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: 4 Star #3 Dairy

Physical address of dairy:

2393 224 AVE	Tulare	Tulare	93274
Number and Street	City	County	Zip Code

Street and nearest cross street (if no address):

Date facility was originally placed in operation: 12/25/2004

Regional Water Quality Control Board Basin Plan designation: Tulare Basin

County Assessor Parcel Number(s) for dairy facility:

X155-X200-X001-XXXX

B. OPERATORS

Mattos, Mario

Operator name: Mattos, Mario Telephone no.: Landline (559) 901-4861 Cellular

2393 224 AVE	Tulare	CA	93274
Mailing Address Number and Street	City	State	Zip Code

This operator is responsible for paying permit fees.

C. OWNERS

Mattos, Mario

Legal owner name: Mattos, Mario Telephone no.: Landline (559) 901-4861 Cellular

2393 224 AVE	Tulare	CA	93274
Mailing Address Number and Street	City	State	Zip Code

This owner is responsible for paying permit fees.

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	358	60	142	120	0	0
Number under roof	0	0	0	0	0	0
Maximum number	358	60	142	120	0	0
Average number	358	60	142	120	0	0
Avg live weight (lbs)	1,100	1,160	800	600		

Predominant milk cow breed: Jersey

Average milk production: 60 *pounds per cow per day*

B. MANURE GENERATED

Total manure excreted by the herd: 12,055.15 *tons per reporting period*

Total nitrogen from manure: 150,386.51 *lbs per reporting period* After ammonia losses (30% loss applied): 105,270.56 *lbs per reporting period*

Total phosphorus from manure: 24,969.51 *lbs per reporting period*

Total potassium from manure: 66,208.24 *lbs per reporting period*

Total salt from manure: 182,361.30 *lbs per reporting period*

C. PROCESS WASTEWATER GENERATED

Process wastewater generated: 6,439,500 *gallons*

Total nitrogen generated: 21,776.21 *lbs*

Total phosphorus generated: 4,367.36 *lbs*

Total potassium generated: 31,513.61 *lbs*

Total salt generated: 189,184.61 *lbs*

	6,439,500	*gallons applied*
+	0	*gallons exported*
-	0	*gallons imported*
=	6,439,500	*gallons generated*

D. FRESH WATER SOURCES

Source Description	Type
P-10	Ground water
P-11 canal	Surface water
P-14	Ground water
P-9	Ground water

E. SUBSURFACE (TILE) DRAINAGE SOURCES

No subsurface (tile) drainage sources entered.

F. NUTRIENT IMPORTS

No dry manure nutrient imports entered.

No process wastewater nutrient imports entered.

No commercial or other nutrient imports entered.

G. NUTRIENT EXPORTS

No solid nutrient exports entered.

No liquid nutrient exports entered.

APPLICATION AREA

A. LIST OF LAND APPLICATION AREAS

Field name	Controlled acres	Cropable acres	Total harvests	Type of waste applied	Parcel number
#15	70	70	2	both	X155-X200-X001-XXXX
#16	24	24	2	both	X155-X200-X001-XXXX
#17	51	51	0	none	X155-X200-X001-XXXX
#18A	74	74	0	none	X155-X200-X001-XXXX
#18B	25	25	0	none	X155-X200-X001-XXXX
Totals for areas that were used for application	94	94	4		
Totals for areas that were not used for application	150	150	0		
Land application area totals	244	244	4		

B. CROPS AND HARVESTS

#15

Field name: #15

10/30/2022: Wheat, silage, boot stage

Crop: Wheat, silage, boot stage Acres planted: 70 Plant date: 10/30/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/20/2023	1,278.00 *ton*	Dry-weight		64.5	15,300.00	3,400.00	14,400.00		8.97

	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	0.00
Total actual harvest content	18.26	198.33	44.07	186.66	1,162.74

#15

06/15/2023: Corn, silage

Crop: Corn, silage Acres planted: 70 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 (%)
09/16/2023	2,009.00 *ton*	Dry-weight		74.1	10,500.00	2,300.00	17,700.00		6.58

	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	0.00
Total actual harvest content	28.70	156.10	34.19	263.14	978.22

#16

Field name: #16

10/31/2022: Wheat, silage, soft dough

Crop: Wheat, silage, soft dough Acres planted: 24 Plant date: 10/31/2022

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	433.00 *ton*	Dry-weight		61.1	10,600.00	2,500.00	9,000.00		7.80

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	18.00	198.00	30.60	149.40	0.00
Total actual harvest content	18.04	148.79	35.09	126.33	1,094.84

06/01/2023: Corn, silage

Crop: Corn, silage Acres planted: 24 Plant date: 06/01/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
09/05/2023	700.00 *ton*	Dry-weight		68.1	7,600.00	2,800.00	14,100.00		5.79

	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	0.00
Total actual harvest content	29.17	141.42	52.10	262.38	1,077.42

NUTRIENT BUDGET

A. LAND APPLICATIONS

#15 - 10/30/2022: Wheat, silage, boot stage

Field name: #15

Crop: Wheat, silage, boot stage Plant date: 10/30/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
10/28/2022	Broadcast/incorporate	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Manure	Corral solids	156.97	52.09	43.64	70.39	710.00 *ton*
Application event totals		156.97	52.09	43.64	70.39	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
10/31/2022	Pipeline	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	50.65	11.22	105.15	611.61	1,470,000.00 *gal*
P-11 canal	Surface water	0.26	0.00	0.00	69.68	10,824,000.00 *gal*
Application event totals		50.90	11.22	105.15	681.29	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
04/09/2023	Pipeline	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	52.45	11.62	108.90	633.45	1,522,500.00 *gal*
P-11 canal	Surface water	0.27	0.00	0.00	72.65	11,286,000.00 *gal*
Application event totals		52.72	11.62	108.90	706.10	

#15 - 06/15/2023: Corn, silage

Field name: #15

Crop: Corn, silage Plant date: 06/15/2023

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

#15 - 06/15/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
05/26/2023	Broadcast/incorporate	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Manure	Corral solids	54.75	19.62	19.94	31.65	426.00 *ton*
Application event totals		54.75	19.62	19.94	31.65	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
05/27/2023	Pipeline	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
P-11 canal	Surface water	0.26	0.00	0.00	71.38	11,088,000.00 *gal*
Application event totals		0.26	0.00	0.00	71.38	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
06/22/2023	Pipeline	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	70.04	11.74	68.70	395.52	864,000.00 *gal*
P-11 canal	Surface water	0.23	0.00	0.00	62.46	9,702,000.00 *gal*
Application event totals		70.27	11.74	68.70	457.98	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/24/2023	Pipeline	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
P-11 canal	Surface water	0.26	0.00	0.00	70.53	10,956,000.00 *gal*
Application event totals		0.26	0.00	0.00	70.53	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/19/2023	Pipeline	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	69.55	13.99	63.35	442.10	1,107,000.00 *gal*
P-11 canal	Surface water	0.27	0.00	0.00	72.65	11,286,000.00 *gal*
Application event totals		69.82	13.99	63.35	514.75	

#16 - 10/31/2022: Wheat, silage, soft dough

Field name: #16

Crop: Wheat, silage, soft dough Plant date: 10/31/2022

#16 - 10/31/2022: Wheat, silage, soft dough

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
10/29/2022	Broadcast/incorporate	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Manure	Corral solids	96.73	32.10	26.89	43.38	150.00 *ton*
Application event totals		96.73	32.10	26.89	43.38	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
11/01/2022	Pipeline	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	51.70	11.45	107.34	624.35	514,500.00 *gal*
P-11 canal	Surface water	0.24	0.00	0.00	64.44	3,432,000.00 *gal*
Application event totals		51.94	11.45	107.34	688.79	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
04/14/2023	Pipeline	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	49.59	10.98	102.96	598.86	493,500.00 *gal*
P-11 canal	Surface water	0.24	0.00	0.00	64.44	3,432,000.00 *gal*
Application event totals		49.83	10.98	102.96	663.30	

