CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

CENTRAL VALLEY REGION
1685 E STREET
FRESNO CA 93706

2023 ANNUAL REPORT

PREPARED FOR:

SILVEIRA DAIRY

11277 AVE 21 1/2

CHOWCHILLA CA 93610

NOTES:

PREPARED BY:

CARDOSO AG SERVICES
PO BOX 906
NEWMAN CA 95360

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: Silveira Dairy

Physical address of dairy:

Number and Street	City	County	Zip Code
11277 Avenue 21 1/2	Chowchilla	Madera	93610

Street and nearest cross street (if no address):

Date facility was originally placed in operation: 10/17/2005

Regional Water Quality Control Board Basin Plan designation: Tulare Basin

County Assessor Parcel Number(s) for dairy facility:

X024-X060-X019-XXXX

B. OPERATORS

Silveira, Johnny

Operator name: Silveira, Johnny

Telephone no.: Landline: ; Cellular: (559) 978-6087

Mailing Address Number and Street	City	State	Zip Code
11135 Avenue 21 1/2 AVE	Chowchilla	CA	93610

This operator is responsible for paying permit fees.

C. OWNERS

Silveira, Johnny

Legal owner name: Silveira, Johnny

Telephone no.: Landline: ; Cellular: (559) 978-6087

Mailing Address Number and Street	City	State	Zip Code
11135 Avenue 21 1/2 AVE	Chowchilla	CA	93610

This owner is responsible for paying permit fees.

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AVAILABLE NUTRIENTS

A. HERD INFORMATION

	Milk Cows	Dry Cows	Bred Heifers (15-24 mo.)	Heifers (7-14 mo. to breeding)	Calves (4-6 mo.)	Calves (0-3 mo.)
Number open confinement	0	0	0	0	0	0
Number under roof	1,338	100	439	381	192	0
Maximum number	1,338	100	439	381	192	0
Average number	1,338	100	439	381	192	0
Avg live weight (lbs)	1,400	1,500	1,100	775		

Predominant milk cow breed: Holstein

Average milk production: 82 *pounds per cow per day*

B. MANURE GENERATED

Total manure excreted by the herd: 46,798.97 *tons per reporting period*

Total nitrogen from manure: 579,255.06 *lbs per reporting period*

After ammonia losses (30% loss applied): 405,478.54 *lbs per reporting period*

Total phosphorus from manure: 96,770.85 *lbs per reporting period*

Total potassium from manure: 266,788.14 *lbs per reporting period*

Total salt from manure: 652,992.30 *lbs per reporting period*

C. PROCESS WASTEWATER GENERATED

Process wastewater generated: 26,556,000 *gallons*

Total nitrogen generated: 141,632.81 *lbs*

Total phosphorus generated: 34,337.07 *lbs*

Total potassium generated: 178,585.17 *lbs*

Total salt generated: 789,105.70 *lbs*

	15,204,000	*gallons applied*
+	11,352,000	*gallons exported*
-	0	*gallons imported*
=	26,556,000	*gallons generated*

D. FRESH WATER SOURCES

Source Description	Type
Domestic Well	Ground water
Irrigation Well	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.

Date	Material type	Quantity	Kjeldahl-N (mg/L)	Ammonium-N (mg/L)	Ammonia-N (mg/L)	Nitrate-N (mg/L)	P (mg/L)	K (mg/L)	EC (µmhos/cm)	TDS (mg/L)
01/01/2023	Process wastewater	2,340,000.00 *gal*	649.00	411.00	0.00	1.00	76.60	850.00		3,600
03/13/2023	Process wastewater	892,500.00 *gal*	649.00	411.00	0.00	1.00	76.60	850.00		3,600
04/18/2023	Process wastewater	2,374,500.00 *gal*	649.00	411.00	0.00	1.00	76.60	850.00		3,600
06/12/2023	Process wastewater	390,000.00 *gal*	833.00	383.00	0.00	0.90	502.00	936.00		3,680
06/30/2023	Process wastewater	405,000.00 *gal*	833.00	383.00	0.00	0.90	502.00	936.00		3,680
07/12/2023	Process wastewater	2,355,000.00 *gal*	494.00	453.00	0.00	0.60	54.70	650.00		3,420
08/10/2023	Process wastewater	2,595,000.00 *gal*	494.00	453.00	0.00	0.60	54.70	650.00		3,420

Material type	Total N (lbs)	Total P (lbs)	Total K (lbs)	Total salt (lbs)
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	56,376.90	9,174.09	72,831.57	334,132.13
Total exports for all materials	56,376.90	9,174.09	72,831.57	334,132.13

APPLICATION AREA

A. LIST OF LAND APPLICATION AREAS

Field name	Controlled acres	Cropable acres	Total harvests	Type of waste applied	Parcel number
Field 1	70	70	2	both	X024-X060-X016-XXXX X024-X060-X017-XXXX X024-X060-X019-XXXX
Field 2/3	47	47	2	process wastewater	X024-X060-X035-XXXX
Field 4	18	18	2	both	X024-X060-X020-XXXX X024-X060-X021-XXXX
Field 5/6	40	40	2	both	X024-X060-X020-XXXX X024-X060-X021-XXXX
New 6	19	19	2	process wastewater	X024-X060-X006-XXXX
Orchard	68	68	1	manure	X024-X010-X035-XXXX X024-X010-X036-XXXX X024-X010-X037-XXXX X024-X010-X038-XXXX
Totals for areas that were used for application	262	262	11		
Totals for areas that were not used for application					
Land application area totals	262	262	11		

B. CROPS AND HARVESTS

Field 1

Field name: Field 1

09/30/2022: Wheat, silage, soft dough

Crop: Wheat, silage, soft dough Acres planted: 70 Plant date: 09/30/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/10/2023	1,245.00 *ton*	Dry-weight		63.6	15,300.00	2,100.00	17,000.00		7.50

	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	17.79	198.10	27.19	220.12	971.10

Field 1

05/25/2023: Corn, silage

Crop: Corn, silage Acres planted: 70 Plant date: 05/25/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
09/11/2023	1,730.00 *ton*	Dry-weight		66.2	14,200.00	2,800.00	19,900.00		7.50

	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	24.71	237.24	46.78	332.47	1,253.01

Field 2/3

Field name: Field 2/3

09/30/2022: Wheat, silage, soft dough

Crop: Wheat, silage, soft dough Acres planted: 47 Plant date: 09/30/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/11/2023	836.30 *ton*	Dry-weight		67.0	16,800.00	2,600.00	19,400.00		10.20

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	18.00	198.00	30.60	149.40	0.00
Total actual harvest content	17.79	197.30	30.53	227.83	1,197.87

05/25/2023: Corn, silage

Crop: Corn, silage Acres planted: 47 Plant date: 05/25/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
09/06/2023	1,161.70 *ton*	Dry-weight		84.8	14,600.00	1,500.00	7,200.00		6.20

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	30.00	240.00	45.00	198.00	0.00
Total actual harvest content	24.72	109.70	11.27	54.10	465.87

Field 4

Field name: Field 4

09/30/2022: Wheat, silage, soft dough

Crop: Wheat, silage, soft dough Acres planted: 18 Plant date: 09/30/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/10/2023	320.30 *ton*	Dry-weight		62.8	16,800.00	2,600.00	17,000.00		9.20

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	18.00	198.00	30.60	149.40	0.00
Total actual harvest content	17.79	222.42	34.42	225.06	1,217.99

05/25/2023: Corn, silage

Crop: Corn, silage Acres planted: 18 Plant date: 05/25/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
09/06/2023	444.90 *ton*	Dry-weight		66.1	17,000.00	3,800.00	24,200.00		10.70

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	30.00	240.00	45.00	198.00	0.00
Total actual harvest content	24.72	284.88	63.68	405.54	1,793.10

Field 5/6

Field name: Field 5/6

09/30/2022: Wheat, silage, soft dough

Crop: Wheat, silage, soft dough Acres planted: 40 Plant date: 09/30/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/10/2023	711.70 *ton*	Dry-weight		67.3	20,200.00	3,600.00	22,300.00		12.00

	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	17.79	235.05	41.89	259.49	1,396.36

Field 5/6

05/25/2023: Corn, silage

Crop: Corn, silage Acres planted: 40 Plant date: 05/25/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
09/06/2023	988.70 *ton*	Dry-weight		73.5	17,500.00	3,100.00	20,800.00		8.60

	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	24.72	229.25	40.61	272.49	1,126.62

New 6

Field name: New 6

09/30/2022: Wheat, silage, soft dough

Crop: Wheat, silage, soft dough Acres planted: 19 Plant date: 09/30/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/10/2023	338.10 *ton*	Dry-weight		66.9	17,400.00	2,500.00	20,700.00		12.20

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	18.00	198.00	30.60	149.40	0.00
Total actual harvest content	17.79	204.97	29.45	243.85	1,437.17

05/25/2023: Corn, silage

Crop: Corn, silage Acres planted: 19 Plant date: 05/25/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
09/12/2023	469.60 *ton*	Dry-weight		72.9	12,500.00	2,700.00	14,200.00		6.30

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	30.00	240.00	45.00	198.00	0.00
Total actual harvest content	24.72	167.45	36.17	190.22	843.95

Orchard

Field name: Orchard

01/10/2011: Almond, in shell

Crop: Almond, in shell Acres planted: 68 Plant date: 01/10/2011

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
09/06/2023	102.00 *ton*	Dry-weight		28.7	20,300.00	2,400.00	17,300.00		5.60

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	1.50	195.00	30.00	150.00	0.00
Total actual harvest content	1.50	43.42	5.13	37.00	119.78

NUTRIENT BUDGET

A. LAND APPLICATIONS

Field 1 - 09/30/2022: Wheat, silage, soft dough

Field name: Field 1

Crop: Wheat, silage, soft dough — Plant date: 09/30/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
10/20/2022	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 Water	Process wastewater	90.66	10.68	118.56	502.13	1,170,000.00 *gal*
Irrigation Well	Ground water	0.54	0.00	0.00	0.00	11,280,000.00 *gal*
Application event totals		91.20	10.68	118.56	502.13	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
03/29/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon Water	Process wastewater	90.66	10.68	118.56	502.13	1,170,000.00 *gal*
Irrigation Well	Ground water	0.53	0.00	0.00	0.00	11,040,000.00 *gal*
Application event totals		91.19	10.68	118.56	502.13	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
04/20/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon Water	Process wastewater	80.20	9.45	104.88	444.19	1,035,000.00 *gal*
Irrigation Well	Ground water	0.51	0.00	0.00	0.00	10,680,000.00 *gal*
Application event totals		80.71	9.45	104.88	444.19	

Field 1 - 05/25/2023: Corn, silage

Field name: Field 1

Crop: Corn, silage — Plant date: 05/25/2023

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

Field 1 - 05/25/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
05/13/2023	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
Solid Manure	Separator solids	138.96	18.39	40.19	0.00	910.00 *ton*
Application event totals		138.96	18.39	40.19	0.00	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
06/29/2023	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 Water	Process wastewater	104.38	62.84	117.16	460.64	1,050,000.00 *gal*
Irrigation Well	Ground water	1.00	0.00	0.00	0.00	20,880,000.00 *gal*
Application event totals		105.38	62.84	117.16	460.64	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/13/2023	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
Irrigation Well	Ground water	0.76	0.00	0.00	0.00	15,960,000.00 *gal*
Application event totals		0.76	0.00	0.00	0.00	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/25/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Irrigation Well	Ground water	0.73	0.00	0.00	0.00	15,360,000.00 *gal*
Application event totals		0.73	0.00	0.00	0.00	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/06/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon Water	Process wastewater	70.76	7.83	92.99	489.26	1,200,000.00 *gal*
Irrigation Well	Ground water	0.69	0.00	0.00	0.00	14,520,000.00 *gal*
Application event totals		71.45	7.83	92.99	489.26	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/18/2023	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
Irrigation Well	Ground water	0.66	0.00	0.00	0.00	13,800,000.00 *gal*
Application event totals		0.66	0.00	0.00	0.00	

Field 1 - 05/25/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/30/2023	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
Irrigation Well	Ground water	0.74	0.00	0.00	0.00	15,600,000.00 *gal*
Application event totals		0.74	0.00	0.00	0.00	

