

**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:** Vanden Berge Dairy

Physical address of dairy:

11701 Old River RD Number and Street	Bakersfield City	Kern County	93311 Zip Code
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Street and nearest cross street (if no address): \_\_\_\_\_

Date facility was originally placed in operation: 07/31/2004

Regional Water Quality Control Board Basin Plan designation: Tulare Basin

County Assessor Parcel Number(s) for dairy facility:

0184-0250-0007-0000	0184-0250-0020-0000
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**B. OPERATORS**

Vanden Berge, Darrell

Operator name: <u>Vanden Berge, Darrell</u>	Telephone no.:	(661) 340-6448	
	Landline	Cellular	
11701 Old River RD Mailing Address Number and Street	Bakersfield City	CA State	93311 Zip Code

**This operator is responsible for paying permit fees.**

**C. OWNERS**

Vanden Berge, Darrell

Legal owner name: <u>Vanden Berge, Darrell</u>	Telephone no.:	(661) 340-6448	
	Landline	Cellular	
11701 Old River RD Mailing Address Number and Street	Bakersfield City	CA State	93311 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	2,785	300	925	350	0	0
Number under roof	0	0	0	0	0	0
Maximum number	3,018	495	1,100	400	0	0
Average number	2,785	300	925	350	0	0
Avg live weight (lbs)	1,400	1,450	1,000	700		

Predominant milk cow breed: Holstein

Average milk production: 75 pounds per cow per day

**B. MANURE GENERATED**

Total manure excreted by the herd: 90,450.17 tons per reporting period

Total nitrogen from manure: 1,131,148.43 lbs per reporting period

After ammonia losses (30% loss applied): 791,803.90 lbs per reporting period

Total phosphorus from manure: 189,758.64 lbs per reporting period

Total potassium from manure: 542,501.92 lbs per reporting period

Total salt from manure: 1,380,302.25 lbs per reporting period

**C. PROCESS WASTEWATER GENERATED**

Process wastewater generated: 54,309,047 gallons

Total nitrogen generated: 215,318.09 lbs

Total phosphorus generated: 54,287.22 lbs

Total potassium generated: 276,131.57 lbs

Total salt generated: 1,776,808.32 lbs

$$\begin{array}{r}
 54,309,047 \text{ gallons applied} \\
 + 0 \text{ gallons exported} \\
 - 0 \text{ gallons imported} \\
 = 54,309,047 \text{ gallons generated}
 \end{array}$$

**D. FRESH WATER SOURCES**

Source Description	Type
canal water	Surface water

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

No subsurface (tile) drainage sources entered.

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**F. NUTRIENT IMPORTS***No dry manure nutrient imports entered.**No process wastewater nutrient imports entered.*

Date	Material type / Description	Quantity	Reporting basis	Moisture (%)	N (%)	P (%)	K (%)	Salt (%)
01/01/2023	Liquid commercial fertilizer <i>nitrogen liquid fertilizer</i>	100,000.00 gal			99.000000	0.000000	0.000000	0.000000

Material type	Total N (lbs)	Total P (lbs)	Total K (lbs)	Total salt (lbs)
Commercial fertilizer / Other	826,155.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	0.00	0.00	0.00	0.00
Total imports for all materials	826,155.00	0.00	0.00	0.00

**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 (%)
02/01/2023	Corral solids	2,310.00 ton	Dry-weight	53.7		16,300.00	8,400.00	30,800.00		11.50
03/01/2023	Corral solids	1,370.00 ton	Dry-weight	53.7		16,300.00	8,400.00	30,800.00		11.50
07/01/2023	Corral solids	4,105.00 ton	Dry-weight	44.8		10,600.00	6,200.00	30,700.00		11.50
11/01/2023	Corral solids	3,920.00 ton	Dry-weight	53.7		16,300.00	8,400.00	30,800.00		11.50

*No liquid nutrient exports entered.*

Material type	Total N (lbs)	Total P (lbs)	Total K (lbs)	Total salt (lbs)
Dry manure	162,751.23	87,213.74	355,888.02	1,330,494.80
Process wastewater	0.00	0.00	0.00	0.00
Total exports for all materials	162,751.23	87,213.74	355,888.02	1,330,494.80

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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 1	87	87	2	both	0184-0250-0020-0000
Field 2	73	73	2	both	0184-0250-0020-0000
Field 3	95	95	2	both	0184-0250-0020-0000
Field 4	71	71	2	both	0184-0250-0020-0000
Field 5	80	80	2	both	0184-0250-0007-0000
Field 6	78	78	2	process wastewater	0184-0250-0007-0000
Field 7	13	13	2	both	0184-0250-0020-0000
Field 9	11	11	2	manure	0184-0250-0007-0000
Totals for areas that were used for application	508	508	16		
Totals for areas that were not used for application					
Land application area totals	508	508	16		

**B. CROPS AND HARVESTS**

## Field 1

Field name: Field 1

12/15/2022: Triticale, soft dough

Crop: Triticale, soft dough      Acres planted: 87      Plant date: 12/15/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/15/2023	1,524.30 ton	Dry-weight		62.0	21,000.00	3,700.00	25,700.00		11.50

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	21.00	441.00	77.70	54.60	21.00
Total actual harvest content	17.52	279.63	49.27	342.21	1,531.31

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**Field 1**

06/01/2023: Corn, silage

Crop: Corn, silage      Acres planted: 87      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 (%)
10/15/2023	1,621.26 ton	Dry-weight		71.5	13,500.00	2,200.00	18,600.00		5.60

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	25.00	350.00	62.50	165.00	25.00
Total actual harvest content	18.64	143.40	23.37	197.57	594.83

**Field 2**

Field name: Field 2

12/15/2022: Triticale, boot stage

Crop: Triticale, boot stage      Acres planted: 73      Plant date: 12/15/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/15/2023	1,876.28 ton	Dry-weight		62.0	21,000.00	3,700.00	25,700.00		11.50

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	20.00	420.00	74.00	52.00	20.00
Total actual harvest content	25.70	410.21	72.28	502.02	2,246.40

06/01/2023: Corn, silage

Crop: Corn, silage      Acres planted: 73      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 (%)
10/15/2023	1,789.05 ton	Dry-weight		71.5	13,500.00	2,200.00	18,600.00		5.60

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	25.00	350.00	62.50	165.00	25.00
Total actual harvest content	24.51	188.59	30.73	259.83	782.28

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**Field 3**

Field name: Field 3

12/15/2022: Triticale, boot stage

Crop: Triticale, boot stage      Acres planted: 95      Plant date: 12/15/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/15/2023	2,416.14 ton	Dry-weight		62.0	21,000.00	3,700.00	25,700.00		11.50

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	20.00	420.00	74.00	52.00	20.00
Total actual harvest content	25.43	405.91	71.52	496.76	2,222.85

06/01/2023: Corn, silage

Crop: Corn, silage      Acres planted: 95      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 (%)
10/15/2023	2,161.48 ton	Dry-weight		71.5	13,500.00	2,200.00	18,600.00		5.60

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	25.00	350.00	62.50	165.00	25.00
Total actual harvest content	22.75	175.08	28.53	241.22	726.26

**Field 4**

Field name: Field 4

12/15/2022: Triticale, boot stage

Crop: Triticale, boot stage      Acres planted: 71      Plant date: 12/15/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/15/2023	1,540.03 ton	Dry-weight		62.0	21,000.00	3,700.00	25,700.00		11.50

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	20.00	420.00	74.00	52.00	20.00
Total actual harvest content	21.69	346.18	60.99	423.66	1,895.76

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**Field 4**

06/01/2023: Corn, silage

Crop: Corn, silage      Acres planted: 71      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 (%)
10/15/2023	1,346.60 ton	Dry-weight		71.5	13,500.00	2,200.00	18,600.00		5.60

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	25.00	350.00	62.50	165.00	25.00
Total actual harvest content	18.97	145.94	23.78	201.08	605.40

**Field 5**

Field name: Field 5

12/15/2022: Triticale, boot stage

Crop: Triticale, boot stage      Acres planted: 80      Plant date: 12/15/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/15/2023	1,820.74 ton	Dry-weight		62.0	21,000.00	3,700.00	25,700.00		11.50

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	20.00	420.00	74.00	52.00	20.00
Total actual harvest content	22.76	363.24	64.00	444.53	1,989.16

06/01/2023: Corn, silage

Crop: Corn, silage      Acres planted: 80      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 (%)
10/15/2023	1,973.87 ton	Dry-weight		71.5	13,500.00	2,200.00	18,600.00		5.60

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	25.00	350.00	62.50	165.00	25.00
Total actual harvest content	24.67	189.86	30.94	261.59	787.57

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**Field 6**

Field name: Field 6

12/15/2022: Triticale, boot stage

Crop: Triticale, boot stage      Acres planted: 78      Plant date: 12/15/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/15/2023	1,540.90 ton	Dry-weight		62.0	21,000.00	3,700.00	25,700.00		11.50

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	20.00	420.00	74.00	52.00	20.00
Total actual harvest content	19.76	315.29	55.55	385.86	1,726.60

06/01/2023: Corn, silage

Crop: Corn, silage      Acres planted: 78      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 (%)
10/15/2023	1,683.23 ton	Dry-weight		71.5	13,500.00	2,200.00	18,600.00		5.60

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	25.00	350.00	62.50	165.00	25.00
Total actual harvest content	21.58	166.06	27.06	228.79	688.83

**Field 7**

Field name: Field 7

12/15/2022: Triticale, boot stage

Crop: Triticale, boot stage      Acres planted: 13      Plant date: 12/15/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/15/2023	331.88 ton	Dry-weight		62.0	21,000.00	3,700.00	25,700.00		11.50

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	20.00	420.00	74.00	52.00	20.00
Total actual harvest content	25.53	407.45	71.79	498.64	2,231.25

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**Field 7**

06/01/2023: Corn, silage

Crop: Corn, silage      Acres planted: 13      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 (%)
10/15/2023	301.89 ton	Dry-weight		71.5	13,500.00	2,200.00	18,600.00		5.60

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	25.00	350.00	62.50	165.00	25.00
Total actual harvest content	23.22	178.70	29.12	246.20	741.26

**Field 9**

Field name: Field 9

12/15/2022: Triticale, boot stage

Crop: Triticale, boot stage      Acres planted: 11      Plant date: 12/15/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/15/2023	368.38 ton	Dry-weight		62.0	21,000.00	3,700.00	25,700.00		11.50

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	20.00	420.00	74.00	52.00	20.00
Total actual harvest content	33.49	534.49	94.17	654.11	2,926.95

06/01/2023: Corn, silage

Crop: Corn, silage      Acres planted: 11      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 (%)
10/15/2023	351.25 ton	Dry-weight		71.5	13,500.00	2,200.00	18,600.00		5.60

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	30.00	420.00	75.00	198.00	30.00
Total actual harvest content	31.93	245.72	40.04	338.54	1,019.26

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

Field 1 - 12/15/2022: Triticale, soft dough

Field name: Field 1

Crop: Triticale, soft dough Plant date: 12/15/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
11/30/2022	Broadcast/incorporate	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
corrals	Corral solids	60.72	31.29	114.74	428.41	350.00 ton
Application event totals		60.72	31.29	114.74	428.41	
01/15/2023	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
lagoon	Process wastewater	185.69	46.77	236.53	1,521.09	3,964,484.00 gal
canal water	Surface water	0.10	0.00	0.00	84.57	9,928,968.00 gal
Application event totals		185.78	46.77	236.53	1,605.66	
04/10/2023	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 water	Surface water	0.08	0.00	0.00	73.17	8,590,060.00 gal
Application event totals		0.08	0.00	0.00	73.17	
12/01/2023	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 water	Surface water	0.07	0.00	0.00	65.49	7,689,280.00 gal
Application event totals		0.07	0.00	0.00	65.49	

