16.36'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG1-MW 1D / DTW: 15.28'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG1-MW 2D **DATE:** 5/14/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	12:15
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	17.89	FEET	**CALC. PURGE VOL.:**	2.04	GAL.
DEPTH OF WELL:	**(feet.100th's)**	30.40	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		12.51	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:03	0	0	18.04	0.5 GPM	6.72	1353	21.7	176	2.2	
12:07	2.04	2		"	6.64	1316	20.8	182	2.7	
12:11	4.08	4		"	6.63	1317	20.8	183	3.1	
12:15	6.12	6	20.00	"	6.63	1320	21.1	186	2.8	10
12:15	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	19.03'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE FG1-MW-2S / WELL WENT DRY.**		
	DUPLICATE #6 TAKEN HERE.		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG1-MW 3D **DATE:** 5/14/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	12:00
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	16.28	FEET	**CALC. PURGE VOL.:**	2.30	GAL.
DEPTH OF WELL:	**(feet.100th's)**	30.40	FEET	**TOTAL VOLUME PURGED:**	8	GAL.
STANDING WATER COLUMN:		14.12	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:51	0	0	21.18	1.0 GPM	7.04	1731	22.1	179	2.8	
11:54	2.30	2.5		"	6.98	1732	21.1	178	3.3	
11:57	4.61	5		"	6.97	1755	21.2	175	3.3	
12:00	6.91	7.5	25.15	"	6.97	1783	21.3	173	3.3	143
12:00	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	24.71'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE FG1-MW-3S / WELL WENT DRY.**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG1-MW	4S	**DATE:**	5/14/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	12:29
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	14.93	FEET	**CALC. PURGE VOL.:**	1.28	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.80	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		7.87	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:20	0	0	15.33	0.5 GPM	6.08	645	21.7	202	2.0	
12:23	1.28	1.5		"	6.02	626	20.8	214	2.1	
12:26	2.57	3		"	6.11	624	21.6	203	2.1	
12:29	3.85	4.5	16.05	"	6.00	632	20.9	204	2.4	57
12:29	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	15.89'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG1-MW 4D / DTW: 14.58'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG1-MW	5S	**DATE:**	5/14/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	13:12
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	14.43	FEET	**CALC. PURGE VOL.:**	1.32	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.50	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		8.07	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:03	0	0	14.59	0.5 GPM	6.73	750	22.1	171	2.6	
13:06	1.32	1.5		"	6.68	760	20.9	166	2.6	
13:09	2.63	3		"	6.68	756	20.2	165	2.8	
13:12	3.95	4.5	14.61	"	6.68	743	20.7	162	2.7	11
13:12	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	14.60'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG1-MW 5D / DTW: 14.23'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG1-MW	6S	**DATE:**	5/14/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	12:56
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	17.88	FEET	**CALC. PURGE VOL.:**	0.88	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.30	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		5.42	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:47	0	0	18.09	0.5 GPM	6.42	581	23.4	190	2.6	
12:50	0.88	1		"	6.42	479	23.6	187	3.0	
12:53	1.77	2		"	6.37	470	23.2	184	3.3	
12:56	2.65	3	18.09	"	6.36	464	23.2	181	3.3	10
12:56	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	18.05'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG1-MW 6D / DTW: 17.68'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG1-MW	7S	**DATE:**	5/14/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	12:42
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	17.49	FEET	**CALC. PURGE VOL.:**	1.57	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.10	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		9.61	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:33	0	0	18.15	0.5 GPM	6.22	814	22.7	192	2.2	
12:36	1.57	1.5		"	6.23	819	22.0	193	2.4	
12:39	3.14	3		"	6.22	820	22.1	190	2.4	
12:42	4.71	4.5	18.19	"	6.22	819	22.2	190	2.4	29
12:42	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	18.11'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG1-MW 7D / DTW: 17.20'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG1-MW	8S	**DATE:**	5/14/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	13:30
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	16.28	FEET	**CALC. PURGE VOL.:**	0.97	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.20	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		5.92	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:21	0	0	16.53	0.5 GPM	6.33	1008	20.7	176	2.4	
13:24	0.97	1		"	6.28	1031	19.8	162	3.0	
13:27	1.93	2		"	6.29	1022	20.0	153	2.8	
13:30	2.90	3	16.58	"	6.29	1014	20.5	147	2.6	102
13:30	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	16.50'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG1-MW 8D / DTW: 16.02'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG1-MW	9S	**DATE:**	5/14/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	11:23
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	14.68	FEET	**CALC. PURGE VOL.:**	1.41	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.30	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		8.62	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:14	0	0	18.22	0.5 GPM	6.82	757	17.0	254	3.0	
11:17	1.41	1.5		"	6.96	741	16.9	241	2.3	
11:20	2.81	3		"	6.96	721	16.6	233	2.3	
11:23	4.22	4.5	20.48	"	6.99	677	16.4	227	2.3	1000+
11:23	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	17.12'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG1-MW 9D / DTW: 15.47'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT, INC.

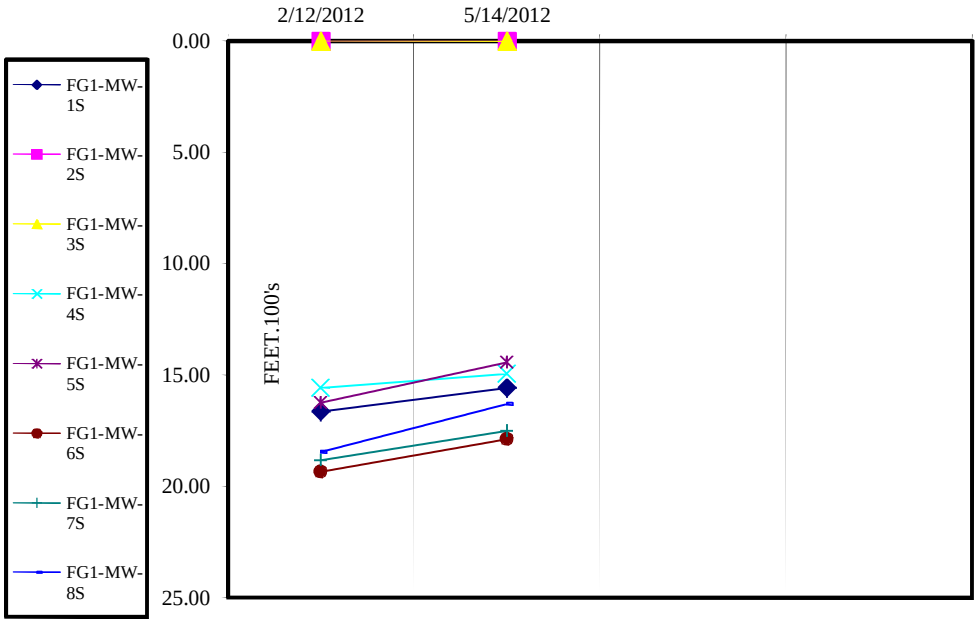
(209) 847-8757 (OFFICE) * (209) 847-7744 (FAX) * deltech1@pacbell.net (Email)

FRANK J. GOMES DAIRY #1
STEVINSON, CA.

MONITORING WELL FIELD SUMMARY LOG 2012

DEPTH TO WATER MEASUREMENTS

	QTR. 1	QTR. 2	QTR. 3	QTR. 4	TOTAL
DATE	2/12/12	5/14/12			DEPTH
LOCATION					
FG1-MW- 1S	16.62	15.58			17.80'
FG1-MW- 2S	DRY	DRY			17.20'
FG1-MW- 3S	DRY	DRY			16.80'
FG1-MW- 4S	15.58	14.93			22.80'
FG1-MW- 5S	16.22	14.43			22.50'
FG1-MW- 6S	19.32	17.88			23.30'
FG1-MW- 7S	18.82	17.49			27.10'
FG1-MW- 8S	18.45	16.28			22.20'
FG1-MW- 9S	17.21	14.68			23.30'



D.T.W. CHART

COMBO- 3260

NOTE:

ALL MEASUREMENTS ARE MADE FROM THE NORTH SIDE AND TOP EDGE OF THE WELL CASING. THE TOP OF CASING WITH A NOTCH OR PERMENANT MARKINGS, WHICH EVER ONE CONDITION IS APPROPRIATE.

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

GALLO CATTLE COMPANY BEAR CREEK
15751 W. HWY 140
LIVINGSTON, CA.
May 14, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BEA-MW	1S	**DATE:**	5/14/2012

PROJECT NAME:	GALLO CATTLE COMPANY BEAR CREEK	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	15751 W. HWY 140	**SAMPLE TIME:**	15:03
CITY, STATE:	LIVINGSTON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	24.03	FEET	**CALC. PURGE VOL.:**	0.60	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.70	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		3.67	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:50	0	0	24.92	0.25 GPM	6.68	4554	23.8	177	2.0	
14:54	0.60	1		"	6.65	4444	22.2	187	2.1	
14:59	1.20	2		"	6.65	4411	22.5	196	2.0	
15:03	1.80	3	25.22	"	6.65	4406	22.3	199	2.0	1000+
15:03	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	24.87'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BEA-MW 1D / DTW: 24.09'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BEA-MW	2S	**DATE:**	5/14/2012

PROJECT NAME:	GALLO CATTLE COMPANY BEAR CREEK	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	15751 W. HWY 140	**SAMPLE TIME:**	14:10
CITY, STATE:	LIVINGSTON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	23.03	FEET	**CALC. PURGE VOL.:**	0.68	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.20	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		4.17	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:58	0	0	26.13	0.25 GPM	7.20	658	23.2	247	3.8	
14:02	0.68	1		"	6.95	618	22.2	250	3.9	
14:06	1.36	2		"	6.94	621	22.2	242	3.6	
14:10	2.04	3	26.15	"	6.91	625	22.2	221	3.6	1000+
14:10	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	26.05'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BEA-MW 2D / DTW: 23.63'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BEA-MW	3S	**DATE:**	5/14/2012

PROJECT NAME:	GALLO CATTLE COMPANY BEAR CREEK	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	15751 W. HWY 140	**SAMPLE TIME:**	14:41
CITY, STATE:	LIVINGSTON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:		TILL ANGERMAN		**MONUMENT:**	POST	
SAMPLER:		DEL-TECH / ASHLEY LIGHT		**WELL CASING MATERIAL :**	PVC	
SIGNED:		Ashley Light		**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:		GROUNDWATER		**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	21.48	FEET	**CALC. PURGE VOL.:**	0.93	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.20	FEET	**TOTAL VOLUME PURGED:**	3.0	GAL.
STANDING WATER COLUMN:		5.72	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:35	0	0	22.59	0.5 GPM	6.79	4871	23.1	191	1.8	
14:37	0.93	1		"	6.81	5404	21.7	201	1.5	
14:39	1.87	2		"	6.70	5555	20.6	203	1.5	
14:41	2.80	3	22.77	"	6.73	5510	21.3	193	1.5	1000+
14:41	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	22.61'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BEA-MW 3D / DTW: 21.52'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BEA-MW	4S	**DATE:**	5/14/2012

PROJECT NAME:	GALLO CATTLE COMPANY BEAR CREEK	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	15751 W. HWY 140	**SAMPLE TIME:**	14:24
CITY, STATE:	LIVINGSTON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	28.63	FEET	**CALC. PURGE VOL.:**	1.74	GAL.
DEPTH OF WELL:	**(feet.100th's)**	39.30	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		10.67	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:12	0	0	29.22	0.5 GPM	7.38	2154	22.6	182	1.6	
14:16	1.74	2		"	7.37	2112	22.5	175	1.5	
14:20	3.48	4		"	7.37	2102	22.7	171	1.5	
14:24	5.22	6	30.22	"	7.37	2080	22.9	163	1.4	1000+
14:24	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	30.04'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BEA-MW 4D / DTW: 28.35'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

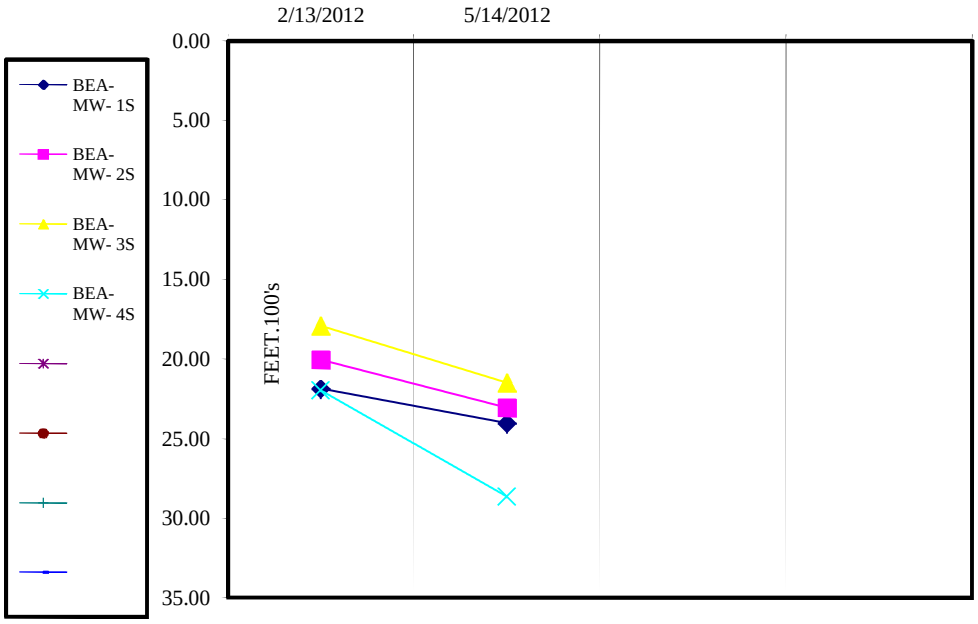
DEL-TECH GEOTECHNICAL SUPPORT, INC.

(209) 847-8757 (OFFICE) * (209) 847-7744 (FAX) * deltech1@pacbell.net (Email)

GALLO CATTLE COMPANY BEAR CREEK
LIVINGSTON, CA.

MONITORING WELL FIELD SUMMARY LOG 2012
DEPTH TO WATER MEASUREMENTS

	QTR. 1	QTR. 2	QTR. 3	QTR. 4	TOTAL
DATE	2/13/12	5/14/12			**DEPTH**
LOCATION					
BEA-MW- 1S	21.86	24.03			27.70'
BEA-MW- 2S	20.04	23.03			27.20'
BEA-MW- 3S	17.92	21.48			27.20'
BEA-MW- 4S	21.96	28.63			39.30'



D.T.W. CHART

COMBO- 3260

NOTE:
ALL MEASUREMENTS ARE MADE FROM THE NORTH SIDE AND TOP EDGE OF THE WELL CASING. THE TOP OF CASING WITH A NOTCH OR PERMENANT MARKINGS, WHICH EVER ONE CONDITION IS APPROPRIATE.

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

GALLO CATTLE COMPANY COTTONWOOD
10561 HWY 140
ATWATER, CA.
May 15, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW	1	**DATE:**	5/15/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	N/A
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	N/A	
DEPTH TO WATER:	**(feet.100th's)**	32.33	FEET	**CALC. PURGE VOL.:**	0.00	GAL.
DEPTH OF WELL:	**(feet.100th's)**	32.33	FEET	**TOTAL VOLUME PURGED:**	0	GAL.
STANDING WATER COLUMN:		0.00	FEET	**LOCATION OF PUMP:**	N/A	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
	0									
	0.00									
	0.00									
	0.00									
	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	N/A
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**WELL WAS DRY / NO SAMPLE TAKEN**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW	2	**DATE:**	5/15/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	12:01
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	25.00	FEET	**CALC. PURGE VOL.:**	1.44	GAL.
DEPTH OF WELL:	**(feet.100th's)**	33.80	FEET	**TOTAL VOLUME PURGED:**	4.5	GAL.
STANDING WATER COLUMN:		8.80	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:52	0	0	25.53	0.5 GPM	7.10	1977	25.4	206	2.6	
11:55	1.44	1.5		"	7.13	2472	22.4	189	2.5	
11:58	2.87	3		"	7.18	2480	22.9	170	2.0	
12:01	4.31	4.5	25.91	"	7.22	2483	25.1	170	2.0	70
12:01	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	25.71'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW	3	**DATE:**	5/15/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	12:26
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	18.79	FEET	**CALC. PURGE VOL.:**	1.98	GAL.
DEPTH OF WELL:	**(feet.100th's)**	30.90	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		12.11	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:14	0	0	20.12	0.5 GPM	7.25	2636	22.8	170	1.6	
12:18	1.98	2		"	7.17	2582	21.2	181	1.9	
12:22	3.95	4		"	7.13	2576	19.9	183	1.7	
12:26	5.93	6	25.09	"	7.16	2570	20.9	180	1.6	1000+
12:26	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	22.96'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW	4	**DATE:**	5/15/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	11:41
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	21.29	FEET	**CALC. PURGE VOL.:**	0.99	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.38	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		6.09	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:35	0	0	22.95	0.5 GPM	7.04	1836	21.9	186	2.0	
11:37	0.99	1		"	7.04	1746	22.2	193	2.2	
11:39	1.99	2		"	7.02	1687	21.0	198	2.2	
11:41	2.98	3	22.95	"	7.02	1694	20.7	198	2.1	29
11:41	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	22.66'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW	5	**DATE:**	5/15/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	11:25
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	17.41	FEET	**CALC. PURGE VOL.:**	1.09	GAL.
DEPTH OF WELL:	**(feet.100th's)**	24.08	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		6.67	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:19	0	0	19.22	0.5 GPM	7.01	2608	21.8	204	1.4	
11:21	1.09	1		"	6.98	2479	20.2	208	1.5	
11:23	2.18	2		"	6.97	2484	19.7	211	1.5	
11:25	3.27	3	20.59	"	6.99	2451	20.5	210	1.5	40
11:25	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	20.01'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW	6	**DATE:**	5/15/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	11:13
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	17.24	FEET	**CALC. PURGE VOL.:**	1.14	GAL.
DEPTH OF WELL:	**(feet.100th's)**	24.21	FEET	**TOTAL VOLUME PURGED:**	4.5	GAL.
STANDING WATER COLUMN:		6.97	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:07	0	0	18.01	0.5 GPM	6.63	2012	23.8	238	2.0	
11:09	1.14	1.5		"	6.75	2981	21.0	246	2.0	
11:11	2.28	3		"	6.77	3006	21.1	241	1.9	
11:13	3.41	4.5	19.20	"	6.76	3022	19.8	239	1.4	326
11:13	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	18.96'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW	7	**DATE:**	5/15/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	12:49
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	13.42	FEET	**CALC. PURGE VOL.:**	1.62	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.35	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		9.93	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:33	0	0	14.86	0.5 GPM	7.37	2325	25.0	187	2.3	
12:35	1.62	2		"	7.36	2328	25.2	184	2.3	
12:37	3.24	4		"	7.34	2326	25.3	182	2.1	
12:49	4.86	6	18.15	"	7.30	2327	25.2	178	2.1	146
12:49	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	15.74'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW	8	**DATE:**	5/15/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	12:53
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	11.12	FEET	**CALC. PURGE VOL.:**	2.09	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.90	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		12.78	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:45	0	0	16.18	0.5 GPM	7.06	1916	21.2	159	2.2	
12:47	2.09	2		"	7.05	1900	21.0	160	2.0	
12:49	4.17	4		"	7.05	1898	21.0	163	1.6	
12:51	6.26	6		"	7.04	1938	18.9	167	1.6	
12:53	8.34	8	17.96	"	7.00	1936	19.0	169	1.5	59
12:53	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	16.22'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW	9	**DATE:**	5/15/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	13:31
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	11.01	FEET	**CALC. PURGE VOL.:**	2.69	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.50	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		16.49	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:22	0	0	11.55	1.0 GPM	6.90	1668	19.2	189	2.5	
13:25	2.69	3		"	6.81	1669	19.1	189	2.2	
13:28	5.38	6		"	6.82	1666	19.3	185	2.3	
13:31	8.07	9	12.26	"	6.82	1657	19.5	186	2.1	8
13:31	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.68'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW	10	**DATE:**	5/15/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	13:09
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	7.32	FEET	**CALC. PURGE VOL.:**	2.44	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.29	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		14.97	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:00	0	0	10.09	1.0 GPM	7.07	1307	19.5	186	1.9	
13:03	2.44	2.5		"	6.95	1296	18.5	185	1.8	
13:06	4.89	5		"	6.94	1288	18.9	180	2.0	
13:09	7.33	7.5	12.09	"	6.94	1302	19.3	176	2.1	8
13:09	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.44'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW 11D **DATE:** 5/15/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	10:04
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	25.30	FEET	**CALC. PURGE VOL.:**	2.46	GAL.
DEPTH OF WELL:	**(feet.100th's)**	40.40	FEET	**TOTAL VOLUME PURGED:**	8	GAL.
STANDING WATER COLUMN:		15.10	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
9:50	0	0	25.48	0.5 GPM	6.64	2216	20.1	281	2.5	
9:55	2.46	2.5		"	6.51	1846	20.4	239	2.0	
9:59	4.93	5		"	6.51	1835	20.8	221	2.1	
10:04	7.39	7.5	25.48	"	6.51	1828	21.0	201	2.0	8
10:04	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	25.35'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE MW- 11S / WELL WENT DRY.**		
WEATHER:	OVERCAST / RAINING.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT -MW	12S	**DATE:**	5/15/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	10:26
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	24.44	FEET	**CALC. PURGE VOL.:**	1.10	GAL.
DEPTH OF WELL:	**(feet.100th's)**	31.20	FEET	**TOTAL VOLUME PURGED:**	4	GAL.
STANDING WATER COLUMN:		6.76	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:06	0	0	26.44	0.25 GPM	6.62	1634	21.8	197	2.1	
10:10	1.10	1		"	6.77	1407	21.5	193	1.8	
10:14	2.21	2		"	6.73	1383	21.1	193	1.7	
10:18	3.31	3		"	6.75	1378	21.4	184	1.6	
10:22	4.41	4	26.99	"	6.76	1400	21.1	192	1.6	73
10:26	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	26.56'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**COT-MW 12D / DTW: 26.03'**		
WEATHER:	OVERCAST / RAINING.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW	13S	**DATE:**	5/15/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	16:42
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	27.63	FEET	**CALC. PURGE VOL.:**	0.89	GAL.
DEPTH OF WELL:	**(feet.100th's)**	33.10	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		5.47	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:30	0	0	28.02	0.25 GPM	6.71	2077	23.4	203	1.5	
10:34	0.89	1		"	6.67	2356	23.4	196	1.4	
10:38	1.79	2		"	6.67	2360	23.4	214	1.5	
10:42	2.68	3	28.10	"	6.76	2358	23.5	225	1.5	12
10:42	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	28.05'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**COT-MW 13D / DTW: 27.43'**		
WEATHER:	OVERCAST / RAINING.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW	14S	**DATE:**	5/15/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	11:01
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	27.47	FEET	**CALC. PURGE VOL.:**	0.80	GAL.
DEPTH OF WELL:	**(feet.100th's)**	32.40	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		4.93	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:49	0	0	27.62	0.5 GPM	6.75	1305	25.1	253	1.5	
10:53	0.80	1		"	6.59	1119	23.4	277	1.3	
10:57	1.61	2		"	6.59	1136	23.2	280	1.3	
11:01	2.41	3	27.88	"	6.58	1150	23.1	284	1.2	1000+
11:01	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	27.74'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**COT-MW 14D / DTW: 27.15'**		
WEATHER:	OVERCAST / RAINING.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

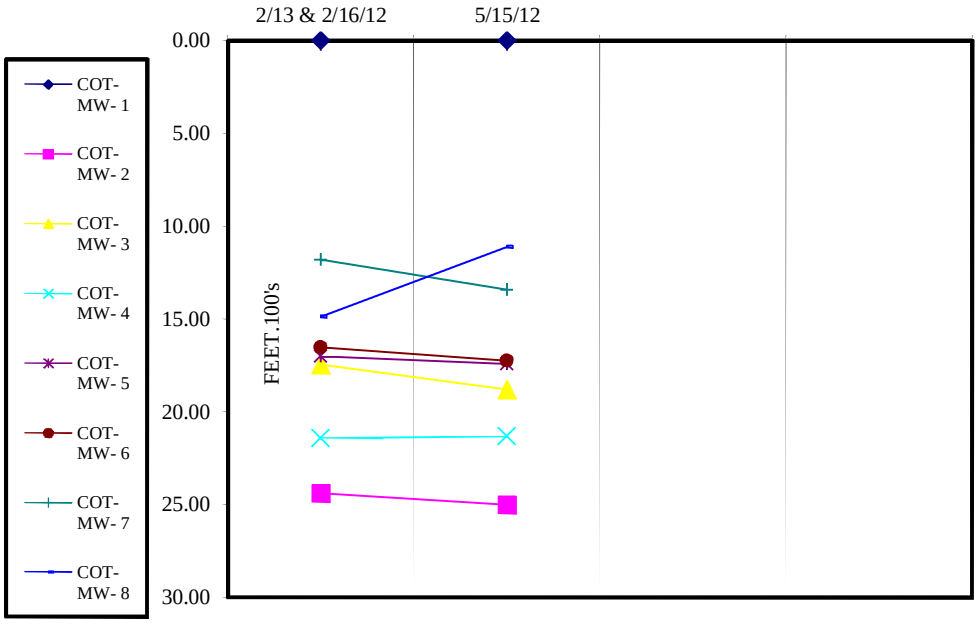
DEL-TECH GEOTECHNICAL SUPPORT, INC.

(209) 847-8757 (OFFICE) * (209) 847-7744 (FAX) * deltech1@pacbell.net (Email)

GALLO CATTLE COMPANY COTTONWOOD
ATWATER, CA.

MONITORING WELL FIELD SUMMARY LOG 2012
DEPTH TO WATER MEASUREMENTS

	QTR. 1	QTR. 2	QTR. 3	QTR. 4	TOTAL
DATE	2/13 & 2/16/12	5/15/12			**DEPTH**
LOCATION					
COT-MW- 1	DRY	DRY			32.33'
COT-MW- 2	24.37	25.00			33.80'
COT-MW- 3	17.45	18.79			30.90'
COT-MW- 4	21.42	21.29			27.38'
COT-MW- 5	17.00	17.41			24.08'
COT-MW- 6	16.53	17.24			24.21'
COT-MW- 7	11.80	13.42			23.35'
COT-MW- 8	14.87	11.12			23.90'
COT-MW- 9	8.56	11.01			27.50'
COT-MW- 10	5.14	7.32			22.29'
COT-MW- 11S	24.12	25.38			26.80'
COT-MW- 12S	24.44	26.27			31.20'
COT-MW- 13S	25.10	27.63			33.10'
COT-MW- 14S	25.16	27.47			32.40'



D.T.W. CHART

COMBO- 3260

NOTE:
ALL MEASUREMENTS ARE MADE FROM THE NORTH SIDE AND TOP EDGE OF THE WELL CASING. THE TOP OF CASING WITH A NOTCH OR PERMENANT MARKINGS, WHICH EVER ONE CONDITION IS APPROPRIATE.

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

GALLO CATTLE COMPANY SANTA RITA
91 S. BERT CRANE ROAD
ATWATER, CA.
May 15, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / SAN-MW 1D **DATE:** 5/15/2012

PROJECT NAME:	GALLO CATTLE COMPANY SANTA RITA	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	91 S. BERT CRANE ROAD	**SAMPLE TIME:**	13:18
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	24.35	FEET	**CALC. PURGE VOL.:**	3.40	GAL.
DEPTH OF WELL:	**(feet.100th's)**	45.20	FEET	**TOTAL VOLUME PURGED:**	11	GAL.
STANDING WATER COLUMN:		20.85	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:57	0	0	23.53	0.5 GPM	7.27	2793	16.9	125	1.0	
13:04	3.40	3.5		"	7.09	2836	17.4	157	1.2	
13:11	6.81	7		"	7.11	2897	17.5	176	1.2	
13:18	10.21	10.5	23.53	"	7.13	2914	17.8	138	1.0	146
13:18	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	23.53'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE SAN-MW-1S / WELL WENT DRY.**		
	DUPLICATE #7 TAKEN HERE.		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / SAN-MW	2D	**DATE:**	5/15/2012

PROJECT NAME:	GALLO CATTLE COMPANY SANTA RITA	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	91 S. BERT CRANE ROAD	**SAMPLE TIME:**	12:19
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	31.23	FEET	**CALC. PURGE VOL.:**	2.25	GAL.
DEPTH OF WELL:	**(feet.100th's)**	45.00	FEET	**TOTAL VOLUME PURGED:**	8	GAL.
STANDING WATER COLUMN:		13.77	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:07	0	0	31.23	0.5 GPM	7.01	2049	20.1	263	4.1	
12:11	2.25	2.5		"	6.94	2043	19.0	250	4.5	
12:15	4.49	5		"	7.01	1946	19.0	238	4.1	
12:19	6.74	7.5	31.55	"	7.00	1939	19.2	230	4.0	650
12:19	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	31.50'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE SAN-MW-2S / WELL WENT DRY.**		
	A LOT OF FINE SAND.		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / SAN-MW	3D	**DATE:**	5/15/2012

PROJECT NAME:	GALLO CATTLE COMPANY SANTA RITA	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	91 S. BERT CRANE ROAD	**SAMPLE TIME:**	12:36
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	32.13	FEET	**CALC. PURGE VOL.:**	2.13	GAL.
DEPTH OF WELL:	**(feet.100th's)**	45.20	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		13.07	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:21	0	0	32.13	0.5 GPM	7.08	1865	22.0	230	3.1	
12:26	2.13	2.5		"	7.02	1866	21.6	210	2.7	
12:31	4.27	5		"	7.00	1877	21.2	209	2.5	
12:36	6.40	7.5	32.24	"	7.00	1872	21.1	205	2.2	56
12:36	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	32.19'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE SAN-MW-3S / WELL WENT DRY.**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / SAN-MW	4D	**DATE:**	5/15/2012

PROJECT NAME:	GALLO CATTLE COMPANY SANTA RITA	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	91 S. BERT CRANE ROAD	**SAMPLE TIME:**	13:00
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	31.20	FEET	**CALC. PURGE VOL.:**	3.90	GAL.
DEPTH OF WELL:	**(feet.100th's)**	55.10	FEET	**TOTAL VOLUME PURGED:**	12	GAL.
STANDING WATER COLUMN:		23.90	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:36	0	0	31.20	0.5 GPM	6.90	1964	20.2	214	3.8	
12:44	3.90	4		"	6.88	1965	20.9	221	3.5	
12:52	7.80	8		"	6.89	1966	20.6	218	3.2	
13:00	11.70	12	31.53	"	6.88	1969	20.5	215	3.0	53
13:00	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	31.50'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE SAN-MW-4S / WELL WENT DRY.**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / SAN-MW	5S	**DATE:**	5/15/2012

PROJECT NAME:	GALLO CATTLE COMPANY SANTA RITA	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	91 S. BERT CRANE ROAD	**SAMPLE TIME:**	15:41
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	26.85	FEET	**CALC. PURGE VOL.:**	0.97	GAL.
DEPTH OF WELL:	**(feet.100th's)**	32.80	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		5.95	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:35	0	0	26.99	0.5 GPM	7.10	1950	20.6	201	3.1	
15:37	0.97	1		"	7.08	1944	20.6	204	2.9	
15:39	1.94	2		"	7.05	1939	20.5	206	2.9	
15:41	2.91	3	27.65	"	7.04	1937	20.5	207	3.0	1000+
15:41	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	27.04'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**SAN-MW 5D / DTW: 26.78'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / SAN-MW	6S	**DATE:**	5/15/2012

PROJECT NAME:	GALLO CATTLE COMPANY SANTA RITA	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	91 S. BERT CRANE ROAD	**SAMPLE TIME:**	13:48
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	14.48	FEET	**CALC. PURGE VOL.:**	2.30	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.60	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		14.12	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:33	0	0	15.75	0.5 GPM	6.90	1870	21.4	173	3.0	
13:38	2.30	2.5		"	6.88	1875	20.8	175	2.9	
13:43	4.61	5		"	6.90	1867	21.1	173	2.7	
13:48	6.91	7.5	15.99	"	6.90	1859	21.5	172	2.7	153
13:48	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	15.85'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**SAN-MW 6D / DTW: 14.29'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / SAN-MW	7S	**DATE:**	5/15/2012

PROJECT NAME:	GALLO CATTLE COMPANY SANTA RITA	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	91 S. BERT CRANE ROAD	**SAMPLE TIME:**	14:14
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	13.90	FEET	**CALC. PURGE VOL.:**	2.66	GAL.
DEPTH OF WELL:	**(feet.100th's)**	30.20	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		16.30	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:59	0	0	14.88	0.5 GPM	6.80	1770	22.1	180	2.5	
14:04	2.66	2.5		"	6.78	1816	19.4	177	2.6	
14:09	5.32	5		"	6.78	1846	19.0	170	2.6	
14:14	7.98	7.5	15.29	"	6.79	1823	20.2	167	2.6	494
14:14	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	15.00'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**SAN-MW 7D / DTW: 14.28'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / SAN-MW	8S	**DATE:**	5/15/2012

PROJECT NAME:	GALLO CATTLE COMPANY SANTA RITA	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	91 S. BERT CRANE ROAD	**SAMPLE TIME:**	14:35
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	17.06	FEET	**CALC. PURGE VOL.:**	1.34	GAL.
DEPTH OF WELL:	**(feet.100th's)**	25.30	FEET	**TOTAL VOLUME PURGED:**	4.5	GAL.
STANDING WATER COLUMN:		8.24	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:26	0	0	21.17	0.5 GPM	6.74	1664	21.0	172	2.0	
14:29	1.34	1.5		"	6.80	1651	22.8	229	1.6	
14:32	2.69	3		"	6.69	1656	20.6	225	1.7	
14:35	4.03	4.5	21.61	"	6.70	1660	20.8	220	1.7	1000+
14:35	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	17.12'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**SAN-MW 8D / DTW: 17.16'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

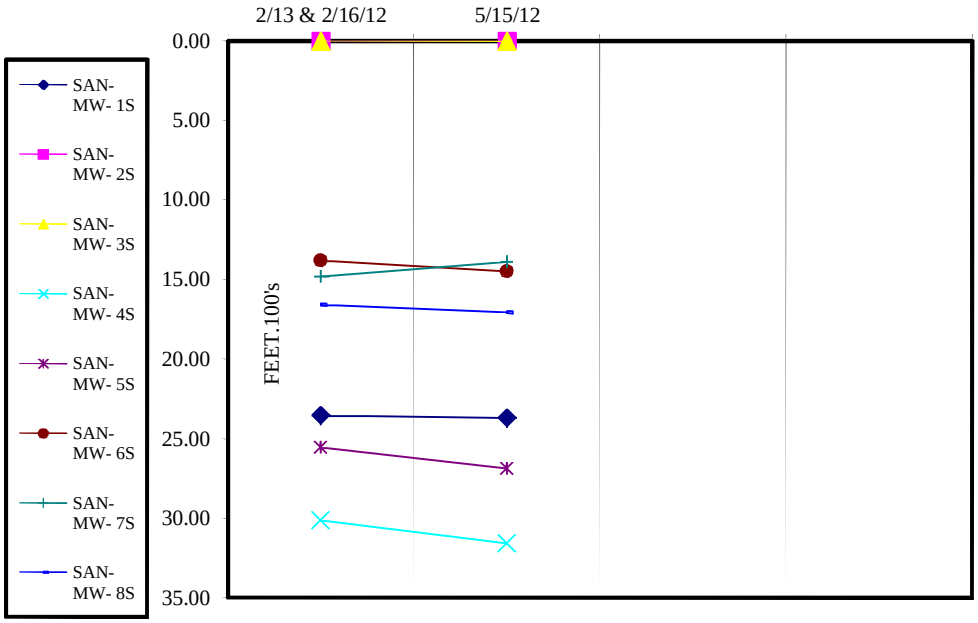
DEL-TECH GEOTECHNICAL SUPPORT, INC.

(209) 847-8757 (OFFICE) * (209) 847-7744 (FAX) * deltech1@pacbell.net (Email)

GALLO CATTLE COMPANY SANTA RITA
ATWATER, CA.

MONITORING WELL FIELD SUMMARY LOG 2012
DEPTH TO WATER MEASUREMENTS

	QTR. 1	QTR. 2	QTR. 3	QTR. 4	TOTAL
DATE	2/13 & 2/16/12	5/15/12			**DEPTH**
LOCATION					
SAN-MW- 1S	23.52	23.70			25.80'
SAN-MW- 2S	DRY	DRY			28.60'
SAN-MW- 3S	DRY	DRY			28.60'
SAN-MW- 4S	30.11	31.56			32.80'
SAN-MW- 5S	25.53	26.85			32.80'
SAN-MW- 6S	13.81	14.48			28.60'
SAN-MW- 7S	14.81	13.90			30.20'
SAN-MW- 8S	16.56	17.06			25.30'



D.T.W. CHART

COMBO- 3260

NOTE:
ALL MEASUREMENTS ARE MADE FROM THE NORTH SIDE AND TOP EDGE OF THE WELL CASING. THE TOP OF CASING WITH A NOTCH OR PERMENANT MARKINGS, WHICH EVER ONE CONDITION IS APPROPRIATE.

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

P. & L. SOUZA DAIRY
20633 CRANE ROAD
HILMAR, CA.
May 10, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / PLS-MW	1D	**DATE:**	5/10/2012

PROJECT NAME:	P. & L. SOUZA DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	20633 CRANE ROAD	**SAMPLE TIME:**	19:45
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	10.80	FEET	**CALC. PURGE VOL.:**	1.00	GAL.
DEPTH OF WELL:	**(feet.100th's)**	16.90	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		6.10	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
19:28	0	0	11.03	0.5 GPM	6.81	2113	17.7	200	0.6	
19:34	1.00	1		"	6.67	2065	17.8	198	0.6	
19:40	1.99	2		"	6.65	2047	17.8	198	0.2	
19:45	2.99	3	12.59	"	6.62	2041	17.7	194	0.2	32
19:45	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	12.11'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**PLS-MW 1D / DTW: 10.80'**		
	S-WELL WENT DRY / SWITCHED OVER TO D-WELL		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / PLS-MW	2S	**DATE:**	5/10/2012

PROJECT NAME:	P. & L. SOUZA DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	20633 CRANE ROAD	**SAMPLE TIME:**	17:53
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	9.67	FEET	**CALC. PURGE VOL.:**	1.11	GAL.
DEPTH OF WELL:	**(feet.100th's)**	16.50	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		6.83	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
17:45	0	0	10.35	0.5 GPM	7.10	2308	18.8	220	6.6	
17:47	1.11	1		"	6.83	2345	17.6	227	7.1	
17:49	2.23	2		"	6.79	2358	17.6	229	6.6	
17:51	3.34	3		"	6.77	2378	17.6	229	6.7	
17:53	4.46	4	10.81	"	6.99	2413	17.7	223	6.5	190
17:53	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.55'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**PLS-MW 2D / DTW: 9.49'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / PLS-MW	3S	**DATE:**	5/10/2012

PROJECT NAME:	P. & L. SOUZA DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	20633 CRANE ROAD	**SAMPLE TIME:**	17:00
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	9.38	FEET	**CALC. PURGE VOL.:**	1.03	GAL.
DEPTH OF WELL:	**(feet.100th's)**	15.70	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		6.32	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
16:54	0	0	11.10	0.5 GPM	6.57	1428	17.6	280	3.5	
16:56	1.03	1		"	6.76	1404	17.6	264	3.4	
16:58	2.06	2		"	6.71	1398	17.6	250	3.7	
17:00	3.09	3	11.57	"	6.85	1389	17.8	234	3.2	160
17:00	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.23'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**PLS-MW 3D / DTW: 9.23'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / PLS-MW	4S	**DATE:**	5/10/2012

PROJECT NAME:	P. & L. SOUZA DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	20633 CRANE ROAD	**SAMPLE TIME:**	19:12
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	10.78	FEET	**CALC. PURGE VOL.:**	2.04	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.30	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		12.52	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
19:00	0	0	10.78	0.5 GPM	6.70	4970	18.3	200	1.6	
19:04	2.04	2		"	6.63	5467	18.5	201	1.5	
19:08	4.09	4		"	6.61	5543	18.5	199	1.5	
19:12	6.13	6	13.65	"	6.62	5612	18.6	192	1.4	32
19:12	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	12.11'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**PLS-MW 4D / DTW: 10.38'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / PLS-MW	5S	**DATE:**	5/10/2012

PROJECT NAME:	P. & L. SOUZA DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	20633 CRANE ROAD	**SAMPLE TIME:**	17:31
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	9.34	FEET	**CALC. PURGE VOL.:**	0.97	GAL.
DEPTH OF WELL:	**(feet.100th's)**	15.30	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		5.96	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
17:25	0	0	9.62	0.5 GPM	6.84	1810	18.9	240	7.6	
17:27	0.97	1		"	7.01	1806	19.0	241	6.8	
17:29	1.95	2		"	6.95	1811	19.0	241	6.5	
17:31	2.92	3	9.85	"	6.90	1814	19.0	241	6.4	743
17:31	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.66'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**PLS-MW 5D / DTW: 9.23'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / PLS-MW	6S	**DATE:**	5/10/2012

PROJECT NAME:	P. & L. SOUZA DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	20633 CRANE ROAD	**SAMPLE TIME:**	18:35
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	8.74	FEET	**CALC. PURGE VOL.:**	2.18	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.10	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		13.36	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
18:20	0	0	8.74	0.5 GPM	7.28	2256	19.2	161	2.6	
18:25	2.18	2		"	7.24	2306	18.5	163	2.3	
18:30	4.36	4		"	7.23	2304	18.6	163	2.2	
18:35	6.54	6	9.02	"	7.22	2300	18.1	165	2.2	21
18:35	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	8.88'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**PLS-MW 6D / DTW: 9.11'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / PLS-MW	7S	**DATE:**	5/10/2012

PROJECT NAME:	P. & L. SOUZA DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	20633 CRANE ROAD	**SAMPLE TIME:**	18:52
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	9.89	FEET	**CALC. PURGE VOL.:**	2.06	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.50	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		12.61	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
18:40	0	0	9.89	0.5 GPM	7.02	2218	17.0	182	3.0	
18:44	2.06	2		"	6.81	2227	17.5	188	2.9	
18:48	4.12	4		"	6.80	2230	17.4	188	3.0	
18:52	6.17	6	11.40	"	6.80	2222	17.4	180	3.1	10
18:52	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.15'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**PLS-MW 7D / DTW: 9.24'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

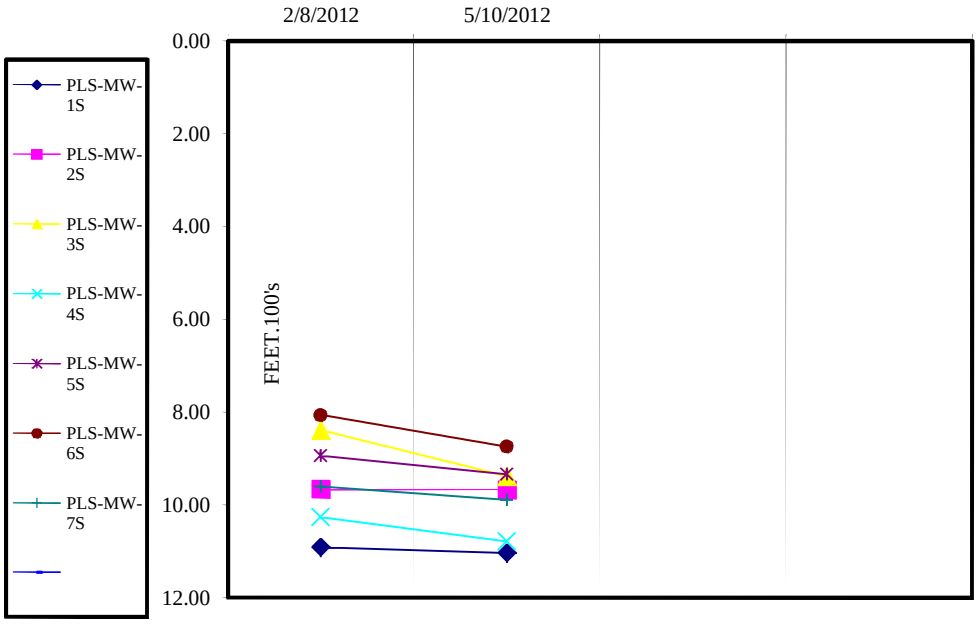
DEL-TECH GEOTECHNICAL SUPPORT, INC.

(209) 847-8757 (OFFICE) * (209) 847-7744 (FAX) * deltech1@pacbell.net (Email)

P. & L. SOUZA DAIRY
HILMAR, CA.

MONITORING WELL FIELD SUMMARY LOG 2012
DEPTH TO WATER MEASUREMENTS

	QTR. 1	QTR. 2	QTR. 3	QTR. 4	TOTAL
DATE	2/8/12	5/10/12			DEPTH
LOCATION					
PLS-MW- 1S	10.90	11.03			16.90'
PLS-MW- 2S	9.65	9.67			16.50'
PLS-MW- 3S	8.39	9.38			15.70'
PLS-MW- 4S	10.26	10.78			23.30'
PLS-MW- 5S	8.93	9.34			15.30'
PLS-MW- 6S	8.06	8.74			22.10'
PLS-MW- 7S	9.60	9.89			22.50'



D.T.W. CHART

COMBO- 3260

NOTE:
ALL MEASUREMENTS ARE MADE FROM THE NORTH SIDE AND TOP EDGE OF THE WELL CASING. THE TOP OF CASING WITH A NOTCH OR PERMENANT MARKINGS, WHICH EVER ONE CONDITION IS APPROPRIATE.

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

PAUL CAETANO DAIRY
9436 GRIFFITH AVENUE
DELHI, CA.
May 10, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / CAE-MW	1S	**DATE:**	5/10/2012

PROJECT NAME:	PAUL CAETANO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	9436 GRIFFITH AVENUE	**SAMPLE TIME:**	10:46
CITY, STATE:	DELHI, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	14.16	FEET	**CALC. PURGE VOL.:**	0.45	GAL.
DEPTH OF WELL:	**(feet.100th's)**	16.90	FEET	**TOTAL VOLUME PURGED:**	2	GAL.
STANDING WATER COLUMN:		2.74	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:40	0	0	14.16	0.5 GPM	6.67	3188	20.6	-207	0.8	
10:42	0.45	0.5		"	6.67	3904	20.7	-106	0.7	
10:44	0.89	1		"	6.67	3910	20.8	-110	0.6	
10:46	1.34	1.5	15.12	"	6.67	3919	21.0	-113	0.6	380
10:46	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	14.69'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**CAE-MW 1D / DTW: 13.74'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / CAE-MW	2S	**DATE:**	5/10/2012

PROJECT NAME:	PAUL CAETANO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	9436 GRIFFITH AVENUE	**SAMPLE TIME:**	11:25
CITY, STATE:	DELHI, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	13.34	FEET	**CALC. PURGE VOL.:**	0.70	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.60	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		4.26	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:20	0	0	13.34	0.5 GPM	6.71	1779	21.1	126	1.2	
11:22	0.70	1		"	6.72	1928	19.9	115	1.0	
11:24	1.39	2		"	6.70	1915	19.9	102	1.0	
11:25	2.09	3	14.12	"	6.69	1910	19.9	98	0.9	20
11:25	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	13.74'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**CAE-MW 2D / DTW: 13.15'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / CAE-MW 3S **DATE:** 5/10/2012

PROJECT NAME:	PAUL CAETANO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	9436 GRIFFITH AVENUE	**SAMPLE TIME:**	11:45
CITY, STATE:	DELHI, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	LIGHT BROWN	
DEPTH TO WATER:	**(feet.100th's)**	13.61	FEET	**CALC. PURGE VOL.:**	0.59	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.20	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		3.59	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:40	0	0	13.61	0.5 GPM	6.82	3133	19.9	125	0.8	
11:41	0.59	1		"	6.76	2925	19.7	136	0.6	
11:42	1.17	2		"	6.74	2838	19.7	143	0.6	
11:45	1.76	3	14.11	"	6.73	2804	20.0	153	0.6	70
11:45	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	14.00'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**CAE-MW 3D / DTW: 13.55'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / CAE-MW	4S	**DATE:**	5/10/2012

PROJECT NAME:	PAUL CAETANO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	9436 GRIFFITH AVENUE	**SAMPLE TIME:**	11:05
CITY, STATE:	DELHI, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	13.67	FEET	**CALC. PURGE VOL.:**	1.57	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.30	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		9.63	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:55	0	0	13.67	0.5 GPM	6.47	1565	20.0	-51	0.9	
10:58	1.57	1.5		"	6.38	1423	19.3	7	0.7	
11:02	3.14	3		"	6.38	1455	19.5	53	0.7	
11:05	4.71	4.5	13.92	"	6.37	1456	19.5	97	0.6	24
11:05	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	13.79'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**CAE-MW 4D / DTW: 13.50'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / CAE-MW	5S	**DATE:**	5/10/2012

PROJECT NAME:	PAUL CAETANO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	9436 GRIFFITH AVENUE	**SAMPLE TIME:**	10:33
CITY, STATE:	DELHI, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	9.50	FEET	**CALC. PURGE VOL.:**	2.15	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.70	FEET	**TOTAL VOLUME PURGED:**	6.0	GAL.
STANDING WATER COLUMN:		13.20	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:18	0	0	9.50	0.5 GPM	6.85	1552	19.3	196	1.3	
10:23	2.15	2		"	6.68	1268	19.6	207	0.9	
10:28	4.31	4		"	6.70	1221	19.9	205	0.9	
10:33	6.46	6	9.58	"	6.70	1214	20.0	202	0.8	15
10:33	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.51'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**CAE-MW 5D / DTW: 9.13'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / CAE-MW	6S	**DATE:**	5/10/2012

PROJECT NAME:	PAUL CAETANO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	9436 GRIFFITH AVENUE	**SAMPLE TIME:**	10:12
CITY, STATE:	DELHI, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	11.64	FEET	**CALC. PURGE VOL.:**	1.45	GAL.
DEPTH OF WELL:	**(feet.100th's)**	20.50	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		8.86	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:00	0	0	11.64	0.5 GPM	6.96	1459	20.1	262	1.1	
10:03	1.45	1.5		"	7.29	1515	19.7	230	1.1	
10:06	2.89	3		"	6.99	1551	19.9	235	1.0	
10:09	4.34	4.5		"	6.96	1555	19.9	237	0.8	
10:12	5.78	6	11.70	"	6.95	1561	19.9	240	0.6	12
10:12	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.70'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**CAE-MW 6D / DTW: 11.53'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

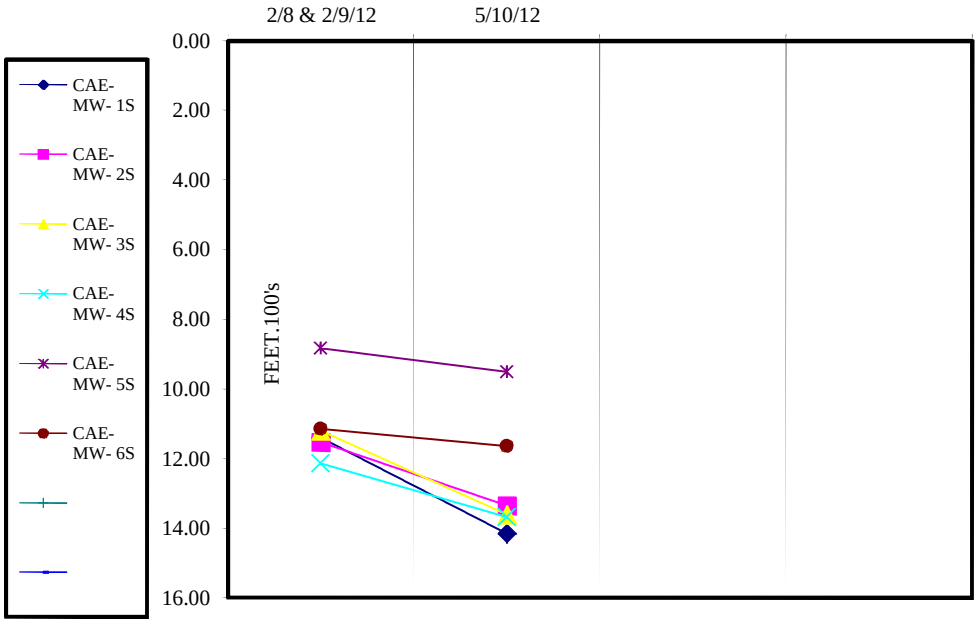
DEL-TECH GEOTECHNICAL SUPPORT, INC.

(209) 847-8757 (OFFICE) * (209) 847-7744 (FAX) * deltech1@pacbell.net (Email)

PAUL CAETANO DAIRY
DELHI, CA.

MONITORING WELL FIELD SUMMARY LOG 2012
DEPTH TO WATER MEASUREMENTS

	QTR. 1	QTR. 2	QTR. 3	QTR. 4	TOTAL
DATE	2/8 & 2/9/12	5/10/12			DEPTH
LOCATION					
CAE-MW- 1S	11.40	14.16			16.90'
CAE-MW- 2S	11.53	13.34			17.60'
CAE-MW- 3S	11.20	13.61			17.20'
CAE-MW- 4S	12.14	13.67			23.30'
CAE-MW- 5S	8.83	9.50			22.70'
CAE-MW- 6S	11.15	11.64			20.50'



D.T.W. CHART

COMBO- 3260

NOTE:

ALL MEASUREMENTS ARE MADE FROM THE NORTH SIDE AND TOP EDGE OF THE WELL CASING. THE TOP OF CASING WITH A NOTCH OR PERMENANT MARKINGS, WHICH EVER ONE CONDITION IS APPROPRIATE.

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

ROBERT GIOLETTI AND SONS DAIRY
118 N. BLAKER ROAD
TURLOCK, CA.
May 8, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ROB-MW 1S **DATE:** 5/8/2012

PROJECT NAME:	ROBERT GIOLETTI AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	118 N. BLAKER ROAD	**SAMPLE TIME:**	12:59
CITY, STATE:	TURLOCK, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL**	PVC	
SIGNED:	Cassandra Hughes			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	12.19	FEET	**CALC. PURGE VOL.:**	1.00	GAL.
DEPTH OF WELL:	**(feet.100th's)**	18.30	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		6.11	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:33	0	0	14.13	0.5 GPM	7.13	925	21.6	181	3.3	
12:35	1.00	1		"	7.04	978	19.9	185	2.9	
12:37	1.99	2		"	6.86	956	19.6	185	2.8	
12:39	2.99	3	15.40	"	6.85	921	18.5	185	2.7	156
12:42	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	14.60'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ROB-MW 1D / DTW: 11.89'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ROB-MW 2S **DATE:** 5/8/2012

PROJECT NAME:	ROBERT GIOLETTI AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	118 N. BLAKER ROAD	**SAMPLE TIME:**	13:02
CITY, STATE:	TURLOCK, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	12.47	FEET	**CALC. PURGE VOL.:**	0.89	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.90	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		5.43	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:52	0	0	14.32	0.5 GPM	6.61	2636	21.3	207	3.1	
12:54	0.89	1		"	6.61	2712	19.4	212	2.9	
12:56	1.77	2		"	6.58	2732	19.5	215	2.8	
12:58	2.66	3	14.80	"	6.57	2750	19.4	216	3.3	1000+
13:02	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.94'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ROB-MW 2D / DTW: 12.31'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ROB-MW 3S **DATE:** 5/8/2012

PROJECT NAME:	ROBERT GIOLETTI AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	118 N. BLAKER ROAD	**SAMPLE TIME:**	13:30
CITY, STATE:	TURLOCK, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	11.13	FEET	**CALC. PURGE VOL.:**	1.25	GAL.
DEPTH OF WELL:	**(feet.100th's)**	18.80	FEET	**TOTAL VOLUME PURGED:**	4.5	GAL.
STANDING WATER COLUMN:		7.67	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:19	0	0	11.96	0.5 GPM	6.81	2059	20.6	187	2.1	
13:22	1.25	1.5		"	6.98	2034	19.5	188	1.9	
13:25	2.50	3		"	6.96	2037	19.4	188	2.2	
13:27	3.76	4.5	12.07	"	6.97	2020	19.5	186	2.0	3
13:30	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.60'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ROB-MW 3D / DTW: 11.03'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ROB-MW	4S	**DATE:**	5/8/2012

PROJECT NAME:	ROBERT GIOLETTI AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	118 N. BLAKER ROAD	**SAMPLE TIME:**	13:49
CITY, STATE:	TURLOCK, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	10.29	FEET	**CALC. PURGE VOL.:**	1.24	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.90	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		7.61	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:37	0	0	11.42	0.5 GPM	6.94	2936	21.1	195	2.0	
13:40	1.24	1.5		"	6.79	3086	20.3	206	1.8	
13:43	2.48	3		"	6.75	3093	19.9	216	2.0	
13:46	3.73	4.5	11.78	"	6.74	3076	19.6	221	1.9	4
13:49	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.31'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ROB-MW 4D / DTW: 10.10'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ROB-MW	5S	**DATE:**	5/8/2012

PROJECT NAME:	ROBERT GIOLETTI AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	118 N. BLAKER ROAD	**SAMPLE TIME:**	14:11
CITY, STATE:	TURLOCK, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH		
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL**	PVC		
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632	
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE	
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR		
DEPTH TO WATER:	**(feet.100th's)**	11.40	FEET	**CALC. PURGE VOL.:**	0.59	GAL.	
DEPTH OF WELL:	**(feet.100th's)**	15.00	FEET	**TOTAL VOLUME PURGED:**	3	GAL.	
STANDING WATER COLUMN:		3.60	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM		

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:01	0	0	12.20	0.5 GPM	6.75	2346	21.5	208	2.3	
14:03	0.59	1		"	6.73	2370	19.8	220	2.5	
14:05	1.18	2		"	6.75	2392	20.1	221	2.6	
14:07	1.76	3	12.28	"	6.75	2401	19.8	238	2.5	39
14:11	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.87'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ROB-MW 5D / DTW: 11.27'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ROB-MW	6S	**DATE:**	5/8/2012

PROJECT NAME:	ROBERT GIOLETTI AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	118 N. BLAKER ROAD	**SAMPLE TIME:**	11:50
CITY, STATE:	TURLOCK, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	13.61	FEET	**CALC. PURGE VOL.:**	2.38	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.20	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		14.59	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:38	0	0	13.83	1.5 GPM	7.00	1966	21.3	193	6.6	
11:40	2.38	2.5		"	6.99	1976	19.3	195	5.6	
11:42	4.76	5		"	6.98	1970	19.2	195	5.6	
11:44	7.14	7.5	13.83	"	6.96	1985	18.9	199	5.7	3
11:50	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	13.63'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ROB-MW 6D / DTW: 13.53'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ROB-MW	7S	**DATE:**	5/8/2012

PROJECT NAME:	ROBERT GIOLETTI AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	118 N. BLAKER ROAD	**SAMPLE TIME:**	11:06
CITY, STATE:	TURLOCK, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL**	PVC	
SIGNED:	Cassandra Hughx			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	11.07	FEET	**CALC. PURGE VOL.:**	2.81	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.30	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		17.23	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:56	0	0	11.48	1.5 GPM	7.58	1450	17.7	168	4.4	
10:58	2.81	3		"	7.23	1522	17.7	164	3.3	
11:00	5.62	6		"	7.17	1548	17.9	164	3.8	
11:02	8.44	9	11.51	"	7.16	1554	17.7	166	3.5	8
11:06	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.12'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ROB-MW 7D / DTW: 12.56'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ROB-MW	8S	**DATE:**	5/8/2012

PROJECT NAME:	ROBERT GIOLETTI AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	118 N. BLAKER ROAD	**SAMPLE TIME:**	12:15
CITY, STATE:	TURLOCK, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	11.33	FEET	**CALC. PURGE VOL.:**	2.70	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.90	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		16.57	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:06	0	0	12.27	1.5 GPM	6.98	2108	20.6	189	3.7	
12:08	2.70	3		"	6.93	2156	19.9	190	3.3	
12:10	5.41	6		"	6.95	2139	20.0	187	4.5	
12:12	8.11	9	12.37	"	6.92	2153	19.5	186	3.1	13
12:15	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.93'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ROB-MW 8D / DTW: 11.72'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT, INC.

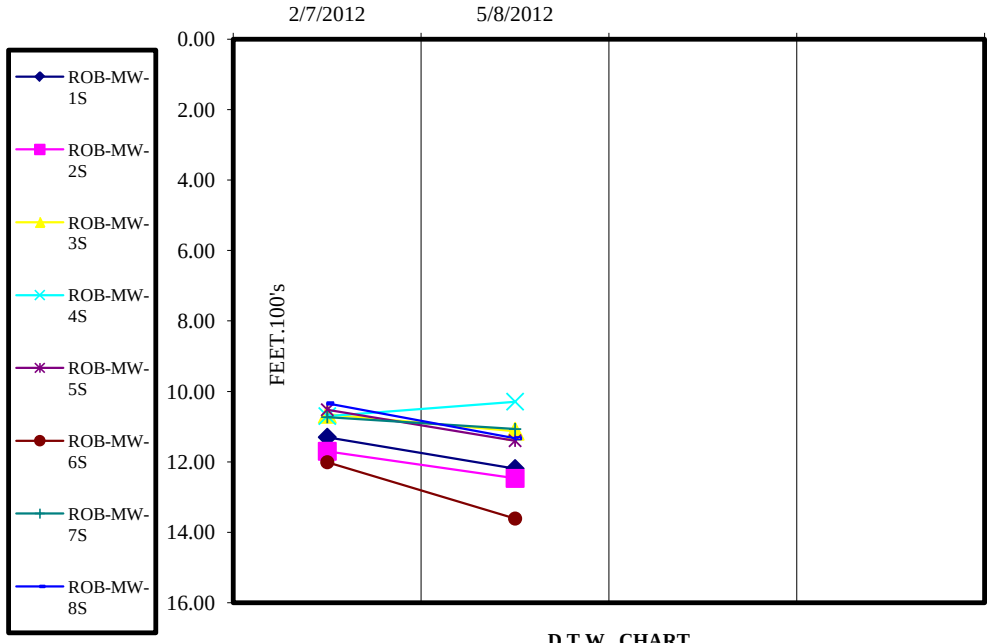
(209) 847-8757 (OFFICE) * (209) 847-7744 (FAX) * deltech1@pacbell.net (Email)

ROBERT GIOLETTI AND SONS DAIRY
TURLOCK, CA.

MONITORING WELL FIELD SUMMARY LOG 2012

DEPTH TO WATER MEASUREMENTS

	QTR. 1	QTR. 2	QTR. 3	QTR. 4	TOTAL
DATE	2/7/12	5/8/12			**DEPTH**
LOCATION					
ROB-MW- 1S	11.30	12.19			18.30'
ROB-MW- 2S	11.70	12.47			17.90'
ROB-MW- 3S	10.65	11.13			18.80'
ROB-MW- 4S	10.70	10.29			17.90'
ROB-MW- 5S	10.52	11.40			15.00'
ROB-MW- 6S	12.01	13.61			28.20'
ROB-MW- 7S	10.73	11.07			28.30'
ROB-MW- 8S	10.34	11.33			27.90'



D.T.W. CHART

COMBO- 3260

NOTE:

ALL MEASUREMENTS ARE MADE FROM THE NORTH SIDE AND TOP EDGE OF THE WELL CASING. THE TOP OF CASING WITH A NOTCH OR PERMENANT MARKINGS, WHICH EVER ONE CONDITION IS APPROPRIATE.

2012Q2 West Side

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

ANTONE L. GOMES AND SONS DAIRY
515 E. STUHR ROAD
NEWMAN, CA.
May 10, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANT-MW 1D **DATE:** 5/10/2012

PROJECT NAME:	ANTONE L. GOMES AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	11:18
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	20.03	FEET	**CALC. PURGE VOL.:**	2.66	GAL.
DEPTH OF WELL:	**(feet.100th's)**	36.30	FEET	**TOTAL VOLUME PURGED:**	9.0	GAL.
STANDING WATER COLUMN:		16.27	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:06	0	0	20.03	0.5 GPM	6.95	2224	19.8	236	2.3	
11:09	2.66	3		"	6.91	2233	19.3	234	1.7	
11:12	5.31	6		"	6.92	2240	19.1	224	1.9	
11:15	7.97	9	20.05	"	6.93	2236	19.4	222	2.1	23
11:18	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	20.03'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE ANT-MW 1S / WELL WENT DRY.**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANT-MW 2S **DATE:** 5/10/2012

PROJECT NAME:	ANTONE L. GOMES AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	9:20
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	21.17	FEET	**CALC. PURGE VOL.:**	1.95	GAL.
DEPTH OF WELL:	**(feet.100th's)**	33.10	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		11.93	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
9:10	0	0	21.17	0.5 GPM	6.88	3884	21.1	290	3.4	
9:12	1.95	2		"	6.94	3998	20.9	263	1.2	
9:14	3.89	4		"	6.99	3539	21.0	250	1.0	
9:16	5.84	6	22.18	"	6.99	3263	21.1	240	1.4	97
9:20	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	22.00'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ANT-MW 2D / DTW: 20.75'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANT-MW 3S **DATE:** 5/10/2012

PROJECT NAME:	ANTONE L. GOMES AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	10:05
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	20.38	FEET	**CALC. PURGE VOL.:**	2.12	GAL.
DEPTH OF WELL:	**(feet.100th's)**	33.40	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		13.02	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
9:56	0	0	20.38	0.5 GPM	7.15	1519	20.0	232	2.2	
9:58	2.12	2		"	7.03	1572	19.8	232	1.6	
10:00	4.25	4		"	7.00	1579	19.7	228	1.7	
10:02	6.37	6	21.21	"	7.01	1600	19.9	228	1.7	59
10:05	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	21.01'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ANT-MW 3D / DTW: 20.68'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANT-MW	4S	**DATE:**	5/10/2012

PROJECT NAME:	ANTONE L. GOMES AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	9:43
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	21.09	FEET	**CALC. PURGE VOL.:**	2.07	GAL.
DEPTH OF WELL:	**(feet.100th's)**	33.80	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		12.71	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
9:34	0	0	21.09	0.5 GPM	7.01	2386	20.4	239	2.0	
9:36	2.07	2		"	7.22	2372	20.5	239	1.7	
9:38	4.15	4		"	6.97	2355	20.6	239	1.8	
9:40	6.22	6	24.10	"	6.96	2361	20.7	235	1.8	267
9:43	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	23.23'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ANT-MW 4D / DTW: 21.00'**		
	ANT-MW 4D NEEDS WATERRA TUBING.		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANT-MW	5S	**DATE:**	5/10/2012

PROJECT NAME:	ANTONE L. GOMES AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	11:41
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	23.52	FEET	**CALC. PURGE VOL.:**	1.65	GAL.
DEPTH OF WELL:	**(feet.100th's)**	33.60	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		10.08	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:33	0	0	23.52	0.5 GPM	7.06	1926	20.2	232	1.8	
11:35	1.65	2		"	6.96	1926	19.8	231	1.2	
11:37	3.29	4		"	6.96	1933	19.5	227	1.3	
11:39	4.94	6	23.54	"	7.02	1927	19.6	223	1.2	55
11:41	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	23.52'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ANT-MW 5D / DTW: 24.42'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANT-MW	6S	**DATE:**	5/10/2012

PROJECT NAME:	ANTONE L. GOMES AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	10:50
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	18.03	FEET	**CALC. PURGE VOL.:**	2.46	GAL.
DEPTH OF WELL:	**(feet.100th's)**	33.10	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		15.07	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:39	0	0	18.03	0.5 GPM	7.25	1906	20.3	233	2.6	
10:42	2.46	2.5		"	7.26	1827	19.8	232	1.8	
10:45	4.92	5		"	7.26	1790	19.4	237	1.8	
10:48	7.38	7.5	18.20	"	7.29	1779	19.6	229	1.8	211
10:50	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	18.12'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ANT-MW 6D / DTW: 18.39'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT, INC.

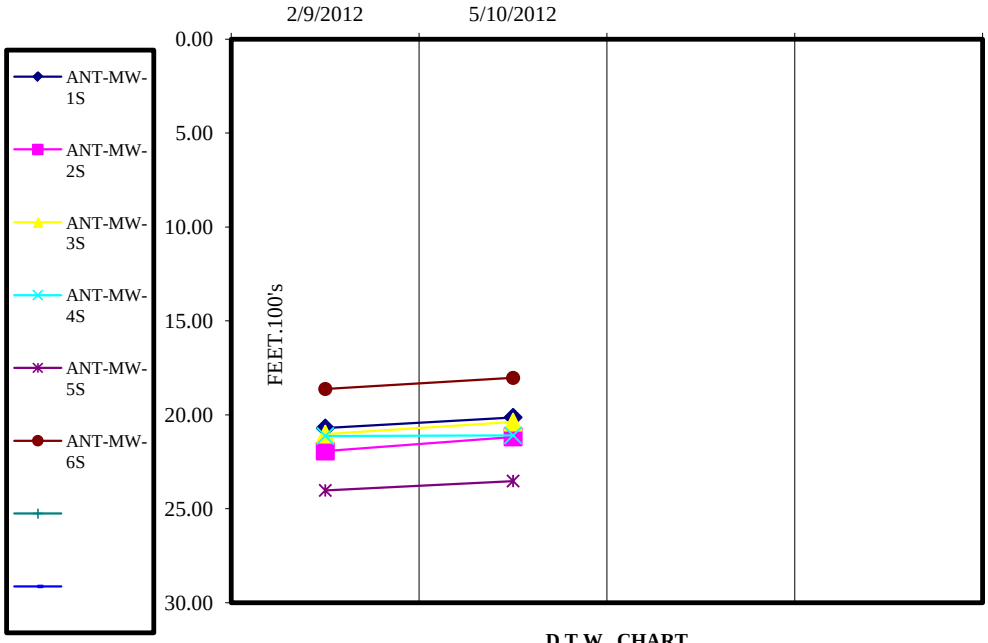
(209) 847-8757 (OFFICE) * (209) 847-7744 (FAX) * deltech1@pacbell.net (Email)

ANTONE L. GOMES AND SONS DAIRY
NEWMAN, CA.

MONITORING WELL FIELD SUMMARY LOG 2012

DEPTH TO WATER MEASUREMENTS

	QTR. 1	QTR. 2	QTR. 3	QTR. 4	TOTAL
DATE	2/9/12	5/10/12			DEPTH
LOCATION					
ANT-MW- 1S	20.70	20.13			21.20'
ANT-MW- 2S	21.92	21.17			33.10'
ANT-MW- 3S	21.02	20.38			33.40'
ANT-MW- 4S	21.12	21.09			33.80'
ANT-MW- 5S	24.02	23.52			33.60'
ANT-MW- 6S	18.62	18.03			33.10'



D.T.W. CHART

COMBO- 3260

NOTE:

ALL MEASUREMENTS ARE MADE FROM THE NORTH SIDE AND TOP EDGE OF THE WELL CASING. THE TOP OF CASING WITH A NOTCH OR PERMENANT MARKINGS, WHICH EVER ONE CONDITION IS APPROPRIATE.

