

**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:** Ron Verhoeven Family Dairy

Physical address of dairy:

4975 Ave 120  
Number and StreetCorcoran  
CityTulare  
County93212  
Zip Code

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

Date facility was originally placed in operation: 05/01/1989Regional Water Quality Control Board Basin Plan designation: Tulare Basin

County Assessor Parcel Number(s) for dairy facility:

X293-X250-X001-XXXX	X293-X250-X002-XXXX	X293-X250-X003-XXXX	X293-X250-X004-XXXX	X293-X250-X005-XXXX	X293-X250-X009-XXXX
X293-X250-X010-XXXX	X293-X260-X005-XXXX				

**B. OPERATORS**

Verhoeven, Ron

Operator name: Verhoeven, RonTelephone no.: (559) 992-1315 (559) 802-6463  
Landline Cellular

4975 Avenue 120

Corcoran  
CityCA  
State93212  
Zip Code**This operator is responsible for paying permit fees.****C. OWNERS**

Verhoeven, Ron

Legal owner name: Verhoeven, RonTelephone no.: (559) 992-1315 (559) 802-6463  
Landline Cellular

4975 Avenue 120

Corcoran  
CityCA  
State93212  
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	1,870	200	290	460	420	0
Number under roof	0	0	0	0	0	0
Maximum number	1,890	210	300	480	450	0
Average number	1,880	205	295	470	435	0
Avg live weight (lbs)	1,400	1,500	1,100	500		

Predominant milk cow breed: Holstein

Average milk production: 63 pounds per cow per day

**B. MANURE GENERATED**

Total manure excreted by the herd: 58,537.50 tons per reporting period

Total nitrogen from manure: 742,560.59 lbs per reporting period

After ammonia losses (30% loss applied): 519,792.41 lbs per reporting period

Total phosphorus from manure: 121,825.52 lbs per reporting period

Total potassium from manure: 351,391.23 lbs per reporting period

Total salt from manure: 932,337.75 lbs per reporting period

**C. PROCESS WASTEWATER GENERATED**

Process wastewater generated: 23,681,628 gallons

Total nitrogen generated: 65,973.00 lbs

Total phosphorus generated: 14,148.41 lbs

Total potassium generated: 134,015.67 lbs

Total salt generated: 720,039.21 lbs

	<u>23,681,628 gallons applied</u>
+	<u>0 gallons exported</u>
-	<u>0 gallons imported</u>
=	<u>23,681,628 gallons generated</u>

**D. FRESH WATER SOURCES**

Source Description	Type
Dom 1	Ground water
Dom 2	Ground water
Dom 3	Ground water
Well 4	Ground water
Well 5	Ground water

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

*No subsurface (tile) drainage sources entered.*

**F. NUTRIENT IMPORTS**

*No dry manure nutrient imports entered.*

*No process wastewater nutrient imports entered.*

*No commercial or other nutrient imports entered.*

**G. NUTRIENT EXPORTS**

*No solid nutrient exports entered.*

*No liquid nutrient exports entered.*

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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
Field A East	42	18	2	process wastewater	0293-0260-0005-0000
Field A West	48	23	2	process wastewater	0293-0260-0005-0000
Field B	40	40	2	process wastewater	0293-0250-0001-0000 0293-0250-0002-0000 0293-0250-0003-0000 0293-0250-0004-0000
Field C	39	15	2	process wastewater	0293-0260-0005-0000
Field D	33	9	2	process wastewater	0293-0260-0005-0000
Field E	75	75	2	process wastewater	0293-0025-0005-0000 0293-0025-0009-0000 0293-0025-0010-0000
Totals for areas that were used for application	277	180	12		
Totals for areas that were not used for application					
Land application area totals	277	180	12		

**B. CROPS AND HARVESTS**

Field A East										
Field name: <u>Field A East</u>										
11/04/2022: Wheat, silage, boot stage										
Crop: <u>Wheat, silage, boot stage</u>						Acres planted: <u>18</u>		Plant date: <u>11/04/2022</u>		
Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)	
05/03/2023	325.00 ton	As-is		61.3	6,900.00	2,900.00	10,500.00		8.30	
	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	100.80	381.60	0.00					
Total actual harvest content	18.06	249.17	104.72	379.17	1,159.93					

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## Field A East

05/21/2023: Milo

Crop: Milo Acres planted: 18 Plant date: 05/21/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
09/07/2023	382.00 ton	As-is		77.4	4,000.00	1,200.00	8,100.00		11.10

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	20.00	180.00	56.00	404.00	0.00
Total actual harvest content	21.22	169.78	50.93	343.80	1,064.76

## Field A West

Field name: Field A West

11/04/2022: Wheat, silage, boot stage

Crop: Wheat, silage, boot stage Acres planted: 23 Plant date: 11/04/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/03/2023	525.00 ton	As-is		64.5	3,900.00	2,700.00	10,800.00		8.60

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	18.00	198.00	100.80	381.60	0.00
Total actual harvest content	22.83	178.04	123.26	493.04	1,393.76

05/25/2023: Milo

Crop: Milo Acres planted: 23 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 (%)
09/26/2023	558.00 ton	As-is		68.0	5,700.00	1,700.00	9,100.00		9.60

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	20.00	180.00	56.00	404.00	0.00
Total actual harvest content	24.26	276.57	82.49	441.55	1,490.59

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## Field B

Field name: Field B

11/04/2022: Wheat, silage, boot stage

Crop: Wheat, silage, boot stage

Acres planted: 40 Plant date: 11/04/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/03/2023	788.50 ton	As-is		59.8	6,200.00	3,000.00	12,200.00		7.60

	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	100.80	381.60	0.00
Total actual harvest content	19.71	244.44	118.28	480.99	1,204.51

05/25/2023: Milo

Crop: Milo

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 (%)
09/26/2023	899.00 ton	As-is		68.4	5,600.00	1,700.00	8,800.00		10.10

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	22.00	198.00	61.60	444.40	0.00
Total actual harvest content	22.48	251.72	76.42	395.56	1,434.62

## Field C

Field name: Field C

11/04/2022: Wheat, silage, boot stage

Crop: Wheat, silage, boot stage

Acres planted: 15 Plant date: 11/04/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/03/2023	275.00 ton	As-is		67.0	5,600.00	3,100.00	10,600.00		9.40

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	18.00	198.00	100.80	381.60	0.00
Total actual harvest content	18.33	205.33	113.67	388.67	1,137.40

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## Field C

05/21/2023: Milo

Crop: Milo Acres planted: 15 Plant date: 05/21/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
09/07/2023	357.00 ton	As-is		70.2	5,700.00	1,800.00	11,000.00		12.20

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	20.00	180.00	56.00	404.00	0.00
Total actual harvest content	23.80	271.32	85.68	523.60	1,730.55

## Field D

Field name: Field D

11/04/2022: Wheat, silage, boot stage

Crop: Wheat, silage, boot stage Acres planted: 9 Plant date: 11/04/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/03/2023	164.00 ton	As-is		65.7	6,100.00	2,800.00	9,700.00		11.70

	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	100.80	381.60	0.00
Total actual harvest content	18.22	222.31	102.04	353.51	1,462.55

05/21/2023: Milo

Crop: Milo Acres planted: 9 Plant date: 05/21/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
09/07/2023	201.00 ton	As-is		67.1	5,500.00	1,800.00	10,300.00		10.50

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	20.00	180.00	56.00	404.00	0.00
Total actual harvest content	22.33	245.67	80.40	460.07	1,543.01

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**Field E**

Field name: Field E

11/04/2022: Wheat, silage, boot stage

Crop: Wheat, silage, boot stage Acres planted: 75 Plant date: 11/04/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/03/2023	1,667.00 <i>ton</i>	As-is		60.9	6,600.00	3,000.00	11,400.00		8.30

	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	100.80	381.60	0.00
Total actual harvest content	22.23	293.39	133.36	506.77	1,442.64

05/25/2023: Milo

Crop: Milo Acres planted: 75 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 (%)
09/26/2023	1,675.00 <i>ton</i>	As-is		71.1	4,800.00	1,600.00	9,500.00		10.60

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	20.00	180.00	56.00	404.00	0.00
Total actual harvest content	22.33	214.40	71.47	424.33	1,368.32



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## NUTRIENT BUDGET

## A. LAND APPLICATIONS

Field A East - 11/04/2022: Wheat, silage, boot stage

Field name: Field A East

Crop: Wheat, silage, boot stage

Plant date: 11/04/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
11/07/2022	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
Well 5	Ground water	4.57	0.00	0.00	773.07	2,818,611.00 <i>gal</i>
Application event totals		4.57	0.00	0.00	773.07	
12/06/2022	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	57.76	8.91	134.38	609.81	469,769.00 <i>gal</i>
Well 5	Ground water	2.29	0.00	0.00	386.53	1,409,306.00 <i>gal</i>
Application event totals		60.04	8.91	134.38	996.35	
02/09/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	72.83	17.38	145.70	801.47	469,769.00 <i>gal</i>
Well 5	Ground water	3.05	0.00	0.00	515.38	1,879,074.00 <i>gal</i>
Application event totals		75.88	17.38	145.70	1,316.85	
04/19/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	72.83	17.38	145.70	801.47	469,769.00 <i>gal</i>
Well 5	Ground water	2.67	0.00	0.00	450.96	1,644,190.00 <i>gal</i>
Application event totals		75.50	17.38	145.70	1,252.42	

Field A East - 05/21/2023: Milo

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## Field A East - 05/21/2023: Milo

Field name: Field A East

Crop: Milo

Plant date: 05/21/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
05/25/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	24.88	5.55	50.20	274.41	117,442.00 <i>gal</i>
Well 5	Ground water	3.81	0.00	0.00	644.22	2,348,843.00 <i>gal</i>
Application event totals		28.69	5.55	50.20	918.64	
06/16/2023	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
Well 5	Ground water	3.24	0.00	0.00	547.59	1,996,516.00 <i>gal</i>
Application event totals		3.24	0.00	0.00	547.59	
07/05/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Well 5	Ground water	3.43	0.00	0.00	579.80	2,113,958.00 <i>gal</i>
Application event totals		3.43	0.00	0.00	579.80	
08/01/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	17.84	3.95	40.38	207.77	140,931.00 <i>gal</i>
Well 5	Ground water	3.05	0.00	0.00	515.38	1,879,074.00 <i>gal</i>
Application event totals		20.89	3.95	40.38	723.15	
08/24/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	37.32	6.77	60.22	381.13	234,884.00 <i>gal</i>
Well 5	Ground water	3.05	0.00	0.00	515.38	1,879,074.00 <i>gal</i>
Application event totals		40.37	6.77	60.22	896.51	

