

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:** 4K Dairy Family Partnership

Physical address of dairy:

7976 84 AVE
Number and StreetPixley
CityTulare
County93256
Zip Code

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

Date facility was originally placed in operation: 01/01/2013Regional Water Quality Control Board Basin Plan designation: Tulare Basin

County Assessor Parcel Number(s) for dairy facility:

X313-X110-X006-XXXX**B. OPERATORS**

Souza, Leslie

Operator name: Souza, LeslieTelephone no.: (559) 679-2313

Landline Cellular

P.O. Box 367CorcoranCA93212

Mailing Address Number and Street

City

State

Zip Code

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

Souza, Leslie

Legal owner name: Souza, LeslieTelephone no.: (559) 679-2313

Landline Cellular

P.O. Box 367CorcoranCA93212

Mailing Address Number and Street

City

State

Zip Code

This owner is responsible for paying permit fees.

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	0	271	925	943	245	955
Number under roof	2,598	0	0	0	0	0
Maximum number	2,645	280	933	955	280	970
Average number	2,598	271	925	943	245	955
Avg live weight (lbs)	1,400	1,450	1,000	750		

Predominant milk cow breed: Jersey-Holstein Cross

Average milk production: 72 pounds per cow per day

B. MANURE GENERATED

Total manure excreted by the herd: 94,129.38 tons per reporting period

Total nitrogen from manure: 1,167,341.25 lbs per reporting period

After ammonia losses (30% loss applied): 817,138.88 lbs per reporting period

Total phosphorus from manure: 189,839.51 lbs per reporting period

Total potassium from manure: 500,954.74 lbs per reporting period

Total salt from manure: 1,285,584.75 lbs per reporting period

C. PROCESS WASTEWATER GENERATED

Process wastewater generated: 95,154,618 gallons

Total nitrogen generated: 218,154.52 lbs

Total phosphorus generated: 45,552.67 lbs

Total potassium generated: 294,800.98 lbs

Total salt generated: 2,133,457.77 lbs

95,154,618 gallons applied
+ 0 gallons exported
- 0 gallons imported
= 95,154,618 gallons generated

D. FRESH WATER SOURCES

Source Description	Type
Pixley I.D.	Surface water
W1	Ground water
W15	Ground water
W1A	Ground water
W2	Ground water

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

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

Source Description	Type
W20	Ground water
W3	Ground water
W4	Ground water
W5	Ground water
W7	Ground water
W8	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**

Date	Material type	Quantity	Reporting basis	Moisture (%)	Density (lbs/cu ft)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
12/01/2023	Corral solids	5,910.00 <i>ton</i>	Dry-weight	8.5		18,500.00	7,400.00	19,200.00		0.00

No liquid nutrient exports entered.

Material type	Total N (lbs)	Total P (lbs)	Total K (lbs)	Total salt (lbs)
Dry manure	200,083.05	80,033.22	207,653.76	0.00
Process wastewater	0.00	0.00	0.00	0.00
Total exports for all materials	200,083.05	80,033.22	207,653.76	0.00

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
1	77	77	2	process wastewater	X313-X160-X002-XXXX
2	74	74	2	process wastewater	X313-X160-X002-XXXX
3	47	47	1	process wastewater	X313-X110-X005-XXXX X313-X110-X006-XXXX
4	22	22	0	none	X313-X110-X006-XXXX
5	79	79	2	process wastewater	X313-X110-X005-XXXX X313-X110-X006-XXXX
6	79	79	2	process wastewater	X313-X110-X006-XXXX
7	77	77	2	process wastewater	X313-X110-X003-XXXX X313-X110-X004-XXXX
8	77	77	2	process wastewater	X313-X110-X003-XXXX
Totals for areas that were used for application	510	510	13		
Totals for areas that were not used for application	22	22	0		
Land application area totals	532	532	13		

B. CROPS AND HARVESTS

1

Field name: 1

11/15/2022: Wheat, silage, soft dough

Crop: Wheat, silage, soft dough Acres planted: 77 Plant date: 11/15/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/11/2023	1,462.00 ton	Dry-weight		69.1	15,800.00	3,500.00	18,900.00		8.40

	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	18.99	185.40	41.07	221.77	985.65

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

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

1

06/05/2023: Corn, silage

Crop: Corn, silage Acres planted: 77 Plant date: 06/05/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
10/05/2023	2,160.00 ton	Dry-weight		67.0	11,800.00	2,300.00	12,900.00		4.99

	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	28.05	218.47	42.58	238.83	923.86

2

Field name: 2

11/14/2022: Wheat, silage, soft dough

Crop: Wheat, silage, soft dough Acres planted: 74 Plant date: 11/14/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/10/2023	1,366.00 ton	Dry-weight		62.2	15,500.00	3,100.00	14,800.00		9.27

	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	18.46	216.31	43.26	206.54	1,293.66

06/10/2023: Corn, silage

Crop: Corn, silage Acres planted: 74 Plant date: 06/10/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
10/05/2023	2,080.00 ton	Dry-weight		66.0	11,800.00	2,300.00	12,700.00		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	28.11	225.54	43.96	242.74	1,062.71

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

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

3

Field name: 3

06/01/2022: Alfalfa, hay

Crop: Alfalfa, hay Acres planted: 47 Plant date: 06/01/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
11/14/2023	400.00 ton	Dry-weight		8.3	32,000.00	2,900.00	22,900.00		10.80

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	8.00	480.00	43.20	336.00	1,600.00
Total actual harvest content	8.51	499.47	45.26	357.43	1,685.72

4

Field name: 4

11/10/2016: Pasture

Crop: Pasture Acres planted: 22 Plant date: 11/10/2016

No harvests entered for this crop.

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	8.00	240.00	40.00	96.00	800.00
Total actual harvest content	0.00	0.00	0.00	0.00	0.00

5

Field name: 5

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

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

5

11/16/2022: Wheat, silage, soft dough

Crop: Wheat, silage, soft doughAcres planted: 79 Plant date: 11/16/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/08/2023	1,445.00 ton	Dry-weight		70.3	16,900.00	3,700.00	19,100.00		8.53

	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	18.29	183.62	40.20	207.52	926.78

06/05/2023: Corn, silage

Crop: Corn, silageAcres planted: 79 Plant date: 06/05/2023

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	2,250.00 ton	Dry-weight		69.3	11,400.00	2,200.00	15,700.00		6.46

	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	28.48	199.36	38.47	274.55	1,129.68

6

Field name: 6

11/13/2022: Wheat, silage, soft dough

Crop: Wheat, silage, soft doughAcres planted: 79 Plant date: 11/13/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/12/2023	1,451.00 ton	Dry-weight		68.2	16,500.00	3,400.00	19,300.00		9.41

	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	18.37	192.74	39.72	225.45	1,099.23

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

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

6

06/10/2023: Corn, silage

Crop: Corn, silage Acres planted: 79 Plant date: 06/10/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
10/04/2023	2,240.00 ton	Dry-weight		67.6	12,200.00	2,600.00	15,700.00		6.63

	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	28.35	224.16	47.77	288.47	1,218.17

7

Field name: 7

11/22/2022: Wheat, silage, soft dough

Crop: Wheat, silage, soft dough Acres planted: 77 Plant date: 11/22/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/12/2023	1,488.00 ton	Dry-weight		68.2	15,800.00	3,700.00	19,900.00		8.46

	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	19.32	194.19	45.47	244.58	1,039.78

06/15/2023: Corn, silage

Crop: Corn, silage Acres planted: 77 Plant date: 06/15/2023

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	2,225.00 ton	Dry-weight		69.9	11,900.00	2,200.00	14,900.00		5.93

	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	28.90	207.01	38.27	259.19	1,031.55

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

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

8

Field name: 8

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

Crop: Wheat, silage, soft dough Acres planted: 77 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 (%)
05/07/2023	1,495.00 <i>ton</i>	Dry-weight		68.0	16,500.00	3,800.00	18,900.00		8.41

	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	19.42	205.03	47.22	234.85	1,045.02

06/05/2023: Corn, silage

Crop: Corn, silage Acres planted: 77 Plant date: 06/05/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
10/04/2023	2,190.00 <i>ton</i>	Dry-weight		70.3	11,800.00	2,200.00	14,100.00		5.88

	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	28.44	199.35	37.17	238.21	993.38

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

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

NUTRIENT BUDGET

A. LAND APPLICATIONS

1 - 11/15/2022: Wheat, silage, soft dough

Field name: 1

Crop: Wheat, silage, soft dough

Plant date: 11/15/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
10/27/2022	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	63.50	14.23	111.51	1,290.07	2,306,895.00 <i>gal</i>
W3	Ground water	5.52	0.00	0.00	265.79	9,432,500.00 <i>gal</i>
Application event totals		69.02	14.23	111.51	1,555.86	
01/14/2023	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	70.92	14.51	129.27	784.12	1,869,550.00 <i>gal</i>
W3	Ground water	5.45	0.00	0.00	262.24	9,306,650.00 <i>gal</i>
Application event totals		76.36	14.51	129.27	1,046.36	
03/20/2023	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
Lagoon	Process wastewater	79.30	16.22	144.56	876.86	2,090,650.00 <i>gal</i>
W3	Ground water	5.89	0.00	0.00	283.61	10,065,000.00 <i>gal</i>
Application event totals		85.19	16.22	144.56	1,160.47	

1 - 06/05/2023: Corn, silage

Field name: 1

Crop: Corn, silage

Plant date: 06/05/2023

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.

1 - 06/05/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
05/18/2023	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	73.05	14.40	135.80	393.64	3,965,200.00 <i>gal</i>
Pixley I.D.	Surface water	0.00	0.00	0.00	24.77	11,426,500.00 <i>gal</i>
Application event totals		73.05	14.40	135.80	418.40	
06/25/2023	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
Pixley I.D.	Surface water	0.00	0.00	0.00	26.45	12,200,700.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	26.45	
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	100.50	21.62	59.40	628.53	3,186,520.00 <i>gal</i>
Pixley I.D.	Surface water	0.00	0.00	0.00	21.03	9,700,000.00 <i>gal</i>
Application event totals		100.50	21.62	59.40	649.55	
07/18/2023	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
W3	Ground water	6.43	0.00	0.00	309.58	10,986,520.00 <i>gal</i>
Application event totals		6.43	0.00	0.00	309.58	
08/03/2023	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	93.47	20.11	55.24	584.57	2,963,650.00 <i>gal</i>
W3	Ground water	5.33	0.00	0.00	256.44	9,100,650.00 <i>gal</i>
Application event totals		98.79	20.11	55.24	841.00	

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

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

1 - 06/05/2023: Corn, silage

Application date	Application method		Precipitation 24 hours prior		Precipitation during application		Precipitation 24 hours following	
08/19/2023	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	
	W3	Ground water	6.29	0.00	0.00	302.81	10,746,250.00 <i>gal</i>	
	Application event totals		6.29	0.00	0.00	302.81		
09/08/2023	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	
	W3	Ground water	7.24	0.00	0.00	348.42	12,365,000.00 <i>gal</i>	
	Application event totals		7.24	0.00	0.00	348.42		

2 - 11/14/2022: Wheat, silage, soft dough

Field name: 2

Crop: Wheat, silage, soft dough

Plant date: 11/14/2022

Application date	Application method	Precipitation 24 hours prior		Precipitation during application			Precipitation 24 hours following	
10/25/2022	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	76.95	17.24	135.12	1,563.26	2,686,500.00 <i>gal</i>	
W3		Ground water	5.95	0.00	0.00	286.32	9,765,200.00 <i>gal</i>	
Application event totals			82.90	17.24	135.12	1,849.58		
01/24/2023	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	93.77	19.18	170.92	1,036.78	2,375,650.00 <i>gal</i>	
W3		Ground water	5.58	0.00	0.00	268.73	9,165,200.00 <i>gal</i>	
Application event totals			99.35	19.18	170.92	1,305.51		

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

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

2 - 11/14/2022: Wheat, silage, soft dough

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
03/24/2023	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	88.27	18.06	160.91	976.06	2,236,500.00 <i>gal</i>
Pixley I.D.	Surface water	0.00	0.00	0.00	19.64	8,706,580.00 <i>gal</i>
Application event totals		88.27	18.06	160.91	995.69	

