BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C11216
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road, Clayton, CA

QC Batch ID: MP2433
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 06/02/10

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	14	21		
Antimony	10	6.9	5.3	4.8	<10
Arsenic	10	4.4	3.1	-0.20	<10
Barium	5.0	.6	.7		
Beryllium	5.0	.1	.2	0.10	<5.0
Boron	50	8.6	11	8.2	<50
Cadmium	2.0	.3	.3	0.10	<2.0
Calcium	50	29	12	-27	<50
Chromium	5.0	.4	.6	0.0	<5.0
Cobalt	5.0	.4	.4		
Copper	5.0	.8	1.1	-0.90	<5.0
Iron	50	2.6	18	2.5	<50
Lead	5.0	3.3	1.3	-0.70	<5.0
Lithium	10	2.2	2.5		
Magnesium	50	9.6	13	-3.3	<50
Manganese	5.0	.1	.2	0.0	<5.0
Molybdenum	5.0	1.3	1		
Nickel	5.0	.8	.5	0.20	<5.0
Potassium	500	58	60	61.7	<500
Selenium	20	14	12	1.7	<20
Silicon	50	3.4	5.3	9.9	<50
Silver	5.0	.9	.7	-0.20	<5.0
Sodium	100	15	13	80.9	<100
Strontium	10	.3	2.4		
Thallium	20	6.5	6.4	-4.3	<20
Tin	50	2.3	2		
Titanium	2.0	.2	.2		
Vanadium	5.0	.7	.5		
Zinc	10	.9	1.1	0.50	<10

Associated samples MP2433: C11216-1, C11216-2, C11216-3, C11216-4, C11216-5, C11216-6, C11216-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

4.3.1

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C11216
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road, Clayton, CA

QC Batch ID: MP2433
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 06/02/10

Metal	C11226-2 Original	MS	Spikelot MPIR1	% Rec	QC Limits
Aluminum	anr				
Antimony	0.0	482	500	96.4	80-120
Arsenic	0.0	475	500	95.0	80-120
Barium	anr				
Beryllium	0.0	486	500	97.2	80-120
Boron	98.0	573	500	95.0	80-120
Cadmium	0.0	472	500	94.4	80-120
Calcium	24800	24900	500	20.0 (a)	80-120
Chromium	0.0	487	500	97.4	80-120
Cobalt					
Copper	80.2	568	500	97.6	80-120
Iron	1370	1850	500	96.0	80-120
Lead	0.0	474	500	94.8	80-120
Lithium					
Magnesium	9990	10200	500	42.0 (a)	80-120
Manganese	107	586	500	95.8	80-120
Molybdenum	anr				
Nickel	2.9	484	500	96.2	80-120
Potassium	2570	7440	5000	97.4	80-120
Selenium	0.0	468	500	93.6	80-120
Silicon	3080	3290	250	84.0	80-120
Silver	0.0	500	500	100.0	80-120
Sodium	78200	77600	500	-120.0(a	80-120
Strontium					
Thallium	0.0	445	500	89.0	80-120
Tin					
Titanium					
Vanadium					
Zinc	10.6	481	500	94.1	80-120

Associated samples MP2433: C11216-1, C11216-2, C11216-3, C11216-4, C11216-5, C11216-6, C11216-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C11216
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road, Clayton, CA

QC Batch ID: MP2433
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 06/02/10

Metal	C11226-2 Original	MSD	Spikelot MPIR1	% Rec	MSD RPD	QC Limit
Aluminum	anr					
Antimony	0.0	477	500	95.4	1.0	20
Arsenic	0.0	464	500	92.8	2.3	20
Barium	anr					
Beryllium	0.0	484	500	96.8	0.4	20
Boron	98.0	567	500	93.8	1.1	20
Cadmium	0.0	467	500	93.4	1.1	20
Calcium	24800	24800	500	0.0 (a)	0.4	20
Chromium	0.0	481	500	96.2	1.2	20
Cobalt						
Copper	80.2	564	500	96.8	0.7	20
Iron	1370	1770	500	80.0	4.4	20
Lead	0.0	470	500	94.0	0.8	20
Lithium						
Magnesium	9990	10100	500	22.0 (a)	1.0	20
Manganese	107	583	500	95.2	0.5	20
Molybdenum	anr					
Nickel	2.9	478	500	95.0	1.2	20
Potassium	2570	7380	5000	96.2	0.8	20
Selenium	0.0	459	500	91.8	1.9	20
Silicon	3080	3260	250	72.0 (a)	0.9	20
Silver	0.0	496	500	99.2	0.8	20
Sodium	78200	77700	500	-100.0(a	0.1	20
Strontium						
Thallium	0.0	441	500	88.2	0.9	20
Tin						
Titanium						
Vanadium						
Zinc	10.6	475	500	92.9	1.3	20

Associated samples MP2433: C11216-1, C11216-2, C11216-3, C11216-4, C11216-5, C11216-6, C11216-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

4.3.2

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C11216
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road, Clayton, CA

QC Batch ID: MP2433
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

4.3.3

Prep Date: 06/02/10 06/02/10

Metal	BSP Result	Spikelot MPIR1	% Rec	QC Limits	BSD Result	Spikelot MPIR1	% Rec	BSD RPD	QC Limit
Aluminum	anr								
Antimony	466	500	93.2	80-120	475	500	95.0	1.9	
Arsenic	446	500	89.2	80-120	458	500	91.6	2.7	
Barium	anr								
Beryllium	467	500	93.4	80-120	473	500	94.6	1.3	
Boron	472	500	94.4	80-120	484	500	96.8	2.5	
Cadmium	460	500	92.0	80-120	468	500	93.6	1.7	
Calcium	457	500	91.4	80-120	474	500	94.8	3.7	
Chromium	483	500	96.6	80-120	491	500	98.2	1.6	
Cobalt									
Copper	466	500	93.2	80-120	473	500	94.6	1.5	
Iron	485	500	97.0	80-120	495	500	99.0	2.0	
Lead	470	500	94.0	80-120	477	500	95.4	1.5	
Lithium									
Magnesium	484	500	96.8	80-120	487	500	97.4	0.6	
Manganese	478	500	95.6	80-120	485	500	97.0	1.5	
Molybdenum	anr								
Nickel	481	500	96.2	80-120	490	500	98.0	1.9	
Potassium	4930	5000	98.6	80-120	4980	5000	99.6	1.0	
Selenium	446	500	89.2	80-120	464	500	92.8	4.0	
Silicon	257	250	102.8	80-120	264	250	105.6	2.7	
Silver	492	500	98.4	80-120	498	500	99.6	1.2	
Sodium	568	500	113.6	80-120	572	500	114.4	0.7	
Strontium									
Thallium	430	500	86.0	80-120	445	500	89.0	3.4	
Tin									
Titanium									
Vanadium									
Zinc	457	500	91.4	80-120	466	500	93.2	2.0	

Associated samples MP2433: C11216-1, C11216-2, C11216-3, C11216-4, C11216-5, C11216-6, C11216-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: C11216
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road, Clayton, CA

QC Batch ID: MP2433
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 06/02/10

Metal	C11226-2 Original	SDL 1:5	%DIF	QC Limits
Aluminum	anr			
Antimony	0.00	0.00	NC	0-10
Arsenic	0.00	0.00	NC	0-10
Barium	anr			
Beryllium	0.00	0.00	NC	0-10
Boron	98.0	136	38.8 (a)	0-10
Cadmium	0.00	0.00	NC	0-10
Calcium	24800	24500	1.0	0-10
Chromium	0.00	0.00	NC	0-10
Cobalt				
Copper	80.2	79.0	1.5	0-10
Iron	1370	1360	0.6	0-10
Lead	0.00	0.00	NC	0-10
Lithium				
Magnesium	9990	9980	0.0	0-10
Manganese	107	108	0.2	0-10
Molybdenum	anr			
Nickel	2.90	6.00	106.9(a)	0-10
Potassium	2570	2550	0.7	0-10
Selenium	0.00	0.00	NC	0-10
Silicon	3080	3000	2.6	0-10
Silver	0.00	0.00	NC	0-10
Sodium	78200	78000	0.3	0-10
Strontium				
Thallium	0.00	0.00	NC	0-10
Tin				
Titanium				
Vanadium				
Zinc	10.6	11.5	8.5	0-10

Associated samples MP2433: C11216-1, C11216-2, C11216-3, C11216-4, C11216-5, C11216-6, C11216-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

4.3.4

POST DIGESTATE SPIKE SUMMARY

Login Number: C11216
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road, Clayton, CA

QC Batch ID: MP2433
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 06/02/10

Metal	Sample ml	Final ml	Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Boron										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead										
Lithium										
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silicon										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP2433: C11216-1, C11216-2, C11216-3, C11216-4, C11216-5, C11216-6, C11216-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested

4.3.5

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: C11216
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road, Clayton, CA

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Alkalinity, Total as CaCO3	GN3890	5.0	0.0	mg/l	250	251	100.5	75-125%
Bromide	GP1783/GN3889	0.20	0.0	mg/l	5	4.78	95.6	90-110%
Chloride	GP1789/GN3906	0.50	0.0	mg/l	5	4.62	92.4	90-110%
Dissolved Organic Carbon	GP1782/GN3888	1.0	0.52	mg/l	25.0	25.2	100.9	75-125%
Fluoride	GP1783/GN3889	0.10	0.0	mg/l	5	4.84	96.8	90-110%
Nitrogen, Nitrate	GP1783/GN3889	0.10	0.0	mg/l	5	4.65	93.0	90-110%
Solids, Total Dissolved	GN3886	10	0.0	mg/l				
Specific Conductivity	GN3877	1.0	0.0	umhos/cm				
Sulfate	GP1789/GN3906	0.50	0.0	mg/l	5	4.76	95.2	90-110%
Turbidity	GN3883	0.50	0.048	NTU	40	41.1	102.8	75-125%

5.1

Associated Samples:
Batch GN3877: C11216-1, C11216-2, C11216-3, C11216-4, C11216-5, C11216-6, C11216-7
Batch GN3883: C11216-1, C11216-2, C11216-3, C11216-4, C11216-5, C11216-6, C11216-7
Batch GN3886: C11216-1, C11216-2, C11216-3, C11216-4, C11216-5, C11216-6, C11216-7
Batch GN3890: C11216-1, C11216-2, C11216-3, C11216-4, C11216-5, C11216-6, C11216-7
Batch GP1782: C11216-1, C11216-2, C11216-3, C11216-4, C11216-5, C11216-6, C11216-7
Batch GP1783: C11216-1, C11216-2, C11216-3, C11216-4, C11216-5, C11216-6, C11216-7
Batch GP1789: C11216-1, C11216-2, C11216-3, C11216-4, C11216-5, C11216-6, C11216-7
(*) Outside of QC limits

BLANK SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: C11216
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road, Clayton, CA

Analyte	Batch ID	Units	Spike Amount	BSD Result	RPD	QC Limit
Alkalinity, Total as CaCO3	GN3890	mg/l	250	251	0.0	
Bromide	GP1783/GN3889	mg/l	5	4.82	0.8	25%
Chloride	GP1789/GN3906	mg/l	5	4.61	0.2	25%
Dissolved Organic Carbon	GP1782/GN3888	mg/l	25.0	24.7	2.2	
Fluoride	GP1783/GN3889	mg/l	5	4.78	1.2	25%
Nitrogen, Nitrate	GP1783/GN3889	mg/l	5	4.65	0.0	25%
Sulfate	GP1789/GN3906	mg/l	5	4.74	0.4	25%
Turbidity	GN3883	NTU	40	40.9	0.5	

5.2

Associated Samples:
Batch GN3883: C11216-1, C11216-2, C11216-3, C11216-4, C11216-5, C11216-6, C11216-7
Batch GN3890: C11216-1, C11216-2, C11216-3, C11216-4, C11216-5, C11216-6, C11216-7
Batch GP1782: C11216-1, C11216-2, C11216-3, C11216-4, C11216-5, C11216-6, C11216-7
Batch GP1783: C11216-1, C11216-2, C11216-3, C11216-4, C11216-5, C11216-6, C11216-7
Batch GP1789: C11216-1, C11216-2, C11216-3, C11216-4, C11216-5, C11216-6, C11216-7
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: C11216
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road, Clayton, CA

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Alkalinity, Total as CaCO3	GN3890	C11107-4	mg/l	169	167	1.2	0-25%
Solids, Total Dissolved	GN3886	C11190-1	mg/l	692	685	1.0	0-%
Specific Conductivity	GN3877	C11216-1	umhos/cm	414	418	1.0	0-25%
Turbidity	GN3883	C11216-1	NTU	26.9	26.5	1.5	0-25%
pH	GN3876	C11216-1	su	7.91	7.93	0.3	0-25%

Associated Samples:
Batch GN3876: C11216-1, C11216-2, C11216-3, C11216-4, C11216-5, C11216-6, C11216-7
Batch GN3877: C11216-1, C11216-2, C11216-3, C11216-4, C11216-5, C11216-6, C11216-7
Batch GN3883: C11216-1, C11216-2, C11216-3, C11216-4, C11216-5, C11216-6, C11216-7
Batch GN3886: C11216-1, C11216-2, C11216-3, C11216-4, C11216-5, C11216-6, C11216-7
Batch GN3890: C11216-1, C11216-2, C11216-3, C11216-4, C11216-5, C11216-6, C11216-7
(*) Outside of QC limits

5.3

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: C11216
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road, Clayton, CA

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Bromide	GP1783/GN3889	C11216-1	mg/l	0.0	4	3.7	92.5	80-120%
Chloride	GP1789/GN3906	C11216-1	mg/l	10.8	10	20.7	99.0	80-120%
Dissolved Organic Carbon	GP1782/GN3888	C11217-2	mg/l	6.6	25	30.2	94.1	75-125%
Fluoride	GP1783/GN3889	C11216-1	mg/l	0.027	4	3.6	89.3	80-120%
Nitrogen, Nitrate	GP1783/GN3889	C11216-1	mg/l	0.031	4	3.6	89.2	80-120%
Sulfate	GP1789/GN3906	C11216-1	mg/l	32.4	10	42.2	98.0	80-120%

Associated Samples:
Batch GP1782: C11216-1, C11216-2, C11216-3, C11216-4, C11216-5, C11216-6, C11216-7
Batch GP1783: C11216-1, C11216-2, C11216-3, C11216-4, C11216-5, C11216-6, C11216-7
Batch GP1789: C11216-1, C11216-2, C11216-3, C11216-4, C11216-5, C11216-6, C11216-7
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: C11216
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road, Clayton, CA

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Bromide	GP1783/GN3889	C11216-1	mg/l	0.0	4	3.7	0.0	
Chloride	GP1789/GN3906	C11216-1	mg/l	10.8	10	20.7	0.0	
Dissolved Organic Carbon	GP1782/GN3888	C11217-2	mg/l	6.6	25	29.6	2.0	
Fluoride	GP1783/GN3889	C11216-1	mg/l	0.027	4	3.5	2.8	
Nitrogen, Nitrate	GP1783/GN3889	C11216-1	mg/l	0.031	4	3.6	0.0	
Sulfate	GP1789/GN3906	C11216-1	mg/l	32.4	10	42.1	0.2	

Associated Samples:
Batch GP1782: C11216-1, C11216-2, C11216-3, C11216-4, C11216-5, C11216-6, C11216-7
Batch GP1783: C11216-1, C11216-2, C11216-3, C11216-4, C11216-5, C11216-6, C11216-7
Batch GP1789: C11216-1, C11216-2, C11216-3, C11216-4, C11216-5, C11216-6, C11216-7
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

e-Hardcopy 2.0
Automated Report

Northern California
ACCUTEST
Laboratories

06/07/10

Technical Report for

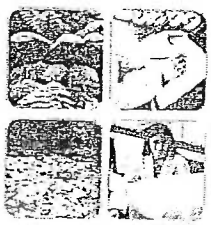
The Source Group

Mt. Diablo- Marsh Creek Road, Clayton, CA

SUNOCO

Accutest Job Number: C11217

Sampling Date: 05/27/10



Report to:

The Source Group
3451C Vincent Road
Pleasant Hill, CA 94523
jphilipp@thesourcegroup.net

ATTN: Jon Philipp

Total number of pages in report: 46

ACCUTEST LABORATORIES 50 YEARS 1956-2006

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Laurie Glantz-Murphy
Laboratory Director

Client Service contact: Anne Kathain 408-588-0200

Certifications: CA (08258CA) DoD/ISO/IEC 17025:2005 (L2242)

Test results relate only to samples analyzed.

Sections: 1 2 3 4 5

Table of Contents

-1-

Sample Summary

The Source Group

Mt. Diablo- Marsh Creek Road, Clayton, CA
Project No: SUNOCO

Job No: C11217

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
C11217-1	05/27/10	12:00	JP	05/28/10	AQ	Surface Water	MTD-SW-02/2
C11217-1F	05/27/10	12:00	JP	05/28/10	AQ	Surface H2O Filtered	MTD-SW-02/2
C11217-2F	05/27/10	12:15	JP	05/28/10	AQ	Surface H2O Filtered	MTD-SW-04/2
C11217-3	05/27/10	09:20	JP	05/28/10	AQ	Surface Water	MTD-SW-12/2
C11217-3F	05/27/10	09:20	JP	05/28/10	AQ	Surface H2O Filtered	MTD-SW-12/2
C11217-4	05/27/10	09:30	JP	05/28/10	AQ	Surface Water	MTD-SW-13/2
C11217-4F	05/27/10	09:30	JP	05/28/10	AQ	Surface H2O Filtered	MTD-SW-13/2
C11217-5	05/27/10	10:05	JP	05/28/10	AQ	Surface Water	MTD-SW-14/2
C11217-5F	05/27/10	10:05	JP	05/28/10	AQ	Surface H2O Filtered	MTD-SW-14/2
C11217-6	05/27/10	11:15	JP	05/28/10	AQ	Surface Water	MTD-SW-15/2
C11217-6F	05/27/10	11:15	JP	05/28/10	AQ	Surface H2O Filtered	MTD-SW-15/2
C11217-7	05/27/10	13:10	JP	05/28/10	AQ	Surface Water	MTD-SW-05/2
C11217-7F	05/27/10	13:10	JP	05/28/10	AQ	Surface H2O Filtered	MTD-SW-05/2

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID:	MTD-SW-02/2		
Lab Sample ID:	C11217-1	Date Sampled:	05/27/10
Matrix:	AQ - Surface Water	Date Received:	05/28/10
		Percent Solids:	n/a
Project:	Mt. Diablo- Marsh Creek Road, Clayton, CA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Antimony	21.9	10	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Arsenic	47.6	10	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Beryllium	< 5.0	5.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Boron	18000	500	ug/l	10	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Cadmium	< 2.0	2.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Calcium	178000	500	ug/l	10	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Chromium	309	5.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Copper	94.3	5.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Iron	83800	50	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Lead	7.6	5.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Magnesium	136000	500	ug/l	10	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Manganese	3410	5.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Mercury	161	10	ug/l	50	06/01/10	06/02/10	RW	EPA 245.1 [1]	EPA 245.1/SW7470A [3]
Nickel	11000	50	ug/l	10	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Potassium	14500	500	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Selenium	< 20	20	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Silicon	13600	500	ug/l	10	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Silver	< 5.0	5.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Sodium	251000	1000	ug/l	10	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Thallium	< 20	20	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Zinc	276	10	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]

(1) Instrument QC Batch: MA1239
(2) Instrument QC Batch: MA1243
(3) Prep QC Batch: MP2431
(4) Prep QC Batch: MP2440

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	MTD-SW-02/2		
Lab Sample ID:	C11217-1	Date Sampled:	05/27/10
Matrix:	AQ - Surface Water	Date Received:	05/28/10
		Percent Solids:	n/a
Project:	Mt. Diablo- Marsh Creek Road, Clayton, CA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate	< 5.0	5.0	mg/l	1	06/01/10	PH	SM18 4500CO2D
Alkalinity, Carbonate	< 5.0	5.0	mg/l	1	06/01/10	PH	SM18 4500CO2D
Alkalinity, Total as CaCO3	< 5.0	5.0	mg/l	1	06/01/10	PH	SM18 2320B
Bromide	0.92	0.20	mg/l	1	05/28/10 17:03	RL	EPA 300/SW846 9056A
Chloride	333	50	mg/l	100	06/02/10 01:23	RL	EPA 300/SW846 9056A
Dissolved Organic Carbon	9.2	1.0	mg/l	1	05/28/10	RL	SM18 5310C
Fluoride	< 0.10	0.10	mg/l	1	05/28/10 17:03	RL	EPA 300/SW846 9056A
Hardness, Total as CaCO3 [a]	1000	3.3	mg/l	1	06/04/10 16:53	CT	SW846 6010B/SM 2340B
Nitrogen, Nitrate	1.3	0.10	mg/l	1	05/28/10 17:03	RL	EPA 300/SW846 9056A
Silica, Dissolved [b]	29.1	1.1	mg/l	1	06/04/10 16:53	CT	SW846 6010B
Solids, Total Dissolved	3060	10	mg/l	1	06/01/10	PH	SM18 2540C
Specific Conductivity	3860	1.0	umhos/cm	1	05/28/10	PH	SM18 2510B/EPA 120.1
Sulfate	3450	100	mg/l	200	06/02/10 11:55	RL	EPA 300/SW846 9056A
Turbidity	261	5.0	NTU	10	05/28/10 12:10	EB	SM18 2130B
pH [c]	3.13		su	1	05/28/10 13:35	PH	SM18 4500H+B

(a) Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)
(b) Calculated as: (Silicon * 2.139)
(c) pH was analyzed past the 15min hold time.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	MTD-SW-02/2		
Lab Sample ID:	C11217-1F	Date Sampled:	05/27/10
Matrix:	AQ - Surface H2O Filtered	Date Received:	05/28/10
		Percent Solids:	n/a
Project:	Mt. Diablo- Marsh Creek Road, Clayton, CA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Mercury	135	5.0	ug/l	25	06/02/10	06/03/10	RW	EPA 245.1 [1]	EPA 245.1/SW7470A [2]

(1) Instrument QC Batch: MA1240
(2) Prep QC Batch: MP2430

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	MTD-SW-12/2		
Lab Sample ID:	C11217-3	Date Sampled:	05/27/10
Matrix:	AQ - Surface Water	Date Received:	05/28/10
		Percent Solids:	n/a
Project:	Mt. Diablo- Marsh Creek Road, Clayton, CA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Antimony	< 10	10	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Arsenic	< 10	10	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Beryllium	< 5.0	5.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Boron	941	50	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Cadmium	< 2.0	2.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Calcium	47100	50	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Chromium	< 5.0	5.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Copper	< 5.0	5.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Iron	< 50	50	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Lead	< 5.0	5.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Magnesium	25700	50	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Manganese	< 5.0	5.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Mercury	< 0.20	0.20	ug/l	1	06/01/10	06/02/10	RW	EPA 245.1 [1]	EPA 245.1/SW7470A [3]
Nickel	< 5.0	5.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Potassium	717	500	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Selenium	< 20	20	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Silicon	7830	50	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Silver	< 5.0	5.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Sodium	17400	100	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Thallium	< 20	20	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Zinc	< 10	10	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]

(1) Instrument QC Batch: MA1239
(2) Instrument QC Batch: MA1243
(3) Prep QC Batch: MP2431
(4) Prep QC Batch: MP2440

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	MTD-SW-12/2		
Lab Sample ID:	C11217-3	Date Sampled:	05/27/10
Matrix:	AQ - Surface Water	Date Received:	05/28/10
		Percent Solids:	n/a
Project:	Mt. Diablo- Marsh Creek Road, Clayton, CA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate	223	5.0	mg/l	1	06/01/10	PH	SM18 4500CO2D
Alkalinity, Carbonate	< 5.0	5.0	mg/l	1	06/01/10	PH	SM18 4500CO2D
Alkalinity, Total as CaCO3	223	5.0	mg/l	1	06/01/10	PH	SM18 2320B
Bromide	4.7	0.20	mg/l	1	05/28/10 18:13	RL	EPA 300/SW846 9056A
Chloride	9.6	1.0	mg/l	2	06/02/10 01:58	RL	EPA 300/SW846 9056A
Dissolved Organic Carbon	2.6	1.0	mg/l	1	05/28/10	RL	SM18 5310C
Fluoride	< 0.10	0.10	mg/l	1	05/28/10 18:13	RL	EPA 300/SW846 9056A
Hardness, Total as CaCO3 [a]	223	0.33	mg/l	1	06/04/10 17:15	CT	SW846 6010B/SM 2340B
Nitrogen, Nitrate	< 0.10	0.10	mg/l	1	05/28/10 18:13	RL	EPA 300/SW846 9056A
Silica, Dissolved [b]	16.7	0.11	mg/l	1	06/04/10 17:15	CT	SW846 6010B
Solids, Total Dissolved	261	10	mg/l	1	06/01/10	PH	SM18 2540C
Specific Conductivity	494	1.0	umhos/cm	1	05/28/10	PH	SM18 2510B/EPA 120.1
Sulfate	29.5	1.0	mg/l	2	06/02/10 01:58	RL	EPA 300/SW846 9056A
Turbidity	1.5	0.50	NTU	1	05/28/10 12:10	EB	SM18 2130B
pH [c]	8.20		su	1	05/28/10 13:44	PH	SM18 4500H+B

(a) Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)
(b) Calculated as: (Silicon * 2.139)
(c) pH was analyzed past the 15min hold time.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	MTD-SW-12/2		
Lab Sample ID:	C11217-3F	Date Sampled:	05/27/10
Matrix:	AQ - Surface H2O Filtered	Date Received:	05/28/10
		Percent Solids:	n/a
Project:	Mt. Diablo- Marsh Creek Road, Clayton, CA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Mercury	< 0.20	0.20	ug/l	1	06/02/10	06/03/10	RW	EPA 245.1 [1]	EPA 245.1/SW7470A [2]

(1) Instrument QC Batch: MA1240
(2) Prep QC Batch: MP2430

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	MTD-SW-13/2		
Lab Sample ID:	C11217-4	Date Sampled:	05/27/10
Matrix:	AQ - Surface Water	Date Received:	05/28/10
		Percent Solids:	n/a
Project:	Mt. Diablo- Marsh Creek Road, Clayton, CA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Antimony	10.4	10	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Arsenic	< 10	10	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Beryllium	< 5.0	5.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Boron	953	50	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Cadmium	< 2.0	2.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Calcium	49700	50	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Chromium	< 5.0	5.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Copper	< 5.0	5.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Iron	89.4	50	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Lead	< 5.0	5.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Magnesium	28200	50	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Manganese	5.8	5.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Mercury	< 0.20	0.20	ug/l	1	06/01/10	06/02/10	RW	EPA 245.1 [1]	EPA 245.1/SW7470A [3]
Nickel	6.2	5.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Potassium	898	500	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Selenium	< 20	20	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Silicon	7720	50	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Silver	< 5.0	5.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Sodium	18200	100	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Thallium	< 20	20	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Zinc	< 10	10	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]

(1) Instrument QC Batch: MA1239
(2) Instrument QC Batch: MA1243
(3) Prep QC Batch: MP2431
(4) Prep QC Batch: MP2440