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

CORREIA FAMILY DAIRY
26380 W. FAHEY ROAD
GUSTINE, CA.
May 11, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COR-MW	1S	**DATE:**	5/11/2012

PROJECT NAME:	CORREIA FAMILY DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	26380 W. FAHEY ROAD	**SAMPLE TIME:**	15:10
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	7.52	FEET	**CALC. PURGE VOL.:**	1.73	GAL.
DEPTH OF WELL:	**(feet.100th's)**	18.10	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		10.58	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:00	0	0	7.52	0.5 GPM	7.20	3813	19.4	220	0.7	
15:03	1.73	1.5		"	7.13	3585	19.1	226	0.4	
15:06	3.45	3		"	7.11	3580	19.1	228	0.5	
15:10	5.18	4.5	8.70	"	7.08	3572	19.2	229	0.4	8
15:10	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	8.15'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**COR-MW 1D / DTW: 7.40'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COR-MW	2S	**DATE:**	5/11/2012

PROJECT NAME:	CORREIA FAMILY DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	26380 W. FAHEY ROAD	**SAMPLE TIME:**	14:55
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	7.79	FEET	**CALC. PURGE VOL.:**	1.52	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.10	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		9.31	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:45	0	0	7.79	0.5 GPM	7.33	1787	19.5	200	0.5	
14:48	1.52	1.5		"	7.32	1772	19.3	206	0.5	
14:53	3.04	3		"	7.18	1775	17.9	210	0.7	
14:55	4.56	4.5	7.80	"	7.20	1774	17.9	210	0.8	10
14:55	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	7.80'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**COR-MW 2D / DTW: 7.55'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COR-MW	3S	**DATE:**	5/11/2012

PROJECT NAME:	CORREIA FAMILY DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	26380 W. FAHEY ROAD	**SAMPLE TIME:**	14:40
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	8.63	FEET	**CALC. PURGE VOL.:**	1.48	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.70	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		9.07	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:30	0	0	8.63	0.5 GPM	7.50	1653	20.3	196	2.2	
14:33	1.48	1.5		"	7.39	1642	19.4	197	1.0	
14:36	2.96	3		"	7.35	1630	18.5	196	0.5.	
14:40	4.44	4.5	8.81	"	7.32	1622	18.4	194	0.4	26
14:40	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	8.71'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**COR-MW 3D / DTW: 8.45'**		
	DUPLICATE #4 TAKEN HERE		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COR-MW	4S	**DATE:**	5/11/2012

PROJECT NAME:	CORREIA FAMILY DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	26380 W. FAHEY ROAD	**SAMPLE TIME:**	15:50
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	7.65	FEET	**CALC. PURGE VOL.:**	BROWN	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.20	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		9.55	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:40	0	0	7.65	0.5 GPM	7.30	2055	20.0	203	0.6	
15:43	BROWN	1.5		"	7.30	2062	20.2	204	0.6	
15:47	#VALUE!	3		"	7.29	2071	19.8	205	0.6	
15:50	#VALUE!	4.5	7.92	"	7.28	2088	19.6	208	0.6	98
15:50	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	5.62'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**COR-MW 4D / DTW: 7.55'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COR-MW	5S	**DATE:**	5/11/2012

PROJECT NAME:	CORREIA FAMILY DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	26380 W. FAHEY ROAD	**SAMPLE TIME:**	15:34
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	7.84	FEET	**CALC. PURGE VOL.:**	1.63	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.80	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		9.96	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:22	0	0	7.84	0.5 GPM	7.47	1987	20.2	209	1.0	
15:26	1.63	1.5		"	7.35	1908	20.6	218	0.8	
15:30	3.25	3		"	7.30	1880	20.6	207	0.9	
15:34	4.88	4.5	10.25	"	7.30	1878	20.5	204	0.9	370
15:34	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	8.28'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**COR-MW 5D / DTW: 7.70'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT, INC.

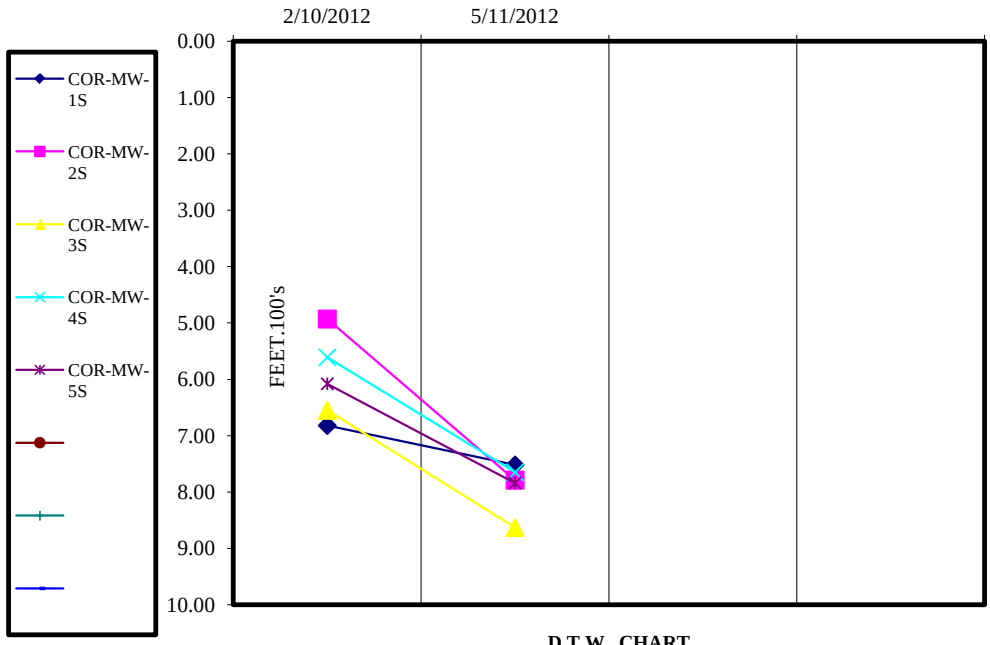
(209) 847-8757 (OFFICE) * (209) 847-7744 (FAX) * deltech1@pacbell.net (Email)

CORREIA FAMILY DAIRY
GUSTINE, CA.

MONITORING WELL FIELD SUMMARY LOG 2012

DEPTH TO WATER MEASUREMENTS

	QTR. 1	QTR. 2	QTR. 3	QTR. 4	TOTAL
DATE	2/10/12	5/11/12			DEPTH
LOCATION					
COR-MW- 1S	6.82	7.52			18.10'
COR-MW- 2S	4.93	7.79			17.10'
COR-MW- 3S	6.55	8.63			17.70'
COR-MW- 4S	5.61	7.65			17.20'
COR-MW- 5S	6.08	7.84			17.80'



D.T.W. CHART

COMBO- 3260

NOTE:

ALL MEASUREMENTS ARE MADE FROM THE NORTH SIDE AND TOP EDGE OF THE WELL CASING. THE TOP OF CASING WITH A NOTCH OR PERMENANT MARKINGS, WHICH EVER ONE CONDITION IS APPROPRIATE.

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

FRANK J. GOMES DAIRY #2
890 KNIEBES ROAD
GUSTINE, CA.
May 10, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG2-MW 1S **DATE:** 5/10/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #2	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	890 KNIEBES ROAD	**SAMPLE TIME:**	14:04
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	4.42	FEET	**CALC. PURGE VOL.:**	2.87	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.00	FEET	**TOTAL VOLUME PURGED:**	9.0	GAL.
STANDING WATER COLUMN:		17.58	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:52	0	0	4.42	0.5 GPM	7.19	5440	20.9	219	1.5	
13:55	2.87	3		"	7.09	5443	19.9	205	1.6	
13:58	5.74	6		"	7.08	5514	19.6	197	1.7	
14:01	8.61	9	11.67	"	7.08	5538	19.5	198	1.9	150
14:04	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	6.62'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG2-MW 1D / DTW: 4.40'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG2-MW 2S **DATE:** 5/10/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #2	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	890 KNIEBES ROAD	**SAMPLE TIME:**	12:45
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	8.13	FEET	**CALC. PURGE VOL.:**	2.48	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.30	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		15.17	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:34	0	0	8.13	0.5 GPM	7.06	3690	21.3	226	2.4	
12:37	2.48	2.5		"	7.16	3769	19.9	225	1.3	
12:40	4.95	5		"	7.14	3781	18.8	223	1.2	
12:43	7.43	7.5	13.55	"	7.18	3792	19.0	218	1.3	573
12:45	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	12.00'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG2-MW 2D / DTW: 8.02'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG2-MW	3S	**DATE:**	5/10/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #2	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	890 KNIEBES ROAD	**SAMPLE TIME:**	13:33
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	10.33	FEET	**CALC. PURGE VOL.:**	2.83	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.70	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		17.37	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:22	0	0	10.33	0.5 GPM	7.15	5729	22.5	235	1.3	
13:25	2.83	3		"	7.06	2749	21.1	233	1.6	
13:28	5.67	6		"	7.22	2737	21.3	227	1.5	
13:31	8.50	9	10.86	"	7.09	2736	21.0	227	1.6	4
13:33	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.52'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG2-MW 3D / DTW: 9.87'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG2-MW	4S	**DATE:**	5/10/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #2	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	890 KNIEBES ROAD	**SAMPLE TIME:**	14:25
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	10.80	FEET	**CALC. PURGE VOL.:**	2.97	GAL.
DEPTH OF WELL:	**(feet.100th's)**	29.00	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		18.20	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:14	0	0	10.80	0.5 GPM	7.23	4623	20.9	216	1.9	
14:17	2.97	3		"	7.22	4574	20.2	216	1.7	
14:20	5.94	6		"	7.32	4534	20.2	213	1.7	
14:23	8.91	9	11.90	"	7.31	4512	20.2	213	1.8	51
14:25	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.41'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG2-MW 4D / DTW: 10.34'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG2-MW 5S **DATE:** 5/10/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #2	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	890 KNIEBES ROAD	**SAMPLE TIME:**	14:49
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	6.30	FEET	**CALC. PURGE VOL.:**	2.37	GAL.
DEPTH OF WELL:	**(feet.100th's)**	20.80	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		14.50	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:38	0	0	6.30	0.5 GPM	7.16	4298	20.1	217	1.5	
14:41	2.37	2.5		"	7.12	4280	18.9	218	1.6	
14:44	4.73	5		"	7.13	4268	18.8	220	2.0	
14:47	7.10	7.5	6.35	"	7.14	4265	18.9	222	1.8	11
14:49	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	6.31'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG2-MW 5D / DTW: 6.10'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

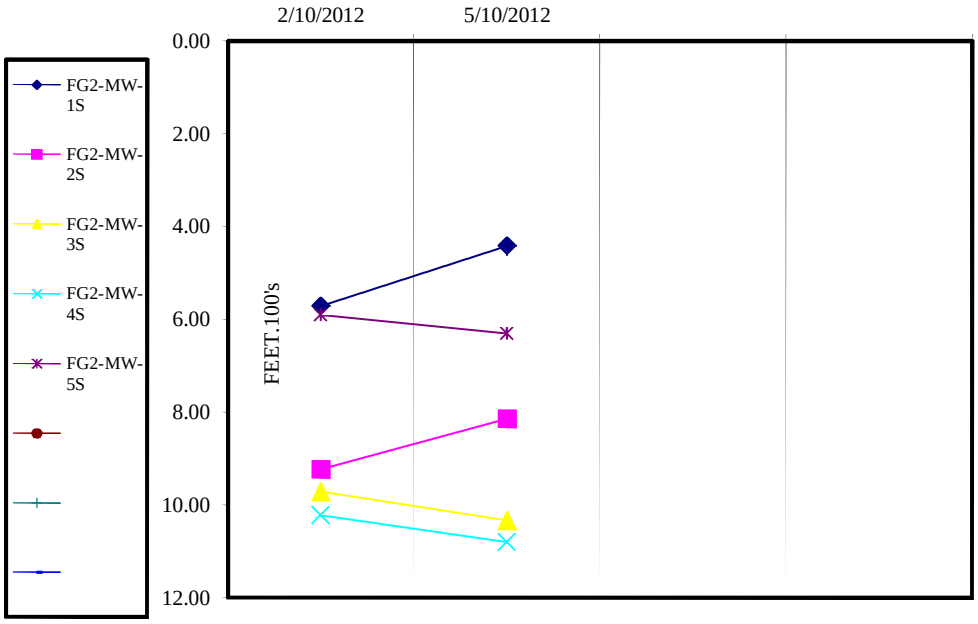
DEL-TECH GEOTECHNICAL SUPPORT, INC.

(209) 847-8757 (OFFICE) * (209) 847-7744 (FAX) * deltech1@pacbell.net (Email)

FRANK J. GOMES DAIRY #2
GUSTINE, CA.

MONITORING WELL FIELD SUMMARY LOG 2012
DEPTH TO WATER MEASUREMENTS

	QTR. 1	QTR. 2	QTR. 3	QTR. 4	TOTAL
DATE	2/10/12	5/10/12			DEPTH
LOCATION					
FG2-MW- 1S	5.71	4.42			22.00'
FG2-MW- 2S	9.22	8.13			23.30'
FG2-MW- 3S	9.70	10.33			27.70'
FG2-MW- 4S	10.22	10.80			29.00'
FG2-MW- 5S	5.91	6.30			20.80'



D.T.W. CHART

COMBO- 3260

NOTE:
ALL MEASUREMENTS ARE MADE FROM THE NORTH SIDE AND TOP EDGE OF THE WELL CASING. THE TOP OF CASING WITH A NOTCH OR PERMENANT MARKINGS, WHICH EVER ONE CONDITION IS APPROPRIATE.

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

GODINHO DAIRY
12710 S. WILSON ROAD
LOS BANOS, CA.
May 9, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / GOD-MW 1S **DATE:** 5/9/2012

PROJECT NAME:	GODINHO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	12710 S. WILSON ROAD	**SAMPLE TIME:**	17:38
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	7.70	FEET	**CALC. PURGE VOL.:**	2.55	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.30	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		15.60	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
17:23	0	0	7.70	0.5 GPM	7.58	2924	19.9	56	1.8	
17:28	2.55	2.5		"	7.37	3057	19.6	69	1.9	
17:33	5.09	5		"	7.58	3037	19.6	57	1.9	
17:38	7.64	7.5	7.77	"	7.40	3025	19.6	63	1.8	15
17:38	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	7.70'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**GOD-MW 1D / DTW: 7.60'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / GOD-MW	2S	**DATE:**	5/9/2012

PROJECT NAME:	GODINHO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	12710 S. WILSON ROAD	**SAMPLE TIME:**	16:50
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	10.80	FEET	**CALC. PURGE VOL.:**	2.73	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.50	FEET	**TOTAL VOLUME PURGED:**	9.0	GAL.
STANDING WATER COLUMN:		16.70	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
16:32	0	0	10.80	0.5 GPM	6.97	2427	22.3	130	2.0	
16:38	2.73	3		"	7.50	3062	20.7	120	2.1	
16:44	5.45	6		"	7.55	3162	20.7	115	2.0	
16:50	8.18	9	10.92	"	7.59	3160	20.6	111	2.0	5
16:50	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.88'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**GOD-MW 2D / DTW: 10.71'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / GOD-MW	3S	**DATE:**	5/9/2012

PROJECT NAME:	GODINHO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	12710 S. WILSON ROAD	**SAMPLE TIME:**	17:12
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	11.35	FEET	**CALC. PURGE VOL.:**	1.85	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.70	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		11.35	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
17:00	0	0	11.35	0.5 GPM	7.61	1543	20.1	110	1.9	
17:04	1.85	2		"	7.45	1623	19.7	115	2.0	
17:08	3.70	4		"	7.35	1625	19.7	117	2.1	
17:12	5.56	6	11.41	"	7.32	1620	19.6	122	2.1	5
17:12	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.39'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**GOD-MW 3D / DTW: 11.22'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / GOD-MW	4S	**DATE:**	5/9/2012

PROJECT NAME:	GODINHO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	12710 S. WILSON ROAD	**SAMPLE TIME:**	17:56
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	11.14	FEET	**CALC. PURGE VOL.:**	1.97	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.20	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		12.06	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
17:44	0	0	11.14	0.5 GPM	7.74	3169	20.2	77	1.9	
17:48	1.97	2		"	7.61	3247	20.6	85	1.4	
17:52	3.94	4		"	7.56	3229	20.6	88	1.8	
17:56	5.90	6	11.17	"	7.56	3244	20.2	89	1.6	7
17:56	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.16'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**GOD-MW 4D / DTW: 10.79'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / GOD-MW	5S	**DATE:**	5/9/2012

PROJECT NAME:	GODINHO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	12710 S. WILSON ROAD	**SAMPLE TIME:**	19:02
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	8.57	FEET	**CALC. PURGE VOL.:**	3.07	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.40	FEET	**TOTAL VOLUME PURGED:**	9.0	GAL.
STANDING WATER COLUMN:		18.83	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
18:44	0	0	8.57	0.5 GPM	7.67	1802	19.8	117	1.6	
18:50	3.07	3		"	7.45	1987	19.2	124	1.7	
18:56	6.15	6		"	7.44	2008	19.2	121	1.8	
19:02	9.22	9	8.65	"	7.41	2012	19.2	123	1.8	7
19:02	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	8.61'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**GOD-MW 5D / DTW: 8.25'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / GOD-MW	6S	**DATE:**	5/9/2012

PROJECT NAME:	GODINHO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	12710 S. WILSON ROAD	**SAMPLE TIME:**	18:22
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	9.10	FEET	**CALC. PURGE VOL.:**	2.55	GAL.
DEPTH OF WELL:	**(feet.100th's)**	24.70	FEET	**TOTAL VOLUME PURGED:**	8	GAL.
STANDING WATER COLUMN:		15.60	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
18:08	0	0	9.10	0.5 GPM	7.53	3921	20.1	101	1.8	
18:12	2.55	2.5		"	7.42	3917	20.0	104	1.9	
18:17	5.09	5		"	7.43	3912	20.0	106	1.9	
18:22	7.64	7.5	9.80	"	7.40	3910	20.0	106	2.0	103
18:22	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.34'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**GOD-MW 6D / DTW: 8.88'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / GOD-MW	7S	**DATE:**	5/9/2012

PROJECT NAME:	GODINHO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	12710 S. WILSON ROAD	**SAMPLE TIME:**	18:48
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	9.40	FEET	**CALC. PURGE VOL.:**	2.58	GAL.
DEPTH OF WELL:	**(feet.100th's)**	25.20	FEET	**TOTAL VOLUME PURGED:**	8	GAL.
STANDING WATER COLUMN:		15.80	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
18:33	0	0	9.40	0.5 GPM	7.51	4246	20.0	106	2.2	
18:38	2.58	2.5		"	7.55	4236	20.0	105	2.0	
18:43	5.16	5		"	7.63	4231	19.9	108	1.8	
18:48	7.74	7.5	9.47	"	7.66	4230	19.9	109	1.7	83
18:48	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	6.22'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**GOD-MW 7D / DTW: 9.25'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

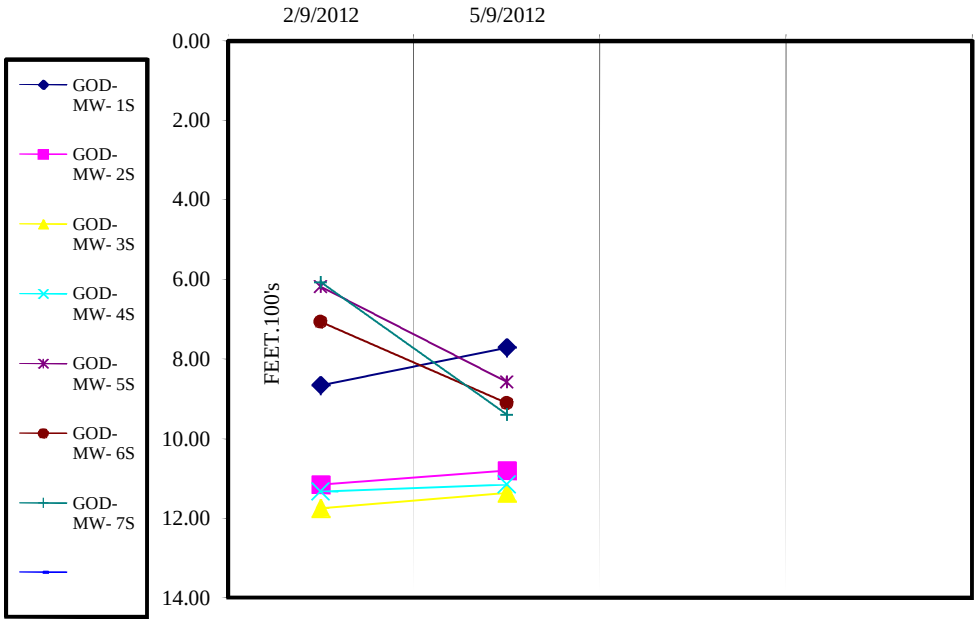
DEL-TECH GEOTECHNICAL SUPPORT, INC.

(209) 847-8757 (OFFICE) * (209) 847-7744 (FAX) * deltech1@pacbell.net (Email)

GODINHO DAIRY
LOS BANOS, CA.

MONITORING WELL FIELD SUMMARY LOG 2012
DEPTH TO WATER MEASUREMENTS

	QTR. 1	QTR. 2	QTR. 3	QTR. 4	TOTAL
DATE	2/9/12	5/9/12			DEPTH
LOCATION					
GOD-MW- 1S	8.66	7.70			23.30'
GOD-MW- 2S	11.14	10.80			27.50'
GOD-MW- 3S	11.74	11.35			22.70'
GOD-MW- 4S	11.32	11.14			23.20'
GOD-MW- 5S	6.18	8.57			27.40'
GOD-MW- 6S	7.07	9.10			24.70'
GOD-MW- 7S	6.06	9.40			25.20'



D.T.W. CHART

COMBO- 3260

NOTE:
ALL MEASUREMENTS ARE MADE FROM THE NORTH SIDE AND TOP EDGE OF THE WELL CASING. THE TOP OF CASING WITH A NOTCH OR PERMENANT MARKINGS, WHICH EVER ONE CONDITION IS APPROPRIATE.

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

JOHN MACHADO DAIRY
22495 W. CHINA CAMP ROAD
LOS BANOS, CA.
May 11, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MAC-MW 1S **DATE:** 5/11/2012

PROJECT NAME:	JOHN MACHADO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22495 W. CHINA CAMP ROAD	**SAMPLE TIME:**	11:55
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	6.04	FEET	**CALC. PURGE VOL.:**	1.89	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.60	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		11.56	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:48	0	0	6.04	0.5 GPM	7.40	2520	20.1	195	0.7	
11:50	1.89	2		"	7.34	2525	19.9	207	1.2	
11:52	3.77	4		"	7.31	2515	19.1	209	0.7	
11:55	5.66	6	7.90	"	7.32	2509	19.2	209	0.5	18
11:55	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	6.69'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MAC-MW 1D / DTW: 5.95'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MAC-MW	2S	**DATE:**	5/11/2012

PROJECT NAME:	JOHN MACHADO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22495 W. CHINA CAMP ROAD	**SAMPLE TIME:**	12:12
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	5.32	FEET	**CALC. PURGE VOL.:**	2.02	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.70	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		12.38	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:00	0	0	5.32	0.5 GPM	7.10	2950	21.0	204	1.0	
12:04	2.02	2		"	7.07	2967	20.5	220	0.5	
12:08	4.04	4		"	7.04	2976	20.4	225	0.6	
12:12	6.06	6	5.45	"	7.05	2976	20.2	222	0.8	12
12:12	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	5.41'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MAC-MW 2D / DTW: 5.10'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MAC-MW	3S	**DATE:**	5/11/2012

PROJECT NAME:	JOHN MACHADO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22495 W. CHINA CAMP ROAD	**SAMPLE TIME:**	10:47
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	5.00	FEET	**CALC. PURGE VOL.:**	3.75	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.00	FEET	**TOTAL VOLUME PURGED:**	12	GAL.
STANDING WATER COLUMN:		23.00	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:26	0	0	5.00	0.5 GPM	6.88	11,250	19.7	267	1.0	
10:33	3.75	4		"	7.11	11,750	18.2	254	0.8	
10:40	7.51	8		"	7.10	12,010	18.3	231	0.8	
10:47	11.26	12	9.28	"	7.10	12,150	18.5	225	1.0	480
10:47	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	7.56'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MAC-MW 3D / DTW: 4.73'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MAC-MW	4S	**DATE:**	5/11/2012

PROJECT NAME:	JOHN MACHADO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22495 W. CHINA CAMP ROAD	**SAMPLE TIME:**	11:14
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	5.65	FEET	**CALC. PURGE VOL.:**	1.88	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.20	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		11.55	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:50	0	0	5.65	0.5 GPM	7.34	5077	20.3	213	0.6	
10:58	1.88	2		"	7.30	4642	19.9	198	0.7	
11:06	3.77	4		"	7.30	4558	19.6	191	0.6	
11:14	5.65	6	5.95	"	7.27	4532	19.7	191	0.5	17
11:14	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	5.75'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MAC-MW 4D / DTW: 5.58'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MAC-MW	5S	**DATE:**	5/11/2012

PROJECT NAME:	JOHN MACHADO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22495 W. CHINA CAMP ROAD	**SAMPLE TIME:**	11:44
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	4.80	FEET	**CALC. PURGE VOL.:**	3.64	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.10	FEET	**TOTAL VOLUME PURGED:**	12.0	GAL.
STANDING WATER COLUMN:		22.30	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:20	0	0	4.80	0.5 GPM	7.35	4504	19.6	179	0.9	
11:28	3.64	4		"	7.55	4388	19.7	181	0.4	
11:36	7.28	8		"	7.57	4310	19.7	183	0.4	
11:44	10.92	12	5.12	"	7.57	4297	19.7	180	0.5	26
11:44	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	4.96'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MAC-MW 5D / DTW: 4.60'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT, INC.

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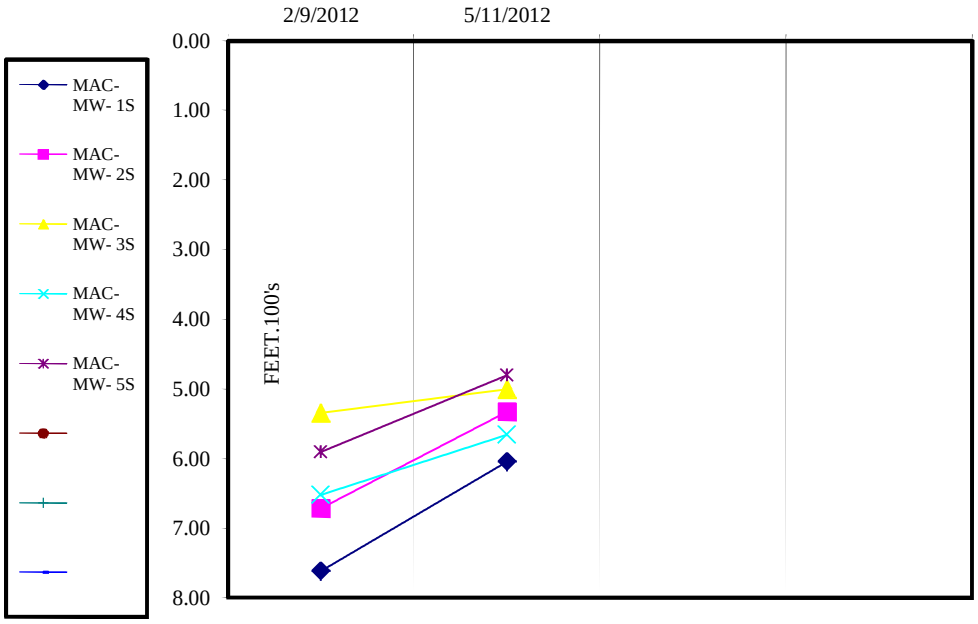
JOHN MACHADO DAIRY
LOS BANOS, CA.

MONITORING WELL FIELD SUMMARY LOG 2012
DEPTH TO WATER MEASUREMENTS

	QTR. 1	QTR. 2	QTR. 3	QTR. 4	TOTAL
DATE	2/9/12	5/11/12			DEPTH
LOCATION					
MAC-MW- 1S	7.61	6.04			17.60'
MAC-MW- 2S	6.71	5.32			17.70'
MAC-MW- 3S	5.34	5.00			28.00'
MAC-MW- 4S	6.52	5.65			27.50'
MAC-MW- 5S	5.90	4.80			27.10'



D.T.W. CHART

COMBO- 3260

NOTE:
ALL MEASUREMENTS ARE MADE FROM THE NORTH SIDE AND TOP EDGE OF THE WELL CASING. THE TOP OF CASING WITH A NOTCH OR PERMENANT MARKINGS, WHICH EVER ONE CONDITION IS APPROPRIATE.

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

JOSE NUNES DAIRY
22484 W. CHINA CAMP ROAD
LOS BANOS, CA.
May 11, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / NUN-MW 1S **DATE:** 5/11/2012

PROJECT NAME:	JOSE NUNES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22484 W. CHINA CAMP ROAD	**SAMPLE TIME:**	13:15
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	7.65	FEET	**CALC. PURGE VOL.:**	1.60	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.46	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		9.81	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:00	0	0	7.65	0.5 GPM	7.30	6895	20.5	201	0.9	
13:05	1.60	1.5		"	7.27	7185	19.9	200	0.5	
13:10	3.20	3		"	7.27	7212	19.9	201	0.5	
13:15	4.80	4.5	8.70	"	7.25	7200	20.0	201	0.7	22
13:15	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	8.15'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**NUN-MW 1D / DTW: 7.35'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / NUN-MW	2S	**DATE:**	5/11/2012

PROJECT NAME:	JOSE NUNES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22484 W. CHINA CAMP ROAD	**SAMPLE TIME:**	13:47
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	7.97	FEET	**CALC. PURGE VOL.:**	3.26	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.95	FEET	**TOTAL VOLUME PURGED:**	10.5	GAL.
STANDING WATER COLUMN:		19.98	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:26	0	0	7.97	0.5 GPM	7.34	4552	18.6	173	0.8	
13:33	3.26	3.5		"	7.38	4145	18.4	184	0.7	
13:40	6.52	7		"	7.38	3995	18.4	190	0.7	
13:47	9.78	10.5	11.50	"	7.30	3987	18.6	193	0.7	22
13:47	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.22'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**NUN-MW 2D / DTW: 7.75'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / NUN-MW	3S	**DATE:**	5/11/2012

PROJECT NAME:	JOSE NUNES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22484 W. CHINA CAMP ROAD	**SAMPLE TIME:**	12:53
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	5.92	FEET	**CALC. PURGE VOL.:**	1.51	GAL.
DEPTH OF WELL:	**(feet.100th's)**	15.18	FEET	**TOTAL VOLUME PURGED:**	4.5	GAL.
STANDING WATER COLUMN:		9.26	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:44	0	0	5.92	0.5 GPM	7.01	7474	21.9	207	0.9	
12:47	1.51	1.5		"	7.09	7501	19.9	208	0.7	
12:50	3.02	3		"	7.09	7526	19.7	208	0.7	
12:53	4.53	4.5	11.86	"	7.11	7533	19.7	210	0.8	25
12:53	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.56'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**NUN-MW 3D / DTW: 5.89'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / NUN-MW	4S	**DATE:**	5/11/2012

PROJECT NAME:	JOSE NUNES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22484 W. CHINA CAMP ROAD	**SAMPLE TIME:**	12:40
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	7.12	FEET	**CALC. PURGE VOL.:**	1.30	GAL.
DEPTH OF WELL:	**(feet.100th's)**	15.06	FEET	**TOTAL VOLUME PURGED:**	4.5	GAL.
STANDING WATER COLUMN:		7.94	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:30	0	0	7.12	0.5 GPM	7.13	9785	22.1	201	0.4	
12:33	1.30	1.5		"	7.10	11,730	19.7	208	0.4	
12:36	2.59	3		"	7.08	11,940	19.7	208	0.5	
12:40	3.89	4.5	12.10	"	7.07	12,100	19.6	210	0.7	305
12:40	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.19'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**NUN-MW 4D / DTW: 7.05'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

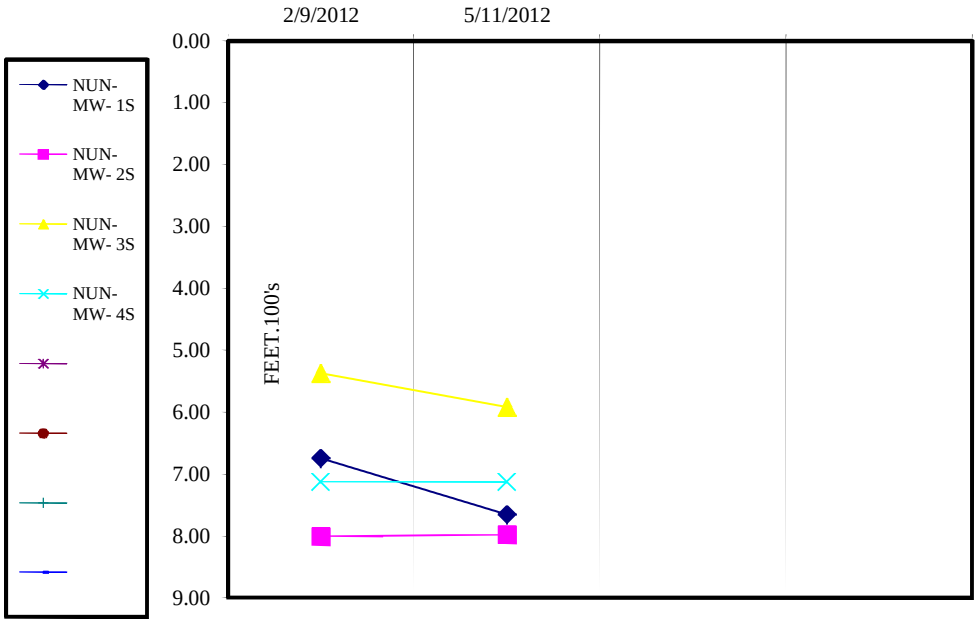
DEL-TECH GEOTECHNICAL SUPPORT, INC.

(209) 847-8757 (OFFICE) * (209) 847-7744 (FAX) * deltech1@pacbell.net (Email)

JOSE NUNES DAIRY
LOS BANOS, CA.

MONITORING WELL FIELD SUMMARY LOG 2012
DEPTH TO WATER MEASUREMENTS

	QTR. 1	QTR. 2	QTR. 3	QTR. 4	TOTAL
DATE	2/9/12	5/11/12			DEPTH
LOCATION					
NUN-MW- 1S	6.74	7.65			17.46'
NUN-MW- 2S	8.00	7.97			27.95'
NUN-MW- 3S	5.37	5.92			15.18'
NUN-MW- 4S	7.12	7.12			15.06'



D.T.W. CHART

COMBO- 3260

NOTE:
ALL MEASUREMENTS ARE MADE FROM THE NORTH SIDE AND TOP EDGE OF THE WELL CASING. THE TOP OF CASING WITH A NOTCH OR PERMENANT MARKINGS, WHICH EVER ONE CONDITION IS APPROPRIATE.

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

MOONSHINE DAIRY
22922 KILBURN ROAD
CROWS LANDING, CA
May 11, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MOO-MW 1 **DATE:** 5/11/2012

PROJECT NAME:	MOONSHINE DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22922 KILBURN ROAD	**SAMPLE TIME:**	11:25
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	4" /	0.6528
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	14.70	FEET	**CALC. PURGE VOL.:**	5.48	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.10	FEET	**TOTAL VOLUME PURGED:**	16	GAL.
STANDING WATER COLUMN:		8.40	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:16	0	0	15.00	1.5 GPM	7.16	2896	20.6	180	1.7	
11:19	5.48	5.5		"	7.01	2900	19.5	172	1.0	
11:22	10.97	11		"	7.00	2912	19.2	161	0.9	
11:25	16.45	16.5	15.05	"	7.58	2900	20.2	129	0.8	5
11:25	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	13.81'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**INSTALLED DEDICATED TUBING.**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MOO-MW	2	**DATE:**	5/11/2012

PROJECT NAME:	MOONSHINE DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22922 KILBURN ROAD	**SAMPLE TIME:**	11:44
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	4" /	0.6528
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	POND
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	20.28	FEET	**CALC. PURGE VOL.:**	5.56	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.80	FEET	**TOTAL VOLUME PURGED:**	17	GAL.
STANDING WATER COLUMN:		8.52	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:35	0	0	20.63	1.5 GPM	7.02	3609	22.2	177	1.7	
11:38	5.56	5.5		"	7.01	3285	20.5	179	0.9	
11:41	11.12	11		"	7.02	3225	21.0	173	0.9	
11:44	16.69	16.5	25.44	"	7.01	3220	20.6	174	1.3	29
11:44	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	23.23'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**INSTALLED DEDICATED TUBING.**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MOO-MW	3	**DATE:**	5/11/2012

PROJECT NAME:	MOONSHINE DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22922 KILBURN ROAD	**SAMPLE TIME:**	12:10
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	4" /	0.6528
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	13.02	FEET	**CALC. PURGE VOL.:**	9.78	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.00	FEET	**TOTAL VOLUME PURGED:**	30.0	GAL.
STANDING WATER COLUMN:		14.98	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:55	0	0	13.58	2.0 GPM	7.10	2322	20.9	168	1.9	
12:00	9.78	10		"	7.06	2315	19.6	164	1.0	
12:05	19.56	20		"	7.02	2326	19.8	163	1.0	
12:10	29.34	30	13.83	"	7.01	2331	19.8	159	1.0	8
12:10	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	13.62'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**INSTALLED DEDICATED TUBING.**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MOO-MW	4	**DATE:**	5/11/2012

PROJECT NAME:	MOONSHINE DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22922 KILBURN ROAD	**SAMPLE TIME:**	12:45
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	4" /	0.6528
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	12.55	FEET	**CALC. PURGE VOL.:**	9.24	GAL.
DEPTH OF WELL:	**(feet.100th's)**	26.70	FEET	**TOTAL VOLUME PURGED:**	27	GAL.
STANDING WATER COLUMN:		14.15	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:36	0	0	13.11	3.0 GPM	7.16	2230	22.0	165	1.8	
12:39	9.24	9		"	7.10	2225	20.5	168	1.0	
12:42	18.47	18		"	7.15	2231	20.6	168	0.9	
12:45	27.71	27	13.45	"	7.17	2236	21.0	168	0.9	9
12:45	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	13.33'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**INSTALLED DEDICATED TUBING.**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MOO-MW	5S	**DATE:**	5/11/2012

PROJECT NAME:	MOONSHINE DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22922 KILBURN ROAD	**SAMPLE TIME:**	12:28
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	13.48	FEET	**CALC. PURGE VOL.:**	3.10	GAL.
DEPTH OF WELL:	**(feet.100th's)**	32.50	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		19.02	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:19	0	0	14.35	1.0 GPM	7.14	2220	20.2	155	1.1	
12:22	3.10	3		"	7.07	2220	20.0	162	0.65	
12:25	6.21	6		"	7.05	2215	19.7	159	0.7	
12:28	9.31	9	14.44	"	7.13	2216	20.0	156	0.7	54
12:28	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	14.36'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MOO-MW 5D / DTW: 13.50'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MOO-MW	6S	**DATE:**	5/11/2012

PROJECT NAME:	MOONSHINE DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22922 KILBURN ROAD	**SAMPLE TIME:**	11:10
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	22.73	FEET	**CALC. PURGE VOL.:**	1.77	GAL.
DEPTH OF WELL:	**(feet.100th's)**	33.60	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		10.87	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:58	0	0	23.35	0.5 GPM	7.00	2515	21.1	169	1.6	
11:02	1.77	2		"	6.85	2233	20.4	173	0.9	
11:06	3.55	4		"	6.95	2370	20.6	166	0.8	
11:10	5.32	6	26.88	"	6.99	2400	20.7	173	0.7	1000+
11:10	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	25.63'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MOO-MW 6D / DTW: 22.98'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MOO-MW	7S	**DATE:**	5/11/2012

PROJECT NAME:	MOONSHINE DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22922 KILBURN ROAD	**SAMPLE TIME:**	10:50
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	19.52	FEET	**CALC. PURGE VOL.:**	1.43	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.30	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		8.78	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:42	0	0	20.60	0.5 GPM	7.03	2695	20.2	166	2.7	
10:44	1.43	1.5		"	6.94	3018	2.1	165	1.9	
10:46	2.87	3		"	7.06	3015	19.9	158	1.8	
10:48	4.30	4.5		"	7.13	3023	19.8	157	1.9	
10:50	5.73	6	22.55	"	7.10	3042	19.6	155	1.8	1000+
10:50	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	22.00'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MOO-MW 7D / DTW: 19.48'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MOO-MW	8S	**DATE:**	5/11/2012

PROJECT NAME:	MOONSHINE DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22922 KILBURN ROAD	**SAMPLE TIME:**	10:35
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:		TILL ANGERMAN		**MONUMENT:**	POST	
SAMPLER:		DEL-TECH / ASHLEY LIGHT		**WELL CASING MATERIAL :**	PVC	
SIGNED:		Ashley Light		**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:		GROUNDWATER		**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	20.00	FEET	**CALC. PURGE VOL.:**	1.11	GAL.
DEPTH OF WELL:	**(feet.100th's)**	26.80	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		6.80	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:29	0	0	20.70	0.5 GPM	7.60	2062	20.5	125	2.1	
10:31	1.11	1		"	7.09	2072	19.4	138	2.1	
10:33	2.22	2		"	7.05	1952	19.5	139	2.1	
10:35	3.33	3	22.10	"	7.07	1810	19.7	141	2.1	1000+
10:35	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	21.66'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MOO-MW 8D / DTW: 19.83'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

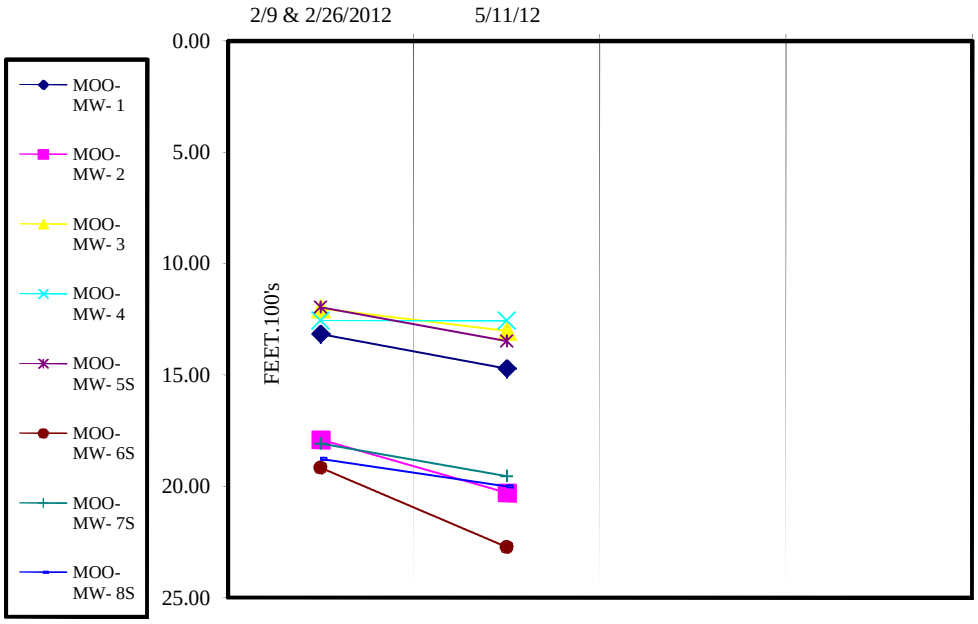
DEL-TECH GEOTECHNICAL SUPPORT, INC.

(209) 847-8757 (OFFICE) * (209) 847-7744 (FAX) * deltech1@pacbell.net (Email)

MOONSHINE DAIRY
CROWS LANDING, CA.

MONITORING WELL FIELD SUMMARY LOG 2012
DEPTH TO WATER MEASUREMENTS

	QTR. 1	QTR. 2	QTR. 3	QTR. 4	TOTAL
DATE	2/9 & 2/26/2012	5/11/12			DEPTH
LOCATION					
MOO-MW- 1	13.15	14.70			23.10'
MOO-MW- 2	17.90	20.28			28.80'
MOO-MW- 3	12.02	13.02			28.00'
MOO-MW- 4	12.57	12.55			26.70'
MOO-MW- 5S	11.96	13.48			32.50'
MOO-MW- 6S	19.17	22.73			33.60'
MOO-MW- 7S	18.06	19.52			28.30'
MOO-MW- 8S	18.75	20.00			26.80'



D.T.W. CHART

COMBO- 3260

NOTE:
ALL MEASUREMENTS ARE MADE FROM THE NORTH SIDE AND TOP EDGE OF THE WELL CASING. THE TOP OF CASING WITH A NOTCH OR PERMENANT MARKINGS, WHICH EVER ONE CONDITION IS APPROPRIATE.

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

TONY L. LOPES DAIRY LP
27500 BUNKER ROAD
GUSTINE, CA.
May 10, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / TON-MW	1S	**DATE:**	5/10/2012

PROJECT NAME:	TONY L. LOPES DAIRY LP	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	27500 BUNKER ROAD	**SAMPLE TIME:**	16:03
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	7.84	FEET	**CALC. PURGE VOL.:**	2.62	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.90	FEET	**TOTAL VOLUME PURGED:**	9.0	GAL.
STANDING WATER COLUMN:		16.06	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:52	0	0	7.84	0.5 GPM	7.07	3981	21.4	222	1.7	
15:55	2.62	3		"	6.95	4027	19.9	222	1.9	
15:58	5.24	6		"	6.97	4029	19.9	221	1.7	
16:01	7.86	9	8.00	"	6.99	4027	19.8	219	1.8	7
16:03	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	7.91'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**TON-MW 1D / DTW: 7.73'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPTONE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / TON-MW	2S	**DATE:**	5/10/2012

PROJECT NAME:	TONY L. LOPES DAIRY LP	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	27500 BUNKER ROAD	**SAMPLE TIME:**	17:34
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	6.56	FEET	**CALC. PURGE VOL.:**	2.75	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.40	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		16.84	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
17:26	0	0	6.56	0.5 GPM	7.11	4961	22.1	211	1.9	
17:28	2.75	3		"	7.10	4919	20.4	215	1.9	
17:30	5.50	6		"	7.10	4910	19.8	216	1.9	
17:32	8.24	9	6.74	"	7.09	4890	19.7	217	1.8	3
17:34	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	6.61'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**TON-MW 2D / DTW: 6.40'**		
	DUPLICATE # 2 TAKEN HERE.		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPTONE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / TON-MW	3S	**DATE:**	5/10/2012

PROJECT NAME:	TONY L. LOPES DAIRY LP	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	27500 BUNKER ROAD	**SAMPLE TIME:**	16:43
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	10.77	FEET	**CALC. PURGE VOL.:**	2.08	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.50	FEET	**TOTAL VOLUME PURGED:**	6.0	GAL.
STANDING WATER COLUMN:		12.73	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
16:35	0	0	10.77	0.5 GPM	7.25	2994	19.7	206	1.2	
16:37	2.08	2		"	7.16	2964	19.1	210	1.7	
16:39	4.16	4		"	7.18	2963	19.3	212	1.7	
16:41	6.23	6	11.12	"	7.13	2912	19.4	213	1.8	28
16:43	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.89'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**TON-MW 3D / DTW: 10.69'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPTONE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / TON-MW	4S	**DATE:**	5/10/2012

PROJECT NAME:	TONY L. LOPES DAIRY LP	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	27500 BUNKER ROAD	**SAMPLE TIME:**	16:21
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	9.75	FEET	**CALC. PURGE VOL.:**	2.13	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.80	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		13.05	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
16:13	0	0	9.75	0.5 GPM	7.00	4094	21.2	190	1.8	
16:15	2.13	2		"	7.03	3989	20.5	197	1.3	
16:17	4.26	4		"	7.01	3941	20.2	201	1.3	
16:19	6.39	6	9.83	"	7.03	3928	20.3	204	1.4	18
16:21	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.80'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**TON-MW 4D / DTW: 9.45'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / TON-MW	5S	**DATE:**	5/10/2012

PROJECT NAME:	TONY L. LOPES DAIRY LP	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	27500 BUNKER ROAD	**SAMPLE TIME:**	17:02
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	9.60	FEET	**CALC. PURGE VOL.:**	2.15	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.80	FEET	**TOTAL VOLUME PURGED:**	6.0	GAL.
STANDING WATER COLUMN:		13.20	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
16:52	0	0	9.60	0.5 GPM	7.10	3453	20.6	215	1.5	
16:54	2.15	2		"	7.07	3437	20.2	217	1.5	
16:56	4.31	4		"	7.24	3402	21.2	213	1.8	
16:58	6.46	6	9.78	"	7.11	3394	20.9	215	1.7	38
17:02	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.71'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**TON-MW 5D / DTW: 9.50'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPTONE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / TON-MW	6S	**DATE:**	5/10/2012

PROJECT NAME:	TONY L. LOPES DAIRY LP	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	27500 BUNKER ROAD	**SAMPLE TIME:**	17:55
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	8.99	FEET	**CALC. PURGE VOL.:**	3.14	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.20	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		19.21	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
17:46	0	0	8.99	0.5 GPM	7.86	1934	19.5	260	1.9	
17:48	3.14	3		"	7.60	2177	18.6	261	1.8	
17:50	6.27	6		"	7.59	2343	18.8	253	1.7	
17:52	9.41	9	9.20	"	7.57	2476	18.5	253	1.8	15
17:55	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.12'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**TON-MW 6D / DTW: 8.53'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPTONE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / TON-MW	7S	**DATE:**	5/10/2012

PROJECT NAME:	TONY L. LOPES DAIRY LP	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	27500 BUNKER ROAD	**SAMPLE TIME:**	17:40
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	6.14	FEET	**CALC. PURGE VOL.:**	3.60	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.20	FEET	**TOTAL VOLUME PURGED:**	12	GAL.
STANDING WATER COLUMN:		22.06	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
17:25	0	0	6.14	0.5 GPM	8.11	1218	20.3	220	1.1	
17:29	3.60	4		"	8.01	1228	20.5	220	1.3	
17:33	7.20	8		"	7.99	1218	20.2	218	1.3	
17:37	10.80	12	6.95	"	7.97	1208	20.4	218	1.4	6
17:40	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	6.55'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**TON-MW 7D / DTW: 5.81'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPTONE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / TON-MW	8S	**DATE:**	5/10/2012

PROJECT NAME:	TONY L. LOPES DAIRY LP	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	27500 BUNKER ROAD	**SAMPLE TIME:**	17:19
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	10.14	FEET	**CALC. PURGE VOL.:**	2.87	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.70	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		17.56	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
17:08	0	0	10.14	0.5 GPM	7.14	6451	19.8	245	1.9	
17:11	2.87	3		"	7.11	6299	19.1	249	1.9	
17:15	5.73	6		"	7.14	6510	19.6	249	1.6	
17:17	8.60	9	12.80	"	7.29	6641	19.0	252	1.9	751
17:19	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.05'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**TON-MW 8D / DTW: 9.63'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPTONE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

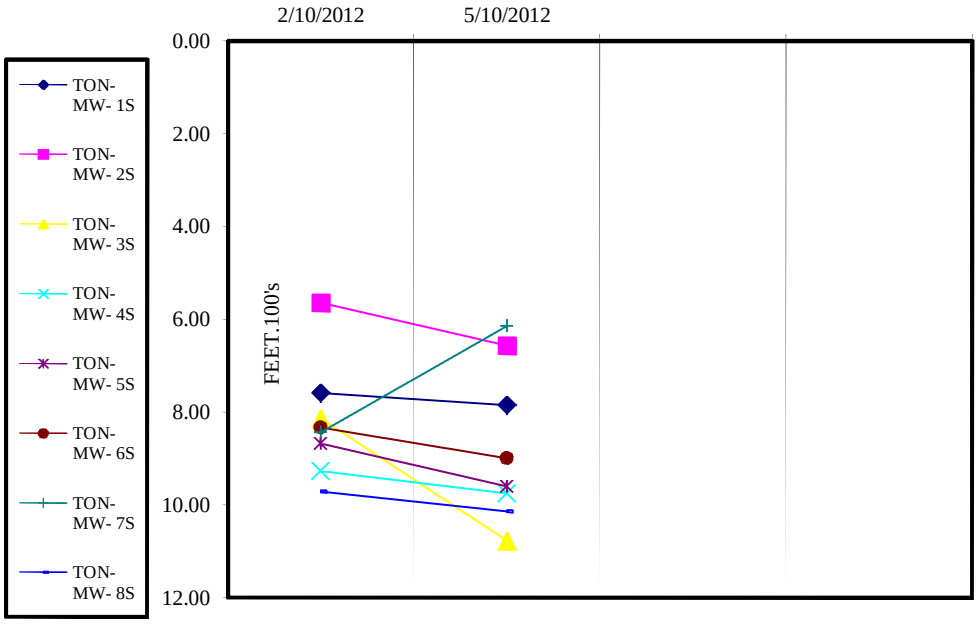
DEL-TECH GEOTECHNICAL SUPPORT, INC.

(209) 847-8757 (OFFICE) * (209) 847-7744 (FAX) * deltech1@pacbell.net (Email)

TONY L. LOPES DAIRY LP
GUSTINE, CA.

MONITORING WELL FIELD SUMMARY LOG 2012
DEPTH TO WATER MEASUREMENTS

	QTR. 1	QTR. 2	QTR. 3	QTR. 4	TOTAL
DATE	2/10/12	5/10/12			DEPTH
LOCATION					
TON-MW- 1S	7.58	7.84			23.90'
TON-MW- 2S	5.64	6.56			23.40'
TON-MW- 3S	8.13	10.77			23.50'
TON-MW- 4S	9.26	9.75			22.80'
TON-MW- 5S	8.67	9.60			22.80'
TON-MW- 6S	8.33	8.99			28.20'
TON-MW- 7S	8.42	6.14			28.20'
TON-MW- 8S	9.71	10.14			27.70'



D.T.W. CHART

COMBO- 3260

NOTE:
ALL MEASUREMENTS ARE MADE FROM THE NORTH SIDE AND TOP EDGE OF THE WELL CASING. THE TOP OF CASING WITH A NOTCH OR PERMENANT MARKINGS, WHICH EVER ONE CONDITION IS APPROPRIATE.

2012Q3 East Side

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

ALBERT MENDES DAIRY
1100 RUBLE ROAD
CROWS LANDING, CA.
August 14, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MEN-MW1S **DATE:** 8/14/2012

PROJECT NAME:	ALBERT MENDES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	1100 RUBLE ROAD	**SAMPLE TIME:**	8:54
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	7.36	FEET	**CALC. PURGE VOL.:**	1.69	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.70	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		10.34	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
8:46	0	0	10.01	1.0 GPM	6.70	5653	21.9	265	1.3	
8:48	1.69	2		"	6.73	5954	20.8	248	1.7	
8:50	3.37	4		"	6.69	6111	20.4	244	1.6	
8:52	5.06	6	11.98	"	6.65	6146	20.7	239	1.5	504
8:54	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.33'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MEN-MW 1D / DTW: 7.36'**		
	LARGE AMOUNT OF WASTE AND GARBAGE AROUND WELL.		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MEN-MW2S **DATE:** 8/14/2012

PROJECT NAME:	ALBERT MENDES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	1100 RUBLE ROAD	**SAMPLE TIME:**	9:15
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	7.25	FEET	**CALC. PURGE VOL.:**	1.67	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.50	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		10.25	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
9:07	0	0	10.81	1.0 GPM	7.05	4557	22.5	168	1.0	
9:09	1.67	2		"	7.03	4519	21.8	171	1.5	
9:11	3.35	4		"	7.00	4537	21.5	174	1.4	
9:13	5.02	6	13.80	"	6.98	4460	21.5	177	1.0	735
9:15	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	13.90'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MEN-MW 2D / DTW: 7.30'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	MEN-MW3S	**DATE:**	8/14/2012

PROJECT NAME:	ALBERT MENDES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	1100 RUBLE ROAD	**SAMPLE TIME:**	10:55
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	8.48	FEET	**CALC. PURGE VOL.:**	1.54	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.90	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		9.42	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:44	0	0	9.55	0.5 GPM	6.81	2919	21.7	212	0.8	
10:47	1.54	1.5		"	6.81	2929	20.5	215	0.7	
10:50	3.07	3		"	6.78	2967	21.2	220	0.9	
10:53	4.61	4.5	9.82	"	6.76	2976	21.3	222	0.7	29
10:55	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.40'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MEN-MW 3D / DTW: 8.25'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MEN-MW4S **DATE:** 8/14/2012

PROJECT NAME:	ALBERT MENDES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	1100 RUBLE ROAD	**SAMPLE TIME:**	11:18
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	7.67	FEET	**CALC. PURGE VOL.:**	1.65	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.80	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		10.13	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:08	0	0	9.41	1.0 GPM	6.95	2242	22.5	214	1.1	
11:10	1.65	2		"	6.93	2274	21.4	216	0.7	
11:12	3.31	4		"	6.88	2285	20.8	217	0.8	
11:14	4.96	6	11.72	"	6.86	2272	21.2	220	0.7	32
11:18	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.65'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MEN-MW 4D / DTW: 7.57'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MEN-MW5S **DATE:** 8/14/2012

PROJECT NAME:	ALBERT MENDES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	1100 RUBLE ROAD	**SAMPLE TIME:**	10:37
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	9.10	FEET	**CALC. PURGE VOL.:**	1.32	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.20	FEET	**TOTAL VOLUME PURGED:**	4.5	GAL.
STANDING WATER COLUMN:		8.10	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:25	0	0	10.42	0.5 GPM	6.94	1908	21.1	209	1.0	
10:28	1.32	1.5		"	6.89	1914	22.1	209	1	
10:31	2.64	3		"	6.88	1909	20.8	209	0.7	
10:34	3.97	4.5	10.55	"	6.88	1908	21.6	207	0.6	2
10:37	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.25'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MEN-MW 5D / DTW: 9.00'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	MEN-MW6S	**DATE:**	8/14/2012

PROJECT NAME:	ALBERT MENDES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	1100 RUBLE ROAD	**SAMPLE TIME:**	9:44
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	6.45	FEET	**CALC. PURGE VOL.:**	2.91	GAL.
DEPTH OF WELL:	**(feet.100th's)**	24.30	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		17.85	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
9:33	0	0	9.01	1.0 GPM	7.02	2849	21.2	201	1.1	
9:36	2.91	3		"	6.88	3064	18.9	204	1.0	
9:39	5.83	6		"	6.87	3133	18.5	206	1.0	
9:42	8.74	9	10.10	"	6.83	3138	18.8	205	1.0	2
9:44	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	8.05'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MEN-MW 6D / DTW: 6.33'**		
	IRRIGATION IN SURROUNDING FIELDS / A LOT OF STANDING WATER.		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	MEN-MW7S	**DATE:**	8/14/2012

PROJECT NAME:	ALBERT MENDES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	1100 RUBLE ROAD	**SAMPLE TIME:**	10:17
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	3.81	FEET	**CALC. PURGE VOL.:**	3.16	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.20	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		19.39	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:05	0	0	5.70	1.0 GPM	7.22	2807	19.1	201	1.0	
10:08	3.16	3		"	7.20	2817	18.9	201	1.0	
10:11	6.33	6		"	7.17	2820	19.2	202	1.0	
10:14	9.49	9	5.82	"	7.14	2804	19.6	204	1.0	10
10:17	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	3.95'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MEN-MW 7D / DTW: 3.69'**		
	IRRIGATION IN SURROUNDING FIELDS / A LOT OF STANDING WATER.		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

ANCHOR J. DAIRY
24507 FIRST AVENUE
STEVINSON, CA.
August 16, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANC-MW1 **DATE:** 8/16/2012

PROJECT NAME:	ANCHOR J. DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	24507 FIRST AVENUE	**SAMPLE TIME:**	10:48
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	12.98	FEET	**CALC. PURGE VOL.:**	1.83	GAL.
DEPTH OF WELL:	**(feet.100th's)**	24.22	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		11.24	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:36	0	0	13.10	0.5 GPM	6.94	1952	21.3	225	0.66	
10:40	1.83	2		"	6.86	1975	20.7	225	0.61	
10:44	3.67	4		"	6.85	1979	20.5	223	0.55	
10:48	5.50	6	13.66	"	6.82	1975	20.9	213	0.43	11
10:48	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	13.56'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	ANC-MW2	**DATE:**	8/16/2012

PROJECT NAME:	ANCHOR J. DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	24507 FIRST AVENUE	**SAMPLE TIME:**	11:04
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	20.38	FEET	**CALC. PURGE VOL.:**	2.45	GAL.
DEPTH OF WELL:	**(feet.100th's)**	35.37	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		14.99	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:52	0	0	20.96	0.5 GPM	6.96	2418	21.3	218	0.95	
10:56	2.45	2.5		"	6.85	2497	20.7	219	0.44	
11:00	4.89	5		"	6.80	2505	20.8	221	0.58	
11:04	7.34	7.5	21.12	"	6.80	2511	20.3	221	0.56	5
11:04	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	21.04'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANC-MW3 **DATE:** 8/16/2012

PROJECT NAME:	ANCHOR J. DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	24507 FIRST AVENUE	**SAMPLE TIME:**	11:15
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	10.43	FEET	**CALC. PURGE VOL.:**	2.42	GAL.
DEPTH OF WELL:	**(feet.100th's)**	25.26	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		14.83	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:08	0	0	10.85	0.5 GPM	6.98	2145	21.9	217	0.93	
11:10	2.42	2.5		"	6.98	1949	21.8	214	0.46	
11:12	4.84	5		"	6.97	1955	21.6	213	0.36	
11:14	7.26	7.5	11.11	"	6.98	1963	21.7	213	0.24	4
11:15	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.05'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**DUPLICATE #4 TAKEN HERE.**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	ANC-MW4	**DATE:**	8/16/2012

PROJECT NAME:	ANCHOR J. DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	24507 FIRST AVENUE	**SAMPLE TIME:**	10:31
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	20.48	FEET	**CALC. PURGE VOL.:**	2.15	GAL.
DEPTH OF WELL:	**(feet.100th's)**	33.65	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		13.17	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:24	0	0	20.74	0.5 GPM	7.21	1869	22.0	224	1.0	
10:26	2.15	2		"	7.11	1265	20.5	228	0.46	
10:28	4.30	4		"	6.97	1270	20.7	224	0.50	
10:30	6.45	6	20.98	"	6.93	1266	21.0	217	0.38	62
10:31	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	20.80'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**VERY SANDY.**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	ANC-MW5S	**DATE:**	8/16/2012

PROJECT NAME:	ANCHOR J. DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	24507 FIRST AVENUE	**SAMPLE TIME:**	10:21
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	16.30	FEET	**CALC. PURGE VOL.:**	1.96	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.30	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		12.00	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:09	0	0	18.22	0.5 GPM	7.38	3063	22.0	249	1.6	
10:12	1.96	2		"	7.36	3549	20.2	246	0.76	
10:16	3.92	4		"	7.30	3568	19.8	243	0.58	
10:20	5.88	6	19.52	"	7.29	3550	20.5	232	0.70	129
10:21	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	19.26'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ANC-MW 5D / DTW: 16.74'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	ANC-MW6S	**DATE:**	8/16/2012

PROJECT NAME:	ANCHOR J. DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	24507 FIRST AVENUE	**SAMPLE TIME:**	11:27
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	13.89	FEET	**CALC. PURGE VOL.:**	2.27	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.80	FEET	**TOTAL VOLUME PURGED:**	10	GAL.
STANDING WATER COLUMN:		13.91	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:20	0	0	14.74	1.0 GPM	6.95	1964	22.0	218	0.83	
11:22	2.27	2		"	6.82	1963	21.8	218	0.64	
11:24	4.54	4		"	6.80	1959	21.7	218	0.60	
11:26	6.81	6	14.81	"	6.80	1950	22.0	217	0.51	2
11:27	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	14.77'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ANC-MW 6D / DTW: 13.82'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	ANC-MW7S	**DATE:**	8/16/2012

PROJECT NAME:	ANCHOR J. DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	24507 FIRST AVENUE	**SAMPLE TIME:**	11:38
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	12.39	FEET	**CALC. PURGE VOL.:**	2.50	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.70	FEET	**TOTAL VOLUME PURGED:**	8	GAL.
STANDING WATER COLUMN:		15.31	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:31	0	0	12.77	1.0 GPM	7.02	1433	21.7	209	2.1	
11:33	2.50	2.5		"	7.01	1303	21.0	207	1.6	
11:35	5.00	5		"	7.02	1295	21.3	205	1.5	
11:37	7.50	7.5	13.11	"	7.02	1288	21.2	204	1.5	9
11:38	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	12.96'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ANC-MW 7D / DTW: 12.29'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

BETTENCOURT AND MARSON DAIRY
18128 AMERICAN AVENUE
HILMAR, CA.
August 14, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BET-MW1S **DATE:** 8/14/2012

PROJECT NAME:	BETTENCOURT AND MARSON DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	13:46
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	15.69	FEET	**CALC. PURGE VOL.:**	1.13	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.60	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		6.91	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:40	0	0	15.69	0.5 GPM	7.97	520	20.6	38	1.6	
13:42	1.13	1		"	6.62	524	19.7	63	1.5	
13:44	2.26	2		"	6.70	524	19.8	64	1.5	
13:46	3.38	3	17.25	"	6.72	522	19.7	64	1.2	8
13:46	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	17.19'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BET-MW 1D / DTW: 15.20'**		
WEATHER:	CLEAR SKIES / VERY HOT.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	BET-MW2S	**DATE:**	8/14/2012

PROJECT NAME:	BETTENCOURT AND MARSON DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	14:20
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	12.60	FEET	**CALC. PURGE VOL.:**	0.77	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.30	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		4.70	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:13	0	0	12.60	0.5 GPM	6.99	592	20.9	58	1.2	
14:15	0.77	1		"	6.88	626	21.0	54	1.2	
14:17	1.53	2		"	6.74	611	21.1	54	1.1	
14:19	2.30	3	13.60	"	6.74	610	21.0	50	1.1	12
14:20	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	13.55'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BET-MW 2D / DTW: 12.23'**		
	SILTY		
WEATHER:	CLEAR SKIES / VERY HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	BET-MW3S	**DATE:**	8/14/2012

PROJECT NAME:	BETTENCOURT AND MARSON DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	14:50
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	10.90	FEET	**CALC. PURGE VOL.:**	1.13	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.80	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		6.90	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:44	0	0	10.90	0.5 GPM	6.81	778	21.7	63	2.2	
14:46	1.13	1		"	6.53	782	21.5	69	2.0	
14:48	2.25	2		"	6.47	790	21.1	70	2.1	
14:50	3.38	3	12.02	"	6.45	799	21.0	75	2.1	17
14:50	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.96'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BET-MW 3D / DTW: 10.70'**		
WEATHER:	CLEAR SKIES / VERY HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	BET-MW4S	**DATE:**	8/14/2012

PROJECT NAME:	BETTENCOURT AND MARSON DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	13:00
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	13.26	FEET	**CALC. PURGE VOL.:**	1.62	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.20	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		9.94	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:51	0	0	13.26	0.5 GPM	7.08	2816	22.3	40	1.0	
12:54	1.62	1.5		"	7.05	2246	21.0	42	1.0	
12:57	3.24	3		"	6.96	2194	20.6	44	1.1	
13:00	4.87	4.5	16.22	"	6.92	2176	20.6	43	1.0	8
13:00	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	16.19'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BET-MW 4D / DTW: 13.79'**		
WEATHER:	CLEAR SKIES / VERY HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	BET-MW5S	**DATE:**	8/14/2012

PROJECT NAME:	BETTENCOURT AND MARSON DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	12:33
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	8.28	FEET	**CALC. PURGE VOL.:**	3.17	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.70	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		19.42	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:24	0	0	8.28	1.0 GPM	7.01	843	21.0	40	2.0	
12:27	3.17	3		"	6.92	862	20.2	38	1.9	
12:30	6.34	6		"	6.96	865	20.2	36	1.5	
12:33	9.51	9	8.35	"	6.95	868	20.3	32	1.5	5
12:33	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	8.29'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BET-MW 5D / DTW: 8.10'**		
WEATHER:	CLEAR SKIES / VERY HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	BET-MW6S	**DATE:**	8/14/2012

PROJECT NAME:	BETTENCOURT AND MARSON DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	11:27
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	7.45	FEET	**CALC. PURGE VOL.:**	3.03	GAL.
DEPTH OF WELL:	**(feet.100th's)**	26.00	FEET	**TOTAL VOLUME PURGED:**	9.0	GAL.
STANDING WATER COLUMN:		18.55	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:18	0	0	7.45	1.0 GPM	7.37	525	22.0	60	1.6	
11:21	3.03	3		"	7.30	503	21.2	56	1.5	
11:24	6.05	6		"	7.29	502	20.6	59	1.5	
11:27	9.08	9	7.50	"	7.30	496	20.6	64	1.4	8
11:27	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	7.47'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BET-MW 6D / DTW: 7.23'**		
WEATHER:	CLEAR SKIES / VERY HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BET-MW7S **DATE:** 8/14/2012

PROJECT NAME:	BETTENCOURT AND MARSON DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	12:00
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	8.29	FEET	**CALC. PURGE VOL.:**	3.09	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.20	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		18.91	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:51	0	0	8.29	1.0 GPM	7.22	356	21.9	7	1.5	
11:54	3.09	3		"	7.03	433	21.7	20	1.4	
11:57	6.17	6		"	7.01	432	21.3	25	1.4	
12:00	9.26	9	8.33	"	7.04	450	21.4	22	1.5	7
12:00	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	8.30'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BET-MW 7D / DTW: 8.07'**		
WEATHER:	CLEAR SKIES / VERY HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	BET-MW8S	**DATE:**	8/14/2012

PROJECT NAME:	BETTENCOURT AND MARSON DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	11:00
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	7.94	FEET	**CALC. PURGE VOL.:**	3.16	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.30	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		19.36	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:51	0	0	7.94	1.0 GPM	7.57	495	21.0	100	1.4	
10:54	3.16	3		"	7.62	489	21.0	116	1.3	
10:57	6.32	6		"	7.33	486	20.9	73	1.3	
11:00	9.48	9	8.02	"	7.30	485	20.9	70	1.0	12
11:00	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	8.00'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BET-MW 8D / DTW: 7.80'**		
WEATHER:	CLEAR SKIES / VERY HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

FRANK J. GOMES DAIRY #1
5301 N. DEANGELIS ROAD
STEVINSON, CA.
August 15, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG1-MW1D **DATE:** 8/15/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	17:39
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	16.08	FEET	**CALC. PURGE VOL.:**	2.34	GAL.
DEPTH OF WELL:	**(feet.100th's)**	30.40	FEET	**TOTAL VOLUME PURGED:**	8	GAL.
STANDING WATER COLUMN:		14.32	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
17:28	0	0	16.08	1.0 GPM	7.72	1278	19.9	95	2.9	
17:31	2.34	2.5		"	7.40	1282	19.8	88	2.5	
17:34	4.67	5		"	7.53	1276	19.9	92	2.5	
17:37	7.01	7.5	16.35	"	7.55	1272	19.8	95	2.6	7
17:39	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	16.29'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE FG1-MW-1S / WELL WENT DRY.**		
	DUPLICATE #1 TAKEN HERE.		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	FG1-MW2D	**DATE:**	8/15/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	17:10
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	19.47	FEET	**CALC. PURGE VOL.:**	1.78	GAL.
DEPTH OF WELL:	**(feet.100th's)**	30.40	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		10.93	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
17:02	0	0	19.47	1.0 GPM	7.37	1178	23.1	145	2.2	
17:04	1.78	2		"	7.15	1160	21.4	130	2.0	
17:06	3.57	4		"	7.07	1166	21.2	121	2.0	
17:08	5.35	6	19.65	"	7.04	1167	21.2	120	2.1	15
17:10	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	19.51'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE FG1-MW-2S / WELL WENT DRY.**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG1-MW3D **DATE:** 8/15/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	16:43
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	LIGHT BROWN	
DEPTH TO WATER:	**(feet.100th's)**	17.62	FEET	**CALC. PURGE VOL.:**	2.09	GAL.
DEPTH OF WELL:	**(feet.100th's)**	30.40	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		12.78	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
16:35	0	0	17.62	1.0 GPM	7.21	1756	21.4	127	2.8	
16:37	2.09	2		"	7.13	793	21.0	13	2.8	
16:39	4.17	4		"	7.37	1877	21.9	100	2.7	
16:41	6.26	6	19.77	"	7.20	1867	21.8	95	2.5	70
16:43	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	24.71'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE FG1-MW-3S / WELL WENT DRY.**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	FG1-MW4S	**DATE:**	8/15/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	18:20
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	11.75	FEET	**CALC. PURGE VOL.:**	1.80	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.80	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		11.05	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
18:13	0	0	11.75	1.0 GPM	7.34	590	22.8	94	2.0	
18:15	1.80	2.0		"	6.72	645	22.2	114	2.1	
18:17	3.61	4.0		"	6.54	642	22.0	113	2.0	
18:19	5.41	6.0	11.83	"	6.50	635	22.0	112	2.0	10
18:20	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.74'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG1-MW 4D / DTW: 11.30'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	FG1-MW5S	**DATE:**	8/15/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	19:55
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	16.92	FEET	**CALC. PURGE VOL.:**	1.04	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.30	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		6.38	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
19:51	0	0	16.92	1.0 GPM	6.99	902	20.2	109	2.4	
19:52	1.04	1		"	6.92	900	20.1	107	2.4	
19:53	2.08	2		"	6.76	904	19.4	107	2.5	
19:54	3.12	3	17.20	"	6.75	906	19.1	107	2.6	8
19:55	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	17.08'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG1-MW 5D / DTW: 16.70'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG1-MW6S **DATE:** 8/15/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	19:20
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	13.97	FEET	**CALC. PURGE VOL.:**	1.39	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.50	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		8.53	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
19:13	0	0	13.97	1.0 GPM	6.70	433	26.4	117	2.5	
19:15	1.39	1.5		"	6.58	431	26.2	120	2.4	
19:17	2.78	3		"	6.51	430	26.2	120	2.4	
19:19	4.18	4.5	14.13	"	6.45	428	26.0	122	2.3	15
19:20	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	14.00'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG1-MW 6D / DTW: 13.84'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	FG1-MW7S	**DATE:**	8/15/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	18:53
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	13.83	FEET	**CALC. PURGE VOL.:**	2.17	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.10	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		13.27	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
18:45	0	0	13.83	1.0 GPM	6.67	505	24.8	122	2.1	
18:47	2.17	2		"	6.34	511	24.3	125	2.0	
18:49	4.33	4		"	6.32	513	24.2	122	2.1	
18:51	6.50	6	13.90	"	6.29	512	24.1	121	2.1	8
18:53	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	13.84'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG1-MW 7D / DTW: 13.63'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	FG1-MW8S	**DATE:**	8/15/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	20:20
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	18.50	FEET	**CALC. PURGE VOL.:**	0.60	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.20	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		3.70	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
20:16	0	0	18.50	1.0 GPM	6.86	1016	21.2	85	2.5	
20:17	0.60	1		"	6.61	1049	19.6	72	2.6	
20:18	1.21	2		"	6.55	1047	19.8	62	2.4	
20:19	1.81	3	19.00	"	6.53	1045	19.6	60	2.4	22
20:20	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	18.77'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG1-MW 8D / DTW: 18.22'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	FG1-MW9S	**DATE:**	8/15/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	20:52
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	15.88	FEET	**CALC. PURGE VOL.:**	1.21	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.30	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		7.42	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
20:44	0	0	15.88	1.0 GPM	7.27	509	18.4	39	2.5	
20:46	1.21	1.5		"	7.13	402	18.0	61	2.5	
20:48	2.42	3	DRY	"	7.11	400	17.8	70	2.4	
20:50	3.63	4.5	21.15	"	7.02	388	17.6	78	2.3	80
20:52	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	21.04'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG1-MW 9D / DTW: 16.93'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

