

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: Jose Ribeiro & Son Dairy, Inc.

Physical address of dairy:

3760 E Mount Whitney 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: 01/01/1940

Regional Water Quality Control Board Basin Plan designation: Tulare Basin

County Assessor Parcel Number(s) for dairy facility:

0057-0020-0067-0000

B. OPERATORS

Ribeiro, Joe

Operator name: Ribeiro, Joe

Telephone no.:

(559) 816-2727

Landline

Cellular

3760 E Mount Whitney AVE

Laton

CA

93242

Mailing Address Number and Street

City

State

Zip Code

This operator is responsible for paying permit fees.

C. OWNERS

Ribeiro, Joe

Legal owner name: Ribeiro, Joe

Telephone no.:

(559) 816-2727

Landline

Cellular

3760 E Mount Whitney AVE

Laton

CA

93242

Mailing Address Number and Street

City

State

Zip Code

This owner is responsible for paying permit fees.

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Ribeiro, Jose

Legal owner name:	Ribeiro, Jose	Telephone no.:	(559) 816-3693
3420 E Mount Whitney AVE Mailing Address Number and Street	Laton	Landline	Cellular
	City	CA	93242
		State	Zip Code

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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	100	200	200	200	0	0
Number under roof	600	0	0	0	0	0
Maximum number	750	200	200	200	150	100
Average number	700	200	200	200	150	100
Avg live weight (lbs)	1,400	1,500	700	500		

Predominant milk cow breed: HolsteinAverage milk production: 65 pounds per cow per day**B. MANURE GENERATED**Total manure excreted by the herd: 25,027.73 tons per reporting periodTotal nitrogen from manure: 316,630.46 lbs per reporting periodAfter ammonia losses (30% loss applied): 221,641.32 lbs per reporting periodTotal phosphorus from manure: 50,902.35 lbs per reporting periodTotal potassium from manure: 131,756.96 lbs per reporting periodTotal salt from manure: 375,585.00 lbs per reporting period**C. PROCESS WASTEWATER GENERATED**Process wastewater generated: 4,824,000 gallonsTotal nitrogen generated: 31,601.55 lbsTotal phosphorus generated: 0.00 lbsTotal potassium generated: 1,278.90 lbsTotal salt generated: 217,530.12 lbs

<u>4,824,000 gallons applied</u>	
+ <u>0 gallons exported</u>	
- <u>0 gallons imported</u>	
= <u>4,824,000 gallons generated</u>	

D. FRESH WATER SOURCES

Source Description	Type
1E	Ground water
4W	Ground water
6W	Ground water
Canal	Surface water

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E. SUBSURFACE (TILE) DRAINAGE SOURCES*No subsurface (tile) drainage sources entered.***F. NUTRIENT IMPORTS***No dry manure nutrient imports entered.**No process wastewater nutrient imports entered.**No commercial or other nutrient imports entered.***G. NUTRIENT EXPORTS**

Date	Material type	Quantity	Reporting basis	Moisture (%)	Density (lbs/cu ft)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/27/2023	Corral solids	950.00 ton	As-is	5.5		1.08	0.27	1.39		70.69
09/19/2023	Corral solids	1,950.00 ton	As-is	48.8		2.16	0.91	3.67		7.78

No liquid nutrient exports entered.

Material type	Total N (lbs)	Total P (lbs)	Total K (lbs)	Total salt (lbs)
Dry manure	10.48	4.06	16.95	1,424,589.99
Process wastewater	0.00	0.00	0.00	0.00
Total exports for all materials	10.48	4.06	16.95	1,424,589.99

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APPLICATION AREA

A. LIST OF LAND APPLICATION AREAS

Field name	Controlled acres	Cropable acres	Total harvests	Type of waste applied	Parcel number
Field 1	38	36	2	process wastewater	0057-0020-0072-0000
Field 2	36	36	2	process wastewater	0057-0020-0072-0000
Field 3	26	26	2	process wastewater	0057-0020-0073-0000
Field 4	3	3	2	process wastewater	0057-0020-0067-0000
Totals for areas that were used for application	103	101	8		
Totals for areas that were not used for application					
Land application area totals	103	101	8		

B. CROPS AND HARVESTS

Field 1

Field name: Field 1

10/14/2022: Wheat, silage, boot stage

Crop: Wheat, silage, boot stage Acres planted: 36 Plant date: 10/14/2022

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	456.42 ton	As-is		59.3	12,400.00	1,700.00	13,500.00		14.72

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	10.00	160.00	28.00	120.00	0.00
Total actual harvest content	12.68	314.42	43.11	342.32	1,519.13

06/08/2023: Corn, silage

Crop: Corn, silage Acres planted: 36 Plant date: 06/08/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
09/27/2023	938.40 ton	As-is		68.2	6,400.00	900.00	8,500.00		8.18

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	30.00	240.00	45.00	198.00	0.00
Total actual harvest content	26.07	333.65	46.92	443.13	1,356.11

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Field 2

Field name: Field 2

10/14/2022: Wheat, silage, boot stage

Crop: Wheat, silage, boot stage Acres planted: 36 Plant date: 10/14/2022

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	572.47 ton	As-is		64.4	8,900.00	1,900.00	12,700.00		13.16

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	10.00	160.00	28.00	120.00	0.00
Total actual harvest content	15.90	283.05	60.43	403.91	1,490.00

06/08/2023: Corn, silage

Crop: Corn, silage Acres planted: 36 Plant date: 06/08/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
09/27/2023	937.61 ton	As-is		71.0	6,900.00	800.00	7,800.00		8.15

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	30.00	240.00	45.00	198.00	0.00
Total actual harvest content	26.04	359.42	41.67	406.30	1,231.13

Field 3

Field name: Field 3

10/14/2022: Wheat, silage, boot stage

Crop: Wheat, silage, boot stage Acres planted: 26 Plant date: 10/14/2022

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	348.12 ton	As-is		53.3	10,700.00	1,700.00	11,300.00		13.11

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	10.00	160.00	28.00	120.00	0.00
Total actual harvest content	13.39	286.53	45.52	302.60	1,639.48

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Field 3

06/08/2023: Corn, silage

Crop: Corn, silage Acres planted: 26 Plant date: 06/08/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
09/27/2023	<u>694.72 ton</u>	As-is		67.1	7,100.00	1,200.00	8,400.00		8.85
		Yield (tons/acre) Total N (lbs/acre) Total P (lbs/acre) Total K (lbs/acre)				Salt (lbs/acre)			
Anticipated harvest content		30.00 240.00 45.00 198.00				0.00			
Total actual harvest content		26.72 379.42 64.13 448.90				1,555.99			

Field 4

Field name: Field 4

10/14/2022: Wheat, silage, boot stage

Crop: Wheat, silage, boot stage Acres planted: 3 Plant date: 10/14/2022

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	<u>33.64 ton</u>	As-is		59.1	9,000.00	1,900.00	13,300.00		15.00
		Yield (tons/acre) Total N (lbs/acre) Total P (lbs/acre) Total K (lbs/acre)				Salt (lbs/acre)			
Anticipated harvest content		10.00 160.00 28.00 120.00				0.00			
Total actual harvest content		11.21 201.84 42.61 298.27				1,375.88			

06/08/2023: Corn, silage

Crop: Corn, silage Acres planted: 3 Plant date: 06/08/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
09/27/2023	<u>80.16 ton</u>	As-is		66.4	6,600.00	900.00	8,400.00		9.68
		Yield (tons/acre) Total N (lbs/acre) Total P (lbs/acre) Total K (lbs/acre)				Salt (lbs/acre)			
Anticipated harvest content		30.00 240.00 45.00 198.00				0.00			
Total actual harvest content		26.72 352.70 48.10 448.90				1,738.13			

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NUTRIENT BUDGET**A. LAND APPLICATIONS**

