

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: Over the Moon Dairy**

Physical address of dairy:

9455 2nd Avenue

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: 05/05/1986Regional Water Quality Control Board Basin Plan designation: Tulare Basin

County Assessor Parcel Number(s) for dairy facility:

X014-X290-X030-XXXX

B. OPERATORS

Lanting, George

Operator name: Lanting, George

Telephone no.:

(559) 381-0809

Landline

Cellular

1885 E San Gregorio ST

Tulare

CA

93274

Mailing Address Number and Street

City

State

Zip Code

This operator is responsible for paying permit fees.**C. OWNERS**

Dragt, Harold

Legal owner name: Dragt, Harold

Telephone no.:

(559) 631-6373

Landline

Cellular

8157 5th Avenue

Hanford

CA

93230

Mailing Address Number and Street

City

State

Zip Code

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

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

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	234	29	44	0	0	0
Number under roof	0	0	0	0	0	0
Maximum number	251	32	52	0	0	0
Average number	234	29	44	0	0	0
Avg live weight (lbs)	1,400	1,450	1,000	0		

Predominant milk cow breed: Holstein

Average milk production: 75 pounds per cow per day

B. MANURE GENERATED

Total manure excreted by the herd: 7,024.26 tons per reporting period

Total nitrogen from manure: 89,742.36 lbs per reporting period

After ammonia losses (30% loss applied): 62,819.65 lbs per reporting period

Total phosphorus from manure: 15,021.37 lbs per reporting period

Total potassium from manure: 45,581.85 lbs per reporting period

Total salt from manure: 116,847.45 lbs per reporting period

C. PROCESS WASTEWATER GENERATED

Process wastewater generated: 21,369,918 gallons

Total nitrogen generated: 22,579.33 lbs

$$\begin{aligned}
 & 21,369,918 \text{ gallons applied} \\
 & + 0 \text{ gallons exported} \\
 & - 0 \text{ gallons imported} \\
 & = 21,369,918 \text{ gallons generated}
 \end{aligned}$$

Total phosphorus generated: 5,010.17 lbs

Total potassium generated: 30,851.63 lbs

Total salt generated: 198,363.40 lbs

D. FRESH WATER SOURCES

Source Description	Type
Dairy Well	Ground water
Well #10N	Ground water
Well #10S	Ground water
Well #2	Ground water
Well 9472 1 1/2 Ave	Ground water

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

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

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.

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

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

APPLICATION AREA

A. LIST OF LAND APPLICATION AREAS

Field name	Controlled acres	Cropable acres	Total harvests	Type of waste applied	Parcel number
FL-10	100	100	2	manure	X072-X100-X009-XXXX
FL-17	17	17	1	process wastewater	X014-X290-X030-XXXX
FL-18	18	18	1	process wastewater	X014-X290-X013-XXXX
FL-19	38	38	2	process wastewater	X014-X290-X011-XXXX
Totals for areas that were used for application	173	173	6		
Totals for areas that were not used for application					
Land application area totals	173	173	6		

B. CROPS AND HARVESTS

FL-10

Field name: FL-10

11/20/2022: Wheat, silage, soft dough

Crop: Wheat, silage, soft dough Acres planted: 100 Plant date: 11/20/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/21/2023	1,810.00 ton	Dry-weight		58.8	13,800.00	2,600.00	18,400.00		8.90

	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	1,494.00
Total actual harvest content	18.10	205.82	38.78	274.42	1,327.38

06/19/2023: Corn, silage

Crop: Corn, silage Acres planted: 100 Plant date: 06/19/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
10/12/2023	2,786.00 ton	Dry-weight		64.6	13,500.00	2,400.00	12,400.00		5.20

	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	27.86	266.29	47.34	244.59	1,025.69

Annual Report - General Order No. R5-2007-0035*Reporting period 01/01/2023 to 12/31/2023.***FL-17**Field name: FL-17

04/18/2023: Corn, silage

Crop: Corn, silageAcres planted: 17 Plant date: 04/18/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
08/09/2023	429.00 <i>ton</i>	Dry-weight		67.0	13,000.00	3,300.00	18,700.00		7.70

	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	25.24	216.52	54.96	311.45	1,282.46

FL-18Field name: FL-18

04/14/2023: Corn, silage

Crop: Corn, silageAcres planted: 18 Plant date: 04/14/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
08/09/2023	496.00 <i>ton</i>	Dry-weight		66.9	13,300.00	3,200.00	14,800.00		6.30

	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	27.56	242.62	58.37	269.98	1,149.23

FL-19Field name: FL-19

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

FL-19

11/19/2022: Wheat, silage, soft dough

Crop: Wheat, silage, soft dough Acres planted: 38 Plant date: 11/19/2022

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	782.00 <i>ton</i>	Dry-weight		63.6	14,700.00	3,100.00	21,800.00		9.80

	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	1,494.00
Total actual harvest content	20.58	220.23	46.44	326.60	1,468.18

06/19/2023: Corn, silage

Crop: Corn, silage Acres planted: 38 Plant date: 06/19/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
10/12/2023	988.00 <i>ton</i>	Dry-weight		63.3	14,100.00	3,300.00	15,500.00		6.30

	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	26.00	269.08	62.98	295.80	1,202.29

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

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

NUTRIENT BUDGET**A. LAND APPLICATIONS**

FL-10 - 11/20/2022: Wheat, silage, soft dough

Field name: FL-10Crop: Wheat, silage, soft doughPlant date: 11/20/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
11/02/2022	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
Well #10N	Ground water	11.16	0.00	0.00	514.04	13,105,950.00 gal
Application event totals		11.16	0.00	0.00	514.04	
11/01/2022	Broadcast/incorporate	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Manure	Corral solids	225.54	93.98	271.19	0.00	750.00 ton
Application event totals		225.54	93.98	271.19	0.00	
02/03/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Well #10N	Ground water	11.14	0.00	0.00	513.41	13,089,900.00 gal
Application event totals		11.14	0.00	0.00	513.41	
04/01/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Well #10N	Ground water	11.54	0.00	0.00	531.77	13,558,200.00 gal
Application event totals		11.54	0.00	0.00	531.77	

FL-10 - 06/19/2023: Corn, silage

Field name: FL-10Crop: Corn, silagePlant date: 06/19/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following

