Annual Report - General Order No. R5-2007-0035
Reporting period 04/16/2023 to 04/15/2024.

DAIRY FACILITY INFORMATION

A. NAME OF DAIRY OR BUSINESS OPERATING THE DAIRY: Gerrit Visser & Sons

Physical address of dairy:

18565 S Marks AVE	Riverdale	Fresno	93656
Number and Street	City	County	Zip Code

Street and nearest cross street (if no address):

Date facility was originally placed in operation: 06/01/1968

Regional Water Quality Control Board Basin Plan designation: Tulare Basin

County Assessor Parcel Number(s) for dairy facility:

0053-0070-0049-0000 0053-0070-0050-0000 0053-0070-0055-0000

B. OPERATORS

Visser, Darrell

Operator name: Visser, Darrell Telephone no.: (559) 867-4898 (Landline) (Cellular)

18437 S Marks AVE	Riverdale	CA	93656
Mailing Address Number and Street	City	State	Zip Code

Visser, Travis

Operator name: Visser, Travis Telephone no.: (550) 905-0391 (Cellular)

18565 S Marks AVE	Riverdale	CA	93656
Mailing Address Number and Street	City	State	Zip Code

This operator is responsible for paying permit fees.

C. OWNERS

Visser, Darrell

Legal owner name: Visser, Darrell Telephone no.: (559) 867-4898 (Landline) (Cellular)

18437 S Marks AVE	Riverdale	CA	93656
Mailing Address Number and Street	City	State	Zip Code

Visser, Travis

Legal owner name: Visser, Travis

Telephone no.: Landline | (550) 905-0391 Cellular

18565 S Marks AVE	Riverdale	CA	93656
Mailing Address Number and Street	City	State	Zip Code

This owner is responsible for paying permit fees.

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AVAILABLE NUTRIENTS

A. HERD INFORMATION

	Milk Cows	Dry Cows	Bred Heifers (15-24 mo.)	Heifers (7-14 mo. to breeding)	Calves (4-6 mo.)	Calves (0-3 mo.)
Number open confinement	550	130	400	330	95	1
Number under roof	400	0	0	0	0	0
Maximum number	1,000	150	415	350	115	2
Average number	955	130	400	330	95	1
Avg live weight (lbs)	1,350	1,400	950	600		

Predominant milk cow breed: Holstein

Average milk production: 72 *pounds per cow per day*

B. MANURE GENERATED

Total manure excreted by the herd: 34,153.95 *tons per reporting period*

Total nitrogen from manure: 422,280.18 *lbs per reporting period* After ammonia losses (30% loss applied): 295,596.13 *lbs per reporting period*

Total phosphorus from manure: 70,155.81 *lbs per reporting period*

Total potassium from manure: 184,650.69 *lbs per reporting period*

Total salt from manure: 480,869.10 *lbs per reporting period*

C. PROCESS WASTEWATER GENERATED

Process wastewater generated: 8,762,500 *gallons*

Total nitrogen generated: 45,271.73 *lbs*

Total phosphorus generated: 11,739.91 *lbs*

Total potassium generated: 40,470.31 *lbs*

Total salt generated: 260,618.94 *lbs*

	8,762,500	*gallons applied*
+	0	*gallons exported*
-	0	*gallons imported*
=	8,762,500	*gallons generated*

D. FRESH WATER SOURCES

Source Description	Type
Canal	Surface water
Domestic #1	Ground water
Domestic #5	Ground water
Irrigation #3	Ground water

E. SUBSURFACE (TILE) DRAINAGE SOURCES

No subsurface (tile) drainage sources entered.

F. NUTRIENT IMPORTS

No dry manure nutrient imports entered.

No process wastewater nutrient imports entered.

No commercial or other nutrient imports entered.

G. NUTRIENT EXPORTS

Date	Material type	Quantity	Reporting basis	Moisture (%)	Density (lbs/cu ft)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
08/15/2023	Corral solids	4,053.60 *ton*	As-is	42.0		15,900.00	3,000.00	20,700.00		0.00

No liquid nutrient exports entered.

Material type	Total N (lbs)	Total P (lbs)	Total K (lbs)	Total salt (lbs)
Dry manure	128,904.48	24,321.60	167,819.04	0.00
Process wastewater	0.00	0.00	0.00	0.00
Total exports for all materials	128,904.48	24,321.60	167,819.04	0.00

APPLICATION AREA

A. LIST OF LAND APPLICATION AREAS

Field name	Controlled acres	Cropable acres	Total harvests	Type of waste applied	Parcel number
Field 1	20	20	2	process wastewater	0053-0070-0049-0000
Field 2	40	40	2	process wastewater	0053-0070-0051-0000
Field 3	40	40	2	process wastewater	0053-0070-0050-0000
Field 4	40	40	2	process wastewater	0053-0070-0055-0000
Totals for areas that were used for application	140	140	8		
Totals for areas that were not used for application					
Land application area totals	140	140	8		

B. CROPS AND HARVESTS

Field 1

Field name: Field 1

05/17/2023: Corn, silage

Crop: Corn, silage Acres planted: 20 Plant date: 05/17/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
09/01/2023	408.00 *ton*	As-is		65.0	5,600.00	1,300.00	8,200.00		0.00

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	20.00	160.00	30.00	132.00	20.00
Total actual harvest content	20.40	228.48	53.04	334.56	0.00

11/04/2023: Triticale, boot stage

Crop: Triticale, boot stage Acres planted: 20 Plant date: 11/04/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
03/29/2024	228.00 *ton*	As-is		65.3	6,100.00	1,500.00	9,000.00		0.00