Field 1 - 10/14/2022: Wheat, silage, boot stage

Field name: Field 1

Crop: Wheat, silage, boot stage

Plant date: 10/14/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following
10/01/2022	Surface (irrigation)	No precipitation	No precipitation		No precipitation
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)
Lagoon	Process wastewater	155.53	0.00	5.95	1,061.01
6W	Ground water	0.30	0.00	0.00	0.00
1E	Ground water	0.45	0.00	0.00	0.00
Application event totals		156.28	0.00	5.95	1,061.01
04/13/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)
Canal	Surface water	0.00	0.00	0.00	31.92
Application event totals		0.00	0.00	0.00	31.92
05/07/2023	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	45.06
Application event totals		0.00	0.00	0.00	45.06

Field 1 - 06/08/2023: Corn, silage

Field name: Field 1

Crop: Corn, silage

Plant date: 06/08/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
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Field 1 - 06/08/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
05/27/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	141.06	0.00	5.98	978.44	684,000.00 gal
Canal	Surface water	0.00	0.00	0.00	26.76	4,275,000.00 gal
Application event totals		141.06	0.00	5.98	1,005.20	
07/06/2023	Surface (irrigation)	No precipitation	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	35.67	5,700,000.00 gal
Application event totals		0.00	0.00	0.00	35.67	
07/16/2023	Surface (irrigation)	No precipitation	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	26.29	4,200,000.00 gal
Application event totals		0.00	0.00	0.00	26.29	
07/26/2023	Surface (irrigation)	No precipitation	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	28.45	4,545,000.00 gal
Application event totals		0.00	0.00	0.00	28.45	
08/04/2023	Surface (irrigation)	No precipitation	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	31.26	4,995,000.00 gal
Application event totals		0.00	0.00	0.00	31.26	
08/13/2023	Surface (irrigation)	No precipitation	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	31.92	5,100,000.00 gal
Application event totals		0.00	0.00	0.00	31.92	

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Field 1 - 06/08/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
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	31.92	5,100,000.00 gal
Application event totals		0.00	0.00	0.00	31.92	
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	28.45	4,545,000.00 gal
Application event totals		0.00	0.00	0.00	28.45	
09/04/2023	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	27.51	4,395,000.00 gal
Application event totals		0.00	0.00	0.00	27.51	

Field 2 - 10/14/2022: Wheat, silage, boot stage

Field name:	Field 2	Plant date:	10/14/2022			
Crop:	Wheat, silage, boot stage					
Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
10/03/2022	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	119.04	0.00	4.55	812.13	744,000.00 gal
6W	Ground water	0.23	0.00	0.00	0.00	2,790,000.00 gal
1E	Ground water	0.34	0.00	0.00	0.00	1,488,000.00 gal
Application event totals		119.62	0.00	4.55	812.13	

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Field 2 - 10/14/2022: Wheat, silage, boot stage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
04/14/2023	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	36.61	5,850,000.00 gal
Application event totals		0.00	0.00	0.00	36.61	
05/11/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	52.57	8,400,000.00 gal
Application event totals		0.00	0.00	0.00	52.57	

Field 2 - 06/08/2023: Corn, silage

Field name: Field 2

Crop: Corn, silage

Plant date: 06/08/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
05/29/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	178.19	0.00	7.55	1,235.93	864,000.00 gal
Canal	Surface water	0.00	0.00	0.00	33.80	5,400,000.00 gal
Application event totals		178.19	0.00	7.55	1,269.73	
07/08/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	40.65	6,495,000.00 gal
Application event totals		0.00	0.00	0.00	40.65	
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	33.80	5,400,000.00 gal
Application event totals		0.00	0.00	0.00	33.80	

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Field 2 - 06/08/2023: Corn, silage

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
Canal	Surface water	0.00	0.00	0.00	31.92	5,100,000.00 gal
Application event totals		0.00	0.00	0.00	31.92	
08/05/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	35.02	5,595,000.00 gal
Application event totals		0.00	0.00	0.00	35.02	
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	35.67	5,700,000.00 gal
Application event totals		0.00	0.00	0.00	35.67	
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	37.08	5,925,000.00 gal
Application event totals		0.00	0.00	0.00	37.08	
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	35.67	5,700,000.00 gal
Application event totals		0.00	0.00	0.00	35.67	
09/06/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	36.61	5,850,000.00 gal
Application event totals		0.00	0.00	0.00	36.61	

Field 3 - 10/14/2022: Wheat, silage, boot stage

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Field 3 - 10/14/2022: Wheat, silage, boot stage

Field name: Field 3

Crop: Wheat, silage, boot stage

Plant date: 10/14/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
09/30/2022	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	154.20	0.00	5.90	1,051.94	696,000.00 gal
6W	Ground water	0.30	0.00	0.00	0.00	2,610,000.00 gal
1E	Ground water	0.45	0.00	0.00	0.00	1,392,000.00 gal
Application event totals		154.95	0.00	5.90	1,051.94	
04/16/2023	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	40.30	4,650,000.00 gal
Application event totals		0.00	0.00	0.00	40.30	
05/09/2023	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	54.60	6,300,000.00 gal
Application event totals		0.00	0.00	0.00	54.60	

Field 3 - 06/08/2023: Corn, silage

Field name: Field 3

Crop: Corn, silage

Plant date: 06/08/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
05/27/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	178.19	0.00	7.55	1,235.93	624,000.00 gal
Canal	Surface water	0.00	0.00	0.00	33.80	3,900,000.00 gal
Application event totals		178.19	0.00	7.55	1,269.73	

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Field 3 - 06/08/2023: Corn, silage

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
Canal	Surface water	0.00	0.00	0.00	44.20	5,100,000.00 gal
Application event totals		0.00	0.00	0.00	44.20	
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	35.10	4,050,000.00 gal
Application event totals		0.00	0.00	0.00	35.10	
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	35.10	4,050,000.00 gal
Application event totals		0.00	0.00	0.00	35.10	
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	35.10	4,050,000.00 gal
Application event totals		0.00	0.00	0.00	35.10	
08/16/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	36.40	4,200,000.00 gal
Application event totals		0.00	0.00	0.00	36.40	
08/24/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	44.20	5,100,000.00 gal
Application event totals		0.00	0.00	0.00	44.20	

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Field 3 - 06/08/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
08/31/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	37.70	4,350,000.00 gal
Application event totals		0.00	0.00	0.00	37.70	
09/05/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	34.19	3,945,000.00 gal
Application event totals		0.00	0.00	0.00	34.19	

Field 4 - 10/14/2022: Wheat, silage, boot stage

Field name: Field 4

Crop: Wheat, silage, boot stage

Plant date: 10/14/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
10/05/2022	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	230.41	0.00	8.81	1,571.86	120,000.00 gal
6W	Ground water	0.45	0.00	0.00	0.00	450,000.00 gal
1E	Ground water	0.67	0.00	0.00	0.00	240,000.00 gal
Application event totals		231.53	0.00	8.81	1,571.86	
04/13/2023	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	45.06	600,000.00 gal
Application event totals		0.00	0.00	0.00	45.06	

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Field 4 - 10/14/2022: Wheat, silage, boot stage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following
05/07/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)
Canal	Surface water	0.00	0.00	0.00	56.33
Application event totals		0.00	0.00	0.00	56.33
					750,000.00 gal

Field 4 - 06/08/2023: Corn, silage

Field name: Field 4

Crop: Corn, silage

Plant date: 06/08/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following
05/28/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)
Lagoon	Process wastewater	296.98	0.00	12.58	2,059.88
Canal	Surface water	0.00	0.00	0.00	56.33
Application event totals		296.98	0.00	12.58	2,116.21
07/06/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)
Canal	Surface water	0.00	0.00	0.00	45.06
Application event totals		0.00	0.00	0.00	45.06
07/16/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)
Canal	Surface water	0.00	0.00	0.00	45.06
Application event totals		0.00	0.00	0.00	45.06
07/26/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)
Canal	Surface water	0.00	0.00	0.00	45.06
Application event totals		0.00	0.00	0.00	45.06

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Field 4 - 06/08/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
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	56.33	750,000.00 gal
Application event totals		0.00	0.00	0.00	56.33	
08/18/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	45.06	600,000.00 gal
Application event totals		0.00	0.00	0.00	45.06	
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	56.33	750,000.00 gal
Application event totals		0.00	0.00	0.00	56.33	
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	48.44	645,000.00 gal
Application event totals		0.00	0.00	0.00	48.44	
09/04/2023	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	45.06	600,000.00 gal
Application event totals		0.00	0.00	0.00	45.06	