2 - 06/10/2023: Corn, silage

Field name: 2

Crop: Corn, silage

Plant date: 06/10/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
05/24/2023	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	70.91	13.97	131.81	382.08	3,698,800.00 <i>gal</i>
Pixley I.D.	Surface water	0.00	0.00	0.00	24.26	10,756,200.00 <i>gal</i>
Application event totals		70.91	13.97	131.81	406.34	
06/30/2023	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
Pixley I.D.	Surface water	0.00	0.00	0.00	26.52	11,759,500.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	26.52	
07/12/2023	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	110.88	23.85	65.54	693.47	3,378,788.00 <i>gal</i>
Pixley I.D.	Surface water	0.00	0.00	0.00	21.90	9,709,850.00 <i>gal</i>
Application event totals		110.88	23.85	65.54	715.37	

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

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

2 - 06/10/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
07/25/2023	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
Lagoon	Process wastewater	85.62	18.42	50.60	535.47	2,608,950.00 <i>gal</i>
Pixley I.D.	Surface water	0.00	0.00	0.00	20.54	9,106,580.00 <i>gal</i>
Application event totals		85.62	18.42	50.60	556.00	
08/08/2023	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
W3	Ground water	7.00	0.00	0.00	337.14	11,498,665.00 <i>gal</i>
Application event totals		7.00	0.00	0.00	337.14	
08/24/2023	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
W3	Ground water	6.86	0.00	0.00	330.40	11,268,500.00 <i>gal</i>
Application event totals		6.86	0.00	0.00	330.40	
09/10/2023	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
W3	Ground water	6.55	0.00	0.00	315.48	10,759,850.00 <i>gal</i>
Application event totals		6.55	0.00	0.00	315.48	

3 - 06/01/2022: Alfalfa, hay

Field name: 3

Crop: Alfalfa, hay

Plant date: 06/01/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
04/24/2023	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
Pixley I.D.	Surface water	0.00	0.00	0.00	23.10	6,504,560.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	23.10	

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

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

3 - 06/01/2022: Alfalfa, hay

Application date	Application method	Precipitation 24 hours prior		Precipitation during application		Precipitation 24 hours following	
05/23/2023	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
Pixley I.D.		Surface water	0.00	0.00	0.00	24.86	7,000,000.00 <i>gal</i>
Application event totals			0.00	0.00	0.00	24.86	
06/20/2023	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
Pixley I.D.		Surface water	0.00	0.00	0.00	26.10	7,350,000.00 <i>gal</i>
Application event totals			0.00	0.00	0.00	26.10	
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
W3		Ground water	7.00	0.00	0.00	337.00	7,300,000.00 <i>gal</i>
Application event totals			7.00	0.00	0.00	337.00	
08/17/2023	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
W3		Ground water	7.05	0.00	0.00	339.30	7,350,000.00 <i>gal</i>
Application event totals			7.05	0.00	0.00	339.30	
09/17/2023	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
W3		Ground water	6.33	0.00	0.00	304.68	6,600,000.00 <i>gal</i>
Application event totals			6.33	0.00	0.00	304.68	
10/20/2023	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
Lagoon		Process wastewater	81.98	12.15	101.15	841.34	1,350,000.00 <i>gal</i>
W3		Ground water	5.85	0.00	0.00	281.62	6,100,500.00 <i>gal</i>
Application event totals			87.83	12.15	101.15	1,122.96	

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

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

4 - 11/10/2016: Pasture

Field name: 4

Crop: Pasture

Plant date: 11/10/2016

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
01/01/2023	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
Pixley I.D.	Surface water	0.00	0.00	0.00	113.80	15,000,000.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	113.80	

5 - 11/16/2022: Wheat, silage, soft dough

Field name: 5

Crop: Wheat, silage, soft dough

Plant date: 11/16/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
10/28/2022	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	53.92	12.08	94.69	1,095.47	2,009,800.00 <i>gal</i>
W5	Ground water	13.68	0.00	0.00	581.75	10,198,650.00 <i>gal</i>
Application event totals		67.61	12.08	94.69	1,677.22	
01/28/2023	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	89.10	18.23	162.41	985.15	2,409,860.00 <i>gal</i>
W5	Ground water	12.99	0.00	0.00	552.22	9,680,900.00 <i>gal</i>
Application event totals		102.08	18.23	162.41	1,537.36	
03/30/2023	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	70.49	14.42	128.49	779.41	1,906,580.00 <i>gal</i>
Pixley I.D.	Surface water	0.00	0.00	0.00	20.93	9,906,500.00 <i>gal</i>
Application event totals		70.49	14.42	128.49	800.34	

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

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

5 - 06/05/2023: Corn, silage

Field name: 5

Crop: Corn, silage

Plant date: 06/05/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
05/23/2023	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	59.28	11.68	110.19	319.40	3,301,000.00 <i>gal</i>
Pixley I.D.	Surface water	0.00	0.00	0.00	2.32	1,100,000.00 <i>gal</i>
Application event totals		59.28	11.68	110.19	321.73	
07/08/2023	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
Pixley I.D.	Surface water	0.00	0.00	0.00	24.82	11,750,000.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	24.82	
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
Lagoon	Process wastewater	86.03	18.51	50.85	538.05	2,798,650.00 <i>gal</i>
Pixley I.D.	Surface water	0.00	0.00	0.00	24.30	11,500,000.00 <i>gal</i>
Application event totals		86.03	18.51	50.85	562.34	
08/06/2023	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
Pixley I.D.	Surface water	0.00	0.00	0.00	24.19	11,450,000.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	24.19	
08/24/2023	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	75.31	16.20	44.51	471.02	2,450,000.00 <i>gal</i>
W5	Ground water	13.28	0.00	0.00	564.71	9,900,000.00 <i>gal</i>
Application event totals		88.59	16.20	44.51	1,035.73	

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

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

5 - 06/05/2023: Corn, silage

Application date	Application method		Precipitation 24 hours prior	Precipitation during application			Precipitation 24 hours following	
09/15/2023	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	
W5		Ground water	15.28	0.00	0.00	649.73	11,390,500.00 <i>gal</i>	
Application event totals			15.28	0.00	0.00	649.73		
09/27/2023	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	
W5		Ground water	15.03	0.00	0.00	638.90	11,200,500.00 <i>gal</i>	
Application event totals			15.03	0.00	0.00	638.90		

6 - 11/13/2022: Wheat, silage, soft dough

Field name: 6

Crop: Wheat, silage, soft dough

Plant date: 11/13/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
10/23/2022	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	69.94	15.67	122.80	1,420.76	2,606,580.00 <i>gal</i>
W5	Ground water	12.89	0.00	0.00	547.97	9,606,500.00 <i>gal</i>
Application event totals		82.82	15.67	122.80	1,968.73	
01/23/2023	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
Lagoon	Process wastewater	77.90	15.94	141.99	861.30	2,106,895.00 <i>gal</i>
W5	Ground water	13.96	0.00	0.00	593.74	10,408,800.00 <i>gal</i>
Application event totals		91.86	15.94	141.99	1,455.03	

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

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

6 - 11/13/2022: Wheat, silage, soft dough

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
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	69.13	14.14	126.02	764.41	1,869,900.00 <i>gal</i>
W5	Ground water	12.49	0.00	0.00	530.86	9,306,500.00 <i>gal</i>
Application event totals		81.62	14.14	126.02	1,295.27	

6 - 06/10/2023: Corn, silage

Field name: 6

Crop: Corn, silage

Plant date: 06/10/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
05/22/2023	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	68.06	13.41	126.50	366.70	3,789,800.00 <i>gal</i>
Pixley I.D.	Surface water	0.00	0.00	0.00	23.03	10,899,650.00 <i>gal</i>
Application event totals		68.06	13.41	126.50	389.73	
06/30/2023	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
Pixley I.D.	Surface water	0.00	0.00	0.00	23.89	11,306,950.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	23.89	
07/12/2023	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
Pixley I.D.	Surface water	0.00	0.00	0.00	22.83	10,806,500.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	22.83	

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

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

6 - 06/10/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
07/25/2023	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
Lagoon	Process wastewater	97.03	20.87	57.35	606.84	3,156,500.00 <i>gal</i>
Pixley I.D.	Surface water	0.00	0.00	0.00	23.44	11,095,650.00 <i>gal</i>
Application event totals		97.03	20.87	57.35	630.28	
08/08/2023	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	89.08	19.16	52.65	557.15	2,898,000.00 <i>gal</i>
Pixley I.D.	Surface water	0.00	0.00	0.00	23.89	11,306,500.00 <i>gal</i>
Application event totals		89.08	19.16	52.65	581.03	
08/22/2023	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
W5	Ground water	15.84	0.00	0.00	673.46	11,806,500.00 <i>gal</i>
Application event totals		15.84	0.00	0.00	673.46	
09/06/2023	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
W5	Ground water	15.57	0.00	0.00	662.20	11,608,950.00 <i>gal</i>
Application event totals		15.57	0.00	0.00	662.20	

7 - 11/22/2022: Wheat, silage, soft dough

Field name: 7

Crop: Wheat, silage, soft dough

Plant date: 11/22/2022

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.

7 - 11/22/2022: Wheat, silage, soft dough

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
11/05/2022	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	67.88	15.21	119.19	1,378.93	2,465,800.00 <i>gal</i>
W5	Ground water	13.09	0.00	0.00	556.48	9,508,660.00 <i>gal</i>
Application event totals		80.97	15.21	119.19	1,935.41	
01/30/2023	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	75.35	15.41	137.36	833.17	1,986,500.00 <i>gal</i>
W5	Ground water	12.95	0.00	0.00	550.52	9,406,860.00 <i>gal</i>
Application event totals		88.30	15.41	137.36	1,383.69	
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	72.33	14.80	131.85	799.78	1,906,880.00 <i>gal</i>
W5	Ground water	12.53	0.00	0.00	532.94	9,106,500.00 <i>gal</i>
Application event totals		84.87	14.80	131.85	1,332.72	

7 - 06/15/2023: Corn, silage

Field name: 7

Crop: Corn, silage

Plant date: 06/15/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
06/01/2023	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	60.96	12.01	113.32	328.47	3,308,800.00 <i>gal</i>
Pixley I.D.	Surface water	0.00	0.00	0.00	21.59	9,961,560.00 <i>gal</i>
Application event totals		60.96	12.01	113.32	350.07	

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

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

7 - 06/15/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
07/05/2023	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
Pixley I.D.	Surface water	0.00	0.00	0.00	25.50	11,766,000.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	25.50	
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
Pixley I.D.	Surface water	0.00	0.00	0.00	24.64	11,369,900.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	24.64	
07/30/2023	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	82.27	17.70	48.62	514.51	2,608,500.00 <i>gal</i>
W5	Ground water	15.15	0.00	0.00	644.17	11,006,995.00 <i>gal</i>
Application event totals		97.42	17.70	48.62	1,158.68	
08/13/2023	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	72.56	15.61	42.89	453.82	2,300,800.00 <i>gal</i>
W5	Ground water	14.55	0.00	0.00	618.59	10,569,890.00 <i>gal</i>
Application event totals		87.11	15.61	42.89	1,072.41	
08/27/2023	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
W5	Ground water	15.70	0.00	0.00	667.66	11,408,510.00 <i>gal</i>
Application event totals		15.70	0.00	0.00	667.66	
09/12/2023	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
W5	Ground water	15.90	0.00	0.00	676.08	11,552,300.00 <i>gal</i>
Application event totals		15.90	0.00	0.00	676.08	

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

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

8 - 11/20/2022: Wheat, silage, soft dough

Field name: 8

Crop: Wheat, silage, soft dough

Plant date: 11/20/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
11/01/2022	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	69.00	15.46	121.15	1,401.69	2,506,500.00 <i>gal</i>
W5	Ground water	12.26	0.00	0.00	521.24	8,906,600.00 <i>gal</i>
Application event totals		81.26	15.46	121.15	1,922.94	
01/28/2023	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	78.33	16.02	142.79	866.12	2,065,060.00 <i>gal</i>
W5	Ground water	13.75	0.00	0.00	584.62	9,989,562.00 <i>gal</i>
Application event totals		92.08	16.02	142.79	1,450.75	
03/29/2023	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	74.38	15.22	135.58	822.39	1,960,800.00 <i>gal</i>
W5	Ground water	13.50	0.00	0.00	573.91	9,806,500.00 <i>gal</i>
Application event totals		87.87	15.22	135.58	1,396.30	