RL = Reporting Limit

Accutest Laboratories

2.5

Report of Analysis

Client Sample ID:	MTD-SW-13/2		
Lab Sample ID:	C11217-4	Date Sampled:	05/27/10
Matrix:	AQ - Surface Water	Date Received:	05/28/10
		Percent Solids:	n/a
Project:	Mt. Diablo- Marsh Creek Road, Clayton, CA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate	229	5.0	mg/l	1	06/01/10	PH	SM18 4500CO2D
Alkalinity, Carbonate	< 5.0	5.0	mg/l	1	06/01/10	PH	SM18 4500CO2D
Alkalinity, Total as CaCO3	233	5.0	mg/l	1	06/01/10	PH	SM18 2320B
Bromide	< 0.20	0.20	mg/l	1	05/28/10 18:31	RL	EPA 300/SW846 9056A
Chloride	10.2	1.3	mg/l	2.5	06/02/10 02:15	RL	EPA 300/SW846 9056A
Dissolved Organic Carbon	2.6	1.0	mg/l	1	05/28/10	RL	SM18 5310C
Fluoride	< 0.10	0.10	mg/l	1	05/28/10 18:31	RL	EPA 300/SW846 9056A
Hardness, Total as CaCO3 [a]	240	0.33	mg/l	1	06/04/10 16:31	CT	SW846 6010B/SM 2340B
Nitrogen, Nitrate	< 0.10	0.10	mg/l	1	05/28/10 18:31	RL	EPA 300/SW846 9056A
Silica, Dissolved [b]	16.5	0.11	mg/l	1	06/04/10 16:31	CT	SW846 6010B
Solids, Total Dissolved	301	10	mg/l	1	06/01/10	PH	SM18 2540C
Specific Conductivity	526	1.0	umhos/cm	1	05/28/10	PH	SM18 2510B/EPA 120.1
Sulfate	39.2	1.3	mg/l	2.5	06/02/10 02:15	RL	EPA 300/SW846 9056A
Turbidity	3.0	0.50	NTU	1	05/28/10 12:10	EB	SM18 2130B
pH [c]	8.37		su	1	05/28/10 13:46	PH	SM18 4500H+B

(a) Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)
(b) Calculated as: (Silicon * 2.139)
(c) pH was analyzed past the 15min hold time.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	MTD-SW-13/2		
Lab Sample ID:	C11217-4F	Date Sampled:	05/27/10
Matrix:	AQ - Surface H2O Filtered	Date Received:	05/28/10
		Percent Solids:	n/a
Project:	Mt. Diablo- Marsh Creek Road, Clayton, CA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Mercury	<0.20	0.20	ug/l	1	06/02/10	06/03/10	RW	EPA 245.1 [1]	EPA 245.1/SW7470A [2]

(1) Instrument QC Batch: MA1240
(2) Prep QC Batch: MP2430

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	MTD-SW-14/2		
Lab Sample ID:	C11217-5	Date Sampled:	05/27/10
Matrix:	AQ - Surface Water	Date Received:	05/28/10
		Percent Solids:	n/a
Project:	Mt. Diablo- Marsh Creek Road, Clayton, CA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Antimony	< 10	10	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Arsenic	< 10	10	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Beryllium	< 5.0	5.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Boron	761	50	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Cadmium	< 2.0	2.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Calcium	22800	50	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Chromium	< 5.0	5.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Copper	6.4	5.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Iron	987	50	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Lead	< 5.0	5.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Magnesium	20400	50	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Manganese	194	5.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Mercury	1.3	0.20	ug/l	1	06/01/10	06/02/10	RW	EPA 245.1 [1]	EPA 245.1/SW7470A [3]
Nickel	587	5.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Potassium	2080	500	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Selenium	< 20	20	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Silicon	15100	50	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Silver	< 5.0	5.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Sodium	20900	100	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Thallium	< 20	20	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Zinc	13.8	10	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]

(1) Instrument QC Batch: MA1239
(2) Instrument QC Batch: MA1243
(3) Prep QC Batch: MP2431
(4) Prep QC Batch: MP2440

RL = Reporting Limit

Accutest Laboratories

2.7

Report of Analysis

Client Sample ID:	MTD-SW-14/2		
Lab Sample ID:	C11217-5	Date Sampled:	05/27/10
Matrix:	AQ - Surface Water	Date Received:	05/28/10
		Percent Solids:	n/a
Project:	Mt. Diablo- Marsh Creek Road, Clayton, CA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate	39.8	5.0	mg/l	1	06/01/10	PH	SM18 4500CO2D
Alkalinity, Carbonate	< 5.0	5.0	mg/l	1	06/01/10	PH	SM18 4500CO2D
Alkalinity, Total as CaCO3	39.8	5.0	mg/l	1	06/01/10	PH	SM18 2320B
Bromide	< 0.20	0.20	mg/l	1	05/28/10 18:48	RL	EPA 300/SW846 9056A
Chloride	14.8	1.0	mg/l	2	06/02/10 02:33	RL	EPA 300/SW846 9056A
Dissolved Organic Carbon	3.7	1.0	mg/l	1	05/28/10	RL	SM18 5310C
Fluoride	< 0.10	0.10	mg/l	1	05/28/10 18:48	RL	EPA 300/SW846 9056A
Hardness, Total as CaCO3 [a]	141	0.33	mg/l	1	06/04/10 17:20	CT	SW846 6010B/SM 2340B
Nitrogen, Nitrate	< 0.10	0.10	mg/l	1	05/28/10 18:48	RL	EPA 300/SW846 9056A
Silica, Dissolved [b]	32.3	0.11	mg/l	1	06/04/10 17:20	CT	SW846 6010B
Solids, Total Dissolved	276	10	mg/l	1	06/01/10	PH	SM18 2540C
Specific Conductivity	414	1.0	umhos/cm	1	05/28/10	PH	SM18 2510B/EPA 120.1
Sulfate	136	5.0	mg/l	10	06/02/10 02:50	RL	EPA 300/SW846 9056A
Turbidity	5.6	0.50	NTU	1	05/28/10 12:10	EB	SM18 2130B
pH [c]	5.94		su	1	05/28/10 13:50	PH	SM18 4500H+B

(a) Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)
(b) Calculated as: (Silicon * 2.139)
(c) pH was analyzed past the 15min hold time.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	MTD-SW-14/2		
Lab Sample ID:	C11217-5F	Date Sampled:	05/27/10
Matrix:	AQ - Surface H2O Filtered	Date Received:	05/28/10
		Percent Solids:	n/a
Project:	Mt. Diablo- Marsh Creek Road, Clayton, CA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Mercury	< 0.20	0.20	ug/l	1	06/02/10	06/03/10	RW	EPA 245.1 [1]	EPA 245.1/SW7470A [2]

(1) Instrument QC Batch: MA1240
(2) Prep QC Batch: MP2430

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	MTD-SW-15/2		
Lab Sample ID:	C11217-6	Date Sampled:	05/27/10
Matrix:	AQ - Surface Water	Date Received:	05/28/10
		Percent Solids:	n/a
Project:	Mt. Diablo- Marsh Creek Road, Clayton, CA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Antimony	62.0	20	ug/l	2	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Arsenic [a]	182	20	ug/l	2	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Beryllium	5.2	5.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Boron	98900	2500	ug/l	50	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Cadmium	< 2.0	2.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Calcium	357000	2500	ug/l	50	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Chromium	240	10	ug/l	2	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Copper	101	10	ug/l	2	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Iron	411000	2500	ug/l	50	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Lead	13.4	5.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Magnesium	567000	2500	ug/l	50	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Manganese	16000	250	ug/l	50	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Mercury	107	4.0	ug/l	20	06/01/10	06/02/10	RW	EPA 245.1 [1]	EPA 245.1/SW7470A [3]
Nickel	25000	250	ug/l	50	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Potassium	53300	1000	ug/l	2	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Selenium [b]	< 40	40	ug/l	2	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Silicon	38500	2500	ug/l	50	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Silver	< 5.0	5.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Sodium	1290000	5000	ug/l	50	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Thallium	< 20	20	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Zinc	1180	20	ug/l	2	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]

(1) Instrument QC Batch: MA1239
(2) Instrument QC Batch: MA1243
(3) Prep QC Batch: MP2431
(4) Prep QC Batch: MP2440

(a) Result confirmed by reanalysis.
(b) Elevated reporting limit(s) due to matrix interference.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	MTD-SW-15/2		
Lab Sample ID:	C11217-6	Date Sampled:	05/27/10
Matrix:	AQ - Surface Water	Date Received:	05/28/10
		Percent Solids:	n/a
Project:	Mt. Diablo- Marsh Creek Road, Clayton, CA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate	< 5.0	5.0	mg/l	1	06/01/10	PH	SM18 4500CO2D
Alkalinity, Carbonate	< 5.0	5.0	mg/l	1	06/01/10	PH	SM18 4500CO2D
Alkalinity, Total as CaCO3	< 5.0	5.0	mg/l	1	06/01/10	PH	SM18 2320B
Bromide	5.5	1.0	mg/l	5	06/01/10 11:29	RL	EPA 300/SW846 9056A
Chloride	1570	150	mg/l	300	06/02/10 14:14	RL	EPA 300/SW846 9056A
Dissolved Organic Carbon	11.3	1.0	mg/l	1	05/28/10	RL	SM18 5310C
Fluoride [a]	< 0.50	0.50	mg/l	5	06/01/10 11:29	RL	EPA 300/SW846 9056A
Hardness, Total as CaCO3 [b]	3230	17	mg/l	1	06/04/10 17:25	CT	SW846 6010B/SM 2340B
Nitrogen, Nitrate [c]	< 0.50	0.50	mg/l	5	06/01/10 11:29	RL	EPA 300/SW846 9056A
Silica, Dissolved [d]	82.4	5.3	mg/l	1	06/04/10 17:25	CT	SW846 6010B
Solids, Total Dissolved	9110	10	mg/l	1	06/01/10	PH	SM18 2540C
Specific Conductivity	11400	2.0	umhos/cm	2	06/04/10	PH	SM18 2510B/EPA 120.1
Sulfate	5340	150	mg/l	300	06/02/10 14:14	RL	EPA 300/SW846 9056A
Turbidity	2650	50	NTU	100	05/28/10 12:10	EB	SM18 2130B
pH [e]	4.36		su	1	05/28/10 13:51	PH	SM18 4500H+B

(a) Elevated detection limit due to high concentration of Chloride.
(b) Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)
(c) Sample exceeded holding time due to reanalysis.
(d) Calculated as: (Silicon * 2.139)
(e) pH was analyzed past the 15min hold time.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	MTD-SW-15/2		
Lab Sample ID:	C11217-6F	Date Sampled:	05/27/10
Matrix:	AQ - Surface H2O Filtered	Date Received:	05/28/10
		Percent Solids:	n/a
Project:	Mt. Diablo- Marsh Creek Road, Clayton, CA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Mercury [a]	55.6	2.0	ug/l	10	06/02/10	06/03/10	RW	EPA 245.1 [1]	EPA 245.1/SW7470A [2]

(1) Instrument QC Batch: MA1240
(2) Prep QC Batch: MP2430

(a) Elevated reporting limit(s) due to matrix interference.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	MTD-SW-05/2		
Lab Sample ID:	C11217-7	Date Sampled:	05/27/10
Matrix:	AQ - Surface Water	Date Received:	05/28/10
		Percent Solids:	n/a
Project:	Mt. Diablo- Marsh Creek Road, Clayton, CA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Antimony	12.0	10	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Arsenic	< 10	10	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Beryllium	< 5.0	5.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Boron	139000	2500	ug/l	50	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Cadmium	< 2.0	2.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Calcium	549000	2500	ug/l	50	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Chromium	27.6	10	ug/l	2	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Copper	27.6	10	ug/l	2	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Iron	22900	100	ug/l	2	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Lead	< 5.0	5.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Magnesium	546000	2500	ug/l	50	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Manganese	6240	10	ug/l	2	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Mercury	66.3	2.0	ug/l	10	06/01/10	06/02/10	RW	EPA 245.1 [1]	EPA 245.1/SW7470A [3]
Nickel	9060	10	ug/l	2	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Potassium	68300	1000	ug/l	2	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Selenium	< 20	20	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Silicon	12800	100	ug/l	2	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Silver	< 5.0	5.0	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Sodium	1760000	5000	ug/l	50	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Thallium	< 20	20	ug/l	1	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]
Zinc	180	20	ug/l	2	06/04/10	06/04/10	CT	SW846 6010B [2]	SW3010A [4]

(1) Instrument QC Batch: MA1239
(2) Instrument QC Batch: MA1243
(3) Prep QC Batch: MP2431
(4) Prep QC Batch: MP2440

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	MTD-SW-05/2		
Lab Sample ID:	C11217-7	Date Sampled:	05/27/10
Matrix:	AQ - Surface Water	Date Received:	05/28/10
		Percent Solids:	n/a
Project:	Mt. Diablo- Marsh Creek Road, Clayton, CA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate	187	5.0	mg/l	1	06/01/10	PH	SM18 4500CO2D
Alkalinity, Carbonate	<5.0	5.0	mg/l	1	06/01/10	PH	SM18 4500CO2D
Alkalinity, Total as CaCO3	187	5.0	mg/l	1	06/01/10	PH	SM18 2320B
Bromide	8.7	1.0	mg/l	5	06/01/10 11:46	RL	EPA 300/SW846 9056A
Chloride	2370	300	mg/l	600	06/02/10 14:31	RL	EPA 300/SW846 9056A
Dissolved Organic Carbon	5.8	1.0	mg/l	1	05/28/10	RL	SM18 5310C
Fluoride [a]	<0.50	0.50	mg/l	5	06/01/10 11:46	RL	EPA 300/SW846 9056A
Hardness, Total as CaCO3 [b]	3620	17	mg/l	1	06/04/10 17:30	CT	SW846 6010B/SM 2340B
Nitrogen, Nitrate [c]	5.7	0.50	mg/l	5	06/01/10 11:46	RL	EPA 300/SW846 9056A
Silica, Dissolved [d]	27.4	0.21	mg/l	1	06/04/10 18:40	CT	SW846 6010B
Solids, Total Dissolved	9980	10	mg/l	1	06/01/10	PH	SM18 2540C
Specific Conductivity	14200	2.0	umhos/cm	2	06/04/10	PH	SM18 2510B/EPA 120.1
Sulfate	3840	300	mg/l	600	06/02/10 14:31	RL	EPA 300/SW846 9056A
Turbidity	298	5.0	NTU	10	05/28/10 12:10	EB	SM18 2130B
pH [e]	7.18		su	1	05/28/10 13:56	PH	SM18 4500H+B

(a) Elevated detection limit due to high concentration of Chloride.
(b) Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)
(c) Sample exceeded holding time due to reanalysis.
(d) Calculated as: (Silicon * 2.139)
(e) pH was analyzed past the 15min hold time.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	MTD-SW-05/2		
Lab Sample ID:	C11217-7F	Date Sampled:	05/27/10
Matrix:	AQ - Surface H2O Filtered	Date Received:	05/28/10
		Percent Solids:	n/a
Project:	Mt. Diablo- Marsh Creek Road, Clayton, CA		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Mercury [a]	39.7	1.0	ug/l	5	06/02/10	06/03/10	RW	EPA 245.1 [1]	EPA 245.1/SW7470A [2]

(1) Instrument QC Batch: MA1240
(2) Prep QC Batch: MP2430

(a) Elevated reporting limit(s) due to matrix interference.

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Northern California
ACCUTEST
Laboratories

CHAIN OF CUSTODY

2105 Lundy Ave, San Jose, CA 95131
(408) 588-0200 FAX: (408) 588-0201

SGRPCAPH 2674

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest NC Job #: C C11217

Client / Reporting Information

Company Name	The Source Group
Address	3451C Vincent Road
City / State / Zip	Pleasant Hill, CA 94523
Project Contact:	Jon Philipp
Phone #	925-944-2856 x 316
Samplers's Name	Jon Philipp

Project Information

Project Name:	Sunoco, Mt. Diablo
Street	
City / State	Clayton, CA
Project #	01-SUN-050
EMAIL:	jphilipp@thesourcegroup.net
Client Purchase Order #	

Requested Analysis

Accutest Sample ID	Sample ID / Field Point / Point of Collection	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	NaHSO4	MEOH	ENCORE	Mercury (dissolved/total) - Lab filter	Priority Pollutant Metals (pm13)	Methyl Mercury (subcontract) Caltest	General Chem (turb, alk, TDS, EC, pH, Dic, Car)	Cations (B, K, Fe, Mn, Mg, Ca, Na, Si)	Hardness (Ca, Mg)	Anions (Cl, F, SO4, Br, NO3, ~~Zn Ad~~ Br)	Dissolved Organic Carbon (Lab-Filtered from Lit-poly)		HOLD (DO NOT ANALYZE)	Matrix Codes / LAB USE ONLY
-1	MTD-SW-02/2	27-May	12:00	JP	SW	4	1		1		2				X	X	X	X	X	X	X	X			
-2	MTD-SW-04/2	27-May	12:15	JP	SW	4	1		1		2				X	X	X	X	X	X	X	X		*	HOLD EF 5/28/10
-3	MTD-SW-12/2	27-May	9:20	JP	SW	3	1		1		1				X	X	X	X	X	X	X	X			
-4	MTD-SW-13/2	27-May	9:30	JP	SW	3	1		1		1				X	X	X	X	X	X	X	X			
-5	MTD-SW-14/2	27-May	10:05	JP	SW	4	1		1		2				X	X	X	X	X	X	X	X			
-6	MTD-SW-15/2	27-May	11:15	JP	SW	4	1		1		2				X	X	X	X	X	X	X	X			
-7	MTD-SW-06/2	27-May	13:10	JP	SW	4	1		1		2				X	X	X	X	X	X	X	X			

Matrix Codes: WW- Wastewater; GW- Ground Water; SW- Surface Water; SO- Soil; OI- Oil; WP- Wipe; LIQ - Non-aqueous Liquid; AIR; DW- Drinking Water (Perchlorate Only)

Turnaround Time (Business days) — Approved By / Date:

- [x] 5 Day Standard
- [ ] 3 Day (60% markup)
- [ ] 2 Day (75% markup)
- [ ] 1 Day (100% markup)

Emergency T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "B" - Results with QC summaries
- [x] Commercial "B+" - Results, QC, and chromatograms
- [ ] FULT1 - Level 4 data package
- [ ] EDF for Geotracker
- [ ] EDD Format ____

Provide EDF Global ID ____

Provide EDF Logcode: ____

Comments / Remarks

Note that two samples are missing the small unpreserved poly. Do what you can to analyze the full suite. If you have to cut something out for lack of sample, call me.

(-2) put on HOLD as per client

250mL poly (1 HNO3) PH<2 (x7); 500mL Amber (1 HCl) each (x7)
1x1Lit poly each N/P (x7); 250mL poly each N/P (x5)

(-3 & -4) used sample from 1Lit-poly N/P to filter for dissolved (Hg)

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 [signature]	5/28/10 11:25	1 [signature] 5388	2 World Courier	05/28/10 12:05	2 [signature]
Relinquished by: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 6	Date Time:	Received By: 6	Custody Seal #	Appropriate Bottle / Pres (Y) N; Labels match CoC? (Y) N	Headspace Y/N N/A; Separate Receipt Log (Y) N; On Ice (Y) N; Cooler Temp. 5.6+0.3 = 5.9°C

C11217: Chain of Custody
Page 1 of 2

Accutest Laboratories Northern California
Sample Receiving Check List

Job# : C11217
Sample Control Rep. Initial: EK | JM

SGRPCAPH2674

Review Chain of Custody Chain of Custody is to be complete and legible.

- ☑ Are these regulatory (~~NPDES~~) ~~samples? GW A~~ (Yes) / No
- ☑ Is pH requested? Yes / (No)
- N/A ☐ Was Client informed that hold time is 15 min? Yes / No Continue Yes / No
- ☐ Was ortho-Phosphate filtered with in 15 min? Yes / No Continue Yes / No
- ☑ Are sample within hold time? (Yes) / No
- Are sample in danger of exceeding hold-time Yes / (No)
- ☑ Existing Client? (Yes) / No Existing Project? (Yes) / No
  - If No: Is Report to info complete and legible, including;
    - ☐ deliverable ☐ Name ☐ Address ☐ phone ☐ e-mail
    - Is Bill to info complete and legible, including;
    - ☐ PO# ☐ Credit card ☐ Contact ☐address ☐ phone ☐ e-mail
    - Is Contact and/or Project Manager identified, including;
    - ☐ phone ☐ e-mail
- ☑ Project name / number ☐ Special requirements? (Yes) / No
- ☑ Sample IDs / date & time of collection provided? (Yes) / No
- ☑ Is Matrix listed and correct? (Yes) / No
- ☑ Analyses listed we do or client has authorized a subcontract? (Yes) / No
- ☑ Chain is signed and dated by both client and sample custodian? (Yes) / No
- ☑ TAT requested available? (Yes) / No Approved by PM

Review Coolers:

- ☑ Were Coolers temperatures measured at ≤6°C? Cooler # 1 Temp 5.4 °C
  - If cooler is outside the ≤6°C; note down below the affected bottles in that cooler
  - Note that ANC does NOT accept evidentiary samples. (We do not lock refrigerators)
- ☑ Shipment Received Method world courier
- ☑ Custody Seals: Present: Yes / (No) If Yes; Unbroken: Yes / No

Review of Sample Bottles: If you answer no, explain to the side

- ☑ Chain matches bottle labels? (Yes) / No ☐ Sample bottle intact? (Yes) / No
- there enough sample volume in proper bottle for requested analyses? (Yes) / No
- roper Preservatives? (Yes) / No Check pH on preserved samples except 1664, 625, 8270 and VOAs.
- ☐ Headspace-VOAs? Greater than 6mm in diameter Yes / No
- N/A List sample ID and affected container

Client Sample ID	pH Check	Other Comments/Issues
-1	pH<2	2 from pair (in HNO3)
↓	↓	↓
-7	↓	

Non-Compliance issues and discrepancies on the COC are forwarded to Project Management

\\Anc-srv-file1\d$\Enlech-Data\Laboratory\SOPs\SOP_CompleteListing\SC001F1_1_Form1_SampleControl_SampleReceivingChecklist_2010-02-15.doc

C11217: Chain of Custody
Page 2 of 2

4

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C11217
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road, Clayton, CA

QC Batch ID: MP2430
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

Prep Date: 06/02/10

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.02	.02	0.0028	<0.20

Associated samples MP2430: C11217-1F, C11217-3F, C11217-4F, C11217-5F, C11217-6F, C11217-7F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

4.1.1

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C11217
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road, Clayton, CA

QC Batch ID: MP2430
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

Prep Date: 06/02/10

Metal	C11217-1F Original	MS	Spikelot HGPWS1	% Rec	QC Limits
Mercury	135	139	4	2240.0(a	70-130

Associated samples MP2430: C11217-1F, C11217-3F, C11217-4F, C11217-5F, C11217-6F, C11217-7F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

4.1.2

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C11217
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road, Clayton, CA

QC Batch ID: MP2430
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

Prep Date: 06/02/10

Metal	C11217-1F Original	MSD	Spikelot HGPWS1	% Rec	MSD RPD	QC Limit
Mercury	135	135	4	2140.0(a	2.9	20

Associated samples MP2430: C11217-1F, C11217-3F, C11217-4F, C11217-5F, C11217-6F, C11217-7F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

4.1.2

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C11217
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road, Clayton, CA

QC Batch ID: MP2430
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

4.1.3

Prep Date: 06/02/10 06/02/10

Metal	BSP Result	Spikelot HGPWS1	% Rec	QC Limits	BSD Result	Spikelot HGPWS1	% Rec	BSD RPD	QC Limit
Mercury	1.9	2	95.0	85-115	2.0	2	100.0	5.1	

Associated samples MP2430: C11217-1F, C11217-3F, C11217-4F, C11217-5F, C11217-6F, C11217-7F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C11217
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road, Clayton, CA

QC Batch ID: MP2431
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

Prep Date: 06/01/10

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.02	.02	-0.0054	<0.20

Associated samples MP2431: C11217-1, C11217-3, C11217-4, C11217-5, C11217-6, C11217-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

4.2.1

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C11217
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road, Clayton, CA

QC Batch ID: MP2431
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

Prep Date: 06/01/10

Metal	C11216-1 Original	MS	Spikelot HGPWS1	% Rec	QC Limits
Mercury	0.0	3.8	4	95.0	70-130

Associated samples MP2431: C11217-1, C11217-3, C11217-4, C11217-5, C11217-6, C11217-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

4.2.2

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C11217
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road, Clayton, CA

QC Batch ID: MP2431
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

Prep Date: 06/01/10

Metal	C11216-1 Original	MSD	Spikelot HGPWS1	% Rec	MSD RPD	QC Limit
Mercury	0.0	3.8	4	95.0	0.0	20

Associated samples MP2431: C11217-1, C11217-3, C11217-4, C11217-5, C11217-6, C11217-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

4.2.2

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C11217
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road, Clayton, CA

QC Batch ID: MP2431
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

4.2.3

Prep Date: 06/01/10 06/01/10

Metal	BSP Result	Spikelot HGPWS1	% Rec	QC Limits	BSD Result	Spikelot HGPWS1	% Rec	BSD RPD	QC Limit
Mercury	1.9	2	95.0	85-115	1.9	2	95.0	0.0	

Associated samples MP2431: C11217-1, C11217-3, C11217-4, C11217-5, C11217-6, C11217-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C11217
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road, Clayton, CA

QC Batch ID: MP2440
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 06/04/10

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	14	21		
Antimony	10	6.9	5.3	4.7	<10
Arsenic	10	4.4	3.1	4.1	<10
Barium	5.0	.6	.7		
Beryllium	5.0	.1	.2	0.10	<5.0
Boron	50	8.6	11	8.4	<50
Cadmium	2.0	.3	.3	0.30	<2.0
Calcium	50	29	12	0.30	<50
Chromium	5.0	.4	.6	0.50	<5.0
Cobalt	5.0	.4	.4		
Copper	5.0	.8	1.1	-0.10	<5.0
Iron	50	2.6	18	0.50	<50
Lead	5.0	3.3	1.3	0.80	<5.0
Lithium	10	2.2	2.5		
Magnesium	50	9.6	13	1.3	<50
Manganese	5.0	.1	.2	0.10	<5.0
Molybdenum	5.0	1.3	1		
Nickel	5.0	.8	.5	0.20	<5.0
Potassium	500	58	60	-5.8	<500
Selenium	20	14	12	-13	<20
Silicon	50	3.4	5.3	0.0	<50
Silver	5.0	.9	.7	0.30	<5.0
Sodium	100	15	13	11.4	<100
Strontium	10	.3	2.4		
Thallium	20	6.5	6.4	7.5	<20
Tin	50	2.3	2		
Titanium	2.0	.2	.2		
Vanadium	5.0	.7	.5		
Zinc	10	.9	1.1	-0.10	<10

Associated samples MP2440: C11217-1, C11217-3, C11217-4, C11217-5, C11217-6, C11217-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C11217
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road, Clayton, CA

QC Batch ID: MP2440
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 06/04/10

Metal	C11217-4 Original	MS	Spikelot MPIR1	% Rec	QC Limits
Aluminum					
Antimony	10.4	509	500	99.7	80-120
Arsenic	0.0	499	500	99.8	80-120
Barium	anr				
Beryllium	0.10	504	500	100.8	80-120
Boron	953	1480	500	105.4	80-120
Cadmium	0.70	491	500	98.1	80-120
Calcium	49700	50500	500	160.0(a)	80-120
Chromium	0.40	490	500	97.9	80-120
Cobalt	anr				
Copper	2.0	500	500	99.6	80-120
Iron	89.4	596	500	101.3	80-120
Lead	4.0	493	500	97.8	80-120
Lithium					
Magnesium	28200	29100	500	180.0(a)	80-120
Manganese	5.8	502	500	99.2	80-120
Molybdenum	anr				
Nickel	6.2	479	500	94.6	80-120
Potassium	898	5940	5000	100.8	80-120
Selenium	0.0	496	500	99.2	80-120
Silicon	7720	8090	250	148.0(a)	80-120
Silver	0.0	523	500	104.6	80-120
Sodium	18200	18800	500	120.0	80-120
Strontium					
Thallium	0.0	462	500	92.4	80-120
Tin					
Titanium					
Vanadium	anr				
Zinc	2.1	487	500	97.0	80-120

Associated samples MP2440: C11217-1, C11217-3, C11217-4, C11217-5, C11217-6, C11217-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C11217
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road, Clayton, CA

QC Batch ID: MP2440
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 06/04/10

