

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: Medeiros Dairy, Inc.

Physical address of dairy:

608 E Riverdale AVE

Number and Street

Laton

Fresno

93242

City

County

Zip Code

Street and nearest cross street (if no address): _____

Date facility was originally placed in operation: 01/01/1975

Regional Water Quality Control Board Basin Plan designation: Tulare Basin

County Assessor Parcel Number(s) for dairy facility:

0055-0350-0075-0000

B. OPERATORS

Medeiros, Melvin

Operator name: Medeiros, Melvin

Telephone no.: (559) 923-4515

Landline

Cellular

608 E Riverdale AVE

Laton

CA

93242

Mailing Address Number and Street

City

State

Zip Code

This operator is responsible for paying permit fees.

C. OWNERS

Medeiros, Melvin

Legal owner name: Medeiros, Melvin

Telephone no.: (559) 923-4515

Landline

Cellular

608 E Riverdale AVE

Laton

CA

93242

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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	700	100	500	500	500	0
Number under roof	225	0	0	0	0	0
Maximum number	925	100	500	500	500	0
Average number	925	100	500	500	500	0
Avg live weight (lbs)	1,200	1,300	1,000	800		

Predominant milk cow breed: JerseyAverage milk production: 70 pounds per cow per day**B. MANURE GENERATED**Total manure excreted by the herd: 36,987.27 tons per reporting periodTotal nitrogen from manure: 448,926.59 lbs per reporting periodAfter ammonia losses (30% loss applied): 314,248.61 lbs per reporting periodTotal phosphorus from manure: 72,795.25 lbs per reporting periodTotal potassium from manure: 177,146.03 lbs per reporting periodTotal salt from manure: 458,531.25 lbs per reporting period**C. PROCESS WASTEWATER GENERATED**Process wastewater generated: 38,176,000 gallonsTotal nitrogen generated: 94,661.80 lbs

$$\begin{aligned}
 & 38,176,000 \text{ gallons applied} \\
 & + 0 \text{ gallons exported} \\
 & - 0 \text{ gallons imported} \\
 & = 38,176,000 \text{ gallons generated}
 \end{aligned}$$

Total phosphorus generated: 11,998.36 lbsTotal potassium generated: 73,579.97 lbsTotal salt generated: 522,641.37 lbs**D. FRESH WATER SOURCES**

Source Description	Type
Canal	Surface water
D1	Ground water
D2	Ground water

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E. SUBSURFACE (TILE) DRAINAGE SOURCES

No subsurface (tile) drainage sources entered.

F. NUTRIENT IMPORTS

No dry manure nutrient imports entered.

No process wastewater nutrient imports entered.

No commercial or other nutrient imports entered.

G. NUTRIENT EXPORTS

No solid nutrient exports entered.

No liquid nutrient exports entered.

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

Field name	Controlled acres	Cropable acres	Total harvests	Type of waste applied	Parcel number
1	38	38	2	process wastewater	X055-X350-X024-XXXX
2	38	38	2	process wastewater	X055-X380-X009-XXXX
3	21	21	2	process wastewater	X055-X250-X029-XXXX
5&6	45	45	2	process wastewater	X055-X250-X014-XXXX
Hills	40	40	2	manure	X056-X070-X045-XXXX
Speed 1	55	55	2	manure	X055-X390-X012-XXXX X055-X390-X013-XXXX X055-X390-X015-XXXX X055-X390-X016-XXXX X055-X390-X017-XXXX
Speed 2	42	42	2	manure	X055-X390-X012-XXXX X055-X390-X013-XXXX X055-X390-X015-XXXX X055-X390-X016-XXXX X055-X390-X017-XXXX
Speed 3	30	30	2	manure	X055-X390-X012-XXXX X055-X390-X013-XXXX X055-X390-X015-XXXX X055-X390-X016-XXXX X055-X390-X017-XXXX
Totals for areas that were used for application	309	309	16		
Totals for areas that were not used for application					
Land application area totals	309	309	16		

B. CROPS AND HARVESTS

1

Field name: 1

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1

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

Crop: Wheat, silage, boot stage Acres planted: 38 Plant date: 11/01/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/02/2023	622.50 ton	Dry-weight		65.4	19,000.00	5,100.00	31,400.00		11.70

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	16.00	256.00	44.80	192.00	0.00
Total actual harvest content	16.38	215.39	57.81	355.95	1,326.32

05/20/2023: Corn, silage

Crop: Corn, silage Acres planted: 38 Plant date: 05/20/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
08/30/2023	1,103.60 ton	Dry-weight		65.2	18,100.00	3,400.00	21,000.00		6.62

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	28.00	224.00	42.00	184.80	0.00
Total actual harvest content	29.04	365.86	68.73	424.48	1,338.12

2

Field name: 2

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

Crop: Wheat, silage, boot stage Acres planted: 38 Plant date: 11/01/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/02/2023	615.30 ton	Dry-weight		69.8	20,900.00	3,900.00	21,200.00		9.45

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	16.00	256.00	44.80	192.00	0.00
Total actual harvest content	16.19	204.40	38.14	207.34	924.21

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2

05/20/2023: Corn, silage

Crop: Corn, silage Acres planted: 38 Plant date: 05/20/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
08/30/2023	1,105.40 ton	Dry-weight		68.1	17,300.00	3,100.00	24,700.00		6.37

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	28.00	224.00	42.00	184.80	0.00
Total actual harvest content	29.09	321.07	57.53	458.41	1,182.21

3

Field name: 3

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

Crop: Wheat, silage, boot stage Acres planted: 21 Plant date: 11/01/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/02/2023	355.10 ton	Dry-weight		54.7	18,100.00	4,300.00	27,500.00		13.20

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	16.00	256.00	44.80	192.00	0.00
Total actual harvest content	16.91	277.29	65.88	421.30	2,022.24

05/20/2023: Corn, silage

Crop: Corn, silage Acres planted: 21 Plant date: 05/20/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
08/30/2023	612.70 ton	Dry-weight		67.3	13,300.00	3,100.00	25,700.00		8.14

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	28.00	224.00	42.00	184.80	0.00
Total actual harvest content	29.18	253.78	59.15	490.39	1,553.21

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5&6

Field name: 5&6

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

Crop: Wheat, silage, boot stage Acres planted: 45 Plant date: 11/01/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/09/2023	755.60 ton	Dry-weight		73.1	33,600.00	5,100.00	41,900.00		19.40

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	16.00	256.00	44.80	192.00	0.00
Total actual harvest content	16.79	303.53	46.07	378.51	1,752.52

05/20/2023: Corn, silage

Crop: Corn, silage Acres planted: 45 Plant date: 05/20/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
08/30/2023	1,311.50 ton	Dry-weight		73.4	19,700.00	3,000.00	30,500.00		8.10

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	28.00	224.00	42.00	184.80	0.00
Total actual harvest content	29.14	305.45	46.51	472.90	1,255.89

Hills

Field name: Hills

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

Crop: Wheat, silage, boot stage Acres planted: 40 Plant date: 11/01/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/02/2023	689.20 ton	Dry-weight		62.2	19,800.00	3,300.00	20,300.00		8.37

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	16.00	256.00	44.80	192.00	0.00
Total actual harvest content	17.23	257.91	42.99	264.43	1,090.27

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Hills

05/20/2023: Corn, silage

Crop: Corn, silage Acres planted: 40 Plant date: 05/20/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
08/30/2023	1,189.60 ton	Dry-weight		71.4	19,600.00	2,800.00	27,400.00		7.23

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	28.00	224.00	42.00	184.80	0.00
Total actual harvest content	29.74	333.42	47.63	466.11	1,229.92

Speed 1

Field name: Speed 1

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

Crop: Wheat, silage, boot stage Acres planted: 55 Plant date: 11/01/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/02/2023	902.10 ton	Dry-weight		61.7	17,300.00	3,300.00	19,600.00		9.37

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	16.00	256.00	44.80	192.00	0.00
Total actual harvest content	16.40	217.35	41.46	246.25	1,177.23

05/20/2023: Corn, silage

Crop: Corn, silage Acres planted: 55 Plant date: 05/20/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
08/30/2023	1,566.30 ton	Dry-weight		68.0	17,900.00	2,500.00	25,300.00		7.29

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	28.00	224.00	42.00	184.80	0.00
Total actual harvest content	28.48	326.25	45.57	461.12	1,328.68

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Speed 2

Field name: Speed 2

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

Crop: Wheat, silage, boot stage Acres planted: 42 Plant date: 11/01/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/02/2023	695.30 ton	Dry-weight		65.3	20,600.00	3,400.00	20,600.00		9.49

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	16.00	256.00	44.80	192.00	0.00
Total actual harvest content	16.55	236.67	39.06	236.67	1,090.31

05/20/2023: Corn, silage

Crop: Corn, silage Acres planted: 42 Plant date: 05/20/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
08/30/2023	1,194.90 ton	Dry-weight		67.2	17,600.00	3,100.00	25,500.00		8.19

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	28.00	224.00	42.00	184.80	0.00
Total actual harvest content	28.45	328.47	57.86	475.91	1,528.52

Speed 3

Field name: Speed 3

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

Crop: Wheat, silage, boot stage Acres planted: 30 Plant date: 11/01/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/02/2023	522.60 ton	Dry-weight		67.8	14,000.00	3,600.00	22,600.00		8.98

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	16.00	256.00	44.80	192.00	0.00
Total actual harvest content	17.42	157.06	40.39	253.54	1,007.42

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Speed 3

05/20/2023: Corn, silage

Crop: Corn, silage Acres planted: _____ 30 Plant date: 05/20/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
09/11/2023	859.20 ton	Dry-weight		69.7	19,500.00	3,000.00	21,700.00		6.50

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	28.00	224.00	42.00	184.80	0.00
Total actual harvest content	28.64	338.44	52.07	376.62	1,128.13

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NUTRIENT BUDGET**A. LAND APPLICATIONS**

1 - 11/01/2022: Wheat, silage, boot stage

Field name: 1

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

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
01/15/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	87.44	5.87	33.81	216.54	664,000.00 gal
Application event totals		87.44	5.87	33.81	216.54	
02/21/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	6.05	2,296,000.00 gal
Application event totals		0.00	0.00	0.00	6.05	
03/16/2023	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
WW	Process wastewater	192.79	12.94	74.54	477.43	1,464,000.00 gal
Canal	Surface water	0.00	0.00	0.00	6.05	2,296,000.00 gal
Application event totals		192.79	12.94	74.54	483.48	
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	Surface water	0.00	0.00	0.00	6.05	2,296,000.00 gal
Application event totals		0.00	0.00	0.00	6.05	