## Field A West - 11/04/2022: Wheat, silage, boot stage

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## Field A West - 11/04/2022: Wheat, silage, boot stage

Field name: Field A West

Crop: Wheat, silage, boot stage

Plant date: 11/04/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
11/05/2022	Pipeline	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	29.39	4.53	68.39	310.35	305,485.00 gal
Well 5	Ground water	4.19	0.00	0.00	708.18	3,299,241.00 gal
Application event totals		33.58	4.53	68.39	1,018.52	

12/04/2022	Surface (irrigation)	No precipitation	No precipitation	No precipitation
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Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Well 5	Ground water	3.10	0.00	0.00	524.57	2,443,883.00 gal
Application event totals		3.10	0.00	0.00	524.57	

02/07/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation
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Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	55.60	13.27	111.23	611.83	458,228.00 gal
Well 5	Ground water	2.13	0.00	0.00	360.64	1,680,169.00 gal
Application event totals		57.73	13.27	111.23	972.47	

04/17/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation
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Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	37.06	8.84	74.15	407.88	305,485.00 gal
Well 5	Ground water	2.72	0.00	0.00	459.00	2,138,397.00 gal
Application event totals		39.78	8.84	74.15	866.89	

## Field A West - 05/25/2023: Milo

Field name: Field A West

Crop: Milo

Plant date: 05/25/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
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## Field A West - 05/25/2023: Milo

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
05/23/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	126.63	28.26	255.48	1,396.56	763,713.00 <i>gal</i>
Well 5	Ground water	3.88	0.00	0.00	655.72	3,054,853.00 <i>gal</i>
Application event totals		130.51	28.26	255.48	2,052.28	
06/15/2023	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
Well 5	Ground water	3.30	0.00	0.00	557.36	2,596,625.00 <i>gal</i>
Application event totals		3.30	0.00	0.00	557.36	
07/04/2023	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
Well 5	Ground water	3.10	0.00	0.00	524.57	2,443,883.00 <i>gal</i>
Application event totals		3.10	0.00	0.00	524.57	
07/31/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	60.54	13.39	137.00	704.93	610,971.00 <i>gal</i>
Well 5	Ground water	3.10	0.00	0.00	524.57	2,443,883.00 <i>gal</i>
Application event totals		63.64	13.39	137.00	1,229.50	
08/23/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	37.98	6.89	61.29	387.93	305,485.00 <i>gal</i>
Well 5	Ground water	3.10	0.00	0.00	524.57	2,443,883.00 <i>gal</i>
Application event totals		41.09	6.89	61.29	912.51	

## Field B - 11/04/2022: Wheat, silage, boot stage

Field name: Field B

Crop: Wheat, silage, boot stage

Plant date: 11/04/2022

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## Field B - 11/04/2022: Wheat, silage, boot stage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application			Precipitation 24 hours following	
11/09/2022	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
Well 5		Ground water	5.16	0.00	0.00	871.38	7,060,105.00 <i>gal</i>
Application event totals			5.16	0.00	0.00	871.38	
12/08/2022	Surface (irrigation)	No precipitation	No precipitation			No precipitation	
Source description		Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon		Process wastewater	60.09	9.27	139.81	634.49	1,086,170.00 <i>gal</i>
Well 5		Ground water	2.97	0.00	0.00	502.72	4,073,138.00 <i>gal</i>
Application event totals			63.07	9.27	139.81	1,137.20	
02/11/2023	Surface (irrigation)	No precipitation	No precipitation			No precipitation	
Source description		Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon		Process wastewater	75.78	18.08	151.60	833.90	1,086,170.00 <i>gal</i>
Well 5		Ground water	2.78	0.00	0.00	469.20	3,801,595.00 <i>gal</i>
Application event totals			78.55	18.08	151.60	1,303.10	
04/21/2023	Surface (irrigation)	No precipitation	No precipitation			No precipitation	
Source description		Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon		Process wastewater	37.89	9.04	75.80	416.95	543,085.00 <i>gal</i>
Well 5		Ground water	3.17	0.00	0.00	536.23	4,344,680.00 <i>gal</i>
Application event totals			41.06	9.04	75.80	953.18	

## Field B - 05/25/2023: Milo

Field name: Field B

Crop: Milo

Plant date: 05/25/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
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# Annual Report - General Order No. R5-2007-0035

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

## Field B - 05/25/2023: Milo

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
05/27/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	103.56	23.11	208.93	1,142.08	1,086,170.00 <i>gal</i>
Well 5	Ground water	4.16	0.00	0.00	703.80	5,702,393.00 <i>gal</i>
Application event totals		107.72	23.11	208.93	1,845.88	
06/18/2023	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
Well 5	Ground water	3.57	0.00	0.00	603.26	4,887,765.00 <i>gal</i>
Application event totals		3.57	0.00	0.00	603.26	
07/07/2023	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
Well 5	Ground water	3.57	0.00	0.00	603.26	4,887,765.00 <i>gal</i>
Application event totals		3.57	0.00	0.00	603.26	
08/03/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	30.94	6.84	70.02	360.30	543,085.00 <i>gal</i>
Well 5	Ground water	3.37	0.00	0.00	569.75	4,616,223.00 <i>gal</i>
Application event totals		34.31	6.84	70.02	930.04	
08/26/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	58.24	10.57	93.98	594.83	814,628.00 <i>gal</i>
Well 5	Ground water	3.17	0.00	0.00	536.23	4,344,680.00 <i>gal</i>
Application event totals		61.41	10.57	93.98	1,131.06	

## Field C - 11/04/2022: Wheat, silage, boot stage

Field name: Field C

Crop: Wheat, silage, boot stage

Plant date: 11/04/2022

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

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

## Field C - 11/04/2022: Wheat, silage, boot stage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
11/11/2022	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
Well 5	Ground water	4.89	0.00	0.00	826.69	2,511,768.00 <i>gal</i>
Application event totals		4.89	0.00	0.00	826.69	
12/09/2022	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	29.65	4.57	68.97	313.01	200,941.00 <i>gal</i>
Well 5	Ground water	2.93	0.00	0.00	496.01	1,507,061.00 <i>gal</i>
Application event totals		32.58	4.57	68.97	809.03	
02/12/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	74.77	17.84	149.58	822.78	401,883.00 <i>gal</i>
Well 5	Ground water	2.74	0.00	0.00	462.95	1,406,590.00 <i>gal</i>
Application event totals		77.50	17.84	149.58	1,285.72	
04/22/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	37.38	8.92	74.79	411.39	200,941.00 <i>gal</i>
Well 5	Ground water	3.13	0.00	0.00	529.08	1,607,532.00 <i>gal</i>
Application event totals		40.51	8.92	74.79	940.47	

## Field C - 05/21/2023: Milo

Field name: Field C

Crop: Milo

Plant date: 05/21/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
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# Annual Report - General Order No. R5-2007-0035

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

## Field C - 05/21/2023: Milo

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
05/29/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	102.18	22.81	206.14	1,126.85	401,883.00 <i>gal</i>
Well 5	Ground water	4.30	0.00	0.00	727.49	2,210,356.00 <i>gal</i>
Application event totals		106.48	22.81	206.14	1,854.34	
06/20/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Well 5	Ground water	3.52	0.00	0.00	595.22	1,808,473.00 <i>gal</i>
Application event totals		3.52	0.00	0.00	595.22	
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
Well 5	Ground water	3.52	0.00	0.00	595.22	1,808,473.00 <i>gal</i>
Application event totals		3.52	0.00	0.00	595.22	
08/05/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	61.06	13.50	138.17	710.99	401,883.00 <i>gal</i>
Well 5	Ground water	3.33	0.00	0.00	562.15	1,708,002.00 <i>gal</i>
Application event totals		64.39	13.50	138.17	1,273.14	
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
Lagoon	Process wastewater	57.47	10.43	92.73	586.90	301,412.00 <i>gal</i>
Well 5	Ground water	3.13	0.00	0.00	529.08	1,607,532.00 <i>gal</i>
Application event totals		60.60	10.43	92.73	1,115.98	

## Field D - 11/04/2022: Wheat, silage, boot stage

Field name: Field D

Crop: Wheat, silage, boot stage

Plant date: 11/04/2022



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

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

**Field D - 11/04/2022: Wheat, silage, boot stage**

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
11/12/2021	Pipeline	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Well 5	Ground water	4.12	0.00	0.00	696.36	1,269,461.00 <i>gal</i>
Application event totals		4.12	0.00	0.00	696.36	
12/10/2022	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	56.76	8.75	132.05	599.24	230,811.00 <i>gal</i>
Well 5	Ground water	3.00	0.00	0.00	506.44	923,245.00 <i>gal</i>
Application event totals		59.75	8.75	132.05	1,105.68	
02/13/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	71.57	17.08	143.17	787.57	230,811.00 <i>gal</i>
Well 5	Ground water	2.25	0.00	0.00	379.83	692,433.00 <i>gal</i>
Application event totals		73.81	17.08	143.17	1,167.40	
04/23/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	71.57	17.08	143.17	787.57	230,811.00 <i>gal</i>
Well 5	Ground water	2.43	0.00	0.00	411.48	750,136.00 <i>gal</i>
Application event totals		74.00	17.08	143.17	1,199.05	

**Field D - 05/21/2023: Milo**

Field name: Field D

Crop: Milo

Plant date: 05/21/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
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# Annual Report - General Order No. R5-2007-0035

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

## Field D - 05/21/2023: Milo

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
05/30/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	97.80	21.83	197.32	1,078.63	230,811.00 <i>gal</i>
Well 5	Ground water	3.75	0.00	0.00	633.05	1,154,056.00 <i>gal</i>
Application event totals		101.55	21.83	197.32	1,711.68	
06/21/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Well 5	Ground water	3.37	0.00	0.00	569.75	1,038,650.00 <i>gal</i>
Application event totals		3.37	0.00	0.00	569.75	
07/10/2023	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
Well 5	Ground water	3.18	0.00	0.00	538.09	980,947.00 <i>gal</i>
Application event totals		3.18	0.00	0.00	538.09	
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	Process wastewater	58.45	12.93	132.26	680.56	230,811.00 <i>gal</i>
Well 5	Ground water	3.18	0.00	0.00	538.09	980,947.00 <i>gal</i>
Application event totals		61.63	12.93	132.26	1,218.65	
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
Lagoon	Process wastewater	36.67	6.66	59.17	374.52	115,406.00 <i>gal</i>
Well 5	Ground water	3.00	0.00	0.00	506.44	923,245.00 <i>gal</i>
Application event totals		39.67	6.66	59.17	880.97	

