

Annual Report - General Order No. R5-2007-0035

Reporting period 01/01/2023 to 12/31/2023.

DAIRY FACILITY INFORMATION**A. NAME OF DAIRY OR BUSINESS OPERATING THE DAIRY:** Santa Anita Dairy

Physical address of dairy:

4356 Kansas AVE

Number and Street

Hanford

City

Kings

County

93230

Zip Code

Street and nearest cross street (if no address): _____

Date facility was originally placed in operation: 05/02/1973Regional Water Quality Control Board Basin Plan designation: Tulare Basin

County Assessor Parcel Number(s) for dairy facility:

X028-X190-X028-XXXX**B. OPERATORS**Carrillo, CarlosOperator name: Carrillo, Carlos

Telephone no.:

(559) 967-0430

Landline

Cellular

4356 Kansas AVE

Mailing Address Number and Street

Hanford

City

CA

State

93230

Zip Code

This operator is responsible for paying permit fees.**C. OWNERS**Parreira, JoeLegal owner name: Parreira, Joe

Telephone no.:

(559) 737-2300

Landline

Cellular

17800 4th AVE

Mailing Address Number and Street

Hanford

City

CA

State

93230

Zip Code

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AVAILABLE NUTRIENTS

A. HERD INFORMATION

	Milk Cows	Dry Cows	Bred Heifers (15-24 mo.)	Heifers (7-14 mo. to breeding)	Calves (4-6 mo.)	Calves (0-3 mo.)
Number open confinement	338	32	53	60	26	0
Number under roof	0	0	0	0	0	0
Maximum number	349	40	61	69	37	0
Average number	338	32	53	60	26	0
Avg live weight (lbs)	1,400	1,450	1,000	700		

Predominant milk cow breed: Holstein

Average milk production: 75 pounds per cow per day

B. MANURE GENERATED

Total manure excreted by the herd: 10,549.57 tons per reporting period

Total nitrogen from manure: 133,844.01 lbs per reporting period

After ammonia losses (30% loss applied): 93,690.81 lbs per reporting period

Total phosphorus from manure: 22,347.34 lbs per reporting period

Total potassium from manure: 65,840.45 lbs per reporting period

Total salt from manure: 166,505.70 lbs per reporting period

C. PROCESS WASTEWATER GENERATED

Process wastewater generated: 10,155,985 gallons

Total nitrogen generated: 25,934.05 lbs

Total phosphorus generated: 5,653.61 lbs

Total potassium generated: 57,049.95 lbs

Total salt generated: 288,778.99 lbs

10,155,985 gallons applied
+ 0 gallons exported
- 0 gallons imported
= 10,155,985 gallons generated

D. FRESH WATER SOURCES

Source Description	Type
Ag 1	Ground water
P-4	Ground water
Well 1	Ground water

E. SUBSURFACE (TILE) DRAINAGE SOURCES

No subsurface (tile) drainage sources entered.

F. NUTRIENT IMPORTS

No dry manure nutrient imports entered.

No process wastewater nutrient imports entered.

No commercial or other nutrient imports entered.

G. NUTRIENT EXPORTS

No solid nutrient exports entered.

No liquid nutrient exports entered.

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APPLICATION AREA

A. LIST OF LAND APPLICATION AREAS

Field name	Controlled acres	Cropable acres	Total harvests	Type of waste applied	Parcel number
Field 1	50	50	2	process wastewater	X028-X190-X028-XXXX
Totals for areas that were used for application	50	50	2		
Totals for areas that were not used for application					
Land application area totals	50	50	2		

B. CROPS AND HARVESTS

Field 1

Field name: Field 1

11/11/2022: Wheat, silage, soft dough

Crop: Wheat, silage, soft dough Acres planted: 50 Plant date: 11/11/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/22/2023	1,075.00 <i>ton</i>	Dry-weight		70.9	16,300.00	4,100.00	22,100.00		11.20

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	18.00	198.00	30.60	149.40	324.00
Total actual harvest content	21.50	203.96	51.30	276.54	1,401.46

05/24/2023: Corn, silage

Crop: Corn, silage Acres planted: 50 Plant date: 05/24/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
08/28/2023	1,410.00 <i>ton</i>	Dry-weight		66.4	13,400.00	2,400.00	13,100.00		5.56

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	30.00	240.00	45.00	198.00	1,500.00
Total actual harvest content	28.20	253.94	45.48	248.25	1,053.64

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NUTRIENT BUDGET

A. LAND APPLICATIONS

Field 1 - 11/11/2022: Wheat, silage, soft dough

Field name: Field 1

Crop: Wheat, silage, soft dough

Plant date: 11/11/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
10/19/2022	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	97.44	19.72	200.75	1,705.20	1,758,500.00 <i>gal</i>
P-4	Ground water	5.11	0.00	0.00	159.04	6,806,500.00 <i>gal</i>
Application event totals		102.55	19.72	200.75	1,864.24	
01/17/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	89.97	21.12	179.72	1,014.79	1,378,740.00 <i>gal</i>
P-4	Ground water	4.89	0.00	0.00	152.12	6,510,480.00 <i>gal</i>
Application event totals		94.86	21.12	179.72	1,166.92	
03/23/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	65.48	16.19	161.94	503.70	1,508,985.00 <i>gal</i>
P-4	Ground water	4.66	0.00	0.00	145.11	6,210,400.00 <i>gal</i>
Application event totals		70.15	16.19	161.94	648.81	

Field 1 - 05/24/2023: Corn, silage

Field name: Field 1

Crop: Corn, silage

Plant date: 05/24/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
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Field 1 - 05/24/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
05/25/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
P-4	Ground water	6.46	0.00	0.00	201.11	8,606,980.00 <i>gal</i>
Application event totals		6.46	0.00	0.00	201.11	
06/15/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	91.12	22.53	225.34	700.91	2,099,800.00 <i>gal</i>
P-4	Ground water	5.56	0.00	0.00	173.05	7,405,990.00 <i>gal</i>
Application event totals		96.68	22.53	225.34	873.96	
06/26/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	82.49	20.40	204.01	634.55	1,900,980.00 <i>gal</i>
P-4	Ground water	5.79	0.00	0.00	180.03	7,704,690.00 <i>gal</i>
Application event totals		88.28	20.40	204.01	814.57	
07/06/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	92.18	13.10	169.24	1,216.43	1,508,980.00 <i>gal</i>
P-4	Ground water	5.93	0.00	0.00	184.60	7,900,540.00 <i>gal</i>
Application event totals		98.11	13.10	169.24	1,401.03	
07/17/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
P-4	Ground water	6.31	0.00	0.00	196.38	8,404,550.00 <i>gal</i>
Application event totals		6.31	0.00	0.00	196.38	

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Field 1 - 05/24/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/31/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
P-4	Ground water	6.39	0.00	0.00	198.76	8,506,522.00 <i>gal</i>
Application event totals		6.39	0.00	0.00	198.76	

