Monitoring Report Submittal Transmittal Form

Attn: Guy Childs (916) 464-4648
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive #200
Rancho Cordova, CA 95670-6114

Discharger:	The Morning Star Packing Company, LP and Fred Gobel
	Name of Facility: Williams Facility
WDRs Order Number:	R5-2013-0144
WDID:	5A062005001
County:	Colusa

I am hereby submitting to the Central Valley Water Board the following information:

Check all that apply:

Monthly Monitoring Report for the month of OCTOBER 2014

1st / 2nd / 3rd / 4th (**circle one**) Quarterly Monitoring Report for the year of_____

1st / 2nd (**circle one**) Semi-annual Monitoring Report for the year _____

Annual Monitoring Report for the year _____

Violation Notification

During the monitoring period, there were / were not (circle one) any violations of the WDRs.

- The violations were: (*add extra pages as needed*)
- Have the violations been corrected? Yes / No. If no, what will be done to correct the violations: (*add extra pages as needed*)

Certification Statement

"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 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."

Signature: _____ Phone: (530)666-6600

Printed Name: ROSS OLIVEIRA Date: 12/1/14

THE MORNING STAR PACKING COMPANY
724 Main Street, Woodland CA 95695

28 November 2014

Mr. Guy Childs
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive #200
Rancho Cordova, CA 95670-6114

Re: Monthly Report for The Morning Star Packing Company – Williams, according to Waste Discharge Requirements Order No. R5-2013-0144.

Dear Mr. Childs:

Please find herewith the October Report with items requested in the Monthly Monitoring Reports section of the Monitoring and Reporting Program No. R5-2013-0144.

1. Tabulated pond monitoring data.

The tabulated pond monitoring results for October are included as **Attachment A**.

2. Tabulated daily flow measurements from each wastewater source and supplemental irrigation water to each check in each LAA field.

The October flow measurement logsheet is included as **Attachment B**.

3. The cumulative annual wastewater (Station 1 and Station 2) flow discharged to the LAAs to date, the average daily flow for the month, and comparison to the average daily flow limit.

The cumulative annual washwater from Station 1 and Station 2 are provided below and included in **Attachment B**:

Source	Annual Flow	Flow Limit
Station 1: Settling Pond/Gutters	219,806,607	
Station 2: Cooling Pond	0	
Total Washwater Discharge	219,806,607	422,000,000

4. Tabulated wastewater monitoring data and calculation of the running average for each group of three consecutive sample results for BOD and total nitrogen.

The October washwater monitoring data logsheet is included as **Attachment C**.

5. A current site plan depicting the irrigation checks within each LAA field that will be used during the calendar year, including all water conveyance ditches and internal berms that divide each LAA (where applicable).

An updated 2014 site plan for the facility's LAA and individual field maps are provided in **Attachment D**.

6. Tabulated update cropping information for each LAA field that includes at least:

a. The crop that will be grown in each field;
b. Planned and actual planting dates;
c. Planned and actual harvest dates;
d. Planned and actual cattle grazing schedule, location of cattle grazing, including the number of head on each field;
e. Typical maximum expected and actual yield at harvest in applicable crop units per acre;
f. Crop total nitrogen demand; and
g. Crop average evapotranspiration rate in inches

The tabulated cropping information for each LAA is included as **Attachment E**.

7. Tabulated land application area monitoring data for each LAA field, including; calculation of the hydraulic loading, irrigation cycle average BOD loading, and total nitrogen loading to date from all sources. The average of the three most recent monitoring results shall be used to determine irrigation cycle average BOD and total nitrogen loading. Loading rates for Settling Pond solids, residual solids, cattle manure and commercial fertilizers shall be calculated separately using actual load analytical results and application areas.

The tabulated land application area monitoring data for each LAA field are also included as **Attachment E**.

8. A summary of the daily pre-application inspection reports for the month.

The pre-application inspection reports for October are included as **Attachment F**.

9. Calculation of the flow-weighted average FDS concentration to date (representative of the Settling Pond and plant sanitation/clean-up water) as monitored at Station 1.

The calculation of the flow-weighted average FDS concentration is presented at the bottom of **Attachment C**.

10. Residual solids monitoring data and monthly mass of residual solids generated and applied to each LAA field and/or disposed of off-site.

The October residual solids monitoring data is included as **Attachment G**.

11. A comparison of monitoring data to the flow limitations, effluent limitations; mass loading limitations (for each LAA field), and discharge specifications, and an explanation of any violation of those requirements.

The Morning Star Packing Company – Williams is in compliance with the flow limitations, effluent limitations, mass loading limitations and the discharge specifications.

12. If requested by staff, copies of laboratory analytical report(s).

If requested, The Morning Star Packing Company – Williams will mail out the laboratory analytical reports.

13. Copies of current calibration logs for all field test instruments.

The calibration log for October and calibration logs for the flow monitoring devices are included as **Attachment H**.

> *"I certify under penalty of law that this document and all attachments have been prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. The information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."*

Respectfully yours,

Ross Oliveira

Attachment A

MONTHLY MONITORING REPORT

MONTH	October
YEAR	2014

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

POND MONITORING RESULTS

Monitoring Location	Monitoring Week	Monitoring Date	Monitoring Time	Dissolved Oxygen[1] (mg/L)	pH	Freeboard (0.1 feet)	Odors[3]	Monthly Pond Berm/Leeve Condition[4]	Technican's Initials
Settling Pond	Week 1	10/6/14	12:45pm	3.82	6.28	30 inches	Slight	Good	JY
	Week 2	10/13/14	2:15pm	3.91	6.36	30 inches	Slight	Good	JY
Coolng Pond	Week 1	10/6/14	1:10pm	6.45	7.36	31.5 inches	None	Good	JY
	Week 2	10/13/14	2:40pm	6.56	7.29	29 inches	None	Good	JY

Sample frequency shall be weekly during the processing season and monthly during the non-processing season.

[1]Samples shall be collected at a depth of one foot from each pond in use, opposite the inlet.

[2]Freeboard shall be measured to the nearest 0.1 foot from staff gauge.

[3]Odors shall be reported as (none, slight, moderate, strong)

[4]If a pond berm/leeve conditon is not reported as good, a description of the condition of the berm/leeve shall be provided, as well as the maintenance that was completed.

Attachment B

MONTHLY MONITORING REPORT

MONTH	October
YEAR	2014

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

FLOW MONITORING RESULTS :

Monitoring Date (Day of Month)	Flow Source					
	Supplemental ~~GCID~~ Irrigation Water (gallons; calculated)	Station 1 - Settling Pond Water (gallons; meter)	Station 2 - Cooling Pond Water (gallons; meter)	Station 3 - Total Discharge to LAAs (gallons; meter)	Names of LAAs Irrigated	Station 3 - Total Discharge to LAAs (inches)
1		2,822,196		3,163,520	See Attached	
2		2,643,185		2,860,692		
3		2,841,789		1,565,725		
4		2,849,497		844,500		
5		3,105,516		918,943		
6		2,540,023		1,078,150		
7		2,277,392		1,114,822		
8		2,339,946		1,035,731		
9		2,339,946		1,294,634		
10		2,520,873		1,698,469		
11		2,629,019		1,769,531		
12		2,020,320		1,453,070		
13		2,144,160		1,344,220		
14		2,102,400		721,965		
15		709,920		269,849		
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
Total Monthly Flow (MG)	0	35,886,182	0			0
Average Daily Flow (MGD)	#DIV/0!	2,392,412	#DIV/0!			#DIV/0!
Cumulative Annual Flow to Date (MG)	151,700,652	219,806,607	0			0

* October 12-16 estimated using single flow reading. Data logger not working.

START DATE	MS FIELD ID #	CHECKS IRRIGATED
10/1/14	11	7-13
10/1/14	11	14-20
10/1/14	16	35-39
10/1/14	16	40-43
10/1/14	18A	14-20
10/1/14	18A	21-27
10/1/14	21	9-16
10/1/14	21	17-24
10/2/14	11	14-20
10/2/14	11	21-33
10/2/14	16	40-43
10/2/14	18A	21-27
10/2/14	18A	28-34
10/2/14	21	17-24
10/2/14	21	25-31
10/3/14	2	1-8
10/3/14	3	1-6
10/3/14	11	21-33
10/3/14	18A	28-34
10/3/14	18A	34-42
10/3/14	20A	1-5
10/3/14	21	25-31
10/3/14	21	32-38
10/4/14	2	1-8
10/4/14	2	9-14
10/4/14	3	1-6
10/4/14	3	7-13
10/4/14	18A	34-42
10/4/14	18B	1-7
10/4/14	20A	1-5
10/4/14	20A	6-11
10/4/14	21	32-38
10/4/14	21	39-45
10/4/14	24A	1-7
10/4/14	24C	1-7
10/5/14	2	9-14
10/5/14	2	15-23
10/5/14	3	7-13
10/5/14	3	14-21
10/5/14	18B	1-7
10/5/14	18B	8-15
10/5/14	20A	6-11
10/5/14	20A	12-18
10/5/14	21	39-45
10/5/14	21	46-50
10/5/14	24A	1-7
10/5/14	24A	8-14
10/5/14	24C	1-7
10/5/14	24C	8-14

START DATE	MS FIELD ID #	CHECKS IRRIGATED
10/6/14	2	15-23
10/6/14	2	24-31
10/6/14	3	14-21
10/6/14	3	22-29
10/6/14	14	1-6
10/6/14	18B	8-15
10/6/14	18B	16-22
10/6/14	20A	12-18
10/6/14	20A	19-25
10/6/14	21	46-50
10/6/14	24A	8-14
10/6/14	24A	15-21
10/6/14	24C	8-14
10/6/14	24C	15-21
10/7/14	2	24-31
10/7/14	2	32-38
10/7/14	3	22-29
10/7/14	3	30-37
10/7/14	14	1-6
10/7/14	14	7-12
10/7/14	18B	16-22
10/7/14	18B	23-31
10/7/14	20A	19-25
10/7/14	20A	26-32
10/7/14	24A	15-21
10/7/14	24A	22-28
10/7/14	24C	15-21
10/7/14	24C	22-28
10/8/14	2	32-38
10/8/14	2	39-45
10/8/14	3	30-37
10/8/14	3	38-45
10/8/14	14	7-12
10/8/14	14	13-16
10/8/14	18B	23-31
10/8/14	18B	32-37
10/8/14	20A	26-32
10/8/14	20A	33-35
10/8/14	20B	1-4
10/8/14	24A	22-28
10/8/14	24A	29-35
10/8/14	24C	22-28
10/8/14	24C	29-35
10/9/14	2	39-45
10/9/14	2	46-52
10/9/14	3	38-45
10/9/14	3	46-54
10/9/14	14	13-16
10/9/14	14	17-19

START DATE	MS FIELD ID #	CHECKS IRRIGATED
10/9/14	18B	32-37
10/9/14	18B	38-42
10/9/14	20A	33-35
10/9/14	20B	1-4
10/9/14	20B	5-11
10/9/14	24A	29-35
10/9/14	24A	36-42
10/9/14	24C	29-35
10/9/14	24C	36-42
10/10/14	2	46-52
10/10/14	2	53-59
10/10/14	3	46-54
10/10/14	14	17-19
10/10/14	14	20-22
10/10/14	18B	38-42
10/10/14	20B	5-11
10/10/14	20B	12-18
10/10/14	24A	36-42
10/10/14	24A	43-44
10/10/14	24B	1-5
10/10/14	24C	36-42
10/10/14	24C	43-44
10/10/14	24D	1-5
10/11/14	2	53-59
10/11/14	5	1-6
10/11/14	6	1-6
10/11/14	11	1-7
10/11/14	14	20-22
10/11/14	14	23-24
10/11/14	15	1-16
10/11/14	16	1-10
10/11/14	20B	12-18
10/11/14	20B	19-25
10/11/14	24A	43-44
10/11/14	24B	1-5
10/11/14	24B	6-12
10/11/14	24C	43-44
10/11/14	24D	1-5
10/11/14	24D	6-12
10/12/14	5	1-6
10/12/14	5	7-12
10/12/14	6	1-6
10/12/14	6	7-12
10/12/14	11	1-7
10/12/14	11	8-13
10/12/14	14	23-24
10/12/14	15	1-16
10/12/14	15	17-24
10/12/14	16	1-10