Field 2/3 - 09/30/2022: Wheat, silage, soft dough

Field name: Field 2/3

Crop: Wheat, silage, soft dough

Plant date: 09/30/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
10/20/2022	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 Water	Process wastewater	83.09	9.79	108.66	460.22	720,000.00 *gal*
Irrigation Well	Ground water	0.64	0.00	0.00	0.00	9,000,000.00 *gal*
Application event totals		83.73	9.79	108.66	460.22	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
03/29/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon Water	Process wastewater	83.09	9.79	108.66	460.22	720,000.00 *gal*
Irrigation Well	Ground water	0.57	0.00	0.00	0.00	8,040,000.00 *gal*
Application event totals		83.67	9.79	108.66	460.22	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
04/20/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon Water	Process wastewater	97.72	58.83	109.69	431.24	660,000.00 *gal*
Irrigation Well	Ground water	0.54	0.00	0.00	0.00	7,560,000.00 *gal*
Application event totals		98.26	58.83	109.69	431.24	

Field 2/3 - 05/25/2023: Corn, silage

Field 2/3 - 05/25/2023: Corn, silage

Field name: Field 2/3

Crop: Corn, silage

Plant date: 05/25/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
06/29/2023	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 Water	Process wastewater	88.84	53.48	99.71	392.04	600,000.00 *gal*
Irrigation Well	Ground water	0.84	0.00	0.00	0.00	11,760,000.00 *gal*
Application event totals		89.67	53.48	99.71	392.04	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/13/2023	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
Irrigation Well	Ground water	0.72	0.00	0.00	0.00	10,200,000.00 *gal*
Application event totals		0.72	0.00	0.00	0.00	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/25/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Irrigation Well	Ground water	0.84	0.00	0.00	0.00	11,760,000.00 *gal*
Application event totals		0.84	0.00	0.00	0.00	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/06/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Irrigation Well	Ground water	0.77	0.00	0.00	0.00	10,800,000.00 *gal*
Application event totals		0.77	0.00	0.00	0.00	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/18/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon Water	Process wastewater	51.37	5.68	67.51	355.23	585,000.00 *gal*
Irrigation Well	Ground water	0.74	0.00	0.00	0.00	10,440,000.00 *gal*
Application event totals		52.11	5.68	67.51	355.23	

Field 2/3 - 05/25/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/30/2023	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
Irrigation Well	Ground water	0.75	0.00	0.00	0.00	10,560,000.00 *gal*
Application event totals		0.75	0.00	0.00	0.00	

Field 4 - 09/30/2022: Wheat, silage, soft dough

Field name: Field 4

Crop: Wheat, silage, soft dough

Plant date: 09/30/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
10/20/2022	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 Water	Process wastewater	90.40	10.65	118.22	500.70	300,000.00 *gal*
Irrigation Well	Ground water	5.49	0.00	0.00	0.00	3,480,000.00 *gal*
Application event totals		95.89	10.65	118.22	500.70	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
03/29/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon Water	Process wastewater	90.40	10.65	118.22	500.70	300,000.00 *gal*
Irrigation Well	Ground water	4.82	0.00	0.00	0.00	3,060,000.00 *gal*
Application event totals		95.23	10.65	118.22	500.70	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
04/20/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon Water	Process wastewater	110.18	66.33	123.67	486.24	285,000.00 *gal*
Irrigation Well	Ground water	3.22	0.00	0.00	0.00	2,040,000.00 *gal*
Application event totals		113.40	66.33	123.67	486.24	

Field 4 - 05/25/2023: Corn, silage

Field 4 - 05/25/2023: Corn, silage

Field name: Field 4

Crop: Corn, silage

Plant date: 05/25/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
05/13/2023	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
Solid Manure	Separator solids	203.10	26.88	58.74	0.00	342.00 *ton*
Application event totals		203.10	26.88	58.74	0.00	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
06/29/2023	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 Water	Process wastewater	92.79	55.86	104.15	409.46	240,000.00 *gal*
Irrigation Well	Ground water	7.38	0.00	0.00	0.00	4,680,000.00 *gal*
Application event totals		100.16	55.86	104.15	409.46	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/13/2023	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
Irrigation Well	Ground water	5.96	0.00	0.00	0.00	3,780,000.00 *gal*
Application event totals		5.96	0.00	0.00	0.00	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/25/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Irrigation Well	Ground water	7.00	0.00	0.00	0.00	4,440,000.00 *gal*
Application event totals		7.00	0.00	0.00	0.00	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/06/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Irrigation Well	Ground water	6.24	0.00	0.00	0.00	3,960,000.00 *gal*
Application event totals		6.24	0.00	0.00	0.00	

Field 4 - 05/25/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/18/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon Water	Process wastewater	55.03	6.09	72.32	380.53	240,000.00 *gal*
Irrigation Well	Ground water	5.30	0.00	0.00	0.00	3,360,000.00 *gal*
Application event totals		60.33	6.09	72.32	380.53	

08/30/2023	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
Irrigation Well	Ground water	6.81	0.00	0.00	0.00	4,320,000.00 *gal*
Application event totals		6.81	0.00	0.00	0.00	

Field 5/6 - 09/30/2022: Wheat, silage, soft dough

Field name: Field 5/6

Crop: Wheat, silage, soft dough Plant date: 09/30/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
10/20/2022	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 Water	Process wastewater	99.67	11.75	130.34	552.02	735,000.00 *gal*
Irrigation Well	Ground water	5.53	0.00	0.00	0.00	7,800,000.00 *gal*
Application event totals		105.20	11.75	130.34	552.02	

03/29/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon Water	Process wastewater	99.67	11.75	130.34	552.02	735,000.00 *gal*
Irrigation Well	Ground water	4.55	0.00	0.00	0.00	6,420,000.00 *gal*
Application event totals		104.22	11.75	130.34	552.02	

Field 5/6 - 09/30/2022: Wheat, silage, soft dough

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
04/20/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon Water	Process wastewater	106.99	64.41	120.09	472.16	615,000.00 *gal*
Irrigation Well	Ground water	4.51	0.00	0.00	0.00	6,360,000.00 *gal*
Application event totals		111.50	64.41	120.09	472.16	

Field 5/6 - 05/25/2023: Corn, silage

Field name: Field 5/6

Crop: Corn, silage

Plant date: 05/25/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
05/13/2023	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
Solid Manure	Separator solids	117.59	15.56	34.01	0.00	440.00 *ton*
Application event totals		117.59	15.56	34.01	0.00	

06/29/2023	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 Water	Process wastewater	93.95	56.55	105.45	414.58	540,000.00 *gal*
Irrigation Well	Ground water	6.81	0.00	0.00	0.00	9,600,000.00 *gal*
Application event totals		100.75	56.55	105.45	414.58	

07/13/2023	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
Irrigation Well	Ground water	5.87	0.00	0.00	0.00	8,280,000.00 *gal*
Application event totals		5.87	0.00	0.00	0.00	

Field 5/6 - 05/25/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/25/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Irrigation Well	Ground water	6.21	0.00	0.00	0.00	8,760,000.00 *gal*
Application event totals		6.21	0.00	0.00	0.00	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/06/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Irrigation Well	Ground water	6.13	0.00	0.00	0.00	8,640,000.00 *gal*
Application event totals		6.13	0.00	0.00	0.00	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/18/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon Water	Process wastewater	58.82	6.50	77.30	406.69	570,000.00 *gal*
Irrigation Well	Ground water	6.43	0.00	0.00	0.00	9,060,000.00 *gal*
Application event totals		65.24	6.50	77.30	406.69	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/30/2023	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
Irrigation Well	Ground water	5.87	0.00	0.00	0.00	8,280,000.00 *gal*
Application event totals		5.87	0.00	0.00	0.00	

New 6 - 09/30/2022: Wheat, silage, soft dough

Field name: New 6

Crop: Wheat, silage, soft dough

Plant date: 09/30/2022

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

New 6 - 09/30/2022: Wheat, silage, soft dough

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
10/20/2022	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 Water	Process wastewater	86.93	10.24	113.68	481.46	304,500.00 *gal*
Irrigation Well	Ground water	0.65	0.00	0.00	0.00	3,720,000.00 *gal*
Application event totals		87.58	10.24	113.68	481.46	

03/29/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon Water	Process wastewater	86.93	10.24	113.68	481.46	304,500.00 *gal*
Irrigation Well	Ground water	0.57	0.00	0.00	0.00	3,240,000.00 *gal*
Application event totals		87.50	10.24	113.68	481.46	

04/20/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon Water	Process wastewater	104.38	62.84	117.16	460.64	285,000.00 *gal*
Irrigation Well	Ground water	0.52	0.00	0.00	0.00	2,940,000.00 *gal*
Application event totals		104.90	62.84	117.16	460.64	

New 6 - 05/25/2023: Corn, silage

Field name: New 6

Crop: Corn, silage

Plant date: 05/25/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
06/29/2023	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 Water	Process wastewater	87.90	52.92	98.66	387.91	240,000.00 *gal*
Irrigation Well	Ground water	0.74	0.00	0.00	0.00	4,200,000.00 *gal*
Application event totals		88.64	52.92	98.66	387.91	

New 6 - 05/25/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/13/2023	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
Irrigation Well	Ground water	0.72	0.00	0.00	0.00	4,080,000.00 *gal*
Application event totals		0.72	0.00	0.00	0.00	

07/25/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon Water	Process wastewater	65.17	7.21	85.65	450.63	300,000.00 *gal*
Irrigation Well	Ground water	0.78	0.00	0.00	0.00	4,440,000.00 *gal*
Application event totals		65.95	7.21	85.65	450.63	

08/06/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon Water	Process wastewater	65.17	7.21	85.65	450.63	300,000.00 *gal*
Irrigation Well	Ground water	0.61	0.00	0.00	0.00	3,480,000.00 *gal*
Application event totals		65.78	7.21	85.65	450.63	

08/18/2023	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
Irrigation Well	Ground water	0.70	0.00	0.00	0.00	3,960,000.00 *gal*
Application event totals		0.70	0.00	0.00	0.00	

08/30/2023	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
Irrigation Well	Ground water	0.82	0.00	0.00	0.00	4,680,000.00 *gal*
Application event totals		0.82	0.00	0.00	0.00	

Orchard - 01/10/2011: Almond, in shell

Field name: Orchard

Crop: Almond, in shell

Plant date: 01/10/2011

Orchard - 01/10/2011: Almond, in shell

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
04/15/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Irrigation Well	Ground water	0.58	0.00	0.00	0.00	11,760,000.00 *gal*
Application event totals		0.58	0.00	0.00	0.00	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
05/07/2023	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
Irrigation Well	Ground water	0.60	0.00	0.00	0.00	12,240,000.00 *gal*
Application event totals		0.60	0.00	0.00	0.00	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
06/10/2023	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
Irrigation Well	Ground water	0.55	0.00	0.00	0.00	11,160,000.00 *gal*
Application event totals		0.55	0.00	0.00	0.00	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/01/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Irrigation Well	Ground water	0.62	0.00	0.00	0.00	12,720,000.00 *gal*
Application event totals		0.62	0.00	0.00	0.00	

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Irrigation Well	Ground water	0.55	0.00	0.00	0.00	11,280,000.00 *gal*
Application event totals		0.55	0.00	0.00	0.00	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
09/12/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Irrigation Well	Ground water	0.57	0.00	0.00	0.00	11,640,000.00 *gal*
Application event totals		0.57	0.00	0.00	0.00	

Orchard - 01/10/2011: Almond, in shell

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
10/03/2023	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
Irrigation Well	Ground water	0.56	0.00	0.00	0.00	11,460,000.00 *gal*
Application event totals		0.56	0.00	0.00	0.00	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
11/05/2023	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
Solid Manure	Compost	153.94	55.49	190.64	0.00	340.00 *ton*
Application event totals		153.94	55.49	190.64	0.00	

B. NUTRIENT BUDGET

Field 1 - 09/30/2022: Wheat, silage, soft dough

Field name: Field 1 Crop: Wheat, silage, soft dough Plant date: 09/30/2022

	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	0.00	0.00	0.00	0.00
Process wastewater	261.53	30.82	342.00	1,448.45
Fresh water	1.57	0.00	0.00	0.00
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	270.10	30.82	342.00	1,448.45
Anticipated crop nutrient removal	198.00	30.60	149.40	0.00
Actual crop nutrient removal	198.10	27.19	220.12	971.10
Nutrient balance	72.00	3.63	121.88	477.35
Applied to removed ratio	1.36	1.13	1.55	1.49

Fresh water applied	
33,000,000.00	*gallons*
1,215.28	*acre-inches*
17.36	*inches/acre*

Process wastewater applied	
3,375,000.00	*gallons*
124.29	*acre-inches*
1.78	*inches/acre*