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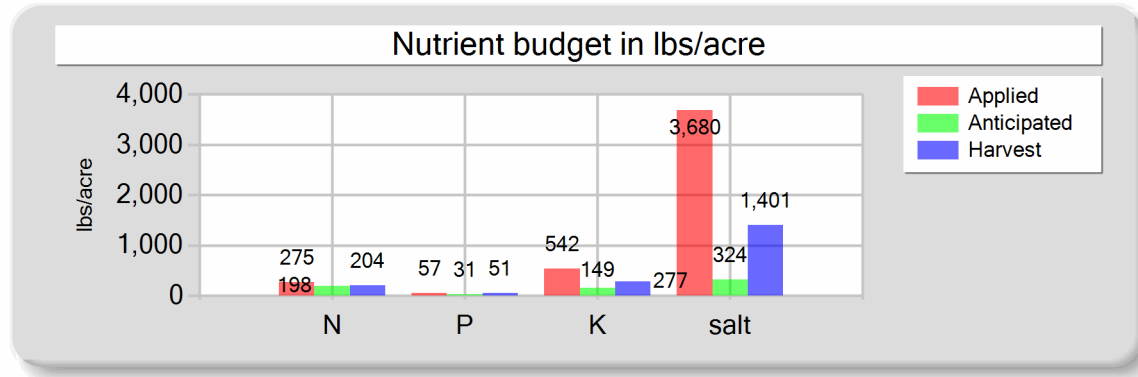
B. NUTRIENT BUDGET

Field 1 - 11/11/2022: Wheat, silage, soft dough

Field name: Field 1

Crop: Wheat, silage, soft dough

Plant date: 11/11/2022



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)	Fresh water applied
Existing soil nutrient content	0.00	0.00	0.00	0.00	19,527,380.00 <i>gallons</i>
Plowdown credit	0.00	0.00	0.00	0.00	719.13 <i>acre-inches</i>
Commercial fertilizer / Other	0.00	0.00	0.00	0.00	14.38 <i>inches/acre</i>
Dry manure	0.00	0.00	0.00	0.00	
Process wastewater	252.89	57.04	542.41	3,223.69	Process wastewater applied
Fresh water	14.67	0.00	0.00	456.28	4,646,225.00 <i>gallons</i>
Atmospheric deposition	7.00	0.00	0.00	0.00	171.10 <i>acre-inches</i>
Total nutrients applied	274.56	57.04	542.41	3,679.97	3.42 <i>inches/acre</i>
Anticipated crop nutrient removal	198.00	30.60	149.40	324.00	
Actual crop nutrient removal	203.96	51.30	276.54	1,401.46	Total harvests for the crop
Nutrient balance	70.60	5.74	265.87	2,278.51	1 <i>harvests</i>
Applied to removed ratio	1.35	1.11	1.96	2.63	

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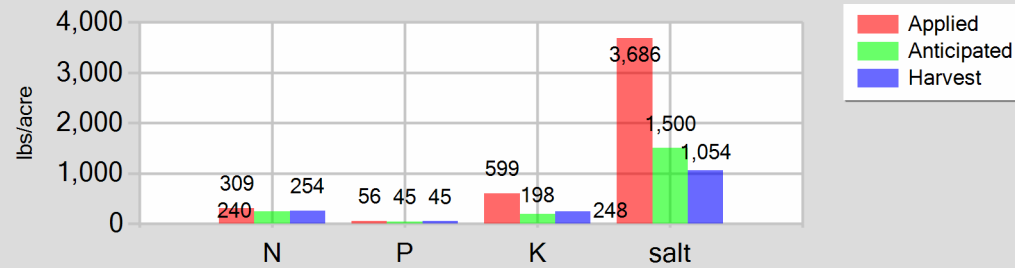
Field 1 - 05/24/2023: Corn, silage

Field name: Field 1

Crop: Corn, silage

Plant date: 05/24/2023

Nutrient budget in lbs/acre



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	265.79	56.03	598.59	2,551.89
Fresh water	36.45	0.00	0.00	1,133.93
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	309.23	56.03	598.59	3,685.82
Anticipated crop nutrient removal	240.00	45.00	198.00	1,500.00
Actual crop nutrient removal	253.94	45.48	248.25	1,053.64
Nutrient balance	55.30	10.55	350.34	2,632.18
Applied to removed ratio	1.22	1.23	2.41	3.50

Fresh water applied
48,529,272.00 gallons
1,787.17 acre-inches
35.74 inches/acre
Process wastewater applied
5,509,760.00 gallons
202.91 acre-inches
4.06 inches/acre
Total harvests for the crop
1 harvests

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NUTRIENT ANALYSES

A. MANURE ANALYSES

Manure

Sample and source description: Manure

Sample date: 05/02/2023 Material type: Corral solids Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 17.2 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Calcium (mg/kg)	Magnesium (mg/kg)	Sodium (mg/kg)	Sulfur (mg/kg)	Chloride (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	18,400.00	6,400.00	9,700.00							
DL	100.00	200.00	200.00							

Manure

Sample and source description: Manure

Sample date: 10/03/2023 Material type: Corral solids Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 44.0 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Calcium (mg/kg)	Magnesium (mg/kg)	Sodium (mg/kg)	Sulfur (mg/kg)	Chloride (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	12,200.00	5,400.00	4,700.00							
DL	100.00	200.00	200.00							

B. PROCESS WASTEWATER ANALYSES

Lagoon

Sample and source description: Lagoon

Sample date: 11/18/2022 Material type: Process wastewater Source of analysis: Lab analysis pH: _____

	Kjeldahl-N (mg/L)	NH4-N (mg/L)	NH3-N (mg/L)	Nitrate-N (mg/L)	Total P (mg/L)	Total K (mg/L)	Calcium (mg/L)	Magnes. (mg/L)	Sodium (mg/L)	Bicarb. (mg/L)	Carb. (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	EC (µmhos/cm)	TDS (mg/L)
Value	332.00	251.00			67.20	684.00								8,750.00	5,810
DL	10.00	2.00			0.20	0.50								100.00	10

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Lagoon

Sample and source description: Lagoon

Sample date: 02/22/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: 7.40

	Kjeldahl-N (mg/L)	NH4-N (mg/L)	NH3-N (mg/L)	Nitrate-N (mg/L)	Total P (mg/L)	Total K (mg/L)	Calcium (mg/L)	Magnes. (mg/L)	Sodium (mg/L)	Bicarb. (mg/L)	Carb. (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	EC (µmhos/cm)	TDS (mg/L)
Value	389.00	230.00		2.00	91.80	781.00								6,650.00	4,410
DL	10.00	2.00		2.00	0.20	0.50								100.00	10

Lagoon

Sample and source description: Lagoon

Sample date: 05/02/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: _____

	Kjeldahl-N (mg/L)	NH4-N (mg/L)	NH3-N (mg/L)	Nitrate-N (mg/L)	Total P (mg/L)	Total K (mg/L)	Calcium (mg/L)	Magnes. (mg/L)	Sodium (mg/L)	Bicarb. (mg/L)	Carb. (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	EC (µmhos/cm)	TDS (mg/L)
Value	260.00	255.00			64.30	643.00								3,010.00	2,000
DL	10.00	2.00			0.20	0.50								100.00	10

Lagoon

Sample and source description: Lagoon

Sample date: 08/04/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: _____

	Kjeldahl-N (mg/L)	NH4-N (mg/L)	NH3-N (mg/L)	Nitrate-N (mg/L)	Total P (mg/L)	Total K (mg/L)	Calcium (mg/L)	Magnes. (mg/L)	Sodium (mg/L)	Bicarb. (mg/L)	Carb. (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	EC (µmhos/cm)	TDS (mg/L)
Value	366.00	360.00			52.00	672.00								7,270.00	4,830
DL	10.00	2.00			0.20	0.50								100.00	10