1 - 05/20/2023: Corn, silage

Field name: 1

Crop: Corn, silage Plant date: 05/20/2023

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

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1 - 05/20/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
06/18/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	13.80	5,236,000.00 gal
Application event totals		0.00	0.00	0.00	13.80	
06/28/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	62.78	13.84	87.02	636.83	1,364,000.00 gal
Canal	Surface water	0.00	0.00	0.00	13.80	5,236,000.00 gal
Application event totals		62.78	13.84	87.02	650.62	
07/08/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	62.78	13.84	87.02	636.83	1,364,000.00 gal
Canal	Surface water	0.00	0.00	0.00	13.80	5,236,000.00 gal
Application event totals		62.78	13.84	87.02	650.62	
07/18/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	62.78	13.84	87.02	636.83	1,364,000.00 gal
Canal	Surface water	0.00	0.00	0.00	13.80	5,236,000.00 gal
Application event totals		62.78	13.84	87.02	650.62	
07/28/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	59.68	1.74	9.32	66.20	1,364,000.00 gal
Canal	Surface water	0.00	0.00	0.00	13.80	5,236,000.00 gal
Application event totals		59.68	1.74	9.32	80.00	

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1 - 05/20/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
08/08/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	62.78	13.84	87.02	636.83	1,364,000.00 gal
Canal	Surface water	0.00	0.00	0.00	13.80	5,236,000.00 gal
Application event totals		62.78	13.84	87.02	650.62	
08/18/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	13.80	5,236,000.00 gal
Application event totals		0.00	0.00	0.00	13.80	

2 - 11/01/2022: Wheat, silage, boot stage

Field name: 2

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

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
01/18/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	126.94	8.52	49.08	314.37	964,000.00 gal
Application event totals		126.94	8.52	49.08	314.37	
02/23/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	5.32	2,020,000.00 gal
Application event totals		0.00	0.00	0.00	5.32	

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2 - 11/01/2022: Wheat, silage, boot stage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
03/16/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	126.94	8.52	49.08	314.37	964,000.00 gal
Canal	Surface water	0.00	0.00	0.00	5.32	2,020,000.00 gal
Application event totals		126.94	8.52	49.08	319.70	
04/12/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	5.32	2,020,000.00 gal
Application event totals		0.00	0.00	0.00	5.32	

2 - 05/20/2023: Corn, silage

Field name: 2

Crop: Corn, silage

Plant date: 05/20/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
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
Canal	Surface water	0.00	0.00	0.00	11.38	4,320,000.00 gal
Application event totals		0.00	0.00	0.00	11.38	
07/01/2023	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
WW	Process wastewater	54.08	11.92	74.96	548.58	1,175,000.00 gal
Canal	Surface water	0.00	0.00	0.00	11.38	4,320,000.00 gal
Application event totals		54.08	11.92	74.96	559.97	

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2 - 05/20/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
07/11/2023	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
WW	Process wastewater	54.08	11.92	74.96	548.58	1,175,000.00 gal
Canal	Surface water	0.00	0.00	0.00	11.38	4,320,000.00 gal
Application event totals		54.08	11.92	74.96	559.97	
07/21/2023	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
WW	Process wastewater	54.08	11.92	74.96	548.58	1,175,000.00 gal
Canal	Surface water	0.00	0.00	0.00	11.38	4,320,000.00 gal
Application event totals		54.08	11.92	74.96	559.97	
08/01/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	51.41	1.50	8.03	57.03	1,175,000.00 gal
Canal	Surface water	0.00	0.00	0.00	11.38	4,320,000.00 gal
Application event totals		51.41	1.50	8.03	68.41	
08/11/2023	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
WW	Process wastewater	198.85	43.83	275.60	2,016.93	4,320,000.00 gal
Canal	Surface water	0.00	0.00	0.00	11.38	4,320,000.00 gal
Application event totals		198.85	43.83	275.60	2,028.31	
08/21/2023	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
Canal	Surface water	0.00	0.00	0.00	11.38	4,320,000.00 gal
Application event totals		0.00	0.00	0.00	11.38	

3 - 11/01/2022: Wheat, silage, boot stage

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3 - 11/01/2022: Wheat, silage, boot stage

Field name: 3

Crop: Wheat, silage, boot stage

Plant date: 11/01/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
01/18/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	178.71	12.00	69.10	442.58	750,000.00 gal
Application event totals		178.71	12.00	69.10	442.58	
02/16/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	5.15	1,080,000.00 gal
Application event totals		0.00	0.00	0.00	5.15	
03/12/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	178.71	12.00	69.10	442.58	750,000.00 gal
Canal	Surface water	0.00	0.00	0.00	5.15	1,080,000.00 gal
Application event totals		178.71	12.00	69.10	447.73	
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	Surface water	0.00	0.00	0.00	5.15	1,080,000.00 gal
Application event totals		0.00	0.00	0.00	5.15	

3 - 05/20/2023: Corn, silage

Field name: 3

Crop: Corn, silage

Plant date: 05/20/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
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3 - 05/20/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
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	Surface water	0.00	0.00	0.00	13.73	2,880,000.00 gal
Application event totals		0.00	0.00	0.00	13.73	
07/02/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	70.80	15.61	98.12	718.11	850,000.00 gal
Canal	Surface water	0.00	0.00	0.00	13.73	2,880,000.00 gal
Application event totals		70.80	15.61	98.12	731.84	
07/02/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	13.73	2,880,000.00 gal
Application event totals		0.00	0.00	0.00	13.73	
07/12/2023	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
WW	Process wastewater	70.80	15.61	98.12	718.11	850,000.00 gal
Canal	Surface water	0.00	0.00	0.00	13.73	2,880,000.00 gal
Application event totals		70.80	15.61	98.12	731.84	
07/22/2023	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
WW	Process wastewater	70.80	15.61	98.12	718.11	850,000.00 gal
Canal	Surface water	0.00	0.00	0.00	13.73	2,880,000.00 gal
Application event totals		70.80	15.61	98.12	731.84	

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3 - 05/20/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
08/02/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	67.30	1.97	10.51	74.65	850,000.00 gal
Canal	Surface water	0.00	0.00	0.00	13.73	2,880,000.00 gal
Application event totals		67.30	1.97	10.51	88.38	
08/12/2023	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
Canal	Surface water	0.00	0.00	0.00	13.73	2,880,000.00 gal
Application event totals		0.00	0.00	0.00	13.73	
08/22/2023	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	Surface water	0.00	0.00	0.00	13.73	2,880,000.00 gal
Application event totals		0.00	0.00	0.00	13.73	

5&6 - 11/01/2022: Wheat, silage, boot stage

Field name: 5&6

Crop: Wheat, silage, boot stage

Plant date: 11/01/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
01/19/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	177.48	11.92	68.62	439.51	1,596,000.00 gal
Application event totals		177.48	11.92	68.62	439.51	
02/21/2023	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
Canal	Surface water	0.00	0.00	0.00	7.39	3,320,000.00 gal
Application event totals		0.00	0.00	0.00	7.39	

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5&6 - 11/01/2022: Wheat, silage, boot stage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
03/15/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	177.48	11.92	68.62	439.51	1,596,000.00 gal
Canal	Surface water	0.00	0.00	0.00	7.39	3,320,000.00 gal
Application event totals		177.48	11.92	68.62	446.90	
04/14/2023	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	Surface water	0.00	0.00	0.00	7.39	3,320,000.00 gal
Application event totals		0.00	0.00	0.00	7.39	

5&6 - 05/20/2023: Corn, silage

Field name: 5&6

Crop: Corn, silage

Plant date: 05/20/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
06/23/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	14.06	6,320,000.00 gal
Application event totals		0.00	0.00	0.00	14.06	
07/03/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	132.00	29.10	182.95	1,338.89	3,396,000.00 gal
Canal	Surface water	0.00	0.00	0.00	14.06	6,320,000.00 gal
Application event totals		132.00	29.10	182.95	1,352.95	

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5&6 - 05/20/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
07/13/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	14.06	6,320,000.00 gal
Application event totals		0.00	0.00	0.00	14.06	
07/23/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	132.00	29.10	182.95	1,338.89	3,396,000.00 gal
Canal	Surface water	0.00	0.00	0.00	14.06	6,320,000.00 gal
Application event totals		132.00	29.10	182.95	1,352.95	
08/03/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	14.06	6,320,000.00 gal
Application event totals		0.00	0.00	0.00	14.06	
08/13/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	125.48	3.67	19.60	139.18	3,396,000.00 gal
Canal	Surface water	0.00	0.00	0.00	14.06	6,320,000.00 gal
Application event totals		125.48	3.67	19.60	153.24	
08/23/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	14.06	6,320,000.00 gal
Application event totals		0.00	0.00	0.00	14.06	

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

Field name: Hills

Crop: Wheat, silage, boot stage

Plant date: 11/01/2022

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

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
10/10/2022	Plow/disc	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Dry Manure	Corral solids	232.50	137.50	545.00	12,361.25	500.00 ton
Application event totals		232.50	137.50	545.00	12,361.25	
02/15/2023	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	Surface water	0.00	0.00	0.00	7.69	3,072,000.00 gal
Application event totals		0.00	0.00	0.00	7.69	
03/16/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	7.69	3,072,000.00 gal
Application event totals		0.00	0.00	0.00	7.69	
04/15/2023	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	Surface water	0.00	0.00	0.00	7.69	3,072,000.00 gal
Application event totals		0.00	0.00	0.00	7.69	

Hills - 05/20/2023: Corn, silage

Field name: Hills

Crop: Corn, silage

Plant date: 05/20/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
05/15/2023	Plow/disc	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Dry Manure	Corral solids	400.00	132.00	592.00	15,206.02	800.00 ton
Application event totals		400.00	132.00	592.00	15,206.02	

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Hills - 05/20/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
06/19/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	12.70	5,072,000.00 gal
Application event totals		0.00	0.00	0.00	12.70	
06/29/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	12.70	5,072,000.00 gal
Application event totals		0.00	0.00	0.00	12.70	
07/09/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	12.70	5,072,000.00 gal
Application event totals		0.00	0.00	0.00	12.70	
07/19/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	12.70	5,072,000.00 gal
Application event totals		0.00	0.00	0.00	12.70	
07/29/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	12.70	5,072,000.00 gal
Application event totals		0.00	0.00	0.00	12.70	
08/09/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	12.70	5,072,000.00 gal
Application event totals		0.00	0.00	0.00	12.70	

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Hills - 05/20/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
08/19/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	12.70	5,072,000.00 gal
Application event totals		0.00	0.00	0.00	12.70	