Metal	C11217-4 Original	MSD	Spikelot MPIRl	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	10.4	507	500	99.3	0.4	20
Arsenic	0.0	498	500	99.6	0.2	20
Barium	anr					
Beryllium	0.10	497	500	99.4	1.4	20
Boron	953	1490	500	107.4	0.7	20
Cadmium	0.70	490	500	97.9	0.2	20
Calcium	49700	50600	500	180.0(a)	0.2	20
Chromium	0.40	490	500	97.9	0.0	20
Cobalt	anr					
Copper	2.0	490	500	97.6	2.0	20
Iron	89.4	589	500	99.9	1.2	20
Lead	4.0	490	500	97.2	0.6	20
Lithium						
Magnesium	28200	29200	500	200.0(a)	0.3	20
Manganese	5.8	494	500	97.6	1.6	20
Molybdenum	anr					
Nickel	6.2	478	500	94.4	0.2	20
Potassium	898	5940	5000	100.8	0.0	20
Selenium	0.0	476	500	95.2	4.1	20
Silicon	7720	8150	250	172.0(a)	0.7	20
Silver	0.0	513	500	102.6	1.9	20
Sodium	18200	18800	500	120.0	0.0	20
Strontium						
Thallium	0.0	457	500	91.4	1.1	20
Tin						
Titanium						
Vanadium	anr					
Zinc	2.1	486	500	96.8	0.2	20

Associated samples MP2440: C11217-1, C11217-3, C11217-4, C11217-5, C11217-6, C11217-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C11217
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road, Clayton, CA

QC Batch ID: MP2440
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

4.3.3

Prep Date: 06/04/10 06/04/10

Metal	BSP Result	Spikelot MPIR1	% Rec	QC Limits	BSD Result	Spikelot MPIR1	% Rec	BSD RPD	QC Limit
Aluminum									
Antimony	473	500	94.6	80-120	480	500	96.0	1.5	
Arsenic	487	500	97.4	80-120	488	500	97.6	0.2	
Barium	anr								
Beryllium	493	500	98.6	80-120	491	500	98.2	0.4	
Boron	495	500	99.0	80-120	500	500	100.0	1.0	
Cadmium	494	500	98.8	80-120	493	500	98.6	0.2	
Calcium	502	500	100.4	80-120	504	500	100.8	0.4	
Chromium	494	500	98.8	80-120	491	500	98.2	0.6	
Cobalt	anr								
Copper	479	500	95.8	80-120	478	500	95.6	0.2	
Iron	503	500	100.6	80-120	506	500	101.2	0.6	
Lead	504	500	100.8	80-120	499	500	99.8	1.0	
Lithium									
Magnesium	500	500	100.0	80-120	511	500	102.2	2.2	
Manganese	500	500	100.0	80-120	497	500	99.4	0.6	
Molybdenum	anr								
Nickel	498	500	99.6	80-120	495	500	99.0	0.6	
Potassium	4870	5000	97.4	80-120	4890	5000	97.8	0.4	
Selenium	502	500	100.4	80-120	499	500	99.8	0.6	
Silicon	254	250	101.6	80-120	253	250	101.2	0.4	
Silver	513	500	102.6	80-120	512	500	102.4	0.2	
Sodium	497	500	99.4	80-120	500	500	100.0	0.6	
Strontium									
Thallium	473	500	94.6	80-120	470	500	94.0	0.6	
Tin									
Titanium									
Vanadium	anr								
Zinc	499	500	99.8	80-120	497	500	99.4	0.4	

Associated samples MP2440: C11217-1, C11217-3, C11217-4, C11217-5, C11217-6, C11217-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: C11217
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road, Clayton, CA

QC Batch ID: MP2440
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 06/04/10

Metal	C11217-4 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	10.4	0.00	100.0(a)	0-10
Arsenic	0.00	0.00	NC	0-10
Barium	anr			
Beryllium	0.100	0.00	100.0(a)	0-10
Boron	953	1000	5.1	0-10
Cadmium	0.700	2.00	185.7(a)	0-10
Calcium	49700	48200	3.1	0-10
Chromium	0.400	0.00	100.0(a)	0-10
Cobalt	anr			
Copper	2.00	0.00	100.0(a)	0-10
Iron	89.4	84.5	5.5	0-10
Lead	4.00	0.00	100.0(a)	0-10
Lithium				
Magnesium	28200	28500	0.9	0-10
Manganese	5.80	6.00	3.4	0-10
Molybdenum	anr			
Nickel	6.20	4.00	35.5 (a)	0-10
Potassium	898	764	15.0 (a)	0-10
Selenium	0.00	0.00	NC	0-10
Silicon	7720	7620	1.3	0-10
Silver	0.00	0.00	NC	0-10
Sodium	18200	17900	1.2	0-10
Strontium				
Thallium	0.00	0.00	NC	0-10
Tin				
Titanium				
Vanadium	anr			
Zinc	2.10	0.00	100.0(a)	0-10

Associated samples MP2440: C11217-1, C11217-3, C11217-4, C11217-5, C11217-6, C11217-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

POST DIGESTATE SPIKE SUMMARY

Login Number: C11217
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road, Clayton, CA

QC Batch ID: MP2440
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 06/04/10

Metal	Sample ml	Final ml	Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Boron										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead										
Lithium										
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silicon										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP2440: C11217-1, C11217-3, C11217-4, C11217-5, C11217-6, C11217-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested

4.3.5

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: C11217
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road, Clayton, CA

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Alkalinity, Total as CaCO3	GN3890	5.0	0.0	mg/l	250	251	100.5	75-125%
Bromide	GP1783/GN3889	0.20	0.0	mg/l	5	4.78	95.6	90-110%
Chloride	GP1789/GN3906	0.50	0.0	mg/l	5	4.62	92.4	90-110%
Dissolved Organic Carbon	GP1782/GN3888	1.0	0.52	mg/l	25.0	25.2	100.9	75-125%
Fluoride	GP1783/GN3889	0.10	0.0	mg/l	5	4.84	96.8	90-110%
Nitrogen, Nitrate	GP1783/GN3889	0.10	0.0	mg/l	5	4.65	93.0	90-110%
Solids, Total Dissolved	GN3886	10	0.0	mg/l				
Specific Conductivity	GN3877	1.0	0.0	umhos/cm				
Specific Conductivity	GN3913	1.0	0.0	umhos/cm				
Sulfate	GP1789/GN3906	0.50	0.0	mg/l	5	4.76	95.2	90-110%
Turbidity	GN3883	0.50	0.048	NTU	40	41.1	102.8	75-125%

Associated Samples:
Batch GN3877: C11217-1, C11217-3, C11217-4, C11217-5
Batch GN3883: C11217-1, C11217-3, C11217-4, C11217-5, C11217-6, C11217-7
Batch GN3886: C11217-1, C11217-3, C11217-4, C11217-5, C11217-6, C11217-7
Batch GN3890: C11217-1, C11217-3, C11217-4, C11217-5, C11217-6, C11217-7
Batch GN3913: C11217-6, C11217-7
Batch GP1782: C11217-1, C11217-3, C11217-4, C11217-5, C11217-6, C11217-7
Batch GP1783: C11217-1, C11217-3, C11217-4, C11217-5, C11217-6, C11217-7
Batch GP1789: C11217-1, C11217-3, C11217-4, C11217-5, C11217-6, C11217-7
(*) Outside of QC limits

BLANK SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: C11217
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road, Clayton, CA

Analyte	Batch ID	Units	Spike Amount	BSD Result	RPD	QC Limit
Alkalinity, Total as CaCO3	GN3890	mg/l	250	251	0.0	
Bromide	GP1783/GN3889	mg/l	5	4.82	0.8	25%
Chloride	GP1789/GN3906	mg/l	5	4.61	0.2	25%
Dissolved Organic Carbon	GP1782/GN3888	mg/l	25.0	24.7	2.2	
Fluoride	GP1783/GN3889	mg/l	5	4.78	1.2	25%
Nitrogen, Nitrate	GP1783/GN3889	mg/l	5	4.65	0.0	25%
Sulfate	GP1789/GN3906	mg/l	5	4.74	0.4	25%
Turbidity	GN3883	NTU	40	40.9	0.5	

5.2

Associated Samples:
Batch GN3883: C11217-1, C11217-3, C11217-4, C11217-5, C11217-6, C11217-7
Batch GN3890: C11217-1, C11217-3, C11217-4, C11217-5, C11217-6, C11217-7
Batch GP1782: C11217-1, C11217-3, C11217-4, C11217-5, C11217-6, C11217-7
Batch GP1783: C11217-1, C11217-3, C11217-4, C11217-5, C11217-6, C11217-7
Batch GP1789: C11217-1, C11217-3, C11217-4, C11217-5, C11217-6, C11217-7
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: C11217
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road, Clayton, CA

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Alkalinity, Total as CaCO3	GN3890	C11107-4	mg/l	169	167	1.2	0-25%
Solids, Total Dissolved	GN3886	C11190-1	mg/l	692	685	1.0	0-%
Specific Conductivity	GN3877	C11216-1	umhos/cm	414	418	1.0	0-25%
Specific Conductivity	GN3913	C11251-1	umhos/cm	893	896	0.3	0-25%
Turbidity	GN3883	C11216-1	NTU	26.9	26.5	1.5	0-25%
pH	GN3876	C11216-1	su	7.91	7.93	0.3	0-25%

5.3

Associated Samples:
Batch GN3876: C11217-1, C11217-3, C11217-4, C11217-5, C11217-6, C11217-7
Batch GN3877: C11217-1, C11217-3, C11217-4, C11217-5
Batch GN3883: C11217-1, C11217-3, C11217-4, C11217-5, C11217-6, C11217-7
Batch GN3886: C11217-1, C11217-3, C11217-4, C11217-5, C11217-6, C11217-7
Batch GN3890: C11217-1, C11217-3, C11217-4, C11217-5, C11217-6, C11217-7
Batch GN3913: C11217-6, C11217-7
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: C11217
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road, Clayton, CA

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Bromide	GP1783/GN3889	C11216-1	mg/l	0.0	4	3.7	92.5	80-120%
Chloride	GP1789/GN3906	C11217-7	mg/l	2370	2400	4740	98.8	80-120%
Dissolved Organic Carbon	GP1782/GN3888	C11217-2	mg/l	6.6	25	30.2	94.1	75-125%
Fluoride	GP1783/GN3889	C11216-1	mg/l	0.027	4	3.6	89.3	80-120%
Nitrogen, Nitrate	GP1783/GN3889	C11216-1	mg/l	0.031	4	3.6	89.2	80-120%
Sulfate	GP1789/GN3906	C11217-7	mg/l	3840	2400	6020	90.8	80-120%

5.4

Associated Samples:
Batch GP1782: C11217-1, C11217-3, C11217-4, C11217-5, C11217-6, C11217-7
Batch GP1783: C11217-1, C11217-3, C11217-4, C11217-5, C11217-6, C11217-7
Batch GP1789: C11217-1, C11217-3, C11217-4, C11217-5, C11217-6, C11217-7
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: C11217
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road, Clayton, CA

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Bromide	GP1783/GN3889	C11216-1	mg/l	0.0	4	3.7	0.0	
Chloride	GP1789/GN3906	C11217-7	mg/l	2370	2400	4760	0.4	
Dissolved Organic Carbon	GP1782/GN3888	C11217-2	mg/l	6.6	25	29.6	2.0	
Fluoride	GP1783/GN3889	C11216-1	mg/l	0.027	4	3.5	2.8	
Nitrogen, Nitrate	GP1783/GN3889	C11216-1	mg/l	0.031	4	3.6	0.0	
Sulfate	GP1789/GN3906	C11217-7	mg/l	3840	2400	6070	0.8	

Associated Samples:
Batch GP1782: C11217-1, C11217-3, C11217-4, C11217-5, C11217-6, C11217-7
Batch GP1783: C11217-1, C11217-3, C11217-4, C11217-5, C11217-6, C11217-7
Batch GP1789: C11217-1, C11217-3, C11217-4, C11217-5, C11217-6, C11217-7
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

Northern California
ACCUTEST.
Laboratories

06/10/10

Technical Report for

The Source Group

Mt. Diablo- Marsh Creek Road, Clayton, CA

SUNOCO

Accutest Job Number: C11216X

Sampling Date: 05/27/10

Report to:

The Source Group
3451C Vincent Road
Pleasant Hill, CA 94523
jphilipp@thesourcegroup.net

ATTN: Jon Philipp

Total number of pages in report:

ACCREDITED IN ACCORDANCE WITH NELAC

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Laurie Glantz-Murphy
Laboratory Director

Client Service contact: Anne Kathain 408-588-0200

Certifications: CA (08258CA) DoD/ISO/IEC 17025:2005 (L2242)

Test results relate only to samples analyzed.

Northern California
ACCUTEST.
Laboratories

06/10/10

Technical Report for

The Source Group

Mt. Diablo- Marsh Creek Road, Clayton, CA

SUNOCO

Accutest Job Number: C11217X

Sampling Date: 05/27/10

Report to:

The Source Group
3451C Vincent Road
Pleasant Hill, CA 94523
jphilipp@thesourcegroup.net

ATTN: Jon Philipp

Total number of pages in report:

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Laurie Glantz-Murphy
Laboratory Director

Client Service contact: Anne Kathain 408-588-0200

Certifications: CA (08258CA) DoD/ISO/IEC 17025:2005 (L2242)

Test results relate only to samples analyzed.

Accutest Laboratories

Sample Summary

The Source Group

Job No: C11216X

Mt. Diablo- Marsh Creek Road, Clayton, CA
Project No: SUNOCO

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
C11216-1X	05/27/10	13:00	JP	05/28/10	AQ	Surface Water	MTD-SW-08/2
C11216-2X	05/27/10	13:30	JP	05/28/10	AQ	Surface Water	MTD-SW-07/2
C11216-3X	05/27/10	13:15	JP	05/28/10	AQ	Surface Water	MTD-SW-09/2
C11216-4X	05/27/10	13:50	JP	05/28/10	AQ	Surface Water	MTD-SW-10/2
C11216-5X	05/27/10	10:50	JP	05/28/10	AQ	Surface Water	MTD-SW-06/2
C11216-6X	05/27/10	09:20	JP	05/28/10	AQ	Surface Water	MTD-SW-11/2
C11216-7X	05/27/10	12:45	JP	05/28/10	AQ	Surface Water	MTD-SW-16/2

Accutest Laboratories

Sample Summary

The Source Group

Job No: C11217X

Mt. Diablo- Marsh Creek Road, Clayton, CA
Project No: SUNOCO

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
C11217-1X	05/27/10	12:00	JP	05/28/10	AQ	Surface Water	MTD-SW-02/2
C11217-3X	05/27/10	09:20	JP	05/28/10	AQ	Surface Water	MTD-SW-12/2
C11217-4X	05/27/10	09:30	JP	05/28/10	AQ	Surface Water	MTD-SW-13/2
C11217-5X	05/27/10	10:05	JP	05/28/10	AQ	Surface Water	MTD-SW-14/2
C11217-6X	05/27/10	11:15	JP	05/28/10	AQ	Surface Water	MTD-SW-15/2
C11217-7X	05/27/10	13:10	JP	05/28/10	AQ	Surface Water	MTD-SW-05/2

Tuesday, June 08, 2010

Ann Kathain
Accutest Laboratories
2105 Lundy Avenue
San Jose, CA 95131

RE: Lab Order: K060068
Project ID: MT.DIABLO

Collected By: CLIENT
PO/Contract #: C11216

Dear Ann Kathain:

Enclosed are the analytical results for sample(s) received by the laboratory on Tuesday, June 01, 2010. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Enclosures

Project Manager: Mike Hamilton

1885 North Kelly Road • Napa, California 94558
(707) 258-4000 • Fax (707) 226-1001 • e-mail: info@caltestlabs.com

SAMPLE SUMMARY

Lab Order: K060068

Project ID: MT.DIABLO

Lab ID	Sample ID	Matrix	Date Collected	Date Received
K060068001	MTD-SW-08/2	Water	5/27/2010 13:00	6/1/2010 14:20
K060068002	MTD-SW-07/2	Water	5/27/2010 13:30	6/1/2010 14:20
K060068003	MTD-SW-09/	Water	5/27/2010 13:15	6/1/2010 14:20
K060068004	MTD-SW-10/2	Water	5/27/2010 13:50	6/1/2010 14:20
K060068005	MTD-SW-06/2	Water	5/27/2010 10:50	6/1/2010 14:20
K060068006	MTD-SW-11/2	Water	5/27/2010 09:20	6/1/2010 14:20
K060068007	MTD-SW-16/2	Water	5/27/2010 12:45	6/1/2010 14:20
K060068008	MTD-SW-02/2	Water	5/27/2010 12:00	6/1/2010 14:20
K060068009	MTD-SW-04/2	Water	5/27/2010 12:15	6/1/2010 14:20
K060068010	MTD-SW-12/2	Water	5/27/2010 09:20	6/1/2010 14:20
K060068011	MTD-SW-13/2	Water	5/27/2010 09:30	6/1/2010 14:20
K060068012	MTD-SW-14/2	Water	5/27/2010 10:05	6/1/2010 14:20
K060068013	MTD-SW-15/2	Water	5/27/2010 11:15	6/1/2010 14:20
K060068014	MTD-SW-05/2	Water	5/27/2010 13:10	6/1/2010 14:20

1885 North Kelly Road • Napa, California 94558
(707) 258-4000 • Fax (707) 226-1001 • e-mail: info@caltestlabs.com

NARRATIVE

Lab Order: K060068

Project ID: MT.DIABLO

General Qualifiers and Notes

Caltest authorizes this report to be reproduced only in its entirety. Results are specific to the sample(s) as submitted and only to the parameter(s) reported.

Caltest certifies that all test results for wastewater and hazardous waste analyses meet all applicable NELAC requirements; all microbiology and drinking water testing meet applicable ELAP requirements, unless stated otherwise,

All analyses performed by EPA Methods or Standard Methods (SM) 18th Ed. except where noted.

Caltest collects samples in compliance with 40 CFR, EPA Methods, Cal. Title 22, and Standard Methods.

Dilution Factors (DF) reported greater than '1' have been used to adjust the result, Reporting Limit (RL), and Method Detection Limit (MDL).

All Solid, sludge, and/or biosolids data is reported in Wet Weight, unless otherwise specified.

Laboratory filtration for dissolved metals (excluding mercury) and/or pH analysis was not performed within the 15 minute holding time as specified by 40CFR 136.3 table II.

Results Qualifiers: Report fields may contain codes and non-numeric data correlating to one or more of the following definitions:

ND - Non Detect - indicates analytical result has not been detected.

RL - Reporting Limit is the quantitation limit at which the laboratory is able to detect an analyte. An analyte not detected at or above the RL is reported as ND unless otherwise noted or qualified. For analyses pertaining to the State Implementation Plan of the California Toxics Rule, the Caltest Reporting Limit (RL) is equivalent to the Minimum Level (ML). A standard is always run at or below the ML. Where Reporting Limits are elevated due to dilution, the ML calibration criteria has been met.

J - reflects estimated analytical result value detected below the Reporting Limit (RL) and above the Method Detection Limit (MDL). The 'J' flag is equivalent to the DNQ Estimated Concentration flag.

E - indicates an estimated analytical result value.

B - indicates the analyte has been detected in the blank associated with the sample.

NC - means not able to be calculated for RPD or Spike Recoveries.

SS - compound is a Surrogate Spike used per laboratory quality assurance manual.

NOTE: This document represents a complete Analytical Report for the samples referenced herein and should be retained as a permanent record thereof.

1885 North Kelly Road • Napa, California 94558
(707) 258-4000 • Fax (707) 226-1001 • e-mail: info@caltestlabs.com

ANALYTICAL RESULTS

Lab Order: K060068

Project ID MT.DIABLO

Lab ID: K060068001 Date Collected: 5/27/2010 13:00 Matrix: Water
Sample ID: MTD-SW-08/2 Date Received: 6/1/2010 14:20

Parameters	Result	Units	R. L.	MDL	DF	Prepared	Batch	Analyzed	Batch	Qual
Methyl Mercury Analysis		**Prep Method:**	Draft EPA 1630			**Prep by:** ECV				
		Analytical Method:	Draft EPA 1630					**Analyzed by:** ECV		
Methyl Mercury	0.705	ng/L	0.05	0.02	1	06/02/10 00:00	MPR 8823	06/03/10 00:00	MHG 3152	

Lab ID: K060068002 Date Collected: 5/27/2010 13:30 Matrix: Water
Sample ID: MTD-SW-07/2 Date Received: 6/1/2010 14:20

Parameters	Result	Units	R. L.	MDL	DF	Prepared	Batch	Analyzed	Batch	Qual
Methyl Mercury Analysis		**Prep Method:**	Draft EPA 1630			**Prep by:** ECV				
		Analytical Method:	Draft EPA 1630					**Analyzed by:** ECV		
Methyl Mercury	1.47	ng/L	0.05	0.02	1	06/02/10 00:00	MPR 8823	06/03/10 00:00	MHG 3152	

Lab ID: K060068003 Date Collected: 5/27/2010 13:15 Matrix: Water
Sample ID: MTD-SW-09/ Date Received: 6/1/2010 14:20

Parameters	Result	Units	R. L.	MDL	DF	Prepared	Batch	Analyzed	Batch	Qual
Methyl Mercury Analysis		**Prep Method:**	Draft EPA 1630			**Prep by:** ECV				
		Analytical Method:	Draft EPA 1630					**Analyzed by:** ECV		
Methyl Mercury	0.657	ng/L	0.2	0.1	1	06/07/10 00:00	MPR 8838	06/07/10 00:00	MHG 3153	

Lab ID: K060068004 Date Collected: 5/27/2010 13:50 Matrix: Water
Sample ID: MTD-SW-10/2 Date Received: 6/1/2010 14:20

Parameters	Result	Units	R. L.	MDL	DF	Prepared	Batch	Analyzed	Batch	Qual
Methyl Mercury Analysis		**Prep Method:**	Draft EPA 1630			**Prep by:** ECV				
		Analytical Method:	Draft EPA 1630					**Analyzed by:** ECV		
Methyl Mercury	7.26	ng/L	0.05	0.02	1	06/02/10 00:00	MPR 8823	06/03/10 00:00	MHG 3152	

Lab ID: K060068005 Date Collected: 5/27/2010 10:50 Matrix: Water
Sample ID: MTD-SW-06/2 Date Received: 6/1/2010 14:20

Parameters	Result	Units	R. L.	MDL	DF	Prepared	Batch	Analyzed	Batch	Qual
Methyl Mercury Analysis		**Prep Method:**	Draft EPA 1630			**Prep by:** ECV				

1885 North Kelly Road • Napa, California 94558
(707) 258-4000 • Fax (707) 226-1001 • e-mail: info@caltestlabs.com

ANALYTICAL RESULTS

Lab Order: K060068

Project ID MT.DIABLO

Lab ID: K060068005 Date Collected: 5/27/2010 10:50 Matrix: Water
Sample ID: MTD-SW-06/2 Date Received: 6/1/2010 14:20

Parameters	Result	Units	R. L.	MDL	DF	Prepared	Batch	Analyzed	Batch	Qual
		Analytical Method: Draft EPA 1630						Analyzed by: ECV		
Methyl Mercury	0.233	ng/L	0.05	0.02	1	06/02/10 00:00	MPR 8823	06/03/10 00:00	MHG 3152	

Lab ID: K060068006 Date Collected: 5/27/2010 09:20 Matrix: Water
Sample ID: MTD-SW-11/2 Date Received: 6/1/2010 14:20

Parameters	Result	Units	R. L.	MDL	DF	Prepared	Batch	Analyzed	Batch	Qual
Methyl Mercury Analysis		Prep Method: Draft EPA 1630				Prep by: ECV				
		Analytical Method: Draft EPA 1630						Analyzed by: ECV		
Methyl Mercury	0.504	ng/L	0.05	0.02	1	06/02/10 00:00	MPR 8823	06/03/10 00:00	MHG 3152	

Lab ID: K060068007 Date Collected: 5/27/2010 12:45 Matrix: Water
mple ID: MTD-SW-16/2 Date Received: 6/1/2010 14:20

Parameters	Result	Units	R. L.	MDL	DF	Prepared	Batch	Analyzed	Batch	Qual
Methyl Mercury Analysis		Prep Method: Draft EPA 1630				Prep by: ECV				
		Analytical Method: Draft EPA 1630						Analyzed by: ECV		
Methyl Mercury	0.0766	ng/L	0.05	0.02	1	06/02/10 00:00	MPR 8823	06/03/10 00:00	MHG 3152	

Lab ID: K060068008 Date Collected: 5/27/2010 12:00 Matrix: Water
Sample ID: MTD-SW-02/2 Date Received: 6/1/2010 14:20

Parameters	Result	Units	R. L.	MDL	DF	Prepared	Batch	Analyzed	Batch	Qual
Methyl Mercury Analysis		Prep Method: Draft EPA 1630				Prep by: ECV				
		Analytical Method: Draft EPA 1630						Analyzed by: ECV		
Methyl Mercury	2.84	ng/L	0.2	0.1	1	06/07/10 00:00	MPR 8838	06/07/10 00:00	MHG 3153	

Lab ID: K060068010 Date Collected: 5/27/2010 09:20 Matrix: Water
Sample ID: MTD-SW-12/2 Date Received: 6/1/2010 14:20

Parameters	Result	Units	R. L.	MDL	DF	Prepared	Batch	Analyzed	Batch	Qual
Methyl Mercury Analysis		Prep Method: Draft EPA 1630				Prep by: ECV				
		Analytical Method: Draft EPA 1630						Analyzed by: ECV		

1885 North Kelly Road • Napa, California 94558
(707) 258-4000 • Fax (707) 226-1001 • e-mail: info@caltestlabs.com

ANALYTICAL RESULTS

Lab Order: K060068

Project ID MT.DIABLO

Lab ID:	K060068010	Date Collected:	5/27/2010 09:20	Matrix:	Water
Sample ID:	MTD-SW-12/2	Date Received:	6/1/2010 14:20		

Parameters	Result	Units	R. L.	MDL	DF	Prepared	Batch	Analyzed	Batch	Qual
Methyl Mercury	0.104	ng/L	0.05	0.02	1	06/02/10 00:00	MPR 8823	06/03/10 00:00	MHG 3152	

Lab ID:	K060068011	Date Collected:	5/27/2010 09:30	Matrix:	Water
Sample ID:	MTD-SW-13/2	Date Received:	6/1/2010 14:20		

Parameters	Result	Units	R. L.	MDL	DF	Prepared	Batch	Analyzed	Batch	Qual
Methyl Mercury Analysis		Prep Method:	Draft EPA 1630			Prep by: ECV				
		Analytical Method:	Draft EPA 1630					Analyzed by: ECV		
Methyl Mercury	0.439	ng/L	0.05	0.02	1	06/02/10 00:00	MPR 8823	06/03/10 00:00	MHG 3152	

Lab ID:	K060068012	Date Collected:	5/27/2010 10:05	Matrix:	Water
Sample ID:	MTD-SW-14/2	Date Received:	6/1/2010 14:20		

Parameters	Result	Units	R. L.	MDL	DF	Prepared	Batch	Analyzed	Batch	Qual
Methyl Mercury Analysis		Prep Method:	Draft EPA 1630			Prep by: ECV				
		Analytical Method:	Draft EPA 1630					Analyzed by: ECV		
Methyl Mercury	1.16	ng/L	0.05	0.02	1	06/02/10 00:00	MPR 8823	06/03/10 00:00	MHG 3152	

Lab ID:	K060068013	Date Collected:	5/27/2010 11:15	Matrix:	Water
Sample ID:	MTD-SW-15/2	Date Received:	6/1/2010 14:20		

Parameters	Result	Units	R. L.	MDL	DF	Prepared	Batch	Analyzed	Batch	Qual
Methyl Mercury Analysis		Prep Method:	Draft EPA 1630			Prep by: ECV				
		Analytical Method:	Draft EPA 1630					Analyzed by: ECV		
Methyl Mercury	4.86	ng/L	0.2	0.1	1	06/07/10 00:00	MPR 8838	06/07/10 00:00	MHG 3153	

Lab ID:	K060068014	Date Collected:	5/27/2010 13:10	Matrix:	Water
Sample ID:	MTD-SW-05/2	Date Received:	6/1/2010 14:20		

Parameters	Result	Units	R. L.	MDL	DF	Prepared	Batch	Analyzed	Batch	Qual
Methyl Mercury Analysis		Prep Method:	Draft EPA 1630			Prep by: ECV				
		Analytical Method:	Draft EPA 1630					Analyzed by: ECV		
Methyl Mercury	3.29	ng/L	0.2	0.1	1	06/07/10 00:00	MPR 8838	06/07/10 00:00	MHG 3153	

1885 North Kelly Road • Napa, California 94558
(707) 258-4000 • Fax (707) 226-1001 • e-mail: info@caltestlabs.com

ANALYTICAL RESULTS

Lab Order: K060068
Project ID MT.DIABLO

Lab ID:	K060068014	Date Collected:	5/27/2010 13:10	Matrix:	Water
Sample ID:	MTD-SW-05/2	Date Received:	6/1/2010 14:20		

Parameters	Result	Units	R. L.	MDL	DF	Prepared	Batch	Analyzed	Batch	Qual

1885 North Kelly Road • Napa, California 94558
(707) 258-4000 • Fax (707) 226-1001 • e-mail: info@caltestlabs.com

QUALITY CONTROL DATA

Lab Order: K060068

Project ID: MT.DIABLO

Analysis Description:	Methyl Mercury Analysis	**QC Batch:**	MPR/8823
Analysis Method:	Draft EPA 1630	**QC Batch Method:**	Draft EPA 1630

METHOD BLANK: 333862

Parameter	Blank Result	Reporting Limit	MDL	Units	Qualifiers
Methyl Mercury	ND	0.05	0.02	ng/L	

LABORATORY CONTROL SAMPLE: 333863

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Methyl Mercury	ng/L	1.11	1.09	98	67-133	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 333864 333865

Parameter	Units	K060068001 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Methyl Mercury	ng/L	0.705	1.11	1.68	1.62	88	82	65-135	3.6	35	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 333866 333867

Parameter	Units	K060068007 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Methyl Mercury	ng/L	0.0766	1.11	1.11	1.18	93	99	65-135	6.1	35	

Analysis Description:	Methyl Mercury Analysis	**QC Batch:**	MPR/8838
Analysis Method:	Draft EPA 1630	**QC Batch Method:**	Draft EPA 1630

METHOD BLANK: 334666

Parameter	Blank Result	Reporting Limit	MDL	Units	Qualifiers
Methyl Mercury	ND	0.05	0.02	ng/L	

LABORATORY CONTROL SAMPLE: 334667

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Methyl Mercury	ng/L	1.11	0.96	86	67-133	

1885 North Kelly Road • Napa, California 94558
(707) 258-4000 • Fax (707) 226-1001 • e-mail: info@caltestlabs.com

QUALITY CONTROL DATA

Lab Order: K060068

Project ID: MT.DIABLO

Analysis Description:	Methyl Mercury Analysis	**QC Batch:**	MPR/8838
Analysis Method:	Draft EPA 1630	**QC Batch Method:**	Draft EPA 1630

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 334668 334669

Parameter	Units	K060232002 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Methyl Mercury	ng/L	0.0356	1.11	1.03	1.04	89	90	65-135	1	35	

1885 North Kelly Road • Napa, California 94558
(707) 258-4000 • Fax (707) 226-1001 • e-mail: info@caltestlabs.com

QUALITY CONTROL DATA QUALIFIERS

Lab Order: K060068

Project ID: MT.DIABLO

QUALITY CONTROL PARAMETER QUALIFIERS

Results Qualifiers: Report fields may contain codes and non-numeric data correlating to one or more of the following definitions:

NS - means not spiked and will not have recoveries reported for Analyte Spike Amounts

NC - means not able to be calculated for RPD or Spike Recoveries.