Lagoon

Sample and source description: Lagoon

Sample date: 11/08/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: _____

	Kjeldahl-N (mg/L)	NH4-N (mg/L)	NH3-N (mg/L)	Nitrate-N (mg/L)	Total P (mg/L)	Total K (mg/L)	Calcium (mg/L)	Magnes. (mg/L)	Sodium (mg/L)	Bicarb. (mg/L)	Carb. (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	EC (µmhos/cm)	TDS (mg/L)
Value	499.00	496.00			57.20	590.00								6,930.00	4,600
DL	10.00	2.00			0.20	0.50								100.00	10

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C. FRESH WATER ANALYSES

P-4

Irrigation well

Sample description: Irrigation well

Sample date: 09/14/2023 Source of analysis: Lab analysis

	Total N (mg/L)	NH4-N (mg/L)	Nitrate-N (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Bicarbonate (mg/L)	Carbonate (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	EC (µmhos/cm)	TDS (mg/L)
Value	4.50		4.50								230.00	140
DL	0.50		0.40								1.00	20

Well 1

Domestic well

Sample description: Domestic well

Sample date: 12/06/2023 Source of analysis: Lab analysis

	Total N (mg/L)	NH4-N (mg/L)	Nitrate-N (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Bicarbonate (mg/L)	Carbonate (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	EC (µmhos/cm)	TDS (mg/L)
Value			11.10	13.00	0.00	49.00	80.00	0.00	5.00	27.00	343.00	220
DL			0.10	1.00	1.00	1.00	10.00	10.00	0.17	1.00	1.00	20

D. SOIL ANALYSES

No soil analyses entered.

E. PLANT TISSUE ANALYSES

Field 1 - 11/11/2022: Wheat, silage, soft dough

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Field 1 - 11/11/2022: Wheat, silage, soft dough

wheat sample

Sample and source description: wheat sampleSample date: 05/22/2023 Source of analysis: Lab analysis Method of reporting: Dry-weightMoisture: 70.9 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	16,300.00	4,100.00	22,100.00		11.20
DL	500.00	200.00	200.00		0.05

Field 1 - 05/24/2023: Corn, silage

corn sample

Sample and source description: corn sampleSample date: 08/28/2023 Source of analysis: Lab analysis Method of reporting: Dry-weightMoisture: 66.4 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	13,400.00	2,400.00	13,100.00		5.56
DL	500.00	200.00	200.00		0.05

F. SUBSURFACE (TILE) DRAINAGE ANALYSES*No subsurface (tile) drainage analyses entered.*

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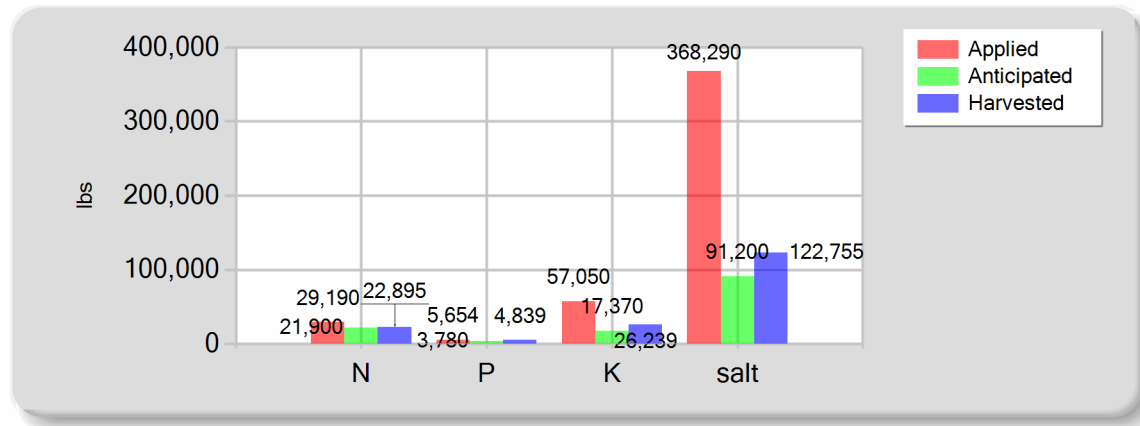
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NUTRIENT APPLICATIONS, POTENTIAL REMOVAL, AND BALANCE

A. SUMMARY OF NUTRIENT APPLICATIONS, POTENTIAL REMOVAL, AND BALANCE

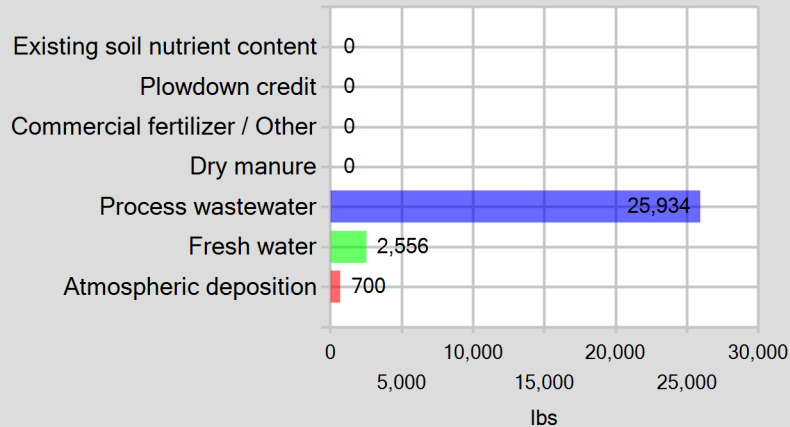
	Total N (lbs)	Total P (lbs)	Total K (lbs)	Total salt (lbs)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	25,934.05	5,653.61	57,049.95	288,778.99
Fresh water	2,555.70	0.00	0.00	79,510.59
Atmospheric deposition	700.00	0.00	0.00	0.00
Total nutrients applied	29,189.75	5,653.61	57,049.95	368,289.58
Anticipated crop nutrient removal	21,900.00	3,780.00	17,370.00	91,200.00
Actual crop nutrient removal	22,894.86	4,839.21	26,239.38	122,754.91
Nutrient balance	6,294.88	814.39	30,810.58	245,534.66
Applied to removed ratio	1.27	1.17	2.17	3.00