Field 1 - 06/01/2023: Corn, silage

Field name: Field 1

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

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

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Field 1 - 06/01/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
05/20/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
lagoon	Process wastewater	115.05	29.55	167.90	1,091.75	3,924,796.00 gal
canal water	Surface water	0.09	0.00	0.00	83.58	9,811,990.00 gal
Application event totals		115.14	29.55	167.90	1,175.32	
05/17/2023	Broadcast/incorporate	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
corrals	Corral solids	20.18	11.80	58.44	218.90	150.00 ton
Application event totals		20.18	11.80	58.44	218.90	
06/20/2023	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 water	Surface water	0.11	0.00	0.00	94.59	11,104,952.00 gal
Application event totals		0.11	0.00	0.00	94.59	
07/15/2023	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
canal water	Surface water	0.11	0.00	0.00	100.61	11,811,990.00 gal
Application event totals		0.11	0.00	0.00	100.61	
08/15/2023	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
Liquid Nitrogen	Liquid commercial fertilizer	30.00	0.00	0.00	0.00	
canal water	Surface water	0.10	0.00	0.00	90.20	10,590,060.00 gal
Application event totals		30.10	0.00	0.00	90.20	
09/05/2023	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 water	Surface water	0.11	0.00	0.00	100.61	11,811,990.00 gal
Application event totals		0.11	0.00	0.00	100.61	

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**Field 1 - 06/01/2023: Corn, silage**

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
09/20/2023	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
canal water	Surface water	0.11	0.00	0.00	100.61	11,811,990.00 gal
Application event totals		0.11	0.00	0.00	100.61	

**Field 2 - 12/15/2022: Triticale, boot stage**

Field name: Field 2

Crop: Triticale, boot stage

Plant date: 12/15/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
11/30/2022	Broadcast/incorporate	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
corrals	Corral solids	64.12	37.51	185.71	695.67	400.00 ton
Application event totals		64.12	37.51	185.71	695.67	
12/01/2022	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
canal water	Surface water	0.11	0.00	0.00	97.35	9,590,060.00 gal
Application event totals		0.11	0.00	0.00	97.35	
01/16/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
lagoon	Process wastewater	332.93	83.86	424.09	2,727.30	5,964,434.00 gal
canal water	Surface water	0.05	0.00	0.00	41.67	4,104,952.00 gal
Application event totals		332.98	83.86	424.09	2,768.97	
04/10/2023	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
canal water	Surface water	0.09	0.00	0.00	80.49	7,928,968.00 gal
Application event totals		0.09	0.00	0.00	80.49	

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Field 2 - 06/01/2023: Corn, silage

Field name: Field 2

Crop: Corn, silage

Plant date: 06/01/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
05/20/2023	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
canal water	Surface water	0.12	0.00	0.00	107.50	10,590,060.00 gal
Application event totals		0.12	0.00	0.00	107.50	
06/20/2023	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
lagoon	Process wastewater	187.80	47.31	239.22	1,538.42	3,364,434.00 gal
canal water	Surface water	0.06	0.00	0.00	51.82	5,104,952.00 gal
Application event totals		187.86	47.31	239.22	1,590.24	
07/15/2023	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
canal water	Surface water	0.10	0.00	0.00	88.21	8,689,280.00 gal
Application event totals		0.10	0.00	0.00	88.21	
08/16/2023	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
Liquid Nitrogen	Other liquid nutrient source	30.00	0.00	0.00	0.00	
canal water	Surface water	0.10	0.00	0.00	88.21	8,689,280.00 gal
Application event totals		30.10	0.00	0.00	88.21	
09/05/2023	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 water	Surface water	0.12	0.00	0.00	107.50	10,590,060.00 gal
Application event totals		0.12	0.00	0.00	107.50	

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**Field 2 - 06/01/2023: Corn, silage**

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
09/20/2023	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
canal water	Surface water	0.12	0.00	0.00	107.50	10,590,060.00 gal
Application event totals		0.12	0.00	0.00	107.50	

**Field 3 - 12/15/2022: Triticale, boot stage**

Field name: Field 3

Crop: Triticale, boot stage

Plant date: 12/15/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
11/29/2022	Broadcast/incorporate	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
corrals	Corral solids	61.59	36.03	178.38	668.21	500.00 ton
Application event totals		61.59	36.03	178.38	668.21	
12/01/2022	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
canal water	Surface water	0.11	0.00	0.00	96.84	12,414,809.00 gal
Application event totals		0.11	0.00	0.00	96.84	
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
lagoon	Process wastewater	304.75	76.77	388.20	2,496.46	7,104,952.00 gal
Application event totals		304.75	76.77	388.20	2,496.46	
04/09/2023	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 water	Surface water	0.07	0.00	0.00	61.85	7,928,968.00 gal
Application event totals		0.07	0.00	0.00	61.85	

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Field 3 - 06/01/2023: Corn, silage

Field name: Field 3

Crop: Corn, silage

Plant date: 06/01/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
05/20/2023	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
canal water	Surface water	0.11	0.00	0.00	99.55	12,762,380.00 gal
Application event totals		0.11	0.00	0.00	99.55	
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
lagoon	Process wastewater	171.79	43.27	218.82	1,407.21	4,004,952.00 gal
canal water	Surface water	0.09	0.00	0.00	82.61	10,590,060.00 gal
Application event totals		171.88	43.27	218.82	1,489.82	
07/16/2023	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
canal water	Surface water	0.08	0.00	0.00	67.78	8,689,280.00 gal
Application event totals		0.08	0.00	0.00	67.78	
08/14/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Liquid Nitrogen	Liquid commercial fertilizer	30.00	0.00	0.00	0.00	
canal water	Surface water	0.11	0.00	0.00	96.84	12,414,809.00 gal
Application event totals		30.11	0.00	0.00	96.84	
09/05/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
canal water	Surface water	0.09	0.00	0.00	82.61	10,590,060.00 gal
Application event totals		0.09	0.00	0.00	82.61	

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**Field 3 - 06/01/2023: Corn, silage**

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
09/20/2023	Subsurface (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 water	Surface water	0.11	0.00	0.00	99.55	12,762,380.00 gal
Application event totals		0.11	0.00	0.00	99.55	

**Field 4 - 12/15/2022: Triticale, boot stage**

Field name: Field 4

Crop: Triticale, boot stage

Plant date: 12/15/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
11/30/2022	Broadcast/incorporate	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
corrals	Corral solids	74.41	38.34	140.60	524.95	350.00 ton
Application event totals		74.41	38.34	140.60	524.95	
12/02/2022	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
canal water	Surface water	0.09	0.00	0.00	80.49	7,711,736.00 gal
Application event totals		0.09	0.00	0.00	80.49	
01/12/2023	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	232.78	58.63	296.51	1,906.83	4,055,868.00 gal
canal water	Surface water	0.06	0.00	0.00	53.28	5,104,952.00 gal
Application event totals		232.84	58.63	296.51	1,960.11	
04/11/2023	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
canal water	Surface water	0.09	0.00	0.00	80.49	7,711,736.00 gal
Application event totals		0.09	0.00	0.00	80.49	

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Field 4 - 06/01/2023: Corn, silage

Field name: Field 4

Crop: Corn, silage

Plant date: 06/01/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
05/19/2023	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 water	Surface water	0.11	0.00	0.00	100.61	9,639,670.00 gal
Application event totals		0.11	0.00	0.00	100.61	
06/19/2023	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
lagoon	Process wastewater	136.85	34.47	174.32	1,121.04	2,384,484.00 gal
canal water	Surface water	0.07	0.00	0.00	60.37	5,783,802.00 gal
Application event totals		136.92	34.47	174.32	1,181.41	
07/14/2023	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 water	Surface water	0.11	0.00	0.00	98.63	9,449,592.00 gal
Application event totals		0.11	0.00	0.00	98.63	
08/17/2023	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
Liquid Nitrogen	Liquid commercial fertilizer	30.00	0.00	0.00	0.00	
canal water	Surface water	0.11	0.00	0.00	100.09	9,590,060.00 gal
Application event totals		30.11	0.00	0.00	100.09	
09/06/2023	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 water	Surface water	0.11	0.00	0.00	100.09	9,590,060.00 gal
Application event totals		0.11	0.00	0.00	100.09	

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**Field 4 - 06/01/2023: Corn, silage**

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
09/20/2023	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
canal water	Surface water	0.10	0.00	0.00	90.69	8,689,280.00 gal
Application event totals		0.10	0.00	0.00	90.69	

**Field 5 - 12/15/2022: Triticale, boot stage**

Field name: Field 5

Crop: Triticale, boot stage

Plant date: 12/15/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
11/28/2022	Broadcast/incorporate	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
corrals	Corral solids	75.47	38.89	142.60	532.45	400.00 ton
Application event totals		75.47	38.89	142.60	532.45	
12/01/2022	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
canal water	Surface water	0.09	0.00	0.00	80.49	8,689,280.00 gal
Application event totals		0.09	0.00	0.00	80.49	
01/11/2023	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	271.68	68.43	346.07	2,225.52	5,333,778.00 gal
canal water	Surface water	0.05	0.00	0.00	47.29	5,104,952.00 gal
Application event totals		271.73	68.43	346.07	2,272.81	
04/10/2023	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
canal water	Surface water	0.07	0.00	0.00	60.22	6,500,668.00 gal
Application event totals		0.07	0.00	0.00	60.22	

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Field 5 - 06/01/2023: Corn, silage

Field name: Field 5

Crop: Corn, silage

Plant date: 06/01/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
05/20/2023	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
canal water	Surface water	0.13	0.00	0.00	118.22	12,762,380.00 gal
Application event totals		0.13	0.00	0.00	118.22	
06/20/2023	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
lagoon	Process wastewater	185.43	46.71	236.20	1,518.97	3,640,434.00 gal
canal water	Surface water	0.09	0.00	0.00	80.49	8,689,280.00 gal
Application event totals		185.52	46.71	236.20	1,599.46	
07/15/2023	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
canal water	Surface water	0.10	0.00	0.00	88.83	9,590,060.00 gal
Application event totals		0.10	0.00	0.00	88.83	
08/15/2023	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
Liquid Nitrogen	Liquid commercial fertilizer	30.00	0.00	0.00	0.00	
canal water	Surface water	0.10	0.00	0.00	88.83	9,590,060.00 gal
Application event totals		30.10	0.00	0.00	88.83	
09/06/2023	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 water	Surface water	0.09	0.00	0.00	83.02	8,962,380.00 gal
Application event totals		0.09	0.00	0.00	83.02	

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**Field 5 - 06/01/2023: Corn, silage**

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
09/20/2023	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
canal water	Surface water	0.09	0.00	0.00	83.68	9,033,920.00 gal
Application event totals		0.09	0.00	0.00	83.68	

**Field 6 - 12/15/2022: Triticale, boot stage**

Field name: Field 6

Crop: Triticale, boot stage

Plant date: 12/15/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
12/01/2022	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
canal water	Surface water	0.11	0.00	0.00	95.86	10,090,060.00 gal
Application event totals		0.11	0.00	0.00	95.86	
01/11/2023	Pipeline	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
lagoon	Process wastewater	314.73	79.28	400.90	2,578.14	6,024,423.00 gal
canal water	Surface water	0.05	0.00	0.00	48.50	5,104,952.00 gal
Application event totals		314.78	79.28	400.90	2,626.64	
04/10/2023	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 water	Surface water	0.04	0.00	0.00	37.66	3,964,484.00 gal
Application event totals		0.04	0.00	0.00	37.66	

