

**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:** Golden Star Dairy

Physical address of dairy:

4109 E Conejo AVE

Number and Street

Selma

Fresno

93662

City

County

Zip Code

Street and nearest cross street (if no address): \_\_\_\_\_

Date facility was originally placed in operation: 06/05/1932

Regional Water Quality Control Board Basin Plan designation: Tulare Basin

County Assessor Parcel Number(s) for dairy facility:

0385-0140-0002-0000

**B. OPERATORS**

Espinloa, Frank

Operator name: Espinloa, Frank

Telephone no.: (559) 380-8249

Landline

Cellular

Po Box 747

Caruthers

CA

93609

Mailing Address Number and Street

City

State

Zip Code

**C. OWNERS**

Crichley, Scott

Legal owner name: Crichley, Scott

Telephone no.: (559) 903-0406

Landline

Cellular

4109 E Conejo AVE

SELMA

CA

93662

Mailing Address Number and Street

City

State

Zip Code

**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	50	100	100	100	0
Number under roof	600	0	0	0	0	0
Maximum number	600	50	100	100	100	0
Average number	600	50	100	100	100	0
Avg live weight (lbs)	1,200	1,300	1,000	800		

Predominant milk cow breed: Holstein

Average milk production: 65 pounds per cow per day

**B. MANURE GENERATED**

Total manure excreted by the herd: 18,108.84 tons per reporting period

Total nitrogen from manure: 229,839.68 lbs per reporting period

After ammonia losses (30% loss applied): 160,887.78 lbs per reporting period

Total phosphorus from manure: 37,998.12 lbs per reporting period

Total potassium from manure: 112,934.54 lbs per reporting period

Total salt from manure: 294,007.50 lbs per reporting period

**C. PROCESS WASTEWATER GENERATED**

Process wastewater generated: 11,475,000 gallons

Total nitrogen generated: 50,705.00 lbs

Total phosphorus generated: 6,046.44 lbs

Total potassium generated: 32,287.75 lbs

Total salt generated: 238,349.47 lbs

$$\begin{aligned}
 & 11,475,000 \text{ gallons applied} \\
 & + 0 \text{ gallons exported} \\
 & - 0 \text{ gallons imported} \\
 & = 11,475,000 \text{ gallons generated}
 \end{aligned}$$

**D. FRESH WATER SOURCES**

Source Description	Type
Barn	Ground water
Canal	Surface water
Dom	Ground water

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**E. SUBSURFACE (TILE) DRAINAGE SOURCES**

*No subsurface (tile) drainage sources entered.*

**F. NUTRIENT IMPORTS**

*No dry manure nutrient imports entered.*

*No process wastewater nutrient imports entered.*

*No commercial or other nutrient imports entered.*

**G. NUTRIENT EXPORTS**

Date	Material type	Quantity	Reporting basis	Moisture (%)	Density (lbs/cu ft)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
10/25/2023	Corral solids	2,500.00 <i>ton</i>	As-is	30.4		14,100.00	5,200.00	17,300.00		54.60

*No liquid nutrient exports entered.*

Material type	Total N (lbs)	Total P (lbs)	Total K (lbs)	Total salt (lbs)
Dry manure	70,500.00	26,000.00	86,500.00	1,900,080.00
Process wastewater	0.00	0.00	0.00	0.00
Total exports for all materials	70,500.00	26,000.00	86,500.00	1,900,080.00

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**APPLICATION AREA****A. LIST OF LAND APPLICATION AREAS**

Field name	Controlled acres	Cropable acres	Total harvests	Type of waste applied	Parcel number
401	20	20	2	process wastewater	X385-X140-X002-XXXX
402	40	39	0	none	X385-X140-X21S-XXXX
403	50	46	2	process wastewater	X385-X170-X033-XXXX
403A	32	29	0	none	X385-X170-X033-XXXX
404	4	4	0	none	X385-X200-X020-XXXX
405	20	17	0	none	X385-X081-X34S-XXXX
406	60	58	0	none	X385-X140-X21S-XXXX
407	80	75	0	none	X385-X110-X07S-XXXX
408	8	7	0	none	X385-X110-X005-XXXX
Totals for areas that were used for application	70	66	4		
Totals for areas that were not used for application	244	229	0		
Land application area totals	314	295	4		

**B. CROPS AND HARVESTS**

401

Field name: 401

11/01/2022: Wheat, silage, boot stage

Crop: Wheat, silage, boot stage      Acres planted: 20      Plant date: 11/01/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/11/2023	323.10 ton	Dry-weight		57.7	15,400.00	4,500.00	32,500.00		12.64

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	16.00	256.00	44.80	192.00	0.00
Total actual harvest content	16.16	210.47	61.50	444.18	1,727.53

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401

06/01/2023: Corn, silage

Crop: Corn, silage      Acres planted: 20      Plant date: 06/01/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
09/20/2023	572.50 ton	Dry-weight		68.8	14,400.00	3,100.00	18,300.00		6.09

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	28.00	224.00	42.00	184.80	0.00
Total actual harvest content	28.63	257.21	55.37	326.87	1,087.80

403

Field name: 403

11/01/2022: Wheat, silage, boot stage

Crop: Wheat, silage, boot stage      Acres planted: 46      Plant date: 11/01/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/11/2023	756.20 ton	Dry-weight		59.9	30,200.00	5,200.00	35,400.00		12.13

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	16.00	256.00	44.80	192.00	0.00
Total actual harvest content	16.44	398.16	68.56	466.72	1,599.24

06/01/2023: Corn, silage

Crop: Corn, silage      Acres planted: 46      Plant date: 06/01/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
09/20/2023	1,305.80 ton	Dry-weight		67.5	14,700.00	2,500.00	15,900.00		5.34

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	28.00	224.00	42.00	184.80	0.00
Total actual harvest content	28.39	271.24	46.13	293.38	985.31

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**NUTRIENT BUDGET****A. LAND APPLICATIONS**

401 - 11/01/2022: Wheat, silage, boot stage

Field name: 401

Crop: Wheat, silage, boot stage

Plant date: 11/01/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application			Precipitation 24 hours following
01/14/2023	Surface (irrigation)	No precipitation	No precipitation			No precipitation
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	129.39	9.94	61.15	390.48	425,000.00 gal
Application event totals		129.39	9.94	61.15	390.48	
02/16/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	10.13	2,024,000.00 gal
Application event totals		0.00	0.00	0.00	10.13	
03/15/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	129.39	9.94	61.15	390.48	425,000.00 gal
Canal	Surface water	0.00	0.00	0.00	10.13	2,024,000.00 gal
Application event totals		129.39	9.94	61.15	400.62	