B. POUNDS OF NUTRIENT APPLIED VS. CROP REMOVAL

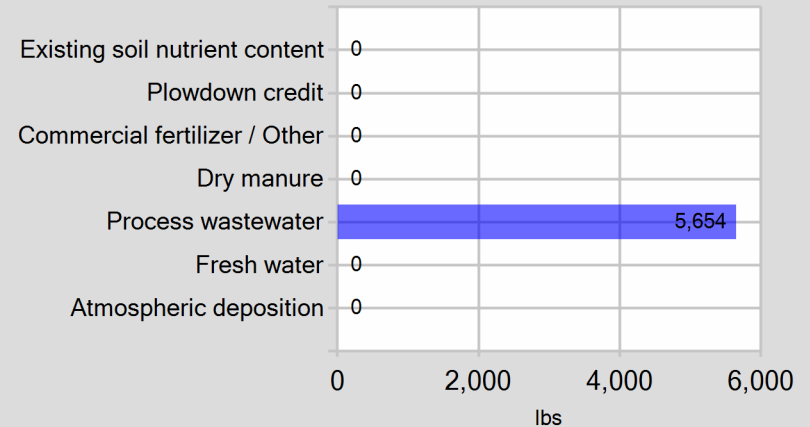


C. POUNDS OF NUTRIENT APPLIED BY MATERIAL TYPE

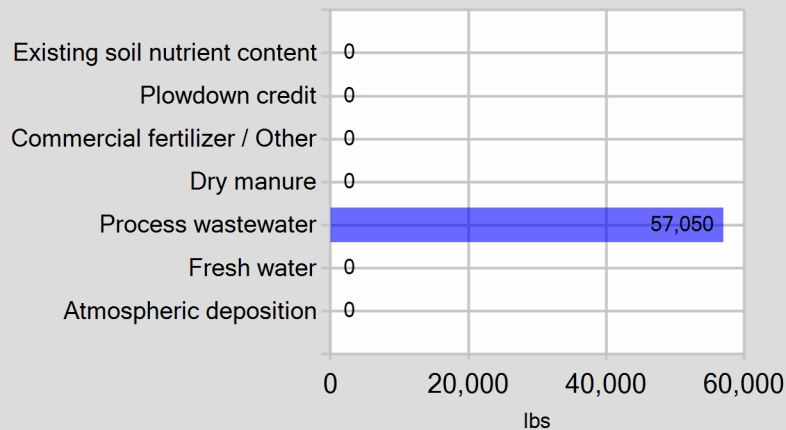
Pounds of nitrogen applied



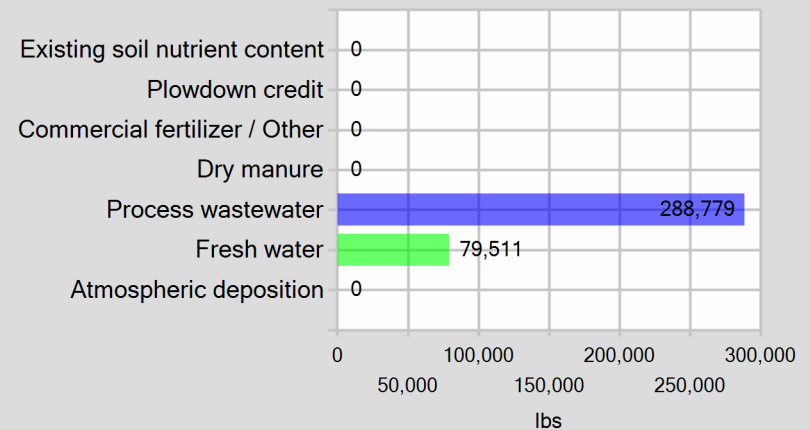
Pounds of phosphorus applied



Pounds of potassium applied



Pounds of salt applied



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EXCEPTION REPORTING

A. MANURE, PROCESS WASTEWATER, AND OTHER DAIRY WASTE DISCHARGES

The following is a summary of all manure and process wastewater discharges from the production area to surface water or to land areas (land application areas or otherwise) when not in accordance with the facility's Nutrient Management Plan.

No manure or process wastewater discharges occurred during the reporting period.

B. STORM WATER DISCHARGES

The following is a summary of all storm water discharges from the production area to surface water during the reporting period when not in accordance with the facility 's Nutrient Management Plan.

No stormwater discharges occurred during the reporting period.

C. LAND APPLICATION AREA TO SURFACE WATER DISCHARGES

The following is a summary of all discharges from the land application area to surface water that have occurred during the reporting period when not in accordance with the facility's Nutrient Management Plan.

No land application area to surface water discharges occurred during the reporting period.

NUTRIENT MANAGEMENT PLAN AND EXPORT AGREEMENT STATEMENTS

A. NUTRIENT MANAGEMENT PLAN STATEMENTS

Was the facility's NMP updated in the reporting period? Yes

Was the facility's NMP developed by a certified nutrient management planner (specialist) as specified in Attachment C of the General Order? Yes

Was the facility's NMP approved by a certified nutrient management planner (specialist) as specified in Attachment C of the General Order? Yes

B. EXPORT AGREEMENT STATEMENT

Are there any written agreements with third parties to receive manure or process wastewater that are new or were revised within the reporting period? No

Annual Report - General Order No. R5-2007-0035
Reporting period 01/01/2023 to 12/31/2023.

ADDITIONAL NOTES

A. NOTES

Ag-1 was out of service in 2023.

Annual Report - General Order No. R5-2007-0035
Reporting period 01/01/2023 to 12/31/2023.

CERTIFICATION

A. OWNER AND/OR OPERATOR 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 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 OF OWNER OF FACILITY

Joe Parreira

PRINT OR TYPE NAME

DATE

6/13/24

SIGNATURE OF OPERATOR OF FACILITY

Carlos Carrillo

PRINT OR TYPE NAME

DATE

6/14/24

Annual Report - General Order No. R5-2007-0035

Reporting period 01/01/2023 to 12/31/2023.

ATTACHMENTS

A. REQUIRED ATTACHMENTS

The following lists the required documents that should be attached to the Annual Report when submitted .

Annual Dairy Facility Assessment

Provide an Annual Dairy Facility Assessment (an update to the Preliminary Dairy Facility Assessment in Attachment A) for each reporting period. On the PDFa Final page, click on the ADFA Report button to generate an ADFA report after updating information as needed .

Manure/Process Wastewater Tracking Manifests

Provide copies of all manure/process wastewater tracking manifests for the reporting period, signed by both the owner/operator and the hauler.

Corrective Actions Documents

Provide records documenting any corrective actions taken to correct deficiencies noted as a result of the inspections required in the Monitoring Requirements of the General Order. Deficiencies not corrected in 30 days must be accompanied by an explanation of the factors preventing immediate correction.

Groundwater Monitoring

Dischargers that monitor supply wells or subsurface (tile) drainage systems, or that have monitoring well systems must submit monitoring results as directed in the General Order, Groundwater Reporting Section starting on page MRP-13.

Storm Water Monitoring

Dischargers that are required to monitor storm water more frequently than required in the General Order must submit monitoring results as directed in the General Order, Storm Water Reporting Section on page MRP-14.

October 4, 2023

Sentry Ag Services
 Attn: Monique Baldiviez
 P.O. Box 7750
 Visalia, CA 93290

Lab No. : VI 2346275
Customer No. : 4019696
Reference : 3160

Laboratory Report

Introduction: This report package contains a total of 7 pages divided into 3 sections:

Case Narrative	(1 page)	: An overview of the work performed at FGL.
Sample Results	(3 pages)	: Results for each sample submitted.
Quality Control	(3 pages)	: Supporting Quality Control (QC) results.

Case Narrative

This Case Narrative pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab No.	Matrix
P-4	09/14/2023	09/14/2023	VI 2346275-003	AGW

Sampling and Receipt Information:

All samples were received in acceptable condition and within temperature requirements, unless noted on the Condition Upon Receipt (CUR) form. All samples were received, prepared and analyzed within the method specified holding times. All samples arrived on ice. All samples were checked for pH if acid or base preservation is required (except for VOAs). For details of sample receipt information, please see the associated Chain of Custody and Condition Upon Receipt Form.

Quality Control: All samples were prepared and analyzed according to established quality control criteria. Any exceptions are noted in the Quality Control Section of this report.