#16 - 06/01/2023: Corn, silage

Field name: #16

Crop: Corn, silage Plant date: 06/01/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
05/18/2023	Broadcast/incorporate	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Manure	Corral solids	56.23	20.15	20.48	32.50	150.00 *ton*
Application event totals		56.23	20.15	20.48	32.50	

#16 - 06/01/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
05/19/2023	Pipeline	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
P-11 canal	Surface water	0.22	0.00	0.00	59.48	3,168,000.00 *gal*
Application event totals		0.22	0.00	0.00	59.48	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
06/19/2023	Pipeline	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	55.33	9.28	54.27	312.44	234,000.00 *gal*
P-11 canal	Surface water	0.25	0.00	0.00	66.92	3,564,000.00 *gal*
Application event totals		55.58	9.28	54.27	379.36	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/13/2023	Pipeline	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
P-11 canal	Surface water	0.24	0.00	0.00	65.68	3,498,000.00 *gal*
Application event totals		0.24	0.00	0.00	65.68	

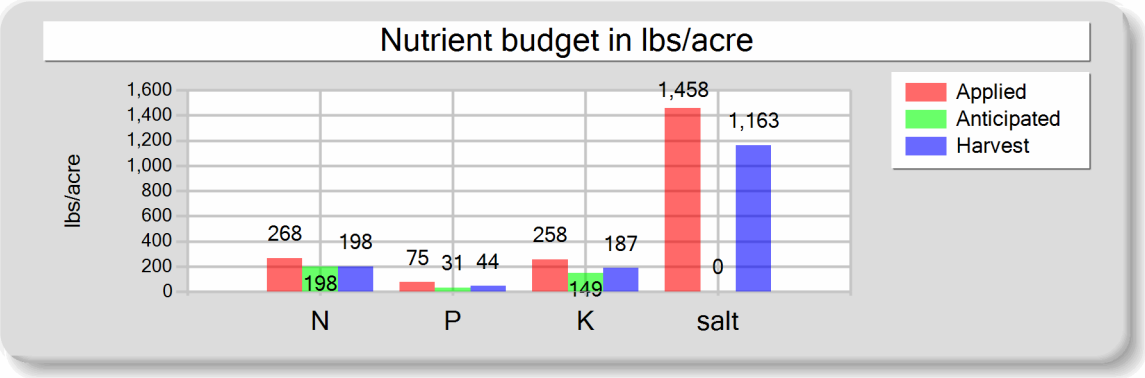
Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/15/2023	Pipeline	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	42.88	8.62	39.05	272.57	234,000.00 *gal*
P-11 canal	Surface water	0.22	0.00	0.00	60.72	3,234,000.00 *gal*
Application event totals		43.10	8.62	39.05	333.29	

B. NUTRIENT BUDGET

#15 - 10/30/2022: Wheat, silage, boot stage

Field name: #15 Crop: Wheat, silage, boot stage Plant date: 10/30/2022



	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	156.97	52.09	43.64	70.39
Process wastewater	103.10	22.83	214.05	1,245.05
Fresh water	0.53	0.00	0.00	142.33
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	267.60	74.92	257.69	1,457.78
Anticipated crop nutrient removal	198.00	30.60	149.40	0.00
Actual crop nutrient removal	198.33	44.07	186.66	1,162.74
Nutrient balance	69.27	30.85	71.03	295.04
Applied to removed ratio	1.35	1.70	1.38	1.25

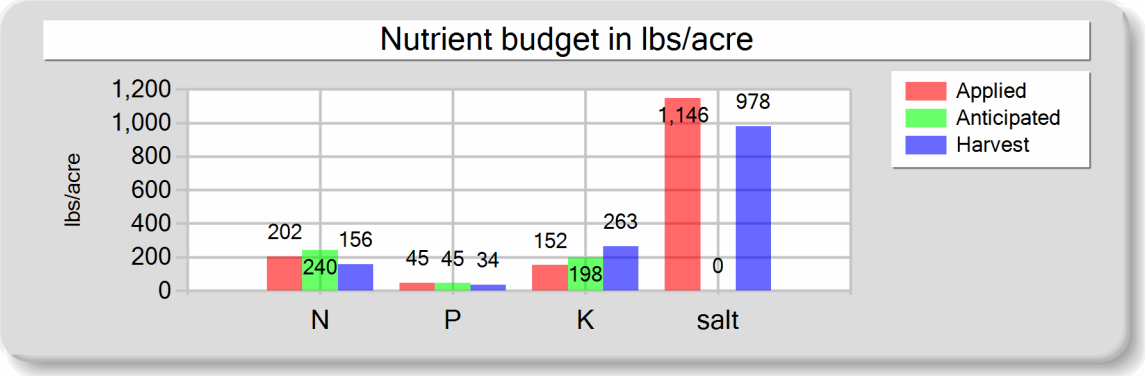
Fresh water applied	
22,110,000.00	*gallons*
814.24	*acre-inches*
11.63	*inches/acre*

Process wastewater applied	
2,992,500.00	*gallons*
110.20	*acre-inches*
1.57	*inches/acre*

Total harvests for the crop	
1	*harvests*

#15 - 06/15/2023: Corn, silage

Field name: #15 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	54.75	19.62	19.94	31.65
Process wastewater	139.59	25.73	132.05	837.62
Fresh water	1.03	0.00	0.00	277.02
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	202.36	45.35	151.98	1,146.29
Anticipated crop nutrient removal	240.00	45.00	198.00	0.00
Actual crop nutrient removal	156.10	34.19	263.14	978.22
Nutrient balance	46.26	11.16	-111.15	168.07
Applied to removed ratio	1.30	1.33	0.58	1.17

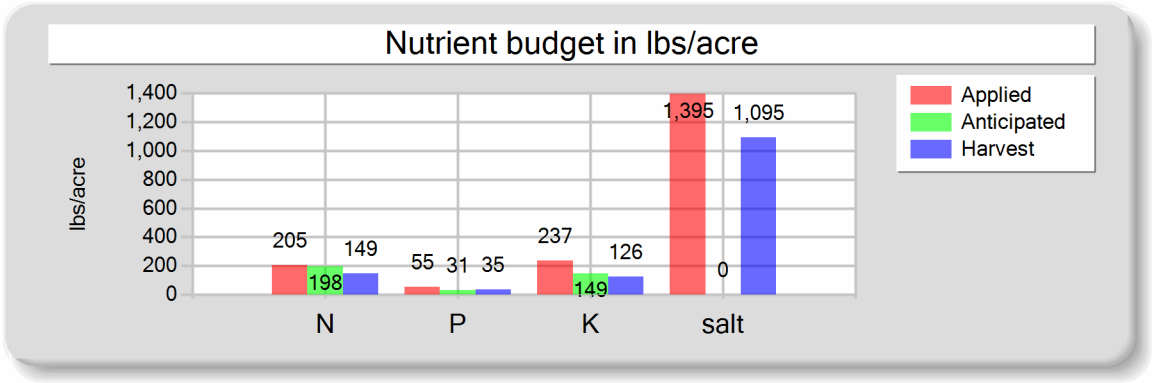
Fresh water applied	
43,032,000.00	*gallons*
1,584.72	*acre-inches*
22.64	*inches/acre*

Process wastewater applied	
1,971,000.00	*gallons*
72.59	*acre-inches*
1.04	*inches/acre*

Total harvests for the crop	
1	*harvests*

#16 - 10/31/2022: Wheat, silage, soft dough

Field name: #16 Crop: Wheat, silage, soft dough Plant date: 10/31/2022



	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	96.73	32.10	26.89	43.38
Process wastewater	101.29	22.43	210.29	1,223.21
Fresh water	0.48	0.00	0.00	128.88
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	205.50	54.53	237.19	1,395.47
Anticipated crop nutrient removal	198.00	30.60	149.40	0.00
Actual crop nutrient removal	148.79	35.09	126.33	1,094.84
Nutrient balance	56.71	19.44	110.86	300.62
Applied to removed ratio	1.38	1.55	1.88	1.27