QC Codes Keys: These descriptors are used to help identify the specific QC samples and clarify the report.

MB - Method Blank

Method Blanks are reported to the same Method Detection Limits (MDLs) or Reporting Limits (RLs) as the analytical samples in the corresponding QC batch.

LCS/LCSD - Laboratory Control Spike / Laboratory Control Spike Duplicate

DUP - Duplicate of Original Sample Matrix

MS/MSD - Matrix Spike / Matrix Spike Duplicate

RPD - Relative Percent Difference

%Recovery - Spike Recovery stated as a percentage

1885 North Kelly Road • Napa, California 94558
(707) 258-4000 • Fax (707) 226-1001 • e-mail: info@caltestlabs.com

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab Order: K060068

Project ID: MT.DIABLO

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
K060068001	MTD-SW-08/2	Draft EPA 1630	MPR/8823	Draft EPA 1630	MHG/3152
K060068002	MTD-SW-07/2	Draft EPA 1630	MPR/8823	Draft EPA 1630	MHG/3152
K060068004	MTD-SW-10/2	Draft EPA 1630	MPR/8823	Draft EPA 1630	MHG/3152
K060068005	MTD-SW-06/2	Draft EPA 1630	MPR/8823	Draft EPA 1630	MHG/3152
K060068006	MTD-SW-11/2	Draft EPA 1630	MPR/8823	Draft EPA 1630	MHG/3152
K060068007	MTD-SW-16/2	Draft EPA 1630	MPR/8823	Draft EPA 1630	MHG/3152
K060068010	MTD-SW-12/2	Draft EPA 1630	MPR/8823	Draft EPA 1630	MHG/3152
K060068011	MTD-SW-13/2	Draft EPA 1630	MPR/8823	Draft EPA 1630	MHG/3152
K060068012	MTD-SW-14/2	Draft EPA 1630	MPR/8823	Draft EPA 1630	MHG/3152
K060068003	MTD-SW-09/	Draft EPA 1630	MPR/8838	Draft EPA 1630	MHG/3153
K060068008	MTD-SW-02/2	Draft EPA 1630	MPR/8838	Draft EPA 1630	MHG/3153
K060068013	MTD-SW-15/2	Draft EPA 1630	MPR/8838	Draft EPA 1630	MHG/3153
K060068014	MTD-SW-05/2	Draft EPA 1630	MPR/8838	Draft EPA 1630	MHG/3153

1885 North Kelly Road • Napa, California 94558
(707) 258-4000 • Fax (707) 226-1001 • e-mail: info@caltestlabs.com

Northern California
ACCUTEST
Laboratories

Accutest ID and PO#: C11216

2105 Lundy Avenue, San Jose, CA 95131 Phone :(408)588-0200 Fax: (408)588-0201

Subcontract Chain of Custody

Subcontract Lab: Caltest Analytical Laboratory
Date Sent: 06/01/10
Date Due: 5 DAY TAT

5 Day TAT RUSH

Project Name: Mt. Diablo
Project Location: Clayton, CA

K060048

	Accutest Lab Number	Customer Sample Name/Field Point ID	Matrix	Method	Collect Date	Collect Time
-1	C11216-1	MTD-SW-08/2	SW	Methyl Mercury	05/27/10	13:00
-2	C11216-2	MTD-SW-07/2	SW	Methyl Mercury	05/27/10	13:30
-3	C11216-3	MTD-SW-09/2	SW	Methyl Mercury	05/27/10	13:15
-4	C11216-4	MTD-SW-10/2	SW	Methyl Mercury	05/27/10	13:50
-5	C11216-5	MTD-SW-06/2	SW	Methyl Mercury	05/27/10	10:50
-6	C11216-6	MTD-SW-11/2	SW	Methyl Mercury	05/27/10	09:20
-7	C11216-7	MTD-SW-16/2	SW	Methyl Mercury	05/27/10	12:45

Comments:

Relinquished By:	Received By:	Date:	Time:
ekumar		6/1/10	1145
Relinquished By:	Received By:	Date:	Time:
		6/1/10	1420
Relinquished By:	Received By:	Date:	Time:

Send the Report to: annek@accutest.com

Northern California
ACCUTEST
Laboratories

2105 Lundy Avenue, San Jose, CA 95131 Phone :(408)588-0200 Fax: (408)588-0201

Accutest ID and PO#: C11217

Subcontract Chain of Custody

Subcontract Lab: Caltest Analytical Laboratory
Date Sent: 06/01/10
Date Due: 5 DAY TAT

5 Day TAT

RUSH

Project Name: Mt. Diablo
Project Location: Clayton, CA

K060068

	Accutest Lab Number	Customer Sample Name/Field Point ID	Matrix	Method	Collect Date	Collect Time
-8	C11217-1	MTD-SW-02/2	SW	Methyl Mercury	05/27/10	12:00
-9	C11217-2	MTD-SW-04/2	SW	Methyl Mercury (ON HOLD)	05/27/10	12:15
-10	C11217-3	MTD-SW-12/2	SW	Methyl Mercury	05/27/10	09:20
-11	C11217-4	MTD-SW-13/2	SW	Methyl Mercury	05/27/10	09:30
-12	C11217-5	MTD-SW-14/2	SW	Methyl Mercury	05/27/10	10:05
-13	C11217-6	MTD-SW-15/2	SW	Methyl Mercury	05/27/10	11:15
-14	C11217-7	MTD-SW-05/2	SW	Methyl Mercury	05/27/10	13:10

Comments: C11217-2 (ON HOLD)

Relinquished By: ekumar	Received By:	Date: 6/1/10	Time: 1145
Relinquished By:	Received By:	Date: 6/1/10	Time: 1426
Relinquished By:	Received By:	Date:	Time:

Send the Report to: annek@accutest.com

Northern California
ACCUTEST Laboratories

CHAIN OF CUSTODY

2105 Lundy Ave, San Jose, CA 95131
(408) 588-0200 FAX: (408) 588-0201

SGRPCAPH2674

FED-EX Tracking #: | Bottle Order Control #:
Accutest Quote #: | Accutest NC Job #: C11216

Client / Reporting Information

Company Name: The Source Group
Address: 3451C Vincent Road
City: Pleasant Hill | State: CA | Zip: 94523
Project Contact: Jon Phillpp
Phone #: 925-944-2856 x 316
Samplers's Name: Jon Phillpp

Project Information

Project Name: Sunoco, Mt. Diablo
Street:
City: Clayton | State: CA
Project #: 01-SUN-050
EMAIL: jphillpp@thesourcegroup.net
Client Purchase Order #:

Requested Analysis

Matrix Codes: WW- Wastewater; GW- Ground Water; SW- Surface Water; SO- Soil; OI-Oil; WP-Wipe; LIQ - Non-aqueous Liquid; AIR; DW- Drinking Water (Perchlorate Only)

Accutest Sample ID	Sample ID / Field Point / Point of Collection	Collection: Date	Time	Sampled by	Matrix	# of bottles	Preserved: HCl	NaOH	HNO3	H2SO4	None	NaHSO4	MeOH	Encore	Mercury (dissolved/total) - Lab filter	Priority Pollutant Metals (PM13)	Methyl Mercury (subcontract) Caltest	General Chem (turb, alk, TDS, EC, pH, Bic, Car)	Cations (B, K, Fe, Mn, Mg, Ca, Na, Si)	Hardness (Ca, Mg)	Anions (Cl, F, SO4, Br, NO3, Zn-Acet) (EK)	Dissolved Organic Carbon (Lab-Filtered From 1 Lit poly)	HOLD (DO NOT ANALYZE) (EK) 5/28/10		LAB USE ONLY
-1	MTD-SW-08/2	27-May	13:00	JP	SW	4	1		1		2				X	X	X	X	X	X	X	X			
-2	MTD-SW-07/2	27-May	13:30	JP	SW	4	1		1		2				X	X	X	X	X	X	X	X			To be Run as per Client Email
-3	MTD-SW-09/2	27-May	13:15	JP	SW	4	1		1		2				X	X	X	X	X	X	X	X			
-4	MTD-SW-10/2	27-May	13:50	JP	SW	4	1		1		2				X	X	X	X	X	X	X	X			
-5	MTD-SW-06/2	27-May	10:50	JP	SW	4	1		1		2				X	X	X	X	X	X	X	X			
-6	MTD-SW-11/2	27-May	9:20	JP	SW	3	1		1		1				X	X	X	X	X	X	X	X			
-7	MTD-SW-16/2	27-May	12:45	JP	SW	4	1		1		2				X	X	X	X	X	X	X	X			To be Run as per Client Email

(EK) 5/28/10

Turnaround Time (Business days)

Approved By:/ Date:

- [x] 5 Day Standard
- [ ] 3 Day (50% markup)
- [ ] 2 Day (75% markup)
- [ ] 1 Day *(100% markup)*

Emergency T/A data available VIA Lablink

Data Deliverable Information

- [x] Commercial "B" - Results with QC summaries
- [ ] Commercial "B+" - Results, QC, and chromatograms
- [ ] FULT1 - Level 4 data package
- [ ] EDF for Geotracker [ ] EDD Format
- Provide EDF Global ID:
- Provide EDF Logcode:

Comments / Remarks

Note that one sample is missing the small unpreserved poly. Do what you can to analyze the full suite. If you have to cut something out for lack of sample, call me.

* Samples on Hold to be analyzed as per Client Email

250mL poly (o)HNO3 PH<2 (X7) ; 500mL Amber (o)HCL each (X7)
1X1Lit poly each N/p (X7) ; 250mL poly each N/p (X7)

(-6) used Sample from 1Lit poly -N/p to Filter for dissolved (Hg)

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler	Date Time	Received By	Relinquished By	Date Time	Received By
1	[signature]	5/28/10 1025	1 Vic Vasquez 5388	2 world courier	05/28/10 12:05	2 [signature]
3	Relinquished by:	Date Time:	Received By:	4 Relinquished By:	Date Time:	4 Received By:
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Appropriate Bottle / Pres. (Y)/N Labels match Coc? (Y) N	Headspace Y/N N/A Separate Receipt Log (Y) N

On Ice (Y) N Cooler Temp. 4.8+-.2=5.1 °C

Accutest Laboratories Northern California
Sample Receiving Check List

Job# : C112116

Sample Control Rep. Initial: EK | JM

SGRPCAPH 2674

Review Chain of Custody Chain of Custody is to be complete and legible.

- ☑ Are these regulatory (~~NPDES~~) samples? ~~CWA~~ — Yes / No
- ☑ Is pH requested? — Yes / No
- N/A ☑ Was Client informed that hold time is 15 min? Yes / No Continue Yes / No
- ☑ Was ortho-Phosphate filtered with in 15 min? Yes / No Continue Yes / No
- ☑ Are sample within hold time? — Yes / No
  - Are sample in danger of exceeding hold-time — Yes / No
- ☑ Existing Client? Yes / No Existing Project? Yes / No
  - If No: Is Report to info complete and legible, including;
    - ☐ deliverable ☐ Name ☐ Address ☐ phone ☐ e-mail
    - Is Bill to info complete and legible, including;
    - ☐ PO# ☐ Credit card ☐ Contact ☐address ☐ phone ☐ e-mail
    - Is Contact and/or Project Manager identified, including;
    - ☐ phone ☐ e-mail
- ☑ Project name / number ☐ Special requirements? — Yes / No
- ☑ Sample IDs / date & time of collection provided? — Yes / No
- ☑ Is Matrix listed and correct? — Yes / No
- ☑ Analyses listed we do or client has authorized a subcontract? — Yes / No
- ☑ Chain is signed and dated by both client and sample custodian? — Yes / No
- ☑ TAT requested available? Yes / No Approved by PM

Review Coolers:

- ☑ Were Coolers temperatures measured at ≤6°C? Cooler # 1 Temp 5.1 °C
  - If cooler is outside the ≤6°C; note down below the affected bottles in that cooler
  - Note that ANC does NOT accept evidentiary samples. (We do not lock refrigerators)
- ☑ Shipment Received Method World Courier
- ☑ Custody Seals: Present: Yes / No If Yes; Unbroken: Yes / No

Review of Sample Bottles: If you answer no, explain to the side

- ☑ Chain matches bottle labels? Yes / No ☑ Sample bottle intact? Yes / No
- ☑ Is there enough sample volume in proper bottle for requested analyses? Yes / No
- ☑ Proper Preservatives? Yes / No Check pH on preserved samples except 1664, 625, 8270 and VOAs.
- N/A ☒ Headspace-VOAs? Greater than 6mm in diameter Yes / No
  List sample ID and affected container

Client Sample ID	pH Check	Other Comments/~~Issues~~
-1	pH<2	250mL poly (w/ HNO3)
↓	↓	↓
-7	↓	↓
		* methylmercury → subbed to Caltest.

Non-Compliance issues and discrepancies on the COC are forwarded to Project Management

Northern California
ACCUTEST Laboratories

CHAIN OF CUSTODY

2105 Lundy Ave, San Jose, CA 95131
(408) 588-0200 FAX: (408) 588-0201

SGRPCAPH 2674

FED-EX Tracking # | Bottle Order Control #

Accutest Quote # | Accutest NC Job #: C 111217

Client / Reporting Information

Company Name: The Source Group
Address: 3451C Vincent Road
City: Pleasant Hill State: CA Zip: 94523
Project Contact: Jon Philipp
Phone #: 925-944-2856 x 316
Samplers's Name: Jon Philipp

Project Information

Project Name: Sunoco, Mt. Diablo
Street:
City: Clayton State: CA
Project #: 01-SUN-050
EMAIL: jphilipp@thesourcegroup.net
Client Purchase Order #:

Requested Analysis

Accutest Sample ID	Sample ID / Field Point / Point of Collection	Collection: Date	Time	Sampled by	Matrix	# of bottles	Preserved: HCl	NaOH	HNO3	H2SO4	NONE	NaHSO4	MEOH	ENCORE	Mercury (dissolved/total) - Lab filter	Priority Pollutant Metals pm13	Methyl Mercury (subcontract) Caltest	General Chem (turb, alk, TDS, EC, pH, Bic, Car)	Cations (B, K, Fe, Mn, Mg, Ca, Na, Si)	Hardness (Ca, Mg)	Anions (Cl, F, SO4, Br, NO3, Zn, As) BK	Dissolved Organic Carbon Lab-Filtered from 1Lit-poly	HOLD (DO NOT ANALYSE)	
-1	MTD-SW-02/2	27-May	12:00	JP	SW	4	1		1		2				X	X	X	X	X	X	X	X		
-2	MTD-SW-04/2	27-May	12:15	JP	SW	4	1		1		2				X	X	X	X	X	X	X	X	*	
-3	MTD-SW-12/2	27-May	9:20	JP	SW	3	1		1		1				X	X	X	X	X	X	X	X		
-4	MTD-SW-13/2	27-May	9:30	JP	SW	3	1		1		1				X	X	X	X	X	X	X	X		
-5	MTD-SW-14/2	27-May	10:05	JP	SW	4	1		1		2				X	X	X	X	X	X	X	X		
-6	MTD-SW-15/2	27-May	11:15	JP	SW	4	1		1		2				X	X	X	X	X	X	X	X		
-7	MTD-SW-05/2	27-May	13:10	JP	SW	4	1		1		2				X	X	X	X	X	X	X	X		

Matrix Codes

WW- Wastewater
GW- Ground Water
SW- Surface Water
SO- Soil
OI-Oil
WP-Wipe
LIQ - Non-aqueous Liquid
AIR
DW- Drinking Water (Perchlorate Only)

LAB USE ONLY

HOLD EK 5/28/10

Turnaround Time (Business days)

Approved By:/ Date:

- [x] 5 Day Standard
- [ ] 3 Day (50% markup)
- [ ] 2 Day (75% markup)
- [ ] 1 Day (100% markup)

Emergency T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "B" - Results with QC summaries
- [x] Commercial "B+" - Results, QC, and chromatograms
- [ ] FULT1 - Level 4 data package
- [ ] EDF for Geotracker [ ] EDD Format
- Provide EDF Global ID:
- Provide EDF Logcode:

Comments / Remarks

Note that two samples are missing the small unpreserved poly. Do what you can to analyze the full suite. If you have to cut something out for lack of sample, call me.

(-2) put on HOLD as per client

250mL poly (1)HNO3 PH<2 (X7); 500mL Amber (1)HCl each (X7)
1x1Lit poly each N/P (X7); 250mL poly each N/P (X5)

(-3 & -4) used sample from 1Lit-poly N/p to filter for dissolved (Hg)

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		5/28/10 1025	Via Rogers 5385	2 world courier	05/28/10 18:05	2
3	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Appropriate Bottle / Preservative Y/N	Headspace Y/N N/A

Labels match COC? (Y) N Separate Receipt Log (Y) N

On Ice (Y) N Cooler Temp. 5.6+0.3 = 5.9°C

Accutest Laboratories Northern California
Sample Receiving Check List

Job# : C112-17
Sample Control Rep. Initial: EK | JM

SGRPCAPH2674

Review Chain of Custody Chain of Custody is to be complete and legible.

- ☑ Are these regulatory ~~(NPDES)~~ samples? ~~CWA~~ — Yes / No
- ☑ Is pH requested? — Yes / (No)
- N/A ☒ Was Client informed that hold time is 15 min? Yes / No Continue Yes / No
- ☒ Was ortho-Phosphate filtered with in 15 min? Yes / No Continue Yes / No
- ☑ Are sample within hold time? — (Yes) / No
- Are sample in danger of exceeding hold-time — Yes / (No)
- ☑ Existing Client? (Yes) / No Existing Project? — (Yes) / No
- If No: Is Report to info complete and legible, including;
  - □ deliverable □ Name □ Address □ phone □ e-mail
  - Is Bill to info complete and legible, including;
  - □ PO# □ Credit card □ Contact □address □ phone □ e-mail
  - Is Contact and/or Project Manager identified, including;
  - □ phone □ e-mail
- ☑ Project name / number □ Special requirements? — (Yes) / No
- ☑ Sample IDs / date & time of collection provided? — (Yes) / No
- ☑ Is Matrix listed and correct? — (Yes) / No
- ☑ Analyses listed we do or client has authorized a subcontract? — (Yes) / No
- ☑ Chain is signed and dated by both client and sample custodian? — (Yes) / No
- ☑ TAT requested available? (Yes) / No Approved by PM

Review Coolers:

- ☑ Were Coolers temperatures measured at ≤6°C? Cooler # 1 Temp 5.9 °C
  - If cooler is outside the ≤6°C; note down below the affected bottles in that cooler.
  - Note that ANC does NOT accept evidentiary samples. (We do not lock refrigerators)
- ☑ Shipment Received Method world courier
- ☑ Custody Seals: Present: Yes / (No) If Yes; Unbroken: Yes / No

Review of Sample Bottles: If you answer no, explain to the side

- ☑ Chain matches bottle labels? (Yes) / No ☑ Sample bottle intact? (Yes) / No
- ☑ Is there enough sample volume in proper bottle for requested analyses? (Yes) / No
- ☑ Proper Preservatives? (Yes) / No Check pH on preserved samples except 1664, 625, 8270 and VOAs.
- ☒ Headspace-VOAs? Greater than 6mm in diameter Yes / No
  N/A List sample ID and affected container

Client Sample ID	pH Check	Other Comments/Issues
-1	pH<2	250mL poly (to HNO3)
↓	↓	↓
-7	↓	↓

Non-Compliance issues and discrepancies on the COC are forwarded to Project Management

APPENDIX D

APPENDIX D

STATISTICAL REPORT ON METHYL MERCURY DATA ANALYSIS

ProUCL Statistical Evaluation of Methyl Mercury in Surface Water

Mount Diablo Mercury Mine

Contra Costa County, California

General Statistics

Number of Valid Observations 21

Number of Distinct Observations 21

Raw Statistics

Minimum	0.0607
Maximum	7.26
Mean	1.367
Median	0.657
SD	1.797
Coefficient of Variation	1.315
Skewness	2.346

Log-transformed Statistics

Minimum of Log Data	-2.802
Maximum of Log Data	1.982
Mean of log Data	-0.281
SD of log Data	1.096

Relevant UCL Statistics

Normal Distribution Test

Shapiro Wilk Test Statistic	0.659
Shapiro Wilk Critical Value	0.908

Data not Normal at 5% Significance Level

Assuming Normal Distribution

95% Student's-t UCL	2.043

95% UCLs (Adjusted for Skewness)

95% Adjusted-CLT UCL	2.226
95% Modified-t UCL	2.076

Gamma Distribution Test

k star (bias corrected)	0.868
Theta Star	1.575
MLE of Mean	1.367
MLE of Standard Deviation	1.467
nu star	36.44
Approximate Chi Square Value (.05)	23.62
Adjusted Level of Significance	0.0383
Adjusted Chi Square Value	22.83
Anderson-Darling Test Statistic	1.072
Anderson-Darling 5% Critical Value	0.771
Kolmogorov-Smirnov Test Statistic	0.198
Kolmogorov-Smirnov 5% Critical Value	0.195

Data not Gamma Distributed at 5% Significance Level

Assuming Gamma Distribution

95% Approximate Gamma UCL	2.108
95% Adjusted Gamma UCL	2.181

Lognormal Distribution Test

Shapiro Wilk Test Statistic	0.954
Shapiro Wilk Critical Value	0.908

Data appear Lognormal at 5% Significance Level

Assuming Lognormal Distribution

95% H-UCL	2.662
95% Chebyshev (MVUE) UCL	2.884
97.5% Chebyshev (MVUE) UCL	3.562
99% Chebyshev (MVUE) UCL	4.893

Data Distribution

Data appear Lognormal at 5% Significance Level

Nonparametric Statistics

95% CLT UCL	2.011
95% Jackknife UCL	2.043
95% Standard Bootstrap UCL	1.984
95% Bootstrap-t UCL	2.593
95% Hall's Bootstrap UCL	2.547
95% Percentile Bootstrap UCL	2.041
95% BCA Bootstrap UCL	2.268
95% Chebyshev(Mean, Sd) UCL	3.076
97.5% Chebyshev(Mean, Sd) UCL	3.815
99% Chebyshev(Mean, Sd) UCL	5.267

