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: Del Arco Dairy

Physical address of dairy:

4738 120 AVE	Corcoran	Tulare	93212
Number and Street	City	County	Zip Code

Street and nearest cross street (if no address):

Date facility was originally placed in operation: 01/01/2003

Regional Water Quality Control Board Basin Plan designation: Tulare Basin

County Assessor Parcel Number(s) for dairy facility:

X291-X060-X021-XXXX

B. OPERATORS

Gorzeman, Randy or Travis

Operator name: Gorzeman, Randy or Travis

Telephone no.: Landline: | Cellular: (559) 331-5259

4738 120 AVE	Corcoran	CA	93212
Mailing Address Number and Street	City	State	Zip Code

This operator is responsible for paying permit fees.

C. OWNERS

Gorzeman, Randy or Travis

Legal owner name: Gorzeman, Randy or Travis

Telephone no.: Landline: | Cellular: (559) 905-7544

4738 120 AVE	Corcoran	CA	93212
Mailing Address Number and Street	City	State	Zip Code

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	1,759	171	235	0	0	0
Number under roof	0	0	0	0	0	0
Maximum number	1,775	182	249	0	0	0
Average number	1,759	171	235	0	0	0
Avg live weight (lbs)	1,400	1,450	1,000	0		

Predominant milk cow breed: Holstein

Average milk production: 75 *pounds per cow per day*

B. MANURE GENERATED

Total manure excreted by the herd: 51,114.47 *tons per reporting period*

Total nitrogen from manure: 656,938.17 *lbs per reporting period* After ammonia losses (30% loss applied): 459,856.72 *lbs per reporting period*

Total phosphorus from manure: 110,247.17 *lbs per reporting period*

Total potassium from manure: 342,643.04 *lbs per reporting period*

Total salt from manure: 867,546.60 *lbs per reporting period*

C. PROCESS WASTEWATER GENERATED

Process wastewater generated: 54,021,953 *gallons*

Total nitrogen generated: 103,689.71 *lbs*

Total phosphorus generated: 20,689.51 *lbs*

Total potassium generated: 146,105.82 *lbs*

Total salt generated: 950,654.87 *lbs*

	54,021,953	*gallons applied*
+	0	*gallons exported*
-	0	*gallons imported*
=	54,021,953	*gallons generated*

D. FRESH WATER SOURCES

Source Description	Type
DW1	Ground water
DW2	Ground water
IW1	Ground water
Lower Tule I.D.	Surface 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 (%)
07/31/2023	Corral solids	3,420.00 *ton*	Dry-weight	17.4		20,600.00	7,000.00	15,400.00		0.00

No liquid nutrient exports entered.

Material type	Total N (lbs)	Total P (lbs)	Total K (lbs)	Total salt (lbs)
Dry manure	116,386.70	39,548.88	87,007.54	0.00
Process wastewater	0.00	0.00	0.00	0.00
Total exports for all materials	116,386.70	39,548.88	87,007.54	0.00

APPLICATION AREA

A. LIST OF LAND APPLICATION AREAS

Field name	Controlled acres	Cropable acres	Total harvests	Type of waste applied	Parcel number
1	125	125	2	process wastewater	X291-X060-X021-XXXX
2	47	47	2	process wastewater	X291-X060-X021-XXXX
3	25	25	2	process wastewater	X293-X270-X014-XXXX X293-X270-X015-XXXX X293-X270-X016-XXXX X293-X270-X017-XXXX X293-X270-X018-XXXX X293-X270-X019-XXXX
Totals for areas that were used for application	197	197	6		
Totals for areas that were not used for application					
Land application area totals	197	197	6		

B. CROPS AND HARVESTS

1

Field name: 1

11/16/2022: Triticale, soft dough

Crop: Triticale, soft dough Acres planted: 125 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 (%)
05/18/2023	2,650.00 *ton*	Dry-weight		67.6	13,500.00	2,900.00	17,900.00		9.11

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	22.00	220.00	37.40	165.00	1,496.00
Total actual harvest content	21.20	185.46	39.84	245.90	1,251.50

1

06/28/2023: Corn, silage

Crop: Corn, silage Acres planted: 125 Plant date: 06/28/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
10/18/2023	3,450.00 *ton*	Dry-weight		66.5	11,800.00	2,400.00	8,600.00		4.85

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	30.00	240.00	45.00	198.00	1,500.00
Total actual harvest content	27.60	218.21	44.38	159.03	896.86

2

Field name: 2

11/16/2022: Triticale, soft dough

Crop: Triticale, soft dough Acres planted: 47 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 (%)
05/18/2023	1,010.00 *ton*	Dry-weight		64.6	13,800.00	2,800.00	15,500.00		8.41

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	22.00	220.00	37.40	165.00	1,496.00
Total actual harvest content	21.49	209.96	42.60	235.82	1,279.54

06/29/2023: Corn, silage

Crop: Corn, silage Acres planted: 47 Plant date: 06/29/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
10/18/2023	1,275.00 *ton*	Dry-weight		68.0	11,500.00	2,200.00	9,500.00		5.21

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	30.00	240.00	45.00	198.00	1,500.00
Total actual harvest content	27.13	199.66	38.20	164.94	904.54

3

Field name: 3

11/22/2022: Triticale, soft dough

Crop: Triticale, soft dough Acres planted: 25 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 (%)
05/17/2023	530.00 *ton*	Dry-weight		63.2	13,400.00	3,200.00	19,700.00		10.00

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	22.00	220.00	37.40	165.00	1,496.00
Total actual harvest content	21.20	209.08	49.93	307.38	1,560.32

06/30/2023: Corn, silage

Crop: Corn, silage Acres planted: 25 Plant date: 06/30/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
10/18/2023	720.00 *ton*	Dry-weight		65.9	11,300.00	2,400.00	9,300.00		5.07

	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	28.80	221.95	47.14	182.67	995.83

NUTRIENT BUDGET

A. LAND APPLICATIONS

1 - 11/16/2022: Triticale, soft dough

Field name: 1

Crop: Triticale, soft dough Plant date: 11/16/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
10/24/2022	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	68.09	17.20	86.29	1,167.29	4,700,232.00 *gal*
Lower Tule I.D.	Surface water	0.00	0.00	0.00	33.00	16,476,500.00 *gal*
Application event totals		68.09	17.20	86.29	1,200.29	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
01/26/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	96.88	17.82	134.35	441.59	4,008,840.00 *gal*
Lower Tule I.D.	Surface water	0.00	0.00	0.00	30.94	15,448,700.00 *gal*
Application event totals		96.88	17.82	134.35	472.53	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
04/07/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	81.12	14.92	112.49	369.74	3,356,550.00 *gal*
Lower Tule I.D.	Surface water	0.00	0.00	0.00	28.25	14,105,000.00 *gal*
Application event totals		81.12	14.92	112.49	397.99	