Total harvests for the crop	
1	*harvests*

Field 1 - 05/25/2023: Corn, silage

Field name: Field 1 Crop: Corn, silage Plant date: 05/25/2023

	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	138.96	18.39	40.19	0.00
Process wastewater	175.14	70.66	210.15	949.90
Fresh water	4.58	0.00	0.00	0.00
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	325.69	89.06	250.34	949.90
Anticipated crop nutrient removal	240.00	45.00	198.00	0.00
Actual crop nutrient removal	237.24	46.78	332.47	1,253.01
Nutrient balance	88.45	42.28	-82.12	-303.11
Applied to removed ratio	1.37	1.90	0.75	0.76

Fresh water applied	
96,120,000.00	*gallons*
3,539.77	*acre-inches*
50.57	*inches/acre*

Process wastewater applied	
2,250,000.00	*gallons*
82.86	*acre-inches*
1.18	*inches/acre*

Total harvests for the crop	
1	*harvests*

Field 2/3 - 09/30/2022: Wheat, silage, soft dough

Field name: Field 2/3 Crop: Wheat, silage, soft dough Plant date: 09/30/2022

	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	0.00	0.00	0.00	0.00
Process wastewater	263.91	78.41	327.01	1,351.68
Fresh water	1.75	0.00	0.00	0.00
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	272.66	78.41	327.01	1,351.68
Anticipated crop nutrient removal	198.00	30.60	149.40	0.00
Actual crop nutrient removal	197.30	30.53	227.83	1,197.87
Nutrient balance	75.36	47.88	99.18	153.81
Applied to removed ratio	1.38	2.57	1.44	1.13

Fresh water applied	
24,600,000.00	*gallons*
905.93	*acre-inches*
19.28	*inches/acre*

Process wastewater applied	
2,100,000.00	*gallons*
77.34	*acre-inches*
1.65	*inches/acre*

Total harvests for the crop	
1	*harvests*

Field 2/3 - 05/25/2023: Corn, silage

Field name: Field 2/3 Crop: Corn, silage Plant date: 05/25/2023

	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	140.21	59.16	167.23	747.27
Fresh water	4.65	0.00	0.00	0.00
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	151.86	59.16	167.23	747.27
Anticipated crop nutrient removal	240.00	45.00	198.00	0.00
Actual crop nutrient removal	109.70	11.27	54.10	465.87
Nutrient balance	42.16	47.89	113.13	281.40
Applied to removed ratio	1.38	5.25	3.09	1.60

Fresh water applied	
65,520,000.00	*gallons*
2,412.88	*acre-inches*
51.34	*inches/acre*

Process wastewater applied	
1,185,000.00	*gallons*
43.64	*acre-inches*
0.93	*inches/acre*

Total harvests for the crop	
1	*harvests*

Field 4 - 09/30/2022: Wheat, silage, soft dough

Field name: Field 4 Crop: Wheat, silage, soft dough Plant date: 09/30/2022

	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	0.00	0.00	0.00	0.00
Process wastewater	290.99	87.64	360.11	1,487.64
Fresh water	13.52	0.00	0.00	0.00
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	311.52	87.64	360.11	1,487.64
Anticipated crop nutrient removal	198.00	30.60	149.40	0.00
Actual crop nutrient removal	222.42	34.42	225.06	1,217.99
Nutrient balance	89.10	53.21	135.05	269.64
Applied to removed ratio	1.40	2.55	1.60	1.22

Fresh water applied	
8,580,000.00	*gallons*
315.97	*acre-inches*
17.55	*inches/acre*

Process wastewater applied	
885,000.00	*gallons*
32.59	*acre-inches*
1.81	*inches/acre*

Total harvests for the crop	
1	*harvests*

Field 4 - 05/25/2023: Corn, silage

Field name: Field 4 Crop: Corn, silage Plant date: 05/25/2023

	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	203.10	26.88	58.74	0.00
Process wastewater	147.82	61.94	176.47	789.99
Fresh water	38.68	0.00	0.00	0.00
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	396.60	88.82	235.21	789.99
Anticipated crop nutrient removal	240.00	45.00	198.00	0.00
Actual crop nutrient removal	284.88	63.68	405.54	1,793.10
Nutrient balance	111.72	25.14	-170.33	-1,003.10
Applied to removed ratio	1.39	1.39	0.58	0.44

Fresh water applied	
24,540,000.00	*gallons*
903.72	*acre-inches*
50.21	*inches/acre*

Process wastewater applied	
480,000.00	*gallons*
17.68	*acre-inches*
0.98	*inches/acre*

Total harvests for the crop	
1	*harvests*

Field 5/6 - 09/30/2022: Wheat, silage, soft dough

Field name: Field 5/6 Crop: Wheat, silage, soft dough Plant date: 09/30/2022

	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	0.00	0.00	0.00	0.00
Process wastewater	306.33	87.90	380.77	1,576.20
Fresh water	14.60	0.00	0.00	0.00
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	327.93	87.90	380.77	1,576.20
Anticipated crop nutrient removal	198.00	30.60	149.40	0.00
Actual crop nutrient removal	235.05	41.89	259.49	1,396.36
Nutrient balance	92.88	46.01	121.28	179.85
Applied to removed ratio	1.40	2.10	1.47	1.13

Fresh water applied	
20,580,000.00	*gallons*
757.89	*acre-inches*
18.95	*inches/acre*

Process wastewater applied	
2,085,000.00	*gallons*
76.78	*acre-inches*
1.92	*inches/acre*

Total harvests for the crop	
1	*harvests*

Field 5/6 - 05/25/2023: Corn, silage

Field name: Field 5/6 Crop: Corn, silage Plant date: 05/25/2023

	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	117.59	15.56	34.01	0.00
Process wastewater	152.76	63.06	182.74	821.27
Fresh water	37.32	0.00	0.00	0.00
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	314.67	78.62	216.75	821.27
Anticipated crop nutrient removal	240.00	45.00	198.00	0.00
Actual crop nutrient removal	229.25	40.61	272.49	1,126.62
Nutrient balance	85.42	38.01	-55.74	-305.35
Applied to removed ratio	1.37	1.94	0.80	0.73

Fresh water applied	
52,620,000.00	*gallons*
1,937.82	*acre-inches*
48.45	*inches/acre*

Process wastewater applied	
1,110,000.00	*gallons*
40.88	*acre-inches*
1.02	*inches/acre*

Total harvests for the crop	
1	*harvests*

New 6 - 09/30/2022: Wheat, silage, soft dough

Field name: New 6 Crop: Wheat, silage, soft dough Plant date: 09/30/2022

	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	0.00	0.00	0.00	0.00
Process wastewater	278.24	83.33	344.52	1,423.57
Fresh water	1.74	0.00	0.00	0.00
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	286.98	83.33	344.52	1,423.57
Anticipated crop nutrient removal	198.00	30.60	149.40	0.00
Actual crop nutrient removal	204.97	29.45	243.85	1,437.17
Nutrient balance	82.01	53.88	100.67	-13.60
Applied to removed ratio	1.40	2.83	1.41	0.99

Fresh water applied	
9,900,000.00	*gallons*
364.58	*acre-inches*
19.19	*inches/acre*

Process wastewater applied	
894,000.00	*gallons*
32.92	*acre-inches*
1.73	*inches/acre*

Total harvests for the crop	
1	*harvests*

New 6 - 05/25/2023: Corn, silage

Field name: New 6 Crop: Corn, silage Plant date: 05/25/2023

	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	218.24	67.33	269.96	1,289.17
Fresh water	4.36	0.00	0.00	0.00
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	229.61	67.33	269.96	1,289.17
Anticipated crop nutrient removal	240.00	45.00	198.00	0.00
Actual crop nutrient removal	167.45	36.17	190.22	843.95
Nutrient balance	62.16	31.16	79.73	445.23
Applied to removed ratio	1.37	1.86	1.42	1.53

Fresh water applied	
24,840,000.00	*gallons*
914.77	*acre-inches*
48.15	*inches/acre*

Process wastewater applied	
840,000.00	*gallons*
30.93	*acre-inches*
1.63	*inches/acre*

Total harvests for the crop	
1	*harvests*

Orchard - 01/10/2011: Almond, in shell

Field name: Orchard | Crop: Almond, in shell | Plant date: 01/10/2011

	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	153.94	55.49	190.64	0.00
Process wastewater	0.00	0.00	0.00	0.00
Fresh water	4.04	0.00	0.00	0.00
Atmospheric deposition	14.00	0.00	0.00	0.00
Total nutrients applied	171.98	55.49	190.64	0.00
Anticipated crop nutrient removal	195.00	30.00	150.00	0.00
Actual crop nutrient removal	43.42	5.13	37.00	119.78
Nutrient balance	128.56	50.36	153.63	-119.78
Applied to removed ratio	3.96	10.81	5.15	0.00

Fresh water applied	
82,260,000.00	*gallons*
3,029.36	*acre-inches*
44.55	*inches/acre*

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

Total harvests for the crop	
1	*harvests*

NUTRIENT ANALYSES

A. MANURE ANALYSES

Separator Manure

Sample and source description: Separator Manure

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

Moisture: 73.8 %

	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	20,400.00	2,700.00	5,900.00							0.00
DL	0.01	0.01	0.01							1.00

Compost Manure

Sample and source description: Compost Manure

Sample date: 12/11/2023 Material type: Compost Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 10.5 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Calcium (mg/kg)	Magnesium (mg/kg)	Sodium (mg/kg)	Sulfur (mg/kg)	Chloride (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	17,200.00	6,200.00	21,300.00							0.00
DL	0.01	0.01	0.01							1.00

B. PROCESS WASTEWATER ANALYSES

2022 Lagoon Q4

Sample and source description: 2022 Lagoon Q4

Sample date: 12/01/2022 Material type: Process wastewater Source of analysis: Lab analysis pH: 7.60

	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	649.00	411.00	0.00	1.00	76.60	850.00								8,400.00	3,600
DL	0.01	0.01	0.01	0.01	0.01	0.01								10.00	1

Lagoon Q1

Sample and source description: Lagoon Q1

Sample date: 03/07/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: 7.30

	Kjeldahl-N (mg/L)	NH4-N (mg/L)	NH3-N (mg/L)	Nitrate-N (mg/L)	Total P (mg/L)	Total K (mg/L)	Calcium (mg/L)	Magnes. (mg/L)	Sodium (mg/L)	Bicarb. (mg/L)	Carb. (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	EC (µmhos/cm)	TDS (mg/L)
Value	481.00	351.00	0.00	0.90	76.10	700.00								6,750.00	3,360
DL	0.01	0.01	0.01	0.01	0.01	0.01								10.00	1

Lagoon Q2

Sample and source description: Lagoon Q2

Sample date: 05/11/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: 7.40

	Kjeldahl-N (mg/L)	NH4-N (mg/L)	NH3-N (mg/L)	Nitrate-N (mg/L)	Total P (mg/L)	Total K (mg/L)	Calcium (mg/L)	Magnes. (mg/L)	Sodium (mg/L)	Bicarb. (mg/L)	Carb. (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	EC (µmhos/cm)	TDS (mg/L)
Value	833.00	383.00	0.00	0.90	502.00	936.00								6,820.00	3,680
DL	0.01	0.01	0.01	0.01	0.01	0.01								10.00	1

Lagoon Q3

Sample and source description: Lagoon Q3

Sample date: 08/02/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: 7.50

	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	494.00	453.00	0.00	0.60	54.70	650.00								7,580.00	3,420
DL	0.01	0.01	0.01	0.01	0.01	0.01								10.00	1

Lagoon Q4

Sample and source description: Lagoon Q4

Sample date: 12/11/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: 7.40

	Kjeldahl-N (mg/L)	NH4-N (mg/L)	NH3-N (mg/L)	Nitrate-N (mg/L)	Total P (mg/L)	Total K (mg/L)	Calcium (mg/L)	Magnes. (mg/L)	Sodium (mg/L)	Bicarb. (mg/L)	Carb. (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	EC (µmhos/cm)	TDS (mg/L)
Value	734.00	568.00	0.00	0.90	66.00	1,040.00								9,350.00	4,150
DL	0.01	0.01	0.01	0.01	0.01	0.01								10.00	1

C. FRESH WATER ANALYSES

Domestic Well

DW-MB

Sample description: DW-MB

Sample date: 12/11/2023 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								268.00	0
DL	0.01	0.01	0.01								10.00	1

Irrigation Well

IW #1

Sample description: IW #1

Sample date: 12/12/2023 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	3.40	0.00	3.40								468.00	0
DL	0.01	0.01	0.01								10.00	1

IW #2

Sample description: IW #2

Sample date: 12/12/2023 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	0.40	0.00	0.40								1,180.00	0
DL	0.01	0.01	0.01								10.00	1