401 - 06/01/2023: Corn, silage

Field name: 401

Crop: Corn, silage

Plant date: 06/01/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application			Precipitation 24 hours following
06/28/2023	Surface (irrigation)	No precipitation	No precipitation			No precipitation
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	15.14	3,024,000.00 gal
Application event totals		0.00	0.00	0.00	15.14	

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401 - 06/01/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
07/08/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	15.14	3,024,000.00 gal
Application event totals		0.00	0.00	0.00	15.14	
07/18/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	101.55	17.76	86.53	701.50	625,000.00 gal
Canal	Surface water	0.00	0.00	0.00	15.14	3,024,000.00 gal
Application event totals		101.55	17.76	86.53	716.64	
07/28/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	15.14	3,024,000.00 gal
Application event totals		0.00	0.00	0.00	15.14	
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
WW	Process wastewater	101.55	17.76	86.53	701.50	625,000.00 gal
Canal	Surface water	0.00	0.00	0.00	15.14	3,024,000.00 gal
Application event totals		101.55	17.76	86.53	716.64	
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
Canal	Surface water	0.00	0.00	0.00	15.14	3,024,000.00 gal
Application event totals		0.00	0.00	0.00	15.14	

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401 - 06/01/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
08/28/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	101.55	17.76	86.53	701.50	625,000.00 gal
Canal	Surface water	0.00	0.00	0.00	15.14	3,024,000.00 gal
Application event totals		101.55	17.76	86.53	716.64	
09/08/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	15.14	3,024,000.00 gal
Application event totals		0.00	0.00	0.00	15.14	

403 - 11/01/2022: Wheat, silage, boot stage

Field name: 403

Crop: Wheat, silage, boot stage Plant date: 11/01/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
12/27/2022	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	109.21	8.39	51.61	329.56	825,000.00 gal
Application event totals		109.21	8.39	51.61	329.56	
02/18/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	201.86	15.51	95.41	609.19	1,525,000.00 gal
Canal	Surface water	0.00	0.00	0.00	9.44	4,336,000.00 gal
Application event totals		201.86	15.51	95.41	618.63	

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403 - 11/01/2022: Wheat, silage, boot stage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
03/16/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	201.86	15.51	95.41	609.19	1,525,000.00 gal
Canal	Surface water	0.00	0.00	0.00	9.44	4,336,000.00 gal
Application event totals		201.86	15.51	95.41	618.63	

403 - 06/01/2023: Corn, silage

Field name: 403

Crop: Corn, silage

Plant date: 06/01/2023

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
Canal	Surface water	0.00	0.00	0.00	11.62	5,336,000.00 gal
Application event totals		0.00	0.00	0.00	11.62	
07/09/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	114.79	20.08	97.81	793.00	1,625,000.00 gal
Canal	Surface water	0.00	0.00	0.00	11.62	5,336,000.00 gal
Application event totals		114.79	20.08	97.81	804.62	
07/19/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	11.62	5,336,000.00 gal
Application event totals		0.00	0.00	0.00	11.62	

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403 - 06/01/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
07/29/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	114.79	20.08	97.81	793.00	1,625,000.00 gal
Canal	Surface water	0.00	0.00	0.00	11.62	5,336,000.00 gal
Application event totals		114.79	20.08	97.81	804.62	
08/09/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	11.62	5,336,000.00 gal
Application event totals		0.00	0.00	0.00	11.62	
08/19/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	114.79	20.08	97.81	793.00	1,625,000.00 gal
Canal	Surface water	0.00	0.00	0.00	11.62	5,336,000.00 gal
Application event totals		114.79	20.08	97.81	804.62	
08/29/2023	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
Canal	Surface water	0.00	0.00	0.00	11.62	5,336,000.00 gal
Application event totals		0.00	0.00	0.00	11.62	
09/09/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	11.62	5,336,000.00 gal
Application event totals		0.00	0.00	0.00	11.62	

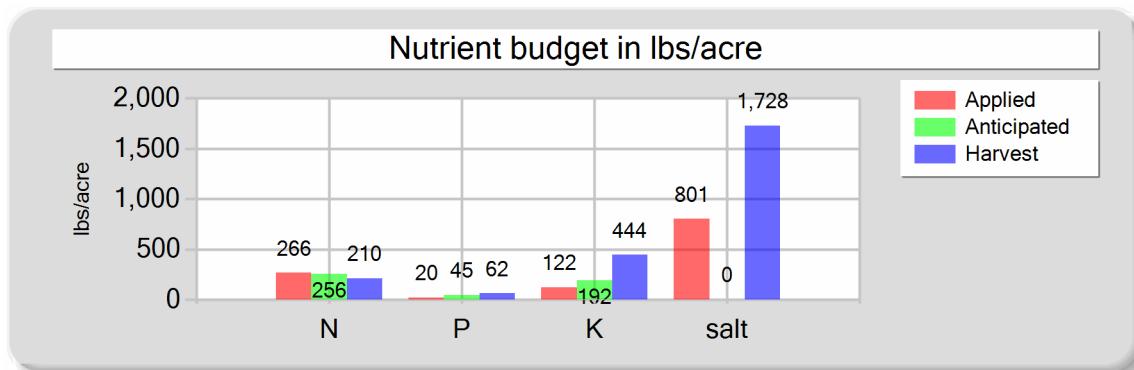
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**B. NUTRIENT BUDGET**

401 - 11/01/2022: Wheat, silage, boot stage

Field name: 401      Crop: Wheat, silage, boot stage      Plant date: 11/01/2022



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	258.78	19.88	122.31	780.97
Fresh water	0.00	0.00	0.00	20.27
Atmospheric deposition	7.00	0.00	0.00	0.00
<b>Total nutrients applied</b>	<b>265.78</b>	<b>19.88</b>	<b>122.31</b>	<b>801.24</b>
Anticipated crop nutrient removal	256.00	44.80	192.00	0.00
Actual crop nutrient removal	210.47	61.50	444.18	1,727.53
Nutrient balance	55.31	-41.62	-321.87	-926.29
Applied to removed ratio	1.26	0.32	0.28	0.46