1 - 06/28/2023: Corn, silage

Field name: 1

Crop: Corn, silage Plant date: 06/28/2023

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

1 - 06/28/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
06/08/2023	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	60.83	13.90	168.16	460.58	6,508,540.00 *gal*
Lower Tule I.D.	Surface water	0.00	0.00	0.00	35.65	17,798,984.00 *gal*
Application event totals		60.83	13.90	168.16	496.23	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
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
Lower Tule I.D.	Surface water	0.00	0.00	0.00	40.05	19,998,980.00 *gal*
Application event totals		0.00	0.00	0.00	40.05	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/29/2023	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	74.09	13.72	79.41	797.60	5,309,880.00 *gal*
Lower Tule I.D.	Surface water	0.00	0.00	0.00	34.76	17,354,400.00 *gal*
Application event totals		74.09	13.72	79.41	832.35	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/09/2023	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	69.56	12.88	74.56	748.89	4,985,650.00 *gal*
Lower Tule I.D.	Surface water	0.00	0.00	0.00	36.05	17,998,980.00 *gal*
Application event totals		69.56	12.88	74.56	784.94	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/21/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	65.70	12.17	70.42	707.32	4,708,884.00 *gal*
Lower Tule I.D.	Surface water	0.00	0.00	0.00	35.82	17,884,542.00 *gal*
Application event totals		65.70	12.17	70.42	743.14	

1 - 06/28/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
09/05/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lower Tule I.D.	Surface water	0.00	0.00	0.00	35.96	17,954,500.00 *gal*
Application event totals		0.00	0.00	0.00	35.96	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
09/21/2023	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
Lower Tule I.D.	Surface water	0.00	0.00	0.00	35.18	17,565,650.00 *gal*
Application event totals		0.00	0.00	0.00	35.18	

2 - 11/16/2022: Triticale, soft dough

Field name: 2

Crop: Triticale, 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	85.02	21.47	107.74	1,457.49	2,206,650.00 *gal*
Lower Tule I.D.	Surface water	0.00	0.00	0.00	31.98	6,004,540.00 *gal*
Application event totals		85.02	21.47	107.74	1,489.47	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
01/16/2023	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	94.41	17.37	130.92	430.32	1,468,850.00 *gal*
Lower Tule I.D.	Surface water	0.00	0.00	0.00	36.78	6,905,520.00 *gal*
Application event totals		94.41	17.37	130.92	467.10	

2 - 11/16/2022: Triticale, soft dough

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
04/03/2023	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	90.31	16.61	125.23	411.61	1,405,002.00 *gal*
Lower Tule I.D.	Surface water	0.00	0.00	0.00	32.51	6,103,220.00 *gal*
Application event totals		90.31	16.61	125.23	444.12	

2 - 06/29/2023: Corn, silage

Field name: 2

Crop: Corn, silage Plant date: 06/29/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
06/11/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	65.54	14.98	181.17	496.22	2,636,565.00 *gal*
Lower Tule I.D.	Surface water	0.00	0.00	0.00	34.54	6,484,840.00 *gal*
Application event totals		65.54	14.98	181.17	530.76	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/19/2023	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	74.18	13.74	79.50	798.58	1,998,980.00 *gal*
Lower Tule I.D.	Surface water	0.00	0.00	0.00	33.61	6,309,542.00 *gal*
Application event totals		74.18	13.74	79.50	832.19	

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lower Tule I.D.	Surface water	0.00	0.00	0.00	38.59	7,245,420.00 *gal*
Application event totals		0.00	0.00	0.00	38.59	

2 - 06/29/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
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	67.59	12.52	72.44	727.63	1,821,365.00 *gal*
Lower Tule I.D.	Surface water	0.00	0.00	0.00	36.63	6,876,230.00 *gal*
Application event totals		67.59	12.52	72.44	764.25	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/26/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	57.83	10.71	61.98	622.61	1,558,500.00 *gal*
Lower Tule I.D.	Surface water	0.00	0.00	0.00	35.33	6,632,550.00 *gal*
Application event totals		57.83	10.71	61.98	657.94	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
09/09/2023	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
Lower Tule I.D.	Surface water	0.00	0.00	0.00	36.41	6,835,660.00 *gal*
Application event totals		0.00	0.00	0.00	36.41	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
09/24/2023	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
Lower Tule I.D.	Surface water	0.00	0.00	0.00	32.52	6,105,590.00 *gal*
Application event totals		0.00	0.00	0.00	32.52	

3 - 11/22/2022: Triticale, soft dough

Field name: 3

Crop: Triticale, soft dough Plant date: 11/22/2022

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

3 - 11/22/2022: Triticale, soft dough

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	91.01	22.98	115.34	1,560.24	1,256,500.00 *gal*
Lower Tule I.D.	Surface water	0.00	0.00	0.00	30.09	3,005,020.00 *gal*
Application event totals		91.01	22.98	115.34	1,590.33	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
01/27/2023	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
Lagoon	Process wastewater	97.46	17.93	135.15	444.22	806,540.00 *gal*
Lower Tule I.D.	Surface water	0.00	0.00	0.00	28.49	2,845,470.00 *gal*
Application event totals		97.46	17.93	135.15	472.71	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
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	85.85	15.80	119.06	391.32	710,500.00 *gal*
Lower Tule I.D.	Surface water	0.00	0.00	0.00	25.07	2,503,600.00 *gal*
Application event totals		85.85	15.80	119.06	416.39	

3 - 06/30/2023: Corn, silage

Field name: 3

Crop: Corn, silage Plant date: 06/30/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
06/11/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	66.53	15.21	183.90	503.69	1,423,550.00 *gal*
Lower Tule I.D.	Surface water	0.00	0.00	0.00	32.06	3,201,980.00 *gal*
Application event totals		66.53	15.21	183.90	535.76	

3 - 06/30/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/20/2023	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
Lower Tule I.D.	Surface water	0.00	0.00	0.00	38.52	3,846,880.00 *gal*
Application event totals		0.00	0.00	0.00	38.52	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
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	89.75	16.62	96.19	966.24	1,286,520.00 *gal*
Lower Tule I.D.	Surface water	0.00	0.00	0.00	34.10	3,405,650.00 *gal*
Application event totals		89.75	16.62	96.19	1,000.35	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/14/2023	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
Lower Tule I.D.	Surface water	0.00	0.00	0.00	39.71	3,965,650.00 *gal*
Application event totals		0.00	0.00	0.00	39.71	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
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
Lagoon	Process wastewater	68.92	12.76	73.86	741.92	987,850.00 *gal*
Lower Tule I.D.	Surface water	0.00	0.00	0.00	34.75	3,469,880.00 *gal*
Application event totals		68.92	12.76	73.86	776.67	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
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
Lagoon	Process wastewater	61.11	11.32	65.50	657.92	876,005.00 *gal*
Lower Tule I.D.	Surface water	0.00	0.00	0.00	33.11	3,306,500.00 *gal*
Application event totals		61.11	11.32	65.50	691.03	

3 - 06/30/2023: Corn, silage

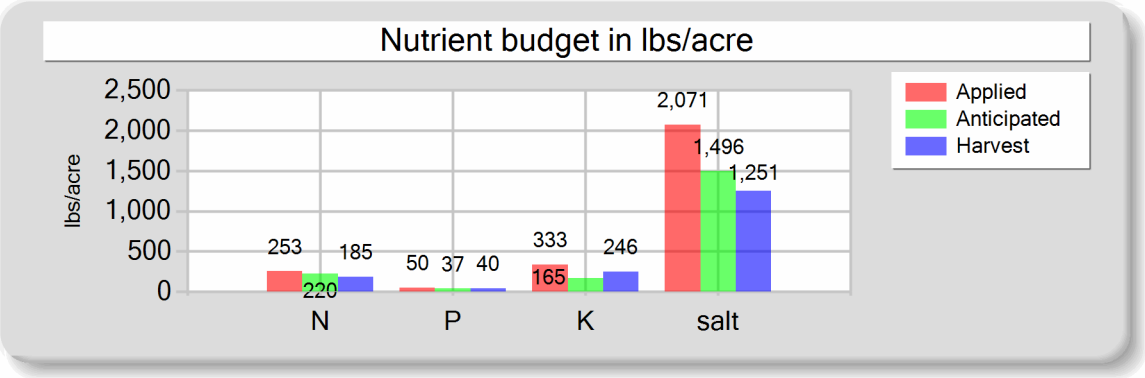
Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
09/24/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lower Tule I.D.	Surface water	0.00	0.00	0.00	31.05	3,100,650.00 *gal*
Application event totals		0.00	0.00	0.00	31.05	