Speed 1 - 11/01/2022: Wheat, silage, boot stage

Field name: Speed 1

Crop: Wheat, silage, boot stage

Plant date: 11/01/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
10/10/2022	Plow/disc	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Dry Manure	Corral solids	236.73	140.00	554.91	12,586.00	700.00 ton
Application event totals		236.73	140.00	554.91	12,586.00	
02/25/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	8.96	4,920,000.00 gal
Application event totals		0.00	0.00	0.00	8.96	
03/16/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	8.96	4,920,000.00 gal
Application event totals		0.00	0.00	0.00	8.96	
04/12/2023	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
Canal	Surface water	0.00	0.00	0.00	8.96	4,920,000.00 gal
Application event totals		0.00	0.00	0.00	8.96	

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

Speed 1 - 05/20/2023: Corn, silage

Field name: Speed 1

Crop: Corn, silage

Plant date: 05/20/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
05/15/2023	Plow/disc	No precipitation	No precipitation		No precipitation	
	Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)
	Dry Manure	Corral solids	363.64	120.00	538.18	13,823.65
	Application event totals		363.64	120.00	538.18	13,823.65
06/10/2023	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)
	Canal	Surface water	0.00	0.00	0.00	12.60
	Application event totals		0.00	0.00	0.00	12.60
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)
	Canal	Surface water	0.00	0.00	0.00	12.60
	Application event totals		0.00	0.00	0.00	12.60
06/30/2023	Shank	No precipitation	No precipitation	No precipitation	No precipitation	
	Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)
	Canal	Surface water	0.00	0.00	0.00	12.60
	Application event totals		0.00	0.00	0.00	12.60
07/10/2023	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)
	Canal	Surface water	0.00	0.00	0.00	12.60
	Application event totals		0.00	0.00	0.00	12.60
07/20/2023	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)
	Canal	Surface water	0.00	0.00	0.00	12.60
	Application event totals		0.00	0.00	0.00	12.60

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Speed 1 - 05/20/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
07/30/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	12.60	6,920,000.00 gal
Application event totals		0.00	0.00	0.00	12.60	
08/10/2023	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	Surface water	0.00	0.00	0.00	12.60	6,920,000.00 gal
Application event totals		0.00	0.00	0.00	12.60	
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
Canal	Surface water	0.00	0.00	0.00	12.60	6,920,000.00 gal
Application event totals		0.00	0.00	0.00	12.60	

Speed 2 - 11/01/2022: Wheat, silage, boot stage

Field name:	Speed 2	Plant date:	11/01/2022			
Crop:	Wheat, silage, boot stage					
Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
10/10/2022	Plow/disc	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Dry Manure	Corral solids	310.00	183.33	726.67	16,481.67	700.00 ton
Application event totals		310.00	183.33	726.67	16,481.67	
02/18/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	10.74	4,506,000.00 gal
Application event totals		0.00	0.00	0.00	10.74	

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Speed 2 - 11/01/2022: Wheat, silage, boot stage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
03/22/2023	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	Surface water	0.00	0.00	0.00	10.74	4,506,000.00 gal
Application event totals		0.00	0.00	0.00	10.74	
04/18/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	10.74	4,506,000.00 gal
Application event totals		0.00	0.00	0.00	10.74	

Speed 2 - 05/20/2023: Corn, silage

Field name: Speed 2

Crop: Corn, silage

Plant date: 05/20/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
05/15/2023	Plow/disc	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Dry Manure	Corral solids	333.33	110.00	493.33	12,671.68	700.00 ton
Application event totals		333.33	110.00	493.33	12,671.68	
06/12/2023	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
Canal	Surface water	0.00	0.00	0.00	13.13	5,506,000.00 gal
Application event totals		0.00	0.00	0.00	13.13	
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	Surface water	0.00	0.00	0.00	13.13	5,506,000.00 gal
Application event totals		0.00	0.00	0.00	13.13	

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Speed 2 - 05/20/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
07/02/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	13.13	5,506,000.00 gal
Application event totals		0.00	0.00	0.00	13.13	
07/12/2023	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
Canal	Surface water	0.00	0.00	0.00	13.13	5,506,000.00 gal
Application event totals		0.00	0.00	0.00	13.13	
07/22/2023	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	Surface water	0.00	0.00	0.00	13.13	5,506,000.00 gal
Application event totals		0.00	0.00	0.00	13.13	
08/02/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	13.13	5,506,000.00 gal
Application event totals		0.00	0.00	0.00	13.13	
08/12/2023	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
Canal	Surface water	0.00	0.00	0.00	13.13	5,506,000.00 gal
Application event totals		0.00	0.00	0.00	13.13	

Speed 3 - 11/01/2022: Wheat, silage, boot stage

Field name: Speed 3

Crop: Wheat, silage, boot stage

Plant date: 11/01/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
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Speed 3 - 11/01/2022: Wheat, silage, boot stage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
10/10/2022	Plow/disc	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Dry Manure	Corral solids	186.00	110.00	436.00	9,889.00	300.00 ton
Application event totals		186.00	110.00	436.00	9,889.00	
02/22/2023	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	Surface water	0.00	0.00	0.00	7.03	2,106,000.00 gal
Application event totals		0.00	0.00	0.00	7.03	
03/18/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	7.03	2,106,000.00 gal
Application event totals		0.00	0.00	0.00	7.03	
04/16/2023	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	Surface water	0.00	0.00	0.00	7.03	2,106,000.00 gal
Application event totals		0.00	0.00	0.00	7.03	

Speed 3 - 05/20/2023: Corn, silage

Field name: Speed 3

Crop: Corn, silage

Plant date: 05/20/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
05/10/2023	Plow/disc	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Dry Manure	Corral solids	400.00	132.00	592.00	15,206.02	600.00 ton
Application event totals		400.00	132.00	592.00	15,206.02	

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Speed 3 - 05/20/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
06/14/2023	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
Canal	Surface water	0.00	0.00	0.00	13.71	4,106,000.00 gal
Application event totals		0.00	0.00	0.00	13.71	
06/24/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	13.71	4,106,000.00 gal
Application event totals		0.00	0.00	0.00	13.71	
07/04/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	13.71	4,106,000.00 gal
Application event totals		0.00	0.00	0.00	13.71	
07/14/2023	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
Canal	Surface water	0.00	0.00	0.00	13.71	4,106,000.00 gal
Application event totals		0.00	0.00	0.00	13.71	
07/24/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	13.71	4,106,000.00 gal
Application event totals		0.00	0.00	0.00	13.71	
08/04/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	13.71	4,106,000.00 gal
Application event totals		0.00	0.00	0.00	13.71	

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Speed 3 - 05/20/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
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
Canal	Surface water	0.00	0.00	0.00	13.71	4,106,000.00 gal
Application event totals		0.00	0.00	0.00	13.71	
08/24/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	13.71	4,106,000.00 gal
Application event totals		0.00	0.00	0.00	13.71	

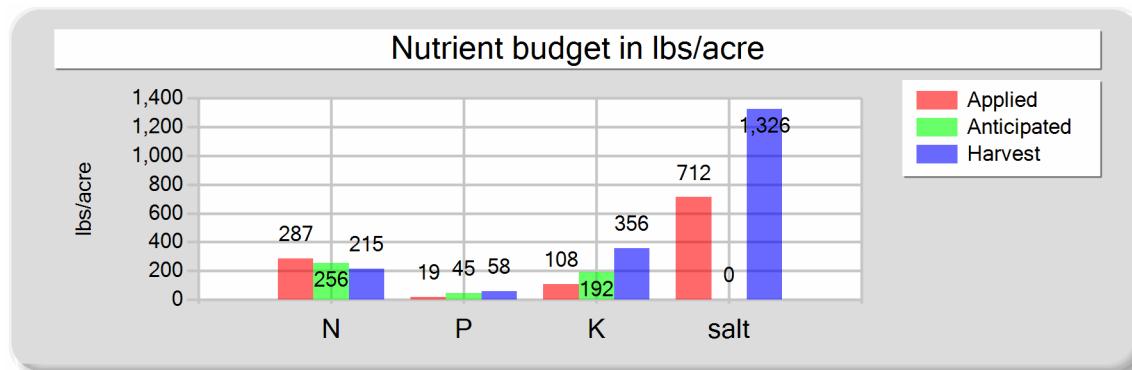
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Reporting period 01/01/2023 to 12/31/2023.

B. NUTRIENT BUDGET

1 - 11/01/2022: Wheat, silage, boot stage

Field name: 1 Crop: Wheat, silage, boot stage Plant date: 11/01/2022



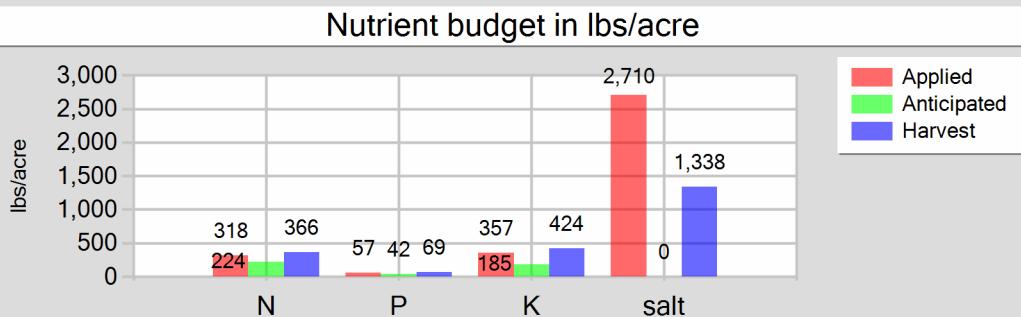
	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)	Fresh water applied
Existing soil nutrient content	0.00	0.00	0.00	0.00	6,888,000.00 gallons
Plowdown credit	0.00	0.00	0.00	0.00	253.66 acre-inches
Commercial fertilizer / Other	0.00	0.00	0.00	0.00	6.68 inches/acre
Dry manure	0.00	0.00	0.00	0.00	
Process wastewater	280.22	18.81	108.35	693.97	Process wastewater applied
Fresh water	0.00	0.00	0.00	18.15	2,128,000.00 gallons
Atmospheric deposition	7.00	0.00	0.00	0.00	78.37 acre-inches
Total nutrients applied	287.22	18.81	108.35	712.12	2.06 inches/acre
Anticipated crop nutrient removal	256.00	44.80	192.00	0.00	
Actual crop nutrient removal	215.39	57.81	355.95	1,326.32	Total harvests for the crop
Nutrient balance	71.84	-39.00	-247.60	-614.20	1 harvests
Applied to removed ratio	1.33	0.33	0.30	0.54	