8 - 06/05/2023: Corn, silage

Field name: 8

Crop: Corn, silage

Plant date: 06/05/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
05/19/2023	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	60.93	12.01	113.25	328.28	3,306,880.00 <i>gal</i>
Pixley I.D.	Surface water	0.00	0.00	0.00	21.47	9,906,804.00 <i>gal</i>
Application event totals		60.93	12.01	113.25	349.76	

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

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

8 - 06/05/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
06/24/2023	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
Pixley I.D.	Surface water	0.00	0.00	0.00	22.99	10,607,310.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	22.99	
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	85.46	18.38	50.51	534.52	2,709,900.00 <i>gal</i>
Pixley I.D.	Surface water	0.00	0.00	0.00	22.11	10,198,950.00 <i>gal</i>
Application event totals		85.46	18.38	50.51	556.62	
07/18/2023	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
Pixley I.D.	Surface water	0.00	0.00	0.00	23.63	10,899,890.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	23.63	
08/02/2023	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	68.30	13.62	37.41	395.87	2,006,980.00 <i>gal</i>
Pixley I.D.	Surface water	0.00	0.00	0.00	22.77	10,506,950.00 <i>gal</i>
Application event totals		68.30	13.62	37.41	418.64	
08/15/2023	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
W5	Ground water	14.04	0.00	0.00	596.87	10,198,900.00 <i>gal</i>
Application event totals		14.04	0.00	0.00	596.87	
08/28/2023	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
W5	Ground water	12.95	0.00	0.00	550.63	9,408,650.00 <i>gal</i>
Application event totals		12.95	0.00	0.00	550.63	

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

8 - 06/05/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
09/13/2023	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
W5	Ground water	12.67	0.00	0.00	538.91	9,208,500.00 <i>gal</i>
Application event totals		12.67	0.00	0.00	538.91	

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

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

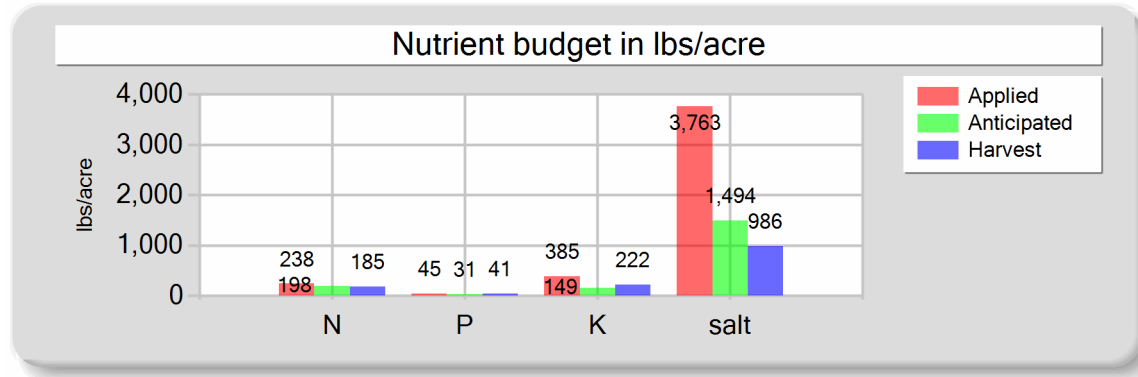
B. NUTRIENT BUDGET

1 - 11/15/2022: Wheat, silage, soft dough

Field name: 1

Crop: Wheat, silage, soft dough

Plant date: 11/15/2022



	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	28,804,150.00 gallons
Plowdown credit	0.00	0.00	0.00	0.00	1,060.76 acre-inches
Commercial fertilizer / Other	0.00	0.00	0.00	0.00	13.78 inches/acre
Dry manure	0.00	0.00	0.00	0.00	
Process wastewater	213.72	44.96	385.33	2,951.05	Process wastewater applied
Fresh water	16.86	0.00	0.00	811.64	6,267,095.00 gallons
Atmospheric deposition	7.00	0.00	0.00	0.00	230.80 acre-inches
Total nutrients applied	237.58	44.96	385.33	3,762.69	3.00 inches/acre
Anticipated crop nutrient removal	198.00	30.60	149.40	1,494.00	
Actual crop nutrient removal	185.40	41.07	221.77	985.65	Total harvests for the crop
Nutrient balance	52.18	3.89	163.56	2,777.03	1 harvests
Applied to removed ratio	1.28	1.09	1.74	3.82	

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

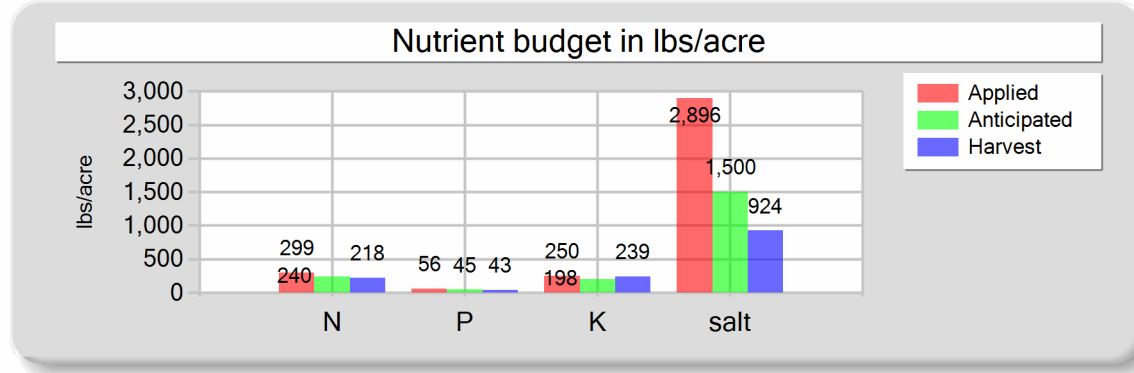
Reporting period 01/01/2023 to 12/31/2023.

1 - 06/05/2023: Corn, silage

Field name: 1

Crop: Corn, silage

Plant date: 06/05/2023



	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	267.02	56.12	250.44	1,606.73
Fresh water	25.28	0.00	0.00	1,289.48
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	299.30	56.12	250.44	2,896.21
Anticipated crop nutrient removal	240.00	45.00	198.00	1,500.00
Actual crop nutrient removal	218.47	42.58	238.83	923.86
Nutrient balance	80.83	13.54	11.61	1,972.35
Applied to removed ratio	1.37	1.32	1.05	3.13

Fresh water applied
76,525,620.00 gallons
2,818.18 acre-inches
36.60 inches/acre

Process wastewater applied
10,115,370.00 gallons
372.51 acre-inches
4.84 inches/acre

Total harvests for the crop
1 harvests

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

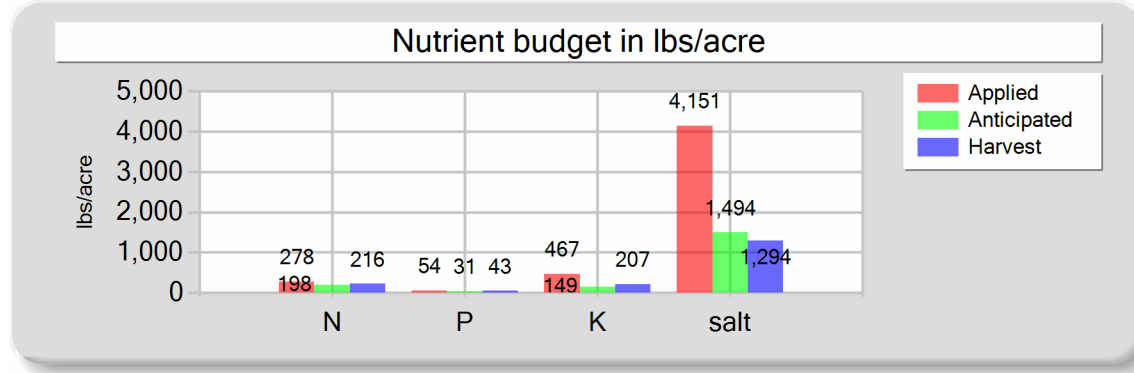
Reporting period 01/01/2023 to 12/31/2023.

2 - 11/14/2022: Wheat, silage, soft dough

Field name: 2

Crop: Wheat, silage, soft dough

Plant date: 11/14/2022



	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
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	258.99	54.48	466.95	3,576.10
Fresh water	11.53	0.00	0.00	574.68
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	277.52	54.48	466.95	4,150.78
Anticipated crop nutrient removal	198.00	30.60	149.40	1,494.00
Actual crop nutrient removal	216.31	43.26	206.54	1,293.66
Nutrient balance	61.21	11.22	260.41	2,857.12
Applied to removed ratio	1.28	1.26	2.26	3.21

Fresh water applied
27,636,980.00 <i>gallons</i>
1,017.78 <i>acre-inches</i>
13.75 <i>inches/acre</i>

Process wastewater applied
7,298,650.00 <i>gallons</i>
268.78 <i>acre-inches</i>
3.63 <i>inches/acre</i>

Total harvests for the crop
1 <i>harvests</i>

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

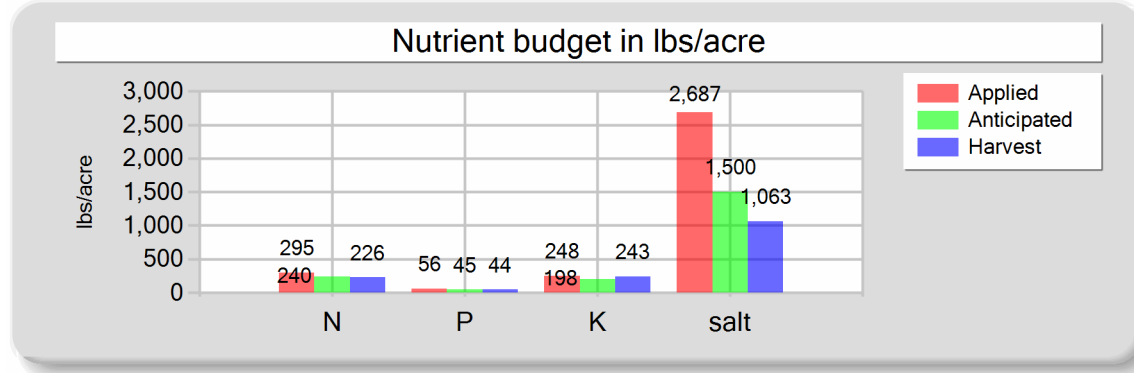
Reporting period 01/01/2023 to 12/31/2023.

2 - 06/10/2023: Corn, silage

Field name: 2

Crop: Corn, silage

Plant date: 06/10/2023



	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	267.40	56.24	247.95	1,611.01
Fresh water	20.42	0.00	0.00	1,076.24
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	294.82	56.24	247.95	2,687.25
Anticipated crop nutrient removal	240.00	45.00	198.00	1,500.00
Actual crop nutrient removal	225.54	43.96	242.74	1,062.71
Nutrient balance	69.28	12.28	5.21	1,624.54
Applied to removed ratio	1.31	1.28	1.02	2.53

Fresh water applied
74,859,145.00 <i>gallons</i>
2,756.81 <i>acre-inches</i>
37.25 <i>inches/acre</i>

Process wastewater applied
9,686,538.00 <i>gallons</i>
356.72 <i>acre-inches</i>
4.82 <i>inches/acre</i>

Total harvests for the crop
1 <i>harvests</i>

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

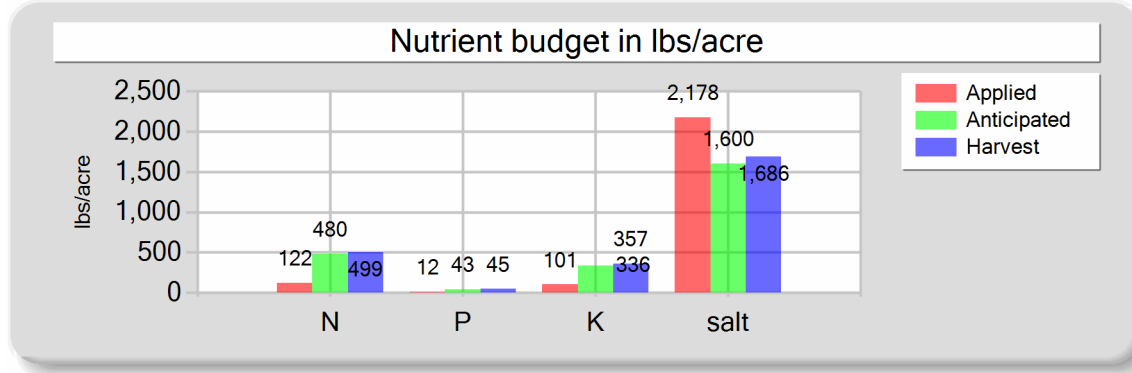
Reporting period 01/01/2023 to 12/31/2023.