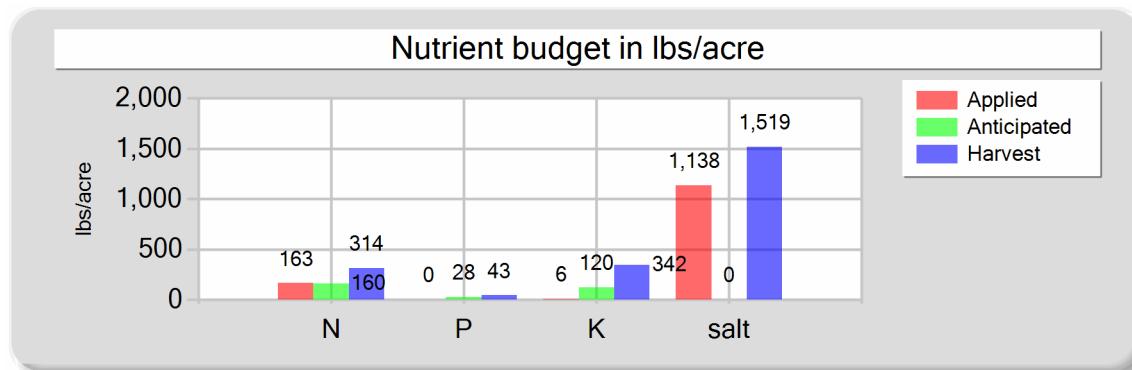
Annual Report - General Order No. R5-2007-0035

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

B. NUTRIENT BUDGET

Field 1 - 10/14/2022: Wheat, silage, boot stage

Field name: Field 1 Crop: Wheat, silage, boot stage Plant date: 10/14/2022



	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	155.53	0.00	5.95	1,061.01
Fresh water	0.75	0.00	0.00	76.98
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	163.28	0.00	5.95	1,137.99
Anticipated crop nutrient removal	160.00	28.00	120.00	0.00
Actual crop nutrient removal	314.42	43.11	342.32	1,519.13
Nutrient balance	-151.14	-43.11	-336.37	-381.14
Applied to removed ratio	0.52	0.00	0.02	0.75

Fresh water applied
17,889,000.00 gallons
658.79 acre-inches
18.30 inches/acre
Process wastewater applied
972,000.00 gallons
35.80 acre-inches
0.99 inches/acre
Total harvests for the crop
1 harvests

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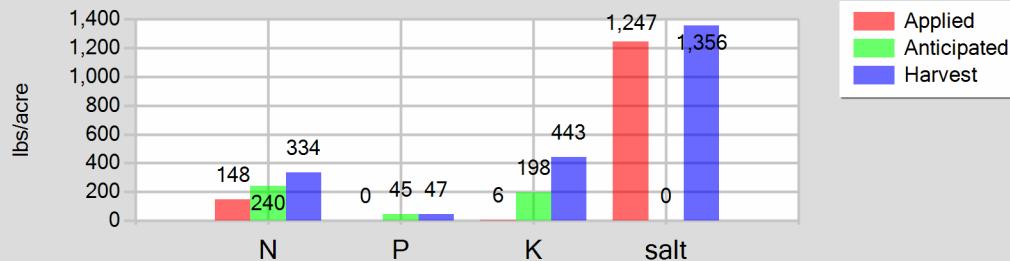
Field 1 - 06/08/2023: Corn, silage

Field name: Field 1

Crop: Corn, silage

Plant date: 06/08/2023

Nutrient budget in lbs/acre



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	141.06	0.00	5.98	978.44
Fresh water	0.00	0.00	0.00	268.22
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	148.06	0.00	5.98	1,246.66
Anticipated crop nutrient removal	240.00	45.00	198.00	0.00
Actual crop nutrient removal	333.65	46.92	443.13	1,356.11
Nutrient balance	-185.59	-46.92	-437.16	-109.45
Applied to removed ratio	0.44	0.00	0.01	0.92

Fresh water applied

42,855,000.00 gallons
1,578.20 acre-inches
43.84 inches/acre

Process wastewater applied

684,000.00 gallons
25.19 acre-inches
0.70 inches/acre

Total harvests for the crop

1 harvests

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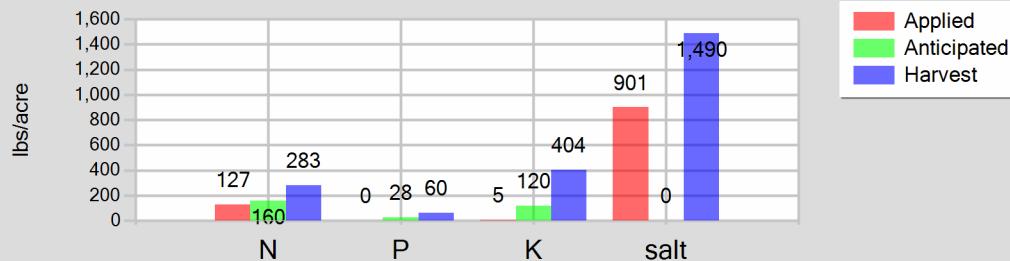
Field 2 - 10/14/2022: Wheat, silage, boot stage

Field name: Field 2

Crop: Wheat, silage, boot stage

Plant date: 10/14/2022

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	119.04	0.00	4.55	812.13
Fresh water	0.58	0.00	0.00	89.19
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	126.62	0.00	4.55	901.32
Anticipated crop nutrient removal	160.00	28.00	120.00	0.00
Actual crop nutrient removal	283.05	60.43	403.91	1,490.00
Nutrient balance	-156.43	-60.43	-399.36	-588.68
Applied to removed ratio	0.45	0.00	0.01	0.60

Fresh water applied

18,528,000.00 gallons
682.32 acre-inches
18.95 inches/acre

Process wastewater applied

744,000.00 gallons
27.40 acre-inches
0.76 inches/acre

Total harvests for the crop

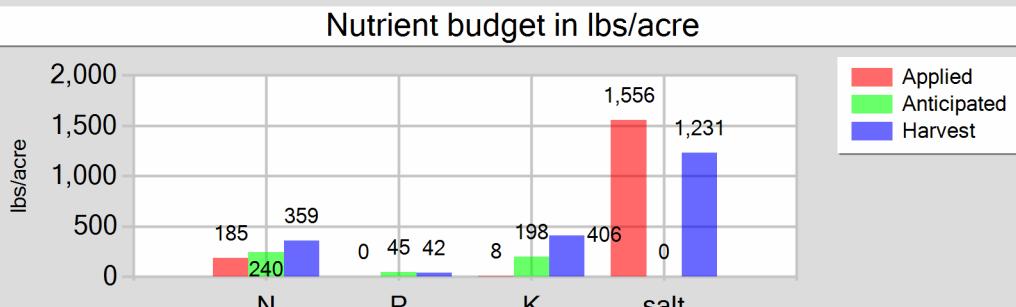
1 harvests

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Field 2 - 06/08/2023: Corn, silage

Field name: Field 2 Crop: Corn, silage Plant date: 06/08/2023



	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	178.19	0.00	7.55	1,235.93
Fresh water	0.00	0.00	0.00	320.23
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	185.19	0.00	7.55	1,556.16
Anticipated crop nutrient removal	240.00	45.00	198.00	0.00
Actual crop nutrient removal	359.42	41.67	406.30	1,231.13
Nutrient balance	-174.23	-41.67	-398.75	325.02
Applied to removed ratio	0.52	0.00	0.02	1.26