GALLO CATTLE COMPANY BEAR CREEK
15751 W. HWY 140
LIVINGSTON, CA.
August 16, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BEA-MW	1S	**DATE:**	2/13/2012

PROJECT NAME:	GALLO CATTLE COMPANY BEAR CREEK	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	15751 W. HWY 140	**SAMPLE TIME:**	10:52
CITY, STATE:	LIVINGSTON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:		TILL ANGERMAN		**MONUMENT:**	POST	
SAMPLER:		DEL-TECH / TIM AVILA		**WELL CASING MATERIAL**	PVC	
SIGNED:		Tim Avila		**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:		GROUNDWATER		**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	21.86	FEET	**CALC. PURGE VOL.:**	0.95	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.70	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		5.84	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:41	0	0	21.86	0.5 GPM	6.86	4023	19.4	194	2.4	
10:43	0.95	1		"	6.77	3688	20.6	212	2.1	
10:47	1.91	2		"	6.74	3680	20.8	211	2.1	
10:52	2.86	3	23.91	"	6.74	3688	19.8	193	2.0	1000+
10:52	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	22.44'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BEA-MW 1D / DTW: 21.73'**		
WEATHER:	OVERCAST / COOL.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BEA-MW	2S	**DATE:**	2/13/2012

PROJECT NAME:	GALLO CATTLE COMPANY BEAR CREEK	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	15751 W. HWY 140	**SAMPLE TIME:**	9:45
CITY, STATE:	LIVINGSTON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:		TILL ANGERMAN		**MONUMENT:**	POST	
SAMPLER:		DEL-TECH / TIM AVILA		**WELL CASING MATERIAL**	PVC	
SIGNED:		Tim Avila		**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:		GROUNDWATER		**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	20.04	FEET	**CALC. PURGE VOL.:**	1.17	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.20	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		7.16	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
9:35	0	0	20.04	0.5 GPM	6.57	1886	17.3	280	3.4	
9:37	1.17	1		"	7.04	884	19.3	257	2.9	
9:41	2.34	2		"	6.91	759	20.7	261	2.7	
9:45	3.51	3	22.05	"	7.05	708	21.6	254	2.7	612
9:45	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	21.22'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BEA-MW 2D / DTW: 20.16'**		
WEATHER:	OVERCAST / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BEA-MW 3S **DATE:** 2/13/2012

PROJECT NAME:	GALLO CATTLE COMPANY BEAR CREEK	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	15751 W. HWY 140	**SAMPLE TIME:**	10:34
CITY, STATE:	LIVINGSTON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL**	PVC	
SIGNED:	Tim Avila			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	17.92	FEET	**CALC. PURGE VOL.:**	1.51	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.20	FEET	**TOTAL VOLUME PURGED:**	4.5	GAL.
STANDING WATER COLUMN:		9.28	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:22	0	0	17.92	0.5 GPM	7.06	3982	18.7	252	2.7	
10:25	1.51	1.5		"	6.91	4504	20.1	256	2.5	
10:29	3.03	3		"	6.90	4660	20.3	254	2.6	
10:34	4.54	4.5	18.45	"	6.90	4675	19.6	253	2.6	13
10:34	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	18.18'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BEA-MW 3D / DTW: 17.77'**		
WEATHER:	OVERCAST / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BEA-MW	4S	**DATE:**	2/13/2012

PROJECT NAME:	GALLO CATTLE COMPANY BEAR CREEK	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	15751 W. HWY 140	**SAMPLE TIME:**	10:14
CITY, STATE:	LIVINGSTON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / TIM AVILA			**WELL CASING MATERIAL**	PVC	
SIGNED:	Tim Avila			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	21.96	FEET	**CALC. PURGE VOL.:**	2.83	GAL.
DEPTH OF WELL:	**(feet.100th's)**	39.30	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		17.34	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:00	0	0	21.96	0.5 GPM	7.43	1508	18.4	255	2.8	
10:03	2.83	3		"	7.43	1915	20.2	244	2.7	
10:08	5.66	6		"	7.46	1983	20.1	234	2.5	
10:14	8.49	9	21.92	"	7.51	2059	19.9	233	2.5	35
10:14	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	21.96'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BEA-MW 4D / DTW: 21.74'**		
WEATHER:	OVERCAST / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	BEA-MW1S	**DATE:**	5/14/2012

PROJECT NAME:	GALLO CATTLE COMPANY BEAR CREEK	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	15751 W. HWY 140	**SAMPLE TIME:**	15:03
CITY, STATE:	LIVINGSTON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	24.03	FEET	**CALC. PURGE VOL.:**	0.60	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.70	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		3.67	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:50	0	0	24.92	0.25 GPM	6.68	4554	23.8	177	2.0	
14:54	0.60	1		"	6.65	4444	22.2	187	2.1	
14:59	1.20	2		"	6.65	4411	22.5	196	2.0	
15:03	1.80	3	25.22	"	6.65	4406	22.3	199	2.0	1000+
15:03	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	24.87'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BEA-MW 1D / DTW: 24.09'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BEA-MW2S **DATE:** 5/14/2012

PROJECT NAME:	GALLO CATTLE COMPANY BEAR CREEK	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	15751 W. HWY 140	**SAMPLE TIME:**	14:10
CITY, STATE:	LIVINGSTON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	23.03	FEET	**CALC. PURGE VOL.:**	0.68	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.20	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		4.17	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:58	0	0	26.13	0.25 GPM	7.20	658	23.2	247	3.8	
14:02	0.68	1		"	6.95	618	22.2	250	3.9	
14:06	1.36	2		"	6.94	621	22.2	242	3.6	
14:10	2.04	3	26.15	"	6.91	625	22.2	221	3.6	1000+
14:10	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	26.05'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BEA-MW 2D / DTW: 23.63'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BEA-MW3S **DATE:** 5/14/2012

PROJECT NAME:	GALLO CATTLE COMPANY BEAR CREEK	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	15751 W. HWY 140	**SAMPLE TIME:**	14:41
CITY, STATE:	LIVINGSTON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	21.48	FEET	**CALC. PURGE VOL.:**	0.93	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.20	FEET	**TOTAL VOLUME PURGED:**	3.0	GAL.
STANDING WATER COLUMN:		5.72	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:35	0	0	22.59	0.5 GPM	6.79	4871	23.1	191	1.8	
14:37	0.93	1		"	6.81	5404	21.7	201	1.5	
14:39	1.87	2		"	6.70	5555	20.6	203	1.5	
14:41	2.80	3	22.77	"	6.73	5510	21.3	193	1.5	1000+
14:41	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	22.61'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BEA-MW 3D / DTW: 21.52'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BEA-MW4S **DATE:** 5/14/2012

PROJECT NAME:	GALLO CATTLE COMPANY BEAR CREEK	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	15751 W. HWY 140	**SAMPLE TIME:**	14:24
CITY, STATE:	LIVINGSTON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	28.63	FEET	**CALC. PURGE VOL.:**	1.74	GAL.
DEPTH OF WELL:	**(feet.100th's)**	39.30	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		10.67	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:12	0	0	29.22	0.5 GPM	7.38	2154	22.6	182	1.6	
14:16	1.74	2		"	7.37	2112	22.5	175	1.5	
14:20	3.48	4		"	7.37	2102	22.7	171	1.5	
14:24	5.22	6	30.22	"	7.37	2080	22.9	163	1.4	1000+
14:24	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	30.04'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BEA-MW 4D / DTW: 28.35'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BEA-MW1D **DATE:** 8/16/2012

PROJECT NAME:	GALLO CATTLE COMPANY BEAR CREEK	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	15751 W. HWY 140	**SAMPLE TIME:**	14:18
CITY, STATE:	LIVINGSTON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	34.58	FEET	**CALC. PURGE VOL.:**	0.92	GAL.
DEPTH OF WELL:	**(feet.100th's)**	40.20	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		5.62	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:10	0	0	37.56	0.5 GPM	6.86	3195	25.6	214	2.2	
14:12	0.92	1		"	6.86	3200	25.5	211	2.0	
14:14	1.83	2		"	6.87	3212	25.4	212	2.0	
14:18	2.75	3	38.22	"	6.87	3109	25.4	210	2.0	1000+
14:18	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	38.16'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BEA-MW2D **DATE:** 8/16/2012

PROJECT NAME:	GALLO CATTLE COMPANY BEAR CREEK	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	15751 W. HWY 140	**SAMPLE TIME:**	13:13
CITY, STATE:	LIVINGSTON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	31.49	FEET	**CALC. PURGE VOL.:**	2.22	GAL.
DEPTH OF WELL:	**(feet.100th's)**	45.10	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		13.61	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:07	0	0	32.25	0.25 GPM	8.04	658	25.8	176	1.2	
13:09	2.22	2		"	7.91	503	24.2	178	1.3	
13:11	4.44	4		"	7.85	496	24.4	181	1.4	
13:13	6.66	6	32.49	"	7.77	490	24.4	184	1.9	189
13:13	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	32.48'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BEA-MW3D **DATE:** 8/16/2012

PROJECT NAME:	GALLO CATTLE COMPANY BEAR CREEK	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	15751 W. HWY 140	**SAMPLE TIME:**	13:50
CITY, STATE:	LIVINGSTON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	33.03	FEET	**CALC. PURGE VOL.:**	1.15	GAL.
DEPTH OF WELL:	**(feet.100th's)**	40.10	FEET	**TOTAL VOLUME PURGED:**	3.0	GAL.
STANDING WATER COLUMN:		7.07	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:44	0	0	33.74	0.5 GPM	7.08	4417	21.9	214	2.3	
13:46	1.15	1		"	7.07	4420	21.9	215	2.0	
13:48	2.31	2		"	7.04	4421	21.8	215	1.9	
13:50	3.46	3	34.02	"	7.03	4426	21.8	216	1.8	86
13:50	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	33.96'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BEA-MW4D **DATE:** 8/16/2012

PROJECT NAME:	GALLO CATTLE COMPANY BEAR CREEK	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	15751 W. HWY 140	**SAMPLE TIME:**	13:34
CITY, STATE:	LIVINGSTON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	37.57	FEET	**CALC. PURGE VOL.:**	3.09	GAL.
DEPTH OF WELL:	**(feet.100th's)**	56.50	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		18.93	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:25	0	0	29.22	1.0 GPM	7.28	1937	23.0	204	0.86	
13:28	3.09	3		"	7.27	1939	23.0	206	0.85	
13:31	6.18	6		"	7.25	1941	22.8	206	0.78	
13:34	9.27	9	30.22	"	7.20	1943	22.5	207	0.74	37
13:34	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	30.18'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

GALLO CATTLE COMPANY COTTONWOOD
10561 HWY 140
ATWATER, CA.
August 16, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	COT-MW1	**DATE:**	8/16/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	N/A
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	N/A	
DEPTH TO WATER:	**(feet.100th's)**	32.33	FEET	**CALC. PURGE VOL.:**	0.00	GAL.
DEPTH OF WELL:	**(feet.100th's)**	32.33	FEET	**TOTAL VOLUME PURGED:**	0	GAL.
STANDING WATER COLUMN:		0.00	FEET	**LOCATION OF PUMP:**	N/A	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
	0									
	0.00									
	0.00									
	0.00									
	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	N/A
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**WELL WAS DRY / NO SAMPLE TAKEN**		
WEATHER:	CLEAR SKIES / VERY HOT.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	COT-MW2	**DATE:**	8/16/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	N/A
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	N/A	
DEPTH TO WATER:	**(feet.100th's)**	33.80	FEET	**CALC. PURGE VOL.:**	0.00	GAL.
DEPTH OF WELL:	**(feet.100th's)**	33.80	FEET	**TOTAL VOLUME PURGED:**	0.0	GAL.
STANDING WATER COLUMN:		0.00	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
	0									
	0.00									
	0.00									
	0.00									
	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	N/A
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**WELL WAS DRY / NO SAMPLE TAKEN**		
WEATHER:	CLEAR SKIES / VERY HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW3 **DATE:** 8/17/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	9:15
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:		TILL ANGERMAN		**MONUMENT:**	POST	
SAMPLER:		DEL-TECH / DON LIGHT		**WELL CASING MATERIAL :**	PVC	
SIGNED:		Don Light		**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:		GROUNDWATER		**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	19.05	FEET	**CALC. PURGE VOL.:**	1.93	GAL.
DEPTH OF WELL:	**(feet.100th's)**	30.90	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		11.85	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
9:03	0	0	19.05	0.5 GPM	7.98	2253	24.4	158	2.8	
9:07	1.93	2		"	7.77	2274	22.9	152	3.1	
9:11	3.87	4		"	7.81	2270	23.0	155	3.0	
9:15	5.80	6	DRY	"	7.83	2270	23.2	156	3.0	1000+
9:15	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	27.22'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**POOR RECHARGE**		
WEATHER:	CLEAR SKIES / VERY HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW4 **DATE:** 8/17/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	9:40
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	23.00	FEET	**CALC. PURGE VOL.:**	0.71	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.38	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		4.38	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
9:34	0	0	23.00	0.5 GPM	7.94	1664	23.8	90	3.0	
9:36	0.71	1		"	7.47	1614	24.9	92	3.3	
9:38	1.43	2		"	7.43	1610	24.5	92	3.3	
9:40	2.14	3	23.27	"	7.41	1607	24.4	91	3.2	400
9:40	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	23.20'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / VERY HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW5 **DATE:** 8/16/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	17:00
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	15.50	FEET	**CALC. PURGE VOL.:**	1.40	GAL.
DEPTH OF WELL:	**(feet.100th's)**	24.08	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		8.58	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
16:51	0	0	15.50	0.5 GPM	6.86	2394	21.5	135	1.5	
16:54	1.40	1.5		"	7.07	2378	21.0	115	1.5	
16:57	2.80	3		"	7.08	2367	20.9	101	1.6	
17:00	4.20	4.5	15.76	"	7.17	2362	20.9	100	1.5	37
17:00	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	15.74'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / VERY HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	COT-MW6	**DATE:**	8/17/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	11:00
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	16.16	FEET	**CALC. PURGE VOL.:**	1.31	GAL.
DEPTH OF WELL:	**(feet.100th's)**	24.21	FEET	**TOTAL VOLUME PURGED:**	4.5	GAL.
STANDING WATER COLUMN:		8.05	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:51	0	0	16.25	0.5 GPM	6.96	3078	23.5	220	2.0	
10:54	1.31	1.5		"	6.90	3045	22.0	220	2.0	
10:57	2.63	3		"	6.90	3045	20.7	220	2.0	
11:00	3.94	4.5	16.88	"	6.90	3040	20.5	220	2.2	124
11:00	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	16.81'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / VERY HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	COT-MW7	**DATE:**	8/16/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	16:15
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	19.69	FEET	**CALC. PURGE VOL.:**	0.60	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.35	FEET	**TOTAL VOLUME PURGED:**	1.5	GAL.
STANDING WATER COLUMN:		3.66	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
16:06	0	0	20.00	0.25 GPM	7.40	1469	27.5	97	2.0	
16:08	0.60	0.5		"	7.25	1433	25.0	96	2.0	
16:10	1.19	1		DRY	7.21	1429	25.5	96	2.1	
16:15	1.79	1.5	22.52	DRY	7.24	1425	25.8	95	2.1	130
16:15	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	22.45'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**POOR RECHARGE / GOES DRY.**		
WEATHER:	CLEAR SKIES / VERY HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW8 **DATE:** 8/17/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	10:23
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	9.20	FEET	**CALC. PURGE VOL.:**	2.40	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.90	FEET	**TOTAL VOLUME PURGED:**	8	GAL.
STANDING WATER COLUMN:		14.70	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:14	0	0	9.20	1.0 GPM	8.20	1156	25.0	130	2.0	
10:17	2.40	2.5		"	8.02	1238	25.0	124	1.6	
10:20	4.80	5		"	7.78	1250	24.6	115	1.5	
10:23	7.20	7.5	17.70	"	7.70	1257	24.3	104	1.4	18
10:23	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	17.66'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / VERY HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW9 **DATE:** 8/16/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	15:36
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	13.06	FEET	**CALC. PURGE VOL.:**	2.36	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.50	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		14.44	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:26	0	0	13.06	1.0 GPM	7.81	1480	20.8	90	2.3	
15:29	2.36	2.5		"	7.72	1492	20.2	91	2.2	
15:32	4.71	5		"	7.69	1512	20.0	91	2.2	
15:35	7.07	7.5	13.28	"	7.66	1522	19.9	93	2.0	23
15:36	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	13.24'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / VERY HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW10 **DATE:** 8/16/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	15:00
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	7.99	FEET	**CALC. PURGE VOL.:**	2.33	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.29	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		14.30	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:51	0	0	7.99	1.0 GPM	8.12	1152	23.1	90	2.0	
14:54	2.33	2.5		"	7.78	1155	23.0	92	1.8	
14:57	4.67	5		"	7.70	1164	22.7	97	1.7	
15:00	7.00	7.5	9.75	"	7.62	1169	22.5	100	1.6	18
15:00	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.64'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / VERY HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW11S **DATE:** 8/16/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	10:04
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	22.20	FEET	**CALC. PURGE VOL.:**	0.75	GAL.
DEPTH OF WELL:	**(feet.100th's)**	26.80	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		4.60	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
9:58	0	0	22.20	0.5 GPM	7.58	1395	25.9	91	2.0	
10:00	0.75	1		"	7.26	1382	22.6	83	1.8	
10:02	1.50	2		"	7.02	1397	22.6	84	1.8	
10:04	2.25	3	23.10	"	6.94	1395	22.7	88	1.7	415
10:04	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	23.05'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**COT-MW 11D / DTW: 22.61'**		
WEATHER:	CLEAR SKIES / VERY HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	COT-MW12S	**DATE:**	8/16/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	13:45
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	23.80	FEET	**CALC. PURGE VOL.:**	1.21	GAL.
DEPTH OF WELL:	**(feet.100th's)**	31.20	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		7.40	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:33	0	0	23.80	0.25 GPM	7.25	1415	22.1	79	2.0	
13:37	1.21	1		"	7.17	1402	21.5	81	1.7	
13:41	2.42	2		"	7.60	1397	22.1	84	1.6	
13:45	3.62	3	23.83	"	7.67	1394	22.2	87	1.6	74
13:45	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	23.79'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**COT-MW 12D / DTW: 23.68'**		
WEATHER:	CLEAR SKIES / VERY HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	COT-MW13S	**DATE:**	8/16/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	13:10
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	26.19	FEET	**CALC. PURGE VOL.:**	1.13	GAL.
DEPTH OF WELL:	**(feet.100th's)**	33.10	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		6.91	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:58	0	0	26.19	0.25 GPM	7.13	2031	22.8	67	1.2	
13:02	1.13	1		"	6.94	2015	22.1	78	1.0	
13:06	2.26	2		"	6.88	2012	22.1	80	1.1	
13:10	3.38	3	26.23	"	6.83	2010	22.0	84	1.1	330
13:10	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	26.20'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**COT-MW 13D / DTW: 25.98'**		
WEATHER:	CLEAR SKIES / VERY HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW14S **DATE:** 8/16/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	12:20
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	27.60	FEET	**CALC. PURGE VOL.:**	0.78	GAL.
DEPTH OF WELL:	**(feet.100th's)**	32.40	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		4.80	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:14	0	0	27.60	0.5 GPM	7.69	940	22.6	96	1.4	
12:16	0.78	1		"	7.08	1250	22.5	109	1.3	
12:18	1.57	2		"	6.89	1258	22.5	111	1.3	
12:20	2.35	3	27.78	"	6.94	1316	22.5	107	1.2	440
12:20	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	27.74'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**COT-MW 14D / DTW: 27.27'**		
WEATHER:	CLEAR SKIES / VERY HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

GALLO CATTLE COMPANY SANTA RITA
91 S. BERT CRANE ROAD
ATWATER, CA.
August 17, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / SAN-MW1D **DATE:** 8/17/2012

PROJECT NAME:	GALLO CATTLE COMPANY SANTA RITA	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	91 S. BERT CRANE ROAD	**SAMPLE TIME:**	13:30
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	29.73	FEET	**CALC. PURGE VOL.:**	2.52	GAL.
DEPTH OF WELL:	**(feet.100th's)**	45.20	FEET	**TOTAL VOLUME PURGED:**	8	GAL.
STANDING WATER COLUMN:		15.47	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:21	0	0	30.03	1.0 GPM	7.31	2675	22.5	189	1.0	
13:24	2.52	2.5		"	7.23	2600	21.1	189	1.1	
13:27	5.05	5		"	7.19	2594	21.2	190	0.98	
13:30	7.57	7.5	30.27	"	7.10	2587	21.3	191	0.97	189
13:30	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	30.25'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE SAN-MW-1S / WELL WENT DRY.**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / SAN-MW2D **DATE:** 8/17/2012

PROJECT NAME:	GALLO CATTLE COMPANY SANTA RITA	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	91 S. BERT CRANE ROAD	**SAMPLE TIME:**	15:18
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	40.09	FEET	**CALC. PURGE VOL.:**	0.80	GAL.
DEPTH OF WELL:	**(feet.100th's)**	45.00	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		4.91	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:12	0	0	40.66	0.5 GPM	7.05	1716	21.6	198	3.8	
15:14	0.80	1		"	7.01	1717	21.9	199	3.8	
15:16	1.60	2		"	6.99	1717	22.2	200	3.9	
15:18	2.40	3	40.70	"	6.97	1719	22.8	201	3.9	781
15:18	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	40.67'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE SAN-MW-2S / WELL WENT DRY.**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / SAN-MW3D **DATE:** 8/17/2012

PROJECT NAME:	GALLO CATTLE COMPANY SANTA RITA	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	91 S. BERT CRANE ROAD	**SAMPLE TIME:**	14:22
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	41.49	FEET	**CALC. PURGE VOL.:**	0.61	GAL.
DEPTH OF WELL:	**(feet.100th's)**	45.20	FEET	**TOTAL VOLUME PURGED:**	1.5	GAL.
STANDING WATER COLUMN:		3.71	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:15	0	0	41.85	0.25 GPM	7.10	1856	23.1	208	1.8	
14:17	0.61	0.5		"	7.04	1844	24.4	210	1.8	
14:19	1.21	1		"	6.97	1825	24.6	211	1.9	
14:21	1.82	1.5	42.05	"	6.97	1817	23.2	211	2.1	226
14:22	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	42.00'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE SAN-MW-3S / WELL WENT DRY.**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	SAN-MW4D	**DATE:**	8/17/2012

PROJECT NAME:	GALLO CATTLE COMPANY SANTA RITA	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	91 S. BERT CRANE ROAD	**SAMPLE TIME:**	14:47
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	41.10	FEET	**CALC. PURGE VOL.:**	2.28	GAL.
DEPTH OF WELL:	**(feet.100th's)**	55.10	FEET	**TOTAL VOLUME PURGED:**	8	GAL.
STANDING WATER COLUMN:		14.00	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:38	0	0	41.88	1.0 GPM	7.10	1679	21.0	203	1.7	
14:41	2.28	2.5		"	7.07	1684	21.1	200	1.1	
14:44	4.57	5		"	7.00	1692	21.5	198	0.98	
14:47	6.85	7.5	41.96	"	6.98	1695	21.7	195	0.93	212
14:47	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	41.90'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE SAN-MW-4S / WELL WENT DRY.**		
	DUPLICATE #7 TAKEN HERE.		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	SAN-MW5D	**DATE:**	8/17/2012

PROJECT NAME:	GALLO CATTLE COMPANY SANTA RITA	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	91 S. BERT CRANE ROAD	**SAMPLE TIME:**	13:56
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	37.60	FEET	**CALC. PURGE VOL.:**	2.55	GAL.
DEPTH OF WELL:	**(feet.100th's)**	53.20	FEET	**TOTAL VOLUME PURGED:**	8	GAL.
STANDING WATER COLUMN:		15.60	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:40	0	0	38.22	0.5 GPM	7.02	2178	21.3	203	5.1	
13:45	2.55	2.5		"	6.95	2140	20.1	206	4.7	
13:50	5.09	5		"	6.92	2133	20.1	207	4.4	
13:55	7.64	7.5	39.11	"	6.92	2133	20.6	209	5.3	115
13:56	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	39.05'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE SAN-MW-5S / WELL WENT DRY.**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / SAN-MW6D **DATE:** 8/17/2012

PROJECT NAME:	GALLO CATTLE COMPANY SANTA RITA	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	91 S. BERT CRANE ROAD	**SAMPLE TIME:**	13:00
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	14.50	FEET	**CALC. PURGE VOL.:**	5.14	GAL.
DEPTH OF WELL:	**(feet.100th's)**	46.00	FEET	**TOTAL VOLUME PURGED:**	15.0	GAL.
STANDING WATER COLUMN:		31.50	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:45	0	0	14.47	1.0 GPM	7.32	1999	24.8	120	2.8	
12:50	5.14	5		"	7.22	1971	22.3	111	3.1	
12:55	10.28	10		"	7.21	1605	23.4	108	2.8	
13:00	15.42	15	16.75	"	7.27	1813	21.7	107	2.8	238
13:00	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	16.68'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE SAN-MW-6S / WELL WENT DRY.**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	SAN-MW7D	**DATE:**	8/17/2012

PROJECT NAME:	GALLO CATTLE COMPANY SANTA RITA	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	91 S. BERT CRANE ROAD	**SAMPLE TIME:**	12:40
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	28.40	FEET	**CALC. PURGE VOL.:**	3.95	GAL.
DEPTH OF WELL:	**(feet.100th's)**	52.60	FEET	**TOTAL VOLUME PURGED:**	12.0	GAL.
STANDING WATER COLUMN:		24.20	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:28	0	0	28.40	1.0 GPM	7.51	1639	18.9	130	2.0	
12:32	3.95	4		"	7.26	1635	18.8	130	2.2	
12:36	7.90	8		"	7.18	1639	18.7	127	2.2	
12:40	11.85	12	28.43	"	7.12	1638	18.9	124	2.1	26
12:40	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	28.12'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE SAN-MW-7S / WELL WENT DRY.**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	SAN-MW8D	**DATE:**	8/17/2012

PROJECT NAME:	GALLO CATTLE COMPANY SANTA RITA	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	91 S. BERT CRANE ROAD	**SAMPLE TIME:**	12:10
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	29.10	FEET	**CALC. PURGE VOL.:**	2.22	GAL.
DEPTH OF WELL:	**(feet.100th's)**	42.70	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		13.60	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:01	0	0	29.10	1.0 GPM	6.35	1452	20.6	241	1.6	
12:04	2.22	2.5		"	7.04	1463	19.9	210	1.6	
12:07	4.44	5		"	7.11	1470	19.5	197	1.5	
12:10	6.66	7.5	30.16	"	7.18	1475	19.3	184	1.4	21
12:10	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	30.05'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE SAN-MW-8S / WELL WENT DRY.**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

P. & L. SOUZA DAIRY
20633 CRANE ROAD
HILMAR, CA.
August 15, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	PLS-MW1S	**DATE:**	8/15/2012

PROJECT NAME:	P. & L. SOUZA DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	20633 CRANE ROAD	**SAMPLE TIME:**	11:32
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	9.40	FEET	**CALC. PURGE VOL.:**	1.22	GAL.
DEPTH OF WELL:	**(feet.100th's)**	16.90	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		7.50	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:27	0	0	9.40	1.0 GPM	7.35	2309	22.4	114	0.8	
11:28	1.22	1		"	7.36	2045	21.3	112	0.8	
11:29	2.45	2		"	7.06	2069	20.9	112	0.9	
11:30	3.67	3	14.80	"	7.04	2064	20.8	110	0.9	10
11:32	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	13.95'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**PLS-MW 1D / DTW: 9.15'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	PLS-MW2S	**DATE:**	8/15/2012

PROJECT NAME:	P. & L. SOUZA DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	20633 CRANE ROAD	**SAMPLE TIME:**	12:15
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	8.20	FEET	**CALC. PURGE VOL.:**	1.35	GAL.
DEPTH OF WELL:	**(feet.100th's)**	16.50	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		8.30	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:07	0	0	8.20	1.0 GPM	7.10	2212	21.4	110	5.5	
12:09	1.35	1		"	7.09	2256	21.0	111	5.0	
12:11	2.71	2		"	7.07	2300	21.0	111	4.5	
12:13	4.06	3	9.00	"	7.06	2324	20.3	113	4.1	480
12:15	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	8.78'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**PLS-MW 2D / DTW: 8.00'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	PLS-MW3S	**DATE:**	8/15/2012

PROJECT NAME:	P. & L. SOUZA DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	20633 CRANE ROAD	**SAMPLE TIME:**	13:38
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	7.72	FEET	**CALC. PURGE VOL.:**	1.30	GAL.
DEPTH OF WELL:	**(feet.100th's)**	15.70	FEET	**TOTAL VOLUME PURGED:**	4.5	GAL.
STANDING WATER COLUMN:		7.98	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:28	0	0	8.85	0.5 GPM	7.55	1235	21.3	101	2.9	
13:31	1.30	1.5		"	7.49	1229	21.1	101	2.5	
13:34	2.60	3		"	7.25	1219	20.6	101	2.6	
13:37	3.91	4.5	10.47	"	7.18	1219	20.3	102	2.6	123
13:38	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.08'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**PLS-MW 3D / DTW: 7.57'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	PLS-MW4S	**DATE:**	8/15/2012

PROJECT NAME:	P. & L. SOUZA DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	20633 CRANE ROAD	**SAMPLE TIME:**	11:00
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	8.88	FEET	**CALC. PURGE VOL.:**	2.35	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.30	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		14.42	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:49	0	0	8.88	1.0 GPM	7.14	4858	23.6	110	1.3	
10:52	2.35	2.5		"	7.05	5010	22.2	111	1.3	
10:55	4.71	5		"	7.03	5051	21.0	110	1.1	
10:58	7.06	7.5	9.77	"	7.01	5055	20.9	114	1.0	22
11:00	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.41'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**PLS-MW 4D / DTW: 8.43'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	PLS-MW5S	**DATE:**	8/15/2012

PROJECT NAME:	P. & L. SOUZA DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	20633 CRANE ROAD	**SAMPLE TIME:**	13:00
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	LIGHT BROWN	
DEPTH TO WATER:	**(feet.100th's)**	7.67	FEET	**CALC. PURGE VOL.:**	1.25	GAL.
DEPTH OF WELL:	**(feet.100th's)**	15.30	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		7.63	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:55	0	0	7.67	1.0 GPM	7.37	1689	22.6	102	5.5	
12:56	1.25	1		"	7.13	1661	20.9	106	5.3	
12:57	2.49	2		"	7.11	1655	20.6	105	5.3	
12:58	3.74	3	12.60	"	7.09	1642	20.6	106	5.0	76
13:00	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	12.00'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**PLS-MW 5D / DTW: 6.54'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	PLS-MW6S	**DATE:**	8/15/2012

PROJECT NAME:	P. & L. SOUZA DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	20633 CRANE ROAD	**SAMPLE TIME:**	9:30
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	5.80	FEET	**CALC. PURGE VOL.:**	2.66	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.10	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		16.30	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
9:19	0	0	5.80	1.0 GPM	6.84	2025	20.8	103	2.0	
9:22	2.66	3		"	6.85	2028	20.5	94	1.9	
9:25	5.32	6		"	6.85	2019	20.5	95	1.8	
9:28	7.98	9	8.90	"	6.88	2017	20.6	93	1.9	12
9:30	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	8.67'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**PLS-MW 6D / DTW: 7.53'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	PLS-MW7S	**DATE:**	8/15/2012

PROJECT NAME:	P. & L. SOUZA DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	20633 CRANE ROAD	**SAMPLE TIME:**	10:10
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	8.19	FEET	**CALC. PURGE VOL.:**	2.34	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.50	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		14.31	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
9:59	0	0	8.19	1.0 GPM	7.15	1995	19.6	131	2.5	
10:02	2.34	2.5		"	7.31	2057	18.7	123	2.4	
10:05	4.67	5		"	7.12	2062	18.8	112	2.2	
10:08	7.01	7.5	9.13	"	7.10	2064	18.6	110	2.2	15
10:10	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.00'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**PLS-MW 7D / DTW: 9.33'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

PAUL CAETANO DAIRY
9436 GRIFFITH AVENUE
DELHI, CA.
May 10, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / CAE-MW1D **DATE:** 8/14/2012

PROJECT NAME:	PAUL CAETANO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	9436 GRIFFITH AVENUE	**SAMPLE TIME:**	19:02
CITY, STATE:	DELHI, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	15.30	FEET	**CALC. PURGE VOL.:**	2.33	GAL.
DEPTH OF WELL:	**(feet.100th's)**	29.60	FEET	**TOTAL VOLUME PURGED:**	8	GAL.
STANDING WATER COLUMN:		14.30	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
18:51	0	0	14.88	1.0 GPM	7.28	2498	20.6	61	0.6	
18:54	2.33	2.5		"	7.15	2593	19.7	61	0.5	
18:57	4.67	5		"	7.12	2604	19.5	62	0.5	
19:00	7.00	7.5	15.10	"	7.10	2699	19.5	64	0.6	460
19:02	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	15.00'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE CAE-MW-1S / WELL WENT DRY**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	CAE-MW2S	**DATE:**	8/14/2012

PROJECT NAME:	PAUL CAETANO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	9436 GRIFFITH AVENUE	**SAMPLE TIME:**	18:05
CITY, STATE:	DELHI, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	14.75	FEET	**CALC. PURGE VOL.:**	0.47	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.60	FEET	**TOTAL VOLUME PURGED:**	2	GAL.
STANDING WATER COLUMN:		2.85	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
18:00	0	0	14.75	0.5 GPM	6.60	2865	22.1	63	1.1	
18:01	0.47	0.5		"	7.05	2919	22.0	58	1.0	
18:02	0.93	1		"	7.12	2940	22.0	59	1.0	
18:03	1.40	1.5	15.83	"	7.16	2944	22.0	63	1.0	42
18:05	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	15.42'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**CAE-MW 2D / DTW: 14.60'**		
	SLOW RECHARGE.		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	CAE-MW3S	**DATE:**	8/14/2012

PROJECT NAME:	PAUL CAETANO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	9436 GRIFFITH AVENUE	**SAMPLE TIME:**	18:53
CITY, STATE:	DELHI, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	15.75	FEET	**CALC. PURGE VOL.:**	0.24	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.20	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		1.45	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
18:48	0	0	15.75	0.25 GPM	7.23	4042	22.2	65	0.7	
18:49	0.24	1		"	7.07	3967	22.1	67	0.7	
18:50	0.47	2		"	7.02	3878	22.1	67	0.8	
18:51	0.71	3	16.50	"	7.00	3856	22.3	69	0.7	43
18:53	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	16.24'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**CAE-MW 3D / DTW: 15.62'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	CAE-MW4S	**DATE:**	8/14/2012

PROJECT NAME:	PAUL CAETANO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	9436 GRIFFITH AVENUE	**SAMPLE TIME:**	20:00
CITY, STATE:	DELHI, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	LGHT BROWN	
DEPTH TO WATER:	**(feet.100th's)**	14.59	FEET	**CALC. PURGE VOL.:**	1.42	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.30	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		8.71	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
19:52	0	0	14.59	1.0 GPM	7.75	1300	21..0	57	0.9	
19:54	1.42	1.5		"	6.90	1325	20.9	73	1.0	
19:56	2.84	3		"	6.80	1338	20.6	74	1.0	
19:58	4.26	4.5	15.55	"	6.82	1340	20.5	78	1.0	57
20:00	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	15.19'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**CAE-MW 4D / DTW: 14.29'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / CAE-MW5S **DATE:** 8/14/2012

PROJECT NAME:	PAUL CAETANO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	9436 GRIFFITH AVENUE	**SAMPLE TIME:**	17:10
CITY, STATE:	DELHI, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	8.20	FEET	**CALC. PURGE VOL.:**	2.37	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.70	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		14.50	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
17:00	0	0	8.20	1.0 GPM	7.34	1259	21.6	70	0.9	
17:03	2.37	2.5		"	7.08	1137	20.6	72	0.6	
17:06	4.73	5		"	7.06	1111	20.5	73	0.7	
17:09	7.10	7.5	10.20	"	7.07	1109	20.5	77	0.7	6
17:10	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.04'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**CAE-MW 5D / DTW: 7.83'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	CAE-MW6S	**DATE:**	8/14/2012

PROJECT NAME:	PAUL CAETANO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	9436 GRIFFITH AVENUE	**SAMPLE TIME:**	16:28
CITY, STATE:	DELHI, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	10.04	FEET	**CALC. PURGE VOL.:**	1.71	GAL.
DEPTH OF WELL:	**(feet.100th's)**	20.50	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		10.46	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
16:20	0	0	10.04	1.0 GPM	7.73	1335	19.6	66	1.0	
16:22	1.71	2		"	7.20	1587	19.6	76	1.0	
16:24	3.41	4		"	7.25	1588	20.0	71	1.0	
16:26	5.12	6	10.22	"	7.24	1585	20.0	70	0.9	26
16:28	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.09'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**CAE-MW 6D / DTW: 9.92'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

ROBERT GIOLETTI AND SONS DAIRY
118 N. BLAKER ROAD
TURLOCK, CA.
August 13, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ROB-MW1D **DATE:** 8/13/2012

PROJECT NAME:	ROBERT GIOLETTI AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	118 N. BLAKER ROAD	**SAMPLE TIME:**	12:25
CITY, STATE:	TURLOCK, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	25.54	FEET	**CALC. PURGE VOL.:**	3.98	GAL.
DEPTH OF WELL:	**(feet.100th's)**	49.90	FEET	**TOTAL VOLUME PURGED:**	12	GAL.
STANDING WATER COLUMN:		24.36	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:10	0	0	25.40	1.0 GPM	6.92	1302	22.4	172	2.5	
12:14	3.98	4		"	6.86	1131	20.9	180	2.3	
12:18	7.95	8		"	6.95	1137	20.5	214	2.3	
12:22	11.93	12	25.42	"	6.94	1139	20.8	219	2.2	4
12:25	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	25.27'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE ROB-MW-1S / WELL WENT DRY.**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ROB-MW2D **DATE:** 8/13/2012

PROJECT NAME:	ROBERT GIOLETTI AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	118 N. BLAKER ROAD	**SAMPLE TIME:**	12:42
CITY, STATE:	TURLOCK, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	21.41	FEET	**CALC. PURGE VOL.:**	1.45	GAL.
DEPTH OF WELL:	**(feet.100th's)**	30.30	FEET	**TOTAL VOLUME PURGED:**	4.5	GAL.
STANDING WATER COLUMN:		8.89	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:34	0	0	22.70	1.0 GPM	6.60	2414	21.9	189	2.6	
12:36	1.45	1.5		"	6.50	2545	20.8	188	2.5	
12:38	2.90	3		"	6.51	2583	20.3	186	2.5	
12:40	4.35	4.5	23.20	"	6.50	2588	20.6	185	2.3	85
12:42	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	22.90'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE ROB-MW-2S / WELL WENT DRY.**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ROB-MW3S **DATE:** 8/13/2012

PROJECT NAME:	ROBERT GIOLETTI AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	118 N. BLAKER ROAD	**SAMPLE TIME:**	13:01
CITY, STATE:	TURLOCK, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	14.93	FEET	**CALC. PURGE VOL.:**	0.63	GAL.
DEPTH OF WELL:	**(feet.100th's)**	18.80	FEET	**TOTAL VOLUME PURGED:**	3.0	GAL.
STANDING WATER COLUMN:		3.87	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:53	0	0	15.65	0.5 GPM	6.96	1972	21.8	182	2.0	
12:55	0.63	1		"	6.94	1979	21.3	175	1.6	
12:57	1.26	2		"	6.93	1979	20.7	171	1.6	
12:59	1.89	3	15.81	"	6.93	1968	21.4	163	1.7	15
13:01	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	15.41'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ROB-MW 3D / DTW: 14.82'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ROB-MW4S **DATE:** 8/13/2012

PROJECT NAME:	ROBERT GIOLETTI AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	118 N. BLAKER ROAD	**SAMPLE TIME:**	13:30
CITY, STATE:	TURLOCK, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	14.03	FEET	**CALC. PURGE VOL.:**	0.63	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.90	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		3.87	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:22	0	0	14.45	0.5 GPM	6.83	3007	24.3	186	1.5	
13:24	0.63	1		"	6.75	3403	23.8	186	1.6	
13:26	1.26	2		"	6.73	3577	23.8	186	1.7	
13:28	1.89	3	14.47	"	6.67	3607	24.0	184	1.6	25
13:30	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	14.30'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ROB-MW 4D / DTW: 13.85'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ROB-MW5D **DATE:** 8/13/2012

PROJECT NAME:	ROBERT GIOLETTI AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	118 N. BLAKER ROAD	**SAMPLE TIME:**	13:56
CITY, STATE:	TURLOCK, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	15.31	FEET	**CALC. PURGE VOL.:**	1.91	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.00	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		11.69	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:48	0	0	16.10	1.0 GPM	6.83	2402	21.3	182	2.0	
13:50	1.91	2		"	6.72	2435	20.7	184	2.0	
13:52	3.82	4		"	6.72	2441	20.8	187	2.2	
13:54	5.72	6	16.20	"	6.67	2421	21.2	190	2.0	9
13:56	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	16.11'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE ROB-MW-5S / WELL WENT DRY.**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ROB-MW6S **DATE:** 8/13/2012

PROJECT NAME:	ROBERT GIOLETTI AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	118 N. BLAKER ROAD	**SAMPLE TIME:**	11:34
CITY, STATE:	TURLOCK, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	16.25	FEET	**CALC. PURGE VOL.:**	1.95	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.20	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		11.95	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:26	0	0	16.63	1.0 GPM	6.81	2369	20.4	176	5.5	
11:28	1.95	2		"	6.78	2405	18.8	164	5.2	
11:30	3.90	4		"	6.74	2419	19.3	159	4.9	
11:32	5.85	6	16.65	"	6.72	2410	19.5	152	4.9	12
11:34	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	16.36'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ROB-MW 6D / DTW: 16.27'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ROB-MW7S **DATE:** 8/13/2012

PROJECT NAME:	ROBERT GIOLETTI AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	118 N. BLAKER ROAD	**SAMPLE TIME:**	11:13
CITY, STATE:	TURLOCK, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	15.85	FEET	**CALC. PURGE VOL.:**	2.03	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.30	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		12.45	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:05	0	0	16.31	1.0 GPM	6.94	880	23.6	248	3.5	
11:07	2.03	2		"	6.95	908	23.8	217	3.3	
11:09	4.06	4		"	7.04	999	21.6	204	3.5	
11:11	6.10	6	16.40	"	7.00	1025	21.2	166	3.2	9.5
11:13	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	16.10'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ROB-MW 7D / DTW: 18.30'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	ROB-MW8S	**DATE:**	8/13/2012

PROJECT NAME:	ROBERT GIOLETTI AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	118 N. BLAKER ROAD	**SAMPLE TIME:**	11:59
CITY, STATE:	TURLOCK, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	17.05	FEET	**CALC. PURGE VOL.:**	1.77	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.90	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		10.85	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:50	0	0	17.79	1.0 GPM	6.96	2116	20.9	164	3.3	
11:52	1.77	2		"	6.86	2124	20.1	156	3.0	
11:54	3.54	4		"	6.85	2140	19.8	153	3.0	
11:56	5.31	6	17.97	"	6.81	2123	19.7	147	3.0	18
11:59	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	17.45'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ROB-MW 8D / DTW: 17.88'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

2012Q3 West Side

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

ANTONE L. GOMES AND SONS DAIRY
515 E. STUHR ROAD
NEWMAN, CA.
August 15, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	ANT-MW1S	**DATE:**	8/15/2012

PROJECT NAME:	ANTONE L. GOMES AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	10:48
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	13.89	FEET	**CALC. PURGE VOL.:**	1.19	GAL.
DEPTH OF WELL:	**(feet.100th's)**	21.20	FEET	**TOTAL VOLUME PURGED:**	3.0	GAL.
STANDING WATER COLUMN:		7.31	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:40	0	0	14.01	0.5 GPM	6.78	1951	21.3	236	2.6	
10:42	1.19	1		"	6.78	1900	20.8	233	2.8	
10:44	2.39	2		"	6.77	1887	20.6	227	3.0	
10:46	3.58	3	14.00	"	6.72	1888	21.0	224	3.0	1.5
10:48	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	13.91'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ANT-MW 1D / DTW: 13.80'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANT-MW2S **DATE:** 8/15/2012

PROJECT NAME:	ANTONE L. GOMES AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	11:40
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	19.20	FEET	**CALC. PURGE VOL.:**	2.27	GAL.
DEPTH OF WELL:	**(feet.100th's)**	33.10	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		13.90	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:26	0	0	20.70	0.5 GPM	7.00	3138	21.9	215	1.2	
11:30	2.27	2		"	6.97	2937	21.7	220	1.3	
11:34	4.54	4		"	6.98	2790	21.5	213	1.5	
11:38	6.81	6	21.57	"	6.97	2756	21.5	216	1.4	14
11:40	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	21.20'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ANT-MW 2D / DTW: 18.75'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	ANT-MW3S	**DATE:**	8/15/2012

PROJECT NAME:	ANTONE L. GOMES AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	12:24
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	15.01	FEET	**CALC. PURGE VOL.:**	3.00	GAL.
DEPTH OF WELL:	**(feet.100th's)**	33.40	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		18.39	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:12	0	0	16.53	1.0 GPM	6.87	2068	21.7	198	2.0	
12:15	3.00	3		"	6.90	2060	21.4	200	2.1	
12:18	6.00	6		"	6.89	2021	20.3	201	1.9	
12:21	9.00	9	17.01	"	6.88	2023	20.3	199	2.0	40
12:24	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	15.82'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ANT-MW 3D / DTW: 16.00'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	ANT-MW4S	**DATE:**	8/15/2012

PROJECT NAME:	ANTONE L. GOMES AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	12:05
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	18.37	FEET	**CALC. PURGE VOL.:**	2.52	GAL.
DEPTH OF WELL:	**(feet.100th's)**	33.80	FEET	**TOTAL VOLUME PURGED:**	8	GAL.
STANDING WATER COLUMN:		15.43	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:54	0	0	20.70	1.0 GPM	6.86	2333	22.5	223	1.5	
11:57	2.52	2.5		"	6.83	2354	21.3	224	1.5	
12:00	5.04	5		"	6.84	2322	21.3	218	1.4	
12:03	7.55	7.5	22.36	"	6.85	2321	22.1	211	1.5	95
12:05	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	22.10'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ANT-MW 4D / DTW: 21.00'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANT-MW5S **DATE:** 8/15/2012

PROJECT NAME:	ANTONE L. GOMES AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	10:23
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	17.71	FEET	**CALC. PURGE VOL.:**	2.59	GAL.
DEPTH OF WELL:	**(feet.100th's)**	33.60	FEET	**TOTAL VOLUME PURGED:**	8	GAL.
STANDING WATER COLUMN:		15.89	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:11	0	0	18.07	1.0 GPM	6.79	1613	20.6	293	0.9	
10:14	2.59	2.5		"	6.81	1579	19.9	270	1.5	
10:17	5.19	5		"	6.90	1561	20.3	273	1.4	
10:20	7.78	7.5	18.07	"	6.89	1557	21.0	251	1.3	13
10:23	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	17.85'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ANT-MW 5D / DTW: 19.93'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	ANT-MW6S	**DATE:**	8/15/2012

PROJECT NAME:	ANTONE L. GOMES AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	11:16
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	10.85	FEET	**CALC. PURGE VOL.:**	3.63	GAL.
DEPTH OF WELL:	**(feet.100th's)**	33.10	FEET	**TOTAL VOLUME PURGED:**	12.0	GAL.
STANDING WATER COLUMN:		22.25	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:00	0	0	11.60	1.0 GPM	6.94	1996	20.4	219	2.5	
11:04	3.63	4		"	7.13	1987	19.5	225	2.3	
11:08	7.26	8		"	7.07	1984	19.3	229	2.1	
11:12	10.89	12	11.70	"	7.06	1960	19.5	229	1.8	3
11:16	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.12'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ANT-MW 6D / DTW: 12.89'**		
	DUPLICATE #2 TAKEN HERE.		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

CORREIA FAMILY DAIRY
26380 W. FAHEY ROAD
GUSTINE, CA.
August 17, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	COR-MW1S	**DATE:**	8/17/2012

PROJECT NAME:	CORREIA FAMILY DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	26380 W. FAHEY ROAD	**SAMPLE TIME:**	9:47
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	7.82	FEET	**CALC. PURGE VOL.:**	1.68	GAL.
DEPTH OF WELL:	**(feet.100th's)**	18.10	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		10.28	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
9:39	0	0	8.16	1.0 GPM	7.36	3734	21.4	213	1.3	
9:41	1.68	2		"	7.07	3787	20.8	216	0.7	
9:43	3.36	4		"	6.99	3765	20.3	217	0.6	
9:45	5.03	6	8.74	"	6.98	3751	20.6	216	0.5	59
9:47	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	8.66'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**COR-MW 1D / DTW: 7.69'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COR-MW2S **DATE:** 8/17/2012

PROJECT NAME:	CORREIA FAMILY DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	26380 W. FAHEY ROAD	**SAMPLE TIME:**	9:31
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	8.50	FEET	**CALC. PURGE VOL.:**	1.40	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.10	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		8.60	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
9:20	0	0	8.87	0.5 GPM	7.29	1503	21.3	219	0.9	
9:23	1.40	1.5		"	7.18	1499	21.0	217	0.7	
9:27	2.81	3		"	7.17	1509	20.4	216	0.6	
9:29	4.21	4.5	9.45	"	7.14	1497	21.2	212	0.5	36
9:31	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.39'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**COR-MW 2D / DTW: 8.27'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	COR-MW3S	**DATE:**	8/17/2012

PROJECT NAME:	CORREIA FAMILY DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	26380 W. FAHEY ROAD	**SAMPLE TIME:**	9:14
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	9.34	FEET	**CALC. PURGE VOL.:**	1.36	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.70	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		8.36	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
9:04	0	0	9.74	0.5 GPM	7.43	1831	22.6	234	1.1	
9:07	1.36	1.5		"	7.35	1831	20.6	234	0.8	
9:10	2.73	3		"	7.28	1834	20.4	233	0.9	
9:13	4.09	4.5	10.09	"	7.23	1824	21.1	229	0.6	95
9:14	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.00'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**COR-MW 3D / DTW: 9.15'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	COR-MW4S	**DATE:**	8/17/2012

PROJECT NAME:	CORREIA FAMILY DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	26380 W. FAHEY ROAD	**SAMPLE TIME:**	10:00
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	8.54	FEET	**CALC. PURGE VOL.:**	1.41	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.20	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		8.66	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
9:49	0	0	8.85	0.5 GPM	7.40	1918	22.1	210	1.1	
9:52	1.41	1.5		"	7.21	1870	22.3	212	0.9	
9:55	2.83	3		"	7.20	1868	22.4	212	0.6	
9:58	4.24	4.5	9.41	"	7.19	1863	22.1	212	0.6	33
10:00	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.25'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**COR-MW 4D / DTW: 8.43'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COR-MW5S **DATE:** 8/17/2012

PROJECT NAME:	CORREIA FAMILY DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	26380 W. FAHEY ROAD	**SAMPLE TIME:**	10:14
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	8.67	FEET	**CALC. PURGE VOL.:**	1.49	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.80	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		9.13	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:04	0	0	8.92	0.5 GPM	7.24	1721	22.3	213	0.9	
10:07	1.49	1.5		"	7.19	1717	22.4	214	0.7	
10:10	2.98	3		"	7.16	1687	22.3	211	0.7	
10:13	4.47	4.5	9.55	"	7.15	1677	22.2	211	0.5	126
10:14	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.41'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**COR-MW 5D / DTW: 8.53'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

FRANK J. GOMES DAIRY #2
890 KNIEBES ROAD
GUSTINE, CA.
August 15, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	FG2-MW1S	**DATE:**	8/15/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #2	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	890 KNIEBES ROAD	**SAMPLE TIME:**	13:51
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	4.40	FEET	**CALC. PURGE VOL.:**	2.87	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.00	FEET	**TOTAL VOLUME PURGED:**	9.0	GAL.
STANDING WATER COLUMN:		17.60	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:40	0	0	10.25	1.0 GPM	7.01	4849	24.3	149	1.9	
13:43	2.87	3		"	6.95	4917	22.4	141	1.3	
13:46	5.74	6		"	6.94	4916	22.1	132	1.4	
13:49	8.62	9	11.90	"	6.92	4902	22.1	130	1.4	120
13:51	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.84'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG2-MW 1D / DTW: 4.38'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	FG2-MW2S	**DATE:**	8/15/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #2	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	890 KNIEBES ROAD	**SAMPLE TIME:**	15:10
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	6.07	FEET	**CALC. PURGE VOL.:**	2.81	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.30	FEET	**TOTAL VOLUME PURGED:**	9.0	GAL.
STANDING WATER COLUMN:		17.23	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:59	0	0	9.43	1.0 GPM	6.98	3882	21.7	185	1.3	
15:02	2.81	3		"	7.03	3530	22.3	191	0.5	
15:05	5.62	6		"	7.04	3516	21.9	196	0.7	
15:08	8.44	9	12.41	"	7.02	3510	22.1	197	0.8	356
15:10	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.73'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG2-MW 2D / DTW: 5.94'**		
	DUPLICATE #3 TAKEN HERE.		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	FG2-MW3S	**DATE:**	8/15/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #2	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	890 KNIEBES ROAD	**SAMPLE TIME:**	14:44
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	8.57	FEET	**CALC. PURGE VOL.:**	3.12	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.70	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		19.13	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:34	0	0	9.85	1.0 GPM	7.00	5845	22.3	181	0.6	
14:37	3.12	3		"	6.95	5820	21.3	183	0.5	
14:40	6.24	6		"	6.96	5813	21.2	185	6.0	
14:43	9.37	9	10.23	"	6.97	5807	21.6	188	0.5	5
14:44	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.50'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG2-MW 3D / DTW: 8.12'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	FG2-MW4S	**DATE:**	8/15/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #2	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	890 KNIEBES ROAD	**SAMPLE TIME:**	14:19
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	8.17	FEET	**CALC. PURGE VOL.:**	3.40	GAL.
DEPTH OF WELL:	**(feet.100th's)**	29.00	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		20.83	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:07	0	0	10.28	1.0 GPM	6.96	4241	22.8	162	0.9	
14:10	3.40	3		"	7.04	4230	22.5	168	0.6	
14:13	6.80	6		"	7.01	4249	22.4	172	0.6	
14:16	10.20	9	10.82	"	7.01	4308	22.6	172	0.7	24
14:19	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.40'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG2-MW 4D / DTW: 7.70'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	FG2-MW5S	**DATE:**	8/15/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #2	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	890 KNIEBES ROAD	**SAMPLE TIME:**	15:28
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	3.83	FEET	**CALC. PURGE VOL.:**	2.77	GAL.
DEPTH OF WELL:	**(feet.100th's)**	20.80	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		16.97	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:17	0	0	4.20	0.5 GPM	7.07	3887	19.3	199	0.6	
15:20	2.77	2.5		"	7.04	3888	19.0	201	0.4	
15:23	5.54	5		"	7.03	3902	18.8	200	0.4	
15:26	8.31	7.5	4.20	"	7.03	3908	18.9	202	0.5	37
15:28	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	3.90'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG2-MW 5D / DTW: 3.66'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

GODINHO DAIRY
12710 S. WILSON ROAD
LOS BANOS, CA.
August 20, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / GOD-MW1S **DATE:** 8/20/2012

PROJECT NAME:	GODINHO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	12710 S. WILSON ROAD	**SAMPLE TIME:**	18:10
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	6.23	FEET	**CALC. PURGE VOL.:**	2.79	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.30	FEET	**TOTAL VOLUME PURGED:**	9.0	GAL.
STANDING WATER COLUMN:		17.07	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
18:00	0	0	6.23	1.0 GPM	7.82	2689	21.4	23	0.62	
18:03	2.79	3		"	7.67	2719	20.9	25	0.45	
18:06	5.57	6		"	7.59	2728	20.7	27	0.57	
18:09	8.36	9	7.44	"	7.56	2727	20.6	28	0.50	12
18:10	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	7.40'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**GOD-MW 1D / DTW: 6.18'**		
	LARGE WEEDS AROUND WELL - 5' TALL		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	GOD-MW2S	**DATE:**	8/20/2012

PROJECT NAME:	GODINHO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	12710 S. WILSON ROAD	**SAMPLE TIME:**	17:00
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	10.23	FEET	**CALC. PURGE VOL.:**	2.82	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.50	FEET	**TOTAL VOLUME PURGED:**	9.0	GAL.
STANDING WATER COLUMN:		17.27	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
16:49	0	0	10.23	1.0 GPM	8.16	2700	21.8	35	0.35	
16:52	2.82	3		"	7.94	2866	21.1	35	0.33	
16:55	5.64	6		"	7.88	2981	21.1	35	0.23	
16:58	8.46	9	10.43	"	7.85	2305	21.2	34	0.21	12
17:00	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.40'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**GOD-MW 2D / DTW: 10.15'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / GOD-MW3S **DATE:** 8/20/2012

PROJECT NAME:	GODINHO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	12710 S. WILSON ROAD	**SAMPLE TIME:**	17:26
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	11.77	FEET	**CALC. PURGE VOL.:**	1.78	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.70	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		10.93	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
17:20	0	0	11.77	1.0 GPM	7.88	1365	21.5	58	0.54	
17:22	1.78	2		"	7.62	1393	20.9	60	0.63	
17:24	3.57	4		"	7.57	1400	20.7	60	0.52	
17:26	5.35	6	12.10	"	7.55	1407	20.7	62	0.60	11
17:26	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	12.08'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**GOD-MW 3D / DTW: 11.68'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / GOD-MW4S **DATE:** 8/20/2012

PROJECT NAME:	GODINHO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	12710 S. WILSON ROAD	**SAMPLE TIME:**	18:38
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	12.16	FEET	**CALC. PURGE VOL.:**	1.80	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.20	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		11.04	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
18:31	0	0	12.16	1.0 GPM	7.93	2927	22.5	36	1.0	
18:33	1.80	2		"	7.77	2967	22.4	38	0.48	
18:35	3.60	4		"	7.75	2956	22.3	39	0.36	
18:37	5.41	6	12.65	"	7.71	2961	22.3	39	0.33	33
18:38	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	12.61'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**GOD-MW 4D / DTW: 11.80'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	GOD-MW5S	**DATE:**	8/20/2012

PROJECT NAME:	GODINHO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	12710 S. WILSON ROAD	**SAMPLE TIME:**	15:40
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	6.42	FEET	**CALC. PURGE VOL.:**	3.42	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.40	FEET	**TOTAL VOLUME PURGED:**	10.5	GAL.
STANDING WATER COLUMN:		20.98	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:28	0	0	6.42	1.0 GPM	8.26	1568	21.5	59	0.72	
15:32	3.42	3.5		"	8.13	1674	21.4	36	0.61	
15:36	6.85	7		"	7.96	1735	21.2	31	0.56	
15:40	10.27	10.5	6.52	"	7.95	1741	21.1	30	0.52	8
15:40	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	6.49'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**GOD-MW 5D / DTW: 6.16'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	GOD-MW6S	**DATE:**	8/20/2012

PROJECT NAME:	GODINHO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	12710 S. WILSON ROAD	**SAMPLE TIME:**	16:28
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:		TILL ANGERMAN		**MONUMENT:**	POST	
SAMPLER:		DEL-TECH / DON LIGHT		**WELL CASING MATERIAL :**	PVC	
SIGNED:		Don Light		**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:		GROUNDWATER		**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	6.29	FEET	**CALC. PURGE VOL.:**	3.0	GAL.
DEPTH OF WELL:	**(feet.100th's)**	24.70	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		18.41	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
16:18	0	0	6.29	1.0 GPM	7.86	3850	22.5	37	0.25	
16:21	3.00	3		"	7.73	3794	22.0	38	0.25	
16:24	6.01	6		"	7.70	3766	21.8	38	0.22	
16:27	9.01	9	7.14	"	7.66	3763	21.7	39	0.22	7
16:28	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	7.12'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**GOD-MW 6D / DTW: 6.16'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	GOD-MW7S	**DATE:**	8/20/2012

PROJECT NAME:	GODINHO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	12710 S. WILSON ROAD	**SAMPLE TIME:**	16:00
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	5.45	FEET	**CALC. PURGE VOL.:**	3.22	GAL.
DEPTH OF WELL:	**(feet.100th's)**	25.20	FEET	**TOTAL VOLUME PURGED:**	10.5	GAL.
STANDING WATER COLUMN:		19.75	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:51	0	0	5.45	1.0 GPM	7.79	4017	22.0	17	0.50	
15:54	3.22	3.5		"	7.76	4034	21.8	18	0.50	
15:57	6.45	7		"	7.75	4011	21.8	23	0.44	
16:00	9.67	10.5	6.11	"	7.75	4010	21.7	25	0.35	17
16:00	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	6.09'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**GOD-MW 7D / DTW: 5.44'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

JOHN MACHADO DAIRY
22495 W. CHINA CAMP ROAD
LOS BANOS, CA.
August 17, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MAC-MW1S **DATE:** 8/17/2012

PROJECT NAME:	JOHN MACHADO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22495 W. CHINA CAMP ROAD	**SAMPLE TIME:**	10:54
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	6.28	FEET	**CALC. PURGE VOL.:**	1.85	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.60	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		11.32	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:47	0	0	6.29	1.0 GPM	7.37	2421	21.2	213	1.0	
10:49	1.85	2		"	7.23	2417	21.7	214	0.72	
10:51	3.69	4		"	7.21	2422	21.7	214	0.51	
10:53	5.54	6	6.42	"	7.18	2423	22.1	215	0.56	26
10:54	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	6.69'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MAC-MW 1D / DTW: 6.17'**		
WEATHER:	CLEAR SKIES / VERY HOT.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MAC-MW2S **DATE:** 8/17/2012

PROJECT NAME:	JOHN MACHADO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22495 W. CHINA CAMP ROAD	**SAMPLE TIME:**	10:40
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	5.05	FEET	**CALC. PURGE VOL.:**	2.06	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.70	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		12.65	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:28	0	0	5.11	0.5 GPM	7.45	2505	22.0	215	1.0	
10:32	2.06	2		"	7.14	2603	20.7	218	0.84	
10:36	4.13	4		"	7.06	2624	20.5	219	0.46	
10:40	6.19	6	5.36	"	7.01	2619	20.9	218	0.60	28
10:40	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	5.32'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MAC-MW 2D / DTW: 4.82'**		
WEATHER:	CLEAR SKIES / VERY HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	MAC-MW3S	**DATE:**	8/17/2012

PROJECT NAME:	JOHN MACHADO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22495 W. CHINA CAMP ROAD	**SAMPLE TIME:**	11:40
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	5.28	FEET	**CALC. PURGE VOL.:**	3.71	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.00	FEET	**TOTAL VOLUME PURGED:**	12	GAL.
STANDING WATER COLUMN:		22.72	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:28	0	0	5.30	1.0 GPM	7.47	9,540	20.1	180	0.66	
11:32	3.71	4		"	7.22	8,485	20.8	101	0.78	
11:36	7.42	8		"	7.13	8,866	20.6	121	0.68	
11:40	11.12	12	6.22	"	7.08	9,029	21.5	133	0.68	193
11:40	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	6.08'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MAC-MW 3D / DTW: 5.08'**		
WEATHER:	CLEAR SKIES / VERY HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MAC-MW4S **DATE:** 8/17/2012

PROJECT NAME:	JOHN MACHADO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22495 W. CHINA CAMP ROAD	**SAMPLE TIME:**	11:22
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	5.44	FEET	**CALC. PURGE VOL.:**	1.92	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.20	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		11.76	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:16	0	0	5.49	1.0 GPM	7.23	4756	24.2	185	0.81	
11:18	1.92	2		"	7.20	4449	22.6	186	0.61	
11:20	3.84	4		"	7.18	4400	22.0	185	0.80	
11:22	5.76	6	5.91	"	7.17	4340	22.7	181	0.57	7
11:22	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	5.88'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MAC-MW 4D / DTW: 5.35'**		
WEATHER:	CLEAR SKIES / VERY HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MAC-MW5S **DATE:** 8/17/2012

PROJECT NAME:	JOHN MACHADO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22495 W. CHINA CAMP ROAD	**SAMPLE TIME:**	11:09
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	4.65	FEET	**CALC. PURGE VOL.:**	3.66	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.10	FEET	**TOTAL VOLUME PURGED:**	12	GAL.
STANDING WATER COLUMN:		22.45	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:57	0	0	4.66	1.0 GPM	7.44	4011	21.3	204	0.91	
11:01	3.66	4		"	7.38	4093	21.3	203	0.60	
11:05	7.33	8		"	7.35	4085	21.5	200	0.55	
11:09	10.99	12	5.17	"	7.33	4082	22.2	195	0.42	672
11:09	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	5.11'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MAC-MW 5D / DTW: 4.50'**		
WEATHER:	CLEAR SKIES / VERY HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

JOSE NUNES DAIRY
22484 W. CHINA CAMP ROAD
LOS BANOS, CA.
August 17, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / NUN-MW1S **DATE:** 8/17/2012

PROJECT NAME:	JOSE NUNES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22484 W. CHINA CAMP ROAD	**SAMPLE TIME:**	12:23
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	6.94	FEET	**CALC. PURGE VOL.:**	1.72	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.46	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		10.52	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:15	0	0	7.55	1.0 GPM	7.33	6133	22.1	161	0.8	
12:17	1.72	2		"	7.26	6320	21.5	162	0.5	
12:19	3.43	4		"	7.17	6438	21.3	165	0.7	
12:21	5.15	6	7.96	"	7.16	6470	21.4	165	0.5	7
12:23	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	7.85'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**NUN-MW 1D / DTW: 6.67'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / NUN-MW2S **DATE:** 8/17/2012

PROJECT NAME:	JOSE NUNES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22484 W. CHINA CAMP ROAD	**SAMPLE TIME:**	12:02
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	7.58	FEET	**CALC. PURGE VOL.:**	3.32	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.95	FEET	**TOTAL VOLUME PURGED:**	10.5	GAL.
STANDING WATER COLUMN:		20.37	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:48	0	0	7.92	1.0 GPM	7.32	5129	21.8	151	0.7	
11:52	3.32	3.5		"	7.32	4746	20.6	151	0.6	
11:56	6.65	7		"	7.27	4112	20.9	151	0.4	
12:00	9.97	10.5	8.66	"	7.23	3892	21.6	152	0.4	8
12:02	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	8.24'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**NUN-MW 2D / DTW: 7.38'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	NUN-MW3S	**DATE:**	8/17/2012

PROJECT NAME:	JOSE NUNES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22484 W. CHINA CAMP ROAD	**SAMPLE TIME:**	12:37
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	LIGHT BROWN	
DEPTH TO WATER:	**(feet.100th's)**	4.79	FEET	**CALC. PURGE VOL.:**	1.70	GAL.
DEPTH OF WELL:	**(feet.100th's)**	15.18	FEET	**TOTAL VOLUME PURGED:**	6.0	GAL.
STANDING WATER COLUMN:		10.39	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:29	0	0	5.22	1.0 GPM	7.30	6893	24.2	169	0.8	
12:31	1.70	2		"	7.09	6838	24.2	132	0.5	
12:33	3.39	4		"	7.05	6824	24.0	137	0.6	
12:35	5.09	6	8.14	"	7.02	6817	23.7	143	0.7	77
12:37	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	8.04'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**NUN-MW 3D / DTW: 4.74'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	NUN-MW4S	**DATE:**	8/17/2012

PROJECT NAME:	JOSE NUNES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22484 W. CHINA CAMP ROAD	**SAMPLE TIME:**	12:51
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / ASHLEY LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Ashley Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	5.60	FEET	**CALC. PURGE VOL.:**	1.54	GAL.
DEPTH OF WELL:	**(feet.100th's)**	15.06	FEET	**TOTAL VOLUME PURGED:**	4.5	GAL.
STANDING WATER COLUMN:		9.46	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:41	0	0	6.24	0.5 GPM	7.21	11,220	23.8	168	1.0	
12:44	1.54	1.5		"	7.12	11,400	23.2	169	0.9	
12:47	3.09	3		"	7.10	11,650	23.5	167	0.7	
12:50	4.63	4.5	9.20	"	7.08	11,820	23.8	165	0.6	262
12:51	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.01'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**NUN-MW 4D / DTW: 5.57'**		
WEATHER:	CLEAR SKIES / HOT.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

MOONSHINE DAIRY
22922 KILBURN ROAD
CROWS LANDING, CA
August 14, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MOO-MW1 **DATE:** 8/14/2012

PROJECT NAME:	MOONSHINE DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22922 KILBURN ROAD	**SAMPLE TIME:**	14:25
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	4" /	0.6528
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	13.18	FEET	**CALC. PURGE VOL.:**	8.53	GAL.
DEPTH OF WELL:	**(feet.100th's)**	26.25	FEET	**TOTAL VOLUME PURGED:**	26	GAL.
STANDING WATER COLUMN:		13.07	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:08	0	0	13.40	2.0 GPM	6.91	3021	22.5	181	0.8	
14:13	8.53	8.5		"	7.00	3090	21.3	169	0.8	
14:18	17.06	17		"	7.16	3093	22.1	154	0.7	
14:23	25.60	25.6	13.44	"	7.18	3106	21.3	143	0.8	2
14:25	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	13.24'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ADJACENT LAGOON IS FULL.**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	MOO-MW2	**DATE:**	8/14/2012

PROJECT NAME:	MOONSHINE DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22922 KILBURN ROAD	**SAMPLE TIME:**	15:28
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	4" /	0.6528
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	19.73	FEET	**CALC. PURGE VOL.:**	6.16	GAL.
DEPTH OF WELL:	**(feet.100th's)**	29.16	FEET	**TOTAL VOLUME PURGED:**	18	GAL.
STANDING WATER COLUMN:		9.43	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:17	0	0	21.02	2.0 GPM	7.01	3790	22.7	169	1.3	
15:20	6.16	6		"	7.06	3573	22.4	171	0.9	
15:23	12.31	12		"	7.05	3693	22.5	166	1.0	
15:26	18.47	18	25.46	"	7.07	3698	23.0	168	2.0	121
15:28	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	25.89'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ADJACENT LAGOON IS FULL.**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	MOO-MW3	**DATE:**	8/14/2012

PROJECT NAME:	MOONSHINE DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22922 KILBURN ROAD	**SAMPLE TIME:**	16:09
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	4" /	0.6528
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	11.06	FEET	**CALC. PURGE VOL.:**	11.06	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.00	FEET	**TOTAL VOLUME PURGED:**	33.0	GAL.
STANDING WATER COLUMN:		16.94	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:49	0	0	11.55	2.0 GPM	7.17	2480	21.1	184	1.8	
15:54	11.06	11		"	7.09	2423	21.4	186	1.4	
16:00	22.12	22		"	7.09	2484	21.4	179	1.6	
16:06	33.18	33	11.60	"	7.12	2485	21.1	179	1.7	2
16:09	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	13.62'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	MOO-MW4	**DATE:**	8/14/2012

PROJECT NAME:	MOONSHINE DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22922 KILBURN ROAD	**SAMPLE TIME:**	16:35
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	4" /	0.6528
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	11.37	FEET	**CALC. PURGE VOL.:**	10.01	GAL.
DEPTH OF WELL:	**(feet.100th's)**	26.70	FEET	**TOTAL VOLUME PURGED:**	30	GAL.
STANDING WATER COLUMN:		15.33	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
16:17	0	0	12.15	2.0 GPM	7.12	2643	21.6	176	0.8	
16:22	10.01	10		"	7.20	2489	20.5	180	1.3	
16:27	20.01	20		"	7.18	2487	20.4	187	1.4	
16:33	30.02	30	12.30	"	7.17	2485	20.5	184	1.3	10
16:35	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	12.00'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	MOO-MW5S	**DATE:**	8/14/2012