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

1 - 05/20/2023: Corn, silage

Field name: 1 Crop: Corn, silage Plant date: 05/20/2023



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	310.82	57.10	357.39	2,613.50
Fresh water	0.00	0.00	0.00	96.59
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	317.82	57.10	357.39	2,710.09
Anticipated crop nutrient removal	224.00	42.00	184.80	0.00
Actual crop nutrient removal	365.86	68.73	424.48	1,338.12
Nutrient balance	-48.04	-11.63	-67.09	1,371.97
Applied to removed ratio	0.87	0.83	0.84	2.03

Fresh water applied
36,652,000.00 gallons
1,349.77 acre-inches
35.52 inches/acre

Process wastewater applied
6,820,000.00 gallons
251.16 acre-inches
6.61 inches/acre

Total harvests for the crop
1 harvests

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

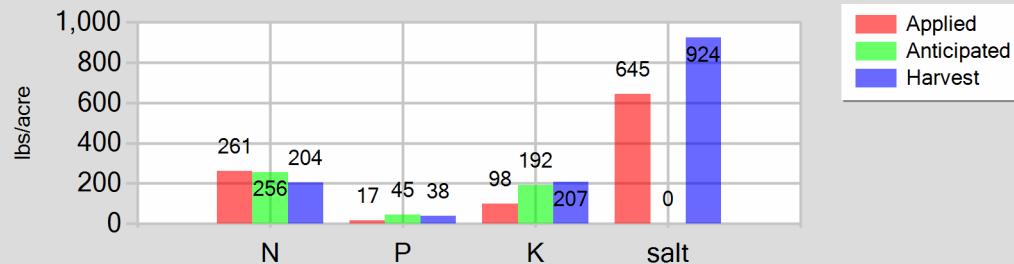
2 - 11/01/2022: Wheat, silage, boot stage

Field name: 2

Crop: Wheat, silage, boot stage

Plant date: 11/01/2022

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	0.00	0.00	0.00	0.00
Process wastewater	253.89	17.05	98.17	628.75
Fresh water	0.00	0.00	0.00	15.97
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	260.89	17.05	98.17	644.72
Anticipated crop nutrient removal	256.00	44.80	192.00	0.00
Actual crop nutrient removal	204.40	38.14	207.34	924.21
Nutrient balance	56.48	-21.10	-109.17	-279.50
Applied to removed ratio	1.28	0.45	0.47	0.70

Fresh water applied

6,060,000.00 gallons
223.17 acre-inches
5.87 inches/acre

Process wastewater applied

1,928,000.00 gallons
71.00 acre-inches
1.87 inches/acre

Total harvests for the crop

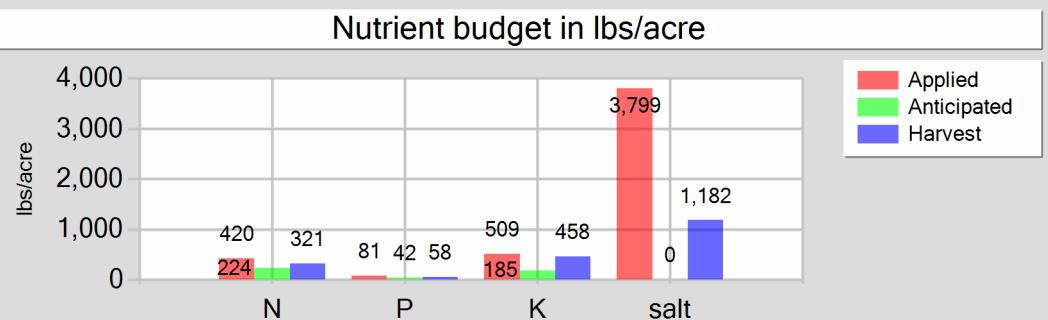
1 harvests

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

2 - 05/20/2023: Corn, silage

Field name: 2 Crop: Corn, silage Plant date: 05/20/2023



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	412.51	81.10	508.50	3,719.71
Fresh water	0.00	0.00	0.00	79.69
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	419.51	81.10	508.50	3,799.40
Anticipated crop nutrient removal	224.00	42.00	184.80	0.00
Actual crop nutrient removal	321.07	57.53	458.41	1,182.21
Nutrient balance	98.44	23.56	50.10	2,617.18
Applied to removed ratio	1.31	1.41	1.11	3.21

Fresh water applied
30,240,000.00 gallons
1,113.64 acre-inches
29.31 inches/acre

Process wastewater applied
9,020,000.00 gallons
332.18 acre-inches
8.74 inches/acre

Total harvests for the crop
1 harvests

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

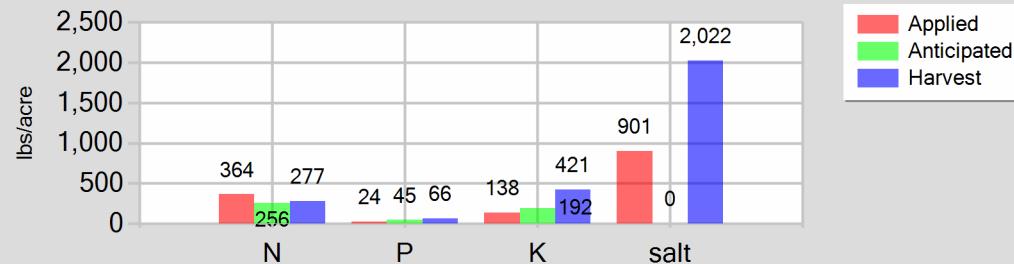
3 - 11/01/2022: Wheat, silage, boot stage

Field name: 3

Crop: Wheat, silage, boot stage

Plant date: 11/01/2022

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	0.00	0.00	0.00	0.00
Process wastewater	357.43	24.00	138.21	885.17
Fresh water	0.00	0.00	0.00	15.45
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	364.43	24.00	138.21	900.62
Anticipated crop nutrient removal	256.00	44.80	192.00	0.00
Actual crop nutrient removal	277.29	65.88	421.30	2,022.24
Nutrient balance	87.14	-41.88	-283.10	-1,121.63
Applied to removed ratio	1.31	0.36	0.33	0.45

Fresh water applied

3,240,000.00 gallons
119.32 acre-inches
5.68 inches/acre

Process wastewater applied

1,500,000.00 gallons
55.24 acre-inches
2.63 inches/acre

Total harvests for the crop

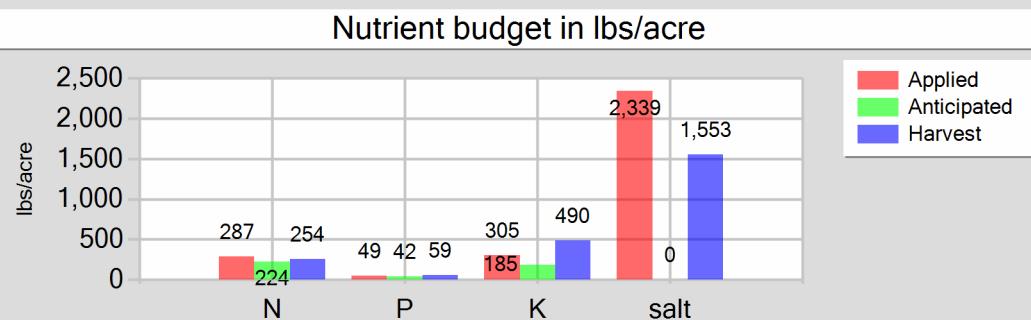
1 harvests

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

3 - 05/20/2023: Corn, silage

Field name: 3 Crop: Corn, silage Plant date: 05/20/2023



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	279.69	48.78	304.88	2,228.97
Fresh water	0.00	0.00	0.00	109.87
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	286.69	48.78	304.88	2,338.84
Anticipated crop nutrient removal	224.00	42.00	184.80	0.00
Actual crop nutrient removal	253.78	59.15	490.39	1,553.21
Nutrient balance	32.91	-10.37	-185.51	785.63
Applied to removed ratio	1.13	0.82	0.62	1.51

Fresh water applied

23,040,000.00 gallons
848.48 acre-inches
40.40 inches/acre

Process wastewater applied

3,400,000.00 gallons
125.21 acre-inches
5.96 inches/acre

Total harvests for the crop

1 harvests

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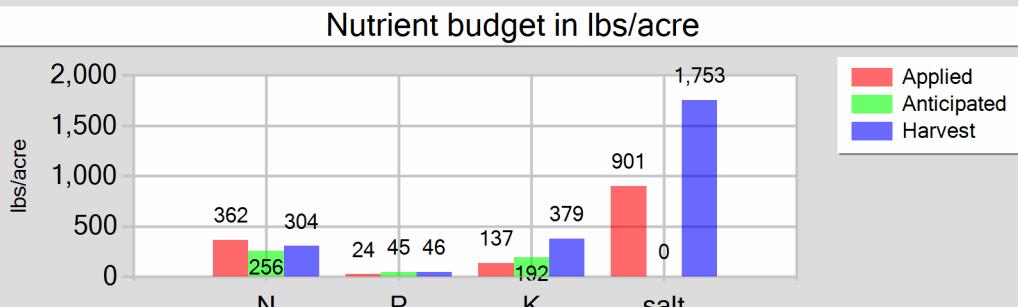
Reporting period 01/01/2023 to 12/31/2023.

5&6 - 11/01/2022: Wheat, silage, boot stage

Field name: 5&6

Crop: Wheat, silage, boot stage

Plant date: 11/01/2022



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)	Fresh water applied
Existing soil nutrient content	0.00	0.00	0.00	0.00	9,960,000.00 gallons
Plowdown credit	0.00	0.00	0.00	0.00	366.79 acre-inches
Commercial fertilizer / Other	0.00	0.00	0.00	0.00	8.15 inches/acre
Dry manure	0.00	0.00	0.00	0.00	
Process wastewater	354.95	23.83	137.25	879.03	Process wastewater applied
Fresh water	0.00	0.00	0.00	22.16	3,192,000.00 gallons
Atmospheric deposition	7.00	0.00	0.00	0.00	117.55 acre-inches
Total nutrients applied	361.95	23.83	137.25	901.19	2.61 inches/acre
Anticipated crop nutrient removal	256.00	44.80	192.00	0.00	
Actual crop nutrient removal	303.53	46.07	378.51	1,752.52	Total harvests for the crop
Nutrient balance	58.42	-22.24	-241.26	-851.33	1 harvests
Applied to removed ratio	1.19	0.52	0.36	0.51	

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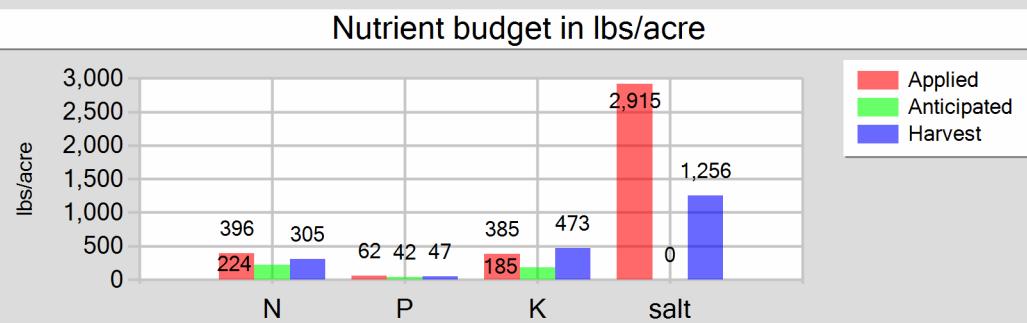
Reporting period 01/01/2023 to 12/31/2023.