B. NUTRIENT BUDGET

1 - 11/16/2022: Triticale, soft dough

Field name: 1 Crop: Triticale, 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	246.09	49.94	333.13	1,978.62
Fresh water	0.00	0.00	0.00	92.19
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	253.09	49.94	333.13	2,070.81
Anticipated crop nutrient removal	220.00	37.40	165.00	1,496.00
Actual crop nutrient removal	185.46	39.84	245.90	1,251.50
Nutrient balance	67.63	10.10	87.23	819.31
Applied to removed ratio	1.36	1.25	1.35	1.65

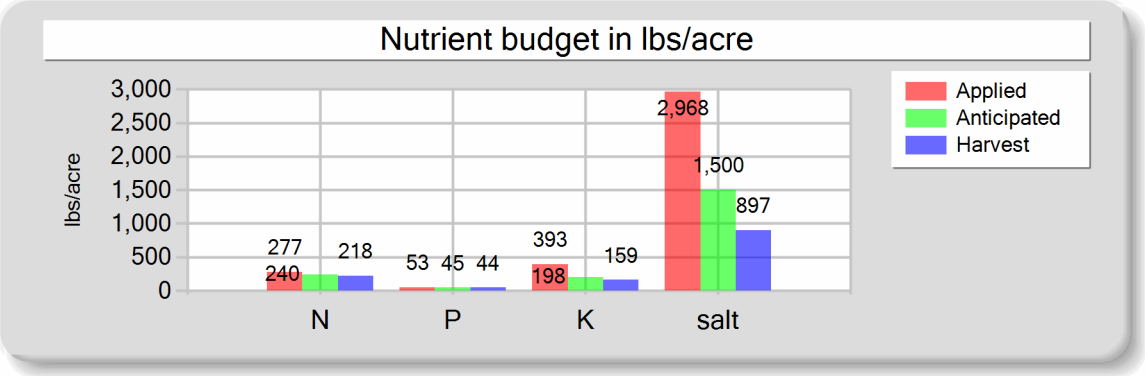
Fresh water applied	
46,030,200.00	*gallons*
1,695.14	*acre-inches*
13.56	*inches/acre*

Process wastewater applied	
12,065,622.00	*gallons*
444.34	*acre-inches*
3.55	*inches/acre*

Total harvests for the crop	
1	*harvests*

1 - 06/28/2023: Corn, silage

Field name: 1 Crop: Corn, silage Plant date: 06/28/2023



	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	270.19	52.67	392.54	2,714.39
Fresh water	0.00	0.00	0.00	253.47
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	277.19	52.67	392.54	2,967.86
Anticipated crop nutrient removal	240.00	45.00	198.00	1,500.00
Actual crop nutrient removal	218.21	44.38	159.03	896.86
Nutrient balance	58.98	8.29	233.50	2,071.00
Applied to removed ratio	1.27	1.19	2.47	3.31

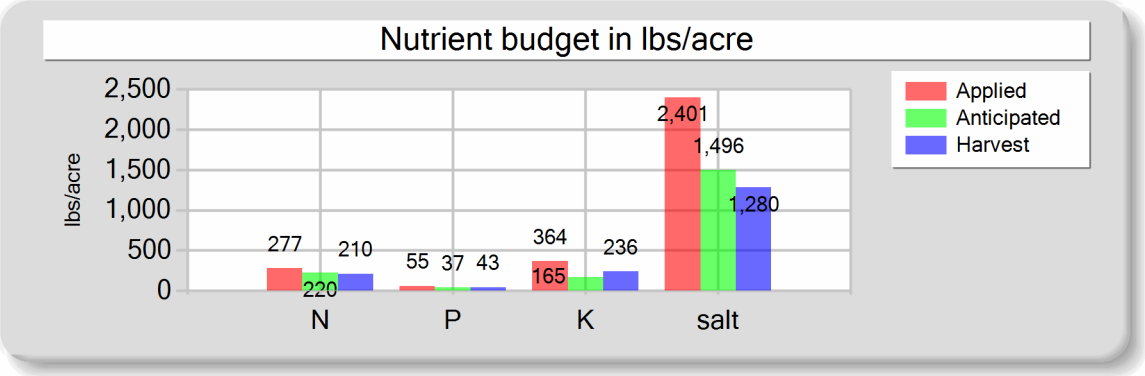
Fresh water applied	
126,556,036.00	*gallons*
4,660.63	*acre-inches*
37.29	*inches/acre*

Process wastewater applied	
21,512,954.00	*gallons*
792.25	*acre-inches*
6.34	*inches/acre*

Total harvests for the crop	
1	*harvests*

2 - 11/16/2022: Triticale, soft dough

Field name: 2 Crop: Triticale, 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	269.73	55.45	363.90	2,299.42
Fresh water	0.00	0.00	0.00	101.28
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	276.73	55.45	363.90	2,400.70
Anticipated crop nutrient removal	220.00	37.40	165.00	1,496.00
Actual crop nutrient removal	209.96	42.60	235.82	1,279.54
Nutrient balance	66.78	12.85	128.07	1,121.16
Applied to removed ratio	1.32	1.30	1.54	1.88

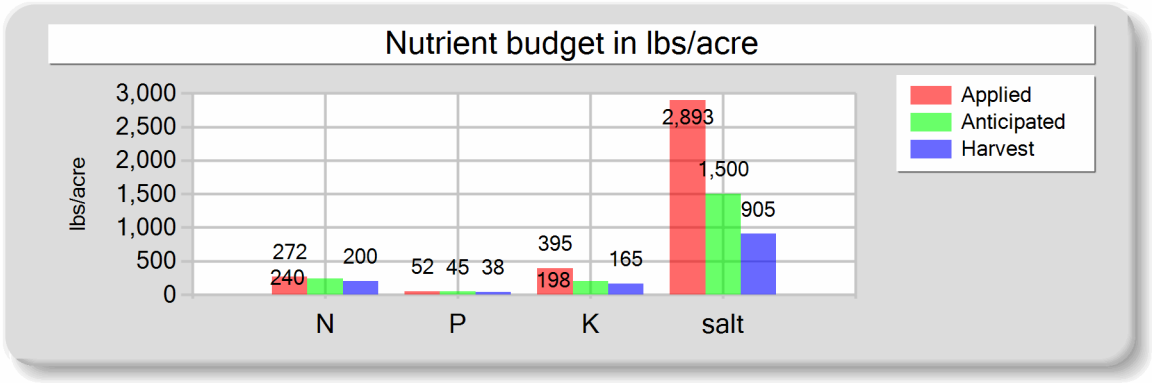
Fresh water applied	
19,013,280.00	*gallons*
700.19	*acre-inches*
14.90	*inches/acre*

Process wastewater applied	
5,080,502.00	*gallons*
187.10	*acre-inches*
3.98	*inches/acre*

