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: Kerman Cattle Co

Physical address of dairy:

4301 S Dickenson	Fresno	Fresno	93706
Number and Street	City	County	Zip Code

Street and nearest cross street (if no address):

Date facility was originally placed in operation: 01/01/1970

Regional Water Quality Control Board Basin Plan designation: Tulare Basin

County Assessor Parcel Number(s) for dairy facility:

B. OPERATORS

Gailey, Matt

Operator name: Gailey, Matt Telephone no.: (559) 280-2972 (Landline) (Cellular)

PO Box 370	Kerman	CA	93630
Mailing Address Number and Street	City	State	Zip Code

This operator is responsible for paying permit fees.

C. OWNERS

Bos Capital

Legal owner name: Bos Capital Telephone no.: (559) 268-2349 (Landline) (Cellular)

4301 S Dickenson	Fresno	CA	93706
Mailing Address Number and Street	City	State	Zip Code

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	770	70	100	50	50	0
Number under roof	0	0	0	0	0	0
Maximum number	770	70	100	50	50	0
Average number	770	70	100	50	50	0
Avg live weight (lbs)	1,200	1,300	1,000	800		

Predominant milk cow breed: Holstein

Average milk production: 69 *pounds per cow per day*

B. MANURE GENERATED

Total manure excreted by the herd: 22,349.87 *tons per reporting period*

Total nitrogen from manure: 286,626.14 *lbs per reporting period* After ammonia losses (30% loss applied): 200,638.30 *lbs per reporting period*

Total phosphorus from manure: 47,777.66 *lbs per reporting period*

Total potassium from manure: 146,956.21 *lbs per reporting period*

Total salt from manure: 378,651.00 *lbs per reporting period*

C. PROCESS WASTEWATER GENERATED

Process wastewater generated: 43,520,000 *gallons*

Total nitrogen generated: 181,482.88 *lbs*

Total phosphorus generated: 19,613.97 *lbs*

Total potassium generated: 141,133.20 *lbs*

Total salt generated: 937,763.37 *lbs*

	43,520,000	*gallons applied*
+	0	*gallons exported*
-	0	*gallons imported*
=	43,520,000	*gallons generated*

D. FRESH WATER SOURCES

Source Description	Type
Barn	Ground water
Canal	Surface water

E. SUBSURFACE (TILE) DRAINAGE SOURCES

No subsurface (tile) drainage sources entered.

F. NUTRIENT IMPORTS

No dry manure nutrient imports entered.

No process wastewater nutrient imports entered.

No commercial or other nutrient imports entered.

G. NUTRIENT EXPORTS

Date	Material type	Quantity	Reporting basis	Moisture (%)	Density (lbs/cu ft)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
10/22/2023	Corral solids	5,200.00 *ton*	As-is	28.9		9,500.00	5,600.00	19,900.00		55.65

No liquid nutrient exports entered.

Material type	Total N (lbs)	Total P (lbs)	Total K (lbs)	Total salt (lbs)
Dry manure	98,800.00	58,240.00	206,960.00	4,114,983.60
Process wastewater	0.00	0.00	0.00	0.00
Total exports for all materials	98,800.00	58,240.00	206,960.00	4,114,983.60

APPLICATION AREA

A. LIST OF LAND APPLICATION AREAS

Field name	Controlled acres	Cropable acres	Total harvests	Type of waste applied	Parcel number
1	75	75	2	process wastewater	X025-X060-X064-XXXX
2	50	50	2	process wastewater	X025-X060-X064-XXXX
3	70	70	2	process wastewater	X025-X060-X031-XXXX
4	65	65	2	process wastewater	X025-X060-X031-XXXX
Totals for areas that were used for application	260	260	8		
Totals for areas that were not used for application					
Land application area totals	260	260	8		

B. CROPS AND HARVESTS

1

Field name: 1

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

Crop: Wheat, silage, boot stage Acres planted: 75 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 (%)
05/23/2023	1,350.00 *ton*	Dry-weight		58.8	29,100.00	4,700.00	37,700.00		11.89

	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	18.00	431.61	69.71	559.17	1,763.52

06/01/2023: Corn, silage

Crop: Corn, silage Acres planted: 75 Plant date: 06/01/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
10/28/2023	1,875.00 *ton*	Dry-weight		69.4	23,500.00	2,700.00	22,700.00		6.58

	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	25.00	359.55	41.31	347.31	1,006.74

2

Field name: 2

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

Crop: Wheat, silage, boot stage Acres planted: 50 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 (%)
05/23/2023	900.00 *ton*	Dry-weight		69.8	17,100.00	4,100.00	23,200.00		9.91

	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	18.00	185.91	44.58	252.23	1,077.42

06/01/2023: Corn, silage

Crop: Corn, silage Acres planted: 50 Plant date: 06/01/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
10/27/2023	1,250.00 *ton*	Dry-weight		66.7	21,600.00	2,600.00	16,000.00		7.58

	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	25.00	359.64	43.29	266.40	1,262.07

3

Field name: 3

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

Crop: Wheat, silage, boot stage Acres planted: 70 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 (%)
05/23/2023	1,260.00 *ton*	Dry-weight		65.3	23,000.00	4,500.00	21,500.00		9.87

	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	18.00	287.32	56.21	268.58	1,232.96

3

06/01/2023: Corn, silage

Crop: Corn, silage Acres planted: 70 Plant date: 06/01/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
10/27/2023	1,750.00 *ton*	Dry-weight		64.9	23,700.00	3,100.00	16,100.00		6.35

	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	25.00	415.94	54.41	282.56	1,114.43

4

Field name: 4

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

Crop: Wheat, silage, boot stage Acres planted: 65 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 (%)
05/23/2023	1,170.00 *ton*	Dry-weight		66.1	18,500.00	3,900.00	23,500.00		9.75

	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	18.00	225.77	47.60	286.79	1,189.89

06/01/2023: Corn, silage

Crop: Corn, silage Acres planted: 65 Plant date: 06/01/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
10/27/2023	1,625.00 *ton*	Dry-weight		71.5	13,200.00	2,200.00	19,000.00		8.21

	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	25.00	188.10	31.35	270.75	1,169.93

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
12/23/2022	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	36.14	4.01	23.93	139.58	500,000.00 *gal*
Application event totals		36.14	4.01	23.93	139.58	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
01/24/2023	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
WW	Process wastewater	108.42	12.04	71.78	418.75	1,500,000.00 *gal*
Canal	Surface water	0.00	0.00	0.00	9.48	7,100,000.00 *gal*
Application event totals		108.42	12.04	71.78	428.23	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
02/24/2023	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
WW	Process wastewater	108.42	12.04	71.78	418.75	1,500,000.00 *gal*
Canal	Surface water	0.00	0.00	0.00	9.48	7,100,000.00 *gal*
Application event totals		108.42	12.04	71.78	428.23	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
03/25/2023	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
WW	Process wastewater	108.42	12.04	71.78	418.75	1,500,000.00 *gal*
Canal	Surface water	0.00	0.00	0.00	9.48	7,100,000.00 *gal*
Application event totals		108.42	12.04	71.78	428.23	

1 - 06/01/2023: Corn, silage

1 - 06/01/2023: Corn, silage

Field name: 1

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

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
06/29/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	14.66	10,980,000.00 *gal*
Application event totals		0.00	0.00	0.00	14.66	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/09/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	66.73	7.84	49.63	370.77	1,580,000.00 *gal*
Canal	Surface water	0.00	0.00	0.00	14.66	10,980,000.00 *gal*
Application event totals		66.73	7.84	49.63	385.43	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
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	14.66	10,980,000.00 *gal*
Application event totals		0.00	0.00	0.00	14.66	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/29/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	66.73	7.84	49.63	370.77	1,580,000.00 *gal*
Canal	Surface water	0.00	0.00	0.00	14.66	10,980,000.00 *gal*
Application event totals		66.73	7.84	49.63	385.43	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
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
WW	Process wastewater	66.73	7.84	49.63	370.77	1,580,000.00 *gal*
Canal	Surface water	0.00	0.00	0.00	14.66	10,980,000.00 *gal*
Application event totals		66.73	7.84	49.63	385.43	

1 - 06/01/2023: 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
WW	Process wastewater	80.80	7.51	82.49	574.69	1,580,000.00 *gal*
Canal	Surface water	0.00	0.00	0.00	14.66	10,980,000.00 *gal*
Application event totals		80.80	7.51	82.49	589.36	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/29/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	14.66	10,980,000.00 *gal*
Application event totals		0.00	0.00	0.00	14.66	

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	80.80	7.51	82.49	574.69	1,580,000.00 *gal*
Canal	Surface water	0.00	0.00	0.00	14.66	10,980,000.00 *gal*
Application event totals		80.80	7.51	82.49	589.36	

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
12/28/2022	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	9.01	4,500,000.00 *gal*
Application event totals		0.00	0.00	0.00	9.01	

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

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
01/26/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	126.85	14.09	83.99	489.94	1,170,000.00 *gal*
Application event totals		126.85	14.09	83.99	489.94	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
02/24/2023	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
WW	Process wastewater	126.85	14.09	83.99	489.94	1,170,000.00 *gal*
Canal	Surface water	0.00	0.00	0.00	9.01	4,500,000.00 *gal*
Application event totals		126.85	14.09	83.99	498.95	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
03/20/2023	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	9.01	4,500,000.00 *gal*
Application event totals		0.00	0.00	0.00	9.01	