Fresh water applied
51,165,000.00 gallons
1,884.23 acre-inches
52.34 inches/acre

Process wastewater applied
864,000.00 gallons
31.82 acre-inches
0.88 inches/acre

Total harvests for the crop
1 harvests

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

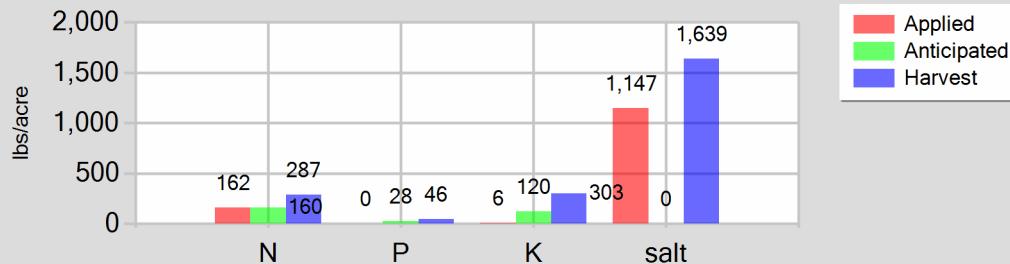
Field 3 - 10/14/2022: Wheat, silage, boot stage

Field name: Field 3

Crop: Wheat, silage, boot stage

Plant date: 10/14/2022

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	154.20	0.00	5.90	1,051.94
Fresh water	0.75	0.00	0.00	94.89
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	161.95	0.00	5.90	1,146.83
Anticipated crop nutrient removal	160.00	28.00	120.00	0.00
Actual crop nutrient removal	286.53	45.52	302.60	1,639.48
Nutrient balance	-124.58	-45.52	-296.70	-492.64
Applied to removed ratio	0.57	0.00	0.02	0.70

Fresh water applied

14,952,000.00 gallons
550.63 acre-inches
21.18 inches/acre

Process wastewater applied

696,000.00 gallons
25.63 acre-inches
0.99 inches/acre

Total harvests for the crop

1 harvests

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

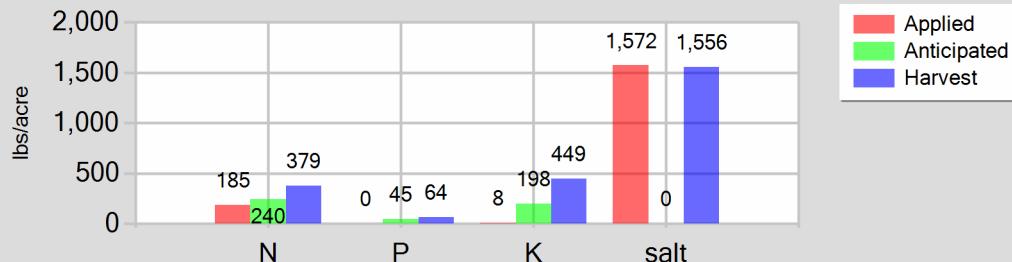
Field 3 - 06/08/2023: Corn, silage

Field name: Field 3

Crop: Corn, silage

Plant date: 06/08/2023

Nutrient budget in lbs/acre



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	178.19	0.00	7.55	1,235.93
Fresh water	0.00	0.00	0.00	335.76
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	185.19	0.00	7.55	1,571.69
Anticipated crop nutrient removal	240.00	45.00	198.00	0.00
Actual crop nutrient removal	379.42	64.13	448.90	1,555.99
Nutrient balance	-194.24	-64.13	-441.35	15.70
Applied to removed ratio	0.49	0.00	0.02	1.01

Fresh water applied

38,745,000.00 gallons
1,426.85 acre-inches
54.88 inches/acre

Process wastewater applied

624,000.00 gallons
22.98 acre-inches
0.88 inches/acre

Total harvests for the crop

1 harvests

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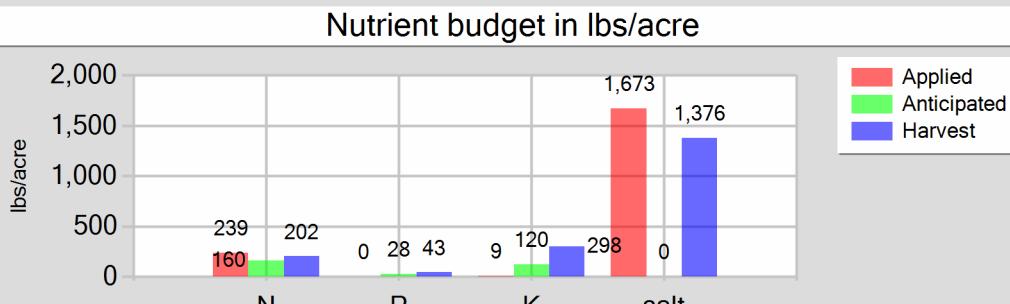
Reporting period 01/01/2023 to 12/31/2023.

Field 4 - 10/14/2022: Wheat, silage, boot stage

Field name: Field 4

Crop: Wheat, silage, boot stage

Plant date: 10/14/2022



	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	230.41	0.00	8.81	1,571.86
Fresh water	1.12	0.00	0.00	101.39
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	238.53	0.00	8.81	1,673.26
Anticipated crop nutrient removal	160.00	28.00	120.00	0.00
Actual crop nutrient removal	201.84	42.61	298.27	1,375.88
Nutrient balance	36.69	-42.61	-289.46	297.38
Applied to removed ratio	1.18	0.00	0.03	1.22

Fresh water applied

2,040,000.00 gallons
75.13 acre-inches
25.04 inches/acre

Process wastewater applied

120,000.00 gallons
4.42 acre-inches
1.47 inches/acre

Total harvests for the crop

1 harvests

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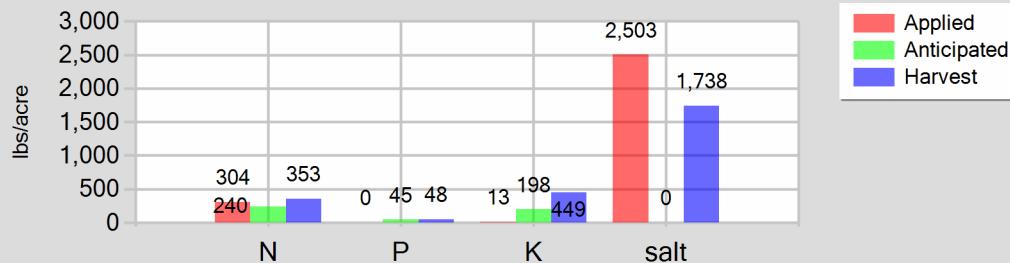
Field 4 - 06/08/2023: Corn, silage

Field name: Field 4

Crop: Corn, silage

Plant date: 06/08/2023

Nutrient budget in lbs/acre



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	296.98	0.00	12.58	2,059.88
Fresh water	0.00	0.00	0.00	442.74
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	303.98	0.00	12.58	2,502.62
Anticipated crop nutrient removal	240.00	45.00	198.00	0.00
Actual crop nutrient removal	352.70	48.10	448.90	1,738.13
Nutrient balance	-48.73	-48.10	-436.31	764.50
Applied to removed ratio	0.86	0.00	0.03	1.44

Fresh water applied

5,895,000.00 gallons
217.09 acre-inches
72.36 inches/acre

Process wastewater applied

120,000.00 gallons
4.42 acre-inches
1.47 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****Corral Manure**

Sample and source description: Corral Manure

Sample date: 05/25/2023 Material type: Corral solids

Source of analysis: Lab analysis

Method of reporting: As-is

Moisture: 5.5 %

	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	1.08	0.27	1.39	0.00	0.00	0.00	0.00	0.00		70.69
DL	0.01	0.01	0.01	0.02	0.01	0.01	0.02	0.01		0.67

Separator Manure

Sample and source description: Separator Manure

Sample date: 05/25/2023 Material type: Separator solids

Source of analysis: Lab analysis

Method of reporting: As-is

Moisture: 77.3 %

	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	0.46	0.06	0.22	0.00	0.00	0.00	0.00	0.00		8.61
DL	0.01	0.01	0.01	0.02	0.01	0.01	0.02	0.01		0.67

Corral Manure

Sample and source description: Corral Manure

Sample date: 10/11/2023 Material type: Corral solids

Source of analysis: Lab analysis

Method of reporting: As-is

Moisture: 48.8 %

	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	2.16	0.91	3.67	0.00	0.00	0.00	0.00	0.00		7.78
DL	0.01	0.01	0.01	0.02	0.01	0.01	0.02	0.01		0.67