3 - 06/01/2022: Alfalfa, hay

Field name: 3

Crop: Alfalfa, hay

Plant date: 06/01/2022



	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
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	81.98	12.15	101.15	841.34
Fresh water	26.22	0.00	0.00	1,336.66
Atmospheric deposition	14.00	0.00	0.00	0.00
Total nutrients applied	122.20	12.15	101.15	2,178.00
Anticipated crop nutrient removal	480.00	43.20	336.00	1,600.00
Actual crop nutrient removal	499.47	45.26	357.43	1,685.72
Nutrient balance	-377.27	-33.11	-256.28	492.28
Applied to removed ratio	0.24	0.27	0.28	1.29

Fresh water applied
48,205,060.00 gallons
1,775.23 acre-inches
37.77 inches/acre

Process wastewater applied
1,350,000.00 gallons
49.72 acre-inches
1.06 inches/acre

Total harvests for the crop
1 harvests

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

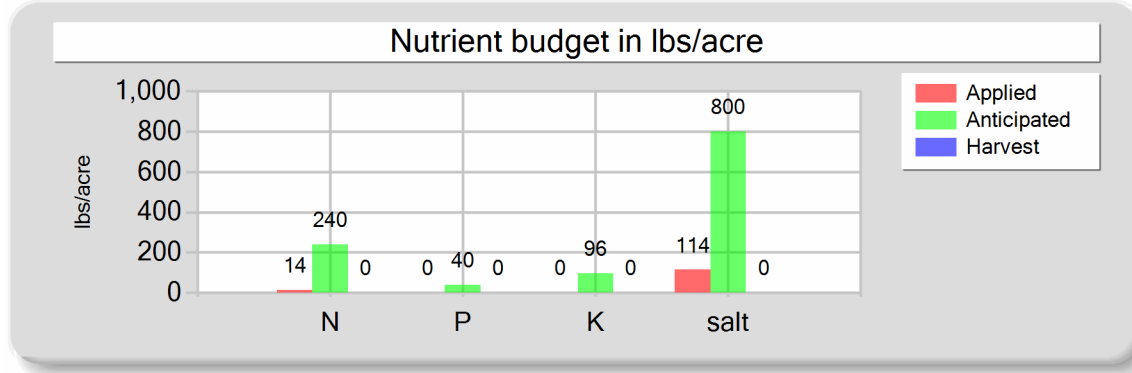
Reporting period 01/01/2023 to 12/31/2023.

4 - 11/10/2016: Pasture

Field name: 4

Crop: Pasture

Plant date: 11/10/2016



	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	15,000,000.00 <i>gallons</i>
Plowdown credit	0.00	0.00	0.00	0.00	552.40 <i>acre-inches</i>
Commercial fertilizer / Other	0.00	0.00	0.00	0.00	25.11 <i>inches/acre</i>
Dry manure	0.00	0.00	0.00	0.00	
Process wastewater	0.00	0.00	0.00	0.00	
Fresh water	0.00	0.00	0.00	113.80	
Atmospheric deposition	14.00	0.00	0.00	0.00	
Total nutrients applied	14.00	0.00	0.00	113.80	
Anticipated crop nutrient removal	240.00	40.00	96.00	800.00	
Actual crop nutrient removal	0.00	0.00	0.00	0.00	
Nutrient balance	14.00	0.00	0.00	113.80	
Applied to removed ratio	0.00	0.00	0.00	0.00	
					Process wastewater applied
					0.00 <i>gallons</i>
					0.00 <i>acre-inches</i>
					0.00 <i>inches/acre</i>
					Total harvests for the crop
					1 <i>harvests</i>

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

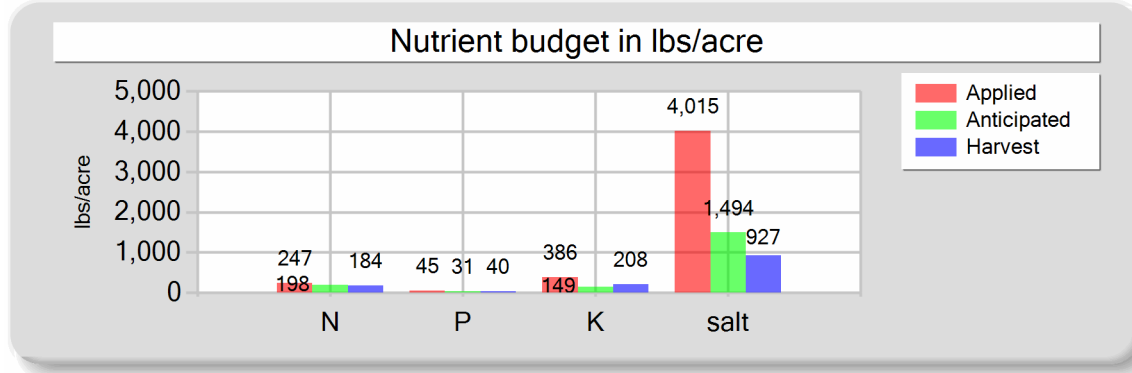
Reporting period 01/01/2023 to 12/31/2023.

5 - 11/16/2022: Wheat, silage, soft dough

Field name: 5

Crop: Wheat, silage, soft dough

Plant date: 11/16/2022



	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
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	213.51	44.73	385.59	2,860.03
Fresh water	26.67	0.00	0.00	1,154.89
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	247.18	44.73	385.59	4,014.93
Anticipated crop nutrient removal	198.00	30.60	149.40	1,494.00
Actual crop nutrient removal	183.62	40.20	207.52	926.78
Nutrient balance	63.56	4.53	178.07	3,088.15
Applied to removed ratio	1.35	1.11	1.86	4.33

Fresh water applied
29,786,050.00 gallons
1,096.92 acre-inches
13.89 inches/acre

Process wastewater applied
6,326,240.00 gallons
232.97 acre-inches
2.95 inches/acre

Total harvests for the crop
1 harvests

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

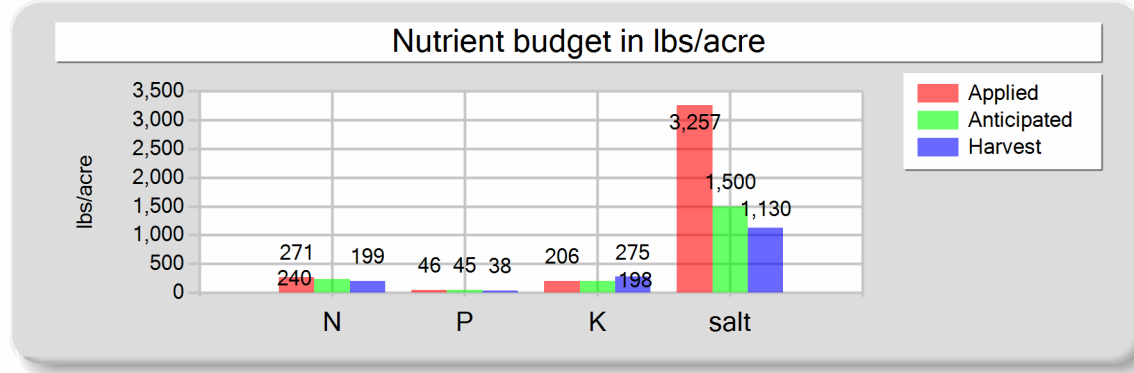
Reporting period 01/01/2023 to 12/31/2023.

5 - 06/05/2023: Corn, silage

Field name: 5

Crop: Corn, silage

Plant date: 06/05/2023



	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	220.62	46.39	205.55	1,328.47
Fresh water	43.59	0.00	0.00	1,928.98
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	271.21	46.39	205.55	3,257.44
Anticipated crop nutrient removal	240.00	45.00	198.00	1,500.00
Actual crop nutrient removal	199.36	38.47	274.55	1,129.68
Nutrient balance	71.85	7.92	-69.00	2,127.76
Applied to removed ratio	1.36	1.21	0.75	2.88

Fresh water applied
68,291,000.00 gallons
2,514.93 acre-inches
31.83 inches/acre

Process wastewater applied
8,549,650.00 gallons
314.85 acre-inches
3.99 inches/acre

Total harvests for the crop
1 harvests

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

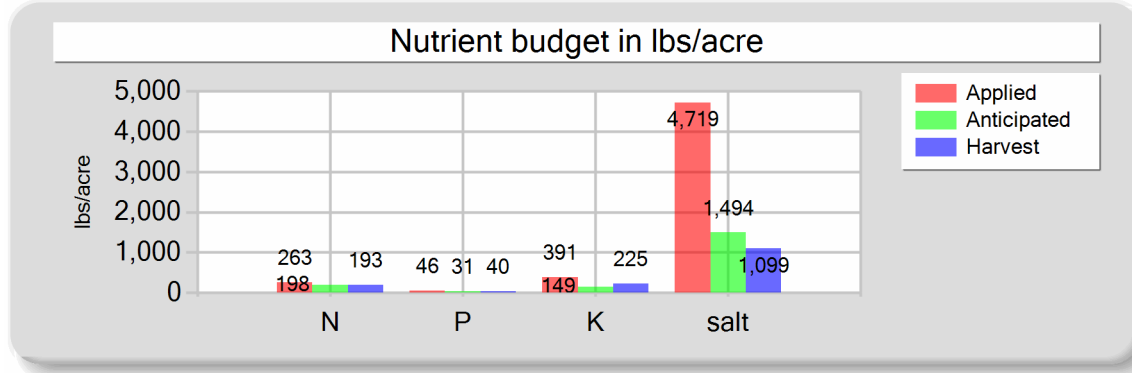
Reporting period 01/01/2023 to 12/31/2023.

6 - 11/13/2022: Wheat, silage, soft dough

Field name: 6

Crop: Wheat, silage, soft dough

Plant date: 11/13/2022



	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
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	216.96	45.74	390.81	3,046.47
Fresh water	39.34	0.00	0.00	1,672.57
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	263.30	45.74	390.81	4,719.04
Anticipated crop nutrient removal	198.00	30.60	149.40	1,494.00
Actual crop nutrient removal	192.74	39.72	225.45	1,099.23
Nutrient balance	70.56	6.03	165.36	3,619.81
Applied to removed ratio	1.37	1.15	1.73	4.29

Fresh water applied
29,321,800.00 gallons
1,079.82 acre-inches
13.67 inches/acre

Process wastewater applied
6,583,375.00 gallons
242.44 acre-inches
3.07 inches/acre

Total harvests for the crop
1 harvests

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

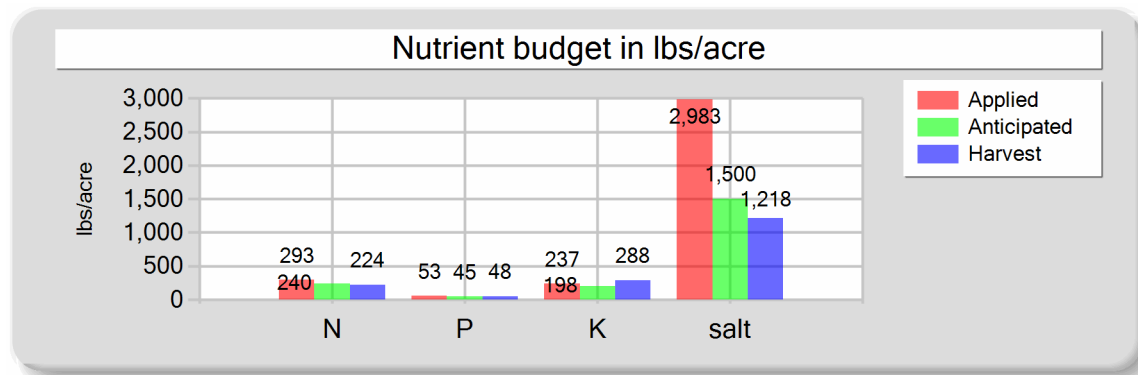
Reporting period 01/01/2023 to 12/31/2023.