**Field 6 - 06/01/2023: Corn, silage**

Field name: Field 6

Crop: Corn, silage

Plant date: 06/01/2023

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Field 6 - 06/01/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
05/20/2023	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
canal water	Surface water	0.12	0.00	0.00	110.11	11,590,060.00 gal
Application event totals		0.12	0.00	0.00	110.11	
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
lagoon	Process wastewater	160.90	40.53	204.96	1,318.08	3,080,000.00 gal
Application event totals		160.90	40.53	204.96	1,318.08	
07/16/2023	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
canal water	Surface water	0.12	0.00	0.00	110.11	11,590,060.00 gal
Application event totals		0.12	0.00	0.00	110.11	
08/16/2023	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
Liquid Nitrogen	Liquid commercial fertilizer	30.00	0.00	0.00	0.00	
canal water	Surface water	0.11	0.00	0.00	100.61	10,590,060.00 gal
Application event totals		30.11	0.00	0.00	100.61	
09/06/2023	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
canal water	Surface water	0.11	0.00	0.00	100.61	10,590,060.00 gal
Application event totals		0.11	0.00	0.00	100.61	
09/19/2023	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 water	Surface water	0.11	0.00	0.00	100.61	10,590,060.00 gal
Application event totals		0.11	0.00	0.00	100.61	

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## Field 7 - 12/15/2022: Triticale, boot stage

Field name: Field 7Crop: Triticale, boot stagePlant date: 12/15/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
11/30/2022	Broadcast/incorporate	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
corrals	Corral solids	63.01	36.86	182.50	683.63	70.00 ton
Application event totals		63.01	36.86	182.50	683.63	
12/01/2022	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 water	Surface water	0.06	0.00	0.00	57.29	1,005,010.00 gal
Application event totals		0.06	0.00	0.00	57.29	
01/13/2023	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
lagoon	Process wastewater	283.99	71.53	361.75	2,326.34	906,004.00 gal
canal water	Surface water	0.07	0.00	0.00	60.37	1,059,006.00 gal
Application event totals		284.06	71.53	361.75	2,386.71	
04/10/2023	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 water	Surface water	0.07	0.00	0.00	60.71	1,065,010.00 gal
Application event totals		0.07	0.00	0.00	60.71	

## Field 7 - 06/01/2023: Corn, silage

Field name: Field 7Crop: Corn, silagePlant date: 06/01/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
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Field 7 - 06/01/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
05/20/2023	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
canal water	Surface water	0.11	0.00	0.00	100.61	1,765,010.00 gal
Application event totals		0.11	0.00	0.00	100.61	
06/22/2023	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	174.28	43.90	222.00	1,427.65	556,004.00 gal
canal water	Surface water	0.07	0.00	0.00	60.37	1,059,006.00 gal
Application event totals		174.35	43.90	222.00	1,488.01	
07/16/2023	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
canal water	Surface water	0.11	0.00	0.00	100.61	1,765,010.00 gal
Application event totals		0.11	0.00	0.00	100.61	
08/17/2023	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
Liquid Nitrogen	Liquid commercial fertilizer	30.00	0.00	0.00	0.00	
canal water	Surface water	0.12	0.00	0.00	102.89	1,804,952.00 gal
Application event totals		30.12	0.00	0.00	102.89	
09/06/2023	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
canal water	Surface water	0.07	0.00	0.00	60.71	1,065,010.00 gal
Application event totals		0.07	0.00	0.00	60.71	
09/19/2023	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 water	Surface water	0.11	0.00	0.00	100.61	1,765,010.00 gal
Application event totals		0.11	0.00	0.00	100.61	

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## Field 9 - 12/15/2022: Triticale, boot stage

Field name: Field 9Crop: Triticale, boot stagePlant date: 12/15/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
11/30/2022	Broadcast/incorporate	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
corrals	Corral solids	164.66	84.86	311.14	1,161.71	120.00 ton
Application event totals		164.66	84.86	311.14	1,161.71	
12/01/2022	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 water	Surface water	0.12	0.00	0.00	108.33	1,608,000.00 gal
Application event totals		0.12	0.00	0.00	108.33	
01/13/2023	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 water	Surface water	0.08	0.00	0.00	67.42	1,000,800.00 gal
Application event totals		0.08	0.00	0.00	67.42	
04/10/2023	Broadcast/incorporate	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 water	Surface water	0.07	0.00	0.00	60.66	900,450.00 gal
Application event totals		0.07	0.00	0.00	60.66	

## Field 9 - 06/01/2023: Corn, silage

Field name: Field 9Crop: Corn, silagePlant date: 06/01/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
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Reporting period 01/01/2023 to 12/31/2023.

Field 9 - 06/01/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
05/19/2023	Broadcast/incorporate	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
corrals	Corral solids	96.05	49.50	181.50	677.66	70.00 ton
Application event totals		96.05	49.50	181.50	677.66	
05/20/2023	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
canal water	Surface water	0.12	0.00	0.00	108.55	1,611,360.00 gal
Application event totals		0.12	0.00	0.00	108.55	
06/22/2023	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
canal water	Surface water	0.12	0.00	0.00	108.55	1,611,350.00 gal
Application event totals		0.12	0.00	0.00	108.55	
07/16/2023	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
canal water	Surface water	0.12	0.00	0.00	108.55	1,611,350.00 gal
Application event totals		0.12	0.00	0.00	108.55	
08/20/2023	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
Liquid Nitrogen	Liquid commercial fertilizer	30.00	0.00	0.00	0.00	
canal water	Surface water	0.11	0.00	0.00	95.91	1,423,756.00 gal
Application event totals		30.11	0.00	0.00	95.91	
09/06/2023	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
canal water	Surface water	0.10	0.00	0.00	88.34	1,311,350.00 gal
Application event totals		0.10	0.00	0.00	88.34	

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

Field 9 - 06/01/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
09/19/2023	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 water	Surface water	0.10	0.00	0.00	88.39	1,312,008.00 gal
Application event totals		0.10	0.00	0.00	88.39	

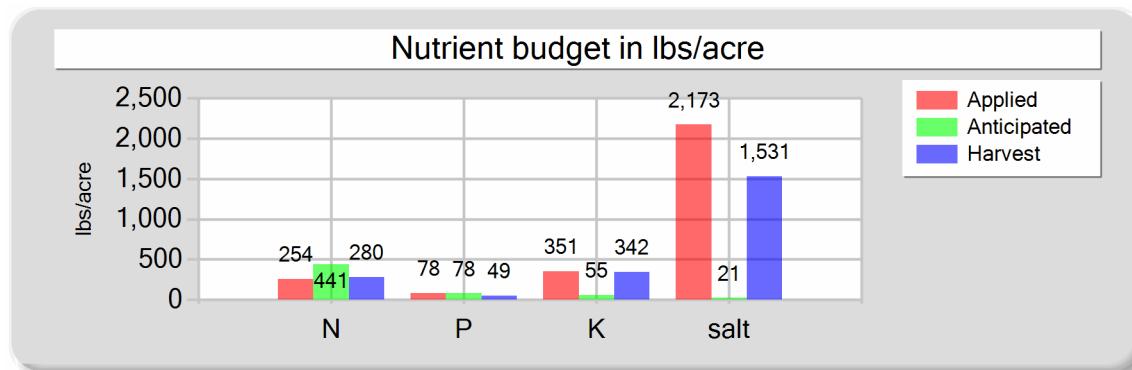
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Reporting period 01/01/2023 to 12/31/2023.

**B. NUTRIENT BUDGET**

Field 1 - 12/15/2022: Triticale, soft dough

Field name: Field 1	Crop: Triticale, soft dough	Plant date: 12/15/2022
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	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	60.72	31.29	114.74	428.41
Process wastewater	185.69	46.77	236.53	1,521.09
Fresh water	0.25	0.00	0.00	223.23
Atmospheric deposition	7.00	0.00	0.00	0.00
<b>Total nutrients applied</b>	<b>253.66</b>	<b>78.07</b>	<b>351.27</b>	<b>2,172.73</b>
Anticipated crop nutrient removal	441.00	77.70	54.60	21.00
Actual crop nutrient removal	279.63	49.27	342.21	1,531.31
Nutrient balance	-25.97	28.80	9.05	641.42
Applied to removed ratio	0.91	1.58	1.03	1.42

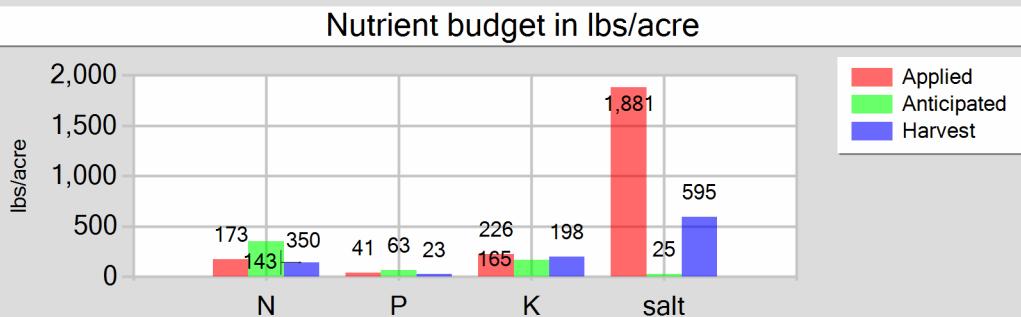
Fresh water applied
26,208,308.00 gallons
965.16 acre-inches
11.09 inches/acre
Process wastewater applied
3,964,484.00 gallons
146.00 acre-inches
1.68 inches/acre
Total harvests for the crop
1 harvests

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

Field 1 - 06/01/2023: Corn, silage

Field name: Field 1      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	30.00	0.00	0.00	0.00
Dry manure	20.18	11.80	58.44	218.90
Process wastewater	115.05	29.55	167.90	1,091.75
Fresh water	0.64	0.00	0.00	570.20
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	172.87	41.35	226.34	1,880.84
Anticipated crop nutrient removal	350.00	62.50	165.00	25.00
Actual crop nutrient removal	143.40	23.37	197.57	594.83
Nutrient balance	29.47	17.99	28.77	1,286.01
Applied to removed ratio	1.21	1.77	1.15	3.16

**Fresh water applied**  
66,942,972.00 gallons  
2,465.28 acre-inches  
28.34 inches/acre

**Process wastewater applied**  
3,924,796.00 gallons  
144.54 acre-inches  
1.66 inches/acre

**Total harvests for the crop**  
1 harvests

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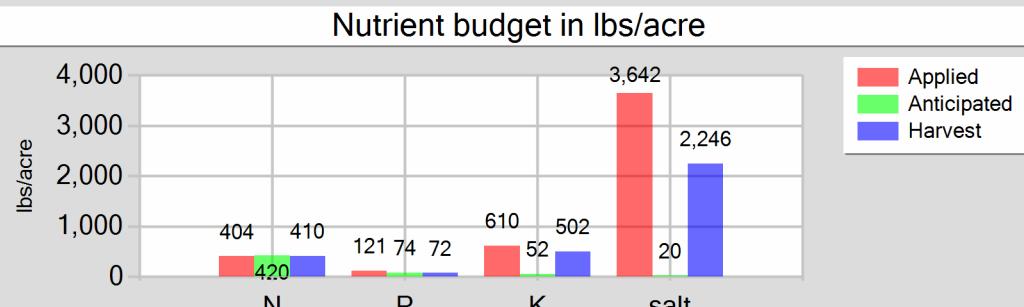
Reporting period 01/01/2023 to 12/31/2023.