PROJECT NAME:	MOONSHINE DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22922 KILBURN ROAD	**SAMPLE TIME:**	15:03
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	12.10	FEET	**CALC. PURGE VOL.:**	3.33	GAL.
DEPTH OF WELL:	**(feet.100th's)**	32.50	FEET	**TOTAL VOLUME PURGED:**	11	GAL.
STANDING WATER COLUMN:		20.40	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:48	0	0	12.87	1.0 GPM	7.16	2398	21.8	158	1.1	
14:52	3.33	3.5		"	7.04	2401	20.4	163	0.9	
14:56	6.66	7		"	7.12	2406	20.4	165	1.0	
15:00	9.99	10.5	13.25	"	7.13	2396	21.3	160	0.7	39
15:03	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	12.67'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MOO-MW 5D / DTW: 16.48'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	MOO-MW6S	**DATE:**	8/14/2012

PROJECT NAME:	MOONSHINE DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22922 KILBURN ROAD	**SAMPLE TIME:**	13:49
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	18.88	FEET	**CALC. PURGE VOL.:**	2.40	GAL.
DEPTH OF WELL:	**(feet.100th's)**	33.60	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		14.72	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:38	0	0	22.52	1.0 GPM	6.96	2132	22.0	207	1.1	
13:41	2.40	2.5		"	6.90	2130	20.9	209	1.1	
13:44	4.80	5		"	6.84	2148	21.5	208	1.1	
13:47	7.21	7.5	24.73	"	6.83	2141	20.9	210	1.1	498
13:49	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	24.72'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MOO-MW 6D / DTW: 25.70'**		
	SILTY / SANDY		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	MOO-MW7S	**DATE:**	8/14/2012

PROJECT NAME:	MOONSHINE DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22922 KILBURN ROAD	**SAMPLE TIME:**	13:29
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	19.85	FEET	**CALC. PURGE VOL.:**	1.38	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.30	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		8.45	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:18	0	0	22.02	0.5 GPM	7.06	3176	20.7	202	2.2	
13:21	1.38	1.5		"	7.04	3256	19.9	205	1.8	
13:24	2.76	3		"	7.03	3381	19.9	213	1.5	
13:27	4.14	4.5	23.32	"	7.03	3391	19.8	214	1.4	938
13:29	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	23.10'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MOO-MW 7D / DTW: 19.81'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	MOO-MW8S	**DATE:**	8/14/2012

PROJECT NAME:	MOONSHINE DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22922 KILBURN ROAD	**SAMPLE TIME:**	13:07
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	19.49	FEET	**CALC. PURGE VOL.:**	1.19	GAL.
DEPTH OF WELL:	**(feet.100th's)**	26.80	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		7.31	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:59	0	0	21.08	0.5 GPM	6.97	1566	22.8	168	3.1	
13:01	1.19	1		"	7.33	1298	20.4	178	3.0	
13:03	2.39	2		"	7.31	1244	19.7	176	3.0	
13:05	3.58	3	22.15	"	7.28	1235	19.8	180	2.9	108
13:07	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	22.10'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MOO-MW 8D / DTW: 19.35'**		
	SANDY / SILTY		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

TONY L. LOPES DAIRY LP
27500 BUNKER ROAD
GUSTINE, CA.
August 16, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / TON-MW1S **DATE:** 8/16/2012

PROJECT NAME:	TONY L. LOPES DAIRY LP	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	27500 BUNKER ROAD	**SAMPLE TIME:**	11:17
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	11.24	FEET	**CALC. PURGE VOL.:**	2.07	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.90	FEET	**TOTAL VOLUME PURGED:**	6.0	GAL.
STANDING WATER COLUMN:		12.66	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:08	0	0	11.55	1.0 GPM	6.96	4034	20.6	238	0.9	
11:10	2.07	2		"	6.94	4030	20.1	240	0.9	
11:12	4.13	4		"	6.93	4025	20.1	238	0.9	
11:14	6.20	6	11.89	"	6.94	4024	20.2	236	1.0	32
11:17	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.60'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**TON-MW 1D / DTW: 11.11'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPTONE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	TON-MW2S	**DATE:**	8/16/2012

PROJECT NAME:	TONY L. LOPES DAIRY LP	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	27500 BUNKER ROAD	**SAMPLE TIME:**	10:59
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	4.66	FEET	**CALC. PURGE VOL.:**	3.06	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.40	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		18.74	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:47	0	0	5.70	1.0 GPM	7.04	4576	20.8	299	1.7	
10:50	3.06	3		"	7.16	4580	20.7	269	1.0	
10:53	6.12	6		"	7.17	4709	20.6	264	0.8	
10:56	9.18	9	5.89	"	7.06	4335	20.7	252	0.9	24
10:59	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	5.75'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**TON-MW 2D / DTW: 4.50'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPTONE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	TON-MW3S	**DATE:**	8/16/2012

PROJECT NAME:	TONY L. LOPES DAIRY LP	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	27500 BUNKER ROAD	**SAMPLE TIME:**	12:09
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	15.75	FEET	**CALC. PURGE VOL.:**	1.26	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.50	FEET	**TOTAL VOLUME PURGED:**	3.0	GAL.
STANDING WATER COLUMN:		7.75	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:01	0	0	16.51	0.5 GPM	7.10	3167	21.4	210	0.9	
12:03	1.26	1		"	7.07	3027	20.4	214	1.3	
12:05	2.53	2		"	7.05	3000	20.4	217	1.3	
12:07	3.79	3	16.68	"	7.06	3001	20.4	217	1.4	6
12:09	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	16.13'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**TON-MW 3D / DTW: 15.65'**		
	DUPLICATE #6 TAKEN HERE.		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPTONE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	TON-MW4S	**DATE:**	8/16/2012

PROJECT NAME:	TONY L. LOPES DAIRY LP	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	27500 BUNKER ROAD	**SAMPLE TIME:**	11:45
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	LIGHT BROWN	
DEPTH TO WATER:	**(feet.100th's)**	17.92	FEET	**CALC. PURGE VOL.:**	0.80	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.80	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		4.88	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:36	0	0	18.41	0.5 GPM	6.98	3943	23.0	216	1.9	
11:38	0.80	1		"	6.99	3922	20.4	217	0.5	
11:40	1.59	2		"	7.00	3921	20.3	219	0.4	
11:42	2.39	3	18.45	"	7.00	3923	20.3	220	0.5	44
11:45	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	18.03'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**TON-MW 4D / DTW: 17.62'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	TON-MW5S	**DATE:**	8/16/2012

PROJECT NAME:	TONY L. LOPES DAIRY LP	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	27500 BUNKER ROAD	**SAMPLE TIME:**	12:42
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	12.96	FEET	**CALC. PURGE VOL.:**	1.61	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.80	FEET	**TOTAL VOLUME PURGED:**	6.0	GAL.
STANDING WATER COLUMN:		9.84	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:33	0	0	14.10	1.0 GPM	7.13	3342	23.0	215	1.3	
12:35	1.61	2		"	6.96	3402	21.5	216	0.5	
12:37	3.21	4		"	6.95	3390	21.3	216	0.5	
12:39	4.82	6	15.16	"	6.94	3386	21.4	216	0.6	5
12:42	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	14.65'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**TON-MW 5D / DTW: 12.88'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPTONE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	TON-MW6S	**DATE:**	8/16/2012

PROJECT NAME:	TONY L. LOPES DAIRY LP	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	27500 BUNKER ROAD	**SAMPLE TIME:**	13:23
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	8.70	FEET	**CALC. PURGE VOL.:**	3.18	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.20	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		19.50	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:12	0	0	10.05	1.0 GPM	7.42	3040	20.6	206	1.0	
13:15	3.18	3		"	7.42	3008	19.8	206	1.1	
13:18	6.36	6		"	7.38	3007	19.8	207	0.8	
13:21	9.55	9	10.15	"	7.38	3018	19.9	207	1.0	3
13:23	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.20'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**TON-MW 6D / DTW: 8.70'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPTONE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	TON-MW7S	**DATE:**	8/16/2012

PROJECT NAME:	TONY L. LOPES DAIRY LP	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	27500 BUNKER ROAD	**SAMPLE TIME:**	14:46
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	7.07	FEET	**CALC. PURGE VOL.:**	3.45	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.20	FEET	**TOTAL VOLUME PURGED:**	11	GAL.
STANDING WATER COLUMN:		21.13	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:32	0	0	8.21	1.0 GPM	7.22	1979	22.8	187	0.7	
14:36	3.45	3.5		"	7.70	1795	22.8	188	1.1	
14:40	6.90	7		"	7.70	1832	22.1	187	0.7	
14:44	10.35	10.5	8.81	"	7.65	1845	21.7	190	0.7	7
14:46	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	8.15'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**TON-MW 7D / DTW: 6.75'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPTONE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	TON-MW8S	**DATE:**	8/16/2012

PROJECT NAME:	TONY L. LOPES DAIRY LP	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	27500 BUNKER ROAD	**SAMPLE TIME:**	14:05
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / CASSANDRA LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Cassandra Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	9.78	FEET	**CALC. PURGE VOL.:**	2.92	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.70	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		17.92	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:50	0	0	12.22	1.0 GPM	7.06	6714	21.2	208	0.9	
13:53	2.92	3		"	7.13	5969	20.6	212	0.6	
13:56	5.85	6		"	7.04	6095	19.8	214	0.7	
13:59	8.77	9	13.19	"	7.04	6036	20.5	213	0.5	28
14:05	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	13.10'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**TON-MW 8D / DTW: 9.23'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPTONE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

2012Q4 East Side

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

ALBERT MENDES DAIRY
1100 RUBLE ROAD
CROWS LANDING, CA.
December 6, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MEN-MW1S **DATE:** 12/6/2012

PROJECT NAME:	ALBERT MENDES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	1100 RUBLE ROAD	**SAMPLE TIME:**	10:35
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	9.20	FEET	**CALC. PURGE VOL.:**	1.39	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.70	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		8.50	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:28	0	0	9.20	1.0 GPM	6.31	4016	18.4	127	2.3	
10:30	1.39	1.5		"	6.31	4668	19.9	111	1.4	
10:32	2.77	3		"	6.44	4734	20.3	104	1.0	
10:35	4.16	4.5	9.22	"	6.55	4729	20.4	98	1.1	225
10:35	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.22'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MEN-MW 1D / DTW: 9.09'**		
	DUPLICATE #5 TAKEN HERE.		
	LARGE AMOUNT OF WASTE AND GARBAGE AROUND WELL.		
WEATHER:	OVERCAST / COLD	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	MEN-MW2S	**DATE:**	12/6/2012

PROJECT NAME:	ALBERT MENDES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	1100 RUBLE ROAD	**SAMPLE TIME:**	10:47
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	9.15	FEET	**CALC. PURGE VOL.:**	1.36	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.50	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		8.35	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:41	0	0	9.15	1.0 GPM	7.09	4507	19.4	76	3.8	
10:43	1.36	1.5		"	7.08	4320	20.5	74	1.7	
10:45	2.73	3		"	7.10	4296	20.9	73	0.9	
10:47	4.09	4.5	9.19	"	7.10	4297	21.0	71	0.9	254
10:47	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.19'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MEN-MW 2D / DTW: 9.03'**		
WEATHER:	OVERCAST / COLD	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MEN-MW3S **DATE:** 12/6/2012

PROJECT NAME:	ALBERT MENDES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	1100 RUBLE ROAD	**SAMPLE TIME:**	11:31
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	9.23	FEET	**CALC. PURGE VOL.:**	1.41	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.90	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		8.67	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:25	0	0	9.23	1.0 GPM	7.70	1774	19.5	58	4.0	
11:27	1.41	1.5		"	7.41	2697	20.0	67	0.8	
11:29	2.83	3		"	7.30	2732	20.2	68	0.9	
11:31	4.24	4.5	9.25	"	7.25	2741	20.2	69	0.6	34
11:31	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.25'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MEN-MW 3D / DTW: 9.04'**		
WEATHER:	OVERCAST / COLD	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MEN-MW4S **DATE:** 12/6/2012

PROJECT NAME:	ALBERT MENDES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	1100 RUBLE ROAD	**SAMPLE TIME:**	11:45
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	8.87	FEET	**CALC. PURGE VOL.:**	1.46	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.80	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		8.93	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:39	0	0	8.87	1.0 GPM	7.34	2380	19.2	77	2.4	
11:41	1.46	1.5		"	7.34	2055	20.2	76	1.1	
11:43	2.91	3		"	7.34	1987	20.5	76	1.0	
11:45	4.37	4.5	8.89	"	7.31	1984	20.6	76	1.2	7
11:45	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	8.89'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MEN-MW 4D / DTW: 8.75'**		
WEATHER:	OVERCAST / COLD	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	MEN-MW5S	**DATE:**	12/6/2012

PROJECT NAME:	ALBERT MENDES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	1100 RUBLE ROAD	**SAMPLE TIME:**	11:17
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	10.10	FEET	**CALC. PURGE VOL.:**	1.16	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.20	FEET	**TOTAL VOLUME PURGED:**	3.0	GAL.
STANDING WATER COLUMN:		7.10	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:12	0	0	10.10	1.0 GPM	7.61	2252	19.2	59	4.6	
11:13	1.16	1		"	7.54	1717	20.7	67	1.5	
11:15	2.32	2		"	7.46	1702	21.0	71	1.0	
11:17	3.48	3	10.16	"	7.42	1701	21.0	72	1.1	9
11:17	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.16'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MEN-MW 5D / DTW: 10.00'**		
WEATHER:	OVERCAST / COLD	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	MEN-MW6S	**DATE:**	12/6/2012

PROJECT NAME:	ALBERT MENDES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	1100 RUBLE ROAD	**SAMPLE TIME:**	12:10
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	8.70	FEET	**CALC. PURGE VOL.:**	2.55	GAL.
DEPTH OF WELL:	**(feet.100th's)**	24.30	FEET	**TOTAL VOLUME PURGED:**	8	GAL.
STANDING WATER COLUMN:		15.60	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:02	0	0	8.70	1.0 GPM	7.93	2573	18.4	62	3.3	
12:05	2.55	2.5		"	7.72	2778	19.0	70	1.2	
12:07	5.09	5		"	7.62	2836	19.0	73	1.3	
12:10	7.64	7.5	8.75	"	7.53	2889	19.0	76	0.7	5
12:10	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	8.75'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MEN-MW 6D / DTW: 8.64'**		
WEATHER:	OVERCAST / COLD	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	MEN-MW7S	**DATE:**	12/6/2012

PROJECT NAME:	ALBERT MENDES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	1100 RUBLE ROAD	**SAMPLE TIME:**	11:05
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	6.96	FEET	**CALC. PURGE VOL.:**	2.65	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.20	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		16.24	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:55	0	0	6.96	1.0 GPM	7.46	3598	19.5	64	4.4	
10:58	2.65	3		"	7.41	2435	19.6	66	1.6	
11:01	5.30	6		"	7.31	2486	19.3	67	0.8	
11:05	7.95	9	7.02	"	7.32	2501	19.4	67	0.9	3
11:05	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	7.02'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MEN-MW 7D / DTW: 6.82''**		
WEATHER:	OVERCAST / COLD	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

ANCHOR J. DAIRY
24507 FIRST AVENUE
STEVINSON, CA.
December 6, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANC-MW1 **DATE:** 12/6/2012

PROJECT NAME:	ANCHOR J. DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	24507 FIRST AVENUE	**SAMPLE TIME:**	14:50
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	13.37	FEET	**CALC. PURGE VOL.:**	1.77	GAL.
DEPTH OF WELL:	**(feet.100th's)**	24.22	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		10.85	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:43	0	0	13.37	1.0 GPM	7.85	2072	17.9	35	4.20	
14:45	1.77	2		"	7.69	1987	20.2	42	1.50	
14:47	3.54	4		"	7.61	1978	20.5	46	0.98	
14:50	5.31	6	13.41	"	7.52	1986	20.6	49	1.00	3
14:50	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	13.41'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANC-MW2 **DATE:** 12/6/2012

PROJECT NAME:	ANCHOR J. DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	24507 FIRST AVENUE	**SAMPLE TIME:**	14:00
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	20.61	FEET	**CALC. PURGE VOL.:**	2.41	GAL.
DEPTH OF WELL:	**(feet.100th's)**	35.37	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		14.76	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:48	0	0	20.61	1.0 GPM	7.71	2194	21.1	28	1.70	
13:51	2.41	2.5		"	7.48	2386	20.4	31	1.00	
13:55	4.82	5		"	7.43	2382	20.7	12	0.98	
14:00	7.23	7.5	20.77	"	7.44	2381	20.6	-17	0.99	3
14:00	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	20.77'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	ANC-MW3	**DATE:**	12/6/2012

PROJECT NAME:	ANCHOR J. DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	24507 FIRST AVENUE	**SAMPLE TIME:**	14:33
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	10.87	FEET	**CALC. PURGE VOL.:**	2.35	GAL.
DEPTH OF WELL:	**(feet.100th's)**	25.26	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		14.39	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:26	0	0	10.87	1.0 GPM	7.81	1412	19.6	61	2.10	
14:29	2.35	2.5		"	7.59	2064	21.2	64	0.86	
14:31	4.70	5		"	7.54	2099	21.7	61	0.78	
14:33	7.05	7.5	10.94	"	7.55	2112	21.6	57	0.70	4
14:33	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.94'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANC-MW4 **DATE:** 12/6/2012

PROJECT NAME:	ANCHOR J. DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	24507 FIRST AVENUE	**SAMPLE TIME:**	14:12
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	21.58	FEET	**CALC. PURGE VOL.:**	1.97	GAL.
DEPTH OF WELL:	**(feet.100th's)**	33.65	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		12.07	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:06	0	0	21.58	1.0 GPM	7.99	1033	17.5	36	5.8	
14:08	1.97	2		"	8.11	924	19.8	39	2.3	
14:10	3.94	4		"	8.02	878	20.3	47	1.8	
14:12	5.91	6	21.71	"	7.98	890	20.4	52	1.7	92
14:12	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	21.71'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	ANC-MW5S	**DATE:**	12/6/2012

PROJECT NAME:	ANCHOR J. DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	24507 FIRST AVENUE	**SAMPLE TIME:**	12:56
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	16.18	FEET	**CALC. PURGE VOL.:**	1.98	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.30	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		12.12	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:50	0	0	16.18	1.0 GPM	7.96	3008	17.8	57	4.8	
12:52	1.98	2		"	7.88	3598	19.6	49	1.4	
12:54	3.96	4		"	8.08	3652	19.9	53	1.00	
12:56	5.93	6	16.29	"	8.10	3618	20.1	52	1.10	91
12:56	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	16.29'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ANC-MW 5D / DTW: 16.54'**		
	DUPLICATE #6 TAKEN HERE.		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANC-MW6S **DATE:** 12/6/2012

PROJECT NAME:	ANCHOR J. DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	24507 FIRST AVENUE	**SAMPLE TIME:**	13:30
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	14.65	FEET	**CALC. PURGE VOL.:**	2.15	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.80	FEET	**TOTAL VOLUME PURGED:**	10	GAL.
STANDING WATER COLUMN:		13.15	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:20	0	0	14.65	1.0 GPM	7.84	1685	21.5	58	1.3	
13:23	2.15	2		"	7.59	1747	22.8	62	0.7	
13:26	4.29	4		"	7.50	1772	23.1	52	0.7	
13:30	6.44	6	14.69	"	7.43	1782	23.2	63	0.8	3
13:30	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	14.69'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ANC-MW 6D / DTW: 14.58'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	ANC-MW7S	**DATE:**	12/6/2012

PROJECT NAME:	ANCHOR J. DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	24507 FIRST AVENUE	**SAMPLE TIME:**	13:15
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	14.34	FEET	**CALC. PURGE VOL.:**	2.18	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.70	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		13.36	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:06	0	0	14.34	1.0 GPM	8.35	2652	19.7	55	2.7	
13:09	2.18	2		"	8.15	1341	20.7	62	1.7	
13:12	4.36	4		"	8.00	1287	21.1	64	1.9	
13:15	6.54	6	14.50	"	7.90	1287	21.1	67	1.9	18
13:15	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	14.50'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ANC-MW 7D / DTW: 14.22'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

BETTENCOURT AND MARSON DAIRY
18128 AMERICAN AVENUE
HILMAR, CA.
December 7, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BET-MW1S **DATE:** 12/7/2012

PROJECT NAME:	BETTENCOURT AND MARSON DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	11:22
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	12.78	FEET	**CALC. PURGE VOL.:**	1.60	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.60	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		9.82	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:15	0	0	12.78	1.0 GPM	5.31	741	18.7	211	3.7	
11:17	1.60	1.5		"	5.93	516	20.7	144	1.7	
11:19	3.21	3		"	6.04	508	21.1	110	1.6	
11:22	4.81	4.5	12.83	"	6.12	501	21.3	97	1.1	4
11:22	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	12.83'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BET-MW 1D / DTW: 12.26'**		
	DUPLICATE #7 TAKEN HERE.		
WEATHER:	CLEAR SKIES / WARM	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BET-MW2S **DATE:** 12/7/2012

PROJECT NAME:	BETTENCOURT AND MARSON DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	11:31
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	14.09	FEET	**CALC. PURGE VOL.:**	0.52	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.30	FEET	**TOTAL VOLUME PURGED:**	2	GAL.
STANDING WATER COLUMN:		3.21	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:28	0	0	14.09	0.5 GPM	6.60	554	20.9	64	4.7	
11:19	0.52	0.5		"	6.36	705	21.7	67	1.9	
11:30	1.05	1		"	6.34	713	21.8	68	1.8	
11:31	1.57	1.5	14.11	"	6.36	722	21.9	69	2.8	12
11:31	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	14.11'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BET-MW 2D / DTW: 13.81'**		
WEATHER:	CLEAR SKIES / WARM	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BET-MW3S **DATE:** 12/7/2012

PROJECT NAME:	BETTENCOURT AND MARSON DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	11:43
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	12.80	FEET	**CALC. PURGE VOL.:**	0.82	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.80	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		5.00	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:40	0	0	12.80	1.0 GPM	6.62	803	21.5	59	3.5	
11:41	0.82	1		"	6.45	821	21.7	64	2.0	
11:42	1.63	2		"	6.34	820	21.9	70	1.9	
11:43	2.45	3	13.41	"	6.31	807	21.8	75	1.8	6
11:43	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	13.41'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BET-MW 3D / DTW: 12.62'**		
WEATHER:	CLEAR SKIES / WARM	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	BET-MW4S	**DATE:**	12/7/2012

PROJECT NAME:	BETTENCOURT AND MARSON DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	12:10
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	10.13	FEET	**CALC. PURGE VOL.:**	2.13	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.20	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		13.07	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:03	0	0	10.13	1.0 GPM	6.88	1396	21.7	74	3.1	
12:06	2.13	2		"	6.76	1474	21.7	71	1.0	
12:08	4.27	4		"	6.71	1588	21.5	68	0.9	
12:10	6.40	6	10.30	"	6.74	1586	21.5	66	0.7	23
12:10	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.30'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BET-MW 4D / DTW: 9.46'**		
WEATHER:	CLEAR SKIES / WARM	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BET-MW5S **DATE:** 12/7/2012

PROJECT NAME:	BETTENCOURT AND MARSON DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	12:28
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	12.07	FEET	**CALC. PURGE VOL.:**	2.55	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.70	FEET	**TOTAL VOLUME PURGED:**	8	GAL.
STANDING WATER COLUMN:		15.63	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:20	0	0	12.07	1.0 GPM	7.36	1306	21.0	66	3.4	
12:23	2.55	2.5		"	7.07	1003	21.3	69	1.1	
12:25	5.10	5		"	6.90	996	21.3	69	1.1	
12:28	7.65	7.5	12.13	"	6.79	996	21.3	71	1.0	28
12:28	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	12.13'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BET-MW 5D / DTW: 11.88'**		
WEATHER:	CLEAR SKIES / WARM	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BET-MW6S **DATE:** 12/7/2012

PROJECT NAME:	BETTENCOURT AND MARSON DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	12:55
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	12.81	FEET	**CALC. PURGE VOL.:**	2.15	GAL.
DEPTH OF WELL:	**(feet.100th's)**	26.00	FEET	**TOTAL VOLUME PURGED:**	6.0	GAL.
STANDING WATER COLUMN:		13.19	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:47	0	0	12.81	1.0 GPM	6.57	588	19.9	88	2.0	
12:49	2.15	2		"	6.26	666	20.5	93	0.7	
12:52	4.31	4		"	6.26	682	20.6	92	1.8	
12:55	6.46	6	12.87	"	6.27	679	20.7	92	1.5	18
12:55	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	12.87'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BET-MW 6D / DTW: 12.59'**		
WEATHER:	CLEAR SKIES / WARM	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BET-MW7S **DATE:** 12/7/2012

PROJECT NAME:	BETTENCOURT AND MARSON DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	12:40
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	13.11	FEET	**CALC. PURGE VOL.:**	2.30	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.20	FEET	**TOTAL VOLUME PURGED:**	8	GAL.
STANDING WATER COLUMN:		14.09	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:32	0	0	13.11	1.0 GPM	7.06	897	20.4	62	2.2	
12:35	2.30	2.5		"	6.83	599	20.8	64	1.3	
12:38	4.60	5		"	6.36	595	20.8	75	1.4	
12:40	6.90	7.5	13.14	"	6.17	593	20.9	85	1.3	20
12:40	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	13.14'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BET-MW 7D / DTW: 12.14'**		
WEATHER:	CLEAR SKIES / WARM	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BET-MW8S **DATE:** 12/7/2012

PROJECT NAME:	BETTENCOURT AND MARSON DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	13:08
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	13.99	FEET	**CALC. PURGE VOL.:**	2.17	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.30	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		13.31	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:00	0	0	13.99	1.0 GPM	6.47	628	20.6	86	2.8	
13:02	2.17	2		"	6.45	611	20.7	85	2.2	
13:05	4.34	4		"	6.56	579	20.9	83	2.6	
13:08	6.52	6	14.04	"	6.53	584	21.2	84	2.5	17
13:08	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	14.04'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**BET-MW 8D / DTW: 14.04'**		
WEATHER:	CLEAR SKIES / WARM	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

FRANK J. GOMES DAIRY #1
5301 N. DEANGELIS ROAD
STEVINSON, CA.
December 11, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG1-MW1S **DATE:** 12/11/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	13:38
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	17.03	FEET	**CALC. PURGE VOL.:**	0.13	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.80	FEET	**TOTAL VOLUME PURGED:**	1	GAL.
STANDING WATER COLUMN:		0.77	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:35	0	0	17.03	0.25 GPM	6.48	1933	17.2	258	4.2	
13:36	0.13	0.25		"	6.64	1436	19.1	249	4.1	
13:37	0.25	0.50		"	6.70	1260	20.1	245	3.6	
13:38	0.38	0.75	17.68	"	6.59	1216	20.1	246	3.3	22
13:38	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	17.68'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG1-MW 1D / DTW: 16.73'**		
WEATHER:	OVERCAST / COOL	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG1-MW2D **DATE:** 12/11/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	14:12
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	20.03	FEET	**CALC. PURGE VOL.:**	1.69	GAL.
DEPTH OF WELL:	**(feet.100th's)**	30.40	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		10.37	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:06	0	0	20.03	1.0 GPM	6.98	1741	19.3	237	2.9	
14:08	1.69	2		"	6.78	1403	20.6	240	1.0	
14:10	3.38	4		"	6.63	1370	20.9	240	0.8	
14:12	5.08	6	20.26	"	6.54	1369	21.0	240	0.9	2
14:12	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	20.26'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE FG1-MW-2S / WELL WENT DRY.**		
WEATHER:	OVERCAST / COOL	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	FG1-MW3D	**DATE:**	12/11/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	13:55
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	LIGHT BROWN	
DEPTH TO WATER:	**(feet.100th's)**	18.17	FEET	**CALC. PURGE VOL.:**	2.00	GAL.
DEPTH OF WELL:	**(feet.100th's)**	30.40	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		12.23	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:49	0	0	18.17	1.0 GPM	6.78	1433	19.1	243	3.5	
13:51	2.00	2		"	6.48	1922	20.3	249	1.1	
13:53	3.99	4		"	6.42	1918	20.8	249	1.3	
13:55	5.99	6	18.43	"	6.45	1966	21.0	249	1.1	43
13:55	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	18.43'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE FG1-MW-3S / WELL WENT DRY.**		
WEATHER:	OVERCAST / COOL	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	FG1-MW4S	**DATE:**	12/11/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	14:23
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	16.47	FEET	**CALC. PURGE VOL.:**	1.03	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.80	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		6.33	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:19	0	0	16.47	1.0 GPM	6.96	925	20.9	231	2.2	
14:20	1.03	1		"	6.67	914	23	231	1.9	
14:21	2.07	2		"	6.40	588	23.7	239	1.9	
14:23	3.10	3	16.77	"	6.18	593	23.4	243	1.8	19
14:23	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	16.77'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG1-MW 4D / DTW: 16.13'**		
WEATHER:	OVERCAST / COOL	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	FG1-MW5S	**DATE:**	12/11/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	15:34
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	15.85	FEET	**CALC. PURGE VOL.:**	1.22	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.30	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		7.45	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:30	0	0	15.85	1.0 GPM	6.60	552	17.3	232	3.0	
15:31	1.22	1		"	6.36	802	18.9	238	1	
15:32	2.43	2		"	6.29	825	19.5	240	0.8	
15:34	3.65	3	16.06	"	6.26	825	19.7	240	0.6	5.5
15:34	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	16.06'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG1-MW 5D / DTW: 15.66'**		
WEATHER:	OVERCAST / COOL	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	FG1-MW6S	**DATE:**	12/11/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	15:46
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	19.48	FEET	**CALC. PURGE VOL.:**	0.49	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.50	FEET	**TOTAL VOLUME PURGED:**	2	GAL.
STANDING WATER COLUMN:		3.02	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:43	0	0	19.48	1.0 GPM	6.55	740	17.9	236	3.5	
15:44	0.49	0.5		"	6.71	492	21.8	228	1.9	
15:45	0.99	1		"	6.56	331	24.0	228	1.2	
15:46	1.48	1.5	19.71	"	6.39	327	24.6	230	1.0	6.5
15:46	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	19.71'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG1-MW 6D / DTW: 19.27'**		
WEATHER:	OVERCAST / COOL	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	FG1-MW7S	**DATE:**	12/11/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	14:41
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	18.83	FEET	**CALC. PURGE VOL.:**	1.35	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.10	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		8.27	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:35	0	0	18.83	1.0 GPM	6.55	540	21.1	241	3.3	
14:37	1.35	1.5		"	6.25	454	22.7	243	1.2	
14:39	2.70	3		"	6.03	489	22.8	245	1.3	
14:41	4.05	4.5	19.11	"	5.97	509	22.8	245	1.5	55
14:41	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	19.11'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG1-MW 7D / DTW: 18.54'**		
WEATHER:	OVERCAST / COOL	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	FG1-MW8S	**DATE:**	12/11/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	14:56
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	18.01	FEET	**CALC. PURGE VOL.:**	0.68	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.20	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		4.19	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:51	0	0	18.01	1.0 GPM	6.29	606	19.9	247	2.8	
14:53	0.68	1		"	5.92	982	20.2	253	2.9	
14:54	1.37	2		"	5.84	1032	20.4	253	2.9	
14:56	2.05	3	18.23	"	5.82	1033	20.4	251	2.7	13
14:56	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	18.23'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG1-MW 8D / DTW: 17.76'**		
WEATHER:	OVERCAST / COOL	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG1-MW9S **DATE:** 12/11/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #1	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	5301 N. DEANGELIS ROAD	**SAMPLE TIME:**	15:11
CITY, STATE:	STEVINSON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	17.29	FEET	**CALC. PURGE VOL.:**	0.98	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.30	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		6.01	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:08	0	0	17.29	1.0 GPM	6.58	738	18.1	232	4.1	
15:09	0.98	1		"	6.55	457	18.2	229	1.2	
15:10	1.96	2		"	6.55	388	18.3	227	1.2	
15:11	2.94	3	17.50	"	6.53	382	18.5	227	1.2	349
15:11	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	17.50'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG1-MW 9D / DTW: 17.26'**		
WEATHER:	OVERCAST / COOL	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

GALLO CATTLE COMPANY BEAR CREEK
15751 W. HWY 140
LIVINGSTON, CA.
December 9, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BEA-MW1D **DATE:** 12/9/2012

PROJECT NAME:	GALLO CATTLE COMPANY BEAR CREEK	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	15751 W. HWY 140	**SAMPLE TIME:**	17:38
CITY, STATE:	LIVINGSTON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	34.25	FEET	**CALC. PURGE VOL.:**	0.97	GAL.
DEPTH OF WELL:	**(feet.100th's)**	40.20	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		5.95	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
17:34	0	0	34.25	1.0 GPM	7.15	2456	16.9	86	3.2	
17:35	0.97	1		"	6.90	2441	18.0	69	1.7	
17:36	1.94	2		"	6.89	2430	18.0	65	1.8	
17:37	2.91	3	36.52	"	6.88	2427	18.0	58	2.0	1000+
17:38	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	36.12'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	BEA-MW2D	**DATE:**	12/9/2012

PROJECT NAME:	GALLO CATTLE COMPANY BEAR CREEK	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	15751 W. HWY 140	**SAMPLE TIME:**	16:00
CITY, STATE:	LIVINGSTON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	29.00	FEET	**CALC. PURGE VOL.:**	2.63	GAL.
DEPTH OF WELL:	**(feet.100th's)**	45.10	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		16.10	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:50	0	0	29.00	1.0 GPM	8.16	665	18.8	145	1.0	
15:53	2.63	3		"	7.97	649	19.8	141	0.6	
15:56	5.26	6		"	7.97	632	20.3	135	0.7	
15:59	7.88	9	29.20	"	7.98	626	20.4	132	0.7	165
16:00	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	29.20'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	BEA-MW3D	**DATE:**	12/9/2012

PROJECT NAME:	GALLO CATTLE COMPANY BEAR CREEK	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	15751 W. HWY 140	**SAMPLE TIME:**	16:28
CITY, STATE:	LIVINGSTON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	31.49	FEET	**CALC. PURGE VOL.:**	1.41	GAL.
DEPTH OF WELL:	**(feet.100th's)**	40.10	FEET	**TOTAL VOLUME PURGED:**	4.5	GAL.
STANDING WATER COLUMN:		8.61	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:21	0	0	31.49	1.0 GPM	7.19	4508	17.6	137	0.7	
16:23	1.41	1.5		"	7.11	4566	18.5	141	0.7	
16:25	2.81	3		"	7.10	4482	18.6	141	0.8	
16:27	4.22	4.5	32.20	"	7.09	4479	18.6	140	0.7	71
16:28	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	32.20'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / BEA-MW4D **DATE:** 12/9/2012

PROJECT NAME:	GALLO CATTLE COMPANY BEAR CREEK	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	15751 W. HWY 140	**SAMPLE TIME:**	17:10
CITY, STATE:	LIVINGSTON, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	32.05	FEET	**CALC. PURGE VOL.:**	3.99	GAL.
DEPTH OF WELL:	**(feet.100th's)**	56.50	FEET	**TOTAL VOLUME PURGED:**	12	GAL.
STANDING WATER COLUMN:		24.45	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
16:58	0	0	32.22	1.0 GPM	7.77	1849	18.3	123	2.20	
17:02	3.99	4		"	7.59	1870	18.6	126	2.30	
17:06	7.98	8		"	7.59	1876	19.1	126	2.90	
17:10	11.97	12	34.18	"	7.58	1875	19.0	126	2.60	40
17:10	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	34.18'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

GALLO CATTLE COMPANY COTTONWOOD
10561 HWY 140
ATWATER, CA.
December 9, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW1 **DATE:** 12/9/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	15:00
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	NONE	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	31.43	FEET	**CALC. PURGE VOL.:**	0.15	GAL.
DEPTH OF WELL:	**(feet.100th's)**	32.33	FEET	**TOTAL VOLUME PURGED:**	0.15	GAL.
STANDING WATER COLUMN:		0.90	FEET	**LOCATION OF PUMP:**	31	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
	0	0	32.52	0.25 GPM	7.44	2001	16.5	155	1.6	880
	0.15	0.1								
	0.29									
	0.44									
15:00	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	N/A
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**POOR RECHARGE / GRAB SAMPLE.**		
	NEW TOTAL DEPTH.		
WEATHER:	OVERCAST / COLD.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW2 **DATE:** 12/9/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	14:25
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	NONE	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	LIGHT BROWN	
DEPTH TO WATER:	**(feet.100th's)**	31.21	FEET	**CALC. PURGE VOL.:**	1.04	GAL.
DEPTH OF WELL:	**(feet.100th's)**	37.58	FEET	**TOTAL VOLUME PURGED:**	3.0	GAL.
STANDING WATER COLUMN:		6.37	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
	0	0		1.0 GPM	7.79	2416	17.4	143	6.2	105
	1.04	1								
	2.08	2								
	3.12	3								
14:25	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	N/A
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**POOR RECHARGE / GRAB SAMPLE. WATERRA TUBING IS 3' BELOW TOP OF CASING.**		
	NEW TOTAL DEPTH.		
WEATHER:	OVERCAST / COLD.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW3 **DATE:** 12/9/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	13:06
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:		TILL ANGERMAN		**MONUMENT:**	POST	
SAMPLER:		DEL-TECH / DON LIGHT		**WELL CASING MATERIAL :**	PVC	
SIGNED:		Don Light		**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:		GROUNDWATER		**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	22.63	FEET	**CALC. PURGE VOL.:**	1.59	GAL.
DEPTH OF WELL:	**(feet.100th's)**	32.38	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		9.75	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:00	0	0	22.63	1.0 GPM	7.86	2674	19.4	101	3.3	
13:02	1.59	2		"	7.65	2534	20.4	101	3.3	
13:04	3.18	4		"	7.63	2527	21.0	101	3.4	
13:06	4.77	6	22.90	"	7.62	2540	21.8	102	3.3	617
13:06	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	22.67'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
	NEW TOTAL DEPTH.		
WEATHER:	OVERCAST / COLD.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW4 **DATE:** 12/9/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	11:11
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	24.90	FEET	**CALC. PURGE VOL.:**	0.70	GAL.
DEPTH OF WELL:	**(feet.100th's)**	29.18	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		4.28	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:07	0	0	24.90	1.0 GPM	7.56	1947	20.1	159	3.1	
11:08	0.70	1		"	7.43	1927	20.8	156	3.3	
11:09	1.40	2		"	7.49	1918	21.1	153	3.7	
11:11	2.10	3	24.97	"	7.47	1912	20.9	151	4.3	70
11:11	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	24.95'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**WATERRA TUBING IS 2' BELOW TOP OF CASING.**		
	COLLECTED FIELD DUPLICATE #7 HERE.		
	NEW TOTAL DEPTH.		
WEATHER:	OVERCAST / COLD.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW5 **DATE:** 12/9/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	12:45
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	18.93	FEET	**CALC. PURGE VOL.:**	1.23	GAL.
DEPTH OF WELL:	**(feet.100th's)**	26.44	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		7.51	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:41	0	0	18.93	1.0 GPM	7.86	2930	19.7	103	3.4	
12:42	1.23	1.5		"	7.47	2707	20.8	111	3.7	
12:43	2.45	3		"	7.48	2698	21.0	112	3.5	
12:45	3.68	4.5	19.11	"	7.40	2694	21.0	114	3.3	60
12:45	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	19.00'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**WATERRA TUBING IS 2' BELOW TOP OF CASING.**		
	NEW TOTAL DEPTH.		
WEATHER:	OVERCAST / COLD.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	COT-MW6	**DATE:**	12/9/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	12:29
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	17.31	FEET	**CALC. PURGE VOL.:**	1.46	GAL.
DEPTH OF WELL:	**(feet.100th's)**	26.25	FEET	**TOTAL VOLUME PURGED:**	4.5	GAL.
STANDING WATER COLUMN:		8.94	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:24	0	0	17.31	1.0 GPM	7.77	1893	19.4	91	3.0	
12:25	1.46	1.5		"	7.37	2359	19.8	102	3.4	
12:27	2.92	3		"	7.35	3044	20.6	106	3.5	
12:29	4.38	4.5	17.48	"	7.28	3066	20.8	110	3.1	61
12:29	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	17.34'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**WATERRA TUBING IS 2' BELOW TOP OF CASING.**		
	NEW TOTAL DEPTH.		
WEATHER:	OVERCAST / COLD.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW7 **DATE:** 12/9/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	14:05
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	11.39	FEET	**CALC. PURGE VOL.:**	2.23	GAL.
DEPTH OF WELL:	**(feet.100th's)**	25.08	FEET	**TOTAL VOLUME PURGED:**	6.0	GAL.
STANDING WATER COLUMN:		13.69	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:58	0	0	11.39	1.0 GPM	7.79	1333	20.0	100	3.6	
14:00	2.23	2		"	7.40	1586	21.3	107	3.6	
14:02	4.47	4		"	7.32	1606	21.7	109	3.4	
14:05	6.70	6	11.51	"	7.28	1617	21.8	110	3.2	13
14:05	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.45'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**WATERRA TUBING IS 2' BELOW TOP OF CASING.**		
	NEW TOTAL DEPTH.		
WEATHER:	OVERCAST / COLD.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW8 **DATE:** 12/9/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	14:19
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	14.37	FEET	**CALC. PURGE VOL.:**	1.71	GAL.
DEPTH OF WELL:	**(feet.100th's)**	24.85	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		10.48	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:13	0	0	14.37	1.0 GPM	7.79	1442	20.8	103	3.7	
14:15	1.71	2		"	7.60	1238	22.4	103	3.2	
14:17	3.42	4		"	7.56	1171	23.3	102	3.2	
14:19	5.13	6	14.56	"	7.54	1168	23.9	100	3.0	17
14:19	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	14.51'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**WATERRA TUBING IS 2' BELOW TOP OF CASING.**		
	NEW TOTAL DEPTH.		
WEATHER:	OVERCAST / COLD.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	COT-MW9	**DATE:**	12/9/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	13:30
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	15.27	FEET	**CALC. PURGE VOL.:**	2.24	GAL.
DEPTH OF WELL:	**(feet.100th's)**	29.00	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		13.73	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:23	0	0	15.27	1.0 GPM	7.86	2170	19.2	105	3.1	
13:26	2.24	2.5		"	7.42	1874	19.7	113	2.5	
13:27	4.48	5		"	7.31	1661	20.3	114	2.5	
13:30	6.72	7.5	15.38	"	7.24	1581	21.1	114	2.5	12
13:30	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	13.24'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**WATERRA TUBING IS 2' BELOW TOP OF CASING.**		
	NEW TOTAL DEPTH.		
WEATHER:	OVERCAST / COLD.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW10 **DATE:** 12/9/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	13:47
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	10.15	FEET	**CALC. PURGE VOL.:**	2.23	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.79	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		13.64	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:40	0	0	10.15	1.0 GPM	7.81	1378	19.9	99	1.9	
13:42	2.23	2.5		"	7.60	1067	21.5	97	1.4	
13:45	4.45	5		"	7.48	1050	22.0	99	1.1	
13:47	6.68	7.5	10.27	"	7.40	1050	22.1	100	1.0	7
13:47	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.21'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**NEW TOTAL DEPTH.**		
WEATHER:	OVERCAST / COLD.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW11S **DATE:** 12/9/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	10:50
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	19.14	FEET	**CALC. PURGE VOL.:**	1.25	GAL.
DEPTH OF WELL:	**(feet.100th's)**	26.80	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		7.66	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:45	0	0	19.14	1.0 GPM	6.23	1584	17.3	269	3.0	
10:46	1.25	1		"	6.51	1803	20.7	251	1.3	
10:48	2.50	2		"	6.75	1982	22.3	239	1.2	
10:50	3.75	3	21.84	"	6.80	1978	22.3	230	1.3	529
10:50	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	21.44'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**COT-MW 11D / DTW: 19.14'**		
WEATHER:	OVERCAST / COLD.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW12S **DATE:** 12/9/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	11:57
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	LIGHT BROWN	
DEPTH TO WATER:	**(feet.100th's)**	19.06	FEET	**CALC. PURGE VOL.:**	1.98	GAL.
DEPTH OF WELL:	**(feet.100th's)**	31.20	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		12.14	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:50	0	0	19.06	1.0 GPM	7.86	1838	18.7	88	3.8	
11:52	1.98	2		"	7.55	1671	19.8	91	3.5	
11:54	3.96	4		"	7.37	1466	20.6	92	3.4	
11:57	5.94	6	19.29	"	7.30	1372	21.1	92	3.0	40
11:57	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	19.11'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**COT-MW 12D / DTW: 18.88'**		
WEATHER:	OVERCAST / COLD.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW13S **DATE:** 12/9/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	12:10
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	21.04	FEET	**CALC. PURGE VOL.:**	1.97	GAL.
DEPTH OF WELL:	**(feet.100th's)**	33.10	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		12.06	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:04	0	0	21.04	1.0 GPM	7.76	1493	20.0	85	3.1	
12:06	1.97	1		"	7.29	1591	21.9	94	1.2	
12:08	3.94	2		"	7.14	1603	22.3	101	1.1	
12:10	5.90	3	21.20	"	7.13	1600	22.4	98	1.1	32
12:10	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	21.10'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**COT-MW 13D / DTW: 20.91'**		
WEATHER:	OVERCAST / COLD.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COT-MW14S **DATE:** 12/9/2012

PROJECT NAME:	GALLO CATTLE COMPANY COTTONWOOD	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	10561 HWY 140	**SAMPLE TIME:**	14:47
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	22.29	FEET	**CALC. PURGE VOL.:**	1.65	GAL.
DEPTH OF WELL:	**(feet.100th's)**	32.40	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		10.11	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:41	0	0	22.29	1.0 GPM	7.95	1239	19.6	94	2.7	
14:43	1.65	2		"	7.29	930	21.7	104	2.0	
14:45	3.30	4		"	7.04	889	22.0	108	2.2	
14:47	4.95	6	22.37	"	7.02	892	22.0	108	1.7	51
14:47	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	22.34'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**COT-MW 14D / DTW: 21.99'**		
WEATHER:	OVERCAST / COLD.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

GALLO CATTLE COMPANY SANTA RITA
91 S. BERT CRANE ROAD
ATWATER, CA.
December 9, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / SAN-MW1D **DATE:** 12/9/2012

PROJECT NAME:	GALLO CATTLE COMPANY SANTA RITA	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	91 S. BERT CRANE ROAD	**SAMPLE TIME:**	12:36
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	29.19	FEET	**CALC. PURGE VOL.:**	2.61	GAL.
DEPTH OF WELL:	**(feet.100th's)**	45.20	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		16.01	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:26	0	0	29.19	1.0 GPM	7.70	2711	18.5	126	2.5	
12:29	2.61	3		"	7.46	2682	18.5	126	2.5	
12:32	5.23	6		"	7.38	2661	18.5	127	2.4	
12:35	7.84	9	29.20	"	7.32	2623	18.5	127	2.4	123
12:36	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	29.19'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE SAN-MW-1S / WELL WENT DRY.**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / SAN-MW2D **DATE:** 12/9/2012

PROJECT NAME:	GALLO CATTLE COMPANY SANTA RITA	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	91 S. BERT CRANE ROAD	**SAMPLE TIME:**	13:00
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	34.85	FEET	**CALC. PURGE VOL.:**	1.66	GAL.
DEPTH OF WELL:	**(feet.100th's)**	45.00	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		10.15	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:53	0	0	34.85	1.0 GPM	7.28	1919	16.6	154	4.6	
11:55	1.66	2		"	7.22	1689	17.5	155	4.4	
11:57	3.31	4		"	7.17	1672	17.7	152	4.6	
11:59	4.97	6	35.05	"	7.16	1671	17.8	150	4.1	520
12:00	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	35.94'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE SAN-MW-2S / WELL WENT DRY.**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / SAN-MW3D **DATE:** 12/9/2012

PROJECT NAME:	GALLO CATTLE COMPANY SANTA RITA	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	91 S. BERT CRANE ROAD	**SAMPLE TIME:**	12:02
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	36.43	FEET	**CALC. PURGE VOL.:**	1.43	GAL.
DEPTH OF WELL:	**(feet.100th's)**	45.20	FEET	**TOTAL VOLUME PURGED:**	4.5	GAL.
STANDING WATER COLUMN:		8.77	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:55	0	0	36.43	1.0 GPM	7.75	1731	19.6	127	4.0	
11:57	1.43	1.5		"	7.57	1726	19.6	127	3.8	
11:59	2.86	3		"	7.40	1726	19.7	128	3.9	
12:01	4.29	4.5	36.66	"	7.27	1725	19.8	129	3.7	200
12:02	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	36.51'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE SAN-MW-3S / WELL WENT DRY.**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / SAN-MW4D **DATE:** 12/9/2012

PROJECT NAME:	GALLO CATTLE COMPANY SANTA RITA	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	91 S. BERT CRANE ROAD	**SAMPLE TIME:**	13:38
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	36.15	FEET	**CALC. PURGE VOL.:**	3.09	GAL.
DEPTH OF WELL:	**(feet.100th's)**	55.10	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		18.95	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:28	0	0	36.15	1.0 GPM	7.57	1763	18.1	148	1.2	
13:31	3.09	3		"	7.20	1720	18.5	141	0.8	
13:34	6.19	6		"	7.43	1723	18.5	132	1.0	
13:37	9.28	9	37.69	"	7.18	1713	18.7	134	1.1	74
13:38	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	37.55'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE SAN-MW-4S / WELL WENT DRY.**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	SAN-MW5D	**DATE:**	12/9/2012

PROJECT NAME:	GALLO CATTLE COMPANY SANTA RITA	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	91 S. BERT CRANE ROAD	**SAMPLE TIME:**	11:00
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	30.33	FEET	**CALC. PURGE VOL.:**	3.73	GAL.
DEPTH OF WELL:	**(feet.100th's)**	53.20	FEET	**TOTAL VOLUME PURGED:**	12	GAL.
STANDING WATER COLUMN:		22.87	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:46	0	0	30.33	1.0 GPM	7.63	1968	18.1	125	5.3	
10:50	3.73	4		"	7.39	1955	18.1	127	5.2	
10:54	7.46	8		"	7.29	1953	18.1	129	5.3	
10:58	11.20	12	30.40	"	7.17	1956	18.1	129	5.4	104
11:00	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	30.39'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE SAN-MW-5S / WELL WENT DRY.**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / SAN-MW6S **DATE:** 12/9/2012

PROJECT NAME:	GALLO CATTLE COMPANY SANTA RITA	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	91 S. BERT CRANE ROAD	**SAMPLE TIME:**	11:24
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	16.39	FEET	**CALC. PURGE VOL.:**	1.99	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.60	FEET	**TOTAL VOLUME PURGED:**	6.0	GAL.
STANDING WATER COLUMN:		12.21	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:17	0	0	16.39	1.0 GPM	7.48	1697	20.5	141	2.4	
11:19	1.99	2		"	7.24	1723	21.3	143	2.3	
11:21	3.99	4		"	7.15	1756	21.1	142	1.9	
11:23	5.98	6	17.70	"	7.20	1780	21.0	138	1.8	202
11:24	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	16.59'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**SAN-MW 6D / DTW: 16.24'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / SAN-MW7S **DATE:** 12/9/2012

PROJECT NAME:	GALLO CATTLE COMPANY SANTA RITA	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	91 S. BERT CRANE ROAD	**SAMPLE TIME:**	10:10
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	21.47	FEET	**CALC. PURGE VOL.:**	0.63	GAL.
DEPTH OF WELL:	**(feet.100th's)**	25.30	FEET	**TOTAL VOLUME PURGED:**	3.0	GAL.
STANDING WATER COLUMN:		3.83	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:03	0	0	21.47	0.5 GPM	7.03	1756	16.8	141	1.1	
10:05	0.63	1		"	6.99	1756	17.9	141	0.7	
10:07	1.25	2		"	7.12	1759	17.9	139	0.9	
10:09	1.88	3	21.50	"	7.11	1759	17.9	138	0.9	30
10:10	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	21.49'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**SAN-MW 7D / DTW: 21.37'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / SAN-MW8S **DATE:** 12/9/2012

PROJECT NAME:	GALLO CATTLE COMPANY SANTA RITA	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	91 S. BERT CRANE ROAD	**SAMPLE TIME:**	9:33
CITY, STATE:	ATWATER, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	23.70	FEET	**CALC. PURGE VOL.:**	1.06	GAL.
DEPTH OF WELL:	**(feet.100th's)**	30.20	FEET	**TOTAL VOLUME PURGED:**	3.0	GAL.
STANDING WATER COLUMN:		6.50	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
9:29	0	0	23.70	1.0 GPM	7.87	1520	18.2	99	2.5	
9:30	1.06	1		"	7.71	1502	18.5	104	2.5	
9:31	2.12	2		"	7.57	1497	18.7	108	2.4	
9:32	3.18	3	23.72	"	7.64	1505	18.3	112	2.3	50
9:33	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	23.70'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**SAN-MW 8D / DTW: 23.50'**		
WEATHER:	CLEAR SKIES / WARM.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

P. & L. SOUZA DAIRY
20633 CRANE ROAD
HILMAR, CA.
December 11, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	PLS-MW1S	**DATE:**	12/11/2012

PROJECT NAME:	P. & L. SOUZA DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	20633 CRANE ROAD	**SAMPLE TIME:**	10:58
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	LT BROWN	
DEPTH TO WATER:	**(feet.100th's)**	12.57	FEET	**CALC. PURGE VOL.:**	0.71	GAL.
DEPTH OF WELL:	**(feet.100th's)**	16.90	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		4.33	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:54	0	0	12.57	1.0 GPM	6.96	4548	17.0	240	3.5	
10:56	0.71	1		"	7.00	2435	18.9	235	1.0	
10:57	1.41	2		"	6.81	2368	19.2	236	0.8	
10:58	2.12	3	12.62	"	6.62	2355	17.9	235	1.1	164
10:58	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	12.62'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**PLS-MW 1D / DTW: 12.34'**		
WEATHER:	OVERCAST / FOGGY	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / PLS-MW2S **DATE:** 12/11/2012

PROJECT NAME:	P. & L. SOUZA DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	20633 CRANE ROAD	**SAMPLE TIME:**	11:16
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	11.24	FEET	**CALC. PURGE VOL.:**	0.86	GAL.
DEPTH OF WELL:	**(feet.100th's)**	16.50	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		5.26	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:13	0	0	11.29	1.0 GPM	6.85	2431	16.7	229	2.6	
11:14	0.86	1		"	6.72	2241	18.6	232	1.5	
11:15	1.72	2		"	6.59	2316	19.0	234	0.9	
11:16	2.58	3	11.37	"	6.49	2353	18.9	235	0.8	469
11:16	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.37'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**PLS-MW 2D / DTW: 11.11'**		
WEATHER:	OVERCAST / FOGGY	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	PLS-MW3S	**DATE:**	12/11/2012

PROJECT NAME:	P. & L. SOUZA DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	20633 CRANE ROAD	**SAMPLE TIME:**	10:10
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	10.79	FEET	**CALC. PURGE VOL.:**	0.80	GAL.
DEPTH OF WELL:	**(feet.100th's)**	15.70	FEET	**TOTAL VOLUME PURGED:**	3.0	GAL.
STANDING WATER COLUMN:		4.91	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:07	0	0	10.79	1.0 GPM	6.79	1481	19.9	278	4.3	
10:08	0.80	1		"	6.38	1327	18.3	278	1.1	
10:09	1.60	2		"	6.15	1328	19.6	277	1.2	
10:10	2.40	3	10.87	"	6.06	1322	19.9	276	1.0	14
10:10	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.87'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**PLS-MW 3D / DTW: 10.65'**		
WEATHER:	OVERCAST / FOGGY	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	PLS-MW4S	**DATE:**	12/11/2012

PROJECT NAME:	P. & L. SOUZA DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	20633 CRANE ROAD	**SAMPLE TIME:**	10:43
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	12.13	FEET	**CALC. PURGE VOL.:**	1.82	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.30	FEET	**TOTAL VOLUME PURGED:**	6.0	GAL.
STANDING WATER COLUMN:		11.17	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:37	0	0	12.13	1.0 GPM	6.94	3225	17.0	241	3.1	
10:39	1.82	2		"	6.49	5367	19.6	252	1.2	
10:41	3.65	4		"	6.39	5332	20.1	254	0.8	
10:43	5.47	6	12.20	"	6.30	5346	19.8	254	0.7	24
10:43	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	12.20'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**PLS-MW 4D / DTW: 11.71'**		
WEATHER:	OVERCAST / FOGGY	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	PLS-MW5S	**DATE:**	12/11/2012

PROJECT NAME:	P. & L. SOUZA DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	20633 CRANE ROAD	**SAMPLE TIME:**	11:45
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	10.88	FEET	**CALC. PURGE VOL.:**	0.72	GAL.
DEPTH OF WELL:	**(feet.100th's)**	15.30	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		4.42	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:42	0	0	10.88	1.0 GPM	7.05	2214	16.8	227	2.7	
11:43	0.72	1		"	6.81	1993	19.4	224	0.9	
11:44	1.44	2		"	6.65	1996	20.5	231	0.8	
11:45	2.16	3	10.95	"	6.55	1991	20.7	233	0.5	564
11:45	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.95'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**PLS-MW 5D / DTW: 10.77'**		
WEATHER:	OVERCAST / FOGGY	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / PLS-MW6S **DATE:** 12/11/2012

PROJECT NAME:	P. & L. SOUZA DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	20633 CRANE ROAD	**SAMPLE TIME:**	10:27
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	9.25	FEET	**CALC. PURGE VOL.:**	2.10	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.10	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		12.85	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:24	0	0	9.25	1.0 GPM	6.76	1528	15.3	251	2.0	
10:25	2.10	2		"	6.57	2373	19.3	251	1.0	
10:26	4.19	4		"	6.61	2426	20.3	251	0.9	
10:27	6.29	6	9.31	"	6.60	2393	20.6	249	0.7	81
10:27	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.31'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**PLS-MW 6D / DTW: 10.06'**		
WEATHER:	OVERCAST / FOGGY	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / PLS-MW7S **DATE:** 12/11/2012

PROJECT NAME:	P. & L. SOUZA DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	20633 CRANE ROAD	**SAMPLE TIME:**	12:06
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	10.96	FEET	**CALC. PURGE VOL.:**	1.88	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.50	FEET	**TOTAL VOLUME PURGED:**	6.0	GAL.
STANDING WATER COLUMN:		11.54	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:00	0	0	10.96	1.0 GPM	6.95	2016	17.6	229	3.7	
12:02	1.88	2		"	6.73	2125	18.6	231	1.0	
12:04	3.77	4		"	6.61	2118	18.8	232	0.7	
12:06	5.65	6	11.03	"	6.52	2128	18.9	231	0.7	24
12:06	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.03'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**PLS-MW 7D / DTW: 10.92'**		
WEATHER:	OVERCAST / FOGGY	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

PAUL CAETANO DAIRY
9436 GRIFFITH AVENUE
DELHI, CA.
December 4, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / CAE-MW1S **DATE:** 12/4/2012

PROJECT NAME:	PAUL CAETANO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	9436 GRIFFITH AVENUE	**SAMPLE TIME:**	15:52
CITY, STATE:	DELHI, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	13.69	FEET	**CALC. PURGE VOL.:**	0.52	GAL.
DEPTH OF WELL:	**(feet.100th's)**	16.90	FEET	**TOTAL VOLUME PURGED:**	2	GAL.
STANDING WATER COLUMN:		3.21	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:42	0	0	13.69	0.5 GPM	7.67	1834	18.8	93	2.4	
15:46	0.52	0.5		"	7.53	2121	20.4	91	0.8	
15:49	1.05	1		"	7.53	2143	21.2	90	0.8	
15:52	1.57	1.5	13.72	"	7.52	2169	21.4	90	0.7	473
15:52	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	13.72'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**CAE-MW 1D / DTW: 13.26'**		
WEATHER:	OVERCAST / COOL	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	CAE-MW2S	**DATE:**	12/4/2012

PROJECT NAME:	PAUL CAETANO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	9436 GRIFFITH AVENUE	**SAMPLE TIME:**	15:02
CITY, STATE:	DELHI, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	LT BROWN	
DEPTH TO WATER:	**(feet.100th's)**	13.85	FEET	**CALC. PURGE VOL.:**	0.61	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.60	FEET	**TOTAL VOLUME PURGED:**	2	GAL.
STANDING WATER COLUMN:		3.75	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:57	0	0	13.85	0.5 GPM	8.14	2445	19.1	57	3.3	
14:59	0.61	0.5		"	8.08	2703	21.6	58	1.2	
15:00	1.22	1		"	8.11	2747	22.2	61	0.9	
15:02	1.84	1.5	13.89	"	8.08	2724	22.2	64	0.7	102
15:02	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	13.89'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**CAE-MW 2D / DTW: 13.66'**		
WEATHER:	OVERCAST / COOL	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	CAE-MW3S	**DATE:**	12/4/2012

PROJECT NAME:	PAUL CAETANO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	9436 GRIFFITH AVENUE	**SAMPLE TIME:**	15:15
CITY, STATE:	DELHI, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	13.53	FEET	**CALC. PURGE VOL.:**	0.60	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.20	FEET	**TOTAL VOLUME PURGED:**	2	GAL.
STANDING WATER COLUMN:		3.67	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:09	0	0	13.53	0.50 GPM	7.97	2975	20.0	77	3.2	
15:11	0.60	0.5		"	7.78	2899	21.8	80	1.7	
15:13	1.20	1		"	7.64	2861	23.0	81	1.3	
15:15	1.80	1.5	13.57	"	7.51	2859	23.5	82	0.8	6
15:15	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	13.57'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**CAE-MW 3D / DTW: 13.41'**		
	DUPLICATE #2 TAKEN HERE.		
WEATHER:	OVERCAST / COOL	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / CAE-MW4S **DATE:** 12/4/2012

PROJECT NAME:	PAUL CAETANO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	9436 GRIFFITH AVENUE	**SAMPLE TIME:**	15:30
CITY, STATE:	DELHI, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	14.34	FEET	**CALC. PURGE VOL.:**	1.46	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.30	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		8.96	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:23	0	0	14.39	1.0 GPM	7.77	2078	20.2	81	3.0	
15:25	1.46	1.5		"	7.78	1344	20.5	80	0.7	
15:28	2.92	3		"	7.63	1325	20.5	84	0.6	
15:30	4.39	4.5	14.49	"	7.55	1324	20.6	87	0.6	14
15:30	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	14.49'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**CAE-MW 4D / DTW: 14.17'**		
WEATHER:	OVERCAST / COOL	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / CAE-MW5S **DATE:** 12/4/2012

PROJECT NAME:	PAUL CAETANO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	9436 GRIFFITH AVENUE	**SAMPLE TIME:**	14:35
CITY, STATE:	DELHI, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	10.56	FEET	**CALC. PURGE VOL.:**	1.98	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.70	FEET	**TOTAL VOLUME PURGED:**	6.0	GAL.
STANDING WATER COLUMN:		12.14	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:28	0	0	10.56	1.0 GPM	7.73	1067	20.0	73	1.7	
14:30	1.98	2		"	7.60	1194	21.6	76	1.7	
14:32	3.96	4		"	7.57	1195	22.1	77	1.6	
14:35	5.94	6	10.56	"	7.56	1179	22.3	77	1.5	15
14:35	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.56'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**CAE-MW 5D / DTW: 10.19'**		
WEATHER:	OVERCAST / COOL	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	CAE-MW6S	**DATE:**	12/4/2012

PROJECT NAME:	PAUL CAETANO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	9436 GRIFFITH AVENUE	**SAMPLE TIME:**	16:23
CITY, STATE:	DELHI, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DONALD LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	12.24	FEET	**CALC. PURGE VOL.:**	1.35	GAL.
DEPTH OF WELL:	**(feet.100th's)**	20.50	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		8.26	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
16:14	0	0	12.24	1.0 GPM	7.82	1107	21.2	69	2.3	
16:17	1.35	1.5		"	7.85	879	21.2	68	0.7	
16:20	2.70	3		"	7.75	853	21.3	69	0.6	
16:23	4.04	4.5	12.77	"	7.74	854	21.3	71	0.5	117
16:23	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.09'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**CAE-MW 6D / DTW: 12.61'**		
WEATHER:	OVERCAST / COOL	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

ROBERT GIOLETTI AND SONS DAIRY
118 N. BLAKER ROAD
TURLOCK, CA.
December 4, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	ROB-MW1S	**DATE:**	12/4/2012

PROJECT NAME:	ROBERT GIOLETTI AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	118 N. BLAKER ROAD	**SAMPLE TIME:**	13:15
CITY, STATE:	TURLOCK, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	15.20	FEET	**CALC. PURGE VOL.:**	0.51	GAL.
DEPTH OF WELL:	**(feet.100th's)**	18.30	FEET	**TOTAL VOLUME PURGED:**	2	GAL.
STANDING WATER COLUMN:		3.10	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:10	0	0	15.20	1.0 GPM	7.78	2037	19.7	84	3.5	
13:11	0.51	0.5		"	7.39	2558	20.5	97	2.4	
13:13	1.01	1		"	7.32	2742	20.6	99	2.2	
13:15	1.52	1.5	15.24	"	7.27	2766	20.7	98	2.1	77
13:15	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	15.24'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ROB-MW 1D / DTW: 14.91'**		
WEATHER:	OVERCAST / COLD	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	ROB-MW2S	**DATE:**	12/4/2012

PROJECT NAME:	ROBERT GIOLETTI AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	118 N. BLAKER ROAD	**SAMPLE TIME:**	13:24
CITY, STATE:	TURLOCK, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	15.79	FEET	**CALC. PURGE VOL.:**	0.34	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.90	FEET	**TOTAL VOLUME PURGED:**	1.5	GAL.
STANDING WATER COLUMN:		2.11	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:19	0	0	15.79	1.0 GPM	7.69	3035	19.9	86	3.6	
13:20	0.34	0.5		"	7.54	2968	21.2	92	1.7	
13:22	0.69	1		"	7.50	2963	21.0	90	1.6	
13:24	1.03	1.5	15.88	"	7.47	2947	21.1	89	1.6	93
13:24	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	15.88'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ROB-MW 2D / DTW: 15.66'**		
WEATHER:	OVERCAST / COLD	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	ROB-MW3S	**DATE:**	12/4/2012

PROJECT NAME:	ROBERT GIOLETTI AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	118 N. BLAKER ROAD	**SAMPLE TIME:**	12:50
CITY, STATE:	TURLOCK, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	16.52	FEET	**CALC. PURGE VOL.:**	0.37	GAL.
DEPTH OF WELL:	**(feet.100th's)**	18.80	FEET	**TOTAL VOLUME PURGED:**	1.5	GAL.
STANDING WATER COLUMN:		2.28	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:46	0	0	16.52	1.0 GPM	7.53	2358	20.7	112	4.1	
12:47	0.37	0.5		"	7.51	1849	21.0	114	2.4	
12:49	0.74	1		"	7.42	1774	21.1	114	2.2	
12:50	1.12	1.5	16.55	"	7.38	1774	21.2	113	2.3	10
12:50	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	16.55'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ROB-MW 3D / DTW: 16.41'**		
	DUPLICATE #1 TAKEN HERE		
WEATHER:	OVERCAST / COLD	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ROB-MW4S **DATE:** 12/4/2012

PROJECT NAME:	ROBERT GIOLETTI AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	118 N. BLAKER ROAD	**SAMPLE TIME:**	12:35
CITY, STATE:	TURLOCK, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	16.10	FEET	**CALC. PURGE VOL.:**	0.29	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.90	FEET	**TOTAL VOLUME PURGED:**	2	GAL.
STANDING WATER COLUMN:		1.80	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:31	0	0	16.10	0.5 GPM	7.37	2405	20.1	116	2.5	
12:32	0.29	0.5		"	7.21	2510	22.0	123	1.1	
12:33	0.59	1		"	7.16	2496	22.5	123	1.1	
12:35	0.88	1.5	16.36	"	7.12	2512	22.6	121	0.8	2
12:35	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	16.36'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ROB-MW 4D / DTW: 16.36'**		
WEATHER:	OVERCAST / COLD	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ROB-MW5D **DATE:** 12/4/2012

PROJECT NAME:	ROBERT GIOLETTI AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	118 N. BLAKER ROAD	**SAMPLE TIME:**	12:16
CITY, STATE:	TURLOCK, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	16.44	FEET	**CALC. PURGE VOL.:**	1.72	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.00	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		10.56	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:10	0	0	16.44	1.0 GPM	6.50	2275	19.7	163	1.6	
12:12	1.72	2		"	6.46	2245	20.7	146	0.8	
12:14	3.45	4		"	6.41	2240	20.9	143	0.8	
12:16	5.17	6	16.70	"	6.45	2237	20.9	139	0.8	5
12:16	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	16.70'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE ROB-MW-5S / WELL WENT DRY.**		
WEATHER:	OVERCAST / COLD	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ROB-MW6S **DATE:** 12/4/2012

PROJECT NAME:	ROBERT GIOLETTI AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	118 N. BLAKER ROAD	**SAMPLE TIME:**	14:18
CITY, STATE:	TURLOCK, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	16.54	FEET	**CALC. PURGE VOL.:**	1.90	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.20	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		11.66	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:10	0	0	16.54	1.0 GPM	7.80	1699	20.2	71	3.1	
14:12	1.90	2		"	7.57	2060	19.8	76	0.8	
14:14	3.81	4		"	7.52	2074	19.7	74	0.6	
14:18	5.71	6	16.56	"	7.49	2083	19.7	73	0.6	8
14:18	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	16.56'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ROB-MW 6D / DTW: 16.37'**		
WEATHER:	OVERCAST / COLD	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ROB-MW7S **DATE:** 12/4/2012

PROJECT NAME:	ROBERT GIOLETTI AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	118 N. BLAKER ROAD	**SAMPLE TIME:**	14:02
CITY, STATE:	TURLOCK, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	15.84	FEET	**CALC. PURGE VOL.:**	2.03	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.30	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		12.46	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:55	0	0	15.84	1.0 GPM	7.69	1892	19.4	69	4.8	
13:57	2.03	2		"	7.70	1527	20.6	71	1.3	
14:00	4.07	4		"	7.74	1410	21.1	73	1.2	
14:02	6.10	6	15.87	"	7.72	1397	21.2	75	1.2	11
14:02	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	15.87'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ROB-MW 7D / DTW: 15.47'**		
WEATHER:	OVERCAST / COLD	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ROB-MW8S **DATE:** 12/4/2012

PROJECT NAME:	ROBERT GIOLETTI AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	118 N. BLAKER ROAD	**SAMPLE TIME:**	13:45
CITY, STATE:	TURLOCK, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	15.60	FEET	**CALC. PURGE VOL.:**	2.01	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.90	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		12.30	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:39	0	0	15.60	1.0 GPM	7.77	2395	20.2	83	3.2	
13:41	2.01	2		"	7.65	2179	19.7	83	1.1	
13:43	4.01	4		"	7.57	2164	19.7	83	1.1	
13:45	6.02	6	15.71	"	7.51	2162	19.7	82	0.8	21
13:45	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	15.71'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ROB-MW 8D / DTW: 15.38'**		
WEATHER:	OVERCAST / COLD	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

2012Q4 West Side

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

ANTONE L. GOMES AND SONS DAIRY
515 E. STUHR ROAD
NEWMAN, CA.
December 10, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANT-MW1D **DATE:** 12/10/2012

PROJECT NAME:	ANTONE L. GOMES AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	16:09
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	21.57	FEET	**CALC. PURGE VOL.:**	2.40	GAL.
DEPTH OF WELL:	**(feet.100th's)**	36.30	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		14.73	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
16:00	0	0	21.57	0.5 GPM	7.80	1504	16.5	65	1.0	
16:03	2.40	2.5		"	7.18	1500	17.0	84	1.4	
16:06	4.81	5		"	7.24	1544	19.1	87	1.5	
16:09	7.21	7.5	21.57	"	7.24	1532	19.4	89	1.5	173
16:09	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	21.57'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ATTEMPTED TO PURGE ANT-MW 1S / WELL WENT DRY.**		
WEATHER:	CLEAR SKIES / WARM	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANT-MW2S **DATE:** 12/10/2012

PROJECT NAME:	ANTONE L. GOMES AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	13:51
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	LT BROWN	
DEPTH TO WATER:	**(feet.100th's)**	25.16	FEET	**CALC. PURGE VOL.:**	1.30	GAL.
DEPTH OF WELL:	**(feet.100th's)**	33.10	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		7.94	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:45	0	0	25.16	1.0 GPM	8.06	2307	20.0	107	2.4	
13:47	1.30	1.5		"	7.45	3355	22.0	116	2.1	
13:49	2.59	3		"	7.27	3442	22.7	112	1.8	
13:51	3.89	4.5	25.25	"	7.20	3450	23.3	108	1.6	80
13:51	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	25.25'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ANT-MW 2D / DTW: 24.74'**		
WEATHER:	CLEAR SKIES / WARM	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANT-MW3S **DATE:** 12/10/2012