2 - 06/01/2023: Corn, silage

Field name: 2

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

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
06/27/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	15.22	7,600,000.00 *gal*
Application event totals		0.00	0.00	0.00	15.22	

2 - 06/01/2023: Corn, silage

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	100.10	11.76	74.44	556.15	1,580,000.00 *gal*
Canal	Surface water	0.00	0.00	0.00	15.22	7,600,000.00 *gal*
Application event totals		100.10	11.76	74.44	571.37	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/17/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	15.22	7,600,000.00 *gal*
Application event totals		0.00	0.00	0.00	15.22	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/27/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	100.10	11.76	74.44	556.15	1,580,000.00 *gal*
Canal	Surface water	0.00	0.00	0.00	15.22	7,600,000.00 *gal*
Application event totals		100.10	11.76	74.44	571.37	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/07/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	15.22	7,600,000.00 *gal*
Application event totals		0.00	0.00	0.00	15.22	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/17/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	121.20	11.26	123.73	862.04	1,580,000.00 *gal*
Canal	Surface water	0.00	0.00	0.00	15.22	7,600,000.00 *gal*
Application event totals		121.20	11.26	123.73	877.26	

2 - 06/01/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/27/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	15.22	7,600,000.00 *gal*
Application event totals		0.00	0.00	0.00	15.22	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
09/07/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	121.20	11.26	123.73	862.04	1,580,000.00 *gal*
Canal	Surface water	0.00	0.00	0.00	15.22	7,600,000.00 *gal*
Application event totals		121.20	11.26	123.73	877.26	

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
12/26/2022	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	195.54	21.72	129.47	755.25	2,525,000.00 *gal*
Application event totals		195.54	21.72	129.47	755.25	

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
Canal	Surface water	0.00	0.00	0.00	9.30	6,500,000.00 *gal*
Application event totals		0.00	0.00	0.00	9.30	

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

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
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
WW	Process wastewater	195.54	21.72	129.47	755.25	2,525,000.00 *gal*
Canal	Surface water	0.00	0.00	0.00	9.30	6,500,000.00 *gal*
Application event totals		195.54	21.72	129.47	764.55	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
03/17/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	9.30	6,500,000.00 *gal*
Application event totals		0.00	0.00	0.00	9.30	

3 - 06/01/2023: Corn, silage

Field name: 3

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

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
06/28/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	15.02	10,500,000.00 *gal*
Application event totals		0.00	0.00	0.00	15.02	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/08/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	100.69	11.83	74.88	559.42	2,225,000.00 *gal*
Canal	Surface water	0.00	0.00	0.00	15.02	10,500,000.00 *gal*
Application event totals		100.69	11.83	74.88	574.44	

3 - 06/01/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
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
Canal	Surface water	0.00	0.00	0.00	15.02	10,500,000.00 *gal*
Application event totals		0.00	0.00	0.00	15.02	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
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	100.69	11.83	74.88	559.42	2,225,000.00 *gal*
Canal	Surface water	0.00	0.00	0.00	15.02	10,500,000.00 *gal*
Application event totals		100.69	11.83	74.88	574.44	

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
Canal	Surface water	0.00	0.00	0.00	15.02	10,500,000.00 *gal*
Application event totals		0.00	0.00	0.00	15.02	

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	121.91	11.33	124.46	867.11	2,225,000.00 *gal*
Canal	Surface water	0.00	0.00	0.00	15.02	10,500,000.00 *gal*
Application event totals		121.91	11.33	124.46	882.13	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/28/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	1.50	1,050,000.00 *gal*
Application event totals		0.00	0.00	0.00	1.50	

3 - 06/01/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
09/08/2023	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	121.91	11.33	124.46	867.11	2,225,000.00 *gal*
Canal	Surface water	0.00	0.00	0.00	15.02	10,500,000.00 *gal*
Application event totals		121.91	11.33	124.46	882.13	

4 - 11/01/2022: Wheat, silage, boot stage

Field name: 4

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
02/06/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	138.86	15.42	91.94	536.32	1,665,000.00 *gal*
Canal	Surface water	0.00	0.00	0.00	8.40	5,450,000.00 *gal*
Application event totals		138.86	15.42	91.94	544.72	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
03/05/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	137.61	15.29	91.11	531.49	1,650,000.00 *gal*
Canal	Surface water	0.00	0.00	0.00	8.40	5,450,000.00 *gal*
Application event totals		137.61	15.29	91.11	539.89	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
04/03/2023	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	8.40	5,450,000.00 *gal*
Application event totals		0.00	0.00	0.00	8.40	

4 - 06/01/2023: Corn, silage

4 - 06/01/2023: Corn, silage

Field name: 4

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

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
06/29/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	14.68	9,530,000.00 *gal*
Application event totals		0.00	0.00	0.00	14.68	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/09/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	76.27	8.96	56.72	423.74	1,565,000.00 *gal*
Canal	Surface water	0.00	0.00	0.00	14.68	9,530,000.00 *gal*
Application event totals		76.27	8.96	56.72	438.43	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
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	14.68	9,530,000.00 *gal*
Application event totals		0.00	0.00	0.00	14.68	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/29/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW	Process wastewater	76.27	8.96	56.72	423.74	1,565,000.00 *gal*
Canal	Surface water	0.00	0.00	0.00	14.68	9,530,000.00 *gal*
Application event totals		76.27	8.96	56.72	438.43	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
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	14.68	9,530,000.00 *gal*
Application event totals		0.00	0.00	0.00	14.68	

4 - 06/01/2023: 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
WW	Process wastewater	92.34	8.58	94.27	656.81	1,565,000.00 *gal*
Canal	Surface water	0.00	0.00	0.00	14.68	9,530,000.00 *gal*
Application event totals		92.34	8.58	94.27	671.50	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/29/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	14.68	9,530,000.00 *gal*
Application event totals		0.00	0.00	0.00	14.68	

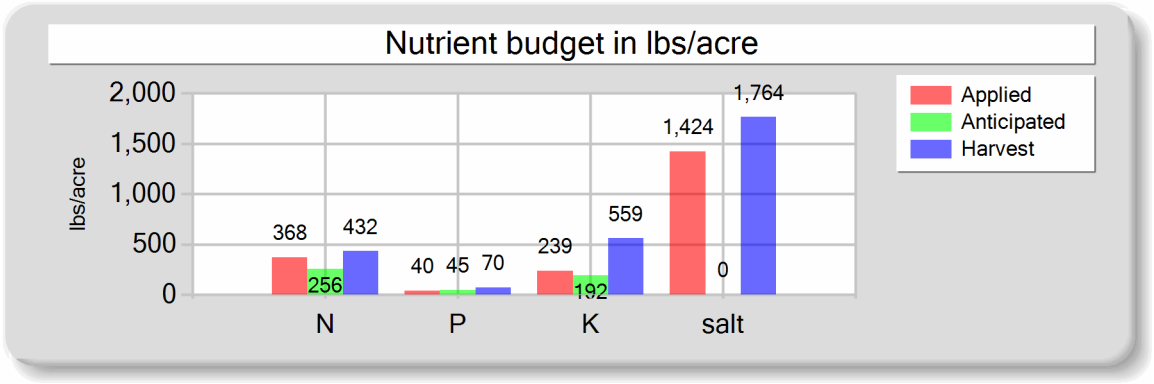
Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
09/09/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	14.68	9,530,000.00 *gal*
Application event totals		0.00	0.00	0.00	14.68	

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)
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	361.40	40.15	239.28	1,395.84
Fresh water	0.00	0.00	0.00	28.44
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	368.40	40.15	239.28	1,424.28
Anticipated crop nutrient removal	256.00	44.80	192.00	0.00
Actual crop nutrient removal	431.61	69.71	559.17	1,763.52
Nutrient balance	-63.21	-29.57	-319.89	-339.24
Applied to removed ratio	0.85	0.58	0.43	0.81

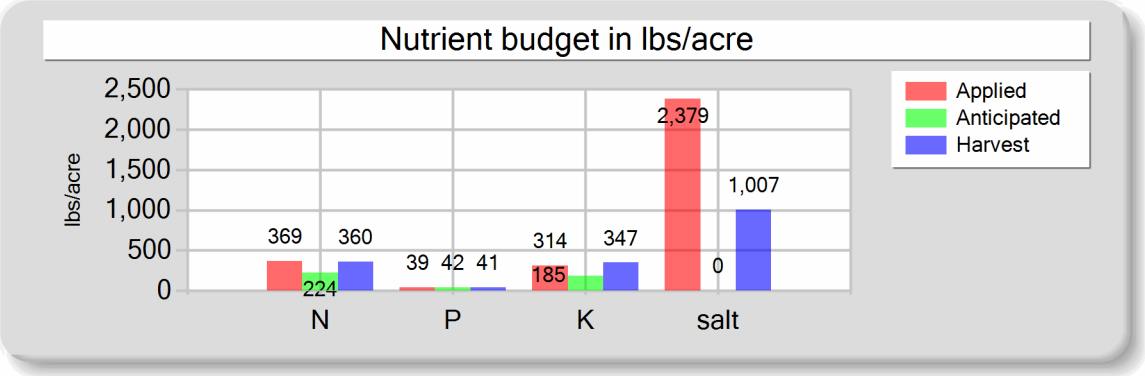
Fresh water applied	
21,300,000.00	*gallons*
784.41	*acre-inches*
10.46	*inches/acre*