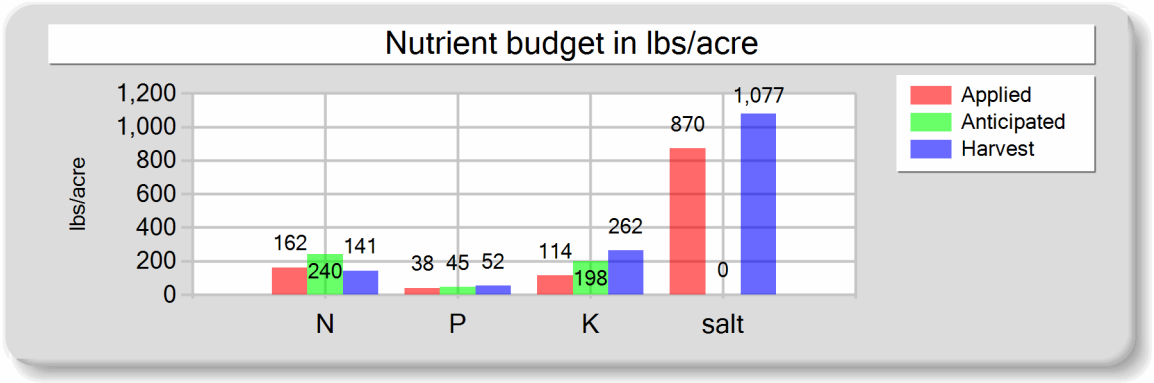
Fresh water applied	
6,864,000.00	*gallons*
252.78	*acre-inches*
10.53	*inches/acre*

Process wastewater applied	
1,008,000.00	*gallons*
37.12	*acre-inches*
1.55	*inches/acre*

Total harvests for the crop	
1	*harvests*

#16 - 06/01/2023: Corn, silage

Field name: #16 Crop: Corn, silage Plant date: 06/01/2023



	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	56.23	20.15	20.48	32.50
Process wastewater	98.21	17.90	93.32	585.01
Fresh water	0.94	0.00	0.00	252.80
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	162.37	38.05	113.80	870.31
Anticipated crop nutrient removal	240.00	45.00	198.00	0.00
Actual crop nutrient removal	141.42	52.10	262.38	1,077.42
Nutrient balance	20.94	-14.05	-148.58	-207.11
Applied to removed ratio	1.15	0.73	0.43	0.81

Fresh water applied	
13,464,000.00	*gallons*
495.83	*acre-inches*
20.66	*inches/acre*

Process wastewater applied	
468,000.00	*gallons*
17.23	*acre-inches*
0.72	*inches/acre*

Total harvests for the crop	
1	*harvests*

NUTRIENT ANALYSES

A. MANURE ANALYSES

M43953-01 Valley Tech

Sample and source description: M43953-01 Valley Tech

Sample date: 03/06/2023 Material type: Corral solids Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 65.3 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Calcium (mg/kg)	Magnesium (mg/kg)	Sodium (mg/kg)	Sulfur (mg/kg)	Chloride (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	22,300.00	7,400.00	6,200.00	0.01	0.01	0.01	0.01	0.01		1.00
DL	0.01	0.02	0.02	0.01	0.01	0.01	0.01	0.01		1.00

M67204-01 Valley Tech

Sample and source description: M67204-01 Valley Tech

Sample date: 09/28/2023 Material type: Corral solids Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 74.0 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Calcium (mg/kg)	Magnesium (mg/kg)	Sodium (mg/kg)	Sulfur (mg/kg)	Chloride (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	17,300.00	6,200.00	6,300.00	0.01	0.01	0.01	0.01	0.01		1.00
DL	0.01	0.02	0.02	0.01	0.01	0.01	0.01	0.01		1.00

B. PROCESS WASTEWATER ANALYSES

L42238-01 Valley Tech

Sample and source description: L42238-01 Valley Tech

Sample date: 01/26/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: 0.00

	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	289.00	152.00	0.00	0.00	64.00	600.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	5.25	3,490
DL	10.00	2.00	2.00	2.00	0.20	0.50	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.10	10

L45339-01 Valley Tech

Sample and source description: L45339-01 Valley Tech

Sample date: 04/03/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: 0.00

	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	680.00	249.00	0.00	0.00	114.00	667.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	5.78	3,840
DL	10.00	2.00	2.00	2.00	0.20	0.50	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.10	10

L63598-01 Valley Tech

Sample and source description: L63598-01 Valley Tech

Sample date: 08/30/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: 0.00

	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	527.00	229.00	0.00	0.00	106.00	480.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	5.05	3,350
DL	10.00	2.00	2.00	2.00	0.20	0.50	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.10	10

L74165-01 Valley Tech

Sample and source description: L74165-01 Valley Tech

Sample date: 12/11/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: 0.00

	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	472.00	340.00	0.00	0.00	81.40	608.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	6.27	4,160
DL	10.00	2.00	2.00	2.00	0.20	0.50	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.10	10

C. FRESH WATER ANALYSES

P-11 canal

P-11 canal

23E0710-01 Dellavalle

Sample description: 23E0710-01 Dellavalle

Sample date: 05/08/2023 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	0.20	0.00	0.20	0.01	0.01	0.01	0.01	0.01	0.01	0.01	67.40	54
DL	0.10	0.10	0.10	0.01	0.01	0.01	0.01	0.01	0.01	0.01	10.00	10

D. SOIL ANALYSES

No soil analyses entered.

E. PLANT TISSUE ANALYSES

#15 - 10/30/2022: Wheat, silage, boot stage

H50974-01 Valley Tech

Sample and source description: H50974-01 Valley Tech

Sample date: 05/20/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 64.5 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	15,300.00	3,400.00	14,400.00		8.97
DL	0.05	0.02	0.02		0.05

#15 - 06/15/2023: Corn, silage

#15 - 06/15/2023: Corn, silage

H66828-01 Valley Tech

Sample and source description: H66828-01 Valley Tech

Sample date: 09/16/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 74.1 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	10,500.00	2,300.00	17,700.00		6.58
DL	0.05	0.02	0.02		0.05

#16 - 10/31/2022: Wheat, silage, soft dough

50675 Valley Tech

Sample and source description: 50675 Valley Tech

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

Moisture: 61.1 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	10,600.00	2,500.00	9,000.00		7.80
DL	0.05	0.02	0.05		0.05

#16 - 06/01/2023: Corn, silage

H64113-01 Valley Tech

Sample and source description: H64113-01 Valley Tech

Sample date: 09/05/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 68.1 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	7,600.00	2,800.00	14,100.00		5.79
DL	0.05	0.02	0.02		0.05

F. SUBSURFACE (TILE) DRAINAGE ANALYSES

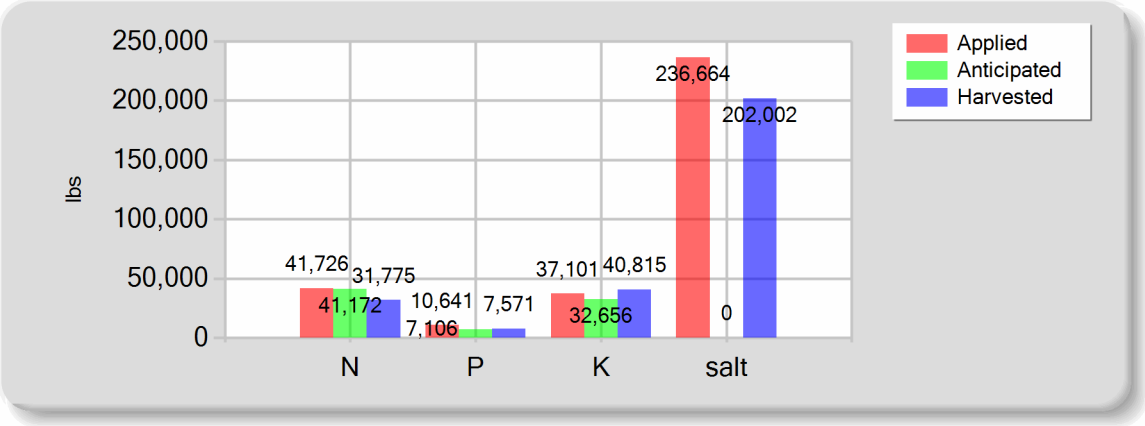
No subsurface (tile) drainage analyses entered.