Fresh water applied
4,048,000.00 gallons
149.07 acre-inches
7.45 inches/acre
Process wastewater applied
850,000.00 gallons
31.30 acre-inches
1.57 inches/acre
Total harvests for the crop
1 harvests

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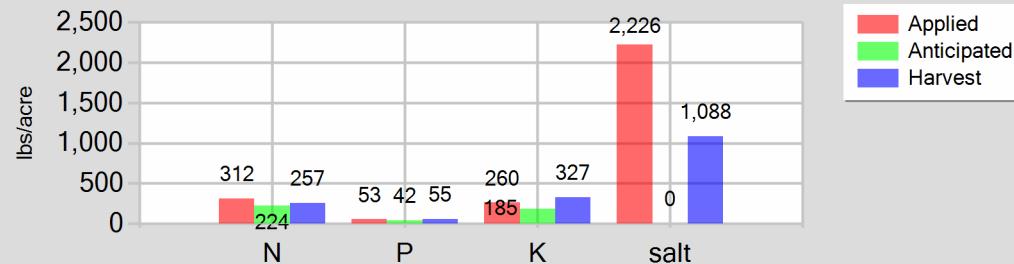
401 - 06/01/2023: Corn, silage

Field name: 401

Crop: Corn, silage

Plant date: 06/01/2023

**Nutrient budget in lbs/acre**



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	304.64	53.28	259.58	2,104.50
Fresh water	0.00	0.00	0.00	121.13
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	311.64	53.28	259.58	2,225.63
Anticipated crop nutrient removal	224.00	42.00	184.80	0.00
Actual crop nutrient removal	257.21	55.37	326.87	1,087.80
Nutrient balance	54.43	-2.09	-67.29	1,137.84
Applied to removed ratio	1.21	0.96	0.79	2.05

**Fresh water applied**

24,192,000.00 gallons  
890.91 acre-inches  
44.55 inches/acre

**Process wastewater applied**

1,875,000.00 gallons  
69.05 acre-inches  
3.45 inches/acre

**Total harvests for the crop**

1 harvests

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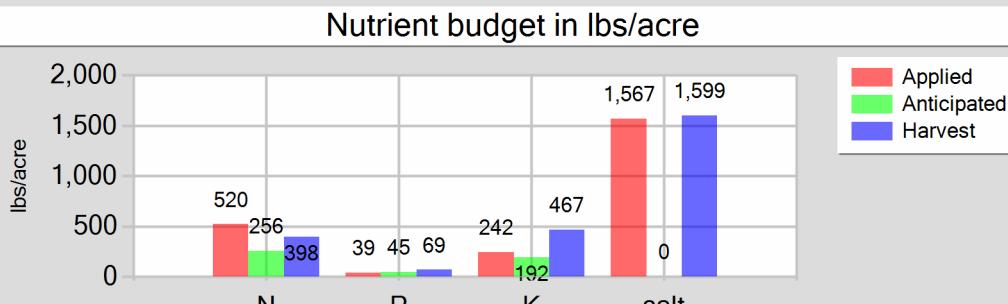
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403 - 11/01/2022: Wheat, silage, boot stage

Field name: 403

Crop: Wheat, silage, boot stage

Plant date: 11/01/2022



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	512.93	39.41	242.43	1,547.95
Fresh water	0.00	0.00	0.00	18.88
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	519.93	39.41	242.43	1,566.83
Anticipated crop nutrient removal	256.00	44.80	192.00	0.00
Actual crop nutrient removal	398.16	68.56	466.72	1,599.24
Nutrient balance	121.77	-29.15	-224.29	-32.41
Applied to removed ratio	1.31	0.57	0.52	0.98

**Fresh water applied**

8,672,000.00 gallons  
319.36 acre-inches  
6.94 inches/acre

**Process wastewater applied**

3,875,000.00 gallons  
142.70 acre-inches  
3.10 inches/acre

**Total harvests for the crop**

1 harvests

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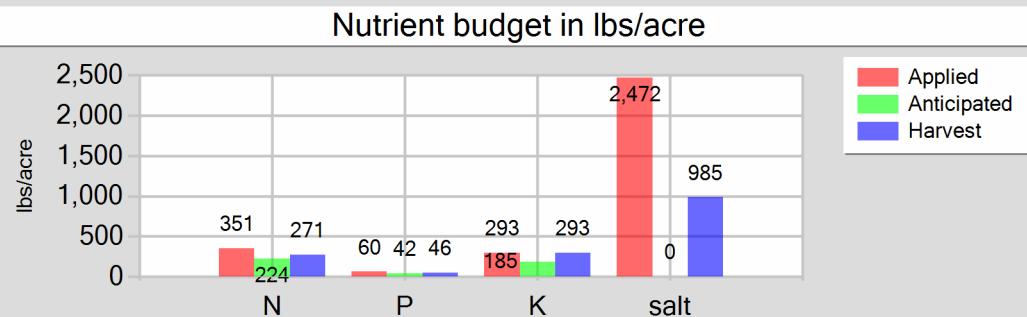
Reporting period 01/01/2023 to 12/31/2023.

403 - 06/01/2023: Corn, silage

Field name: 403

Crop: Corn, silage

Plant date: 06/01/2023



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	344.38	60.23	293.44	2,379.01
Fresh water	0.00	0.00	0.00	92.93
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	351.38	60.23	293.44	2,471.94
Anticipated crop nutrient removal	224.00	42.00	184.80	0.00
Actual crop nutrient removal	271.24	46.13	293.38	985.31
Nutrient balance	80.14	14.10	0.06	1,486.62
Applied to removed ratio	1.30	1.31	1.00	2.51

**Fresh water applied**

42,688,000.00 gallons
1,572.05 acre-inches
34.18 inches/acre

**Process wastewater applied**

4,875,000.00 gallons
179.53 acre-inches
3.90 inches/acre

**Total harvests for the crop**

1 harvests
------------

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

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

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

Sample and source description: Dry Manure

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

Moisture: 17.7 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Calcium (mg/kg)	Magnesium (mg/kg)	Sodium (mg/kg)	Sulfur (mg/kg)	Chloride (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	11,300.00	6,000.00	21,100.00	14,200.00	8,300.00	7,200.00	4,400.00	1,095.20		67.80
DL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00		1.00