## Field E - 11/04/2022: Wheat, silage, boot stage

Field name: Field E

Crop: Wheat, silage, boot stage

Plant date: 11/04/2022

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

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

## Field E - 11/04/2022: Wheat, silage, boot stage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application			Precipitation 24 hours following	
11/12/2022	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
Well 5		Ground water	4.96	0.00	0.00	837.86	12,728,555.00 <i>gal</i>
Application event totals			4.96	0.00	0.00	837.86	
12/10/2022	Surface (irrigation)	No precipitation	No precipitation			No precipitation	
Source description		Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon		Process wastewater	60.09	9.27	139.81	634.49	2,036,569.00 <i>gal</i>
Well 5		Ground water	3.37	0.00	0.00	569.75	8,655,417.00 <i>gal</i>
Application event totals			63.47	9.27	139.81	1,204.23	
02/13/2023	Surface (irrigation)	No precipitation	No precipitation			No precipitation	
Source description		Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon		Process wastewater	113.66	27.12	227.40	1,250.84	3,054,853.00 <i>gal</i>
Well 5		Ground water	3.17	0.00	0.00	536.23	8,146,275.00 <i>gal</i>
Application event totals			116.84	27.12	227.40	1,787.08	
04/23/2023	Surface (irrigation)	No precipitation	No precipitation			No precipitation	
Source description		Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon		Process wastewater	94.72	22.60	189.50	1,042.37	2,545,711.00 <i>gal</i>
Well 5		Ground water	3.17	0.00	0.00	536.23	8,146,275.00 <i>gal</i>
Application event totals			97.89	22.60	189.50	1,578.60	

## Field E - 05/25/2023: Milo

Field name: Field E

Crop: Milo

Plant date: 05/25/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
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**Field E - 05/25/2023: Milo**

Application date	Application method	Precipitation 24 hours prior		Precipitation during application		Precipitation 24 hours following	
05/30/2023	Surface (irrigation)	No precipitation		No precipitation		No precipitation	
Source description		Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon		Process wastewater	51.78	11.56	104.46	571.04	1,018,284.00 <i>gal</i>
Well 5		Ground water	4.36	0.00	0.00	737.32	11,201,128.00 <i>gal</i>
Application event totals			56.14	11.56	104.46	1,308.36	
06/21/2023	Surface (irrigation)	No precipitation		No precipitation		No precipitation	
Source description		Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Well 5		Ground water	3.57	0.00	0.00	603.26	9,164,559.00 <i>gal</i>
Application event totals			3.57	0.00	0.00	603.26	
07/10/2023	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
Well 5		Ground water	3.57	0.00	0.00	603.26	9,164,559.00 <i>gal</i>
Application event totals			3.57	0.00	0.00	603.26	
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		Process wastewater	30.94	6.84	70.02	360.30	1,018,284.00 <i>gal</i>
Well 5		Ground water	3.57	0.00	0.00	603.26	9,164,559.00 <i>gal</i>
Application event totals			34.51	6.84	70.02	963.56	
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
Lagoon		Process wastewater	38.83	7.05	62.66	396.55	1,018,284.00 <i>gal</i>
Well 5		Ground water	3.37	0.00	0.00	569.75	8,655,417.00 <i>gal</i>
Application event totals			42.20	7.05	62.66	966.30	

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

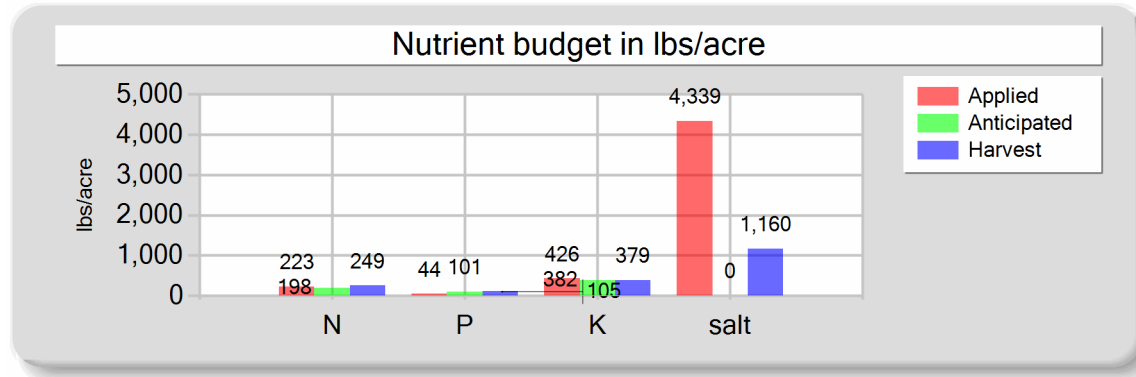
## B. NUTRIENT BUDGET

Field A East - 11/04/2022: Wheat, silage, boot stage

Field name: Field A East

Crop: Wheat, silage, boot stage

Plant date: 11/04/2022



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)	Fresh water applied
Existing soil nutrient content	0.00	0.00	0.00	0.00	7,751,181.00 gallons
Plowdown credit	0.00	0.00	0.00	0.00	285.45 acre-inches
Commercial fertilizer / Other	0.00	0.00	0.00	0.00	15.86 inches/acre
Dry manure	0.00	0.00	0.00	0.00	
Process wastewater	203.42	43.67	425.78	2,212.75	Process wastewater applied
Fresh water	12.58	0.00	0.00	2,125.93	1,409,307.00 gallons
Atmospheric deposition	7.00	0.00	0.00	0.00	51.90 acre-inches
Total nutrients applied	222.99	43.67	425.78	4,338.68	2.88 inches/acre
Anticipated crop nutrient removal	198.00	100.80	381.60	0.00	
Actual crop nutrient removal	249.17	104.72	379.17	1,159.93	Total harvests for the crop
Nutrient balance	-26.17	-61.06	46.61	3,178.76	1 harvests
Applied to removed ratio	0.89	0.42	1.12	3.74	

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

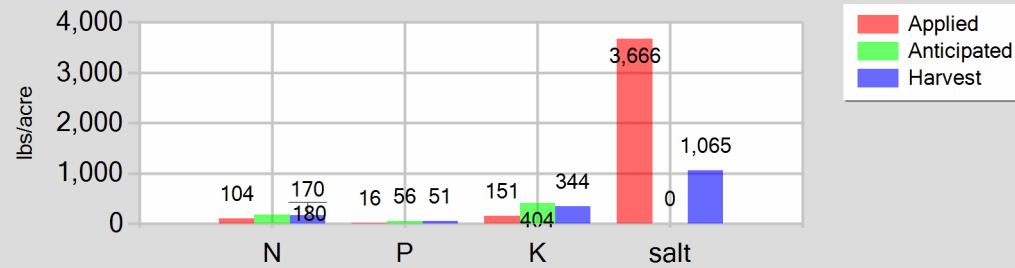
Field A East - 05/21/2023: Milo

Field name: Field A East

Crop: Milo

Plant date: 05/21/2023

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	80.04	16.27	150.80	863.32
Fresh water	16.58	0.00	0.00	2,802.37
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	103.62	16.27	150.80	3,665.69
Anticipated crop nutrient removal	180.00	56.00	404.00	0.00
Actual crop nutrient removal	169.78	50.93	343.80	1,064.76
Nutrient balance	-66.15	-34.66	-193.00	2,600.93
Applied to removed ratio	0.61	0.32	0.44	3.44

Fresh water applied
10,217,465.00 <i>gallons</i>
376.27 <i>acre-inches</i>
20.90 <i>inches/acre</i>

Process wastewater applied
493,257.00 <i>gallons</i>
18.16 <i>acre-inches</i>
1.01 <i>inches/acre</i>

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

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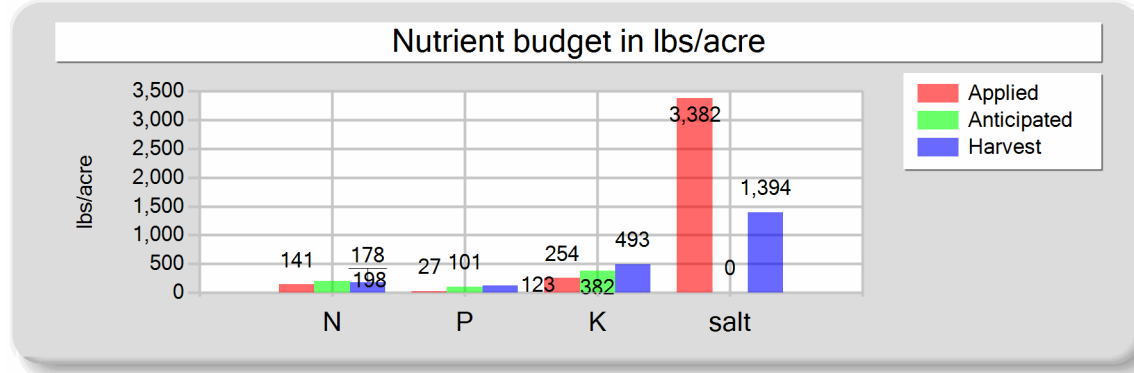
Reporting period 01/01/2023 to 12/31/2023.