Irrigation Well

IW-Orchard

Sample description: IW-Orchard

Sample date: 12/12/2023 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	0.40	0.00	0.40								1,430.00	0
DL	0.01	0.01	0.01								10.00	1

D. SOIL ANALYSES

Field 2/3

Field 3 Soil

Sample and source description: Field 3 Soil

Sample date: 09/15/2023 Source of analysis: Lab analysis

	Nitrate-N (mg/kg)	Total P (mg/kg)	Soluble P (mg/kg)	K (mg/kg)	EC (µmhos/cm)	Organic matter (%)	Total salt (mg/kg)
Value			36.00				
DL			0.01				

Field 4

Field 4 Soil

Sample and source description: Field 4 Soil

Sample date: 09/15/2023 Source of analysis: Lab analysis

	Nitrate-N (mg/kg)	Total P (mg/kg)	Soluble P (mg/kg)	K (mg/kg)	EC (µmhos/cm)	Organic matter (%)	Total salt (mg/kg)
Value			31.00				
DL			0.01				

Field 5/6

Field 5/6

Field 5 Soil

Sample and source description: Field 5 Soil

Sample date: 09/15/2023 Source of analysis: Lab analysis

	Nitrate-N (mg/kg)	Total P (mg/kg)	Soluble P (mg/kg)	K (mg/kg)	EC (µmhos/cm)	Organic matter (%)	Total salt (mg/kg)
Value			35.00				
DL			0.01				

Field 6 Soil

Sample and source description: Field 6 Soil

Sample date: 09/15/2023 Source of analysis: Lab analysis

	Nitrate-N (mg/kg)	Total P (mg/kg)	Soluble P (mg/kg)	K (mg/kg)	EC (µmhos/cm)	Organic matter (%)	Total salt (mg/kg)
Value			45.00				
DL			0.01				

Orchard

Almond 1 Soil

Sample and source description: Almond 1 Soil

Sample date: 09/15/2023 Source of analysis: Lab analysis

	Nitrate-N (mg/kg)	Total P (mg/kg)	Soluble P (mg/kg)	K (mg/kg)	EC (µmhos/cm)	Organic matter (%)	Total salt (mg/kg)
Value			34.00				
DL			0.01				

Orchard

Almond 2 Soil

Sample and source description: Almond 2 Soil

Sample date: 09/15/2023 Source of analysis: Lab analysis

	Nitrate-N (mg/kg)	Total P (mg/kg)	Soluble P (mg/kg)	K (mg/kg)	EC (µmhos/cm)	Organic matter (%)	Total salt (mg/kg)
Value			36.00				
DL			0.01				

Almond 3 soil

Sample and source description: Almond 3 soil

Sample date: 09/15/2023 Source of analysis: Lab analysis

	Nitrate-N (mg/kg)	Total P (mg/kg)	Soluble P (mg/kg)	K (mg/kg)	EC (µmhos/cm)	Organic matter (%)	Total salt (mg/kg)
Value			38.00				
DL			0.01				

Almond 4 Soil

Sample and source description: Almond 4 Soil

Sample date: 09/15/2023 Source of analysis: Lab analysis

	Nitrate-N (mg/kg)	Total P (mg/kg)	Soluble P (mg/kg)	K (mg/kg)	EC (µmhos/cm)	Organic matter (%)	Total salt (mg/kg)
Value			25.00				
DL			0.01				

E. PLANT TISSUE ANALYSES

Field 1 - 09/30/2022: Wheat, silage, soft dough

Field 1 - 09/30/2022: Wheat, silage, soft dough

Field 1 Wheat Silage

Sample and source description: Field 1 Wheat Silage

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

Moisture: 63.6 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	15,300.00	2,100.00	17,000.00		7.50
DL	0.01	0.01	0.01		1.00

Field 1 - 05/25/2023: Corn, silage

Field 1 Corn

Sample and source description: Field 1 Corn

Sample date: 09/11/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 66.2 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	14,200.00	2,800.00	19,900.00		7.50
DL	0.01	0.01	0.01		1.00

Field 2/3 - 09/30/2022: Wheat, silage, soft dough

Field 2 Wheat Silage

Sample and source description: Field 2 Wheat Silage

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

Moisture: 67.0 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	16,800.00	2,600.00	19,400.00		10.20
DL	0.01	0.01	0.01		1.00

Field 2/3 - 05/25/2023: Corn, silage

Field 2 Corn Silage

Sample and source description: Field 2 Corn Silage

Sample date: 09/06/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 84.8 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	14,600.00	1,500.00	7,200.00		6.20
DL	0.01	0.01	0.01		1.00

Field 4 - 09/30/2022: Wheat, silage, soft dough

Field 4 Wheat Silage

Sample and source description: Field 4 Wheat Silage

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

Moisture: 62.8 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	16,800.00	2,600.00	17,000.00		9.20
DL	0.01	0.01	0.01		1.00

Field 4 - 05/25/2023: Corn, silage

Field 4 Corn Silage

Sample and source description: Field 4 Corn Silage

Sample date: 09/06/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 66.1 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	17,000.00	3,800.00	24,200.00		10.70
DL	0.01	0.01	0.01		1.00

Field 5/6 - 09/30/2022: Wheat, silage, soft dough

Field 5/6 Wheat Silage

Sample and source description: Field 5/6 Wheat Silage

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

Moisture: 67.3 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	20,200.00	3,600.00	22,300.00		12.00
DL	0.01	0.01	0.01		1.00

Field 5/6 - 05/25/2023: Corn, silage

Field 5/6 Corn Silage

Sample and source description: Field 5/6 Corn Silage

Sample date: 09/06/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 73.5 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	17,500.00	3,100.00	20,800.00		8.60
DL	0.01	0.01	0.01		1.00

New 6 - 09/30/2022: Wheat, silage, soft dough

Field 6 Wheat Silage

Sample and source description: Field 6 Wheat Silage

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

Moisture: 66.9 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	17,400.00	2,500.00	20,700.00		12.20
DL	0.01	0.01	0.01		1.00

New 6 - 05/25/2023: Corn, silage

Field 6 Corn Silage

Sample and source description: Field 6 Corn Silage

Sample date: 09/12/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 72.9 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	12,500.00	2,700.00	14,200.00		6.30
DL	0.01	0.01	0.01		1.00

Orchard - 01/10/2011: Almond, in shell

Almonds

Sample and source description: Almonds

Sample date: 09/06/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 28.7 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	20,300.00	2,400.00	17,300.00		5.60
DL	0.01	0.01	0.01		1.00

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	28,554.72	6,167.16	18,194.17	0.00
Process wastewater	85,255.90	25,162.99	105,753.60	454,973.57
Fresh water	4,138.99	0.00	0.00	0.00
Atmospheric deposition	3,668.00	0.00	0.00	0.00
Total nutrients applied	121,617.61	31,330.15	123,947.77	454,973.57
Anticipated crop nutrient removal	98,232.00	16,706.40	77,595.60	0.00
Actual crop nutrient removal	82,635.36	13,804.47	95,325.05	440,488.79
Nutrient balance	38,982.25	17,525.68	28,622.71	14,484.78
Applied to removed ratio	1.47	2.27	1.30	1.03

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

No notes entered for this annual report.

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.

Johnny Silveira

SIGNATURE OF OWNER OF FACILITY	SIGNATURE OF OPERATOR OF FACILITY
Johnny Silveira	SAME AS OWNER
PRINT OR TYPE NAME	PRINT OR TYPE NAME
Jul 1, 2024	
DATE	DATE

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.

Manure / Process Wastewater Tracking Manifest
For
Existing Milk Cow Dairies

General Order No. R5-2007-0035, Attachment D

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/process wastewater 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: Johnny Silveira

Name of Dairy Facility: Silveira Dairy

Facility Address:

Number and Street	City	County	Zip Code
11277 Avenue 21 1/2	Chowchilla	Madera	93610

Contact Person Name and Phone Number:

Name	Phone Number
Johnny Silveira	(559) 978-6087

PROCESS WASTEWATER HAULER INFORMATION

Name of Hauling Company/Person: Silveira Dairy Pipeline

Address of Hauling Company/Person:

Number and Street	City	State	Zip Code
11277 Ave 21 1/2	Chowchilla	CA	93610

Contact Person:

Name	Phone Number
Johnny Silveira	(559) 978-6087

DESTINATION INFORMATION

Composting Facility / Broker / Farmer / Other (identify): Farmer

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

Name	Phone Number
Silveira Dairy Heifers	(559) 978-6087

Address	City	State	Zip Code
1021 Ave 21 1/2	Chowchilla	CA	93610

Destination Address or Assessor's Parcel Number:

Address	City	Zip Code
1021 Ave 21 1/2	Chowchilla	93610

Street and nearest cross street (if no address)	County
	Madera

Assessor's Parcel Number	Assessor's Parcel Number County

Last date hauled: 01/01/2023

Manure / Process Wastewater Tracking Manifest
For
Existing Milk Cow Dairies

General Order No. R5-2007-0035, Attachment D

PROCESS WASTEWATER AMOUNT HAULED

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

Process Wastewater: 2,340,000 gallons

Method used to determine volume of process wastewater:

gpm x sixty x hours ran

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?

[X] 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 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.

Johnny Silveira

Operator Signature Date

Johnny Silveira

Hauler Signature Date

Manure / Process Wastewater Tracking Manifest
For
Existing Milk Cow Dairies

General Order No. R5-2007-0035, Attachment D

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/process wastewater 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: Johnny Silveira

Name of Dairy Facility: Silveira Dairy

Facility Address:

Number and Street	City	County	Zip Code
11277 Avenue 21 1/2	Chowchilla	Madera	93610

Contact Person Name and Phone Number:

Name	Phone Number
Johnny Silveira	(559) 978-6087

PROCESS WASTEWATER HAULER INFORMATION

Name of Hauling Company/Person: Silveira Dairy Pipeline

Address of Hauling Company/Person:

Number and Street	City	State	Zip Code
11277 Ave 21 1/2	Chowchilla	CA	93610

Contact Person:

Name	Phone Number
Johnny Silveira	(559) 978-6087

DESTINATION INFORMATION

Composting Facility / Broker / Farmer / Other (identify): Farmer

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

Name	Phone Number
Silveira Dairy Heifers	(559) 978-6087

Address	City	State	Zip Code
1021 Ave 21 1/2	Chowchilla	CA	93610

Destination Address or Assessor's Parcel Number:

Address	City	Zip Code
1021 Ave 21 1/2	Chowchilla	93610

Street and nearest cross street (if no address)	County
	Madera

Assessor's Parcel Number	Assessor's Parcel Number County

Last date hauled: 03/13/2023

Manure / Process Wastewater Tracking Manifest
For
Existing Milk Cow Dairies

General Order No. R5-2007-0035, Attachment D

PROCESS WASTEWATER AMOUNT HAULED

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

Process Wastewater: 892,500 gallons

Method used to determine volume of process wastewater:

gpm x sixty x hours ran

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?

[X] 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

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Johnny Silveira

Operator Signature Date

Johnny Silveira

Hauler Signature Date

Manure / Process Wastewater Tracking Manifest
For
Existing Milk Cow Dairies

General Order No. R5-2007-0035, Attachment D

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/process wastewater 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: Johnny Silveira

Name of Dairy Facility: Silveira Dairy

Facility Address:

Number and Street	City	County	Zip Code
11277 Avenue 21 1/2	Chowchilla	Madera	93610

Contact Person Name and Phone Number:

Name	Phone Number
Johnny Silveira	(559) 978-6087

PROCESS WASTEWATER HAULER INFORMATION

Name of Hauling Company/Person: Silveira Dairy Pipeline

Address of Hauling Company/Person:

Number and Street	City	State	Zip Code
11277 Ave 21 1/2	Chowchilla	CA	93610

Contact Person:

Name	Phone Number
Johnny Silveira	(559) 978-6087

DESTINATION INFORMATION

Composting Facility / Broker / Farmer / Other (identify): Farmer

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

Name	Phone Number
Silveira Dairy Heifers	(559) 978-6087

Address	City	State	Zip Code
1021 Ave 21 1/2	Chowchilla	CA	93610

Destination Address or Assessor's Parcel Number:

Address	City	Zip Code
1021 Ave 21 1/2	Chowchilla	93610

Street and nearest cross street (if no address)	County
	Madera

Assessor's Parcel Number	Assessor's Parcel Number County

Last date hauled: 04/18/2023

Manure / Process Wastewater Tracking Manifest
For
Existing Milk Cow Dairies

General Order No. R5-2007-0035, Attachment D

PROCESS WASTEWATER AMOUNT HAULED

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

Process Wastewater: 2,374,500 gallons

Method used to determine volume of process wastewater:

gpm x sixty x hours ran

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?