Process wastewater applied	
5,000,000.00	*gallons*
184.13	*acre-inches*
2.46	*inches/acre*

Total harvests for the crop	
1	*harvests*

1 - 06/01/2023: Corn, silage

Field name: 1 Crop: Corn, silage Plant date: 06/01/2023



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	361.80	38.54	313.86	2,261.68
Fresh water	0.00	0.00	0.00	117.28
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	368.80	38.54	313.86	2,378.97
Anticipated crop nutrient removal	224.00	42.00	184.80	0.00
Actual crop nutrient removal	359.55	41.31	347.31	1,006.74
Nutrient balance	9.25	-2.77	-33.45	1,372.23
Applied to removed ratio	1.03	0.93	0.90	2.36

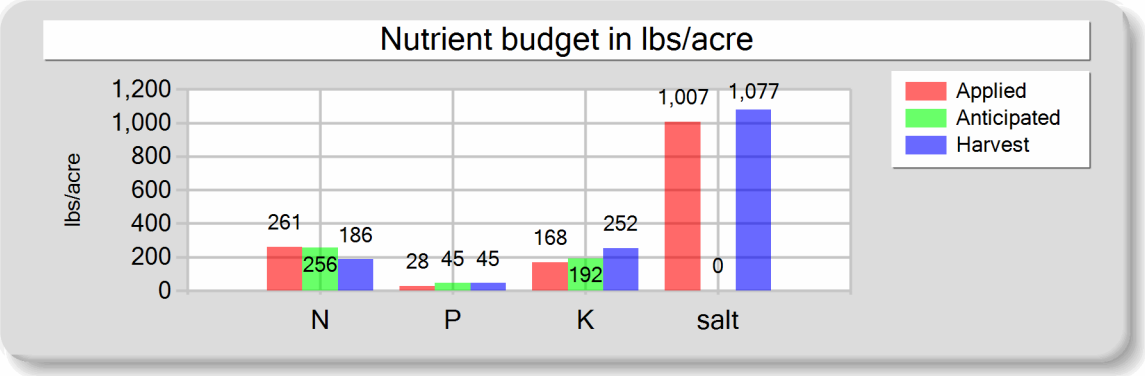
Fresh water applied	
87,840,000.00	*gallons*
3,234.85	*acre-inches*
43.13	*inches/acre*

Process wastewater applied	
7,900,000.00	*gallons*
290.93	*acre-inches*
3.88	*inches/acre*

Total harvests for the crop	
1	*harvests*

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

Field name: 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	0.00	0.00	0.00	0.00
Process wastewater	253.70	28.18	167.97	979.88
Fresh water	0.00	0.00	0.00	27.04
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	260.70	28.18	167.97	1,006.92
Anticipated crop nutrient removal	256.00	44.80	192.00	0.00
Actual crop nutrient removal	185.91	44.58	252.23	1,077.42
Nutrient balance	74.79	-16.39	-84.26	-70.50
Applied to removed ratio	1.40	0.63	0.67	0.93

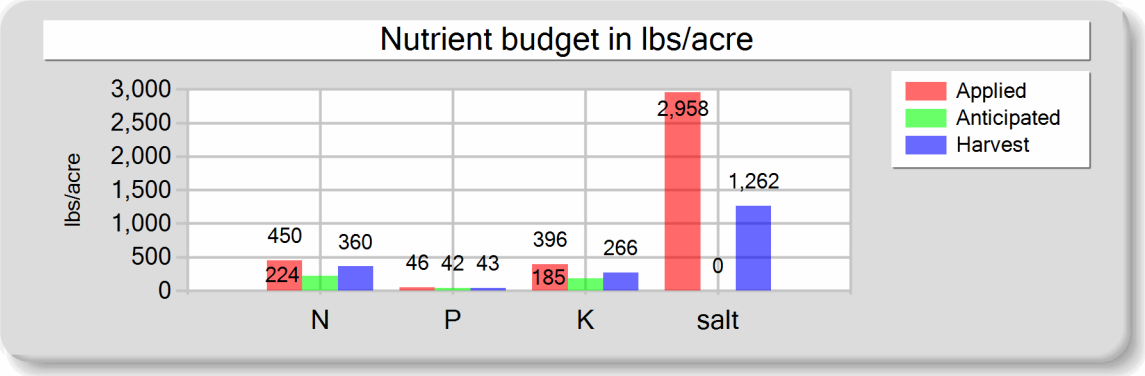
Fresh water applied	
13,500,000.00	*gallons*
497.16	*acre-inches*
9.94	*inches/acre*

Process wastewater applied	
2,340,000.00	*gallons*
86.17	*acre-inches*
1.72	*inches/acre*

Total harvests for the crop	
1	*harvests*

2 - 06/01/2023: Corn, silage

Field name: 2 Crop: Corn, silage Plant date: 06/01/2023



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	442.60	46.04	396.34	2,836.38
Fresh water	0.00	0.00	0.00	121.77
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	449.60	46.04	396.34	2,958.15
Anticipated crop nutrient removal	224.00	42.00	184.80	0.00
Actual crop nutrient removal	359.64	43.29	266.40	1,262.07
Nutrient balance	89.96	2.75	129.94	1,696.08
Applied to removed ratio	1.25	1.06	1.49	2.34

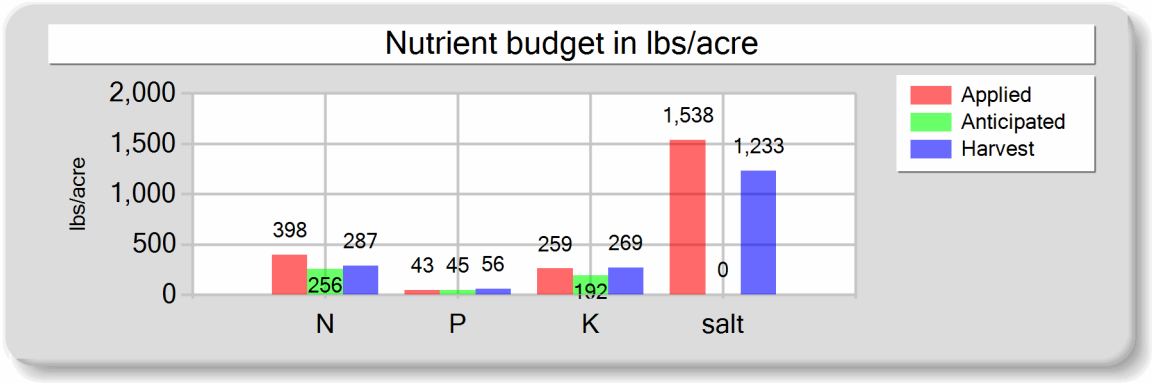
Fresh water applied	
60,800,000.00	*gallons*
2,239.06	*acre-inches*
44.78	*inches/acre*

Process wastewater applied	
6,320,000.00	*gallons*
232.74	*acre-inches*
4.65	*inches/acre*

Total harvests for the crop	
1	*harvests*

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

Field name: 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)
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	391.09	43.44	258.93	1,510.50
Fresh water	0.00	0.00	0.00	27.90
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	398.09	43.44	258.93	1,538.39
Anticipated crop nutrient removal	256.00	44.80	192.00	0.00
Actual crop nutrient removal	287.32	56.21	268.58	1,232.96
Nutrient balance	110.77	-12.77	-9.64	305.43
Applied to removed ratio	1.39	0.77	0.96	1.25

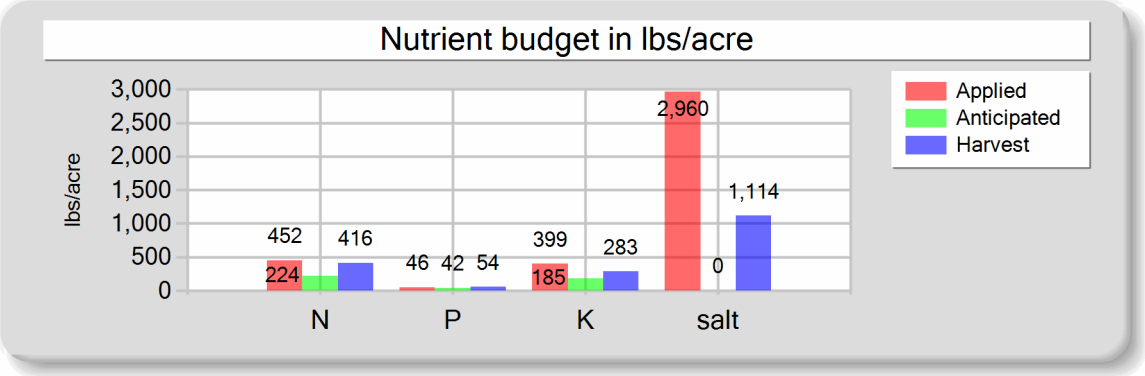
Fresh water applied	
19,500,000.00	*gallons*
718.12	*acre-inches*
10.26	*inches/acre*

Process wastewater applied	
5,050,000.00	*gallons*
185.97	*acre-inches*
2.66	*inches/acre*