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	10.00	150.00	27.00	116.00	10.00
Total actual harvest content	11.40	139.08	34.20	205.20	0.00

Field 2

Field name: Field 2

05/17/2023: Corn, silage

Crop: Corn, silage Acres planted: 40 Plant date: 05/17/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
08/31/2023	801.00 *ton*	As-is		64.2	5,300.00	1,400.00	8,700.00		0.00

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	20.00	160.00	30.00	132.00	20.00
Total actual harvest content	20.03	212.27	56.07	348.44	0.00

11/04/2023: Triticale, boot stage

Crop: Triticale, boot stage Acres planted: 40 Plant date: 11/04/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
03/29/2024	224.00 *ton*	As-is		67.6	7,900.00	1,700.00	10,000.00		0.00

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	10.00	150.00	27.00	116.00	10.00
Total actual harvest content	5.60	88.48	19.04	112.00	0.00

Field 3

Field name: Field 3

05/17/2023: Corn, silage

Crop: Corn, silage Acres planted: 40 Plant date: 05/17/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
09/01/2023	781.00 *ton*	As-is		63.7	5,500.00	1,200.00	7,600.00		0.00

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	20.00	160.00	30.00	132.00	20.00
Total actual harvest content	19.53	214.78	46.86	296.78	0.00

Field 3

11/04/2023: Triticale, boot stage

Crop: Triticale, boot stage Acres planted: 40 Plant date: 11/04/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
03/29/2024	395.00 *ton*	As-is		69.4	7,400.00	1,700.00	9,800.00		0.00

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	10.00	150.00	27.00	116.00	10.00
Total actual harvest content	9.88	146.15	33.58	193.55	0.00

Field 4

Field name: Field 4

05/17/2023: Corn, silage

Crop: Corn, silage Acres planted: 40 Plant date: 05/17/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
08/31/2023	747.00 *ton*	As-is		65.1	5,100.00	1,300.00	7,600.00		0.00

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	20.00	160.00	30.00	132.00	20.00
Total actual harvest content	18.68	190.49	48.56	283.86	0.00

11/04/2023: Triticale, boot stage

Crop: Triticale, boot stage Acres planted: 40 Plant date: 11/04/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
03/29/2024	341.00 *ton*	As-is		63.0	7,300.00	1,800.00	10,200.00		0.00

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	10.00	150.00	27.00	116.00	10.00
Total actual harvest content	8.53	124.47	30.69	173.91	0.00

NUTRIENT BUDGET

A. LAND APPLICATIONS

Field 1 - 05/17/2023: Corn, silage

Field name: Field 1

Crop: Corn, silage Plant date: 05/17/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
05/01/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Process Water	Process wastewater	39.38	7.50	36.90	209.29	165,000.00 *gal*
Canal	Surface water	0.11	0.00	0.00	29.79	2,550,000.00 *gal*
Application event totals		39.49	7.50	36.90	239.08	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
06/20/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Process Water	Process wastewater	39.38	7.50	36.90	209.29	165,000.00 *gal*
Canal	Surface water	0.10	0.00	0.00	28.62	2,450,000.00 *gal*
Application event totals		39.48	7.50	36.90	237.92	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/01/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Process Water	Process wastewater	33.70	5.53	30.48	208.54	127,500.00 *gal*
Canal	Surface water	0.09	0.00	0.00	26.58	2,275,000.00 *gal*
Application event totals		33.80	5.53	30.48	235.12	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/12/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Process Water	Process wastewater	35.68	5.86	32.28	220.81	135,000.00 *gal*
Canal	Surface water	0.10	0.00	0.00	28.04	2,400,000.00 *gal*
Application event totals		35.78	5.86	32.28	248.85	

Field 1 - 05/17/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/20/2023	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
Process Water	Process wastewater	33.04	5.42	29.89	204.45	125,000.00 *gal*
Canal	Surface water	0.10	0.00	0.00	27.75	2,375,000.00 *gal*
Application event totals		33.14	5.42	29.89	232.20	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/01/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Process Water	Process wastewater	37.01	6.08	33.47	228.99	140,000.00 *gal*
Canal	Surface water	0.10	0.00	0.00	28.92	2,475,000.00 *gal*
Application event totals		37.11	6.08	33.47	257.90	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/11/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Process Water	Process wastewater	43.61	7.16	39.45	269.88	165,000.00 *gal*
Canal	Surface water	0.11	0.00	0.00	29.50	2,525,000.00 *gal*
Application event totals		43.72	7.16	39.45	299.38	

Field 1 - 11/04/2023: Triticale, boot stage

Field name: Field 1

Crop: Triticale, boot stage Plant date: 11/04/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
10/15/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Process Water	Process wastewater	47.58	7.81	43.04	294.41	180,000.00 *gal*
Domestic #5	Ground water	8.68	0.00	0.00	0.00	1,600,000.00 *gal*
Application event totals		56.26	7.81	43.04	294.41	

Field 1 - 11/04/2023: Triticale, boot stage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
01/25/2024	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
Process Water	Process wastewater	41.96	33.08	33.08	200.80	175,000.00 *gal*
Domestic #5	Ground water	8.41	0.00	0.00	0.00	1,550,000.00 *gal*
Application event totals		50.37	33.08	33.08	200.80	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
02/20/2024	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
Process Water	Process wastewater	47.96	37.80	37.80	229.49	200,000.00 *gal*
Irrigation #3	Ground water	4.75	0.00	0.00	0.00	1,325,000.00 *gal*
Application event totals		52.71	37.80	37.80	229.49	