[X] 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

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Johnny Silveira

Operator Signature Date

Johnny Silveira

Hauler Signature Date

Manure / Process Wastewater Tracking Manifest
For
Existing Milk Cow Dairies

General Order No. R5-2007-0035, Attachment D

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/process wastewater 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: Johnny Silveira

Name of Dairy Facility: Silveira Dairy

Facility Address:

Number and Street	City	County	Zip Code
11277 Avenue 21 1/2	Chowchilla	Madera	93610

Contact Person Name and Phone Number:

Name	Phone Number
Johnny Silveira	(559) 978-6087

PROCESS WASTEWATER HAULER INFORMATION

Name of Hauling Company/Person: Silveira Dairy Pipeline

Address of Hauling Company/Person:

Number and Street	City	State	Zip Code
11277 Ave 21 1/2	Chowchilla	CA	93610

Contact Person:

Name	Phone Number
Johnny Silveira	(559) 978-6087

DESTINATION INFORMATION

Composting Facility / Broker / Farmer / Other (identify): Farmer

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

Name	Phone Number
Silveira Dairy Heifers	(559) 978-6087

Address	City	State	Zip Code
1021 Ave 21 1/2	Chowchilla	CA	93610

Destination Address or Assessor's Parcel Number:

Address	City	Zip Code
1021 Ave 21 1/2	Chowchilla	93610

Street and nearest cross street (if no address)	County
	Madera

Assessor's Parcel Number	Assessor's Parcel Number County

Last date hauled: 06/12/2023

Manure / Process Wastewater Tracking Manifest
For
Existing Milk Cow Dairies

General Order No. R5-2007-0035, Attachment D

PROCESS WASTEWATER AMOUNT HAULED

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

Process Wastewater: 390,000 gallons

Method used to determine volume of process wastewater:

gpm x sixty x hours ran

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?

[X] 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 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.

Johnny Silveira

Operator Signature Date

Johnny Silveira

Hauler Signature Date

Manure / Process Wastewater Tracking Manifest
For
Existing Milk Cow Dairies

General Order No. R5-2007-0035, Attachment D

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/process wastewater 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: Johnny Silveira

Name of Dairy Facility: Silveira Dairy

Facility Address:

Number and Street	City	County	Zip Code
11277 Avenue 21 1/2	Chowchilla	Madera	93610

Contact Person Name and Phone Number:

Name	Phone Number
Johnny Silveira	(559) 978-6087

PROCESS WASTEWATER HAULER INFORMATION

Name of Hauling Company/Person: Silveira Dairy Pipeline

Address of Hauling Company/Person:

Number and Street	City	State	Zip Code
11277 Ave 21 1/2	Chowchilla	CA	93610

Contact Person:

Name	Phone Number
Johnny Silveira	(559) 978-6087

DESTINATION INFORMATION

Composting Facility / Broker / Farmer / Other (identify): Farmer

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

Name	Phone Number
Silveira Dairy Heifers	(559) 978-6087

Address	City	State	Zip Code
1021 Ave 21 1/2	Chowchilla	CA	93610

Destination Address or Assessor's Parcel Number:

Address	City	Zip Code
1021 Ave 21 1/2	Chowchilla	93610

Street and nearest cross street (if no address)	County
	Madera

Assessor's Parcel Number	Assessor's Parcel Number County

Last date hauled: 06/30/2023

Manure / Process Wastewater Tracking Manifest
For
Existing Milk Cow Dairies

General Order No. R5-2007-0035, Attachment D

PROCESS WASTEWATER AMOUNT HAULED

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

Process Wastewater: 405,000 gallons

Method used to determine volume of process wastewater:

gpm x sixty x hours ran

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?

[X] 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 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.

Johnny Silveira

Operator Signature Date

Johnny Silveira

Hauler Signature Date

Manure / Process Wastewater Tracking Manifest
For
Existing Milk Cow Dairies

General Order No. R5-2007-0035, Attachment D

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/process wastewater 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: Johnny Silveira

Name of Dairy Facility: Silveira Dairy

Facility Address:

Number and Street	City	County	Zip Code
11277 Avenue 21 1/2	Chowchilla	Madera	93610

Contact Person Name and Phone Number:

Name	Phone Number
Johnny Silveira	(559) 978-6087

PROCESS WASTEWATER HAULER INFORMATION

Name of Hauling Company/Person: Silveira Dairy Pipeline

Address of Hauling Company/Person:

Number and Street	City	State	Zip Code
11277 Ave 21 1/2	Chowchilla	CA	93610

Contact Person:

Name	Phone Number
Johnny Silveira	(559) 978-6087

DESTINATION INFORMATION

Composting Facility / Broker / Farmer / Other (identify): Farmer

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

Name	Phone Number
Silveira Dairy Heifers	(559) 978-6087

Address	City	State	Zip Code
1021 Ave 21 1/2	Chowchilla	CA	93610

Destination Address or Assessor's Parcel Number:

Address	City	Zip Code
1021 Ave 21 1/2	Chowchilla	93610

Street and nearest cross street (if no address)	County
	Madera

Assessor's Parcel Number	Assessor's Parcel Number County

Last date hauled: 07/12/2023

Manure / Process Wastewater Tracking Manifest
For
Existing Milk Cow Dairies

General Order No. R5-2007-0035, Attachment D

PROCESS WASTEWATER AMOUNT HAULED

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

Process Wastewater: 2,355,000 gallons

Method used to determine volume of process wastewater:

gpm x sixty x hours pumped

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?

[X] 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 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.

Johnny Silveira

Operator Signature Date

Johnny Silveira

Hauler Signature Date

Manure / Process Wastewater Tracking Manifest
For
Existing Milk Cow Dairies

General Order No. R5-2007-0035, Attachment D

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/process wastewater 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: Johnny Silveira

Name of Dairy Facility: Silveira Dairy

Facility Address:

Number and Street	City	County	Zip Code
11277 Avenue 21 1/2	Chowchilla	Madera	93610

Contact Person Name and Phone Number:

Name	Phone Number
Johnny Silveira	(559) 978-6087

PROCESS WASTEWATER HAULER INFORMATION

Name of Hauling Company/Person: Silveira Dairy Pipeline

Address of Hauling Company/Person:

Number and Street	City	State	Zip Code
11277 Ave 21 1/2	Chowchilla	CA	93610

Contact Person:

Name	Phone Number
Johnny Silveira	(559) 978-6087

DESTINATION INFORMATION

Composting Facility / Broker / Farmer / Other (identify): Farmer

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

Name	Phone Number
Silveira Dairy Heifers	(559) 978-6087

Address	City	State	Zip Code
1021 Ave 21 1/2	Chowchilla	CA	93610

Destination Address or Assessor's Parcel Number:

Address	City	Zip Code
1021 Ave 21 1/2	Chowchilla	93610

Street and nearest cross street (if no address)	County
	Madera

Assessor's Parcel Number	Assessor's Parcel Number County

Last date hauled: 08/10/2023

Manure / Process Wastewater Tracking Manifest
For
Existing Milk Cow Dairies

General Order No. R5-2007-0035, Attachment D

PROCESS WASTEWATER AMOUNT HAULED

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

Process Wastewater: 2,595,000 gallons

Method used to determine volume of process wastewater:

gpm x sixty x hours pumped

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?

[X] 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

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Johnny Silveira

Operator Signature Date

Johnny Silveira

Hauler Signature Date

DELLAVALLE LABORATORY INC

Report of Dairy Well Water Analysis

Silveira Dairy (Chowchilla)
11380 Ave 22
Chowchilla CA 93610
00-0021349 08

E-mail:
Copy To: cas.labs@yahoo.com

Lab No.: 23L0731
Sampled By: M. Pedroso
Requested By: Johnny Silveira
Submitted Date: 12/12/23
Reported Date: 12/18/23
Project:
Crop ID:

		Date Sampled	Time Sampled	EC µmhos/cm	EC mmhos/cm	NO_3-N mg/L	Field NH_4-N mg/L	Total NH_4-N mg/L	pH at 25°C unit
1	DW - MB	12/11/23	14:40	268	0.27	0.2	ND		7.7
2	~~DW - Barn (Heifers)~~	~~12/11/23~~	~~14:35~~	~~333~~	~~0.33~~	~~0.3~~	~~ND~~		~~7.3~~
3	~~DW - House (Heifers)~~	~~12/11/23~~	~~14:30~~	~~287~~	~~0.29~~	~~1.1~~	~~ND~~		~~6.8~~

***** = Field NH_4-N not Taken.
ND = None Detected

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

Report of Dairy Well Water Analysis

DELLAVALLE LABORATORY INC

Silveira Dairy (Chowchilla)
11380 Ave 22
Chowchilla CA 93610
00-0021349 08

E-mail:
Copy To: cas.labs@yahoo.com

Lab No.: 23L0731
Sampled By: M. Pedroso
Requested By: Johnny Silveira
Submitted Date: 12/12/23
Reported Date: 12/18/23
Project:
Crop ID:

		Date Sampled	Time Sampled	EC µmhos/cm	EC mmhos/cm	NO_3-N mg/L	Nitrogen agricultural use Calcs calculated from nitrate-N lbs/AcFoot	lbs/AcInch
1	DW - MB	12/11/23	14:40	268	0.27	0.2	0.55	0.05
2	~~DW - Barn (Heifers)~~	~~12/11/23~~	~~14:35~~	~~333~~	~~0.33~~	~~0.3~~	~~0.82~~	~~0.07~~
~~3~~	~~DW - House (Heifers)~~	~~12/11/23~~	~~14:30~~	~~287~~	~~0.29~~	~~1.1~~	~~3.00~~	~~0.25~~

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

Sampling abbreviations: H.B. = hose bib, S.P. = stand pipe, Dom. = domestic well, IR = irrigation well, AG = ag well.
Nitrate exceeds Water Quality MCL levels if results are above 10 mg/l nitrate-nitrogen NO3-N (equivalent to 45 mg/l nitrate, NO3).
Total Salt results are used to monitor changes of salt in the well aquifers between annual tests.
MCL = Maximum Contaminant Level according to the California Domestic Water Quality and Monitoring Regulations (Title 22)
MDL = Method Detection Limit; **RL** = Reporting Limit, mg/L = ppm.
SM = Standard Methods for the Examination of Water and Wastewater
EPA = Environmental Protection Agency methods used unless otherwise indicated.

DELLAVALLE™
LABORATORY INC

Silveira Dairy (Chowchilla)
11380 Ave 22
Chowchilla, CA 93610

Account# 00-0021349
Account Manager: Ben Nydam
Submitted By: Johnny Silveira

Received: 12/12/2023 15:53
Reported: 12/18/2023 12:46

Samples in this Report

Lab ID	Sample	Matrix	Sampled By	Crop	Date Sampled
23L0731-01	DW - MB	Well Water	M. Pedroso		12/11/2023 14:40
~~23L0731-02~~	~~DW - Barn (Heifers)~~	~~Well Water~~	~~M. Pedroso~~		~~12/11/2023 14:35~~
~~23L0731-03~~	~~DW - House (Heifers)~~	~~Well Water~~	~~M. Pedroso~~		~~12/11/2023 14:30~~

Default Cooler Temperature on Receipt °C: 1.1
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.