6 - 06/10/2023: Corn, silage

Field name: 6

Crop: Corn, silage

Plant date: 06/10/2023



	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	254.17	53.45	236.51	1,530.69
Fresh water	31.41	0.00	0.00	1,452.73
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	292.58	53.45	236.51	2,983.42
Anticipated crop nutrient removal	240.00	45.00	198.00	1,500.00
Actual crop nutrient removal	224.16	47.77	288.47	1,218.17
Nutrient balance	68.42	5.68	-51.96	1,765.25
Applied to removed ratio	1.31	1.12	0.82	2.45

Fresh water applied
78,830,700.00 gallons
2,903.07 acre-inches
36.75 inches/acre

Process wastewater applied
9,844,300.00 gallons
362.53 acre-inches
4.59 inches/acre

Total harvests for the crop
1 harvests

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

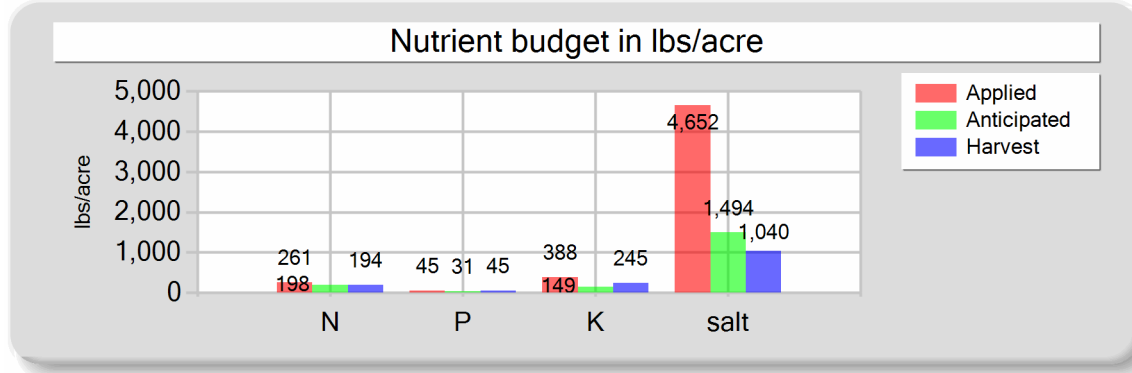
Reporting period 01/01/2023 to 12/31/2023.

7 - 11/22/2022: Wheat, silage, soft dough

Field name: 7

Crop: Wheat, silage, soft dough

Plant date: 11/22/2022



	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
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	215.56	45.42	388.39	3,011.88
Fresh water	38.57	0.00	0.00	1,639.94
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	261.13	45.42	388.39	4,651.83
Anticipated crop nutrient removal	198.00	30.60	149.40	1,494.00
Actual crop nutrient removal	194.19	45.47	244.58	1,039.78
Nutrient balance	66.94	-0.06	143.81	3,612.05
Applied to removed ratio	1.34	1.00	1.59	4.47

Fresh water applied
28,022,020.00 gallons
1,031.96 acre-inches
13.40 inches/acre

Process wastewater applied
6,359,180.00 gallons
234.19 acre-inches
3.04 inches/acre

Total harvests for the crop
1 harvests

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

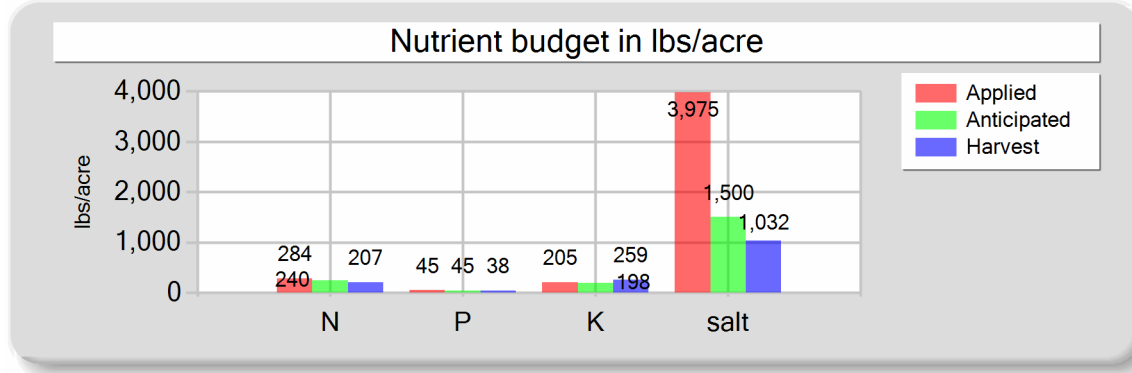
Reporting period 01/01/2023 to 12/31/2023.

7 - 06/15/2023: Corn, silage

Field name: 7

Crop: Corn, silage

Plant date: 06/15/2023



	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	215.79	45.32	204.83	1,296.81
Fresh water	61.30	0.00	0.00	2,678.24
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	284.09	45.32	204.83	3,975.05
Anticipated crop nutrient removal	240.00	45.00	198.00	1,500.00
Actual crop nutrient removal	207.01	38.27	259.19	1,031.55
Nutrient balance	77.08	7.05	-54.36	2,943.50
Applied to removed ratio	1.37	1.18	0.79	3.85

Fresh water applied
77,635,155.00 gallons
2,859.04 acre-inches
37.13 inches/acre

Process wastewater applied
8,218,100.00 gallons
302.64 acre-inches
3.93 inches/acre

Total harvests for the crop
1 harvests

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

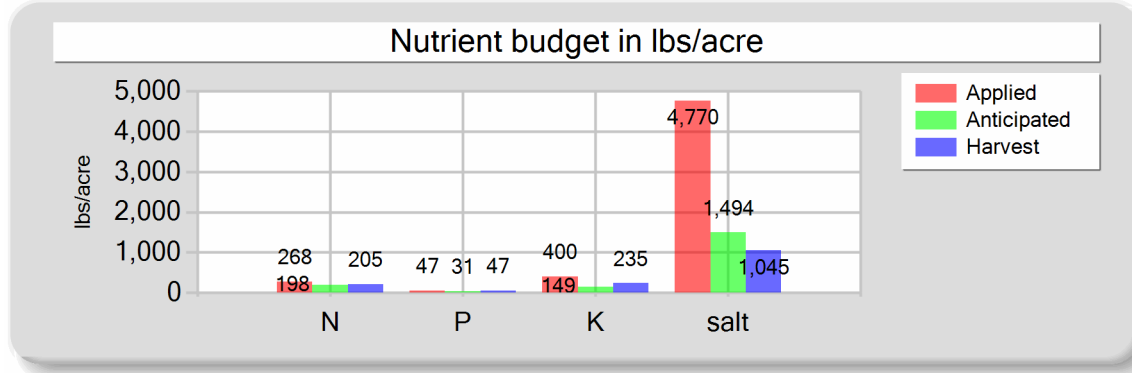
Reporting period 01/01/2023 to 12/31/2023.

8 - 11/20/2022: Wheat, silage, soft dough

Field name: 8

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
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	221.71	46.70	399.52	3,090.21
Fresh water	39.51	0.00	0.00	1,679.78
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	268.21	46.70	399.52	4,769.99
Anticipated crop nutrient removal	198.00	30.60	149.40	1,494.00
Actual crop nutrient removal	205.03	47.22	234.85	1,045.02
Nutrient balance	63.18	-0.52	164.67	3,724.96
Applied to removed ratio	1.31	0.99	1.70	4.56

Fresh water applied
28,702,662.00 gallons
1,057.02 acre-inches
13.73 inches/acre

Process wastewater applied
6,532,360.00 gallons
240.56 acre-inches
3.12 inches/acre

Total harvests for the crop
1 harvests

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

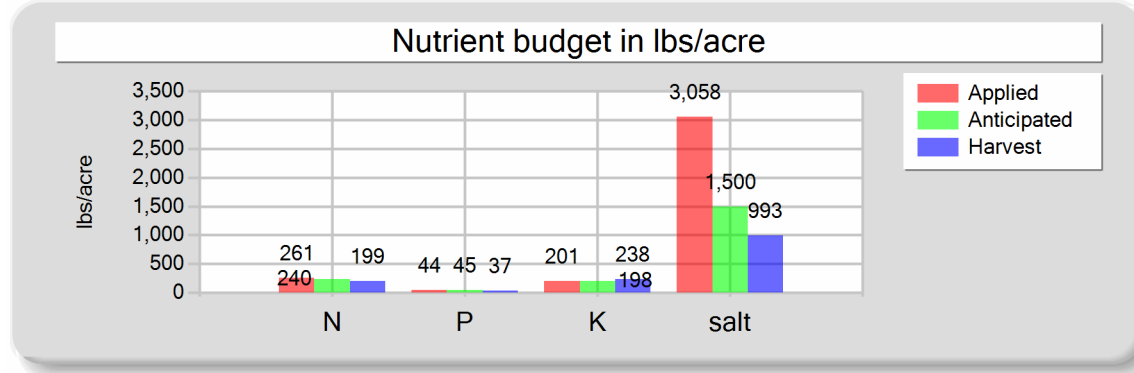
Reporting period 01/01/2023 to 12/31/2023.

8 - 06/05/2023: Corn, silage

Field name: 8

Crop: Corn, silage

Plant date: 06/05/2023



	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	80,935,954.00 <i>gallons</i>
Plowdown credit	0.00	0.00	0.00	0.00	2,980.60 <i>acre-inches</i>
Commercial fertilizer / Other	0.00	0.00	0.00	0.00	38.71 <i>inches/acre</i>
Dry manure	0.00	0.00	0.00	0.00	
Process wastewater	214.69	44.01	201.18	1,258.67	Process wastewater applied
Fresh water	39.66	0.00	0.00	1,799.38	8,023,760.00 <i>gallons</i>
Atmospheric deposition	7.00	0.00	0.00	0.00	295.49 <i>acre-inches</i>
Total nutrients applied	261.35	44.01	201.18	3,058.05	3.84 <i>inches/acre</i>
Anticipated crop nutrient removal	240.00	45.00	198.00	1,500.00	
Actual crop nutrient removal	199.35	37.17	238.21	993.38	Total harvests for the crop
Nutrient balance	62.00	6.84	-37.03	2,064.67	1 <i>harvests</i>
Applied to removed ratio	1.31	1.18	0.84	3.08	

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: 10/24/2022 Material type: Corral solids Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 20.7 %

	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	28,800.00	7,800.00	31,800.00							
DL	100.00	200.00	200.00							

Manure

Sample and source description: Manure

Sample date: 05/01/2023 Material type: Corral solids Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 5.7 %

	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	22,500.00	7,600.00	24,600.00							
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: 8.5 %

	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	18,500.00	7,400.00	19,200.00							
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: LagoonSample date: 11/24/2022 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	254.00	194.00	0.00	0.00	56.90	446.00								7,770.00	5,160
DL	10.00	2.00	0.10	0.10	0.20	0.50								100.00	10

Lagoon

Sample and source description: LagoonSample date: 03/06/2023 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	350.00	188.00	0.00	0.00	71.60	638.00								5,830.00	3,870
DL	10.00	2.00	0.10	2.00	0.20	0.50								100.00	10

Lagoon

Sample and source description: LagoonSample date: 05/01/2023 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	170.00	119.00	0.00	0.00	33.50	316.00								1,380.00	916
DL	10.00	2.00	0.10	0.10	0.20	0.50								100.00	10

Lagoon

Sample and source description: LagoonSample date: 08/07/2023 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	291.00	141.00	0.00	0.00	62.60	172.00								2,740.00	1,820
DL	10.00	2.00	0.10	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.

Lagoon

Sample and source description: Lagoon

Sample date: 11/09/2023 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	342.00	339.00	0.00	0.00	50.70	422.00								5,290.00	3,510
DL	10.00	2.00	0.10	0.10	0.20	0.50								100.00	10

C. FRESH WATER ANALYSES

Pixley I.D.

Canal water

Sample description: Canal water

Sample date: 06/23/2023 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	0.00		0.00								42.00	20
DL	0.50		0.40								1.00	20

W20

W20

Sample description: W20

Sample date: 12/14/2023 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			11.60								892.00	
DL			0.40								1.00	

W3

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

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

W3

W3

Sample description: W3

Sample date: 08/30/2023 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 (µmhos/cm)	TDS (mg/L)
Value	5.40	0.00	5.40	31.00	2.00	57.00	100.00	0.00	12.60	52.00	447.00	260
DL	0.20	0.20	0.20	1.00	1.00	1.00	10.00	10.00	0.17	1.00	1.00	20

W5

W5

Sample description: W5

Sample date: 08/30/2023 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 (µmhos/cm)	TDS (mg/L)
Value	12.70	0.00	12.70								782.00	540
DL	0.20	0.20	0.20								1.00	20

D. SOIL ANALYSES

No soil analyses entered.