**Dry Manure**

Sample and source description: Dry Manure

Sample date: 10/27/2023 Material type: Corral solids Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 30.4 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Calcium (mg/kg)	Magnesium (mg/kg)	Sodium (mg/kg)	Sulfur (mg/kg)	Chloride (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	14,100.00	5,200.00	17,300.00							54.60
DL	100.00	100.00	100.00							1.00

**B. PROCESS WASTEWATER ANALYSES****1st Qtr WW**

Sample and source description: 1st Qtr WW

Sample date: 02/03/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: 7.69

	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	729.66	109.21	0.00	0.00	56.06	344.86								3,440.00	2,202
DL	67.00	0.57	0.01	0.01	0.64	0.01								1.00	19

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

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

**2nd Qtr WW**

Sample and source description: 2nd Qtr WW

Sample date: 06/09/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: 7.66

	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)
<b>Value</b>	389.40	148.20	0.00	0.00	68.10	331.80	6.20	5.70	12.20	40.40	0.00	1.30	5.50	4,204.00	2,690
<b>DL</b>	67.00	0.57	0.01	0.01	0.64	0.01	0.02	0.01	0.01	0.10	0.10	0.01	0.01	1.00	19

**3rd Qtr WW**

Sample and source description: 3rd Qtr WW

Sample date: 09/13/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: 7.19

	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)
<b>Value</b>	182.80	73.52	0.00	0.00	28.06	194.80								1,637.00	1,047
<b>DL</b>	67.00	0.57	0.01	0.01	0.64	0.01								1.00	19

**4th Qtr WW**

Sample and source description: 4th Qtr WW

Sample date: 12/08/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: 7.47

	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)
<b>Value</b>	3,696.00	270.30	0.00	0.00	61.30	473.11								5,772.00	3,694
<b>DL</b>	67.00	0.57	0.01	0.01	0.64	0.01								1.00	19

**C. FRESH WATER ANALYSES**

Barn
------

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

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

**Barn****Barn**Sample description: BarnSample 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	0.00										290.00	
DL	0.10										1.00	

**Canal****Canal**Sample description: CanalSample date: 08/17/2023 Source of analysis: Lab analysis

	Total N (mg/L)	NH4-N (mg/L)	Nitrate-N (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Bicarbonate (mg/L)	Carbonate (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	EC (µmhos/cm)	TDS (mg/L)
Value	0.00										20.00	
DL	0.10										1.00	

**Dom****Dom**Sample description: DomSample 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	0.00										250.00	
DL	1.00										1.00	

**D. SOIL ANALYSES**

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

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

No soil analyses entered.

**E. PLANT TISSUE ANALYSES**

401 - 11/01/2022: Wheat, silage, boot stage

401

Sample and source description: 401

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

Moisture: 57.7 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
<b>Value</b>	15,400.00	4,500.00	32,500.00		12.64
<b>DL</b>	100.00	100.00	100.00		1.00

401 - 06/01/2023: Corn, silage

Dairy

Sample and source description: Dairy

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

Moisture: 68.8 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
<b>Value</b>	14,400.00	3,100.00	18,300.00		6.09
<b>DL</b>	100.00	100.00	100.00		1.00

403 - 11/01/2022: Wheat, silage, boot stage

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

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

403 - 11/01/2022: Wheat, silage, boot stage

403

Sample and source description: 403

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

Moisture: 59.9 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
<b>Value</b>	30,200.00	5,200.00	35,400.00		12.13
<b>DL</b>	100.00	100.00	100.00		1.00

403 - 06/01/2023: Corn, silage

403

Sample and source description: 403

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

Moisture: 67.5 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
<b>Value</b>	14,700.00	2,500.00	15,900.00		5.34
<b>DL</b>	100.00	100.00	100.00		1.00

**F. SUBSURFACE (TILE) DRAINAGE ANALYSES**

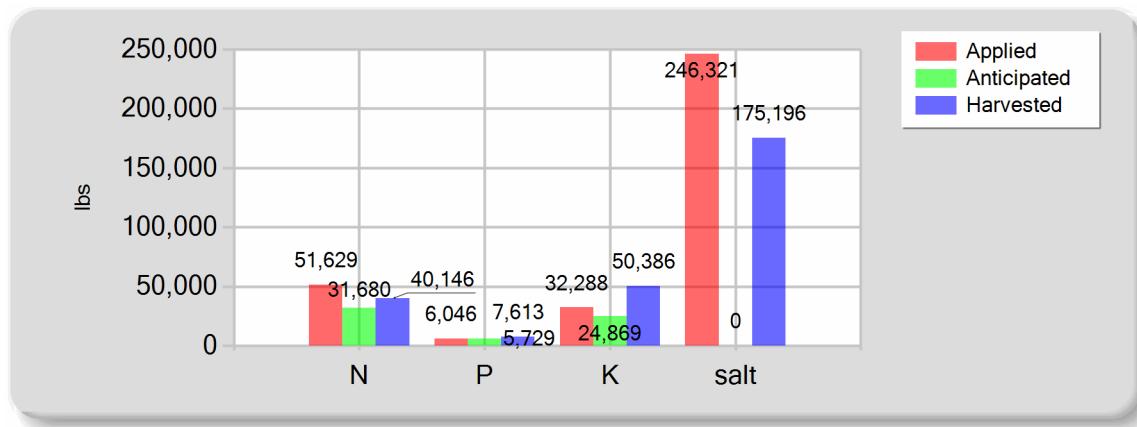
*No subsurface (tile) drainage analyses entered.*