Total harvests for the crop	
1	*harvests*

3 - 06/01/2023: Corn, silage

Field name: 3 Crop: Corn, silage Plant date: 06/01/2023



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	445.20	46.31	398.67	2,853.05
Fresh water	0.00	0.00	0.00	106.65
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	452.20	46.31	398.67	2,959.70
Anticipated crop nutrient removal	224.00	42.00	184.80	0.00
Actual crop nutrient removal	415.94	54.41	282.56	1,114.43
Nutrient balance	36.26	-8.09	116.12	1,845.27
Applied to removed ratio	1.09	0.85	1.41	2.66

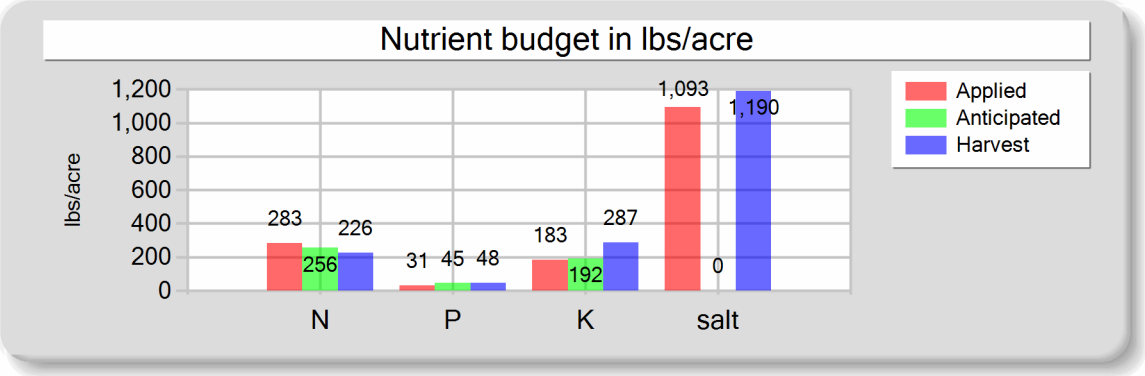
Fresh water applied	
74,550,000.00	*gallons*
2,745.42	*acre-inches*
39.22	*inches/acre*

Process wastewater applied	
8,900,000.00	*gallons*
327.76	*acre-inches*
4.68	*inches/acre*

Total harvests for the crop	
1	*harvests*

4 - 11/01/2022: Wheat, silage, boot stage

Field name: 4 Crop: Wheat, silage, boot stage Plant date: 11/01/2022



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	276.47	30.71	183.05	1,067.82
Fresh water	0.00	0.00	0.00	25.19
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	283.47	30.71	183.05	1,093.01
Anticipated crop nutrient removal	256.00	44.80	192.00	0.00
Actual crop nutrient removal	225.77	47.60	286.79	1,189.89
Nutrient balance	57.70	-16.88	-103.75	-96.88
Applied to removed ratio	1.26	0.65	0.64	0.92

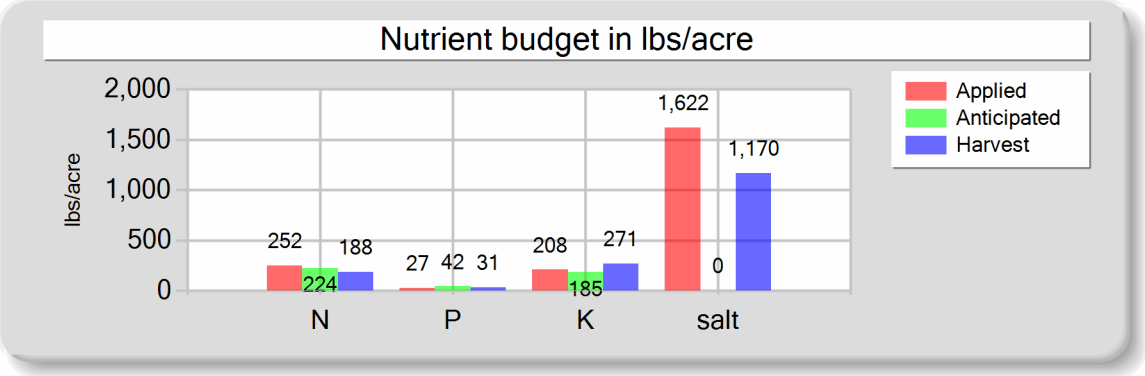
Fresh water applied	
16,350,000.00	*gallons*
602.11	*acre-inches*
9.26	*inches/acre*

Process wastewater applied	
3,315,000.00	*gallons*
122.08	*acre-inches*
1.88	*inches/acre*

Total harvests for the crop	
1	*harvests*

4 - 06/01/2023: Corn, silage

Field name: 4 Crop: Corn, silage Plant date: 06/01/2023



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	244.88	26.50	207.71	1,504.30
Fresh water	0.00	0.00	0.00	117.46
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	251.88	26.50	207.71	1,621.76
Anticipated crop nutrient removal	224.00	42.00	184.80	0.00
Actual crop nutrient removal	188.10	31.35	270.75	1,169.93
Nutrient balance	63.78	-4.85	-63.04	451.83
Applied to removed ratio	1.34	0.85	0.77	1.39

Fresh water applied	
76,240,000.00	*gallons*
2,807.66	*acre-inches*
43.19	*inches/acre*

Process wastewater applied	
4,695,000.00	*gallons*
172.90	*acre-inches*
2.66	*inches/acre*

Total harvests for the crop	
1	*harvests*

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: 64.5 %

	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	8,800.00	1,700.00	6,500.00	4,300.00	1,700.00	1,700.00	16,001.00	214.40		23.60
DL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00		1.00

Dry Manure

Sample and source description: Dry Manure

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

Moisture: 28.9 %

	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	9,500.00	5,600.00	19,900.00							55.65
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: 02/03/2022 Material type: Process wastewater Source of analysis: Lab analysis pH: 7.54

	Kjeldahl-N (mg/L)	NH4-N (mg/L)	NH3-N (mg/L)	Nitrate-N (mg/L)	Total P (mg/L)	Total K (mg/L)	Calcium (mg/L)	Magnes. (mg/L)	Sodium (mg/L)	Bicarb. (mg/L)	Carb. (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	EC (µmhos/cm)	TDS (mg/L)
Value	649.61	161.07	0.00	0.00	72.16	430.10								3,920.00	2,509
DL	67.00	0.57	0.01	0.01	0.64	0.01								1.00	19

2nd Qtr WW

Sample and source description: 2nd Qtr WW

Sample date: 06/09/2022 Material type: Process wastewater Source of analysis: Lab analysis pH: 7.58

	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	379.60	138.60	0.00	0.00	44.60	282.30	5.90	4.80	6.00	31.60	0.00	1.10	3.70	3,296.00	2,109
DL	67.00	0.57	0.01	0.01	0.64	0.01	0.02	0.01	0.01	0.10	0.10	0.01	0.01	1.00	19

3rd Qtr WW

Sample and source description: 3rd Qtr WW

Sample date: 09/13/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: 7.84

	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	459.60	242.90	0.00	0.00	42.70	469.20								5,108.00	3,269
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: 7.38

	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	279.70	121.00	0.00	0.00	56.98	226.80								3,059.00	1,957
DL	67.00	0.57	0.01	0.01	0.64	0.01								1.00	19

C. FRESH WATER ANALYSES

Barn

Barn

Barn

Sample description: Barn

Sample date: 12/13/2023 Source of analysis: Lab analysis

	Total N (mg/L)	NH4-N (mg/L)	Nitrate-N (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Bicarbonate (mg/L)	Carbonate (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	EC (µmhos/cm)	TDS (mg/L)
Value	0.70										1,120.00	
DL	0.10										10.00	

Canal

Canal

Sample description: Canal

Sample date: 08/17/2023 Source of analysis: Lab analysis

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

D. SOIL ANALYSES

No soil analyses entered.

E. PLANT TISSUE ANALYSES

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

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

1

Sample and source description: 1

Sample date: 05/23/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 58.8 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	29,100.00	4,700.00	37,700.00		11.89
DL	100.00	100.00	100.00		1.00

1 - 06/01/2023: Corn, silage

1

Sample and source description: 1

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

Moisture: 69.4 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	23,500.00	2,700.00	22,700.00		6.58
DL	100.00	100.00	100.00		1.00

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

2

Sample and source description: 2

Sample date: 05/23/2023 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	17,100.00	4,100.00	23,200.00		9.91
DL	100.00	100.00	100.00		1.00

2 - 06/01/2023: Corn, silage

2

Sample and source description: 2

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

Moisture: 66.7 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	21,600.00	2,600.00	16,000.00		7.58
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: 05/26/2023 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	23,000.00	4,500.00	21,500.00		9.87
DL	100.00	100.00	100.00		1.00

3 - 06/01/2023: Corn, silage

3

Sample and source description: 3

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

Moisture: 64.9 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	23,700.00	3,100.00	16,100.00		6.35
DL	100.00	100.00	100.00		1.00

4 - 11/01/2022: Wheat, silage, boot stage

4

Sample and source description: 4

Sample date: 05/26/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 66.1 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	18,500.00	3,900.00	23,500.00		9.75
DL	100.00	100.00	100.00		1.00

4 - 06/01/2023: Corn, silage

4

Sample and source description: 4

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

Moisture: 71.5 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	13,200.00	2,200.00	19,000.00		8.21
DL	100.00	100.00	100.00		1.00