5&6 - 05/20/2023: Corn, silage

Field name: 5&6

Crop: Corn, silage

Plant date: 05/20/2023



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)	Fresh water applied
Existing soil nutrient content	0.00	0.00	0.00	0.00	44,240,000.00 gallons
Plowdown credit	0.00	0.00	0.00	0.00	1,629.21 acre-inches
Commercial fertilizer / Other	0.00	0.00	0.00	0.00	36.20 inches/acre
Dry manure	0.00	0.00	0.00	0.00	
Process wastewater	389.48	61.86	385.49	2,816.96	Process wastewater applied
Fresh water	0.00	0.00	0.00	98.45	10,188,000.00 gallons
Atmospheric deposition	7.00	0.00	0.00	0.00	375.19 acre-inches
Total nutrients applied	396.48	61.86	385.49	2,915.41	8.34 inches/acre
Anticipated crop nutrient removal	224.00	42.00	184.80	0.00	Total harvests for the crop
Actual crop nutrient removal	305.45	46.51	472.90	1,255.89	1 harvests
Nutrient balance	91.04	15.34	-87.40	1,659.51	
Applied to removed ratio	1.30	1.33	0.82	2.32	

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

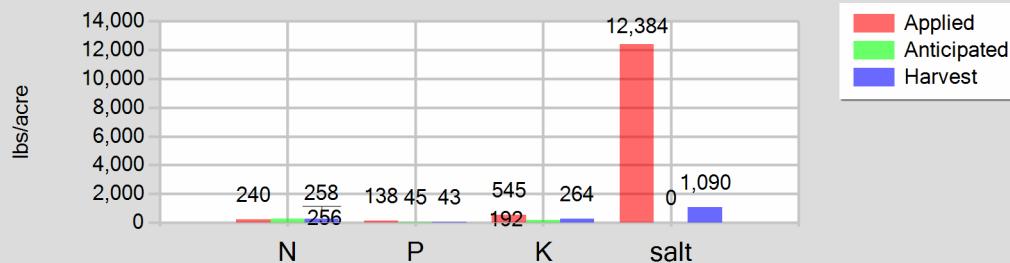
Hills - 11/01/2022: Wheat, silage, boot stage

Field name: Hills

Crop: Wheat, silage, boot stage

Plant date: 11/01/2022

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	232.50	137.50	545.00	12,361.25
Process wastewater	0.00	0.00	0.00	0.00
Fresh water	0.00	0.00	0.00	23.07
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	239.50	137.50	545.00	12,384.32
Anticipated crop nutrient removal	256.00	44.80	192.00	0.00
Actual crop nutrient removal	257.91	42.99	264.43	1,090.27
Nutrient balance	-18.41	94.51	280.57	11,294.06
Applied to removed ratio	0.93	3.20	2.06	11.36

Fresh water applied

9,216,000.00 gallons
339.39 acre-inches
8.48 inches/acre

Process wastewater applied

0.00 gallons
0.00 acre-inches
0.00 inches/acre

Total harvests for the crop

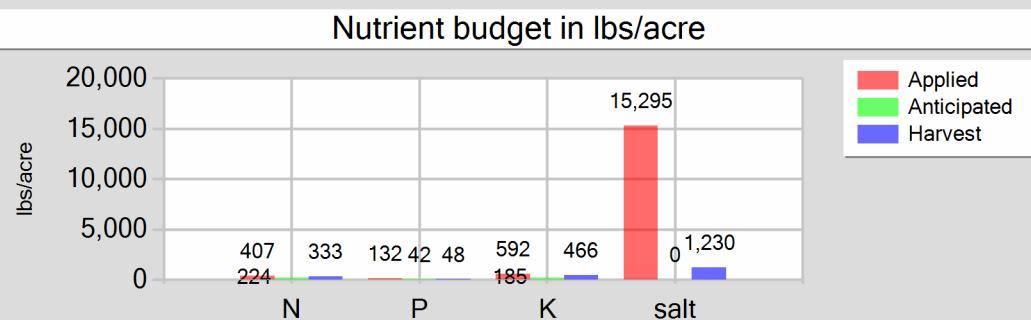
1 harvests

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

Hills - 05/20/2023: Corn, silage

Field name: Hills Crop: Corn, silage Plant date: 05/20/2023



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	400.00	132.00	592.00	15,206.02
Process wastewater	0.00	0.00	0.00	0.00
Fresh water	0.00	0.00	0.00	88.88
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	407.00	132.00	592.00	15,294.90
Anticipated crop nutrient removal	224.00	42.00	184.80	0.00
Actual crop nutrient removal	333.42	47.63	466.11	1,229.92
Nutrient balance	73.58	84.37	125.89	14,064.98
Applied to removed ratio	1.22	2.77	1.27	12.44

Fresh water applied
35,504,000.00 gallons
1,307.49 acre-inches
32.69 inches/acre

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

Total harvests for the crop
1 harvests

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

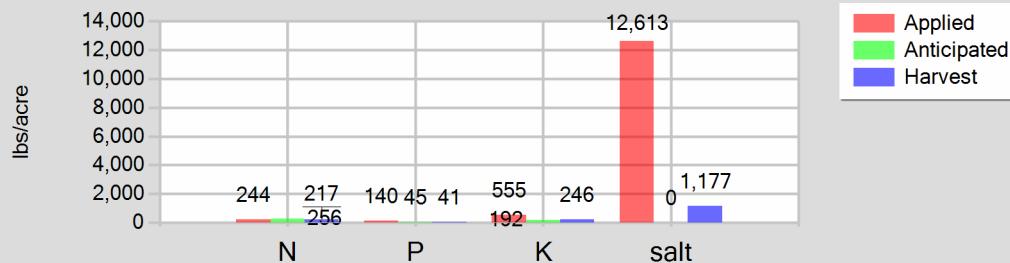
Speed 1 - 11/01/2022: Wheat, silage, boot stage

Field name: Speed 1

Crop: Wheat, silage, boot stage

Plant date: 11/01/2022

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	236.73	140.00	554.91	12,586.00
Process wastewater	0.00	0.00	0.00	0.00
Fresh water	0.00	0.00	0.00	26.87
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	243.73	140.00	554.91	12,612.87
Anticipated crop nutrient removal	256.00	44.80	192.00	0.00
Actual crop nutrient removal	217.35	41.46	246.25	1,177.23
Nutrient balance	26.37	98.54	308.66	11,435.65
Applied to removed ratio	1.12	3.38	2.25	10.71

Fresh water applied

14,760,000.00 gallons
543.56 acre-inches
9.88 inches/acre

Process wastewater applied

0.00 gallons
0.00 acre-inches
0.00 inches/acre

Total harvests for the crop

1 harvests

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

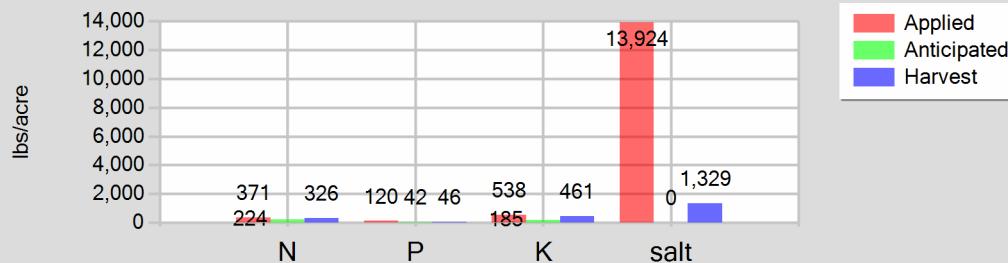
Speed 1 - 05/20/2023: Corn, silage

Field name: Speed 1

Crop: Corn, silage

Plant date: 05/20/2023

Nutrient budget in lbs/acre



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	363.64	120.00	538.18	13,823.65
Process wastewater	0.00	0.00	0.00	0.00
Fresh water	0.00	0.00	0.00	100.80
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	370.64	120.00	538.18	13,924.45
Anticipated crop nutrient removal	224.00	42.00	184.80	0.00
Actual crop nutrient removal	326.25	45.57	461.12	1,328.68
Nutrient balance	44.39	74.43	77.06	12,595.77
Applied to removed ratio	1.14	2.63	1.17	10.48

Fresh water applied

55,360,000.00 gallons
2,038.72 acre-inches
37.07 inches/acre

Process wastewater applied

0.00 gallons
0.00 acre-inches
0.00 inches/acre

Total harvests for the crop

1 harvests

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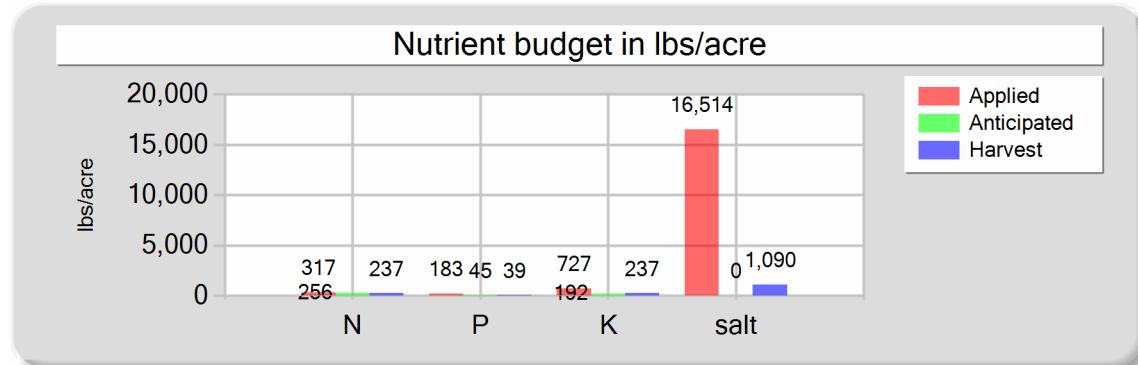
Reporting period 01/01/2023 to 12/31/2023.