PROJECT NAME:	ANTONE L. GOMES AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	14:14
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	22.87	FEET	**CALC. PURGE VOL.:**	1.72	GAL.
DEPTH OF WELL:	**(feet.100th's)**	33.40	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		10.53	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:07	0	0	22.87	1.0 GPM	7.66	2450	21.2	86	2.3	
14:09	1.72	2		"	7.40	1779	21.2	87	2.0	
14:11	3.44	4		"	7.33	1715	21.2	90	2.0	
14:14	5.16	6	23.09	"	7.29	1739	21.2	92	1.7	239
14:14	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	23.09'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ANT-MW 3D / DTW: 23.10'**		
WEATHER:	CLEAR SKIES / WARM	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	ANT-MW4S	**DATE:**	12/10/2012

PROJECT NAME:	ANTONE L. GOMES AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	14:26
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	24.76	FEET	**CALC. PURGE VOL.:**	1.48	GAL.
DEPTH OF WELL:	**(feet.100th's)**	33.80	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		9.04	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:20	0	0	24.76	1.0 GPM	7.36	1865	21.1	85	2.8	
14:22	1.48	1.5		"	7.29	2002	22.0	85	2.1	
14:24	2.95	3		"	7.29	2008	22.1	86	2.0	
14:26	4.43	4.5	25.01	"	7.30	2020	22.4	83	2.0	196
14:26	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	25.01'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ANT-MW 4D / DTW: 24.66'**		
WEATHER:	CLEAR SKIES / WARM	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANT-MW5S **DATE:** 12/10/2012

PROJECT NAME:	ANTONE L. GOMES AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	15:20
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	25.62	FEET	**CALC. PURGE VOL.:**	1.30	GAL.
DEPTH OF WELL:	**(feet.100th's)**	33.60	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		7.98	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:14	0	0	25.62	1.0 GPM	8.02	1843	18.9	52	3.0	
15:16	1.30	1.5		"	7.47	1736	20.0	68	2.1	
15:18	2.60	3		"	7.34	1521	21.4	81	2.2	
15:20	3.91	4.5	25.74	"	7.31	1524	21.8	83	1.2	567
15:20	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	25.74'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ANT-MW 5D / DTW: 25.14'**		
WEATHER:	CLEAR SKIES / WARM	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / ANT-MW6S **DATE:** 12/10/2012

PROJECT NAME:	ANTONE L. GOMES AND SONS DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	18128 AMERICAN AVENUE	**SAMPLE TIME:**	14:45
CITY, STATE:	HILMAR, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	18.78	FEET	**CALC. PURGE VOL.:**	2.34	GAL.
DEPTH OF WELL:	**(feet.100th's)**	33.10	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		14.32	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:37	0	0	18.78	1.0 GPM	7.57	1959	21.6	80	2.1	
14:40	2.34	2.5		"	7.36	1922	21.1	85	1.6	
14:42	4.67	5		"	7.37	1904	21.0	85	1.6	
14:45	7.01	7.5	19.11	"	7.38	1894	20.9	86	1.5	11
14:45	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	19.11'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**ANT-MW 6D / DTW: 19.74'**		
WEATHER:	CLEAR SKIES / WARM	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

CORREIA FAMILY DAIRY
26380 W. FAHEY ROAD
GUSTINE, CA.
December 7, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	COR-MW1S	**DATE:**	12/7/2012

PROJECT NAME:	CORREIA FAMILY DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	26380 W. FAHEY ROAD	**SAMPLE TIME:**	13:40
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	7.86	FEET	**CALC. PURGE VOL.:**	1.67	GAL.
DEPTH OF WELL:	**(feet.100th's)**	18.10	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		10.24	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:33	0	0	7.81	1.0 GPM	7.57	3664	20.6	119	0.8	
13:35	1.67	2		"	7.46	3669	20.5	122	0.7	
13:37	3.34	4		"	7.33	3671	20.6	127	0.6	
13:39	5.01	6	8.00	"	7.29	3679	20.5	130	0.5	48
13:40	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	7.95'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**COR-MW 1D / DTW: 7.75'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	COR-MW2S	**DATE:**	12/7/2012

PROJECT NAME:	CORREIA FAMILY DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	26380 W. FAHEY ROAD	**SAMPLE TIME:**	14:00
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	7.27	FEET	**CALC. PURGE VOL.:**	1.60	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.10	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		9.83	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:53	0	0	7.27	1.0 GPM	7.70	1759	20.3	127	1.0	
13:55	1.60	1.5		"	7.64	1762	20.1	125	0.8	
13:57	3.21	3		"	7.58	1770	19.9	126	0.7	
13:59	4.81	4.5	7.41	"	7.55	1773	19.8	126	0.7	31
14:00	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	7.39'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**COR-MW 2D / DTW: 7.05'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	COR-MW3S	**DATE:**	12/7/2012

PROJECT NAME:	CORREIA FAMILY DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	26380 W. FAHEY ROAD	**SAMPLE TIME:**	14:26
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	8.23	FEET	**CALC. PURGE VOL.:**	1.55	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.70	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		9.47	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:19	0	0	8.23	1.0 GPM	7.37	2184	20.6	120	1.1	
14:21	1.55	1.5		"	7.44	2211	20.3	114	0.8	
14:23	3.09	3		"	7.55	2230	20.3	108	0.7	
14:25	4.64	4.5	8.50	"	7.57	2234	20.2	101	0.7	16
14:26	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	8.33'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**COR-MW 3D / DTW: 8.03'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	COR-MW4S	**DATE:**	12/7/2012

PROJECT NAME:	CORREIA FAMILY DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	26380 W. FAHEY ROAD	**SAMPLE TIME:**	15:00
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	7.24	FEET	**CALC. PURGE VOL.:**	1.63	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.20	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		9.96	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:53	0	0	7.24	1.0 GPM	7.78	1850	20.8	91	0.6	
14:55	1.63	2		"	7.75	1848	20.9	92	0.6	
14:57	3.25	4		"	7.72	1842	21.0	93	0.5	
14:59	4.88	6	7.89	"	7.70	1840	21.0	93	0.4	8
15:00	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	7.55'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**COR-MW 4D / DTW: 7.13'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / COR-MW5S **DATE:** 12/7/2012

PROJECT NAME:	CORREIA FAMILY DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	26380 W. FAHEY ROAD	**SAMPLE TIME:**	15:38
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	7.45	FEET	**CALC. PURGE VOL.:**	1.69	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.80	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		10.35	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:31	0	0	7.45	1.0 GPM	7.53	3263	20.8	99	0.7	
15:33	1.69	2		"	7.51	3016	20.9	99	0.7	
15:35	3.38	4		"	7.49	2763	21.1	101	0.5	
15:37	5.07	6	8.00	"	7.47	2488	21.3	101	0.5	33
15:38	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	7.85'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**COR-MW 5D / DTW: 7.30'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

FRANK J. GOMES DAIRY #2
890 KNIEBES ROAD
GUSTINE, CA.
December 6, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG2-MW1S **DATE:** 12/6/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #2	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	890 KNIEBES ROAD	**SAMPLE TIME:**	12:40
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	5.24	FEET	**CALC. PURGE VOL.:**	2.74	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.00	FEET	**TOTAL VOLUME PURGED:**	9.0	GAL.
STANDING WATER COLUMN:		16.76	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:31	0	0	5.24	1.0 GPM	7.42	6530	20.1	123	0.5	
12:34	2.74	3		"	7.30	6528	20.2	123	0.6	
12:37	5.47	6		"	7.28	6511	20.2	125	0.7	
12:40	8.21	9	7.00	"	7.26	6507	20.4	125	1.0	140
12:40	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	6.75'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG2-MW 1D / DTW: 5.00'**		
WEATHER:	OVERCAST / COLD.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG2-MW2S **DATE:** 12/6/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #2	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	890 KNIEBES ROAD	**SAMPLE TIME:**	11:40
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	7.70	FEET	**CALC. PURGE VOL.:**	2.55	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.30	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		15.60	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:31	0	0	7.70	1.0 GPM	7.61	3277	20.9	121	0.7	
11:34	2.55	2.5		"	7.21	3290	20.9	121	0.7	
11:37	5.09	5		"	7.27	3300	21.0	125	0.8	
11:40	7.64	7.5	10.14	"	7.30	3306	21.0	128	1.0	17
11:40	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.00'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG2-MW 2D / DTW: 8.55'**		
WEATHER:	OVERCAST / COLD.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG2-MW3S **DATE:** 12/6/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #2	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	890 KNIEBES ROAD	**SAMPLE TIME:**	11:20
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	9.93	FEET	**CALC. PURGE VOL.:**	2.90	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.70	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		17.77	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:11	0	0	9.93	1.0 GPM	7.27	5358	20.1	123	1.0	
11:14	2.90	3		"	7.37	5365	20.0	121	1.0	
11:17	5.80	6		"	7.42	5370	19.9	121	1.0	
11:20	8.70	9	10.70	"	7.44	5374	19.9	120	1.0	32
11:20	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.61'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG2-MW 3D / DTW: 8.50'**		
WEATHER:	OVERCAST / COLD.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / FG2-MW4S **DATE:** 12/6/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #2	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	890 KNIEBES ROAD	**SAMPLE TIME:**	10:55
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	8.85	FEET	**CALC. PURGE VOL.:**	3.29	GAL.
DEPTH OF WELL:	**(feet.100th's)**	29.00	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		20.15	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:46	0	0	8.30	1.0 GPM	7.33	4056	20.4	117	0.7	
10:49	3.29	3		"	7.42	4085	20.6	111	0.7	
10:52	6.58	6		"	7.55	4120	21.0	110	0.6	
10:55	9.87	9	10.24	"	7.60	4165	21.3	108	0.6	43
10:55	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.19'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG2-MW 4D / DTW: 8.30'**		
WEATHER:	OVERCAST / COLD.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	FG2-MW5S	**DATE:**	12/6/2012

PROJECT NAME:	FRANK J. GOMES DAIRY #2	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	890 KNIEBES ROAD	**SAMPLE TIME:**	12:10
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	5.12	FEET	**CALC. PURGE VOL.:**	2.56	GAL.
DEPTH OF WELL:	**(feet.100th's)**	20.80	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		15.68	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:01	0	0	5.12	1.0 GPM	6.97	4190	19.8	146	1.4	
12:04	2.56	2.5		"	6.99	4260	19.7	141	0.9	
12:07	5.12	5		"	7.11	4241	19.6	139	0.7	
12:10	7.68	7.5	5.13	"	7.16	4258	19.6	137	0.6	9
12:10	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	5.12'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**FG2-MW 5D / DTW: 4.92'**		
WEATHER:	OVERCAST / COLD.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

GODINHO DAIRY
12710 S. WILSON ROAD
LOS BANOS, CA.
December 3, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / GOD-MW1S **DATE:** 12/3/2012

PROJECT NAME:	GODINHO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	12710 S. WILSON ROAD	**SAMPLE TIME:**	15:18
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	9.86	FEET	**CALC. PURGE VOL.:**	2.19	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.30	FEET	**TOTAL VOLUME PURGED:**	6.0	GAL.
STANDING WATER COLUMN:		13.44	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:12	0	0	9.86	1.0 GPM	7.07	2275	19.9	97	3.40	
15:14	2.19	2		"	6.99	2914	20.6	94	1.00	
15:16	4.39	4		"	7.00	2928	20.7	93	0.72	
15:18	6.58	6	10.16	"	7.00	2923	20.8	92	0.96	6
15:18	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.16'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**GOD-MW 1D / DTW: 9.79'**		
WEATHER:	CLEAR SKIES / WARM	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	GOD-MW2S	**DATE:**	12/3/2012

PROJECT NAME:	GODINHO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	12710 S. WILSON ROAD	**SAMPLE TIME:**	14:48
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	12.94	FEET	**CALC. PURGE VOL.:**	2.38	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.50	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		14.56	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:42	0	0	12.94	1.0 GPM	7.38	2733	21.4	105	0.90	
14:44	2.38	2.5		"	7.31	2892	21.8	109	0.74	
14:46	4.75	5		"	7.28	2959	21.8	111	0.68	
14:48	7.13	7.5	12.97	"	7.25	3038	21.9	109	0.78	7
14:48	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	12.97'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**GOD-MW 2D / DTW: 12.85'**		
WEATHER:	CLEAR SKIES / WARM	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	GOD-MW3S	**DATE:**	12/3/2012

PROJECT NAME:	GODINHO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	12710 S. WILSON ROAD	**SAMPLE TIME:**	15:04
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	13.40	FEET	**CALC. PURGE VOL.:**	1.52	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.70	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		9.30	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:57	0	0	13.40	1.0 GPM	7.47	1548	21.4	98	1.6	
15:00	1.52	1.5		"	7.32	1392	21.7	112	1.2	
15:02	3.04	3		"	7.26	1391	21.7	118	1.1	
15:04	4.55	4.5	13.55	"	7.21	1396	21.8	117	1.0	15
15:04	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	13.55'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**GOD-MW 3D / DTW: 13.29'**		
WEATHER:	CLEAR SKIES / WARM	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / GOD-MW4S **DATE:** 12/3/2012

PROJECT NAME:	GODINHO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	12710 S. WILSON ROAD	**SAMPLE TIME:**	15:39
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	13.67	FEET	**CALC. PURGE VOL.:**	1.56	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.20	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		9.53	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:33	0	0	13.67	1.0 GPM	7.25	3270	21.4	99	3.3	
15:35	1.56	1.5		"	7.24	3001	22.3	98	1.0	
15:37	3.11	3		"	7.22	3030	22.7	101	1.0	
15:39	4.67	4.5	14.07	"	7.22	3056	22.8	101	0.9	22
15:39	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	14.07'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**GOD-MW 4D / DTW: 13.33'**		
WEATHER:	CLEAR SKIES / WARM	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	GOD-MW5S	**DATE:**	12/3/2012

PROJECT NAME:	GODINHO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	12710 S. WILSON ROAD	**SAMPLE TIME:**	14:05
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	9.22	FEET	**CALC. PURGE VOL.:**	2.97	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.40	FEET	**TOTAL VOLUME PURGED:**	9.0	GAL.
STANDING WATER COLUMN:		18.18	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:45	0	0	9.22	1.0 GPM	7.75	2006	22.3	158	1.0	
13:55	2.97	3		"	7.70	2013	22.1	158	1.0	
14:00	5.93	6		"	7.68	2023	22.2	93	1.0	
14:05	8.90	9	9.29	"	7.59	2007	22.0	82	0.7	3
14:05	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.29'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**GOD-MW 5D / DTW: 8.91'**		
WEATHER:	CLEAR SKIES / WARM	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / GOD-MW6S **DATE:** 12/3/2012

PROJECT NAME:	GODINHO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	12710 S. WILSON ROAD	**SAMPLE TIME:**	14:33
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	10.30	FEET	**CALC. PURGE VOL.:**	2.4	GAL.
DEPTH OF WELL:	**(feet.100th's)**	24.70	FEET	**TOTAL VOLUME PURGED:**	8	GAL.
STANDING WATER COLUMN:		14.40	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:27	0	0	10.30	1.0 GPM	7.25	4044	21.6	96	1.40	
14:29	2.35	2.5		"	7.21	3963	22.0	109	1.00	
14:31	4.70	5		"	7.19	3967	22.0	110	0.90	
14:33	7.05	7.5	10.74	"	7.16	3969	21.9	110	0.85	87
14:33	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.74'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**GOD-MW 6D / DTW: 10.17'**		
WEATHER:	CLEAR SKIES / WARM	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / GOD-MW7S **DATE:** 12/3/2012

PROJECT NAME:	GODINHO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	12710 S. WILSON ROAD	**SAMPLE TIME:**	14:19
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	9.92	FEET	**CALC. PURGE VOL.:**	2.49	GAL.
DEPTH OF WELL:	**(feet.100th's)**	25.20	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		15.28	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:10	0	0	9.92	1.0 GPM	7.17	4100	21.4	120	1.3	
14:15	2.49	2.5		"	7.22	4124	21.9	114	0.9	
14:17	4.99	5		"	7.22	4138	21.8	110	0.9	
14:19	7.48	7.5	10.05	"	7.21	4141	21.8	106	0.7	6
14:19	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	10.05'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**GOD-MW 7D / DTW: 9.88'**		
WEATHER:	CLEAR SKIES / WARM	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

JOHN MACHADO DAIRY
22495 W. CHINA CAMP ROAD
LOS BANOS, CA.
December 3, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	MAC-MW1S	**DATE:**	12/3/2012

PROJECT NAME:	JOHN MACHADO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22495 W. CHINA CAMP ROAD	**SAMPLE TIME:**	17:01
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	5.62	FEET	**CALC. PURGE VOL.:**	1.96	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.60	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		11.98	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
16:55	0	0	5.62	1.0 GPM	6.98	2456	19.6	72	1.8	
16:57	1.96	2		"	6.98	2458	20.0	75	1.3	
16:59	3.91	4		"	6.97	2457	20.5	75	0.7	
17:01	5.87	6	6.09	"	6.96	2461	20.6	75	0.8	1.5
17:01	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	6.09'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MAC-MW 1D / DTW: 5.52'**		
WEATHER:	CLEAR SKIES / WARM	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	MAC-MW2S	**DATE:**	12/3/2012

PROJECT NAME:	JOHN MACHADO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22495 W. CHINA CAMP ROAD	**SAMPLE TIME:**	16:48
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	6.05	FEET	**CALC. PURGE VOL.:**	1.90	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.70	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		11.65	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
16:41	0	0	6.05	1.0 GPM	7.38	3523	19.3	41	4.1	
16:43	1.90	2		"	7.35	2685	20.7	53	1.4	
16:45	3.80	4		"	7.13	2644	20.7	61	0.7	
16:48	5.70	6	6.24	"	7.06	2641	20.9	64	0.9	2
16:48	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	6.24'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MAC-MW 2D / DTW: 5.85'**		
WEATHER:	CLEAR SKIES / WARM	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	MAC-MW3S	**DATE:**	12/3/2012

PROJECT NAME:	JOHN MACHADO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22495 W. CHINA CAMP ROAD	**SAMPLE TIME:**	16:04
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	4.94	FEET	**CALC. PURGE VOL.:**	3.76	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.00	FEET	**TOTAL VOLUME PURGED:**	12	GAL.
STANDING WATER COLUMN:		23.06	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:58	0	0	4.94	1.0 GPM	7.24	8,705	19.6	92	1.5	
16:00	3.76	4		"	7.12	8,449	19.8	97	1.0	
16:02	7.53	8		"	7.04	8,241	19.7	99	0.9	
16:04	11.29	12	6.98	"	6.97	8,316	19.7	100	0.9	4
16:04	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	6.98'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MAC-MW 3D / DTW: 4.72'**		
WEATHER:	CLEAR SKIES / WARM	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MAC-MW4S **DATE:** 12/3/2012

PROJECT NAME:	JOHN MACHADO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22495 W. CHINA CAMP ROAD	**SAMPLE TIME:**	16:20
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	4.62	FEET	**CALC. PURGE VOL.:**	2.05	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.20	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		12.58	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
16:11	0	0	4.62	1.0 GPM	7.09	4522	20.0	84	1.4	
16:14	2.05	2		"	7.03	4102	20.9	89	0.7	
16:17	4.11	4		"	6.98	4055	21.0	91	0.9	
16:20	6.16	6	4.84	"	6.96	4042	21.1	91	1.2	35
16:20	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	4.84'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MAC-MW 4D / DTW: 4.60'**		
WEATHER:	CLEAR SKIES / WARM	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MAC-MW5S **DATE:** 12/3/2012

PROJECT NAME:	JOHN MACHADO DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22495 W. CHINA CAMP ROAD	**SAMPLE TIME:**	16:35
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	4.07	FEET	**CALC. PURGE VOL.:**	3.76	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.10	FEET	**TOTAL VOLUME PURGED:**	12	GAL.
STANDING WATER COLUMN:		23.03	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
16:26	0	0	4.07	1.0 GPM	6.97	4302	20.7	87	1.3	
16:29	3.76	4		"	7.01	4288	21.3	91	1.0	
16:32	7.52	8		"	7.05	4283	21.4	92	0.8	
16:35	11.28	12	4.18	"	7.05	4280	21.4	84	0.8	6
16:35	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	4.18'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MAC-MW 5D / DTW: 4.18'**		
WEATHER:	CLEAR SKIES / WARM	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

JOSE NUNES DAIRY
22484 W. CHINA CAMP ROAD
LOS BANOS, CA.
December 4, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / NUN-MW1S **DATE:** 12/4/2012

PROJECT NAME:	JOSE NUNES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22484 W. CHINA CAMP ROAD	**SAMPLE TIME:**	13:46
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	7.15	FEET	**CALC. PURGE VOL.:**	1.68	GAL.
DEPTH OF WELL:	**(feet.100th's)**	17.46	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		10.31	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:39	0	0	7.15	1.0 GPM	7.68	6305	19.9	112	0.8	
13:41	1.68	2		"	7.55	6483	19.9	115	0.9	
13:43	3.37	4		"	7.52	6505	19.9	117	0.9	
13:45	5.05	6	7.40	"	7.45	6514	20.1	120	1.1	5
13:46	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	7.40'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**NUN-MW 1D / DTW: 6.85'**		
WEATHER:	OVERCAST / FOGGY.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	NUN-MW2S	**DATE:**	12/4/2012

PROJECT NAME:	JOSE NUNES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22484 W. CHINA CAMP ROAD	**SAMPLE TIME:**	13:20
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	7.20	FEET	**CALC. PURGE VOL.:**	3.39	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.95	FEET	**TOTAL VOLUME PURGED:**	10.5	GAL.
STANDING WATER COLUMN:		20.75	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:07	0	0	7.20	1.0 GPM	7.13	4250	20.8	143	1.9	
13:11	3.39	3.5		"	7.20	4152	20.9	142	1.5	
13:15	6.77	7		"	7.27	4139	21.4	140	1.5	
13:19	10.16	10.5	7.55	"	7.29	4132	21.5	137	1.6	7
13:20	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	7.55'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**NUN-MW 2D / DTW: 7.24'**		
	DUPLICATE #3 TAKEN HERE.		
WEATHER:	OVERCAST / FOGGY.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	NUN-MW3S	**DATE:**	12/4/2012

PROJECT NAME:	JOSE NUNES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22484 W. CHINA CAMP ROAD	**SAMPLE TIME:**	14:10
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	5.60	FEET	**CALC. PURGE VOL.:**	1.56	GAL.
DEPTH OF WELL:	**(feet.100th's)**	15.18	FEET	**TOTAL VOLUME PURGED:**	4.5	GAL.
STANDING WATER COLUMN:		9.58	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:03	0	0	5.60	1.0 GPM	7.38	6709	20.1	124	0.2	
14:05	1.56	1.5		"	7.20	6812	20.4	125	0.6	
14:07	3.13	3		"	7.17	6844	20.7	127	0.8	
14:09	4.69	4.5	5.72	"	7.13	6852	20.9	129	1.0	6
14:10	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	5.72'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**NUN-MW 3D / DTW: 5.53'**		
WEATHER:	OVERCAST / FOGGY.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING*		
	IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	NUN-MW4S	**DATE:**	12/4/2012

PROJECT NAME:	JOSE NUNES DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22484 W. CHINA CAMP ROAD	**SAMPLE TIME:**	14:35
CITY, STATE:	LOS BANOS, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	6.94	FEET	**CALC. PURGE VOL.:**	1.33	GAL.
DEPTH OF WELL:	**(feet.100th's)**	15.06	FEET	**TOTAL VOLUME PURGED:**	4.5	GAL.
STANDING WATER COLUMN:		8.12	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:28	0	0	6.94	1.0 GPM	7.15	9,384	19.7	129	0.5	
14:30	1.33	1.5		"	7.19	9,574	19.7	129	0.6	
14:32	2.65	3		"	7.21	9,785	19.8	130	0.6	
14:34	3.98	4.5	7.14	"	7.27	9,990	19.8	130	0.5	202
14:35	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	7.14'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**NUN-MW 4D / DTW: 6.87'**		
WEATHER:	OVERCAST / FOGGY.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

MOONSHINE DAIRY
22922 KILBURN ROAD
CROWS LANDING, CA
December 10, 2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MOO-MW1 **DATE:** 12/10/2012

PROJECT NAME:	MOONSHINE DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22922 KILBURN ROAD	**SAMPLE TIME:**	12:21
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	4" /	0.6528
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	14.85	FEET	**CALC. PURGE VOL.:**	7.44	GAL.
DEPTH OF WELL:	**(feet.100th's)**	26.25	FEET	**TOTAL VOLUME PURGED:**	23	GAL.
STANDING WATER COLUMN:		11.40	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:00	0	0	14.85	1.0 GPM	7.79	2851	20.2	70	1.6	
12:07	7.44	7.5		"	7.46	2752	21.0	59	1.4	
12:14	14.88	15		"	7.46	2725	20.1	57	0.6	
12:21	22.33	22.5	15.12	"	7.40	2725	20.0	54	0.6	26
12:21	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	15.12'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MOO-MW2 **DATE:** 12/10/2012

PROJECT NAME:	MOONSHINE DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22922 KILBURN ROAD	**SAMPLE TIME:**	11:05
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	4" /	0.6528
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	21.51	FEET	**CALC. PURGE VOL.:**	4.99	GAL.
DEPTH OF WELL:	**(feet.100th's)**	29.16	FEET	**TOTAL VOLUME PURGED:**	15	GAL.
STANDING WATER COLUMN:		7.65	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOULME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:50	0	0	21.51	1.0 GPM	7.88	2617	19.9	90	2.7	
10:55	4.99	5		"	7.70	2392	18.8	94	3.4	
11:00	9.99	10		"	7.42	2455	18.4	94	1.6	
11:05	14.98	15	22.72	"	7.37	2512	18.5	96	0.7	173
11:05	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	22.72'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	MOO-MW3	**DATE:**	12/10/2012

PROJECT NAME:	MOONSHINE DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22922 KILBURN ROAD	**SAMPLE TIME:**	10:47
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	4" /	0.6528
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	13.52	FEET	**CALC. PURGE VOL.:**	9.45	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.00	FEET	**TOTAL VOLUME PURGED:**	28.5	GAL.
STANDING WATER COLUMN:		14.48	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:20	0	0	13.52	1.0 GPM	7.63	2065	14.9	141	2.1	
10:29	9.45	9.5		"	7.43	2195	18.1	138	0.6	
10:38	18.91	19		"	7.40	2197	18.8	129	0.6	
10:47	28.36	28.5	13.97	"	7.38	2192	19.2	122	0.6	18
10:47	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	13.97'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	MOO-MW4	**DATE:**	12/10/2012

PROJECT NAME:	MOONSHINE DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22922 KILBURN ROAD	**SAMPLE TIME:**	13:33
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	4" /	0.6528
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	14.29	FEET	**CALC. PURGE VOL.:**	8.10	GAL.
DEPTH OF WELL:	**(feet.100th's)**	26.70	FEET	**TOTAL VOLUME PURGED:**	24	GAL.
STANDING WATER COLUMN:		12.41	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:08	0	0	14.29	1.0 GPM	7.90	2289	19.8	96	1.4	
13:17	8.10	8		"	7.74	1985	19.9	98	1.0	
13:25	16.20	16		"	7.73	1833	20.1	97	0.6	
13:33	24.30	24	14.50	"	7.70	1856	20.2	96	0.6	14
13:33	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	14.50'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:			
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY.*		
	NEW NITRILE GLOVES.		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	MOO-MW5S	**DATE:**	12/10/2012

PROJECT NAME:	MOONSHINE DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22922 KILBURN ROAD	**SAMPLE TIME:**	10:12
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	LT BROWN	
DEPTH TO WATER:	**(feet.100th's)**	14.03	FEET	**CALC. PURGE VOL.:**	3.01	GAL.
DEPTH OF WELL:	**(feet.100th's)**	32.50	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		18.47	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
10:02	0	0	14.03	1.0 GPM	6.55	1655	11.8	189	3.3	
10:05	3.01	3		"	6.94	1893	15.4	181	1.3	
10:08	6.03	6		"	7.15	2033	17.4	172	0.5	
10:12	9.04	9	14.13	"	7.30	2074	17.7	164	0.5	86
10:12	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	14.13'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MOO-MW 5D / DTW: 16.38'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / MOO-MW6S **DATE:** 12/10/2012

PROJECT NAME:	MOONSHINE DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22922 KILBURN ROAD	**SAMPLE TIME:**	12:36
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	22.83	FEET	**CALC. PURGE VOL.:**	1.76	GAL.
DEPTH OF WELL:	**(feet.100th's)**	33.60	FEET	**TOTAL VOLUME PURGED:**	6.0	GAL.
STANDING WATER COLUMN:		10.77	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:30	0	0	22.83	1.0 GPM	8.25	2154	21.5	107	2.2	
12:30	1.76	2		"	7.54	2129	21.3	117	1.5	
12:34	3.52	4		"	7.43	2092	21.2	114	1.7	
12:36	5.27	6	23.00	"	7.40	2098	21.3	108	1.6	835
12:36	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	23.00'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MOO-MW 6D / DTW: 23.88'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	MOO-MW7S	**DATE:**	12/10/2012

PROJECT NAME:	MOONSHINE DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22922 KILBURN ROAD	**SAMPLE TIME:**	11:53
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	20.92	FEET	**CALC. PURGE VOL.:**	1.20	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.30	FEET	**TOTAL VOLUME PURGED:**	5	GAL.
STANDING WATER COLUMN:		7.38	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:49	0	0	20.92	1.0 GPM	7.62	2089	20.0	86	2.5	
11:50	1.20	1.5		"	7.37	2788	20.5	86	1.6	
11:52	2.41	3		"	7.35	2926	20.5	83	1.5	
11:53	3.61	4.5	21.11	"	7.35	2976	20.6	79	1.2	37
11:53	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	21.11'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MOO-MW 7D / DTW: 20.88'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	MOO-MW8S	**DATE:**	12/10/2012

PROJECT NAME:	MOONSHINE DAIRY	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	22922 KILBURN ROAD	**SAMPLE TIME:**	11:38
CITY, STATE:	CROWS LANDING, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / EZARIA NONA			**WELL CASING MATERIAL :**	PVC	
SIGNED:				**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	20.83	FEET	**CALC. PURGE VOL.:**	0.97	GAL.
DEPTH OF WELL:	**(feet.100th's)**	26.80	FEET	**TOTAL VOLUME PURGED:**	3	GAL.
STANDING WATER COLUMN:		5.97	FEET	**LOCATION OF PUMP:**	~ 2 FEET ABOVE BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:35	0	0	20.83	1.0 GPM	8.10	2472	19.2	82	3.5	
11:36	0.97	1		"	7.71	1233	19.9	83	2.5	
11:37	1.95	2		"	7.66	1061	20.3	84	2.6	
11:38	2.92	3	21.23	"	7.61	1031	23.3	85	2.5	101
11:38	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	21.23'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**MOO-MW 8D / DTW: 20.71'**		
WEATHER:	CLEAR SKIES / COOL.	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPROBE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

2012
GROUNDWATER
FIELD MONITORING
SUMMARY REPORT

SITE:

TONY L. LOPES DAIRY LP
27500 BUNKER ROAD
GUSTINE, CA.
12/6 & 12/7/2012

645 N. YOSEMITE AVENUE, OAKDALE, CALIF. 95361 * OFFICE (209) 847-8757 * FAX (209) 847-7744

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / TON-MW1S **DATE:** 12/7/2012

PROJECT NAME:	TONY L. LOPES DAIRY LP	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	27500 BUNKER ROAD	**SAMPLE TIME:**	13:33
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	N/A
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	9.10	FEET	**CALC. PURGE VOL.:**	2.42	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.90	FEET	**TOTAL VOLUME PURGED:**	7.5	GAL.
STANDING WATER COLUMN:		14.80	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
13:24	0	0	9.10	1.0 GPM	7.25	3825	20.4	137	0.6	
13:27	2.42	2.5		"	7.21	3827	20.4	137	0.5	
13:30	4.83	5		"	7.16	3830	20.4	135	0.5	
13:33	7.25	7.5	9.61	"	7.12	3832	20.2	135	0.5	17
13:33	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.61'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**TON-MW 1D / DTW: 9.00'**		
WEATHER:	OVERCAST / COLD	**WIND:**	0 MPH
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPTONE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	TON-MW2S	**DATE:**	12/6/2012

PROJECT NAME:	TONY L. LOPES DAIRY LP	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	27500 BUNKER ROAD	**SAMPLE TIME:**	15:10
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	7.57	FEET	**CALC. PURGE VOL.:**	2.58	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.40	FEET	**TOTAL VOLUME PURGED:**	8	GAL.
STANDING WATER COLUMN:		15.83	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:01	0	0	7.57	1.0 GPM	7.32	4705	19.7	93	0.7	
15:04	2.58	2.5		"	7.30	4652	19.8	100	0.5	
15:07	5.17	5		"	7.29	4648	19.8	102	0.5	
15:10	7.75	7.5	7.80	"	7.26	4627	19.8	106	0.5	48
15:10	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	7.80'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**TON-MW 2D / DTW: 7.38'**		
WEATHER:	OVERCAST / COLD	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPTONE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / TON-MW3S **DATE:** 12/6/2012

PROJECT NAME:	TONY L. LOPES DAIRY LP	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	27500 BUNKER ROAD	**SAMPLE TIME:**	16:25
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	11.32	FEET	**CALC. PURGE VOL.:**	1.99	GAL.
DEPTH OF WELL:	**(feet.100th's)**	23.50	FEET	**TOTAL VOLUME PURGED:**	6.0	GAL.
STANDING WATER COLUMN:		12.18	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
16:19	0	0	11.32	1.0 GPM	7.53	2955	19.5	100	0.8	
16:21	1.99	2		"	7.40	2910	19.8	100	0.6	
16:23	3.98	4		"	7.28	2857	19.8	102	0.5	
16:25	5.96	6	11.52	"	7.25	2845	19.9	104	0.5	28
16:25	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.52'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**TON-MW 3D / DTW: 11.22'**		
WEATHER:	OVERCAST / COLD	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPTONE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	TON-MW4S	**DATE:**	12/7/2012

PROJECT NAME:	TONY L. LOPES DAIRY LP	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	27500 BUNKER ROAD	**SAMPLE TIME:**	13:02
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	12.81	FEET	**CALC. PURGE VOL.:**	1.63	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.80	FEET	**TOTAL VOLUME PURGED:**	6	GAL.
STANDING WATER COLUMN:		9.99	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:56	0	0	12.81	1.0 GPM	7.54	3805	19.9	139	1.1	
12:58	1.63	2		"	7.40	3788	19.9	138	1.0	
13:00	3.26	4		"	7.31	3602	20.0	138	0.8	
13:02	4.89	6	13.01	"	7.28	3607	20.0	137	0.7	24
13:02	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	13.01'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**TON-MW 4D / DTW: 12.47'**		
WEATHER:	OVERCAST / COLD	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 3560 FLOWCELL	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	TON-MW5S	**DATE:**	12/6/2012

PROJECT NAME:	TONY L. LOPES DAIRY LP	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	27500 BUNKER ROAD	**SAMPLE TIME:**	15:50
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	FLUSH	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	11.43	FEET	**CALC. PURGE VOL.:**	1.86	GAL.
DEPTH OF WELL:	**(feet.100th's)**	22.80	FEET	**TOTAL VOLUME PURGED:**	6.0	GAL.
STANDING WATER COLUMN:		11.37	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
15:44	0	0	11.43	1.0 GPM	7.27	3160	19.3	101	0.5	
15:46	1.86	2		"	7.30	3160	21.0	100	0.5	
15:48	3.71	4		"	7.30	3162	21.2	102	0.6	
15:50	5.57	6	15.21	"	7.37	3169	21.4	102	0.7	12
15:50	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	15.21'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**TON-MW 5D / DTW: 11.35'**		
WEATHER:	OVERCAST / COLD	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPTONE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION / TON-MW6S **DATE:** 12/6/2012

PROJECT NAME:	TONY L. LOPES DAIRY LP	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	27500 BUNKER ROAD	**SAMPLE TIME:**	14:25
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	BROWN	
DEPTH TO WATER:	**(feet.100th's)**	10.96	FEET	**CALC. PURGE VOL.:**	2.81	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.20	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		17.24	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
14:16	0	0	10.96	1.0 GPM	8.12	2156	18.7	97	0.7	
14:19	2.81	3		"	8.10	2171	19.5	96	0.7	
14:22	5.63	6		"	8.09	2180	19.8	95	0.7	
14:25	8.44	9	11.15	"	8.09	2184	19.8	95	0.7	220
14:25	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	11.15'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**TON-MW 6D / DTW: 10.48'**		
WEATHER:	OVERCAST / COLD	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPTONE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	TON-MW7S	**DATE:**	12/7/2012

PROJECT NAME:	TONY L. LOPES DAIRY LP	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	27500 BUNKER ROAD	**SAMPLE TIME:**	11:20
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	9.07	FEET	**CALC. PURGE VOL.:**	3.12	GAL.
DEPTH OF WELL:	**(feet.100th's)**	28.20	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		19.13	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
11:11	0	0	9.07	1.0 GPM	7.43	1162	22.9	127	0.8	
11:14	3.12	3		"	7.62	1166	22.9	123	0.6	
11:17	6.24	6		"	7.85	1168	22.7	114	0.5	
11:20	9.37	9	9.15	"	7.95	1169	22.8	110	0.5	20
11:20	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	9.15'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**TON-MW 7D / DTW: 8.75'**		
WEATHER:	OVERCAST / COLD	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPTONE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

DEL-TECH GEOTECHNICAL SUPPORT SERVICES, INC.

MONITORING WELL FIELD LOG 2012

SAMPLE LOCATION /	TON-MW8S	**DATE:**	12/7/2012

PROJECT NAME:	TONY L. LOPES DAIRY LP	**ANALYSIS PERFORMED:**	SEE CHAIN OF CUSTODY
ADDRESS:	27500 BUNKER ROAD	**SAMPLE TIME:**	12:10
CITY, STATE:	GUSTINE, CA.	**SAMPLE CONTAINERS:**	SEE CHAIN OF CUSTODY
SITE CONTACT:	TILL ANGERMAN	**PRESERVATIVES:**	SEE CHAIN OF CUSTODY
CONSULTANT:	LUHDORFF & SCALMANINI	**LAB. ANALYSIS BY:**	BC LABORATORIES

PROJECT MANAGER:	TILL ANGERMAN			**MONUMENT:**	POST	
SAMPLER:	DEL-TECH / DON LIGHT			**WELL CASING MATERIAL :**	PVC	
SIGNED:	Don Light			**WELL CASING DIA. :**	2" /	0.1632
SAMPLE MEDIA:	GROUNDWATER			**P.I.D. READING / ODOR:**	N/A	NONE
TOP OF CASING ELEVATION:			MSL	**COLOR:**	CLEAR	
DEPTH TO WATER:	**(feet.100th's)**	9.80	FEET	**CALC. PURGE VOL.:**	2.92	GAL.
DEPTH OF WELL:	**(feet.100th's)**	27.70	FEET	**TOTAL VOLUME PURGED:**	9	GAL.
STANDING WATER COLUMN:		17.90	FEET	**LOCATION OF PUMP:**	~ 2 FEET FROM BOTTOM	

FIELD PARAMETERS

TIME	CUMULATIVE CASING VOLUME PER PURGE (GAL)	VOLUME PURGED (GAL)	D.T.W. (FT)	PUMPING RATE (GPM/LPM)	pH (units)	SPECIFIC COND. (uS/cm)	TEMP. (Celsius)	O.R.P. (Mvolts)	DISSOLVED OXYGEN (PPM)	TURBIDITY (N.T.U.)
12:01	0	0	9.80	1.0 GPM	7.34	5705	19.4	118	0.9	
12:04	2.92	3		"	7.32	5700	19.2	120	0.8	
12:07	5.84	6		"	7.30	5690	18.9	123	0.7	
12:10	8.76	9	12.35	"	7.27	5697	18.8	127	0.7	53
12:10	SAMPLED									

PURGE METHOD:	CENTRIFUGAL PUMP.		
SAMPLE METHOD:	DEDICATED TUBING.		
D. T. W. AFTER PURGE:		**D. T. W. AT SAMPLE TIME:**	12.35'
WELL INTEGRITY:	CAP & SEAL ARE SECURE.		
WELL LOCATION:	SEE SITE MAP.		
REMARKS:	**TON-MW 8D / DTW: 9.37'**		
WEATHER:	OVERCAST / COLD	**WIND:**	NW5
QUALITY CONTROL:	*ALL PURGING EQUIPMENT WAS CLEANED AS NECESSARY. DEDICATED PURGE TUBING IS INSTALLED IN EACH WELL. NEW NITRILE GLOVES.*		
CONTAINMENT:	*NONE*		
INSTRUMENTATION:	Y.S.I. 556 MULTIPTONE SYSTEM	Y.S.I. DISSOLVED OXYGEN METER	
	SOLINIST SLOPE METER	TURBIDITY METER	

Attachment B5

USDA NRCS SSURGO Soil Data Reports (incl. data descriptions)

Map Unit Description

Detailed Soil Map Units

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this report, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. The contrasting components are mentioned in the map unit descriptions. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description indicates the composition of the map unit and selected properties of the components of the unit.

Soils that have profiles that are almost alike make up a "soil series." Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into "soil phases." Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A "complex" consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An "association" is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An "undifferentiated group" is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include "miscellaneous areas." Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Additional information about the map units described in this report is available in other Soil Data Mart reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the Soil Data Mart reports define some of the properties included in the map unit descriptions.

Taxonomic Classification of the Soils

The system of soil classification used by the National Cooperative Soil Survey has six categories (Soil Survey Staff, 1999 and 2003). Beginning with the broadest, these categories are the order, suborder, great group, subgroup, family, and series. Classification is based on soil properties observed in the field or inferred from those observations or from laboratory measurements. This table shows the classification of the soils in the survey area. The categories are defined in the following paragraphs.

ORDER. Twelve soil orders are recognized. The differences among orders reflect the dominant soil-forming processes and the degree of soil formation. Each order is identified by a word ending in "sol." An example is Alfisols.

SUBORDER. Each order is divided into suborders primarily on the basis of properties that influence soil genesis and are important to plant growth or properties that reflect the most important variables within the orders. The last syllable in the name of a suborder indicates the order. An example is Udalfs ("Ud," meaning humid, plus "alfs," from Alfisols).

GREAT GROUP. Each suborder is divided into great groups on the basis of close similarities in kind, arrangement, and degree of development of pedogenic horizons; soil moisture and temperature regimes; type of saturation; and base status. Each great group is identified by the name of a suborder and by a prefix that indicates a property of the soil. An example is Hapludalfs ("Hapl," meaning minimal horizonation, plus "udalfs," the suborder of the Alfisols that has a udic moisture regime).

SUBGROUP. Each great group has a typic subgroup. Other subgroups are intergrades or extragrades. The typic subgroup is the central concept of the great group; it is not necessarily the most extensive. Intergrades are transitions to other orders, suborders, or great groups. Extragrades have some properties that are not representative of the great group but do not indicate transitions to any other taxonomic class. Each subgroup is identified by one or more adjectives preceding the name of the great group. The adjective "Typic" identifies the subgroup that typifies the great group. An example is Typic Hapludalfs.

FAMILY. Families are established within a subgroup on the basis of physical and chemical properties and other characteristics that affect management. Generally, the properties are those of horizons below plow depth where there is much biological activity. Among the properties and characteristics considered are particle-size class, mineralogy class, cation-exchange activity class, soil temperature regime, soil depth, and reaction class. A family name consists of the name of a subgroup preceded by terms that indicate soil properties. An example is fine-loamy, mixed, active, mesic Typic Hapludalfs.

SERIES. The series consists of soils within a family that have horizons similar in color, texture, structure, reaction, consistence, mineral and chemical composition, and arrangement in the profile.

References:
Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.
Soil Survey Staff. 2003. Keys to soil taxonomy. 9th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. (The soils in a given survey area may have been classified according to earlier editions of this publication.)

Engineering Properties

This table gives the engineering classifications and the range of engineering properties for the layers of each soil in the survey area.

"Depth" to the upper and lower boundaries of each layer is indicated.

"Texture" is given in the standard terms used by the U.S. Department of Agriculture. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter. "Loam," for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand. If the content of particles coarser than sand is 15 percent or more, an appropriate modifier is added, for example, "gravelly."

"Classification" of the soils is determined according to the Unified soil classification system (ASTM, 2005) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO, 2004).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to particle-size distribution of the fraction less than 3 inches in diameter and according to plasticity index, liquid limit, and organic matter content. Sandy and gravelly soils are identified as GW, GP, GM, GC, SW, SP, SM, and SC; silty and clayey soils as ML, CL, OL, MH, CH, and OH; and highly organic soils as PT. Soils exhibiting engineering properties of two groups can have a dual classification, for example, CL-ML.

The AASHTO system classifies soils according to those properties that affect roadway construction and maintenance. In this system, the fraction of a mineral soil that is less than 3 inches in diameter is classified in one of seven groups from A-1 through A-7 on the basis of particle-size distribution, liquid limit, and plasticity index. Soils in group A-1 are coarse grained and low in content of fines (silt and clay). At the other extreme, soils in group A-7 are fine grained. Highly organic soils are classified in group A-8 on the basis of visual inspection.

If laboratory data are available, the A-1, A-2, and A-7 groups are further classified as A-1-a, A-1-b, A-2-4, A-2-5, A-2-6, A-2-7, A-7-5, or A-7-6. As an additional refinement, the suitability of a soil as subgrade material can be indicated by a group index number. Group index numbers range from 0 for the best subgrade material to 20 or higher for the poorest.

"Rock fragments" larger than 10 inches in diameter and 3 to 10 inches in diameter are indicated as a percentage of the total soil on a dry-weight basis. The percentages are estimates determined mainly by converting volume percentage in the field to weight percentage.

"Percentage (of soil particles) passing designated sieves" is the percentage of the soil fraction less than 3 inches in diameter based on an ovendry weight. The sieves, numbers 4, 10, 40, and 200 (USA Standard Series), have openings of 4.76, 2.00, 0.420, and 0.074 millimeters, respectively. Estimates are based on laboratory tests of soils sampled in the survey area and in nearby areas and on estimates made in the field.

"Liquid limit" and "plasticity index" (Atterberg limits) indicate the plasticity characteristics of a soil. The estimates are based on test data from the survey area or from nearby areas and on field examination.

References:
American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.
American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Physical Soil Properties

This table shows estimates of some physical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

"Depth" to the upper and lower boundaries of each layer is indicated.

Particle size is the effective diameter of a soil particle as measured by sedimentation, sieving, or micrometric methods. Particle sizes are expressed as classes with specific effective diameter class limits. The broad classes are sand, silt, and clay, ranging from the larger to the smaller.

"Sand" as a soil separate consists of mineral soil particles that are 0.05 millimeter to 2 millimeters in diameter. In this table, the estimated sand content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

"Silt" as a soil separate consists of mineral soil particles that are 0.002 to 0.05 millimeter in diameter. In this table, the estimated silt content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

"Clay" as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. In this table, the estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of sand, silt, and clay affects the physical behavior of a soil. Particle size is important for engineering and agronomic interpretations, for determination of soil hydrologic qualities, and for soil classification.

The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, saturated hydraulic conductivity (Ksat), plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

"Moist bulk density" is the weight of soil (ovendry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at 1/3- or 1/10-bar (33kPa or 10kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute linear extensibility, shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

"Saturated hydraulic conductivity (Ksat)" refers to the ease with which pores in a saturated soil transmit water. The estimates in the table are expressed in terms of micrometers per second. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Saturated hydraulic conductivity (Ksat) is considered in the design of soil drainage systems and septic tank absorption fields.

"Available water capacity" refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

"Linear extensibility" refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at 1/3- or 1/10-bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. The amount and type of clay minerals in the soil influence volume change.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

"Organic matter" is the plant and animal residue in the soil at various stages of decomposition. In this table, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of organic matter in a soil can be maintained by returning crop residue to the soil. Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms.

"Erosion factors" are shown in the table as the K factor (Kw and Kf) and the T factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and Ksat. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

"Erosion factor Kw" indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

"Erosion factor Kf" indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

"Erosion factor T" is an estimate of the maximum average annual rate of soil erosion by wind and/or water that can occur without affecting crop

productivity over a sustained period. The rate is in tons per acre per year.

"Wind erodibility groups" are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. The groups are described in the "National Soil Survey Handbook."

"Wind erodibility index" is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

Reference:
United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. (http://www.soils.usda.gov)

Soil Features

This table gives estimates of various soil features. The estimates are used in land use planning that involves engineering considerations.

A "restrictive layer" is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers. The table indicates the hardness and thickness of the restrictive layer, both of which significantly affect the ease of excavation. "Depth to top" is the vertical distance from the soil surface to the upper boundary of the restrictive layer.

"Subsidence" is the settlement of organic soils or of saturated mineral soils of very low density. Subsidence generally results from either desiccation and shrinkage, or oxidation of organic material, or both, following drainage. Subsidence takes place gradually, usually over a period of several years. The table shows the expected initial subsidence, which usually is a result of drainage, and total subsidence, which results from a combination of factors.

"Potential for frost action" is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing. Frost action occurs when moisture moves into the freezing zone of the soil. Temperature, texture, density, saturated hydraulic conductivity (Ksat), content of organic matter, and depth to the water table are the most important factors considered in evaluating the potential for frost action. It is assumed that the soil is not insulated by vegetation or snow and is not artificially drained. Silty and highly structured, clayey soils that have a high water table in winter are the most susceptible to frost action. Well drained, very gravelly, or very sandy soils are the least susceptible. Frost heave and low soil strength during thawing cause damage to pavements and other rigid structures.

"Risk of corrosion" pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel or concrete. The rate of corrosion of uncoated steel is related to such factors as soil moisture, particle-size distribution, acidity, and electrical conductivity of the soil. The rate of corrosion of concrete is based mainly on the sulfate and sodium content, texture, moisture content, and acidity of the soil. Special site examination and design may be needed if the combination of factors results in a severe hazard of corrosion. The steel or concrete in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than the steel or concrete in installations that are entirely within one kind of soil or within one soil layer.

For uncoated steel, the risk of corrosion, expressed as "low," "moderate," or "high," is based on soil drainage class, total acidity, electrical resistivity near field capacity, and electrical conductivity of the saturation extract.

For concrete, the risk of corrosion also is expressed as "low," "moderate," or "high." It is based on soil texture, acidity, and amount of sulfates in the saturation extract.

Chemical Soil Properties

This table shows estimates of some chemical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

"Depth" to the upper and lower boundaries of each layer is indicated.

"Cation-exchange capacity" is the total amount of extractable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. Soils having a low cation-exchange capacity hold fewer cations and may require more frequent applications of fertilizer than soils having a high cation-exchange capacity. The ability to retain cations reduces the hazard of ground-water pollution.

"Effective cation-exchange capacity" refers to the sum of extractable cations plus aluminum expressed in terms of milliequivalents per 100 grams of soil. It is determined for soils that have pH of less than 5.5.

"Soil reaction" is a measure of acidity or alkalinity. It is important in selecting crops and other plants, in evaluating soil amendments for fertility and stabilization, and in determining the risk of corrosion.

"Calcium carbonate" equivalent is the percent of carbonates, by weight, in the fraction of the soil less than 2 millimeters in size. The availability of plant nutrients is influenced by the amount of carbonates in the soil.

"Gypsum" is expressed as a percent, by weight, of hydrated calcium sulfates in the fraction of the soil less than 20 millimeters in size. Gypsum is partially soluble in water. Soils that have a high content of gypsum may collapse if the gypsum is removed by percolating water.

"Salinity" is a measure of soluble salts in the soil at saturation. It is expressed as the electrical conductivity of the saturation extract, in millimhos per centimeter at 25 degrees C. Estimates are based on field and laboratory measurements at representative sites of nonirrigated soils. The salinity of irrigated soils is affected by the quality of the irrigation water and by the frequency of water application. Hence, the salinity of soils in individual fields can differ greatly from the value given in the table. Salinity affects the suitability of a soil for crop production, the stability of soil if used as construction material, and the potential of the soil to corrode metal and concrete.

"Sodium adsorption ratio" (SAR) is a measure of the amount of sodium (Na) relative to calcium (Ca) and magnesium (Mg) in the water extract from saturated soil paste. It is the ratio of the Na concentration divided by the square root of one-half of the Ca + Mg concentration. Soils that have SAR values of 13 or more may be characterized by an increased dispersion of organic matter and clay particles, reduced saturated hydraulic conductivity and aeration, and a general degradation of soil structure.

Water Features

This table gives estimates of various soil water features. The estimates are used in land use planning that involves engineering considerations.

"Hydrologic soil groups" are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The four hydrologic soil groups are:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas.

"Surface runoff" refers to the loss of water from an area by flow over the land surface. Surface runoff classes are based on slope, climate, and vegetative cover. The concept indicates relative runoff for very specific conditions. It is assumed that the surface of the soil is bare and that the retention of surface water resulting from irregularities in the ground surface is minimal. The classes are negligible, very low, low, medium, high, and very high.

The "months" in the table indicate the portion of the year in which a water table, ponding, and/or flooding is most likely to be a concern.

"Water table" refers to a saturated zone in the soil. The water features table indicates, by month, depth to the top ("upper limit") and base ("lower limit") of the saturated zone in most years. Estimates of the upper and lower limits are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors or mottles (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

"Ponding" is standing water in a closed depression. Unless a drainage system is installed, the water is removed only by percolation, transpiration, or evaporation. The table indicates "surface water depth" and the "duration" and "frequency" of ponding. Duration is expressed as "very brief" if less than 2 days, "brief" if 2 to 7 days, "long" if 7 to 30 days, and "very long" if more than 30 days. Frequency is expressed as none, rare, occasional, and frequent. "None" means that ponding is not probable; "rare" that it is unlikely but possible under unusual weather conditions (the chance of ponding is nearly 0 percent to 5 percent in any year); "occasional" that it occurs, on the average, once or less in 2 years (the chance of ponding is 5 to 50 percent in any year); and "frequent" that it occurs, on the average, more than once in 2 years (the chance of ponding is more than 50 percent in any year).

"Flooding" is the temporary inundation of an area caused by overflowing streams, by runoff from adjacent slopes, or by tides. Water standing for short periods after rainfall or snowmelt is not considered flooding, and water standing in swamps and marshes is considered ponding rather than flooding.

"Duration" and "frequency" are estimated. Duration is expressed as "extremely brief" if 0.1 hour to 4 hours, "very brief" if 4 hours to 2 days, "brief" if 2 to 7 days, "long" if 7 to 30 days, and "very long" if more than 30 days. Frequency is expressed as none, very rare, rare, occasional, frequent, and very frequent. "None" means that flooding is not probable; "very rare" that it is very unlikely but possible under extremely unusual weather conditions (the chance of flooding is less than 1 percent in any year); "rare" that it is unlikely but possible under unusual weather conditions (the chance of flooding is 1 to 5 percent in any year); "occasional" that it occurs infrequently under normal weather conditions (the chance of flooding is 5 to 50 percent in any year); "frequent" that it is likely to occur often under normal weather conditions (the chance of flooding is more than 50 percent in any year but is less than 50 percent in all months in any year); and "very frequent" that it is likely to occur very often under normal weather conditions (the chance of flooding is more than 50 percent in all months of any year).

The information is based on evidence in the soil profile, namely thin strata of gravel, sand, silt, or clay deposited by floodwater; irregular decrease in organic matter content with increasing depth; and little or no horizon development.

Also considered are local information about the extent and levels of flooding and the relation of each soil on the landscape to historic floods. Information on the extent of flooding based on soil data is less specific than that provided by detailed engineering surveys that delineate flood-prone areas at specific flood frequency levels.

Stanislaus County, Western Part | CA642

Map Unit Description

Stanislaus County, California, Western Part

245 Bolfar-Columbia complex, 0 to 2 percent slopes, rarely flooded

Setting

Elevation: 40 to 60 feet
Mean annual precipitation: 10 to 12 inches
Mean annual air temperature: 59 to 63 degrees F
Frost-free period: 260 to 280 days

Composition

Bolfar and similar soils: 45 percent
Columbia, sandy substratum and similar soils: 40 percent
Minor components: 15 percent

Description of Bolfar

Setting

Landform: Flood plains
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Properties and Qualities

Slope: 0 to 2 percent
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: About 36 to 60 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate maximum: 2 percent
Gypsum maximum: 0 percent
Available water capacity: Moderate (about 8.5 inches)

Interpretive Groups

Land capability classification (irrigated): 2w
Land capability (non irrigated): 4w

Typical Profile

0 to 24 inches: loam
24 to 38 inches: loam
38 to 60 inches: stratified sandy loam to clay loam

Description of Columbia, sandy substratum

Setting

Landform: Flood plains
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium from mixed rock

Properties and Qualities

Slope: 0 to 2 percent
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high or high (0.60 to 2.00 in/hr)
Depth to water table: About 36 to 60 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate maximum: 0 percent
Gypsum maximum: 0 percent
Available water capacity: Moderate (about 7.1 inches)

Interpretive Groups

Land capability classification (irrigated): 3w
Land capability (non irrigated): 4w

Typical Profile

0 to 12 inches: fine sandy loam
12 to 41 inches: sandy loam
41 to 60 inches: stratified sand to loamy sand

Minor Components

Dello soils

Percent of map unit: 5 percent
Landform: Flood plains

Merritt soils

Percent of map unit: 5 percent
Landform: Flood plains

Clear lake soils

Percent of map unit: 3 percent
Landform: Basin floors

Veritas soils

Percent of map unit: 2 percent
Landform: Fan terraces

Taxonomic Classification of the Soils

Stanislaus County, California, Western Part

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Bolfar	Fine-loamy, mixed, calcareous, thermic Cumulic Endoaquolls
Clear Lake	Fine, smectitic, thermic Xeric Endoaquerts
Columbia, sandy substratum	Coarse-loamy, mixed, superactive, nonacid, thermic Oxyaquic Xerofluvents
Dello	Mixed, thermic Typic Psammaquents
Merritt	Fine-silty, mixed, superactive, thermic Fluvaquentic Haploxerolls
Veritas	Coarse-loamy, mixed, superactive, thermic Typic Haploxerolls

Engineering Properties

Stanislaus County, California, Western Part

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				*Pct*	*Pct*					*Pct*	
245:												
Bolfar	0-24	Loam	CL, CL-ML, ML	A-4	0	0	100	100	85-95	60-75	25-35	5-10
	24-38	Clay loam, Loam, Sandy clay loam	CL, SC	A-2-4, A-6	0	0	100	100	80-100	35-80	30-40	10-20
	38-60	Stratified sandy loam to clay loam	CL, SC	A-2-4, A-6	0	0	100	100	60-95	35-75	30-40	10-20
Columbia, sandy substratum	0-12	Fine sandy loam	SC-SM, SM	A-2-4, A-4	0	0	100	100	85-95	35-50	20-25	NP-5
	12-41	Sandy loam	SC-SM, SM	A-2-4, A-4	0	0	100	100	80-95	35-50	20-25	NP-5
	41-60	Stratified sand to loamy sand	SM, SP-SM	A-1-b, A-2-4, A-3	0	0	100	95-100	40-70	5-15	---	NP
Dello	---	---	---	---	---	---	---	---	---	---	---	---
Merritt	---	---	---	---	---	---	---	---	---	---	---	---
Clear Lake	---	---	---	---	---	---	---	---	---	---	---	---
Veritas	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Stanislaus County, California, Western Part

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
245:														
Bolfar	0-24	---	---	18-27	1.40-1.50	4.23-14.11	0.12-0.15	0.0-2.9	1.0-2.0	.43	.43	5	6	48
	24-38	---	---	18-35	1.35-1.50	1.41-4.23	0.12-0.17	3.0-5.9	0.0-1.0	.37	.37			
	38-60	---	---	18-25	1.40-1.50	1.41-4.23	0.12-0.16	3.0-5.9	0.0-1.0	.43	.43			
Columbia, sandy substratum	0-12	---	---	8-18	1.40-1.50	4.23-14.11	0.13-0.15	0.0-2.9	1.0-2.0	.49	.49	4	3	86
	12-41	---	---	8-18	1.45-1.55	14.11-42.34	0.13-0.15	0.0-2.9	0.0-1.0	.32	.32			
	41-60	---	---	0-5	1.60-1.70	42.34-141.14	0.05-0.08	0.0-2.9	0.0-1.0	.15	.15			
Dello	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Merritt	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Clear Lake	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Veritas	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Stanislaus County, California, Western Part

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
245:									
Bolfar	---	---	---	---	0	---	Low	High	Low
Columbia, sandy substratum	---	---	---	---	0	---	Low	Moderate	Low
Dello	---	---	---	---	---	---	---	---	---
Merritt	---	---	---	---	---	---	---	---	---
Clear Lake	---	---	---	---	---	---	---	---	---
Veritas	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Stanislaus County, California, Western Part

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
245:								
Bolfar	0-24	15-22	---	7.4-8.4	0-1	0	0.0-4.0	0
	24-38	13-28	---	7.9-8.4	1-2	0	0.0-4.0	0
	38-60	5.0-20	---	7.9-8.4	0-1	0	0.0-4.0	0
Columbia, sandy substratum	0-12	7.3-16	---	7.4-8.4	0	0	0.0	0
	12-41	6.2-15	---	6.1-7.8	0	0	0.0	0
	41-60	0.0-5.0	---	6.1-7.8	0	0	0.0	0
Dello	---	---	---	---	---	---	---	---
Merritt	---	---	---	---	---	---	---	---
Clear Lake	---	---	---	---	---	---	---	---
Veritas	---	---	---	---	---	---	---	---

Water Features

Stanislaus County, California, Western Part

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
245:										
Bolfar	D	Low	January	3.0-5.0	>6.0	---	---	None	Brief	Rare
			February	3.0-5.0	>6.0	---	---	None	Brief	Rare
			March	3.0-5.0	>6.0	---	---	None	Brief	Rare
			April	3.0-5.0	>6.0	---	---	None	Brief	Rare
			May	5.0->6.0	>6.0	---	---	None	---	None
			June	5.0->6.0	>6.0	---	---	None	---	None
			July	5.0->6.0	>6.0	---	---	None	---	None
			August	5.0->6.0	>6.0	---	---	None	---	None
			September	5.0->6.0	>6.0	---	---	None	---	None
			October	5.0->6.0	>6.0	---	---	None	Brief	Rare
			November	5.0->6.0	>6.0	---	---	None	Brief	Rare
			December	3.0-5.0	>6.0	---	---	None	Brief	Rare
Columbia, sandy substratum	C	Very low	January	3.0-5.0	>6.0	---	---	None	Brief	Rare
			February	3.0-5.0	>6.0	---	---	None	Brief	Rare
			March	3.0-5.0	>6.0	---	---	None	Brief	Rare
			April	3.0-5.0	>6.0	---	---	None	Brief	Rare
			May	4.0->6.0	>6.0	---	---	None	---	None
			June	4.0->6.0	>6.0	---	---	None	---	None
			July	4.0->6.0	>6.0	---	---	None	---	None
			August	4.0->6.0	>6.0	---	---	None	---	None
			September	4.0->6.0	>6.0	---	---	None	---	None
			October	4.0->6.0	>6.0	---	---	None	Brief	Rare
			November	4.0->6.0	>6.0	---	---	None	Brief	Rare
			December	3.0-5.0	>6.0	---	---	None	Brief	Rare
Dello	---	---	Jan-Dec			---	---	None	---	None
Merritt	---	---	Jan-Dec			---	---	None	---	None

Water Features

Stanislaus County, California, Western Part

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
245:										
Clear Lake	---	---	Jan-Dec			---	---	None	---	None
Veritas	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Stanislaus County, California, Western Part

153 Columbia fine sandy loam, channeled, partially drained, o to 2 percent slopes, frequently flooded

Setting

Elevation: 30 to 50 feet
Mean annual precipitation: 10 to 12 inches
Mean annual air temperature: 59 to 63 degrees F
Frost-free period: 260 to 280 days

Composition

Columbia and similar soils: 85 percent
Minor components: 15 percent

Description of Columbia

Setting

Landform: Flood plains
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium from mixed rock

Properties and Qualities

Slope: 0 to 2 percent
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: About 36 to 60 inches
Frequency of flooding: Frequent
Frequency of ponding: None
Calcium carbonate maximum: 0 percent
Gypsum maximum: 0 percent
Available water capacity: Moderate (about 6.6 inches)

Interpretive Groups

Land capability classification (irrigated): 4w
Land capability (non irrigated): 4w

Typical Profile

0 to 14 inches: fine sandy loam
14 to 60 inches: stratified sandy loam to fine sandy loam

Minor Components

Dello soils

Percent of map unit: 5 percent
Landform: Flood plains

Dospalos soils

Percent of map unit: 5 percent
Landform: Flood plains

Merritt soils

Percent of map unit: 5 percent
Landform: Flood plains

Taxonomic Classification of the Soils

Stanislaus County, California, Western Part

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Columbia	Coarse-loamy, mixed, superactive, nonacid, thermic Oxyaquic Xerofluvents
Dello	Mixed, thermic Typic Psammaquents
Dospalos	Fine, smectitic, thermic Vertic Endoaquolls
Merritt	Fine-silty, mixed, superactive, thermic Fluvaquentic Haploxerolls

Engineering Properties

Stanislaus County, California, Western Part

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
153:												
Columbia	0-14	Fine sandy loam	SC, SC-SM, SM	A-2-4, A-4	0	0	100	100	85-95	35-50	20-30	NP-10
	14-60	Stratified sandy loam to fine sandy loam	SC, SC-SM, SM	A-2-4, A-4	0	0	100	100	80-95	35-50	20-30	NP-10
Dello	---	---	---	---	---	---	---	---	---	---	---	---
Dospalos	---	---	---	---	---	---	---	---	---	---	---	---
Merritt	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Stanislaus County, California, Western Part

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
153:														
Columbia	0-14	---	---	10-18	1.50-1.60	14.11-42.34	0.10-0.12	0.0-2.9	0.5-2.0	.32	.32	5	3	86
	14-60	---	---	8-18	1.50-1.60	14.11-42.34	0.10-0.12	0.0-2.9	0.0-1.0	.32	.32			
Dello	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dospalos	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Merritt	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Stanislaus County, California, Western Part

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
153:									
Columbia	---	---	---	---	0	---	Low	Moderate	Low
Dello	---	---	---	---	---	---	---	---	---
Dospalos	---	---	---	---	---	---	---	---	---
Merritt	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Stanislaus County, California, Western Part

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
153:								
Columbia	0-14	8.6-16	---	6.1-7.8	0	0	0.0	0
	14-60	5.0-15	---	6.1-7.8	0	0	0.0	0
Dello	---	---	---	---	---	---	---	---
Dospalos	---	---	---	---	---	---	---	---
Merritt	---	---	---	---	---	---	---	---

Water Features

Stanislaus County, California, Western Part

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
153:										
Columbia	C	Very low	January	3.0-5.0	>6.0	---	---	None	Long	Frequent
			February	3.0-5.0	>6.0	---	---	None	Long	Frequent
			March	3.0-5.0	>6.0	---	---	None	Long	Frequent
			April	3.0-5.0	>6.0	---	---	None	Long	Frequent
			May	5.0->6.0	>6.0	---	---	None	---	None
			June	5.0->6.0	>6.0	---	---	None	---	None
			July	5.0->6.0	>6.0	---	---	None	---	None
			August	5.0->6.0	>6.0	---	---	None	---	None
			September	5.0->6.0	>6.0	---	---	None	---	None
			October	5.0->6.0	>6.0	---	---	None	---	None
			November	5.0->6.0	>6.0	---	---	None	---	None
			December	3.0-5.0	>6.0	---	---	None	Long	Frequent
Dello	---	---	Jan-Dec			---	---	None	---	None
Dospalos	---	---	Jan-Dec			---	---	None	---	None
Merritt	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Stanislaus County, California, Western Part

170 Dospalos-Bolfar complex, 0 to 2 percent slopes, occasionally flooded

Setting

Elevation: 30 to 60 feet
Mean annual precipitation: 10 to 12 inches
Mean annual air temperature: 59 to 63 degrees F
Frost-free period: 260 to 280 days

Composition

Dospalos and similar soils: 45 percent
Bolfar and similar soils: 40 percent
Minor components: 15 percent

Description of Dospalos

Setting

Landform: Flood plains
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Properties and Qualities

Slope: 0 to 2 percent
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low or moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 36 to 60 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Calcium carbonate maximum: 15 percent
Gypsum maximum: 0 percent
Available water capacity: Moderate (about 7.4 inches)

Interpretive Groups

Land capability classification (irrigated): 2w
Land capability (non irrigated): 4w

Typical Profile

0 to 26 inches: clay
26 to 44 inches: clay loam
44 to 60 inches: clay loam

Description of Bolfar

Setting

Landform: Flood plains
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Properties and Qualities

Slope: 0 to 2 percent
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: About 36 to 60 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Calcium carbonate maximum: 2 percent
Gypsum maximum: 0 percent
Available water capacity: Moderate (about 8.8 inches)

Interpretive Groups

Land capability classification (irrigated): 2w
Land capability (non irrigated): 4w

Typical Profile

0 to 24 inches: clay loam
24 to 38 inches: loam
38 to 60 inches: stratified sandy loam to clay loam

Minor Components

Columbia soils

Percent of map unit: 5 percent
Landform: Flood plains

Dello soils

Percent of map unit: 5 percent
Landform: Flood plains

Clear lake soils

Percent of map unit: 3 percent
Landform: Basin floors

Merritt soils

Percent of map unit: 2 percent
Landform: Flood plains

Taxonomic Classification of the Soils

Stanislaus County, California, Western Part

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Bolfar	Fine-loamy, mixed, calcareous, thermic Cumulic Endoaquolls
Clear Lake	Fine, smectitic, thermic Xeric Endoaquerts
Columbia	Coarse-loamy, mixed, superactive, nonacid, thermic Oxyaquic Xerofluvents
Dello	Mixed, thermic Typic Psammaquents
Dospalos	Fine, smectitic, thermic Vertic Endoaquolls
Merritt	Fine-silty, mixed, superactive, thermic Fluvaquentic Haploxerolls

Engineering Properties

Stanislaus County, California, Western Part

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
170:												
Dospalos	0-26	Clay	CL	A-6, A-7-6	0	0	100	100	90-100	70-95	40-50	15-25
	26-44	Clay, Clay loam	CH, CL	A-6, A-7-6	0	0	100	100	90-100	70-95	40-65	15-35
	44-60	Clay, Clay loam, Sandy clay loam	CH, CL	A-6, A-7-6	0	0	100	100	80-100	50-85	35-60	15-30
Bolfar	0-24	Clay loam	CL	A-6	0	0	100	100	90-100	75-80	30-40	10-20
	24-38	Clay loam, Loam, Sandy clay loam	CL, SC	A-6	0	0	100	100	80-100	35-80	30-40	10-20
	38-60	Stratified sandy loam to clay loam	CL	A-6	0	0	100	100	80-100	50-75	30-40	10-20
Columbia	---	---	---	---	---	---	---	---	---	---	---	---
Dello	---	---	---	---	---	---	---	---	---	---	---	---
Clear Lake	---	---	---	---	---	---	---	---	---	---	---	---
Merritt	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Stanislaus County, California, Western Part

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
170:														
Dospalos	0-26	---	---	40-60	1.35-1.45	1.41-4.23	0.10-0.15	3.0-5.9	1.0-3.0	.32	.32	5	7	38
	26-44	---	---	35-60	1.20-1.35	0.42-1.41	0.09-0.14	6.0-8.9	0.0-1.0	.32	.32			
	44-60	---	---	30-60	1.20-1.45	0.42-1.41	0.09-0.14	6.0-8.9	0.0-1.0	.32	.32			
Bolfar	0-24	---	---	27-35	1.35-1.45	1.41-4.23	0.13-0.17	3.0-5.9	1.0-2.0	.37	.37	5	6	48
	24-38	---	---	18-35	1.35-1.50	1.41-4.23	0.12-0.17	3.0-5.9	0.0-1.0	.37	.37			
	38-60	---	---	18-35	1.35-1.50	1.41-4.23	0.12-0.16	3.0-5.9	0.0-1.0	.43	.43			
Columbia	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dello	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Clear Lake	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Merritt	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Stanislaus County, California, Western Part

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
170:									
Dospalos	---	---	---	---	0	---	Low	High	Moderate
Bolfar	---	---	---	---	0	---	Low	High	Low
Columbia	---	---	---	---	---	---	---	---	---
Dello	---	---	---	---	---	---	---	---	---
Clear Lake	---	---	---	---	---	---	---	---	---
Merritt	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Stanislaus County, California, Western Part