START DATE	MS FIELD ID #	CHECKS IRRIGATED
10/12/14	16	11-21
10/12/14	20B	19-25
10/12/14	20B	26-31
10/12/14	24B	6-12
10/12/14	24B	13-18
10/12/14	24D	6-12
10/12/14	24D	13-18
10/13/14	5	7-12
10/13/14	5	13-17
10/13/14	6	7-12
10/13/14	6	13-18
10/13/14	11	8-13
10/13/14	11	14-18
10/13/14	15	17-24
10/13/14	15	25-35
10/13/14	16	11-21
10/13/14	16	22-32
10/13/14	20B	26-31
10/13/14	20B	32-35
10/13/14	24B	13-18
10/13/14	24B	19-26
10/13/14	24D	13-18
10/13/14	24D	19-26
10/14/14	5	13-17
10/14/14	5	18-24
10/14/14	6	13-18
10/14/14	6	19-24
10/14/14	11	14-18
10/14/14	11	19-25
10/14/14	15	25-35
10/14/14	15	25-35
10/14/14	15	36-41
10/14/14	16	22-32
10/14/14	16	33-43
10/14/14	20B	32-35
10/14/14	24B	19-26
10/14/14	24B	27-33
10/14/14	24D	19-26
10/14/14	24D	27-33
10/15/14	5	18-24
10/15/14	5	25-32
10/15/14	6	19-24
10/15/14	6	25-30
10/15/14	11	19-25
10/15/14	11	26-33
10/15/14	15	36-41
10/15/14	16	33-43

Attachment C

MONTHLY MONITORING REPORT

DISCHARGER:	**Morning Star Packing Company, LP and Fred Gobel**
FACILITY:	**Morning Star Tomato Packing Plant**
COUNTY:	**Colusa**
WDRs Order:	**R5-2013-0144**

MONTH	October
YEAR	2014

WASTEWATER MONITORING RESULTS : Washwater Discharge began on July 16th

Samples Collected from Station 1

Monitoring Week	Monitoring Date	BOD (mg/L)	3-Sample Average BOD (mg/L)[1]	Total Nitrogen (mg/L)	3-Sample Average Total Nitrogen (mg/L)[1]	FDS (mg/L)
Second to Last Week of Previous Month	9/4/14	469	589	26	26	340
Last Week of Previous Month	9/11/14	520	538	25	25	380
Week 1 of Current Month	10/2/14	441	477	18	23	140
Week 2 of Current Month	10/9/14	397	453	19	21	430
Week 3 of Current Month						
Week 4 of Current Month						
Week 5 of Current Month						

Sampling is not required during periods when no wastewater is discharged to the LAAs.

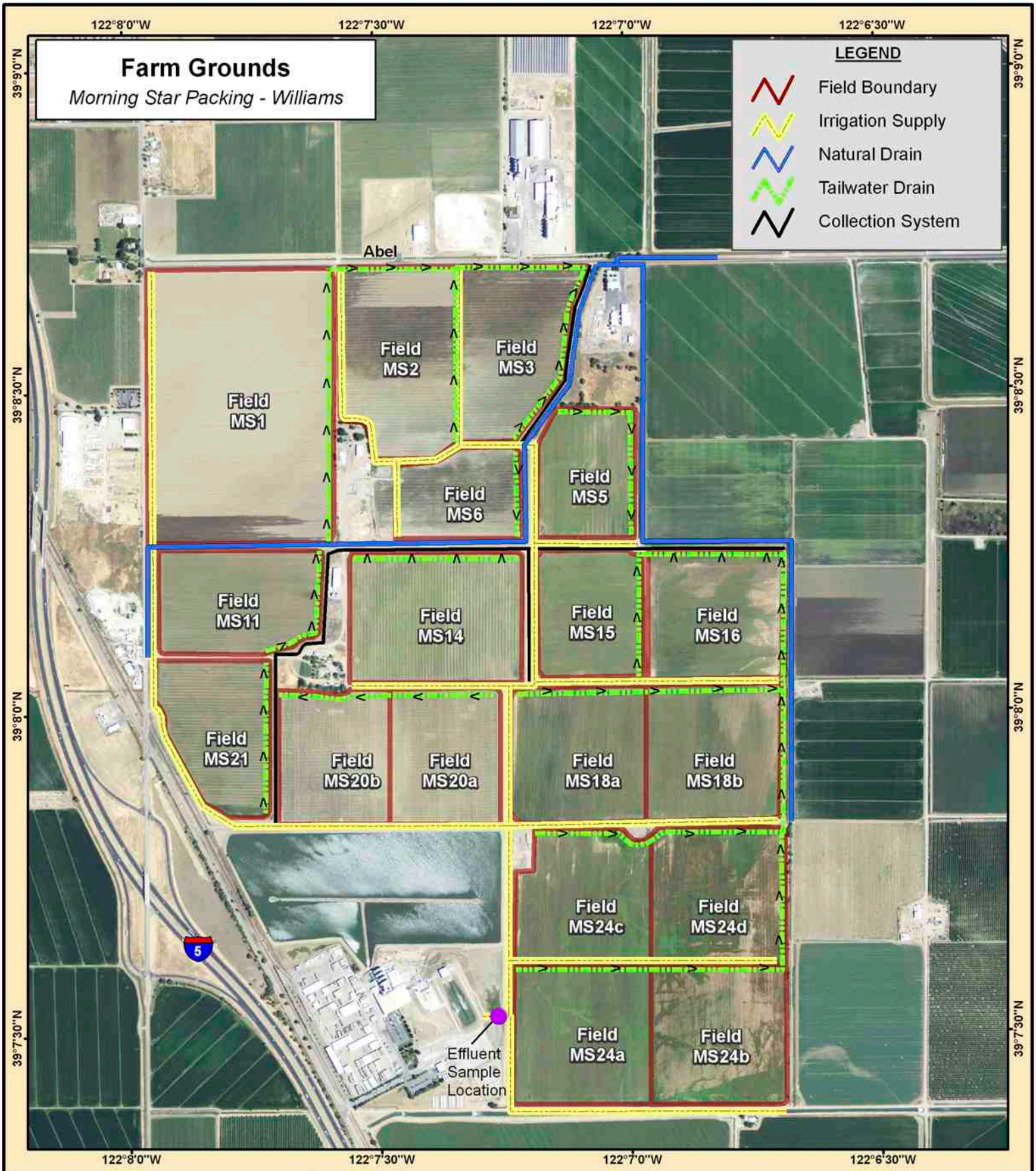
Average BOD Concentration (mg/L)[1]	**419**
Average Monthly Total Nitrogen Concentration (mg/L)[2]	**19**
Monthly Average FDS Concentration (mg/L)	**285**
Flow Weighted Average FDS Concentration to Date (mg/L)[3]	**486**

[1]See MRP Reporting Section A.4.

[2]Value to be used in annual loading calculation (WDR Section C.2.a).

[3]Calculated per WDR Section C.1.a (Show Calculations).

Attachment D



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Map Scale 1:14,400 1 Inch = 1,200 Feet

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Data Source:
Aerial Photography: Summer 2012
Projection: UTM Zone 10N, NAD 83
State of California: Colusa County

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Prairieville, LA (225) 677-7207
Map Date: February 27, 2014
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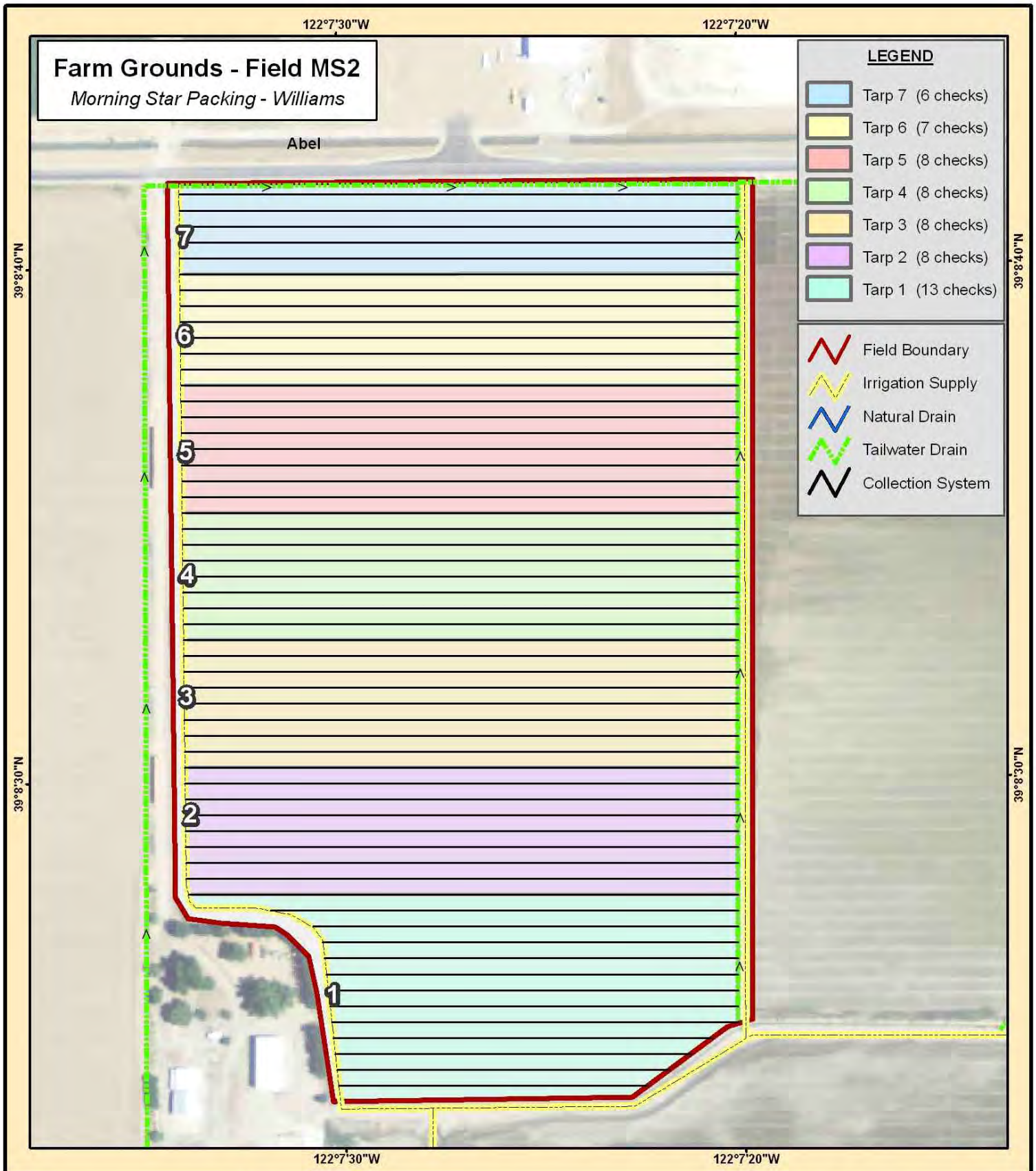