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

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

FL-10 - 06/19/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
06/03/2023	Broadcast/incorporate	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Manure	Corral solids	259.69	83.63	217.15	0.00	800.00 ton
Application event totals		259.69	83.63	217.15	0.00	
06/05/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Well #10N	Ground water	13.47	0.00	0.00	620.48	15,819,900.00 gal
Application event totals		13.47	0.00	0.00	620.48	
07/12/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Well #10N	Ground water	13.12	0.00	0.00	604.36	15,408,998.00 gal
Application event totals		13.12	0.00	0.00	604.36	
07/28/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Well #10N	Ground water	12.86	0.00	0.00	592.61	15,109,400.00 gal
Application event totals		12.86	0.00	0.00	592.61	
08/10/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Well #10N	Ground water	13.03	0.00	0.00	600.35	15,306,580.00 gal
Application event totals		13.03	0.00	0.00	600.35	
08/24/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Well #10N	Ground water	12.77	0.00	0.00	588.27	14,998,560.00 gal
Application event totals		12.77	0.00	0.00	588.27	

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

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

FL-10 - 06/19/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
09/05/2023	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
Well #10N	Ground water	12.18	0.00	0.00	561.13	14,306,800.00 gal
Application event totals		12.18	0.00	0.00	561.13	
09/20/2023	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
Well #10N	Ground water	11.75	0.00	0.00	541.48	13,805,610.00 gal
Application event totals		11.75	0.00	0.00	541.48	

FL-17 - 04/18/2023: Corn, silage

Field name: FL-17

Crop: Corn, silage

Plant date: 04/18/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
04/02/2023	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	63.56	13.35	95.91	291.79	1,177,060.00 gal
Well #2	Ground water	22.54	0.00	0.00	471.58	3,256,520.00 gal
Application event totals		86.10	13.35	95.91	763.37	
05/27/2023	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
Well #2	Ground water	21.45	0.00	0.00	448.76	3,098,950.00 gal
Application event totals		21.45	0.00	0.00	448.76	

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

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

FL-17 - 04/18/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
06/18/2023	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	55.98	15.34	77.51	624.41	1,096,560.00 gal
Well #2	Ground water	18.73	0.00	0.00	391.96	2,706,689.00 gal
Application event totals		74.72	15.34	77.51	1,016.36	
06/29/2023	Surface (irrigation)	No precipitation	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	43.89	12.03	60.76	489.49	859,620.00 gal
Well #2	Ground water	19.37	0.00	0.00	405.32	2,798,980.00 gal
Application event totals		63.26	12.03	60.76	894.81	
07/12/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Well #2	Ground water	17.37	0.00	0.00	363.47	2,509,980.00 gal
Application event totals		17.37	0.00	0.00	363.47	
07/24/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Well #2	Ground water	16.67	0.00	0.00	348.83	2,408,900.00 gal
Application event totals		16.67	0.00	0.00	348.83	

FL-18 - 04/14/2023: Corn, silage

Field name: FL-18

Crop: Corn, silage

Plant date: 04/14/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
------------------	--------------------	------------------------------	----------------------------------	----------------------------------

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

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

FL-18 - 04/14/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
04/01/2023	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	65.33	13.72	98.58	299.91	1,280,998.00 gal
Well #2	Ground water	17.65	0.00	0.00	369.38	2,700,800.00 gal
Application event totals		82.98	13.72	98.58	669.29	
05/23/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	No precipitation
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Well #2	Ground water	21.96	0.00	0.00	459.46	3,359,500.00 gal
Application event totals		21.96	0.00	0.00	459.46	
06/15/2023	Surface (irrigation)	No precipitation	No precipitation	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	60.72	12.75	91.63	278.77	1,190,690.00 gal
Well #2	Ground water	18.37	0.00	0.00	384.30	2,809,900.00 gal
Application event totals		79.09	12.75	91.63	663.07	
06/26/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	No precipitation
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Well #2	Ground water	20.33	0.00	0.00	425.33	3,109,898.00 gal
Application event totals		20.33	0.00	0.00	425.33	
07/10/2023	Surface (irrigation)	No precipitation	No precipitation	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	59.30	16.25	82.11	661.43	1,229,900.00 gal
Well #2	Ground water	16.93	0.00	0.00	354.19	2,589,800.00 gal
Application event totals		76.23	16.25	82.11	1,015.62	

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

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

FL-18 - 04/14/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
07/22/2023	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
Well #2	Ground water	17.69	0.00	0.00	370.08	2,705,950.00 gal
Application event totals		17.69	0.00	0.00	370.08	

FL-19 - 11/19/2022: Wheat, silage, soft dough

Field name: FL-19

Crop: Wheat, silage, soft dough Plant date: 11/19/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
10/31/2022	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	86.25	14.32	81.65	1,113.77	1,906,650.00 gal
Well #2	Ground water	15.82	0.00	0.00	331.03	5,109,850.00 gal
Application event totals		102.08	14.32	81.65	1,444.80	
01/11/2023	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	83.54	15.38	115.10	823.06	1,408,980.00 gal
Well #2	Ground water	14.57	0.00	0.00	304.91	4,706,559.00 gal
Application event totals		98.12	15.38	115.10	1,127.96	
04/22/2023	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	57.73	12.12	87.12	265.03	2,389,800.00 gal
Well #2	Ground water	13.65	0.00	0.00	285.63	4,409,062.00 gal
Application event totals		71.38	12.12	87.12	550.67	

FL-19 - 06/19/2023: Corn, silage

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

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

FL-19 - 06/19/2023: Corn, silage

Field name: FL-19

Crop: Corn, silage

Plant date: 06/19/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
06/02/2023	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	75.12	15.78	113.37	344.89	3,109,880.00 gal
Well #2	Ground water	18.29	0.00	0.00	382.74	5,908,006.00 gal
Application event totals		93.42	15.78	113.37	727.63	
07/17/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Well #2	Ground water	19.54	0.00	0.00	408.78	6,309,890.00 gal
Application event totals		19.54	0.00	0.00	408.78	
08/01/2023	Surface (irrigation)	No precipitation	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	66.46	18.21	92.02	741.25	2,909,800.00 gal
Well #2	Ground water	18.92	0.00	0.00	395.82	6,109,898.00 gal
Application event totals		85.38	18.21	92.02	1,137.07	
08/13/2023	Surface (irrigation)	No precipitation	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	64.18	17.59	88.86	715.82	2,809,980.00 gal
Well #2	Ground water	17.99	0.00	0.00	376.39	5,809,920.00 gal
Application event totals		82.17	17.59	88.86	1,092.21	
08/26/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Well #2	Ground water	17.06	0.00	0.00	356.95	5,509,820.00 gal
Application event totals		17.06	0.00	0.00	356.95	