Field 2 - 05/17/2023: Corn, silage

Field name: Field 2

Crop: Corn, silage Plant date: 05/17/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
05/03/2023	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
Process Water	Process wastewater	17.90	3.41	16.77	95.13	150,000.00 *gal*
Canal	Surface water	0.05	0.00	0.00	14.60	2,500,000.00 *gal*
Application event totals		17.95	3.41	16.77	109.74	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
05/02/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Process Water	Process wastewater	17.30	3.30	16.21	91.96	145,000.00 *gal*
Canal	Surface water	0.05	0.00	0.00	14.46	2,475,000.00 *gal*
Application event totals		17.35	3.30	16.21	106.42	

Field 2 - 05/17/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
06/22/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Process Water	Process wastewater	15.51	2.96	14.54	82.45	130,000.00 *gal*
Canal	Surface water	0.05	0.00	0.00	14.17	2,425,000.00 *gal*
Application event totals		15.56	2.96	14.54	96.61	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
06/21/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Process Water	Process wastewater	13.72	2.62	12.86	72.94	115,000.00 *gal*
Canal	Surface water	0.05	0.00	0.00	14.31	2,450,000.00 *gal*
Application event totals		13.77	2.62	12.86	87.25	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/03/2023	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
Process Water	Process wastewater	13.22	2.17	11.95	81.78	100,000.00 *gal*
Canal	Surface water	0.05	0.00	0.00	14.17	2,425,000.00 *gal*
Application event totals		13.27	2.17	11.95	95.95	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/02/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Process Water	Process wastewater	14.92	2.84	13.98	79.28	125,000.00 *gal*
Canal	Surface water	0.05	0.00	0.00	13.87	2,375,000.00 *gal*
Application event totals		14.97	2.84	13.98	93.15	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/14/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Process Water	Process wastewater	12.89	2.12	11.66	79.74	97,500.00 *gal*
Canal	Surface water	0.05	0.00	0.00	14.17	2,425,000.00 *gal*
Application event totals		12.94	2.12	11.66	93.90	

Field 2 - 05/17/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/13/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Process Water	Process wastewater	14.21	2.33	12.85	87.91	107,500.00 *gal*
Canal	Surface water	0.05	0.00	0.00	13.73	2,350,000.00 *gal*
Application event totals		14.26	2.33	12.85	101.64	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/22/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Process Water	Process wastewater	12.56	2.06	11.36	77.69	95,000.00 *gal*
Canal	Surface water	0.05	0.00	0.00	13.87	2,375,000.00 *gal*
Application event totals		12.61	2.06	11.36	91.57	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/21/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Process Water	Process wastewater	16.52	2.71	14.94	102.23	125,000.00 *gal*
Canal	Surface water	0.05	0.00	0.00	13.58	2,325,000.00 *gal*
Application event totals		16.57	2.71	14.94	115.81	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/03/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Process Water	Process wastewater	16.52	2.71	14.94	102.23	125,000.00 *gal*
Canal	Surface water	0.05	0.00	0.00	13.87	2,375,000.00 *gal*
Application event totals		16.57	2.71	14.94	116.10	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/02/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Process Water	Process wastewater	13.88	2.28	12.55	85.87	105,000.00 *gal*
Canal	Surface water	0.05	0.00	0.00	14.31	2,450,000.00 *gal*
Application event totals		13.93	2.28	12.55	100.18	

Field 2 - 05/17/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/12/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Process Water	Process wastewater	14.54	2.39	13.15	89.96	110,000.00 *gal*
Canal	Surface water	0.05	0.00	0.00	13.73	2,350,000.00 *gal*
Application event totals		14.59	2.39	13.15	103.69	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/13/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Process Water	Process wastewater	15.20	2.50	13.75	94.05	115,000.00 *gal*
Canal	Surface water	0.05	0.00	0.00	14.02	2,400,000.00 *gal*
Application event totals		15.25	2.50	13.75	108.07	

Field 2 - 11/04/2023: Triticale, boot stage

Field name: Field 2

Crop: Triticale, boot stage Plant date: 11/04/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
10/17/2023	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
Process Water	Process wastewater	17.18	2.82	15.54	106.32	130,000.00 *gal*
Irrigation #3	Ground water	2.38	0.00	0.00	0.00	1,325,000.00 *gal*
Application event totals		19.56	2.82	15.54	106.32	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
10/16/2023	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
Process Water	Process wastewater	12.56	2.06	11.36	77.69	95,000.00 *gal*
Irrigation #3	Ground water	2.20	0.00	0.00	0.00	1,225,000.00 *gal*
Application event totals		14.75	2.06	11.36	77.69	

Field 2 - 11/04/2023: Triticale, boot stage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
01/27/2024	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
Process Water	Process wastewater	21.58	17.01	17.01	103.27	180,000.00 *gal*
Irrigation #3	Ground water	2.15	0.00	0.00	0.00	1,200,000.00 *gal*
Application event totals		23.73	17.01	17.01	103.27	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
01/26/2024	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
Process Water	Process wastewater	14.39	11.34	11.34	68.85	120,000.00 *gal*
Irrigation #3	Ground water	2.11	0.00	0.00	0.00	1,175,000.00 *gal*
Application event totals		16.50	11.34	11.34	68.85	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
02/22/2024	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
Process Water	Process wastewater	14.49	2.36	13.02	86.58	100,000.00 *gal*
Irrigation #3	Ground water	2.15	0.00	0.00	0.00	1,200,000.00 *gal*
Application event totals		16.64	2.36	13.02	86.58	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
02/21/2024	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
Process Water	Process wastewater	16.66	2.71	14.97	99.57	115,000.00 *gal*
Irrigation #3	Ground water	2.29	0.00	0.00	0.00	1,275,000.00 *gal*
Application event totals		18.95	2.71	14.97	99.57	