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Map Scale 1:3,000 1 Inch = 250 Feet

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Data Source:
Aerial Photography: Summer 2012
Projection: UTM Zone 10N, NAD 83
State of California: Colusa County

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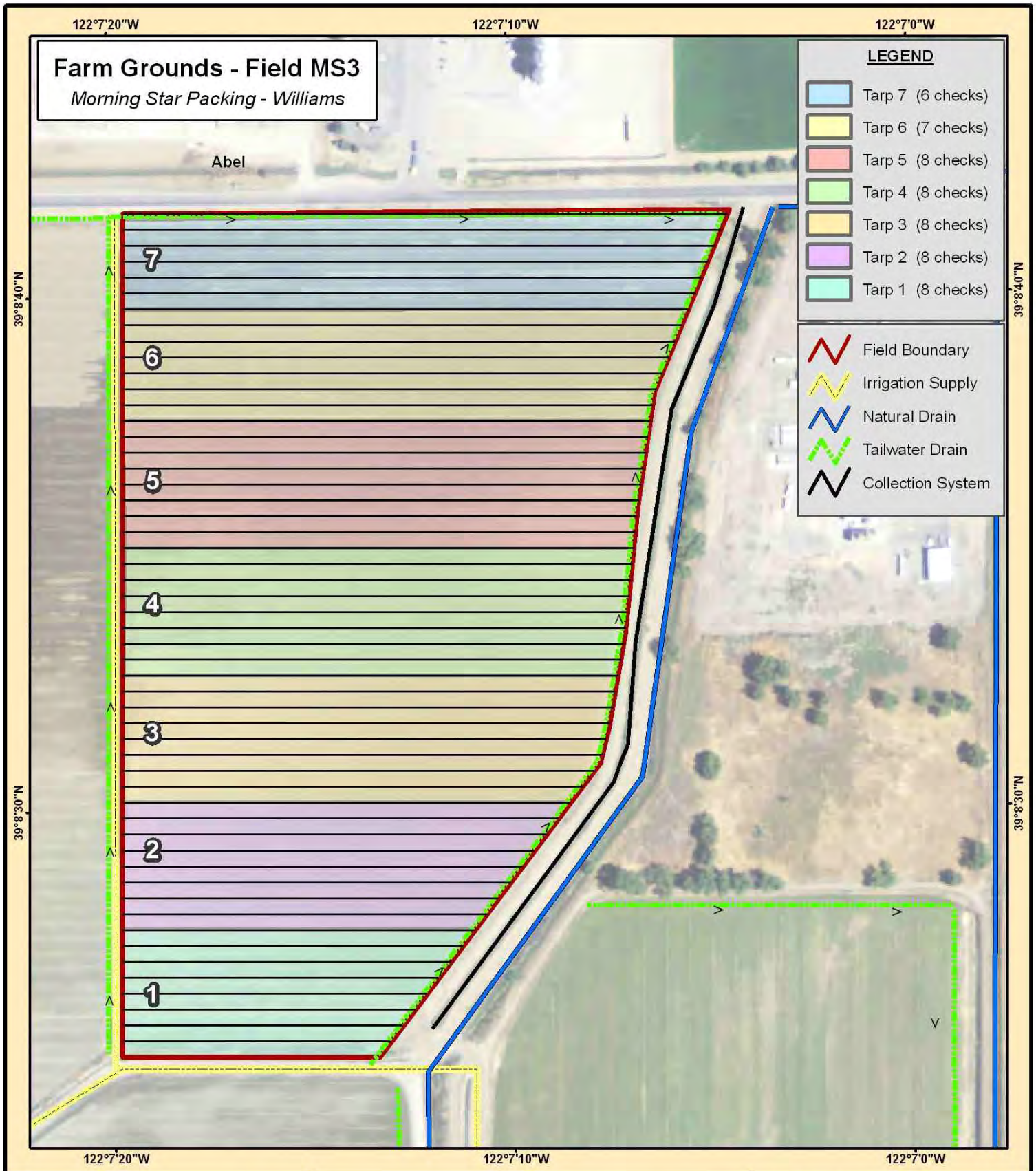
Prairieville, LA (225) 677-7207
Map Date: March 18, 2014
Map ID: CMS2014-043



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Data Source:
Aerial Photography: Summer 2012
Projection: UTM Zone 10N, NAD 83
State of California: Colusa County

Map Source:
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Prairieville, LA (225) 677-7207
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Map Scale 1:2,700 1 Inch = 225 Feet

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Data Source:
Aerial Photography: Summer 2012
Projection: UTM Zone 10N, NAD 83
State of California: Colusa County

Map Source:
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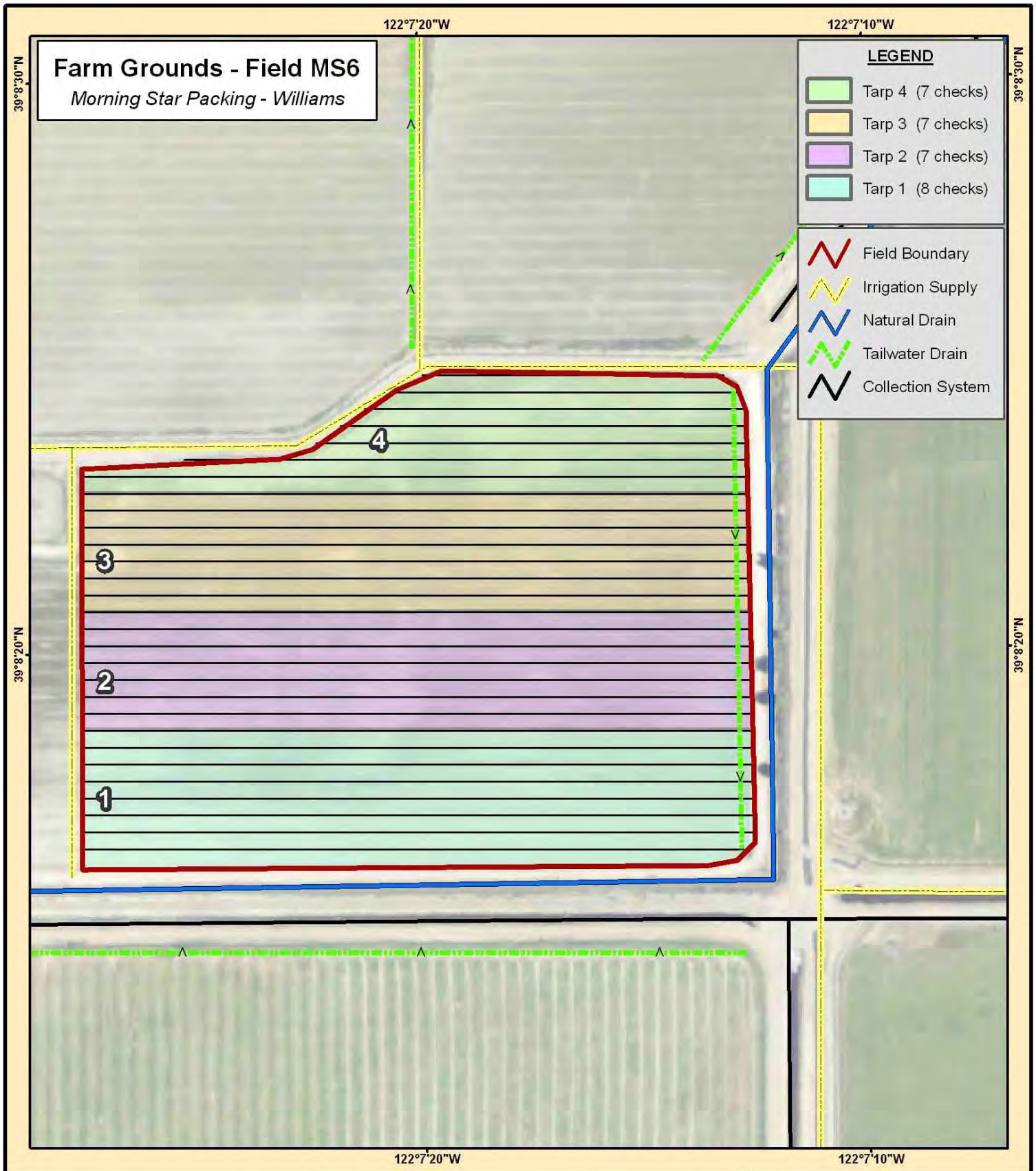
Prairieville, LA (225) 677-7207
Map Date: March 24, 2014
Map ID: CMS2014-049



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Map Scale 1:2,700 1 Inch = 225 Feet

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Data Source:
Aerial Photography: Summer 2012
Projection: UTM Zone 10N, NAD 83
State of California: Colusa County

Map Source:
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Prairieville, LA (225) 677-7207
Map Date: March 24, 2014
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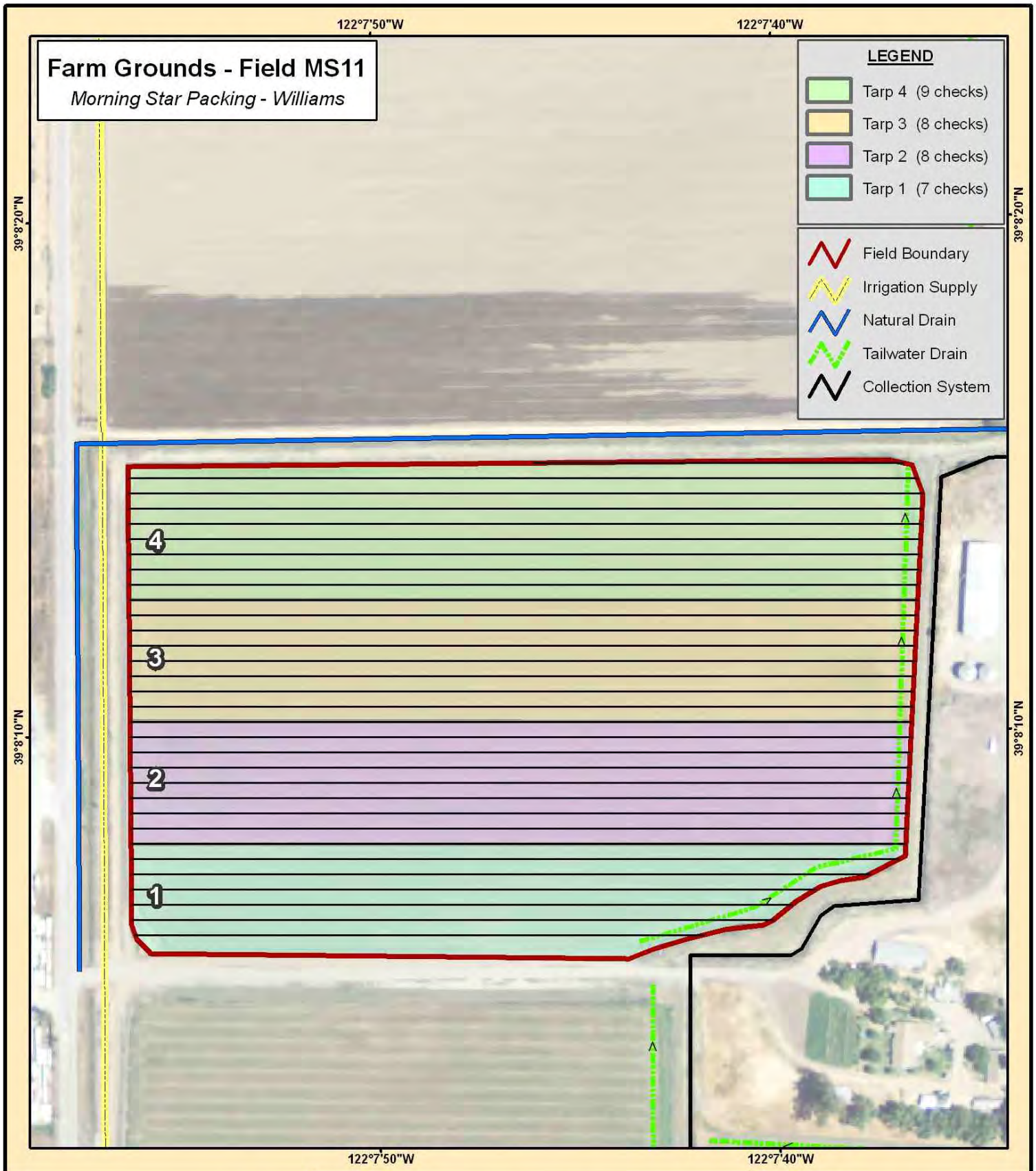