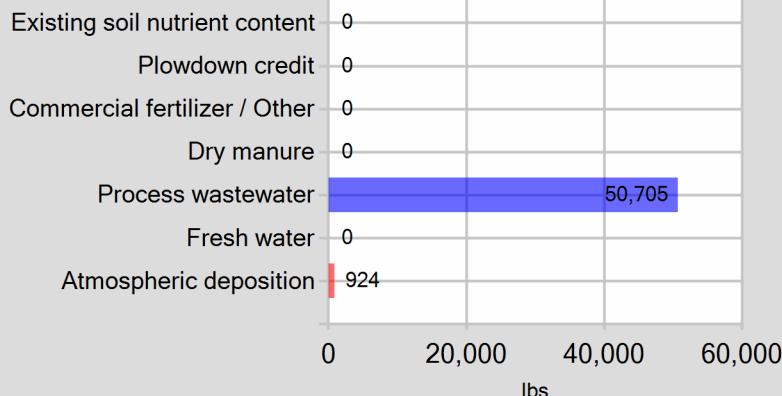
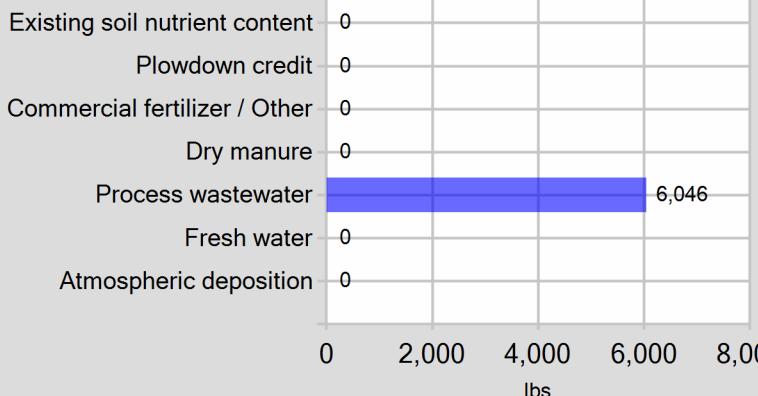
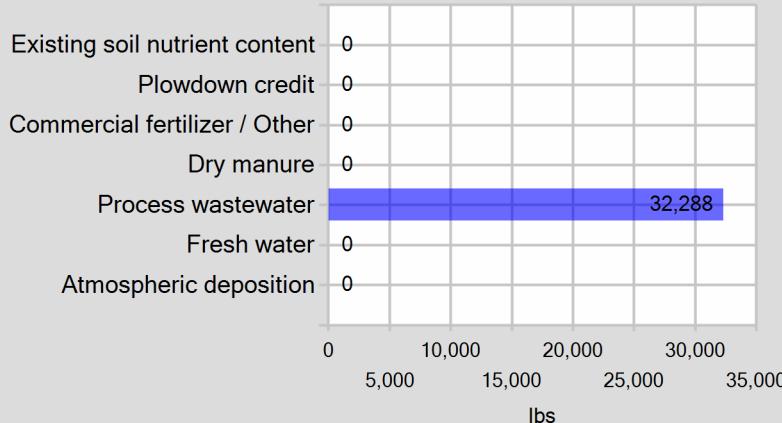
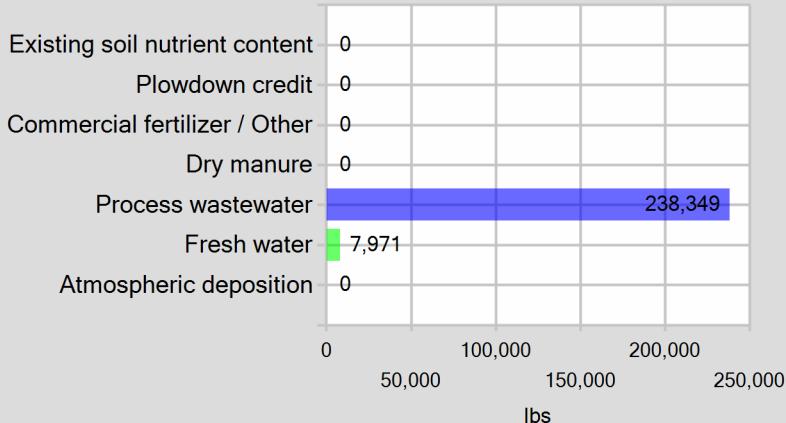
**Annual Report - General Order No. R5-2007-0035**

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

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

	Total N (lbs)	Total P (lbs)	Total K (lbs)	Total salt (lbs)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	50,705.00	6,046.44	32,287.75	238,349.47
Fresh water	0.00	0.00	0.00	7,971.14
Atmospheric deposition	924.00	0.00	0.00	0.00
Total nutrients applied	51,629.00	6,046.44	32,287.75	246,320.62
Anticipated crop nutrient removal	31,680.00	5,728.80	24,868.80	0.00
Actual crop nutrient removal	40,146.12	7,613.07	50,385.69	175,195.84
Nutrient balance	11,482.88	-1,566.63	-18,097.94	71,124.78
Applied to removed ratio	1.29	0.79	0.64	1.41

**B. POUNDS OF NUTRIENT APPLIED VS. CROP REMOVAL**

**C. POUNDS OF NUTRIENT APPLIED BY MATERIAL TYPE****Pounds of nitrogen applied****Pounds of phosphorus applied****Pounds of potassium applied****Pounds of salt applied**

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

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

**EXCEPTION REPORTING**

**A. MANURE, PROCESS WASTEWATER, AND OTHER DAIRY WASTE DISCHARGES**

The following is a summary of all manure and process wastewater discharges from the production area to surface water or to land areas (land application areas or otherwise) when not in accordance with the facility's Nutrient Management Plan.

*No manure or process wastewater discharges occurred during the reporting period.*

**B. STORM WATER DISCHARGES**

The following is a summary of all storm water discharges from the production area to surface water during the reporting period when not in accordance with the facility's Nutrient Management Plan.

*No stormwater discharges occurred during the reporting period.*

**C. LAND APPLICATION AREA TO SURFACE WATER DISCHARGES**

The following is a summary of all discharges from the land application area to surface water that have occurred during the reporting period when not in accordance with the facility's Nutrient Management Plan.

*No land application area to surface water discharges occurred during the reporting period.*

**NUTRIENT MANAGEMENT PLAN AND EXPORT AGREEMENT STATEMENTS**

**A. NUTRIENT MANAGEMENT PLAN STATEMENTS**

Was the facility's NMP updated in the reporting period? No

Was the facility's NMP developed by a certified nutrient management planner (specialist) as specified in Attachment C of the General Order? Yes

Was the facility's NMP approved by a certified nutrient management planner (specialist) as specified in Attachment C of the General Order? Yes

**B. EXPORT AGREEMENT STATEMENT**

Are there any written agreements with third parties to receive manure or process wastewater that are new or were revised within the reporting period? No

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

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

**ADDITIONAL NOTES**

**A. NOTES**

All wells tested negative for Ammonia.

They were tested onsite with test strips.

We had an extremely wet year and had early flood release water and then Canal water thru the whole year so no wells were turned on .