Field 3 - 05/17/2023: Corn, silage

Field name: Field 3

Crop: Corn, silage Plant date: 05/17/2023

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

Field 3 - 05/17/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
05/05/2023	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
Process Water	Process wastewater	14.92	2.84	13.98	79.28	125,000.00 *gal*
Canal	Surface water	0.05	0.00	0.00	13.73	2,350,000.00 *gal*
Application event totals		14.97	2.84	13.98	93.01	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
05/04/2023	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
Process Water	Process wastewater	14.32	2.73	13.42	76.11	120,000.00 *gal*
Canal	Surface water	0.05	0.00	0.00	13.87	2,375,000.00 *gal*
Application event totals		14.37	2.73	13.42	89.98	

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Process Water	Process wastewater	13.72	2.62	12.86	72.94	115,000.00 *gal*
Canal	Surface water	0.05	0.00	0.00	14.02	2,400,000.00 *gal*
Application event totals		13.77	2.62	12.86	86.95	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
06/23/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Process Water	Process wastewater	13.43	2.56	12.58	71.35	112,500.00 *gal*
Canal	Surface water	0.05	0.00	0.00	13.44	2,300,000.00 *gal*
Application event totals		13.47	2.56	12.58	84.79	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/05/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Process Water	Process wastewater	14.54	2.39	13.15	89.96	110,000.00 *gal*
Canal	Surface water	0.05	0.00	0.00	13.58	2,325,000.00 *gal*
Application event totals		14.59	2.39	13.15	103.54	

Field 3 - 05/17/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/04/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Process Water	Process wastewater	14.32	2.73	13.42	76.11	120,000.00 *gal*
Canal	Surface water	0.05	0.00	0.00	14.02	2,400,000.00 *gal*
Application event totals		14.37	2.73	13.42	90.13	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/15/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Process Water	Process wastewater	12.56	2.06	11.36	77.69	95,000.00 *gal*
Canal	Surface water	0.05	0.00	0.00	13.29	2,275,000.00 *gal*
Application event totals		12.60	2.06	11.36	90.98	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/16/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Process Water	Process wastewater	13.88	2.28	12.55	85.87	105,000.00 *gal*
Canal	Surface water	0.05	0.00	0.00	13.58	2,325,000.00 *gal*
Application event totals		13.93	2.28	12.55	99.45	

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Process Water	Process wastewater	12.56	2.06	11.36	77.69	95,000.00 *gal*
Canal	Surface water	0.05	0.00	0.00	13.44	2,300,000.00 *gal*
Application event totals		12.60	2.06	11.36	91.13	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/23/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Process Water	Process wastewater	15.20	2.50	13.75	94.05	115,000.00 *gal*
Canal	Surface water	0.05	0.00	0.00	13.29	2,275,000.00 *gal*
Application event totals		15.25	2.50	13.75	107.34	

Field 3 - 05/17/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
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
Process Water	Process wastewater	12.56	2.06	11.36	77.69	95,000.00 *gal*
Canal	Surface water	0.05	0.00	0.00	13.73	2,350,000.00 *gal*
Application event totals		12.60	2.06	11.36	91.42	

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
Process Water	Process wastewater	13.88	2.28	12.55	85.87	105,000.00 *gal*
Canal	Surface water	0.05	0.00	0.00	14.31	2,450,000.00 *gal*
Application event totals		13.93	2.28	12.55	100.18	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/15/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Process Water	Process wastewater	15.20	2.50	13.75	94.05	115,000.00 *gal*
Canal	Surface water	0.05	0.00	0.00	13.44	2,300,000.00 *gal*
Application event totals		15.25	2.50	13.75	107.48	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/14/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Process Water	Process wastewater	12.89	2.12	11.66	79.74	97,500.00 *gal*
Canal	Surface water	0.05	0.00	0.00	14.02	2,400,000.00 *gal*
Application event totals		12.94	2.12	11.66	93.76	

Field 3 - 11/04/2023: Triticale, boot stage

Field name: Field 3

Crop: Triticale, boot stage Plant date: 11/04/2023

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

Field 3 - 11/04/2023: Triticale, boot stage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
10/19/2023	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
Process Water	Process wastewater	20.38	16.07	16.07	97.53	170,000.00 *gal*
Irrigation #3	Ground water	2.42	0.00	0.00	0.00	1,350,000.00 *gal*
Application event totals		22.80	16.07	16.07	97.53	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
10/18/2023	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
Process Water	Process wastewater	19.78	15.59	15.59	94.66	165,000.00 *gal*
Irrigation #3	Ground water	2.51	0.00	0.00	0.00	1,400,000.00 *gal*
Application event totals		22.29	15.59	15.59	94.66	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
01/29/2024	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
Process Water	Process wastewater	22.78	17.96	17.96	109.01	190,000.00 *gal*
Irrigation #3	Ground water	2.24	0.00	0.00	0.00	1,250,000.00 *gal*
Application event totals		25.02	17.96	17.96	109.01	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
01/28/2024	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
Process Water	Process wastewater	18.58	14.65	14.65	88.93	155,000.00 *gal*
Irrigation #3	Ground water	2.29	0.00	0.00	0.00	1,275,000.00 *gal*
Application event totals		20.87	14.65	14.65	88.93	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
02/24/2024	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
Process Water	Process wastewater	23.91	3.89	21.48	142.86	165,000.00 *gal*
Irrigation #3	Ground water	2.15	0.00	0.00	0.00	1,200,000.00 *gal*
Application event totals		26.06	3.89	21.48	142.86	