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Map Scale 1:3,000 1 Inch = 250 Feet

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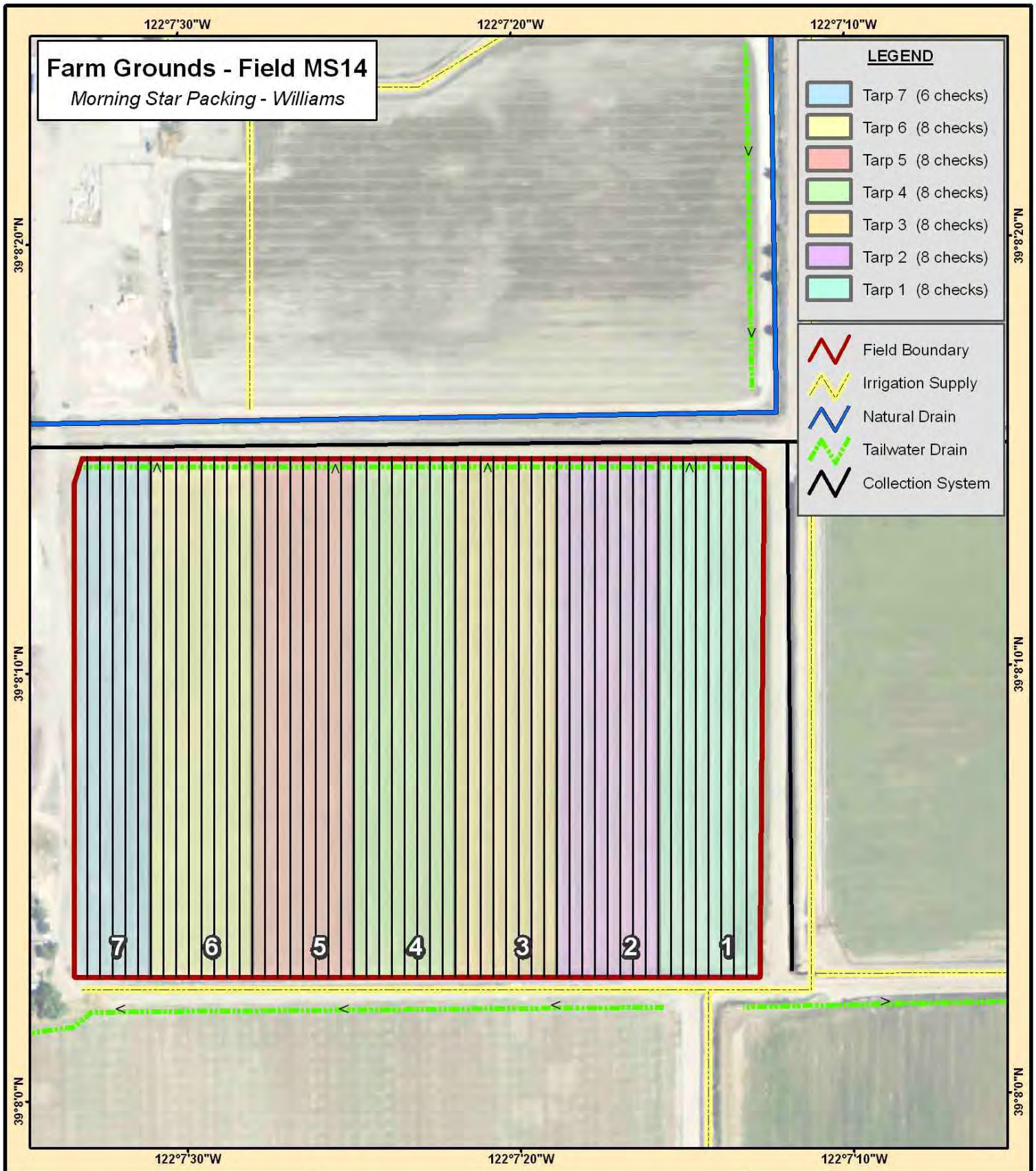
N

Data Source:
Aerial Photography: Summer 2012
Projection: UTM Zone 10N, NAD 83
State of California: Colusa County

Map Source:
Custom Mapping Services, L.L.C.
Prairieville, LA (225) 677-7207
Map Date: March 24, 2014
Map ID: CMS2014-048



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Data Source:
Aerial Photography: Summer 2012
Projection: UTM Zone 10N, NAD 83
State of California: Colusa County

Map Source:
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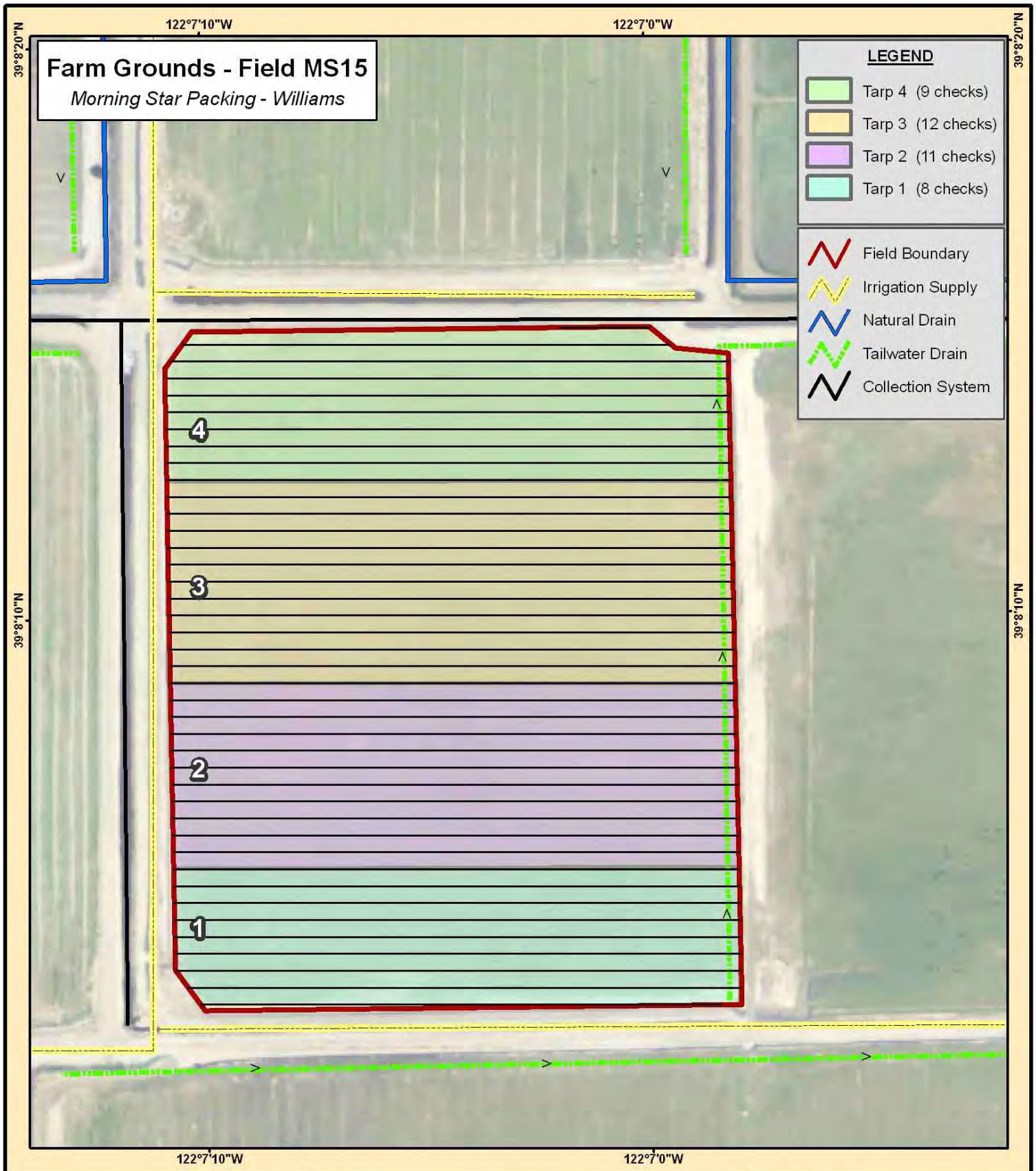
Prairieville, LA (225) 677-7207
Map Date: March 24, 2014
Map ID: CMS2014-050



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Map Scale 1:2,700 1 Inch = 225 Feet

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0 30 60 120 180 240 300 360 420 Feet

N

Data Source:
Aerial Photography: Summer 2012
Projection: UTM Zone 10N, NAD 83
State of California: Colusa County

Map Source:
Custom Mapping Services, L.L.C.
Prairieville, LA (225) 677-7207
Map Date: March 24, 2014
Map ID: CMS2014-045

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Map Scale 1:3,840 1 Inch = 320 Feet