F. SUBSURFACE (TILE) DRAINAGE ANALYSES

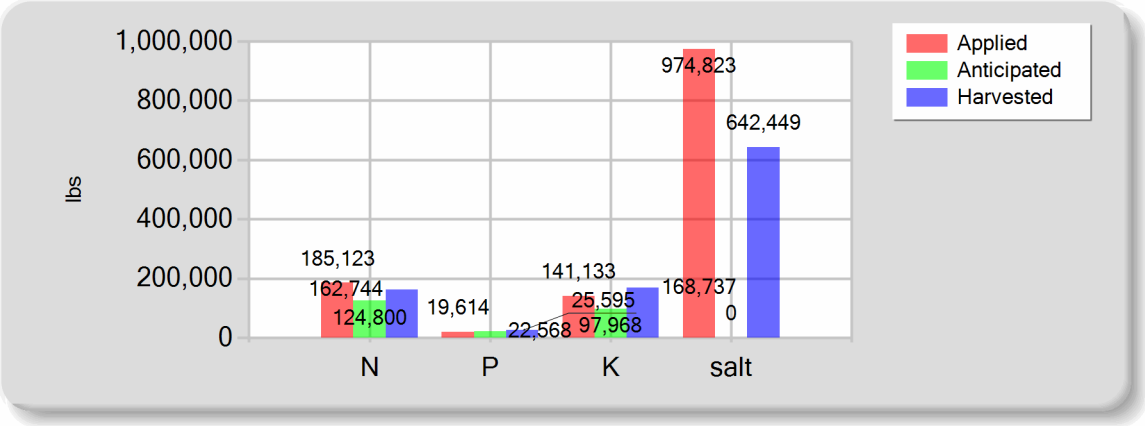
No subsurface (tile) drainage analyses entered.

NUTRIENT APPLICATIONS, POTENTIAL REMOVAL, AND BALANCE

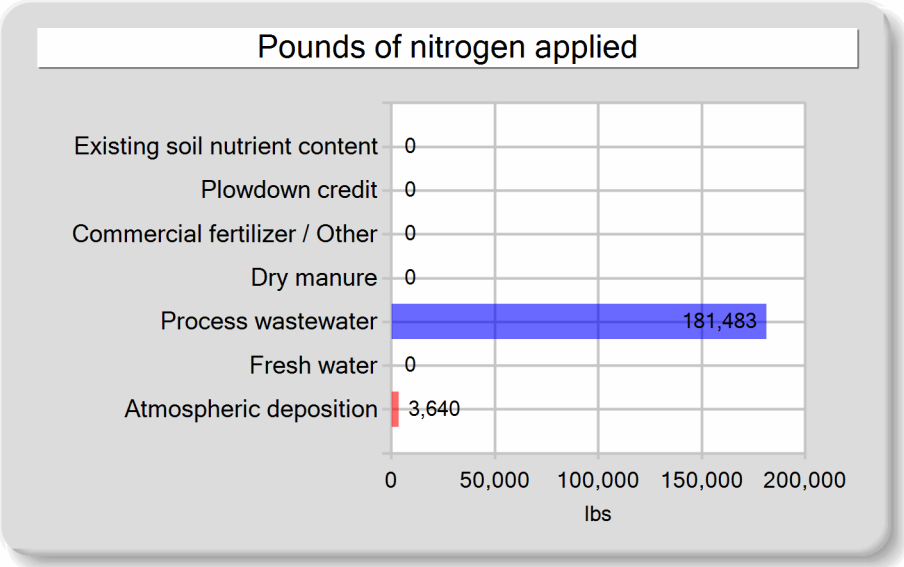
A. SUMMARY OF NUTRIENT APPLICATIONS, POTENTIAL REMOVAL, AND BALANCE

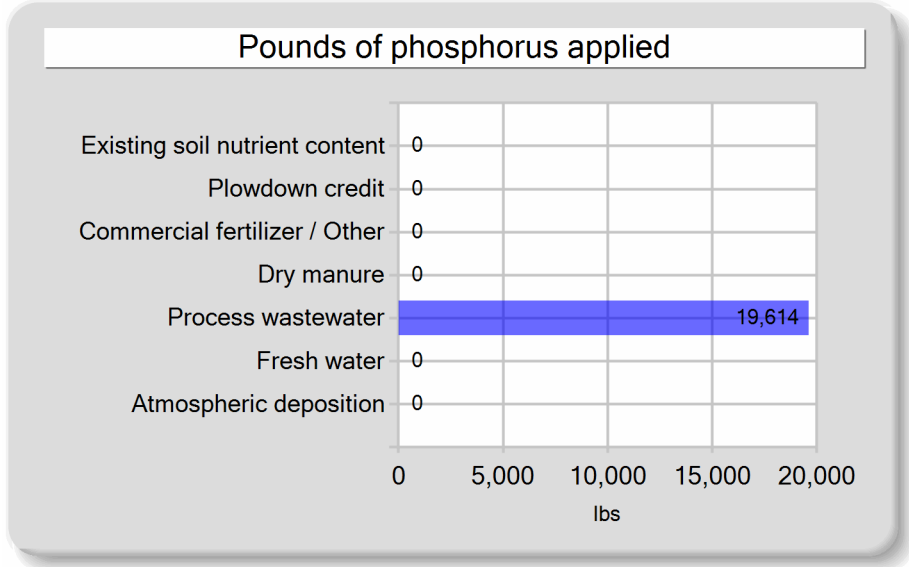
	Total N (lbs)	Total P (lbs)	Total K (lbs)	Total salt (lbs)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	181,482.88	19,613.97	141,133.20	937,763.37
Fresh water	0.00	0.00	0.00	37,059.81
Atmospheric deposition	3,640.00	0.00	0.00	0.00
Total nutrients applied	185,122.88	19,613.97	141,133.20	974,823.18
Anticipated crop nutrient removal	124,800.00	22,568.00	97,968.00	0.00
Actual crop nutrient removal	162,744.03	25,594.58	168,736.92	642,449.07
Nutrient balance	22,378.85	-5,980.62	-27,603.72	332,374.10
Applied to removed ratio	1.14	0.77	0.84	1.52

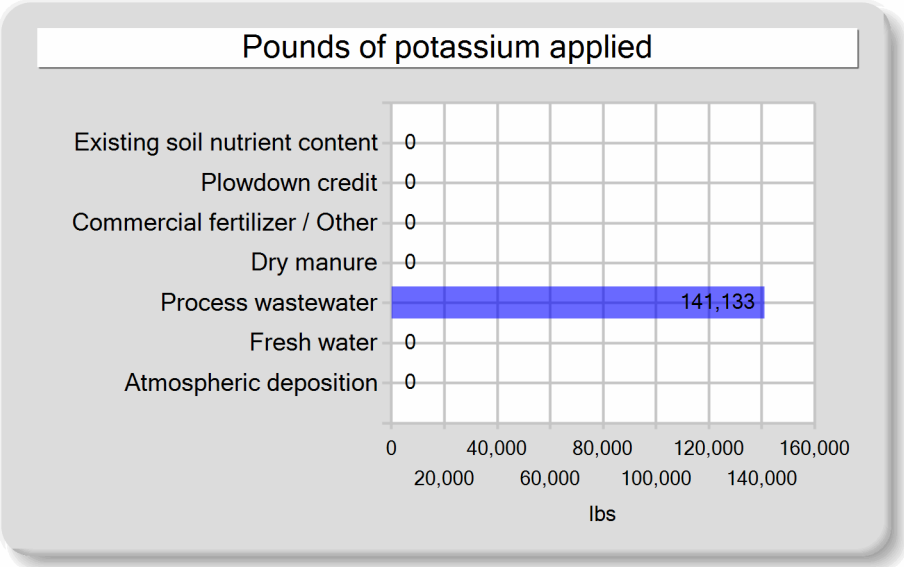
B. POUNDS OF NUTRIENT APPLIED VS. CROP REMOVAL

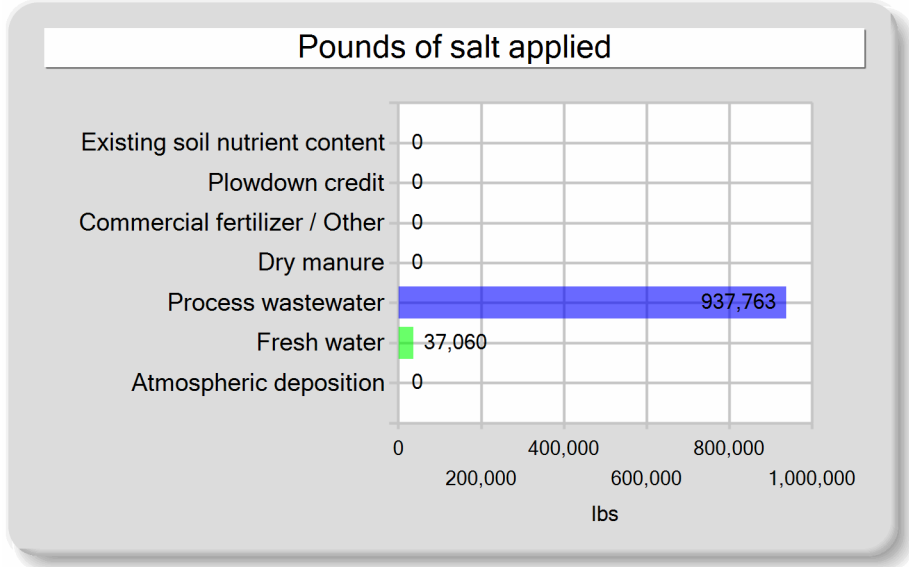


C. POUNDS OF NUTRIENT APPLIED BY MATERIAL TYPE









EXCEPTION REPORTING

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

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

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

B. STORM WATER DISCHARGES

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

No stormwater discharges occurred during the reporting period.