Field 2 - 12/15/2022: Triticale, boot stage

Field name: Field 2

Crop: Triticale, boot stage

Plant date: 12/15/2022



	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	64.12	37.51	185.71	695.67
Process wastewater	332.93	83.86	424.09	2,727.30
Fresh water	0.25	0.00	0.00	219.51
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	404.30	121.37	609.81	3,642.48
Anticipated crop nutrient removal	420.00	74.00	52.00	20.00
Actual crop nutrient removal	410.21	72.28	502.02	2,246.40
Nutrient balance	-5.91	49.09	107.79	1,396.08
Applied to removed ratio	0.99	1.68	1.21	1.62

**Fresh water applied**  
21,623,980.00 gallons  
796.34 acre-inches  
10.91 inches/acre

**Process wastewater applied**  
5,964,434.00 gallons  
219.65 acre-inches  
3.01 inches/acre

**Total harvests for the crop**  
1 harvests

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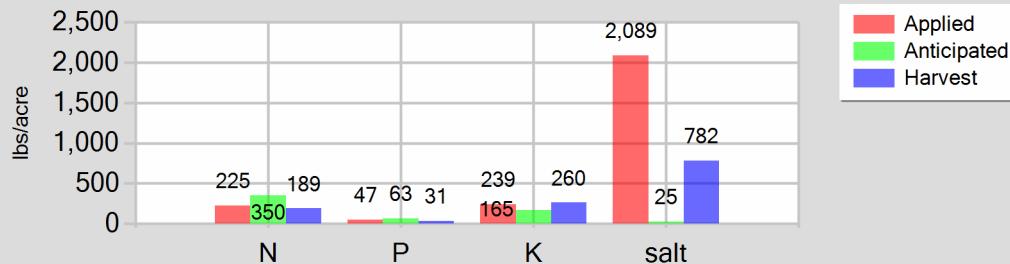
Field 2 - 06/01/2023: Corn, silage

Field name: Field 2

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	30.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	187.80	47.31	239.22	1,538.42
Fresh water	0.62	0.00	0.00	550.74
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	225.42	47.31	239.22	2,089.16
Anticipated crop nutrient removal	350.00	62.50	165.00	25.00
Actual crop nutrient removal	188.59	30.73	259.83	782.28
Nutrient balance	36.84	16.57	-20.60	1,306.88
Applied to removed ratio	1.20	1.54	0.92	2.67

**Fresh water applied**

54,253,692.00 gallons  
1,997.98 acre-inches  
27.37 inches/acre

**Process wastewater applied**

3,364,434.00 gallons  
123.90 acre-inches  
1.70 inches/acre

**Total harvests for the crop**

1 harvests

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

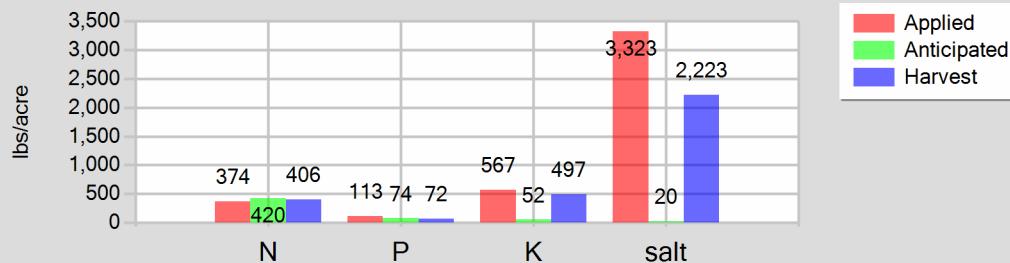
Field 3 - 12/15/2022: Triticale, boot stage

Field name: Field 3

Crop: Triticale, boot stage

Plant date: 12/15/2022

**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	61.59	36.03	178.38	668.21
Process wastewater	304.75	76.77	388.20	2,496.46
Fresh water	0.18	0.00	0.00	158.69
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	373.53	112.79	566.58	3,323.36
Anticipated crop nutrient removal	420.00	74.00	52.00	20.00
Actual crop nutrient removal	405.91	71.52	496.76	2,222.85
Nutrient balance	-32.39	41.27	69.82	1,100.51
Applied to removed ratio	0.92	1.58	1.14	1.50

**Fresh water applied**

20,343,777.00 gallons  
749.19 acre-inches  
7.89 inches/acre

**Process wastewater applied**

7,104,952.00 gallons  
261.65 acre-inches  
2.75 inches/acre

**Total harvests for the crop**

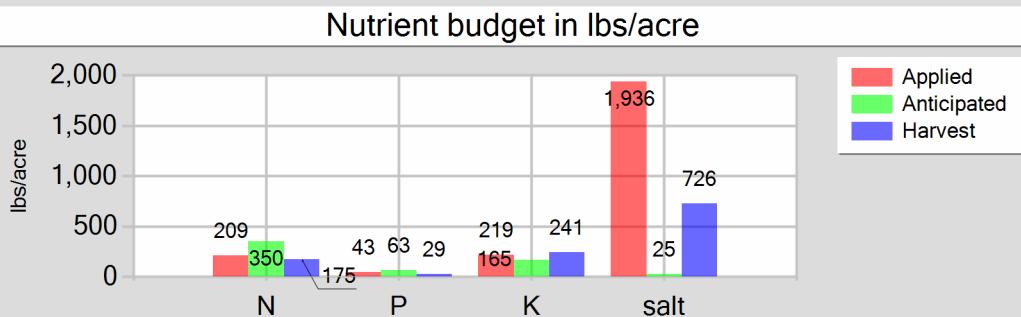
1 harvests

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Field 3 - 06/01/2023: Corn, silage

Field name: Field 3      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	30.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	171.79	43.27	218.82	1,407.21
Fresh water	0.60	0.00	0.00	528.94
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	209.38	43.27	218.82	1,936.15
Anticipated crop nutrient removal	350.00	62.50	165.00	25.00
Actual crop nutrient removal	175.08	28.53	241.22	726.26
Nutrient balance	34.30	14.74	-22.40	1,209.89
Applied to removed ratio	1.20	1.52	0.91	2.67

**Fresh water applied**

67,808,969.00 gallons
2,497.17 acre-inches
26.29 inches/acre

**Process wastewater applied**

4,004,952.00 gallons
147.49 acre-inches
1.55 inches/acre

**Total harvests for the crop**

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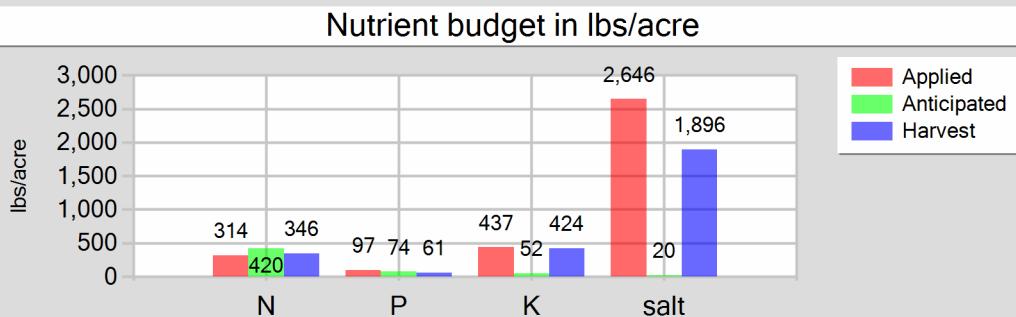
Reporting period 01/01/2023 to 12/31/2023.

Field 4 - 12/15/2022: Triticale, boot stage

Field name: Field 4

Crop: Triticale, boot stage

Plant date: 12/15/2022



	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	74.41	38.34	140.60	524.95
Process wastewater	232.78	58.63	296.51	1,906.83
Fresh water	0.24	0.00	0.00	214.26
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	314.42	96.98	437.11	2,646.04
Anticipated crop nutrient removal	420.00	74.00	52.00	20.00
Actual crop nutrient removal	346.18	60.99	423.66	1,895.76
Nutrient balance	-31.76	35.99	13.45	750.28
Applied to removed ratio	0.91	1.59	1.03	1.40

**Fresh water applied**

20,528,424.00 gallons
755.99 acre-inches
10.65 inches/acre

**Process wastewater applied**

4,055,868.00 gallons
149.36 acre-inches
2.10 inches/acre

**Total harvests for the crop**

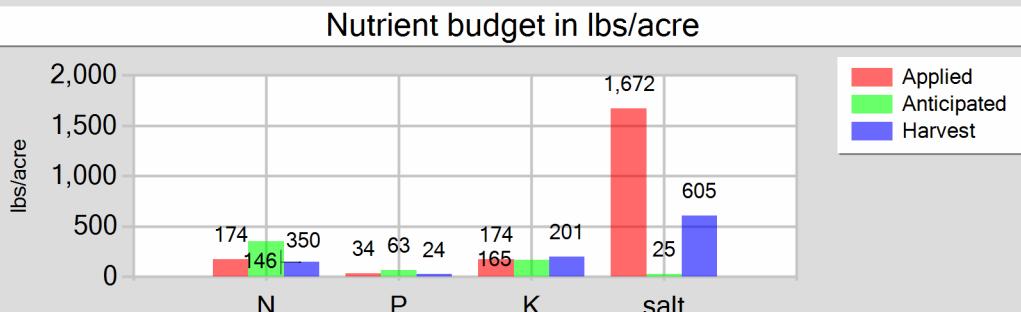
1 harvests
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Reporting period 01/01/2023 to 12/31/2023.

Field 4 - 06/01/2023: Corn, silage

Field name: Field 4      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	30.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	136.85	34.47	174.32	1,121.04
Fresh water	0.62	0.00	0.00	550.48
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	174.47	34.47	174.32	1,671.52
Anticipated crop nutrient removal	350.00	62.50	165.00	25.00
Actual crop nutrient removal	145.94	23.78	201.08	605.40
Nutrient balance	28.53	10.69	-26.76	1,066.12
Applied to removed ratio	1.20	1.45	0.87	2.76

**Fresh water applied**  
52,742,464.00 gallons  
1,942.33 acre-inches  
27.36 inches/acre

**Process wastewater applied**  
2,384,484.00 gallons  
87.81 acre-inches  
1.24 inches/acre

**Total harvests for the crop**  
1 harvests

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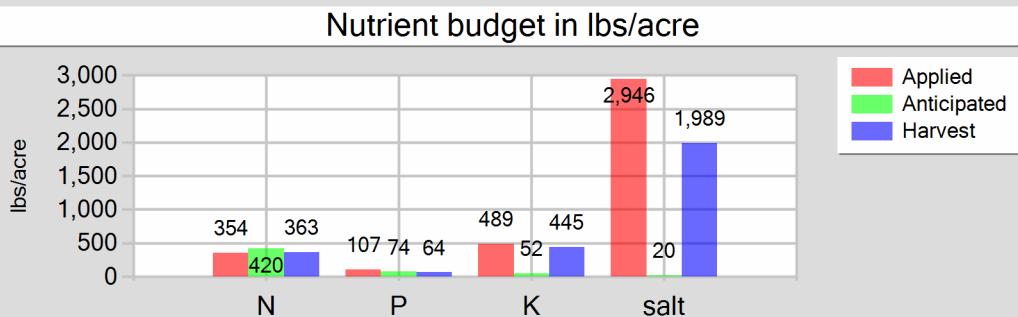
Reporting period 01/01/2023 to 12/31/2023.