Total harvests for the crop	
1	*harvests*

2 - 06/29/2023: Corn, silage

Field name: 2 Crop: Corn, silage Plant date: 06/29/2023



	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	265.14	51.94	395.09	2,645.04
Fresh water	0.00	0.00	0.00	247.63
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	272.14	51.94	395.09	2,892.67
Anticipated crop nutrient removal	240.00	45.00	198.00	1,500.00
Actual crop nutrient removal	199.66	38.20	164.94	904.54
Nutrient balance	72.48	13.74	230.16	1,988.13
Applied to removed ratio	1.36	1.36	2.40	3.20

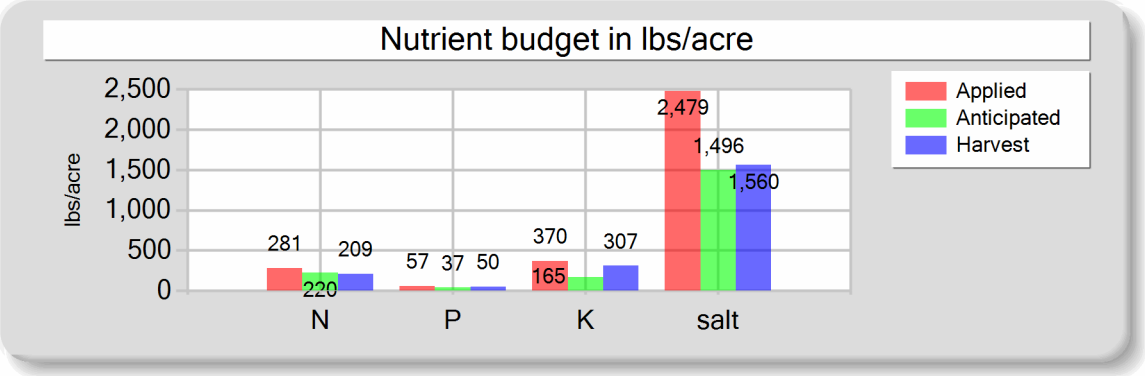
Fresh water applied	
46,489,832.00	*gallons*
1,712.06	*acre-inches*
36.43	*inches/acre*

Process wastewater applied	
8,015,410.00	*gallons*
295.18	*acre-inches*
6.28	*inches/acre*

Total harvests for the crop	
1	*harvests*

3 - 11/22/2022: Triticale, soft dough

Field name: 3 Crop: Triticale, 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	274.33	56.71	369.55	2,395.78
Fresh water	0.00	0.00	0.00	83.66
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	281.33	56.71	369.55	2,479.44
Anticipated crop nutrient removal	220.00	37.40	165.00	1,496.00
Actual crop nutrient removal	209.08	49.93	307.38	1,560.32
Nutrient balance	72.24	6.78	62.16	919.12
Applied to removed ratio	1.35	1.14	1.20	1.59

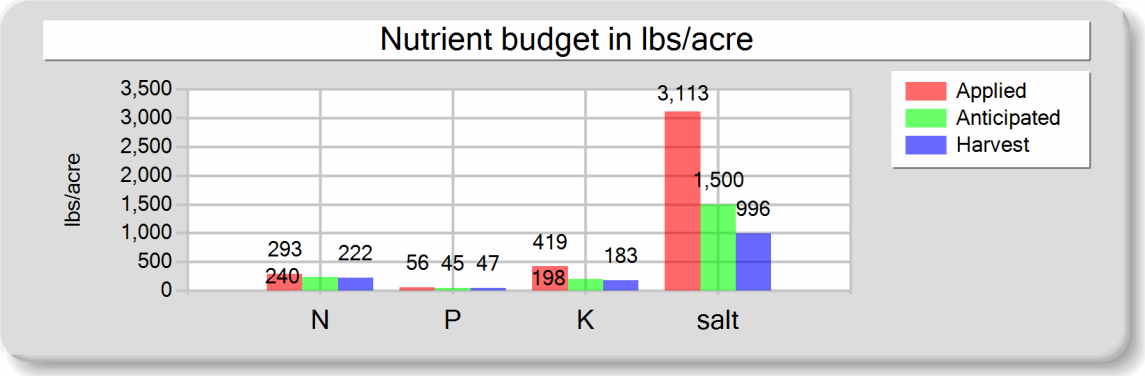
Fresh water applied	
8,354,090.00	*gallons*
307.65	*acre-inches*
12.31	*inches/acre*

Process wastewater applied	
2,773,540.00	*gallons*
102.14	*acre-inches*
4.09	*inches/acre*

Total harvests for the crop	
1	*harvests*

3 - 06/30/2023: Corn, silage

Field name: 3 Crop: Corn, silage Plant date: 06/30/2023



	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	286.31	55.90	419.45	2,869.78
Fresh water	0.00	0.00	0.00	243.31
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	293.31	55.90	419.45	3,113.09
Anticipated crop nutrient removal	240.00	45.00	198.00	1,500.00
Actual crop nutrient removal	221.95	47.14	182.67	995.83
Nutrient balance	71.36	8.76	236.79	2,117.26
Applied to removed ratio	1.32	1.19	2.30	3.13

Fresh water applied	
24,297,190.00	*gallons*
894.78	*acre-inches*
35.79	*inches/acre*

Process wastewater applied	
4,573,925.00	*gallons*
168.44	*acre-inches*
6.74	*inches/acre*

Total harvests for the crop	
1	*harvests*

NUTRIENT ANALYSES

A. MANURE ANALYSES

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: 17.4 %

	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	20,600.00	7,000.00	15,400.00							
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: 7.6 %

	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	7,800.00	4,100.00	7,400.00							
DL	100.00	200.00	200.00							

B. PROCESS WASTEWATER ANALYSES

Lagoon

Sample and source description: Lagoon

Sample date: 11/28/2022 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	217.00	119.00	0.00	0.00	54.80	275.00								5,600.00	3,720
DL	10.00	2.00	0.10	0.10	0.20	0.50								100.00	10

Lagoon

Sample and source description: Lagoon

Sample date: 03/30/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: 7.00

	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	360.00	183.00		2.00	66.60	502.00								2,480.00	1,650
DL	10.00	2.00		2.00	0.20	0.50								100.00	10

Lagoon

Sample and source description: Lagoon

Sample 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	140.00	67.20			32.00	387.00								1,590.00	1,060
DL	10.00	2.00			0.20	0.50								100.00	10

Lagoon

Sample and source description: Lagoon

Sample 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	209.00	160.00			38.70	224.00								3,390.00	2,250
DL	10.00	2.00			0.20	0.50								100.00	10

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	134.00	132.00			32.10	205.00								2,910.00	1,930
DL	10.00	2.00			0.20	0.50								100.00	10

C. FRESH WATER ANALYSES

DW1

DW1

Sample description: DW1

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			5.00	42.00	2.00	81.00	130.00	0.00	32.50	130.00	809.00	510
DL			0.10	1.00	1.00	1.00	10.00	10.00	0.17	2.00	1.00	20

DW2

DW2

Sample description: DW2

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			5.00	42.00	2.00	81.00	130.00	0.00	32.50	130.00	809.00	510
DL			0.10	1.00	1.00	1.00	10.00	10.00	0.17	2.00	1.00	20

Lower Tule 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								40.00	30
DL	0.50		0.40								1.00	20

D. SOIL ANALYSES

No soil analyses entered.