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

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

Separator Manure

Sample and source description: Separator Manure

Sample date: 10/11/2023 Material type: Separator solids Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 48.2 %

	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	0.87	0.16	0.35	0.00	0.00	0.00	0.00	0.00		9.33
DL	0.01	0.01	0.01	0.02	0.01	0.01	0.02	0.01		0.67

B. PROCESS WASTEWATER ANALYSES

Wastewater

Sample and source description: Wastewater

Sample date: 03/08/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: 7.47

	Kjeldahl-N (mg/L)	NH4-N (mg/L)	NH3-N (mg/L)	Nitrate-N (mg/L)	Total P (mg/L)	Total K (mg/L)	Calcium (mg/L)	Magnes. (mg/L)	Sodium (mg/L)	Bicarb. (mg/L)	Carb. (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	EC (µmhos/cm)	TDS (mg/L)
Value	690.00	369.30	4.70	0.26	0.00	26.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.40	4,709
DL	20.00	0.57	0.57	0.01	0.01	0.01	0.01	0.01	0.01	0.10	0.10	0.02	0.01	0.01	19

Wastewater

Sample and source description: Wastewater

Sample date: 05/29/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: 7.61

	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	889.00	525.50	10.00	0.68	0.00	37.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.60	6,171
DL	20.00	0.57	0.57	0.01	0.01	0.01	0.01	0.01	0.01	0.10	0.10	0.02	0.01	0.01	19

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

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

Wastewater

Sample and source description: Wastewater

Sample date: 08/10/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: 7.76

	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	659.00	351.00	9.00	1.16	0.00	26.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.60	4,867
DL	20.00	0.57	0.57	0.01	0.01	0.01	0.01	0.01	0.01	0.10	0.10	0.02	0.01	0.01	19

Wastewater

Sample and source description: Wastewater

Sample date: 10/11/2023 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	779.00	186.50	1.90	0.51	0.00	13.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00	2,549
DL	20.00	0.57	0.57	0.01	0.01	0.01	0.01	0.01	0.01	0.10	0.10	0.02	0.01	0.01	19

C. FRESH WATER ANALYSES

1E

1E

Sample description: 1E

Sample date: 08/09/2022 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	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	220.00	0
DL	0.01	0.57	0.01	0.01	0.01	0.01	0.10	0.10	0.02	0.01	0.01	19

4W

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

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

4W**4W**Sample description: 4WSample date: 08/09/2022 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	0.36	0.00	0.36	2.20	0.00	49.00	65.00	20.00	15.00	2.80	230.00	140
DL	0.01	0.57	0.01	0.01	0.01	0.01	0.10	0.10	0.02	0.01	0.01	19

6W**6W**Sample description: 6WSample date: 08/09/2022 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	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	220.00	0
DL	0.01	0.57	0.01	0.01	0.01	0.01	0.10	0.10	0.02	0.01	0.01	19

Canal**Canal**Sample description: CanalSample date: 07/17/2023 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.00	27
DL	0.01	0.57	0.01	0.01	0.01	0.01	0.10	0.10	0.02	0.01	0.01	19

D. SOIL ANALYSES

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

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

No soil analyses entered.

E. PLANT TISSUE ANALYSES

Field 1 - 10/14/2022: Wheat, silage, boot stage

Wheat

Sample and source description: Wheat

Sample date: 05/23/2023 Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 59.3 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	1.24	0.17	1.35		14.72
DL	0.01	0.01	0.01		0.67

Field 1 - 06/08/2023: Corn, silage

Corn

Sample and source description: Corn

Sample date: 11/02/2023 Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 68.2 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	0.64	0.09	0.85		8.18
DL	0.01	0.01	0.01		0.67

Field 2 - 10/14/2022: Wheat, silage, boot stage

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Field 2 - 10/14/2022: Wheat, silage, boot stage

Wheat

Sample and source description: Wheat

Sample date: 05/23/2023 Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 64.4 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	0.89	0.19	1.27		13.16
DL	0.01	0.01	0.01		0.67

Field 2 - 06/08/2023: Corn, silage

Corn

Sample and source description: Corn

Sample date: 11/02/2023 Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 71.0 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	0.69	0.08	0.78		8.15
DL	0.01	0.01	0.01		0.67

Field 3 - 10/14/2022: Wheat, silage, boot stage

Wheat

Sample and source description: Wheat

Sample date: 05/23/2023 Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 53.3 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	1.07	0.17	1.13		13.11
DL	0.01	0.01	0.01		0.67

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

Field 3 - 06/08/2023: Corn, silage

Corn

Sample and source description: Corn

Sample date: 11/02/2023 Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 67.1 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	0.71	0.12	0.84		8.85
DL	0.01	0.01	0.01		0.67

Field 4 - 10/14/2022: Wheat, silage, boot stage

Wheat

Sample and source description: Wheat

Sample date: 05/23/2023 Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 59.1 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	0.90	0.19	1.33		15.00
DL	0.01	0.01	0.01		0.67

Field 4 - 06/08/2023: Corn, silage

Corn

Sample and source description: Corn

Sample date: 11/02/2023 Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 66.4 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	0.66	0.09	0.84		9.68
DL	0.01	0.01	0.01		0.67

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F. SUBSURFACE (TILE) DRAINAGE ANALYSES

No subsurface (tile) drainage analyses entered.

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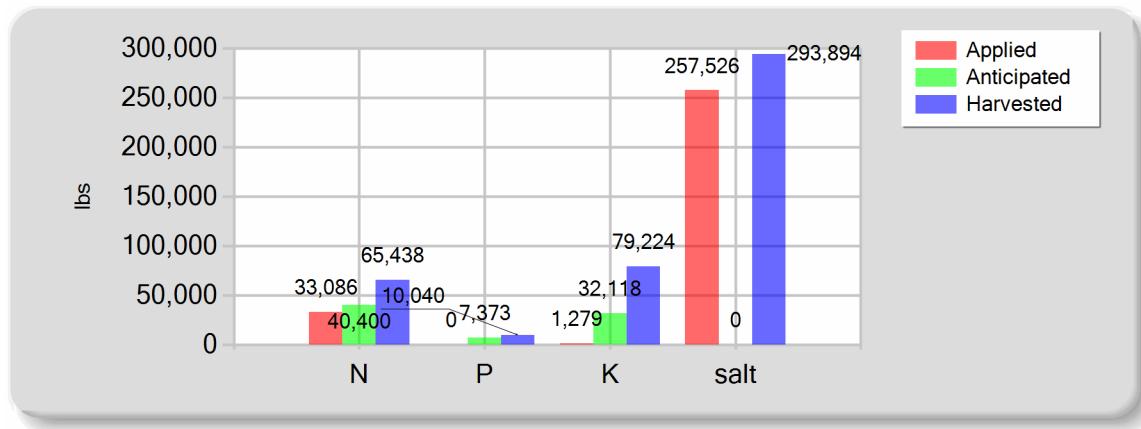
Reporting period 01/01/2023 to 12/31/2023.