C. LAND APPLICATION AREA TO SURFACE WATER DISCHARGES

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

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

NUTRIENT MANAGEMENT PLAN AND EXPORT AGREEMENT STATEMENTS

A. NUTRIENT MANAGEMENT PLAN STATEMENTS

Was the facility's NMP updated in the reporting period?	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

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 .

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
Bos Capital	Matt Gailey
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	SIGNATURE OF OPERATOR OF FACILITY
Bos Capital	Matt Gailey
PRINT OR TYPE NAME	PRINT OR TYPE NAME
6/27/24	6/27/24
DATE	DATE

Manure / Process Wastewater Tracking Manifest
For
Existing Milk Cow Dairies

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

INSTRUCTIONS

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

OPERATOR INFORMATION

Name of Operator: Matt Gailey

Name of Dairy Facility: Kerman Cattle Co

Facility Address:

4301 S Dickenson	Fresno	Fresno	93706
Number and Street	City	County	Zip Code

Contact Person Name and Phone Number: Matt Gailey (Name) (559) 280-2972 (Phone Number)

MANURE HAULER INFORMATION

Name of Hauling Company/Person: Burrows Brothers Trucking

Address of Hauling Company/Person:

13265 W Kamm AVE	Kerman	CA	93656
Number and Street	City	State	Zip Code

Contact Person: Lonie Burrows (Name) (559) 246-3831 (Phone Number)

DESTINATION INFORMATION

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

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

Burrow Brother Trucking (Name) (559) 246-3831 (Phone Number)

13265 Kerman	Kerman	CA	93656
Address	City	State	Zip Code

Destination Address or Assessor's Parcel Number:

	Kerman	93656
Address	City	Zip Code

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

Assessor's Parcel Number _____ Assessor's Parcel Number County _____

Last date hauled: 10/22/2023

Manure / Process Wastewater Tracking Manifest
For
Existing Milk Cow Dairies

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

MANURE AMOUNT HAULED

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

Manure: 5,200.00 tons

Manure Solids Content: 71.1 %

Method used to determine amount of manure:

Weighted Average

CERTIFICATION

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

Operator Signature — Date: 6/27/24

Hauler Signature — Date: 6/27/24

DELLAVALLE™
LABORATORY INC

Kerman Cattle Co
PO Box 370
Kerman, CA 93630

Account# 00-0025824
Account Manager: Ben Nydam
Submitted By: Christina Medeiros

Received: 12/13/2023 7:00
Reported: 12/20/2023 11:17

Samples in this Report

Lab ID	Sample	Matrix	Sampled By	Crop	Date Sampled
23L0669-01	Barn	Ag Water	Medeiros		12/12/2023 7:10

Default Cooler Temperature on Receipt °C: 19.2
Containers Intact
COC/Labels Agree
Received On Ice

Notes and Definitions

Item	Definition
H	Hold Time Exceeded
MCL	Drinking Water Maximum Contaminant Level
ND	Analyte NOT DETECTED at or above the reporting limit.
NES	Not Enough Sample
*	Not Taken
RPD	Relative Percent Difference
%REC	Percent Recovery
Source	Sample that was matrix spiked or duplicated.

Laboratory Director/Technical Manager

ELAP Certification #1595
A2LA Certification #6440.02

DELLAVALLE™
LABORATORY INC

Kerman Cattle Co
PO Box 370
Kerman, CA 93630

Account# 00-0025824
Account Manager: Ben Nydam
Submitted By: Christina Medeiros

Received: 12/13/2023 7:00
Reported: 12/20/2023 11:17

Sample Results

Sample: Barn
23L0669-01 (Water)

Sampled: 12/12/2023 7:10
Sampled By: Medeiros

Analyte	Result	Units	Reporting Limit	DIL	DW MCL	Date/Time Analyzed	Method	Notes	Batch
Electrical Conductivity	**1.12**	mmhos/cm	0.01	1		12/13/23 16:09	SM 2510 B		BEL0496
Electrical Conductivity umhos	**1120**	umhos/cm	10.0	1		12/13/23 16:09	SM 2510 B		BEL0496
Ammonia (as N)	ND	mg/L	0.00	1		12/12/23 07:10	Field		BEL0516
Nitrate Nitrogen as NO3N	**0.7**	mg/L	0.1	1	10	12/14/23 07:23	EPA 300.0		BEL0569
Temperature	**25.0**	units	0.0	1		12/13/23 16:09	SM 4500-H+	H	BEL0496
pH	**7.7**	units	1.0	1		12/13/23 16:09	SM 4500-H+	H	BEL0496

DELLAVALLE™
LABORATORY INC

Kerman Cattle Co
PO Box 370
Kerman, CA 93630

Account# 00-0025824
Account Manager: Ben Nydam
Submitted By: Christina Medeiros

Received: 12/13/2023 7:00
Reported: 12/20/2023 11:17

Quality Control

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BEL0496										
Blank (BEL0496-BLK1)					Prepared & Analyzed: 12/13/2023					
Temperature	25.0		0.0	units						
Electrical Conductivity	ND		0.01	mmhos/cm						
Electrical Conductivity umhos	ND		10.0	umhos/cm						
pH	5.7		1.0	units						
Blank (BEL0496-BLK2)					Prepared & Analyzed: 12/13/2023					
Electrical Conductivity	ND		0.01	mmhos/cm						
Temperature	25.0		0.0	units						
Electrical Conductivity umhos	ND		10.0	umhos/cm						
pH	7.7		1.0	units						
Blank (BEL0496-BLK3)					Prepared & Analyzed: 12/13/2023					
Temperature	25.0		0.0	units						
Electrical Conductivity	ND		0.01	mmhos/cm						
Electrical Conductivity umhos	ND		10.0	umhos/cm						
pH	7.7		1.0	units						
Duplicate (BEL0496-DUP1)		**Source: 23L0678-01**			Prepared & Analyzed: 12/13/2023					
Electrical Conductivity	0.26		0.01	mmhos/cm		0.26			0.960	10
Electrical Conductivity umhos	262		10.0	umhos/cm		259			0.960	10
pH	9.4		1.0	units		9.4			0.00	10
Duplicate (BEL0496-DUP2)		**Source: 23L0687-04**			Prepared & Analyzed: 12/13/2023					
Electrical Conductivity	0.43		0.01	mmhos/cm		0.42			0.587	10
pH	8.2		1.0	units		8.2			0.00	10
Electrical Conductivity umhos	427		10.0	umhos/cm		425			0.587	10
Reference (BEL0496-SRM1)					Prepared & Analyzed: 12/13/2023					
Electrical Conductivity	444			umhos/cm	426.0		104	90-110		
Reference (BEL0496-SRM2)					Prepared & Analyzed: 12/13/2023					
pH	7.5			units	7.520		100	67021-101.3		
Reference (BEL0496-SRM3)					Prepared & Analyzed: 12/13/2023					
Electrical Conductivity	1070			umhos/cm	1000		107	90-110		
Electrical Conductivity umhos	1070			umhos/cm	1000		107	90-110		
Reference (BEL0496-SRM4)					Prepared & Analyzed: 12/13/2023					
Electrical Conductivity	1080			umhos/cm	1000		108	90-110		
Electrical Conductivity umhos	1080			umhos/cm	1000		108	90-110		
Reference (BEL0496-SRM5)					Prepared & Analyzed: 12/13/2023					
Electrical Conductivity	1090			umhos/cm	1000		109	90-110		

DELLAVALLE™
LABORATORY INC

Kerman Cattle Co
PO Box 370
Kerman, CA 93630

Account# 00-0025824
Account Manager: Ben Nydam
Submitted By: Christina Medeiros

Received: 12/13/2023 7:00
Reported: 12/20/2023 11:17

Quality Control
(Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BEL0496 (Continued)										
Reference (BEL0496-SRM5)					Prepared & Analyzed: 12/13/2023					
Electrical Conductivity umhos	1090			umhos/cm	1000		109	90-110		
Reference (BEL0496-SRM6)					Prepared & Analyzed: 12/13/2023					
pH	4.0			units	4.000		100	97.5-102.5		
Reference (BEL0496-SRM7)					Prepared & Analyzed: 12/13/2023					
pH	4.0			units	4.000		101	97.5-102.5		
Reference (BEL0496-SRM8)					Prepared & Analyzed: 12/13/2023					
pH	4.0			units	4.000		100	97.5-102.5		

DELLAVALLE™
LABORATORY INC

Kerman Cattle Co
PO Box 370
Kerman, CA 93630

Account# 00-0025824
Account Manager: Ben Nydam
Submitted By: Christina Medeiros

Received: 12/13/2023 7:00
Reported: 12/20/2023 11:17

Quality Control
(Continued)

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

DELLAVALLE™
LABORATORY INC

Kerman Cattle Co
PO Box 370
Kerman, CA 93630

Account# 00-0025824
Account Manager: Ben Nydam
Submitted By: Christina Medeiros

Received: 12/13/2023 7:00
Reported: 12/20/2023 11:17

Quality Control
(Continued)

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

12/13/23 07:00 23L0669

WATER WORK REQUEST

DELLAVALLE LABORATORY, INC.