E. PLANT TISSUE ANALYSES

1 - 11/16/2022: Triticale, soft dough

1

Sample and source description: 1

Sample date: 05/18/2023 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	13,500.00	2,900.00	17,900.00		9.11
DL	500.00	200.00	200.00		0.05

1 - 06/28/2023: Corn, silage

1

Sample and source description: 1

Sample date: 10/18/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 66.5 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	11,800.00	2,400.00	8,600.00		4.85
DL	500.00	200.00	200.00		0.05

2 - 11/16/2022: Triticale, soft dough

2 - 11/16/2022: Triticale, soft dough

2

Sample and source description: 2

Sample date: 05/18/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 64.6 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	13,800.00	2,800.00	15,500.00		8.41
DL	500.00	200.00	200.00		0.05

2 - 06/29/2023: Corn, silage

2

Sample and source description: 2

Sample date: 10/18/2023 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	11,500.00	2,200.00	9,500.00		5.21
DL	500.00	200.00	200.00		0.05

3 - 11/22/2022: Triticale, soft dough

3

Sample and source description: 3

Sample date: 05/17/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 63.2 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	13,400.00	3,200.00	19,700.00		10.00
DL	500.00	200.00	200.00		0.05

3 - 06/30/2023: Corn, silage

3

Sample and source description: 3

Sample date: 10/18/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 65.9 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	11,300.00	2,400.00	9,300.00		5.07
DL	500.00	200.00	200.00		0.05

F. SUBSURFACE (TILE) DRAINAGE ANALYSES

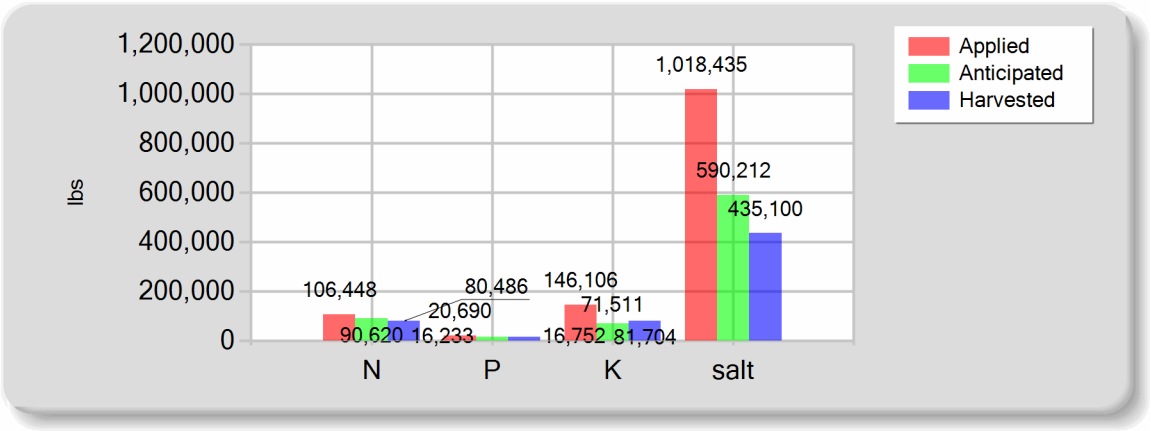
No subsurface (tile) drainage analyses entered.

NUTRIENT APPLICATIONS, POTENTIAL REMOVAL, AND BALANCE

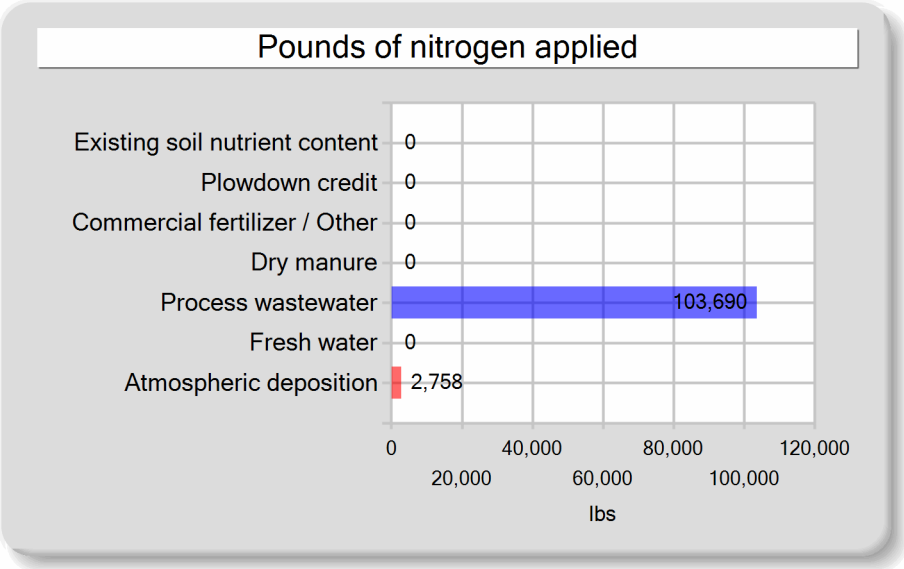
A. SUMMARY OF NUTRIENT APPLICATIONS, POTENTIAL REMOVAL, AND BALANCE

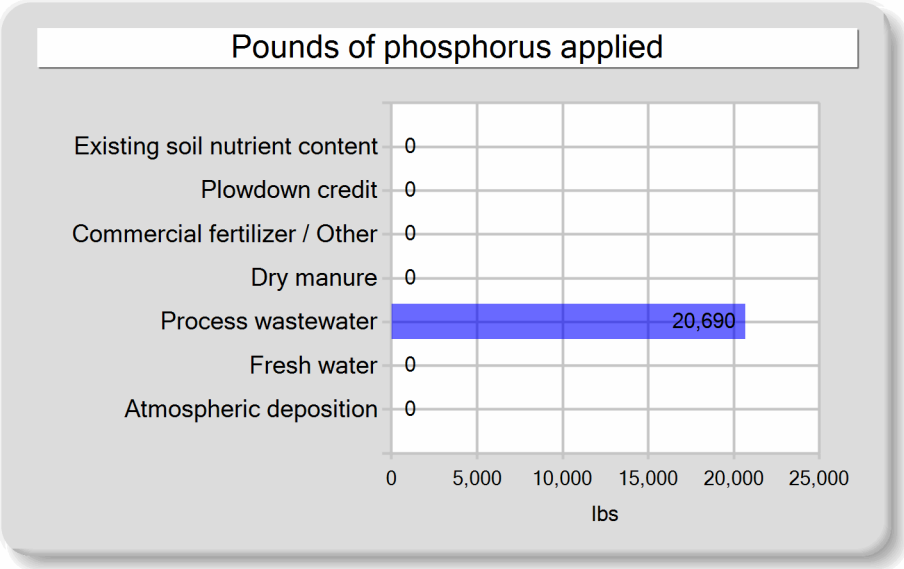
	Total N (lbs)	Total P (lbs)	Total K (lbs)	Total salt (lbs)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	103,689.71	20,689.51	146,105.82	950,654.87
Fresh water	0.00	0.00	0.00	67,779.92
Atmospheric deposition	2,758.00	0.00	0.00	0.00
Total nutrients applied	106,447.71	20,689.51	146,105.82	1,018,434.78
Anticipated crop nutrient removal	90,620.00	16,232.80	71,511.00	590,212.00
Actual crop nutrient removal	80,485.83	16,751.66	81,703.77	435,100.23
Nutrient balance	25,961.88	3,937.85	64,402.05	583,334.56
Applied to removed ratio	1.32	1.24	1.79	2.34