Speed 2 - 11/01/2022: Wheat, silage, boot stage

Field name: Speed 2

Crop: Wheat, silage, boot stage

Plant date: 11/01/2022



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	310.00	183.33	726.67	16,481.67
Process wastewater	0.00	0.00	0.00	0.00
Fresh water	0.00	0.00	0.00	32.23
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	317.00	183.33	726.67	16,513.90
Anticipated crop nutrient removal	256.00	44.80	192.00	0.00
Actual crop nutrient removal	236.67	39.06	236.67	1,090.31
Nutrient balance	80.33	144.27	489.99	15,423.59
Applied to removed ratio	1.34	4.69	3.07	15.15

Fresh water applied

13,518,000.00 gallons
497.82 acre-inches
11.85 inches/acre

Process wastewater applied

0.00 gallons
0.00 acre-inches
0.00 inches/acre

Total harvests for the crop

1 harvests

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

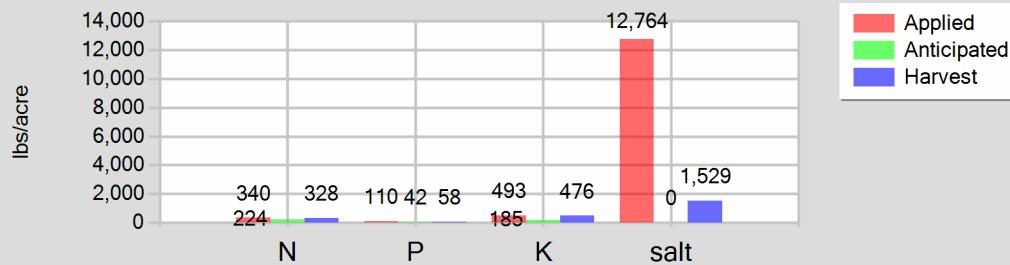
Speed 2 - 05/20/2023: Corn, silage

Field name: Speed 2

Crop: Corn, silage

Plant date: 05/20/2023

Nutrient budget in lbs/acre



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	333.33	110.00	493.33	12,671.68
Process wastewater	0.00	0.00	0.00	0.00
Fresh water	0.00	0.00	0.00	91.90
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	340.33	110.00	493.33	12,763.58
Anticipated crop nutrient removal	224.00	42.00	184.80	0.00
Actual crop nutrient removal	328.47	57.86	475.91	1,528.52
Nutrient balance	11.86	52.14	17.42	11,235.06
Applied to removed ratio	1.04	1.90	1.04	8.35

Fresh water applied

38,542,000.00 gallons
1,419.37 acre-inches
33.79 inches/acre

Process wastewater applied

0.00 gallons
0.00 acre-inches
0.00 inches/acre

Total harvests for the crop

1 harvests

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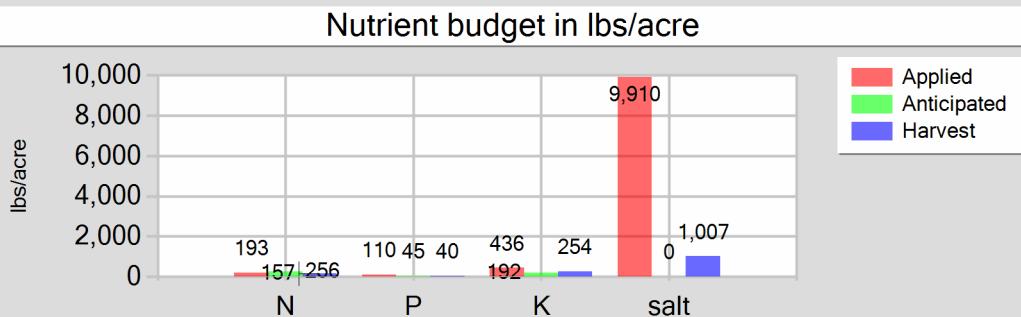
Reporting period 01/01/2023 to 12/31/2023.

Speed 3 - 11/01/2022: Wheat, silage, boot stage

Field name: Speed 3

Crop: Wheat, silage, boot stage

Plant date: 11/01/2022



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)	Fresh water applied
Existing soil nutrient content	0.00	0.00	0.00	0.00	6,318,000.00 gallons
Plowdown credit	0.00	0.00	0.00	0.00	232.67 acre-inches
Commercial fertilizer / Other	0.00	0.00	0.00	0.00	7.76 inches/acre
Dry manure	186.00	110.00	436.00	9,889.00	
Process wastewater	0.00	0.00	0.00	0.00	0.00 gallons
Fresh water	0.00	0.00	0.00	21.09	0.00 acre-inches
Atmospheric deposition	7.00	0.00	0.00	0.00	0.00 inches/acre
Total nutrients applied	193.00	110.00	436.00	9,910.09	
Anticipated crop nutrient removal	256.00	44.80	192.00	0.00	
Actual crop nutrient removal	157.06	40.39	253.54	1,007.42	
Nutrient balance	35.94	69.61	182.46	8,902.67	Total harvests for the crop
Applied to removed ratio	1.23	2.72	1.72	9.84	1 harvests

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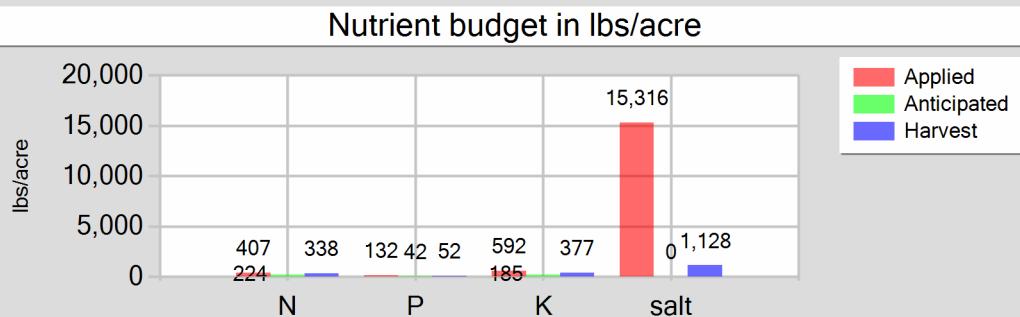
Reporting period 01/01/2023 to 12/31/2023.

Speed 3 - 05/20/2023: Corn, silage

Field name: Speed 3

Crop: Corn, silage

Plant date: 05/20/2023



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	400.00	132.00	592.00	15,206.02
Process wastewater	0.00	0.00	0.00	0.00
Fresh water	0.00	0.00	0.00	109.65
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	407.00	132.00	592.00	15,315.66
Anticipated crop nutrient removal	224.00	42.00	184.80	0.00
Actual crop nutrient removal	338.44	52.07	376.62	1,128.13
Nutrient balance	68.56	79.93	215.38	14,187.53
Applied to removed ratio	1.20	2.54	1.57	13.58

Fresh water applied
32,848,000.00 gallons
1,209.68 acre-inches
40.32 inches/acre

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

Total harvests for the crop
1 harvests

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

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

Sample and source description: Dry Manure

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

Moisture: 32.8 %

	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	10,000.00	3,300.00	14,800.00	9,500.00	5,600.00	5,500.00	2,600.00	599.70		56.57
DL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00		1.00

Dry Manure

Sample and source description: Dry Manure

Sample date: 10/16/2023 Material type: Corral solids Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 22.5 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Calcium (mg/kg)	Magnesium (mg/kg)	Sodium (mg/kg)	Sulfur (mg/kg)	Chloride (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	9,300.00	5,500.00	21,800.00							63.80
DL	100.00	100.00	100.00							1.00

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

Sample and source description: 1st Qtr WW

Sample date: 02/03/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: 7.73

	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	599.64	90.27	0.00	0.00	40.26	231.86								2,320.00	1,485
DL	67.00	0.57	0.01	0.01	0.57	0.01								1.00	19

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2nd Qtr WW

Sample and source description: 2nd Qtr WW

Sample date: 06/09/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: 7.49

	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	209.60	139.70	0.00	0.00	46.20	290.50	6.40	5.00	7.70	31.70	0.00	1.20	3.50	3,322.00	2,126
DL	67.00	0.57	0.01	0.01	0.64	0.01	0.02	0.01	0.01	0.10	0.10	0.02	0.01	1.00	19

3rd Qtr WW

Sample and source description: 3rd Qtr WW

Sample date: 08/28/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: 7.31

	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	199.25	13.27	0.00	0.00	5.82	31.12								346.00	221
DL	67.00	0.57	0.01	0.01	0.64	0.01								1.00	19

4th Qtr WW

Sample and source description: 4th Qtr WW

Sample date: 12/08/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: 7.49

	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	479.70	129.00	0.00	0.00	45.80	199.80								2,664.00	1,704
DL	67.00	0.57	0.01	0.01	0.64	0.01								1.00	19

C. FRESH WATER ANALYSES

Canal

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

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

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

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

D1**D1**Sample description: D1Sample date: 12/13/2023 Source of analysis: Lab analysis

	Total N (mg/L)	NH4-N (mg/L)	Nitrate-N (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Bicarbonate (mg/L)	Carbonate (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	EC (μ mhos/cm)	TDS (mg/L)
Value	0.00										448.00	
DL	1.00										1.00	

D2**D2**Sample description: D2Sample date: 12/13/2023 Source of analysis: Lab analysis

	Total N (mg/L)	NH4-N (mg/L)	Nitrate-N (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Bicarbonate (mg/L)	Carbonate (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	EC (μ mhos/cm)	TDS (mg/L)
Value	0.00										443.00	
DL	0.10										1.00	

D. SOIL ANALYSES

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

No soil analyses entered.