Field 5 - 12/15/2022: Triticale, boot stage

Field name: Field 5

Crop: Triticale, boot stage

Plant date: 12/15/2022



	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	75.47	38.89	142.60	532.45
Process wastewater	271.68	68.43	346.07	2,225.52
Fresh water	0.21	0.00	0.00	187.99
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	354.36	107.33	488.67	2,945.96
Anticipated crop nutrient removal	420.00	74.00	52.00	20.00
Actual crop nutrient removal	363.24	64.00	444.53	1,989.16
Nutrient balance	-8.88	43.33	44.14	956.80
Applied to removed ratio	0.98	1.68	1.10	1.48

**Fresh water applied**

20,294,900.00 gallons  
747.39 acre-inches  
9.34 inches/acre

**Process wastewater applied**

5,333,778.00 gallons  
196.42 acre-inches  
2.46 inches/acre

**Total harvests for the crop**

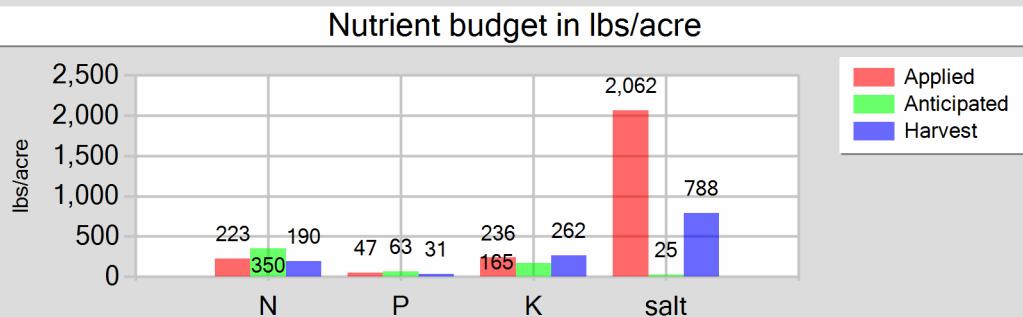
1 harvests

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

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

Field 5 - 06/01/2023: Corn, silage

Field name: Field 5      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	30.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	185.43	46.71	236.20	1,518.97
Fresh water	0.61	0.00	0.00	543.07
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	223.04	46.71	236.20	2,062.04
Anticipated crop nutrient removal	350.00	62.50	165.00	25.00
Actual crop nutrient removal	189.86	30.94	261.59	787.57
Nutrient balance	33.18	15.77	-25.39	1,274.47
Applied to removed ratio	1.17	1.51	0.90	2.62

**Fresh water applied**

58,628,080.00 gallons
2,159.07 acre-inches
26.99 inches/acre

**Process wastewater applied**

3,640,434.00 gallons
134.06 acre-inches
1.68 inches/acre

**Total harvests for the crop**

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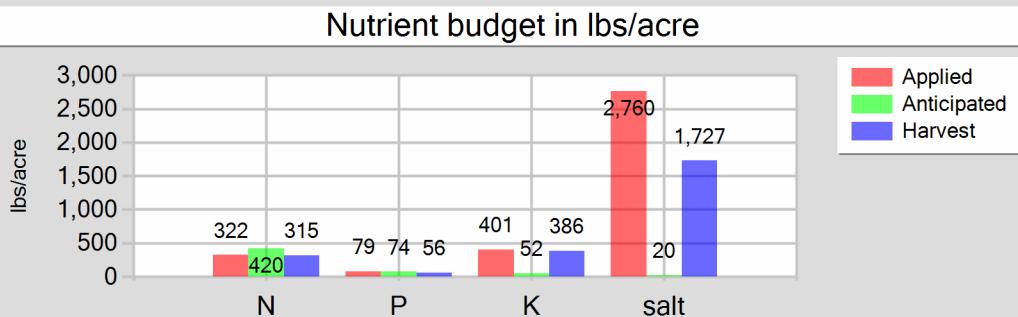
Reporting period 01/01/2023 to 12/31/2023.

Field 6 - 12/15/2022: Triticale, boot stage

Field name: Field 6

Crop: Triticale, boot stage

Plant date: 12/15/2022



	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	314.73	79.28	400.90	2,578.14
Fresh water	0.20	0.00	0.00	182.02
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	321.93	79.28	400.90	2,760.17
Anticipated crop nutrient removal	420.00	74.00	52.00	20.00
Actual crop nutrient removal	315.29	55.55	385.86	1,726.60
Nutrient balance	6.64	23.73	15.04	1,033.57
Applied to removed ratio	1.02	1.43	1.04	1.60

**Fresh water applied**

19,159,496.00 gallons  
705.58 acre-inches  
9.05 inches/acre

**Process wastewater applied**

6,024,423.00 gallons  
221.86 acre-inches  
2.84 inches/acre

**Total harvests for the crop**

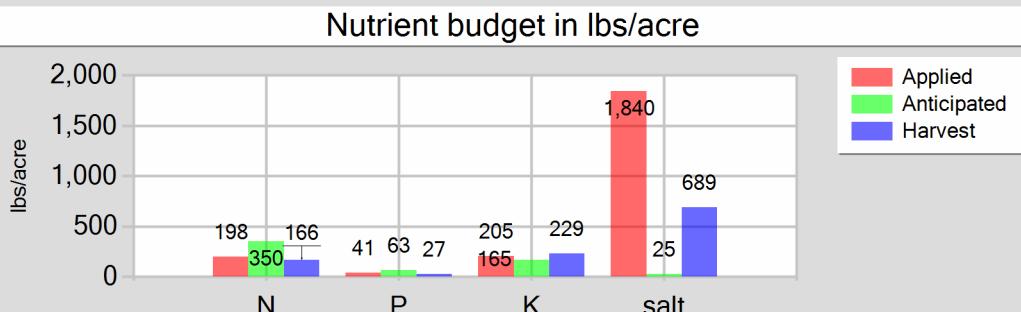
1 harvests

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

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

Field 6 - 06/01/2023: Corn, silage

Field name: Field 6      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	30.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	160.90	40.53	204.96	1,318.08
Fresh water	0.59	0.00	0.00	522.05
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	198.49	40.53	204.96	1,840.14
Anticipated crop nutrient removal	350.00	62.50	165.00	25.00
Actual crop nutrient removal	166.06	27.06	228.79	688.83
Nutrient balance	32.44	13.47	-23.83	1,151.31
Applied to removed ratio	1.20	1.50	0.90	2.67

**Fresh water applied**  
 54,950,300.00 gallons  
 2,023.63 acre-inches  
 25.94 inches/acre

**Process wastewater applied**  
 3,080,000.00 gallons  
 113.43 acre-inches  
 1.45 inches/acre

**Total harvests for the crop**  
 1 harvests

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

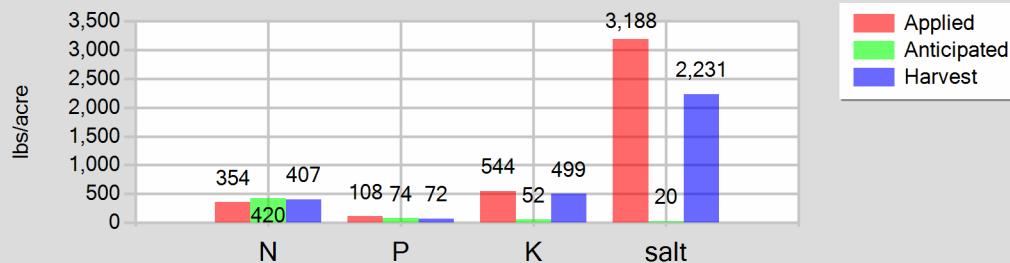
Field 7 - 12/15/2022: Triticale, boot stage

Field name: Field 7

Crop: Triticale, boot stage

Plant date: 12/15/2022

**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	63.01	36.86	182.50	683.63
Process wastewater	283.99	71.53	361.75	2,326.34
Fresh water	0.20	0.00	0.00	178.36
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	354.20	108.39	544.25	3,188.33
Anticipated crop nutrient removal	420.00	74.00	52.00	20.00
Actual crop nutrient removal	407.45	71.79	498.64	2,231.25
Nutrient balance	-53.24	36.60	45.61	957.08
Applied to removed ratio	0.87	1.51	1.09	1.43

**Fresh water applied**

3,129,026.00 gallons  
115.23 acre-inches  
8.86 inches/acre

**Process wastewater applied**

906,004.00 gallons  
33.37 acre-inches  
2.57 inches/acre

**Total harvests for the crop**

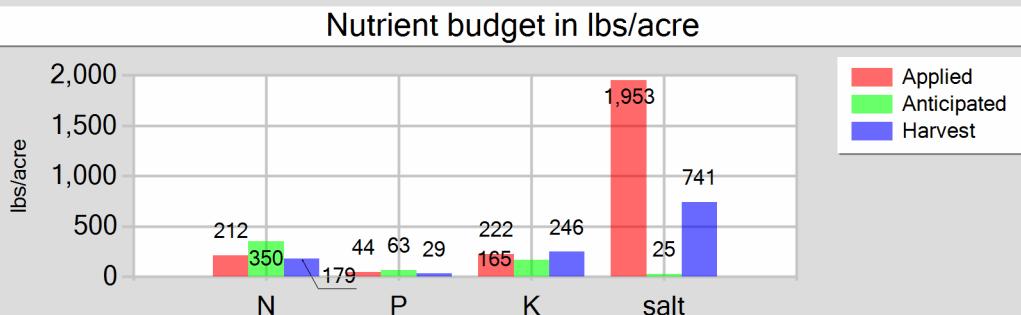
1 harvests

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

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

Field 7 - 06/01/2023: Corn, silage

Field name: Field 7      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	30.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	174.28	43.90	222.00	1,427.65
Fresh water	0.59	0.00	0.00	525.79
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	211.87	43.90	222.00	1,953.44
Anticipated crop nutrient removal	350.00	62.50	165.00	25.00
Actual crop nutrient removal	178.70	29.12	246.20	741.26
Nutrient balance	33.18	14.78	-24.20	1,212.18
Applied to removed ratio	1.19	1.51	0.90	2.64

**Fresh water applied**  
9,223,998.00 gallons  
339.69 acre-inches  
26.13 inches/acre

**Process wastewater applied**  
556,004.00 gallons  
20.48 acre-inches  
1.58 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.

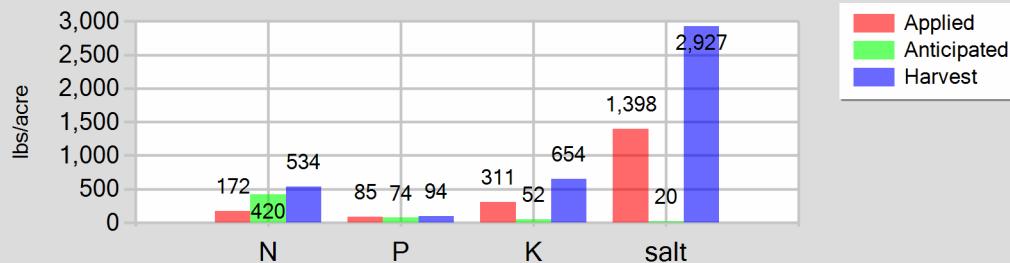
Field 9 - 12/15/2022: Triticale, boot stage

Field name: Field 9

Crop: Triticale, boot stage

Plant date: 12/15/2022

**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	164.66	84.86	311.14	1,161.71
Process wastewater	0.00	0.00	0.00	0.00
Fresh water	0.27	0.00	0.00	236.41
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	171.93	84.86	311.14	1,398.12
Anticipated crop nutrient removal	420.00	74.00	52.00	20.00
Actual crop nutrient removal	534.49	94.17	654.11	2,926.95
Nutrient balance	-362.56	-9.32	-342.97	-1,528.83
Applied to removed ratio	0.32	0.90	0.48	0.48

**Fresh water applied**

3,509,250.00 gallons  
129.23 acre-inches  
11.75 inches/acre

**Process wastewater applied**

0.00 gallons  
0.00 acre-inches  
0.00 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.