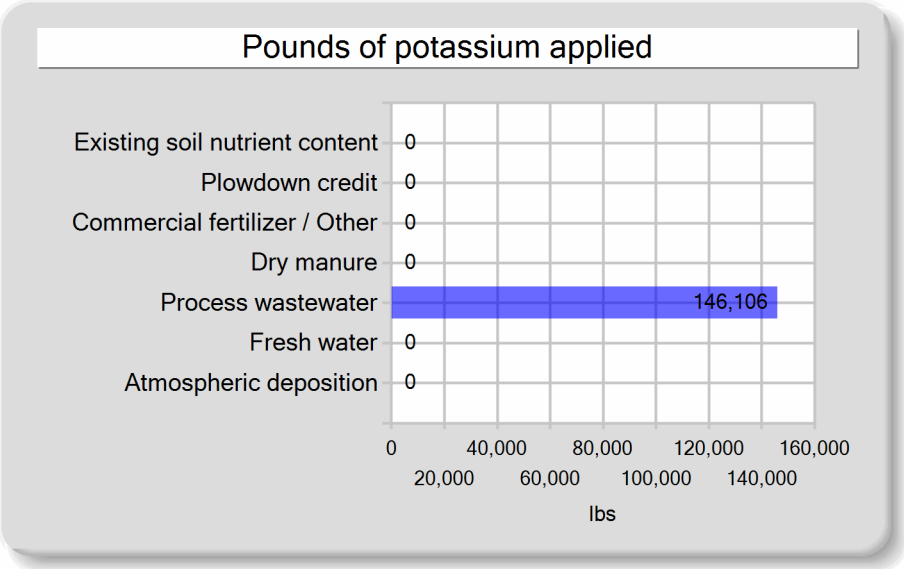
B. POUNDS OF NUTRIENT APPLIED VS. CROP REMOVAL

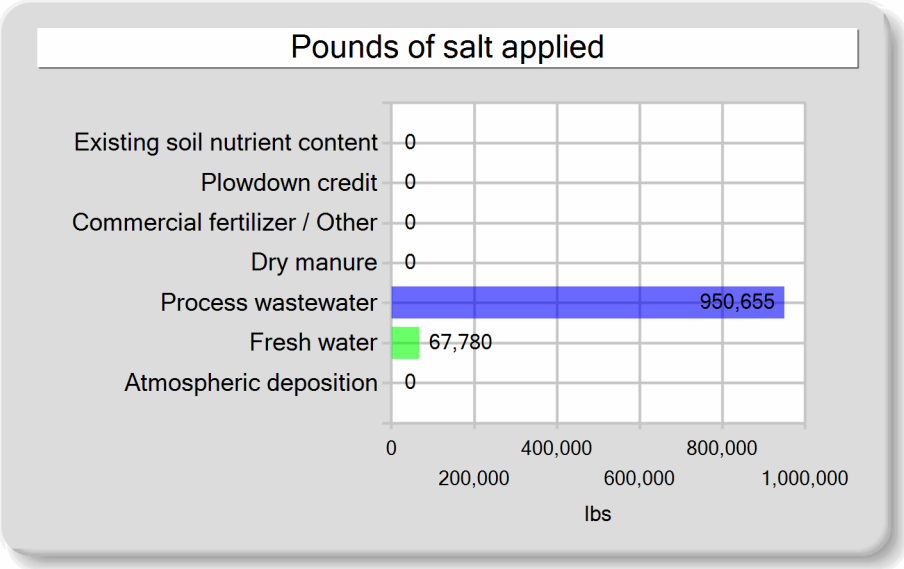


C. POUNDS OF NUTRIENT APPLIED BY MATERIAL TYPE









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

ADDITIONAL NOTES

A. NOTES

IW1 was out of service in 2023.

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

CERTIFICATION

A. OWNER AND/OR OPERATOR CERTIFICATION

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

SIGNATURE OF OWNER OF FACILITY	SIGNATURE OF OPERATOR OF FACILITY
Randy or Travis Gorzeman	Randy or Travis Gorzeman
PRINT OR TYPE NAME	PRINT OR TYPE NAME
06/20/2024	06/20/2024
DATE	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 Baldivez
P.O. Box 7750
Visalia, CA 93290

Lab No. : **VI 2344187**
Customer No. : **4019696**
Reference : **3043**

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
Lower Tule I.D.	06/23/2023	06/23/2023	VI 2344187-001	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

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

July 11, 2023

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

Description : Lower Tule I.D.
Project : Lower Tule I.D.

Lab No. : VI 2344187-001
Customer No. : 4019696
Reference : 3043
Sampled On : June 23, 2023 at 08:45
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	19:43	lcr
Nitrate Nitrogen	ND	0.4	mg/L		1	U	06/28/2023	11:00	lfs	SM 4500-NO3 F	06/28/2023	12:33	lfs
Nitrogen, Total as Nitrogen	ND	0.5	mg/L		1	U	07/03/2023	12:54	sta	Calc.	07/07/2023	19:43	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	12:33	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	07/03/2023	12:54	sta	EPA 351.2	07/07/2023	19:43	lcr
Conductivity	40	1	umhos/cm		1		07/05/2023	14:10	amm	SM 4500-H+B	07/05/2023	22:57	sta
Solids, Total Dissolved (TDS)	30	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

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July 11, 2023

Sentry Ag Service

Lab No. : VI 2344187
Customer No. : 4019696

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
E. C.	2320B	(VI 2343994-001)	Dup	umhos/cm		1.38%	5	
Solids, Total Dissolved	2540CE	06/27/2023:207083CTL	Blank	mg/L		ND	<20	
			LCS	mg/L	993.7	101%	90-110	
		(STK2338352-001)	Dup	mg/L		3.55%	5	
		(STK2338352-001)	Dup	mg/L		4.96%	5	
Nitrogen, Total Kjeldahl	351.2	07/03/2023:207257STA	Blank	mg/L		ND	<0.5	
			LCS	mg/L	12.00	102%	73-124	
			MS	mg/L	12.00	89.5%	54-136	
		(VI 2343914-005)	MSD	mg/L	12.00	96.2%	54-136	
			MSRPD	mg/L		6.8%	≤27	
			MS	mg/L	12.00	97.0%	54-136	
		(VI 2343914-006)	MSD	mg/L	12.00	98.6%	54-136	
			MSRPD	mg/L		1.6%	≤27	
Nitrate + Nitrite as N	4500NO3F	06/28/2023:207139LFS	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	98.6%	80-120	
			MS	mg/L	5.609	98.8%	66-125	
		(SP 2310989-001)	MSD	mg/L	5.609	98.1%	66-125	
			MSRPD	mg/L		0.6%	≤30.4	
Nitrate Nitrogen	4500NO3F	06/28/2023:207139LFS	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	98.6%	80-120	
			MS	mg/L	5.609	98.8%	66-125	
		(SP 2310989-001)	MSD	mg/L	5.609	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 analyted. 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.