Field 3 - 11/04/2023: Triticale, boot stage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
02/23/2024	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
Process Water	Process wastewater	25.36	4.13	22.78	151.51	175,000.00 *gal*
Irrigation #3	Ground water	2.42	0.00	0.00	0.00	1,350,000.00 *gal*
Application event totals		27.78	4.13	22.78	151.51	

Field 4 - 05/17/2023: Corn, silage

Field name: Field 4

Crop: Corn, silage Plant date: 05/17/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
05/06/2023	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
Process Water	Process wastewater	11.34	2.16	10.62	60.25	95,000.00 *gal*
Canal	Surface water	0.05	0.00	0.00	12.85	2,200,000.00 *gal*
Application event totals		11.38	2.16	10.62	73.10	

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)	Amount
Process Water	Process wastewater	11.64	2.22	10.90	61.84	97,500.00 *gal*
Canal	Surface water	0.05	0.00	0.00	13.29	2,275,000.00 *gal*
Application event totals		11.68	2.22	10.90	75.13	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
06/26/2023	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
Process Water	Process wastewater	11.23	1.84	10.16	69.51	85,000.00 *gal*
Canal	Surface water	0.05	0.00	0.00	13.87	2,375,000.00 *gal*
Application event totals		11.28	1.84	10.16	83.39	

Field 4 - 05/17/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
06/25/2023	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
Process Water	Process wastewater	12.53	2.39	11.74	66.59	105,000.00 *gal*
Canal	Surface water	0.05	0.00	0.00	13.73	2,350,000.00 *gal*
Application event totals		12.58	2.39	11.74	80.32	

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
Process Water	Process wastewater	13.13	2.50	12.30	69.76	110,000.00 *gal*
Canal	Surface water	0.05	0.00	0.00	13.29	2,275,000.00 *gal*
Application event totals		13.17	2.50	12.30	83.05	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
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)	Amount
Process Water	Process wastewater	11.93	2.27	11.18	63.42	100,000.00 *gal*
Canal	Surface water	0.04	0.00	0.00	12.27	2,100,000.00 *gal*
Application event totals		11.98	2.27	11.18	75.69	

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
Process Water	Process wastewater	11.89	1.95	10.76	73.60	90,000.00 *gal*
Canal	Surface water	0.05	0.00	0.00	13.29	2,275,000.00 *gal*
Application event totals		11.94	1.95	10.76	86.89	

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
Process Water	Process wastewater	11.23	1.84	10.16	69.51	85,000.00 *gal*
Canal	Surface water	0.05	0.00	0.00	12.71	2,175,000.00 *gal*
Application event totals		11.28	1.84	10.16	82.22	

Field 4 - 05/17/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
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)	Amount
Process Water	Process wastewater	10.57	1.74	9.56	65.42	80,000.00 *gal*
Canal	Surface water	0.05	0.00	0.00	13.14	2,250,000.00 *gal*
Application event totals		10.62	1.74	9.56	78.57	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/25/2023	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
Process Water	Process wastewater	10.24	1.68	9.26	63.38	77,500.00 *gal*
Canal	Surface water	0.04	0.00	0.00	12.27	2,100,000.00 *gal*
Application event totals		10.29	1.68	9.26	75.65	

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
Process Water	Process wastewater	10.90	1.79	9.86	67.47	82,500.00 *gal*
Canal	Surface water	0.05	0.00	0.00	13.44	2,300,000.00 *gal*
Application event totals		10.95	1.79	9.86	80.90	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/06/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Process Water	Process wastewater	12.23	2.01	11.06	75.65	92,500.00 *gal*
Canal	Surface water	0.05	0.00	0.00	13.73	2,350,000.00 *gal*
Application event totals		12.27	2.01	11.06	89.37	

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
Process Water	Process wastewater	13.88	2.28	12.55	85.87	105,000.00 *gal*
Canal	Surface water	0.05	0.00	0.00	13.14	2,250,000.00 *gal*
Application event totals		13.92	2.28	12.55	99.01	

Field 4 - 05/17/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
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
Process Water	Process wastewater	12.56	2.06	11.36	77.69	95,000.00 *gal*
Canal	Surface water	0.05	0.00	0.00	12.85	2,200,000.00 *gal*
Application event totals		12.60	2.06	11.36	90.54	

Field 4 - 11/04/2023: Triticale, boot stage

Field name: Field 4

Crop: Triticale, boot stage Plant date: 11/04/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
10/21/2023	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
Process Water	Process wastewater	20.29	3.30	18.23	121.21	140,000.00 *gal*
Irrigation #3	Ground water	2.33	0.00	0.00	0.00	1,300,000.00 *gal*
Application event totals		22.62	3.30	18.23	121.21	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
10/20/2023	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
Process Water	Process wastewater	21.15	3.47	19.13	130.85	160,000.00 *gal*
Irrigation #3	Ground water	2.38	0.00	0.00	0.00	1,325,000.00 *gal*
Application event totals		23.52	3.47	19.13	130.85	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
01/31/2024	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
Process Water	Process wastewater	24.63	4.01	22.13	147.18	170,000.00 *gal*
Irrigation #3	Ground water	2.38	0.00	0.00	0.00	1,325,000.00 *gal*
Application event totals		27.01	4.01	22.13	147.18	