NUTRIENT APPLICATIONS, POTENTIAL REMOVAL, AND BALANCE

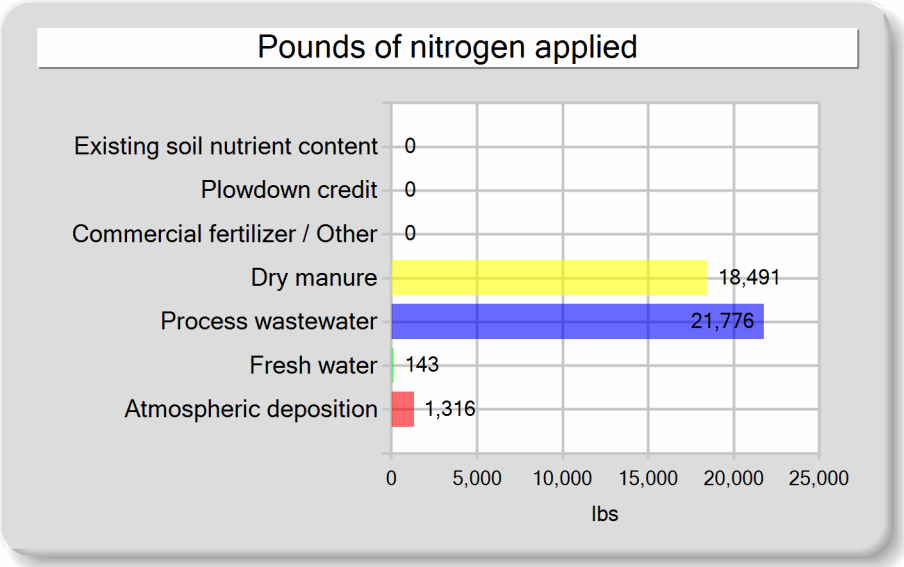
A. SUMMARY OF NUTRIENT APPLICATIONS, POTENTIAL REMOVAL, AND BALANCE

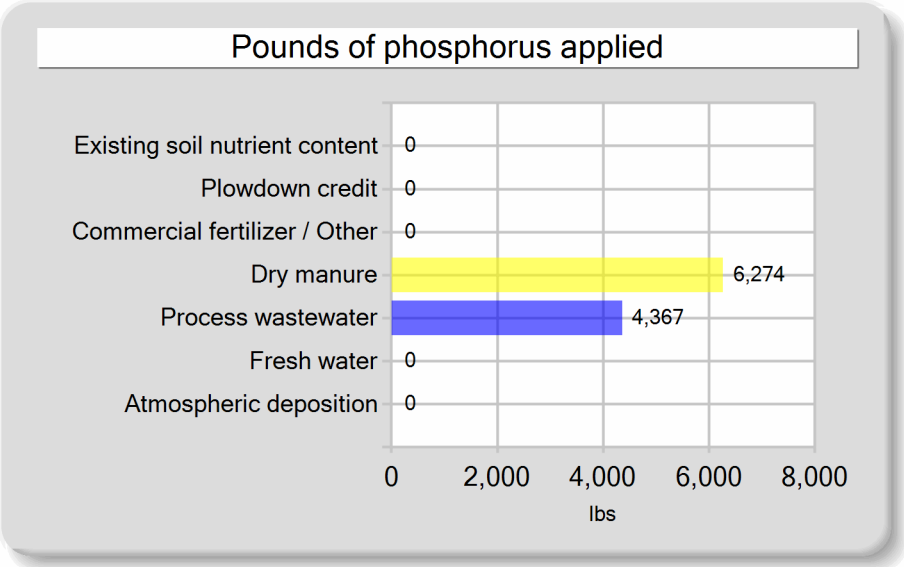
	Total N (lbs)	Total P (lbs)	Total K (lbs)	Total salt (lbs)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	18,491.23	6,273.64	5,587.38	8,963.60
Process wastewater	21,776.21	4,367.36	31,513.61	189,184.61
Fresh water	142.65	0.00	0.00	38,515.35
Atmospheric deposition	1,316.00	0.00	0.00	0.00
Total nutrients applied	41,726.08	10,641.00	37,100.99	236,663.56
Anticipated crop nutrient removal	41,172.00	7,106.40	32,655.60	0.00
Actual crop nutrient removal	31,774.89	7,571.28	40,814.92	202,001.86
Nutrient balance	9,951.19	3,069.72	-3,713.92	34,661.70
Applied to removed ratio	1.31	1.41	0.91	1.17

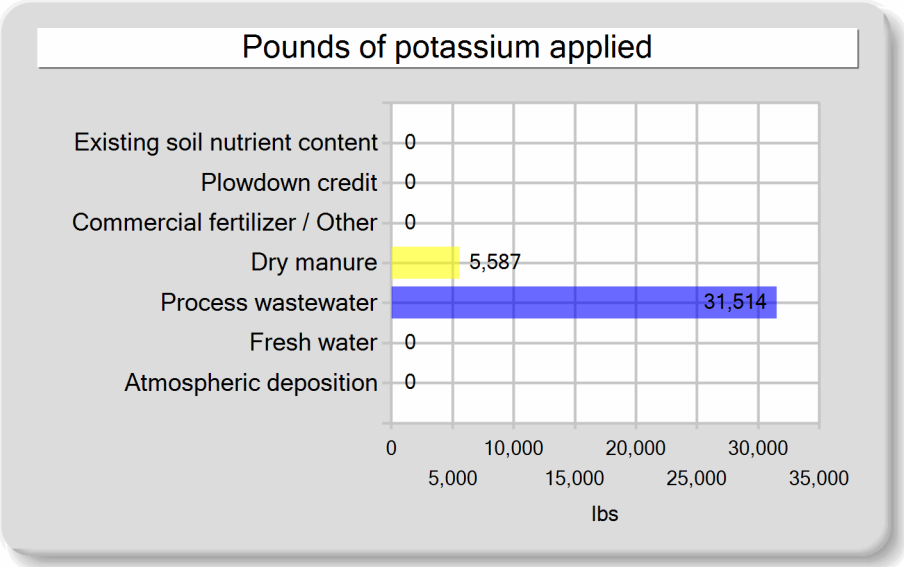
B. POUNDS OF NUTRIENT APPLIED VS. CROP REMOVAL

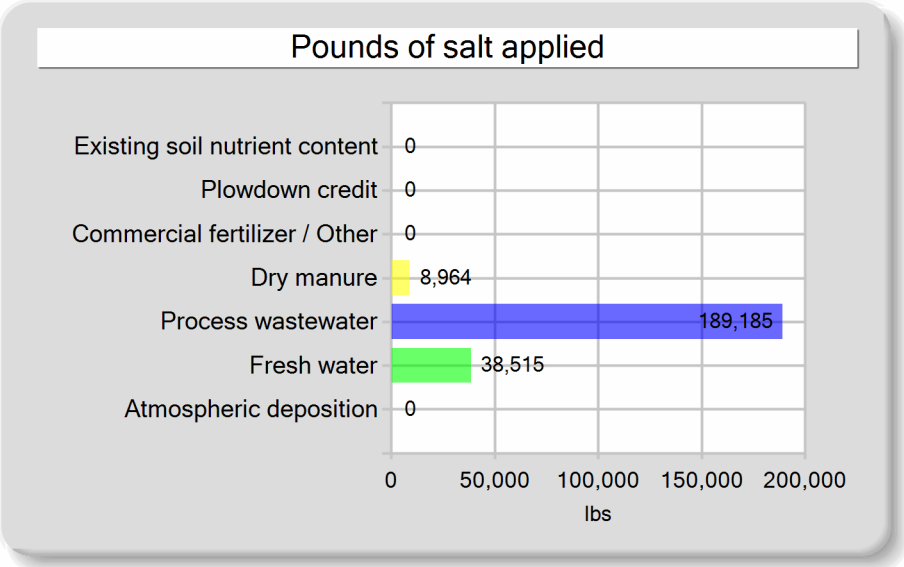


C. POUNDS OF NUTRIENT APPLIED BY MATERIAL TYPE









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

1.) AG Wells 9,10 & 14 were not available during reporting period.