Field A West - 11/04/2022: Wheat, silage, boot stage

Field name: Field A West

Crop: Wheat, silage, boot stage

Plant date: 11/04/2022



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)	Fresh water applied
Existing soil nutrient content	0.00	0.00	0.00	0.00	9,561,690.00 <i>gallons</i>
Plowdown credit	0.00	0.00	0.00	0.00	352.12 <i>acre-inches</i>
Commercial fertilizer / Other	0.00	0.00	0.00	0.00	15.31 <i>inches/acre</i>
Dry manure	0.00	0.00	0.00	0.00	
Process wastewater	122.05	26.65	253.76	1,330.06	Process wastewater applied
Fresh water	12.14	0.00	0.00	2,052.40	1,069,198.00 <i>gallons</i>
Atmospheric deposition	7.00	0.00	0.00	0.00	39.37 <i>acre-inches</i>
Total nutrients applied	141.20	26.65	253.76	3,382.45	1.71 <i>inches/acre</i>
Anticipated crop nutrient removal	198.00	100.80	381.60	0.00	
Actual crop nutrient removal	178.04	123.26	493.04	1,393.76	Total harvests for the crop
Nutrient balance	-36.85	-96.62	-239.28	1,988.69	1 <i>harvests</i>
Applied to removed ratio	0.79	0.22	0.51	2.43	

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

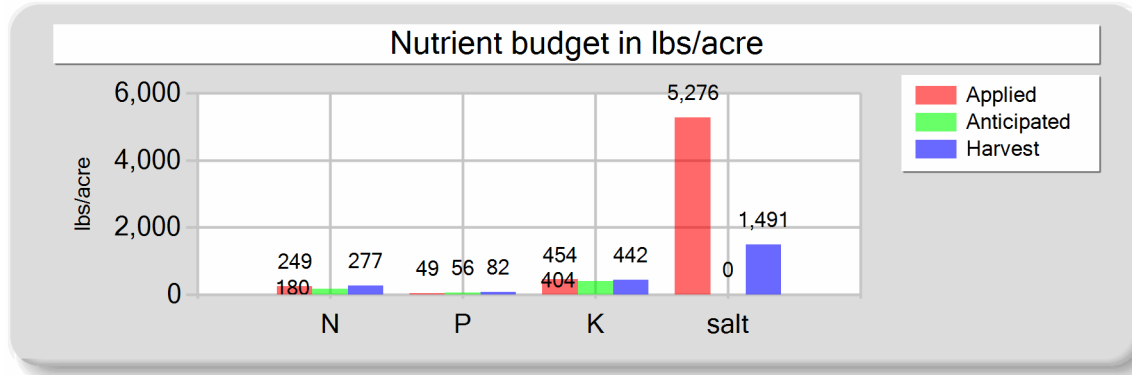
Reporting period 01/01/2023 to 12/31/2023.

Field A West - 05/25/2023: Milo

Field name: Field A West

Crop: Milo

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	225.16	48.55	453.77	2,489.42
Fresh water	16.49	0.00	0.00	2,786.80
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	248.64	48.55	453.77	5,276.22
Anticipated crop nutrient removal	180.00	56.00	404.00	0.00
Actual crop nutrient removal	276.57	82.49	441.55	1,490.59
Nutrient balance	-27.93	-33.94	12.22	3,785.64
Applied to removed ratio	0.90	0.59	1.03	3.54

Fresh water applied
12,983,127.00 <i>gallons</i>
478.12 <i>acre-inches</i>
20.79 <i>inches/acre</i>

Process wastewater applied
1,680,169.00 <i>gallons</i>
61.87 <i>acre-inches</i>
2.69 <i>inches/acre</i>

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



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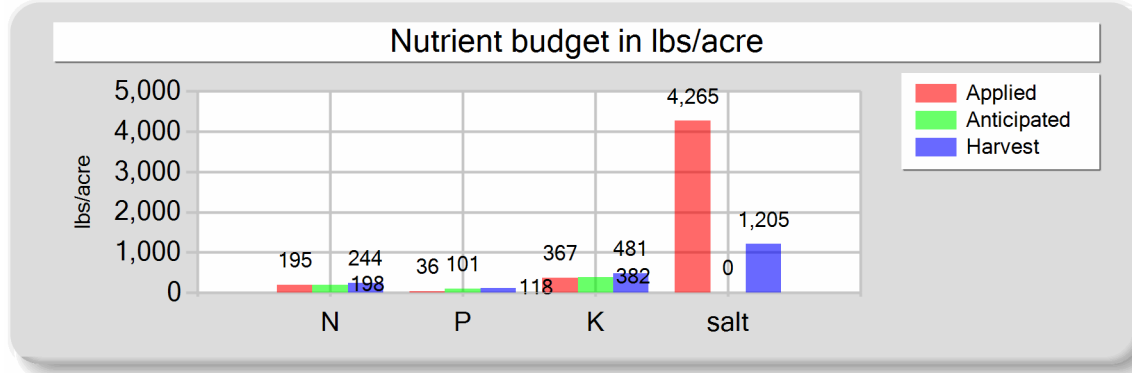
Reporting period 01/01/2023 to 12/31/2023.

Field B - 11/04/2022: Wheat, silage, boot stage

Field name: Field B

Crop: Wheat, silage, boot stage

Plant date: 11/04/2022



	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	173.76	36.39	367.21	1,885.33
Fresh water	14.08	0.00	0.00	2,379.53
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	194.84	36.39	367.21	4,264.86
Anticipated crop nutrient removal	198.00	100.80	381.60	0.00
Actual crop nutrient removal	244.44	118.28	480.99	1,204.51
Nutrient balance	-49.60	-81.88	-113.78	3,060.35
Applied to removed ratio	0.80	0.31	0.76	3.54

Fresh water applied
19,279,518.00 <i>gallons</i>
710.00 <i>acre-inches</i>
17.75 <i>inches/acre</i>

Process wastewater applied
2,715,425.00 <i>gallons</i>
100.00 <i>acre-inches</i>
2.50 <i>inches/acre</i>

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

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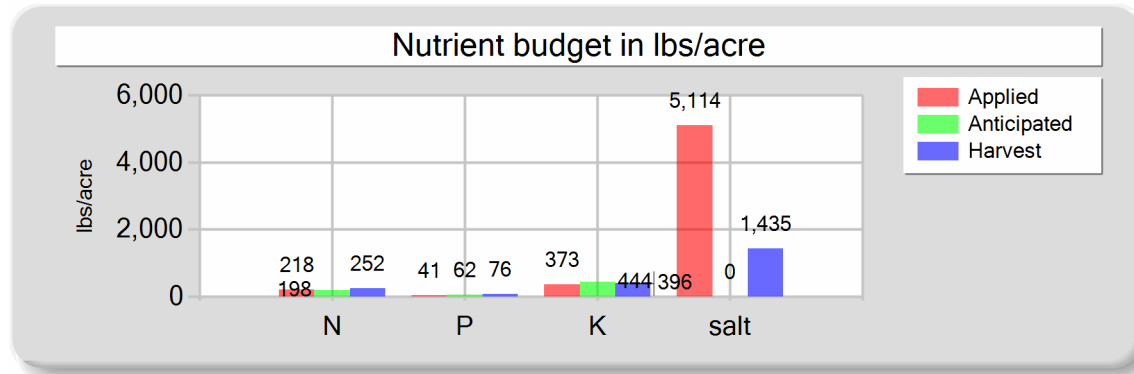
Reporting period 01/01/2023 to 12/31/2023.

Field B - 05/25/2023: Milo

Field name: Field B

Crop: Milo

Plant date: 05/25/2023



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)	Fresh water applied
Existing soil nutrient content	0.00	0.00	0.00	0.00	24,438,826.00 <i>gallons</i>
Plowdown credit	0.00	0.00	0.00	0.00	900.00 <i>acre-inches</i>
Commercial fertilizer / Other	0.00	0.00	0.00	0.00	22.50 <i>inches/acre</i>
Dry manure	0.00	0.00	0.00	0.00	
Process wastewater	192.74	40.53	372.93	2,097.20	Process wastewater applied
Fresh water	17.84	0.00	0.00	3,016.30	2,443,883.00 <i>gallons</i>
Atmospheric deposition	7.00	0.00	0.00	0.00	90.00 <i>acre-inches</i>
Total nutrients applied	217.59	40.53	372.93	5,113.51	2.25 <i>inches/acre</i>
Anticipated crop nutrient removal	198.00	61.60	444.40	0.00	
Actual crop nutrient removal	251.72	76.42	395.56	1,434.62	Total harvests for the crop
Nutrient balance	-34.13	-35.89	-22.63	3,678.88	1 <i>harvests</i>
Applied to removed ratio	0.86	0.53	0.94	3.56	

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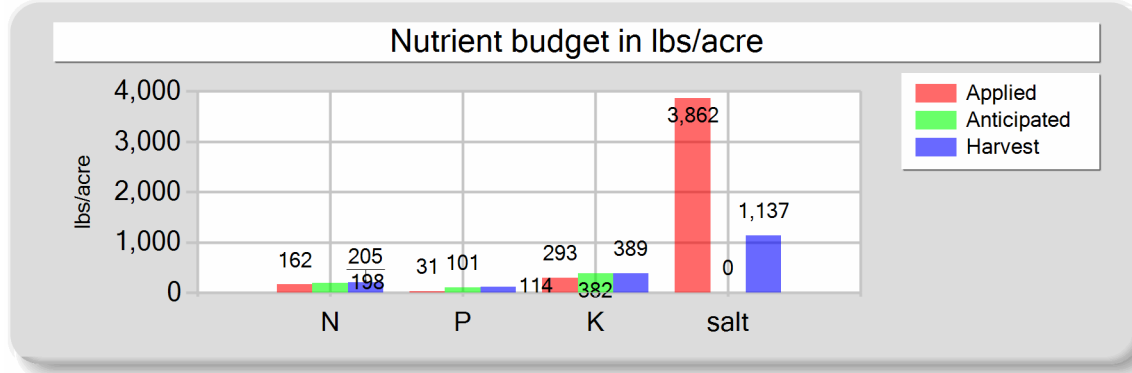
Reporting period 01/01/2023 to 12/31/2023.