Test Summary

EPA 200.7	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
EPA 300.0	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
EPA 351.2	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
SM 2540 C	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
SM 4500-H+B	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
SM 4500-NO3 F	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)

Certification: I certify that this data package is in compliance with ELAP standards, both technically and for completeness, except for any conditions listed above and in the QC Section. Release of the data contained in this data package is authorized by the Laboratory Director or his designee, as verified by the following electronic signature. This report shall not be reproduced except in full, without the written approval of the laboratory.

KD: EHB

Approved By **Kelly A. Dunnahoo, B.S.**

 Digitally signed by Kelly A. Dunnahoo, B.S.
 Title: Laboratory Director
 Date: 2023-10-05

Section: Case Narrative

Page 1 of 7

Page 1 of 7

Corporate Offices & Laboratory
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 Santa Paula, CA 93060
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 FAX: (559)734-8435
 CA ELAP Certification No. 2810

October 4, 2023

Sentry Ag Services
 Attn: Monique Baldiviez
 P.O. Box 7750
 Visalia, CA 93290

Description : P-4
 Project : XXXXXXXXXX

Lab No. : VI 2346275-003
 Customer No. : 4019696
 Reference : 3160
 Sampled On : September 14, 2023 at 08:30
 Sampled By : Brandon
 Received On : September 14, 2023 at 15:14
 Matrix : Ag Water

Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
Dairy Analysis							Date	Time	Who	Method	Date	Time	Who
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	UI	09/28/2023	10:26	sta	EPA 351.2	10/03/2023	22:37	lcr
Nitrate Nitrogen	4.5	0.4	mg/L		1		09/15/2023	13:00	lfs	SM 4500-NO3 F	09/15/2023	15:52	lfs
Nitrogen, Total as Nitrogen	4.5	0.5	mg/L		1	I	09/28/2023	10:26	sta	Calc.	10/03/2023	22:37	lcr
Nitrate + Nitrite as N	4.5	0.4	mg/L		1		09/15/2023	13:00	lfs	SM 4500-NO3 F	09/15/2023	15:52	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	UI	09/28/2023	10:26	sta	EPA 351.2	10/03/2023	22:37	lcr
Conductivity	230	1	umhos/cm		1	I	09/21/2023	11:31	krh	SM 4500-H+B	09/21/2023	16:01	krh
Solids, Total Dissolved (TDS)	140	20	mg/L		1		09/19/2023	09:45	ctl	SM 2540 C	09/20/2023	11:00	ctl

DQF Flags Definition:

- U Constituent results were non-detect.
- I The MS/MSD did not meet QC criteria.
- I The RPD for the laboratory duplicate exceeded laboratory criteria.

ND=Non-Detected, RL=Reporting Level , Dil.=Dilution

October 4, 2023
Sentry Ag Service

Lab No. : VI 2346275
Customer No. : 4019696

Quality Control - Metals

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Metals Calcium	200.7	09/21/2023:210620EJC (SP 2315861-001)	Blank	mg/L		ND	<1	406
			LCS	mg/L	12.00	93.6%	85-115	
			MS	mg/L	12.00	31.6%	<¼	
			MSD	mg/L	12.00	76.9%	75-125	
			MSRPD	mg/L		5.3%	≤20.0	
Magnesium	200.7	09/21/2023:210620EJC (SP 2315864-001) (SP 2315861-001)	Blank	mg/L		ND	<1	435
			LCS	mg/L	12.00	96.4%	85-115	
			MS	mg/L	12.00	97.2%	75-125	
			MSD	mg/L	12.00	66.9%	<1/4	
			MSRPD	mg/L		2.0%	≤20	
			MS	mg/L	12.00	73.2%	75-125	
			MSD	mg/L	12.00	89.1%	75-125	
Sodium	200.7	09/21/2023:210620EJC (SP 2315861-001)	Blank	mg/L		ND	<1	406
			LCS	mg/L	12.00	91.3%	85-115	
			MS	mg/L	12.00	23.5%	<¼	
			MSD	mg/L	12.00	77.6%	75-125	
			MSRPD	mg/L		5.4%	≤20.0	

Definition

- Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.
- DQO : Data Quality Objective - This is the criteria against which the quality control data is compared.
- LCS : Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.
- MS : Matrix Spikes - A random sample is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.
- MSD : Matrix Spike Duplicate of MS/MSD pair - A random sample duplicate is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.
- MSRPD : MS/MSD Relative Percent Difference (RPD) - The MS relative percent difference is an indication of precision for the preparation and analysis.
- ND : Non-detect - Result was below the DQO listed for the analyte.

Explanation

- 406 : Matrix Spike (MS) not within the Acceptance Range (AR) because of high analyte concentration in the sample. Data was accepted based on the LCS or CCV recovery.
- 435 : Sample matrix may be affecting this analyte. Data was accepted based on the LCS or CCV recovery.

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
E. C.	2320B	09/21/2023:210608KRH	ND	umhos/cm		110%	5	435
	2320B	(SP 2315816-002)	Dup	umhos/cm		0.8%	5	
Solids, Total Dissolved	2540CE	09/19/2023:210493CTL	Blank	mg/L		ND	<20	
		(SP 2315608-001)	LCS	mg/L	991.5	99.7%	90-110	
		(SP 2315608-001)	Dup	mg/L		0.8%	5	
			Dup	mg/L		0.7%	5	
			Blank	mg/L		ND	<20	
			LCS	mg/L	991.5	101%	90-110	
		(CC 2383155-001)	Dup	mg/L		0.4%	5	
		(CC 2383155-001)	Dup	mg/L		2.89%	5	
Chloride	300.0	09/15/2023:210455LDM	Blank	mg/L		ND	<1	
			LCS	mg/L	25.00	102 %	90-110	
			MS	mg/L	50.00	97.7 %	67-117	
		(VI 2346275-001)	MSD	mg/L	50.00	98.0 %	67-117	
			MSRPD	mg/L	10.00	0.2%	≤7	
			MS	mg/L	50.00	100 %	67-117	
		(STK2352450-001)	MSD	mg/L	50.00	100 %	67-117	
			MSRPD	mg/L	10.00	0.1%	≤7	
Nitrate + Nitrite as N	300.0	09/15/2023:210455LDM	Blank	mg/L		ND	<0.4	
			LCS	mg/L	20.00	102 %	90-110	
			MS	mg/L	40.00	89.4 %	86-112	
		(VI 2346275-001)	MSD	mg/L	40.00	89.5 %	86-112	
			MSRPD	mg/L	10.00	0.03%	≤7	
			MS	mg/L	40.00	101 %	86-112	
		(STK2352450-001)	MSD	mg/L	40.00	100 %	86-112	
			MSRPD	mg/L	10.00	0.3%	≤7	
Nitrate Nitrogen	300.0	09/15/2023:210455LDM	Blank	mg/L		ND	<0.4	
			LCS	mg/L	20.00	102 %	90-110	
			MS	mg/L	40.00	89.4 %	86-112	
		(VI 2346275-001)	MSD	mg/L	40.00	89.5 %	86-112	
			MSRPD	mg/L	10.00	0.03%	≤7	
			MS	mg/L	40.00	101 %	86-112	
		(STK2352450-001)	MSD	mg/L	40.00	100 %	86-112	
			MSRPD	mg/L	10.00	0.3%	≤7	
Sulfate Sulfur	300.0	09/15/2023:210455LDM	Blank	mg/L		1	<0.5	
			LCS	mg/L	50.00	102 %	90-110	
			MS	mg/L	100.0	98.3 %	18-165	
		(VI 2346275-001)	MSD	mg/L	100.0	98.7 %	18-165	
			MSRPD	mg/L	10.00	0.3%	≤7	
			MS	mg/L	100.0	98.1 %	18-165	
		(STK2352450-001)	MSD	mg/L	100.0	98.0 %	18-165	
			MSRPD	mg/L	10.00	0.02%	≤7	
Nitrogen, Total Kjeldahl	351.2	09/28/2023:210923STA	Blank	mg/L		ND	<0.5	
			LCS	mg/L	12.00	91.0%	73-124	
			MS	mg/L	12.00	89.3%	90-110	435
		(SP 2315701-001)	MSD	mg/L	12.00	89.7%	90-110	435
			MSRPD	mg/L		0.4%	≤20	
			MS	mg/L	12.00	89.9%	90-110	435
		(SP 2315701-003)	MSD	mg/L	12.00	92.8%	90-110	
			MSRPD	mg/L		3.2%	≤20	