E. PLANT TISSUE ANALYSES

1 - 11/15/2022: Wheat, silage, soft dough

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

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

1 - 11/15/2022: Wheat, silage, soft dough

1

Sample and source description: 1

Sample date: 05/11/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 69.1 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	15,800.00	3,500.00	18,900.00		8.40
DL	500.00	200.00	200.00		0.05

1 - 06/05/2023: Corn, silage

1

Sample and source description: 1

Sample date: 10/05/2023 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	11,800.00	2,300.00	12,900.00		4.99
DL	500.00	200.00	200.00		0.05

2 - 11/14/2022: Wheat, silage, soft dough

2

Sample and source description: 2

Sample date: 05/10/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 62.2 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	15,500.00	3,100.00	14,800.00		9.27
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.

2 - 06/10/2023: Corn, silage

2

Sample and source description: 2

Sample date: 10/05/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 66.0 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	11,800.00	2,300.00	12,700.00		5.56
DL	500.00	200.00	200.00		0.05

3 - 06/01/2022: Alfalfa, hay

3

Sample and source description: 3

Sample date: 11/14/2023 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)	Total salt (mg/kg)	TFS (%)
Value	32,000.00	2,900.00	22,900.00		10.80
DL	500.00	200.00	200.00		0.05

5 - 11/16/2022: Wheat, silage, soft dough

5

Sample and source description: 5

Sample date: 05/08/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 70.3 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	16,900.00	3,700.00	19,100.00		8.53
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.

5 - 06/05/2023: Corn, silage

5

Sample and source description: 5

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

Moisture: 69.3 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	11,400.00	2,200.00	15,700.00		6.46
DL	500.00	200.00	200.00		0.05

6 - 11/13/2022: Wheat, silage, soft dough

6

Sample and source description: 6

Sample date: 05/12/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 68.2 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	16,500.00	3,400.00	19,300.00		9.41
DL	500.00	200.00	200.00		0.05

6 - 06/10/2023: Corn, silage

6

Sample and source description: 6

Sample date: 10/04/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 67.6 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	12,200.00	2,600.00	15,700.00		6.63
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.

7 - 11/22/2022: Wheat, silage, soft dough

7

Sample and source description: 7

Sample date: 05/12/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 68.2 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	15,800.00	3,700.00	19,900.00		8.46
DL	500.00	200.00	200.00		0.05

7 - 06/15/2023: Corn, silage

7

Sample and source description: 7

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

Moisture: 69.9 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	11,900.00	2,200.00	14,900.00		5.93
DL	500.00	200.00	200.00		0.05

8 - 11/20/2022: Wheat, silage, soft dough

8

Sample and source description: 8

Sample date: 05/07/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 68.0 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	16,500.00	3,800.00	18,900.00		8.41
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.

8 - 06/05/2023: Corn, silage

8

Sample and source description: 8

Sample date: 10/04/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 70.3 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	11,800.00	2,200.00	14,100.00		5.88
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

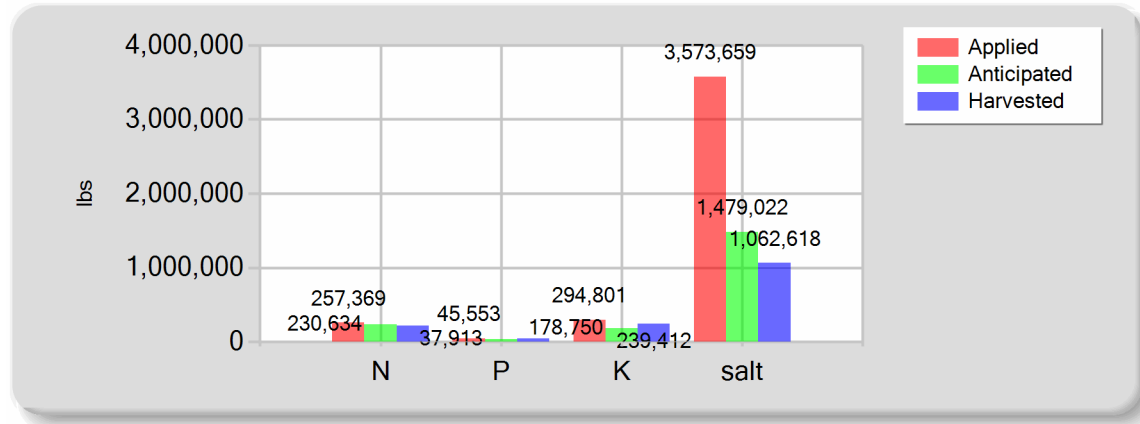
Reporting period 01/01/2023 to 12/31/2023.

NUTRIENT APPLICATIONS, POTENTIAL REMOVAL, AND BALANCE

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

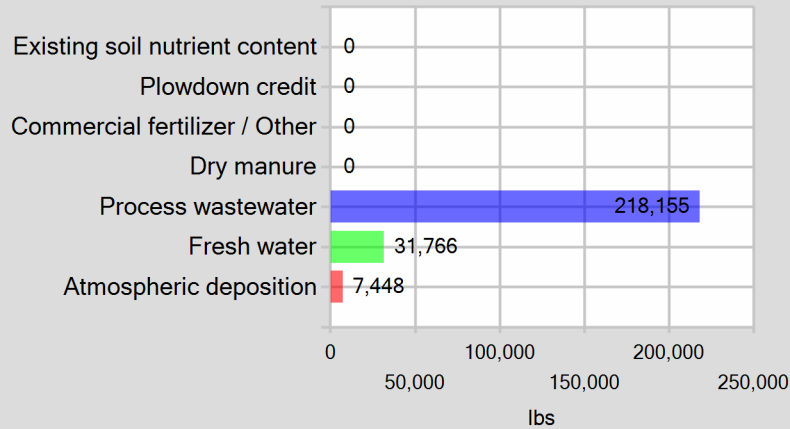
	Total N (lbs)	Total P (lbs)	Total K (lbs)	Total salt (lbs)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	218,154.52	45,552.67	294,800.98	2,133,457.77
Fresh water	31,766.43	0.00	0.00	1,440,200.80
Atmospheric deposition	7,448.00	0.00	0.00	0.00
Total nutrients applied	257,368.95	45,552.67	294,800.98	3,573,658.57
Anticipated crop nutrient removal	230,634.00	37,913.20	178,750.20	1,479,022.00
Actual crop nutrient removal	212,489.17	41,095.90	239,412.34	1,062,617.80
Nutrient balance	44,879.78	4,456.77	55,388.64	2,511,040.77
Applied to removed ratio	1.21	1.11	1.23	3.36

B. POUNDS OF NUTRIENT APPLIED VS. CROP REMOVAL

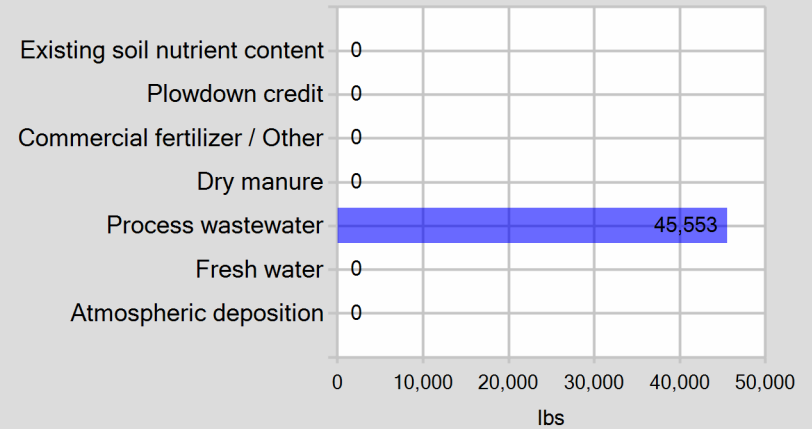


C. POUNDS OF NUTRIENT APPLIED BY MATERIAL TYPE

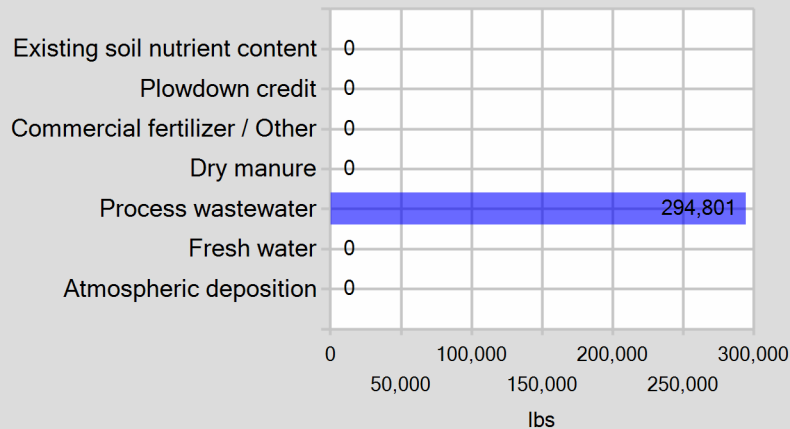
Pounds of nitrogen applied



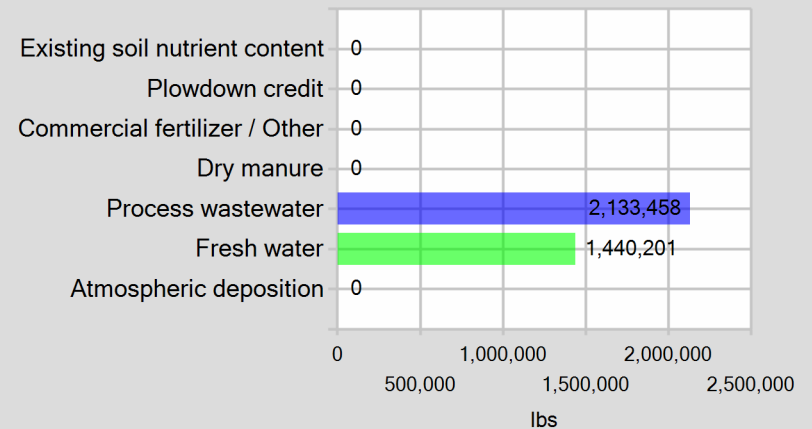
Pounds of phosphorus applied



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

~ Wells W1, W1A, W2, W4, W7, W8, and W15 were out of Service in 2023.

~ Field 4 is pasture and didn't have a harvest or manure applications.

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

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

ANNUAL REPORT VALIDATION INFORMATION

A. VALIDATION ERRORS

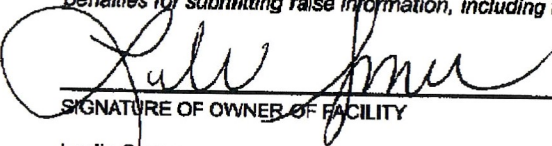
The following sections contain validation errors and should be reviewed before submitting the Annual Report :

1. Harvest Events

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

Leslie Spuza

PRINT OR TYPE NAME

6/25/24
DATE

SIGNATURE OF OPERATOR OF FACILITY

SAME AS OWNER

PRINT OR TYPE NAME

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.

July 11, 2023

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

Lab No. : VI 2344189
Customer No. : 4019696
Reference : 3042

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
Pixley I.D.	06/23/2023	06/23/2023	VI 2344189-001	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

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: 2023-07-11

July 11, 2023

Sentry Ag Services

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

Description : Pixley I.D.
 Project : Pixley I.D.