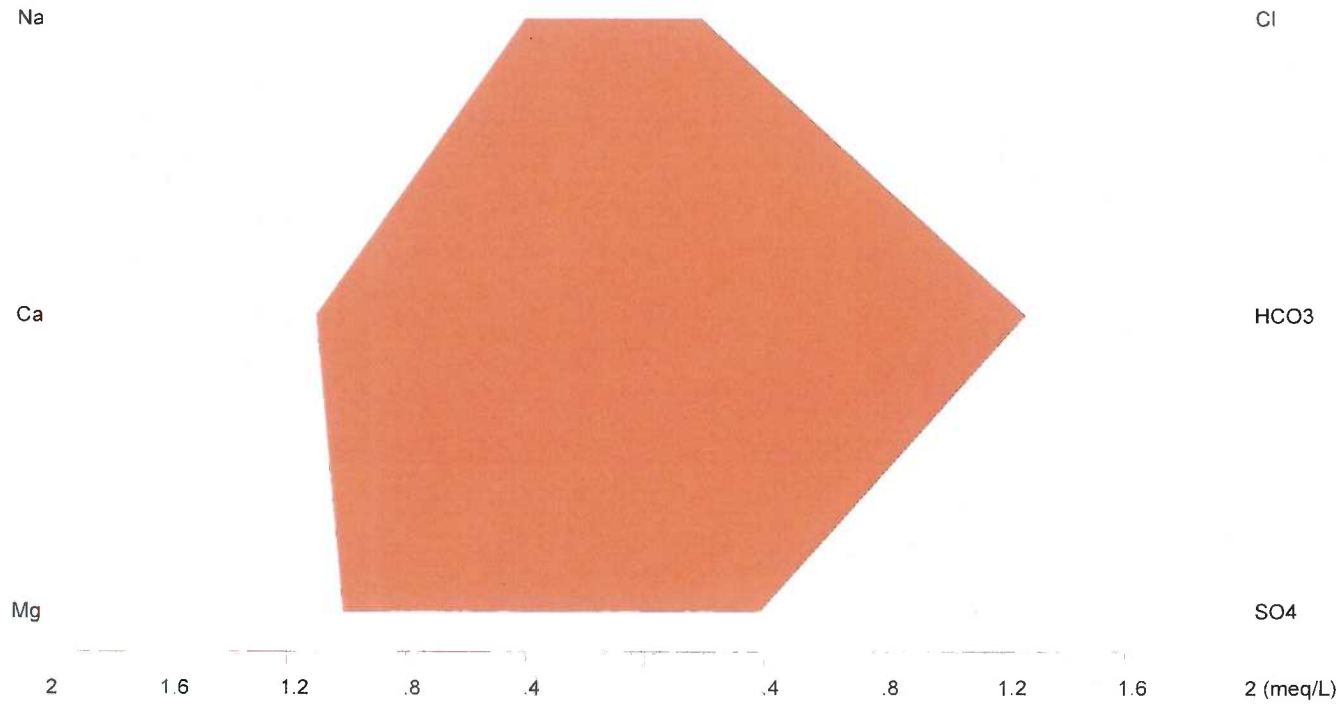
Use 95% Chebyshev (MVUE) UCL 2.88

APPENDIX E

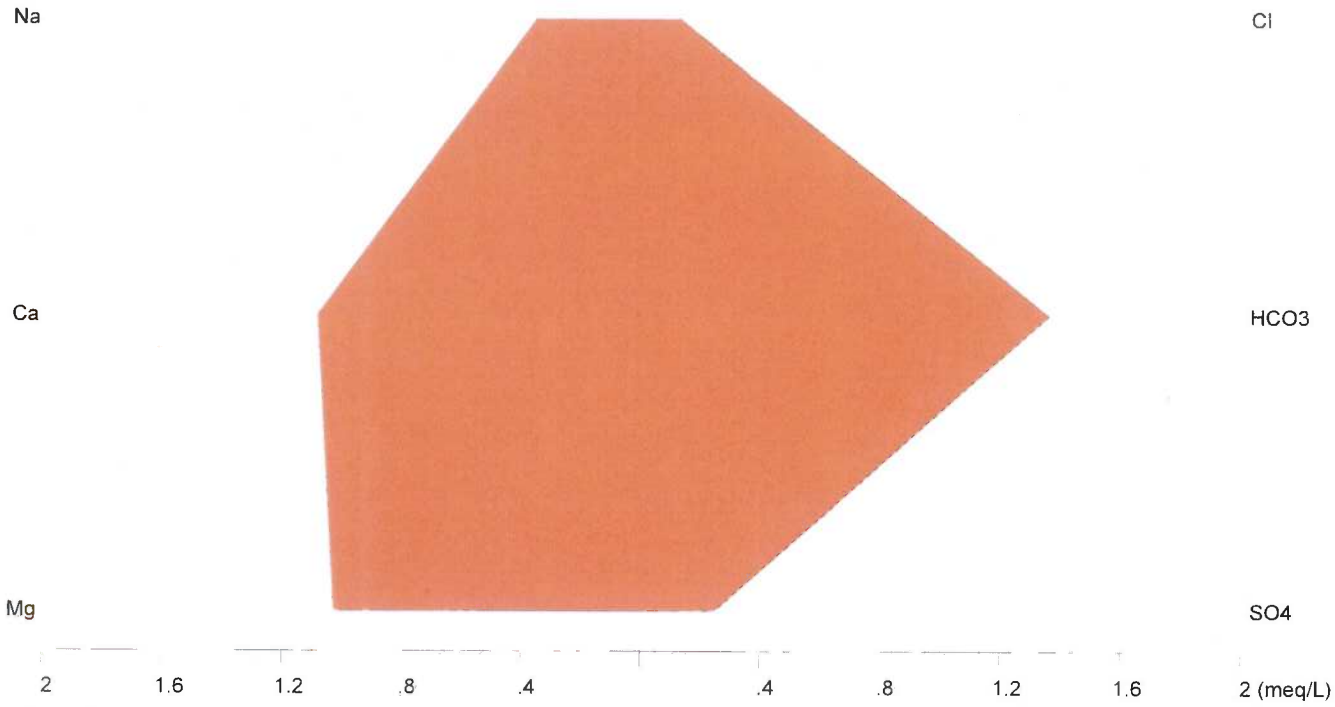
WATER QUALITY STIFF DIAGRAMS FOR 2010 SAMPLING

BACKGROUND WATER SIGNATURE

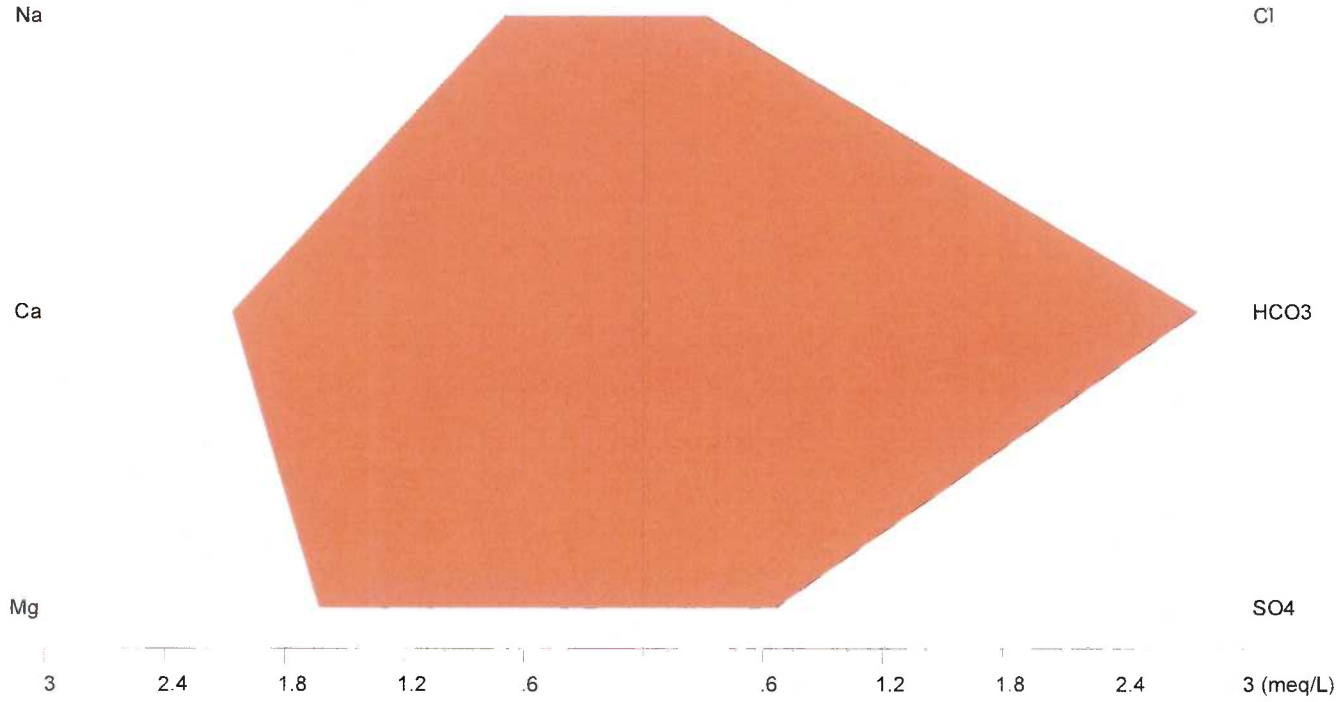
Stiff Diagram – SW-7
Collected April 2010
Background Water
Mt. Diablo



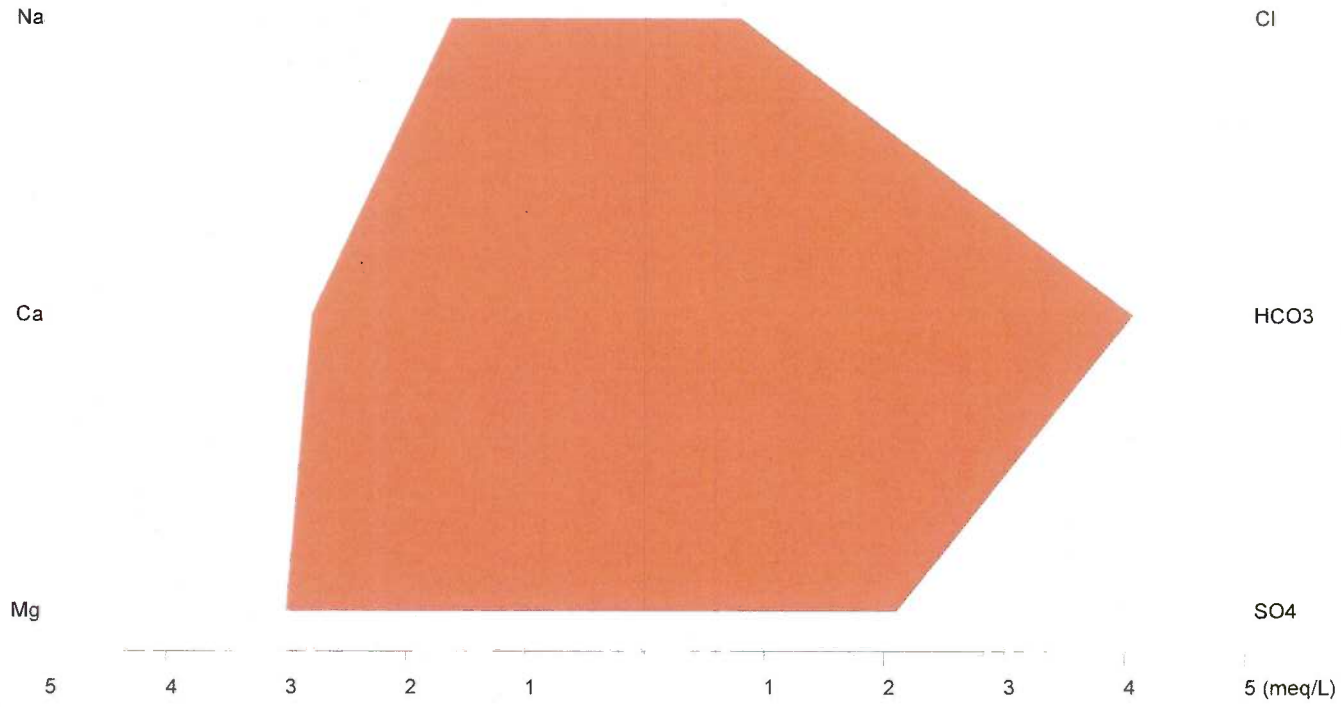
Stiff Diagram – SW-8
Collected April 2010
Background Water
Mt. Diablo



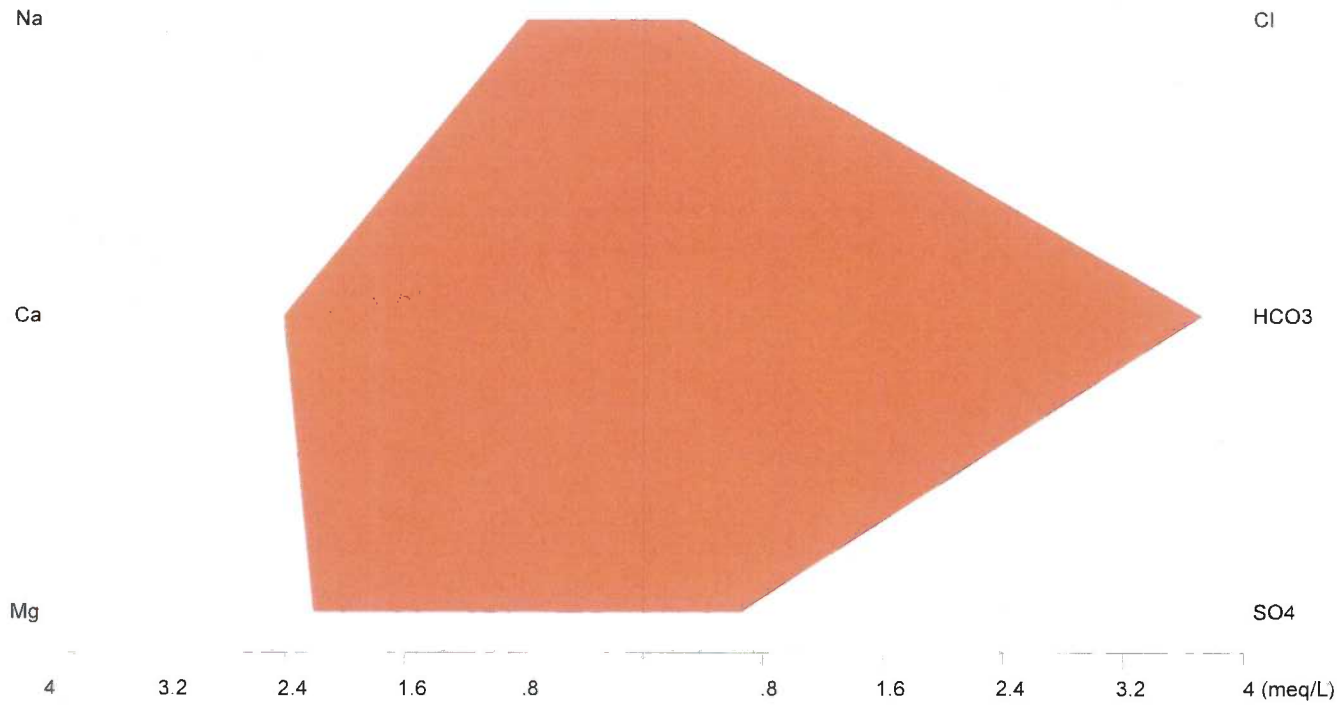
Stiff Diagram – SW-8
Collected May 2010
Background Water
Mt. Diablo



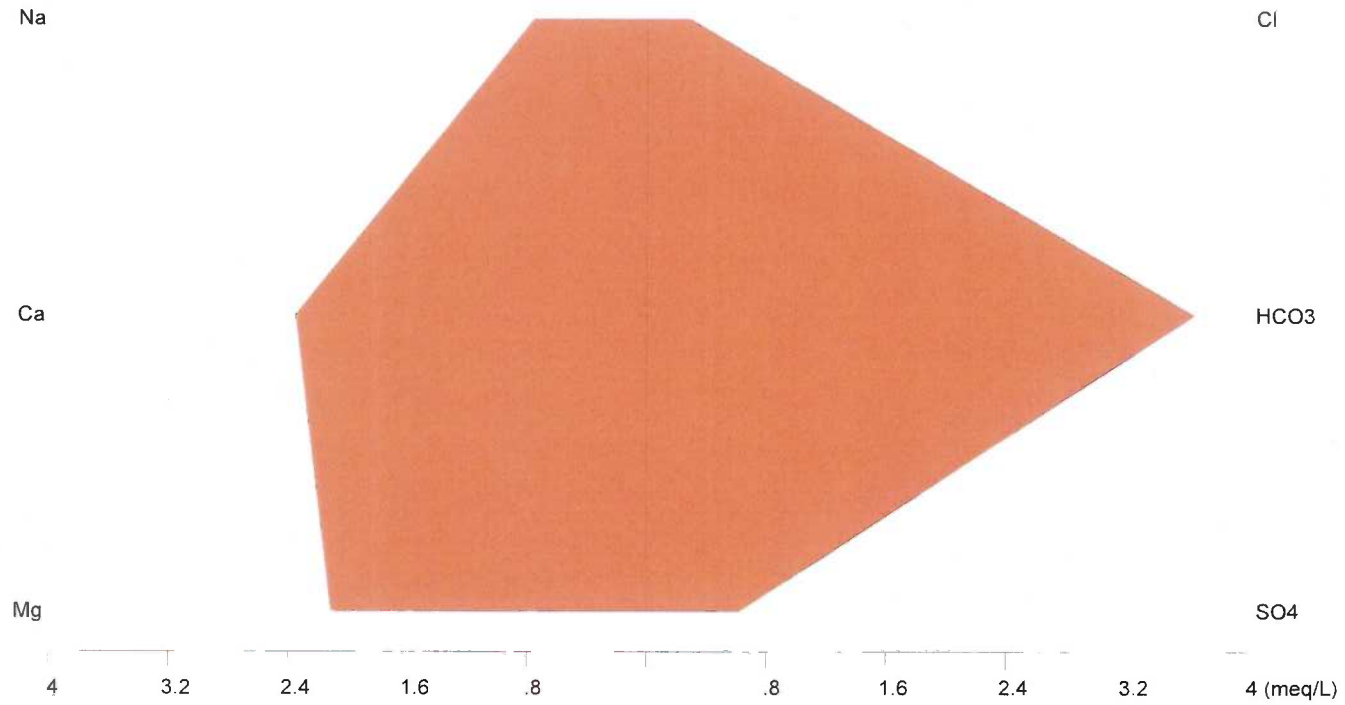
Stiff Diagram – SW-10
Collected May 2010
Background Water
Mt. Diablo



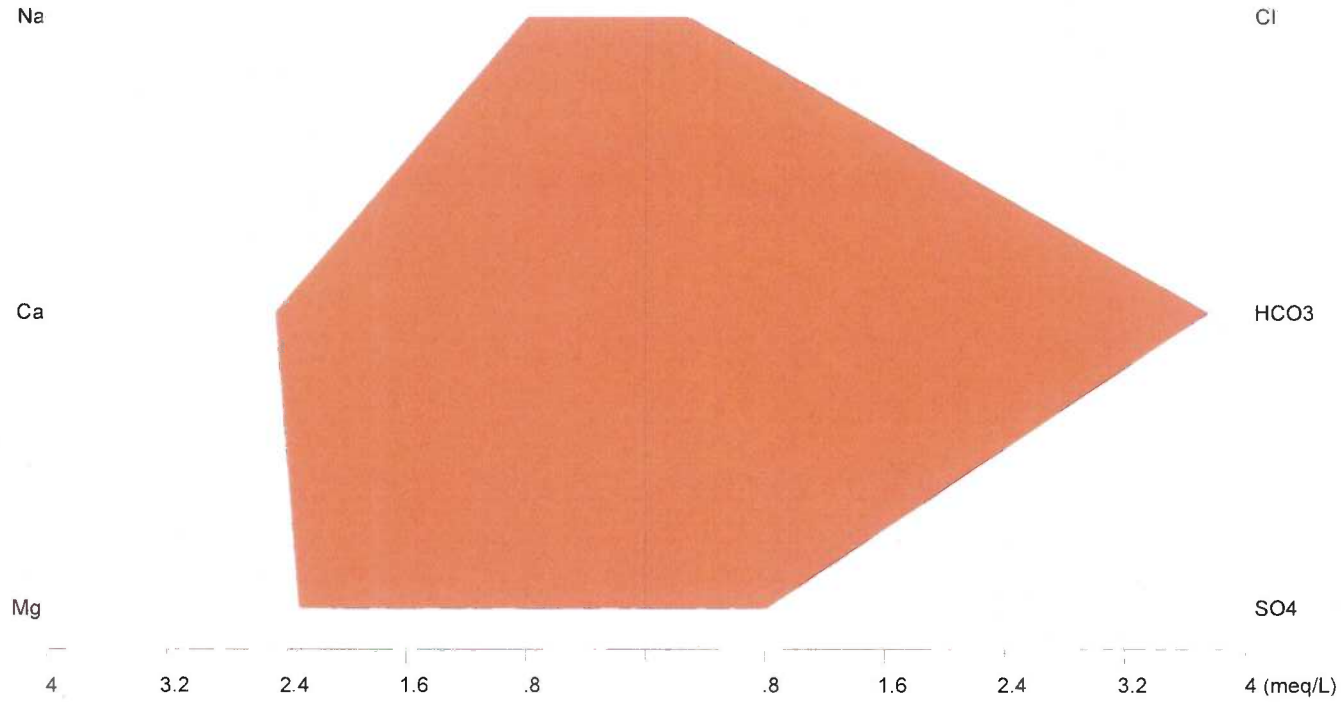
Stiff Diagram – SW-11
Collected May 2010
Background Water
Mt. Diablo



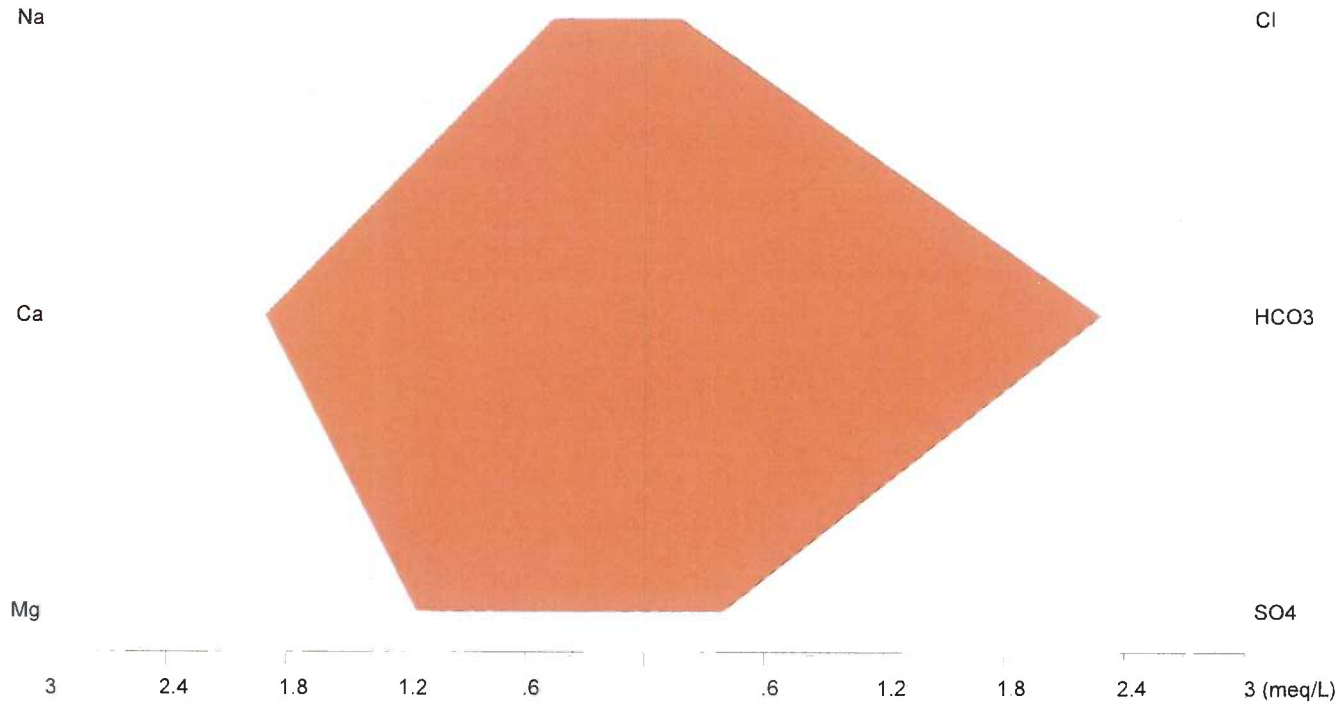
Stiff Diagram – SW-12
Collected May 2010
Background Water
Mt. Diablo