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Nitrate + Nitrite as N	4500NO3F	09/15/2023:210406LFS (CH 2377879-001)	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	95.2%	80-120	
			MS	mg/L	5.609	94.5%	66-125	
			MSD	mg/L	5.609	96.2%	66-125	
			MSRPD	mg/L		1.3%	≤30.4	
Nitrate Nitrogen	4500NO3F	09/15/2023:210406LFS (CH 2377879-001)	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	95.2%	80-120	
			MS	mg/L	5.609	94.5%	66-125	
			MSD	mg/L	5.609	96.2%	66-125	
			MSRPD	mg/L		1.3%	≤30.4	

Definition

- Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.
- Dup : Duplicate Sample - A random sample with each batch is prepared and analyzed in duplicate. The relative percent difference is an indication of precision for the preparation and analysis.
- LCS : Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.
- MS : Matrix Spikes - A random sample is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.
- MSD : Matrix Spike Duplicate of MS/MSD pair - A random sample duplicate is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.
- MSRPD : MS/MSD Relative Percent Difference (RPD) - The MS relative percent difference is an indication of precision for the preparation and analysis.
- ND : Non-detect - Result was below the DQO listed for the analyte.

Explanation

- 435 : Sample matrix may be affecting this analyte. Data was accepted based on the LCS or CCV recovery.

GLS 9/15/23
me 1145

Inter-Laboratory Condition Upon Receipt (Attach to COC)

Sample Receipt at: STK CC

CH VI

1. Number of ice chests/packages received: 1 Shipping tracking # CSTC

2. Were samples received in a chilled condition? Temps 26.1 / 14.0 C / 1 / 1

Surface water SWTR bact samples: A sample that has a temperature upon receipt of $>10^{\circ}\text{C}$, whether iced or not, should be flagged unless the time since sample collection has been less than two hours.

3. Do the number of bottles received agree with the COC? Yes No N/A

4. Were samples received intact? (i.e. no broken bottles, leaks etc.) Yes No

5. VOAs checked for Headspace? Yes No N/A

6. Were sample custody seals intact? Yes No N/A

7. If required, was sample split for pH analysis? Yes No N/A

8. Were all analyses within holding times at time of receipt? Yes No

9. Verify sample date, time and sampler name Yes No

Sign and date the COC, place in a ziplock and put in the same ice chest as the samples.

Sample Receipt Review completed by (initials): ADH

Sample Receipt at SP:

1. Were samples received in a chilled condition? Temps: 22 / 1 / 1 / 1 / 1

Acceptable is above freezing to 6°C . If many packages are received at one time check for tests/H.T.'s/rushes/

2. Shipping tracking numbers: 560126075
068

3. Do the number of bottles received agree with the COC? Yes No N/A

4. Were samples received intact? (i.e. no broken bottles, leaks etc.) Yes No

5. Were sample custody seals intact? Yes No N/A

Sign and date the COC, obtain LIMS sample numbers, select methods/tests and print labels.

Sample Verification, Labeling and Distribution:

1. Were all requested analyses understood and acceptable? Yes No

2. Did bottle labels correspond with the client's ID's? Yes No

3. Were all bottles requiring sample preservation properly preserved? Yes No N/A FGL
[Exception: Oil & Grease, VOA and CrVI verified in lab]

4. VOAs checked for Headspace? Yes No N/A

5. Have rush or project due dates been checked and accepted? Yes No N/A

6. Were all analyses within holding times at time of receipt? Yes No

Attach labels to the containers and include a copy of the COC for lab delivery.

Sample Receipt, Login and Verification completed by (initials): MX

Discrepancy Documentation:

Any items above which are "No" or do not meet specifications (i.e. temps) must be resolved.

1. Person Contacted: _____ Phone Number: _____

Initiated By: _____ Date: _____

Problem: _____

Resolution: _____

2. Person Contacted: _____

Initiated By: _____

Problem: _____

Resolution: _____

Phone Number: _____

(4019696)

Sentry Ag Service

VI 2346275

(Please use the back of this sheet for additional contacts)

mdc 09/14/2023 18:04:58



VI 2346275

December 18, 2023

Sentry Ag Services
 Attn: Monique Baldiviez
 P.O. Box 7750
 Visalia, CA 93290

Lab No. : VI 2348253
Customer No. : 4019696
Reference : 3461

Laboratory Report

Introduction: This report package contains a total of 4 pages divided into 3 sections:

Case Narrative	(1 page)	: An overview of the work performed at FGL.
Sample Results	(1 page)	: Results for each sample submitted.
Quality Control	(2 pages)	: Supporting Quality Control (QC) results.

Case Narrative

This Case Narrative pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab No.	Matrix
Well 1	12/06/2023	12/06/2023	VI 2348253-001	DW

Sampling and Receipt Information:

The Sample was received in acceptable condition and within temperature requirements, unless noted on the Condition Upon Receipt (CUR) form. The Sample was received, prepared and analyzed within the method specified holding times. All samples arrived on ice. All samples were checked for pH if acid or base preservation is required (except for VOAs). For details of sample receipt information, please see the associated Chain of Custody and Condition Upon Receipt Form.

Quality Control: All samples were prepared and analyzed according to established quality control criteria. Any exceptions are noted in the Quality Control Section of this report.

Test Summary

EPA 200.7	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
EPA 300.0	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
SM 2540 C	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
SM 4500-H+B	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)

Certification: I certify that this data package is in compliance with ELAP standards, both technically and for completeness, except for any conditions listed above and in the QC Section. Release of the data contained in this data package is authorized by the Laboratory Director or his designee, as verified by the following electronic signature. This report shall not be reproduced except in full, without the written approval of the laboratory.