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

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

**CERTIFICATION**

**A. OWNER AND/OR OPERATOR CERTIFICATION**

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

---

SIGNATURE OF OWNER OF FACILITY

Scott Crichtley

PRINT OR TYPE NAME

---

SIGNATURE OF OPERATOR OF FACILITY

Frank Espinola

PRINT OR TYPE NAME

---

DATE

---

DATE

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

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

**ATTACHMENTS**

**A. REQUIRED ATTACHMENTS**

The following lists the required documents that should be attached to the Annual Report when submitted .

**Annual Dairy Facility Assessment**

Provide an Annual Dairy Facility Assessment (an update to the Preliminary Dairy Facility Assessment in Attachment A) for each reporting period. On the PDFA Final page, click on the ADFA Report button to generate an ADFA report after updating information as needed.

**Manure/Process Wastewater Tracking Manifests**

Provide copies of all manure/process wastewater tracking manifests for the reporting period, signed by both the owner/operator and the hauler.

**Corrective Actions Documents**

Provide records documenting any corrective actions taken to correct deficiencies noted as a result of the inspections required in the Monitoring Requirements of the General Order. Deficiencies not corrected in 30 days must be accompanied by an explanation of the factors preventing immediate correction.

**Groundwater Monitoring**

Dischargers that monitor supply wells or subsurface (tile) drainage systems, or that have monitoring well systems must submit monitoring results as directed in the General Order, Groundwater Reporting Section starting on page MRP-13.

**Storm Water Monitoring**

Dischargers that are required to monitor storm water more frequently than required in the General Order must submit monitoring results as directed in the General Order, Storm Water Reporting Section on page MRP-14.

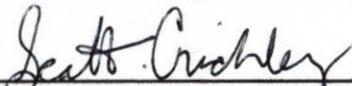
Annual Report - General Order No. R5-2007-0035

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

CERTIFICATION

A. OWNER AND/OR OPERATOR CERTIFICATION

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



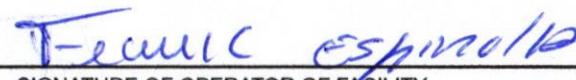
SIGNATURE OF OWNER OF FACILITY

Scott Crichley

PRINT OR TYPE NAME

6/17/24

DATE



SIGNATURE OF OPERATOR OF FACILITY

Frank Espinloa

PRINT OR TYPE NAME

6/17/24

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: Frank Espinola, EName of Dairy Facility: Golden Star Dairy

Facility Address:

4109 E Conejo AVE Number and Street	Selma City	Fresno County	93662 Zip Code
--	---------------	------------------	-------------------

Contact Person Name and Phone Number:	<u>Frank Espinola</u> Name	(559) 380-8249 Phone Number
---------------------------------------	-------------------------------	--------------------------------

**MANURE HAULER INFORMATION**Name of Hauling Company/Person: Medeiros Farms

Address of Hauling Company/Person:

12137 S Hughes AVE Number and Street	Caruthers City	CA State	93609 Zip Code
---	-------------------	-------------	-------------------

Contact Person:	<u>Manuel Medeiros</u> Name	(559) 906-1406 Phone Number
-----------------	--------------------------------	--------------------------------

**DESTINATION INFORMATION**Composting Facility / Broker / Farmer / Other (identify): Farmer

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

Medeiros Farms Name	(559) 906-1406 Phone Number
------------------------	--------------------------------

12137 S Hughes Address	Caruthers City	CA State	93609 Zip Code
---------------------------	-------------------	-------------	-------------------

Destination Address or Assessor's Parcel Number:

Address	Caruthers City	93609 Zip Code
---------	-------------------	-------------------

Hughes Street and nearest cross street (if no address)	Fresno County
---	------------------

Assessor's Parcel Number                          Assessor's Parcel Number County

Last date hauled: 10/25/2023

**Manure / Process Wastewater Tracking Manifest**

**For**

**Existing Milk Cow Dairies**

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

**MANURE AMOUNT HAULED**

Enter the amount of manure hauled in tons, manure solids content, and the method used to calculate the amount:

Manure: 2,500.00 tons

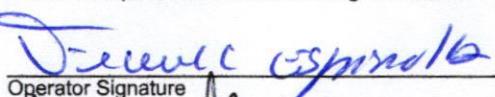
Manure Solids Content: 69.6 %

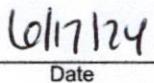
Method used to determine amount of manure:

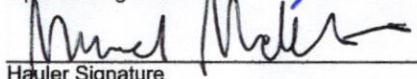
Weighted Average

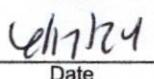
**CERTIFICATION**

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.

  
Operator Signature

  
Date  
6/17/24

  
Hauler Signature

  
Date  
6/17/24



Golden Star Dairy  
Po Box 747  
Caruthers, CA 93609

Account# 00-0025812  
Account Manager: Ben Nydam  
Submitted By: Christina Medeiros

Received: 12/13/2023 7:00  
Reported: 12/21/2023 08:22

### Samples in this Report

Lab ID	Sample	Matrix	Sampled By	Crop	Date Sampled
23L0636-01	Barn	Ag Water	Medeiros		12/12/2023 9:00
23L0636-02	Dom	Ag Water	Medeiros		12/12/2023 9:05

Default Cooler      Temperature on Receipt °C: 14.1  
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.

Laboratory Director/Technical Manager

ELAP Certification #1595  
A2LA Certification #6440.02

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.



Golden Star Dairy  
Po Box 747  
Caruthers, CA 93609

Account# 00-0025812  
Account Manager: Ben Nydam  
Submitted By: Christina Medeiros

Received: 12/13/2023 7:00  
Reported: 12/21/2023 08:22

## Sample Results

**Sample: Barn**  
**23L0636-01 (Water)**

Sampled: 12/12/2023 9:00  
Sampled By: Medeiros

Analyte	Result	Units	Reporting Limit	DIL	DW MCL	Date/Time Analyzed	Method	Notes	Batch
<b>Electrical Conductivity</b>	<b>0.29</b>	mmhos/cm	0.01	1		12/13/23 14:52	SM 2510 B		BEL0494
<b>Electrical Conductivity umhos</b>	<b>289</b>	umhos/cm	10.0	1		12/13/23 14:52	SM 2510 B		BEL0494
Ammonia (as N)	ND	mg/L	0.00	1		12/12/23 09:00	Field		BEL0509
Nitrate Nitrogen as NO3N	ND	mg/L	0.1	1	10	12/13/23 19:38	EPA 300.0		BEL0447
<b>Temperature</b>	<b>25.0</b>	units	0.0	1		12/13/23 14:52	SM 4500-H+	H	BEL0494
<b>pH</b>	<b>9.3</b>	units	1.0	1		12/13/23 14:52	SM 4500-H+	H	BEL0494

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.