Field C - 11/04/2022: Wheat, silage, boot stage

Field name: Field C

Crop: Wheat, silage, boot stage

Plant date: 11/04/2022



	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	141.79	31.33	293.34	1,547.18
Fresh water	13.69	0.00	0.00	2,314.73
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	162.49	31.33	293.34	3,861.91
Anticipated crop nutrient removal	198.00	100.80	381.60	0.00
Actual crop nutrient removal	205.33	113.67	388.67	1,137.40
Nutrient balance	-42.84	-82.33	-95.33	2,724.51
Applied to removed ratio	0.79	0.28	0.75	3.40

Fresh water applied
7,032,951.00 <i>gallons</i>
259.00 <i>acre-inches</i>
17.27 <i>inches/acre</i>

Process wastewater applied
803,765.00 <i>gallons</i>
29.60 <i>acre-inches</i>
1.97 <i>inches/acre</i>

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

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

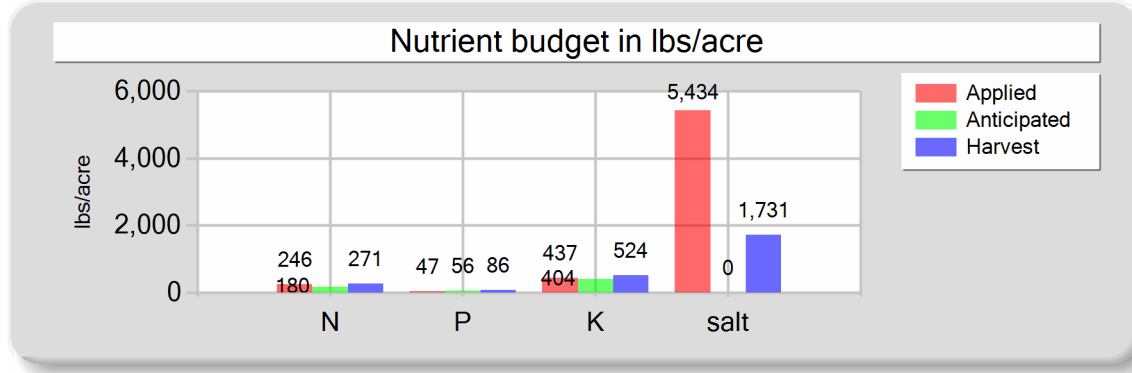
Reporting period 01/01/2023 to 12/31/2023.

Field C - 05/21/2023: Milo

Field name: Field C

Crop: Milo

Plant date: 05/21/2023



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	220.70	46.74	437.04	2,424.73
Fresh water	17.80	0.00	0.00	3,009.15
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	245.50	46.74	437.04	5,433.89
Anticipated crop nutrient removal	180.00	56.00	404.00	0.00
Actual crop nutrient removal	271.32	85.68	523.60	1,730.55
Nutrient balance	-25.82	-38.94	-86.56	3,703.34
Applied to removed ratio	0.90	0.55	0.83	3.14

Fresh water applied
9,142,836.00 <i>gallons</i>
336.70 <i>acre-inches</i>
22.45 <i>inches/acre</i>

Process wastewater applied
1,105,178.00 <i>gallons</i>
40.70 <i>acre-inches</i>
2.71 <i>inches/acre</i>

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

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

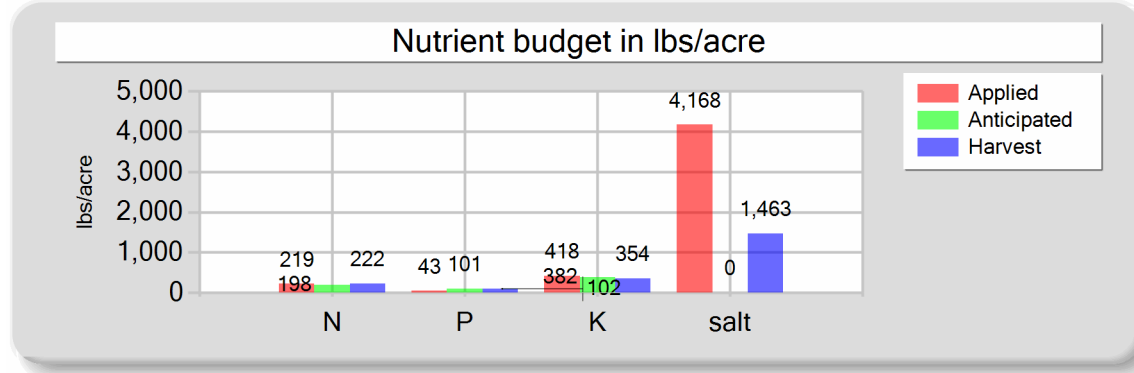
Reporting period 01/01/2023 to 12/31/2023.

Field D - 11/04/2022: Wheat, silage, boot stage

Field name: Field D

Crop: Wheat, silage, boot stage

Plant date: 11/04/2022



	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	199.89	42.91	418.40	2,174.37
Fresh water	11.80	0.00	0.00	1,994.11
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	218.69	42.91	418.40	4,168.48
Anticipated crop nutrient removal	198.00	100.80	381.60	0.00
Actual crop nutrient removal	222.31	102.04	353.51	1,462.55
Nutrient balance	-3.63	-59.13	64.88	2,705.93
Applied to removed ratio	0.98	0.42	1.18	2.85

Fresh water applied
3,635,275.00 <i>gallons</i>
133.87 <i>acre-inches</i>
14.87 <i>inches/acre</i>

Process wastewater applied
692,433.00 <i>gallons</i>
25.50 <i>acre-inches</i>
2.83 <i>inches/acre</i>

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

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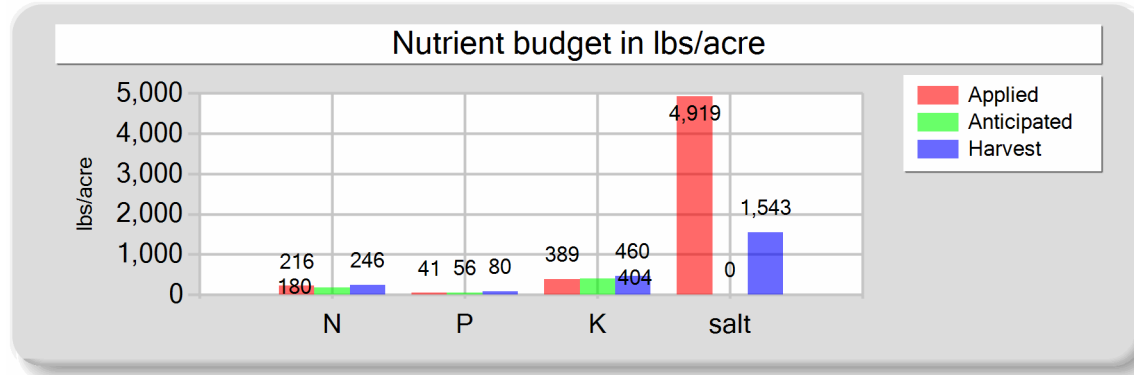
Reporting period 01/01/2023 to 12/31/2023.

Field D - 05/21/2023: Milo

Field name: Field D

Crop: Milo

Plant date: 05/21/2023



	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	192.92	41.41	388.76	2,133.71
Fresh water	16.48	0.00	0.00	2,785.42
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	216.40	41.41	388.76	4,919.14
Anticipated crop nutrient removal	180.00	56.00	404.00	0.00
Actual crop nutrient removal	245.67	80.40	460.07	1,543.01
Nutrient balance	-29.27	-38.99	-71.31	3,376.13
Applied to removed ratio	0.88	0.52	0.84	3.19

Fresh water applied
5,077,845.00 <i>gallons</i>
187.00 <i>acre-inches</i>
20.78 <i>inches/acre</i>

Process wastewater applied
577,028.00 <i>gallons</i>
21.25 <i>acre-inches</i>
2.36 <i>inches/acre</i>

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

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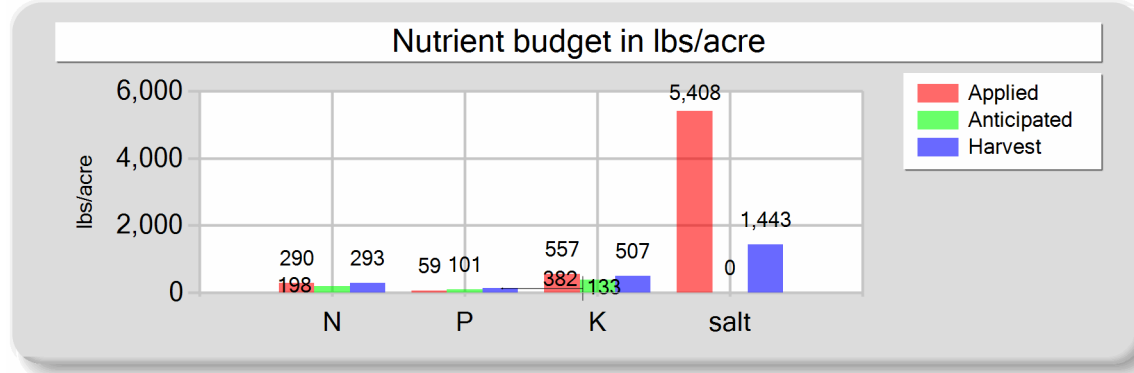
Reporting period 01/01/2023 to 12/31/2023.

Field E - 11/04/2022: Wheat, silage, boot stage

Field name: Field E

Crop: Wheat, silage, boot stage

Plant date: 11/04/2022



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)	Fresh water applied
Existing soil nutrient content	0.00	0.00	0.00	0.00	37,676,522.00 <i>gallons</i>
Plowdown credit	0.00	0.00	0.00	0.00	1,387.50 <i>acre-inches</i>
Commercial fertilizer / Other	0.00	0.00	0.00	0.00	18.50 <i>inches/acre</i>
Dry manure	0.00	0.00	0.00	0.00	
Process wastewater	268.48	59.00	556.71	2,927.70	Process wastewater applied
Fresh water	14.67	0.00	0.00	2,480.07	7,637,133.00 <i>gallons</i>
Atmospheric deposition	7.00	0.00	0.00	0.00	281.25 <i>acre-inches</i>
Total nutrients applied	290.15	59.00	556.71	5,407.77	3.75 <i>inches/acre</i>
Anticipated crop nutrient removal	198.00	100.80	381.60	0.00	
Actual crop nutrient removal	293.39	133.36	506.77	1,442.64	Total harvests for the crop
Nutrient balance	-3.24	-74.36	49.94	3,965.13	1 <i>harvests</i>
Applied to removed ratio	0.99	0.44	1.10	3.75	

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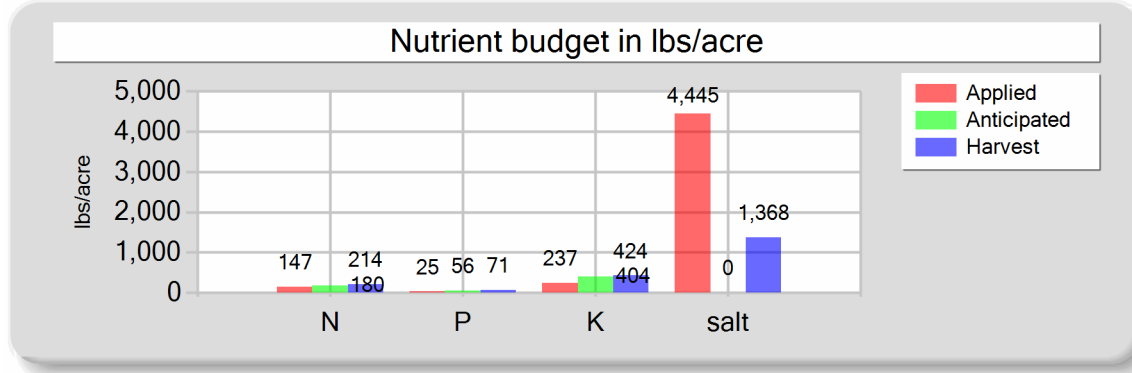
Reporting period 01/01/2023 to 12/31/2023.