Scott McFriedland

Laboratory Director/Technical Manager

ELAP Certification #1595
A2LA Certification #6440.02

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DELLAVALLE™
LABORATORY INC

Silveira Dairy (Chowchilla)
11380 Ave 22
Chowchilla, CA 93610

Account# 00-0021349
Account Manager: Ben Nydam
Submitted By: Johnny Silveira

Received: 12/12/2023 15:53
Reported: 12/18/2023 12:46

Sample Results

Sample: DW - MB
23L0731-01 (Water)

Sampled: 12/11/2023 14:40
Sampled By: M. Pedroso

Analyte	Result	Units	Reporting Limit	DIL	DW MCL	Date/Time Analyzed	Method	Notes	Batch
Electrical Conductivity	**0.27**	mmhos/cm	0.01	1		12/13/23 18:47	SM 2510 B		BEL0587
Electrical Conductivity umhos	**268**	umhos/cm	10.0	1		12/13/23 18:47	SM 2510 B		BEL0587
Ammonia (as N)	ND	mg/L	0.00	1		12/11/23 14:40	Field		BEL0402
Nitrate Nitrogen as NO3N	**0.2**	mg/L	0.1	1	10	12/13/23 13:19	EPA 300.0		BEL0350
Temperature	**25.0**	units	0.0	1		12/13/23 18:47	SM 4500-H+	H	BEL0587
pH	**7.7**	units	1.0	1		12/13/23 18:47	SM 4500-H+	H	BEL0587

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DELLAVALLE™
LABORATORY INC

Silveira Dairy (Chowchilla)
11380 Ave 22
Chowchilla, CA 93610

Account# 00-0021349
Account Manager: Ben Nydam
Submitted By: Johnny Silveira

Received: 12/12/2023 15:53
Reported: 12/18/2023 12:46

Sample Results
(Continued)

Sample: DW - Barn (Heifers)
23L0731-02 (Water)

Sampled: 12/11/2023 14:35
Sampled By: M. Pedroso

Analyte	Result	Units	Reporting Limit	DIL	DW MCL	Date/Time Analyzed	Method	Notes	Batch
Electrical Conductivity	**0.33**	mmhos/cm	0.01	1		12/13/23 18:48	SM 2510 B		BEL0587
Electrical Conductivity umhos	**333**	umhos/cm	10.0	1		12/13/23 18:48	SM 2510 B		BEL0587
Ammonia (as N)	ND	mg/L	0.00	1		12/11/23 14:35	Field		BEL0402
Nitrate Nitrogen as NO3N	**0.3**	mg/L	0.1	1	10	12/13/23 13:40	EPA 300.0		BEL0350
Temperature	**25.0**	units	0.0	1		12/13/23 18:48	SM 4500-H+	H	BEL0587
pH	**7.3**	units	1.0	1		12/13/23 18:48	SM 4500-H+	H	BEL0587

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DELLAVALLE™
LABORATORY INC

Silveira Dairy (Chowchilla)
11380 Ave 22
Chowchilla, CA 93610

Account# 00-0021349
Account Manager: Ben Nydam
Submitted By: Johnny Silveira

Received: 12/12/2023 15:53
Reported: 12/18/2023 12:46

Sample Results
(Continued)

Sample: DW - House (Heifers)
23L0731-03 (Water)

Sampled: 12/11/2023 14:30
Sampled By: M. Pedroso

Analyte	Result	Units	Reporting Limit	DIL	DW MCL	Date/Time Analyzed	Method	Notes	Batch
Electrical Conductivity	**0.29**	mmhos/cm	0.01	1		12/13/23 18:55	SM 2510 B		BEL0587
Electrical Conductivity umhos	**287**	umhos/cm	10.0	1		12/13/23 18:55	SM 2510 B		BEL0587
Ammonia (as N)	ND	mg/L	0.00	1		12/11/23 14:30	Field		BEL0402
Nitrate Nitrogen as NO3N	**1.1**	mg/L	0.1	1	10	12/13/23 14:01	EPA 300.0		BEL0350
Temperature	**25.0**	units	0.0	1		12/13/23 18:55	SM 4500-H+	H	BEL0587
pH	**6.8**	units	1.0	1		12/13/23 18:55	SM 4500-H+	H	BEL0587

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DELLAVALLE™ LABORATORY INC

Silveira Dairy (Chowchilla)
11380 Ave 22
Chowchilla, CA 93610

Account# 00-0021349
Account Manager: Ben Nydam
Submitted By: Johnny Silveira

Received: 12/12/2023 15:53
Reported: 12/18/2023 12:46

Quality Control

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BEL0350										
Blank (BEL0350-BLK1)					Prepared & Analyzed: 12/12/2023					
Nitrate Nitrogen as NO3N	ND		0.1	mg/L						
Blank (BEL0350-BLK2)					Prepared & Analyzed: 12/12/2023					
Nitrate Nitrogen as NO3N	ND		0.1	mg/L						
Blank (BEL0350-BLK3)					Prepared: 12/12/2023 Analyzed: 12/13/2023					
Nitrate Nitrogen as NO3N	ND		0.1	mg/L						
Blank (BEL0350-BLK4)					Prepared: 12/12/2023 Analyzed: 12/13/2023					
Nitrate Nitrogen as NO3N	ND		0.1	mg/L						
Blank (BEL0350-BLK5)					Prepared: 12/12/2023 Analyzed: 12/13/2023					
Nitrate Nitrogen as NO3N	ND		0.1	mg/L						
LCS (BEL0350-BS1)					Prepared: 12/12/2023 Analyzed: 12/13/2023					
Nitrate Nitrogen as NO3N	4.6		0.1	mg/L	5.000		92.8	90-110		
LCS (BEL0350-BS2)					Prepared: 12/12/2023 Analyzed: 12/13/2023					
Nitrate Nitrogen as NO3N	5.4		0.1	mg/L	5.000		107	90-110		
LCS (BEL0350-BS3)					Prepared: 12/12/2023 Analyzed: 12/13/2023					
Nitrate Nitrogen as NO3N	4.7		0.1	mg/L	5.000		94.3	90-110		
LCS (BEL0350-BS4)					Prepared: 12/12/2023 Analyzed: 12/13/2023					
Nitrate Nitrogen as NO3N	4.6		0.1	mg/L	5.000		92.7	90-110		
Duplicate (BEL0350-DUP1)		**Source: 23L0592-01**			Prepared: 12/12/2023 Analyzed: 12/13/2023					
Nitrate Nitrogen as NO3N	0.08		0.1	mg/L		0.08			0.00	10
Duplicate (BEL0350-DUP2)		**Source: 23L0594-01**			Prepared: 12/12/2023 Analyzed: 12/13/2023					
Nitrate Nitrogen as NO3N	0.09		0.1	mg/L		0.09			5.65	10
Duplicate (BEL0350-DUP3)		**Source: 23L0724-01**			Prepared: 12/12/2023 Analyzed: 12/13/2023					
Nitrate Nitrogen as NO3N	0.6		0.1	mg/L		0.6			1.23	10
Duplicate (BEL0350-DUP4)		**Source: 23L0731-01**			Prepared: 12/12/2023 Analyzed: 12/13/2023					
Nitrate Nitrogen as NO3N	0.2		0.1	mg/L		0.2			0.466	10
Matrix Spike (BEL0350-MS1)		**Source: 23L0592-01**			Prepared & Analyzed: 12/12/2023					
Nitrate Nitrogen as NO3N	4.6		0.1	mg/L	5.000	0.08	90.7	90-110		
Matrix Spike (BEL0350-MS2)		**Source: 23L0594-01**			Prepared: 12/12/2023 Analyzed: 12/13/2023					
Nitrate Nitrogen as NO3N	4.7		0.1	mg/L	5.000	0.09	91.7	90-110		

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DELLAVALLE™ LABORATORY INC

Silveira Dairy (Chowchilla)
11380 Ave 22
Chowchilla, CA 93610

Account# 00-0021349
Account Manager: Ben Nydam
Submitted By: Johnny Silveira

Received: 12/12/2023 15:53
Reported: 12/18/2023 12:46

Quality Control
(Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BEL0350 (Continued)										
Matrix Spike (BEL0350-MS4)			**Source: 23L0731-01**		Prepared: 12/12/2023 Analyzed: 12/13/2023					
Nitrate Nitrogen as NO3N	4.9		0.1	mg/L	5.000	0.2	93.7	90-110		
Reference (BEL0350-SRM1)					Prepared & Analyzed: 12/12/2023					
Nitrate Nitrogen as NO3N	9.2			mg/L	10.00		92.0	90-110		
Reference (BEL0350-SRM2)					Prepared: 12/12/2023 Analyzed: 12/13/2023					
Nitrate Nitrogen as NO3N	9.3			mg/L	10.00		92.6	90-110		
Reference (BEL0350-SRM3)					Prepared: 12/12/2023 Analyzed: 12/13/2023					
Nitrate Nitrogen as NO3N	9.3			mg/L	10.00		92.7	90-110		
Reference (BEL0350-SRM4)					Prepared: 12/12/2023 Analyzed: 12/13/2023					
Nitrate Nitrogen as NO3N	9.4			mg/L	10.00		93.6	90-110		
Reference (BEL0350-SRM5)					Prepared: 12/12/2023 Analyzed: 12/13/2023					
Nitrate Nitrogen as NO3N	9.2			mg/L	10.00		92.2	90-110		

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Silveira Dairy (Chowchilla)
11380 Ave 22
Chowchilla, CA 93610

Account# 00-0021349
Account Manager: Ben Nydam
Submitted By: Johnny Silveira

Received: 12/12/2023 15:53
Reported: 12/18/2023 12:46

Quality Control
(Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BEL0587										
Blank (BEL0587-BLK1)					Prepared & Analyzed: 12/13/2023					
Electrical Conductivity	ND		0.01	mmhos/cm						
Temperature	25.0		0.0	units						
pH	5.5		1.0	units						
Electrical Conductivity umhos	ND		10.0	umhos/cm						
Blank (BEL0587-BLK2)					Prepared & Analyzed: 12/13/2023					
Electrical Conductivity	ND		0.01	mmhos/cm						
Temperature	25.0		0.0	units						
pH	7.3		1.0	units						
Electrical Conductivity umhos	ND		10.0	umhos/cm						
Blank (BEL0587-BLK3)					Prepared & Analyzed: 12/13/2023					
Temperature	25.0		0.0	units						
Electrical Conductivity	ND		0.01	mmhos/cm						
pH	7.7		1.0	units						
Electrical Conductivity umhos	ND		10.0	umhos/cm						
Duplicate (BEL0587-DUP1)		**Source: 23L0731-02**			Prepared & Analyzed: 12/13/2023					
Electrical Conductivity	0.34		0.01	mmhos/cm		0.33			0.509	10
Electrical Conductivity umhos	335		10.0	umhos/cm		333			0.509	10
pH	7.2		1.0	units		7.3			1.66	10
Duplicate (BEL0587-DUP2)		**Source: 23L0737-03**			Prepared & Analyzed: 12/13/2023					
Electrical Conductivity	0.68		0.01	mmhos/cm		0.66			3.31	10
Electrical Conductivity umhos	682		10.0	umhos/cm		659			3.31	10
pH	8.3		1.0	units		8.3			0.00	10
Reference (BEL0587-SRM1)					Prepared & Analyzed: 12/13/2023					
Electrical Conductivity	448			umhos/cm	426.0		105	90-110		
Reference (BEL0587-SRM2)					Prepared & Analyzed: 12/13/2023					
pH	7.5			units	7.520		100	67021-101.32		
Reference (BEL0587-SRM3)					Prepared & Analyzed: 12/13/2023					
Electrical Conductivity	1080			umhos/cm	1000		108	90-110		
Electrical Conductivity umhos	1080			umhos/cm	1000		108	90-110		
Reference (BEL0587-SRM4)					Prepared & Analyzed: 12/13/2023					
Electrical Conductivity	1070			umhos/cm	1000		107	90-110		
Electrical Conductivity umhos	1070			umhos/cm	1000		107	90-110		
Reference (BEL0587-SRM5)					Prepared & Analyzed: 12/13/2023					
Electrical Conductivity	1060			umhos/cm	1000		106	90-110		

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Silveira Dairy (Chowchilla)
11380 Ave 22
Chowchilla, CA 93610

Account# 00-0021349
Account Manager: Ben Nydam
Submitted By: Johnny Silveira

Received: 12/12/2023 15:53
Reported: 12/18/2023 12:46

Quality Control
(Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BEL0587 (Continued)										
Reference (BEL0587-SRM5)					Prepared & Analyzed: 12/13/2023					
Electrical Conductivity umhos	1060			umhos/cm	1000		106	90-110		
Reference (BEL0587-SRM6)					Prepared & Analyzed: 12/13/2023					
pH	4.0			units	4.000		101	97.5-102.5		
Reference (BEL0587-SRM7)					Prepared & Analyzed: 12/13/2023					
pH	4.0			units	4.000		101	97.5-102.5		
Reference (BEL0587-SRM8)					Prepared & Analyzed: 12/13/2023					
pH	4.0			units	4.000		100	97.5-102.5		

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12/12/23 15:53 23L0731

JG

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

Bill To: Acct No. 21349 Cons. 8

Purchase Order No. _____ Results Needed By _____

Client: **Silveira Dairy (Chowchilla)**
Address: 11380 Ave 22
City, State, Zip: Chowchilla, CA 93610
Phone _____ Fax _____
Cell/Email _____