E. PLANT TISSUE ANALYSES

1 - 11/01/2022: Wheat, silage, boot stage

1

Sample and source description: 1

Sample date: 05/02/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 65.4 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	19,000.00	5,100.00	31,400.00		11.70
DL	100.00	100.00	100.00		1.00

1 - 05/20/2023: Corn, silage

1

Sample and source description: 1

Sample date: 08/30/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 65.2 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	18,100.00	3,400.00	21,000.00		6.62
DL	100.00	100.00	100.00		1.00

2 - 11/01/2022: Wheat, silage, boot stage

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

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

2 - 11/01/2022: Wheat, silage, boot stage

2

Sample and source description: 2

Sample date: 05/02/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 69.8 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	20,900.00	3,900.00	21,200.00		9.45
DL	100.00	100.00	100.00		1.00

2 - 05/20/2023: Corn, silage

2

Sample and source description: 2

Sample date: 08/30/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 68.1 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	17,300.00	3,100.00	24,700.00		6.37
DL	100.00	100.00	100.00		1.00

3 - 11/01/2022: Wheat, silage, boot stage

3

Sample and source description: 3

Sample date: 05/02/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 54.7 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	18,100.00	4,300.00	27,500.00		13.20
DL	100.00	100.00	100.00		1.00

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

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

3 - 05/20/2023: Corn, silage

3

Sample and source description: 3

Sample date: 08/30/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 67.3 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	13,300.00	3,100.00	25,700.00		8.14
DL	100.00	100.00	100.00		1.00

5&6 - 11/01/2022: Wheat, silage, boot stage

5&6

Sample and source description: 5&6

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

Moisture: 73.1 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	33,600.00	5,100.00	41,900.00		19.40
DL	100.00	100.00	100.00		1.00

5&6 - 05/20/2023: Corn, silage

5

Sample and source description: 5

Sample date: 08/30/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 73.4 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	19,700.00	3,000.00	30,500.00		8.10
DL	100.00	100.00	100.00		1.00

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

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

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

Hills

Sample and source description: Hills

Sample date: 05/02/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 62.2 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	19,800.00	3,300.00	20,300.00		8.37
DL	100.00	100.00	100.00		1.00

Hills - 05/20/2023: Corn, silage

Hills

Sample and source description: Hills

Sample date: 08/30/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 71.4 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	19,600.00	2,800.00	27,400.00		7.23
DL	100.00	100.00	100.00		1.00

Speed 1 - 11/01/2022: Wheat, silage, boot stage

Speed 1

Sample and source description: Speed 1

Sample date: 05/02/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 61.7 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	17,300.00	3,300.00	19,600.00		9.37
DL	100.00	100.00	100.00		1.00

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

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

Speed 1 - 05/20/2023: Corn, silage

Speed 1

Sample and source description: Speed 1

Sample date: 08/30/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 68.0 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	17,900.00	2,500.00	25,300.00		7.29
DL	100.00	100.00	100.00		1.00

Speed 2 - 11/01/2022: Wheat, silage, boot stage

Speed 2

Sample and source description: Speed 2

Sample date: 05/02/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 65.3 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	20,600.00	3,400.00	20,600.00		9.49
DL	100.00	100.00	100.00		1.00

Speed 2 - 05/20/2023: Corn, silage

Speed 2

Sample and source description: Speed 2

Sample date: 08/30/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 67.2 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	17,600.00	3,100.00	25,500.00		8.19
DL	100.00	100.00	100.00		1.00

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

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

Speed 3 - 11/01/2022: Wheat, silage, boot stage

Speed3

Sample and source description: Speed3

Sample date: 05/02/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 67.8 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	14,000.00	3,600.00	22,600.00		8.98
DL	100.00	100.00	100.00		1.00

Speed 3 - 05/20/2023: Corn, silage

Speed 3

Sample and source description: Speed 3

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

Moisture: 69.7 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	19,500.00	3,000.00	21,700.00		6.50
DL	100.00	100.00	100.00		1.00

F. SUBSURFACE (TILE) DRAINAGE ANALYSES

No subsurface (tile) drainage analyses entered.

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

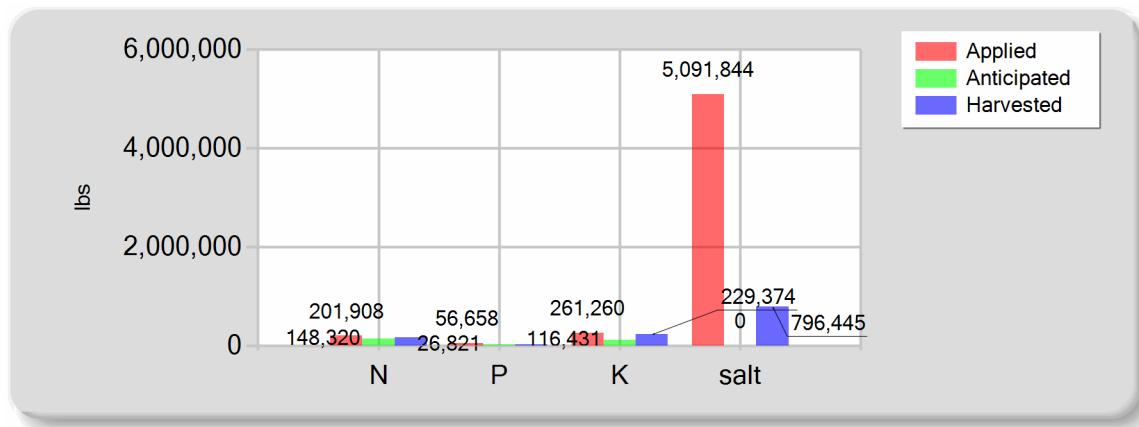
Reporting period 01/01/2023 to 12/31/2023.

NUTRIENT APPLICATIONS, POTENTIAL REMOVAL, AND BALANCE

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

	Total N (lbs)	Total P (lbs)	Total K (lbs)	Total salt (lbs)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	102,920.00	44,660.00	187,680.00	4,532,512.48
Process wastewater	94,661.80	11,998.36	73,579.97	522,641.37
Fresh water	0.00	0.00	0.00	36,689.89
Atmospheric deposition	4,326.00	0.00	0.00	0.00
Total nutrients applied	201,907.80	56,658.36	261,259.97	5,091,843.74
Anticipated crop nutrient removal	148,320.00	26,821.20	116,431.20	0.00
Actual crop nutrient removal	172,764.16	30,491.39	229,373.52	796,445.20
Nutrient balance	29,143.63	26,166.97	31,886.45	4,295,398.54
Applied to removed ratio	1.17	1.86	1.14	6.39

B. POUNDS OF NUTRIENT APPLIED VS. CROP REMOVAL

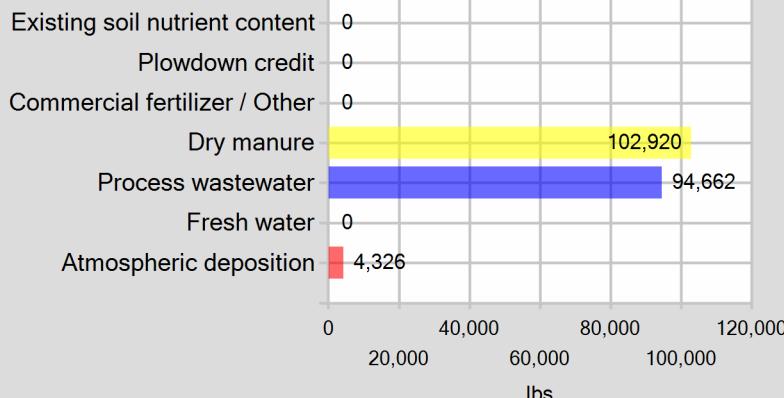


Annual Report - General Order No. R5-2007-0035

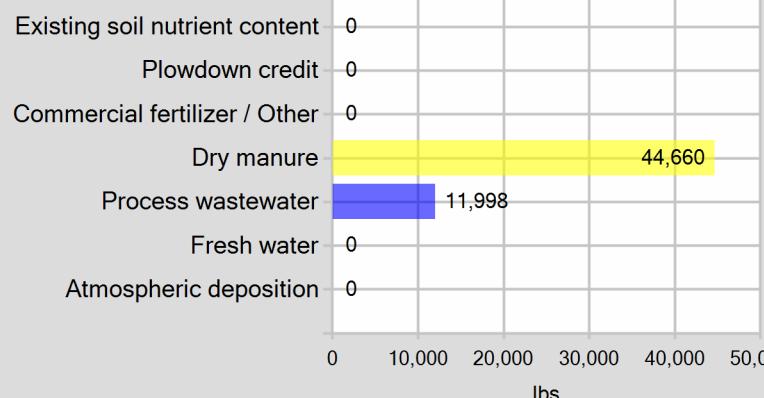
Reporting period 01/01/2023 to 12/31/2023.

C. POUNDS OF NUTRIENT APPLIED BY MATERIAL TYPE

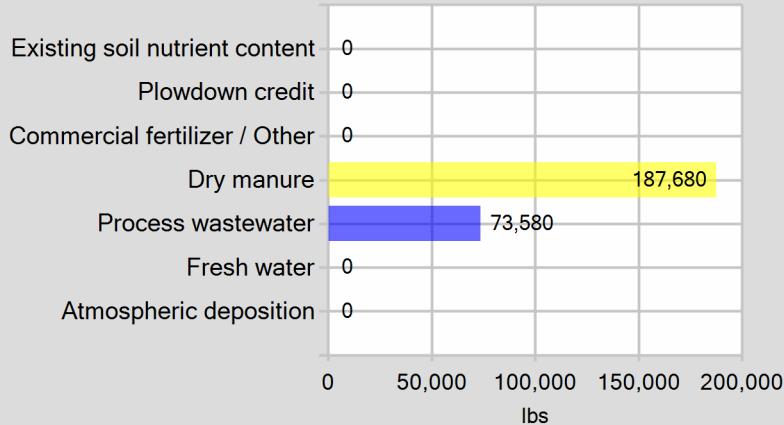
Pounds of nitrogen applied



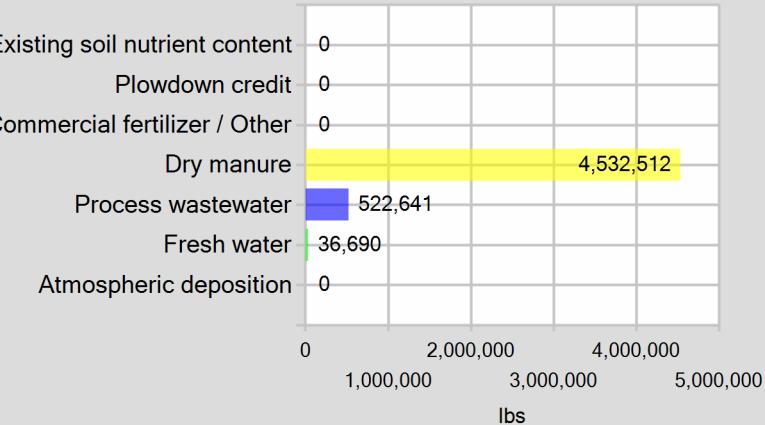
Pounds of phosphorus applied



Pounds of potassium applied



Pounds of salt applied



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

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

EXCEPTION REPORTING

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

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

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

B. STORM WATER DISCHARGES

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

No stormwater discharges occurred during the reporting period.

C. LAND APPLICATION AREA TO SURFACE WATER DISCHARGES

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

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

NUTRIENT MANAGEMENT PLAN AND EXPORT AGREEMENT STATEMENTS

A. NUTRIENT MANAGEMENT PLAN STATEMENTS

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

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

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

B. EXPORT AGREEMENT STATEMENT

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

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

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

ADDITIONAL NOTES

A. NOTES

All wells were all negative for Ammonia which we tested onsite using a test strip.