Golden Star Dairy  
Po Box 747  
Caruthers, CA 93609

Account# 00-0025812  
Account Manager: Ben Nydam  
Submitted By: Christina Medeiros

Received: 12/13/2023 7:00  
Reported: 12/21/2023 08:22

**Sample: Dom**  
**23L0636-02 (Water)**

Sampled: 12/12/2023 9:05

Sampled By: Medeiros

**Sample Results**  
**(Continued)**

Analyte	Result	Units	Reporting Limit	DIL	DW MCL	Date/Time Analyzed	Method	Notes	Batch
<b>Electrical Conductivity</b>	<b>0.25</b>	mmhos/cm	0.01	1		12/13/23 14:53	SM 2510 B		BEL0494
<b>Electrical Conductivity umhos</b>	<b>254</b>	umhos/cm	10.0	1		12/13/23 14:53	SM 2510 B		BEL0494
Ammonia (as N)	ND	mg/L	0.00	1		12/12/23 09:05	Field		BEL0509
Nitrate Nitrogen as NO <sub>3</sub> N	ND	mg/L	0.1	1	10	12/13/23 19:59	EPA 300.0		BEL0447
<b>Temperature</b>	<b>25.0</b>	units	0.0	1		12/13/23 14:53	SM 4500-H+	H	BEL0494
<b>pH</b>	<b>9.3</b>	units	1.0	1		12/13/23 14:53	SM 4500-H+	H	BEL0494

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Golden Star Dairy  
Po Box 747  
Caruthers, CA 93609

Account# 00-0025812  
Account Manager: Ben Nydam  
Submitted By: Christina Medeiros

Received: 12/13/2023 7:00  
Reported: 12/21/2023 08:22

## Quality Control

Analyte	Result Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit
<b>Batch: BEL0447</b>									
<b>Blank (BEL0447-BLK1)</b>									
Nitrate Nitrogen as NO3N	ND	0.1	mg/L		Prepared & Analyzed: 12/13/2023				
<b>Blank (BEL0447-BLK2)</b>									
Nitrate Nitrogen as NO3N	ND	0.1	mg/L		Prepared & Analyzed: 12/13/2023				
<b>Blank (BEL0447-BLK3)</b>									
Nitrate Nitrogen as NO3N	ND	0.1	mg/L		Prepared: 12/13/2023 Analyzed: 12/14/2023				
<b>Blank (BEL0447-BLK4)</b>									
Nitrate Nitrogen as NO3N	ND	0.1	mg/L		Prepared: 12/13/2023 Analyzed: 12/14/2023				
<b>LCS (BEL0447-BS1)</b>									
Nitrate Nitrogen as NO3N	4.9	0.1	mg/L	5.000	Prepared & Analyzed: 12/13/2023	98.1	90-110		
<b>LCS (BEL0447-BS2)</b>									
Nitrate Nitrogen as NO3N	4.9	0.1	mg/L	5.000	Prepared: 12/13/2023 Analyzed: 12/14/2023	98.5	90-110		
<b>LCS (BEL0447-BS3)</b>									
Nitrate Nitrogen as NO3N	0.07	0.1	mg/L	5.000	Prepared: 12/13/2023 Analyzed: 12/14/2023	1.44	90-110		
<b>Duplicate (BEL0447-DUP1)</b>									
Nitrate Nitrogen as NO3N	0.04	0.1	mg/L	0.04	Prepared: 12/13/2023 Analyzed: 12/14/2023			5.26	10
<b>Duplicate (BEL0447-DUP2)</b>									
Nitrate Nitrogen as NO3N	1.8	0.1	mg/L	1.8	Prepared: 12/13/2023 Analyzed: 12/14/2023			0.112	10
<b>Duplicate (BEL0447-DUP3)</b>									
Nitrate Nitrogen as NO3N	0.04	0.1	mg/L	0.04	Prepared: 12/13/2023 Analyzed: 12/14/2023			2.74	10
<b>Matrix Spike (BEL0447-MS1)</b>									
Nitrate Nitrogen as NO3N	4.8	0.1	mg/L	5.000	Prepared & Analyzed: 12/13/2023	96.0	90-110		
<b>Matrix Spike (BEL0447-MS2)</b>									
Nitrate Nitrogen as NO3N	6.7	0.1	mg/L	5.000	Prepared: 12/13/2023 Analyzed: 12/14/2023	1.8	98.2	90-110	
<b>Matrix Spike (BEL0447-MS3)</b>									
Nitrate Nitrogen as NO3N	4.9	0.1	mg/L	5.000	Prepared: 12/13/2023 Analyzed: 12/14/2023	0.04	98.0	90-110	
<b>Reference (BEL0447-SRM1)</b>									
Nitrate Nitrogen as NO3N	10.0		mg/L	10.00	Prepared & Analyzed: 12/13/2023	99.7	90-110		
<b>Reference (BEL0447-SRM2)</b>									
Nitrate Nitrogen as NO3N	9.8		mg/L	10.00	Prepared: 12/13/2023 Analyzed: 12/14/2023	98.5	90-110		

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**Quality Control**  
**(Continued)**

Analyte	Result Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit
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***Batch: BEL0447 (Continued)***

Reference (BEL0447-SRM3)	Prepared: 12/13/2023 Analyzed: 12/14/2023
Nitrate Nitrogen as NO <sub>3</sub> N	mg/L      10.00      98.2      90-110
Reference (BEL0447-SRM4)	Prepared: 12/13/2023 Analyzed: 12/14/2023
Nitrate Nitrogen as NO <sub>3</sub> N	mg/L      10.00      95.5      90-110

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**Quality Control**  
**(Continued)**