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Laboratory Analysis Work Order 2344187

3043

SITE NAME: Lower Tule 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, NO_3N (Dom)
- W2 EC, NO_3N, TDS, TN (Irr)
- ~~W3~~ NH_4-N (Ammonium)
- W4 EC, NO_3N, Ca, Mg, Na, HCO_3, CO_3, SO_4S, Cl, TDS (Dom, GM)
- W5 EC, NO_3N, TDS, TN, Ca, Mg, Na, HCO_3, CO_3, SO_4S, Cl (Irr, GM)
- W6 NO_3N, NO_2 (Dom ILRP, Annually)
- W7 Ca, Mg, Na, K, HCO_3, CO_3, SO_4, Cl + Lab Filtering (GWM)
- W8 Other: _____

Plant Tissue

- P1 TN, NO_3N, PO_4P, 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, NH_4N, TKN, TP, TK, TDS (Quarterly)
- L2 EC, NO_3N, NH_4N, TKN, TP, TK, TDS, pH (Annually)
- L3 Ca, Mg, Na, HCO_3,CO_3, SO_4S, 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, NO_3N, PO_4P, K-AA, Zn, Mn, Fe, Cu, SO_4S
- S2 S1 + CEC, CaCO3, OM, C:N, TN
- S3 NO_3N, NH_4N
- S4 Other: _____

	Sample ID	Description	Analysis	Date/Time	Sampled by	SAS USE ONLY: FIELD TESTS NH_3N*	pH	Temp
1	Lower Tule I.D.	Canal	W2	6/23/23 8:45	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. Postive 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 sampes, please note below.

NOTES: GLS 6/24/23 1634

CHAIN OF CUSTODY RECORDING

	Signature	Company	Received Date & Time	Relinquished Date & Time
1st	Klay	SAS		6/23/23 10:28
2nd	GLS	FGL	6-23-2023 1028	
3rd	GLS	FGL		6-23-2023 1028
4th	GLS		6-23-2023 1028	

LABORATORY USE ONLY
Logged In By: _____ **Total Samples:** _____ **Laboratory No.:** _____

6-6°
ROI

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: 0.6°/ROI / ____ / ____ / ____
   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.

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): CDS

Sample Receipt at SP:

1. Were samples received in a chilled condition? Temps: 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:
   5896487857 / 56 / 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? [Exception: Oil & Grease, VOA and CrVI verified in lab]	(Yes)	No	N/A	FGL
4.	VOAs checked for Headspace?	Yes	No	(N/A)	
5.	Have rush or project due dates been checked and accepted?	Yes	No	(N/A)	
6.	Were all analyses within holding times at time of receipt?	(Yes)	No		

Attach labels to the containers and include a copy of the COC for lab delivery.
Sample Receipt, Login and Verification completed by (initials): CDA

Discrepancy Documentation:

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

1. Person Contacted: _____ Phone Number: _____
   Initiated By: _____ Date: _____
   Problem:
   Resolution:

2. Person Contacted: _____
   Initiated By: _____
   Problem:
   Resolution:

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

(4019696)
Sentry Ag Service
VI 2344187
iv 06/24/2023 09:55:15
VI 2344187

a07-1101

December 27, 2023

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

Lab No. : VI 2348559
Customer No. : 4019696
Reference : 3505

Laboratory Report

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

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

Case Narrative

This Case Narrative pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab No.	Matrix
DW1 & DW2	12/14/2023	12/14/2023	VI 2348559-001	DW

Sampling and Receipt Information:

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

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

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

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

KD: JRD

Approved By **Kelly A. Dunnahoo, B.S.** Digitally signed by Kelly A. Dunnahoo, B.S.
Title: Laboratory Director
Date: 2023-12-29

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December 27, 2023

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

Description : DW1 & DW2
Project : Del Arco

Lab No. : VI 2348559-001
Customer No. : 4019696
Reference : 3505
Sampled On : December 14, 2023 at 11:01
Sampled By : Brandon
Received On : December 14, 2023 at 14:13
Matrix : Drinking Water

Sample Results - Inorganic

Constituent	Result	RL	Units	MCL/AL	Dil.	DQF	Sample Preparation			Sample Analysis			
Dairy Analysis							Date	Time	Who	Method	Date	Time	Who
Alkalinity (as CaCO3)	100	10	mg/L		1		12/19/2023	17:12	amm	SM 4500-H+B	12/19/2023	22:15	amm
Bicarbonate	130	10	mg/L		1		12/19/2023	17:12	amm	SM 4500-H+B	12/19/2023	22:15	amm
Carbonate	ND	10	mg/L		1	U	12/19/2023	17:12	amm	SM 4500-H+B	12/19/2023	22:15	amm
Hydroxide	ND	10	mg/L		1	U	12/19/2023	17:12	amm	SM 4500-H+B	12/19/2023	22:15	amm
Chloride	130	2*	mg/L	500[2]	2		12/15/2023	14:32	ldm	EPA 300.0	12/16/2023	23:31	ldm
Nitrate Nitrogen	5.0	0.1	mg/L	10	1		12/15/2023	14:32	ldm	EPA 300.0	12/16/2023	10:00	ldm
Conductivity	809	1	umhos/cm	1600[2]	1		12/19/2023	17:12	amm	SM 4500-H+B	12/19/2023	22:15	amm
Sulfate Sulfur	32.5	0.17	mg/L		1		12/15/2023	14:32	ldm	EPA 300.0	12/16/2023	10:00	ldm
Solids, Total Dissolved (TDS)	510	20	mg/L	1000[2]	1		12/18/2023	11:45	ctl	SM 2540 C	12/19/2023	10:45	ctl
Calcium	42	1	mg/L		1		12/18/2023	07:55	ejc	EPA 200.7	12/19/2023	12:19	ac
Magnesium	2	1	mg/L		1		12/18/2023	07:55	ejc	EPA 200.7	12/19/2023	12:19	ac
Potassium	ND	1	mg/L		1	U	12/18/2023	07:55	ejc	EPA 200.7	12/19/2023	12:19	ac
Sodium	81	1	mg/L		1		12/18/2023	07:55	ejc	EPA 200.7	12/19/2023	12:19	ac

DQF Flags Definition:
U Constituent results were non-detect.

ND=Non-Detected, RL=Reporting Level * RL adjusted for dilution, Dil.=Dilution
MCL = Maximum Contamination Level. 2 - Secondary Standard. 3 - CDPH Notification Level. AL = Regulatory Action Level.

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CA ELAP Certification No. 2810

December 27, 2023
Sentry Ag Service

Lab No. : VI 2348559
Customer No. : 4019696

Quality Control - Metals

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Metals								
Calcium	200.7	12/18/2023:214203EJC	Blank	mg/L		ND	<1	
			LCS	mg/L	12.00	99.1%	85-115	
			MS	mg/L	12.00	95.7%	75-125	
		(VI 2348524-001)	MSD	mg/L	12.00	75.8%	75-125	
			MSRPD	mg/L		3.1%	≤20.0	
			MS	mg/L	12.00	123%	75-125	
		(SP 2320618-001)	MSD	mg/L	12.00	92.7%	75-125	
			MSRPD	mg/L		3.2%	≤20.0	
Magnesium	200.7	12/18/2023:214203EJC	Blank	mg/L		ND	<1	
			LCS	mg/L	12.00	97.8%	85-115	
			MS	mg/L	12.00	103%	75-125	
		(VI 2348524-001)	MSD	mg/L	12.00	99.2%	75-125	
			MSRPD	mg/L		3.1%	≤20	
			MS	mg/L	12.00	112%	75-125	
		(SP 2320618-001)	MSD	mg/L	12.00	92.4%	75-125	
			MSRPD	mg/L		5.1%	≤20	
Potassium	200.7	12/18/2023:214203EJC	Blank	mg/L		ND	<1	
			LCS	mg/L	12.00	98.4%	85-115	
			MS	mg/L	12.00	100%	75-125	
		(VI 2348524-001)	MSD	mg/L	12.00	97.3%	75-125	
			MSRPD	mg/L		3.0%	≤20.0	
			MS	mg/L	12.00	105%	75-125	
		(SP 2320618-001)	MSD	mg/L	12.00	100%	75-125	
			MSRPD	mg/L		3.0%	≤20.0	
Sodium	200.7	12/18/2023:214203EJC	Blank	mg/L		ND	<1	
			LCS	mg/L	12.00	93.7%	85-115	
			MS	mg/L	12.00	101%	75-125	
		(VI 2348524-001)	MSD	mg/L	12.00	85.0%	75-125	
			MSRPD	mg/L		2.9%	≤20.0	
			MS	mg/L	12.00	158%	<¼	406
		(SP 2320618-001)	MSD	mg/L	12.00	56.2%	<1/4	
			MSRPD	mg/L		6.2%	≤20.0	

Definition

Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.
DQO : Data Quality Objective - This is the criteria against which the quality control data is compared.
LCS : Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.
MS : Matrix Spikes - A random sample is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.
MSD : Matrix Spike Duplicate of MS/MSD pair - A random sample duplicate is spiked with a known amount of analyted. 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.