Stiff Diagram – SW-13
Collected May 2010
Background Water
Mt. Diablo

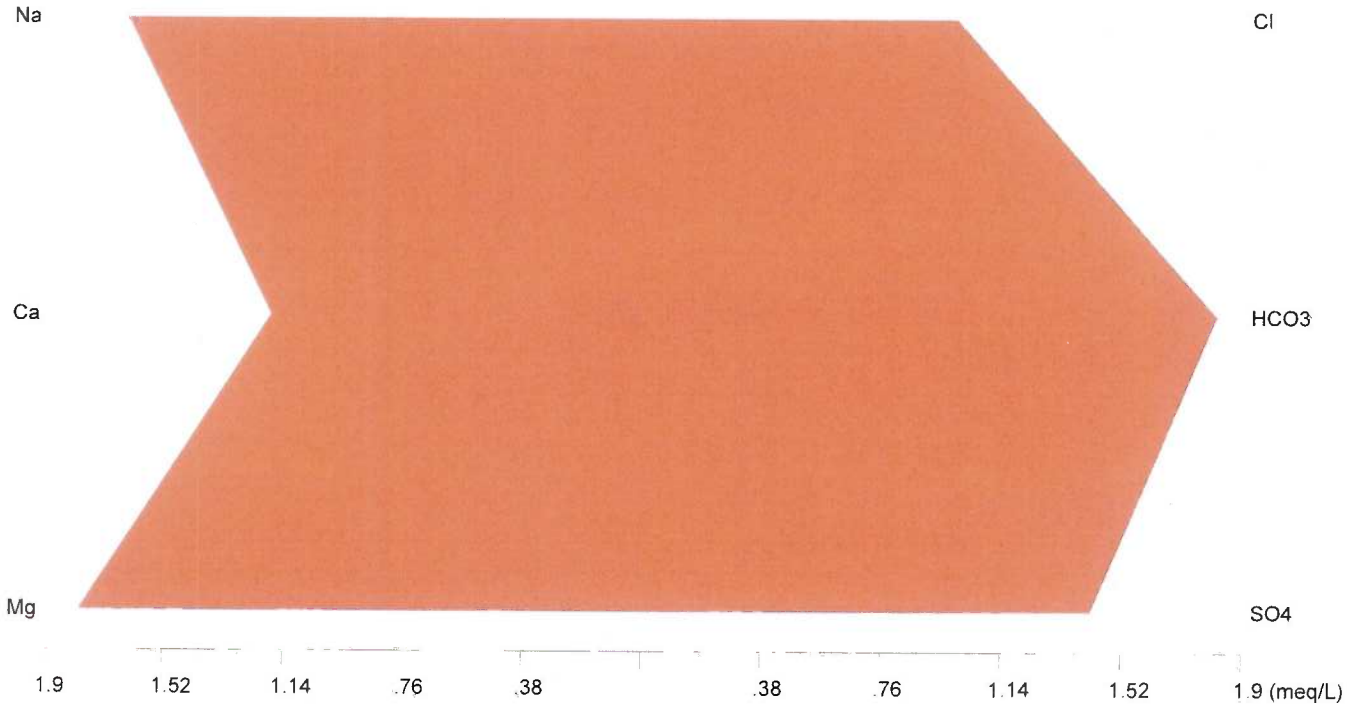


Stiff Diagram – SW-16
Collected May 2010
Background Water
Mt. Diablo

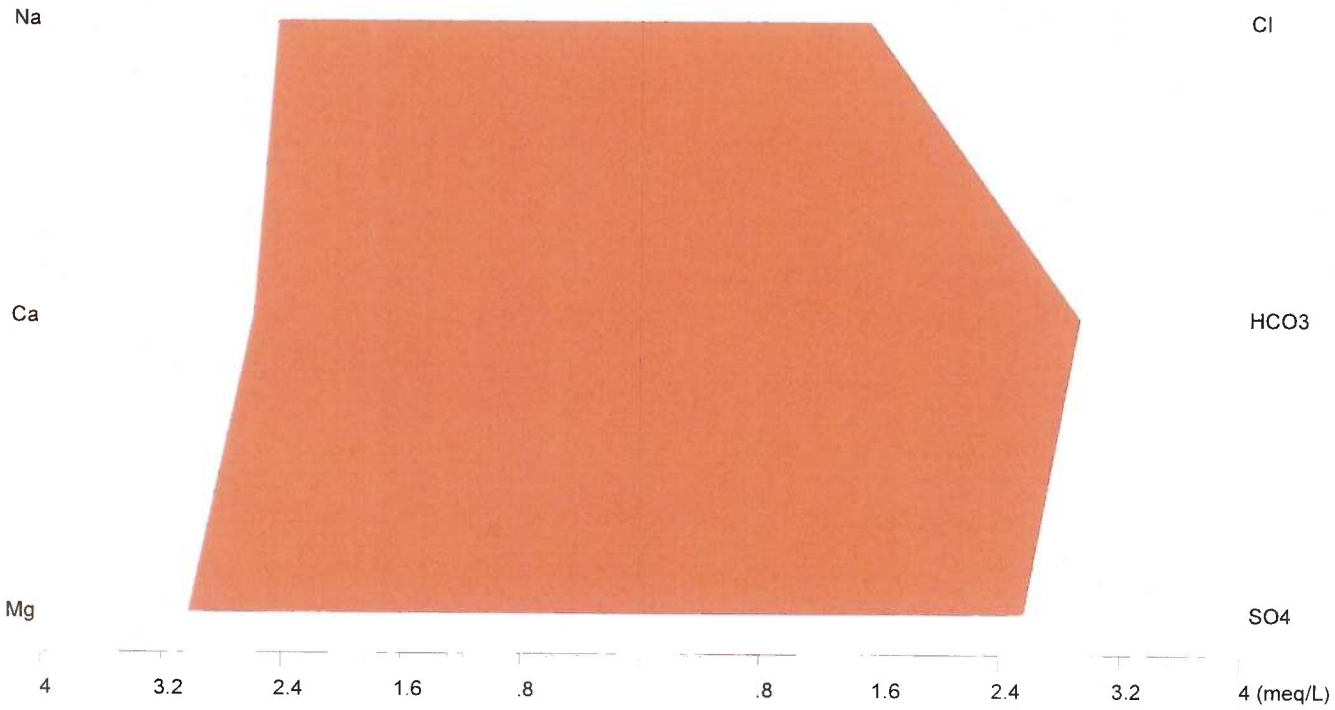


PARK SPRING WATER SIGNATURE

Stiff Diagram – SW-4
Collected April 2010
Background Water
Mt. Diablo

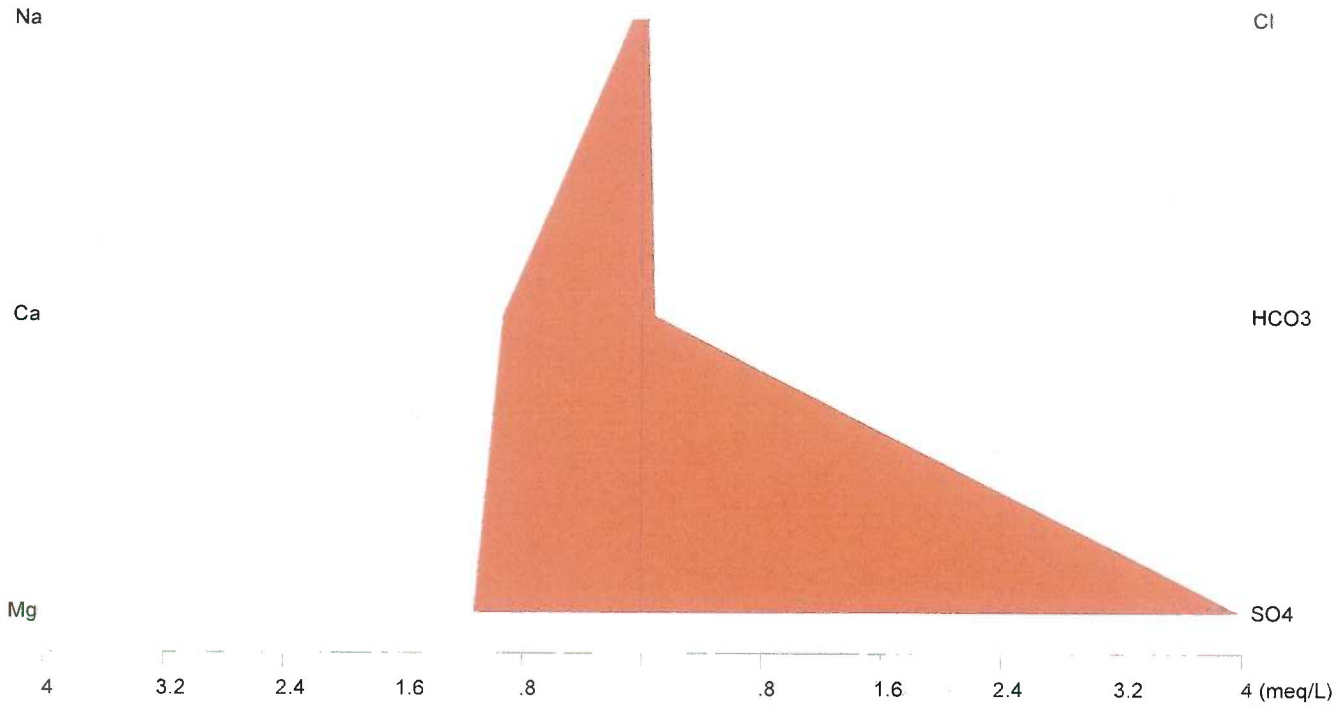


Stiff Diagram – SW-7
Collected April 2010
Park Spring Water
Mt. Diablo

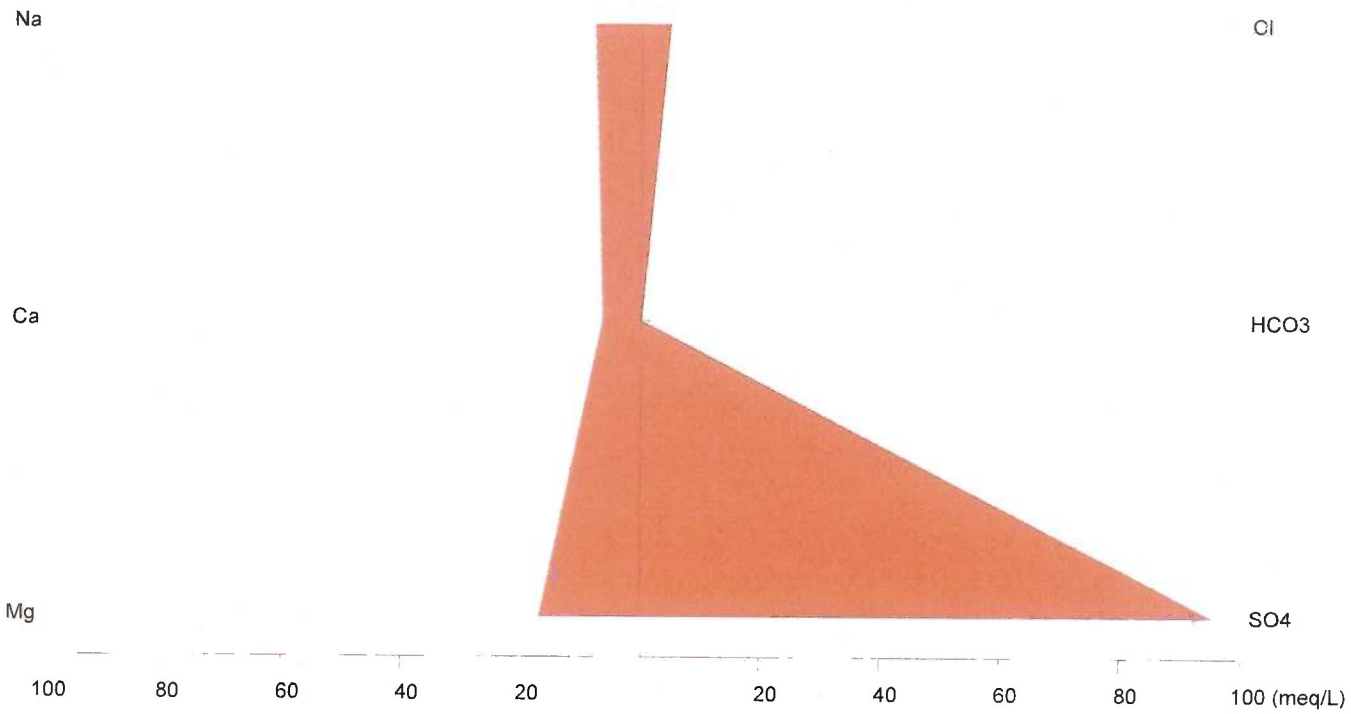


MINE WASTE SOURCE WATER SIGNATURE

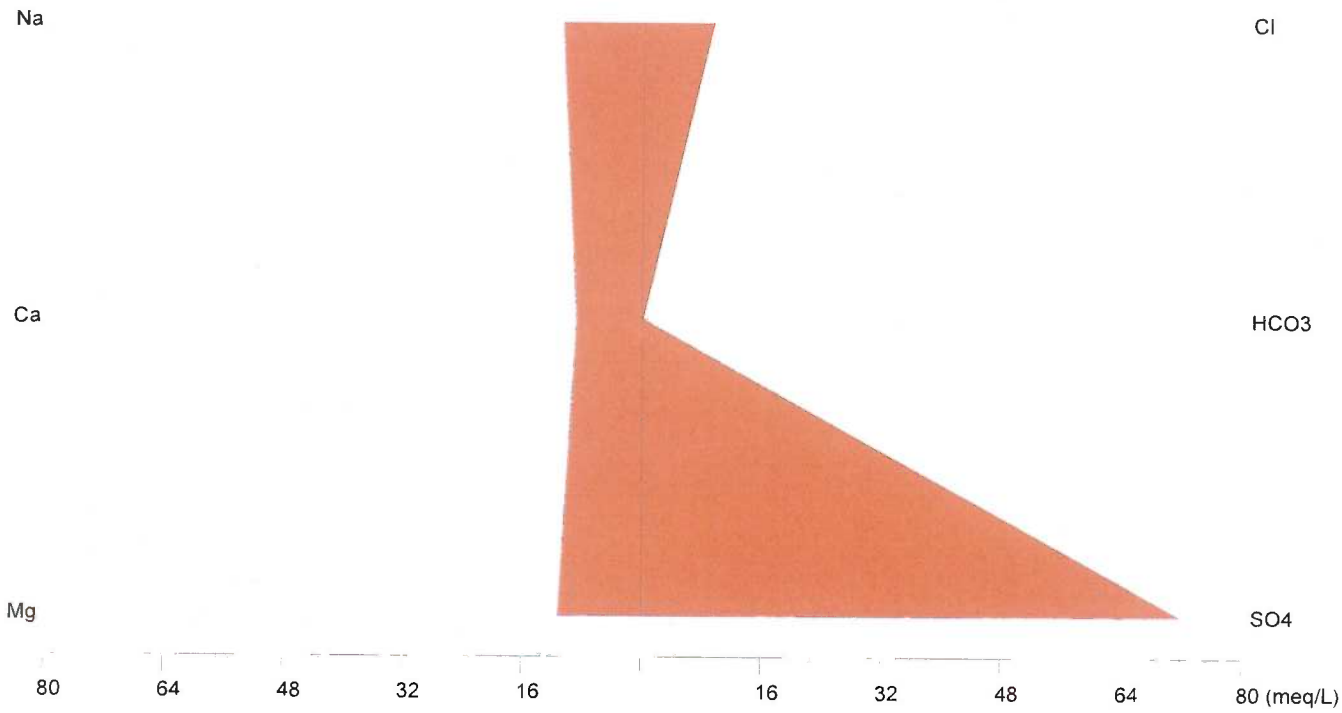
Stiff Diagram – SW-1
Collected April 2010
Mine Waste Source Water
Mt. Diablo



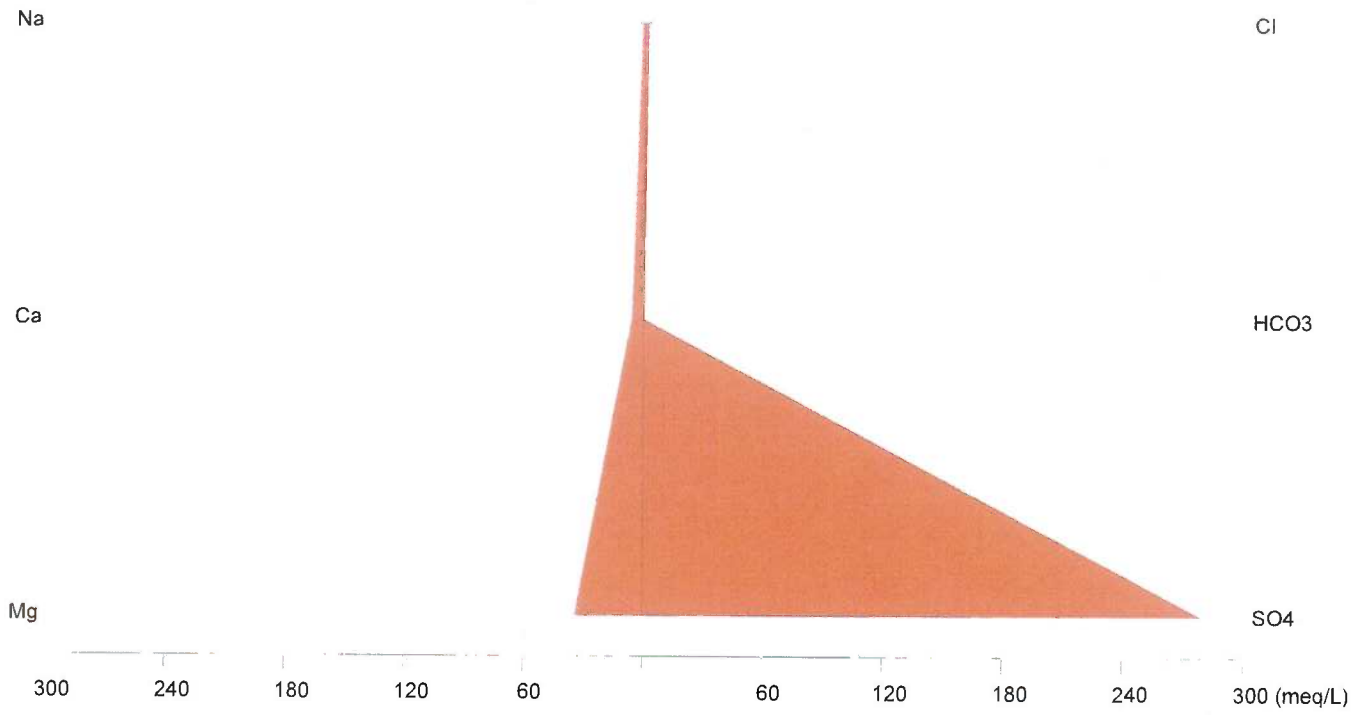
Stiff Diagram – SW-2
Collected April 2010
Mine Waste Source Water
Mt. Diablo



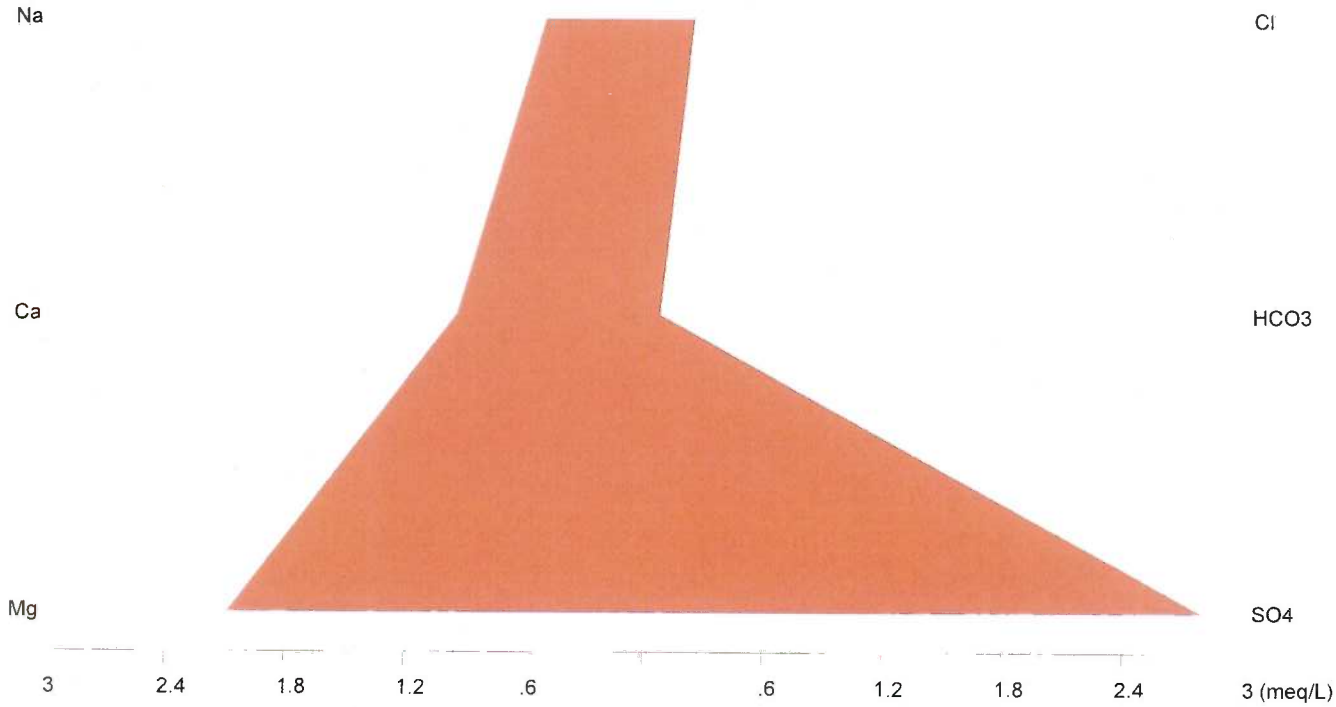
Stiff Diagram – SW-2
Collected May 2010
Mine Waste Source Water
Mt. Diablo



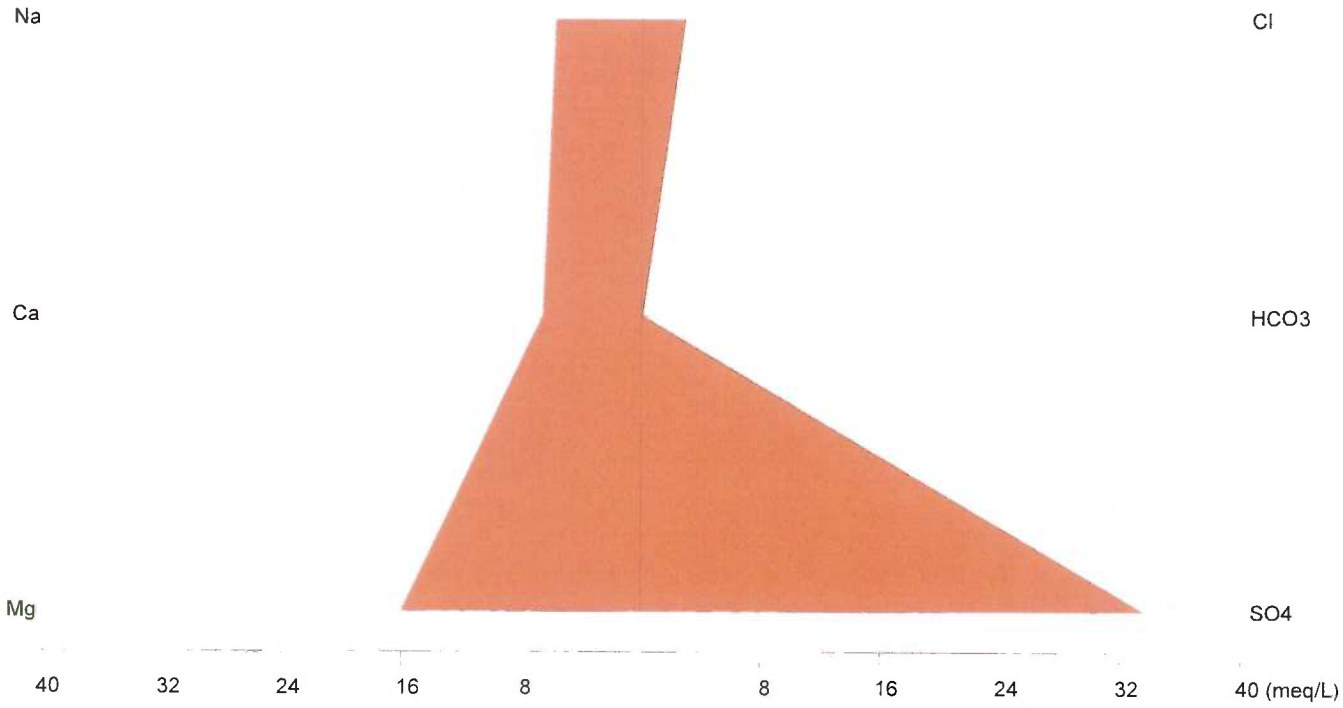
Stiff Diagram – SW-3
Collected April 2010
Mine Waste Source Water
Mt. Diablo



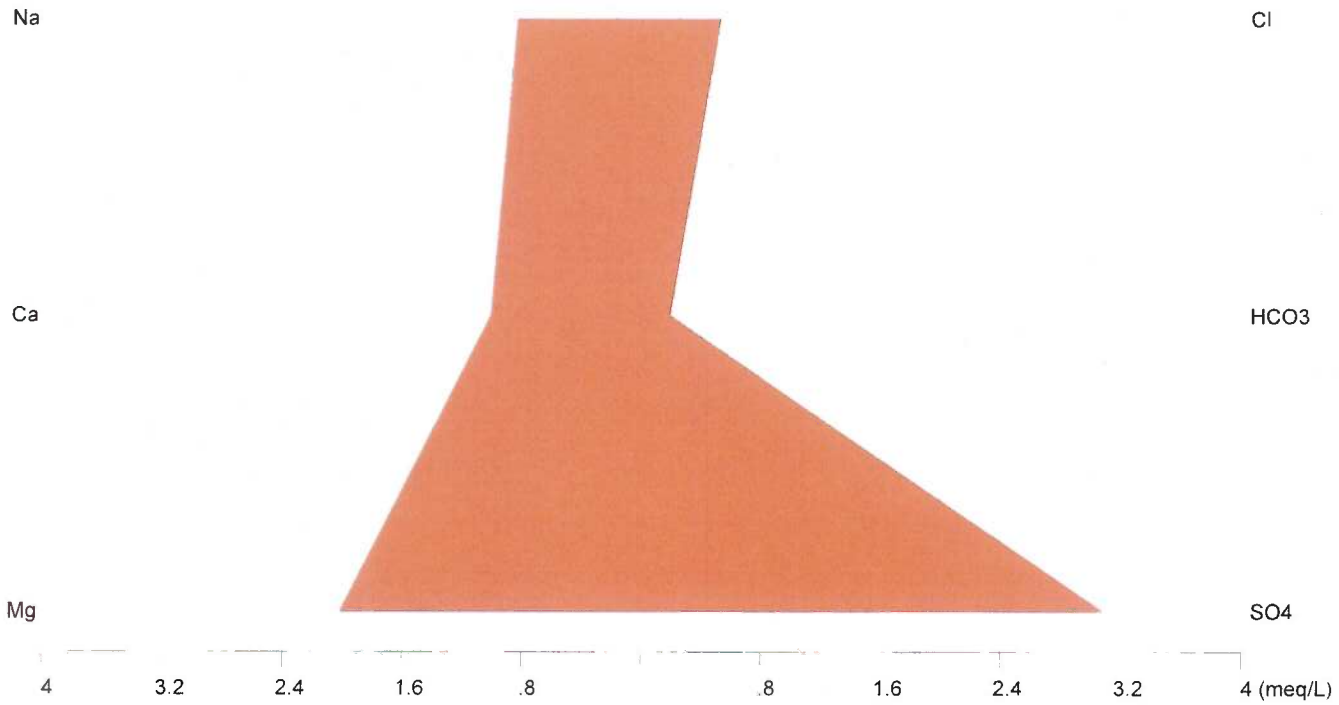
Stiff Diagram – SW-6
Collected April 2010
Mine Waste Source Water
Mt. Diablo



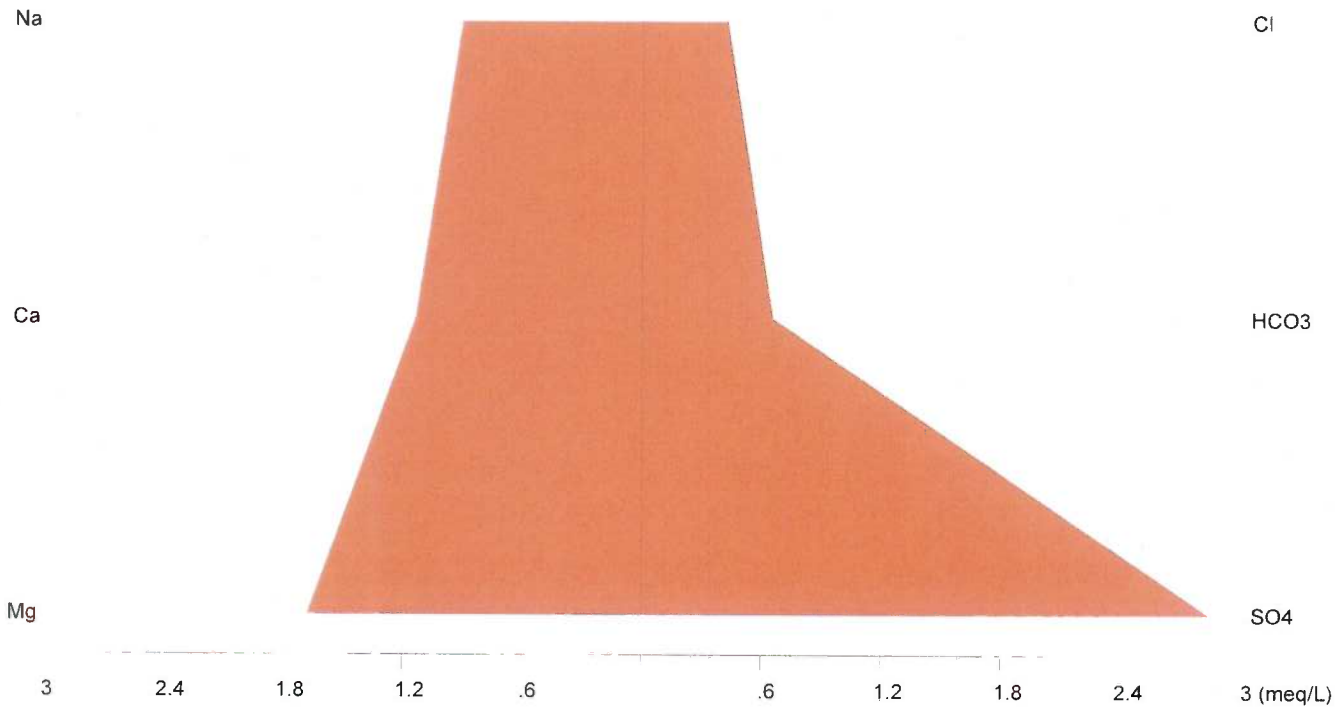
Stiff Diagram – SW-6
Collected May 2010
Mine Waste Source Water
Mt. Diablo