Analyte	Result Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit
<b>Batch: BEL0494</b>									
<b>Blank (BEL0494-BLK1)</b>									
Prepared & Analyzed: 12/13/2023									
Electrical Conductivity	ND	0.01	mmhos/cm						
Temperature	25.0	0.0	units						
Electrical Conductivity umhos	ND	10.0	umhos/cm						
pH	6.3	1.0	units						
<b>Blank (BEL0494-BLK2)</b>									
Prepared & Analyzed: 12/13/2023									
Electrical Conductivity	ND	0.01	mmhos/cm						
Temperature	25.0	0.0	units						
Electrical Conductivity umhos	ND	10.0	umhos/cm						
pH	7.6	1.0	units						
<b>Blank (BEL0494-BLK3)</b>									
Prepared & Analyzed: 12/13/2023									
Electrical Conductivity	ND	0.01	mmhos/cm						
Temperature	25.0	0.0	units						
Electrical Conductivity umhos	ND	10.0	umhos/cm						
pH	7.8	1.0	units						
<b>Duplicate (BEL0494-DUP1)</b>									
<b>Source: 23L0635-03</b>									
Prepared & Analyzed: 12/13/2023									
Electrical Conductivity	1.22	0.01	mmhos/cm		1.22		0.664	10	
pH	7.5	1.0	units		7.5		0.00	10	
Electrical Conductivity umhos	1220	10.0	umhos/cm		1220		0.664	10	
<b>Duplicate (BEL0494-DUP2)</b>									
<b>Source: 23L0643-01</b>									
Prepared & Analyzed: 12/13/2023									
Electrical Conductivity	9.46	0.01	mmhos/cm		9.30		1.69	10	
Electrical Conductivity umhos	9460	10.0	umhos/cm		9300		1.69	10	
pH	7.3	1.0	units		7.3		0.137	10	
<b>Reference (BEL0494-SRM1)</b>									
Prepared & Analyzed: 12/13/2023									
Electrical Conductivity	447		umhos/cm		426.0	105	90-110		
<b>Reference (BEL0494-SRM2)</b>									
Prepared & Analyzed: 12/13/2023									
pH	7.5		units		7.520	100	67021-101.3%		
<b>Reference (BEL0494-SRM3)</b>									
Prepared & Analyzed: 12/13/2023									
Electrical Conductivity	1070		umhos/cm		1000	107	90-110		
Electrical Conductivity umhos	1070		umhos/cm		1000	107	90-110		
<b>Reference (BEL0494-SRM4)</b>									
Prepared & Analyzed: 12/13/2023									
Electrical Conductivity	1060		umhos/cm		1000	106	90-110		
Electrical Conductivity umhos	1060		umhos/cm		1000	106	90-110		
<b>Reference (BEL0494-SRM5)</b>									
Prepared & Analyzed: 12/13/2023									
Electrical Conductivity	1070		umhos/cm		1000	107	90-110		

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**Quality Control**  
**(Continued)**

Analyte	Result Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit
<b>Batch: BEL0494 (Continued)</b>									
<b>Reference (BEL0494-SRM5)</b>									
Electrical Conductivity umhos	1070		umhos/cm	1000	107	Prepared & Analyzed: 12/13/2023	90-110		
<b>Reference (BEL0494-SRM6)</b>									
pH	4.0		units	4.000	101	Prepared & Analyzed: 12/13/2023	97.5-102.5		
<b>Reference (BEL0494-SRM7)</b>									
pH	4.0		units	4.000	101	Prepared & Analyzed: 12/13/2023	97.5-102.5		
<b>Reference (BEL0494-SRM8)</b>									
pH	4.0		units	4.000	100	Prepared & Analyzed: 12/13/2023	97.5-102.5		

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12/13/23 07:00

23L0636

<b>Shipping Information:</b> Shipped In <input type="checkbox"/> Picked-Up <input type="checkbox"/> Walk In <input checked="" type="checkbox"/> DLI Sampler <input type="checkbox"/> Other <input type="checkbox"/>										
<input type="checkbox"/> Samples refrigerated before pick up					<input type="checkbox"/> Picked up samples placed in Ice chest					
Container: Ice Chest <input checked="" type="checkbox"/> Box <input type="checkbox"/> None <input type="checkbox"/>					Refrigerant: Wet Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/>					
Samples Preserved with HNO <sub>3</sub> or H <sub>2</sub> SO <sub>4</sub> were: <input type="checkbox"/> Received Preserved <input type="checkbox"/> Preserved Upon Receipt at Laboratory										
Type of Container(s) Received	1	2	3	4	5	6	7	8	9	10
<b>Sample Containers for Internal (DLI) Use</b> (Containers that go into the Lab)										
Plastics	100 mL sterile plastic Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (Green)									
	250 mL unpreserved (White) Plastic									
	250 mL HNO <sub>3</sub> (Red) Plastic									
	* pH Value									
	250 mL H <sub>2</sub> SO <sub>4</sub> (Yellow) Plastic									
	* pH Value									
	500 mL unpreserved (White) Plastic									
1 L unpreserved (White) Plastic										
1 L unpreserved (BOD) (Purple) Plastic										
Special	500mL unpreserved (White) Glass									
	PO4-P Kit									
	Other:									
<b>Sample Containers for Subcontracted ("Send Out") Analyses</b> (Containers that go in the Subcontract ("Send Out") Refrigerator)										
Plastics	100 mL sterile plastic Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (Green)									
	250 mL unpreserved (White) Plastic									
	250 mL HNO <sub>3</sub> (Red) Plastic									
	250 mL H <sub>2</sub> SO <sub>4</sub> (Yellow) Plastic									
	500 mL HNO <sub>3</sub> (Red)									
	1 L unpreserved (White) Plastic									
	1 L unpreserved (BOD) (Purple) Plastic									
VOA Vials	100 mL AG VOA, Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> + MCAA (EPA531)									
	40 mL VOA, Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (EPA547)									
	40mL AG VOA unpreserved (White) (Set of 3)									
	40 mL AG VOA, Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (Green) (Set of 3)									
	40mL VOA, H <sub>3</sub> PO <sub>4</sub> (Set of 3)									
	40 mL VOA, HCl (Blue) (Set of 3)									
	40 mL VOA, Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (Green) (Set of 3)									
Glass	250 mL AG unpreserved (White)									
	250 mL AG H <sub>2</sub> SO <sub>4</sub> (Yellow)									
	250 mL AG Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (Green)									
	250 mL AG Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> + MCAA									
	500 mL glass unpreserved (White)									
	500 mL AG HCl (Blue)									
	1 L AG unpreserved (White)									
Special	1 L AG H <sub>2</sub> SO <sub>4</sub> (Yellow)									
	1 L AG Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (Green)									
	1 L AG HCl (Blue)									
	Cr <sup>6+</sup> - 50mL Plastic w/Borate/HCO <sub>3</sub> /CO <sub>3</sub>									
	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:										