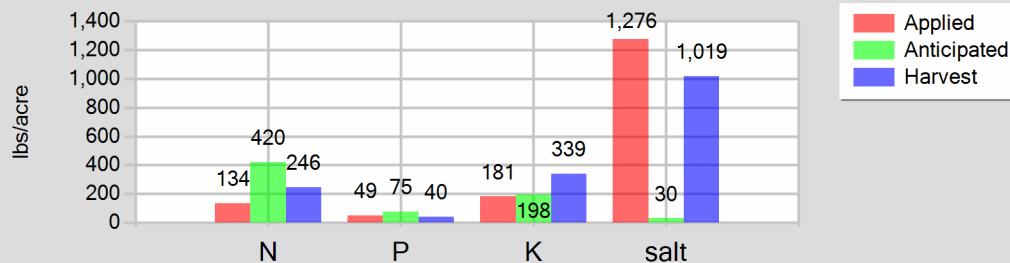
Field 9 - 06/01/2023: Corn, silage

Field name: Field 9

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	30.00	0.00	0.00	0.00
Dry manure	96.05	49.50	181.50	677.66
Process wastewater	0.00	0.00	0.00	0.00
Fresh water	0.67	0.00	0.00	598.30
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	133.73	49.50	181.50	1,275.96
Anticipated crop nutrient removal	420.00	75.00	198.00	30.00
Actual crop nutrient removal	245.72	40.04	338.54	1,019.26
Nutrient balance	-111.99	9.46	-157.05	256.70
Applied to removed ratio	0.54	1.24	0.54	1.25

**Fresh water applied**

8,881,174.00 gallons  
327.06 acre-inches  
29.73 inches/acre

**Process wastewater applied**

0.00 gallons  
0.00 acre-inches  
0.00 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**

## 23c0886 Heifer

Sample and source description: 23c0886 Heifer

Sample date: 03/29/2023 Material type: Corral solids Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 44.8 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Calcium (mg/kg)	Magnesium (mg/kg)	Sodium (mg/kg)	Sulfur (mg/kg)	Chloride (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	10,600.00	6,200.00	30,700.00							11.50
DL	0.01	0.01	0.01							0.01

## 23c0886 Milk Cow

Sample and source description: 23c0886 Milk Cow

Sample date: 03/29/2023 Material type: Corral solids Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 53.7 %

	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	16,300.00	8,400.00	30,800.00							11.50
DL	0.01	0.01	0.01							0.01

**B. PROCESS WASTEWATER ANALYSES**

## Dellavalle 22I597

Sample and source description: Dellavalle 22I597

Sample date: 09/26/2022 Material type: Process wastewater Source of analysis: Lab analysis pH: 7.10

	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	299.00	262.00	0.00	0.70	77.60	459.00								5,270.00	2,460
DL	0.10	0.10	0.10	0.01	0.01	0.01								10.00	10

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

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

23c0887 1st quarter

Sample and source description: 23c0887 1st quarter

Sample date: 03/29/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: 7.00

	Kjeldahl-N (mg/L)	NH4-N (mg/L)	NH3-N (mg/L)	Nitrate-N (mg/L)	Total P (mg/L)	Total K (mg/L)	Calcium (mg/L)	Magnes. (mg/L)	Sodium (mg/L)	Bicarb. (mg/L)	Carb. (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	EC (µmhos/cm)	TDS (mg/L)
Value	487.00	219.00	0.00	1.30	123.00	622.00								5,810.00	4,000
DL	0.02	0.01	0.10	0.01	0.10	0.01								10.00	10

23j0589 3rd Quarter

Sample and source description: 23j0589 3rd Quarter

Sample date: 10/09/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: 7.10

	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	305.00	243.00	0.00	0.60	78.50	446.00								5,310.00	2,900
DL	0.02	0.01	0.10	0.01	0.10	0.01								10.00	10

**C. FRESH WATER ANALYSES**

canal water

Average

Sample description: Average

Sample date: 12/25/2020 Source of analysis: Other/estimated

	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	0.10	0.00	0.10								148.00	
DL	0.01	0.01	0.01								0.10	

**D. SOIL ANALYSES**

Field 1

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

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

**Field 1**

09-14s65454

Sample and source description: 09-14s65454

Sample date: 09/14/2023 Source of analysis: Lab analysis

	Nitrate-N (mg/kg)	Total P (mg/kg)	Soluble P (mg/kg)	K (mg/kg)	EC (µmhos/cm)	Organic matter (%)	Total salt (mg/kg)
Value	16.00	145.00		775.00	1.30	2.72	
DL	0.01	0.01		0.01	0.01	0.10	

**Field 2**

09-14s65454

Sample and source description: 09-14s65454

Sample date: 09/14/2023 Source of analysis: Lab analysis

	Nitrate-N (mg/kg)	Total P (mg/kg)	Soluble P (mg/kg)	K (mg/kg)	EC (µmhos/cm)	Organic matter (%)	Total salt (mg/kg)
Value	27.00	196.00		956.00	1.16	3.60	
DL	0.01	0.01		0.01	0.01	0.10	

**Field 3**

09-14s65454

Sample and source description: 09-14s65454

Sample date: 09/14/2023 Source of analysis: Lab analysis

	Nitrate-N (mg/kg)	Total P (mg/kg)	Soluble P (mg/kg)	K (mg/kg)	EC (µmhos/cm)	Organic matter (%)	Total salt (mg/kg)
Value	14.60	206.00		608.00	1.14	2.70	
DL	0.01	0.01		0.01	0.01	0.10	

**Field 4**

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

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

**Field 4**

09-14s65454

Sample and source description: 09-14s65454

Sample date: 09/14/2023 Source of analysis: Lab analysis

	Nitrate-N (mg/kg)	Total P (mg/kg)	Soluble P (mg/kg)	K (mg/kg)	EC (µmhos/cm)	Organic matter (%)	Total salt (mg/kg)
Value	12.40	145.00		878.00	1.02	2.28	
DL	0.01	0.01		0.01	0.01	0.10	

**Field 5**

09-14s65454

Sample and source description: 09-14s65454

Sample date: 09/14/2023 Source of analysis: Lab analysis

	Nitrate-N (mg/kg)	Total P (mg/kg)	Soluble P (mg/kg)	K (mg/kg)	EC (µmhos/cm)	Organic matter (%)	Total salt (mg/kg)
Value	26.30	157.00		647.00	1.20	3.29	
DL	0.01	0.01		0.01	0.01	0.10	

**Field 6**

09-14s65454

Sample and source description: 09-14s65454

Sample date: 09/14/2023 Source of analysis: Lab analysis

	Nitrate-N (mg/kg)	Total P (mg/kg)	Soluble P (mg/kg)	K (mg/kg)	EC (µmhos/cm)	Organic matter (%)	Total salt (mg/kg)
Value	18.50	101.00		538.00	1.13	1.25	
DL	0.01	0.01		0.01	0.01	0.10	

**Field 7**

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

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

**Field 7**

09-14s65454

Sample and source description: 09-14s65454

Sample date: 09/14/2023      Source of analysis: Lab analysis

	Nitrate-N (mg/kg)	Total P (mg/kg)	Soluble P (mg/kg)	K (mg/kg)	EC (µmhos/cm)	Organic matter (%)	Total salt (mg/kg)
Value	18.60	151.00		714.00	1.10	2.24	
DL	0.01	0.01		0.01	0.01	0.10	

**Field 9**

09-14s65454

Sample and source description: 09-14s65454

Sample date: 09/14/2023      Source of analysis: Lab analysis

	Nitrate-N (mg/kg)	Total P (mg/kg)	Soluble P (mg/kg)	K (mg/kg)	EC (µmhos/cm)	Organic matter (%)	Total salt (mg/kg)
Value	46.20	199.00		874.00	1.81	4.07	
DL	0.01	0.01		0.01	0.01	0.10	

**E. PLANT TISSUE ANALYSES**

Field 1 - 12/15/2022: Triticale, soft dough

Average

Sample and source description: Average

Sample date: 01/01/2023      Source of analysis: Other/estimated      Method of reporting: Dry-weight

Moisture: 62.0 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	21,000.00	3,700.00	25,700.00		11.50
DL	0.01	0.01	0.01		0.01

Field 1 - 06/01/2023: Corn, silage

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

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

Field 1 - 06/01/2023: Corn, silage

Average

Sample and source description: Average

Sample date: 01/01/2023 Source of analysis: Other/estimated Method of reporting: Dry-weight

Moisture: 71.5 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
<b>Value</b>	13,500.00	2,200.00	18,600.00		5.60
<b>DL</b>	0.01	0.01	0.01		0.01

Field 2 - 12/15/2022: Triticale, boot stage

Average

Sample and source description: Average

Sample date: 01/01/2023 Source of analysis: Other/estimated Method of reporting: Dry-weight

Moisture: 62.0 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
<b>Value</b>	21,000.00	3,700.00	25,700.00		11.50
<b>DL</b>	0.01	0.01	0.01		0.01

Field 2 - 06/01/2023: Corn, silage

Average

Sample and source description: Average

Sample date: 01/01/2023 Source of analysis: Other/estimated Method of reporting: Dry-weight

Moisture: 71.5 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
<b>Value</b>	13,500.00	2,200.00	18,600.00		5.60
<b>DL</b>	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 3 - 12/15/2022: Triticale, boot stage

**Average**

Sample and source description: Average

Sample date: 01/01/2023 Source of analysis: Other/estimated Method of reporting: Dry-weight

Moisture: 62.0 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
<b>Value</b>	21,000.00	3,700.00	25,700.00		11.50
<b>DL</b>	0.01	0.01	0.01		0.01

Field 3 - 06/01/2023: Corn, silage

**Average**

Sample and source description: Average

Sample date: 01/01/2023 Source of analysis: Other/estimated Method of reporting: Dry-weight

Moisture: 71.5 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
<b>Value</b>	13,500.00	2,200.00	18,600.00		5.60
<b>DL</b>	0.01	0.01	0.01		0.01

Field 4 - 12/15/2022: Triticale, boot stage

**Average**

Sample and source description: Average

Sample date: 01/01/2023 Source of analysis: Other/estimated Method of reporting: Dry-weight

Moisture: 62.0 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
<b>Value</b>	21,000.00	3,700.00	25,700.00		11.50
<b>DL</b>	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 4 - 06/01/2023: Corn, silage

Average

Sample and source description: Average

Sample date: 01/01/2023 Source of analysis: Other/estimated Method of reporting: Dry-weight

Moisture: 71.5 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
<b>Value</b>	13,500.00	2,200.00	18,600.00		5.60
<b>DL</b>	0.01	0.01	0.01		0.01