KD: JRD

Approved By **Kelly A. Dunnahoo, B.S.**



Digitally signed by Kelly A. Dunnahoo, B.S.
 Title: Laboratory Director
 Date: 2023-12-18

December 18, 2023

Sentry Ag Services

Attn: Monique Baldiviez
 P.O. Box 7750
 Visalia, CA 93290

Description : Well 1
 Project : Santa Anita

Lab No. : VI 2348253-001
 Customer No. : 4019696
 Reference : 3461
 Sampled On : December 6, 2023 at 08:20
 Sampled By : Brandon
 Received On : December 6, 2023 at 12:47
 Matrix : Drinking Water

Sample Results - Inorganic

Constituent	Result	RL	Units	MCL/AL	Dil.	DQF	Sample Preparation			Sample Analysis			
Dairy Analysis							Date	Time	Who	Method	Date	Time	Who
Alkalinity (as CaCO ₃)	70	10	mg/L		1		12/09/2023	15:04	amm	SM 4500-H+B	12/09/2023	23:20	amm
Bicarbonate	80	10	mg/L		1		12/09/2023	15:04	amm	SM 4500-H+B	12/09/2023	23:20	amm
Carbonate	ND	10	mg/L		1	U	12/09/2023	15:04	amm	SM 4500-H+B	12/09/2023	23:20	amm
Hydroxide	ND	10	mg/L		1	U	12/09/2023	15:04	amm	SM 4500-H+B	12/09/2023	23:20	amm
Chloride	27	1	mg/L	500 ²	1		12/07/2023	11:23	ldm	EPA 300.0	12/08/2023	12:23	ldm
Nitrate Nitrogen	11.1	0.1	mg/L	10	1		12/07/2023	11:23	ldm	EPA 300.0	12/08/2023	12:23	ldm
Conductivity	343	1	umhos/cm	1600 ²	1		12/09/2023	15:04	amm	SM 4500-H+B	12/09/2023	23:20	amm
Sulfate Sulfur	5.00	0.17	mg/L		1		12/07/2023	11:23	ldm	EPA 300.0	12/08/2023	12:23	ldm
Solids, Total Dissolved (TDS)	220	20	mg/L	1000 ²	1		12/08/2023	09:50	ctl	SM 2540 C	12/11/2023	11:30	ctl
Calcium	13	1	mg/L		1		12/07/2023	07:15	ejc	EPA 200.7	12/08/2023	17:10	ac
Magnesium	ND	1	mg/L		1	U	12/07/2023	07:15	ejc	EPA 200.7	12/08/2023	17:10	ac
Potassium	ND	1	mg/L		1	U	12/07/2023	07:15	ejc	EPA 200.7	12/08/2023	17:10	ac
Sodium	49	1	mg/L		1		12/07/2023	07:15	ejc	EPA 200.7	12/08/2023	17:10	ac

DQF Flags Definition:

U Constituent results were non-detect.

ND=Non-Detected, RL=Reporting Level, Dil.=Dilution

MCL = Maximum Contamination Level. 2 - Secondary Standard. 3 - CDPH Notification Level. AL = Regulatory Action Level.

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 FAX: (209)942-0423
 CA ELAP Certification No. 1563

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 CA ELAP Certification No. 2670

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 FAX: (559)734-8435
 CA ELAP Certification No. 2810

December 18, 2023
Sentry Ag Service

Lab No. : VI 2348253
Customer No. : 4019696

Quality Control - Metals

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Metals Calcium	200.7	12/07/2023:213816EJC (CC 2384296-004)	Blank	mg/L		ND	<1	
			LCS	mg/L	12.00	97.4%	85-115	
			MS	mg/L	12.00	88.8%	75-125	
			MSD	mg/L	12.00	106%	75-125	
			MSRPD	mg/L		1.7%	≤20.0	
			MS	mg/L	12.00	69.3%	<¼	406
			MSD	mg/L	12.00	54.2%	<1/4	
			MSRPD	mg/L		1.5%	≤20.0	
Magnesium	200.7	12/07/2023:213816EJC (CC 2384296-004)	Blank	mg/L		ND	<1	
			LCS	mg/L	12.00	98.5%	85-115	
			MS	mg/L	12.00	69.5%	<¼	406
			MSD	mg/L	12.00	101%	75-125	
			MSRPD	mg/L		2.9%	≤20	
			MS	mg/L	12.00	74.2%	<¼	406
			MSD	mg/L	12.00	66.0%	<1/4	
			MSRPD	mg/L		1.2%	≤20	
Potassium	200.7	12/07/2023:213816EJC (CC 2384296-004)	Blank	mg/L		ND	<1	
			LCS	mg/L	12.00	97.9%	85-115	
			MS	mg/L	12.00	97.0%	75-125	
			MSD	mg/L	12.00	97.2%	75-125	
			MSRPD	mg/L		0.2%	≤20.0	
			MS	mg/L	12.00	98.0%	75-125	
			MSD	mg/L	12.00	98.4%	75-125	
			MSRPD	mg/L		0.3%	≤20.0	
Sodium	200.7	12/07/2023:213816EJC (CC 2384296-004)	Blank	mg/L		ND	<1	
			LCS	mg/L	12.00	96.4%	85-115	
			MS	mg/L	12.00	87.7%	75-125	
			MSD	mg/L	12.00	101%	75-125	
			MSRPD	mg/L		2.4%	≤20.0	
			MS	mg/L	12.00	89.4%	75-125	
			MSD	mg/L	12.00	75.8%	75-125	
			MSRPD	mg/L		2.2%	≤20.0	

Definition

Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.

DQO : Data Quality Objective - This is the criteria against which the quality control data is compared.

LCS : Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.

MS : Matrix Spikes - A random sample is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.

MSD : Matrix Spike Duplicate of MS/MSD pair - A random sample duplicate is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.

MSRPD : MS/MSD Relative Percent Difference (RPD) - The MS relative percent difference is an indication of precision for the preparation and analysis.

ND : Non-detect - Result was below the DQO listed for the analyte.

Explanation

406 : Matrix Spike (MS) not within the Acceptance Range (AR) because of high analyte concentration in the sample. Data was accepted based on the LCS or CCV recovery.

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
Alkalinity (as CaCO ₃)	2320B	12/09/2023:213884AMM	ND	mg/L		0.4%	10	406
Bicarbonate	2320B	(VI 2348309-001)	Dup	mg/L		0.4%	10	
E. C.	2320B	(VI 2348309-001)	Dup	umhos/cm		0.2%	5	
Solids, Total Dissolved	2540CE	12/08/2023:213823CTL	Blank	mg/L		ND	<20	
		(SP 2320140-001)	LCS	mg/L	991.5	99.5%	90-110	
		(SP 2320140-001)	Dup	mg/L		0.6%	5	
			Dup	mg/L		0.2%	5	
Chloride	300.0	12/07/2023:213946LDM	Blank	mg/L		ND	<1	
			LCS	mg/L	25.00	98.5%	90-110	
			MS	mg/L	50.00	102%	67-117	
		(CH 2373985-001)	MSD	mg/L	50.00	102%	67-117	
			MSRPD	mg/L		0.0%	≤7	
			MS	mg/L	50.00	100%	67-117	
		(VI 2348252-001)	MSD	mg/L	50.00	101%	67-117	
			MSRPD	mg/L		0.8%	≤7	
Nitrate Nitrogen	300.0	12/07/2023:213946LDM	Blank	mg/L		ND	<0.4	
			LCS	mg/L	20.00	96.6%	90-110	
			MS	mg/L	40.00	101%	86-112	
		(CH 2373985-001)	MSD	mg/L	40.00	101%	86-112	
			MSRPD	mg/L		0.1%	≤7	
			MS	mg/L	40.00	101%	86-112	
		(VI 2348252-001)	MSD	mg/L	40.00	102%	86-112	
			MSRPD	mg/L		0.9%	≤7	
Sulfate Sulfur	300.0	12/07/2023:213946LDM	Blank	mg/L		ND	<0.5	
			LCS	mg/L	50.00	99.8%	90-110	
			MS	mg/L	100.0	103%	18-165	
		(CH 2373985-001)	MSD	mg/L	100.0	103%	18-165	
			MSRPD	mg/L		0.1%	≤7	
			MS	mg/L	100.0	102%	18-165	
		(VI 2348252-001)	MSD	mg/L	100.0	103%	18-165	
			MSRPD	mg/L		1.0%	≤7	

Definition

- Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.
- Dup : Duplicate Sample - A random sample with each batch is prepared and analyzed in duplicate. The relative percent difference is an indication of precision for the preparation and analysis.
- LCS : Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.
- MS : Matrix Spikes - A random sample is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.
- MSD : Matrix Spike Duplicate of MS/MSD pair - A random sample duplicate is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.
- MSRPD : MS/MSD Relative Percent Difference (RPD) - The MS relative percent difference is an indication of precision for the preparation and analysis.
- ND : Non-detect - Result was below the DQO listed for the analyte.