Field E - 05/25/2023: Milo

Field name: Field E

Crop: Milo

Plant date: 05/25/2023



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)	Fresh water applied
Existing soil nutrient content	0.00	0.00	0.00	0.00	47,350,222.00 <i>gallons</i>
Plowdown credit	0.00	0.00	0.00	0.00	1,743.75 <i>acre-inches</i>
Commercial fertilizer / Other	0.00	0.00	0.00	0.00	23.25 <i>inches/acre</i>
Dry manure	0.00	0.00	0.00	0.00	
Process wastewater	121.55	25.45	237.14	1,327.89	Process wastewater applied
Fresh water	18.44	0.00	0.00	3,116.85	3,054,852.00 <i>gallons</i>
Atmospheric deposition	7.00	0.00	0.00	0.00	112.50 <i>acre-inches</i>
Total nutrients applied	146.99	25.45	237.14	4,444.73	1.50 <i>inches/acre</i>
Anticipated crop nutrient removal	180.00	56.00	404.00	0.00	
Actual crop nutrient removal	214.40	71.47	424.33	1,368.32	Total harvests for the crop
Nutrient balance	-67.41	-46.02	-187.19	3,076.42	1 <i>harvests</i>
Applied to removed ratio	0.69	0.36	0.56	3.25	



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

**NUTRIENT ANALYSES**

**A. MANURE ANALYSES**

22I1017

Sample and source description: 22I1017

Sample date: 09/14/2022    Material type: Corral solids    Source of analysis: Lab analysis    Method of reporting: As-is

Moisture: 50.4 %

	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 (%)
<b>Value</b>	8,700.00	2,600.00	11,900.00	10,100.00	3,700.00	3,600.00	2,100.00	400.00		0.00
<b>DL</b>	0.10	0.01	0.01	1.00	0.01	0.01	0.01	0.01		10.00

23E0423

Sample and source description: 23E0423

Sample date: 05/03/2023    Material type: Corral solids    Source of analysis: Lab analysis    Method of reporting: As-is

Moisture: 79.1 %

	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 (%)
<b>Value</b>	4,200.00	400.00	1,200.00	2,300.00	600.00	400.00	500.00	0.00		0.00
<b>DL</b>	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		10.00

23F0709

Sample and source description: 23F0709

Sample date: 06/06/2023    Material type: Corral solids    Source of analysis: Lab analysis    Method of reporting: As-is

Moisture: 37.0 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Calcium (mg/kg)	Magnesium (mg/kg)	Sodium (mg/kg)	Sulfur (mg/kg)	Chloride (mg/kg)	Total salt (mg/kg)	TFS (%)
<b>Value</b>	8,200.00	3,300.00	17,400.00	18,400.00	5,600.00	5,300.00	3,300.00	300.00		0.00
<b>DL</b>	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		10.00

**B. PROCESS WASTEWATER ANALYSES**

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

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

22J0462

Sample and source description: 22J0462

Sample date: 10/05/2022 Material type: Process wastewater Source of analysis: Lab analysis pH: \_\_\_\_\_

	Kjeldahl-N (mg/L)	NH4-N (mg/L)	NH3-N (mg/L)	Nitrate-N (mg/L)	Total P (mg/L)	Total K (mg/L)	Calcium (mg/L)	Magnes. (mg/L)	Sodium (mg/L)	Bicarb. (mg/L)	Carb. (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	EC (µmhos/cm)	TDS (mg/L)
<b>Value</b>	263.00	204.00	0.00	2.20	40.90	617.00	183.00	124.00	294.00	1,970.00	0.00	22.40	396.00		2,800
<b>DL</b>	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		10

22C0859

Sample and source description: 22C0859

Sample date: 03/28/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: \_\_\_\_\_

	Kjeldahl-N (mg/L)	NH4-N (mg/L)	NH3-N (mg/L)	Nitrate-N (mg/L)	Total P (mg/L)	Total K (mg/L)	Calcium (mg/L)	Magnes. (mg/L)	Sodium (mg/L)	Bicarb. (mg/L)	Carb. (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	EC (µmhos/cm)	TDS (mg/L)
<b>Value</b>	333.00	220.00	0.00	1.40	79.80	669.00									3,680
<b>DL</b>	0.01	0.01	0.01	0.01	0.01	0.01									10

23E0435

Sample and source description: 23E0435

Sample date: 05/03/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: \_\_\_\_\_

	Kjeldahl-N (mg/L)	NH4-N (mg/L)	NH3-N (mg/L)	Nitrate-N (mg/L)	Total P (mg/L)	Total K (mg/L)	Calcium (mg/L)	Magnes. (mg/L)	Sodium (mg/L)	Bicarb. (mg/L)	Carb. (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	EC (µmhos/cm)	TDS (mg/L)
<b>Value</b>	456.00	263.00	0.00	1.00	102.00	922.00	235.00	147.00	349.00	2,970.00	0.00	70.50	706.00		5,040
<b>DL</b>	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		10

23F0717

Sample and source description: 23F0717

Sample date: 06/06/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: \_\_\_\_\_

	Kjeldahl-N (mg/L)	NH4-N (mg/L)	NH3-N (mg/L)	Nitrate-N (mg/L)	Total P (mg/L)	Total K (mg/L)	Calcium (mg/L)	Magnes. (mg/L)	Sodium (mg/L)	Bicarb. (mg/L)	Carb. (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	EC (µmhos/cm)	TDS (mg/L)
<b>Value</b>	272.00	244.00	0.00	1.10	60.40	618.00	169.00	110.00	261.00	2,410.00	0.00	68.30	423.00		3,180
<b>DL</b>	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		10

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

23I1698

Sample and source description: 23I1698

Sample date: 09/26/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: \_\_\_\_\_

	Kjeldahl-N (mg/L)	NH4-N (mg/L)	NH3-N (mg/L)	Nitrate-N (mg/L)	Total P (mg/L)	Total K (mg/L)	Calcium (mg/L)	Magnes. (mg/L)	Sodium (mg/L)	Bicarb. (mg/L)	Carb. (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	EC (µmhos/cm)	TDS (mg/L)
<b>Value</b>	342.00	242.00	0.00	0.70	62.20	553.00									3,500
<b>DL</b>	0.01	0.01	0.01	0.01	0.01	0.01									10

23L0356

Sample and source description: 23L0356

Sample date: 12/06/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: \_\_\_\_\_

	Kjeldahl-N (mg/L)	NH4-N (mg/L)	NH3-N (mg/L)	Nitrate-N (mg/L)	Total P (mg/L)	Total K (mg/L)	Calcium (mg/L)	Magnes. (mg/L)	Sodium (mg/L)	Bicarb. (mg/L)	Carb. (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	EC (µmhos/cm)	TDS (mg/L)
<b>Value</b>	528.00	294.00	0.00	0.40	74.40	728.00									4,350
<b>DL</b>	0.01	0.01	0.01	0.01	0.01	0.01									10

## C. FRESH WATER ANALYSES

Dom 1

23L0354

Sample description: 23L0354

Sample date: 12/06/2023 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)
<b>Value</b>	0.30			31.00	0.30	62.00	64.50	0.00	30.80	82.70	459.00	
<b>DL</b>	0.01			0.01	0.01	0.01	0.01	0.01	0.01	0.01	10.00	

Dom 2

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

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

**Dom 2**

**23L0354**

Sample description: 23L0354

Sample date: 12/06/2023 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)
<b>Value</b>	7.90			95.30	3.60	101.00	82.10	0.00	95.30	159.00	971.00	
<b>DL</b>	0.01			0.01	0.01	0.01	0.01	0.01	0.01	0.01	10.00	

**Dom 3**

**23L0354**

Sample description: 23L0354

Sample date: 12/06/2023 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)
<b>Value</b>	1.00			37.50	0.60	64.00	64.30	0.00	32.30	93.50	503.00	
<b>DL</b>	0.01			0.01	0.01	0.01	0.01	0.01	0.01	0.01	10.00	

**Well 4**

**23L0908**

Sample description: 23L0908

Sample date: 12/13/2023 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)
<b>Value</b>	27.40										2,050.00	
<b>DL</b>	0.01										10.00	

**Well 5**

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

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

**Well 5**

23L0908

Sample description: 23L0908Sample date: 12/13/2023 Source of analysis: Lab analysis

	Total N (mg/L)	NH <sub>4</sub> -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)
<b>Value</b>	3.50										986.00	
<b>DL</b>	0.01										10.00	

**D. SOIL ANALYSES***No soil analyses entered.***E. PLANT TISSUE ANALYSES**

Field A East - 11/04/2022: Wheat, silage, boot stage

23E0426

Sample and source description: 23E0426Sample date: 05/03/2023 Source of analysis: Lab analysis Method of reporting: As-isMoisture: 61.3 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
<b>Value</b>	6,900.00	2,900.00	10,500.00		8.30
<b>DL</b>	0.01	0.01	0.01		0.01

Field A East - 05/21/2023: Milo

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

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

## Field A East - 05/21/2023: Milo

23I0583

Sample and source description: 23I0583

Sample date: 09/07/2023 Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 77.4 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	4,000.00	1,200.00	8,100.00		11.10
DL	0.01	0.01	0.01		0.01

## Field A West - 11/04/2022: Wheat, silage, boot stage

23E0426

Sample and source description: 23E0426

Sample date: 05/03/2023 Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 64.5 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	3,900.00	2,700.00	10,800.00		8.60
DL	0.01	0.01	0.01		0.01