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

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

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

CERTIFICATION

A. OWNER AND/OR OPERATOR CERTIFICATION

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

SIGNATURE OF OWNER OF FACILITY

SIGNATURE OF OPERATOR OF FACILITY

Melvin Medeiros

SAME AS OWNER

PRINT OR TYPE NAME

PRINT OR TYPE NAME

DATE

DATE

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

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

ATTACHMENTS

A. REQUIRED ATTACHMENTS

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

Annual Dairy Facility Assessment

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

Manure/Process Wastewater Tracking Manifests

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

Corrective Actions Documents

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

Groundwater Monitoring

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

Storm Water Monitoring

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

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

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

CERTIFICATION

A. OWNER AND/OR OPERATOR CERTIFICATION

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



SIGNATURE OF OWNER OF FACILITY

Melvin Medeiros

PRINT OR TYPE NAME

06125124

DATE

SIGNATURE OF OPERATOR OF FACILITY

SAME AS OWNER

PRINT OR TYPE NAME

DATE



Melvin Mederios Dairy
608 Riverdale Avenue
Laton, CA 93242

Account# 00-0018046
Account Manager: Ben Nydam
Submitted By: Christina Medeiros

Received: 08/17/2023 8:44
Reported: 08/21/2023 15:47

Samples in this Report

Lab ID	Sample	Matrix	Sampled By	Crop	Date Sampled
23H1632-01	Canal	Ag Water			08/16/2023 15:30
Default Cooler	Temperature on Receipt °C: 1.1				
Containers Intact					
COC/Labels Agree					
Received On Ice					

Notes and Definitions

Item	Definition
MCL	Drinking Water Maximum Contaminant Level
ND	Analyte NOT DETECTED at or above the reporting limit.
NES	Not Enough Sample
*	Not Taken

Laboratory Director/Technical Manager

ELAP Certification #1595
A2LA Certification #6440.02

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



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Reported: 08/21/2023 15:47

Sample Results

Sample: Canal
23H1632-01 (Water)

Sampled: 8/16/2023 15:30

Sampled By:

Analyte	Result	Units	Reporting Limit	DIL	DW MCL	Date/Time Analyzed	Method	Notes	Batch
Electrical Conductivity	0.02	mmhos/cm	0.01	1		08/18/23 18:00	SM 2510 B		BEH0919
Nitrate Nitrogen as NO3N	23.3	mg/L	0.1	1	10	08/18/23 14:31	EPA 300.0		BEH0887

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Quality Control

Analyte	Result Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit
Batch: BEH0887									
Blank (BEH0887-BLK1)									
Nitrate Nitrogen as NO3N	ND	0.1	mg/L		Prepared: 8/17/2023 Analyzed: 8/18/2023				
Blank (BEH0887-BLK2)									
Nitrate Nitrogen as NO3N	ND	0.1	mg/L		Prepared: 8/17/2023 Analyzed: 8/18/2023				
LCS (BEH0887-BS1)									
Nitrate Nitrogen as NO3N	5.1	0.1	mg/L	5.000		102	90-110		
Duplicate (BEH0887-DUP1)									
Nitrate Nitrogen as NO3N	0.7	0.1	mg/L		0.7			0.151	10
Matrix Spike (BEH0887-MS1)									
Nitrate Nitrogen as NO3N	6.0	0.1	mg/L	5.000	0.7	106	90-110		
Reference (BEH0887-SRM1)									
Nitrate Nitrogen as NO3N	10.2		mg/L	10.00		102	90-110		
Reference (BEH0887-SRM2)									
Nitrate Nitrogen as NO3N	10.2		mg/L	10.00		102	90-110		

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608 Riverdale Avenue
Laton, CA 93242

Account# 00-0018046
Account Manager: Ben Nydam
Submitted By: Christina Medeiros

Received: 08/17/2023 8:44
Reported: 08/21/2023 15:47

Quality Control
(Continued)

Analyte	Result Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	Limits	RPD	RPD Limit
Batch: BEH0919									
Blank (BEH0919-BLK1)									
Electrical Conductivity	ND		0.01	mmhos/cm	Prepared: 8/17/2023 Analyzed: 8/18/2023				
Blank (BEH0919-BLK2)									
Electrical Conductivity	ND		0.01	mmhos/cm	Prepared: 8/17/2023 Analyzed: 8/18/2023				
Blank (BEH0919-BLK3)									
Electrical Conductivity	ND		0.01	mmhos/cm	Prepared: 8/17/2023 Analyzed: 8/18/2023				
Duplicate (BEH0919-DUP1)									
Electrical Conductivity	0.02		0.01	mmhos/cm	Source: 23H1632-01 Prepared: 8/17/2023 Analyzed: 8/18/2023	0.02		6.30	10
Duplicate (BEH0919-DUP2)									
Electrical Conductivity	0.47		0.01	mmhos/cm	Source: 23H1667-01 Prepared: 8/17/2023 Analyzed: 8/18/2023	0.47		0.466	10
Reference (BEH0919-SRM1)									
Electrical Conductivity	517			umhos/cm	538.0	96.1	90-110		
Reference (BEH0919-SRM3)									
Electrical Conductivity	981			umhos/cm	1000	98.1	90-110		
Reference (BEH0919-SRM4)									
Electrical Conductivity	990			umhos/cm	1000	99.0	90-110		
Reference (BEH0919-SRM5)									
Electrical Conductivity	994			umhos/cm	1000	99.4	90-110		

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08/17/23 08:44

23H1632

WATER WORK REQUEST

Acct No.

18046

Cons.

8

Purchase Order No.

Results Needed By
Melvin Medeiros Dairy

Client _____

Medeiros Dairy

Address _____

608 E. Riverdale Ave

City, State, Zip _____

Laton Ca 93242

Email: _____

Medeiros33@aol.com

Copy to: mel_tinamedeiros@yahoo.comRequested by/Cell: Christina Medeiros/ 559-903-2490

Facility: _____

Date sampled _____

Sampled by _____

 QA/QC Document Copy of Chain RWQCB

DESCRIPTION OF SAMPLES

1. Canal

Sampled From: _____

2. _____

Sampled From: _____

3. _____

Sampled From: _____

4. _____

Sampled From: _____

5. _____

Sampled From: _____

6. _____

Sampled From: _____

7. _____

Sampled From: _____

8. _____

Sampled From: _____

9. _____

Sampled From: _____

10. _____

Sampled From: _____

CHAIN OF CUSTODY

Carrier	Signature	Company	Received (Date/Time)	Relinquished (Date/Time)
First	<u>MM</u>	Medeiros		8/16/23 4:35pm
Second	<u>MM</u>	DLI	8/16/23 4:35pm	8/16/23
Third	<u>MM</u>	DLI	8/17/23 8:44	
Fourth				

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

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

Invoicing Information:

Medeiros Pricing 2023

Shipping			
Sampling Hrs	Miles	Consulting	\$ _____ In
_____	_____	_____	\$ _____ Out
Amt Paid	Rec By	Check No.	Date

Signature _____

Sample received in cooler with ice?

[] Yes [] No

et:update 2020

IR Thermometer SN: 200560723
 Correction Factor: 0°C
 Calibration Due: 9/26/2023
 Location: Laboratory



08/17/23 08:44

23H1632

Shipping Information: Shipped In <input type="checkbox"/> Picked-Up <input type="checkbox"/> Walk In <input type="checkbox"/> DLI Sampler <input checked="" type="checkbox"/> Other <input type="checkbox"/>											
<input type="checkbox"/> Samples refrigerated before pick up <input type="checkbox"/> Picked up samples placed in Ice chest					Container: Ice Chest <input checked="" type="checkbox"/> Box <input type="checkbox"/> None <input type="checkbox"/> Refrigerant: Wet Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/>						
Samples Preserved with HNO₃ or H₂SO₄ were: <input type="checkbox"/> Received Preserved <input type="checkbox"/> Preserved Upon Receipt at Laboratory											
Type of Container(s) Received	Sample Number										
	1	2	3	4	5	6	7	8	9	10	
Sample Containers for Internal (DLI) Use <i>(Containers that go into the Lab)</i>											
Plastics	100 mL sterile plastic Na ₂ S ₂ O ₃ (Green)										
	250 mL unpreserved (White) Plastic										
	250 mL HNO ₃ (Red) Plastic										
	* pH Value										
	250 mL H ₂ SO ₄ (Yellow) Plastic										
	* pH Value										
	500 mL unpreserved (White) Plastic										
1 L unpreserved (White) Plastic	1										
1 L unpreserved (BOD) (Purple) Plastic											
Special	500mL unpreserved (White) Glass										
	PO4-P Kit										
	Other:										
Sample Containers for Subcontracted ("Send Out") Analyses <i>(Containers that go in the Subcontract ("Send Out") Refrigerator)</i>											
Plastics	100 mL sterile plastic Na ₂ S ₂ O ₃ (Green)										
	250 mL unpreserved (White) Plastic										
	250 mL HNO ₃ (Red) Plastic										
	250 mL H ₂ SO ₄ (Yellow) Plastic										
	500 mL HNO ₃ (Red)										
	1 L unpreserved (White) Plastic										
	1 L unpreserved (BOD) (Purple) Plastic										
VOA Vials	40 mL VOA, Na ₂ S ₂ O ₃ + MCAA (EPA531)										
	40 mL VOA, Na ₂ S ₂ O ₃ (EPA547)										
	40mL AG VOA unpreserved (White) (Set of 3)										
	40 mL AG VOA, Na ₂ S ₂ O ₃ (Green) (Set of 3)										
	40mL VOA, H ₃ PO ₄ (Set of 3)										
	40 mL VOA, HCl (Blue) (Set of 3)										
	40 mL VOA, Na ₂ S ₂ O ₃ (Green) (Set of 3)										
Glass	250 mL AG unpreserved (White)										
	250 mL AG H ₂ SO ₄ (Yellow)										
	250 mL AG Na ₂ S ₂ O ₃ (Green)										
	250 mL AG Na ₂ S ₂ O ₃ + MCAA										
	500 mL glass unpreserved (White)										
	500 mL AG HCl (Blue)										
	1 L AG unpreserved (White)										
	1 L AG H ₂ SO ₄ (Yellow)										
	1 L AG Na ₂ S ₂ O ₃ (Green)										
Special	1 L AG HCl (Blue)										
	Cr ⁶⁺ - 50mL Plastic w/Borate/HCO ₃ /CO ₃										
	Cyanide - 500 mL NaOH										
	Asbestos - 1L P wrapped in foil (Set of 2)										
	Sulfide - 1 L AG or P NaOH + ZnAc										
	Chlorite/Bromate - 250 mL AG with EDA										
HAA5 - 250mL AG Ammonium Chlorite											
DO KIT											
Other:											