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
Mario Mattos	SAME AS OWNER
PRINT OR TYPE NAME	PRINT OR TYPE NAME
DATE	DATE

CERTIFICATION

A. OWNER AND/OR OPERATOR CERTIFICATION

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SIGNATURE OF OWNER OF FACILITY	SIGNATURE OF OPERATOR OF FACILITY
Mario Mattos	SAME AS OWNER
PRINT OR TYPE NAME	PRINT OR TYPE NAME
4-23-24	
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.

DELLAVALLE™
LABORATORY INC

Roxey J Avila
740 S. Kazarian St.
Tulare, CA 93274

Account# 00-0024349
Account Manager: Ben Nydam
Submitted By: Roxey
Ranch: 4 Star Dairy #3

Received: 02/02/2023 7:15
Reported: 02/03/2023 14:37

Samples in this Report

Lab ID	Sample	Matrix	Sampled By	Crop	Date Sampled
23B0250-01	D-13	Drinking Water	Justin		02/01/2023 12:19

Default Cooler Temperature on Receipt °C: 7.6
Containers Intact
COC/Labels Agree
Received On Ice

Notes and Definitions

Item	Definition
H	Hold Time Exceeded
MCL	Drinking Water Maximum Contaminant Level
ND	Analyte NOT DETECTED at or above the reporting limit.
NES	Not Enough Sample
*	Not Taken
RPD	Relative Percent Difference
%REC	Percent Recovery
Source	Sample that was matrix spiked or duplicated.

Laboratory Director/Technical Manager

ELAP Certification #1595
A2LA Certification #6440.02

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Account# 00-0024349
Account Manager: Ben Nydam
Submitted By: Roxey
Ranch: 4 Star Dairy #3

Received: 02/02/2023 7:15
Reported: 02/03/2023 14:37

Sample Results

Sample: D-13
23B0250-01 (Water)

Sampled: 2/1/2023 12:19
Sampled By: Justin

Analyte	Result	Units	Reporting Limit	DIL	DW MCL	Date/Time Analyzed	Method	Notes	Batch
Electrical Conductivity	**0.59**	mmhos/cm	0.01	1		02/03/23 11:55	SM 2510 B		BEB0062
Electrical Conductivity umhos	**594**	umhos/cm	10.0	1		02/03/23 11:55	SM 2510 B		BEB0062
Ammonia (as N)	ND	mg/L	0.00	1		02/01/23 12:19	Field		BEB0031
Nitrate Nitrogen as NO3N	**26.5**	mg/L	0.1	1	10	02/02/23 17:16	EPA 300.0		BEB0019
pH	**7.7**	units	1.0	1		02/03/23 11:55	SM 4500-H+	H	BEB0062
Temperature	**25.0**	°C	0.0	1		02/03/23 11:55	SM 2510 B		BEB0062

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Account Manager: Ben Nydam
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Ranch: 4 Star Dairy #3

Received: 02/02/2023 7:15
Reported: 02/03/2023 14:37

Quality Control

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BEB0019										
Blank (BEB0019-BLK1)					Prepared & Analyzed: 2/2/2023					
Nitrate Nitrogen as NO3N	ND		0.1	mg/L						
Blank (BEB0019-BLK2)					Prepared & Analyzed: 2/2/2023					
Nitrate Nitrogen as NO3N	ND		0.1	mg/L						
Blank (BEB0019-BLK3)					Prepared & Analyzed: 2/2/2023					
Nitrate Nitrogen as NO3N	ND		0.1	mg/L						
LCS (BEB0019-BS1)					Prepared & Analyzed: 2/2/2023					
Nitrate Nitrogen as NO3N	4.9		0.1	mg/L	5.000		97.8	90-110		
LCS (BEB0019-BS2)					Prepared & Analyzed: 2/3/2023					
Nitrate Nitrogen as NO3N	4.9		0.1	mg/L	5.000		97.6	90-110		
Duplicate (BEB0019-DUP1)		**Source: 23B0248-01**			Prepared & Analyzed: 2/2/2023					
Nitrate Nitrogen as NO3N	0.2		0.1	mg/L		0.2			1.81	10
Duplicate (BEB0019-DUP2)		**Source: 23B0251-04**			Prepared & Analyzed: 2/3/2023					
Nitrate Nitrogen as NO3N	35.2		0.1	mg/L		35.4			0.465	10
Matrix Spike (BEB0019-MS1)		**Source: 23B0248-01**			Prepared & Analyzed: 2/2/2023					
Nitrate Nitrogen as NO3N	4.5		0.1	mg/L	5.000	0.2	85.2	90-110		
Matrix Spike (BEB0019-MS2)		**Source: 23B0251-04**			Prepared & Analyzed: 2/3/2023					
Nitrate Nitrogen as NO3N	39.5		0.1	mg/L	5.000	35.4	83.5	90-110		
Reference (BEB0019-SRM1)					Prepared & Analyzed: 2/2/2023					
Nitrate Nitrogen as NO3N	10.0			mg/L	10.00		100	90-110		
Reference (BEB0019-SRM2)					Prepared & Analyzed: 2/2/2023					
Nitrate Nitrogen as NO3N	10.0			mg/L	10.00		100	90-110		
Reference (BEB0019-SRM3)					Prepared & Analyzed: 2/3/2023					
Nitrate Nitrogen as NO3N	10.1			mg/L	10.00		101	90-110		

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Account# 00-0024349
Account Manager: Ben Nydam
Submitted By: Roxey
Ranch: 4 Star Dairy #3

Received: 02/02/2023 7:15
Reported: 02/03/2023 14:37

Quality Control
(Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BEB0062										
Blank (BEB0062-BLK1)					Prepared & Analyzed: 2/3/2023					
Electrical Conductivity	ND		0.01	mmhos/cm						
pH	5.6		1.0	units						
Electrical Conductivity umhos	ND		10.0	umhos/cm						
Temperature	25.0		0.0	°C						
Blank (BEB0062-BLK3)					Prepared & Analyzed: 2/3/2023					
Electrical Conductivity	ND		0.01	mmhos/cm						
pH	7.4		1.0	units						
Temperature	25.0		0.0	°C						
Electrical Conductivity umhos	ND		10.0	umhos/cm						
Duplicate (BEB0062-DUP2)	**Source: 23B0251-04**				Prepared & Analyzed: 2/3/2023					
Electrical Conductivity	0.80		0.01	mmhos/cm		0.81			0.745	10
pH	7.8		1.0	units		7.9			1.28	10
Electrical Conductivity umhos	802		10.0	umhos/cm		808			0.745	10
Reference (BEB0062-SRM1)					Prepared & Analyzed: 2/3/2023					
Electrical Conductivity	560			umhos/cm	538.0		104	90-110		
Reference (BEB0062-SRM2)					Prepared & Analyzed: 2/3/2023					
pH	7.7			units	7.620		101	68766-101.3		
Reference (BEB0062-SRM3)					Prepared & Analyzed: 2/3/2023					
Electrical Conductivity	1040			umhos/cm	1000		104	90-110		
Electrical Conductivity umhos	1040			umhos/cm	1000		104	90-110		
Reference (BEB0062-SRM5)					Prepared & Analyzed: 2/3/2023					
Electrical Conductivity	1050			umhos/cm	1000		105	90-110		
Electrical Conductivity umhos	1050			umhos/cm	1000		105	90-110		
Reference (BEB0062-SRM6)					Prepared & Analyzed: 2/3/2023					
pH	4.0			units	4.000		101	97.5-102.5		
Reference (BEB0062-SRM8)					Prepared & Analyzed: 2/3/2023					
pH	4.0			units	4.000		101	97.5-102.5		

02/02/23 07:15 23B0250

DELLAVALLE LABORATORY, INC.