1910 W. McKinley Avenue, Suite 110 • Fresno, CA 93728
www.dellavallelab.com 559 233-6129 • 800 228-9896 • Fax 559 268-8174

Bill To: Acct No. 25824 Cons. 8

No. of Samples 1 No. Bottles

Purchase Order No. Results Needed By

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

Client **Kerman Cattle Co**
Address PO Box 370
City, State, Zip Kerman CA 93630
Email kermancattle@outlook.com

Copy to: mel_tinamedeiros@yahoo.com

Requested by/Cell: Christina Medeiros/ 559-903-2490

Facility:

Date sampled

Sampled by Medeiros

☑ QA/QC Document ☑ Copy of Chain ☐ RWQCB

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

☒ EC, NO_3-N
(1) 1 L plastic, unpreserved (white)

☐ DWW1: (EC, pH, NO_3-N, **NH_4-N Field Test)**
(1) 1 L plastic, unpreserved (white)

☐ DWW2: (DWW1 Plus SO_4, CO_3, HCO_3, Cl, Ca, Mg, Na, TDS)
(1) 1 L plastic, unpreserved (white)

☐ DCW1: (EC, NO_3-N, TDS)
(1) 1 L plastic, unpreserved (white)

☐ DPW1: (EC, pH, NO_3-N, NH_4-N, TKN, TDS, TP, TK)
(1) 1 L plastic, unpreserved (white)

☐ DPW2: (DPW1 Plus Ca, Mg, Na, HCO_3, CO_3, SO_4, Cl)
(1) 1 L plastic, unpreserved (white)

☐ Other

H/F

DESCRIPTION OF SAMPLES

		Date Sampled	Time Sampled	Field NH4-N (mg/L)	Received Temp °C
1. Barn	Sampled From:	12/13/23	7:10am	0	19.2 / -1.8
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:				

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

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

CHAIN OF CUSTODY

Carrier	Signature	Company	Received (Date/Time)	Relinquished (Date/Time)
First				12/12/23 11:32AM
Second	[signature]	DCI	12/12/23 11:32AM	
Third				
Fourth	[signature]	DCI	12/13 0750	

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

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

Invoicing Information:
Medeiros Pricing 2023
Sampling Hrs ____ Miles ____ Consulting ____
Amt Paid ____ Rec By ____ Check No. ____ Date ____

Shipping
$ ____ In
$ ____ Out

Signature ____

Sample received in cooler with ice?
[ ] Yes [ ] No

ctt:update 2020

12/13/23 07:00 23L0669

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

☐ Samples refridgerated before pick up ☐ Picked up samples placed in Ice chest

Container: Ice Chest ☑ Box ☐ None ☐ **Refrigerant:** Wet Ice ☑ Blue Ice ☐ None ☐

Samples Preserved with HNO_3 or H_2SO_4 were: ☐ Received Preserved ☐ Preserved Upon Receipt at Laboratory

	Type of Container(s) Received	Sample Number 1	2	3	4	5	6	7	8	9	10
Sample Containers for Internal (DLI) Use *(Containers that go into the Lab)*											
Plastics	100 mL sterile plastic $Na_2S_2O_3$ (Green)										
	250 mL unpreserved (White) Plastic										
	250 mL HNO_3 (Red) Plastic										
	* pH Value										
	250 mL H_2SO_4 (Yellow) Plastic										
	* pH Value										
	500 mL unpreserved (White) Plastic										
	1 L unpreserved (White) Plastic										
	1 L unpreserved (BOD) (Purple) Plastic										
Special	500mL unpreserved (White) Glass										
	PO4-P Kit										
	Other:										
Sample Containers for Subcontracted ("Send Out") Analyses *(Containers that go in the Subcontract ("Send Out") Refrigerator)*											
Plastics	100 mL sterile plastic $Na_2S_2O_3$ (Green)										
	250 mL unpreserved (White) Plastic										
	250 mL HNO_3 (Red) Plastic										
	250 mL H_2SO_4 (Yellow) Plastic										
	500 mL HNO_3 (Red)										
	1 L unpreserved (White) Plastic										
	1 L unpreserved (BOD) (Purple) Plastic										
	1 L HNO_3 (Red)										
VOA Vials	40 mL VOA, $Na_2S_2O_3$ + MCAA (EPA531)										
	40 mL VOA, $Na_2S_2O_3$ (EPA547)										
	40mL AG VOA unpreserved (White) (Set of 3)										
	40 mL AG VOA, $Na_2S_2O_3$ (Green) (Set of 3)										
	40mL VOA, H_3PO_4 (Set of 3)										
	40 mL VOA, HCl (Blue) (Set of 3)										
	40 mL VOA, $Na_2S_2O_3$ (Green) (Set of 3)										
Glass	250 mL AG unpreserved (White)										
	250 mL AG H_2SO_4 (Yellow)										
	250 mL AG $Na_2S_2O_3$ (Green)										
	250 mL AG $Na_2S_2O_3$ + MCAA										
	500 mL glass unpreserved (White)										
	500 mL AG HCl (Blue)										
	1 L AG unpreserved (White)										
	1 L AG H_2SO_4 (Yellow)										
	1 L AG $Na_2S_2O_3$ (Green)										
	1 L AG HCl (Blue)										
Special	Cr^{6+} - 50mL Plastic w/Borate/HCO_3/CO_3										
	Cyanide - 500 mL NaOH										
	Asbestos - 1L P wrapped in foil (Set of 2)										
	Sulfide - 1 L **AG** or **P** NaOH + ZnAc										
	Chlorite/Bromate - 250 mL AG with EDA										
	HAA5 - 250mL AG Ammonium Chlorite										
	DO KIT										
	Other:										
	Other:										

DELLAVALLE™
LABORATORY INC

Kerman Cattle Co
PO Box 370
Kerman, CA 93630

Account# 00-0025824
Account Manager: Ben Nydam
Submitted By: Christina Medeiros

Received: 08/17/2023 8:40
Reported: 08/23/2023 14:15

Samples in this Report

Lab ID	Sample	Matrix	Sampled By	Crop	Date Sampled
23H1580-01	Canal	Ag Water			08/16/2023 15:30

Default Cooler Temperature on Receipt °C: 0.8
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

DELLAVALLE™
LABORATORY INC

Kerman Cattle Co
PO Box 370
Kerman, CA 93630

Account# 00-0025824
Account Manager: Ben Nydam
Submitted By: Christina Medeiros

Received: 08/17/2023 8:40
Reported: 08/23/2023 14:15

Sample Results

Sample: Canal
23H1580-01 (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 17:11	SM 2510 B		BEH0918
Nitrate Nitrogen as NO3N	ND	mg/L	0.1	1	10	08/17/23 20:52	EPA 300.0		BEH0886

DELLAVALLE™
LABORATORY INC

Kerman Cattle Co
PO Box 370
Kerman, CA 93630

Account# 00-0025824
Account Manager: Ben Nydam
Submitted By: Christina Medeiros

Received: 08/17/2023 8:40
Reported: 08/23/2023 14:15

Quality Control

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BEH0886										
Blank (BEH0886-BLK1)					Prepared & Analyzed: 8/17/2023					
Nitrate Nitrogen as NO3N	ND		0.1	mg/L						
Blank (BEH0886-BLK2)					Prepared & Analyzed: 8/17/2023					
Nitrate Nitrogen as NO3N	ND		0.1	mg/L						
Blank (BEH0886-BLK3)					Prepared: 8/17/2023 Analyzed: 8/18/2023					
Nitrate Nitrogen as NO3N	ND		0.1	mg/L						
LCS (BEH0886-BS1)					Prepared & Analyzed: 8/17/2023					
Nitrate Nitrogen as NO3N	4.9		0.1	mg/L	5.000		97.8	90-110		
LCS (BEH0886-BS2)					Prepared: 8/17/2023 Analyzed: 8/18/2023					
Nitrate Nitrogen as NO3N	4.9		0.1	mg/L	5.000		98.4	90-110		
Duplicate (BEH0886-DUP1)		**Source: 23H0170-01**			Prepared & Analyzed: 8/17/2023					
Nitrate Nitrogen as NO3N	0.2		0.1	mg/L		0.2			0.475	10
Duplicate (BEH0886-DUP2)		**Source: 23H1556-01**			Prepared: 8/17/2023 Analyzed: 8/18/2023					
Nitrate Nitrogen as NO3N	5.8		0.1	mg/L		5.8			0.172	10
Matrix Spike (BEH0886-MS1)		**Source: 23H0170-01**			Prepared & Analyzed: 8/17/2023					
Nitrate Nitrogen as NO3N	5.2		0.1	mg/L	5.000	0.2	99.6	90-110		
Matrix Spike (BEH0886-MS2)		**Source: 23H1556-01**			Prepared: 8/17/2023 Analyzed: 8/18/2023					
Nitrate Nitrogen as NO3N	10.8		0.1	mg/L	5.000	5.8	98.9	90-110		
Reference (BEH0886-SRM1)					Prepared & Analyzed: 8/17/2023					
Nitrate Nitrogen as NO3N	9.9			mg/L	10.00		98.8	90-110		
Reference (BEH0886-SRM2)					Prepared: 8/17/2023 Analyzed: 8/18/2023					
Nitrate Nitrogen as NO3N	10.0			mg/L	10.00		99.6	90-110		
Reference (BEH0886-SRM3)					Prepared: 8/17/2023 Analyzed: 8/18/2023					
Nitrate Nitrogen as NO3N	10.0			mg/L	10.00		99.6	90-110		