Stiff Diagram – SW-10
Collected April 2010
Mine Waste Source Water
Mt. Diablo

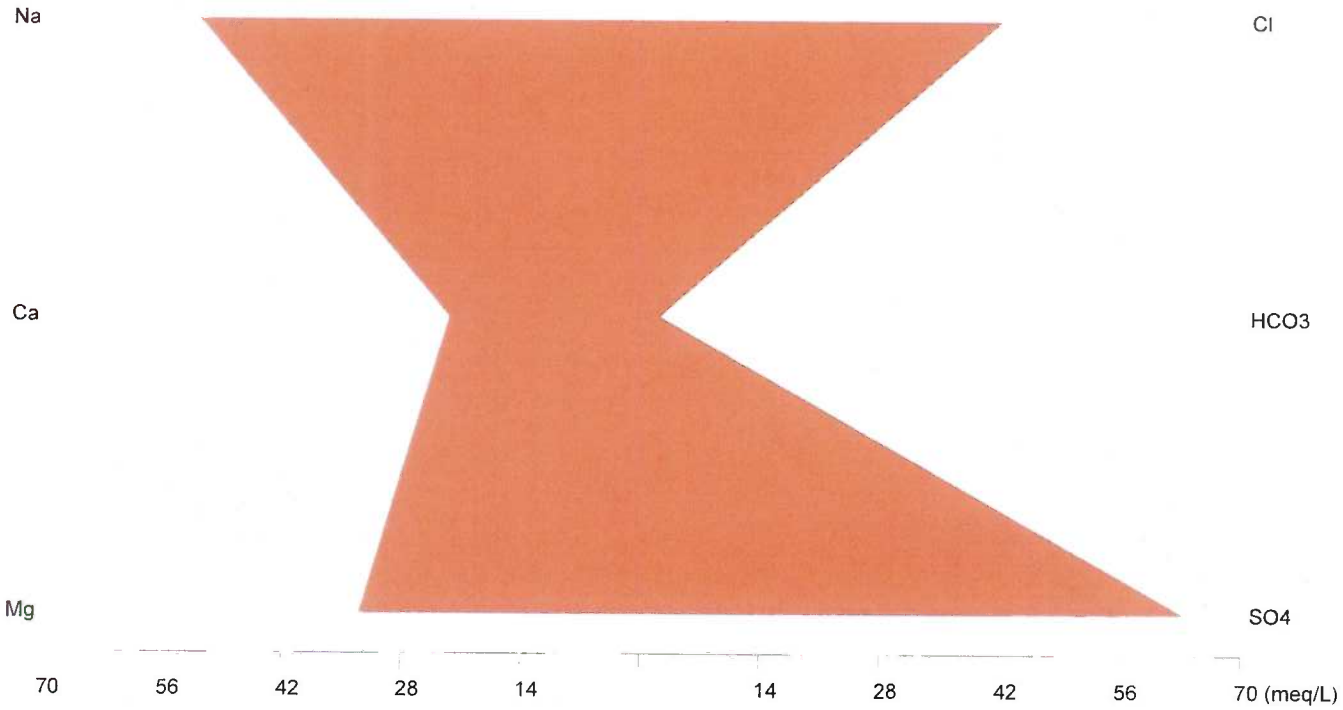


Stiff Diagram – SW-14
Collected May 2010
Mine Waste Source Water
Mt. Diablo

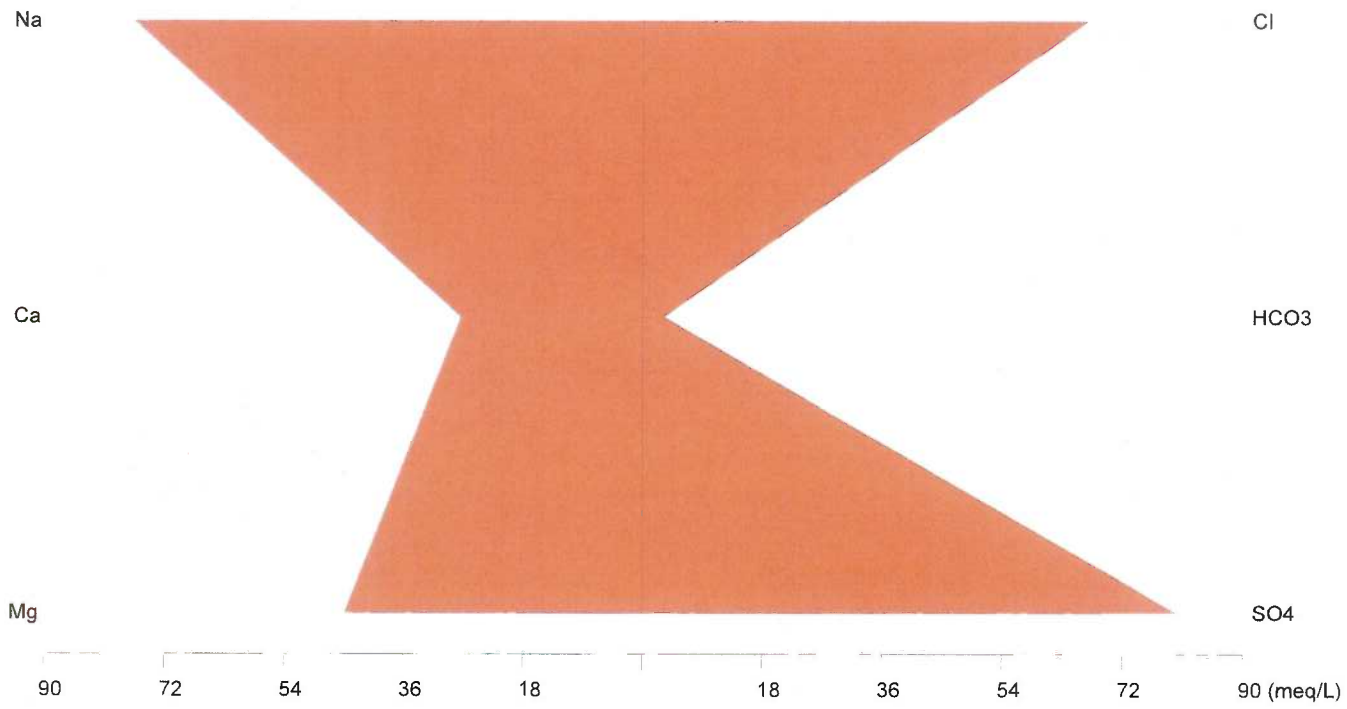


ALTERED MINE WASTE WATER SIGNATURE

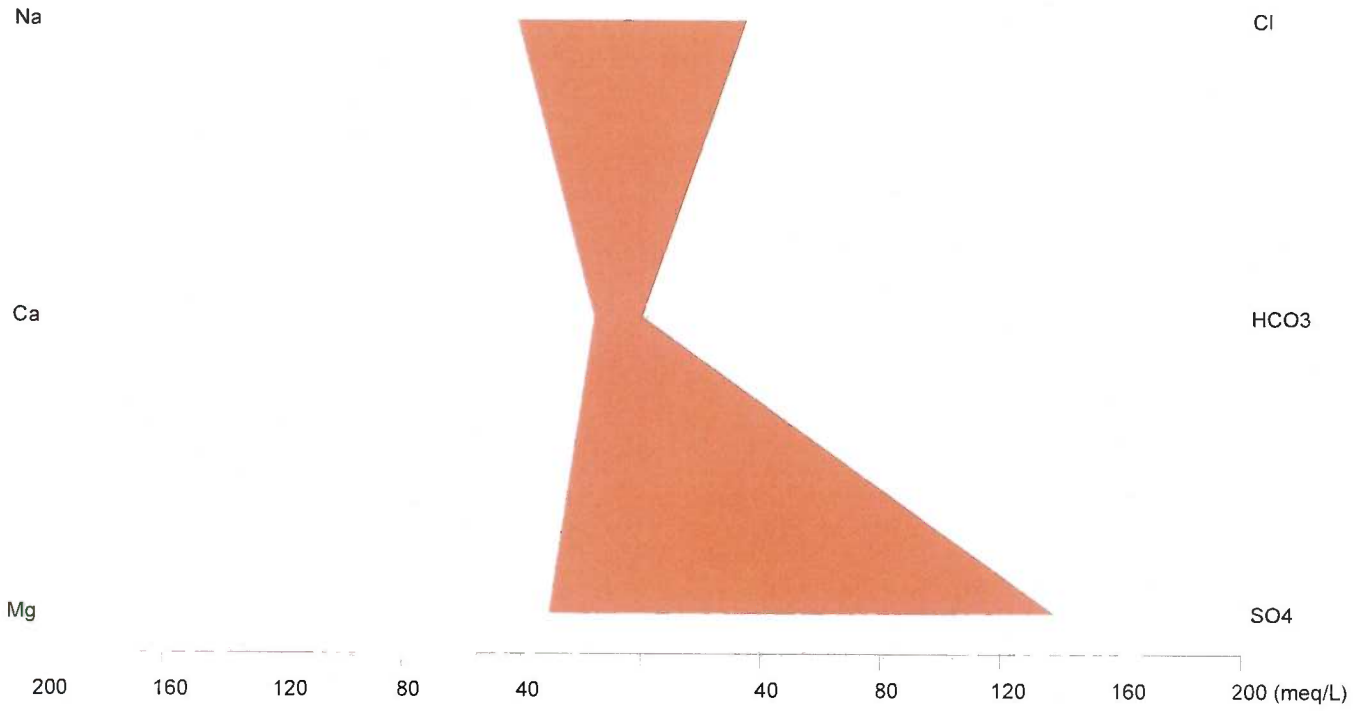
Stiff Diagram – SW-5
Collected April 2010
Altered Mine Waste Water
Mt. Diablo



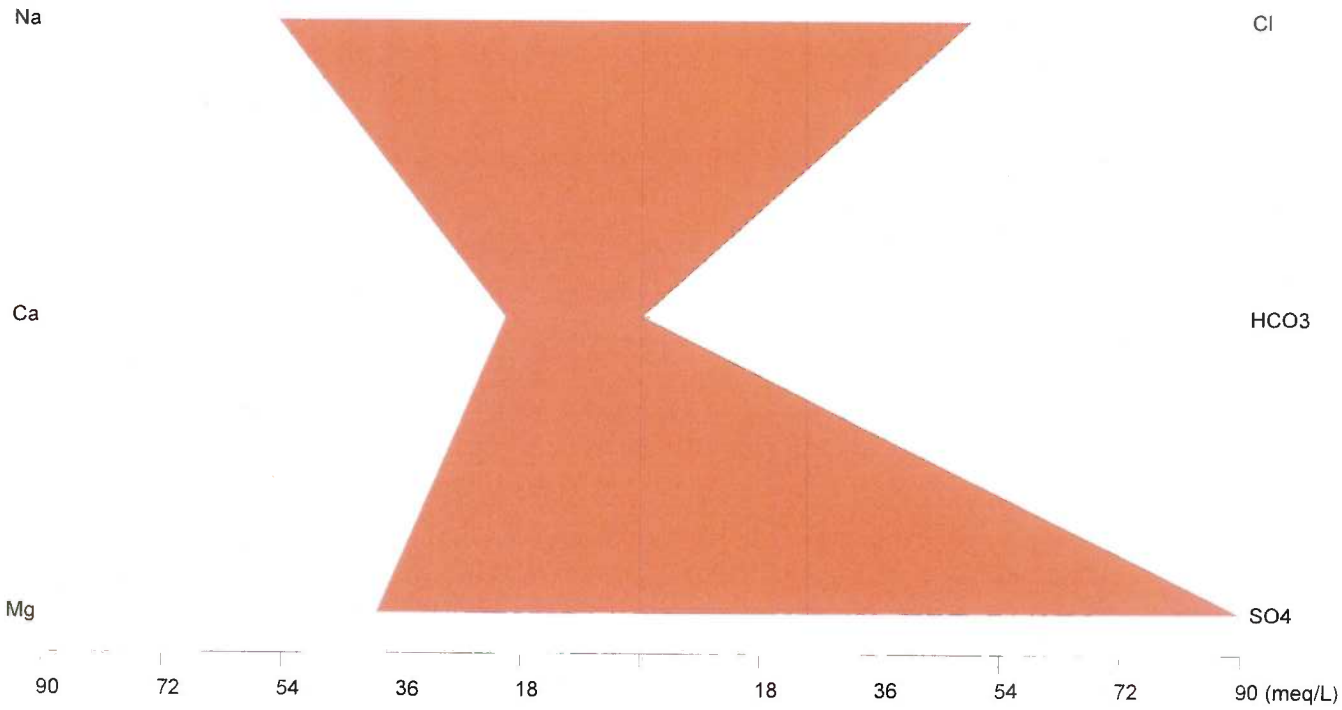
Stiff Diagram – SW-5
Collected May 2010
Altered Mine Waste Water
Mt. Diablo



Stiff Diagram – SW-9
Collected April 2010
Altered Mine Waste Water
Mt. Diablo



Stiff Diagram – SW-9
Collected May 2010
Altered Mine Waste Water
Mt. Diablo



Stiff Diagram – SW-15
Collected May 2010
Altered Mine Waste Water
Mt. Diablo

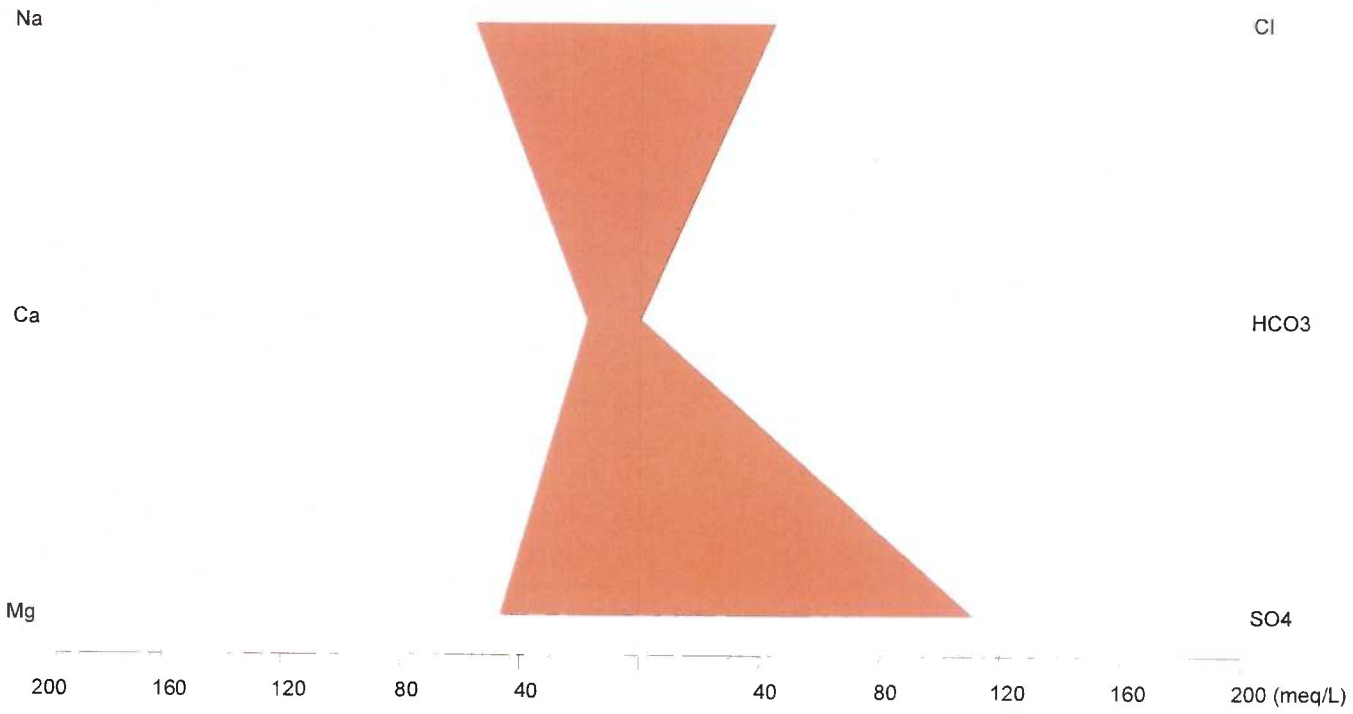


EXHIBIT 33

Linda S. Adams
Secretary for Environmental Protection

California Regional Water Quality Control Board
Central Valley Region
Katherine Hart, Chair

11020 Sun Center Drive #200, Rancho Cordova, California 95670-6114
Phone (916) 464-3291 • FAX (916) 464-4645
http://www.waterboards.ca.gov/centralvalley

Arnold Schwarzenegger
Governor

30 August 2010

Lisa A. Runyon, Senior Counsel
Sunoco, Inc.
1735 Market Street. Ste. LL
Philadelphia PA 19103-7583

CHARACTERIZATION REPORT, MOUNT DIABLO MERCURY MINE, CONTRA COSTA COUNTY

Central Valley Regional Water Quality Control Board staff has reviewed the "*Characterization Report, Mount Diablo Mercury Mine*" ("Report") submitted on your behalf by The Source Group, Inc. The Report reviews old and new characterization data from the Mount Diablo site. Staff generally concurs with the Report's conclusions (1) that a large portion of the mercury discharge to surface water is interactions between exposed mine tailings/waste rock, oxygen and storm water; (2) methyl mercury generation in existing ponds appears to be small; and (3) remedial actions should concentrate on consolidating and covering tailings/waste rock deposits. However, the Board does not accept the Report's conclusion that Bradley Mining Co. is solely responsible for generating the main tailings/waste rock deposits. Rather, analysis of all currently-available evidence leads Board staff to conclude that every party active on this site between 1930 to present has contributed to the discharge of mining waste, and that it is not feasible to separate degrees of responsibility.

The Report proposes the following additional work elements to complete characterization:

1. A detailed topographic survey
2. Installation of a monitoring well into the Adit level to sample mine waters before they react with the atmosphere or mine waste.
3. Installation of a monitoring well into the former Cordero Tunnels.
4. Measure and evaluate gradients between the Cordero Tunnels and the Adit water, using measurements collected from the monitor wells.
5. Additional confirmation surface water sampling as conditions allow.

The detailed topographic survey, additional surface water samples and samples collected from the Adit workings will provide useful information for remediation planning. Staff concurs with these proposed actions. The Cordero Tunnels monitoring well and the evaluation of gradients between the Cordero workings and older underground workings is not likely to be useful in remediation planning, but can be used to support Sunoco's divisibility argument. We suggest that if this well is drilled (drilling the well is not required), it be placed in a location in vicinity of the Cordero tunnels to determine if groundwater is higher in surrounding bedrock than in the

mine. If the groundwater is higher in the bedrock groundwater, it would suggest the groundwater flows from the Cordero Tunnels into the main workings. If the well is drilled into the Cordero workings and the water level is the same as in main working, it maybe difficult to determine if water is flowing down the Cordero working into the main workings. There is some likelihood that Cordero working will have the same water level as the main working because of high porosity and permeability of a backfilled Cordero mine tunnel.

Staff continues to develop information on potential responsible parties and we hope to issue a revised Order naming more responsible parties.

If you have any questions concerning this matter, please contact Ross Atkinson at (916) 464-4614 or via email at ratkinson@waterboards.ca.gov.

for

VICTOR IZZO
Senior Engineering Geologist
Title 27 Permitting and Mines Unit

cc: Patrick Pulupa, Office of the Chief Counsel, SWRCB, Sacramento
Gary Riley, Superfund Project Manager, USEPA Region 9, San Francisco
Stephen Bachman, State Parks, Mt Diablo Vista Dist., Petaluma
R. Mitch Avalon, Contra Costa County Flood Control, Martinez
Anthony Garvin, Bradley Mining Company, Brobeck, Phleger & Harrison, San Francisco
William R. Morse, Sunoco, Inc. Philadelphia, PA
Emily Lewis, BCCZ Corp. Counsel for Kennametal, Pittsburg, PA
David Chapman, Edgcomb Law Group, San Francisco.
Peter Ton, Wactor and Wick LLP, Oakland, CA
David Chapman, Edgcomb Law Group, San Francisco.
Paul Horton, The Source Group, Inc. Pleasant Hill

RDA:T:\R5S Sections\Title27 Permitting Confined Animal_Staff\AtkinsR\MtDiablo\CharazationRept.doc

EXHIBIT 34

EDGCOMB LAW GROUP

115 Sansome Street, Suite 700
San Francisco, California 94104
415.399.1555 direct
415.399.1885 fax
jedgcomb@edgcomb-law.com

January 20, 2012

BY EMAIL & U.S. MAIL

Julie Macedo, Esq.
State Water Resources Control Board
Senior Staff Counsel, Office of Enforcement
1001 "I" Street, 16th Floor
P.O. Box 100
Sacramento, CA 95814

Dear Ms. Macedo:

In advance of the January 24, 2012 meeting between Sunoco, Inc. (R&M)("Sunoco") and the Central Valley Regional Water Quality Control Board ("Regional Board") concerning the December 7, 2011 *Additional Characterization Report, Mount Diablo Mercury Mine* ("Site") prepared by Sunoco's consultant SGI, we are bringing to your attention another issue we would like to discuss at that meeting.

Specifically, our ongoing investigation into the corporate relationship between Cordero Mining Company ("Cordero") and Sunoco has determined there is no legal basis for the Regional Board to pursue Site related claims against Cordero, or to attribute Cordero liability at the Site, if any, to Sunoco.

The relevant background facts may be summarized as follows. Cordero was organized under Nevada law on March 4, 1941. Cordero briefly leased the Site and conducted limited operations there between late 1954 and early 1956. Effective as of November 18, 1975, long after Cordero operations at the Site were completed, Cordero was dissolved as a corporate entity, as acknowledged by the Nevada Secretary of State. It is our understanding that Cordero was a wholly-owned subsidiary of Sun Oil Company (Delaware) when Cordero dissolved in 1975.

Nevada law governs the capacity of Cordero, and its former shareholder, to be pursued for Cordero's Site actions. The California Corporations Code does not apply to foreign entities such as Cordero (a dissolved Nevada corporation). *See Cal. Corp. Code § 162* ("'Corporation,' unless otherwise expressly provided, refers only to a corporation organized under this division or a corporation subject to this division under the provisions of subdivision (a) of Section 102.")

Nevada's corporate capacity statute provides that claims against a dissolved corporation relating to pre-dissolution acts survive only for a period of two years following the date of dissolution. NRS 78.595 ("The dissolution of a corporation does not impair any remedy or cause of action available to or against it or its directors, officers or shareholders arising before its dissolution and commenced within two years after the date of the dissolution.") Further, effective June 16, 2011, Section 15 of Nevada Senate Bill 405 enacted a provision reaffirming the limited liability of stockholders of a dissolved corporation:

> "2. A stockholder of a corporation dissolved pursuant to an NRS 78.580 or whose period of corporate existence has expired, the assets of which were distributed pursuant to an NRS 78.590, is not liable for any claim against the corporation on which an action, suit or proceeding is not begun before the expiration of the period described in NRS 78.585."

As noted above, Cordero was dissolved as of November 18, 1975 and lacked the capacity to be sued two years later (November 18, 1977). Therefore, Cordero cannot be a liable party in regards to the Site. For the same reason, and also pursuant to Section 15 of Nevada Senate Bill 405, a former shareholder of Cordero cannot be held liable for Cordero's Site actions either.

A recent decision by the United States District Court for the District of Nevada, *Assurance Co. of Am. v. Campbell Concrete of Nev., Inc.*, 2011 U.S. Dist. LEXIS 145845 (D. Nev. Dec. 19, 2011), supports the non-liability under Nevada law of Cordero's former shareholder with respect to claims arising post-dissolution as well. *See Assurance, supra* (applying Nevada law, grants motion to dismiss filed by defendant shareholder of a dissolved Nevada corporation against which post-dissolution claims had been filed).

We look forward to discussing with you the technical and legal issues related to the Site on January 24, 2012. Please let us know if you have any questions regarding the above in advance of the meeting.

Very truly yours,

John D. Edgcomb

cc (via email only):
V. Izzo
J. Freudenberg
S. Cullinan
B. Morse

EXHIBIT 35

SITE REMEDIATION WORK PLAN

Mount Diablo Mercury Mine
2430 Morgan Territory Road
Contra Costa County, California

Project No. 01-SUN-050

Prepared For:

10 Industrial Highway, MS4
Lester, PA 19029

Prepared By:

THE SOURCE GROUP, INC.
3478 Buskirk Avenue, Suite 100
Pleasant Hill, California 94523

May 8, 2012

SITE REMEDIATION WORK PLAN

Mount Diablo Mercury Mine
2430 Morgan Territory Road
Contra Costa County, California

01-SUN-050

Prepared For:

SUNOCO

10 Industrial Highway, MS4
Lester, PA 19029

Prepared By:

SGI environmental THE SOURCE GROUP, INC.

3478 Buskirk Avenue, Suite 100
Pleasant Hill, CA 94523

May 8, 2012

Prepared and Reviewed By:

Ivy Inouye
Senior Toxicologist

Paul D. Horton, P.G., C.HG.
Principal Hydrogeologist

Robert Campbell, P.G., C.E.G.
Principal Engineering Geologist

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF ACRONYMS

As	arsenic
AMD	Acid Mine Drainage
BMP	best management practices
Ca	calcium
CEQA	California Environmental Quality Act
cfs	cubic feet per second
cm/sec	centimeter per second
COC	chemical of concern
COPC	chemical of potential concern
Cr	chromium
Cu	copper
CVRWQCB	Central Valley Regional Water Quality Control Board
CSM	conceptual site model
DMEA	Defense Minerals Exploration Agency
Fe	iron
gpm	gallons per minute
GPS	global positioning system
HASP	Health and Safety Plan
K	potassium
km	kilometer
m	meter
Mg	magnesium
Mn	manganese
msl	mean sea level
Na	sodium
Ni	nickel
NOI	Notice of Intent
Pb	lead
PRP	potential responsible party
RCRA	Resource Conversation and Recovery Act
Sb	antimony
Si	silica
STLC	soluble threshold limits concentrations
SWPPP	Stormwater Pollution Prevention Plan

USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
WPCB	Water Pollution Control Board
Zn	zinc
°F	Degree Fahrenheit
ng/L	nanograms per liter
µmhos/cm	micromhos per centimeter

PROFESSIONAL GEOLOGIST CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my knowledge and on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Paul D. Horton, P.G., C.HG.
Printed Name of Registered Professional Geologist

Signature

#5435
Registration Number

California
State

June 8, 1998
Date

1.0 INTRODUCTION

The Source Group, Inc. (SGI), on behalf of Sunoco, Inc. (R&M) (Sunoco), has prepared this Site Remediation Work Plan (Remediation Plan) as required and noted in item 3.0 (Page 5) of the Central Valley Regional Water Quality Control Board (CVRWQCB) December 30, 2009 Revised Technical Reporting Order R5-2009-0869 (Rev. Order) for the former Mount Diablo Mercury Mine in Contra Costa County, California (the Site or Mine). On February 7, 2012, the CVRWQCB issued correspondence approving the Characterization Reports for the Mine and officially setting the due date for submittal of the Remediation Plan as May 8, 2012.

The Revised Technical Reporting Order R5-2009-0869 (Rev. Order) for the former Mount Diablo Mercury Mine was issued to several potentially responsible parties (PRPs), including Jack and Carolyn Wessman, Bradley Mining Co. (Bradley), U.S. Department of the Interior, and Sunoco, which are referred to as Dischargers in the Rev. Order. Sunoco is a named discharger due to its purported connection with the Cordero Mining Company (Cordero) that conducted mercury ore investigations via tunneling and assaying during 1955. Submission of this Remediation Plan on behalf of Sunoco is not a commitment to implement it, which is not required by the Rev. Order, and Sunoco expressly reserves all rights with respect to any obligation to do so.

The Source Group, Inc. has prepared this Remediation Plan, to describe and/or provide the following:

- Site background;
- Characterization of the Mine-related materials to be removed;
- Water quality and human health risk assessment;
- A proposed Mine-related materials removal scope of work;
- A proposed spring/adit water routing and management scope of work;
- The removal design, methods, and procedures;
- A long term maintenance and monitoring plan; and
- A conceptual project schedule.

1.1 Project Objectives

The primary objectives of the removal activities described in this Remediation Plan are to mitigate the migration of particulate material and water potentially containing mercury from Mine-related materials (e.g., waste rock, tailings, and spring/adit discharges) associated with the Site that are potential sources of mercury to Dunn and Marsh Creeks. More specifically, the objectives of this Remediation Plan are to meet the goals specified in the Rev. Order and excerpted as follows:

Order R5-2009-0869, Page 5

3. Within 90 days of staff concurrence with the Characterization Report, submit a Site Remediation Work Plan (hereafter Remediation Plan) for the site. The Remediation Plan shall describe remediation activities to clean up or remediate the mining waste either to background concentrations, or to the lowest level that is technically and economically achievable. The Remediation Plan shall also address long-term maintenance and monitoring necessary to confirm and preserver the long-term effectiveness of the remedies. The potential remediation activities shall comply with all applicable WQOs in the Basin Plan. The Remediation Plan shall also include:

a. An evaluation of water quality risk assessment

b. A human health risk assessment

c. A time schedule to conduct the remediation activities.

The objectives for the Remediation Plan were further discussed and expanded in the February 7, 2012 CVRWQCB correspondence approving Mine Characterization reports excerpted as follows:

"The Reports conclude that groundwater in the Mine workings is chemically no different than background spring water and that Acid Mine Drainage (AMD) discharges are generated by the interaction of water from natural springs, the Mine workings, and rain fall with exposed Mine wastes. The Reports outline a conceptual site remedial plan, which was discussed among Sunoco staff, consultants, and Regional Board staff. The remedial plan could include capturing and re-directing away from Mine waste piles spring/adit discharges. If spring/adit discharges are chemically similar to background native spring discharges then it would be evaluated whether liquid can be released above Dunn Creek as background spring water without further treatment (the Plan should consider an artificial wetlands above the creek to mitigate the discharge). Mine waste may be consolidated where possible and covered to reduce interactions with stormwater. Any Mine wastes or pond solids in the Dunn Creek floodplain should be considered for removal and the Lower Pond SI filled and covered."

This Remediation Plan presents a scope of work designed to address the goals and objectives detailed above. Major scope of work items include the removal, consolidation and capping of Mine wastes of concern, the capture and re-routing of spring/adit discharges, and the restoration of the Dunn Creek Floodplain immediately below the Mine. During execution of the reclamation activities, environmental and health and safety controls would be implemented to ensure the work is completed safely and in accordance with applicable federal, state, and local regulations and permit conditions.