1910 W. McKinley Avenue, Suite 110 • Fresno, CA 93728
www.dellavallelab.com 559 233-6129 • 800 228-9896 • Fax 559 268-8174

WATER WORK REQUEST

Acct No. 24349 Cons. 8
Bill To:

Purchase Order No. Results Needed By

Client **Roxey J Avila**
Address 740 S. Kazarian Street
City, State, Zip Tulare, CA 93274
Phone (559) 786-4683 Fax
Cell/Email goroxey@yahoo.com

Copy to

Requested by Roxey

Ranch **4 STAR DAIRY #3**

Date sampled 2-1-23

Sampled by Justin

[X] QA/QC Document [X] Copy of Chain [ ] RWQCB

No. of Samples 1 No. Bottles 1

Water Type: [X] Drinking [ ] Wastewater
[ ] Ag Water [ ] Ground Water [ ] Mon. Well
[ ] Supply Water [ ] Other

Analysis and Bottles Required: *(Please Indicate Analysis)*

(X) DWW1: (EC, pH, NO_3-N, **NH_4-N Field Test***)
(1) l L plastic, unpreserved (white)

( ) DWW2: (DWW1 Plus SO_4, CO_3, HCO_3, Cl, Ca, Mg, Na, TDS)
(1) l L plastic, unpreserved (white)

( ) DCW1: (EC, NO_3-N, TDS)
(1) l L plastic, unpreserved (white)

( ) DPW1: (EC, pH, NO_3-N, NH_4-N, TKN, TDS, TP, TK)
(1) l L plastic, unpreserved (white)

( ) DPW2: (DPW1 Plus Ca, Mg, Na, HCO_3, CO_3, SO_4, Cl)
(1) l L plastic, unpreserved (white)

( ) Other

NO_3-N 26.5

DESCRIPTION OF SAMPLES		Date Sampled	Time Sampled	Field NH4-N (mg/L)	Received Temp °C
1. D-13	Sampled From:	2-1-23	12 PM	"0"	7.6
2.	Sampled From:				
3.	Sampled From:				
4.	Sampled From:				
5.	Sampled From:				
6.	Sampled From:				
7.	Sampled From:	Kara 2/3/23			
8.	Sampled From:	12:46 - per Roxey. OK & thanks			
9.	Sampled From:				
10.	Sampled From:				

CHAIN OF CUSTODY

Carrier	Signature	Company	Received (Date/Time)	Relinquished (Date/Time)
First				02/01/23 2:18pm
Second	Upon Delivery	DLI	02/01/23 2:18pm	
Third				
Fourth		DLI	2/2 0715	

I guarantee that as the client, or on behalf of the client named, I have the authority to contract the above requested services. Should it be found that I do not have such authority, I agree to be personally liable for all costs and, if there should be action against me for this breach, reasonable attorneys' fees. It is understood that payment is expected to be cash with samples unless terms have been previously arranged. Terms are net 30 days; overdue accounts will be charged a dated damage fee of 2% per month (annually 24 %) or $5.00 per month whichever is greater.

If payment is not made when due and a legitimate dispute exists concerning the product or services of Dellavalle Laboratory, Inc., it will be submitted to mediation under the Rules and Procedures of Creative Alternative to Litigation, Inc. (cal). If the dispute is not resolved in mediation, then the dispute will be submitted to binding arbitration through cal under its Rules and Procedures. The prties will equally bear the costs of mediation/arbitration. If, however, the mediator declares that no legitimate dispute exists, then debtor will pay all mediation and arbitration costs, and in the event of arbitration, reasonable attorneys' fees of Dellavalle Laboratory.

Invoicing Information:

Sampling Hrs ___ Miles ___ Consulting ___

Amt Paid ___ Rec By ___ Check No. ___ Date ___

Shipping

$ ___ In
$ ___ Out

Signature

Sample received in cooler with ice?
[ ] Yes [ ] No

mg:update 2022

Pas

02/02/23 07:15 23B0250

Shipping Information: Shipped In □ Picked-Up □ [illegible] In ☑ DLI Sampler □ Other □ _____

□ Samples refrigerated before pick up | □ Picked up samples placed in Ice chest

Container: Ice Chest □ Box □ None ☑ | **Refrigerant:** Wet Ice □ Blue Ice □ None ☑

Samples Preserved with HNO_3 or H_2SO_4 were: □ Received Preserved □ Preserved Upon Receipt at Laboratory

	Type of Container(s) Received	Sample Number 1	2	3	4	5	6	7	8	9	10
Sample Containers for Internal (DLI) Use *(Containers that go into the Lab)*											
Plastics	100 mL sterile plastic $Na_2S_2O_3$ (Green)										
	250 mL unpreserved (White) Plastic										
	250 mL HNO_3 (Red) Plastic										
	* pH Value										
	250 mL H_2SO_4 (Yellow) Plastic										
	* pH Value										
	500 mL unpreserved (White) Plastic										
	1 L unpreserved (White) Plastic										
	1 L unpreserved (BOD) (Purple) Plastic										
Special	500mL unpreserved (White) Glass										
	PO4-P Kit										
	Other:										
Sample Containers for Subcontracted ("Send Out") Analyses *(Containers that go in the Subcontract ("Send Out") Refrigerator)*											
Plastics	100 mL sterile plastic $Na_2S_2O_3$ (Green)										
	250 mL unpreserved (White) Plastic										
	250 mL HNO_3 (Red) Plastic										
	250 mL H_2SO_4 (Yellow) Plastic										
	500 mL HNO_3 (Red)										
	1 L unpreserved (White) Plastic										
	1 L unpreserved (BOD) (Purple) Plastic										
	1 L HNO_3 (Red)										
VOA Vials	40 mL VOA, $Na_2S_2O_3$ + MCAA (EPA531)										
	40 mL VOA, $Na_2S_2O_3$ (EPA547)										
	40mL AG VOA unpreserved (White) (Set of 3)										
	40 mL AG VOA, $Na_2S_2O_3$ (Green) (Set of 3)										
	40mL VOA, H_3PO_4 (Set of 3)										
	40 mL VOA, HCl (Blue) (Set of 3)										
	40 mL VOA, $Na_2S_2O_3$ (Green) (Set of 3)										
Glass	250 mL AG unpreserved (White)										
	250 mL AG H_2SO_4 (Yellow)										
	250 mL AG $Na_2S_2O_3$ (Green)										
	250 mL AG $Na_2S_2O_3$ + MCAA										
	500 mL glass unpreserved (White)										
	500 mL AG HCl (Blue)										
	1 L AG unpreserved (White)										
	1 L AG H_2SO_4 (Yellow)										
	1 L AG $Na_2S_2O_3$ (Green)										
	1 L AG HCl (Blue)										
Special	Cr^{6+} - 50mL Plastic w/Borate/HCO_3/CO_3										
	Cyanide - 500 mL NaOH										
	Asbestos - 1L P wrapped in foil (Set of 2)										
	Sulfide - 1 L **AG** or **P** NaOH + ZnAc										
	Chlorite/Bromate - 250 mL AG with EDA										
	HAA5 - 250mL AG Ammonium Chlorite										
	DO KIT										
	Other:										
	Other:										