Field 5 - 12/15/2022: Triticale, boot stage

Average

Sample and source description: Average

Sample date: 01/01/2023 Source of analysis: Other/estimated Method of reporting: Dry-weight

Moisture: 62.0 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
<b>Value</b>	21,000.00	3,700.00	25,700.00		11.50
<b>DL</b>	0.01	0.01	0.01		0.01

Field 5 - 06/01/2023: Corn, silage

Average

Sample and source description: Average

Sample date: 01/01/2023 Source of analysis: Other/estimated Method of reporting: Dry-weight

Moisture: 71.5 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
<b>Value</b>	13,500.00	2,200.00	18,600.00		5.60
<b>DL</b>	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 6 - 12/15/2022: Triticale, boot stage

**Average**

Sample and source description: Average

Sample date: 01/01/2023 Source of analysis: Other/estimated Method of reporting: Dry-weight

Moisture: 62.0 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
<b>Value</b>	21,000.00	3,700.00	25,700.00		11.50
<b>DL</b>	0.01	0.01	0.01		0.01

Field 6 - 06/01/2023: Corn, silage

**Average**

Sample and source description: Average

Sample date: 01/01/2023 Source of analysis: Other/estimated Method of reporting: Dry-weight

Moisture: 71.5 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
<b>Value</b>	13,500.00	2,200.00	18,600.00		5.60
<b>DL</b>	0.01	0.01	0.01		0.01

Field 7 - 12/15/2022: Triticale, boot stage

**Average**

Sample and source description: Average

Sample date: 01/01/2023 Source of analysis: Other/estimated Method of reporting: Dry-weight

Moisture: 62.0 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
<b>Value</b>	21,000.00	3,700.00	25,700.00		11.50
<b>DL</b>	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 7 - 06/01/2023: Corn, silage

Average

Sample and source description: Average

Sample date: 01/01/2023 Source of analysis: Other/estimated Method of reporting: Dry-weight

Moisture: 71.5 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
<b>Value</b>	13,500.00	2,200.00	18,600.00		5.60
<b>DL</b>	0.01	0.01	0.01		0.01

Field 9 - 12/15/2022: Triticale, boot stage

Average

Sample and source description: Average

Sample date: 01/01/2023 Source of analysis: Other/estimated Method of reporting: Dry-weight

Moisture: 62.0 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
<b>Value</b>	21,000.00	3,700.00	25,700.00		11.50
<b>DL</b>	0.01	0.01	0.01		0.01

Field 9 - 06/01/2023: Corn, silage

Average

Sample and source description: Average

Sample date: 01/01/2023 Source of analysis: Other/estimated Method of reporting: Dry-weight

Moisture: 71.5 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
<b>Value</b>	13,500.00	2,200.00	18,600.00		5.60
<b>DL</b>	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.*

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

*No subsurface (tile) drainage analyses entered.*

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

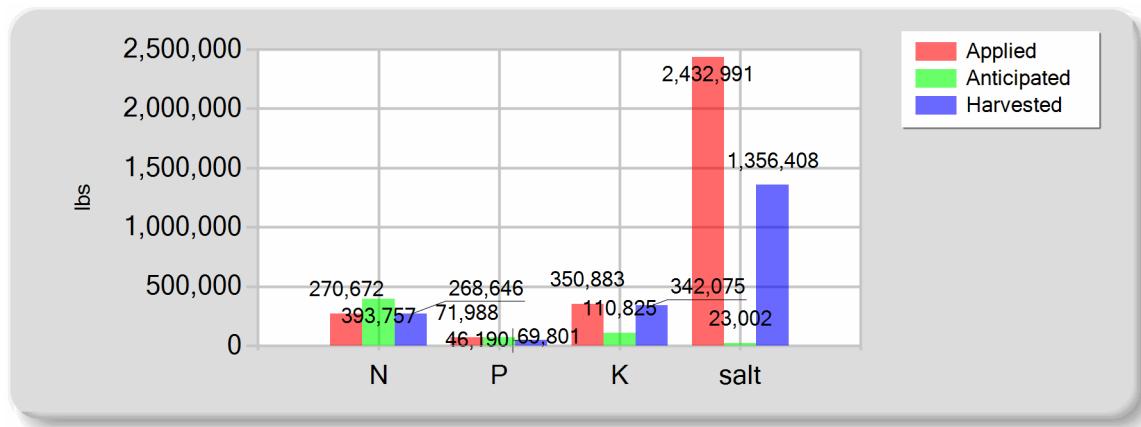
Reporting period 01/01/2023 to 12/31/2023.

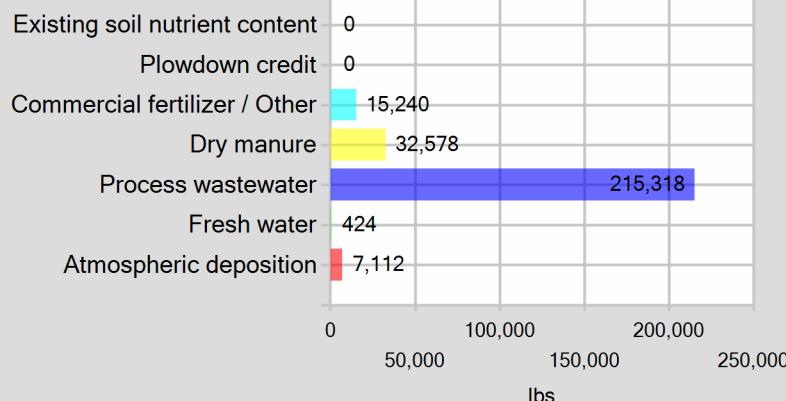
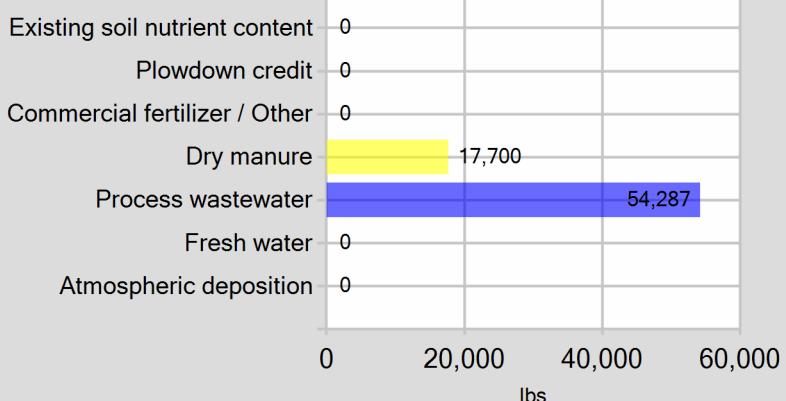
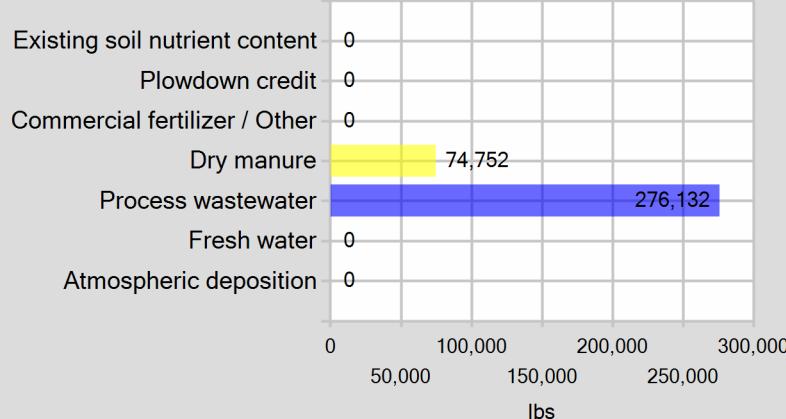
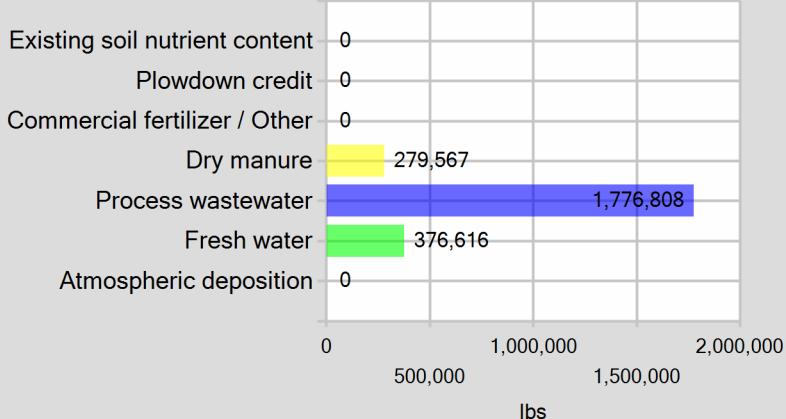
**NUTRIENT APPLICATIONS, POTENTIAL REMOVAL, AND BALANCE**

**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	15,240.00	0.00	0.00	0.00
Dry manure	32,577.69	17,700.31	74,751.77	279,567.30
Process wastewater	215,318.09	54,287.22	276,131.57	1,776,808.32
Fresh water	424.12	0.00	0.00	376,615.84
Atmospheric deposition	7,112.00	0.00	0.00	0.00
<b>Total nutrients applied</b>	<b>270,671.89</b>	<b>71,987.54</b>	<b>350,883.34</b>	<b>2,432,991.47</b>
Anticipated crop nutrient removal	393,757.00	69,801.40	110,825.20	23,002.00
Actual crop nutrient removal	268,645.96	46,189.95	342,075.01	1,356,407.88
<b>Nutrient balance</b>	<b>2,025.93</b>	<b>25,797.59</b>	<b>8,808.33</b>	<b>1,076,583.59</b>
Applied to removed ratio	1.01	1.56	1.03	1.79

**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**

All Canal Water 2023

No triple crop, weather conditions

Added Liquid Nitrogen 30# per acre corn only per crop adviser

**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

Darrell Vanden Berge

PRINT OR TYPE NAME

---

SIGNATURE OF OPERATOR OF FACILITY

SAME AS OWNER

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.

# VANDENBERGE DAIRY

## Supporting Documents

### Abstract

2023 Annual Report support documents

**Griffin Dairy Consultant LLC**  
[griffinj1647@yahoo.com](mailto:griffinj1647@yahoo.com)

**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

Darrell Vanden Berge

PRINT OR TYPE NAME

6/27/2024

DATE



SIGNATURE OF OPERATOR OF FACILITY

SAME AS OWNER

PRINT OR TYPE NAME

6/27/2024

DATE

## ATTACHMENT D

### Manure/Process Wastewater Tracking Manifest For Existing Milk Cow Dairies

**Instructions:**

- 1) Complete one manifest for each hauling event, for each destination. A hauling event may last for several days, as long as the manure is being hauled to the same destination.
- 2) If there are multiple destinations, **complete a separate form for each destination.**
- 3) The operator must obtain the signature of the hauler upon completion of each manure-hauling event.
- 4) The operator shall submit copies of manure/process wastewater tracking manifest(s) with the Annual Monitoring Report for Existing Milk Cow Dairies.