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

FL-19 - 06/19/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
09/07/2023	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
Well #2	Ground water	18.30	0.00	0.00	382.86	5,909,800.00 gal
Application event totals		18.30	0.00	0.00	382.86	

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

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

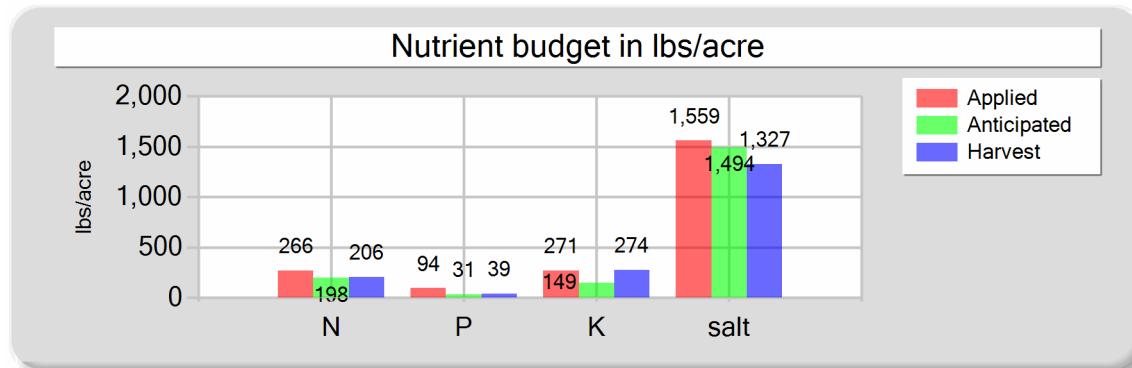
B. NUTRIENT BUDGET

FL-10 - 11/20/2022: Wheat, silage, soft dough

Field name: FL-10

Crop: Wheat, silage, soft dough

Plant date: 11/20/2022



	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	Fresh water applied
Plowdown credit	0.00	0.00	0.00	0.00	39,754,050.00 gallons
Commercial fertilizer / Other	0.00	0.00	0.00	0.00	1,464.01 acre-inches
Dry manure	225.54	93.98	271.19	0.00	14.64 inches/acre
Process wastewater	0.00	0.00	0.00	0.00	Process wastewater applied
Fresh water	33.84	0.00	0.00	1,559.21	0.00 gallons
Atmospheric deposition	7.00	0.00	0.00	0.00	0.00 acre-inches
Total nutrients applied	266.38	93.98	271.19	1,559.21	0.00 inches/acre
Anticipated crop nutrient removal	198.00	30.60	149.40	1,494.00	Total harvests for the crop
Actual crop nutrient removal	205.82	38.78	274.42	1,327.38	1 harvests
Nutrient balance	60.56	55.20	-3.24	231.83	
Applied to removed ratio	1.29	2.42	0.99	1.17	

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

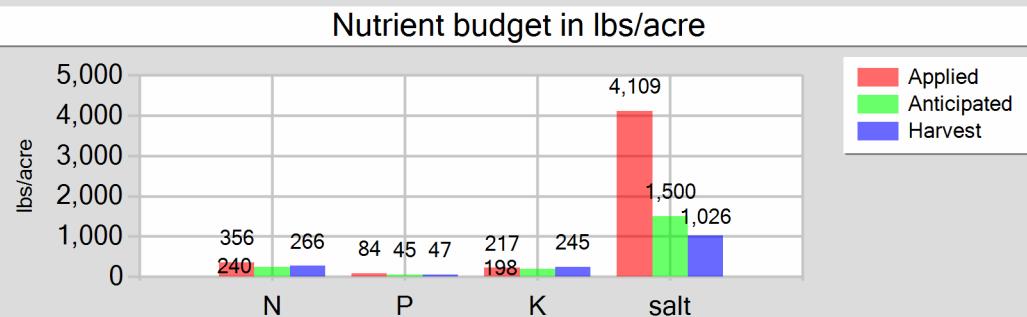
Reporting period 01/01/2023 to 12/31/2023.

FL-10 - 06/19/2023: Corn, silage

Field name: FL-10

Crop: Corn, silage

Plant date: 06/19/2023



	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	259.69	83.63	217.15	0.00
Process wastewater	0.00	0.00	0.00	0.00
Fresh water	89.17	0.00	0.00	4,108.68
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	355.86	83.63	217.15	4,108.68
Anticipated crop nutrient removal	240.00	45.00	198.00	1,500.00
Actual crop nutrient removal	266.29	47.34	244.59	1,025.69
Nutrient balance	89.58	36.29	-27.44	3,082.99
Applied to removed ratio	1.34	1.77	0.89	4.01

Fresh water applied
104,755,848.00 *gallons*
3,857.80 *acre-inches*
38.58 *inches/acre*

Process wastewater applied
0.00 *gallons*
0.00 *acre-inches*
0.00 *inches/acre*

Total harvests for the crop
1 *harvests*

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

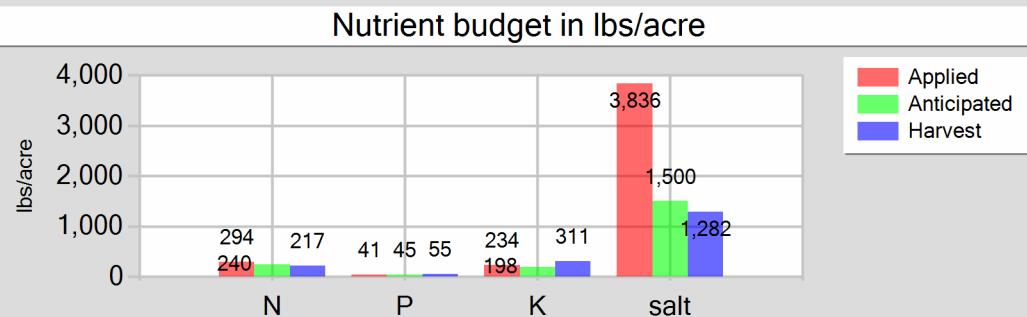
Reporting period 01/01/2023 to 12/31/2023.