DELLAVALLE™
LABORATORY INC

Roxey J Avila
740 S. Kazarian St.
Tulare, CA 93274

Account# 00-0024349
Account Manager: Ben Nydam
Submitted By: Roxey
Ranch: 4 Star Dairy #3

Received: 05/09/2023 7:50
Reported: 05/30/2023 12:33

Samples in this Report

Lab ID	Sample	Matrix	Sampled By	Crop	Date Sampled
23E0710-01	Canal Lift 11	Ag Water	Roxey		05/08/2023 8:45

Default Cooler Temperature on Receipt °C: 9.3
Custody Seals
Containers Intact
COC/Labels Agree

Notes and Definitions

Item	Definition
H	Hold Time Exceeded
MCL	Drinking Water Maximum Contaminant Level
ND	Analyte NOT DETECTED at or above the reporting limit.
NES	Not Enough Sample
*	Not Taken
RPD	Relative Percent Difference
%REC	Percent Recovery
Source	Sample that was matrix spiked or duplicated.

Laboratory Director/Technical Manager

ELAP Certification #1595
A2LA Certification #6440.02

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Ranch: 4 Star Dairy #3

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Sample Results

Sample: Canal Lift 11
23E0710-01 (Water)

Sampled: 5/8/2023 8:45
Sampled By: Roxey

Analyte	Result	Units	Reporting Limit	DIL	DW MCL	Date/Time Analyzed	Method	Notes	Batch
Electrical Conductivity	**0.07**	mmhos/cm	0.01	1		05/11/23 13:27	SM 2510 B		BEE0294
Electrical Conductivity umhos	**67.4**	umhos/cm	10.0	1		05/11/23 13:27	SM 2510 B		BEE0294
Nitrate Nitrogen as NO3N	**0.2**	mg/L	0.1	1	10	05/09/23 20:29	EPA 300.0		BEE0285
pH	**7.6**	units	1.0	1		05/11/23 13:27	SM 4500-H+	H	BEE0294
Total Filterable Solids (TDS)	**54.0**	mg/L	10.0	1		05/26/23 14:01	SM 2540 C		BEE0919
Temperature	**25.0**	°C	0.0	1		05/11/23 13:27	SM 2510 B		BEE0294

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Quality Control

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BEE0285										
Blank (BEE0285-BLK1)					Prepared & Analyzed: 5/9/2023					
Nitrate Nitrogen as NO3N	ND		0.1	mg/L						
Blank (BEE0285-BLK2)					Prepared & Analyzed: 5/9/2023					
Nitrate Nitrogen as NO3N	ND		0.1	mg/L						
LCS (BEE0285-BS1)					Prepared & Analyzed: 5/9/2023					
Nitrate Nitrogen as NO3N	5.1		0.1	mg/L	5.000		103	90-110		
Duplicate (BEE0285-DUP1)		**Source: 23E0697-01**			Prepared & Analyzed: 5/9/2023					
Nitrate Nitrogen as NO3N	0.3		0.1	mg/L		0.3			0.317	10
Matrix Spike (BEE0285-MS1)		**Source: 23E0697-01**			Prepared & Analyzed: 5/9/2023					
Nitrate Nitrogen as NO3N	5.6		0.1	mg/L	5.000	0.3	105	90-110		
Reference (BEE0285-SRM1)					Prepared & Analyzed: 5/9/2023					
Nitrate Nitrogen as NO3N	10.4			mg/L	10.00		104	90-110		
Reference (BEE0285-SRM2)					Prepared & Analyzed: 5/9/2023					
Nitrate Nitrogen as NO3N	10.4			mg/L	10.00		104	90-110		

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Reported: 05/30/2023 12:33

Quality Control
(Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BEE0294										
Blank (BEE0294-BLK1)					Prepared & Analyzed: 5/11/2023					
pH	5.5		1.0	units						
Electrical Conductivity	ND		0.01	mmhos/cm						
Electrical Conductivity umhos	ND		10.0	umhos/cm						
Temperature	25.0		0.0	°C						
Blank (BEE0294-BLK2)					Prepared & Analyzed: 5/11/2023					
pH	5.6		1.0	units						
Electrical Conductivity	ND		0.01	mmhos/cm						
Temperature	25.0		0.0	°C						
Electrical Conductivity umhos	ND		10.0	umhos/cm						
Blank (BEE0294-BLK3)					Prepared & Analyzed: 5/11/2023					
Electrical Conductivity	ND		0.01	mmhos/cm						
pH	5.7		1.0	units						
Electrical Conductivity umhos	ND		10.0	umhos/cm						
Temperature	25.0		0.0	°C						
Duplicate (BEE0294-DUP1)		**Source: 23E0030-01**			Prepared & Analyzed: 5/11/2023					
Electrical Conductivity	0.54		0.01	mmhos/cm		0.55			2.04	10
pH	7.4		1.0	units		7.4			0.404	10
Electrical Conductivity umhos	540		10.0	umhos/cm		551			2.04	10
Duplicate (BEE0294-DUP2)		**Source: 23E0703-01**			Prepared & Analyzed: 5/11/2023					
pH	7.6		1.0	units		7.6			0.393	10
Electrical Conductivity	0.07		0.01	mmhos/cm		0.07			0.447	10
Electrical Conductivity umhos	67.0		10.0	umhos/cm		67.3			0.447	10
Reference (BEE0294-SRM1)					Prepared & Analyzed: 5/11/2023					
Electrical Conductivity	569			umhos/cm	538.0		106	90-110		
Reference (BEE0294-SRM2)					Prepared & Analyzed: 5/11/2023					
pH	7.8			units	7.790		99.9	.7163-101.28		
Reference (BEE0294-SRM3)					Prepared & Analyzed: 5/11/2023					
Electrical Conductivity	1060			umhos/cm	1000		106	90-110		
Electrical Conductivity umhos	1060			umhos/cm	1000		106	90-110		
Reference (BEE0294-SRM4)					Prepared & Analyzed: 5/11/2023					
Electrical Conductivity	1060			umhos/cm	1000		106	90-110		
Electrical Conductivity umhos	1060			umhos/cm	1000		106	90-110		
Reference (BEE0294-SRM5)					Prepared & Analyzed: 5/11/2023					
Electrical Conductivity	1070			umhos/cm	1000		107	90-110		

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Reported: 05/30/2023 12:33

Quality Control
(Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BEE0294 (Continued)										
Reference (BEE0294-SRM5)					Prepared & Analyzed: 5/11/2023					
Electrical Conductivity umhos	1070			umhos/cm	1000		107	90-110		
Reference (BEE0294-SRM6)					Prepared & Analyzed: 5/11/2023					
pH	4.0			units	4.000		100	97.5-102.5		
Reference (BEE0294-SRM7)					Prepared & Analyzed: 5/11/2023					
pH	4.0			units	4.000		100	97.5-102.5		
Reference (BEE0294-SRM8)					Prepared & Analyzed: 5/11/2023					
pH	4.0			units	4.000		99.8	97.5-102.5		

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Received: 05/09/2023 7:50
Reported: 05/30/2023 12:33

Quality Control
(Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BEE0919										
Blank (BEE0919-BLK1)					Prepared: 5/24/2023 Analyzed: 5/26/2023					
Total Filterable Solids (TDS)	ND		10.0	mg/L						
LCS (BEE0919-BS1)					Prepared: 5/24/2023 Analyzed: 5/26/2023					
Total Filterable Solids (TDS)	23.8		10.0	mg/L	2000		1.19	0-200		
Duplicate (BEE0919-DUP1)		**Source: 23E0705-01**			Prepared: 5/24/2023 Analyzed: 5/26/2023					
Total Filterable Solids (TDS)	50.0		10.0	mg/L		50.0			0.00	5
Reference (BEE0919-SRM1)					Prepared: 5/24/2023 Analyzed: 5/26/2023					
Total Filterable Solids (TDS)	330			mg/L	325.0		102	90-110		

05/09/23 07:50 23E0710

EDS

WATER WORK REQUEST

DELLAVALLE LABORATORY, INC.