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
170:								
Dospalos	0-26	26-52	---	7.4-8.4	1-2	0	0.0-4.0	0
	26-44	6.0-36	---	7.9-8.4	1-15	0	0.0-4.0	0
	44-60	5.2-36	---	7.9-8.4	1-2	0	0.0-4.0	0
Bolfar	0-24	22-28	---	7.4-8.4	0-1	0	0.0-4.0	0
	24-38	13-28	---	7.9-8.4	1-2	0	0.0-4.0	0
	38-60	5.0-25	---	7.9-8.4	0-1	0	0.0-4.0	0
Columbia	---	---	---	---	---	---	---	---
Dello	---	---	---	---	---	---	---	---
Clear Lake	---	---	---	---	---	---	---	---
Merritt	---	---	---	---	---	---	---	---

Water Features

Stanislaus County, California, Western Part

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
170:										
Dospalos	D	Medium	January	3.0-5.0	>6.0	---	---	None	Long	Occasional
			February	3.0-5.0	>6.0	---	---	None	Long	Occasional
			March	3.0-5.0	>6.0	---	---	None	Long	Occasional
			April	3.0-5.0	>6.0	---	---	None	Long	Occasional
			May	5.0->6.0	>6.0	---	---	None	---	None
			June	5.0->6.0	>6.0	---	---	None	---	None
			July	5.0->6.0	>6.0	---	---	None	---	None
			August	5.0->6.0	>6.0	---	---	None	---	None
			September	5.0->6.0	>6.0	---	---	None	---	None
			October	5.0->6.0	>6.0	---	---	None	---	None
			November	5.0->6.0	>6.0	---	---	None	---	None
			December	3.0-5.0	>6.0	---	---	None	Long	Occasional
Bolfar	D	Low	January	3.0-5.0	>6.0	---	---	None	Long	Occasional
			February	3.0-5.0	>6.0	---	---	None	Long	Occasional
			March	3.0-5.0	>6.0	---	---	None	Long	Occasional
			April	3.0-5.0	>6.0	---	---	None	Long	Occasional
			May	5.0->6.0	>6.0	---	---	None	---	None
			June	5.0->6.0	>6.0	---	---	None	---	None
			July	5.0->6.0	>6.0	---	---	None	---	None
			August	5.0->6.0	>6.0	---	---	None	---	None
			September	5.0->6.0	>6.0	---	---	None	---	None
			October	5.0->6.0	>6.0	---	---	None	---	None
			November	5.0->6.0	>6.0	---	---	None	---	None
			December	3.0-5.0	>6.0	---	---	None	Long	Occasional
Columbia	---	---	Jan-Dec			---	---	None	---	None
Dello	---	---	Jan-Dec			---	---	None	---	None

Water Features

Stanislaus County, California, Western Part

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
170:										
Clear Lake	---	---	Jan-Dec			---	---	None	---	None
Merritt	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Stanislaus County, California, Western Part

274 Elsalado loam, 0 to 2 percent slopes

Setting

Elevation: 40 to 300 feet
Mean annual precipitation: 10 to 12 inches
Mean annual air temperature: 59 to 63 degrees F
Frost-free period: 260 to 270 days

Composition

Elsalado and similar soils: 85 percent
Minor components: 15 percent

Description of Elsalado

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sandstone-shale

Properties and Qualities

Slope: 0 to 2 percent
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high or high (0.60 to 2.00 in/hr)
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 15 percent
Gypsum maximum: 0 percent
Sodium adsorption ratio maximum: 5.0
Available water capacity: Moderate (about 9.0 inches)

Interpretive Groups

Land capability classification (irrigated): 1
Land capability (non irrigated): 4c

Typical Profile

0 to 6 inches: loam
6 to 26 inches: loam
26 to 60 inches: loam

Minor Components

Vernalis soils

Percent of map unit: 5 percent
Landform: Alluvial fans

Zacharias soils

Percent of map unit: 5 percent
Landform: Alluvial fans

Capay soils

Percent of map unit: 5 percent
Landform: Basin floors

Taxonomic Classification of the Soils

Stanislaus County, California, Western Part

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Capay	Fine, smectitic, thermic Typic Haploxererts
Elsalado	Coarse-loamy, mixed, superactive, thermic Fluventic Haploxerepts
Vernalis	Fine-loamy, mixed, superactive, thermic Calcic Haploxerepts
Zacharias	Fine-loamy, mixed, superactive, thermic Typic Haploxerepts

Engineering Properties

Stanislaus County, California, Western Part

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
274:												
Elsalado	0-6	Loam	ML	A-4	0	0	95-100	90-100	75-90	50-65	20-30	NP-5
	6-26	Fine sandy loam, Loam	ML, SM	A-2-4, A-4	0	0	95-100	90-100	75-90	35-65	20-30	NP-5
	26-60	Fine sandy loam, Loam	ML, SM	A-2-4, A-4	0	0	95-100	90-100	75-90	35-65	20-30	NP-5
Capay	---	---	---	---	---	---	---	---	---	---	---	---
Vernalis	---	---	---	---	---	---	---	---	---	---	---	---
Zacharias	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Stanislaus County, California, Western Part

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
274:														
Elsalado	0-6	---	---	8-18	1.45-1.60	4.23-14.11	0.14-0.16	0.0-2.9	0.5-1.0	.43	.43	5	5	56
	6-26	---	---	8-18	1.45-1.65	4.23-14.11	0.14-0.16	0.0-2.9	0.0-0.5	.43	.43			
	26-60	---	---	8-18	1.45-1.65	4.23-14.11	0.14-0.16	0.0-2.9	0.0-0.5	.43	.43			
Capay	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Vernalis	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Zacharias	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Stanislaus County, California, Western Part

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
274:									
Elsalado	---	---	---	---	0	---	Low	High	Low
Capay	---	---	---	---	---	---	---	---	---
Vernalis	---	---	---	---	---	---	---	---	---
Zacharias	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Stanislaus County, California, Western Part

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
274:								
Elsalado	0-6	7.1-15	---	7.4-8.4	1-2	0	0.0-2.0	1-5
	6-26	6.2-15	---	7.4-8.4	2-15	0	0.0-2.0	1-5
	26-60	6.2-15	---	7.4-8.4	2-15	0	0.0-2.0	1-5
Capay	---	---	---	---	---	---	---	---
Vernalis	---	---	---	---	---	---	---	---
Zacharias	---	---	---	---	---	---	---	---

Water Features

Stanislaus County, California, Western Part

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
274:										
Elsalado	B	Low	Jan-Dec			---	---	None	---	None
Capay	---	---	Jan-Dec			---	---	None	---	None
Vernalis	---	---	Jan-Dec			---	---	None	---	None
Zacharias	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Stanislaus County, California, Western Part

330 Pedcat clay loam, 0 to 2 percent slopes, rarely flooded

Setting

Elevation: 60 to 90 feet
Mean annual precipitation: 10 to 12 inches
Mean annual air temperature: 59 to 63 degrees F
Frost-free period: 260 to 280 days

Composition

Pedcat and similar soils: 90 percent
Minor components: 10 percent

Description of Pedcat

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium from sedimentary rock

Properties and Qualities

Slope: 0 to 2 percent
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Low or moderately low (0.01 to 0.06 in/hr)
Depth to water table: About 42 to 60 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate maximum: 15 percent
Gypsum maximum: 0 percent
Salinity maximum: Slightly saline or moderately saline (8.0 to 16.0 mmhos/cm)
Sodium adsorption ratio maximum: 50.0
Available water capacity: Moderate (about 6.7 inches)

Interpretive Groups

Land capability classification (irrigated): 3w
Land capability (non irrigated): 4w

Typical Profile

0 to 7 inches: clay loam
7 to 25 inches: clay
25 to 51 inches: clay loam
51 to 60 inches: stratified sandy clay loam to clay

Minor Components

Clear lake soils

Percent of map unit: 4 percent
Landform: Basin floors

Dospalos soils

Percent of map unit: 4 percent
Landform: Flood plains

Columbia soils

Percent of map unit: 2 percent
Landform: Flood plains

Taxonomic Classification of the Soils

Stanislaus County, California, Western Part

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Clear Lake	Fine, smectitic, thermic Xeric Endoaquerts
Columbia	Coarse-loamy, mixed, superactive, nonacid, thermic Oxyaquic Xerofluvents
Dospalos	Fine, smectitic, thermic Vertic Endoaquolls
Pedcat	Fine, mixed, thermic Aquic Natrixeralfs

Engineering Properties

Stanislaus County, California, Western Part

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
330:												
Pedcat	0-7	Clay loam	CL	A-6, A-7-6	0	0	100	100	90-100	70-80	30-45	10-20
	7-25	Clay, Silty clay	CH, CL	A-7-6	0	0	100	100	95-100	85-95	45-55	20-30
	25-51	Clay, Clay loam, Silty clay loam	CL	A-6, A-7-6	0	0	100	100	80-100	70-95	35-50	15-25
	51-60	Stratified sandy clay loam to clay	CL	A-6, A-7-6	0	0	100	100	75-100	50-85	35-50	15-25
Clear Lake	---	---	---	---	---	---	---	---	---	---	---	---
Dospalos	---	---	---	---	---	---	---	---	---	---	---	---
Columbia	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Stanislaus County, California, Western Part

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
330:														
Pedcat	0-7	---	---	27-38	1.35-1.45	1.41-4.23	0.10-0.16	3.0-5.9	0.5-1.0	.37	.37	2	4	86
	7-25	---	---	40-50	1.35-1.45	0.07-0.42	0.09-0.13	6.0-8.9	0.0-0.5	.32	.32			
	25-51	---	---	30-45	1.35-1.45	0.42-1.41	0.09-0.12	6.0-8.9	0.0-0.5	.32	.32			
	51-60	---	---	30-45	1.40-1.50	0.42-1.41	0.09-0.12	6.0-8.9	0.0-0.5	.32	.32			
Clear Lake	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dospalos	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Columbia	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Stanislaus County, California, Western Part

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
330:									
Pedcat	---	---	---	---	0	---	Low	High	Moderate
Clear Lake	---	---	---	---	---	---	---	---	---
Dospalos	---	---	---	---	---	---	---	---	---
Columbia	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Stanislaus County, California, Western Part

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
330:								
Pedcat	0-7	21-30	---	6.6-7.8	1-2	0	0.0-2.0	0-2
	7-25	26-37	---	7.9-8.4	2-15	0	0.0-4.0	2-5
	25-51	20-34	---	7.9-9.0	2-15	0	8.0-16.0	12-50
	51-60	10-30	---	7.9-9.0	2-15	0	0.0-4.0	5-12
Clear Lake	---	---	---	---	---	---	---	---
Dospalos	---	---	---	---	---	---	---	---
Columbia	---	---	---	---	---	---	---	---

Water Features

Stanislaus County, California, Western Part

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
330:										
Pedcat	D	High	January	3.5-5.0	>6.0	---	---	None	Brief	Rare
			February	3.5-5.0	>6.0	---	---	None	Brief	Rare
			March	3.5-5.0	>6.0	---	---	None	Brief	Rare
			April	5.0->6.0	>6.0	---	---	None	Brief	Rare
			May	5.0->6.0	>6.0	---	---	None	---	None
			June	5.0->6.0	>6.0	---	---	None	---	None
			July	5.0->6.0	>6.0	---	---	None	---	None
			August	5.0->6.0	>6.0	---	---	None	---	None
			September	5.0->6.0	>6.0	---	---	None	---	None
			October	5.0->6.0	>6.0	---	---	None	Brief	Rare
			November	5.0->6.0	>6.0	---	---	None	Brief	Rare
			December	3.5-5.0	>6.0	---	---	None	Brief	Rare
Clear Lake	---	---	Jan-Dec			---	---	None	---	None
Dospalos	---	---	Jan-Dec			---	---	None	---	None
Columbia	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Stanislaus County, California, Western Part

331 Pedcat clay loam, 0 to 2 percent slopes

Setting

Elevation: 70 to 90 feet
Mean annual precipitation: 10 to 12 inches
Mean annual air temperature: 59 to 63 degrees F
Frost-free period: 260 to 280 days

Composition

Pedcat and similar soils: 90 percent
Minor components: 10 percent

Description of Pedcat

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium from sedimentary rock

Properties and Qualities

Slope: 0 to 2 percent
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Low or moderately low (0.01 to 0.06 in/hr)
Depth to water table: About 42 to 60 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 15 percent
Gypsum maximum: 0 percent
Salinity maximum: Slightly saline or moderately saline (8.0 to 16.0 mmhos/cm)
Sodium adsorption ratio maximum: 50.0
Available water capacity: Moderate (about 6.7 inches)

Interpretive Groups

Land capability classification (irrigated): 3w
Land capability (non irrigated): 4w

Typical Profile

0 to 7 inches: clay loam
7 to 25 inches: clay
25 to 51 inches: clay loam
51 to 60 inches: stratified sandy clay loam to clay

Minor Components

Clear lake soils

Percent of map unit: 4 percent
Landform: Basin floors

Dospalos soils

Percent of map unit: 4 percent
Landform: Flood plains

Columbia soils

Percent of map unit: 2 percent
Landform: Flood plains

Taxonomic Classification of the Soils

Stanislaus County, California, Western Part

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Clear Lake	Fine, smectitic, thermic Xeric Endoaquerts
Columbia	Coarse-loamy, mixed, superactive, nonacid, thermic Oxyaquic Xerofluvents
Dospalos	Fine, smectitic, thermic Vertic Endoaquolls
Pedcat	Fine, mixed, thermic Aquic Natrixeralfs

Engineering Properties

Stanislaus County, California, Western Part

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
331:												
Pedcat	0-7	Clay loam	CL	A-4, A-6, A-7-6	0	0	100	100	90-100	70-80	30-45	10-20
	7-25	Clay, Silty clay	CH, CL	A-7-6	0	0	100	100	95-100	85-95	45-55	20-30
	25-51	Clay, Clay loam, Silty clay loam	CL	A-6, A-7-6	0	0	100	100	80-100	70-95	35-50	15-25
	51-60	Stratified sandy clay loam to clay	CL	A-6, A-7-6	0	0	100	100	75-100	50-85	35-50	15-25
Clear Lake	---	---	---	---	---	---	---	---	---	---	---	---
Dospalos	---	---	---	---	---	---	---	---	---	---	---	---
Columbia	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Stanislaus County, California, Western Part

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
331:														
Pedcat	0-7	---	---	27-38	1.35-1.45	1.41-4.23	0.10-0.16	3.0-5.9	0.5-1.0	.37	.37	2	4	86
	7-25	---	---	40-50	1.35-1.45	0.07-0.42	0.09-0.13	6.0-8.9	0.0-0.5	.32	.32			
	25-51	---	---	30-45	1.35-1.45	0.42-1.41	0.09-0.12	6.0-8.9	0.0-0.5	.32	.32			
	51-60	---	---	30-45	1.40-1.50	0.42-1.41	0.09-0.12	6.0-8.9	0.0-0.5	.32	.32			
Clear Lake	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dospalos	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Columbia	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Stanislaus County, California, Western Part

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
331:									
Pedcat	---	---	---	---	0	---	Low	High	Moderate
Clear Lake	---	---	---	---	---	---	---	---	---
Dospalos	---	---	---	---	---	---	---	---	---
Columbia	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Stanislaus County, California, Western Part

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
331:								
Pedcat	0-7	21-30	---	6.6-7.8	1-2	0	0.0-2.0	0-2
	7-25	26-37	---	7.9-8.4	2-15	0	0.0-4.0	2-5
	25-51	20-34	---	7.9-9.0	2-15	0	8.0-16.0	12-50
	51-60	10-30	---	7.9-9.0	2-15	0	0.0-4.0	5-12
Clear Lake	---	---	---	---	---	---	---	---
Dospalos	---	---	---	---	---	---	---	---
Columbia	---	---	---	---	---	---	---	---

Water Features

Stanislaus County, California, Western Part

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
331:										
Pedcat	D	High	January	3.5-5.0	>6.0	---	---	None	---	None
			February	3.5-5.0	>6.0	---	---	None	---	None
			March	3.5-5.0	>6.0	---	---	None	---	None
			April	5.0->6.0	>6.0	---	---	None	---	None
			May	5.0->6.0	>6.0	---	---	None	---	None
			June	5.0->6.0	>6.0	---	---	None	---	None
			July	5.0->6.0	>6.0	---	---	None	---	None
			August	5.0->6.0	>6.0	---	---	None	---	None
			September	5.0->6.0	>6.0	---	---	None	---	None
			October	5.0->6.0	>6.0	---	---	None	---	None
			November	5.0->6.0	>6.0	---	---	None	---	None
			December	3.5-5.0	>6.0	---	---	None	---	None
Clear Lake	---	---	Jan-Dec			---	---	None	---	None
Dospalos	---	---	Jan-Dec			---	---	None	---	None
Columbia	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Stanislaus County, California, Western Part

122 Vernalis loam, 0 to 2 percent slopes

Setting

Elevation: 20 to 300 feet
Mean annual precipitation: 10 to 12 inches
Mean annual air temperature: 59 to 63 degrees F
Frost-free period: 260 to 280 days

Composition

Vernalis and similar soils: 85 percent
Minor components: 15 percent

Description of Vernalis

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium from mixed rock

Properties and Qualities

Slope: 0 to 2 percent
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high or high (0.60 to 2.00 in/hr)
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 5 percent
Gypsum maximum: 0 percent
Sodium adsorption ratio maximum: 5.0
Available water capacity: High (about 9.6 inches)

Interpretive Groups

Land capability classification (irrigated): 1
Land capability (non irrigated): 4c

Typical Profile

0 to 20 inches: loam
20 to 62 inches: clay loam

Minor Components

Capay soils

Percent of map unit: 5 percent
Landform: Basin floors

Stomar soils

Percent of map unit: 5 percent
Landform: Alluvial fans

Zacharias soils

Percent of map unit: 5 percent
Landform: Alluvial fans

Taxonomic Classification of the Soils

Stanislaus County, California, Western Part

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Capay	Fine, smectitic, thermic Typic Haploxererts
Stomar	Fine, smectitic, thermic Mollic Haploxeralfs
Vernalis	Fine-loamy, mixed, superactive, thermic Calcic Haploxerepts
Zacharias	Fine-loamy, mixed, superactive, thermic Typic Haploxerepts

Engineering Properties

Stanislaus County, California, Western Part

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
122:												
Vernalis	0-20	Loam	ML	A-4	0	0	100	95-100	80-100	55-80	25-35	NP-10
	20-62	Clay loam, Loam, Silt loam	CL, CL-ML	A-4, A-6	0	0	100	95-100	80-100	55-80	25-40	5-20
Capay	---	---	---	---	---	---	---	---	---	---	---	---
Stomar	---	---	---	---	---	---	---	---	---	---	---	---
Zacharias	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Stanislaus County, California, Western Part

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
122:														
Vernalis	0-20	---	---	18-27	1.55-1.65	4.23-14.11	0.14-0.17	0.0-2.9	1.0-2.0	.37	.37	5	6	48
	20-62	---	---	18-30	1.45-1.55	4.23-14.11	0.14-0.18	3.0-5.9	0.5-1.0	.37	.37			
Capay	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Stomar	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Zacharias	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Stanislaus County, California, Western Part

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
122:									
Vernalis	---	---	---	---	0	---	Low	High	Low
Capay	---	---	---	---	---	---	---	---	---
Stomar	---	---	---	---	---	---	---	---	---
Zacharias	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Stanislaus County, California, Western Part

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
122:								
Vernalis	0-20	15-22	---	6.6-8.4	0-2	0	0.0-2.0	0-5
	20-62	15-24	---	6.6-8.4	1-5	0	0.0-2.0	0-5
Capay	---	---	---	---	---	---	---	---
Stomar	---	---	---	---	---	---	---	---
Zacharias	---	---	---	---	---	---	---	---

Water Features

Stanislaus County, California, Western Part

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
122:										
Vernalis	B	Low	Jan-Dec			---	---	None	---	None
Capay	---	---	Jan-Dec			---	---	None	---	None
Stomar	---	---	Jan-Dec			---	---	None	---	None
Zacharias	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Stanislaus County, California, Western Part

125 Vernalis clay loam, 0 to 2 percent slopes

Setting

Elevation: 70 to 280 feet
Mean annual precipitation: 10 to 12 inches
Mean annual air temperature: 59 to 63 degrees F
Frost-free period: 260 to 280 days

Composition

Vernalis and similar soils: 85 percent
Minor components: 15 percent

Description of Vernalis

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium from mixed rock

Properties and Qualities

Slope: 0 to 2 percent
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 5 percent
Gypsum maximum: 0 percent
Sodium adsorption ratio maximum: 5.0
Available water capacity: High (about 10.0 inches)

Interpretive Groups

Land capability classification (irrigated): 1
Land capability (non irrigated): 4c

Typical Profile

0 to 20 inches: clay loam
20 to 62 inches: clay loam

Minor Components

Capay soils

Percent of map unit: 5 percent
Landform: Basin floors

Stomar soils

Percent of map unit: 5 percent
Landform: Alluvial fans

Zacharias soils

Percent of map unit: 5 percent
Landform: Alluvial fans

Taxonomic Classification of the Soils

Stanislaus County, California, Western Part

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Capay	Fine, smectitic, thermic Typic Haploxererts
Stomar	Fine, smectitic, thermic Mollic Haploxeralfs
Vernalis	Fine-loamy, mixed, superactive, thermic Calcic Haploxerepts
Zacharias	Fine-loamy, mixed, superactive, thermic Typic Haploxerepts

Engineering Properties

Stanislaus County, California, Western Part

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
125:												
Vernalis	0-20	Clay loam	CL	A-4, A-6	0	0	100	95-100	85-100	65-85	30-40	10-20
	20-62	Clay loam, Loam, Silt loam	CL, CL-ML	A-4, A-6	0	0	100	95-100	80-100	55-80	25-40	5-20
Capay	---	---	---	---	---	---	---	---	---	---	---	---
Stomar	---	---	---	---	---	---	---	---	---	---	---	---
Zacharias	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Stanislaus County, California, Western Part

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
125:														
Vernalis	0-20	---	---	27-35	1.45-1.55	1.41-4.23	0.17-0.18	3.0-5.9	1.0-2.0	.32	.32	5	6	48
	20-62	---	---	18-30	1.45-1.55	4.23-14.11	0.14-0.18	3.0-5.9	0.5-1.0	.37	.37			
Capay	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Stomar	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Zacharias	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Stanislaus County, California, Western Part

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
125:									
Vernalis	---	---	---	---	0	---	Low	High	Low
Capay	---	---	---	---	---	---	---	---	---
Stomar	---	---	---	---	---	---	---	---	---
Zacharias	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Stanislaus County, California, Western Part

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
125:								
Vernalis	0-20	22-28	---	6.6-8.4	0-2	0	0.0-2.0	0-5
	20-62	15-24	---	6.6-8.4	1-5	0	0.0-2.0	0-5
Capay	---	---	---	---	---	---	---	---
Stomar	---	---	---	---	---	---	---	---
Zacharias	---	---	---	---	---	---	---	---

Water Features

Stanislaus County, California, Western Part

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
125:										
Vernalis	B	Low	Jan-Dec			---	---	None	---	None
Capay	---	---	Jan-Dec			---	---	None	---	None
Stomar	---	---	Jan-Dec			---	---	None	---	None
Zacharias	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Stanislaus County, California, Western Part

126 Vernalis-Zacharias complex, 0 to 2 percent slopes, rarely flooded

Setting

Elevation: 30 to 400 feet
Mean annual precipitation: 10 to 12 inches
Mean annual air temperature: 59 to 63 degrees F
Frost-free period: 260 to 280 days

Composition

Vernalis and similar soils: 45 percent
Zacharias and similar soils: 40 percent
Minor components: 15 percent

Description of Vernalis

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium from mixed rock

Properties and Qualities

Slope: 0 to 2 percent
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate maximum: 5 percent
Gypsum maximum: 0 percent
Sodium adsorption ratio maximum: 5.0
Available water capacity: High (about 10.0 inches)

Interpretive Groups

Land capability classification (irrigated): 1
Land capability (non irrigated): 4w

Typical Profile

0 to 20 inches: clay loam
20 to 62 inches: clay loam

Description of Zacharias

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium from mixed rock

Properties and Qualities

Slope: 0 to 2 percent
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate maximum: 2 percent
Gypsum maximum: 0 percent
Available water capacity: High (about 9.7 inches)

Interpretive Groups

Land capability classification (irrigated): 1
Land capability (non irrigated): 4w

Typical Profile

0 to 14 inches: clay loam
14 to 66 inches: clay loam

Minor Components

Capay soils

Percent of map unit: 8 percent
Landform: Basin floors

Stomar soils

Percent of map unit: 7 percent
Landform: Alluvial fans

Taxonomic Classification of the Soils

Stanislaus County, California, Western Part

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Capay	Fine, smectitic, thermic Typic Haploxererts
Stomar	Fine, smectitic, thermic Mollic Haploxeralfs
Vernalis	Fine-loamy, mixed, superactive, thermic Calcic Haploxerepts
Zacharias	Fine-loamy, mixed, superactive, thermic Typic Haploxerepts

Engineering Properties

Stanislaus County, California, Western Part

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
126:												
Vernalis	0-20	Clay loam	CL	A-4, A-6	0	0	100	95-100	85-100	65-85	30-40	10-20
	20-62	Clay loam, Loam, Silt loam	CL, CL-ML	A-4, A-6	0	0	100	95-100	80-100	55-80	25-40	5-20
Zacharias	0-14	Clay loam	CL	A-4, A-6	0	0	85-100	75-100	65-90	60-80	30-40	10-15
	14-66	Clay loam, Loam	CL	A-4, A-6	0	0	85-100	75-100	60-90	50-80	30-40	10-20
Capay	---	---	---	---	---	---	---	---	---	---	---	---
Stomar	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Stanislaus County, California, Western Part

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
126:														
Vernalis	0-20	---	---	27-35	1.45-1.55	1.41-4.23	0.17-0.18	3.0-5.9	1.0-2.0	.32	.32	5	6	48
	20-62	---	---	18-30	1.45-1.55	4.23-14.11	0.14-0.18	3.0-5.9	0.5-1.0	.37	.37			
Zacharias	0-14	---	---	27-30	1.40-1.50	1.41-4.23	0.15-0.19	3.0-5.9	1.0-2.0	.37	.43	5	6	48
	14-66	---	---	25-35	1.40-1.55	1.41-4.23	0.13-0.18	3.0-5.9	0.0-0.5	.37	.37			
Capay	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Stomar	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Stanislaus County, California, Western Part

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
126:									
Vernalis	---	---	---	---	0	---	Low	High	Low
Zacharias	---	---	---	---	0	---	Low	High	Low
Capay	---	---	---	---	---	---	---	---	---
Stomar	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Stanislaus County, California, Western Part

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
126:								
Vernalis	0-20	22-28	---	6.6-8.4	0-2	0	0.0-2.0	0-5
	20-62	15-24	---	6.6-8.4	1-5	0	0.0-2.0	0-5
Zacharias	0-14	22-25	---	6.1-7.3	1-2	0	0.0	0
	14-66	17-27	---	6.6-7.8	1-2	0	0.0	0
Capay	---	---	---	---	---	---	---	---
Stomar	---	---	---	---	---	---	---	---

Water Features

Stanislaus County, California, Western Part

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
126:										
Vernalis	B	Low	January	---	---	---	---	None	Brief	Rare
			February	---	---	---	---	None	Brief	Rare
			March	---	---	---	---	None	Brief	Rare
			April	---	---	---	---	None	Brief	Rare
			October	---	---	---	---	None	Brief	Rare
			November	---	---	---	---	None	Brief	Rare
			December	---	---	---	---	None	Brief	Rare
Zacharias	B	Low	January	---	---	---	---	None	Brief	Rare
			February	---	---	---	---	None	Brief	Rare
			March	---	---	---	---	None	Brief	Rare
			April	---	---	---	---	None	Brief	Rare
			October	---	---	---	---	None	Brief	Rare
			November	---	---	---	---	None	Brief	Rare
			December	---	---	---	---	None	Brief	Rare
Capay	---	---	Jan-Dec			---	---	None	---	None
Stomar	---	---	Jan-Dec			---	---	None	---	None

Eastern Stanislaus Area | CA644

Map Unit Description

Eastern Stanislaus Area, California

DwA Dinuba sandy loam, slightly saline-alkali, 0 to 1 percent slopes

Setting

Elevation: 100 to 500 feet
Mean annual precipitation: 12 to 12 inches
Mean annual air temperature: 63 to 63 degrees F
Frost-free period: 250 to 250 days

Composition

Dinuba and similar soils: 85 percent
Minor components: 15 percent

Description of Dinuba

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Properties and Qualities

Slope: 0 to 1 percent
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low or moderately high (0.06 to 0.20 in/hr)
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 0 percent
Gypsum maximum: 0 percent
Salinity maximum: Very slightly saline or slightly saline (4.0 to 8.0 mmhos/cm)
Sodium adsorption ratio maximum: 5.0
Available water capacity: Low (about 5.4 inches)

Interpretive Groups

Land capability classification (irrigated): 2w
Land capability (non irrigated): 4s

Typical Profile

0 to 10 inches: sandy loam
10 to 30 inches: sandy loam
30 to 60 inches: very fine sand, silt loam

Minor Components

Hilmar soils

Percent of map unit: 5 percent

Hanford soils

Percent of map unit: 5 percent

Fresno soils

Percent of map unit: 5 percent

Taxonomic Classification of the Soils

Eastern Stanislaus Area, California

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Dinuba	Coarse-loamy, mixed, active, thermic Typic Haploxeralfs

Engineering Properties

Eastern Stanislaus Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
DwA:												
Dinuba	0-10	Sandy loam	SM	A-4	0	0	100	95-100	70-82	35-45	19-28	3-10
	10-30	Fine sandy loam, Sandy loam	SM	A-4	0	0	100	95-100	69-81	33-43	20-30	6-12
	30-60	Very fine sand, silt loam	ML, SM	A-4	0	0	100	96-100	91-100	74-85	20-29	6-12
Fresno	---	---	---	---	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---	---	---	---	---
Hilmar	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Eastern Stanislaus Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
DwA:														
Dinuba	0-10	---	---	7-15	1.45-1.55	4.00-14.00	0.07-0.11	0.5-1.3	0.5-1.0	.24	.24	5	3	86
	10-30	---	---	10-18	1.45-1.55	4.00-14.00	0.07-0.11	0.7-1.5	0.0-0.5	.24	.24			
	30-60	---	---	10-18	1.70-1.80	0.42-1.40	0.07-0.11	0.7-1.5	0.0	.64	.64			
Fresno	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hilmar	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Eastern Stanislaus Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
DwA:									
Dinuba	---	---	---	---	---	---	None	High	Moderate
Fresno	---	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---	---
Hilmar	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Eastern Stanislaus Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
DwA:								
Dinuba	0-10	3.8-8.1	---	7.4-8.4	0	0	4.0-8.0	0
	10-30	5.1-9.6	---	7.4-8.4	0	0	4.0-8.0	0-5
	30-60	5.1-9.1	---	7.4-9.0	0	0	4.0-8.0	0-5
Fresno	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---
Hilmar	---	---	---	---	---	---	---	---

Water Features

Eastern Stanislaus Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
DwA:										
Dinuba	C	Medium	Jan-Dec			---	---	None	---	None
Fresno	---	---	Jan-Dec			---	---	None	---	None
Hanford	---	---	Jan-Dec			---	---	None	---	None
Hilmar	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Eastern Stanislaus Area, California

HfA Hilmar loamy sand, 0 to 1 percent

Setting

Elevation: 300 to 900 feet
Mean annual precipitation: 11 to 11 inches
Mean annual air temperature: 63 to 63 degrees F
Frost-free period: 230 to 300 days

Composition

Hilmar and similar soils: 85 percent
Minor components: 15 percent

Description of Hilmar

Setting

Landform: Fan skirts
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Wind modified sandy alluvium derived from granite over silty alluvium derived from granite

Properties and Qualities

Slope: 0 to 1 percent
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low or moderately high (0.06 to 0.20 in/hr)
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 5 percent
Gypsum maximum: 0 percent
Salinity maximum: Non saline or slightly saline (2.0 to 8.0 mmhos/cm)
Available water capacity: Moderate (about 7.2 inches)

Interpretive Groups

Land capability classification (irrigated): 3w
Land capability (non irrigated): 4s

Typical Profile

0 to 7 inches: loamy sand
7 to 21 inches: sand
21 to 29 inches: sandy loam
29 to 60 inches: very fine sandy loam, silt loam

Minor Components

Dinuba soils

Percent of map unit: 10 percent

Delhi soils

Percent of map unit: 5 percent

Taxonomic Classification of the Soils

Eastern Stanislaus Area, California

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Hilmar	Sandy over loamy, mixed (calcareous), active, thermic Aeric Halaquepts

Engineering Properties

Eastern Stanislaus Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
HfA:												
Hilmar	0-7	Loamy sand	SM	A-2	0	0	100	100	74-84	25-35	0-24	NP-6
	7-21	Loamy sand, Sand	SM, SP-SM	A-2	0	0	100	100	72-82	5-15	0-23	NP-6
	21-29	Loamy sand, Sandy loam	SM	A-2	0	0	100	100	74-79	35-40	16-23	2-6
	29-60	Very fine sandy loam, silt loam	ML	A-4	0	0	100	100	88-95	70-77	18-26	4-10
Dinuba	---	---	---	---	---	---	---	---	---	---	---	---
Delhi	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Eastern Stanislaus Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
HfA:														
Hilmar	0-7	---	---	0-10	1.60-1.70	42.00-141.00	0.06-0.10	0.0-0.7	0.5-1.0	.24	.24	5	2	134
	7-21	---	---	0-10	1.60-1.70	42.00-141.00	0.06-0.10	0.0-0.7	0.0-0.5	.05	.05			
	21-29	---	---	5-10	1.60-1.70	42.00-141.00	0.06-0.10	0.2-0.7	0.0-0.5	.37	.37			
	29-60	---	---	8-15	1.60-1.70	0.42-1.40	0.14-0.17	0.2-0.9	0.0	.64	.64			
Dinuba	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Delhi	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Eastern Stanislaus Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
HfA:									
Hilmar	---	---	---	---	---	---	None	High	Moderate
Dinuba	---	---	---	---	---	---	---	---	---
Delhi	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Eastern Stanislaus Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
HfA:								
Hilmar	0-7	0.1-5.4	---	7.3-7.8	0	0	0.0	0
	7-21	0.1-5.4	---	7.3-7.8	0	0	0.0	0
	21-29	2.6-5.4	---	7.8-8.4	0-5	0	0.0-2.0	0
	29-60	4.1-7.6	---	8.4-9.6	0-5	0	2.0-8.0	0
Dinuba	---	---	---	---	---	---	---	---
Delhi	---	---	---	---	---	---	---	---

Water Features

Eastern Stanislaus Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
HfA:										
Hilmar	C	Medium	Jan-Dec			---	---	None	---	None
Dinuba	---	---	Jan-Dec			---	---	None	---	None
Delhi	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Eastern Stanislaus Area, California

WdA Waukena sandy loam, slightly saline-alkali, 0 to 1 percent slopes

Setting

Elevation: 1500 to 3800 feet
Mean annual precipitation: 50 to 50 inches
Mean annual air temperature: 55 to 55 degrees F
Frost-free period: 225 to 275 days

Composition

Waukena and similar soils: 85 percent
Minor components: 15 percent

Description of Waukena

Setting

Landform: Basin-floor remnants
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Properties and Qualities

Slope: 0 to 1 percent
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low or moderately high (0.06 to 0.20 in/hr)
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate maximum: 5 percent
Gypsum maximum: 0 percent
Salinity maximum: Very slightly saline or slightly saline (4.0 to 8.0 mmhos/cm)
Sodium adsorption ratio maximum: 20.0
Available water capacity: Moderate (about 6.6 inches)

Interpretive Groups

Land capability classification (irrigated): 3s
Land capability (non irrigated): 6s

Typical Profile

0 to 6 inches: sandy loam
6 to 60 inches: sandy loam

Minor Components

Unnamed

Percent of map unit: 5 percent
Landform: Depressions

Rossi soils

Percent of map unit: 5 percent

Fresno soils

Percent of map unit: 5 percent

Taxonomic Classification of the Soils

Eastern Stanislaus Area, California

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Waukena	Fine, serpentinitic, superactive, mesic Pachic Ultic Argixerolls

Engineering Properties

Eastern Stanislaus Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
WdA:												
Waukena	0-6	Sandy loam	SM	A-4	0	0	100	95-100	69-81	33-43	25-35	6-12
	6-60	Fine sandy loam, Sandy loam	SM	A-4	0	0	100	95-100	69-81	33-43	20-30	6-12
Fresno	---	---	---	---	---	---	---	---	---	---	---	---
Rossi	---	---	---	---	---	---	---	---	---	---	---	---
Unnamed	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Eastern Stanislaus Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
WdA:														
Waukena	0-6	---	---	10-18	1.50-1.60	1.40-4.00	0.10-0.12	0.7-1.9	2.0-3.0	.28	.28	2	3	86
	6-60	---	---	10-18	1.50-1.60	0.42-1.40	0.10-0.12	0.7-1.5	0.0-0.5	.32	.32			
Fresno	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Rossi	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Unnamed	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Eastern Stanislaus Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
WdA:									
Waukena	---	---	---	---	---	---	None	High	Moderate
Fresno	---	---	---	---	---	---	---	---	---
Rossi	---	---	---	---	---	---	---	---	---
Unnamed	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Eastern Stanislaus Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
WdA:								
Waukena	0-6	10-17	---	6.6-7.8	0	0	4.0-8.0	0-5
	6-60	7.2-12	---	7.9-8.4	1-5	0	4.0-8.0	15-20
Fresno	---	---	---	---	---	---	---	---
Rossi	---	---	---	---	---	---	---	---
Unnamed	---	---	---	---	---	---	---	---

Water Features

Eastern Stanislaus Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
WdA:										
Waukena	C	High	January	---	---	---	---	None	Brief	Rare
			February	---	---	---	---	None	Brief	Rare
			March	---	---	---	---	None	Brief	Rare
			April	---	---	---	---	None	Brief	Rare
			May	---	---	---	---	None	Brief	Rare
			June	---	---	---	---	None	Brief	Rare
			July	---	---	---	---	None	Brief	Rare
			August	---	---	---	---	None	Brief	Rare
			September	---	---	---	---	None	Brief	Rare
			October	---	---	---	---	None	Brief	Rare
			November	---	---	---	---	None	Brief	Rare
			December	---	---	---	---	None	Brief	Rare
Fresno	---	---	Jan-Dec			---	---	None	---	None
Rossi	---	---	Jan-Dec			---	---	None	---	None
Unnamed	---	---	Jan-Dec			---	---	None	---	None

Merced County, Western Part | CA647

Map Unit Description

Merced County, California, Western Part

153 CHINVAR LOAM

Setting

Elevation: 80 to 110 feet
Mean annual precipitation: 11 to 11 inches
Mean annual air temperature: 63 to 63 degrees F
Frost-free period: 210 to 280 days

Composition

Chinvar and similar soils: 85 percent
Minor components: 15 percent

Description of Chinvar

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sedimentary rock

Properties and Qualities

Slope: 0 to 2 percent
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high or high (0.57 to 1.98 in/hr)
Depth to water table: About 0 to 0 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 3 percent
Gypsum maximum: 0 percent
Salinity maximum: Non saline or slightly saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio maximum: 13.0
Available water capacity: Moderate (about 7.4 inches)

Interpretive Groups

Land capability classification (irrigated): 3s
Land capability (non irrigated): 4s

Typical Profile

0 to 13 inches: loam
13 to 38 inches: loam
38 to 60 inches: stratified gravelly sandy loam to very gravelly loam

Minor Components

Pedcat, clay soils

Percent of map unit: 5 percent
Landform: Fan aprons
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear

Pedcat, loam soils

Percent of map unit: 5 percent
Landform: Fan aprons
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear

Dosamigos soils

Percent of map unit: 3 percent
Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Linear

Unnamed soils

Percent of map unit: 2 percent

Taxonomic Classification of the Soils

Merced County, California, Western Part

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
CHINVAR	Fine-loamy, mixed, thermic Aquic Haploxerolls

Engineering Properties

Merced County, California, Western Part

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
153:												
CHINVAR	0-13	Loam	CL-ML, ML	A-4	0	0	100	95-100	80-95	50-75	25-35	5-10
	13-38	Clay loam, Loam	CL, CL-ML	A-4, A-6	0	0	100	95-100	80-95	50-75	25-40	5-15
	38-60	Stratified gravelly sandy loam to very gravelly loam	GC-GM, GM, SC-SM, SM	A-1, A-2	0	0-5	40-70	35-65	25-60	15-35	20-30	NP-10
PEDCAT, CLAY	---	---	---	---	---	---	---	---	---	---	---	---
PEDCAT, LOAM	---	---	---	---	---	---	---	---	---	---	---	---
DOSAMIGOS	---	---	---	---	---	---	---	---	---	---	---	---
UNNAMED	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced County, California, Western Part

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
153:														
CHINVAR	0-13	---	---	20-27	1.45-1.55	4.00-14.00	0.14-0.16	0.0-2.9	1.0-3.0	.32	.32	4	6	48
	13-38	---	---	20-30	1.30-1.50	4.00-14.00	0.13-0.15	3.0-5.9	0.0-0.5	.37	.37			
	38-60	---	---	10-18	1.45-1.60	4.00-14.00	0.07-0.10	0.0-2.9	0.0-0.5	.20	.24			
PEDCAT, CLAY	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PEDCAT, LOAM	---	---	---	---	---	---	---	---	---	---	---	---	---	---
DOSAMIGOS	---	---	---	---	---	---	---	---	---	---	---	---	---	---
UNNAMED	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced County, California, Western Part

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
153:									
CHINVAR	---	---	---	---	---	---	None	High	Low
PEDCAT, CLAY	---	---	---	---	---	---	---	---	---
PEDCAT, LOAM	---	---	---	---	---	---	---	---	---
DOSAMIGOS	---	---	---	---	---	---	---	---	---
UNNAMED	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced County, California, Western Part

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
153:								
CHINVAR	0-13	15-20	---	7.9-8.4	0	0	0.0-2.0	5-13
	13-38	10-15	---	7.9-8.4	1-3	0	2.0-8.0	5-13
	38-60	5.0-10	---	7.4-8.4	0	0	0.0-2.0	5-13
PEDCAT, CLAY	---	---	---	---	---	---	---	---
PEDCAT, LOAM	---	---	---	---	---	---	---	---
DOSAMIGOS	---	---	---	---	---	---	---	---
UNNAMED	---	---	---	---	---	---	---	---

Water Features

Merced County, California, Western Part

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
153:										
CHINVAR	B	Low	January	0.0 3.0-5.0	3.0-5.0 >6.0	---	---	None	---	None
			February	0.0 3.0-5.0	3.0-5.0 >6.0	---	---	None	---	None
			March	0.0 3.0-5.0	3.0-5.0 >6.0	---	---	None	---	None
			December	0.0 3.0-5.0	3.0-5.0 >6.0	---	---	None	---	None
PEDCAT, CLAY	---	---	Jan-Dec			---	---	None	---	None
PEDCAT, LOAM	---	---	Jan-Dec			---	---	None	---	None
DOSAMIGOS	---	---	Jan-Dec			---	---	None	---	None
UNNAMED	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced County, California, Western Part

167 DELDOTA CLAY, PARTIALLY DRAINED

Setting

Elevation: 90 to 300 feet
Mean annual precipitation: 8 to 12 inches
Mean annual air temperature: 61 to 63 degrees F
Frost-free period: 210 to 280 days

Composition

Deldota and similar soils: 85 percent
Minor components: 15 percent

Description of Deldota

Setting

Landform: Terraces
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Residuum weathered from sedimentary rock

Properties and Qualities

Slope: 0 to 2 percent
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low or moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 0 to 0 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 40 percent
Gypsum maximum: 20 percent
Available water capacity: High (about 9.9 inches)

Interpretive Groups

Land capability classification (irrigated): 2w
Land capability (non irrigated): 4w

Typical Profile

0 to 17 inches: clay
17 to 24 inches: clay loam
24 to 68 inches: clay loam

Minor Components

Dosamigos clay loam, partially drained soils

Percent of map unit: 3 percent
Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Linear

Woo soils

Percent of map unit: 3 percent

Chateau soils

Percent of map unit: 3 percent
Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Linear

Dosamigos clay, partially drained soils

Percent of map unit: 2 percent
Landform: Basin floors
Landform position (two-dimensional): Toeslope
Down-slope shape: Concave
Across-slope shape: Concave

Paver soils

Percent of map unit: 2 percent

Stanislaus soils
Percent of map unit: 2 percent

Taxonomic Classification of the Soils

Merced County, California, Western Part

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
DELDOTA	Fine, montmorillonitic, thermic Vertic Haploxerolls

Engineering Properties

Merced County, California, Western Part

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
167:												
DELDOTA	0-17	Clay	CH, CL	A-7	0	0	100	95-100	90-100	75-95	45-60	20-30
	17-24	Clay, Clay loam	CH, CL	A-7	0	0	100	95-100	90-100	70-95	45-60	20-30
	24-68	Clay loam	CL, ML	A-6, A-7	0	0	100	95-100	90-100	70-80	35-45	10-20
CHATEAU	---	---	---	---	---	---	---	---	---	---	---	---
Dosamigos clay loam, partially drained	---	---	---	---	---	---	---	---	---	---	---	---
Woo	---	---	---	---	---	---	---	---	---	---	---	---
Dosamigos clay, partially drained	---	---	---	---	---	---	---	---	---	---	---	---
Paver	---	---	---	---	---	---	---	---	---	---	---	---
Stanislaus	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced County, California, Western Part

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
167:														
DELDOTA	0-17	---	---	40-50	1.30-1.45	0.42-1.40	0.15-0.16	6.0-8.9	1.0-3.0	.28	.28	5	4	86
	17-24	---	---	35-50	1.30-1.40	0.42-1.40	0.15-0.17	6.0-8.9	0.5-1.0	.28	.28			
	24-68	---	---	30-40	1.30-1.50	0.42-1.40	0.16-0.18	3.0-5.9	0.0-0.5	.24	.24			
CHATEAU	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dosamigos clay loam, partially drained	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Woo	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dosamigos clay, partially drained	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Paver	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Stanislaus	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced County, California, Western Part

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
167:									
DELDOTA	---	---	---	---	---	---	None	High	Low
CHATEAU	---	---	---	---	---	---	---	---	---
Dosamigos clay loam, partially drained	---	---	---	---	---	---	---	---	---
Woo	---	---	---	---	---	---	---	---	---
Dosamigos clay, partially drained	---	---	---	---	---	---	---	---	---
Paver	---	---	---	---	---	---	---	---	---
Stanislaus	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced County, California, Western Part

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
167:								
DELDOTA	0-17	2.0-7.0	---	7.4-8.4	30-40	1-5	0.0-2.0	0
	17-24	2.0-5.0	---	7.4-8.4	25-35	5-10	0.0-2.0	0
	24-68	2.0-5.0	---	7.4-8.4	20-30	5-20	0.0-2.0	0
CHATEAU	---	---	---	---	---	---	---	---
Dosamigos clay loam, partially drained	---	---	---	---	---	---	---	---
Woo	---	---	---	---	---	---	---	---
Dosamigos clay, partially drained	---	---	---	---	---	---	---	---
Paver	---	---	---	---	---	---	---	---
Stanislaus	---	---	---	---	---	---	---	---

Water Features

Merced County, California, Western Part

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
167:										
DELDOTA	D	High	January	0.0 3.5-5.0	3.5-5.0 >6.0	---	---	None	---	None
			February	0.0 3.5-5.0	3.5-5.0 >6.0	---	---	None	---	None
			March	0.0 3.5-5.0	3.5-5.0 >6.0	---	---	None	---	None
			December	0.0 3.5-5.0	3.5-5.0 >6.0	---	---	None	---	None
CHATEAU	---	---	Jan-Dec			---	---	None	---	None
Dosamigos clay loam, partially drained	---	---	Jan-Dec			---	---	None	---	None
Woo	---	---	Jan-Dec			---	---	None	---	None
Dosamigos clay, partially drained	---	---	Jan-Dec			---	---	None	---	None
Paver	---	---	Jan-Dec			---	---	None	---	None
Stanislaus	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced County, California, Western Part

168 DOSAMIGOS CLAY LOAM, PARTIALLY DRAINED

Setting

Elevation: 70 to 180 feet
Mean annual precipitation: 9 to 12 inches
Mean annual air temperature: 61 to 63 degrees F
Frost-free period: 210 to 280 days

Composition

Dosamigos and similar soils: 85 percent
Minor components: 15 percent

Description of Dosamigos

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sedimentary rock

Properties and Qualities

Slope: 0 to 2 percent
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Very low or moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 0 to 0 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 35 percent
Gypsum maximum: 10 percent
Salinity maximum: Non saline or moderately saline (2.0 to 16.0 mmhos/cm)
Available water capacity: Moderate (about 8.6 inches)

Interpretive Groups

Land capability classification (irrigated): 3w
Land capability (non irrigated): 6w

Typical Profile

0 to 5 inches: clay loam
5 to 29 inches: clay loam
29 to 62 inches: clay loam

Minor Components

Pedcat soils

Percent of map unit: 5 percent
Landform: Fan aprons
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear

Volta soils

Percent of map unit: 5 percent
Landform: Fan aprons
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear

Deldota, clay, partially drained soils

Percent of map unit: 5 percent

Taxonomic Classification of the Soils

Merced County, California, Western Part

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
DOSAMIGOS	Fine, montmorillonitic, thermic Aquic Haploxerolls

Engineering Properties

Merced County, California, Western Part

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
168:												
DOSAMIGOS	0-5	Clay loam	CL	A-6, A-7	0	0	100	100	90-100	70-80	35-45	15-20
	5-29	Clay, Clay loam	CH, CL	A-7	0	0	100	100	90-100	70-95	40-55	15-30
	29-62	Clay, Clay loam, Sandy clay	CH, CL	A-6, A-7	0	0	100	95-100	85-100	50-95	35-55	15-30
DELDOTA, CLAY, PARTIALLY DRAINED	---	---	---	---	---	---	---	---	---	---	---	---
PEDCAT	---	---	---	---	---	---	---	---	---	---	---	---
VOLTA	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced County, California, Western Part

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
168:														
DOSAMIGOS	0-5	---	---	35-40	1.35-1.45	0.42-1.40	0.17-0.20	3.0-5.9	1.0-2.0	.28	.28	5	4	86
	5-29	---	---	37-50	1.25-1.40	0.01-0.42	0.12-0.17	6.0-8.9	0.5-1.0	.28	.28			
	29-62	---	---	30-45	1.30-1.50	0.42-1.40	0.09-0.16	3.0-5.9	0.0-0.5	.32	.32			
DELDOTA, CLAY, PARTIALLY DRAINED	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PEDCAT	---	---	---	---	---	---	---	---	---	---	---	---	---	---
VOLTA	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced County, California, Western Part

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
168:									
DOSAMIGOS	---	---	---	---	---	---	None	High	Low
DELDOTA, CLAY, PARTIALLY DRAINED	---	---	---	---	---	---	---	---	---
PEDCAT	---	---	---	---	---	---	---	---	---
VOLTA	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced County, California, Western Part

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
168:								
DOSAMIGOS	0-5	5.0-10	---	7.9-8.4	25-35	0	0.0-2.0	0
	5-29	10-30	---	7.9-8.4	25-35	1-3	0.0-8.0	0
	29-62	10-30	---	7.9-8.4	20-30	5-10	2.0-16.0	0
DELDOTA, CLAY, PARTIALLY DRAINED	---	---	---	---	---	---	---	---
PEDCAT	---	---	---	---	---	---	---	---
VOLTA	---	---	---	---	---	---	---	---

Water Features

Merced County, California, Western Part

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
168:										
DOSAMIGOS	D	Very high	January	0.0	3.5-5.0	---	---	None	---	None
				3.5-5.0	>6.0					
			February	0.0	3.5-5.0	---	---	None	---	None
				3.5-5.0	>6.0					
			March	0.0	3.5-5.0	---	---	None	---	None
				3.5-5.0	>6.0					
			December	0.0	3.5-5.0	---	---	None	---	None
				3.5-5.0	>6.0					
DELDOTA, CLAY, PARTIALLY DRAINED	---	---	Jan-Dec			---	---	None	---	None
PEDCAT	---	---	Jan-Dec			---	---	None	---	None
VOLTA	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced County, California, Western Part

169 DOSAMIGOS CLAY, PARTIALLY DRAINED

Setting

Elevation: 70 to 180 feet
Mean annual precipitation: 9 to 12 inches
Mean annual air temperature: 61 to 63 degrees F
Frost-free period: 210 to 280 days

Composition

Dosamigos and similar soils: 85 percent
Minor components: 15 percent

Description of Dosamigos

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sedimentary rock

Properties and Qualities

Slope: 0 to 2 percent
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Very low or moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 0 to 0 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 35 percent
Gypsum maximum: 10 percent
Salinity maximum: Non saline or moderately saline (2.0 to 16.0 mmhos/cm)
Available water capacity: Moderate (about 8.3 inches)

Interpretive Groups

Land capability classification (irrigated): 3w
Land capability (non irrigated): 6w

Typical Profile

0 to 15 inches: clay
15 to 27 inches: clay loam
27 to 60 inches: clay loam

Minor Components

Britto soils

Percent of map unit: 4 percent
Landform: Basin floors
Landform position (two-dimensional): Toeslope
Down-slope shape: Concave
Across-slope shape: Concave

Chateau soils

Percent of map unit: 4 percent
Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Linear

Deldota, clay, partially drained soils

Percent of map unit: 4 percent

Woo soils

Percent of map unit: 3 percent

Taxonomic Classification of the Soils

Merced County, California, Western Part

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
DOSAMIGOS	Fine, montmorillonitic, thermic Aquic Haploxerolls

Engineering Properties

Merced County, California, Western Part

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
169:												
DOSAMIGOS	0-15	Clay	CL	A-7	0	0	100	100	90-100	75-95	40-50	20-30
	15-27	Clay, Clay loam	CH, CL	A-7	0	0	100	100	90-100	70-95	40-55	15-30
	27-60	Clay, Clay loam, Sandy clay	CH, CL	A-6, A-7	0	0	100	95-100	85-100	50-95	35-55	15-30
BRITTO	---	---	---	---	---	---	---	---	---	---	---	---
CHATEAU	---	---	---	---	---	---	---	---	---	---	---	---
DELDOTA, CLAY, PARTIALLY DRAINED	---	---	---	---	---	---	---	---	---	---	---	---
WOO	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced County, California, Western Part

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
169:														
DOSAMIGOS	0-15	---	---	40-45	1.30-1.40	0.42-1.40	0.14-0.16	6.0-8.9	1.0-2.0	.24	.24	5	4	86
	15-27	---	---	37-50	1.25-1.40	0.01-0.42	0.12-0.17	6.0-8.9	0.5-1.0	.28	.28			
	27-60	---	---	30-45	1.30-1.50	0.42-1.40	0.09-0.16	3.0-5.9	0.0-0.5	.32	.32			
BRITTO	---	---	---	---	---	---	---	---	---	---	---	---	---	---
CHATEAU	---	---	---	---	---	---	---	---	---	---	---	---	---	---
DELDOTA, CLAY, PARTIALLY DRAINED	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WOO	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced County, California, Western Part

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
169:									
DOSAMIGOS	---	---	---	---	---	---	None	High	Low
BRITTO	---	---	---	---	---	---	---	---	---
CHATEAU	---	---	---	---	---	---	---	---	---
DELDOTA, CLAY, PARTIALLY DRAINED	---	---	---	---	---	---	---	---	---
WOO	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced County, California, Western Part

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
169:								
DOSAMIGOS	0-15	5.0-10	---	7.9-8.4	25-35	0	0.0-2.0	0
	15-27	10-30	---	7.9-8.4	25-35	1-3	0.0-8.0	0
	27-60	10-30	---	7.9-8.4	20-30	5-10	2.0-16.0	0
BRITTO	---	---	---	---	---	---	---	---
CHATEAU	---	---	---	---	---	---	---	---
DELDOTA, CLAY, PARTIALLY DRAINED	---	---	---	---	---	---	---	---
WOO	---	---	---	---	---	---	---	---

Water Features

Merced County, California, Western Part

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
169:										
DOSAMIGOS	D	Very high	January	0.0 3.5-5.0	3.5-5.0 >6.0	---	---	None	---	None
			February	0.0 3.5-5.0	3.5-5.0 >6.0	---	---	None	---	None
			March	0.0 3.5-5.0	3.5-5.0 >6.0	---	---	None	---	None
			December	0.0 3.5-5.0	3.5-5.0 >6.0	---	---	None	---	None
BRITTO	---	---	Jan-Dec			---	---	None	---	None
CHATEAU	---	---	Jan-Dec			---	---	None	---	None
DELDOTA, CLAY, PARTIALLY DRAINED	---	---	Jan-Dec			---	---	None	---	None
WOO	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced County, California, Western Part

192 HENMEL CLAY LOAM, PARTIALLY DRAINED

Setting

Elevation: 100 to 110 feet
Mean annual precipitation: 11 to 11 inches
Mean annual air temperature: 63 to 63 degrees F
Frost-free period: 210 to 280 days

Composition

Henmel and similar soils: 85 percent
Minor components: 15 percent

Description of Henmel

Setting

Landform: Fan aprons
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sedimentary rock

Properties and Qualities

Slope: 0 to 2 percent
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low or moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 0 to 0 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 5 percent
Gypsum maximum: 0 percent
Sodium adsorption ratio maximum: 10.0
Available water capacity: High (about 9.3 inches)

Interpretive Groups

Land capability classification (irrigated): 2w
Land capability (non irrigated): 4w

Typical Profile

0 to 15 inches: clay loam
15 to 37 inches: silty clay loam
37 to 44 inches: sandy clay
44 to 66 inches: sandy loam

Minor Components

Pedcat soils

Percent of map unit: 3 percent
Landform: Fan aprons
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear

Turlock soils

Percent of map unit: 3 percent
Landform: Rims on basin floors
Landform position (two-dimensional): Toeslope
Down-slope shape: Concave, convex
Across-slope shape: Concave, convex

Capay soils

Percent of map unit: 3 percent

Stanislaus soils

Percent of map unit: 3 percent

Woo soils

Percent of map unit: 3 percent

Taxonomic Classification of the Soils

Merced County, California, Western Part

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
HENMEL	Fine, montmorillonitic, thermic Typic Argiaquolls

Engineering Properties

Merced County, California, Western Part

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
192:												
HENMEL	0-15	Clay loam	CL	A-6	0	0	100	100	90-100	70-80	30-40	10-20
	15-37	Clay, Silty clay, Silty clay loam	CH, CL	A-7	0	0	100	100	90-100	50-95	40-55	20-30
	37-44	Sandy clay	CL	A-7	0	0	100	100	85-95	50-60	40-50	15-25
	44-66	Sandy clay loam, Sandy loam	SC, SC-SM	A-4, A-6	0	0	100	100	60-85	35-50	20-35	5-15
CAPAY	---	---	---	---	---	---	---	---	---	---	---	---
PEDCAT	---	---	---	---	---	---	---	---	---	---	---	---
STANISLAUS	---	---	---	---	---	---	---	---	---	---	---	---
TURLOCK	---	---	---	---	---	---	---	---	---	---	---	---
WOO	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced County, California, Western Part

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
192:														
HENMEL	0-15	---	---	27-35	1.40-1.50	1.40-4.00	0.17-0.19	3.0-5.9	1.0-3.0	.32	.32	5	6	48
	15-37	---	---	35-45	1.35-1.55	0.42-1.40	0.14-0.16	6.0-8.9	0.5-1.0	.32	.32			
	37-44	---	---	35-40	1.35-1.45	0.42-1.40	0.13-0.16	6.0-8.9	0.5-1.0	.24	.24			
	44-66	---	---	15-25	1.45-1.60	14.00-42.00	0.10-0.18	3.0-5.9	0.0-0.5	.28	.28			
CAPAY	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PEDCAT	---	---	---	---	---	---	---	---	---	---	---	---	---	---
STANISLAUS	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TURLOCK	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WOO	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced County, California, Western Part

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
192:									
HENMEL	---	---	---	---	---	---	None	High	Low
CAPAY	---	---	---	---	---	---	---	---	---
PEDCAT	---	---	---	---	---	---	---	---	---
STANISLAUS	---	---	---	---	---	---	---	---	---
TURLOCK	---	---	---	---	---	---	---	---	---
WOO	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced County, California, Western Part

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
192:								
HENMEL	0-15	15-25	---	7.9-8.4	0	0	0.0-2.0	0
	15-37	15-25	---	7.9-8.4	0	0	0.0-2.0	5-10
	37-44	15-25	---	7.9-8.4	1-5	0	0.0-2.0	5-10
	44-66	10-15	---	7.9-9.0	1-5	0	0.0-2.0	0
CAPAY	---	---	---	---	---	---	---	---
PEDCAT	---	---	---	---	---	---	---	---
STANISLAUS	---	---	---	---	---	---	---	---
TURLOCK	---	---	---	---	---	---	---	---
WOO	---	---	---	---	---	---	---	---

Water Features

Merced County, California, Western Part

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
192:										
HENMEL	D	High	January	0.0 3.0-5.0	3.0-5.0 >6.0	---	---	None	---	None
			February	0.0 3.0-5.0	3.0-5.0 >6.0	---	---	None	---	None
			March	0.0 3.0-5.0	3.0-5.0 >6.0	---	---	None	---	None
			December	0.0 3.0-5.0	3.0-5.0 >6.0	---	---	None	---	None
CAPAY	---	---	Jan-Dec			---	---	None	---	None
PEDCAT	---	---	Jan-Dec			---	---	None	---	None
STANISLAUS	---	---	Jan-Dec			---	---	None	---	None
TURLOCK	---	---	Jan-Dec			---	---	None	---	None
WOO	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced County, California, Western Part

236 PEDCAT CLAY LOAM, LEVELED, 0 TO 2 PERCENT SLOPES

Setting

Elevation: 70 to 1100 feet
Mean annual precipitation: 11 to 11 inches
Mean annual air temperature: 63 to 63 degrees F
Frost-free period: 200 to 280 days

Composition

Pedcat and similar soils: 85 percent
Minor components: 15 percent

Description of Pedcat

Setting

Landform: Fan aprons
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sedimentary rock

Properties and Qualities

Slope: 0 to 2 percent
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Very low or moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 0 to 0 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 3 percent
Gypsum maximum: 0 percent
Salinity maximum: Slightly saline or moderately saline (8.0 to 16.0 mmhos/cm)
Sodium adsorption ratio maximum: 60.0
Available water capacity: Moderate (about 6.7 inches)

Interpretive Groups

Land capability classification (irrigated): 4w
Land capability (non irrigated): 7w

Typical Profile

0 to 5 inches: clay loam
5 to 23 inches: clay
23 to 29 inches: clay
29 to 60 inches: stratified sandy clay loam to clay

Minor Components

Chinvar soils

Percent of map unit: 3 percent
Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Linear

Marcuse soils

Percent of map unit: 3 percent
Landform: Rims on basin floors
Landform position (two-dimensional): Toeslope
Down-slope shape: Concave, convex
Across-slope shape: Concave, convex

Britto soils

Percent of map unit: 3 percent
Landform: Rims on basin floors
Landform position (two-dimensional): Toeslope
Down-slope shape: Concave, convex
Across-slope shape: Concave, convex

Dosamigos, clay loam, partially drained soils

Percent of map unit: 3 percent
Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Linear

Volta, clay loam, partially drained soils

Percent of map unit: 3 percent
Landform: Fan aprons
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear

Taxonomic Classification of the Soils

Merced County, California, Western Part

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
PEDCAT	Fine, mixed, thermic Aquic Natrixeralfs

Engineering Properties

Merced County, California, Western Part

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
236:												
PEDCAT	0-5	Clay loam	CL	A-6, A-7	0	0	100	100	90-100	70-80	30-45	10-20
	5-23	Clay, Silty clay	CH, CL	A-7	0	0	100	100	95-100	85-95	45-55	20-30
	23-29	Clay, Clay loam, Silty clay loam	CL	A-6, A-7	0	0	100	100	80-100	70-95	35-50	15-25
	29-60	Stratified sandy clay loam to clay	CL	A-6, A-7	0	0	100	100	75-100	50-85	35-50	15-25
BRITTO	---	---	---	---	---	---	---	---	---	---	---	---
CHINVAR	---	---	---	---	---	---	---	---	---	---	---	---
DOSAMIGOS, CLAY LOAM, PARTIALLY DRAINED	---	---	---	---	---	---	---	---	---	---	---	---
MARCUSE	---	---	---	---	---	---	---	---	---	---	---	---
VOLTA, CLAY LOAM, PARTIALLY DRAINED	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced County, California, Western Part

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
236:														
PEDCAT	0-5	---	---	27-38	1.40-1.50	1.40-4.00	0.10-0.16	3.0-5.9	0.5-1.0	.37	.37	2	6	48
	5-23	---	---	40-50	1.35-1.50	0.01-0.42	0.09-0.13	6.0-8.9	0.0-0.5	.32	.32			
	23-29	---	---	30-45	1.35-1.55	0.42-1.40	0.09-0.12	6.0-8.9	0.0-0.5	.32	.32			
	29-60	---	---	30-45	1.35-1.55	0.42-1.40	0.09-0.12	6.0-8.9	0.0-0.5	.32	.32			
BRITTO	---	---	---	---	---	---	---	---	---	---	---	---	---	---
CHINVAR	---	---	---	---	---	---	---	---	---	---	---	---	---	---
DOSAMIGOS, CLAY LOAM, PARTIALLY DRAINED	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MARCUSE	---	---	---	---	---	---	---	---	---	---	---	---	---	---
VOLTA, CLAY LOAM, PARTIALLY DRAINED	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced County, California, Western Part

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
236:									
PEDCAT	---	---	---	---	---	---	None	High	Moderate
BRITTO	---	---	---	---	---	---	---	---	---
CHINVAR	---	---	---	---	---	---	---	---	---
DOSAMIGOS, CLAY LOAM, PARTIALLY DRAINED	---	---	---	---	---	---	---	---	---
MARCUSE	---	---	---	---	---	---	---	---	---
VOLTA, CLAY LOAM, PARTIALLY DRAINED	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced County, California, Western Part

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
236:								
PEDCAT	0-5	15-20	---	6.6-7.8	0	0	8.0-16.0	13-20
	5-23	15-30	---	7.9-8.4	1-3	0	8.0-16.0	20-60
	23-29	15-25	---	7.9-9.0	1-3	0	8.0-16.0	20-60
	29-60	15-25	---	7.9-9.0	1-3	0	8.0-16.0	13-30
BRITTO	---	---	---	---	---	---	---	---
CHINVAR	---	---	---	---	---	---	---	---
DOSAMIGOS, CLAY LOAM, PARTIALLY DRAINED	---	---	---	---	---	---	---	---
MARCUSE	---	---	---	---	---	---	---	---
VOLTA, CLAY LOAM, PARTIALLY DRAINED	---	---	---	---	---	---	---	---

Water Features

Merced County, California, Western Part

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
236:										
PEDCAT	D	Very high	January	0.0	1.5-3.0	---	---	None	---	None
				1.5-3.0	>6.0					
			February	0.0	1.5-3.0	---	---	None	---	None
				1.5-3.0	>6.0					
			March	0.0	1.5-3.0	---	---	None	---	None
				1.5-3.0	>6.0					
			December	0.0	1.5-3.0	---	---	None	---	None
				1.5-3.0	>6.0					
BRITTO	---	---	Jan-Dec			---	---	None	---	None
CHINVAR	---	---	Jan-Dec			---	---	None	---	None
DOSAMIGOS, CLAY LOAM, PARTIALLY DRAINED	---	---	Jan-Dec			---	---	None	---	None
MARCUSE	---	---	Jan-Dec			---	---	None	---	None
VOLTA, CLAY LOAM, PARTIALLY DRAINED	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced County, California, Western Part

237 PEDCAT CLAY, 0 TO 2 PERCENT SLOPES, SEVERELY ERODED

Setting

Elevation: 70 to 1100 feet
Mean annual precipitation: 11 to 11 inches
Mean annual air temperature: 63 to 63 degrees F
Frost-free period: 200 to 280 days

Composition

Pedcat and similar soils: 85 percent
Minor components: 15 percent

Description of Pedcat

Setting

Landform: Drainageways
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Alluvium derived from sedimentary rock

Properties and Qualities

Slope: 0 to 2 percent
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low or moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 0 to 0 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 3 percent
Gypsum maximum: 0 percent
Salinity maximum: Slightly saline or moderately saline (8.0 to 16.0 mmhos/cm)
Sodium adsorption ratio maximum: 60.0
Available water capacity: Moderate (about 6.6 inches)

Interpretive Groups

Land capability (non irrigated): 7w
Ecological site: Loamy Saline-Alkali 9-12" P.Z. (R017XF069CA)

Typical Profile

0 to 18 inches: clay
18 to 23 inches: clay
23 to 60 inches: stratified sandy clay loam to clay

Minor Components

Volta soils

Percent of map unit: 10 percent
Landform: Fan aprons
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear

Pedcat, loam soils

Percent of map unit: 5 percent
Landform: Fan aprons
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear

Taxonomic Classification of the Soils

Merced County, California, Western Part

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
PEDCAT	Fine, mixed, thermic Aquic Natrixeralfs

Engineering Properties

Merced County, California, Western Part

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
237:												
PEDCAT	0-18	Clay	CH, CL	A-7	0	0	100	100	90-100	75-95	45-55	20-30
	18-23	Clay, Clay loam, Silty clay loam	CL	A-6, A-7	0	0	100	100	80-100	70-95	35-50	15-25
	23-60	Stratified sandy clay loam to clay	CL	A-6, A-7	0	0	100	100	75-100	50-85	35-50	15-25
VOLTA	---	---	---	---	---	---	---	---	---	---	---	---
PEDCAT, LOAM	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced County, California, Western Part

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
237:														
PEDCAT	0-18	---	---	40-50	1.35-1.45	0.42-1.40	0.09-0.13	6.0-8.9	0.5-1.0	.32	.32	2	4	86
	18-23	---	---	30-45	1.35-1.55	0.42-1.40	0.09-0.12	6.0-8.9	0.0-0.5	.32	.32			
	23-60	---	---	30-45	1.35-1.55	0.42-1.40	0.09-0.12	6.0-8.9	0.0-0.5	.32	.32			
VOLTA	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PEDCAT, LOAM	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced County, California, Western Part

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
237:									
PEDCAT	---	---	---	---	---	---	None	High	Moderate
VOLTA	---	---	---	---	---	---	---	---	---
PEDCAT, LOAM	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced County, California, Western Part

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
237:								
PEDCAT	0-18	20-30	---	7.9-8.4	0	0	8.0-16.0	13-20
	18-23	15-25	---	7.9-9.0	1-3	0	8.0-16.0	20-60
	23-60	15-25	---	7.9-9.0	1-3	0	8.0-16.0	13-30
VOLTA	---	---	---	---	---	---	---	---
PEDCAT, LOAM	---	---	---	---	---	---	---	---

Water Features

Merced County, California, Western Part

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
237:										
PEDCAT	D	High	January	0.0 1.5-3.0	1.5-3.0 >6.0	---	---	None	---	None
			February	0.0 1.5-3.0	1.5-3.0 >6.0	---	---	None	---	None
			March	0.0 1.5-3.0	1.5-3.0 >6.0	---	---	None	---	None
			December	0.0 1.5-3.0	1.5-3.0 >6.0	---	---	None	---	None
VOLTA	---	---	Jan-Dec			---	---	None	---	None
PEDCAT, LOAM	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced County, California, Western Part

234 PEDCAT LOAM, 0 TO 2 PERCENT SLOPES

Setting

Elevation: 70 to 1100 feet
Mean annual precipitation: 11 to 11 inches
Mean annual air temperature: 63 to 63 degrees F
Frost-free period: 200 to 280 days

Composition

Pedcat and similar soils: 85 percent
Minor components: 15 percent

Description of Pedcat

Setting

Landform: Fan aprons
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sedimentary rock

Properties and Qualities

Slope: 0 to 2 percent
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Very low or moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 0 to 0 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 3 percent
Gypsum maximum: 0 percent
Salinity maximum: Slightly saline or moderately saline (8.0 to 16.0 mmhos/cm)
Sodium adsorption ratio maximum: 60.0
Available water capacity: Moderate (about 6.6 inches)

Interpretive Groups

Land capability (non irrigated): 7w
Ecological site: Loamy Saline-Alkali 9-12" P.Z. (R017XF069CA)

Typical Profile

0 to 5 inches: loam
5 to 23 inches: clay
23 to 29 inches: clay
29 to 60 inches: stratified sandy clay loam to clay

Minor Components

Santanela soils

Percent of map unit: 3 percent
Landform: Basin floors
Landform position (two-dimensional): Toeslope
Down-slope shape: Concave
Across-slope shape: Concave

Marcuse soils

Percent of map unit: 3 percent
Landform: Basin floors
Landform position (two-dimensional): Toeslope
Down-slope shape: Concave
Across-slope shape: Concave