Field 4 - 11/04/2023: Triticale, boot stage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
01/30/2024	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
Process Water	Process wastewater	19.56	3.18	17.57	116.88	135,000.00 *gal*
Irrigation #3	Ground water	2.60	0.00	0.00	0.00	1,450,000.00 *gal*
Application event totals		22.16	3.18	17.57	116.88	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
02/26/2024	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
Process Water	Process wastewater	24.63	4.01	22.13	147.18	170,000.00 *gal*
Irrigation #3	Ground water	2.24	0.00	0.00	0.00	1,250,000.00 *gal*
Application event totals		26.88	4.01	22.13	147.18	

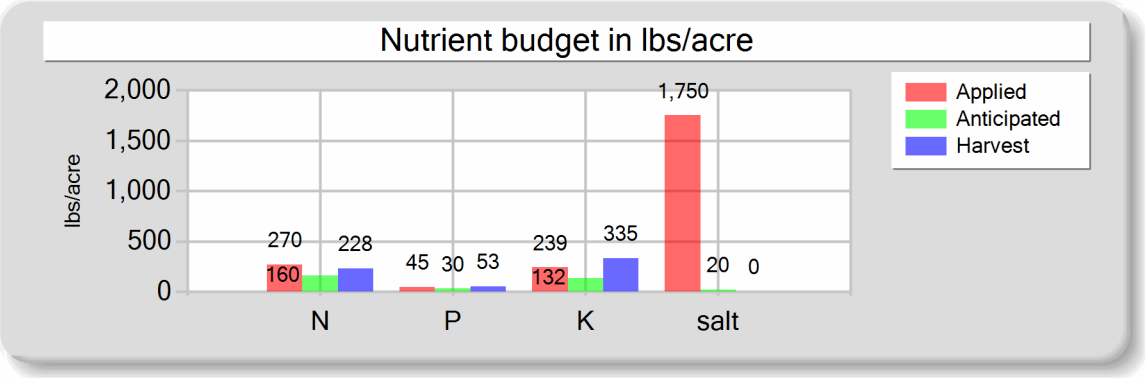
Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
02/25/2024	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Process Water	Process wastewater	26.08	4.24	23.43	155.84	180,000.00 *gal*
Irrigation #3	Ground water	2.51	0.00	0.00	0.00	1,400,000.00 *gal*
Application event totals		28.60	4.24	23.43	155.84	

B. NUTRIENT BUDGET

Field 1 - 05/17/2023: Corn, silage

Field name: Field 1 Crop: Corn, silage Plant date: 05/17/2023



	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	261.81	45.06	239.37	1,551.25
Fresh water	0.71	0.00	0.00	199.20
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	269.52	45.06	239.37	1,750.45
Anticipated crop nutrient removal	160.00	30.00	132.00	20.00
Actual crop nutrient removal	228.48	53.04	334.56	0.00
Nutrient balance	41.04	-7.98	-95.19	1,750.45
Applied to removed ratio	1.18	0.85	0.72	0.00

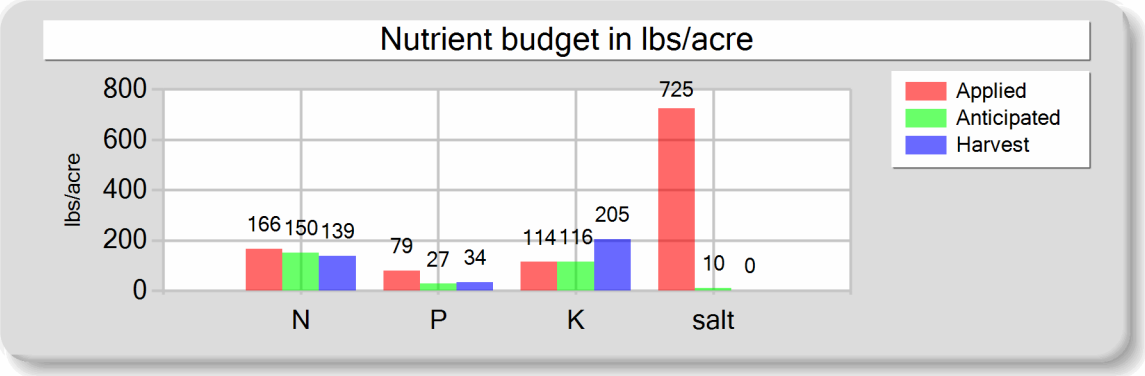
Fresh water applied	
17,050,000.00	*gallons*
627.89	*acre-inches*
31.39	*inches/acre*

Process wastewater applied	
1,022,500.00	*gallons*
37.66	*acre-inches*
1.88	*inches/acre*

Total harvests for the crop	
1	*harvests*

Field 1 - 11/04/2023: Triticale, boot stage

Field name: Field 1 Crop: Triticale, boot stage Plant date: 11/04/2023



	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	137.50	78.69	113.92	724.70
Fresh water	21.84	0.00	0.00	0.00
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	166.34	78.69	113.92	724.70
Anticipated crop nutrient removal	150.00	27.00	116.00	10.00
Actual crop nutrient removal	139.08	34.20	205.20	0.00
Nutrient balance	27.26	44.49	-91.28	724.70
Applied to removed ratio	1.20	2.30	0.56	0.00