1.2 General Project Approach

The project, as outlined, includes planning, design, permitting, bid specifications, contractor selection, and oversight services during the project development, construction, and post-construction phases. The following summarizes the general approach to each of the project phases and the controls that would be implemented to ensure the work is completed safely and in accordance with applicable federal, state, and local regulations and permit conditions:

- Project Development and Scoping - During this phase, the project will be defined based on the identified objectives and schedule constraints. Applicable county, state, and federal approvals will be attained, bid specifications will be prepared, and the construction contractor selected so construction may be initiated. The implementing parties would work closely with the CVRWQCB, and other regulatory agencies, as needed, to comply with applicable environmental requirements; and identify sustainable business practices that can be integrated into the removal design and implementation. Support from the CVRWQCB through the permitting process to ensure that applications and permits are received in a timely manner will be critical to the overall project success.
- Construction - The construction phase will include Site preparation; removal, consolidation and stabilization of Mine-related waste rock, tailings, and stockpiled ore; removal of Mine-related equipment (if required) and clean capture and routing of Travertine Spring/Adit discharges away from contact with any Mine-related waste materials. During the construction phase, a record of approvals and permit conditions will be created and maintained in a single "*Permit Book*", including all certified and signed permissions and exemptions and a complete list of permit conditions and best management practices (BMPs) that are to be adhered to during construction. In addition, clear lines of communication and project responsibilities will be defined for each construction activity prior to the start of construction. Following completion of removal activities, compliance with permit conditions and requirements will be documented, and the Site will be restored and re-vegetated in working areas, as needed, and a final inspection by CVRWQCB will be scheduled. Following completion of removal and consolidation activities, a long-term maintenance and monitoring plan will be developed as appropriate based on the final disposition of implemented remedial actions concerning capped areas, re-vegetated areas, and water discharge controls.

Descriptions of the removal scope of work and the removal design, methods, and procedures are provided in Sections 3.0 and 4.0 of this Remediation Plan, including the environmental, health and safety controls to be implemented during the project.

1.3 Work Plan Organization

This Remediation Plan is organized as follows:

- Section 2.0 provides background information related to the Site, including an overview of the Site setting, history and development, environmental conditions, and Mine-related

material characterization, and conceptual site model (CSM), which provide the basis for the remediation and removal actions.

- Section 3.0 provides the approach and scope of work of the Mine-related material remediation actions.
- Section 4.0 provides detailed descriptions of the removal design, methods, and procedures.
- Section 5.0 discusses the proposed project schedule.

Limitations and list of literature cited in the Remediation Plan are provided in Sections 6.0 and 7.0, respectively.

2.0 BACKGROUND

This section summarizes Site background information relevant to the planned mining-material remediation activities, including the Site setting, history and development, environmental conditions, and characterization of Mine-related material. This information was used to develop the CSM (Section 2.5).

2.1 Site Setting

The Mine is located on the lower flanks of the northeastern environs of Mount Diablo (Figure 2-1). The Site is situated at an elevation of approximately 700 to 1,100 feet above mean sea level (msl) with the general slope of the land down to the east towards Dunn Creek, the eastern border of the property.

The Mine has reportedly been closed since around 1969. Most assay and process equipment has been removed from the Site, yet some abandoned wood structures that were part of the Mine operations remain and are not part of planned remedial actions. Remnants of the Mine visible from Morgan Territory Road include two ponds and bare uncovered tailings piles. The relevant Mine features within the area of focus of this Remediation Plan include the following; collapsed Mine workings area, furnace and processing area, Main Tailings Pile (Bradley Tailings), a series of three ponds on the eastern part of the Mine adjacent to Morgan Territory Road, two springs, and the former Mine portal (165 level Adit).

Currently the Site owners, Jack and Carolyn Wessman, and their lessees, use the Site for residential purposes and small-scale cattle ranching.

2.1.1 Land Use and Ownership

Jack and Carolyn Wessman, additional named dischargers on the Rev. Order, currently own the Mine. The property is used for residential purposes supporting multiple families that include home rentals. Occasionally in the past, the property has been leased for use as an organized paint ball gun battle facility. The property also supports a small herd of cattle owned and managed by Jack Wessman. These cattle are not raised for commercial sale but are used for vegetation control and considered family pets. Jack and Carolyn Wessman have owned the property since 1974 and its use has been primarily the same during this time period. Mr. and Mrs. Wessman purchased the Mine property as part of a larger land purchase in 1974. The property was purchased for residential use. The Wessman family has conducted many modifications to the property over the years during their ownership. This includes the importation of fill materials to fill in Mine openings, covering Mine tailings, and re-directing drainage from the upper Mine area around the exposed eastern Mine tailings as discussed further in Section 2.3.5.

2.1.2 Site Location and Features

The Mine is located in unincorporated eastern Contra Costa County, California at the northeastern base of Mount Diablo. The Mine lies 5 miles east from the town of Clayton and just south of the intersection of Marsh Creek Road and Morgan Territory Road (Figure 2-1). The Site as it pertains to the focus of this Remediation Plan includes the former Mine and its historic working areas that make-up the southeastern quadrant of the property owned by Jack and Carolyn Wessman. The Site is adjoined to the south and west by lands of Mount Diablo State Park, to the north by the remainder of Wessman Property Holdings, and to the east by Morgan Territory Road.

Mine-related features that remain on the Site include buildings associated with the old furnace plant, and various other related Mine buildings including the former electrical shed, the dynamite storage building, a former stack foundation and various other wooden out-buildings (Figure 2-2, Mine Features). The most prominent features that remain include the highly visible Main Tailings Pile located on the eastern slope of the Mine property bounded on the east by the Lower Pond Surface Impoundment (Lower Pond SI). The Main Tailings Pile is highly visible due to the fact that it is a bare, red and orange pile that supports little vegetation. Spring water discharges from the face of the Main Tailings Pile creating a steady source of surface flow that moves across the lower portion of the Main Tailings Pile and into the Lower Pond SI. The source of this continuous spring flow is interpreted to be from two buried Site features. The Main Tailings Pile was placed over a natural spring called the travertine Spring that pre-dates mining activity. This spring has resulted in the deposition of travertine deposits along the slope from the spring emanation point to the valley floor. These travertine deposits underlie on-lapping Mine tailings and derived sediments. Upslope and to the North of the original Travertine Spring emanation point lies the buried portal of the 165 level Adit. The 165 level Adit is buried by approximately 40 feet of tailings material and the location and condition of this portal are unknown. Spring water that emanates from the face of the Main Tailings Pile daylights through one main discharge point supplemented by several seeps below the former locations of both the Travertine Spring and the buried portal of the 165 level Adit (Figure 2-3).

The Lower Pond SI is the location of the historic Mine-constructed surface impoundment that has been upgraded by the current property owner to provide effective containment of historic Mine-derived waste and sediments. The Lower Pond SI contains sediments largely sourced via stormwater flow and Travertine Spring/Adit discharge drainage through and off the Main Tailings Pile. The Middle Pond contains stormwater and flanks the Lower Pond SI to the north. The Middle Pond is not a historic Mine feature but was created by the current property owner, Jack Wessman, as part of stormwater management controls for the Mine conducted under the direction of the CVRWQCB.

2.1.3 Potentially Significant Historical and Archeological Features

The Mine property is currently not listed on the National Register of National Historic Landmarks nor is it listed as a California Historical Landmark. The Mine was developed in the mid to late

1800's and portions of original mining equipment and structures remain at the Site. Remedial actions proposed in this Remediation Plan do not currently include the removal or destruction of any of these historic Site structures.

2.1.4 Regional Geologic Setting

Mount Diablo is a geologic anomaly about 30 miles (50 kilometers [km]) east of San Francisco. The mountain is the result of geologic compression and uplift caused by the movements of the Earth's plates. The mountain lies between converging earthquake faults and continues to grow slowly. The mountain grows from three to five millimeters each year.

The upper portion of the mountain is made up of volcanic and sedimentary deposits of what once was one or more island arcs of the Pacific Plate dating back to the Jurassic and Cretaceous periods, between 90 and 190 million years ago. During this time, the Pacific Plate was subducting beneath the North American continent. These deposits were scraped off the top and accreted onto the North American Plate. This resulted in the highly distorted and fractured basalt and serpentine of the Mount Diablo Ophiolite and metasediments of the Franciscan complex around the summit. East of the subduction zone, a basin was filling with sediment from the ancestral Sierra further to the east. Up to 60,000 feet (18,000 meters [m]) of sandstone, mudstone, and limestone of the Great Valley Sequence were deposited from 66 to 150 million years ago. These deposits are now found faulted against the Ophiolite and Franciscan deposits.

Over the past 20 million years continental deposits have been periodically laid down and subsequently jostled around by the newly-formed San Andreas Fault system, forming the Coast Ranges. Within the last four million years, local faulting has resulted in compression, folding, buckling, and erosion, bringing the various formations into their current juxtaposition. This faulting action continues to change the shape of Mount Diablo, along with the rest of the Coast Ranges.

The following describes the regional geology for Mount Diablo, as reported by Pampeyan (1963).

> "The Coast Ranges of California east of San Francisco consist of Mesozoic and Cenozoic rocks, folded into a series of northwest-striking anticlines and synclines that are in some places overturned to the west. The Diablo Range, which forms the east edge of the Coast Ranges, is made up of a number of folds lying en echelon for more than 150 miles south of the Bay Area; Mount Diablo is at the north end of the Diablo Range and on the crest of one of these anticlines.
>
> The rocks of Mount Diablo and vicinity can be divided into four groups: (1) a basement complex of broken and jumbled sedimentary, igneous, and metamorphic rocks; (2) a section of younger sedimentary rocks, more than 35,000 feet thick, in fault contact with the basement complex; (3) volcanic rocks which locally cut and overlie the younger sedimentary rocks; and (4) landslides, alluvium, and travertine which in places cover the older rocks.

The rocks of the basement complex make up the main mass of Mount Diablo, which occupies an area of about 18 square miles. They are in fault contact with the surrounding sedimentary rocks and form a semicircular plug which has been upthrust through the overlying strata. This plug is divided into two parts by a narrow northeast-trending band of serpentine. South of this band, greenstone, chert, graywacke, shale, limestone, schist, and conglomerate of the Franciscan formation, cut by a few small bodies of serpentine, crop out in an area of 11 square miles. North of the serpentine band, an area of 5 square miles is occupied mainly by diabase but includes a few exposures of pillow basalt and vesicular diabase. The exact age relations of the rocks composing the basement complex are unknown; but it appears that first the diabase and then the serpentine intruded the Franciscan rocks before the plug was emplaced.

The sedimentary rocks overlying the basement complex consist mainly of fossiliferous clastic marine beds ranging in age from late Jurassic to late Miocene, but fresh-water Pliocene deposits overlie the Miocene beds south of Mount Diablo.

On the northeast side of Mount Diablo, Cretaceous rocks are cut by dikes and plugs of rhyodacite probably of late Tertiary or early Quaternary age. South and east of Mount Diablo, along the periphery of the plug, numerous recent landslides obscure much of the bedrock geology."

2.1.5 Mine Geology

The Mount Diablo Mine area geology discussed below is summarized from Knox (1938), Ross (1940), Division of Water Resources (1952), Pampeyan (1963), and Dibblee (1980), and Iovenetti (1989). The most recent geologic maps of the area are in Pampeyan (1963) and Dibblee (1980).

The rocks of the Mount Diablo basement complex are separated from the Jurassic and younger rocks by what Pampeyan (1963) called the boundary fault, which is actually a fault zone. In most places, the boundary fault consists of highly sheared material up to 100 feet wide. In discussing the Mount Diablo Mercury Mine, Pampeyan and Sheahan (1957) reported that, "*The Mine is located in a fault zone that separates Franciscan sandstone and minor chert, greenstone, and shale on the west from Cretaceous shales and calcareous sandstone on the east (Figure 2-4). Two fault trends were mapped in the area. The mercury ore body that sourced the Mount Diablo Mercury Mine is within a northwest trending fault zone consisting of four traces (Knox, 1938). A north-south trending fault zone, approximately 200 feet east of the surface impoundment, was mapped by Dibblee (1980). He also reported that, "The quicksilver deposits form only in Franciscan formation, in serpentine and silica-carbonate rock which is an alteration product of serpentine.*"

Ross (1940) reported that, "*The lodes are in fracture zones near the footwalls of inclined, more or less tabular serpentine masses in Franciscan rock. They are thought to be formed by hot springs so recent that it is still giving rise to sulphurous gases and methane. The lodes are unique in that*

meta-cinnabar is an abundant primary ore mineral. The ore shoots are in zones of intense brecciation and are controlled in part by cross-fractures."

The mercury mineralization at the Mine principally occurs in silicacarbonate rocks which are a product of hydrothermal alteration of the Franciscan serpentine. The primary ores in the Mine are metacinnabar and cinnabar. The gangue minerals are quartz, calcite, marcasite, pyrite, chalcopyrite, and stibnite. The iron sulfides, marcasite, and pyrite are commonly present and locally abundant. Hydrogen sulfide, sulfur dioxide, and methane gases were encountered during mining operations in considerable amounts. Several types of sulfates were also widespread throughout the Mine workings especially in portions of the Mine that were relatively undisturbed for a long time.

A relatively large hot spring deposit, which has been variously described as calcareous tufa, calcareous sinter or travertine, is southeast of the Mine. The hot spring is no longer active, but a small spring with continuous flow was reported by Ross (1940) near this deposit and it was mapped as a Travertine Spring by Knox (1938). Neither the water chemistry nor temperature for this spring was documented; however, Pampeyan (1963) reported that the location of this spring was near the portal of the 165 level Adit (Figure 2-4).

Southwest of the Lower Pond SI, a significant but relatively low flow spring complex occurs on the Mount Diablo State Park land (the State Park Spring). This spring complex is apparently on one of the northwest trending faults associated with the mercury mineralization.

The Lower Pond SI is located in the small valley which contains Dunn Creek, a tributary to Marsh Creek. The former channel for Dunn Creek longitudinally traverses the Lower Pond SI. In the area of the "*travertine*" deposit, the base of Dunn Creek is "*travertine*" cemented alluvial gravel. Virtually this entire travertine deposit is presently overlain by Mine tailings to the west and the Lower Pond SI to the east.

2.1.6 Hydrogeology

Groundwater presence and movement in the area is neither predictable nor continuous due to the highly distorted and fractured nature of the Mount Diablo Ophiolite and meta-sediments of the Franciscan complex around the summit. However, the presence of many springs around the base of Mount Diablo attests to the accumulation and movement of groundwater recharged on the slopes of the mountain.

Well drillers in the area report that water production in the Cretaceous shale formations (like those adjacent to the ore zone at the Mine) are very unpredictable. Very often, no water is found. When it is produced, production is generally low and water quality degrades during the summer months. This is corroborated by the findings produced by a study of the Division of Water Resources (1952) when investigating conditions around the Mine.

Groundwater is present in the Mine workings. Two monitoring wells completed within the Mine workings indicate an upward hydraulic gradient in this area of Mount Diablo (see Section 2.3.4).

The presence of springs along the fault trace that defines the mercury ore zone at the Mine indicates the movement of groundwater sourced in the environs of Mount Diablo is moving down slope and forced to the surface as it encounters the highly sheared material within the 100 foot thick fault zone. Groundwater emerging as spring water contains a large mineral load consistent with movement within the highly mineralized rock of the fault zone at the Mine. Monitoring well DMEA-1, located within the Cretaceous shale and calcareous sandstone formations north and east of the fault zone, was dry and devoid of groundwater until the fault zone was encountered at depth (Section 2.3.4 and SGI, 2011).

Hydraulic head conditions combined with water quality data from these monitoring wells confirm the vertical movement of groundwater up through the fault zone on its path to discharge via the springs, and potentially via near-surface sub-flow that is not visible. Under the direction of the CVRWQCB, Jack Wessman conducted an investigation of sub-flow at a location just west of the Lower Pond SI. Jack Wessman constructed the trench on June 5, 1989. Water was found at a depth of 6 feet below grade with a field ph of 4.44 and electrical conductance of 13,620 micromhos per centimeter (µmhos/cm). This is similar to the water quality of current spring water seeps on the face of the Main Tailings Pile (SGI, 2011) and indicates the presence of near-surface sub-flow in the area between the Lower Pond SI and the Main Tailings Pile lying above and west.

One residential supply well is located to the northwest of the Mine area providing potable water supply to the Wessman Family residence. Jack Wessman reports that this well makes plenty of water and has been tested by the Wessman family for suitability as a potable water supply. This well has been the source of water supply to the Wessman family since 1974. Additional residential properties located within the Wessman property tract north of the Mine are provided water by the local water company.

2.1.7 Hydrology

The Mine lies within the upper reaches of the 128 square mile Marsh Creek Watershed (Figure 2-5). The Mine is bordered on the east by Dunn Creek, a minor tributary to Marsh Creek. On the north, a feeder stream to Dunn Creek called "*My Creek*" drains the northern portion of the Mine Site. Two perennially flowing springs are located in the Mine area and are designated the "*State Park*" Spring and the "*Travertine/Adit*" Spring. The State Park Spring is located near the Mine property boundary on lands of the Mount Diablo State Park. The Travertine/Adit Spring emerges on the eastern slope of Mine tailings mid-way between the top of the tailings mound and Dunn Creek floodplain (Figure 2-3). Evaluation of flow from the Travertine/Adit Spring in summer and late fall is based on field observation estimates conducted by SGI are on the order of 3 to 5 gallons per minute (gpm).

One ephemeral spring, the Ore House Spring, is located near the historic Mine Furnace Plant. The Ore House Spring is a low flow spring and has not been observed to have enough flow to cause notable overland flow from the spring's emanation point. Flow from this spring currently moves into a drainage ditch that is channeled with other surface water in the area that ultimately flows into the

Upper Pond and then to Dunn Creek. The only known measurement of flow from the Ore House Spring was made by Slotton (1996) at 0.01 cubic feet per second (cfs) in late March of 1995 following an extensive period of storms (Slotton, 1996). As a result of the timing of measurement by Slotton, this flow rate can likely be considered on the high side of the range for spring base flow at this location.

Two perennial ponds exist in the Dunn Creek floodplain directly below the area of exposed Mine tailings. Both of these ponds drain directly into Dunn Creek. A third ephemeral pond (the Upper Pond), created by the current property owner as part of stormwater controls, is located on the slopes of the Mine above Middle Pond and drains directly into the Middle Pond.

All surface water leaving the Mine is ultimately captured by Dunn Creek. Dunn Creek flows south from the Mine Site to join Marsh Creek 0.5 miles downstream. Marsh Creek then flows approximately 11 miles to discharge into the Marsh Creek Reservoir and then into the western San Joaquin Delta at Big Break.

Surface flow that originates at the Mine takes one of three paths as depicted on Figure 2-6 as follows:

1. Surface flow on the northern portion of the Mine area drains north into the ephemeral feeder stream called My Creek. My Creek then drains into Dunn Creek in the northeastern corner of the Mine area;
2. Flow that originates in the upper reaches of the Mine including the old Mine workings areas is captured via stormwater control features installed by the current property owner and ultimately discharged into the Upper Pond which in turn flows into the Middle Pond. The Middle Pond drains directly into Dunn Creek along the northern boundary of the Lower Pond SI. Dunn Creek then flows along the eastern boundary of the Lower Pond SI south towards Marsh Creek bypassing the Lower Pond SI; and
3. Surface flow and spring flow that originates from the exposed eastern Mine tailings and the Travertine/Adit Spring area drains directly east and flows into the Lower Pond SI. The Lower Pond SI overflows into a channel and flows into Dunn Creek below the southern impoundment berm.

The State Park Spring emerges as a perennial spring on the adjacent Mount Diablo State Park. The spring flows directly east to join Dunn Creek just below the southern bank of the Lower Pond SI impoundment. Some stormwater flow from the southernmost extent of Mine tailings may join State Park Spring water as it migrates downslope towards Dunn Creek.

Above the Lower Pond SI, Dunn Creek is an ephemeral stream. Drainage from the Lower Pond SI and the State Park Spring create a condition of perennial flow in Dunn Creek below the Lower Pond SI as it moves downstream to discharge into Marsh Creek.

Although the primary objective of the Remediation Plan is to control erosion and minimize sediment and dissolved phase mineral discharge into Dunn and Marsh Creeks, the remediation program is not a Dunn Creek stream restoration project.

2.1.8 Climate

The climate in eastern Contra Costa County is "*mediterranean*," characterized by mild to moderately cold, wet winters and hot, dry summers. Mt. Diablo represents the border between the cool summer climate type found along the Pacific coast and the hot summer climate type found in the Central Valley.

The National Weather Service maintains a weather station at Mount Diablo Junction, 2,170 feet (661 m) above sea level. The warmest month at the station is July, with an average high of 85.2 degrees Fahrenheit (°F) and an average low of 59.6°F. The coolest month is January, with an average high of 55.6°F and an average low of 39.3°F. The highest temperature recorded was 111°F on July 15, 1972. The lowest temperature recorded was 14°F on February 6, 1989, and on December 14, 1990. (The San Francisco Chronicle reported that the temperature dropped to 10°F at the summit on January 21, 1962.) Temperatures reach 90°F or higher on an average of 36.0 days each year and 100°F or higher on 3.3 days each year. Lows of 32°F or lower occur on an average of 15.4 days annually.

Annual precipitation averages 23.96 inches. The most precipitation recorded in a month was 13.54 inches in February 1998. The greatest 24-hour precipitation was 5.02 inches on January 21, 1972. The average annual days with measurable precipitation is 65.3 days.

Snowfall at Mount Diablo Junction averages 1.2 inches each year. Prior to 2009, the most snowfall observed in a month was 17.0 inches in April 1975; that same month saw 6.0 inches in one day (April 4, 1975). Measurable snowfall does not occur every year, so the annual average days with measurable snowfall is only 0.5 days. Snow is more common in the upper reaches of the mountain. On December 7, 2009, Mount Diablo received a rare snow event of 18.0 inches, receiving more in one day than what it normally receives in one year. (Mount Diablo Junction Station Data supplied by the Western Regional Climate Center).

2.1.9 Vegetation

Vegetation in the environs of the Mine and Mount Diablo is mixed oak woodland and savannah and open grassland with extensive areas of chaparral and a number of endemic plant species, such as the Mount Diablo manzanita (*Arctostaphylos auriculata*), Mount Diablo fairy-lantern (*Calochortus pulchellus*), chaparral bellflower (*Campanula exigua*), Mount Diablo bird's beak (*Cordylanthus nidularius*), and Mount Diablo sunflower (*Helianthella castanea*). The area can include a mixed ground cover of western poison-oak that is toxic via skin contact to most people.

2.2 Site History and Development

Historically, mercury has been mined at several localities around Mount Diablo. By far the largest amount was at the Mount Diablo Mine, which operated intermittently between 1863 to the late 1950s.

2.2.1 Mining History

Between 1863 and 1936, various operators removed approximately 1,739 flasks of mercury from the Site. Bradley produced more than 10,000 flasks of mercury during its 15 years of mining operations at the Site between 1936 to 1951. At the end of Bradley's operations, the underground Mine workings consisted of four levels in a steeply dipping shear zone. The Bradley workings were accessed by a main shaft and had an adit that exited to the surface on the 165 level (the 165 level Adit; Pampeyan, 1963).

Bradley generated 78,188 cubic yards of milled tailings and 24,815 cubic yards of waste rock from the Mine tunnels (Ross, 1940). The material generated by Bradley represents 97.3 percent of all waste material generated, and nearly 100 percent of all mill tailings, as documented in the attached Table 2-1. In addition to the materials generated from the Mine, Bradley also operated a rock quarry to the west of the Mine. Waste rock generated from Bradley's quarry operation is reported to have been placed in the area called the "*Waste Dump*" on maps produced by the California Division of Mines and Geology (Pampeyan, 1963). Historical records indicate that Bradley's mining waste and tailings piles at the Site match the waste pile configuration reflected in the 1953 California Division of Mines and Geology's Site mapping (Pampeyan, 1963). Figure 2-4 provides a map depicting the locations of the tailings and waste rock piles that Bradley generated on the Site. The area that received Bradley's quarry waste rock is north (northern waste rock) and is circled in a green outline (figure 2-4).

Following the period of extensive Bradley operations, Mt. Diablo Quicksilver Co., Ltd. (Mt. Diablo Quicksilver) leased the Mine to Ronnie B. Smith and partners (Smith, 1951). Using surface (open pit) mining methods, Smith, et al. produced an estimated 125 flasks of mercury in a rotary furnace. In 1953, the Defense Minerals Exploration Agency (DMEA) granted Smith, et al. a loan to explore the deeper parts of the shear zone (Schuette, 1954). With DMEA's grant money, and under the DMEA's supervision, Smith, et al. constructed a 300-foot-deep shaft (historically referred to as the DMEA Shaft) during the period from August 15, 1953 to January 16, 1954 (Schuette, 1954). The DMEA Shaft and workings flooded on February 18, 1954 and, subsequently, Smith, et al. abandoned the project (Schuette, 1954).

Cordero leased the Site from Mt. Diablo Quicksilver on November 1, 1954, and began re-conditioning the DMEA Shaft in January 1955 before discontinuing operations in December 1955. Cordero conducted its underground mining efforts from the pre-existing DMEA Shaft (Pampeyan and Sheahan, 1957). The total volume of waste rock generated by Cordero was approximately 1,228 cubic yards (Table 2-1). Cordero generated an estimated 100 to 200 tons of ore with a grade of 3 to 10 pounds of mercury per ton (Pampeyan and Sheahan, 1957), which equates to approximately 50 to 100 cubic yards of ore material.

In 1956 the Nevada Scheelite Corp. leased the Mine and installed a deep-well pump (550 gpm) to remove water which had risen to a point 112 feet below the collar of the shaft. Since the downstream ranchers objected to the discharge of acid Mine water into the creek this work was suspended. Attention was then directed to the open pit where some exploration was done using

wagon drills. A small tonnage of retort-grade ore was developed. Since this was not sufficient to satisfy the requirements of the company, the lease was relinquished (California Division of Mines, 1958).

A June 1958 State Water Pollution Control Board (WPCB) inspection report states the Mine was leased to John E. Johnson and that he was operating it, but he apparently died later that year and the Site ceased operation. Welty and Randall Mining Co. subsequently operated an unidentified portion of the Site from approximately 1965 to 1969. They apparently re-worked Mine tailings at the Site under a lease from Victoria Resources Company (Victoria Resources), which purchased the Mine from Mt. Diablo Quicksilver in May 1962. On or about December 9, 1969, Guadalupe Mining Co. (Guadalupe) purchased the Mine from Victoria Resources. It is unclear whether Guadalupe actually operated the Mine. In June 1974, the current owners, Jack and Carolyn Wessman and the Wessman Family Trust purchased the Site from Guadalupe. In 1977, the Wessmans sold the portion of the Site containing the settlement pond to Ellen and Frank Meyer, but subsequently re-purchased it in 1989.

2.3 Previous Investigations

The potential for contamination of Marsh Creek from the Site has long been of concern, resulting in considerable sampling of Marsh Creek, Dunn Creek, Horse Creek, pond effluent, and other surface waters, over the past 50 plus years (WPCB Document Log) by the following:

- CVRWQCB and its predecessor, the WPCB, as part of inspection visits to the Mine since the late 1930's;
- J.L. Iovenitti, Weiss Associates, and J. Wessman, as part of *Mount Diablo Mine Surface Impoundment Technical Report* dated June 30, 1989;
- Professor Darell G. Slotton, U.C. Davis, as part of the *Marsh Creek Watershed Mercury Assessment Project* conducted in March 1996, July 1997, and June 1998; and
- Sunoco Inc, via The Source Group, Inc – Site Characterization Report, August 2, 2010 and Additional Site Characterization Report, December 7, 2011.

The following sections briefly summarize these previous investigations.

2.3.1 State Water Pollution Control Board / California Regional Water Quality Control Board Investigations

Sampling events conducted by the CVRWQCB and its predecessor, the WPCB, have consisted of collecting grab samples under varying conditions (ranging from high run-off periods, to periods of little or no run-off). Samples have been collected since the early 1950's at the following locations:

- Dunn Creek (at various locations);
- Horse Creek (upstream of pond outlet);
- Perkins Creek (above the confluence with Marsh Creek);
- Curry Creek (above the confluence with Marsh Creek);
- Marsh Creek (at various locations);