Explanation

- 406 : Matrix Spike (MS) not within the Acceptance Range (AR) because of high analyte concentration in the sample. Data was accepted based on the LCS or CCV recovery.



Laboratory Analysis Work Order

2348253

3461

SITE NAME: Santa Anita

LABORATORY: VT | FGL 4-19696

Billing: Sentry Ag Services, LLC
P.O. Box 7750, Visalia, CA 93290

Authorized Copy Release to:
labs@sentryagservices.com

ANALYSIS TO BE COMPLETED

Irrigation/Ground Water (ELAP Standards)

- W1 EC, NO₃N (Dom)
W2 EC, NO₃N, TDS, TN (Irr)
W3 NH₄-N (Ammonium)
W4 EC, NO₃N, Ca, Mg, Na, HCO₃, CO₃, SO₄S, Cl, TDS (Dom, GM) *1.8°C R2*
W5 EC, NO₃N, TDS, TN, Ca, Mg, Na, HCO₃, CO₃, SO₄S, Cl (Irr, GM)
W6 NO₃N, NO₂ (Dom ILRP, Annually)
W7 Ca, Mg, Na, K, HCO₃, CO₃, SO₄, Cl + Lab Filtering (GWM) *TH407*
W8 Other: _____

Process Waste Water (lagoon)

- L1 EC, NH₄N, TKN, TP, TK, TDS (Quarterly)
L2 EC, NO₃N, NH₄N, TKN, TP, TK, TDS, pH (Annually)
L3 Ca, Mg, Na, HCO₃, CO₃, SO₄S, Cl (Biennially)
L4 Other: _____

Manure

- M1 TN, TP, TK, %M (2/year)
M2 TN, TP, K, %M, Ca, Mg, Na, S, Cl, ash (Biennially)
M3 Other: _____

Plant Tissue

- P1 TN, NO₃N, PO₄P, K (Mid Season - Wheat)
P2 TN, P, K (Mid-season - Corn)
P3 TN, TP, TK, Ash, %M (At Harvest)
P4 TN, %M
P5 % Moisture
P6 NIR
P7 Other: _____

Soil

- S1 SP%, pH, EC, Ca, Mg, Na, K, ESP, LP, B, NO₃N, PO₄P, K-AA, Zn, Mn, Fe, Cu, SO₄S
S2 S1 + CEC, CaCO₃, OM, C:N, TN
S3 NO₃N, NH₄N
S4 Other: _____

	Sample ID	Description	Analysis	Date/Time	Sampled by	SAS USE ONLY: FIELD TESTS		
						NH ₃ N *	pH	Temp
1	well 1	domestic	W4	12/6/23 8:10	T. Gordon	2		
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								

* Field Test of ammonium nitrogen may only be made by a trained technician. Positive test to be analyzed for ammonium nitrogen by the laboratory.

All samples are to follow the procedures noted in the Sampling & Analysis Plan of the NMP and the RWQCB specifications. Any samples taken outside of these procedures shall provide the procedures on the notes below. Additionally, if any preservatives are used in the collections or processing of samples, please note below.

NOTES:

CHAIN OF CUSTODY RECORDING

	Signature	Company	Received Date & Time	Relinquished Date & Time
1 st	<i>[Signature]</i>	SAS		12/6/23 12:47
2 nd	AJB	FGL	12/6/23 1241	
3 rd	AJB	FGL		12/6/23 1730
4 th	GLS	GLS	12/6/23 1730	

LABORATORY USE ONLY

Logged In By: _____ Total Samples: _____ Laboratory No.: *61 12/6/23 1030*

Inter-Laboratory Condition Upon Receipt (Attach to COC)

Sample Receipt at: CC CH STK VI

1. Number of ice chests/packages received: 1 Shipping tracking #(s): ATL

2. Temp IR Gun ID #: TA407

3. Were samples received on ice? ☒ Yes ☐ No Temps: 7.8°C / / / /
Surface water SWTR bact samples: A sample that has a temperature upon receipt of $>10^{\circ}\text{C}$, whether iced or not, should be flagged unless the time since sample collection has been less than two hours.

4. Do the number of bottles received agree with the COC? ☒ Yes ☐ No ☐ N/A

5. Were samples received intact? (i.e. no broken bottles, leaks etc.) ☒ Yes ☐ No

6. VOAs checked for Headspace? ☐ Yes ☐ No ☒ N/A

7. Were all analyses within holding times at time of receipt? ☒ Yes ☐ No

8. Verify sample date, time and sampler name ☒ Yes ☐ No

Sign and date the COC, place in a ziplock and put in the same ice chest as the samples.

Sample Receipt Review completed by (initials): ASB

Sample Receipt at SP:

1. Number of ice chests/packages received: 6 Shipping tracking #(s): SL0514024, SL0514025, SL0514026, SL0514027, SL0514028, SL0514029

2. Temp IR Gun ID #: U640

3. Were samples received on ice? ☒ Yes ☐ No Temps: 1 / 1 / 1 / 1 / 1 / 1
Acceptable is above freezing to 6°C . If many packages are received at one time check for tests/H.T.'s/rushes/

4. Do the number of bottles received agree with the COC? ☒ Yes ☐ No ☐ N/A

5. Were samples received intact? (i.e. no broken bottles, leaks etc.) ☒ Yes ☐ No

Sign and date the COC, obtain LIMS sample numbers, select methods/tests and print labels.

Sample Verification, Labeling and Distribution:

1. Were all requested analyses understood and acceptable? ☒ Yes ☐ No

2. Did bottle labels correspond with the client's ID's? ☒ Yes ☐ No

3. Were all bottles requiring sample preservation properly preserved? ☒ Yes ☐ No ☐ N/A FGL
[Exception: Oil & Grease, VOA and CrVI verified in lab]

4. VOAs checked for Headspace? ☐ Yes ☐ No ☒ N/A

5. Have rush or project due dates been checked and accepted? ☐ Yes ☐ No ☒ N/A

6. Were all analyses within holding times at time of receipt? ☒ Yes ☐ No

Attach labels to the containers and include a copy of the COC for lab delivery.

Sample Receipt, Login and Verification completed by (initials): JK

Discrepancy Documentation:

Any items above which are "No" or do not meet specifications (i.e. temps) must be resolved.

1. Person Contacted: _____ Phone Number: _____

Initiated By: _____ Date: _____

Problem: _____

Resolution: _____

2. Person Contacted: _____ Phone Number: _____

Initiated By: _____

Problem: _____

Resolution: _____

(4019696)
Sentry Ag Service
VI 2348253

iv 12/07/2023 08:37:16