Lab No. : VI 2344189-001
 Customer No. : 4019696
 Reference : 3042
 Sampled On : June 23, 2023 at 09:00
 Sampled By : Klay
 Received On : June 23, 2023 at 10:28
 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	U	07/03/2023	12:54	sta	EPA 351.2	07/07/2023	19:47	lcr
Nitrate Nitrogen	ND	0.4	mg/L		1	U	06/28/2023	11:00	lfs	SM 4500-NO3 F	06/28/2023	12:36	lfs
Nitrogen, Total as Nitrogen	ND	0.5	mg/L		1	U	07/03/2023	12:54	sta	Calc.	07/07/2023	19:47	lcr
Nitrate + Nitrite as N	ND	0.4	mg/L		1	U	06/28/2023	11:00	lfs	SM 4500-NO3 F	06/28/2023	12:36	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	07/03/2023	12:54	sta	EPA 351.2	07/07/2023	19:47	lcr
Conductivity	42	1	umhos/cm		1		07/05/2023	14:10	amm	SM 4500-H+B	07/05/2023	22:11	sta
Solids, Total Dissolved (TDS)	20	20	mg/L		1		06/27/2023	12:45	ctl	SM 2540 C	06/28/2023	11:35	ctl

DQF Flags Definition:

U Constituent results were non-detect.

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

Corporate Offices & Laboratory

853 Corporation Street
 Santa Paula, CA 93060
 TEL: (805)392-2000
 Env FAX: (805)525-4172 / Ag FAX: (805)392-2063
 CA ELAP Certification No. 1573

Office & Laboratory

2500 Stagecoach Road
 Stockton, CA 95215
 TEL: (209)942-0182
 FAX: (209)942-0423
 CA ELAP Certification No. 1563

Office & Laboratory

563 E. Lindo Avenue
 Chico, CA 95926
 TEL: (530)343-5818
 FAX: (530)343-3807
 CA ELAP Certification No. 2670

Office & Laboratory

3442 Empresa Drive, Suite D
 San Luis Obispo, CA 93401
 TEL: (805)783-2940
 FAX: (805)783-2912
 CA ELAP Certification No. 2775

Office & Laboratory

9415 W. Goshen Avenue
 Visalia, CA 93291
 TEL: (559)734-9473
 FAX: (559)734-8435
 CA ELAP Certification No. 2810

July 11, 2023
Sentry Ag Service

Lab No. : VI 2344189
Customer No. : 4019696

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
E. C.	2320B	(VI 2344352-001)	Dup	umhos/cm		0.6%	5	
Solids, Total Dissolved	2540CE	06/27/2023:207083CTL (STK2338352-001) (STK2338352-001)	Blank	mg/L	993.7	ND	<20	
			LCS	mg/L		101%	90-110	
			Dup	mg/L		3.55%	5	
			Dup	mg/L		4.96%	5	
Nitrogen, Total Kjeldahl	351.2	07/03/2023:207257STA (VI 2343914-005) (VI 2343914-006)	Blank	mg/L	12.00	ND	<0.5	
			LCS	mg/L		102%	73-124	
			MS	mg/L		89.5%	54-136	
			MSD	mg/L		96.2%	54-136	
			MSRPD	mg/L		6.8%	≤27	
			MS	mg/L		97.0%	54-136	
			MSD	mg/L		98.6%	54-136	
			MSRPD	mg/L		1.6%	≤27	
Nitrate + Nitrite as N	4500NO3F	06/28/2023:207139LFS (SP 2310989-001)	Blank	mg/L	5.609	ND	<0.4	
			LCS	mg/L		98.6%	80-120	
			MS	mg/L		98.8%	66-125	
			MSD	mg/L		98.1%	66-125	
			MSRPD	mg/L		0.6%	≤30.4	
Nitrate Nitrogen	4500NO3F	06/28/2023:207139LFS (SP 2310989-001)	Blank	mg/L	5.609	ND	<0.4	
			LCS	mg/L		98.6%	80-120	
			MS	mg/L		98.8%	66-125	
			MSD	mg/L		98.1%	66-125	
			MSRPD	mg/L		0.6%	≤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.



Laboratory Analysis Work Order 2344189

3042

SITE NAME: Pixley I.D.

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)
- 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)
- W8 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: _____

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: _____

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	Pixley I.D.	Canal	W2	6/23/23 9:00	Klay	-		
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>	<i>[Signature]</i>		6/23/23 10:28
2 nd	<i>[Signature]</i>	FGL	6-23-2023 1028	
3 rd	<i>[Signature]</i>	FGL		6-23-2023 1028
4 th	<i>[Signature]</i>		6-23-2023 1730	6-23-2023 1730

LABORATORY USE ONLY

Logged In By: _____ Total Samples: _____ Laboratory No.: _____

6.6°
ROT

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 # OTC

2. Were samples received in a chilled condition? Temps: 6.6° ROT / 1 / 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) CS

Sample Receipt at SP:

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

2. Shipping tracking numbers:

559648785 / 7 / 50 / 64 / 75

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): CS

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: _____

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

(4019696)
Sentry Ag Service
VI 2344189

iv 06/24/2023 09:55:05



01 2344189

September 14, 2023

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

Lab No. : VI 2345798
Customer No. : 4019696
Reference : 3138

Laboratory Report

Introduction: This report package contains a total of 6 pages divided into 3 sections:

Case Narrative	(1 page)	: An overview of the work performed at FGL.
Sample Results	(2 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
W3	08/30/2023	08/30/2023	VI 2345798-001	AGW
W5	08/30/2023	08/30/2023	VI 2345798-002	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: 2023-09-15

Section: Case Narrative

Page 1 of 6

Page 1 of 6

Corporate Offices & Laboratory
 853 Corporation Street
 Santa Paula, CA 93060
 TEL: (805)392-2000
 Env FAX: (805)525-4172 / Ag FAX: (805)392-2063
 CA ELAP Certification No. 1573

Office & Laboratory
 2500 Stagecoach Road
 Stockton, CA 95215
 TEL: (209)942-0182
 FAX: (209)942-0423
 CA ELAP Certification No. 1563

Office & Laboratory
 563 E. Lindo Avenue
 Chico, CA 95926
 TEL: (530)343-5818
 FAX: (530)343-3807
 CA ELAP Certification No. 2670

Office & Laboratory
 3442 Empresa Drive, Suite D
 San Luis Obispo, CA 93401
 TEL: (805)783-2940
 FAX: (805)783-2912
 CA ELAP Certification No. 2775

Office & Laboratory
 9415 W. Goshen Avenue
 Visalia, CA 93291
 TEL: (559)734-9473
 FAX: (559)734-8435
 CA ELAP Certification No. 2810

September 14, 2023

Sentry Ag Services

Attn: Monique Baldiviez

P.O. Box 7750

Visalia, CA 93290

Description : W3

Project : 4K

Lab No. : VI 2345798-001

Customer No. : 4019696

Reference : 3138

Sampled On : August 30, 2023 at 08:40

Sampled By : Brandon H.

Received On : August 30, 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
Alkalinity (as CaCO ₃)	80	10	mg/L		1		09/04/2023	15:06	amm	SM 4500-H+B	09/05/2023	03:47	amm
Bicarbonate	100	10	mg/L		1		09/04/2023	15:06	amm	SM 4500-H+B	09/05/2023	03:47	amm
Carbonate	ND	10	mg/L		1	U	09/04/2023	15:06	amm	SM 4500-H+B	09/05/2023	03:47	amm
Hydroxide	ND	10	mg/L		1	U	09/04/2023	15:06	amm	SM 4500-H+B	09/05/2023	03:47	amm
Chloride	52	1	mg/L		1		08/31/2023	11:04	ldm	EPA 300.0	08/31/2023	22:06	ldm
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	UI	09/12/2023	09:41	sta	EPA 351.2	09/13/2023	16:47	lcr
Nitrate Nitrogen	5.4	0.1	mg/L		1		08/31/2023	11:04	ldm	EPA 300.0	08/31/2023	22:06	ldm
Nitrogen, Total as Nitrogen	5.4	0.5	mg/L		1	l	09/12/2023	09:41	sta	Calc.	09/13/2023	16:47	lcr
Nitrate + Nitrite as N	5.4	0.1	mg/L		1		08/31/2023	11:04	ldm	EPA 300.0	08/31/2023	22:06	ldm
Kjeldahl Nitrogen	ND	0.5	mg/L		1	UI	09/12/2023	09:41	sta	EPA 351.2	09/13/2023	16:47	lcr
Conductivity	447	1	umhos/cm		1		09/04/2023	15:06	amm	SM 4500-H+B	09/05/2023	03:47	amm
Sulfate Sulfur	12.6	0.17	mg/L		1		08/31/2023	11:04	ldm	EPA 300.0	08/31/2023	22:06	ldm
Solids, Total Dissolved (TDS)	260	20	mg/L		1		09/01/2023	10:30	ctl	SM 2540 C	09/05/2023	11:45	ctl
Calcium	31	1	mg/L		1		09/01/2023	07:35	ejc	EPA 200.7	09/06/2023	16:25	ac
Magnesium	2	1	mg/L		1		09/01/2023	07:35	ejc	EPA 200.7	09/06/2023	16:25	ac
Sodium	57	1	mg/L		1	h	09/01/2023	07:35	ejc	EPA 200.7	09/06/2023	16:25	ac

DQF Flags Definition:

- U Constituent results were non-detect.
- l The MS/MSD did not meet QC criteria.
- h The MS/MSD did not meet QC criteria.

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

Corporate Offices & Laboratory

853 Corporation Street
 Santa Paula, CA 93060
 TEL: (805)392-2000
 Env FAX: (805)525-4172 / Ag FAX: (805)392-2063
 CA ELAP Certification No. 1573

Office & Laboratory

2500 Stagecoach Road
 Stockton, CA 95215
 TEL: (209)942-0182
 FAX: (209)942-0423
 CA ELAP Certification No. 1563

Office & Laboratory

563 E. Lindo Avenue
 Chico, CA 95926
 TEL: (530)343-5818
 FAX: (530)343-3807
 CA ELAP Certification No. 2670

Office & Laboratory

3442 Empresa Drive, Suite D
 San Luis Obispo, CA 93401
 TEL: (805)783-2940
 FAX: (805)783-2912
 CA ELAP Certification No. 2775

Office & Laboratory

9415 W. Goshen Avenue
 Visalia, CA 93291
 TEL: (559)734-9473
 FAX: (559)734-8435
 CA ELAP Certification No. 2810

September 14, 2023

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

Description : W5
 Project : 4K

Lab No. : VI 2345798-002
 Customer No. : 4019696
 Reference : 3138
 Sampled On : August 30, 2023 at 08:45
 Sampled By : Brandon H.
 Received On : August 30, 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	Ul	09/12/2023	09:41	sta	EPA 351.2	09/13/2023	16:49	lcr
Nitrate Nitrogen	12.7	0.4	mg/L		1	h	08/31/2023	12:00	lfs	SM 4500-NO3 F	08/31/2023	14:06	lfs
Nitrogen, Total as Nitrogen	12.7	0.5	mg/L		1	lh	09/12/2023	09:41	sta	Calc.	09/13/2023	16:49	lcr
Nitrate + Nitrite as N	12.7	0.4	mg/L		1	h	08/31/2023	12:00	lfs	SM 4500-NO3 F	08/31/2023	14:06	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	Ul	09/12/2023	09:41	sta	EPA 351.2	09/13/2023	16:49	lcr
Conductivity	782	1	umhos/cm		1		09/12/2023	06:52	krh	SM 4500-H+B	09/12/2023	10:24	krh
Solids, Total Dissolved (TDS)	540	20	mg/L		1		09/01/2023	10:30	ctl	SM 2540 C	09/05/2023	11:45	ctl

DQF Flags Definition:

- U Constituent results were non-detect.
- l The MS/MSD did not meet QC criteria.
- h The MS/MSD did not meet QC criteria.