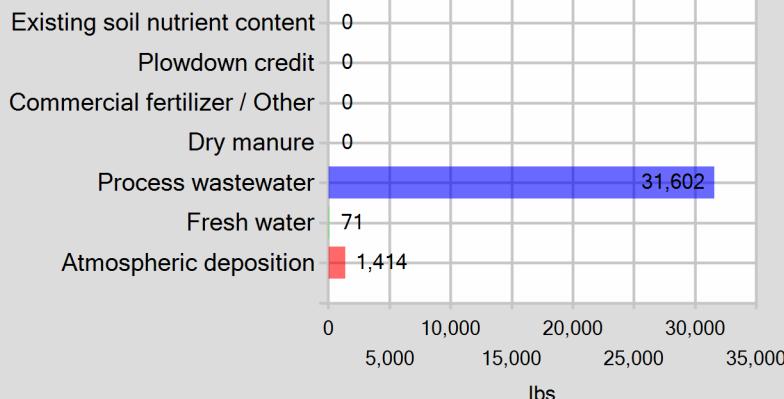
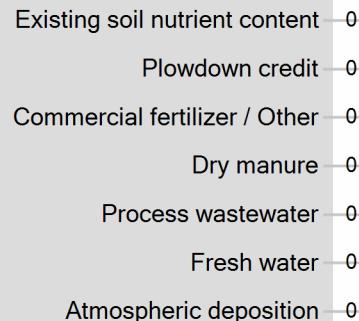
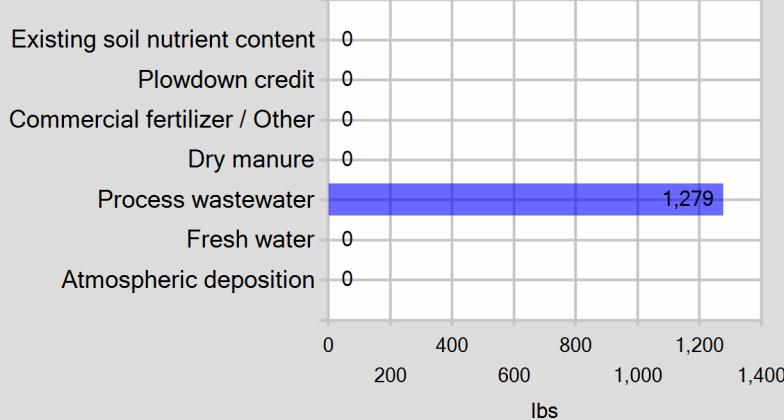
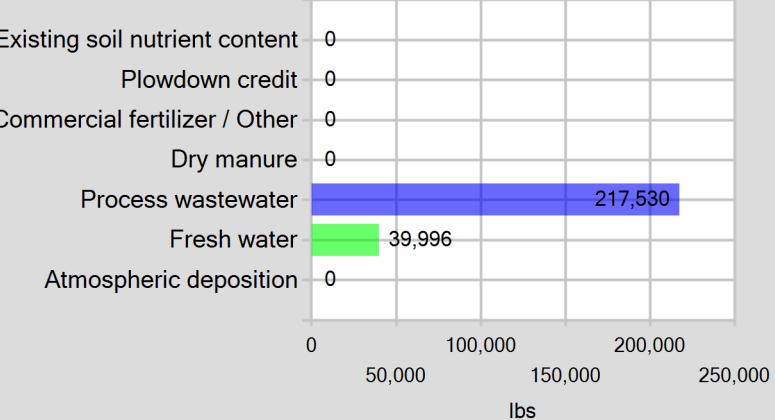
NUTRIENT APPLICATIONS, POTENTIAL REMOVAL, AND BALANCE

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

	Total N (lbs)	Total P (lbs)	Total K (lbs)	Total salt (lbs)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	31,601.55	0.00	1,278.90	217,530.12
Fresh water	70.78	0.00	0.00	39,995.67
Atmospheric deposition	1,414.00	0.00	0.00	0.00
Total nutrients applied	33,086.34	0.00	1,278.90	257,525.78
Anticipated crop nutrient removal	40,400.00	7,373.00	32,118.00	0.00
Actual crop nutrient removal	65,438.14	10,039.57	79,223.91	293,893.51
Nutrient balance	-32,351.81	-10,039.57	-77,945.02	-36,367.73
Applied to removed ratio	0.51	0.00	0.02	0.88

B. POUNDS OF NUTRIENT APPLIED VS. CROP REMOVAL



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

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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

No notes entered for this annual report.

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

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

CERTIFICATION

A. OWNER AND/OR OPERATOR CERTIFICATION

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

SIGNATURE OF OWNER OF FACILITY

Jose Ribeiro

PRINT OR TYPE NAME

SIGNATURE OF OPERATOR OF FACILITY

Joe Ribeiro

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.

ATTACHMENT D

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

Instructions:

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

Operator Information:			
Name of Operator: <u>Joe Ribeiro</u>			
Name of Dairy Facility: <u>Joe Ribeiro & Dairy</u>			
Facility Address: <u>3760 E. Mt. Whitney</u>		City	Zip Code
Number and Street			
Contact Person Name and Phone Number: <u>Joe Ribeiro</u>		816-2727	Phone Number
Name			
Manure/Process Wastewater Hauler Information:			
Name of Hauling Company/Person: <u>Eddie Garcia</u>			
Address of Hauling Company /Person: <u>760 Julia Way</u>		City	Zip Code
Number and Street			
Contact Person: <u>Eddie Garcia</u>		Phone Number	
Name			
Destination Information:			
Composting Facility / Broker / <u>Farmer</u> Other (identify) _____ (please circle one)			
Contact information of Composting Facility, Broker, Farmer, or Other (as identified above):			
<u>Eddie Garcia</u>		<u>Hanford</u>	
Name	Number and Street	City	Zip Code
Phone Number			
Manure/Process Wastewater Destination Address or Assessor's Parcel Number:			
<u>Ullye Blanchard</u>		<u>Laton</u>	
Number and Street	City	Zip Code	Assessor's Parcel Number
Dates Hauled: <u>9-12-23 to 9-19-23</u>			
Amount Hauled:			
Enter the amount of manure hauled in tons or cubic yards (indicate the units used), the manure solids content (if amount reported in tons) or manure density (if amount reported in cubic yards), and the method used to calculate the amount:			
Manure: <u>1950</u> Tons or Cubic Yards (indicate which units used)			
Manure Solids Content (if amount reported in tons): _____			
Manure Density (if amount reported in cubic yards): _____			

Method used to determine amount of manure: Amount truck holds

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

Process Wastewater: _____ Gallons

Method used to determine volume of process wastewater: _____

Written Agreement:

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

Yes No

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

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

Certification:

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

Operator's Signature: Eddie Grana Date: 9/19/23

Hauler's Signature: [Signature] Date: _____

ATTACHMENT D

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

Instructions:

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

Operator Information:			
Name of Operator: <u>Joe Ribeiro</u>			
Name of Dairy Facility: <u>Jose Ribeiro & Son Dairy</u>			
Facility Address: <u>3760 E Mt. Whitney Laton</u>		Number and Street	City
			Zip Code
Contact Person Name and Phone Number: <u>Joe Ribeiro 816-2727</u>			
		Name	Phone Number
Manure/Process Wastewater Hauler Information:			
Name of Hauling Company/Person: <u>Eddie Garcia</u>			
Address of Hauling Company /Person: <u>760 Julia Way Hanford</u>			
		Number and Street	City
			Zip Code
Contact Person: <u>Eddie Garcia</u>			
		Name	Phone Number
Destination Information:			
Composting Facility / Broker / <u>Farmer</u> Other (identify) _____ (please circle one)			
Contact information of Composting Facility, Broker, Farmer, or Other (as identified above):			
<u>Eddie Garcia</u>		Number and Street	City
		Zip Code	Phone Number
Manure/Process Wastewater Destination Address or Assessor's Parcel Number:			
<u>4144 Blanchard Laton</u>		Number and Street	City
		Zip Code	Assessor's Parcel Number
Dates Hauled: <u>5-26-23 to 5-27-23</u>			
Amount Hauled:			
Enter the amount of manure hauled in tons or cubic yards (indicate the units used), the manure solids content (if amount reported in tons) or manure density (if amount reported in cubic yards), and the method used to calculate the amount:			
Manure: <u>950</u> Tons or Cubic Yards (indicate which units used)			
Manure Solids Content (if amount reported in tons): _____			
Manure Density (if amount reported in cubic yards): _____			

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

D-2

Method used to determine amount of manure: Amount Truck holds

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

Process Wastewater: _____ Gallons

Method used to determine volume of process wastewater: _____

Written Agreement:

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

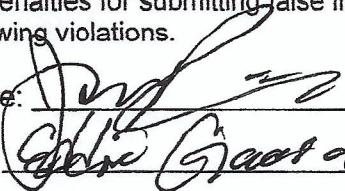
Yes No

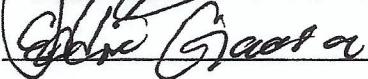
If the answer is no, the Operator agrees to have such a written agreement with any such party for any process wastewater transferred after 31 December 2007 to such party.