## Field A West - 05/25/2023: Milo

23I1714

Sample and source description: 23I1714

Sample date: 09/26/2023 Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 68.0 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	5,700.00	1,700.00	9,100.00		9.60
DL	0.01	0.01	0.01		0.01

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

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

Field B - 11/04/2022: Wheat, silage, boot stage

23E0426

Sample and source description: 23E0426

Sample date: 05/03/2023 Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 59.8 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	6,200.00	3,000.00	12,200.00		7.60
DL	0.01	0.01	0.01		0.01

Field B - 05/25/2023: Milo

23I1714

Sample and source description: 23I1714

Sample date: 09/26/2023 Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 68.4 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	5,600.00	1,700.00	8,800.00		10.10
DL	0.01	0.01	0.01		0.01

Field C - 11/04/2022: Wheat, silage, boot stage

23E0426

Sample and source description: 23E0426

Sample date: 05/03/2023 Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 67.0 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	5,600.00	3,100.00	10,600.00		9.40
DL	0.01	0.01	0.01		0.01

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

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

Field C - 05/21/2023: Milo

23I0583

Sample and source description: 23I0583

Sample date: 09/07/2023 Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 70.2 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	5,700.00	1,800.00	11,000.00		12.20
DL	0.01	0.01	0.01		0.01

Field D - 11/04/2022: Wheat, silage, boot stage

23E0426

Sample and source description: 23E0426

Sample date: 05/03/2023 Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 65.7 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	6,100.00	2,800.00	9,700.00		11.70
DL	0.01	0.01	0.01		0.01

Field D - 05/21/2023: Milo

23I0583

Sample and source description: 23I0583

Sample date: 09/07/2023 Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 67.1 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	5,500.00	1,800.00	10,300.00		10.50
DL	0.01	0.01	0.01		0.01



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

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

Field E - 11/04/2022: Wheat, silage, boot stage

23E0426

Sample and source description: 23E0426

Sample date: 05/03/2023 Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 60.9 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	6,600.00	3,000.00	11,400.00		8.30
DL	0.01	0.01	0.01		0.01

Field E - 05/25/2023: Milo

23I1714

Sample and source description: 23I1714

Sample date: 09/26/2023 Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 71.1 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	4,800.00	1,600.00	9,500.00		10.60
DL	0.01	0.01	0.01		0.01

**F. SUBSURFACE (TILE) DRAINAGE ANALYSES***No subsurface (tile) drainage analyses entered.*

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

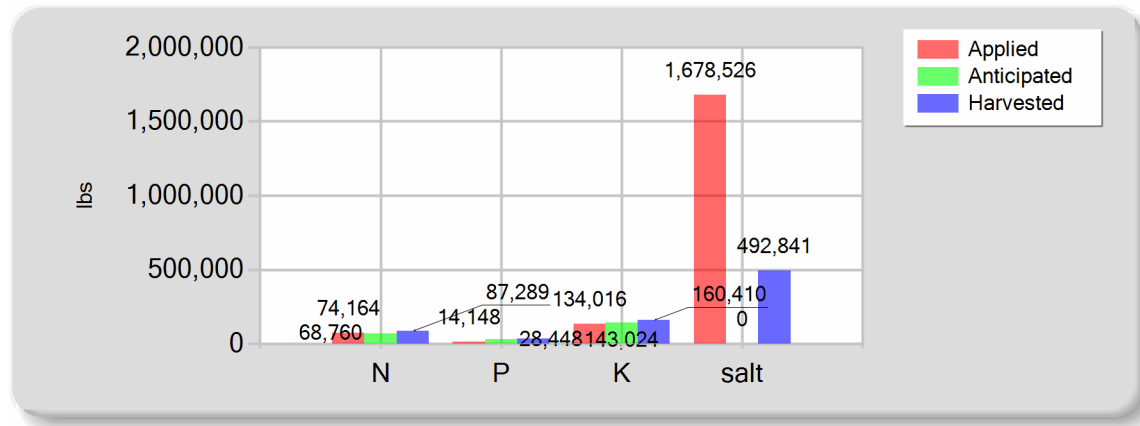
Reporting period 01/01/2023 to 12/31/2023.

**NUTRIENT APPLICATIONS, POTENTIAL REMOVAL, AND BALANCE**

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

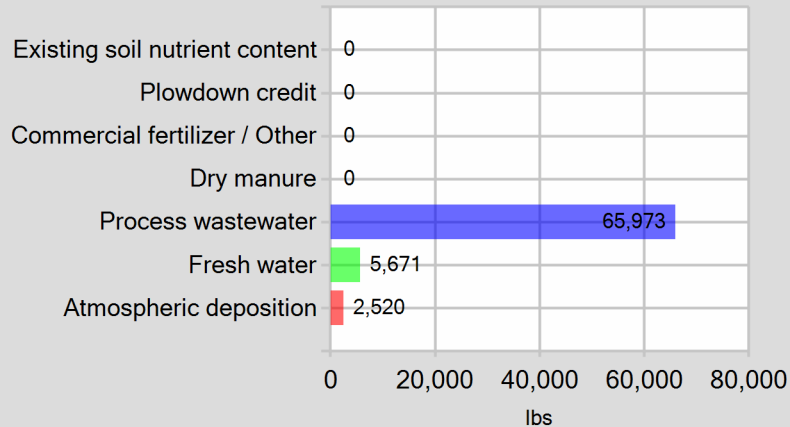
	Total N (lbs)	Total P (lbs)	Total K (lbs)	Total salt (lbs)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	65,973.00	14,148.41	134,015.67	720,039.21
Fresh water	5,670.56	0.00	0.00	958,486.97
Atmospheric deposition	2,520.00	0.00	0.00	0.00
Total nutrients applied	74,163.56	14,148.41	134,015.67	1,678,526.18
Anticipated crop nutrient removal	68,760.00	28,448.00	143,024.00	0.00
Actual crop nutrient removal	87,289.40	35,315.80	160,409.60	492,841.29
Nutrient balance	-13,125.84	-21,167.39	-26,393.93	1,185,684.89
Applied to removed ratio	0.85	0.40	0.84	3.41

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

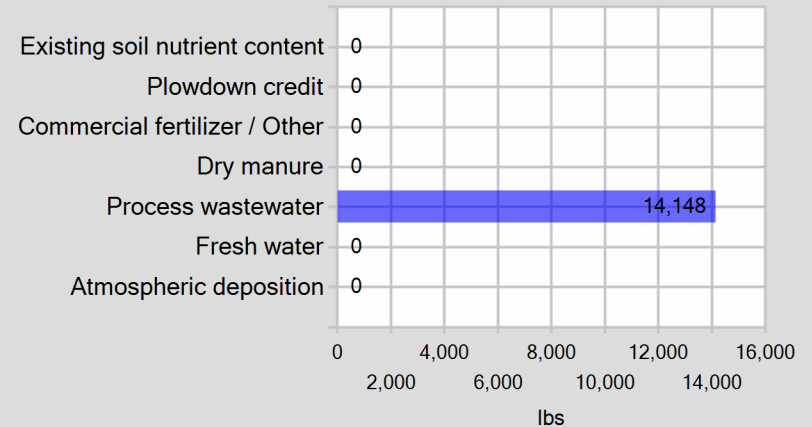


## C. POUNDS OF NUTRIENT APPLIED BY MATERIAL TYPE

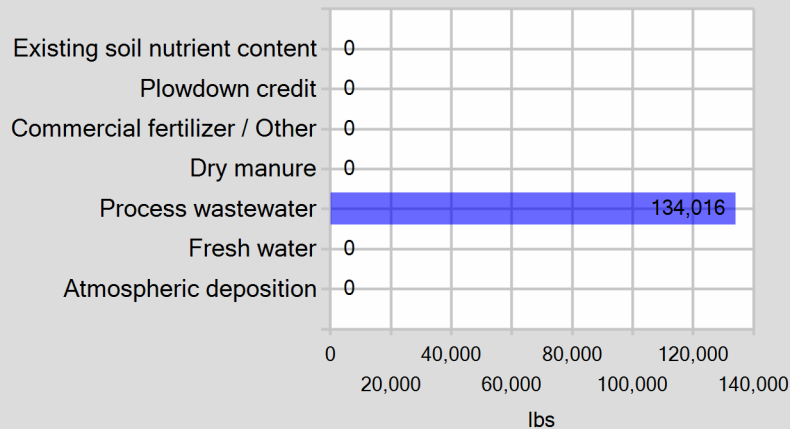
Pounds of nitrogen applied



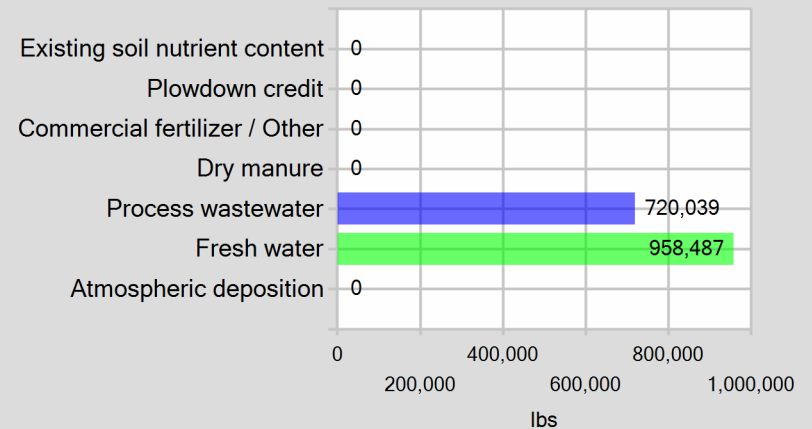
Pounds of phosphorus applied



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? Yes

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

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

**B. EXPORT AGREEMENT STATEMENT**

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

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

ADDITIONAL NOTES

**A. NOTES**

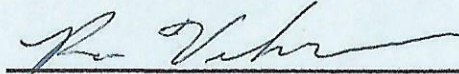
*No notes entered for this annual report.*

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.



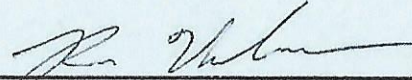
SIGNATURE OF OWNER OF FACILITY

Ron Verhoeven

PRINT OR TYPE NAME

6-29-2024

DATE



SIGNATURE OF OPERATOR OF FACILITY

SAME AS OWNER

PRINT OR TYPE NAME

6-29-2024

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.