FL-17 - 04/18/2023: Corn, silage

Field name: FL-17

Crop: Corn, silage

Plant date: 04/18/2023



	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	163.42	40.71	234.19	1,405.68
Fresh water	116.14	0.00	0.00	2,429.92
Atmospheric deposition	14.00	0.00	0.00	0.00
Total nutrients applied	293.57	40.71	234.19	3,835.60
Anticipated crop nutrient removal	240.00	45.00	198.00	1,500.00
Actual crop nutrient removal	216.52	54.96	311.45	1,282.46
Nutrient balance	77.05	-14.25	-77.26	2,553.14
Applied to removed ratio	1.36	0.74	0.75	2.99

Fresh water applied

16,780,019.00 <i>gallons</i>
617.95 <i>acre-inches</i>
36.35 <i>inches/acre</i>

Process wastewater applied

3,133,240.00 <i>gallons</i>
115.39 <i>acre-inches</i>
6.79 <i>inches/acre</i>

Total harvests for the crop

1 <i>harvests</i>

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

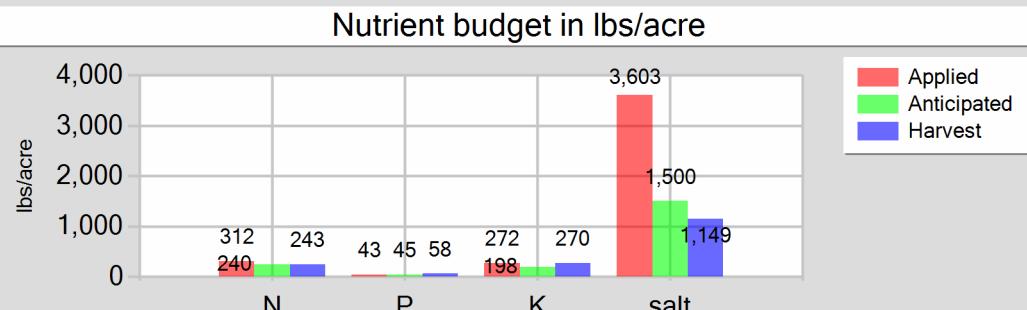
Reporting period 01/01/2023 to 12/31/2023.

FL-18 - 04/14/2023: Corn, silage

Field name: FL-18

Crop: Corn, silage

Plant date: 04/14/2023



	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	17,275,848.00 gallons
Plowdown credit	0.00	0.00	0.00	0.00	636.21 acre-inches
Commercial fertilizer / Other	0.00	0.00	0.00	0.00	35.35 inches/acre
Dry manure	0.00	0.00	0.00	0.00	
Process wastewater	185.35	42.72	272.33	1,240.11	Process wastewater applied
Fresh water	112.93	0.00	0.00	2,362.74	3,701,588.00 gallons
Atmospheric deposition	14.00	0.00	0.00	0.00	136.32 acre-inches
Total nutrients applied	312.28	42.72	272.33	3,602.84	7.57 inches/acre
Anticipated crop nutrient removal	240.00	45.00	198.00	1,500.00	Total harvests for the crop
Actual crop nutrient removal	242.62	58.37	269.98	1,149.23	1 harvests
Nutrient balance	69.66	-15.65	2.35	2,453.61	
Applied to removed ratio	1.29	0.73	1.01	3.14	

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

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

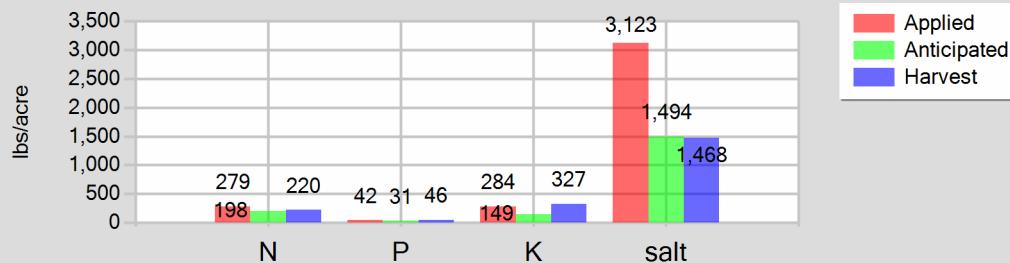
FL-19 - 11/19/2022: Wheat, silage, soft dough

Field name: FL-19

Crop: Wheat, silage, soft dough

Plant date: 11/19/2022

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	227.53	41.82	283.87	2,201.86
Fresh water	44.05	0.00	0.00	921.58
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	278.58	41.82	283.87	3,123.43
Anticipated crop nutrient removal	198.00	30.60	149.40	1,494.00
Actual crop nutrient removal	220.23	46.44	326.60	1,468.18
Nutrient balance	58.35	-4.62	-42.72	1,655.25
Applied to removed ratio	1.26	0.90	0.87	2.13

Fresh water applied

14,225,471.00 *gallons*
523.88 *acre-inches*
13.79 *inches/acre*

Process wastewater applied

5,705,430.00 *gallons*
210.11 *acre-inches*
5.53 *inches/acre*

Total harvests for the crop

1 *harvests*

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

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

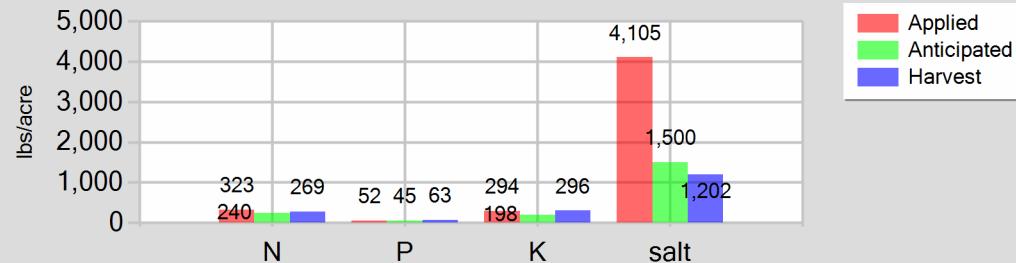
FL-19 - 06/19/2023: Corn, silage

Field name: FL-19

Crop: Corn, silage

Plant date: 06/19/2023

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	205.76	51.57	294.25	1,801.96
Fresh water	110.10	0.00	0.00	2,303.53
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	322.86	51.57	294.25	4,105.49
Anticipated crop nutrient removal	240.00	45.00	198.00	1,500.00
Actual crop nutrient removal	269.08	62.98	295.80	1,202.29
Nutrient balance	53.77	-11.40	-1.56	2,903.19
Applied to removed ratio	1.20	0.82	0.99	3.41

Fresh water applied

35,557,334.00 *gallons*
1,309.46 *acre-inches*
34.46 *inches/acre*

Process wastewater applied

8,829,660.00 *gallons*
325.17 *acre-inches*
8.56 *inches/acre*

Total harvests for the crop

1 *harvests*

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

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

NUTRIENT ANALYSES**A. MANURE ANALYSES****Manure**

Sample and source description: Manure

Sample date: 11/18/2022 Material type: Corral solids Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 27.5 %