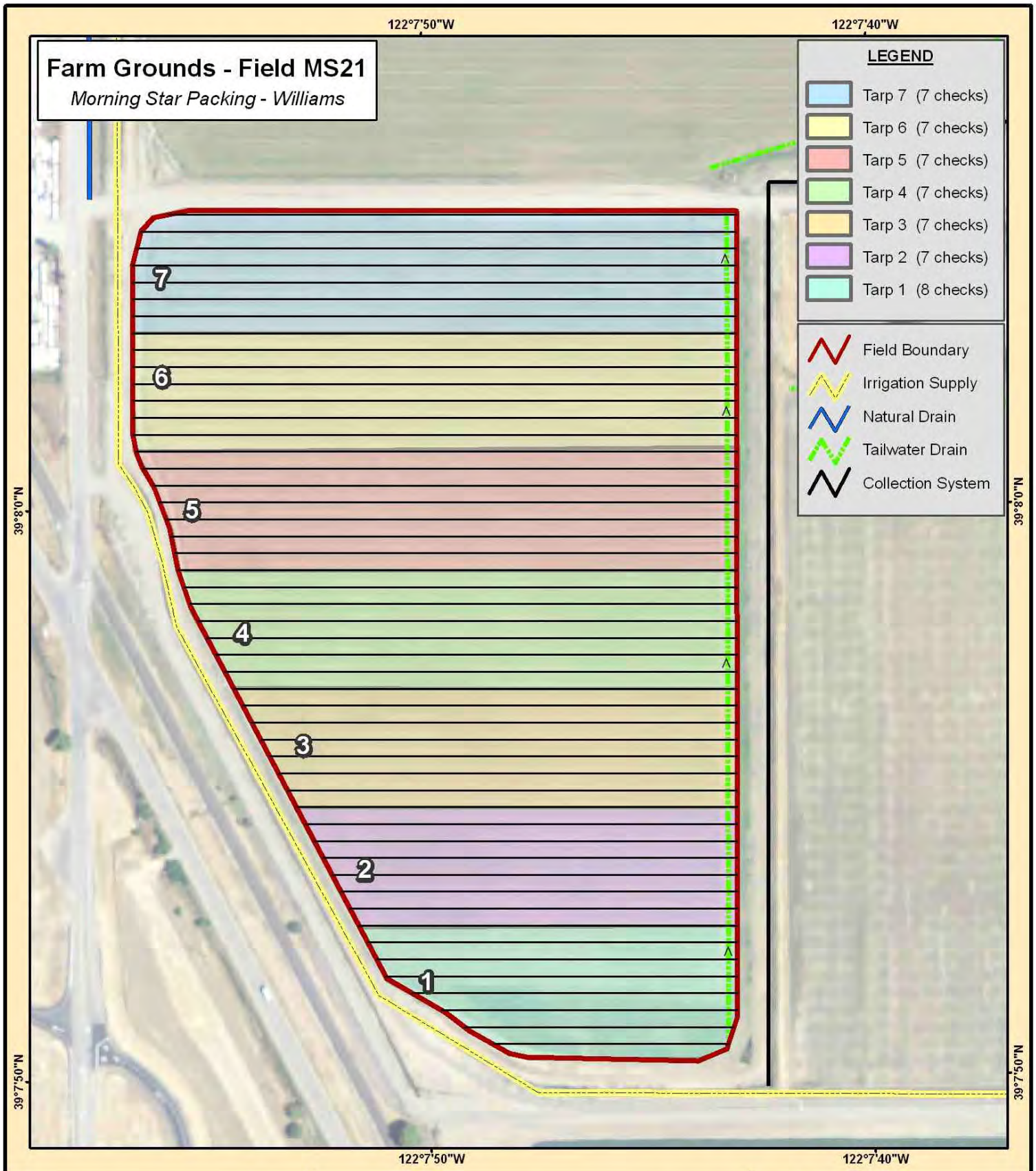
0 160 320 640 Feet

0 60 120 240 360 480 600 Feet

N

Data Source:
Aerial Photography: Summer 2012
Projection: UTM Zone 10N, NAD 83
State of California: Colusa County

Map Source:
Custom Mapping Services, L.L.C.
Prairieville, LA (225) 677-7207
Map Date: March 24, 2014
Map ID: CMS2014-051



CUSTOM MAPPING SERVICES

Custom Mapping Services, L.L.C. does not guarantee the accuracy or content of the data used in this map. Map is intended for pictorial use only and is not to be used for legal purposes.

Map Scale 1:2,700 1 Inch = 225 Feet

0 112.5 225 450 Feet

0 30 60 120 180 240 300 360 420 Feet

N

Data Source:
Aerial Photography: Summer 2012
Projection: UTM Zone 10N, NAD 83
State of California: Colusa County

Map Source:
Custom Mapping Services, L.L.C.
Prairieville, LA (225) 677-7207
Map Date: March 24, 2014
Map ID: CMS2014-046

Attachment E

MONTHLY MONITORING REPORT

MONTH	October
YEAR	2014

DISCHARGER:	**Morning Star Packing Company, LP and Fred Gobel**
FACILITY:	**Morning Star Tomato Packing Plant**
COUNTY:	**Colusa**
WDRs Order:	**R5-2013-0144**

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME MS2

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	41.05
Number of Checks	58
Check Width (feet)	30
Check Length (feet)**	1,100
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	4-Jun
Actual Planting Date	6/4/14
Anticipated Harvest Date	August 13, October 17
Actual Harvest Date	7/24/2014, 9/16/14
Expected Harvest Yield	3 tons/acre
Actual Harvest Yield	1.2 tons/acre

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

**Est based on Google Earth

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00							
2			0.00							
3	0800		0.00	1-8	WW	237,175	16	6.1	1.4	24
4		0900	0.00	1-8	WW	76,304	9	6.1	0.5	24
	0900			9-14	WW	95,380	15	4.5	0.8	24
5		1000	0.00	9-14	WW	65,803	10	4.5	0.5	24
	1000			15-23	WW	138,185	14	6.8	0.7	29
6		1100	0.00	15-23	WW	110,922	11	6.8	0.6	29
	1100			24-31	WW	116,524	13	6.1	0.7	38
7		1200	0.00	24-31	WW	117,303	12	6.1	0.7	38
	1200			32-38	WW	102,640	12	5.3	0.7	45
8		1300	0.00	32-38	WW	96,381	13	5.3	0.7	45
	1300			39-45	WW	81,553	11	5.3	0.6	45
9		1400	0.00	39-45	WW	153,280	14	5.3	1.1	45
	1400			46-52	WW	109,486	10	5.3	0.8	45
10		1500	0.00	46-52	WW	308,788	15	5.3	2.1	45
	1500			53-59	WW	185,273	9	5.3	1.3	45
11		1600	0.00	53-59	WW	173,103	16	5.3	1.2	45
12			0.00							
13			0.00							
14			0.00							
15			0.01							
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25			0.04							
26			0.01							
27			0.00							
28			0.00							
29			0.00							
30			0.00							
31			0.07							
Total			0.13							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	8

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	October
YEAR	2014

DISCHARGER:	**Morning Star Packing Company, LP and Fred Gobel**
FACILITY:	**Morning Star Tomato Packing Plant**
COUNTY:	**Colusa**
WDRs Order:	**R5-2013-0144**

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME MS3

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	41.05
Number of Checks	53
Check Width (feet)	30
Check Length (feet)**	1,000
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	5-Jun
Actual Planting Date	5-Jun
Anticipated Harvest Date	August 14, October 18
Actual Harvest Date	7/24/2014, 9/16/14
Expected Harvest Yield	3 tons/acre
Actual Harvest Yield	1.2 tons/acre

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

**Est based on Google Earth

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Flow Rate to Each Check (gpm)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00							
2			0.00							
3	0900		0.00	1-6	WW	151,603	15	4.1	1.4	24
4		1000	0.00	1-6	WW	57,806	10	4.1	0.5	24
	1000			7-13	WW	94,417	14	4.8	0.7	24
5		1100	0.00	7-13	WW	76,770	11	4.8	0.6	24
	1100			14-21	WW	103,689	13	5.5	0.7	26
6		1200	0.00	14-21	WW	97,782	12	5.5	0.7	26
	1200			22-29	WW	97,782	12	5.5	0.7	32
7		1300	0.00	22-29	WW	115,526	13	5.5	0.8	32
	1300			30-37	WW	97,752	11	5.5	0.7	32
8		1400	0.00	30-37	WW	107,838	14	5.5	0.7	32
	1400			38-45	WW	107,838	14	5.5	0.7	37
9		1500	0.00	38-45	WW	170,627	15	5.5	1.1	37
	1500			46-54	WW	115,173	9	6.2	0.7	37
10		1600	0.00	46-54	WW	384,983	16	6.2	2.3	37
11			0.00							
12			0.00							
13			0.00							
14			0.00							
15			0.01							
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25			0.04							
26			0.01							
27			0.00							
28			0.00							
29			0.00							
30			0.00							
31			0.07							
Total			0.13							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	7

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	October
YEAR	2014

DISCHARGER:	**Morning Star Packing Company, LP and Fred Gobel**
FACILITY:	**Morning Star Tomato Packing Plant**
COUNTY:	**Colusa**
WDRs Order:	**R5-2013-0144**

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME MS5

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	24.6
Number of Checks	34
Check Width (feet)	30
Check Length (feet)**	1,200
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	3-Jul
Actual Planting Date	N/A
Anticipated Harvest Date	Sept 11, November 15
Actual Harvest Date	9-Sep
Expected Harvest Yield	3 tons/acre
Actual Harvest Yield	3.7 tons/acre

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00							
2			0.00							
3			0.00							
4			0.00							
5			0.00							
6			0.00							
7			0.00							
8			0.00							
9			0.00							
10			0.00							
11	0600		0.00	1-6	WW	182,096	18	5.0	1.4	30
12		0700	0.00	1-6	WW	52,209	7	5.0	0.4	30
	0700			7-12	WW	126,794	17	5.0	0.9	29
13		0800	0.00	7-12	WW	61,442	8	5.0	0.5	29
	0800			13-17	WW	102,404	16	4.1	0.9	28
14		0900	0.00	13-17	WW	28,974	9	4.1	0.3	28
	0900			18-24	WW	67,606	15	5.8	0.4	30
15		1000	0.01	18-24	WW	24,428	10	5.8	0.2	30
	1000	2400		25-32	WW	39,085	14	6.6	0.2	64
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25			0.04							
26			0.01							
27			0.00							
28			0.00							
29			0.00							
30			0.00							
31			0.07							
Total			0.13							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	4

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	October
YEAR	2014

DISCHARGER:	**Morning Star Packing Company, LP and Fred Gobel**
FACILITY:	**Morning Star Tomato Packing Plant**
COUNTY:	**Colusa**
WDRs Order:	**R5-2013-0144**

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME MS6

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	21.4
Number of Checks	29
Check Width (feet)	30
Check Length (feet)**	1,300
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	3-Jul
Actual Planting Date	
Anticipated Harvest Date	Sept 11, November 15
Actual Harvest Date	23-Aug
Expected Harvest Yield	3 tons/acre
Actual Harvest Yield	2.9 tons/acre

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

**Est based on Google Earth

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00							
2			0.00							
3			0.00							
4			0.00							
5			0.00							
6			0.00							
7			0.00							
8			0.00							
9			0.00							
10			0.00							
11	0700		0.00	1-6	WW	186,311	17	5.4	1.3	29
12		0800	0.00	1-6	WW	64,640	8	5.4	0.4	29
	0800			7-12	WW	129,281	16	5.4	0.9	31
13		0900	0.00	7-12	WW	74,883	9	5.4	0.5	31
	0900			13-18	WW	124,805	15	5.4	0.9	29
14		1000	0.00	13-18	WW	41,851	10	5.4	0.3	29
	1000			19-24	WW	58,592	14	5.4	0.4	34
15		1100	0.01	19-24	WW	24,952	11	5.4	0.2	34
	1100	2400		25-30	WW	29,488	13	5.4	0.2	34
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25			0.04							
26			0.01							
27			0.00							
28			0.00							
29			0.00							
30			0.00							
31			0.07							
Total			0.13							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	5

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	October
YEAR	2014

DISCHARGER:	**Morning Star Packing Company, LP and Fred Gobel**
FACILITY:	**Morning Star Tomato Packing Plant**
COUNTY:	**Colusa**
WDRs Order:	**R5-2013-0144**

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME MS11

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	35.6
Number of Checks	32
Check Width (feet)	30
Check Length (feet)**	1,500
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	24-Jun
Actual Planting Date	24-Jun
Anticipated Harvest Date	Sept 2, Nov 6
Actual Harvest Date	25-Aug
Expected Harvest Yield	4 tons/acre
Actual Harvest Yield	4.3 tons/acre