Copy to: Cardoso Ag Sevices - cas.labs@yahoo.com

Requested by: Johnny Silveira - (559) 978-6087

Ranch _____

Date sampled: 12/11/23

Sampled by: MPedroso

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

No. of Samples _____ No. Bottles _____

Water Type: [ ] 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 _____

DESCRIPTION OF SAMPLES

		Date Sampled	Time Sampled	Field NH4-N (mg/L)	Received Temp °C
1. DW-MB	Sampled From:	12/11/23	240P	Ø	1.1
2. DW-BarnHeifers	Sampled From:	12/11/23	235P	Ø	0.9
3. DW-HouseHeifers	Sampled From:	12/11/23	230P	Ø	1.1
4.	Sampled From:				
5.	Sampled From:				
6.	Sampled From:				
7.	Sampled From:				
8.	Sampled From:				
9.	Sampled From:				
10.	Sampled From:				

IR Thermometer SN: 192603727
Correction Factor: 0°C
Calibration Due: 03/06/2024
Location: Laboratory

CHAIN OF CUSTODY

Carrier	Signature	Company	Received (Date/Time)	Relinquished (Date/Time)
First	MPed	CASInc	12/11/23 240P	12/12/23 9:30am
Second	JCF	DLV	12-12-23 9:30	12-12-23 2:01
Third	MM	DLI	12/12 15:53	
Fourth				

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

ctt:update 2020

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

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

12/12/23 15:53 23L0731

	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										
"	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 AG VOA, $Na_2S_2O_3$ + MCAA										
	40 mL AG VOA, $Na_2S_2O_3$										
	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:										

SEND OUT

Report of Dairy Well Water Analysis

DELLAVALLE LABORATORY INC

Silveira Dairy (Chowchilla)
11380 Ave 22
Chowchilla CA 93610
00-0021349 08

E-mail:
Copy To: cas.labs@yahoo.com

Lab No.: 23L0775
Sampled By: J. Silveira
Requested By: Johnny Silveira
Submitted Date: 12/13/23
Reported Date: 12/20/23
Project:
Crop ID:

		Date Sampled	Time Sampled	EC µmhos/cm	EC mmhos/cm	NO_3-N mg/L	Field NH_4-N mg/L	Total NH_4-N mg/L	pH at 25°C unit
~~1~~	~~IW - West (Andrade)~~	~~12/12/23~~	~~8:48~~	~~230~~	~~0.23~~	~~0.7~~	~~ND~~		~~7.8~~
~~2~~	~~IW - Rd 11 New (Andrade)~~	~~12/12/23~~	~~8:36~~	~~1130~~	~~1.13~~	~~0.3~~	~~ND~~		~~7.7~~
~~3~~	~~IW - Rd 11 Old (Andrade)~~	~~12/12/23~~	~~8:42~~	~~1060~~	~~1.06~~	~~29.5~~	~~ND~~		~~7.4~~
4	IW - Orchard	12/12/23	8:58	1430	1.43	0.4	ND		7.7
5	IW #1	12/12/23	8:24	468	0.47	3.4	ND		7.7
6	IW #2	12/12/23	8:29	1180	1.18	0.4	ND		7.6

***** = Field NH_4-N not Taken.
ND = None Detected

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

Report of Dairy Well Water Analysis

DELLAVALLE LABORATORY INC

Silveira Dairy (Chowchilla)
11380 Ave 22
Chowchilla CA 93610
00-0021349 08

E-mail:
Copy To: cas.labs@yahoo.com

Lab No.: 23L0775
Sampled By: J. Silveira
Requested By: Johnny Silveira
Submitted Date: 12/13/23
Reported Date: 12/20/23
Project:
Crop ID:

		Date Sampled	Time Sampled	EC µmhos/cm	EC mmhos/cm	NO_3-N mg/L	Nitrogen agricultural use Calcs calculated from nitrate-N lbs/AcFoot	lbs/AcInch
~~1~~	~~IW - West (Andrade)~~	~~12/12/23~~	~~8:48~~	~~230~~	~~0.23~~	~~0.7~~	~~1.91~~	~~0.16~~
~~2~~	~~IW - Rd 11 New (Andrade)~~	~~12/12/23~~	~~8:36~~	~~1130~~	~~1.13~~	~~0.3~~	~~0.82~~	~~0.07~~
~~3~~	~~IW - Rd 11 Old (Andrade)~~	~~12/12/23~~	~~8:42~~	~~1060~~	~~1.06~~	~~29.5~~	~~80.54~~	~~6.71~~
4	IW - Orchard	12/12/23	8:58	**1430**	**1.43**	0.4	1.09	0.09
5	IW #1	12/12/23	8:24	468	0.47	**3.4**	9.28	0.77
6	IW #2	12/12/23	8:29	**1180**	**1.18**	0.4	1.09	0.09

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

Sampling abbreviations: H.B. = hose bib, S.P. = stand pipe, Dom. = domestic well, IR = irrigation well, AG = ag well.
Nitrate exceeds Water Quality MCL levels if results are above 10 mg/l nitrate-nitrogen NO3-N (equivalent to 45 mg/l nitrate, NO3).
Total Salt results are used to monitor changes of salt in the well aquifers between annual tests.
MCL = Maximum Contaminant Level according to the California Domestic Water Quality and Monitoring Regulations (Title 22)
MDL = Method Detection Limit; **RL** = Reporting Limit, mg/L = ppm.
SM = Standard Methods for the Examination of Water and Wastewater
EPA = Environmental Protection Agency methods used unless otherwise indicated.

DELLAVALLE™
LABORATORY INC

Silveira Dairy (Chowchilla)
11380 Ave 22
Chowchilla, CA 93610

Account# 00-0021349
Account Manager: Ben Nydam
Submitted By: Johnny Silveira

Received: 12/13/2023 7:00
Reported: 12/20/2023 14:15

Samples in this Report

Lab ID	Sample	Matrix	Sampled By	Crop	Date Sampled
~~23L0775-01~~	~~IW - West (Andrade)~~	~~Ag Water~~	~~J. Silveira~~		~~12/12/2023 8:48~~
~~23L0775-02~~	~~IW - Rd 11 New (Andrade)~~	~~Ag Water~~	~~J. Silveira~~		~~12/12/2023 8:36~~
~~23L0775-03~~	~~IW - Rd 11 Old (Andrade)~~	~~Ag Water~~	~~J. Silveira~~		~~12/12/2023 8:42~~
23L0775-04	IW - Orchard	Ag Water	J. Silveira		12/12/2023 8:58
23L0775-05	IW #1	Ag Water	J. Silveira		12/12/2023 8:24
23L0775-06	IW #2	Ag Water	J. Silveira		12/12/2023 8:29

Default Cooler Temperature on Receipt °C: 0.8
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.

Scott McFriedland

Laboratory Director/Technical Manager

ELAP Certification #1595
A2LA Certification #6440.02

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LABORATORY INC

Silveira Dairy (Chowchilla)
11380 Ave 22
Chowchilla, CA 93610

Account# 00-0021349
Account Manager: Ben Nydam
Submitted By: Johnny Silveira

Received: 12/13/2023 7:00
Reported: 12/20/2023 14:15

Sample Results

Sample: IW - West (Andrade)
23L0775-01 (Water)

Sampled: 12/12/2023 8:48
Sampled By: J. Silveira

Analyte	Result	Units	Reporting Limit	DIL	DW MCL	Date/Time Analyzed	Method	Notes	Batch
Electrical Conductivity	**0.23**	mmhos/cm	0.01	1		12/14/23 16:27	SM 2510 B		BEL0615
Electrical Conductivity umhos	**230**	umhos/cm	10.0	1		12/14/23 16:27	SM 2510 B		BEL0615
Ammonia (as N)	ND	mg/L	0.00	1		12/12/23 08:48	Field		BEL0439
Nitrate Nitrogen as NO3N	**0.7**	mg/L	0.1	1	10	12/14/23 08:50	EPA 300.0		BEL0569
Temperature	**25.0**	units	0.0	1		12/14/23 16:27	SM 4500-H+	H	BEL0615
pH	**7.8**	units	1.0	1		12/14/23 16:27	SM 4500-H+	H	BEL0615

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LABORATORY INC

Silveira Dairy (Chowchilla)
11380 Ave 22
Chowchilla, CA 93610

Account# 00-0021349
Account Manager: Ben Nydam
Submitted By: Johnny Silveira

Received: 12/13/2023 7:00
Reported: 12/20/2023 14:15

Sample Results
(Continued)

Sample: IW - Rd 11 New (Andrade)
23L0775-02 (Water)

Sampled: 12/12/2023 8:36
Sampled By: J. Silveira

Analyte	Result	Units	Reporting Limit	DIL	DW MCL	Date/Time Analyzed	Method	Notes	Batch
Electrical Conductivity	**1.13**	mmhos/cm	0.01	1		12/14/23 16:28	SM 2510 B		BEL0615
Electrical Conductivity umhos	**1130**	umhos/cm	10.0	1		12/14/23 16:28	SM 2510 B		BEL0615
Ammonia (as N)	ND	mg/L	0.00	1		12/12/23 08:36	Field		BEL0439
Nitrate Nitrogen as NO3N	**0.3**	mg/L	0.1	1	10	12/14/23 09:12	EPA 300.0		BEL0569
Temperature	**25.0**	units	0.0	1		12/14/23 16:28	SM 4500-H+	H	BEL0615
pH	**7.7**	units	1.0	1		12/14/23 16:28	SM 4500-H+	H	BEL0615

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LABORATORY INC

Silveira Dairy (Chowchilla)
11380 Ave 22
Chowchilla, CA 93610

Account# 00-0021349
Account Manager: Ben Nydam
Submitted By: Johnny Silveira

Received: 12/13/2023 7:00
Reported: 12/20/2023 14:15

Sample Results
(Continued)

Sample: IW - Rd 11 Old (Andrade)
23L0775-03 (Water)

Sampled: 12/12/2023 8:42
Sampled By: J. Silveira

Analyte	Result	Units	Reporting Limit	DIL	DW MCL	Date/Time Analyzed	Method	Notes	Batch
Electrical Conductivity	**1.06**	mmhos/cm	0.01	1		12/14/23 16:30	SM 2510 B		BEL0615
Electrical Conductivity umhos	**1060**	umhos/cm	10.0	1		12/14/23 16:30	SM 2510 B		BEL0615
Ammonia (as N)	ND	mg/L	0.00	1		12/12/23 08:42	Field		BEL0439
Nitrate Nitrogen as NO3N	**29.5**	mg/L	0.1	1	10	12/14/23 09:34	EPA 300.0		BEL0569
Temperature	**25.0**	units	0.0	1		12/14/23 16:30	SM 4500-H+	H	BEL0615
pH	**7.4**	units	1.0	1		12/14/23 16:30	SM 4500-H+	H	BEL0615

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DELLAVALLE™
LABORATORY INC

Silveira Dairy (Chowchilla)
11380 Ave 22
Chowchilla, CA 93610

Account# 00-0021349
Account Manager: Ben Nydam
Submitted By: Johnny Silveira

Received: 12/13/2023 7:00
Reported: 12/20/2023 14:15

Sample Results
(Continued)

Sample: IW - Orchard
23L0775-04 (Water)

Sampled: 12/12/2023 8:58
Sampled By: J. Silveira

Analyte	Result	Units	Reporting Limit	DIL	DW MCL	Date/Time Analyzed	Method	Notes	Batch
Electrical Conductivity	**1.43**	mmhos/cm	0.01	1		12/14/23 16:31	SM 2510 B		BEL0615
Electrical Conductivity umhos	**1430**	umhos/cm	10.0	1		12/14/23 16:31	SM 2510 B		BEL0615
Ammonia (as N)	ND	mg/L	0.00	1		12/12/23 08:58	Field		BEL0439
Nitrate Nitrogen as NO3N	**0.4**	mg/L	0.1	1	10	12/14/23 09:56	EPA 300.0		BEL0569
Temperature	**25.0**	units	0.0	1		12/14/23 16:31	SM 4500-H+	H	BEL0615
pH	**7.7**	units	1.0	1		12/14/23 16:31	SM 4500-H+	H	BEL0615

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DELLAVALLE™
LABORATORY INC

Silveira Dairy (Chowchilla)
11380 Ave 22
Chowchilla, CA 93610

Account# 00-0021349
Account Manager: Ben Nydam
Submitted By: Johnny Silveira

Received: 12/13/2023 7:00
Reported: 12/20/2023 14:15

Sample Results
(Continued)

Sample: IW #1
23L0775-05 (Water)