	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	16,800.00	7,000.00	20,200.00							
DL	100.00	200.00	200.00							

Manure

Sample and source description: Manure

Sample date: 05/03/2023 Material type: Corral solids Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 8.3 %

	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	17,700.00	5,700.00	14,800.00							
DL	100.00	200.00	200.00							

Manure

Sample and source description: Manure

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

Moisture: 19.5 %

	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	25,300.00	6,400.00	20,200.00							
DL	100.00	200.00	200.00							

B. PROCESS WASTEWATER ANALYSES

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

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

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 (μ mhos/cm)	TDS (mg/L)
Value	206.00	128.00			34.20	195.00								4,000.00	2,660
DL	10.00	2.00			0.20	0.50								100.00	10

Lagoon

Sample and source description: Lagoon

Sample date: 02/21/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: 7.30

	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 (μ mhos/cm)	TDS (mg/L)
Value	270.00	132.00	0.00	0.00	49.70	372.00								4,010.00	2,660
DL	10.00	2.00	2.00	2.00	0.20	0.50								100.00	10

Lagoon

Sample and source description: Lagoon

Sample date: 05/03/2023 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 (μ mhos/cm)	TDS (mg/L)
Value	110.00	54.70	0.00	0.00	23.10	166.00								760.00	505
DL	10.00	2.00	2.00	2.00	0.20	0.50								100.00	10

Lagoon

Sample and source description: Lagoon

Sample date: 08/02/2023 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 (μ mhos/cm)	TDS (mg/L)
Value	104.00	82.90	0.00	0.00	28.50	144.00								1,740.00	1,160
DL	10.00	2.00	2.00	2.00	0.20	0.50								100.00	10

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

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

LagoonSample and source description: LagoonSample date: 11/10/2023 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 (μ hos/cm)	TDS (mg/L)
Value	164.00	158.00	0.00	0.00	35.20	207.00								2,840.00	1,890
DL	10.00	2.00	2.00	2.00	0.20	0.50								100.00	10

C. FRESH WATER ANALYSES**Dairy Well****Domestic Well**Sample description: Domestic WellSample date: 11/30/2023 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 (μ hos/cm)	TDS (mg/L)
Value	0.70	0.00	0.70								167.00	
DL	0.50	1.00	0.50								100.00	

Well #10N**Irrigation well**Sample description: Irrigation wellSample date: 11/16/2023 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 (μ hos/cm)	TDS (mg/L)
Value	10.20		10.20	68.10	12.40	70.00	173.00	0.00	57.40	73.00	760.00	470
DL	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1

Well #10S

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

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

Well #10S**Irrigation well**Sample description: Irrigation wellSample date: 11/16/2023 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	23.80		23.80								1,330.00	
DL	1.00		1.00								1.00	

Well #2**Irrigation well**Sample description: Irrigation wellSample date: 11/16/2023 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	14.10		14.10	29.10	0.00	64.00	74.50	4.00	28.60	37.60	458.00	295
DL	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1

Well 9472 1 1/2 Ave**Domestic well**Sample description: Domestic wellSample date: 11/16/2023 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	42.40		42.40	198.00	15.70	99.00	430.00	0.00	69.00	35.40	1,310.00	880
DL	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1

D. SOIL ANALYSES

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

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

No soil analyses entered.

E. PLANT TISSUE ANALYSES

FL-10 - 11/20/2022: Wheat, silage, soft dough

wheat sample

Sample and source description: wheat sample

Sample date: 05/21/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 58.8 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	13,800.00	2,600.00	18,400.00		8.90
DL	500.00	200.00	200.00		0.05

FL-10 - 06/19/2023: Corn, silage

corn sample

Sample and source description: corn sample

Sample date: 10/12/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 64.6 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	13,500.00	2,400.00	12,400.00		5.20
DL	500.00	200.00	200.00		0.05

FL-17 - 04/18/2023: Corn, silage

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

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

FL-17 - 04/18/2023: Corn, silage

corn sample

Sample and source description: corn sample

Sample date: 08/09/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 67.0 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	13,000.00	3,300.00	18,700.00		7.70
DL	500.00	200.00	200.00		0.05

FL-18 - 04/14/2023: Corn, silage

corn sample

Sample and source description: corn sample

Sample date: 08/09/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 66.9 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	13,300.00	3,200.00	14,800.00		6.30
DL	500.00	200.00	200.00		0.05

FL-19 - 11/19/2022: Wheat, silage, soft dough

wheat sample

Sample and source description: wheat sample

Sample date: 05/22/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 63.6 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	14,700.00	3,100.00	21,800.00		9.80
DL	500.00	200.00	200.00		0.05

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

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

FL-19 - 06/19/2023: Corn, silage

corn sample

Sample and source description: corn sample

Sample date: 10/12/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 63.3 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	14,100.00	3,300.00	15,500.00		6.30
DL	500.00	200.00	200.00		0.05

F. SUBSURFACE (TILE) DRAINAGE ANALYSES

No subsurface (tile) drainage analyses entered.

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

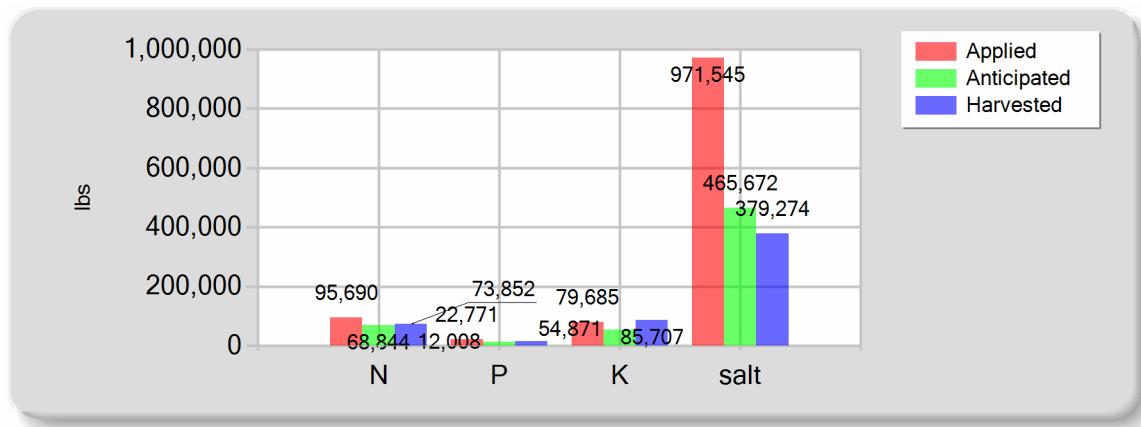
Reporting period 01/01/2023 to 12/31/2023.