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

**Est based on Google Earth

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1	1000		0.00	14-20	WW	613,312	14	7.2	3.1	29
		1100		14-20	WW	399,741	11	7.2	2.0	29
2	1100		0.00	21-33	WW	877,354	13	13.4	2.4	12
		1200		21-33	WW	394,169	12	13.4	1.1	12
3			0.00							
4			0.00							
5			0.00							
6			0.00							
7			0.00							
8			0.00							
9			0.00							
10			0.00							
11	1000		0.00	1-7	WW	206,544	14	7.2	1.1	44
12		1100	0.00	1-7	WW	119,647	11	7.2	0.6	44
	1100			8-13	WW	121,201	13	6.2	0.7	31
13		1200	0.00	8-13	WW	115,204	12	6.2	0.7	31
	1200			14-18	WW	96,003	12	5.2	0.7	52
14		1300	0.00	14-18	WW	52,314	13	5.2	0.4	52
	1300			19-25	WW	61,972	11	7.2	0.3	35
15		1400	0.01	19-25	WW	42,749	14	7.2	0.2	35
	1400	2400		26-33	WW	34,897	10	8.3	0.2	35
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25			0.04							
26			0.01							
27			0.00							
28			0.00							
29			0.00							
30			0.00							
31			0.07							
Total			0.13							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	14

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	October
YEAR	2014

DISCHARGER:	**Morning Star Packing Company, LP and Fred Gobel**
FACILITY:	**Morning Star Tomato Packing Plant**
COUNTY:	**Colusa**
WDRs Order:	**R5-2013-0144**

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME MS14

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	44.5
Number of Checks	54
Check Width (feet)	30
Check Length (feet)**	1,250
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

**Est based on Google Earth

Crop Information

Crop Name	Grass Hay
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	June 19th
Actual Planting Date	2008
Anticipated Harvest Date	August 28, Nov 1
Actual Harvest Date	7/10/2014, 9/10/14
Expected Harvest Yield	2 tons/acre
Actual Harvest Yield	2.3 tons/acre

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00							
2			0.00							
3			0.00							
4			0.00							
5			0.00							
6	0700		0.00	1-6	WW	129,867	17	5.2	0.9	28
7		0800	0.00	1-6	WW	66,649	8	5.2	0.5	28
	0800			7-12	WW	133,299	16	5.2	1.0	36
8		0900	0.00	7-12	WW	64,992	9	5.2	0.5	36
	0900			13-16	WW	108,320	15	5.2	0.8	25
9		1000	0.00	13-16	WW	106,642	10	5.2	0.8	25
	1000			17-19	WW	74,649	14	2.6	1.1	37
10		1100	0.00	17-19	WW	110,282	11	2.6	1.6	37
	1100			20-22	WW	130,333	13	2.58	1.9	38
11		1200	0.00	20-22	WW	63,228	12	2.58	0.9	38
	1200			23-24	WW	42,152	12	1.72	0.9	34
12		1300	0.00	23-24	WW	33,667	13	1.72	0.7	34
13			0.00							
14			0.00							
15			0.01							
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25			0.04							
26			0.01							
27			0.00							
28			0.00							
29			0.00							
30			0.00							
31			0.07							
Total			0.13							

[1]**Calculations and assumptions shall be documented on a separate piece of paper**

[2]**See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.**

Total Nitrogen Loading Rate for Month (lb/ac)[3]	4

[3]**See MRP footnote 5**

MONTHLY MONITORING REPORT

DISCHARGER:	**Morning Star Packing Company, LP and Fred Gobel**
FACILITY:	**Morning Star Tomato Packing Plant**
COUNTY:	**Colusa**
WDRs Order:	**R5-2013-0144**

MONTH	October
YEAR	2014

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME MS15

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	26.7
Number of Checks	40
Check Width (feet)	30
Check Length (feet)**	1,000
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	30-Jun
Actual Planting Date	30-Jun
Anticipated Harvest Date	Sept 8, Nov 12
Actual Harvest Date	26-Aug
Expected Harvest Yield	N/A
Actual Harvest Yield	3.4 tons/acre

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00							
2			0.00							
3			0.00							
4			0.00							
5			0.00							
6			0.00							
7			0.00							
8			0.00							
9			0.00							
10			0.00							
11	0800		0.00	1-16	WW	359,695	16	11.0	1.2	32
12		0900	0.00	1-16	WW	149,170	9	11.0	0.5	32
	0900			17-24	WW	124,308	15	5.5	0.8	33
13		1000	0.00	17-24	WW	85,336	10	5.5	0.6	33
	1000			25-35	WW	164,273	14	7.6	0.8	38
14		1100	0.00	25-35	WW	64,923	11	7.6	0.3	38
	1100			36-41	WW	41,851	13	4.1	0.4	39
15	1100	2400	0.01	36-41	WW	22,683	13	4.1	0.2	39
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25			0.04							
26			0.01							
27			0.00							
28			0.00							
29			0.00							
30			0.00							
31			0.07							
Total			0.13							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	6

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	October
YEAR	2014

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME MS16

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	36.7
Number of Checks	*42
Check Width (feet)	30
Check Length (feet)**	1,240
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

*Estimated & Calculated based on Google Earth with 30' checks
**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	1-Jul
Actual Planting Date	
Anticipated Harvest Date	Sept 9, Nov 13
Actual Harvest Date	8-Sep
Expected Harvest Yield	3 tons/acre
Actual Harvest Yield	3.7 tons/acre

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1		2000	0.00	35-39	WW	517,351	20	4.3	4.5	
	2000	2100		40-43	WW	82,776	4	3.4	0.9	
2		2100	0.00	40-43	WW	360,494	21	3.4	3.9	
3			0.00							
4			0.00							
5			0.00							
6			0.00							
7			0.00							
8			0.00							
9			0.00							
10			0.00							
11	0900		0.00	1-10	WW	261,341	15	8.5	1.1	31
12		1000	0.00	1-10	WW	128,452	10	8.5	0.6	31
	1000			11-21	WW	197,816	14	9.4	0.8	31
13		1100	0.00	11-21	WW	160,048	11	9.4	0.6	31
	1100			22-32	WW	189,148	13	9.4	0.7	38
14		1200	0.00	22-32	WW	87,823	12	9.4	0.3	38
	1200			33-43	WW	87,823	12	9.4	0.3	24
15		1300	0.01	33-43	WW	51,567	13	9.4	0.2	24
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25			0.04							
26			0.01							
27			0.00							
28			0.00						#DIV/0!	#REF!
29			0.00						#DIV/0!	#REF!
30			0.00						#DIV/0!	#REF!
31			0.07							
Total			0.13							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	9

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	October
YEAR	2014

DISCHARGER:	**Morning Star Packing Company, LP and Fred Gobel**
FACILITY:	**Morning Star Tomato Packing Plant**
COUNTY:	**Colusa**
WDRs Order:	**R5-2013-0144**

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME MS18a

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	39.1
Number of Checks*	42
Check Width (feet)	30
Check Length (feet)**	1,300
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

*Estimated & Calculated based on Google Earth with 30' checks
**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	23-Jun
Actual Planting Date	23-Jun
Anticipated Harvest Date	Sept 1, Nov 5
Actual Harvest Date	8/13/2014, 10/22/14
Expected Harvest Yield	N/A
Actual Harvest Yield	2.8 tons / acre

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1	0	1600	0.00	14-20	WW	607,471	16	6.3	3.6	5
	1600	1700		21-27	WW	303,735	8	6.3	1.8	12
2		1700	0.00	21-27	WW	535,411	17	6.3	3.1	12
	1700	1800		28-34	WW	220,463	7	6.3	1.3	24
		1800		28-34	WW	275,918	18	6.3	1.6	24
3	1800	1900	0.00	34-42	WW	105,112	6	7.2	0.5	24
		1900		34-42	WW	190,375	19	7.2	1.0	24
4			0.00							
5			0.00							
6			0.00							
7			0.00							
8			0.00							
9			0.00							
10			0.00							
11			0.00							
12			0.00							
13			0.00							
14			0.00							
15			0.01							
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25			0.04							
26			0.01							
27			0.00							
28			0.00							
29			0.00							
30			0.00							
31			0.07							
Total			0.13							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	9

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	October
YEAR	2014

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME MS18b

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	39.1
Number of Checks*	43
Check Width (feet)	30
Check Length (feet)**	1,300
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

*Estimated & Calculated based on Google Earth with 30' checks
**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	23-Jun
Actual Planting Date	23-Jun
Anticipated Harvest Date	Sept 1, Nov 5
Actual Harvest Date	8/13/2014, 10/22/14
Expected Harvest Yield	N/A
Actual Harvest Yield	2.7 tons/acre

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00							
2			0.00							
3			0.00							
4	1900		0.00	1-7	WW	43,836	5	6.3	0.3	23
5		2000	0.00	1-7	WW	181,456	20	6.3	1.1	23
	2000			8-15	WW	41,476	4	7.2	0.2	23
6		2100	0.00	8-15	WW	222,454	21	7.2	1.1	23
	2100			16-22	WW	27,807	3	6.3	0.2	21
7		2200	0.00	16-22	WW	222,387	22	6.3	1.3	21
	2200			23-31	WW	25,993	2	8.1	0.1	21
8		2300	0.00	23-31	WW	259,101	23	8.1	1.2	21
	2300			32-37	WW	7,510	1	5.4	0.1	23
9		2400	0.00	32-37	WW	266,178	24	5.4	1.8	23
	2400			38-42	WW	0	0	4.5	0.0	29
10		0100	0.00	38-42	WW	17,378	1	4.5	0.1	29
11			0.00							
12			0.00							
13			0.00							
14			0.00							
15			0.01							
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25			0.04							
26			0.01							
27			0.00							
28			0.00							
29			0.00							
30			0.00							
31			0.07							
Total			0.13							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	5

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	October
YEAR	2014

DISCHARGER:	**Morning Star Packing Company, LP and Fred Gobel**
FACILITY:	**Morning Star Tomato Packing Plant**
COUNTY:	**Colusa**
WDRs Order:	**R5-2013-0144**

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME MS20a

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	32.3
Number of Checks	34
Check Width (feet)	30
Check Length (feet)**	1,250
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	10-Jun
Actual Planting Date	10-Jun
Anticipated Harvest Date	Aug 19, Oct 23
Actual Harvest Date	8/5/2014, 9/27/14
Expected Harvest Yield	3 tons/acre
Actual Harvest Yield	1.5 tons/acre

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00							
2			0.00							
3	0600	0700	0.00	1-5	WW	189,504	18	4.3	1.6	16
4		0700	0.00	1-5	WW	42,150	7	4.3	0.4	16
	0700	0800		6-11	WW	122,838	17	5.2	0.9	16
5		0800	0.00	6-11	WW	59,821	8	5.2	0.4	16
	0800	0900		12-18	WW	139,581	16	6.0	0.9	16
6		0900	0.00	12-18	WW	80,212	9	6.0	0.5	16
	0900	1000		19-25	WW	133,686	15	6.0	0.8	12
7		1000	0.00	19-25	WW	97,197	10	6.0	0.6	12
	1000	1100		26-32	WW	136,076	14	6.0	0.8	12
8		1100	0.00	26-32	WW	92,674	11	6.0	0.6	12
	1100	1200		33-35	WW	46,939	13	2.6	0.7	12
9		1200	0.00	33-35	WW	63,985	12	2.6	0.9	12
10			0.00							
11			0.00							
12			0.00							
13			0.00							
14			0.00							
15			0.01							
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25			0.04							
26			0.01							
27			0.00							
28			0.00							
29			0.00							
30			0.00							
31			0.07							
Total			0.13							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	6