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December 27, 2023
Sentry Ag Service

Lab No. : VI 2348559
Customer No. : 4019696

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
Alkalinity (as CaCO3)	2320B	(VI 2348390-003)	Dup	mg/L		1.51%	10	
Bicarbonate	2320B	(VI 2348390-003)	Dup	mg/L		1.51%	10	
E. C.	2320B	(VI 2348390-003)	Dup	umhos/cm		0.4%	5	
Solids, Total Dissolved	2540CE	12/18/2023:214216CTL	Blank	mg/L		ND	<20	
			LCS	mg/L	991.5	99.9%	90-110	
		(VI 2348568-001)	Dup	mg/L		0.2%	5	
		(VI 2348568-001)	Dup	mg/L		2.01%	5	
Chloride	300.0	12/15/2023:214302LDM	Blank	mg/L		ND	<1	
			LCS	mg/L	25.00	101%	90-110	
			MS	mg/L	50.00	90.2%	67-117	
		(VI 2348570-001)	MSD	mg/L	50.00	89.6%	67-117	
			MSRPD	mg/L		0.4%	≤7	
			MS	mg/L	50.00	88.1%	67-117	
		(VI 2348570-002)	MSD	mg/L	50.00	89.1%	67-117	
			MSRPD	mg/L		0.5%	≤7	
Nitrate Nitrogen	300.0	12/15/2023:214302LDM	Blank	mg/L		ND	<0.4	
			LCS	mg/L	20.00	102%	90-110	
			MS	mg/L	40.00	104%	86-112	
		(VI 2348570-001)	MSD	mg/L	40.00	103%	86-112	
			MSRPD	mg/L		0.3%	≤7	
			MS	mg/L	40.00	102%	86-112	
		(VI 2348570-002)	MSD	mg/L	40.00	102%	86-112	
			MSRPD	mg/L		0.3%	≤7	
Sulfate Sulfur	300.0	12/15/2023:214302LDM	Blank	mg/L		ND	<0.5	
			LCS	mg/L	50.00	102%	90-110	
			MS	mg/L	100.0	104%	18-165	
		(VI 2348570-001)	MSD	mg/L	100.0	103%	18-165	
			MSRPD	mg/L		0.3%	≤7	
			MS	mg/L	100.0	91.1%	18-165	
		(VI 2348570-002)	MSD	mg/L	100.0	91.6%	18-165	
			MSRPD	mg/L		0.3%	≤7	

Definition

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

Dup : Duplicate Sample - A random sample with each batch is prepared and analyzed in duplicate. The relative percent difference is an indication of precision for the preparation and analysis.

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

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

MSD : Matrix Spike Duplicate of MS/MSD pair - A random sample duplicate is spiked with a known amount of analyted. 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.

Page 4 of 4

Laboratory Analysis Work Order

No. 3505

2348559

SITE NAME: Del Arco

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, NO_3N (Dom)
- W2 EC, NO_3N, TDS, TN (Irr)
- W3 NH_4-N (Ammonium)
- (W4) EC, NO_3N, Ca, Mg, Na, HCO_3, CO_3, SO_4S, Cl, TDS (Dom, GM)
- W5 EC, NO_3N, TDS, TN, Ca, Mg, Na, HCO_3, CO_3, SO_4S, Cl (Irr, GM)
- W6 NO_3N, NO_2 (Dom ILRP, Annually)
- W7 Ca, Mg, Na, K, HCO_3, CO_3, SO_4, Cl + Lab Filtering (GWM)
- W8 Other: _____

18.4°C
ROE
TH407

Plant Tissue

- P1 TN, NO_3N, PO_4P, 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, NH_4N, TKN, TP, TK, TDS (Quarterly)
- L2 EC, NO_3N, NH_4N, TKN, TP, TK, TDS, pH (Annually)
- L3 Ca, Mg, Na, HCO_3,CO_3, SO_4S, 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, NO_3N, PO_4P, K-AA, Zn, Mn, Fe, Cu, SO_4S
- S2 S1 + CEC, CaCO3, OM, C:N, TN
- S3 NO_3N, NH_4N
- S4 Other: _____

	Sample ID	Description	Analysis	Date/Time	Sampled by	SAS USE ONLY: FIELD TESTS NH_3N*	pH	Temp
1	DW1 + DW2	Dom	W4	12/14/23	Brandon	—		
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 sampes, please note below.

NOTES:

CHAIN OF CUSTODY RECORDING

	Signature	Company	Received Date & Time	Relinquished Date & Time
1st		SAS		12/14/23 2:43
2nd	ASB	FGL	12/14/23 1443	
3rd	ASB	FGL		12/14/23 1730
4th	GCS	GCS	12/14/23 1730	

LABORATORY USE ONLY
Logged In By: _____ Total Samples: _____ Laboratory No.: 12/15/23 1155

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): CR
2. Temp IR Gun ID #: 403
3. Were samples received on ice? (Yes) No Temps: 18.4°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): ADB

Sample Receipt at SP:

1. Number of ice chests/packages received: 3 Shipping tracking #(s): 510018941454, 510018573705 510018941463
2. Temp IR Gun ID #: 2060
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? [Exception: Oil & Grease, VOA and CrVI verified in lab]	(Yes)	No	N/A	FGL
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): LW

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: Time sumped 1101 (off of bottle)
2. Person Contacted: _____ Phone Number: _____
   Initiated By: _____ Date:
   Problem:
   Resolution:

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

(4019696)
Sentry Ag Service
VI 2348559
iv 12/15/2023 09:45:55
VI 2348559

2

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: Randy Garzeman

Name of Dairy Facility: Del Arco Dairy

Facility Address: 9295 Ave 88 Dixley 93256
Number and Street / City / Zip Code

Contact Person Name and Phone Number: Randy 559-905-7549
Name / Phone Number

Manure/Process Wastewater Hauler Information:

Name of Hauling Company/Person:

Address of Hauling Company /Person:

Contact Person: ANGEL GONZALEZ (559)358-6923

Destination Information:

Composting Facility / Broker / Farmer / Other (identify) Composting (please circle one)

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

Harvest 24487 Rd 140 Tulare 93274 (559)686-1622
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: April 23 – July 23

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: 3,420 (Tons) or Cubic Yards (indicate which units used)
Manure Solids Content (if amount reported in tons): _____
Manure Density (if amount reported in cubic yards): _____

Method used to determine amount of manure: Dairy 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: Randy Guyon Date: 5/13/24

Hauler's Signature: Angel Cordoba Date: 5/13/24