Dosamigos, clay loam, partially drained soils

Percent of map unit: 3 percent
Landform: Basin floors
Landform position (two-dimensional): Toeslope
Down-slope shape: Concave
Across-slope shape: Concave

Chateau soils

Percent of map unit: 3 percent
Landform: Fan aprons
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear

Volta soils

Percent of map unit: 3 percent
Landform: Fan aprons
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear

Taxonomic Classification of the Soils

Merced County, California, Western Part

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
PEDCAT	Fine, mixed, thermic Aquic Natrixeralfs

Engineering Properties

Merced County, California, Western Part

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
234:												
PEDCAT	0-5	Loam	CL, CL-ML	A-4, A-6	0	0	100	100	85-95	60-75	25-35	5-15
	5-23	Clay, Silty clay	CH, CL	A-7	0	0	100	100	95-100	85-95	45-55	20-30
	23-29	Clay, Clay loam, Silty clay loam	CL	A-6, A-7	0	0	100	100	80-100	70-95	35-50	15-25
	29-60	Stratified sandy clay loam to clay	CL	A-6, A-7	0	0	100	100	75-100	50-85	35-50	15-25
CHATEAU	---	---	---	---	---	---	---	---	---	---	---	---
DOSAMIGOS, CLAY LOAM, PARTIALLY DRAINED	---	---	---	---	---	---	---	---	---	---	---	---
MARCUSE	---	---	---	---	---	---	---	---	---	---	---	---
SANTANELA	---	---	---	---	---	---	---	---	---	---	---	---
VOLTA	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced County, California, Western Part

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
234:														
PEDCAT	0-5	---	---	18-27	1.45-1.55	4.00-14.00	0.09-0.14	0.0-2.9	0.5-1.0	.43	.43	2	6	48
	5-23	---	---	40-50	1.35-1.50	0.01-0.42	0.09-0.13	6.0-8.9	0.0-0.5	.32	.32			
	23-29	---	---	30-45	1.35-1.55	0.42-1.40	0.09-0.12	6.0-8.9	0.0-0.5	.32	.32			
	29-60	---	---	30-45	1.35-1.55	0.42-1.40	0.09-0.12	6.0-8.9	0.0-0.5	.32	.32			
CHATEAU	---	---	---	---	---	---	---	---	---	---	---	---	---	---
DOSAMIGOS, CLAY LOAM, PARTIALLY DRAINED	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MARCUSE	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SANTANELA	---	---	---	---	---	---	---	---	---	---	---	---	---	---
VOLTA	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced County, California, Western Part

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
234:									
PEDCAT	---	---	---	---	---	---	None	High	Moderate
CHATEAU	---	---	---	---	---	---	---	---	---
DOSAMIGOS, CLAY LOAM, PARTIALLY DRAINED	---	---	---	---	---	---	---	---	---
MARCUSE	---	---	---	---	---	---	---	---	---
SANTANELA	---	---	---	---	---	---	---	---	---
VOLTA	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced County, California, Western Part

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
234:								
PEDCAT	0-5	10-15	---	6.1-7.3	0	0	8.0-16.0	13-20
	5-23	15-30	---	7.9-8.4	1-3	0	8.0-16.0	20-60
	23-29	15-25	---	7.9-9.0	1-3	0	8.0-16.0	20-60
	29-60	15-25	---	7.9-9.0	1-3	0	8.0-16.0	13-30
CHATEAU	---	---	---	---	---	---	---	---
DOSAMIGOS, CLAY LOAM, PARTIALLY DRAINED	---	---	---	---	---	---	---	---
MARCUSE	---	---	---	---	---	---	---	---
SANTANELA	---	---	---	---	---	---	---	---
VOLTA	---	---	---	---	---	---	---	---

Water Features

Merced County, California, Western Part

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
234:										
PEDCAT	D	Very high	January	0.0 1.5-3.0	1.5-3.0 >6.0	---	---	None	---	None
			February	0.0 1.5-3.0	1.5-3.0 >6.0	---	---	None	---	None
			March	0.0 1.5-3.0	1.5-3.0 >6.0	---	---	None	---	None
			December	0.0 1.5-3.0	1.5-3.0 >6.0	---	---	None	---	None
CHATEAU	---	---	Jan-Dec			---	---	None	---	None
DOSAMIGOS, CLAY LOAM, PARTIALLY DRAINED	---	---	Jan-Dec			---	---	None	---	None
MARCUSE	---	---	Jan-Dec			---	---	None	---	None
SANTANELA	---	---	Jan-Dec			---	---	None	---	None
VOLTA	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced County, California, Western Part

258 TRULAE SILTY CLAY, PARTIALLY DRAINED

Setting

Elevation: 80 to 90 feet
Mean annual precipitation: 11 to 11 inches
Mean annual air temperature: 63 to 63 degrees F
Frost-free period: 210 to 280 days

Composition

Trulae and similar soils: 85 percent
Minor components: 15 percent

Description of Trulae

Setting

Landform: Basin floors
Landform position (two-dimensional): Toeslope
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Alluvium derived from sedimentary rock

Properties and Qualities

Slope: 0 to 2 percent
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Very low or moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 0 to 0 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 10 percent
Gypsum maximum: 0 percent
Salinity maximum: Very slightly saline or slightly saline (4.0 to 8.0 mmhos/cm)
Sodium adsorption ratio maximum: 50.0
Available water capacity: Moderate (about 8.2 inches)

Interpretive Groups

Land capability classification (irrigated): 3w
Land capability (non irrigated): 6w

Typical Profile

0 to 15 inches: silty clay
15 to 45 inches: clay
45 to 63 inches: clay loam

Minor Components

Volta soils

Percent of map unit: 3 percent
Landform: Fan aprons
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear

Turlock soils

Percent of map unit: 3 percent
Landform: Rims, basin floors
Landform position (two-dimensional): Toeslope
Down-slope shape: Concave, convex
Across-slope shape: Concave, convex

Triangle, sodic soils

Percent of map unit: 3 percent
Landform: Basin floors
Landform position (two-dimensional): Toeslope
Down-slope shape: Concave
Across-slope shape: Concave

Triangle soils

Percent of map unit: 3 percent
Landform: Basin floors
Landform position (two-dimensional): Toeslope
Down-slope shape: Concave
Across-slope shape: Concave

Woo soils

Percent of map unit: 3 percent

Taxonomic Classification of the Soils

Merced County, California, Western Part

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
TRULAE	Very-fine, montmorillonitic, thermic Aquic Chromoxererts

Engineering Properties

Merced County, California, Western Part

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
258:												
TRULAE	0-15	Silty clay	CH	A-7	0	0	100	100	95-100	90-95	40-60	20-35
	15-45	Clay	CH	A-7	0	0	100	100	90-100	75-95	50-70	25-40
	45-63	Clay loam	CL, ML	A-6, A-7	0	0	90-100	90-100	80-100	65-85	35-50	10-25
TRIANGLE	---	---	---	---	---	---	---	---	---	---	---	---
TRIANGLE, SODIC	---	---	---	---	---	---	---	---	---	---	---	---
TURLOCK	---	---	---	---	---	---	---	---	---	---	---	---
VOLTA	---	---	---	---	---	---	---	---	---	---	---	---
WOO	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced County, California, Western Part

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
258:														
TRULAE	0-15	---	---	40-60	1.40-1.50	0.42-1.40	0.12-0.15	6.0-8.9	1.0-2.0	.32	.32	5	7	38
	15-45	---	---	60-65	1.25-1.35	0.01-0.42	0.12-0.14	6.0-8.9	0.0-0.5	.24	.24			
	45-63	---	---	30-40	1.40-1.50	1.40-4.00	0.13-0.16	3.0-5.9	0.0-0.5	.28	.28			
TRIANGLE	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TRIANGLE, SODIC	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TURLOCK	---	---	---	---	---	---	---	---	---	---	---	---	---	---
VOLTA	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WOO	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced County, California, Western Part

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
258:									
TRULAE	---	---	---	---	---	---	None	High	Low
TRIANGLE	---	---	---	---	---	---	---	---	---
TRIANGLE, SODIC	---	---	---	---	---	---	---	---	---
TURLOCK	---	---	---	---	---	---	---	---	---
VOLTA	---	---	---	---	---	---	---	---	---
WOO	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced County, California, Western Part

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
258:								
TRULAE	0-15	35-45	---	7.9-8.4	0	0	4.0-8.0	0
	15-45	40-50	---	7.9-8.4	1-10	0	4.0-8.0	13-50
	45-63	20-30	---	7.9-8.4	1-10	0	4.0-8.0	13-50
TRIANGLE	---	---	---	---	---	---	---	---
TRIANGLE, SODIC	---	---	---	---	---	---	---	---
TURLOCK	---	---	---	---	---	---	---	---
VOLTA	---	---	---	---	---	---	---	---
WOO	---	---	---	---	---	---	---	---

Water Features

Merced County, California, Western Part

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
258:										
TRULAE	D	Very high	January	0.0 4.0-5.0	4.0-5.0 >6.0	---	---	None	---	None
			February	0.0 4.0-5.0	4.0-5.0 >6.0	---	---	None	---	None
			March	0.0 4.0-5.0	4.0-5.0 >6.0	---	---	None	---	None
			December	0.0 4.0-5.0	4.0-5.0 >6.0	---	---	None	---	None
TRIANGLE	---	---	Jan-Dec			---	---	None	---	None
TRIANGLE, SODIC	---	---	Jan-Dec			---	---	None	---	None
TURLOCK	---	---	Jan-Dec			---	---	None	---	None
VOLTA	---	---	Jan-Dec			---	---	None	---	None
WOO	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced County, California, Western Part

266 VOLTA CLAY LOAM, PARTIALLY DRAINED

Setting

Elevation: 80 to 110 feet
Mean annual precipitation: 11 to 11 inches
Mean annual air temperature: 63 to 63 degrees F
Frost-free period: 210 to 280 days

Composition

Volta and similar soils: 85 percent
Minor components: 15 percent

Description of Volta

Setting

Landform: Fan aprons
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sedimentary rock

Properties and Qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 46 to 60 inches to Duripan
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: About 0 to 0 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 10 percent
Gypsum maximum: 0 percent
Salinity maximum: Non saline or slightly saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio maximum: 30.0
Available water capacity: Moderate (about 6.2 inches)

Interpretive Groups

Land capability classification (irrigated): 4w
Land capability (non irrigated): 7w

Typical Profile

0 to 6 inches: clay loam
6 to 33 inches: clay loam
33 to 46 inches: clay loam
46 to 84 inches: cemented

Minor Components

Pedcat soils

Percent of map unit: 10 percent
Landform: Fan aprons
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear

Dosamigos, clay loam, partially drained soils

Percent of map unit: 5 percent
Landform: Basin floors
Landform position (two-dimensional): Toeslope
Down-slope shape: Concave
Across-slope shape: Concave

Taxonomic Classification of the Soils

Merced County, California, Western Part

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
VOLTA	Fine, mixed, thermic Typic Natraqualfs

Engineering Properties

Merced County, California, Western Part

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
266:												
VOLTA	0-6	Clay loam	CL	A-7	0	0	100	100	90-100	70-80	40-50	15-25
	6-33	Clay, Clay loam	CH, CL	A-7	0	0	100	100	90-100	75-95	40-55	20-30
	33-46	Clay, Clay loam	CL	A-6, A-7	0	0	100	100	90-100	70-95	35-50	15-25
	46-84	Cemented	---	---	---	---	---	---	---	---	---	---
PEDCAT	---	---	---	---	---	---	---	---	---	---	---	---
DOSAMIGOS, CLAY LOAM, PARTIALLY DRAINED	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced County, California, Western Part

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
266:														
VOLTA	0-6	---	---	35-40	1.40-1.50	1.40-4.00	0.15-0.17	6.0-8.9	0.5-1.0	.43	.43	2	4L	86
	6-33	---	---	35-50	1.35-1.50	0.01-0.42	0.11-0.15	6.0-8.9	0.0-0.5	.32	.32			
	33-46	---	---	30-45	1.35-1.50	0.42-1.40	0.11-0.15	6.0-8.9	0.0-0.5	.37	.37			
	46-84	---	---	---	---	0.00-0.01	0.00	---	---	---	---			
PEDCAT	---	---	---	---	---	---	---	---	---	---	---	---	---	---
DOSAMIGOS, CLAY LOAM, PARTIALLY DRAINED	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced County, California, Western Part

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
266:									
VOLTA	Duripan	46-60	4-17	Strongly cemented	---	---	None	High	Moderate
PEDCAT	---	---	---	---	---	---	---	---	---
DOSAMIGOS, CLAY LOAM, PARTIALLY DRAINED	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced County, California, Western Part

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
266:								
VOLTA	0-6	15-25	---	7.4-9.0	1-3	0	0.0-2.0	0
	6-33	15-25	---	7.9-9.0	5-10	0	2.0-8.0	13-30
	33-46	15-25	---	7.9-9.0	5-10	0	2.0-8.0	8-15
	46-84	---	---	---	---	---	---	---
PEDCAT	---	---	---	---	---	---	---	---
DOSAMIGOS, CLAY LOAM, PARTIALLY DRAINED	---	---	---	---	---	---	---	---

Water Features

Merced County, California, Western Part

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
266:										
VOLTA	D	Very high	January	0.0	3.5-5.0	---	---	None	---	None
				3.5-5.0	3.8-4.6					
			February	0.0	3.5-5.0	---	---	None	---	None
				3.5-5.0	3.8-4.6					
			March	0.0	3.5-5.0	---	---	None	---	None
				3.5-5.0	3.8-4.6					
			December	0.0	3.5-5.0	---	---	None	---	None
				3.5-5.0	3.8-4.6					
PEDCAT	---	---	Jan-Dec			---	---	None	---	None
DOSAMIGOS, CLAY LOAM, PARTIALLY DRAINED	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced County, California, Western Part

265 VOLTA CLAY LOAM

Setting

Elevation: 80 to 110 feet
Mean annual precipitation: 11 to 11 inches
Mean annual air temperature: 63 to 63 degrees F
Frost-free period: 210 to 280 days

Composition

Volta and similar soils: 85 percent
Minor components: 15 percent

Description of Volta

Setting

Landform: Fan aprons
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sedimentary rock

Properties and Qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 46 to 60 inches to Duripan
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: About 0 to 0 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 10 percent
Gypsum maximum: 0 percent
Salinity maximum: Very slightly saline or slightly saline (4.0 to 8.0 mmhos/cm)
Sodium adsorption ratio maximum: 30.0
Available water capacity: Moderate (about 6.0 inches)

Interpretive Groups

Land capability (non irrigated): 7w
Ecological site: LOAMY SALINE-ALKALI SUBIRRIGAT (R017XF073CA)

Typical Profile

0 to 1 inches: clay loam
1 to 26 inches: clay loam
26 to 46 inches: clay loam
46 to 60 inches: cemented

Minor Components

Triangle soils

Percent of map unit: 5 percent
Landform: Basin floors
Landform position (two-dimensional): Toeslope
Down-slope shape: Concave
Across-slope shape: Concave

Marcuse soils

Percent of map unit: 5 percent
Landform: Basin floors
Landform position (two-dimensional): Toeslope
Down-slope shape: Concave
Across-slope shape: Concave

Pedcat soils

Percent of map unit: 5 percent
Landform: Fan aprons
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear

Taxonomic Classification of the Soils

Merced County, California, Western Part

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
VOLTA	Fine, mixed, thermic Typic Natraqualfs

Engineering Properties

Merced County, California, Western Part

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
265:												
VOLTA	0-1	Clay loam	CL, ML	A-6, A-7	0	0	100	100	90-100	70-85	35-45	10-20
	1-26	Clay, Clay loam	CH, CL	A-7	0	0	100	100	90-100	70-95	40-55	20-30
	26-46	Clay, Clay loam	CL	A-6, A-7	0	0	100	100	90-100	70-95	35-50	15-25
	46-60	Cemented	---	---	---	---	---	---	---	---	---	---
MARCUSE	---	---	---	---	---	---	---	---	---	---	---	---
PEDCAT	---	---	---	---	---	---	---	---	---	---	---	---
TRIANGLE	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced County, California, Western Part

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
265:														
VOLTA	0-1	---	---	27-35	1.40-1.50	1.40-4.00	0.15-0.17	3.0-5.9	0.5-1.0	.43	.43	2	4L	86
	1-26	---	---	35-50	1.35-1.50	0.01-0.42	0.11-0.15	6.0-8.9	0.0-0.5	.32	.32			
	26-46	---	---	30-45	1.35-1.50	0.42-1.40	0.11-0.15	6.0-8.9	0.0-0.5	.37	.37			
	46-60	---	---	---	---	0.00-0.01	0.00	---	---	---	---			
MARCUSE	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PEDCAT	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TRIANGLE	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced County, California, Western Part

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
265:									
VOLTA	Duripan	46-60	4-17	Strongly cemented	---	---	None	High	Low
MARCUSE	---	---	---	---	---	---	---	---	---
PEDCAT	---	---	---	---	---	---	---	---	---
TRIANGLE	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced County, California, Western Part

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
265:								
VOLTA	0-1	15-20	---	7.4-9.0	1-3	0	0.0-2.0	0
	1-26	15-25	---	7.9-9.0	5-10	0	4.0-8.0	13-30
	26-46	15-25	---	7.9-9.0	5-10	0	4.0-8.0	8-15
	46-60	---	---	---	---	---	---	---
MARCUSE	---	---	---	---	---	---	---	---
PEDCAT	---	---	---	---	---	---	---	---
TRIANGLE	---	---	---	---	---	---	---	---

Water Features

Merced County, California, Western Part

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
265:										
VOLTA	D	Very high	January	0.0	1.0-3.0	---	---	None	---	None
				1.0-3.0	3.8-4.6					
			February	0.0	1.0-3.0	---	---	None	---	None
				1.0-3.0	3.8-4.6					
			March	0.0	1.0-3.0	---	---	None	---	None
				1.0-3.0	3.8-4.6					
			December	0.0	1.0-3.0	---	---	None	---	None
				1.0-3.0	3.8-4.6					
MARCUSE	---	---	Jan-Dec			---	---	None	---	None
PEDCAT	---	---	Jan-Dec			---	---	None	---	None
TRIANGLE	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced County, California, Western Part

279 WOO CLAY LOAM, WET, 0 TO 2 PERCENT SLOPES

Setting

Elevation: 70 to 130 feet
Mean annual precipitation: 11 to 11 inches
Mean annual air temperature: 63 to 63 degrees F
Frost-free period: 210 to 280 days

Composition

Woo and similar soils: 85 percent
Minor components: 15 percent

Description of Woo

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sedimentary rock

Properties and Qualities

Slope: 0 to 2 percent
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low or moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 0 to 0 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 10 percent
Gypsum maximum: 0 percent
Available water capacity: High (about 10.2 inches)

Interpretive Groups

Land capability classification (irrigated): 2w
Land capability (non irrigated): 4w

Typical Profile

0 to 19 inches: clay loam
19 to 48 inches: loam
48 to 62 inches: clay

Minor Components

Dosamigos soils

Percent of map unit: 3 percent
Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Linear

Pedcat soils

Percent of map unit: 3 percent
Landform: Fan aprons
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear

Deldota, clay, partially drained soils

Percent of map unit: 3 percent

Woo, clay loam soils

Percent of map unit: 3 percent

Woo, loam soils

Percent of map unit: 3 percent

Taxonomic Classification of the Soils

Merced County, California, Western Part

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
WOO	Fine-loamy, mixed, thermic Calcic Haploxerolls

Engineering Properties

Merced County, California, Western Part

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
279:												
WOO	0-19	Clay loam	CL	A-6	0	0	100	95-100	90-100	70-80	30-40	10-20
	19-48	Clay loam, Loam, Sandy clay loam	CL, CL-ML	A-4, A-6	0	0	100	95-100	75-95	50-75	25-40	5-20
	48-62	Clay, Clay loam	CH, CL	A-7	0	0	100	95-100	85-95	75-90	40-55	20-30
DELDOTA, CLAY, PARTIALLY DRAINED	---	---	---	---	---	---	---	---	---	---	---	---
DOSAMIGOS	---	---	---	---	---	---	---	---	---	---	---	---
PEDCAT	---	---	---	---	---	---	---	---	---	---	---	---
WOO, CLAY LOAM	---	---	---	---	---	---	---	---	---	---	---	---
WOO, LOAM	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced County, California, Western Part

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
279:														
WOO	0-19	---	---	27-35	1.40-1.50	1.40-4.00	0.17-0.19	3.0-5.9	1.0-2.0	.32	.32	5	4L	86
	19-48	---	---	18-35	1.40-1.55	1.40-4.00	0.14-0.19	3.0-5.9	0.5-1.0	.32	.32			
	48-62	---	---	35-45	1.35-1.50	0.42-1.40	0.14-0.17	6.0-8.9	0.0-0.5	.32	.32			
DELDOTA, CLAY, PARTIALLY DRAINED	---	---	---	---	---	---	---	---	---	---	---	---	---	---
DOSAMIGOS	---	---	---	---	---	---	---	---	---	---	---	---	---	---
PEDCAT	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WOO, CLAY LOAM	---	---	---	---	---	---	---	---	---	---	---	---	---	---
WOO, LOAM	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced County, California, Western Part

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
279:									
WOO	---	---	---	---	---	---	None	High	Low
DELDOTA, CLAY, PARTIALLY DRAINED	---	---	---	---	---	---	---	---	---
DOSAMIGOS	---	---	---	---	---	---	---	---	---
PEDCAT	---	---	---	---	---	---	---	---	---
WOO, CLAY LOAM	---	---	---	---	---	---	---	---	---
WOO, LOAM	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced County, California, Western Part

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
279:								
WOO	0-19	15-20	---	6.6-7.8	1-3	0	0.0	0
	19-48	10-15	---	7.9-8.4	5-10	0	0.0-2.0	0
	48-62	15-25	---	7.9-8.4	5-10	0	0.0-4.0	0
DELDOTA, CLAY, PARTIALLY DRAINED	---	---	---	---	---	---	---	---
DOSAMIGOS	---	---	---	---	---	---	---	---
PEDCAT	---	---	---	---	---	---	---	---
WOO, CLAY LOAM	---	---	---	---	---	---	---	---
WOO, LOAM	---	---	---	---	---	---	---	---

Water Features

Merced County, California, Western Part

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
279:										
WOO	C	Medium	April	0.0 4.0->6.0	4.0->6.0 >6.0	---	---	None	---	None
			May	0.0 4.0->6.0	4.0->6.0 >6.0	---	---	None	---	None
			June	0.0 4.0->6.0	4.0->6.0 >6.0	---	---	None	---	None
			July	0.0 4.0->6.0	4.0->6.0 >6.0	---	---	None	---	None
			August	0.0 4.0->6.0	4.0->6.0 >6.0	---	---	None	---	None
			September	0.0 4.0->6.0	4.0->6.0 >6.0	---	---	None	---	None
			October	0.0 4.0->6.0	4.0->6.0 >6.0	---	---	None	---	None
DELDOTA, CLAY, PARTIALLY DRAINED	---	---	Jan-Dec			---	---	None	---	None
DOSAMIGOS	---	---	Jan-Dec			---	---	None	---	None
PEDCAT	---	---	Jan-Dec			---	---	None	---	None
WOO, CLAY LOAM	---	---	Jan-Dec			---	---	None	---	None
WOO, LOAM	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced County, California, Western Part

274 WOO LOAM, 0 TO 2 PERCENT SLOPES

Setting

Elevation: 70 to 340 feet
Mean annual precipitation: 11 to 11 inches
Mean annual air temperature: 63 to 63 degrees F
Frost-free period: 210 to 280 days

Composition

Woo and similar soils: 85 percent
Minor components: 15 percent

Description of Woo

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sedimentary rock

Properties and Qualities

Slope: 0 to 2 percent
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 10 percent
Gypsum maximum: 0 percent
Available water capacity: High (about 10.0 inches)

Interpretive Groups

Land capability classification (irrigated): 1
Land capability (non irrigated): 4c

Typical Profile

0 to 16 inches: loam
16 to 67 inches: clay loam

Minor Components

Unnamed, gravelly soils

Percent of map unit: 3 percent

Damluis soils

Percent of map unit: 3 percent

Stanislaus soils

Percent of map unit: 3 percent

San emigdio, fine sandy loam soils

Percent of map unit: 3 percent

San emigdio, loam soils

Percent of map unit: 3 percent

Taxonomic Classification of the Soils

Merced County, California, Western Part

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
WOO	Fine-loamy, mixed, thermic Calcic Haploxerolls

Engineering Properties

Merced County, California, Western Part

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
274:												
WOO	0-16	Loam	CL-ML, ML	A-4	0	0	100	95-100	75-95	55-75	25-35	5-10
	16-67	Clay loam, Loam	CL, CL-ML	A-4, A-6	0	0	80-100	75-100	65-95	50-75	25-40	5-20
DAMLUIS	---	---	---	---	---	---	---	---	---	---	---	---
SAN EMIGDIO, FINE SANDY LOAM	---	---	---	---	---	---	---	---	---	---	---	---
SAN EMIGDIO, LOAM	---	---	---	---	---	---	---	---	---	---	---	---
STANISLAUS	---	---	---	---	---	---	---	---	---	---	---	---
UNNAMED, GRAVELLY	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced County, California, Western Part

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
274:														
WOO	0-16	---	---	18-27	1.45-1.55	4.00-14.00	0.14-0.17	0.0-2.9	1.0-2.0	.37	.37	5	4L	86
	16-67	---	---	18-35	1.40-1.55	1.40-4.00	0.14-0.19	3.0-5.9	0.5-1.0	.32	.37			
DAMLUIS	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SAN EMIGDIO, FINE SANDY LOAM	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SAN EMIGDIO, LOAM	---	---	---	---	---	---	---	---	---	---	---	---	---	---
STANISLAUS	---	---	---	---	---	---	---	---	---	---	---	---	---	---
UNNAMED, GRAVELLY	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced County, California, Western Part

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
274:									
WOO	---	---	---	---	---	---	None	High	Low
DAMLUIS	---	---	---	---	---	---	---	---	---
SAN EMIGDIO, FINE SANDY LOAM	---	---	---	---	---	---	---	---	---
SAN EMIGDIO, LOAM	---	---	---	---	---	---	---	---	---
STANISLAUS	---	---	---	---	---	---	---	---	---
UNNAMED, GRAVELLY	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced County, California, Western Part

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
274:								
WOO	0-16	10-15	---	6.6-8.4	1-3	0	0.0	0
	16-67	10-15	---	7.4-8.4	5-10	0	0.0-2.0	0
DAMLUIS	---	---	---	---	---	---	---	---
SAN EMIGDIO, FINE SANDY LOAM	---	---	---	---	---	---	---	---
SAN EMIGDIO, LOAM	---	---	---	---	---	---	---	---
STANISLAUS	---	---	---	---	---	---	---	---
UNNAMED, GRAVELLY	---	---	---	---	---	---	---	---

Water Features

Merced County, California, Western Part

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
274:										
WOO	C	Medium	Jan-Dec			---	---	None	---	None
DAMLUIS	---	---	Jan-Dec			---	---	None	---	None
SAN EMIGDIO, FINE SANDY LOAM	---	---	Jan-Dec			---	---	None	---	None
SAN EMIGDIO, LOAM	---	---	Jan-Dec			---	---	None	---	None
STANISLAUS	---	---	Jan-Dec			---	---	None	---	None
UNNAMED, GRAVELLY	---	---	Jan-Dec			---	---	None	---	None

Merced Area | CA648

Map Unit Description

Merced Area, California

AfA Atwater loamy sand, 0 to 3 percent slopes

Setting

Elevation: 500 to 500 feet
Mean annual precipitation: 15 to 15 inches
Mean annual air temperature: 61 to 61 degrees F
Frost-free period: 250 to 280 days

Composition

Atwater and similar soils: 85 percent
Minor components: 15 percent

Description of Atwater

Setting

Landform: Dunes, dunes
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy alluvium derived from granite

Properties and Qualities

Slope: 0 to 3 percent
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 0 percent
Gypsum maximum: 0 percent
Available water capacity: Low (about 5.8 inches)

Interpretive Groups

Land capability classification (irrigated): 3s
Land capability (non irrigated): 4s

Typical Profile

0 to 20 inches: loamy sand
20 to 32 inches: sandy loam
32 to 60 inches: sandy loam

Minor Components

San joaquin

Percent of map unit: 5 percent

Rocklin

Percent of map unit: 5 percent

Delhi

Percent of map unit: 5 percent

Taxonomic Classification of the Soils

Merced Area, California

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Atwater	Coarse-loamy, mixed, active, thermic Typic Haploxeralfs

Engineering Properties

Merced Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
AfA:												
Atwater	0-20	Loamy sand	SM	A-2	0	0	100	100	50-70	15-30	0	NP
	20-32	Sandy loam	SM	A-2, A-4	0	0	100	100	60-75	30-50	20-30	NP-5
	32-60	Loamy sand, Sandy loam	SM	A-2	0	0	100	100	50-70	15-35	0	NP
Delhi	---	---	---	---	---	---	---	---	---	---	---	---
Rocklin	---	---	---	---	---	---	---	---	---	---	---	---
San Joaquin	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
AfA:														
Atwater	0-20	---	---	2-10	1.60-1.70	42.00-141.00	0.07-0.09	0.0-2.9	0.5-1.0	.28	.28	5	2	134
	20-32	---	---	12-18	1.50-1.60	14.00-42.00	0.10-0.13	0.0-2.9	0.0-0.5	.28	.28			
	32-60	---	---	2-10	1.50-1.65	14.00-42.00	0.07-0.12	0.0-2.9	0.0-0.5	.28	.28			
Delhi	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Rocklin	---	---	---	---	---	---	---	---	---	---	---	---	---	---
San Joaquin	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
AfA:									
Atwater	---	---	---	---	---	---	None	Moderate	Low
Delhi	---	---	---	---	---	---	---	---	---
Rocklin	---	---	---	---	---	---	---	---	---
San Joaquin	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
AfA:								
Atwater	0-20	1.0-5.0	---	6.1-7.3	0	0	0.0	0
	20-32	5.0-10	---	6.1-7.3	0	0	0.0	0
	32-60	1.0-5.0	---	6.6-7.3	0	0	0.0	0
Delhi	---	---	---	---	---	---	---	---
Rocklin	---	---	---	---	---	---	---	---
San Joaquin	---	---	---	---	---	---	---	---

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
AfA:										
Atwater	B	Negligible	Jan-Dec			---	---	None	---	None
Delhi	---	---	Jan-Dec			---	---	None	---	None
Rocklin	---	---	Jan-Dec			---	---	None	---	None
San Joaquin	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced Area, California

DbA Delhi loamy fine sand, 0 to 3 percent slopes

Setting

Landscape: Alluvial plains, valleys
Elevation: 30 to 1400 feet
Mean annual precipitation: 10 to 16 inches
Mean annual air temperature: 59 to 64 degrees F
Frost-free period: 225 to 310 days

Composition

Delhi and similar soils: 85 percent
Minor components: 15 percent

Description of Delhi

Setting

Landform: Sand sheets
Landform position (two-dimensional): Backslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Wind modified sandy alluvium derived from granite

Properties and Qualities

Slope: 0 to 3 percent
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High or very high (5.95 to 19.98 in/hr)
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 0 percent
Gypsum maximum: 0 percent
Available water capacity: Low (about 4.8 inches)

Interpretive Groups

Land capability classification (irrigated): 3s
Land capability (non irrigated): 4e

Typical Profile

0 to 12 inches: loamy fine sand
12 to 44 inches: loamy sand
44 to 68 inches: sand

Minor Components

Hanford

Percent of map unit: 5 percent

Tujunga

Percent of map unit: 5 percent

Grangeville

Percent of map unit: 4 percent

Unnamed

Percent of map unit: 1 percent
Landform: Depressions

Taxonomic Classification of the Soils

Merced Area, California

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Delhi	TYPIC XEROPSAMMENTS, MIXED, THERMIC

Engineering Properties

Merced Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
DbA:												
Delhi	0-12	Loamy fine sand	SM	A-2	0	0	100	100	50-80	15-35	---	NP
	12-44	Loamy fine sand, Loamy sand	SM	A-2	0	0	100	100	50-80	15-35	---	NP
	44-68	Fine sand, Loamy sand, Sand	SM, SP-SM	A-1, A-2, A-3	0	0	100	100	40-80	5-35	---	NP
Hanford	---	---	---	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---	---	---	---
Grangeville	---	---	---	---	---	---	---	---	---	---	---	---
Unnamed	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
DbA:														
Delhi	0-12	---	---	0-5	1.60-1.70	42.00-141.00	0.06-0.10	0.0-2.9	0.5-1.0	.24	.24	5	2	134
	12-44	---	---	0-5	1.60-1.70	42.00-141.00	0.06-0.10	0.0-2.9	0.0-0.5	.24	.24			
	44-68	---	---	0-5	1.60-1.70	42.00-141.00	0.05-0.10	0.0-2.9	0.0-0.5	.20	.20			
Hanford	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Grangeville	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Unnamed	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
DbA:									
Delhi	---	---	---	---	---	---	None	Moderate	Low
Hanford	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---
Grangeville	---	---	---	---	---	---	---	---	---
Unnamed	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
DbA:								
Delhi	0-12	1.0-5.0	---	6.1-7.8	0	0	0.0	0
	12-44	1.0-5.0	---	6.1-7.8	0	0	0.0	0
	44-68	1.0-5.0	---	6.1-7.8	0	0	0.0	0
Hanford	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---
Grangeville	---	---	---	---	---	---	---	---
Unnamed	---	---	---	---	---	---	---	---

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
DbA:										
Delhi	A	Negligible	Jan-Dec			---	---	None	---	None
Hanford	---	---	Jan-Dec			---	---	None	---	None
Tujunga	---	---	Jan-Dec			---	---	None	---	None
Grangeville	---	---	Jan-Dec			---	---	None	---	None
Unnamed	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced Area, California

DdA Delhi loamy sand, 0 to 3 percent slopes

Setting

Landscape: Alluvial plains, valleys
Elevation: 30 to 1400 feet
Mean annual precipitation: 10 to 16 inches
Mean annual air temperature: 59 to 64 degrees F
Frost-free period: 225 to 310 days

Composition

Delhi and similar soils: 85 percent
Minor components: 15 percent

Description of Delhi

Setting

Landform: Sand sheets
Landform position (two-dimensional): Backslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Wind modified sandy alluvium derived from granite

Properties and Qualities

Slope: 0 to 3 percent
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High or very high (5.95 to 19.98 in/hr)
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 0 percent
Gypsum maximum: 0 percent
Available water capacity: Low (about 4.8 inches)

Interpretive Groups

Land capability classification (irrigated): 3s
Land capability (non irrigated): 4e

Typical Profile

0 to 12 inches: loamy sand
12 to 44 inches: loamy sand
44 to 68 inches: sand

Minor Components

Grangeville

Percent of map unit: 5 percent

Hanford

Percent of map unit: 5 percent

Tujunga

Percent of map unit: 5 percent

Taxonomic Classification of the Soils

Merced Area, California

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Delhi	TYPIC XEROPSAMMENTS, MIXED, THERMIC

Engineering Properties

Merced Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
DdA:												
Delhi	0-12	Loamy sand	SM	A-2	0	0	100	100	50-80	15-35	---	NP
	12-44	Loamy fine sand, Loamy sand	SM	A-2	0	0	100	100	50-80	15-35	---	NP
	44-68	Fine sand, Loamy sand, Sand	SM, SP-SM	A-1, A-2, A-3	0	0	100	100	40-80	5-35	---	NP
Grangeville	---	---	---	---	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
DdA:														
Delhi	0-12	---	---	0-5	1.60-1.70	42.00-141.00	0.06-0.10	0.0-2.9	0.5-1.0	.24	.24	5	2	134
	12-44	---	---	0-5	1.60-1.70	42.00-141.00	0.06-0.10	0.0-2.9	0.0-0.5	.24	.24			
	44-68	---	---	0-5	1.60-1.70	42.00-141.00	0.05-0.10	0.0-2.9	0.0-0.5	.20	.20			
Grangeville	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
DdA:									
Delhi	---	---	---	---	---	---	None	Moderate	Low
Grangeville	---	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
DdA:								
Delhi	0-12	1.0-5.0	---	6.1-7.8	0	0	0.0	0
	12-44	1.0-5.0	---	6.1-7.8	0	0	0.0	0
	44-68	1.0-5.0	---	6.1-7.8	0	0	0.0	0
Grangeville	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
DdA:										
Delhi	A	Negligible	Jan-Dec			---	---	None	---	None
Grangeville	---	---	Jan-Dec			---	---	None	---	None
Hanford	---	---	Jan-Dec			---	---	None	---	None
Tujunga	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced Area, California

DeA Delhi loamy sand, silty substratum, 0 to 3 percent slopes

Setting

Landscape: Alluvial plains, valleys
Elevation: 200 to 1400 feet
Mean annual precipitation: 13 to 13 inches
Mean annual air temperature: 63 to 63 degrees F
Frost-free period: 225 to 310 days

Composition

Delhi and similar soils: 85 percent
Minor components: 15 percent

Description of Delhi

Setting

Landform: Sand sheets
Landform position (two-dimensional): Backslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Wind modified sandy alluvium derived from granite

Properties and Qualities

Slope: 0 to 3 percent
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 0 percent
Gypsum maximum: 0 percent
Available water capacity: Moderate (about 6.4 inches)

Interpretive Groups

Land capability classification (irrigated): 3s
Land capability (non irrigated): 4e

Typical Profile

0 to 12 inches: loamy sand
12 to 30 inches: sand
30 to 60 inches: fine sandy loam

Minor Components

Grangeville

Percent of map unit: 5 percent

Hanford

Percent of map unit: 5 percent

Tujunga

Percent of map unit: 5 percent

Taxonomic Classification of the Soils

Merced Area, California

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Delhi	TYPIC XEROPSAMMENTS, MIXED, THERMIC

Engineering Properties

Merced Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
DeA:												
Delhi	0-12	Loamy sand	SM	A-2	0	0	100	100	50-80	15-35	---	NP
	12-30	Fine sand, Sand	SM, SP-SM	A-1, A-2, A-3	0	0	100	100	40-70	5-25	---	NP
	30-60	Fine sandy loam	SM	A-4	0	0	100	100	65-80	35-50	20-30	NP-5
Grangeville	---	---	---	---	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
DeA:														
Delhi	0-12	---	---	0-5	1.60-1.70	42.00-141.00	0.06-0.10	0.0-2.9	0.5-1.0	.24	.24	5	2	134
	12-30	---	---	0-5	1.60-1.70	42.00-141.00	0.05-0.08	0.0-2.9	0.0-0.5	.20	.20			
	30-60	---	---	5-15	1.50-1.60	14.00-42.00	0.13-0.15	0.0-2.9	0.0-0.5	.28	.28			
Grangeville	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
DeA:									
Delhi	---	---	---	---	---	---	None	Moderate	Low
Grangeville	---	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
DeA:								
Delhi	0-12	1.0-5.0	---	6.1-7.8	0	0	0.0	0
	12-30	1.0-5.0	---	6.1-7.8	0	0	0.0	0
	30-60	1.0-5.0	---	6.1-7.8	0	0	0.0	0
Grangeville	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
DeA:										
Delhi	A	Negligible	Jan-Dec			---	---	None	---	None
Grangeville	---	---	Jan-Dec			---	---	None	---	None
Hanford	---	---	Jan-Dec			---	---	None	---	None
Tujunga	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced Area, California

DfA Delhi sand, 0 to 3 percent slopes

Setting

Landscape: Alluvial plains, valleys
Elevation: 30 to 1400 feet
Mean annual precipitation: 10 to 16 inches
Mean annual air temperature: 59 to 64 degrees F
Frost-free period: 225 to 310 days

Composition

Delhi and similar soils: 85 percent
Minor components: 15 percent

Description of Delhi

Setting

Landform: Sand sheets
Landform position (two-dimensional): Backslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Wind modified sandy alluvium derived from granite

Properties and Qualities

Slope: 0 to 3 percent
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High or very high (5.95 to 19.98 in/hr)
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 0 percent
Gypsum maximum: 0 percent
Available water capacity: Low (about 4.3 inches)

Interpretive Groups

Land capability classification (irrigated): 3s
Land capability (non irrigated): 4e

Typical Profile

0 to 12 inches: sand
12 to 44 inches: sand
44 to 68 inches: sand

Minor Components

Hanford

Percent of map unit: 5 percent

Tujunga

Percent of map unit: 5 percent

Grangeville

Percent of map unit: 4 percent

Unnamed

Percent of map unit: 1 percent
Landform: Depressions

Taxonomic Classification of the Soils

Merced Area, California

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Delhi	TYPIC XEROPSAMMENTS, MIXED, THERMIC

Engineering Properties

Merced Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
DfA:												
Delhi	0-12	Sand	SM, SP-SM	A-1, A-2, A-3	0	0	100	100	40-70	5-25	---	NP
	12-44	Sand	SM, SP-SM	A-1, A-2, A-3	0	0	100	100	40-70	5-15	---	NP
	44-68	Fine sand, Loamy sand, Sand	SM, SP-SM	A-1, A-2, A-3	0	0	100	100	40-80	5-35	---	NP
Hanford	---	---	---	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---	---	---	---
Grangeville	---	---	---	---	---	---	---	---	---	---	---	---
Unnamed	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
DfA:														
Delhi	0-12	---	---	0-5	1.60-1.70	42.00-141.00	0.05-0.08	0.0-2.9	0.5-1.0	.20	.20	5	1	180
	12-44	---	---	0-5	1.60-1.70	42.00-141.00	0.05-0.08	0.0-2.9	0.0-0.5	.20	.20			
	44-68	---	---	0-5	1.60-1.70	42.00-141.00	0.05-0.10	0.0-2.9	0.0-0.5	.20	.20			
Hanford	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Grangeville	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Unnamed	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
DfA:									
Delhi	---	---	---	---	---	---	None	Moderate	Low
Hanford	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---
Grangeville	---	---	---	---	---	---	---	---	---
Unnamed	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
DfA:								
Delhi	0-12	1.0-5.0	---	6.1-7.8	0	0	0.0	0
	12-44	1.0-5.0	---	6.1-7.8	0	0	0.0	0
	44-68	1.0-5.0	---	6.1-7.8	0	0	0.0	0
Hanford	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---
Grangeville	---	---	---	---	---	---	---	---
Unnamed	---	---	---	---	---	---	---	---

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
DfA:										
Delhi	A	Negligible	Jan-Dec			---	---	None	---	None
Hanford	---	---	Jan-Dec			---	---	None	---	None
Tujunga	---	---	Jan-Dec			---	---	None	---	None
Grangeville	---	---	Jan-Dec			---	---	None	---	None
Unnamed	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced Area, California

DfB Delhi sand, 3 to 8 percent slopes

Setting

Landscape: Alluvial plains, valleys
Elevation: 30 to 1400 feet
Mean annual precipitation: 10 to 16 inches
Mean annual air temperature: 59 to 64 degrees F
Frost-free period: 225 to 310 days

Composition

Delhi and similar soils: 85 percent
Minor components: 15 percent

Description of Delhi

Setting

Landform: Sand sheets
Landform position (two-dimensional): Backslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Wind modified sandy alluvium derived from granite

Properties and Qualities

Slope: 3 to 8 percent
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High or very high (5.95 to 19.98 in/hr)
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 0 percent
Gypsum maximum: 0 percent
Available water capacity: Low (about 4.3 inches)

Interpretive Groups

Land capability classification (irrigated): 3s
Land capability (non irrigated): 4e

Typical Profile

0 to 12 inches: sand
12 to 44 inches: sand
44 to 68 inches: sand

Minor Components

Grangeville

Percent of map unit: 5 percent

Hanford

Percent of map unit: 5 percent

Tujunga

Percent of map unit: 5 percent

Taxonomic Classification of the Soils

Merced Area, California

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Delhi	TYPIC XEROPSAMMENTS, MIXED, THERMIC

Engineering Properties

Merced Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
DfB:												
Delhi	0-12	Sand	SM, SP-SM	A-1, A-2, A-3	0	0	100	100	40-70	5-25	---	NP
	12-44	Sand	SM, SP-SM	A-1, A-2, A-3	0	0	100	100	40-70	5-15	---	NP
	44-68	Fine sand, Loamy sand, Sand	SM, SP-SM	A-1, A-2, A-3	0	0	100	100	40-80	5-35	---	NP
Grangeville	---	---	---	---	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
DfB:														
Delhi	0-12	---	---	0-5	1.60-1.70	42.00-141.00	0.05-0.08	0.0-2.9	0.5-1.0	.20	.20	5	1	180
	12-44	---	---	0-5	1.60-1.70	42.00-141.00	0.05-0.08	0.0-2.9	0.0-0.5	.20	.20			
	44-68	---	---	0-5	1.60-1.70	42.00-141.00	0.05-0.10	0.0-2.9	0.0-0.5	.20	.20			
Grangeville	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
DfB:									
Delhi	---	---	---	---	---	---	None	Moderate	Low
Grangeville	---	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
DfB:								
Delhi	0-12	1.0-5.0	---	6.1-7.8	0	0	0.0	0
	12-44	1.0-5.0	---	6.1-7.8	0	0	0.0	0
	44-68	1.0-5.0	---	6.1-7.8	0	0	0.0	0
Grangeville	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
DfB:										
Delhi	A	Very low	Jan-Dec			---	---	None	---	None
Grangeville	---	---	Jan-Dec			---	---	None	---	None
Hanford	---	---	Jan-Dec			---	---	None	---	None
Tujunga	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced Area, California

DgA Delhi sand, silty substratum, 0 to 3 percent slopes

Setting

Landscape: Alluvial plains, valleys
Elevation: 200 to 1400 feet
Mean annual precipitation: 13 to 13 inches
Mean annual air temperature: 63 to 63 degrees F
Frost-free period: 225 to 310 days

Composition

Delhi and similar soils: 85 percent
Minor components: 15 percent

Description of Delhi

Setting

Landform: Sand sheets
Landform position (two-dimensional): Backslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Wind modified sandy alluvium derived from granite

Properties and Qualities

Slope: 0 to 3 percent
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 0 percent
Gypsum maximum: 0 percent
Available water capacity: Moderate (about 6.3 inches)

Interpretive Groups

Land capability classification (irrigated): 3s
Land capability (non irrigated): 4e

Typical Profile

0 to 12 inches: sand
12 to 30 inches: sand
30 to 60 inches: fine sandy loam

Minor Components

Grangeville

Percent of map unit: 5 percent

Hanford

Percent of map unit: 5 percent

Tujunga

Percent of map unit: 5 percent

Taxonomic Classification of the Soils

Merced Area, California

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Delhi	TYPIC XEROPSAMMENTS, MIXED, THERMIC

Engineering Properties

Merced Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
DgA:												
Delhi	0-12	Sand	SM, SP-SM	A-1, A-2, A-3	0	0	100	100	40-70	5-25	---	NP
	12-30	Fine sand, Sand	SM, SP-SM	A-1, A-2, A-3	0	0	100	100	40-70	5-25	---	NP
	30-60	Fine sandy loam	SM	A-4	0	0	100	100	65-80	35-50	20-30	NP-5
Grangeville	---	---	---	---	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
DgA:														
Delhi	0-12	---	---	0-5	1.60-1.70	42.00-141.00	0.05-0.08	0.0-2.9	0.5-1.0	.20	.20	5	1	180
	12-30	---	---	0-5	1.60-1.70	42.00-141.00	0.05-0.08	0.0-2.9	0.0-0.5	.20	.20			
	30-60	---	---	5-15	1.50-1.60	14.00-42.00	0.13-0.15	0.0-2.9	0.0-0.5	.28	.28			
Grangeville	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
DgA:									
Delhi	---	---	---	---	---	---	None	Moderate	Low
Grangeville	---	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
DgA:								
Delhi	0-12	1.0-5.0	---	6.1-7.8	0	0	0.0	0
	12-30	1.0-5.0	---	6.1-7.8	0	0	0.0	0
	30-60	1.0-5.0	---	6.1-7.8	0	0	0.0	0
Grangeville	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
DgA:										
Delhi	A	Negligible	Jan-Dec			---	---	None	---	None
Grangeville	---	---	Jan-Dec			---	---	None	---	None
Hanford	---	---	Jan-Dec			---	---	None	---	None
Tujunga	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced Area, California

DkA Dello sand, 0 to 1 percent slopes

Setting

Elevation: 10 to 10 feet
Mean annual precipitation: 8 to 15 inches
Mean annual air temperature: 61 to 63 degrees F
Frost-free period: 240 to 260 days

Composition

Dello and similar soils: 85 percent
Minor components: 15 percent

Description of Dello

Setting

Landform: Depressions
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Properties and Qualities

Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): High or very high (5.95 to 19.98 in/hr)
Depth to water table: About 0 to 0 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate maximum: 0 percent
Gypsum maximum: 0 percent
Available water capacity: Low (about 4.2 inches)

Interpretive Groups

Land capability classification (irrigated): 3w
Land capability (non irrigated): 4w

Typical Profile

0 to 6 inches: sand
6 to 60 inches: sand

Minor Components

Delhi

Percent of map unit: 5 percent

Foster

Percent of map unit: 5 percent
Landform: Flood plains

Grangeville

Percent of map unit: 5 percent

Taxonomic Classification of the Soils

Merced Area, California

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Dello	Mixed, thermic Typic Psammaquents

Engineering Properties

Merced Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
DkA:												
Dello	0-6	Sand	SM	A-2, A-3	0	0	100	100	50-70	5-20	---	NP
	6-60	Fine sand, Sand	SM	A-2, A-3	0	0	100	100	50-70	5-20	---	NP
Delhi	---	---	---	---	---	---	---	---	---	---	---	---
Foster	---	---	---	---	---	---	---	---	---	---	---	---
Grangeville	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
DkA:														
Dello	0-6	---	---	0-7	1.60-1.70	42.00-141.00	0.06-0.08	0.0-2.9	0.5-1.0	.10	.10	5	1	180
	6-60	---	---	0-7	1.60-1.70	42.00-141.00	0.06-0.08	0.0-2.9	0.0-0.5	.10	.10			
Delhi	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Foster	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Grangeville	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
DkA:									
Dello	---	---	---	---	---	---	None	High	Low
Delhi	---	---	---	---	---	---	---	---	---
Foster	---	---	---	---	---	---	---	---	---
Grangeville	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
DkA:								
Dello	0-6	1.0-5.0	---	6.6-8.4	0	0	0.0-2.0	0
	6-60	1.0-5.0	---	6.6-8.4	0	0	0.0-2.0	0
Delhi	---	---	---	---	---	---	---	---
Foster	---	---	---	---	---	---	---	---
Grangeville	---	---	---	---	---	---	---	---

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
DkA:										
Dello	C	Negligible	January	0.0	3.0-4.0	---	---	None	Brief	Rare
				3.0-4.0	>6.0					
			February	0.0	3.0-4.0	---	---	None	Brief	Rare
				3.0-4.0	>6.0					
			March	0.0	3.0-4.0	---	---	None	Brief	Rare
				3.0-4.0	>6.0					
			April	3.0-4.0	>6.0	---	---	None	Brief	Rare
			May	3.0-4.0	>6.0	---	---	None	Brief	Rare
			June	3.0-4.0	>6.0	---	---	None	Brief	Rare
			July	3.0-4.0	>6.0	---	---	None	Brief	Rare
			August	3.0-4.0	>6.0	---	---	None	Brief	Rare
			September	3.0-4.0	>6.0	---	---	None	Brief	Rare
			October	3.0-4.0	>6.0	---	---	None	Brief	Rare
			November	0.0	3.0-4.0	---	---	None	Brief	Rare
				3.0-4.0	>6.0					
			December	0.0	3.0-4.0	---	---	None	Brief	Rare
				3.0-4.0	>6.0					
Delhi	---	---	Jan-Dec			---	---	None	---	None
Foster	---	---	Jan-Dec			---	---	None	---	None
Grangeville	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced Area, California

DoA Dello sand, slightly saline-alkali, 0 to 1 percent slopes

Setting

Elevation: 10 to 10 feet
Mean annual precipitation: 8 to 15 inches
Mean annual air temperature: 61 to 63 degrees F
Frost-free period: 240 to 260 days

Composition

Dello and similar soils: 85 percent
Minor components: 15 percent

Description of Dello

Setting

Landform: Depressions
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Properties and Qualities

Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): High or very high (5.95 to 19.98 in/hr)
Depth to water table: About 0 to 0 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate maximum: 0 percent
Gypsum maximum: 0 percent
Salinity maximum: Very slightly saline or slightly saline (4.0 to 8.0 mmhos/cm)
Sodium adsorption ratio maximum: 5.0
Available water capacity: Low (about 4.2 inches)

Interpretive Groups

Land capability classification (irrigated): 3w
Land capability (non irrigated): 4w

Typical Profile

0 to 6 inches: sand
6 to 60 inches: sand

Minor Components

Delhi

Percent of map unit: 5 percent

Foster

Percent of map unit: 5 percent
Landform: Flood plains

Grangeville

Percent of map unit: 5 percent

Taxonomic Classification of the Soils

Merced Area, California

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Dello	Mixed, thermic Typic Psammaquents

Engineering Properties

Merced Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
DoA:												
Dello	0-6	Sand	SM	A-2, A-3	0	0	100	100	50-70	5-20	0	NP
	6-60	Fine sand, Sand	SM	A-2, A-3	0	0	100	100	50-70	5-20	0	NP
Delhi	---	---	---	---	---	---	---	---	---	---	---	---
Foster	---	---	---	---	---	---	---	---	---	---	---	---
Grangeville	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
DoA:														
Dello	0-6	---	---	0-7	1.60-1.70	42.00-141.00	0.06-0.08	0.0-2.9	0.5-1.0	.10	.10	5	1	180
	6-60	---	---	0-7	1.60-1.70	42.00-141.00	0.06-0.08	0.0-2.9	0.0-0.5	.10	.10			
Delhi	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Foster	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Grangeville	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
DoA:									
Dello	---	---	---	---	---	---	None	High	Low
Delhi	---	---	---	---	---	---	---	---	---
Foster	---	---	---	---	---	---	---	---	---
Grangeville	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
DoA:								
Dello	0-6	1.0-5.0	---	6.6-8.4	0	0	4.0-8.0	0
	6-60	1.0-5.0	---	6.6-8.4	0	0	4.0-8.0	0-5
Delhi	---	---	---	---	---	---	---	---
Foster	---	---	---	---	---	---	---	---
Grangeville	---	---	---	---	---	---	---	---

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
DoA:										
Dello	C	Negligible	January	0.0	3.0-4.0	---	---	None	Brief	Rare
				3.0-4.0	>6.0					
			February	0.0	3.0-4.0	---	---	None	Brief	Rare
				3.0-4.0	>6.0					
			March	0.0	3.0-4.0	---	---	None	Brief	Rare
				3.0-4.0	>6.0					
			April	3.0-4.0	>6.0	---	---	None	Brief	Rare
			May	3.0-4.0	>6.0	---	---	None	Brief	Rare
			June	3.0-4.0	>6.0	---	---	None	Brief	Rare
			July	3.0-4.0	>6.0	---	---	None	Brief	Rare
			August	3.0-4.0	>6.0	---	---	None	Brief	Rare
			September	3.0-4.0	>6.0	---	---	None	Brief	Rare
			October	3.0-4.0	>6.0	---	---	None	Brief	Rare
			November	0.0	3.0-4.0	---	---	None	Brief	Rare
				3.0-4.0	>6.0					
			December	0.0	3.0-4.0	---	---	None	Brief	Rare
				3.0-4.0	>6.0					
Delhi	---	---	Jan-Dec			---	---	None	---	None
Foster	---	---	Jan-Dec			---	---	None	---	None
Grangeville	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced Area, California

DpA Dinuba sandy loam, 0 to 1 percent slopes

Setting

Elevation: 100 to 500 feet
Mean annual precipitation: 12 to 12 inches
Mean annual air temperature: 63 to 63 degrees F
Frost-free period: 250 to 250 days

Composition

Dinuba and similar soils: 85 percent
Minor components: 15 percent

Description of Dinuba

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Properties and Qualities

Slope: 0 to 1 percent
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low or moderately high (0.06 to 0.20 in/hr)
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 0 percent
Gypsum maximum: 0 percent
Available water capacity: Moderate (about 7.2 inches)

Interpretive Groups

Land capability classification (irrigated): 2s
Land capability (non irrigated): 4s

Typical Profile

0 to 18 inches: sandy loam
18 to 24 inches: sandy loam
24 to 60 inches: stratified very fine sand to silt loam

Minor Components

Delhi

Percent of map unit: 5 percent

Fresno

Percent of map unit: 5 percent

Hanford

Percent of map unit: 5 percent

Taxonomic Classification of the Soils

Merced Area, California

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Dinuba	Coarse-loamy, mixed, active, thermic Typic Haploxeralfs

Engineering Properties

Merced Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
DpA:												
Dinuba	0-18	Sandy loam	SM	A-4	0	0	100	95-100	70-85	35-50	20-30	NP-5
	18-24	Fine sandy loam, Sandy loam	SM	A-4	0	0	100	95-100	70-85	35-50	20-30	NP-5
	24-60	Stratified very fine sand to silt loam	ML, SM	A-4	0	0	100	95-100	70-85	35-60	20-35	NP-10
Delhi	---	---	---	---	---	---	---	---	---	---	---	---
Fresno	---	---	---	---	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
DpA:														
Dinuba	0-18	---	---	7-15	1.50-1.60	14.00-42.00	0.10-0.13	0.0-2.9	0.5-1.0	.37	.37	4	3	86
	18-24	---	---	10-18	1.50-1.60	14.00-42.00	0.10-0.13	0.0-2.9	0.0-0.5	.37	.37			
	24-60	---	---	10-18	1.70-1.80	0.42-1.40	0.10-0.13	0.0-2.9	0.0	.37	.37			
Delhi	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Fresno	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
DpA:									
Dinuba	---	---	---	---	---	---	None	High	Low
Delhi	---	---	---	---	---	---	---	---	---
Fresno	---	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
DpA:								
Dinuba	0-18	5.0-10	---	6.6-7.8	0	0	0.0	0
	18-24	5.0-10	---	6.6-8.4	0	0	0.0-2.0	0
	24-60	5.0-10	---	7.9-8.4	0	0	0.0-4.0	0
Delhi	---	---	---	---	---	---	---	---
Fresno	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
DpA:										
Dinuba	C	Medium	Jan-Dec			---	---	None	---	None
Delhi	---	---	Jan-Dec			---	---	None	---	None
Fresno	---	---	Jan-Dec			---	---	None	---	None
Hanford	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced Area, California

DrA Dinuba sandy loam, slightly saline-alkali, 0 to 1 percent slope

Setting

Elevation: 100 to 500 feet
Mean annual precipitation: 12 to 12 inches
Mean annual air temperature: 63 to 63 degrees F
Frost-free period: 250 to 250 days

Composition

Dinuba and similar soils: 85 percent
Minor components: 15 percent

Description of Dinuba

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Properties and Qualities

Slope: 0 to 1 percent
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low or moderately high (0.06 to 0.20 in/hr)
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 0 percent
Gypsum maximum: 0 percent
Salinity maximum: Very slightly saline or slightly saline (4.0 to 8.0 mmhos/cm)
Sodium adsorption ratio maximum: 5.0
Available water capacity: Moderate (about 7.2 inches)

Interpretive Groups

Land capability classification (irrigated): 2s
Land capability (non irrigated): 4s

Typical Profile

0 to 18 inches: sandy loam
18 to 24 inches: sandy loam
24 to 60 inches: stratified very fine sand to silt loam

Minor Components

Delhi

Percent of map unit: 5 percent

Hanford

Percent of map unit: 5 percent

Fresno

Percent of map unit: 5 percent

Taxonomic Classification of the Soils

Merced Area, California

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Dinuba	Coarse-loamy, mixed, active, thermic Typic Haploxeralfs

Engineering Properties

Merced Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
DrA:												
Dinuba	0-18	Sandy loam	SM	A-4	0	0	100	95-100	70-85	35-50	20-30	NP-5
	18-24	Fine sandy loam, Sandy loam	SM	A-4	0	0	100	95-100	70-85	35-50	20-30	NP-5
	24-60	Stratified very fine sand to silt loam	ML, SM	A-4	0	0	100	95-100	70-85	35-60	20-35	NP-10
Delhi	---	---	---	---	---	---	---	---	---	---	---	---
Fresno	---	---	---	---	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
DrA:														
Dinuba	0-18	---	---	7-15	1.50-1.60	14.00-42.00	0.10-0.13	0.0-2.9	0.5-1.0	.37	.37	4	3	86
	18-24	---	---	10-18	1.50-1.60	14.00-42.00	0.10-0.13	0.0-2.9	0.0-0.5	.37	.37			
	24-60	---	---	10-18	1.70-1.80	0.42-1.40	0.10-0.13	0.0-2.9	0.0	.37	.37			
Delhi	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Fresno	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
DrA:									
Dinuba	---	---	---	---	---	---	None	High	Low
Delhi	---	---	---	---	---	---	---	---	---
Fresno	---	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
DrA:								
Dinuba	0-18	5.0-10	---	7.9-8.4	0	0	4.0-8.0	0
	18-24	5.0-10	---	7.9-8.4	0	0	4.0-8.0	0-5
	24-60	5.0-10	---	7.9-8.4	0	0	4.0-8.0	0-5
Delhi	---	---	---	---	---	---	---	---
Fresno	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
DrA:										
Dinuba	C	Medium	Jan-Dec			---	---	None	---	None
Delhi	---	---	Jan-Dec			---	---	None	---	None
Fresno	---	---	Jan-Dec			---	---	None	---	None
Hanford	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced Area, California

DuA Dune land, 0 to 3 percent slopes

Composition

Dune land: 100 percent

Description of Dune land

Setting

Landform: Alluvial fans
Parent material: Eolian deposits

Properties and Qualities

Slope: 0 to 3 percent
Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High or very high (5.95 to 19.98 in/hr)
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 0 percent
Gypsum maximum: 0 percent
Available water capacity: Very low (about 2.5 inches)

Interpretive Groups

Land capability (non irrigated): 8

Typical Profile

0 to 6 inches: fine sand
6 to 60 inches: sand

Engineering Properties

Merced Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
DuA:												
Dune land	0-6	Fine sand	SM, SP, SP-SM	A-2, A-3	0	0	100	100	60-80	0-25	---	NP
	6-60	Fine sand, Sand	SM, SP, SP-SM	A-2, A-3	0	0	100	100	50-80	0-25	0	NP

Physical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
DuA:														
Dune land	0-6	---	---	0-1	1.60-1.70	42.00-141.00	0.04-0.05	0.0-2.9	0.0-0.1	.15	.15	5	1	250
	6-60	---	---	0-1	1.60-1.70	42.00-141.00	0.03-0.05	0.0-2.9	0.0	.10	.10			

Soil Features

Merced Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
DuA:									
Dune land	---	---	---	---	---	---	None	---	---

Chemical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
DuA:								
Dune land	0-6	---	1.0-2.0	---	0	0	0.0	0
	6-60	---	1.0-2.0	---	0	0	0.0	0

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
DuA:										
Dune land	A	Negligible	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced Area, California

DuB Dune land, 3 to 8 percent slopes

Composition

Dune land: 100 percent

Description of Dune land

Setting

Landform: Alluvial fans
Parent material: Eolian deposits

Properties and Qualities

Slope: 3 to 8 percent
Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High or very high (5.95 to 19.98 in/hr)
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 0 percent
Gypsum maximum: 0 percent
Available water capacity: Very low (about 2.5 inches)

Interpretive Groups

Land capability (non irrigated): 8

Typical Profile

0 to 6 inches: fine sand
6 to 60 inches: sand

Engineering Properties

Merced Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
DuB:												
Dune land	0-6	Fine sand	SM, SP, SP-SM	A-2, A-3	0	0	100	100	60-80	0-25	0	NP
	6-60	Fine sand, Sand	SM, SP, SP-SM	A-2, A-3	0	0	100	100	50-80	0-25	0	NP

Physical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
DuB:														
Dune land	0-6	---	---	0-1	1.60-1.70	42.00-141.00	0.04-0.05	0.0-2.9	0.0-0.1	.15	.15	5	1	250
	6-60	---	---	0-1	1.60-1.70	42.00-141.00	0.03-0.05	0.0-2.9	0.0	.10	.10			

Soil Features

Merced Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
DuB:									
Dune land	---	---	---	---	---	---	None	---	---

Chemical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
DuB:								
Dune land	0-6	---	1.0-2.0	---	0	0	0.0	0
	6-60	---	1.0-2.0	---	0	0	0.0	0

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
DuB:										
Dune land	A	Very low	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced Area, California

FrA Fresno loam, moderately saline alkali, 0 to 1 percent slopes

Setting

Landscape: Alluvial plains
Elevation: 0 to 250 feet
Mean annual precipitation: 8 to 8 inches
Mean annual air temperature: 63 to 63 degrees F
Frost-free period: 250 to 250 days

Composition

Fresno and similar soils: 85 percent
Minor components: 15 percent

Description of Fresno

Setting

Landform: Fan remnants
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Properties and Qualities

Slope: 0 to 1 percent
Depth to restrictive feature: 20 to 36 inches to Duripan
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate maximum: 5 percent
Gypsum maximum: 0 percent
Salinity maximum: Slightly saline or moderately saline (8.0 to 16.0 mmhos/cm)
Sodium adsorption ratio maximum: 20.0
Available water capacity: Very low (about 2.3 inches)

Interpretive Groups

Land capability classification (irrigated): 3s
Land capability (non irrigated): 6s

Typical Profile

0 to 4 inches: loam
4 to 21 inches: sandy clay loam
21 to 30 inches: cemented
30 to 60 inches: stratified sandy loam to loam

Minor Components

Pachappa

Percent of map unit: 5 percent

Traver

Percent of map unit: 5 percent

Lewis

Percent of map unit: 4 percent

Playas

Percent of map unit: 1 percent
Landform: Playas

Taxonomic Classification of the Soils

Merced Area, California

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Fresno	Fine-loamy, mixed, thermic Natric Durixeralfs

Engineering Properties

Merced Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
FrA:												
Fresno	0-4	Loam	CL-ML, ML	A-4	0	0	100	95-100	70-90	50-60	25-35	5-10
	4-21	Clay loam, Sandy clay loam	CL, SC	A-6	0	0	100	95-100	85-95	35-65	30-40	10-20
	21-30	Cemented	---	---	---	---	---	---	---	---	---	---
	30-60	Stratified sandy loam to loam	ML, SM	A-4	0	0	100	95-100	60-85	35-60	20-35	NP-10
Pachappa	---	---	---	---	---	---	---	---	---	---	---	---
Traver	---	---	---	---	---	---	---	---	---	---	---	---
Lewis	---	---	---	---	---	---	---	---	---	---	---	---
Playas	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
FrA:														
Fresno	0-4	---	---	15-25	1.35-1.45	4.00-14.00	0.09-0.12	0.0-2.9	0.5-1.0	.43	.43	3	6	48
	4-21	---	---	20-35	1.35-1.50	0.01-0.42	0.09-0.12	3.0-5.9	0.0-0.5	.43	.43			
	21-30	---	---	---	---	0.00-0.01	0.00	---	---	---	---			
	30-60	---	---	10-25	1.45-1.65	1.40-4.00	0.08-0.12	0.0-2.9	0.0	.43	.43			
Pachappa	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Traver	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Lewis	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Playas	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
FrA:									
Fresno	Duripan	20-36	0-3	Strongly cemented	---	---	None	High	Moderate
Pachappa	---	---	---	---	---	---	---	---	---
Traver	---	---	---	---	---	---	---	---	---
Lewis	---	---	---	---	---	---	---	---	---
Playas	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
FrA:								
Fresno	0-4	10-20	---	7.8-9.6	0-5	0	8.0-16.0	0-5
	4-21	10-20	---	7.8-9.6	0-5	0	8.0-16.0	10-20
	21-30	---	---	---	---	---	---	---
	30-60	5.0-15	---	7.8-9.6	0-5	0	4.0-16.0	0-5
Pachappa	---	---	---	---	---	---	---	---
Traver	---	---	---	---	---	---	---	---
Lewis	---	---	---	---	---	---	---	---
Playas	---	---	---	---	---	---	---	---

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
FrA:										
Fresno	C	Very high	January	---	---	---	---	None	Brief	Rare
			February	---	---	---	---	None	Brief	Rare
			March	---	---	---	---	None	Brief	Rare
			April	---	---	---	---	None	Brief	Rare
			May	---	---	---	---	None	Brief	Rare
			June	---	---	---	---	None	Brief	Rare
			July	---	---	---	---	None	Brief	Rare
			August	---	---	---	---	None	Brief	Rare
			September	---	---	---	---	None	Brief	Rare
			October	---	---	---	---	None	Brief	Rare
			November	---	---	---	---	None	Brief	Rare
			December	---	---	---	---	None	Brief	Rare
Pachappa	---	---	Jan-Dec			---	---	None	---	None
Traver	---	---	Jan-Dec			---	---	None	---	None
Lewis	---	---	Jan-Dec			---	---	None	---	None

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
FrA:										
Playas	---	---	January	---	---	---	---	None	Brief	None
			February	---	---	---	---	None	Brief	None
			March	---	---	---	---	None	Brief	None
			April	---	---	---	---	None	Brief	None
			May	---	---	---	---	None	Brief	None
			June	---	---	---	---	None	Brief	None
			July	---	---	---	---	None	Brief	None
			August	---	---	---	---	None	Brief	None
			September	---	---	---	---	None	Brief	None
			October	---	---	---	---	None	Brief	None
			November	---	---	---	---	None	Brief	None
			December	---	---	---	---	None	Brief	None

Map Unit Description

Merced Area, California

FnA Fresno loam, poorly drained variant, moderately saline-alkali, to 1 percent slopes

Setting

Elevation: 0 to 250 feet
Mean annual precipitation: 8 to 8 inches
Mean annual air temperature: 63 to 63 degrees F
Frost-free period: 250 to 250 days

Composition

Fresno variant and similar soils: 85 percent
Minor components: 15 percent

Description of Fresno variant

Setting

Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Properties and Qualities

Slope: 0 to 1 percent
Depth to restrictive feature: 20 to 36 inches to Duripan
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: About 0 to 0 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate maximum: 5 percent
Gypsum maximum: 0 percent
Salinity maximum: Slightly saline or moderately saline (8.0 to 16.0 mmhos/cm)
Sodium adsorption ratio maximum: 20.0
Available water capacity: Very low (about 2.3 inches)

Interpretive Groups

Land capability classification (irrigated): 3s
Land capability (non irrigated): 6s

Typical Profile

0 to 4 inches: loam
4 to 21 inches: sandy clay loam
21 to 30 inches: cemented
30 to 60 inches: stratified sandy loam to loam

Minor Components

Lewis

Percent of map unit: 5 percent

Pachappa

Percent of map unit: 5 percent

Traver

Percent of map unit: 5 percent

Taxonomic Classification of the Soils

Merced Area, California

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Fresno variant	NATRIC DURIXERALFS, FINE-LOAMY, MIXED, THERMIC

Engineering Properties

Merced Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
FnA:												
Fresno variant	0-4	Loam	CL-ML, ML	A-4	0	0	100	95-100	70-90	50-60	25-35	5-10
	4-21	Clay loam, Sandy clay loam	CL, SC	A-6	0	0	100	95-100	85-95	35-65	30-40	10-20
	21-30	Cemented	---	---	---	---	---	---	---	---	---	---
	30-60	Stratified sandy loam to loam	ML, SM	A-4	0	0	100	95-100	60-85	35-60	20-35	NP-10
Lewis	---	---	---	---	---	---	---	---	---	---	---	---
Pachappa	---	---	---	---	---	---	---	---	---	---	---	---
Traver	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
FnA:														
Fresno variant	0-4	---	---	15-25	1.35-1.45	4.00-14.00	0.09-0.12	0.0-2.9	0.5-1.0	.43	.43	3	6	48
	4-21	---	---	20-35	1.35-1.50	0.01-0.42	0.09-0.12	3.0-5.9	0.0-0.5	.43	.43			
	21-30	---	---	---	---	0.00-0.01	0.00	---	---	---	---			
	30-60	---	---	10-25	1.45-1.65	1.40-4.00	0.08-0.12	0.0-2.9	0.0	.43	.43			
Lewis	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Pachappa	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Traver	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
FnA:									
Fresno variant	Duripan	20-36	0-3	Strongly cemented	---	---	None	High	Moderate
Lewis	---	---	---	---	---	---	---	---	---
Pachappa	---	---	---	---	---	---	---	---	---
Traver	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
FnA:								
Fresno variant	0-4	10-20	---	7.8-9.6	0-5	0	8.0-16.0	5-10
	4-21	10-20	---	7.8-9.6	0-5	0	8.0-16.0	10-20
	21-30	---	---	---	---	---	---	---
	30-60	5.0-15	---	7.8-9.6	0-5	0	4.0-16.0	0-5
Lewis	---	---	---	---	---	---	---	---
Pachappa	---	---	---	---	---	---	---	---
Traver	---	---	---	---	---	---	---	---