NUTRIENT APPLICATIONS, POTENTIAL REMOVAL, AND BALANCE

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

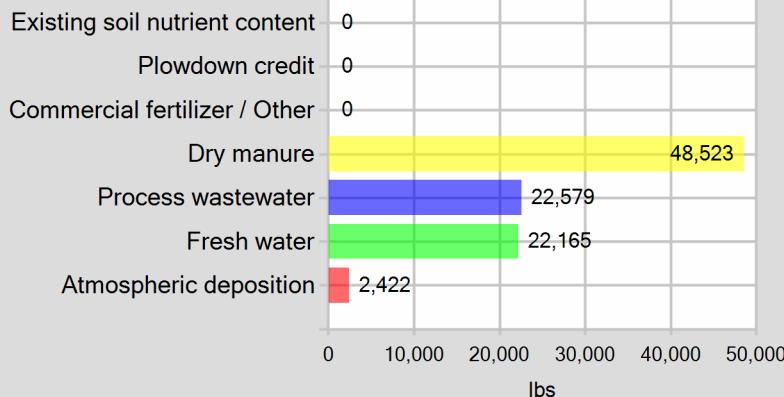
	Total N (lbs)	Total P (lbs)	Total K (lbs)	Total salt (lbs)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	48,523.44	17,760.54	48,833.06	0.00
Process wastewater	22,579.33	5,010.17	30,851.63	198,363.40
Fresh water	22,165.37	0.00	0.00	773,181.44
Atmospheric deposition	2,422.00	0.00	0.00	0.00
Total nutrients applied	95,690.14	22,770.71	79,684.69	971,544.84
Anticipated crop nutrient removal	68,844.00	12,007.80	54,871.20	465,672.00
Actual crop nutrient removal	73,852.22	14,754.75	85,706.80	379,273.60
Nutrient balance	21,837.92	8,015.95	-6,022.11	592,271.25
Applied to removed ratio	1.30	1.54	0.93	2.56

B. POUNDS OF NUTRIENT APPLIED VS. CROP REMOVAL

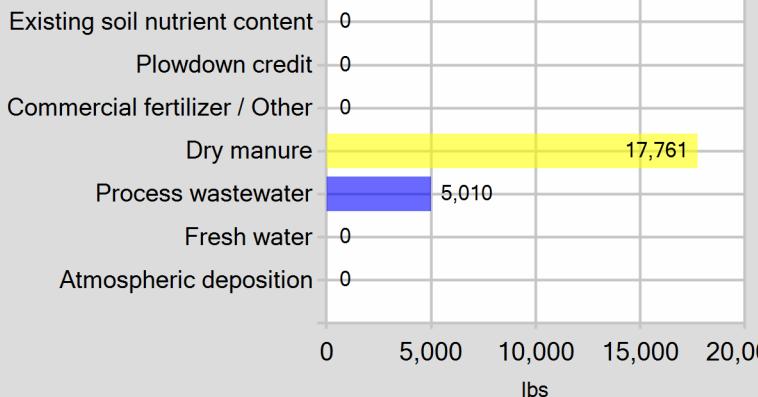


C. POUNDS OF NUTRIENT APPLIED BY MATERIAL TYPE

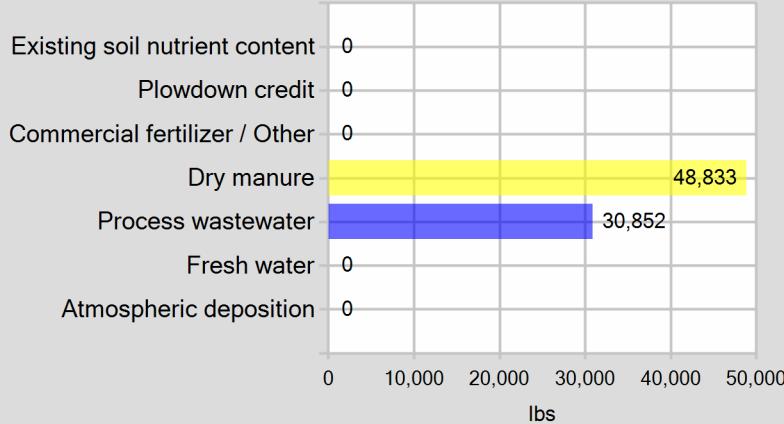
Pounds of nitrogen applied



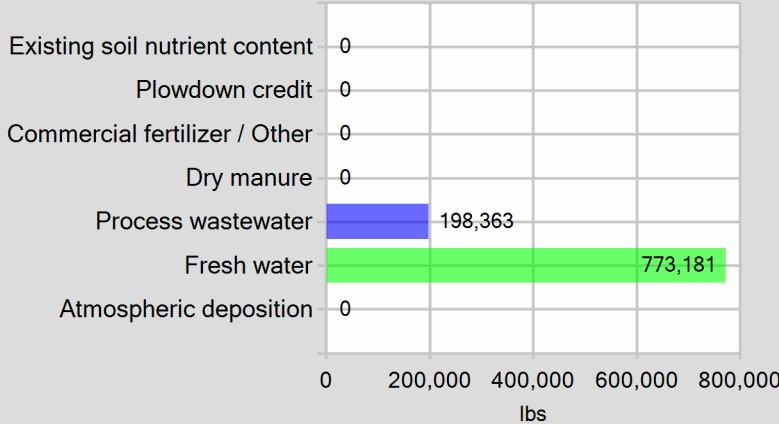
Pounds of phosphorus applied



Pounds of potassium applied



Pounds of salt applied



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

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

No notes entered for this annual report.

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

Harold Dragt

PRINT OR TYPE NAME

6-25-2024

DATE



SIGNATURE OF OPERATOR OF FACILITY

George Lanting

PRINT OR TYPE NAME

6/24/24

DATE

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.