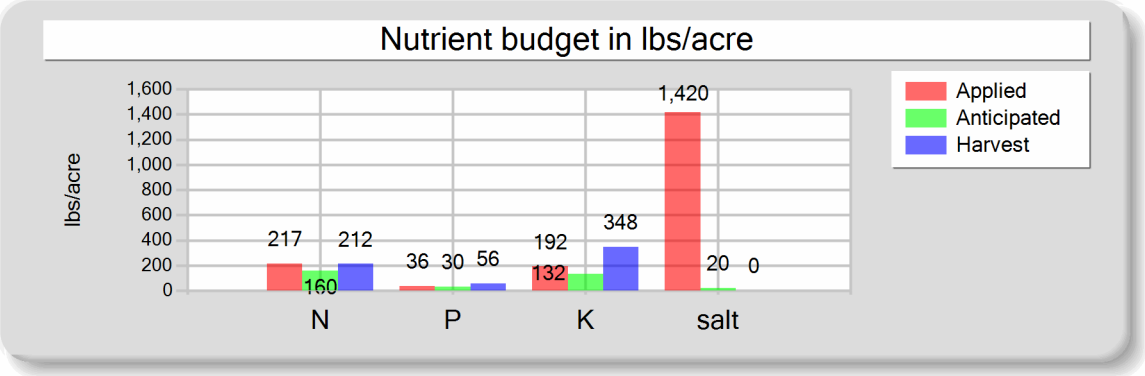
Fresh water applied	
4,475,000.00	*gallons*
164.80	*acre-inches*
8.24	*inches/acre*

Process wastewater applied	
555,000.00	*gallons*
20.44	*acre-inches*
1.02	*inches/acre*

Total harvests for the crop	
1	*harvests*

Field 2 - 05/17/2023: Corn, silage

Field name: Field 2 Crop: Corn, silage Plant date: 05/17/2023



	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	208.88	36.39	191.51	1,223.21
Fresh water	0.70	0.00	0.00	196.86
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	216.58	36.39	191.51	1,420.07
Anticipated crop nutrient removal	160.00	30.00	132.00	20.00
Actual crop nutrient removal	212.27	56.07	348.44	0.00
Nutrient balance	4.32	-19.68	-156.92	1,420.07
Applied to removed ratio	1.02	0.65	0.55	0.00

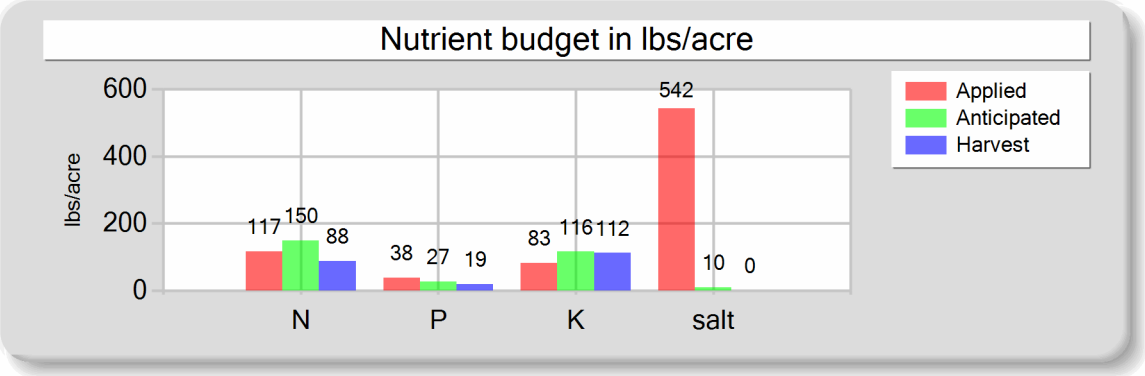
Fresh water applied	
33,700,000.00	*gallons*
1,241.06	*acre-inches*
31.03	*inches/acre*

Process wastewater applied	
1,645,000.00	*gallons*
60.58	*acre-inches*
1.51	*inches/acre*

Total harvests for the crop	
1	*harvests*

Field 2 - 11/04/2023: Triticale, boot stage

Field name: Field 2 Crop: Triticale, boot stage Plant date: 11/04/2023



	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	96.86	38.30	83.24	542.27
Fresh water	13.28	0.00	0.00	0.00
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	117.14	38.30	83.24	542.27
Anticipated crop nutrient removal	150.00	27.00	116.00	10.00
Actual crop nutrient removal	88.48	19.04	112.00	0.00
Nutrient balance	28.66	19.26	-28.76	542.27
Applied to removed ratio	1.32	2.01	0.74	0.00

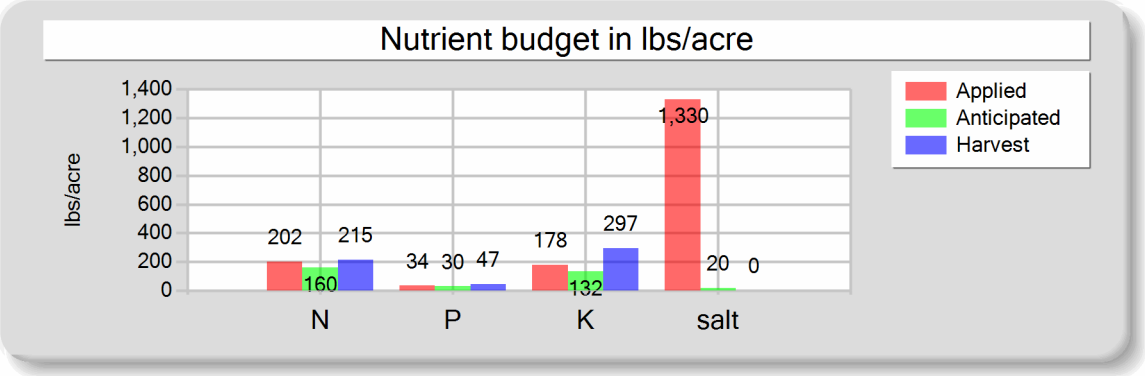
Fresh water applied	
7,400,000.00	*gallons*
272.52	*acre-inches*
6.81	*inches/acre*