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
FnA:										
Fresno variant	D	Very high	January	0.0	1.0-2.0	---	---	None	Brief	Rare
				1.0-2.0	1.7-3.0					
			February	0.0	1.0-2.0	---	---	None	Brief	Rare
				1.0-2.0	1.7-3.0					
			March	0.0	1.0-2.0	---	---	None	Brief	Rare
				1.0-2.0	1.7-3.0					
			April	---	---	---	---	None	Brief	Rare
			May	---	---	---	---	None	Brief	Rare
			June	---	---	---	---	None	Brief	Rare
			July	---	---	---	---	None	Brief	Rare
			August	---	---	---	---	None	Brief	Rare
			September	---	---	---	---	None	Brief	Rare
			October	---	---	---	---	None	Brief	Rare
			November	---	---	---	---	None	Brief	Rare
			December	0.0	1.0-2.0	---	---	None	Brief	Rare
				1.0-2.0	1.7-3.0					
Lewis	---	---	Jan-Dec			---	---	None	---	None
Pachappa	---	---	Jan-Dec			---	---	None	---	None
Traver	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced Area, California

FsA Fresno loam, strongly saline-alkali, 0 to 1 percent slopes

Setting

Landscape: Alluvial plains
Elevation: 0 to 250 feet
Mean annual precipitation: 8 to 8 inches
Mean annual air temperature: 63 to 63 degrees F
Frost-free period: 250 to 250 days

Composition

Fresno and similar soils: 85 percent
Minor components: 15 percent

Description of Fresno

Setting

Landform: Fan remnants
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Properties and Qualities

Slope: 0 to 1 percent
Depth to restrictive feature: 20 to 36 inches to Duripan
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate maximum: 5 percent
Gypsum maximum: 0 percent
Salinity maximum: Moderately saline or strongly saline (16.0 to 30.0 mmhos/cm)
Sodium adsorption ratio maximum: 20.0
Available water capacity: Very low (about 2.3 inches)

Interpretive Groups

Land capability classification (irrigated): 3s
Land capability (non irrigated): 6s

Typical Profile

0 to 4 inches: loam
4 to 21 inches: sandy clay loam
21 to 30 inches: cemented
30 to 60 inches: stratified sandy loam to loam

Minor Components

Pachappa

Percent of map unit: 5 percent

Traver

Percent of map unit: 5 percent

Lewis

Percent of map unit: 4 percent

Playas

Percent of map unit: 1 percent
Landform: Playas

Taxonomic Classification of the Soils

Merced Area, California

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Fresno	Fine-loamy, mixed, thermic Natric Durixeralfs

Engineering Properties

Merced Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
FsA:												
Fresno	0-4	Loam	CL-ML, ML	A-4	0	0	100	95-100	70-90	50-60	25-35	5-10
	4-21	Clay loam, Sandy clay loam	CL, SC	A-6	0	0	100	95-100	85-95	35-65	30-40	10-20
	21-30	Cemented	---	---	---	---	---	---	---	---	---	---
	30-60	Stratified sandy loam to loam	ML, SM	A-4	0	0	100	95-100	60-85	35-60	20-35	NP-10
Pachappa	---	---	---	---	---	---	---	---	---	---	---	---
Traver	---	---	---	---	---	---	---	---	---	---	---	---
Lewis	---	---	---	---	---	---	---	---	---	---	---	---
Playas	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
FsA:														
Fresno	0-4	---	---	15-25	1.35-1.45	4.00-14.00	0.09-0.12	0.0-2.9	0.5-1.0	.43	.43	3	6	48
	4-21	---	---	20-35	1.35-1.50	0.01-0.42	0.09-0.12	3.0-5.9	0.0-0.5	.43	.43			
	21-30	---	---	---	---	0.00-0.01	0.00	---	---	---	---			
	30-60	---	---	10-25	1.45-1.65	1.40-4.00	0.08-0.12	0.0-2.9	0.0	.43	.43			
Pachappa	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Traver	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Lewis	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Playas	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
FsA:									
Fresno	Duripan	20-36	0-3	Strongly cemented	---	---	None	High	Moderate
Pachappa	---	---	---	---	---	---	---	---	---
Traver	---	---	---	---	---	---	---	---	---
Lewis	---	---	---	---	---	---	---	---	---
Playas	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
FsA:								
Fresno	0-4	10-20	---	7.8-9.6	0-5	0	16.0-30.0	10-20
	4-21	10-20	---	7.8-9.6	0-5	0	16.0-30.0	10-20
	21-30	---	---	---	---	---	---	---
	30-60	5.0-15	---	7.8-9.6	0-5	0	4.0-16.0	0-5
Pachappa	---	---	---	---	---	---	---	---
Traver	---	---	---	---	---	---	---	---
Lewis	---	---	---	---	---	---	---	---
Playas	---	---	---	---	---	---	---	---

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
FsA:										
Fresno	C	Very high	January	---	---	---	---	None	Brief	Rare
			February	---	---	---	---	None	Brief	Rare
			March	---	---	---	---	None	Brief	Rare
			April	---	---	---	---	None	Brief	Rare
			May	---	---	---	---	None	Brief	Rare
			June	---	---	---	---	None	Brief	Rare
			July	---	---	---	---	None	Brief	Rare
			August	---	---	---	---	None	Brief	Rare
			September	---	---	---	---	None	Brief	Rare
			October	---	---	---	---	None	Brief	Rare
			November	---	---	---	---	None	Brief	Rare
			December	---	---	---	---	None	Brief	Rare
Pachappa	---	---	Jan-Dec			---	---	None	---	None
Traver	---	---	Jan-Dec			---	---	None	---	None
Lewis	---	---	Jan-Dec			---	---	None	---	None

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
FsA:										
Playas	---	---	January	---	---	---	---	None	Brief	None
			February	---	---	---	---	None	Brief	None
			March	---	---	---	---	None	Brief	None
			April	---	---	---	---	None	Brief	None
			May	---	---	---	---	None	Brief	None
			June	---	---	---	---	None	Brief	None
			July	---	---	---	---	None	Brief	None
			August	---	---	---	---	None	Brief	None
			September	---	---	---	---	None	Brief	None
			October	---	---	---	---	None	Brief	None
			November	---	---	---	---	None	Brief	None
			December	---	---	---	---	None	Brief	None

Map Unit Description

Merced Area, California

GbA Grangeville loam, 0 to 1 percent slopes

Setting

Elevation: 10 to 1800 feet
Mean annual precipitation: 8 to 16 inches
Mean annual air temperature: 61 to 64 degrees F
Frost-free period: 200 to 300 days

Composition

Grangeville and similar soils: 85 percent
Minor components: 15 percent

Description of Grangeville

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Properties and Qualities

Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high or high (0.57 to 1.98 in/hr)
Depth to water table: About 0 to 0 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Calcium carbonate maximum: 2 percent
Gypsum maximum: 0 percent
Available water capacity: Moderate (about 8.6 inches)

Interpretive Groups

Land capability classification (irrigated): 2w
Land capability (non irrigated): 4w

Typical Profile

0 to 12 inches: loam
12 to 60 inches: sandy loam

Minor Components

Foster

Percent of map unit: 5 percent
Landform: Flood plains

Hanford

Percent of map unit: 5 percent

Traver

Percent of map unit: 5 percent

Taxonomic Classification of the Soils

Merced Area, California

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Grangeville	Coarse-loamy, mixed, superactive, thermic Fluvaquentic Haploxerolls

Engineering Properties

Merced Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
GbA:												
Grangeville	0-12	Loam	ML	A-4	0	0	100	95-100	85-100	50-80	25-40	NP-10
	12-60	Fine sandy loam, Loam, Sandy loam	ML, SM	A-4	0	0	100	95-100	60-95	35-60	20-35	NP-10
Foster	---	---	---	---	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---	---	---	---	---
Traver	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
GbA:														
Grangeville	0-12	---	---	8-20	1.45-1.55	4.00-14.00	0.15-0.17	0.0-2.9	1.0-6.0	.37	.37	5	5	56
	12-60	---	---	8-18	1.50-1.60	14.00-42.00	0.12-0.15	0.0-2.9	0.0-1.0	.32	.32			
Foster	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Traver	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
GbA:									
Grangeville	---	---	---	---	---	---	None	High	Low
Foster	---	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---	---
Traver	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
GbA:								
Grangeville	0-12	5.0-15	---	6.1-8.4	0-2	0	0.0	0
	12-60	5.0-10	---	6.6-8.4	0-2	0	0.0-2.0	0
Foster	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---
Traver	---	---	---	---	---	---	---	---

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
GbA:										
Grangeville	B	Low	January	0.0	4.0->6.0	---	---	None	Long	Occasional
				4.0->6.0	>6.0					
			February	0.0	4.0->6.0	---	---	None	Long	Occasional
				4.0->6.0	>6.0					
			March	0.0	4.0->6.0	---	---	None	Long	Occasional
				4.0->6.0	>6.0					
			April	4.0->6.0	>6.0	---	---	None	---	None
			May	4.0->6.0	>6.0	---	---	None	---	None
			June	4.0->6.0	>6.0	---	---	None	---	None
			July	4.0->6.0	>6.0	---	---	None	---	None
			August	4.0->6.0	>6.0	---	---	None	---	None
			September	4.0->6.0	>6.0	---	---	None	---	None
			October	4.0->6.0	>6.0	---	---	None	---	None
			November	0.0	4.0->6.0	---	---	None	---	None
				4.0->6.0	>6.0					
			December	0.0	4.0->6.0	---	---	None	Long	Occasional
				4.0->6.0	>6.0					
Foster	---	---	Jan-Dec			---	---	None	---	None
Hanford	---	---	Jan-Dec			---	---	None	---	None
Traver	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced Area, California

GcA Grangeville loam, slightly saline-alkali, 0 to 1 percent slopes

Setting

Elevation: 10 to 1800 feet
Mean annual precipitation: 8 to 16 inches
Mean annual air temperature: 61 to 64 degrees F
Frost-free period: 200 to 300 days

Composition

Grangeville and similar soils: 85 percent
Minor components: 15 percent

Description of Grangeville

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Properties and Qualities

Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high or high (0.57 to 1.98 in/hr)
Depth to water table: About 0 to 0 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Calcium carbonate maximum: 2 percent
Gypsum maximum: 0 percent
Salinity maximum: Very slightly saline or slightly saline (4.0 to 8.0 mmhos/cm)
Sodium adsorption ratio maximum: 5.0
Available water capacity: Moderate (about 8.6 inches)

Interpretive Groups

Land capability classification (irrigated): 2w
Land capability (non irrigated): 4w

Typical Profile

0 to 12 inches: loam
12 to 60 inches: sandy loam

Minor Components

Foster

Percent of map unit: 5 percent
Landform: Flood plains

Hanford

Percent of map unit: 5 percent

Traver

Percent of map unit: 5 percent

Taxonomic Classification of the Soils

Merced Area, California

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Grangeville	Coarse-loamy, mixed, superactive, thermic Fluvaquentic Haploxerolls

Engineering Properties

Merced Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
GcA:												
Grangeville	0-12	Loam	ML	A-4	0	0	100	95-100	85-100	50-80	25-40	NP-10
	12-60	Fine sandy loam, Loam, Sandy loam	ML, SM	A-4	0	0	100	95-100	60-95	35-60	20-35	NP-10
Foster	---	---	---	---	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---	---	---	---	---
Traver	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
GcA:														
Grangeville	0-12	---	---	8-20	1.45-1.55	4.00-14.00	0.15-0.17	0.0-2.9	1.0-6.0	.37	.37	5	5	56
	12-60	---	---	8-18	1.50-1.60	14.00-42.00	0.12-0.15	0.0-2.9	0.0-1.0	.32	.32			
Foster	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Traver	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
GcA:									
Grangeville	---	---	---	---	---	---	None	High	Low
Foster	---	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---	---
Traver	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
GcA:								
Grangeville	0-12	5.0-15	---	6.6-8.4	0-2	0	4.0-8.0	0
	12-60	5.0-10	---	6.6-8.4	0-2	0	4.0-8.0	0-5
Foster	---	---	---	---	---	---	---	---
Hanford	---	---	---	---	---	---	---	---
Traver	---	---	---	---	---	---	---	---

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
GcA:										
Grangeville	B	Low	January	0.0	4.0->6.0	---	---	None	Long	Occasional
				4.0->6.0	>6.0					
			February	0.0	4.0->6.0	---	---	None	Long	Occasional
				4.0->6.0	>6.0					
			March	0.0	4.0->6.0	---	---	None	Long	Occasional
				4.0->6.0	>6.0					
			April	4.0->6.0	>6.0	---	---	None	---	None
			May	4.0->6.0	>6.0	---	---	None	---	None
			June	4.0->6.0	>6.0	---	---	None	---	None
			July	4.0->6.0	>6.0	---	---	None	---	None
			August	4.0->6.0	>6.0	---	---	None	---	None
			September	4.0->6.0	>6.0	---	---	None	---	None
			October	4.0->6.0	>6.0	---	---	None	---	None
			November	0.0	4.0->6.0	---	---	None	---	None
				4.0->6.0	>6.0					
			December	0.0	4.0->6.0	---	---	None	Long	Occasional
				4.0->6.0	>6.0					
Foster	---	---	Jan-Dec			---	---	None	---	None
Hanford	---	---	Jan-Dec			---	---	None	---	None
Traver	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced Area, California

HcB Hanford fine sandy loam, channeled, 0 to 8 percent slopes

Setting

Landscape: Valleys
Elevation: 10 to 150 feet
Mean annual precipitation: 12 to 25 inches
Mean annual air temperature: 57 to 63 degrees F
Frost-free period: 230 to 340 days

Composition

Hanford and similar soils: 70 percent
Columbia and similar soils: 15 percent
Minor components: 15 percent

Description of Hanford

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from igneous rock

Properties and Qualities

Slope: 0 to 5 percent
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: About 0 to 0 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Calcium carbonate maximum: 0 percent
Gypsum maximum: 0 percent
Available water capacity: Moderate (about 6.3 inches)

Interpretive Groups

Land capability classification (irrigated): 2w
Land capability (non irrigated): 4w

Typical Profile

0 to 12 inches: fine sandy loam
12 to 30 inches: fine sandy loam
30 to 60 inches: stratified sand to silt loam

Description of Columbia

Setting

Landform: Flood plains
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Coarse-loamy alluvium derived from igneous, metamorphic and sedimentary rock

Properties and Qualities

Slope: 0 to 5 percent
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: About 0 to 0 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Calcium carbonate maximum: 0 percent
Gypsum maximum: 0 percent
Available water capacity: Moderate (about 6.3 inches)

Interpretive Groups

Land capability classification (irrigated): 2w
Land capability (non irrigated): 4w

Typical Profile

0 to 13 inches: fine sandy loam
13 to 30 inches: fine sandy loam
30 to 60 inches: stratified sand to silt loam

Minor Components

Dinuba
Percent of map unit: 5 percent

Grangeville
Percent of map unit: 5 percent

Tujunga
Percent of map unit: 5 percent

Taxonomic Classification of the Soils

Merced Area, California

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Columbia	Coarse-loamy, mixed, superactive, nonacid, thermic Aquic Xerofluvents
Hanford	Coarse-loamy, mixed, superactive, nonacid, thermic Aquic Xerofluvents

Engineering Properties

Merced Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
HcB:												
Hanford	0-12	Fine sandy loam	SM	A-4	0	0	100	95-100	65-90	35-50	20-30	NP-5
	12-30	Fine sandy loam, Sandy loam	SM	A-4	0	0	100	95-100	65-90	30-50	20-30	NP-5
	30-60	Stratified sand to silt loam	SM	A-4	0	0	100	95-100	60-90	35-50	20-25	NP-5
Columbia	0-13	Fine sandy loam	SC-SM, SM	A-4	0	0	100	95-100	65-90	30-50	20-30	NP-10
	13-30	Fine sandy loam, Sandy loam	SC-SM, SM	A-4	0	0	100	95-100	65-90	35-50	20-30	NP-10
	30-60	Stratified sand to silt loam	SM	A-4	0	0	100	95-100	60-90	35-50	20-25	NP-5
Dinuba	---	---	---	---	---	---	---	---	---	---	---	---
Grangeville	---	---	---	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
HcB:														
Hanford	0-12	---	---	8-18	1.50-1.60	14.00-42.00	0.10-0.12	0.0-2.9	0.5-1.0	.32	.32	5	3	86
	12-30	---	---	10-18	1.50-1.60	14.00-42.00	0.10-0.12	0.0-2.9	0.0-0.5	.32	.32			
	30-60	---	---	10-18	1.50-1.65	14.00-42.00	0.08-0.11	0.0-2.9	0.0-0.5	.32	.32			
Columbia	0-13	---	---	8-18	1.50-1.60	14.00-42.00	0.10-0.12	0.0-2.9	0.5-2.0	.32	.32	5	3	86
	13-30	---	---	10-18	1.50-1.60	14.00-42.00	0.10-0.12	0.0-2.9	0.0-0.5	.32	.32			
	30-60	---	---	10-18	1.50-1.65	14.00-42.00	0.08-0.11	0.0-2.9	0.0-0.5	.32	.32			
Dinuba	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Grangeville	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
HcB:									
Hanford	---	---	---	---	---	---	None	Moderate	Low
Columbia	---	---	---	---	---	---	None	Moderate	Low
Dinuba	---	---	---	---	---	---	---	---	---
Grangeville	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
HcB:								
Hanford	0-12	5.0-10	---	6.6-7.3	0	0	0.0	0
	12-30	5.0-10	---	6.6-7.3	0	0	0.0	0
	30-60	5.0-10	---	6.6-7.3	0	0	0.0	0
Columbia	0-13	5.0-10	---	6.1-7.8	0	0	0.0	0
	13-30	5.0-10	---	6.1-7.8	0	0	0.0	0
	30-60	5.0-10	---	6.1-7.8	0	0	0.0	0
Dinuba	---	---	---	---	---	---	---	---
Grangeville	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
HcB:										
Hanford	C	Very low	January	0.0 3.0-5.0	3.0-5.0 >6.0	---	---	None	Long	Occasional
			February	0.0 3.0-5.0	3.0-5.0 >6.0	---	---	None	Long	Occasional
			March	3.0-5.0	>6.0	---	---	None	Long	Occasional
			April	---	---	---	---	None	Long	Occasional
			December	0.0 3.0-5.0	3.0-5.0 >6.0	---	---	None	Long	Occasional
Columbia	C	Very low	January	0.0 3.0-5.0	3.0-5.0 >6.0	---	---	None	Long	Occasional
			February	0.0 3.0-5.0	3.0-5.0 >6.0	---	---	None	Long	Occasional
			March	0.0 3.0-5.0	3.0-5.0 >6.0	---	---	None	Long	Occasional
			April	---	---	---	---	None	Long	Occasional
			December	0.0 3.0-5.0	3.0-5.0 >6.0	---	---	None	Long	Occasional
Dinuba	---	---	Jan-Dec			---	---	None	---	None
Grangeville	---	---	Jan-Dec			---	---	None	---	None
Tujunga	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced Area, California

HbA Hanford fine sandy loam, moderately deep and deep over sand, 0 to 1 percent slopes

Setting

Elevation: 150 to 900 feet
Mean annual precipitation: 9 to 20 inches
Mean annual air temperature: 63 to 64 degrees F
Frost-free period: 250 to 280 days

Composition

Hanford and similar soils: 85 percent
Minor components: 15 percent

Description of Hanford

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from igneous rock

Properties and Qualities

Slope: 0 to 1 percent
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate maximum: 0 percent
Gypsum maximum: 0 percent
Available water capacity: Moderate (about 6.2 inches)

Interpretive Groups

Land capability classification (irrigated): 2s
Land capability (non irrigated): 4s

Typical Profile

0 to 12 inches: fine sandy loam
12 to 40 inches: fine sandy loam
40 to 60 inches: sand

Minor Components

Dinuba

Percent of map unit: 5 percent

Grangeville

Percent of map unit: 5 percent

Tujunga

Percent of map unit: 5 percent

Taxonomic Classification of the Soils

Merced Area, California

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Hanford	Coarse-loamy, mixed, superactive, nonacid, thermic Typic Xerorthents

Engineering Properties

Merced Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
HbA:												
Hanford	0-12	Fine sandy loam	SM	A-4	0	0	95-100	90-100	50-75	35-50	20-30	NP-5
	12-40	Coarse sandy loam, Fine sandy loam, Sandy loam	SM	A-4	0	0	95-100	90-100	50-75	35-50	20-30	NP-5
	40-60	Sand	SW-SM	A-1	0	0	85-100	75-100	40-50	5-10	0	NP
Dinuba	---	---	---	---	---	---	---	---	---	---	---	---
Grangeville	---	---	---	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
HbA:														
Hanford	0-12	---	---	7-18	1.50-1.60	14.00-42.00	0.10-0.15	0.0-2.9	0.5-1.0	.32	.32	4	3	86
	12-40	---	---	7-18	1.50-1.60	14.00-42.00	0.10-0.15	0.0-2.9	0.0-0.5	.32	.32			
	40-60	---	---	0-5	1.60-1.70	42.00-141.00	0.04-0.06	0.0-2.9	0.0	.10	.10			
Dinuba	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Grangeville	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
HbA:									
Hanford	---	---	---	---	---	---	None	Moderate	Low
Dinuba	---	---	---	---	---	---	---	---	---
Grangeville	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
HbA:								
Hanford	0-12	5.0-10	---	6.6-7.3	0	0	0.0	0
	12-40	5.0-10	---	6.6-7.3	0	0	0.0	0
	40-60	5.0-10	---	6.6-7.3	0	0	0.0	0
Dinuba	---	---	---	---	---	---	---	---
Grangeville	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
HbA:										
Hanford	B	Very low	January	---	---	---	---	None	Brief	Rare
			February	---	---	---	---	None	Brief	Rare
			March	---	---	---	---	None	Brief	Rare
			April	---	---	---	---	None	Brief	Rare
			May	---	---	---	---	None	Brief	Rare
			June	---	---	---	---	None	Brief	Rare
			July	---	---	---	---	None	Brief	Rare
			August	---	---	---	---	None	Brief	Rare
			September	---	---	---	---	None	Brief	Rare
			October	---	---	---	---	None	Brief	Rare
			November	---	---	---	---	None	Brief	Rare
			December	---	---	---	---	None	Brief	Rare
Dinuba	---	---	Jan-Dec			---	---	None	---	None
Grangeville	---	---	Jan-Dec			---	---	None	---	None
Tujunga	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced Area, California

HgA Hilmar loamy sand, 0 to 3 percent slopes

Setting

Elevation: 300 to 900 feet
Mean annual precipitation: 11 to 11 inches
Mean annual air temperature: 63 to 63 degrees F
Frost-free period: 230 to 300 days

Composition

Hilmar and similar soils: 85 percent
Minor components: 15 percent

Description of Hilmar

Setting

Landform: Fan skirts
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Wind modified sandy alluvium derived from granite over silty alluvium derived from granite

Properties and Qualities

Slope: 0 to 3 percent
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low or moderately high (0.06 to 0.20 in/hr)
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 5 percent
Gypsum maximum: 0 percent
Salinity maximum: Non saline or very slightly saline (2.0 to 4.0 mmhos/cm)
Available water capacity: Moderate (about 7.7 inches)

Interpretive Groups

Land capability classification (irrigated): 2w
Land capability (non irrigated): 4w

Typical Profile

0 to 23 inches: loamy sand
23 to 60 inches: stratified very fine sandy loam to silt loam

Minor Components

Delhi

Percent of map unit: 5 percent

Dello

Percent of map unit: 5 percent
Landform: Depressions

Tujunga

Percent of map unit: 5 percent

Taxonomic Classification of the Soils

Merced Area, California

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Hilmar	Sandy over loamy, mixed (calcareous), active, thermic Aeric Halaquepts

Engineering Properties

Merced Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
HgA:												
Hilmar	0-23	Loamy sand	SM	A-2	0	0	100	100	50-75	15-30	0	NP
	23-60	Stratified very fine sandy loam to silt loam	ML	A-4	0	0	100	100	90-100	60-85	25-35	NP-10
Delhi	---	---	---	---	---	---	---	---	---	---	---	---
Dello	---	---	---	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
HgA:														
Hilmar	0-23	---	---	0-10	1.55-1.65	42.00-141.00	0.06-0.10	0.0-2.9	0.5-1.0	.24	.24	5	2	134
	23-60	---	---	8-15	1.45-1.55	0.42-1.40	0.14-0.17	0.0-2.9	0.0-0.5	.55	.55			
Delhi	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dello	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
HgA:									
Hilmar	---	---	---	---	---	---	None	High	Low
Delhi	---	---	---	---	---	---	---	---	---
Dello	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
HgA:								
Hilmar	0-23	1.0-5.0	---	7.3-8.4	0	0	2.0-4.0	0
	23-60	1.0-5.0	---	8.4-9.6	1-5	0	2.0-4.0	0
Delhi	---	---	---	---	---	---	---	---
Dello	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
HgA:										
Hilmar	C	Medium	Jan-Dec			---	---	None	---	None
Delhi	---	---	Jan-Dec			---	---	None	---	None
Dello	---	---	Jan-Dec			---	---	None	---	None
Tujunga	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced Area, California

HfA Hilmar loamy sand, poorly drained, slightly saline-alkali, 0 to 1 percent slopes

Setting

Elevation: 300 to 900 feet
Mean annual precipitation: 11 to 11 inches
Mean annual air temperature: 63 to 63 degrees F
Frost-free period: 230 to 300 days

Composition

Hilmar and similar soils: 85 percent
Minor components: 15 percent

Description of Hilmar

Setting

Landform: Fan skirts
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Wind modified sandy alluvium derived from granite over silty alluvium derived from granite

Properties and Qualities

Slope: 0 to 1 percent
Depth to restrictive feature: None within 60 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low or moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 0 to 0 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate maximum: 5 percent
Gypsum maximum: 0 percent
Salinity maximum: Very slightly saline or slightly saline (4.0 to 8.0 mmhos/cm)
Sodium adsorption ratio maximum: 5.0
Available water capacity: Very low (about 1.8 inches)

Interpretive Groups

Land capability classification (irrigated): 4w
Land capability (non irrigated): 4w

Typical Profile

0 to 23 inches: loamy sand
23 to 60 inches: stratified very fine sandy loam to silt loam

Minor Components

Delhi

Percent of map unit: 5 percent

Dello

Percent of map unit: 5 percent
Landform: Depressions

Tujunga

Percent of map unit: 5 percent

Taxonomic Classification of the Soils

Merced Area, California

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Hilmar	Sandy over loamy, mixed (calcareous), active, thermic Aeric Halaquepts

Engineering Properties

Merced Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
HfA:												
Hilmar	0-23	Loamy sand	SM	A-2	0	0	100	100	50-75	15-30	0	NP
	23-60	Stratified very fine sandy loam to silt loam	ML	A-4	0	0	100	100	90-100	60-85	25-35	NP-10
Delhi	---	---	---	---	---	---	---	---	---	---	---	---
Dello	---	---	---	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
HfA:														
Hilmar	0-23	---	---	0-10	1.55-1.65	42.00-141.00	0.06-0.10	0.0-2.9	0.5-1.0	.24	.24	5	2	134
	23-60	---	---	8-15	1.45-1.55	0.42-1.40	0.14-0.17	0.0-2.9	0.0-0.5	.55	.55			
Delhi	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dello	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
HfA:									
Hilmar	Abrupt textural change	---	---	Strongly cemented	---	---	None	High	Low
Delhi	---	---	---	---	---	---	---	---	---
Dello	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
HfA:								
Hilmar	0-23	1.0-5.0	---	7.3-8.4	0	0	4.0-8.0	0
	23-60	1.0-5.0	---	8.4-9.6	1-5	0	4.0-8.0	0-5
Delhi	---	---	---	---	---	---	---	---
Dello	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
HfA:										
Hilmar	D	Medium	January	0.0	1.0-2.5	---	---	None	Brief	Rare
				1.0-2.5	1.5-2.5					
			February	0.0	1.0-2.5	---	---	None	Brief	Rare
				1.0-2.5	1.5-2.5					
			March	0.0	1.0-2.5	---	---	None	Brief	Rare
				1.0-2.5	1.5-2.5					
			April	1.0-2.5	1.5-2.5	---	---	None	Brief	Rare
			May	1.0-2.5	1.5-2.5	---	---	None	Brief	Rare
			June	---	---	---	---	None	Brief	Rare
			July	---	---	---	---	None	Brief	Rare
			August	---	---	---	---	None	Brief	Rare
			September	---	---	---	---	None	Brief	Rare
			October	---	---	---	---	None	Brief	Rare
			November	---	---	---	---	None	Brief	Rare
			December	---	---	---	---	None	Brief	Rare
Delhi	---	---	Jan-Dec			---	---	None	---	None
Dello	---	---	Jan-Dec			---	---	None	---	None
Tujunga	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced Area, California

HhA Hilmar loamy sand, slightly saline-alkali, 0 to 3 percent slope

Setting

Elevation: 300 to 900 feet
Mean annual precipitation: 11 to 11 inches
Mean annual air temperature: 63 to 63 degrees F
Frost-free period: 230 to 300 days

Composition

Hilmar and similar soils: 85 percent
Minor components: 15 percent

Description of Hilmar

Setting

Landform: Fan skirts
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Wind modified sandy alluvium derived from granite over silty alluvium derived from granite

Properties and Qualities

Slope: 0 to 3 percent
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low or moderately high (0.06 to 0.20 in/hr)
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 5 percent
Gypsum maximum: 0 percent
Salinity maximum: Very slightly saline or slightly saline (4.0 to 8.0 mmhos/cm)
Sodium adsorption ratio maximum: 5.0
Available water capacity: Moderate (about 7.7 inches)

Interpretive Groups

Land capability classification (irrigated): 2w
Land capability (non irrigated): 4w

Typical Profile

0 to 23 inches: loamy sand
23 to 60 inches: stratified very fine sandy loam to silt loam

Minor Components

Delhi

Percent of map unit: 5 percent

Dello

Percent of map unit: 5 percent
Landform: Depressions

Tujunga

Percent of map unit: 5 percent

Taxonomic Classification of the Soils

Merced Area, California

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Hilmar	Sandy over loamy, mixed (calcareous), active, thermic Aeric Halaquepts

Engineering Properties

Merced Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
HhA:												
Hilmar	0-23	Loamy sand	SM	A-2	0	0	100	100	50-75	15-30	0	NP
	23-60	Stratified very fine sandy loam to silt loam	ML	A-4	0	0	100	100	90-100	60-85	25-35	NP-10
Delhi	---	---	---	---	---	---	---	---	---	---	---	---
Dello	---	---	---	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
HhA:														
Hilmar	0-23	---	---	0-10	1.55-1.65	42.00-141.00	0.06-0.10	0.0-2.9	0.5-1.0	.24	.24	5	2	134
	23-60	---	---	8-15	1.45-1.55	0.42-1.40	0.14-0.17	0.0-2.9	0.0-0.5	.55	.55			
Delhi	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dello	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
HhA:									
Hilmar	---	---	---	---	---	---	None	High	Low
Delhi	---	---	---	---	---	---	---	---	---
Dello	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
HhA:								
Hilmar	0-23	1.0-5.0	---	7.3-8.4	0	0	4.0-8.0	0
	23-60	1.0-5.0	---	8.4-9.6	1-5	0	4.0-8.0	0-5
Delhi	---	---	---	---	---	---	---	---
Dello	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
HhA:										
Hilmar	C	Medium	Jan-Dec			---	---	None	---	None
Delhi	---	---	Jan-Dec			---	---	None	---	None
Dello	---	---	Jan-Dec			---	---	None	---	None
Tujunga	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced Area, California

HoA Hilmar sand, 0 to 3 percent slopes

Setting

Elevation: 300 to 900 feet
Mean annual precipitation: 11 to 11 inches
Mean annual air temperature: 63 to 63 degrees F
Frost-free period: 230 to 300 days

Composition

Hilmar and similar soils: 85 percent
Minor components: 15 percent

Description of Hilmar

Setting

Landform: Fan skirts
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Wind modified sandy alluvium derived from granite over silty alluvium derived from granite

Properties and Qualities

Slope: 0 to 3 percent
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low or moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 0 to 0 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 5 percent
Gypsum maximum: 0 percent
Salinity maximum: Non saline or very slightly saline (2.0 to 4.0 mmhos/cm)
Available water capacity: Moderate (about 7.3 inches)

Interpretive Groups

Land capability classification (irrigated): 3w
Land capability (non irrigated): 4w

Typical Profile

0 to 23 inches: sand
23 to 60 inches: stratified very fine sandy loam to silt loam

Minor Components

Tujunga

Percent of map unit: 5 percent

Dello

Percent of map unit: 5 percent
Landform: Depressions

Delhi

Percent of map unit: 5 percent

Taxonomic Classification of the Soils

Merced Area, California

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Hilmar	Sandy over loamy, mixed (calcareous), active, thermic Aeric Halaquepts

Engineering Properties

Merced Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
HoA:												
Hilmar	0-23	Sand	SM, SP-SM	A-1, A-2, A-3	0	0	100	100	40-70	5-15	0	NP
	23-60	Stratified very fine sandy loam to silt loam	ML	A-4	0	0	100	100	90-100	60-85	25-35	NP-10
Delhi	---	---	---	---	---	---	---	---	---	---	---	---
Dello	---	---	---	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
HoA:														
Hilmar	0-23	---	---	0-5	1.60-1.70	42.00-141.00	0.05-0.07	0.0-2.9	0.5-1.0	.20	.20	5	1	180
	23-60	---	---	8-15	1.45-1.55	0.42-1.40	0.14-0.17	0.0-2.9	0.0-0.5	.55	.55			
Delhi	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dello	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
HoA:									
Hilmar	---	---	---	---	---	---	None	High	Low
Delhi	---	---	---	---	---	---	---	---	---
Dello	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
HoA:								
Hilmar	0-23	1.0-5.0	---	7.3-8.4	0	0	2.0-4.0	0
	23-60	1.0-5.0	---	8.4-9.6	1-5	0	2.0-4.0	0
Delhi	---	---	---	---	---	---	---	---
Dello	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
HoA:										
Hilmar	C	Medium	January	0.0	3.0-5.0	---	---	None	---	None
				1.5-3.3	>6.0					
			February	0.0	3.0-5.0	---	---	None	---	None
				1.5-3.3	>6.0					
			March	0.0	3.0-5.0	---	---	None	---	None
Delhi	---	---	Jan-Dec			---	---	None	---	None
Dello	---	---	Jan-Dec			---	---	None	---	None
Tujunga	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced Area, California

HkA Hilmar sand, poorly drained, 0 to 1 percent slopes

Setting

Elevation: 300 to 900 feet
Mean annual precipitation: 11 to 11 inches
Mean annual air temperature: 63 to 63 degrees F
Frost-free period: 230 to 300 days

Composition

Hilmar and similar soils: 85 percent
Minor components: 15 percent

Description of Hilmar

Setting

Landform: Fan skirts
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Wind modified sandy alluvium derived from granite over silty alluvium derived from granite

Properties and Qualities

Slope: 0 to 1 percent
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low or moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 0 to 0 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate maximum: 5 percent
Gypsum maximum: 0 percent
Salinity maximum: Non saline or very slightly saline (2.0 to 4.0 mmhos/cm)
Available water capacity: Moderate (about 7.3 inches)

Interpretive Groups

Land capability classification (irrigated): 4w
Land capability (non irrigated): 4w

Typical Profile

0 to 23 inches: sand
23 to 60 inches: stratified very fine sandy loam to silt loam

Minor Components

Delhi

Percent of map unit: 5 percent

Dello

Percent of map unit: 5 percent
Landform: Depressions

Tujunga

Percent of map unit: 5 percent

Taxonomic Classification of the Soils

Merced Area, California

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Hilmar	Sandy over loamy, mixed (calcareous), active, thermic Aeric Halaquepts

Engineering Properties

Merced Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
HkA:												
Hilmar	0-23	Sand	SM, SP-SM	A-1, A-2, A-3	0	0	100	100	40-70	5-15	0	NP
	23-60	Stratified very fine sandy loam to silt loam	ML	A-4	0	0	100	100	90-100	60-85	25-35	NP-10
Delhi	---	---	---	---	---	---	---	---	---	---	---	---
Dello	---	---	---	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
HkA:														
Hilmar	0-23	---	---	0-5	1.60-1.70	42.00-141.00	0.05-0.07	0.0-2.9	0.5-1.0	.20	.20	5	1	180
	23-60	---	---	8-15	1.45-1.55	0.42-1.40	0.14-0.17	0.0-2.9	0.0-0.5	.55	.55			
Delhi	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dello	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
HkA:									
Hilmar	---	---	---	---	---	---	None	High	Low
Delhi	---	---	---	---	---	---	---	---	---
Dello	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
HkA:								
Hilmar	0-23	1.0-5.0	---	7.3-8.4	0	0	2.0-4.0	0
	23-60	1.0-5.0	---	8.4-9.6	1-5	0	2.0-4.0	0
Delhi	---	---	---	---	---	---	---	---
Dello	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
HkA:										
Hilmar	D	Medium	January	0.0	1.0-1.5	---	---	None	Brief	Rare
				1.0-1.5	1.5-2.5					
			February	0.0	1.0-1.5	---	---	None	Brief	Rare
				1.0-1.5	1.5-2.5					
			March	1.0-1.5	1.5-2.5	---	---	None	Brief	Rare
			April	1.0-1.5	1.5-2.5	---	---	None	Brief	Rare
			May	---	---	---	---	None	Brief	Rare
			June	---	---	---	---	None	Brief	Rare
			July	---	---	---	---	None	Brief	Rare
			August	---	---	---	---	None	Brief	Rare
			September	---	---	---	---	None	Brief	Rare
			October	---	---	---	---	None	Brief	Rare
			November	---	---	---	---	None	Brief	Rare
			December	---	---	---	---	None	Brief	Rare
Delhi	---	---	Jan-Dec			---	---	None	---	None
Dello	---	---	Jan-Dec			---	---	None	---	None
Tujunga	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced Area, California

HmA Hilmar sand poorly drained, moderately saline-alkali, 0 to 1 percent slopes

Setting

Elevation: 300 to 900 feet
Mean annual precipitation: 11 to 11 inches
Mean annual air temperature: 63 to 63 degrees F
Frost-free period: 230 to 300 days

Composition

Hilmar and similar soils: 85 percent
Minor components: 15 percent

Description of Hilmar

Setting

Landform: Fan skirts
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Wind modified sandy alluvium derived from granite over silty alluvium derived from granite

Properties and Qualities

Slope: 0 to 1 percent
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low or moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 0 to 0 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate maximum: 5 percent
Gypsum maximum: 0 percent
Salinity maximum: Slightly saline or moderately saline (8.0 to 16.0 mmhos/cm)
Sodium adsorption ratio maximum: 10.0
Available water capacity: Moderate (about 7.3 inches)

Interpretive Groups

Land capability classification (irrigated): 4w
Land capability (non irrigated): 4w

Typical Profile

0 to 23 inches: sand
23 to 60 inches: stratified very fine sandy loam to silt loam

Minor Components

Delhi

Percent of map unit: 5 percent

Dello

Percent of map unit: 5 percent
Landform: Depressions

Tujunga

Percent of map unit: 5 percent

Taxonomic Classification of the Soils

Merced Area, California

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Hilmar	Sandy over loamy, mixed (calcareous), active, thermic Aeric Halaquepts

Engineering Properties

Merced Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
HmA:												
Hilmar	0-23	Sand	SM, SP-SM	A-1, A-2, A-3	0	0	100	100	40-70	5-15	0	NP
	23-60	Stratified very fine sandy loam to silt loam	ML	A-4	0	0	100	100	90-100	60-85	25-35	NP-10
Delhi	---	---	---	---	---	---	---	---	---	---	---	---
Dello	---	---	---	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
HmA:														
Hilmar	0-23	---	---	0-5	1.60-1.70	42.00-141.00	0.05-0.07	0.0-2.9	0.5-1.0	.20	.20	5	1	180
	23-60	---	---	8-15	1.45-1.55	0.42-1.40	0.14-0.17	0.0-2.9	0.0-0.5	.55	.55			
Delhi	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dello	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
HmA:									
Hilmar	---	---	---	---	---	---	None	High	Low
Delhi	---	---	---	---	---	---	---	---	---
Dello	---	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
HmA:								
Hilmar	0-23	1.0-5.0	---	7.3-8.4	0	0	8.0-16.0	0-5
	23-60	1.0-5.0	---	8.4-9.6	1-5	0	8.0-16.0	5-10
Delhi	---	---	---	---	---	---	---	---
Dello	---	---	---	---	---	---	---	---
Tujunga	---	---	---	---	---	---	---	---

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
HmA:										
Hilmar	D	Medium	January	0.0	1.0-1.5	---	---	None	Brief	Rare
				1.0-1.5	1.5-2.5					
			February	0.0	1.0-1.5	---	---	None	Brief	Rare
				1.0-1.5	1.5-2.5					
			March	1.0-1.5	1.5-2.5	---	---	None	Brief	Rare
			April	1.0-1.5	1.5-2.5	---	---	None	Brief	Rare
			May	---	---	---	---	None	Brief	Rare
			June	---	---	---	---	None	Brief	Rare
			July	---	---	---	---	None	Brief	Rare
			August	---	---	---	---	None	Brief	Rare
			September	---	---	---	---	None	Brief	Rare
			October	---	---	---	---	None	Brief	Rare
			November	---	---	---	---	None	Brief	Rare
			December	---	---	---	---	None	Brief	Rare
Delhi	---	---	Jan-Dec			---	---	None	---	None
Dello	---	---	Jan-Dec			---	---	None	---	None
Tujunga	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced Area, California

HpA Hilmar sand, slightly saline-alkali, 0 to 3 percent slopes

Setting

Elevation: 300 to 900 feet
Mean annual precipitation: 11 to 11 inches
Mean annual air temperature: 63 to 63 degrees F
Frost-free period: 230 to 300 days

Composition

Hilmar and similar soils: 85 percent
Minor components: 15 percent

Description of Hilmar

Setting

Landform: Fan skirts
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Wind modified sandy alluvium derived from granite over silty alluvium derived from granite

Properties and Qualities

Slope: 0 to 3 percent
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low or moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 0 to 0 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 5 percent
Gypsum maximum: 0 percent
Salinity maximum: Very slightly saline or slightly saline (4.0 to 8.0 mmhos/cm)
Available water capacity: Moderate (about 7.3 inches)

Interpretive Groups

Land capability classification (irrigated): 3w
Land capability (non irrigated): 4w

Typical Profile

0 to 23 inches: sand
23 to 60 inches: stratified very fine sandy loam to silt loam

Minor Components

Delhi

Percent of map unit: 5 percent

Dello

Percent of map unit: 5 percent

Tujunga

Percent of map unit: 5 percent

Taxonomic Classification of the Soils

Merced Area, California

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Hilmar	Sandy over loamy, mixed (calcareous), active, thermic Aeric Halaquepts

Engineering Properties

Merced Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
HpA:												
Hilmar	0-23	Sand	SM, SP-SM	A-1, A-2, A-3	0	0	100	100	40-70	5-15	0	NP
	23-60	Stratified very fine sandy loam to silt loam	ML	A-4	0	0	100	100	90-100	60-85	25-35	NP-10

Physical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
HpA:														
Hilmar	0-23	---	---	0-5	1.60-1.70	42.00-141.00	0.05-0.07	0.0-2.9	0.5-1.0	.20	.20	5	1	180
	23-60	---	---	8-15	1.45-1.55	0.42-1.40	0.14-0.17	0.0-2.9	0.0-0.5	.55	.55			

Soil Features

Merced Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
HpA:									
Hilmar	---	---	---	---	---	---	None	High	Low

Chemical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
HpA:								
Hilmar	0-23	1.0-5.0	---	7.3-8.4	0	0	4.0-8.0	0
	23-60	1.0-5.0	---	8.4-9.6	1-5	0	4.0-8.0	0

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
HpA:										
Hilmar	C	Medium	January	0.0	3.0-5.0	---	---	None	---	None
				1.5-3.3	>6.0					
			February	0.0	3.0-5.0	---	---	None	---	None
				1.5-3.3	>6.0					

Map Unit Description

Merced Area, California

LeA Landlow silty clay loam, 0 to 1 percent slopes

Setting

Landscape: Basins
Elevation: 200 to 200 feet
Mean annual precipitation: 15 to 15 inches
Mean annual air temperature: 61 to 61 degrees F
Frost-free period: 230 to 290 days

Composition

Landlow and similar soils: 85 percent
Minor components: 15 percent

Description of Landlow

Setting

Landform: Basin floors
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from igneous, metamorphic and sedimentary rock

Properties and Qualities

Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Very low or moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 0 to 0 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate maximum: 5 percent
Gypsum maximum: 0 percent
Available water capacity: High (about 9.1 inches)

Interpretive Groups

Land capability classification (irrigated): 2w
Land capability (non irrigated): 4w

Typical Profile

0 to 12 inches: silty clay loam
12 to 46 inches: clay
46 to 60 inches: clay

Minor Components

Lewis

Percent of map unit: 5 percent

Yokohl

Percent of map unit: 5 percent

Burchell

Percent of map unit: 4 percent

Unnamed

Percent of map unit: 1 percent
Landform: Depressions

Taxonomic Classification of the Soils

Merced Area, California

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Landlow	Fine, smectitic, thermic Aquic Haploxerolls

Engineering Properties

Merced Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
LeA:												
Landlow	0-12	Silty clay loam	CL	A-7	0	0	100	100	90-100	80-90	40-50	20-30
	12-46	Clay, Silty clay, Silty clay loam	CH, CL	A-7	0	0	100	100	95-100	85-95	45-65	25-45
	46-60	Clay, Clay loam	CH, CL	A-7	0	0	100	95-100	90-100	80-95	40-65	20-45
Lewis	---	---	---	---	---	---	---	---	---	---	---	---
Yokohl	---	---	---	---	---	---	---	---	---	---	---	---
Burchell	---	---	---	---	---	---	---	---	---	---	---	---
Unnamed	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
LeA:														
Landlow	0-12	---	---	30-40	1.35-1.45	0.42-1.40	0.16-0.17	6.0-8.9	1.0-2.0	.37	.37	5	7	38
	12-46	---	---	35-60	1.30-1.50	0.42-1.40	0.13-0.16	6.0-8.9	0.0-0.5	.32	.32			
	46-60	---	---	35-60	1.30-1.50	0.01-0.42	0.13-0.15	6.0-8.9	0.0-0.5	.32	.32			
Lewis	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Yokohl	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Burchell	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Unnamed	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
LeA:									
Landlow	---	---	---	---	---	---	None	High	Low
Lewis	---	---	---	---	---	---	---	---	---
Yokohl	---	---	---	---	---	---	---	---	---
Burchell	---	---	---	---	---	---	---	---	---
Unnamed	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
LeA:								
Landlow	0-12	25-35	---	6.6-8.4	0	0	0.0-4.0	0
	12-46	30-50	---	7.4-8.4	1-5	0	0.0-4.0	0
	46-60	25-45	---	7.9-8.4	1-5	0	0.0-4.0	0
Lewis	---	---	---	---	---	---	---	---
Yokohl	---	---	---	---	---	---	---	---
Burchell	---	---	---	---	---	---	---	---
Unnamed	---	---	---	---	---	---	---	---

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
LeA:										
Landlow	C	High	January	0.0	3.0-4.0	---	---	None	Brief	Rare
				3.0-4.0	>6.0					
			February	0.0	3.0-4.0	---	---	None	Brief	Rare
				3.0-4.0	>6.0					
			March	3.0-4.0	>6.0	---	---	None	Brief	Rare
			April	3.0-4.0	>6.0	---	---	None	Brief	Rare
			May	3.0-4.0	>6.0	---	---	None	Brief	Rare
			June	---	---	---	---	None	Brief	Rare
			July	---	---	---	---	None	Brief	Rare
			August	---	---	---	---	None	Brief	Rare
			September	---	---	---	---	None	Brief	Rare
			October	---	---	---	---	None	Brief	Rare
			November	3.0-4.0	>6.0	---	---	None	Brief	Rare
			December	0.0	3.0-4.0	---	---	None	Brief	Rare
				3.0-4.0	>6.0					
Lewis	---	---	Jan-Dec			---	---	None	---	None
Yokohl	---	---	Jan-Dec			---	---	None	---	None
Burchell	---	---	Jan-Dec			---	---	None	---	None

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
LeA:										
Unnamed	---	---	January	---	---	---	---	None	Brief	None
			February	---	---	---	---	None	Brief	None
			March	---	---	---	---	None	Brief	None
			April	---	---	---	---	None	Brief	None
			May	---	---	---	---	None	Brief	None
			June	---	---	---	---	None	Brief	None
			July	---	---	---	---	None	Brief	None
			August	---	---	---	---	None	Brief	None
			September	---	---	---	---	None	Brief	None
			October	---	---	---	---	None	Brief	None
			November	---	---	---	---	None	Brief	None
			December	---	---	---	---	None	Brief	None

Map Unit Description

Merced Area, California

LfA Landlow silty clay loam, slightly saline-alkali, 0 to 1 percent slopes

Setting

Landscape: Basins
Elevation: 30 to 150 feet
Mean annual precipitation: 12 to 18 inches
Mean annual air temperature: 61 to 63 degrees F
Frost-free period: 230 to 290 days

Composition

Landlow and similar soils: 85 percent
Minor components: 15 percent

Description of Landlow

Setting

Landform: Basin floors
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from igneous, metamorphic and sedimentary rock

Properties and Qualities

Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Very low or moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 0 to 0 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate maximum: 5 percent
Gypsum maximum: 0 percent
Salinity maximum: Very slightly saline or slightly saline (4.0 to 8.0 mmhos/cm)
Sodium adsorption ratio maximum: 5.0
Available water capacity: Moderate (about 7.5 inches)

Interpretive Groups

Land capability classification (irrigated): 2w
Land capability (non irrigated): 4w

Typical Profile

0 to 12 inches: silty clay loam
12 to 46 inches: clay
46 to 60 inches: clay

Minor Components

Lewis

Percent of map unit: 5 percent

Yokohl

Percent of map unit: 5 percent

Burchell

Percent of map unit: 4 percent

Unnamed

Percent of map unit: 1 percent
Landform: Depressions

Taxonomic Classification of the Soils

Merced Area, California

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Landlow	Fine, smectitic, thermic Aquic Haploxerolls

Engineering Properties

Merced Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
LfA:												
Landlow	0-12	Silty clay loam	CL	A-7	0	0	100	100	90-100	80-90	40-50	20-30
	12-46	Clay, Silty clay, Silty clay loam	CH, CL	A-7	0	0	100	100	95-100	85-95	45-65	25-45
	46-60	Clay, Clay loam	CH, CL	A-7	0	0	100	95-100	90-100	80-95	40-65	20-45
Lewis	---	---	---	---	---	---	---	---	---	---	---	---
Yokohl	---	---	---	---	---	---	---	---	---	---	---	---
Burchell	---	---	---	---	---	---	---	---	---	---	---	---
Unnamed	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
LfA:														
Landlow	0-12	---	---	30-40	1.35-1.45	0.42-1.40	0.12-0.17	6.0-8.9	1.0-2.0	.37	.37	5	7	38
	12-46	---	---	35-60	1.30-1.50	0.42-1.40	0.09-0.14	6.0-8.9	0.0-0.5	.32	.32			
	46-60	---	---	35-60	1.30-1.50	0.01-0.42	0.09-0.15	6.0-8.9	0.0-0.5	.32	.32			
Lewis	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Yokohl	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Burchell	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Unnamed	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
LfA:									
Landlow	---	---	---	---	---	---	None	High	Low
Lewis	---	---	---	---	---	---	---	---	---
Yokohl	---	---	---	---	---	---	---	---	---
Burchell	---	---	---	---	---	---	---	---	---
Unnamed	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
LfA:								
Landlow	0-12	25-35	---	7.4-8.4	0	0	4.0-8.0	0
	12-46	30-50	---	7.4-9.0	1-5	0	4.0-8.0	0-5
	46-60	25-45	---	7.9-9.0	1-5	0	4.0-8.0	0-5
Lewis	---	---	---	---	---	---	---	---
Yokohl	---	---	---	---	---	---	---	---
Burchell	---	---	---	---	---	---	---	---
Unnamed	---	---	---	---	---	---	---	---

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
LfA:										
Landlow	C	High	January	0.0 3.0-4.0	3.0-4.0 >6.0	---	---	None	Brief	Rare
			February	0.0 3.0-4.0	3.0-4.0 >6.0	---	---	None	Brief	Rare
			March	3.0-4.0	>6.0	---	---	None	Brief	Rare
			April	3.0-4.0	>6.0	---	---	None	Brief	Rare
			May	---	---	---	---	None	Brief	Rare
			June	---	---	---	---	None	Brief	Rare
			July	---	---	---	---	None	Brief	Rare
			August	---	---	---	---	None	Brief	Rare
			September	---	---	---	---	None	Brief	Rare
			October	---	---	---	---	None	Brief	Rare
			November	3.0-4.0	>6.0	---	---	None	Brief	Rare
			December	0.0 3.0-4.0	3.0-4.0 >6.0	---	---	None	Brief	Rare
Lewis	---	---	Jan-Dec			---	---	None	---	None
Yokohl	---	---	Jan-Dec			---	---	None	---	None
Burchell	---	---	Jan-Dec			---	---	None	---	None

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
LfA:										
Unnamed	---	---	January	---	---	---	---	None	Brief	None
			February	---	---	---	---	None	Brief	None
			March	---	---	---	---	None	Brief	None
			April	---	---	---	---	None	Brief	None
			May	---	---	---	---	None	Brief	None
			June	---	---	---	---	None	Brief	None
			July	---	---	---	---	None	Brief	None
			August	---	---	---	---	None	Brief	None
			September	---	---	---	---	None	Brief	None
			October	---	---	---	---	None	Brief	None
			November	---	---	---	---	None	Brief	None
			December	---	---	---	---	None	Brief	None

Map Unit Description

Merced Area, California

LoA Lewis silty clay loam, slightly saline-alkali, 0 to 1 percent slopes

Setting

Elevation: 100 to 600 feet
Mean annual precipitation: 9 to 12 inches
Mean annual air temperature: 63 to 64 degrees F
Frost-free period: 250 to 300 days

Composition

Lewis and similar soils: 85 percent
Minor components: 15 percent

Description of Lewis

Setting

Landform: Fan remnants
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from igneous, metamorphic and sedimentary rock

Properties and Qualities

Slope: 0 to 1 percent
Depth to restrictive feature: 20 to 40 inches to Duripan
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate maximum: 5 percent
Gypsum maximum: 0 percent
Salinity maximum: Very slightly saline or moderately saline (4.0 to 16.0 mmhos/cm)
Sodium adsorption ratio maximum: 20.0
Available water capacity: Low (about 3.1 inches)

Interpretive Groups

Land capability classification (irrigated): 3s
Land capability (non irrigated): 6s

Typical Profile

0 to 4 inches: silty clay loam
4 to 28 inches: clay loam
28 to 32 inches: cemented
32 to 60 inches: stratified sandy loam to clay loam

Minor Components

Landlow

Percent of map unit: 5 percent

Traver

Percent of map unit: 5 percent

Fresno

Percent of map unit: 4 percent

Unnamed

Percent of map unit: 1 percent
Landform: Depressions

Taxonomic Classification of the Soils

Merced Area, California

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Lewis	Fine, smectitic, thermic Natric Durixeralfs

Engineering Properties

Merced Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
LoA:												
Lewis	0-4	Silty clay loam	CL	A-6, A-7	0	0	100	95-100	90-100	65-80	30-45	10-20
	4-28	Clay, Clay loam	CH, CL	A-7	0	0	100	100	90-100	75-95	40-60	20-30
	28-32	Cemented	---	---	---	---	---	---	---	---	---	---
	32-60	Stratified sandy loam to clay loam	CL-ML	A-4	0	0	100	95-100	60-90	50-60	20-30	5-10
Landlow	---	---	---	---	---	---	---	---	---	---	---	---
Traver	---	---	---	---	---	---	---	---	---	---	---	---
Fresno	---	---	---	---	---	---	---	---	---	---	---	---
Unnamed	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
LoA:														
Lewis	0-4	---	---	27-30	1.40-1.50	1.40-4.00	0.15-0.18	3.0-5.9	0.5-1.0	.43	.43	2	6	48
	4-28	---	---	35-60	1.40-1.55	0.01-0.42	0.06-0.13	6.0-8.9	0.0-0.5	.32	.32			
	28-32	---	---	---	---	0.00-0.01	0.00	---	---	---	---			
	32-60	---	---	15-30	1.50-1.60	1.40-4.00	0.06-0.09	3.0-5.9	0.0	.32	.32			
Landlow	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Traver	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Fresno	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Unnamed	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
LoA:									
Lewis	Duripan	20-40	0-3	Weakly cemented	---	---	None	High	High
Landlow	---	---	---	---	---	---	---	---	---
Traver	---	---	---	---	---	---	---	---	---
Fresno	---	---	---	---	---	---	---	---	---
Unnamed	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
LoA:								
Lewis	0-4	15-25	---	7.9-9.0	1-5	0	0.0-4.0	0-5
	4-28	30-50	---	8.4-9.6	1-5	0	4.0-16.0	10-20
	28-32	---	---	---	---	---	---	---
	32-60	10-20	---	8.4-9.6	1-5	0	4.0-16.0	0-5
Landlow	---	---	---	---	---	---	---	---
Traver	---	---	---	---	---	---	---	---
Fresno	---	---	---	---	---	---	---	---
Unnamed	---	---	---	---	---	---	---	---

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
LoA:										
Lewis	D	Very high	January	---	---	---	---	None	Brief	Rare
			February	---	---	---	---	None	Brief	Rare
			March	---	---	---	---	None	Brief	Rare
			April	---	---	---	---	None	Brief	Rare
			May	---	---	---	---	None	Brief	Rare
			June	---	---	---	---	None	Brief	Rare
			July	---	---	---	---	None	Brief	Rare
			August	---	---	---	---	None	Brief	Rare
			September	---	---	---	---	None	Brief	Rare
			October	---	---	---	---	None	Brief	Rare
			November	---	---	---	---	None	Brief	Rare
			December	---	---	---	---	None	Brief	Rare
Landlow	---	---	Jan-Dec			---	---	None	---	None
Traver	---	---	Jan-Dec			---	---	None	---	None
Fresno	---	---	Jan-Dec			---	---	None	---	None

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
LoA:										
Unnamed	---	---	January	---	---	---	---	None	Brief	None
			February	---	---	---	---	None	Brief	None
			March	---	---	---	---	None	Brief	None
			April	---	---	---	---	None	Brief	None
			May	---	---	---	---	None	Brief	None
			June	---	---	---	---	None	Brief	None
			July	---	---	---	---	None	Brief	None
			August	---	---	---	---	None	Brief	None
			September	---	---	---	---	None	Brief	None
			October	---	---	---	---	None	Brief	None
			November	---	---	---	---	None	Brief	None
			December	---	---	---	---	None	Brief	None

Map Unit Description

Merced Area, California

Rf Riverwash

Composition

Riverwash: 100 percent

Description of Riverwash

Setting

Landform: Basin floors
Parent material: Gravelly alluvium

Properties and Qualities

Slope: 0 to 2 percent
Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High or very high (5.95 to 19.98 in/hr)
Depth to water table: About 0 to 0 inches
Frequency of flooding: Frequent
Frequency of ponding: None
Calcium carbonate maximum: 0 percent
Gypsum maximum: 0 percent
Available water capacity: Very low (about 2.9 inches)

Interpretive Groups

Land capability (non irrigated): 8

Typical Profile

0 to 6 inches: coarse sand
6 to 60 inches: stratified coarse sand to sandy loam

Engineering Properties

Merced Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
Rf:												
Riverwash	0-6	Coarse sand	SP, SP-SM, SW, SW-SM	A-1, A-3	0	0-5	80-100	75-100	30-60	0-10	0	NP
	6-60	Stratified coarse sand to sandy loam	SM, SP, SP-SM	A-1, A-2, A-3	---	0-5	80-100	75-100	40-70	0-20	0	NP

Physical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
Rf:														
Riverwash	0-6	---	---	0-1	1.60-1.70	42.00-141.00	0.03-0.04	0.0-2.9	0.0-0.1	.10	.10	5	1	180
	6-60	---	---	0-5	1.60-1.70	42.00-141.00	0.04-0.06	0.0-2.9	0.0	.10	.10			

Soil Features

Merced Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
Rf:									
Riverwash	---	---	---	---	---	---	None	---	---

Chemical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
Rf:								
Riverwash	0-6	---	1.0-5.0	---	0	0	0.0	0
	6-60	---	1.0-5.0	---	0	0	0.0	0

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
Rf:										
Riverwash	D	Very low	January	0.0	0.0-2.0	---	---	None	Very long	Frequent
				0.0-2.0	>6.0					
			February	0.0	0.0-2.0	---	---	None	Very long	Frequent
				0.0-2.0	>6.0					
			March	0.0	0.0-2.0	---	---	None	Very long	Frequent
				0.0-2.0	>6.0					
			April	0.0	0.0-2.0	---	---	None	Very long	Frequent
				0.0-2.0	>6.0					
			May	0.0-2.0	>6.0	---	---	None	Very long	Frequent
			June	0.0-2.0	>6.0	---	---	None	Very long	Frequent
			July	0.0-2.0	>6.0	---	---	None	Very long	Frequent
			August	0.0-2.0	>6.0	---	---	None	---	None
			September	0.0-2.0	>6.0	---	---	None	---	None
			October	0.0-2.0	>6.0	---	---	None	Very long	Frequent
			November	0.0	0.0-2.0	---	---	None	Very long	Frequent
				0.0-2.0	>6.0					
			December	0.0	0.0-2.0	---	---	None	Very long	Frequent
				0.0-2.0	>6.0					

Map Unit Description

Merced Area, California

SnA Snelling sandy loam, 0 to 3 percent slopes

Setting

Elevation: 150 to 2000 feet
Mean annual precipitation: 12 to 20 inches
Mean annual air temperature: 59 to 63 degrees F
Frost-free period: 250 to 250 days

Composition

Snelling and similar soils: 85 percent
Minor components: 15 percent

Description of Snelling

Setting

Landform: Fan remnants
Landform position (two-dimensional): Backslope
Down-slope shape: Convex
Across-slope shape: Concave
Parent material: Alluvium derived from granite

Properties and Qualities

Slope: 0 to 3 percent
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 0 percent
Gypsum maximum: 0 percent
Available water capacity: Moderate (about 8.4 inches)

Interpretive Groups

Land capability classification (irrigated): 1
Land capability (non irrigated): 4c

Typical Profile

0 to 22 inches: sandy loam
22 to 50 inches: sandy clay loam
50 to 60 inches: sandy loam

Minor Components

Greenfield

Percent of map unit: 5 percent

Montpellier

Percent of map unit: 5 percent

Peters

Percent of map unit: 5 percent

Taxonomic Classification of the Soils

Merced Area, California

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Snelling	TYPIC HAPLOXERALFS, FINE-LOAMY, MIXED, THERMIC

Engineering Properties

Merced Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
SnA:												
Snelling	0-22	Sandy loam	SM	A-4	0	0	90-100	75-100	50-75	35-50	20-30	NP-5
	22-50	Sandy clay loam	SC	A-6	0	0	90-100	85-100	70-90	45-50	25-40	10-20
	50-60	Coarse sandy loam, Loamy sand, Sandy loam	SM	A-2	0	0	90-100	75-100	40-65	25-35	20-30	NP-5
Greenfield	---	---	---	---	---	---	---	---	---	---	---	---
Montpellier	---	---	---	---	---	---	---	---	---	---	---	---
Peters	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
SnA:														
Snelling	0-22	---	---	8-20	1.50-1.60	4.00-14.00	0.10-0.13	0.0-2.9	0.5-1.0	.32	.32	5	3	86
	22-50	---	---	20-30	1.45-1.55	1.40-4.00	0.15-0.18	3.0-5.9	0.0-0.5	.28	.28			
	50-60	---	---	5-15	1.60-1.70	4.00-14.00	0.08-0.12	0.0-2.9	0.0-0.5	.24	.24			
Greenfield	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Montpellier	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Peters	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
SnA:									
Snelling	---	---	---	---	---	---	None	High	Low
Greenfield	---	---	---	---	---	---	---	---	---
Montpellier	---	---	---	---	---	---	---	---	---
Peters	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
SnA:								
Snelling	0-22	5.0-15	---	6.1-7.3	0	0	0.0	0
	22-50	10-20	---	6.1-7.8	0	0	0.0	0
	50-60	5.0-10	---	6.1-8.4	0	0	0.0-2.0	0
Greenfield	---	---	---	---	---	---	---	---
Montpellier	---	---	---	---	---	---	---	---
Peters	---	---	---	---	---	---	---	---

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
SnA:										
Snelling	B	Low	Jan-Dec			---	---	None	---	None
Greenfield	---	---	Jan-Dec			---	---	None	---	None
Montpellier	---	---	Jan-Dec			---	---	None	---	None
Peters	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced Area, California

SnB Snelling sandy loam, 3 to 8 percent slopes

Setting

Elevation: 150 to 2000 feet
Mean annual precipitation: 12 to 20 inches
Mean annual air temperature: 59 to 63 degrees F
Frost-free period: 250 to 250 days

Composition

Snelling and similar soils: 85 percent
Minor components: 15 percent

Description of Snelling

Setting

Landform: Fan remnants
Landform position (two-dimensional): Backslope
Down-slope shape: Convex
Across-slope shape: Concave
Parent material: Alluvium derived from granite

Properties and Qualities

Slope: 3 to 8 percent
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 0 percent
Gypsum maximum: 0 percent
Available water capacity: Moderate (about 8.4 inches)

Interpretive Groups

Land capability classification (irrigated): 2e
Land capability (non irrigated): 4e

Typical Profile

0 to 22 inches: sandy loam
22 to 50 inches: sandy clay loam
50 to 60 inches: sandy loam

Minor Components

Greenfield

Percent of map unit: 5 percent

Montpellier

Percent of map unit: 5 percent

Peters

Percent of map unit: 5 percent

Taxonomic Classification of the Soils

Merced Area, California

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Snelling	TYPIC HAPLOXERALFS, FINE-LOAMY, MIXED, THERMIC

Engineering Properties

Merced Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
SnB:												
Snelling	0-22	Sandy loam	SM	A-4	0	0	90-100	75-100	50-75	35-50	20-30	NP-5
	22-50	Sandy clay loam	SC	A-6	0	0	90-100	85-100	70-90	45-50	25-40	10-20
	50-60	Coarse sandy loam, Loamy sand, Sandy loam	SM	A-2	0	0	90-100	75-100	40-65	25-35	20-30	NP-5
Greenfield	---	---	---	---	---	---	---	---	---	---	---	---
Montpellier	---	---	---	---	---	---	---	---	---	---	---	---
Peters	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
SnB:														
Snelling	0-22	---	---	8-20	1.50-1.60	4.00-14.00	0.10-0.13	0.0-2.9	0.5-1.0	.32	.32	5	3	86
	22-50	---	---	20-30	1.45-1.55	1.40-4.00	0.15-0.18	3.0-5.9	0.0-0.5	.28	.28			
	50-60	---	---	5-15	1.60-1.70	4.00-14.00	0.08-0.12	0.0-2.9	0.0-0.5	.24	.24			
Greenfield	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Montpellier	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Peters	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
SnB:									
Snelling	---	---	---	---	---	---	None	High	Low
Greenfield	---	---	---	---	---	---	---	---	---
Montpellier	---	---	---	---	---	---	---	---	---
Peters	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
SnB:								
Snelling	0-22	5.0-15	---	6.1-7.3	0	0	0.0	0
	22-50	10-20	---	6.1-7.8	0	0	0.0	0
	50-60	5.0-10	---	6.1-8.4	0	0	0.0-2.0	0
Greenfield	---	---	---	---	---	---	---	---
Montpellier	---	---	---	---	---	---	---	---
Peters	---	---	---	---	---	---	---	---

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
SnB:										
Snelling	B	Medium	Jan-Dec			---	---	None	---	None
Greenfield	---	---	Jan-Dec			---	---	None	---	None
Montpellier	---	---	Jan-Dec			---	---	None	---	None
Peters	---	---	Jan-Dec			---	---	None	---	None

Map Unit Description

Merced Area, California

WcA Waukena fine sandy loam, strongly saline-alkali, 0 to 1 percent slopes

Setting

Elevation: 600 to 600 feet
Mean annual precipitation: 10 to 10 inches
Mean annual air temperature: 61 to 61 degrees F
Frost-free period: 250 to 250 days

Composition

Waukena and similar soils: 85 percent
Minor components: 15 percent

Description of Waukena

Setting

Landform: Basin-floor remnants
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Properties and Qualities

Slope: 0 to 1 percent
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low or moderately high (0.06 to 0.20 in/hr)
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate maximum: 5 percent
Gypsum maximum: 0 percent
Salinity maximum: Moderately saline or strongly saline (16.0 to 30.0 mmhos/cm)
Sodium adsorption ratio maximum: 20.0
Available water capacity: Moderate (about 6.1 inches)

Interpretive Groups

Land capability classification (irrigated): 6s
Land capability (non irrigated): 6s

Typical Profile

0 to 10 inches: fine sandy loam
10 to 39 inches: sandy clay loam
39 to 60 inches: stratified loamy fine sand to clay loam

Minor Components

Fresno

Percent of map unit: 5 percent

Hilmar

Percent of map unit: 5 percent

Traver

Percent of map unit: 5 percent

Taxonomic Classification of the Soils

Merced Area, California

[An asterisk by the soil name indicates a taxadjunct to the series]

Soil name	Family or higher taxonomic classification
Waukena	Fine-loamy, mixed, superactive, thermic Typic Natrixeralfs

Engineering Properties

Merced Area, California

Absence of an entry indicates that the data were not estimated. The asterisk '*' denotes the representative texture; other possible textures follow the dash.

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				Pct	Pct					Pct	
WcA:												
Waukena	0-10	Fine sandy loam	SM	A-4	0	0	100	95-100	65-85	35-50	20-30	NP-5
	10-39	Sandy clay loam	SC	A-6	0	0	100	95-100	70-90	35-50	30-40	10-15
	39-60	Stratified loamy fine sand to clay loam	SM	A-2, A-4	0	0	100	95-100	50-80	30-50	20-35	NP-10
Fresno	---	---	---	---	---	---	---	---	---	---	---	---
Hilmar	---	---	---	---	---	---	---	---	---	---	---	---
Traver	---	---	---	---	---	---	---	---	---	---	---	---

Physical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Sand	Silt	Clay	Moist bulk density	Saturated hydraulic conductivity	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
	In	Pct	Pct	Pct	g/cc	micro m/sec	In/In	Pct	Pct					
WcA:														
Waukena	0-10	---	---	8-15	1.50-1.60	4.00-14.00	0.07-0.11	0.0-2.9	0.5-1.0	.37	.37	5	3	86
	10-39	---	---	20-30	1.45-1.60	0.42-1.40	0.08-0.15	3.0-5.9	0.0-0.5	.37	.37			
	39-60	---	---	8-20	1.50-1.70	1.40-4.00	0.06-0.10	0.0-2.9	0.0-0.5	.37	.37			
Fresno	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hilmar	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Traver	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Soil Features

Merced Area, California

Map symbol and soil name	Restrictive layer				Subsidence		Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total		Uncoated steel	Concrete
		In	In		In	In			
WcA:									
Waukena	---	---	---	---	---	---	None	High	Moderate
Fresno	---	---	---	---	---	---	---	---	---
Hilmar	---	---	---	---	---	---	---	---	---
Traver	---	---	---	---	---	---	---	---	---

Chemical Soil Properties

Merced Area, California

Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbon-ate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
WcA:								
Waukena	0-10	5.0-10	---	7.8-9.6	0	0	8.0-16.0	15-20
	10-39	10-20	---	7.8-9.6	1-5	0	16.0-30.0	15-20
	39-60	5.0-10	---	7.8-9.6	1-5	0	4.0-16.0	5-10
Fresno	---	---	---	---	---	---	---	---
Hilmar	---	---	---	---	---	---	---	---
Traver	---	---	---	---	---	---	---	---

Water Features

Merced Area, California

Map symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
WcA:										
Waukena	D	High	January	---	---	---	---	None	Brief	Rare
			February	---	---	---	---	None	Brief	Rare
			March	---	---	---	---	None	Brief	Rare
			April	---	---	---	---	None	Brief	Rare
			May	---	---	---	---	None	Brief	Rare
			June	---	---	---	---	None	Brief	Rare
			July	---	---	---	---	None	Brief	Rare
			August	---	---	---	---	None	Brief	Rare
			September	---	---	---	---	None	Brief	Rare
			October	---	---	---	---	None	Brief	Rare
			November	---	---	---	---	None	Brief	Rare
			December	---	---	---	---	None	Brief	Rare
Fresno	---	---	Jan-Dec			---	---	None	---	None
Hilmar	---	---	Jan-Dec			---	---	None	---	None
Traver	---	---	Jan-Dec			---	---	None	---	None