December 13, 2023

Lab No. : VI 2348033
Customer No. : 4019696

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

Laboratory Report

Introduction: This report package contains a total of 3 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 | (1 page) | : 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
Dairy Well	11/30/2023	11/30/2023	VI 2348033-001	AGW

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

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: JRD

Approved By **Kelly A. Dunnahoo, B.S.**  Digitally signed by Kelly A. Dunnahoo, B.S.
Title: Laboratory Director
Date: 2023-12-14

December 13, 2023

Sentry Ag Services

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

Description : Dairy Well
Project : Over The Moon

Lab No. : VI 2348033-001

Customer No. : 4019696

Sampled On : November 30, 2023 at 10:45

Sampled By : Jeremy DeRuiter

Received On : November 30, 2023 at 16:05

Matrix : Ag Water

Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
							Date	Time	Who	Method	Date	Time	Who
Dairy Analysis													
Nitrate Nitrogen	0.7	0.4	mg/L		1		12/01/2023	12:15	lfs	SM 4500-NO3 F	12/01/2023	14:08	lfs
Conductivity	167	1	umhos/cm		1		12/07/2023	07:47	krh	SM 4500-H+B	12/07/2023	12:49	krh

DQF Flags Definition:

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

December 13, 2023
Sentry Ag Service

Lab No. : VI 2348033
 Customer No. : 4019696

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
E. C.	2320B	(VI 2348057-001)	Dup	umhos/cm		0.3%	5	
Nitrate Nitrogen	4500NO3F	12/01/2023:213604LFS (SP 2319794-001)	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	95.1%	80-120	
			MS	mg/L	5.609	92.4%	66-125	
			MSD	mg/L	5.609	92.9%	66-125	
			MSRPD	mg/L		0.3%	≤30.4	

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.
- 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.



Environmental
Analytical Chemists

www.fglinc.com

CHAIN OF CUSTODY
AND ANALYSIS REQUEST DOCUMENT

AGRICULTURAL
Environmental

CLIENT DETAILS
Sons of the Sun
Customer Number: 401000
Address: _____

□ New Customer Customer Number: 401000
Phone: _____ Fax: _____
E-Mail: _____
Project name: Over The Moon

Contact person: _____
Billing Information (if different from above)
Name: _____
Address: _____

Phone: _____ Fax: _____
E-Mail: _____
Contact person: _____

Purchase order/contract/FGL quote number: _____
Pre Log Required: yes _____ Frequency: Other _____
SAMPLE INFORMATION

Sample Number	Location/Description	Date Sampled	Time Sampled
1	Soil - 1	11/30/22	19:45

Received by: _____ Date: _____ Time: _____

Relinquished by: _____ Date: _____ Time: _____

Received by: _____ Date: _____ Time: _____

Relinquished by: _____ Date: _____ Time: _____

Received by: _____ Date: _____ Time: _____

Relinquished by: _____ Date: _____ Time: _____

Received by: _____ Date: _____ Time: _____

Relinquished by: _____ Date: _____ Time: _____

Received by: _____ Date: _____ Time: _____

Relinquished by: _____ Date: _____ Time: _____

Received by: _____ Date: _____ Time: _____

Relinquished by: _____ Date: _____ Time: _____

Received by: _____ Date: _____ Time: _____

Relinquished by: _____ Date: _____ Time: _____

Received by: _____ Date: _____ Time: _____

Relinquished by: _____ Date: _____ Time: _____

Received by: _____ Date: _____ Time: _____

Relinquished by: _____ Date: _____ Time: _____

Received by: _____ Date: _____ Time: _____

SECTION I		SAMPLING	SECTION II	REPORT INFORMATION	SECTION III
Client: Sons of the Sun		Sampler (s): General Detector	Rush Analysis (surcharge will apply): <input type="checkbox"/> 5 Day <input type="checkbox"/> 4 Day <input type="checkbox"/> 3 Day <input type="checkbox"/> 2 Day <input type="checkbox"/> 24 hour		Rush pre-approved by lab: _____
Phone: _____ E-Mail: _____		Time: _____ Shipping Charge: _____	Electronic Data Transfer: <input type="checkbox"/> yes <input type="checkbox"/> no If yes, To: State _____ Client _____ Other _____ Lab number: <u>23490323</u>		
Comp Sampler Set up Date: _____ Time: _____ Mileage: _____					

SECTION IV		ANALYSES REQUESTED				
Number of Containers		Type of Sampling: Composite (C) or Grab (G)				
(V) VOA (MT) Metal Tube		(P) Portable (NP) Non-Portable				
(SW) Surface Water (MW) Monitoring Well		(WW) Wastewater (TW) Travel Blank (AGW) Ag Water				
(S) Soil (SLG) Sludge (SLD) Solid (O) Oil		(B) Bact: (S)ys System (SRC) Source (W) Waste				
(LT) LeafTissue (PET) Petiole Tissue (PRD) Produce		(BAC): Routine (ROUT) Repeat (RPT) Other (OTH)				
(4) H ₂ SO ₄ , (5) HNO ₃ , (6) Na ₂ SO ₄ , (7) Other		Preservative: (1) NaOH + ZnAc, (2) NaOH, (3) HCl (4) H ₂ SO ₄ , (5) HNO ₃ , (6) Na ₂ SO ₄ , (7) Other				
W4						X

SECTION V		CUSTODY	SECTION VI
Relinquished by: _____ Date: 11/30/23 Time: 16:05		Relinquished by: _____ Date: 12/1/23 Time: 11:43	
Received by: _____ Date: 11/30/23 Time: 16:05		Received by: _____ Date: 12/1/23 Time: 11:43	
Relinquished by: _____ Date: 11/30/23 Time: 16:05		Relinquished by: _____ Date: 12/1/23 Time: 11:43	
Received by: _____ Date: 11/30/23 Time: 16:05		Received by: _____ Date: 12/1/23 Time: 11:43	

SECTION VII		Office & Laboratory
Corporate Offices & Laboratory		Office & Laboratory 563 Corporate Street Santa Paula, CA 93060 TEL: (805) 392-2000 FAX: (805) 425-4172
Stockton, CA 95218		563 Stagecoach Road Stockton, CA 95218 TEL: (209) 942-0182 FAX: (209) 942-0423
Chico, CA 95926		563 East Linda Avenue San Luis Obispo, CA 93401 TEL: (805) 783-2940 FAX: (805) 783-2912
Visalia, CA 93291		3442 Empire Drive, Suite D Office & Laboratory 3442 Empire Drive, Suite D San Luis Obispo, CA 93401 TEL: (559) 734-8473 FAX: (559) 734-8435

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): OTC

2. Temp IR Gun ID #: 409

3. Were samples received on ice? Yes No Temps: 11.6°C / / /

Surface water SWTR bact samples: A sample that has a temperature upon receipt of >10°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): AKS

Sample Receipt at SP:

1. Number of ice chests/packages received: 2 Shipping tracking #(s): 600553707 / 15

2. Temp IR Gun ID #: 263

3. Were samples received on ice? Yes No Temps: 2 / 3 / / /

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): CDA

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: _____ Date: _____

Problem:

Resolution:

(Please use the back of this sheet for additional comments or cc

(4019696)
Sentry Ag Service
VI 2348033
iv 12/01/2023 07:25:46

01 2348033

Report of Dairy Well Water Analysis

Lab No.: 23K0978

Sampled By: Cynthia Tiemersma

Requested By: Ben Dragt

Submitted Date: 11/17/23

Reported Date: 12/06/23

Project: 9455 2nd Ave, Hanford

Crop ID:

E-mail:

Copy To:

	Date Sampled	Time Sampled	EC μmhos/cm	EC mmhos/cm	NO ₃ -N mg/L	NH ₄ -N mg/L	Field NH ₄ -N mg/L	Total NH ₄ -N mg/L	TDS mg/L	CO ₃ as CaCO ₃ mg/L	HCO ₃ as CaCO ₃ mg/L	Cl mg/L	SO ₄ mg/L	Ca mg/L	Mg mg/L	Na mg/L	pH at 25°C
1	Well #2 (fld 19)	11/16/23	8:22	458	0.46	14.1	*		295	4	74.5	37.6	28.6	29.4	0.9	64	8.6
2	Well #10 N <i>Boehm</i>	11/16/23	8:44	760	0.76	10.2	*		470	ND	173	73.0	57.4	68.1	12.4	70	7.8
3	9472 1-1/2 ave	11/16/23	8:18	1310	1.31	42.4	*		880	ND	430	35.4	69.0	198	15.7	99	7.8

* = Field NH₄-N not Taken.

ND = None Detected

Approved By:

Becky M. Friedland

Laboratory Director\Technical Manager

ELAP Certification #1595

A2LA Certification #6440.02

Report of Dairy Well Water Analysis

Harold Dragt & Sons Dairy #2
8157 5th Avenue
Hanford CA 93230
00-0015789 08

E-mail:
Copy To:

Lab No.: 23K0978
Sampled By: Cynthia Tiemersma
Requested By: Ben Dragt
Submitted Date: 11/17/23
Reported Date: 12/06/23
Project: 9455 2nd Ave, Hanford
Crop ID:

	Date Sampled	Time Sampled	EC μmhos/cm	EC mmhos/cm	NO ₃ -N mg/L	Nitrogen	
						agricultural use Calcs calculated from nitrate-N	lbs/AcFoot lbs/AcInch
1	Well #2 (fld 19)	11/16/23	8:22	458	0.46	14.1	38.49 3.21
2	Well #10 N	11/16/23	8:44	760	0.76	10.2	27.85 2.32
3	9472 1-1/2 ave	11/16/23	8:18	1310	1.31	42.4	115.75 9.65

Water for Crop Use	Total	Total	Nitrate
Nutrient Management	Salts	Salts	Nitrogen
Low Levels	< 900	< 0.90	< 2.0
Significant Levels	900-2200	0.90-2.2	2.0-10.0
High Levels	2200+	2.2+	10.0+

Sampling abbreviations: H.B. = hose bib, S.P. = stand pipe, Dom. = domestic well, IR = irrigation well, AG = ag well.

Nitrate exceeds Water Quality MCL levels if results are above 10 mg/l nitrate-nitrogen NO₃-N (equivalent to 45 mg/l nitrate, NO₃).

Total Salt results are used to monitor changes of salt in the well aquifers between annual tests.

MCL = Maximum Contaminant Level according to the California Domestic Water Quality and Monitoring Regulations (Title 22)

MDL = Method Detection Limit; RL = Reporting Limit, mg/L = ppm.

SM = Standard Methods for the Examination of Water and Wastewater

EPA = Environmental Protection Agency methods used unless otherwise indicated.

Report of Dairy Well Water Analysis

Harold Dragt & Sons Dairy #2

8157 5th Avenue

Hanford

00-0015789

CA

93230

08

E-mail:

Copy To:

Lab No.: 23K0979

Sampled By: Cynthia Tiemersma

Requested By: Ben Dragt

Submitted Date: 11/17/23

Reported Date: 11/29/23

Project: 9455 2nd Ave, Hanford

Crop ID:

	Date Sampled	Time Sampled	EC μmhos/cm	EC mmhos/cm	NO ₃ -N mg/L	NH ₄ -N mg/L	Field	Total NH ₄ -N mg/L	pH at 25°C
							at 25°C	unit	
1	Submersible Well (fld 10)	11/16/23 8:39	1330	1.33	23.8	*			7.6

* = Field NH₄-N not Taken.

ND = None Detected

Approved By: Scott M. Fricke
Laboratory Director\Technical Manager
ELAP Certification #1595
A2LA Certification #6440.02

Report of Dairy Well Water Analysis

Harold Dragt & Sons Dairy #2
 8157 5th Avenue
 Hanford CA 93230
 00-0015789 08

Lab No.: 23K0979
 Sampled By: Cynthia Tiemersma
 Requested By: Ben Dragt
 Submitted Date: 11/17/23
 Reported Date: 11/29/23
 Project: 9455 2nd Ave, Hanford
 Crop ID:

E-mail:
 Copy To:

	Date Sampled	Time Sampled	EC	EC	NO ₃ -N	Nitrogen agricultural use Calcs calculated from nitrate-N	
			μmhos/cm	mmhos/cm	mg/L	lbs/AcFoot	lbs/AcInch
1	Submersible Well (fld 10)	11/16/23 8:39	1330	1.33	23.8	64.97	5.41

Water for Crop Use Nutrient Management	Total Salts	Total Salts	Nitrate Nitrogen
Low Levels	< 900	< 0.90	< 2.0
Significant Levels	900-2200	0.90-2.2	2.0-10.0
High Levels	2200+	2.2+	10.0+

Sampling abbreviations: H.B. = hose bib, S.P. = stand pipe, Dom. = domestic well, IR = irrigation well, AG = ag well.

Nitrate exceeds Water Quality MCL levels if results are above 10 mg/l nitrate-nitrogen NO₃-N (equivalent to 45 mg/l nitrate, NO₃).

Total Salt results are used to monitor changes of salt in the well aquifers between annual tests.

MCL = Maximum Contaminant Level according to the California Domestic Water Quality and Monitoring Regulations (Title 22)

MDL = Method Detection Limit; RL = Reporting Limit, mg/L = ppm.

SM = Standard Methods for the Examination of Water and Wastewater

EPA = Environmental Protection Agency methods used unless otherwise indicated.