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	October
YEAR	2014

DISCHARGER:	**Morning Star Packing Company, LP and Fred Gobel**
FACILITY:	**Morning Star Tomato Packing Plant**
COUNTY:	**Colusa**
WDRs Order:	**R5-2013-0144**

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME MS20b

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	32.3
Number of Checks	35
Check Width (feet)	30
Check Length (feet)**	1,250
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	10-Jun
Actual Planting Date	10-Jun
Anticipated Harvest Date	Aug 19, Oct 23
Actual Harvest Date	5-Aug
Expected Harvest Yield	3 tons/acre
Actual Harvest Yield	1.5 tons/acre

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00							
2			0.00							
3			0.00							
4			0.00							
5			0.00							
6			0.00							
7			0.00							
8	1100		0.00	1-4	WW	62,585	13	3.4	0.7	12
9		1200	0.00	1-4	WW	85,314	12	3.4	0.9	12
	1200			5-11	WW	149,299	12	6.0	0.9	16
10		1300	0.00	5-11	WW	304,110	13	6.0	1.9	16
	1300			12-18	WW	257,324	11	6.0	1.6	16
11		1400	0.00	12-18	WW	172,120	14	6.0	1.1	16
	1400			19-25	WW	122,943	10	6.0	0.8	19
12		1500	0.00	19-25	WW	135,962	15	6.0	0.8	19
	1500			26-31	WW	69,923	9	5.2	0.5	19
13		1600	0.00	26-31	WW	128,005	16	5.2	0.9	19
	1600			32-35	WW	42,668	8	3.4	0.5	8
14		1700	0.00	32-35	WW	45,607	17	3.4	0.5	8
15			0.01							
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25			0.04							
26			0.01							
27			0.00							
28			0.00							
29			0.00							
30			0.00							
31			0.07							
Total			0.13							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	8

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	October
YEAR	2014

DISCHARGER:	**Morning Star Packing Company, LP and Fred Gobel**
FACILITY:	**Morning Star Tomato Packing Plant**
COUNTY:	**Colusa**
WDRs Order:	**R5-2013-0144**

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME MS21

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	25.9
Number of Checks	50
Check Width (feet)	30
Check Length (feet)**	750
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	28-Jun
Actual Planting Date	28-Jun
Anticipated Harvest Date	Sept 6, Nov 10
Actual Harvest Date	21-Aug
Expected Harvest Yield	2 tons/acre
Actual Harvest Yield	3.4 tons/acre

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1	0	1100	0.00	9-16	WW	275,364	11	4.1	2.5	36
	1100	1200		17-24	WW	325,431	13	4.1	2.9	31
2		1200	0.00	17-24	WW	249,189	12	4.1	2.2	31
	1200	1300		25-31	WW	218,041	12	3.6	2.2	29
		1300		25-31	WW	114,966	13	3.6	1.2	29
3	1300	1400	0.00	32-38	WW	97,279	11	3.6	1.0	34
		1400		32-38	WW	70,813	14	3.6	0.7	34
4	1400	1500	0.00	39-45	WW	50,580	10	3.6	0.5	43
		1500		39-45	WW	78,514	15	3.6	0.8	43
	1500	1600		46-50	WW	33,649	9	2.6	0.5	43
5		1600	0.00	46-50	WW	61,114	16	2.6	0.9	43
6			0.00							
7			0.00							
8			0.00							
9			0.00							
10			0.00							
11			0.00							
12			0.00							
13			0.00							
14			0.00							
15			0.01							
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25			0.04							
26			0.01							
27			0.00							
28			0.00							
29			0.00							
30			0.00							
31			0.07							
Total			0.13							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	10

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	October
YEAR	2014

DISCHARGER:	**Morning Star Packing Company, LP and Fred Gobel**
FACILITY:	**Morning Star Tomato Packing Plant**
COUNTY:	**Colusa**
WDRs Order:	**R5-2013-0144**

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME MS24a

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	39.95
Number of Checks*	44
Check Width (feet)	30
Check Length (feet)**	1,300
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

*Estimated & Calculated based on Google Earth with 30' checks
**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	15-Jun
Actual Planting Date	15-Jun
Anticipated Harvest Date	Aug 24, Oct 28
Actual Harvest Date	7/28/2014, 9/29/14
Expected Harvest Yield	3 tons/acre
Actual Harvest Yield	1.6 tons/acre

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00							
2			0.00							
3			0.00							
4	1100		0.00	1-7	WW	1,042,599	13	6.3	6.1	7
5		1200	0.00	1-7	WW	546,643	12	6.3	3.2	7
	1200			8-14	WW	546,643	12	6.3	3.2	7
6		1300	0.00	8-14	WW	395,924	13	6.3	2.3	7
	1300			15-21	WW	335,013	11	6.3	2.0	7
7		1400	0.00	15-21	WW	339,083	14	6.3	2.0	7
	1400			22-28	WW	242,202	10	6.3	1.4	7
8		1500	0.00	22-28	WW	407,567	15	6.3	2.4	7
	1500			29-35	WW	244,540	9	6.3	1.4	17
9		1600	0.00	29-35	WW	348,437	16	6.3	2.0	17
	1600			36-42	WW	174,219	8	6.3	1.0	17
10		1700	0.00	36-42	WW	291,268	17	6.3	1.7	17
	1700			43-44	WW	34,267	7	1.8	0.7	4
11		1800	0.00	43-44	WW	88,404	18	1.8	1.8	4
12			0.00							
13			0.00							
14			0.00							
15			0.01							
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25			0.04							
26			0.01							
27			0.00							
28			0.00							
29			0.00							
30			0.00							
31			0.07							
Total			0.13							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	20

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	October
YEAR	2014

DISCHARGER:	**Morning Star Packing Company, LP and Fred Gobel**
FACILITY:	**Morning Star Tomato Packing Plant**
COUNTY:	**Colusa**
WDRs Order:	**R5-2013-0144**

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME MS24b

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	39.95
Number of Checks*	44
Check Width (feet)	30
Check Length (feet)**	1,300
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

*Estimated & Calculated based on Google Earth with 30' checks
**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	15-Jun
Actual Planting Date	15-Jun
Anticipated Harvest Date	Aug 24, Oct 28
Actual Harvest Date	7/28/2014, 9/30/14
Expected Harvest Yield	3 tons/acre
Actual Harvest Yield	1.6 tons/acre

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00							
2			0.00							
3			0.00							
4			0.00							
5			0.00							
6			0.00							
7			0.00							
8			0.00							
9			0.00							
10	1700		0.00	1-5	WW	85,667	7	4.5	0.7	17
11		1800	0.00	1-5	WW	221,011	18	4.5	1.8	17
	1600			6-12	WW	137,518	8	6.3	0.8	17
12		1700	0.00	6-12	WW	207,701	17	6.3	1.2	17
	1700			13-18	WW	73,306	7	5.4	0.5	13
13		1800	0.00	13-18	WW	282,332	18	5.4	1.9	13
	1800			19-26	WW	125,481	6	7.2	0.6	13
14		1900	0.00	19-26	WW	556,568	19	7.2	2.9	13
	1900			27-33	WW	128,157	5	6.3	0.8	10
15		2000	0.01	27-33	WW	180,674	20	6.3	1.1	10
	2000	0:00		34-41	WW	41,297	4	7.2	0.2	10
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25			0.04							
26			0.01							
27			0.00							
28			0.00							
29			0.00							
30			0.00							
31			0.07							
Total			0.13							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	8

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	October
YEAR	2014

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME MS24c

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	39.95
Number of Checks*	44
Check Width (feet)	30
Check Length (feet)**	1,300
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

*Estimated & Calculated based on Google Earth with 30' checks
**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	15-Jun
Actual Planting Date	15-Jun
Anticipated Harvest Date	Aug 24, Oct 28
Actual Harvest Date	7/28/2014, 9/23/14
Expected Harvest Yield	3 tons/acre
Actual Harvest Yield	1.6 tons/acre

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00							
2			0.00							
3			0.00							
4	1200		0.00	1-7	WW	962,399	12	6.3	5.7	7
5		1300	0.00	1-7	WW	592,197	13	6.3	3.5	7
	1300			8-14	WW	501,089	11	6.3	2.9	7
6		1400	0.00	8-14	WW	426,380	14	6.3	2.5	7
	1400			15-21	WW	304,557	10	6.3	1.8	7
7		1500	0.00	15-21	WW	363,303	15	6.3	2.1	7
	1500			22-28	WW	217,982	9	6.3	1.3	7
8		1600	0.00	22-28	WW	434,738	16	6.3	2.6	7
	1600			29-35	WW	217,369	8	6.3	1.3	17
9		1700	0.00	29-35	WW	370,215	17	6.3	2.2	17
	1700			36-42	WW	152,441	7	6.3	0.9	17
10		1800	0.00	36-42	WW	308,401	18	6.3	1.8	17
	1800			43-44	WW	29,372	6	1.8	0.6	17
11		1900	0.00	43-44	WW	93,316	19	1.8	1.9	17
12			0.00							
13			0.00							
14			0.00							
15			0.01							
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25			0.04							
26			0.01							
27			0.00							
28			0.00							
29			0.00							
30			0.00							
31			0.07							
Total			0.13							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	20

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	October
YEAR	2014

DISCHARGER:	**Morning Star Packing Company, LP and Fred Gobel**
FACILITY:	**Morning Star Tomato Packing Plant**
COUNTY:	**Colusa**
WDRs Order:	**R5-2013-0144**

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME MS24d

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	39.95
Number of Checks*	44
Check Width (feet)	30
Check Length (feet)**	1,300
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

*Estimated & Calculated based on Google Earth with 30' checks
**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	15-Jun
Actual Planting Date	15-Jun
Anticipated Harvest Date	Aug 24, Oct 28
Actual Harvest Date	7/28/2014, 9/29/14
Expected Harvest Yield	3 tons/acre
Actual Harvest Yield	1.6 tons/acre

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00							
2			0.00							
3			0.00							
4			0.00							
5			0.00							
6			0.00							
7			0.00							
8			0.00							
9			0.00							
10	1800		0.00	1-5	WW	73,429	6	4.5	0.6	17
11		1900	0.00	1-5	WW	233,290	19	4.5	1.9	17
	1900			6-12	WW	85,949	5	6.3	0.5	17
12		2000	0.00	6-12	WW	244,354	20	6.3	1.4	17
	2000			13-18	WW	41,889	4	5.4	0.3	13
13		2100	0.00	13-18	WW	329,387	21	5.4	2.3	13
	2100			19-26	WW	62,740	3	7.2	0.3	13
14		2200	0.00	19-26	WW	644,447	22	7.2	3.3	13
	2200			27-33	WW	51,263	2	6.3	0.3	9
15		2300	0.01	27-33	WW	207,776	23	6.3	1.2	9
	2300	2400		34-41	WW	10,324	1	7.2	0.1	9
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25			0.04							
26			0.01							
27			0.00							
28			0.00							
29			0.00							
30			0.00							
31			0.07							
Total			0.13							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	8

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

DISCHARGER: **Morming Star Packing Company, LP and Fred Gobel**
FACILITY: **Morning Star Tomato Packing Plant**
COUNTY: **Colusa**
WDRs Order **R5-2013-0144**