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

September 14, 2023
Sentry Ag Service

Lab No. : VI 2345798
Customer No. : 4019696

Quality Control - Metals

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Metals Calcium	200.7	09/01/2023:209817EJC (CH 2377359-009)	Blank	mg/L		ND	<1	406
			LCS	mg/L	12.00	94.5%	85-115	
			MS	mg/L	12.00	168%	<¼	
			MSD	mg/L	12.00	133%	<1/4	
			MSRPD	mg/L		3.3%	≤20.0	
			MS	mg/L	12.00	89.4%	75-125	
			MSD	mg/L	12.00	113%	75-125	
			MSRPD	mg/L		2.7%	≤20.0	
Magnesium	200.7	09/01/2023:209817EJC (CH 2377359-009)	Blank	mg/L		ND	<1	406
			LCS	mg/L	12.00	97.6%	85-115	
			MS	mg/L	12.00	135%	<¼	
			MSD	mg/L	12.00	112%	75-125	
			MSRPD	mg/L		3.1%	≤20	
			MS	mg/L	12.00	85.8%	75-125	
			MSD	mg/L	12.00	103%	75-125	
			MSRPD	mg/L		2.7%	≤20	
Sodium	200.7	09/01/2023:209817EJC (CH 2377359-009)	Blank	mg/L		ND	<1	435
			LCS	mg/L	12.00	89.2%	85-115	
			MS	mg/L	12.00	128%	75-125	
			MSD	mg/L	12.00	114%	75-125	
			MSRPD	mg/L		3.1%	≤20.0	
			MS	mg/L	12.00	94.2%	75-125	
			MSD	mg/L	12.00	110%	75-125	
			MSRPD	mg/L		3.8%	≤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								
Alkalinity (as CaCO ₃)	2320B	09/04/2023:209860AMM	ND	mg/L		0.7%	10	435
Bicarbonate	2320B	(VI 2345646-007)	Dup	mg/L		0.6%	10	
E. C.	2320B	(VI 2345646-007)	Dup	umhos/cm		0.3%	5	
	2320B	(STK2351897-003)	Dup	umhos/cm		3.57%	5	
Solids, Total Dissolved	2540CE	09/01/2023:209835CTL	Blank	mg/L		ND	<20	
			LCS	mg/L	991.5	100%	90-110	
		(STK2351855-001)	Dup	mg/L		2.03%	5	
		(STK2351855-001)	Dup	mg/L		2.43%	5	
Chloride	300.0	08/31/2023:209857LDM	Blank	mg/L		ND	<1	
			LCS	mg/L	25.00	101 %	90-110	
			MS	mg/L	50.00	102 %	67-117	
			MSD	mg/L	50.00	102 %	67-117	
		(VI 2345658-003)	MSRPD	mg/L	10.00	0.05%	≤7	
			MS	mg/L	50.00	96.5 %	67-117	
			MSD	mg/L	50.00	96.4 %	67-117	
			MSRPD	mg/L	10.00	0.1%	≤7	
		(CH 2377307-001)	MSD	mg/L	50.00	96.4 %	67-117	
			MSRPD	mg/L	10.00	0.1%	≤7	
Nitrate + Nitrite as N	300.0	08/31/2023:209857LDM	Blank	mg/L		ND	<0.4	
			LCS	mg/L	20.00	100 %	90-110	
			MS	mg/L	40.00	103 %	86-112	
			MSD	mg/L	40.00	103 %	86-112	
		(VI 2345658-003)	MSRPD	mg/L	10.00	0.06%	≤7	
			MS	mg/L	40.00	100 %	86-112	
			MSD	mg/L	40.00	100 %	86-112	
			MSRPD	mg/L	10.00	0.0%	≤7	
		(CH 2377307-001)	MSD	mg/L	40.00	100 %	86-112	
			MSRPD	mg/L	10.00	0.0%	≤7	
Nitrate Nitrogen	300.0	08/31/2023:209857LDM	Blank	mg/L		ND	<0.4	
			LCS	mg/L	20.00	100 %	90-110	
			MS	mg/L	40.00	103 %	86-112	
			MSD	mg/L	40.00	103 %	86-112	
		(VI 2345658-003)	MSRPD	mg/L	10.00	0.06%	≤7	
			MS	mg/L	40.00	100 %	86-112	
			MSD	mg/L	40.00	100 %	86-112	
			MSRPD	mg/L	10.00	0.0%	≤7	
		(CH 2377307-001)	MSD	mg/L	40.00	100 %	86-112	
			MSRPD	mg/L	10.00	0.0%	≤7	
Sulfate Sulfur	300.0	08/31/2023:209857LDM	Blank	mg/L		ND	<0.5	
			LCS	mg/L	50.00	102 %	90-110	
			MS	mg/L	100.0	103 %	18-165	
			MSD	mg/L	100.0	103 %	18-165	
		(VI 2345658-003)	MSRPD	mg/L	10.00	0.02%	≤7	
			MS	mg/L	100.0	94.4 %	18-165	
			MSD	mg/L	100.0	94.3 %	18-165	
			MSRPD	mg/L	10.00	0.05%	≤7	
		(CH 2377307-001)	MSD	mg/L	100.0	94.3 %	18-165	
			MSRPD	mg/L	10.00	0.05%	≤7	
Nitrogen, Total Kjeldahl	351.2	09/12/2023:210201STA	Blank	mg/L		ND	<0.5	
			LCS	mg/L	12.00	87.6%	73-124	
			MS	mg/L	12.00	91.3%	90-110	
			MSD	mg/L	12.00	83.2%	90-110	435
		(CH 2377291-005)	MSRPD	mg/L		8.9%	≤20	
			MS	mg/L	12.00	81.1%	<¼	406
			MSD	mg/L	12.00	79.6%	<1/4	
			MSRPD	mg/L		1.8%	≤20	
		(CH 2377291-006)	MSD	mg/L	12.00	79.6%	<1/4	
			MSRPD	mg/L		1.8%	≤20	
Nitrate + Nitrite as N	4500NO3F	08/31/2023:209806LFS	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	100%	80-120	

September 14, 2023

Sentry Ag Service

Lab No. : VI 2345798

Customer No. : 4019696

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Nitrate Nitrogen	4500NO3F	(CH 2377338-001)	MS	mg/L	5.609	521%	66-125	435
			MSD	mg/L	5.609	519%	66-125	435
			MSRPD	mg/L		0.3%	≤30.4	
		08/31/2023:209806LFS	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	100%	80-120	
			MS	mg/L	5.609	521%	66-125	435
		(CH 2377338-001)	MSD	mg/L	5.609	519%	66-125	435
			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.
- 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.
- 435** : Sample matrix may be affecting this analyte. Data was accepted based on the LCS or CCV recovery.



Laboratory Analysis Work Order

3138

SITE NAME: 4K

234579E

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)
 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)
 W8 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: _____

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: _____

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	W3	Irr. Well	W5	8/30/23 8:40	Brandon H	—		
2	W5	↓	W2	↓ 8:45	↓	—		
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		8/30/23 15:14
2 nd	<i>[Signature]</i>	FGL	8/30/23 15:14	
3 rd	<i>[Signature]</i>		8/30/23 17:30	
4 th	<i>[Signature]</i>		8/30/23 17:30	

LABORATORY USE ONLY
 Logged In By: *[Signature]*

Total Samples: _____

Laboratory No.: _____

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 # 01C

2. Were samples received in a chilled condition? Temps: 01 5.7 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) TH

Sample Receipt at SP:

1. Were samples received in a chilled condition? Temps: 6 C 4 C 3 C 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: 60002333 101120

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): TH

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: _____

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

(4019696)
Sentry Ag Service
VI 2345798

cda 08/31/2023 07:19:15



VI 2345798

2345798

Number here

January 2, 2024

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

Lab No. : VI 2348548
Customer No. : 4019696
Reference : 3495

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
W20	12/14/2023	12/14/2023	VI 2348548-001	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

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: 2024-01-03

January 2, 2024

Sentry Ag Services

Attn: Monique Baldiviez

P.O. Box 7750

Visalia, CA 93290

Description : W20

Project : 4 K Dairy

Lab No. : VI 2348548-001

Customer No. : 4019696

Reference : 3495

Sampled On : December 14, 2023 at 08:02

Sampled By : Brandon

Received On : December 14, 2023 at 13:37

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
Nitrate Nitrogen	11.6	0.4	mg/L	10	1		12/15/2023	13:00	lfs	SM 4500-NO3 F	12/15/2023	16:31	lfs
Conductivity	892	1	umhos/cm	1600 ²	1		12/22/2023	09:20	krh	SM 4500-H+B	12/22/2023	12:07	krh

DQF Flags Definition:

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

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

January 2, 2024
Sentry Ag Service

Lab No. : VI 2348548
Customer No. : 4019696

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
E. C.	2320B	(VI 2348803-002)	Dup	umhos/cm		0.1%	5	
Nitrate Nitrogen	4500NO3F	12/15/2023:214153LFS	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	93.3%	80-120	
			MS	mg/L	5.609	93.1%	66-125	
		(VI 2348536-001)	MSD	mg/L	5.609	94.3%	66-125	
			MSRPD	mg/L		1.0%	≤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.



Laboratory Analysis Work Order

3495

SITE NAME: 4 K Dairy

2348548
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)
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)
W8 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: _____

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: _____

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: _____

10.0°C
2.5
TH 457

Sample ID	Description	Analysis	Date/Time	Sampled by	SAS USE ONLY: FIELD TESTS		
					NH ₃ N *	pH	Temp
1	W-20	domestic well	12/14/23 8:02 am	Brandon	0		
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	<u>ASB</u>	<u>SAS</u>		<u>12/14/23 13:37</u>
2 nd	<u>ASB</u>	<u>FGL</u>	<u>12/14/23 13:37</u>	
3 rd	<u>ASB</u>	<u>FGL</u>		<u>12/14/23 17:30</u>
4 th	<u>GCS</u>	<u>GCS</u>	<u>12/14/23 17:30</u>	

LABORATORY USE ONLY

Logged In By: _____ Total Samples: _____ Laboratory No.: _____

12/15/23
1:55

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): 02

2. Temp IR Gun ID #: 407

3. Were samples received on ice? Yes No Temps: 10.0°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): AB

Sample Receipt at SP:

1. Number of ice chests/packages received: 3 Shipping tracking #(s): 5101039454, 5100394
510039370 03

2. Temp IR Gun ID #: 0246

3. Were samples received on ice? Yes No Temps: 2 / 1 / 1 / 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):

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:



ATTACHMENT D

Manure/Process Wastewater Tracking Manifest For Existing Milk Cow Dairies

Instructions:

- 1) Complete one manifest for each hauling event, for each destination. A hauling event may last for several days, as long as the manure is being hauled to the same destination.
- 2) If there are multiple destinations, **complete a separate form for each destination.**
- 3) The operator must obtain the signature of the hauler upon completion of each manure-hauling event.
- 4) The operator shall submit copies of manure/process wastewater tracking manifest(s) with the Annual Monitoring Report for Existing Milk Cow Dairies.

Operator Information:

Name of Operator: Leslie Souza

Name of Dairy Facility: 4K

Facility Address: 7976 Ave 84 Pixley 93256
Number and Street City Zip Code

Contact Person Name and Phone Number: Leslie 559-697-2373
Name Phone Number

Manure/Process Wastewater Hauler Information:

Name of Hauling Company/Person: 4K

Address of Hauling Company /Person: 7976 Ave. 84 Pixley 93256
Number and Street City Zip Code

Contact Person: Leslie 697-2373
Name Phone Number

Destination Information:

Composting Facility ☒ Broker ☐ Farmer ☐ Other (identify) _____ (please circle one)

Contact information of Composting Facility, Broker, Farmer, or Other (as identified above):

Fields Custom Hay 6215 Rd. 42 Alpaugh 93201 677-2373
Name Number and Street City Zip Code Phone Number

Manure/Process Wastewater Destination Address or Assessor's Parcel Number:

Number and Street City Zip Code Assessor's Parcel Number

Dates Hauled: 12/1/2023

Amount Hauled:

Enter the amount of manure hauled in tons or cubic yards (indicate the units used), the manure solids content (if amount reported in tons) or manure density (if amount reported in cubic yards), and the method used to calculate the amount:

Manure: 5910.0 Tons or Cubic Yards (indicate which units used)

Manure Solids Content (if amount reported in tons): 91.5%

Manure Density (if amount reported in cubic yards): _____

Attachment D
Waste Discharge Requirements General Order No. R5-2007-0035
Existing Milk Cow Dairies

D-2

Method used to determine amount of manure: Scale

Enter the amount of process wastewater hauled in gallons and the method used to determine the amount.

Process Wastewater: _____ Gallons

Method used to determine volume of process wastewater: _____

Written Agreement:

Does the Operator have a written agreement (in compliance with Land Application Specification C.2 of Waste Discharge Requirements General Order No. R5-2007-0035) with any party that receives process wastewater from the Operator for its own use? (please check one)

☐ Yes

☒ No

If the answer is no, the Operator agrees to have such a written agreement with any such party for any process wastewater transferred after 31 December 2007 to such party.
(Operator shall provide initials here to acknowledge this requirement).

Certification:

I declare under the penalty of law that I personally examined and am familiar with the information submitted in this document, 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 a fine and imprisonment for knowing violations.

Operator's Signature: _____

Date: 6-26-24

Hauler's Signature: _____

Date: 6-26-24