<b>Operator Information:</b>			
Name of Operator: <u>Curtis Vanden Berge</u>			
Name of Dairy Facility: <u>Vanden Berge Dairy</u>			
Facility Address: <u>11701 Old River Rd. Bakerfield 93311</u>	Number and Street	City	Zip Code
Contact Person Name and Phone Number: <u>Curtis</u>	Name	Phone Number <u>661-340-6448</u>	
<b>Manure/Process Wastewater Hauler Information:</b>			
Name of Hauling Company/Person: <u>Vanden Berge Dairy</u>			
Address of Hauling Company /Person: <u>11701 Old River Rd. Bakerfield 93311</u>	Number and Street	City	Zip Code
Contact Person: <u>Curtis</u>	Name	Phone Number <u>661-340-6448</u>	
<b>Destination Information:</b>			
Composting Facility / Broker / Farmer / Other (identify) _____ (please circle one)			
Contact information of Composting Facility, Broker, Farmer, or Other (as identified above): <u>KSA</u> <u>4101 Kimber</u> <u>Bakerfield 93311</u> <u>661-616-7554</u>			
Name Number and Street City Zip Code Phone Number			
Manure/Process Wastewater Destination Address or Assessor's Parcel Number:			
Number and Street	City	Zip Code	Assessor's Parcel Number
Dates Hauled: <u>1-1-23 to 2-1-23</u>			
<b>Amount Hauled:</b>			
Enter the amount of manure hauled in tons or cubic yards (indicate the units used), the manure solids content (if amount reported in tons) or manure density (if amount reported in cubic yards), and the method used to calculate the amount:			
Manure: <u>2310</u>	Tons or Cubic Yards (indicate which units used)		
Manure Solids Content (if amount reported in tons): <u>75%</u>			
Manure Density (if amount reported in cubic yards): _____			

Attachment D

Waste Discharge Requirements General Order No. R5-2007-0035  
Existing Milk Cow Dairies

D-2

Method used to determine amount of manure: truck load count  
and weights

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

Process Wastewater: \_\_\_\_\_ Gallons

Method used to determine volume of process wastewater: \_\_\_\_\_

**Written Agreement:**

Does the Operator have a written agreement (in compliance with Land Application Specification C.2 of Waste Discharge Requirements General Order No. R5-2007-0035) with any party that receives process wastewater from the Operator for its own use? (please check one)

Yes       No

If the answer is no, the Operator agrees to have such a written agreement with any such party for any process wastewater transferred after 31 December 2007 to such party.  
\_\_\_\_\_  
(Operator shall provide initials here to acknowledge this requirement).

**Certification:**

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

Operator's Signature: Lyle J

Date: 6-12-2024

Hauler's Signature: Lyle J

Date: 6-12-2024

## ATTACHMENT D

### Manure/Process Wastewater Tracking Manifest For Existing Milk Cow Dairies

**Instructions:**

- 1) Complete one manifest for each hauling event, for each destination. A hauling event may last for several days, as long as the manure is being hauled to the same destination.
- 2) If there are multiple destinations, **complete a separate form for each destination.**
- 3) The operator must obtain the signature of the hauler upon completion of each manure-hauling event.
- 4) The operator shall submit copies of manure/process wastewater tracking manifest(s) with the Annual Monitoring Report for Existing Milk Cow Dairies.

<b>Operator Information:</b>			
Name of Operator:	Vanden Berge Dairy - Curtis		
Name of Dairy Facility:	Vanden Berge Dairy		
Facility Address:	11701 Old River Rd. Bakersfield 93311	Number and Street	City Zip Code
Contact Person Name and Phone Number:	Curtis	Name	Phone Number 661-340-6448
<b>Manure/Process Wastewater Hauler Information:</b>			
Name of Hauling Company/Person:	Vanden Berge Dairy		
Address of Hauling Company /Person:	11701 Old River Rd. Bakersfield 93311	Number and Street	City Zip Code
Contact Person:	Curtis	Name	Phone Number 661-340-6448
<b>Destination Information:</b>			
Composting Facility / Broker / Farmer	Other (identify)	(please circle one)	
Contact information of Composting Facility, Broker, Farmer, or Other (as identified above):			
Bruni Farms	10747 Buena Vista Rd. Bakersfield 93311	Number and Street	City Zip Code
	661-201-3049	Phone Number	
Manure/Process Wastewater Destination Address or Assessor's Parcel Number:			
Number and Street	City	Zip Code	Assessor's Parcel Number
Dates Hauled:	2-1-23	to	3-1-23
<b>Amount Hauled:</b>			
Enter the amount of manure hauled in tons or cubic yards (indicate the units used), the manure solids content (if amount reported in tons) or manure density (if amount reported in cubic yards), and the method used to calculate the amount:			
Manure:	1370	Tons or Cubic Yards (indicate which units used)	
Manure Solids Content (if amount reported in tons):	75%		
Manure Density (if amount reported in cubic yards):			

Attachment D

**Waste Discharge Requirements General Order No. R5-2007-0035**  
**Existing Milk Cow Dairies**

D-2

Method used to determine amount of manure: load count and weights

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

Process Wastewater: \_\_\_\_\_ Gallons

Method used to determine volume of process wastewater:

**Written Agreement:**

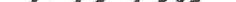
Does the Operator have a written agreement (in compliance with Land Application Specification C.2 of Waste Discharge Requirements General Order No. R5-2007-0035) with any party that receives process wastewater from the Operator for its own use? (please check one)

Yes       No

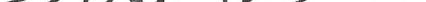
If the answer is no, the Operator agrees to have such a written agreement with any such party for any process wastewater transferred after **31 December 2007** to such party.  
\_\_\_\_\_  
(Operator shall provide initials here to acknowledge this requirement).

### Certification:

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

Operator's Signature: 

Date: 6-12-2020

Hauler's Signature: 

Date: 6-12-2024

## ATTACHMENT D

### **Manure/Process Wastewater Tracking Manifest For Existing Milk Cow Dairies**

**Instructions:**

- 1) Complete one manifest for each hauling event, for each destination. A hauling event may last for several days, as long as the manure is being hauled to the same destination.
- 2) If there are multiple destinations, **complete a separate form for each destination.**
- 3) The operator must obtain the signature of the hauler upon completion of each manure-hauling event.
- 4) The operator shall submit copies of manure/process wastewater tracking manifest(s) with the Annual Monitoring Report for Existing Milk Cow Dairies.

<b>Operator Information:</b>			
Name of Operator: <u>Cevader Berge</u>			
Name of Dairy Facility: <u>Varden Berge Dairy</u>			
Facility Address: <u>11701 Old River Rd</u>	Number and Street	City	Zip Code
Contact Person Name and Phone Number: <u>Lurtis</u> <u>661-340-6448</u>			
Name	Phone Number		
<b>Manure/Process Wastewater Hauler Information:</b>			
Name of Hauling Company/Person: <u>Western Ag Services</u>			
Address of Hauling Company /Person: <u>8224 Ashe Rd.</u>	Number and Street	City	Zip Code
Contact Person: <u>Jorgen</u>	Name	Phone Number	
<b>Destination Information:</b>			
Composting Facility/ Broker / Farmer / Other (identify) _____ (please circle one)			
Contact information of Composting Facility, Broker, Farmer, or Other (as identified above):			
<u>8224 Ashe Rd.</u>	Number and Street	City	Zip Code
<u>Barbersfield CA</u> <u>G3313</u> <u>661-695-1700</u> Phone Number			
Manure/Process Wastewater Destination Address or Assessor's Parcel Number:			
Number and Street	City	Zip Code	Assessor's Parcel Number
Dates Hauled: _____			
<b>Amount Hauled:</b>			
Enter the amount of manure hauled in tons or cubic yards (indicate the units used), the manure solids content (if amount reported in tons) or manure density (if amount reported in cubic yards), and the method used to calculate the amount:			
Manure: <u>4105</u>	Tons or Cubic Yards (indicate which units used)		
Manure Solids Content (if amount reported in tons): <u>86%</u>			
Manure Density (if amount reported in cubic yards): _____			

## Attachment D

Waste Discharge Requirements General Order No. R5-2007-0035  
Existing Milk Cow Dairies

D-2

Method used to determine amount of manure: truck scale

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

Process Wastewater: \_\_\_\_\_ Gallons

Method used to determine volume of process wastewater:

**Written Agreement:**

Does the Operator have a written agreement (in compliance with Land Application Specification C.2 of Waste Discharge Requirements General Order No. R5-2007-0035) with any party that receives process wastewater from the Operator for its own use? (please check one)

Yes  No

If the answer is no, the Operator agrees to have such a written agreement with any such party for any process wastewater transferred after **31 December 2007** to such party.  
\_\_\_\_\_  
(Operator shall provide initials here to acknowledge this requirement).

### Certification:

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

Operator's Signature:

Date: 6-12-2024

Hauler's Signature:

Date: \_\_\_\_\_

**ATTACHMENT D**

**Manure/Process Wastewater Tracking Manifest  
For  
Existing Milk Cow Dairies**

## Instructions:

- 1) Complete one manifest for each hauling event, for each destination. A hauling event may last for several days, as long as the manure is being hauled to the same destination.
  - 2) If there are multiple destinations, **complete a separate form for each destination**.
  - 3) The operator must obtain the signature of the hauler upon completion of each manure-hauling event.
  - 4) The operator shall submit copies of manure/process wastewater tracking manifest(s) with the Annual Monitoring Report for Existing Milk Cow Dairies.

<b>Operator Information:</b>		Curtis Vanden Berge		
Name of Operator:				
Name of Dairy Facility:		Vanden Berge Dairy		
Facility Address:		11701 Old River Rd.	Bakersfield	93311
Number and Street		City	Zip Code	
Contact Person Name and Phone Number:		Curtis	661-340-6448	
		Name	Phone Number	
<b>Manure/Process Wastewater Hauler Information:</b>				
Name of Hauling Company/Person:		Vanden Berge Dairy		
Address of Hauling Company /Person:		11701 old River Rd. Bakersfield 93311		
		Number and Street	City	Zip Code
Contact Person:		Curtis Vanden Berge	661-340-6448	
		Name	Phone Number	
<b>Destination Information:</b>				
Composting Facility / Broker / Farmer / Other (identify) _____ (please circle one)				
Contact information of Composting Facility, Broker, Farmer, or Other (as identified above):				
ATB Farms 10747 Taft Hwy		Bakersfield	93311	661-979-6229
Name	Number and Street	City	Zip Code	Phone Number
Manure/Process Wastewater Destination Address or Assessor's Parcel Number:				
Number and Street	City	Zip Code	Assessor's Parcel Number	
Dates Hauled:	10-1-23 to 11-1-23			
<b>Amount Hauled:</b>				
Enter the amount of manure hauled in tons or cubic yards (indicate the units used), the manure solids content (if amount reported in tons) or manure density (if amount reported in cubic yards), and the method used to calculate the amount:				
Manure:	3920	Tons	or Cubic Yards (indicate which units used)	
Manure Solids Content (if amount reported in tons):		88 %		
Manure Density (if amount reported in cubic yards):				

Attachment D

Waste Discharge Requirements General Order No. R5-2007-0035  
Existing Milk Cow Dairies

D-2

Method used to determine amount of manure: Number of loads  
times weight on various loads

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

Process Wastewater: \_\_\_\_\_ Gallons

Method used to determine volume of process wastewater: \_\_\_\_\_

**Written Agreement:**

Does the Operator have a written agreement (in compliance with Land Application Specification C.2 of Waste Discharge Requirements General Order No. R5-2007-0035) with any party that receives process wastewater from the Operator for its own use? (please check one)

Yes  No

If the answer is no, the Operator agrees to have such a written agreement with any such party for any process wastewater transferred after **31 December 2007** to such party.

(Operator shall provide initials here to acknowledge this requirement).

**Certification:**

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

Operator's Signature: G. E. Walzer

Date: 6-13-2024

Hauler's Signature: G. E. Walzer

Date: 6-13-2024