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

Certification:

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

Operator's Signature:  Date: 5/27/23

Hauler's Signature:  Date: _____

Jose Ribeiro
Jose Ribeiro Dairy
3760 E. Mt. Whitney Ave.
Laton, CA 93242

RE: Report for AGG2086 RB5 Surface

Dear Jose Ribeiro,

Thank you for using BSK Associates for your analytical testing needs. In the following pages, you will find the test results for the samples submitted to our laboratory on 7/17/2023. The results have been approved for release by our Laboratory Director as indicated by the authorizing signature below.

The samples were analyzed for the test(s) indicated on the Chain of Custody (see attached) and the results relate only to the samples analyzed. BSK certifies that the testing was performed in accordance with the quality system requirements specified in the 2016 TNI Standard. Any deviations from this standard or from the method requirements for each test procedure performed will be annotated alongside the analytical result or noted in the Case Narrative. Unless otherwise noted, the sample results are reported on an "as received" basis.

This certificate of analysis shall not be reproduced except in full, without written approval of the laboratory.

If additional clarification of any information is required, please contact your Project Manager, Mary Thao , at 559-497-2888.

Thank you again for using BSK Associates. We value your business and appreciate your loyalty.

Sincerely,



Mary Thao, Project Manager



Accredited in Accordance with NELAP
ORELAP #4021

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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AGG2086

RB5 Surface

Case Narrative

Project and Report Details		Invoice Details
Client:	Jose Ribeiro Dairy	Invoice To: Jose Ribeiro Dairy
Report To:	Jose Ribeiro	Invoice Attn: Jose Ribeiro
Project #:	RB5-Surface	Project PO#: -
Received:	7/17/2023 - 16:00	
Report Due:	7/31/2023	

Sample Receipt Conditions

Cooler:	Default Cooler	Custody Seals
Temperature on Receipt °C:	27.8	Containers Intact
		COC/Labels Agree
		Preservation Confirmed
		Received On Blue Ice
		Sample(s) arrived at lab on same day sampled.
		Sample(s) were received in temperature range.

Data Qualifiers

The following qualifiers have been applied to one or more analytical results:

None applied

Report Distribution

Recipient(s)	Report Format	CC:
Jose Ribeiro	FINAL.RPT	
Madison Looper	FINAL.RPT	

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AGG2086

RB5 Surface

RB5-Surface

Certificate of Analysis

Sample ID: AGG2086-01

Sampled By: Madison Looper

Sample Description: Canal

Sample Date - Time: 07/17/2023 - 13:45

Matrix: Surface Water

Sample Type: Grab

BSK Associates Laboratory Fresno
General Chemistry

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
Conductivity @ 25C	SM 2510B	20	1.0	umhos/cm	1	AGG1088	07/18/23	07/18/23	
Nitrate as N	EPA 300.0	ND	0.23	mg/L	1	AGG1038	07/18/23 03:13	07/18/23	
Nitrite as N	EPA 300.0	ND	0.050	mg/L	1	AGG1038	07/18/23 03:13	07/18/23	
Total Dissolved Solids	SM 2540C	27	5.0	mg/L	1	AGG1131	07/18/23	07/18/23	
Total Kjeldahl Nitrogen	EPA 351.2	ND	1.0	mg/L	1	AGG1212	07/19/23	07/20/23	
Total Nitrogen, IC	CALC	ND	1.0	mg/L					

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AGG2086

RB5 Surface

BSK Associates Laboratory Fresno
General Chemistry Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
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EPA 300.0 - Quality Control

Batch: AGG1038								Prepared: 7/17/2023			
Prep Method: Method Specific Preparation								Analyst: DXR			
Blank (AGG1038-BLK1)											
Nitrate as N	ND		0.23	mg/L							07/17/23
Nitrite as N	ND		0.050	mg/L							07/17/23
Blank Spike (AGG1038-BS1)											
Nitrate as N	22		0.23	mg/L	23	ND	97	90-110			07/17/23
Nitrite as N	1.0		0.050	mg/L	1.0	ND	101	90-110			07/17/23
Matrix Spike (AGG1038-MS1), Source: AGG1995-02											
Nitrate as N	10		0.23	mg/L	11	ND	91	80-120			07/17/23
Nitrite as N	0.49		0.050	mg/L	0.50	ND	98	80-120			07/17/23
Matrix Spike (AGG1038-MS2), Source: AGG2016-02											
Nitrate as N	12		0.23	mg/L	11	1.2	94	80-120			07/18/23
Nitrite as N	0.49		0.050	mg/L	0.50	ND	97	80-120			07/18/23
Matrix Spike Dup (AGG1038-MSD1), Source: AGG1995-02											
Nitrate as N	10		0.23	mg/L	11	ND	92	80-120	2	20	07/17/23
Nitrite as N	0.50		0.050	mg/L	0.50	ND	100	80-120	2	20	07/17/23
Matrix Spike Dup (AGG1038-MSD2), Source: AGG2016-02											
Nitrate as N	12		0.23	mg/L	11	1.2	97	80-120	2	20	07/18/23
Nitrite as N	0.50		0.050	mg/L	0.50	ND	100	80-120	3	20	07/18/23

EPA 351.2 - Quality Control

Batch: AGG1212								Prepared: 7/19/2023			
Prep Method: Method Specific Preparation								Analyst: ERA			
Blank (AGG1212-BLK1)											
Total Kjeldahl Nitrogen	ND		1.0	mg/L							07/20/23
Blank Spike (AGG1212-BS1)											
Total Kjeldahl Nitrogen	9.7		1.0	mg/L	10	ND	97	90-110			07/20/23
Blank Spike Dup (AGG1212-BSD1)											
Total Kjeldahl Nitrogen	10		1.0	mg/L	10	ND	100	90-110	3	10	07/20/23
Matrix Spike (AGG1212-MS1), Source: AGG1713-01											
Total Kjeldahl Nitrogen	13		1.0	mg/L	10	3.5	95	90-110			07/20/23
Matrix Spike (AGG1212-MS2), Source: AGG2079-02											
Total Kjeldahl Nitrogen	9.1		1.0	mg/L	10	ND	91	90-110			07/20/23
Matrix Spike Dup (AGG1212-MSD1), Source: AGG1713-01											
Total Kjeldahl Nitrogen	13		1.0	mg/L	10	3.5	95	90-110	0	10	07/20/23

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RB5 Surface

BSK Associates Laboratory Fresno

General Chemistry Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD Limit	Date Analyzed	Date Qual
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EPA 351.2 - Quality Control

Batch: AGG1212

Prepared: 7/19/2023

Prep Method: Method Specific Preparation

Analyst: ERA

Matrix Spike Dup (AGG1212-MSD2), Source: AGG2079-02

Total Kjeldahl Nitrogen 9.2 1.0 mg/L 10 ND 92 90-110 1 10 07/20/23

SM 2510B - Quality Control

Batch: AGG1088

Prepared: 7/18/2023

Prep Method: Method Specific Preparation

Analyst: EFG

Blank Spike (AGG1088-BS1)

Conductivity @ 25C 1400 1.0 umhos/cm 1400 ND 99 90-110 1 07/18/23

Blank Spike Dup (AGG1088-BSD1)

Conductivity @ 25C 1400 1.0 umhos/cm 1400 ND 99 90-110 1 5 07/18/23

Duplicate (AGG1088-DUP1), Source: AGG1977-01

Conductivity @ 25C 210 1.0 umhos/cm 210 1 5 07/18/23

SM 2540C - Quality Control

Batch: AGG1131

Prepared: 7/18/2023

Prep Method: Method Specific Preparation

Analyst: SYY

Blank (AGG1131-BLK1)

Total Dissolved Solids ND 5.0 mg/L 07/18/23

Blank Spike (AGG1131-BS1)

Total Dissolved Solids 1000 mg/L 1000 103 70-130 07/18/23

Duplicate (AGG1131-DUP1), Source: AGG2116-01

Total Dissolved Solids 350 5.0 mg/L 340 1 10 07/18/23

Duplicate (AGG1131-DUP2), Source: AGG2116-02

Total Dissolved Solids 330 5.0 mg/L 330 2 10 07/18/23

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Certificate of Analysis

Notes:

- The Chain of Custody document and Sample Integrity Sheet are part of the analytical report.
 - Any remaining sample(s) for testing will be disposed of according to BSK's sample retention policy unless other arrangements are made in advance.
 - All positive results for EPA Methods 504.1 and 524.2 require the analysis of a Field Reagent Blank (FRB) to confirm that the results are not a contamination error from field sampling steps. If Field Reagent Blanks were not submitted with the samples, this method requirement has not been performed.
 - Samples collected by BSK Analytical Laboratories were collected in accordance with the BSK Sampling and Collection Standard Operating Procedures.
 - J-value is equivalent to DNQ (Detected, not quantified) which is a trace value. A trace value is an analyte detected between the MDL and the laboratory reporting limit. This result is of an unknown data quality and is only qualitative (estimated). Baseline noise, calibration curve extrapolation below the lowest calibrator, method blank detections, and integration artifacts can all produce apparent DNQ values, which contribute to the un-reliability of these values.
 - (1) - Residual chlorine and pH analysis have a 15 minute holding time for both drinking and waste water samples as defined by the EPA and 40 CFR 136. Waste water and ground water (monitoring well) samples must be field filtered to meet the 15 minute holding time for dissolved metals.
 - Field tests are outside the scope of laboratory accreditation and there is no certification available for field testing.
 - Summations of analytes (i.e. Total Trihalomethanes) may appear to add individual amounts incorrectly, due to rounding of analyte values occurring before or after the total value is calculated, as well as rounding of the total value.
 - RL Multiplier is the factor used to adjust the reporting limit (RL) due to variations in sample preparation procedures and dilutions required for matrix interferences.
 - Due to the subjective nature of the Threshold Odor Method, all characterizations of the detected odor are the opinion of the panel of analysts. The characterizations can be found in Standard Methods 2170B Figure 2170:1.
 - The MCLs provided in this report (if applicable) represent the primary MCLs for that analyte.
 - (2) - Formerly known as Bis(2-Chloroisopropyl) ether.
- Unless otherwise noted, TOC results by SM 5310C method do not include purgeable organic carbon, which is removed along with the inorganic carbon interference. The POC contribution to TOC is considered to be negligible.



AGG2086

RB5 Surface

Certificate of Analysis

Definitions

mg/L: Milligrams/Liter (ppm)
mg/Kg: Milligrams/Kilogram (ppm)
µg/L: Micrograms/Liter (ppb)
µg/Kg: Micrograms/Kilogram (ppb)
%: Percent
NR: Non-Reportable

MDL: Method Detection Limit
RL: Reporting Limit: DL x Dilution
ND: None Detected below MRL/MDL
pCi/L: PicoCuries per Liter
RL Mult: RL Multiplier
MCL: Maximum Contaminant Limit

MDA95: Min. Detected Activity
MPN: Most Probable Number
CFU: Colony Forming Unit
Absent: Less than 1 CFU/100mLs
Present: 1 or more CFU/100mLs
U: The analyte was not detected at or above the reported sample quantitation limit.

Please see the individual Subcontract Lab's report for applicable certifications.

The following parameters are not available for certification through CA ELAP:

Odor Diisopropyl ether (DIPE) by EPA 524.2

The following parameters are calculated values and are outside the scope of our NELAP accreditation:

Total Nitrogen Aggressive Index Trivalent Chromium

BSK is not accredited under the NELAP program for the following additional parameters:

NA

Certifications: Please refer to our website for a copy of our Accredited Fields of Testing under each certification.

Fresno

State of California - ELAP	1180	State of Hawaii	4021
Los Angeles CSD	9254479	NELAP certified	4021-021
State of Nevada	CA000792022-1	State of Oregon - NELAP	4021-021
EPA UCMR5	CA00079	State of Washington	C997-23

Sacramento

State of California - ELAP	1180-S1
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San Bernardino

State of California - ELAP	1180-S2	Los Angeles CSD	9254478
NELAP certified	4119-007	State of Oregon - NELAP	4119-007

Vancouver

NELAP certified	WA100008-016	State of Oregon - NELAP	WA100008-016
State of Washington	C824-22		

**Sample Integrity**

BSK Bottles: Yes No

Page 1 of 1

COC Info	Was temperature within range? Chemistry ≤ 6°C Micro < 8°C	Yes	No	NA	Were correct containers and preservatives received for the tests requested?		Yes	No	NA
					Bubbles Present VOAs (524.2/TTHM/TCP)? TB Received? (Check Method Below)				
	If samples were taken today, is there evidence that chilling has begun?	Yes	No	NA			Yes	No	NA
	Did all bottles arrive unbroken and intact?	Yes	No	NA	Was a sufficient amount of sample received?		Yes	No	NA
	Did all bottle labels agree with COC?	Yes	No	NA	Do samples have a hold time <72 hours?		Yes	No	NA
	Was sodium thiosulfate added to CN sample(s) until chlorine was no longer present?	Yes	NA	NA	Was PM notified of discrepancies? PM: By/Time:		Yes	No	NA
	250ml(A) 500ml(B) 1Liter(C) 40ml/VOA(V) 125ml(D)	Checks*		Passed?	A				
Bottles Received "—" means preservation/chlorine checks are either N/A or are performed in the lab	Bacti Na ₂ S ₂ O ₃	—		—					
	None (P) White Cap	—		—	IC				
	Cr6 (P) Lt. Green Label/Blue Cap NH ₄ OH(NH ₄) ₂ SO ₄ DW	Cl, pH > 8		P F					
	Cr6 (P) Pink Label/Blue Cap NH ₄ OH(NH ₄) ₂ SO ₄ WW	pH 9.3-9.7		P F					
	Cr6 (P) Black Label/Blue Cap NH ₄ OH(NH ₄) ₂ SO ₄ 7199 ***24 HOUR HOLD TIME***	pH 9.0-9.5		P F					
	HNO ₃ (P) Red Cap or HCl (P) Purple Cap/Lt. Blue Label	—							
	H ₂ SO ₄ (P) or (AG) Yellow Cap/Label	pH < 2		P F	1P				
	NaOH (P) Green Cap	Cl, pH >10		P F					
	NaOH + ZnAc (P)	pH > 9		P F					
	Dissolved Oxygen 300ml (g)	—		—					
	None (AG) 608/8081/8082, 625, 632/8321, 8151, 8270	—		—					
	HCl (AG) Lt. Blue Label O&G, Diesel, TCP	—		—					
	Ascorbic, EDTA, KH ₂ C ₈ O ₄ (AG) Pink Label 525	—		—					
	Na ₂ SO ₃ 250mL (AG) Neon Green Label 515	—		—					
	Na ₂ S ₂ O ₃ 1 Liter (Brown P) 549	—		—					
	Na ₂ S ₂ O ₃ (AG) Blue Label 548, THM, 524	—		—					
	Na ₂ S ₂ O ₃ (CG) Blue Label 504, 505, 547	—		—					
	Na ₂ S ₂ O ₃ + MCAA (CG) Orange Label 531	pH < 3		P F					
	NH ₄ Cl (AG) Purple Label 552	—		—					
	EDA (P) or (AG) Brown Label DBPs	—		—					
HCL (CG) 524.2,BTEX, Gas, MTBE, 8260/624	—		—						
Buffer pH 4 (CG)	—		—						
H ₃ PO ₄ (CG) Salmon Label	—		—						
Trizma - EPA 537.1 Light Blue Label FB	--		--						
Ammonia Acetate - EPA 533 Purple Label FB	--		--						
Bottled Water	—		—						
Asbestos 1L (P) w/ Foil / LL Metals Bottle	—		—						
Clear Glass	—		—						
OTHER:	—		—						
Split	Container	Preservative	Lot #	Initials	Date/Time	Preservation	Check	pH Lot # AG 04945 Cl Lot #	
	S P								
Comments	*Preservation check completed by lab performing analysis.				<input checked="" type="checkbox"/> Indicates Blanks Received 504 524.2 TTHM 537/533 TCP <input checked="" type="checkbox"/> MS/MSD Received Method: _____				
	Labeled by: Labels Checked by:								

Scanned: _____ Rush/Short HT Page: _____ Time: _____