# Report of Dairy Well Water Analysis

Ron Verhoeven Family Dairy  
4975 Ave 120  
Corcoran CA 93212  
00-0015818 08

Lab No.: 23L0354  
Sampled By: Pamela Verhoeven  
Requested By: Marty Verhoeven  
Submitted Date: 12/07/23  
Reported Date: 12/18/23  
Project: 4975 Ave 120, Corcoran 93212  
Crop ID:

E-mail: martyverhoeven@gmail.com  
Copy To:

		Date	Time	EC	EC	NO <sub>3</sub> -N	Field	Total		CO <sub>3</sub>	HCO <sub>3</sub>						pH
		Sampled	Sampled	μmhos/cm	mmhos/cm	mg/L	NH <sub>4</sub> -N	NH <sub>4</sub> -N	TDS	as	as	Cl	SO <sub>4</sub>	Ca	Mg	Na	at 25°C
							mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	unit
1	Dom 1 (Valve@Well)	12/06/23	12:30	459	0.46	0.3	*		260	ND	64.5	82.7	30.8	31.0	0.3	62	8.0
2	Dom 2 (Valve@Well)	12/06/23	12:35	971	0.97	7.9	*		600	ND	82.1	159	95.3	95.3	3.6	101	8.0
3	Dom 3 (Valve@Well)	12/06/23	12:40	503	0.50	1.0	*		310	ND	64.3	93.5	32.3	37.5	0.6	64	7.6

\* = Field NH<sub>4</sub>-N not Taken.  
ND = None Detected

Approved By: Scott M. Erickson  
Laboratory Director/Technical Manager  
ELAP Certification #1595  
A2LA Certification #6440.02





12/07/23 06:45

23L0354

bj

## WATER WORK REQUEST

 Bill To: Acct No. 15818 Cons. 08

Purchase Order No. \_\_\_\_\_ Results Needed By \_\_\_\_\_

 Client Verhoeven, Ron Family Dairy  
 Address 4975 Ave 120  
 City, State, Zip Corcoran 93212  
 Email: \_\_\_\_\_
Copy to: martyverhoeven@gmail.comRequested by/Cell: Marty Verhoeven/ 559-410-2420Facility: 4975 Ave 120, Corcoran 93212Date sampled 12-6-23Sampled by Pamela Verhoeven
☒ QA/QC Document
 ☒ Copy of Chain
 ☐ RWQCB

## DESCRIPTION OF SAMPLES

1. <u>Pom 1</u>	Sampled From: <u>Value @ well</u>
2. <u>Pom 2</u>	Sampled From: <u>Value @ well</u>
3. <u>Pom 3</u>	Sampled From: <u>Value @ well</u>
4. _____	Sampled From: _____
5. _____	Sampled From: _____
6. _____	Sampled From: _____
7. _____	Sampled From: _____
8. _____	Sampled From: _____
9. _____	Sampled From: _____
10. _____	Sampled From: _____

## 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 3 No. Bottles 3  
 Water Type: ☐ Drinking ☐ Wastewater  
☐ Ag Water ☒ Ground Water ☐ Mon. Well  
☐ Supply Water ☐ Other \_\_\_\_\_

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

- ☐ DWW1: (EC, pH, NO<sub>3</sub>-N, NH<sub>4</sub>-N Field Test)  
 (1) 1L plastic, unpreserved (white)
- ☒ DWW2: (DWW1 Plus SO<sub>4</sub>, CO<sub>3</sub>, HCO<sub>3</sub>, Cl, Ca, Mg, Na, TDS)  
 (1) 1L plastic, unpreserved (white)
- ☐ DCW1: (EC, NO<sub>3</sub>-N, TDS)  
 (1) 1L plastic, unpreserved (white)
- ☐ DPW1: (EC, pH, NO<sub>3</sub>-N, NH<sub>4</sub>-N, TKN, TDS, TP, TK )  
 (1) 1L plastic, unpreserved (white)
- ☐ DPW2: (DPW1 Plus Ca, Mg, Na, HCO<sub>3</sub>, CO<sub>3</sub>, SO<sub>4</sub>, Cl)  
 (1) 1L plastic, unpreserved (white)
- ☐ Other \_\_\_\_\_

Date Sampled	Time Sampled	Field NH <sub>4</sub> -N (mg/L)	Received Temp °C
<u>12-6-23</u>	<u>12:30</u>		<u>0.3 / 0.3</u>
<u>12-6-23</u>	<u>12:35</u>		<u>3.4 / 0.4</u>
<u>12-6-23</u>	<u>12:40</u>		<u>0.9 / 0.5</u>
IR Thermometer SN: 200560723			
Correction Factor: 0°C			
Calibration Due: 12/22/2023			
Location: Laboratory			
IR Thermometer SN: 221511276			
Correction Factor: 0°C			
Calibration Due: 12/22/2023			
Location: Hanford			

## CHAIN OF CUSTODY

Carrier	Signature	Company	Received (Date/Time)	Relinquished (Date/Time)
First	<u>Pamela Verhoeven</u>	<u>VDFC</u>	<u>12-6-23 12:30</u>	<u>12/6/23 3:10</u>
Second	<u>CTT</u>	<u>DCI</u>	<u>12/6/23 3:10</u>	<u>12/6/23 3:10</u>
Third				
Fourth	<u>gt</u>	<u>DCI</u>	<u>12/7 06:45</u>	

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 attorney's fees. It is understood that payment is expected to be made with samples unless terms have been previously arranged. Terms are net 30 days. In case accounts will be charged a default charge fee of 2% per month (maximum 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 Alternatives to Litigation, Inc. (CALI). If the dispute is not resolved in mediation, then the dispute will be submitted to binding arbitration through CALI under its Rules and Procedures. The parties will equally bear the costs of mediation/arbitration. If, however, the mediator declares that no legitimate dispute exists, then either will pay all mediation and arbitration costs, and in the event of arbitration, reasonable attorney's fees of Dellavalle Laboratory.

Invoicing Information:		Shipping	
Price List 2022		\$ _____	In
Sampling Hrs _____	Miles _____	\$ _____	Out
Consulting _____			
Am't Paid _____	Rec By _____	Check No. _____	Date _____

Signature \_\_\_\_\_

Sample received in cooler with ice?

[ ] Yes [ ] No

date: 12/07/23

# Report of Dairy Well Water Analysis

Ron Verhoeven Family Dairy  
4975 Ave 120  
Corcoran CA 93212  
00-0015818 08

E-mail: martyverhoeven@gmail.com  
Copy To:

Lab No.: 23L0908  
Sampled By: Marty V.  
Requested By: Marty Verhoeven  
Submitted Date: 12/14/23  
Reported Date: 12/21/23  
Project: 4975 Ave 120, Corcoran 93212  
Crop ID:

		Date Sampled	Time Sampled	EC µmhos/cm	EC mmhos/cm	NO <sub>3</sub> -N mg/L	Field NH <sub>4</sub> -N mg/L	Total NH <sub>4</sub> -N mg/L	pH at 25°C unit
1	Well 4	12/13/23	14:20	2050	2.05	27.4	*		7.7
2	Well 5	12/13/23	14:15	986	0.99	3.5	*		7.6

\* = Field NH<sub>4</sub>-N not Taken.  
ND = None Detected

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





12/14/23 07:00

23L0908

## WATER WORK REQUEST

Bill To: Aest No 15818 Cons 08

Purchase Order No. Results Needed By

Client Verhoeven, Ron Family Dairy  
Address 4975 Ave 120  
City, State, Zip Corcoran 93212  
Email: 0

Copy to: martyverhoeven@gmail.com

Requested by/Cell: Marty Verhoeven/ 559-410-2420

Facility: 4975 Ave 120, Corcoran 93212

Date sampled 12/13/23

Sampled by Marty V.

☒ QA/QC Document ☒ Copy of Chain ☐ RWQCB

## DESCRIPTION OF SAMPLES

1. Well 4	Sampled From
2. Well 5	Sampled From
3.	Sampled From
4.	Sampled From
5.	Sampled From
6.	Sampled From
7.	Sampled From
8.	Sampled From
9.	Sampled From
10.	Sampled From

## 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 2 No. Bottles 2

Water Type: ☒ Ag Water ☐ Drinking ☐ Wastewater  
☐ Supply Water ☐ Ground Water ☐ Mon. Well  
☐ Other

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

- ☒ DWW1: (EC, pH, NO<sub>3</sub>-N, NH<sub>4</sub>-N Field Test)  
(1) 1 L plastic, unpreserved (white)
- ☐ DWW2: (DWW1 Plus SO<sub>4</sub>, CO<sub>3</sub>, HCO<sub>3</sub>, Cl, Ca, Mg, Na, TDS)  
(1) 1 L plastic, unpreserved (white)
- ☐ DCW1: (EC, NO<sub>3</sub>-N, TDS)  
(1) 1 L plastic, unpreserved (white)
- ☐ DPW1: (EC, pH, NO<sub>3</sub>-N, NH<sub>4</sub>-N, TKN, TDS, TP, TK )  
(1) 1 L plastic, unpreserved (white)
- ☐ DPW2: (DPW1 Plus Ca, Mg, Na, HCO<sub>3</sub>, CO<sub>3</sub>, SO<sub>4</sub>, Cl)  
(1) 1 L plastic, unpreserved (white)
- ☐ Other

Date Sampled	Time Sampled	Field NH <sub>4</sub> -N (mg/L)	Received Temp °C	H/F
12/13/23	2:20 pm		17.0	1-1
12/13/23	2:15 pm		17.7	0-1
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	[Signature]	WFL	12/23/23 2:5	12/13/23 3:17
Second	[Signature]	DLI	12/13/23 3:17 pm	
Third				
Fourth	[Signature]	DLI	12/14 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 stated 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 Alternatives to Litigation, Inc. (cali). If the dispute is not resolved in mediation, then the dispute will be submitted to binding arbitration through cali under its Rules and Procedures. The parties will equally bear the costs of mediation/arbitration. If, however, the mediator declares that no legitimate dispute exists, then either will pay all mediation and arbitration costs, and in the event of arbitration, reasonable attorneys' fees of Dellavalle Laboratory.

Invoicing Information:			Shipping	
Price List 2023			\$	In
Sampling Hrs	Miles	Consulting	\$	Out
Amt Paid	Rec By	Check No.	Date	

Signature \_\_\_\_\_  
Sample received in cooler with ice? ☐ Yes ☐ No  
eti update 2020