Sampled: 12/12/2023 8:24
Sampled By: J. Silveira

Analyte	Result	Units	Reporting Limit	DIL	DW MCL	Date/Time Analyzed	Method	Notes	Batch
Electrical Conductivity	**0.47**	mmhos/cm	0.01	1		12/14/23 16:33	SM 2510 B		BEL0615
Electrical Conductivity umhos	**468**	umhos/cm	10.0	1		12/14/23 16:33	SM 2510 B		BEL0615
Ammonia (as N)	ND	mg/L	0.00	1		12/12/23 08:24	Field		BEL0439
Nitrate Nitrogen as NO3N	**3.4**	mg/L	0.1	1	10	12/14/23 10:17	EPA 300.0		BEL0569
Temperature	**25.0**	units	0.0	1		12/14/23 16:33	SM 4500-H+	H	BEL0615
pH	**7.7**	units	1.0	1		12/14/23 16:33	SM 4500-H+	H	BEL0615

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DELLAVALLE™
LABORATORY INC

Silveira Dairy (Chowchilla)
11380 Ave 22
Chowchilla, CA 93610

Account# 00-0021349
Account Manager: Ben Nydam
Submitted By: Johnny Silveira

Received: 12/13/2023 7:00
Reported: 12/20/2023 14:15

Sample Results
(Continued)

Sample: IW #2
23L0775-06 (Water)

Sampled: 12/12/2023 8:29
Sampled By: J. Silveira

Analyte	Result	Units	Reporting Limit	DIL	DW MCL	Date/Time Analyzed	Method	Notes	Batch
Electrical Conductivity	**1.18**	mmhos/cm	0.01	1		12/14/23 16:34	SM 2510 B		BEL0615
Electrical Conductivity umhos	**1180**	umhos/cm	10.0	1		12/14/23 16:34	SM 2510 B		BEL0615
Ammonia (as N)	ND	mg/L	0.00	1		12/12/23 08:29	Field		BEL0439
Nitrate Nitrogen as NO3N	**0.4**	mg/L	0.1	1	10	12/14/23 10:39	EPA 300.0		BEL0569
Temperature	**25.0**	units	0.0	1		12/14/23 16:34	SM 4500-H+	H	BEL0615
pH	**7.6**	units	1.0	1		12/14/23 16:34	SM 4500-H+	H	BEL0615

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DELLAVALLE™ LABORATORY INC

Silveira Dairy (Chowchilla)
11380 Ave 22
Chowchilla, CA 93610

Account# 00-0021349
Account Manager: Ben Nydam
Submitted By: Johnny Silveira

Received: 12/13/2023 7:00
Reported: 12/20/2023 14:15

Quality Control

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BEL0569										
Blank (BEL0569-BLK1)					Prepared & Analyzed: 12/14/2023					
Nitrate Nitrogen as NO3N	ND		0.1	mg/L						
Blank (BEL0569-BLK2)					Prepared & Analyzed: 12/14/2023					
Nitrate Nitrogen as NO3N	ND		0.1	mg/L						
Blank (BEL0569-BLK3)					Prepared & Analyzed: 12/14/2023					
Nitrate Nitrogen as NO3N	ND		0.1	mg/L						
Blank (BEL0569-BLK4)					Prepared & Analyzed: 12/14/2023					
Nitrate Nitrogen as NO3N	ND		0.1	mg/L						
LCS (BEL0569-BS1)					Prepared & Analyzed: 12/14/2023					
Nitrate Nitrogen as NO3N	5.0		0.1	mg/L	5.000		99.3	90-110		
LCS (BEL0569-BS2)					Prepared & Analyzed: 12/14/2023					
Nitrate Nitrogen as NO3N	5.2		0.1	mg/L	5.000		103	90-110		
LCS (BEL0569-BS3)					Prepared & Analyzed: 12/14/2023					
Nitrate Nitrogen as NO3N	4.9		0.1	mg/L	5.000		98.7	90-110		
Duplicate (BEL0569-DUP1)		**Source: 23L0625-01**			Prepared & Analyzed: 12/14/2023					
Nitrate Nitrogen as NO3N	0.06		0.1	mg/L		0.06			1.77	10
Duplicate (BEL0569-DUP2)		**Source: 23L0674-01**			Prepared & Analyzed: 12/14/2023					
Nitrate Nitrogen as NO3N	0.06		0.1	mg/L		0.06			0.00	10
Duplicate (BEL0569-DUP3)		**Source: 23L0730-02**			Prepared & Analyzed: 12/14/2023					
Nitrate Nitrogen as NO3N	0.06		0.1	mg/L		0.05			1.83	10
Matrix Spike (BEL0569-MS1)		**Source: 23L0625-01**			Prepared & Analyzed: 12/14/2023					
Nitrate Nitrogen as NO3N	5.0		0.1	mg/L	5.000	0.06	98.6	90-110		
Matrix Spike (BEL0569-MS2)		**Source: 23L0674-01**			Prepared & Analyzed: 12/14/2023					
Nitrate Nitrogen as NO3N	4.8		0.1	mg/L	5.000	0.06	94.2	90-110		
Matrix Spike (BEL0569-MS3)		**Source: 23L0730-02**			Prepared & Analyzed: 12/14/2023					
Nitrate Nitrogen as NO3N	4.8		0.1	mg/L	5.000	0.05	94.1	90-110		
Reference (BEL0569-SRM1)					Prepared & Analyzed: 12/14/2023					
Nitrate Nitrogen as NO3N	9.7			mg/L	10.00		97.4	90-110		
Reference (BEL0569-SRM2)					Prepared & Analyzed: 12/14/2023					
Nitrate Nitrogen as NO3N	9.8			mg/L	10.00		98.4	90-110		

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DELLAVALLE™
LABORATORY INC

Silveira Dairy (Chowchilla)
11380 Ave 22
Chowchilla, CA 93610

Account# 00-0021349
Account Manager: Ben Nydam
Submitted By: Johnny Silveira

Received: 12/13/2023 7:00
Reported: 12/20/2023 14:15

Quality Control
(Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BEL0569 (Continued)										
Reference (BEL0569-SRM3)					Prepared & Analyzed: 12/14/2023					
Nitrate Nitrogen as NO3N	9.9			mg/L	10.00		99.0	90-110		
Reference (BEL0569-SRM4)					Prepared & Analyzed: 12/14/2023					
Nitrate Nitrogen as NO3N	10.0			mg/L	10.00		99.7	90-110		

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11380 Ave 22
Chowchilla, CA 93610

Account# 00-0021349
Account Manager: Ben Nydam
Submitted By: Johnny Silveira

Received: 12/13/2023 7:00
Reported: 12/20/2023 14:15

Quality Control
(Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BEL0615										
Blank (BEL0615-BLK1)					Prepared & Analyzed: 12/14/2023					
Electrical Conductivity	ND		0.01	mmhos/cm						
Temperature	25.0		0.0	units						
Electrical Conductivity umhos	ND		10.0	umhos/cm						
pH	4.7		1.0	units						
Blank (BEL0615-BLK2)					Prepared & Analyzed: 12/14/2023					
Temperature	25.0		0.0	units						
Electrical Conductivity	ND		0.01	mmhos/cm						
Electrical Conductivity umhos	ND		10.0	umhos/cm						
pH	7.6		1.0	units						
Blank (BEL0615-BLK3)					Prepared & Analyzed: 12/14/2023					
Electrical Conductivity	ND		0.01	mmhos/cm						
Temperature	25.0		0.0	units						
Electrical Conductivity umhos	ND		10.0	umhos/cm						
pH	7.5		1.0	units						
Duplicate (BEL0615-DUP1)		**Source: 23L0774-08**			Prepared & Analyzed: 12/14/2023					
Electrical Conductivity	0.53		0.01	mmhos/cm		0.53			1.05	10
pH	8.3		1.0	units		8.3			0.00	10
Electrical Conductivity umhos	528		10.0	umhos/cm		534			1.05	10
Duplicate (BEL0615-DUP2)		**Source: 23L0776-01**			Prepared & Analyzed: 12/14/2023					
Electrical Conductivity	5.91		0.01	mmhos/cm		5.89			0.203	10
Electrical Conductivity umhos	5910		10.0	umhos/cm		5890			0.203	10
pH	7.0		1.0	units		7.0			0.286	10
Reference (BEL0615-SRM1)					Prepared & Analyzed: 12/14/2023					
Electrical Conductivity	435			umhos/cm	426.0		102	90-110		
Reference (BEL0615-SRM2)					Prepared & Analyzed: 12/14/2023					
pH	7.5			units	7.520		100	67021-101.32		
Reference (BEL0615-SRM3)					Prepared & Analyzed: 12/14/2023					
Electrical Conductivity	1030			umhos/cm	1000		103	90-110		
Electrical Conductivity umhos	1030			umhos/cm	1000		103	90-110		
Reference (BEL0615-SRM4)					Prepared & Analyzed: 12/14/2023					
Electrical Conductivity	1030			umhos/cm	1000		103	90-110		
Electrical Conductivity umhos	1030			umhos/cm	1000		103	90-110		
Reference (BEL0615-SRM5)					Prepared & Analyzed: 12/14/2023					
Electrical Conductivity	1050			umhos/cm	1000		105	90-110		

The results in this report apply to the samples as received and were analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. All results listed in this report are for the exclusive use of the submitting party. Dellavalle Laboratory, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

DELLAVALLE™ LABORATORY INC

Silveira Dairy (Chowchilla)
11380 Ave 22
Chowchilla, CA 93610

Account# 00-0021349
Account Manager: Ben Nydam
Submitted By: Johnny Silveira

Received: 12/13/2023 7:00
Reported: 12/20/2023 14:15

Quality Control
(Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BEL0615 (Continued)										
Reference (BEL0615-SRM5)					Prepared & Analyzed: 12/14/2023					
Electrical Conductivity umhos	1050			umhos/cm	1000		105	90-110		
Reference (BEL0615-SRM6)					Prepared & Analyzed: 12/14/2023					
pH	4.0			units	4.000		101	97.5-102.5		
Reference (BEL0615-SRM7)					Prepared & Analyzed: 12/14/2023					
pH	4.0			units	4.000		101	97.5-102.5		
Reference (BEL0615-SRM8)					Prepared & Analyzed: 12/14/2023					
pH	4.0			units	4.000		100	97.5-102.5		

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12/13/23 07:00 23L0775

JG

WATER WORK REQUEST

Bill To: Acct No. 21349 Cons. 8

Purchase Order No. _____ Results Needed By _____

Client: Silveira Dairy (Chowchilla)
Address: 11380 Ave 22
City, State, Zip: Chowchilla, CA 93610
Phone: _____ Fax: _____
Cell/Email: _____

Copy to: Cardoso Ag Sevices - cas.labs@yahoo.com

Requested by: Johnny Silveira - (559) 978-6087

Ranch: _____

Date sampled: 12/12/23

Sampled by: JSilveira

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

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

No. of Samples: 6 No. Bottles: 6

Water Type: [ ] 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**) Per maryanne E 12.13.23
(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)

( ) 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 _____

DESCRIPTION OF SAMPLES	Sampled From:	Date Sampled	Time Sampled	Field NH4-N (mg/L)	Received Temp °C	H/E
1. IW-West (Andrade)		12/12/23	848A	Ø	0.8	/.6
2. IW-Rd 11 New (Andrade)		12/12/23	836A	Ø	1.7	/.4
3. IW-Rd 11 Old (Andrade)		12/12/23	842A	Ø	0.6	/-2.8
4. IW-Orchard		12/12/23	858A	Ø	0.9	/-.1
5. IW #1		12/12/23	824A	Ø	0.1	/.8
6. IW #2		12/12/23	829A	Ø	0.6	/-.1
7.						
8.						
9.						
10.						

IR Thermometer SN: 200560723
Correction Factor: 0°C
Calibration Due: 03/06/2024
Location: Laboratory

IR Thermometer SN: 221511276
Correction Factor: 0°C
Calibration Due: 03/06/2024
Location: Hanford

CHAIN OF CUSTODY

Carrier	Signature	Company	Received (Date/Time)	Relinquished (Date/Time)
First	JSilveira	SilveiraDairy	12/12/23 858A	12/12/23 9am
Second	MPedroso	CASinc	12/12/23 9am	12/12/23 330p
Third	[illegible]	DCL	12/12/23 3:36pm	
Fourth	[illegible]	[illegible]	12/13 07:00	

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 prtics 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

ctt:update 2020

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

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

12/13/23 07:00 23L0775

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	1	1	1	1	1				
	1 L unpreserved (BOD) (Purple) Plastic										
=	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 AG VOA, $Na_2S_2O_3$ + MCAA										
	40 mL AG VOA, $Na_2S_2O_3$										
	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:										

SENT OUT