MONTH October
YEAR 2014

LAND APPLICATION AREA MONITORING TOTAL NITROGEN LOADING RESULTS

LAA Field	~~Gobel~~	MS 1	MS 2	MS 3	MS 5	MS 6	MS 11	MS 14	MS 15	MS 16	MS 18a	MS 18b	MS 20a	MS 20b	MS 21	MS 24a	MS 24b	MS 24c	MS 24d
Acres of LAA Irrigated																			
Total Nitrogen Loading from Wastewater (lbs/ac)			82	80	173	142	236	98	164	126	161	79	67	55	192	80	89	80	91
Total Nitrogen Loading Rate from Settling Pond Solids (lbs/ac/month)					123	123			123	123					123				
Total Nitrogen Loading Rate from Cooling Pond Solids (lbs/ac/month)																			
Total Nitrogen Loading Rate from Residual Solids (lbs/ac/month)																			
Total Nitrogen Loading Rate from Cattle/ Manure (lbs/ac/month)																			
Total Nitrogen Loading Rate from Commercial Fertilizers (lbs/ac/month)			56	14		63	14	63	0	0	82	82	119	119	0	82	82	82	82
Cumulative Annual Total Nitrogen Value (lbs/ac/year)			138	94	296	328	250	161	287	249	243	161	186	174	315	162	171	162	173
Annual Crop Demand (lbs/ac/year)																			

Attachment F

MORNING STAR

LAND APPLICATION AREA MONITORING

Weekly-Inspection Observations:

Technician: Justin Young

Date: 10/6/14 Weather: Sunny

1. Any evidence of erosion: yes / no
2. Berm Condition Good
3. Standpipe and flow control valve condition N/A
4. Are the valves being used properly: yes / no
5. Is there any soil saturation: yes / no
6. Is there any ponding: yes / no
7. Is there any potential runoff to off-site areas: yes / no
8. Is there any potential and actual discharge to surface water: yes / no
9. Are there any accumulation of organic solids at soil surface: yes / no
10. Is there any soil clogging: yes / no
11. Are there any odors that have the potential to be objectionable at or beyond the property boundary: yes / no
12. Are there any insects: yes / no
13. Temperature and wind direction/strength: 93° NNE @ 3MPH
14. Other observations: Crops are growing good

MORNING STAR

Excellence Through Commitment

LAND APPLICATION AREA MONITORING

Weekly-Inspection Observations:

Technician: Justin Young

Date: 10/13/14 Weather: Sunny

1. Any evidence of erosion: yes / no
2. Berm Condition good
3. Standpipe and flow control valve condition N/A
4. Are the valves being used properly: yes / no
5. Is there any soil saturation: yes / no
6. Is there any ponding: yes / no
7. Is there any potential runoff to off-site areas: yes / no
8. Is there any potential and actual discharge to surface water: yes / no
9. Are there any accumulation of organic solids at soil surface: yes / no
10. Is there any soil clogging: yes / no
11. Are there any odors that have the potential to be objectionable at or beyond the property boundary: yes / no
12. Are there any insects: yes / no
13. Temperature and wind direction/strength: 90° 5mph SE
14. Other observations: Crops are growing good

MORNING STAR

Excellence Through Commitment

LAND APPLICATION AREA MONITORING

Weekly-Inspection Observations:

Technician: Justin Yaus

Date: 10/20/14 Weather: Cloudy

1. Any evidence of erosion: yes / no
2. Berm Condition good
3. Standpipe and flow control valve condition N/A
4. Are the valves being used properly: yes / no
5. Is there any soil saturation: yes / no
6. Is there any ponding: yes / no
7. Is there any potential runoff to off-site areas: yes / no
8. Is there any potential and actual discharge to surface water: yes / no
9. Are there any accumulation of organic solids at soil surface: yes / no
10. Is there any soil clogging: yes / no
11. Are there any odors that have the potential to be objectionable at or beyond the property boundary: yes / no
12. Are there any insects: yes / no
13. Temperature and wind direction/strength: 75° 12 MPH SW
14. Other observations: Crops are growing good

Attachment G

DISCHARGER: **Morning Star Packing Company, LP and Fred Gobel**
FACILITY: **Morning Star Tomato Packing Plant**
COUNTY: **Colusa**
WDRs Order **R5-2013-0144**

MONTHLY MONITORING REPORT

MONTH	October
YEAR	2014

RESIDUAL SOLIDS MONITORING : Facility Not Processing, Solids Monitoring N/A

Date	Type of Solids Generated	Volume of Solids Generated (tons)[1]	Volume of Solids Disposed of Offsite (tons)	Offsite Solids Disposal Location[2]	Volume of Solids Disposed of Onsite (tons)	Onsite Solids Disposal Location[3]
October	Pomace, Wet Waste	2,560	2,560	Animal Feed, Gilton Resource Recover/Transfer Station	0	

[1]Volume of Solids Generated. Solids may include pomace, seeds, stems, diatomaceous earth, screenings, pond solids, and sump solids, or other material.

[2]Volume Disposed of Off-site. Describe the disposal method (e.g. animal feed, land application, off-site composting, landfill, etc.) and the name of the hauling company.

[3]Volume Disposed of On-site; location of on-site disposal (e.g. land application area field); method of application, spreading, and incorporation; application rate (tons/acre), and results from weekly grab sample analysis for total nitrogen.

Attachment H

DISCHARGE **Morning Star Packing Company, LP and Fred Gobel**
FACILITY: **Morning Star Tomato Packing Plant**
COUNTY: **Colusa**
WDRs Order **R5-2013-0144**

MONTHLY MONITORING REPORT

MONTH	October
YEAR	2014

FIELD INSTRUMENT CALIBRATION LOG

Monitoring Week	Date	Time	Lower Standard pH Buffer	Lower Standard Stabilized pH	Lower pH Standard Calibrated pH	Upper Standard pH Buffer	Upper Standard Stabilized pH	Upper Standard Calibrated pH	DO Initial Reading	Electrolyte Solution Added	DO Reading after Calibration	Technican's Initials
Week 1	10/6/14	12:45pm	4.0	3.9		10.0	9.9		3.82	N/A	N/A	JI
Week 2	10/13/14	2:15pm	4.0	3.9		10.0	9.9		3.91	N/A	N/A	JI
Week 3												
Week 4												
Week 5												

If either calibrated pH value is more than 0.2 higher or lower than its corresponding pH buffer value, recalibrate the meter before using it in the field.

INSTRUMENT CALIBRATION REPORT

Aqua Sierra Controls, Inc.
1650 Industrial Drive
Auburn, CA 95603
Phone (800) 649-4287
Fax (530) 823-3475
service@aquasierra.com
www.aquasierra.com

Attn: JAMES BRISCO
MORNING STAR PACKING COMPANY
2211 OLD HIGHWAY 99
WILLIAMS, CA 95987

Instrument ID 01
Description FLOW METER
Serial Number A1J001295
Model Number U SONIC R

Calibrated 5/30/2014
Scheduled 5/30/2015
Calibration ID 21526
Certificate # 01
Equipment ID
Department
Manufacturer DREXEL BROOK
Calibration Type INITIAL
Location SETTLING POND
Building OUTSIDE

Calibration Specifications

Stated Accy Pct of Reading

In Val	In Type	Out Val	Out Type	Fnd As	Error %	Lft As	Error %
0.00	FEET H2O	0.00	GPM	0.00	0.00%	0.00	0.00%
0.20	FEET H2O	334.20	GPM	330.00	-1.26%	330.00	-1.26%
0.54	FEET H2O	1483.00	GPM	1,483.00	0.00%	1,483.00	0.00%
0.71	FEET H2O	2235.00	GPM	2,275.00	1.79%	2,275.00	1.79%
0.87	FEET H2O	3032.00	GPM	3,068.00	1.19%	3,068.00	1.19%

Test Instruments Used During the Calibration

Test Instrument ID	Description	Manufacturer	Model Number	Serial Number
101	ULTRASONIC TEST STAND	ASC	1076-10	ASC-04-KEN

Notes about this calibration
2.5' RECTANGULAR WEIR
ZERO DISTANCE = 2.74'
VERIFIED LEVEL READING AT WEIR

Calibration Result Calibration Successful
Who Calibrated KEN LANE

INSTRUMENT CALIBRATION REPORT

Aqua Sierra Controls, Inc.
1650 Industrial Drive
Auburn, CA 95603
Phone (800) 649-4287
Fax (530) 823-3475
service@aquasierra.com
www.aquasierra.com

Attn: JAMES BRISCO
MORNING STAR PACKING COMPANY
2211 OLD HIGHWAY 99
WILLIAMS, CA 95987

Instrument ID 02
Description FLOW METER
Serial Number A1J000210
Model Number U SONIC R

Calibrated 5/30/2014
Scheduled 5/30/2015
Calibration ID 21527
Certificate # 02
Equipment ID
Department
Manufacturer DREXEL BROOK
Calibration Type INITIAL
Location COOLING POND
Building OUTSIDE

Calibration Specifications

Stated Accy Pct of Reading

In Val	In Type	Out Val	Out Type	Fnd As	Error %	Lft As	Error %
0.00	FEET H2O	0.00	GPM	0.00	0.00%	0.00	0.00%
0.22	FEET H2O	301.70	GPM	299.00	-0.89%	299.00	-0.89%
0.41	FEET H2O	752.80	GPM	749.00	-0.50%	749.00	-0.50%
0.55	FEET H2O	1153.00	GPM	1,174.00	1.82%	1,174.00	1.82%
0.67	FEET H2O	1530.00	GPM	1,542.00	0.78%	1,542.00	0.78%

Test Instruments Used During the Calibration

Test Instrument ID	Description	Manufacturer	Model Number	Serial Number
101	ULTRASONIC TEST STAND	ASC	1076-10	ASC-04-KEN

Notes about this calibration

2' RECTANGULAR WEIR WITH END CONTRACTIONS
ZERO DISTANCE = 32.6" OR 2.72'
CHANNEL #2

Calibration Result Calibration Successful
Who Calibrated KEN LANE

INSTRUMENT CALIBRATION REPORT

Aqua Sierra Controls, Inc.
1650 Industrial Drive
Auburn, CA 95603
Phone (800) 649-4287
Fax (530) 823-3475
service@aquasierra.com
www.aquasierra.com

Attn: JAMES BRISCO
MORNING STAR PACKING COMPANY
2211 OLD HIGHWAY 99
WILLIAMS, CA 95987

Instrument ID 03
Description FLOW METER
Serial Number A1J000210
Model Number U SONIC R

Calibrated 5/30/2014
Scheduled 5/30/2015
Calibration ID 21524
Certificate # 03
Equipment ID
Department
Manufacturer DREXEL BROOK
Calibration Type INITIAL
Location MAIN DITCH
Building OUTSIDE

Calibration Specifications

Stated Accy Pct of Reading

In Val	In Type	Out Val	Out Type	Fnd As	Error %	Lft As	Error %
0.00	FEET H2O	0.00	GPM	0.00	0.00%	0.00	0.00%
0.20	FEET H2O	334.20	GPM	340.00	1.74%	340.00	1.74%
0.54	FEET H2O	1483.00	GPM	1,476.00	-0.47%	1,476.00	-0.47%
0.71	FEET H2O	2235.00	GPM	2,228.00	-0.31%	2,228.00	-0.31%
0.87	FEET H2O	3032.00	GPM	3,048.00	0.53%	3,048.00	0.53%

Test Instruments Used During the Calibration

Test Instrument ID	Description	Manufacturer	Model Number	Serial Number
101	ULTRASONIC TEST STAND	ASC	1076-10	ASC-04-KEN

Notes about this calibration
2.5' RECTANGULAR WEIR
CHANNEL #1
ZERO DISTANCE MEASURED AT 3.13'
VERIFIED LEVEL READING AT WEIR

Calibration Result Calibration Successful
Who Calibrated KEN LANE