1910 W. McKinley Avenue, Suite 110 • Fresno, CA 93728
www.dellavallelab.com 559 233-6129 • 800 228-9896 • Fax 559 268-8174

Bill To: Acct No. 24349 Cons. 8

Purchase Order No. _____ Results Needed By _____

No. of Samples _____ No. Bottles _____

Water Type: [ ] Drinking [ ] Wastewater
[X] Ag Water [ ] Ground Water [ ] Mon. Well
[ ] Supply Water [ ] Other _____

Client **Roxey J Avila**
Address 740 S. Kazarian Street
City, State, Zip Tulare, CA 93274
Phone (559) 786-4683 Fax _____
Cell/Email goroxey@yahoo.com

Copy to _____

Requested by Roxey

Ranch **4 STAR DAIRY #3**

Date sampled 5-8-23

Sampled by Roxey

[X] QA/QC Document [X] Copy of Chain [ ] RWQCB

Analysis and Bottles Required: *(Please Indicate Analysis)*

( ) DWW1: (EC, pH, NO_3-N, **NH_4-N Field Test***)
(1) 1 L plastic, unpreserved (white)

( ) DWW2: (DWW1 Plus SO_4, CO_3, HCO_3, Cl, Ca, Mg, Na, TDS)
(1) 1 L plastic, unpreserved (white)

[X] DCW1: (EC, NO_3-N, TDS)
(1) 1 L plastic, unpreserved (white)

( ) DPW1: (EC, pH, NO_3-N, NH_4-N, TKN, TDS, TP, TK)
(1) 1 L plastic, unpreserved (white)

( ) DPW2: (DPW1 Plus Ca, Mg, Na, HCO_3, CO_3, SO_4, Cl)
(1) 1 L plastic, unpreserved (white)

( ) Other _____ H / F

DESCRIPTION OF SAMPLES		Date Sampled	Time Sampled	Field NH4-N (mg/L)	Received Temp °C
1. Canalift 11	Sampled From:	5-8-23	8:45A	'Ø11	9.3/3.3
2.	Sampled From:				
3.	Sampled From:				
4.	Sampled From:				
5.	Sampled From:				
6.	Sampled From:				
7.	Sampled From:				
8.	Sampled From:				
9.	Sampled From:				
10.	Sampled From:				

IR Thermometer SN: 221314362
Correction Factor: 0°C
Calibration Due: 6/30/2023
Location: Hanford Office

Temperature Upon Receipt
Hanford (°C):
Laboratory (°C): 3.3

IR Thermometer SN: 200560723
Correction Factor: 0°C
Calibration Due: 6/30/2023
Location: Laboratory

CHAIN OF CUSTODY

Carrier	Signature	Company	Received (Date/Time)	Relinquished (Date/Time)
First	Joshua Teixeira	HDS	5/8/23 4:00pm	5/9/23 10:42AM
Second	[illegible]	DLI	5/9/23 10:42AM	
Third				
Fourth	[illegible]	DLI	5/9 [illegible]	

I guarantee that as the client, or on behalf of the client named, I have the authority to contract the above requested services. Should it be found that I do not have such authority, I agree to be personally liable for all costs and, if there should be action against me for this breach, reasonable attorneys' fees. It is understood that payment is expected to be cash with samples unless terms have been previously arranged. Terms are net 30 days; overdue accounts will be charged a dated damage fee of 2% per month (annually 24 %) or $5.00 per month whichever is greater.

If payment is not made when due and a legitimate dispute exists concerning the product or services of Dellavalle Laboratory, Inc., it will be submitted to mediation under the Rules and Procedures of Creative Alternative to Litigation, Inc. (cal). If the dispute is not resolved in mediation, then the dispute will be submitted to binding arbitration through cal under its Rules and Procedures. The prties will equally bear the costs of mediation/arbitration. If, however, the mediator declares that no legitimate dispute exists, then debtor will pay all mediation and arbitration costs, and in the event of arbitration, reasonable attorneys' fees of Dellavalle Laboratory.

Invoicing Information:

Sampling Hrs ___ Miles ___ Consulting ___

Amt Paid ___ Rec By ___ Check No. ___

Shipping

$ _____ In
$ _____ Out

Date _____

Signature _____

Sample received in cooler with ice?
[ ] Yes [ ] No

mg:update 2022

05/09/23 07:50 23E0710

Shipping Information: Shipped In ☐ Picked-Up ☐ Walk In ☑ DLI Sampler ☐ Other ☐ _____

☐ Samples refridgerated before pick up ☐ Picked up samples placed in Ice chest

Container: Ice Chest ☑ Box ☐ None ☐ **Refrigerant:** Wet Ice ☐ Blue Ice ☐ None ☐

Samples Preserved with HNO_3 or H_2SO_4 were: ☐ Received Preserved ☐ Preserved Upon Receipt at Laboratory

	Type of Container(s) Received	Sample Number 1	2	3	4	5	6	7	8	9	10
Sample Containers for Internal (DLI) Use *(Containers that go into the Lab)*											
Plastics	100 mL sterile plastic $Na_2S_2O_3$ (Green)										
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	250 mL HNO_3 (Red) Plastic										
	* pH Value										
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	* pH Value										
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	1 L unpreserved (White) Plastic										
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Special	500mL unpreserved (White) Glass										
	PO4-P Kit										
	Other:										
Sample Containers for Subcontracted ("Send Out") Analyses *(Containers that go in the Subcontract ("Send Out") Refrigerator)*											
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	250 mL unpreserved (White) Plastic										
	250 mL HNO_3 (Red) Plastic										
	250 mL H_2SO_4 (Yellow) Plastic										
	500 mL HNO_3 (Red)										
	1 L unpreserved (White) Plastic										
	1 L unpreserved (BOD) (Purple) Plastic										
	1 L HNO_3 (Red)										
VOA Vials	40 mL VOA, $Na_2S_2O_3$ + MCAA (EPA531)										
	40 mL VOA, $Na_2S_2O_3$ (EPA547)										
	40mL AG VOA unpreserved (White) (Set of 3)										
	40 mL AG VOA, $Na_2S_2O_3$ (Green) (Set of 3)										
	40mL VOA, H_3PO_4 (Set of 3)										
	40 mL VOA, HCl (Blue) (Set of 3)										
	40 mL VOA, $Na_2S_2O_3$ (Green) (Set of 3)										
Glass	250 mL AG unpreserved (White)										
	250 mL AG H_2SO_4 (Yellow)										
	250 mL AG $Na_2S_2O_3$ (Green)										
	250 mL AG $Na_2S_2O_3$ + MCAA										
	500 mL glass unpreserved (White)										
	500 mL AG HCl (Blue)										
	1 L AG unpreserved (White)										
	1 L AG H_2SO_4 (Yellow)										
	1 L AG $Na_2S_2O_3$ (Green)										
	1 L AG HCl (Blue)										
Special	Cr^{6+} - 50mL Plastic w/Borate/HCO_3/CO_3										
	Cyanide - 500 mL NaOH										
	Asbestos - 1L P wrapped in foil (Set of 2)										
	Sulfide - 1 L **AG** or **P** NaOH + ZnAc										
	Chlorite/Bromate - 250 mL AG with EDA										
	HAA5 - 250mL AG Ammonium Chlorite										
	DO KIT										
	Other:										
	Other:										

DLI

SENDOUT