DELLAVALLE™
LABORATORY INC

Kerman Cattle Co
PO Box 370
Kerman, CA 93630

Account# 00-0025824
Account Manager: Ben Nydam
Submitted By: Christina Medeiros

Received: 08/17/2023 8:40
Reported: 08/23/2023 14:15

Quality Control
(Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BEH0918										
Blank (BEH0918-BLK1)					Prepared: 8/17/2023 Analyzed: 8/18/2023					
Electrical Conductivity	ND		0.01	mmhos/cm						
Blank (BEH0918-BLK2)					Prepared: 8/17/2023 Analyzed: 8/18/2023					
Electrical Conductivity	ND		0.01	mmhos/cm						
Blank (BEH0918-BLK3)					Prepared: 8/17/2023 Analyzed: 8/18/2023					
Electrical Conductivity	ND		0.01	mmhos/cm						
Duplicate (BEH0918-DUP1)		**Source: 23H1497-03**			Prepared: 8/17/2023 Analyzed: 8/18/2023					
Electrical Conductivity	0.02		0.01	mmhos/cm		0.02			9.30	10
Duplicate (BEH0918-DUP2)		**Source: 23H1590-01**			Prepared: 8/17/2023 Analyzed: 8/18/2023					
Electrical Conductivity	0.02		0.01	mmhos/cm		0.02			0.00	10
Reference (BEH0918-SRM1)					Prepared: 8/17/2023 Analyzed: 8/18/2023					
Electrical Conductivity	511			umhos/cm	538.0		94.9	90-110		
Reference (BEH0918-SRM3)					Prepared: 8/17/2023 Analyzed: 8/18/2023					
Electrical Conductivity	956			umhos/cm	1000		95.6	90-110		
Reference (BEH0918-SRM4)					Prepared: 8/17/2023 Analyzed: 8/18/2023					
Electrical Conductivity	956			umhos/cm	1000		95.6	90-110		
Reference (BEH0918-SRM5)					Prepared: 8/17/2023 Analyzed: 8/18/2023					
Electrical Conductivity	971			umhos/cm	1000		97.1	90-110		

08/17/23 08:40 23H1580

AV

WATER WORK REQUEST

DELLAVALLE LABORATORY, INC.

1910 W. McKinley Avenue, Suite 110 • Fresno, CA 93728
www.dellavallelab.com 559 233-6129 • 800 228-9896 • Fax 559 268-8174

Acct No. Cons.
Bill To: 25824 8

No. of Samples 1 No. Bottles 1

Water Type:
- [X] Ag Water
- [ ] Supply Water
- [ ] Drinking
- [ ] Ground Water
- [ ] Other
- [ ] Wastewater
- [ ] Mon. Well

Purchase Order No. Results Needed By

Client: Kerman Cattle Co
Address: PO Box 370
City, State, Zip: Kerman CA 93630
Email: kermancattle@outlook.com

Copy to: mel_tinamedeiros@yahoo.com

Requested by/Cell: Christina Medeiros/ 559-903-2490

Facility:

Date sampled

Sampled by

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

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

- [X] EC, NO_3-N
  (1) 1 L plastic, unpreserved (white)
- [ ] DWW1: (EC, pH, NO_3-N, **NH_4-N Field Test)**
  (1) 1 L plastic, unpreserved (white)
- [ ] DWW2: (DWW1 Plus SO_4, CO_3, HCO_3, Cl, Ca, Mg, Na, TDS)
  (1) 1 L plastic, unpreserved (white)
- [ ] DCW1: (EC, NO_3-N, TDS)
  (1) 1 L plastic, unpreserved (white)
- [ ] DPW1: (EC, pH, NO_3-N, NH_4-N, TKN, TDS, TP, TK)
  (1) 1 L plastic, unpreserved (white)
- [ ] DPW2: (DPW1 Plus Ca, Mg, Na, HCO_3, CO_3, SO_4, Cl)
  (1) 1 L plastic, unpreserved (white)
- [ ] Other

DESCRIPTION OF SAMPLES

		Date Sampled	Time Sampled	Field NH4-N (mg/L)	Received Temp °C
1. Canal	Sampled From:	8/16/23	3:30pm		0.8
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		Medeiros		8/16/23 4:35
Second		DLL	8/16/23 4:35pm	8/16/23
Third	MM	DLL	8/17/23 8:40	
Fourth				

I guarantee that as the client, or on behalf of the client named, I have the authority to contract the above requested services. Should it be found that I do not have such authority, I agree to be personally liable for all costs and, if there should be action against me for this breach, reasonable attorneys' fees. It is understood that payment is expected to be cash with samples unless terms have been previously arranged. Terms are net 30 days; overdue accounts will be charged a dated damage fee of 2% per month (annually 24 %) or $5.00 per month whichever is greater.
If payment is not made when due and a legitimate dispute exists concerning the product or services of Dellavalle Laboratory, Inc., it will be submitted to mediation under the Rules and Procedures of Creative Alternative to Litigation, Inc. (cal). If the dispute is not resolved in mediation, then the dispute will be submitted to binding arbitration through cal under its Rules and Procedures. The prties will equally bear the costs of mediation/arbitration. If, however, the mediator declares that no legitimate dispute exists, then debtor will pay all mediation and arbitration costs, and in the event of arbitration, reasonable attorneys' fees of Dellavalle Laboratory.

Invoicing Information:
Medeiros Pricing 2023
Sampling Hrs ___ Miles ___ Consulting ___

Shipping
$ ___ In
$ ___ Out

Amt Paid Rec By Check No. Date

Signature

Sample received in cooler with ice?
[ ] Yes [ ] No

ctt:update 2020

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

08/17/23 08:40 23H1580

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

☐ Samples refrigerated before pick up ☐ Picked up samples placed in Ice chest

Container: Ice Chest ☑ Box ☐ None ☐ **Refrigerant:** Wet Ice ☑ Blue Ice ☐ None ☐

Samples Preserved with HNO_3 or H_2SO_4 were: ☐ Received Preserved ☐ Preserved Upon Receipt at Laboratory

	Type of Container(s) Received	Sample Number 1	2	3	4	5	6	7	8	9	10
Sample Containers for Internal (DLI) Use *(Containers that go into the Lab)*											
Plastics	100 mL sterile plastic $Na_2S_2O_3$ (Green)										
	250 mL unpreserved (White) Plastic										
	250 mL HNO_3 (Red) Plastic										
	* pH Value										
	250 mL H_2SO_4 (Yellow) Plastic										
	* pH Value										
	500 mL unpreserved (White) Plastic										
	1 L unpreserved (White) Plastic	1									
	1 L unpreserved (BOD) (Purple) Plastic										
Special	500mL unpreserved (White) Glass										
	PO4-P Kit										
	Other:										
Sample Containers for Subcontracted ("Send Out") Analyses *(Containers that go in the Subcontract ("Send Out") Refrigerator)*											
Plastics	100 mL sterile plastic $Na_2S_2O_3$ (Green)										
	250 mL unpreserved (White) Plastic										
	250 mL HNO_3 (Red) Plastic										
	250 mL H_2SO_4 (Yellow) Plastic										
	500 mL HNO_3 (Red)										
	1 L unpreserved (White) Plastic										
	1 L unpreserved (BOD) (Purple) Plastic										
	1 L HNO_3 (Red)										
VOA Vials	40 mL VOA, $Na_2S_2O_3$ + MCAA (EPA531)										
	40 mL VOA, $Na_2S_2O_3$ (EPA547)										
	40mL AG VOA unpreserved (White) (Set of 3)										
	40 mL AG VOA, $Na_2S_2O_3$ (Green) (Set of 3)										
	40mL VOA, H_3PO_4 (Set of 3)										
	40 mL VOA, HCl (Blue) (Set of 3)										
	40 mL VOA, $Na_2S_2O_3$ (Green) (Set of 3)										
Glass	250 mL AG unpreserved (White)										
	250 mL AG H_2SO_4 (Yellow)										
	250 mL AG $Na_2S_2O_3$ (Green)										
	250 mL AG $Na_2S_2O_3$ + MCAA										
	500 mL glass unpreserved (White)										
	500 mL AG HCl (Blue)										
	1 L AG unpreserved (White)										
	1 L AG H_2SO_4 (Yellow)										
	1 L AG $Na_2S_2O_3$ (Green)										
	1 L AG HCl (Blue)										
Special	Cr^{6+} - 50mL Plastic w/Borate/HCO_3/CO_3										
	Cyanide - 500 mL NaOH										
	Asbestos - 1L P wrapped in foil (Set of 2)										
	Sulfide - 1 L **AG** or **P** NaOH + ZnAc										
	Chlorite/Bromate - 250 mL AG with EDA										
	HAA5 - 250mL AG Ammonium Chlorite										
	DO KIT										
	Other:										