Process wastewater applied	
740,000.00	*gallons*
27.25	*acre-inches*
0.68	*inches/acre*

Total harvests for the crop	
1	*harvests*

Field 3 - 05/17/2023: Corn, silage

Field name: Field 3 Crop: Corn, silage Plant date: 05/17/2023



	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	193.95	33.71	177.73	1,138.38
Fresh water	0.68	0.00	0.00	191.75
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	201.63	33.71	177.73	1,330.13
Anticipated crop nutrient removal	160.00	30.00	132.00	20.00
Actual crop nutrient removal	214.78	46.86	296.78	0.00
Nutrient balance	-13.14	-13.15	-119.05	1,330.13
Applied to removed ratio	0.94	0.72	0.60	0.00

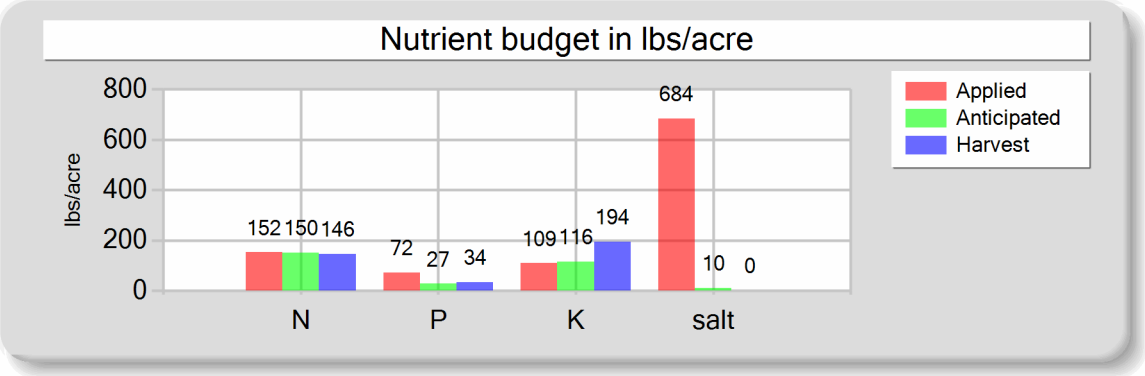
Fresh water applied	
32,825,000.00	*gallons*
1,208.83	*acre-inches*
30.22	*inches/acre*

Process wastewater applied	
1,525,000.00	*gallons*
56.16	*acre-inches*
1.40	*inches/acre*

Total harvests for the crop	
1	*harvests*

Field 3 - 11/04/2023: Triticale, boot stage

Field name: Field 3 Crop: Triticale, boot stage Plant date: 11/04/2023



	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	130.80	72.28	108.53	684.50
Fresh water	14.04	0.00	0.00	0.00
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	151.84	72.28	108.53	684.50
Anticipated crop nutrient removal	150.00	27.00	116.00	10.00
Actual crop nutrient removal	146.15	33.58	193.55	0.00
Nutrient balance	5.69	38.71	-85.02	684.50
Applied to removed ratio	1.04	2.15	0.56	0.00

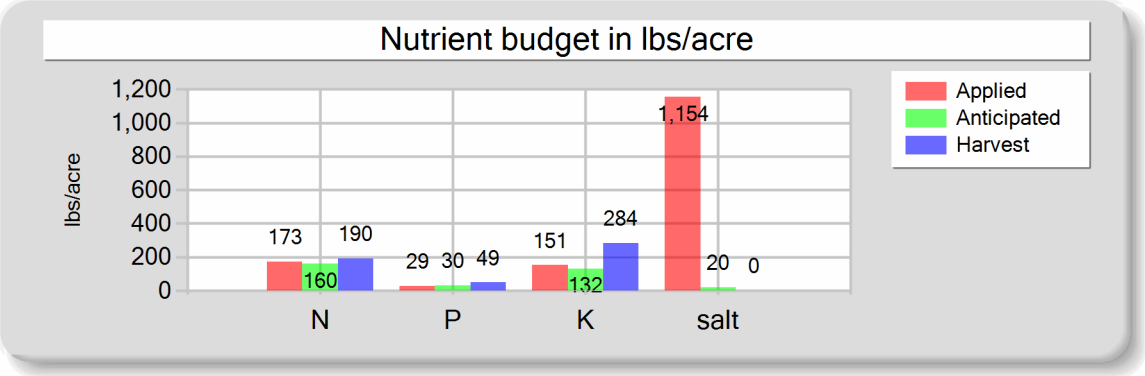
Fresh water applied	
7,825,000.00	*gallons*
288.17	*acre-inches*
7.20	*inches/acre*

Process wastewater applied	
1,020,000.00	*gallons*
37.56	*acre-inches*
0.94	*inches/acre*

Total harvests for the crop	
1	*harvests*

Field 4 - 05/17/2023: Corn, silage

Field name: Field 4 Crop: Corn, silage Plant date: 05/17/2023



	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	165.30	28.74	151.49	969.98
Fresh water	0.66	0.00	0.00	183.86
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	172.96	28.74	151.49	1,153.84
Anticipated crop nutrient removal	160.00	30.00	132.00	20.00
Actual crop nutrient removal	190.49	48.56	283.86	0.00
Nutrient balance	-17.53	-19.82	-132.37	1,153.84
Applied to removed ratio	0.91	0.59	0.53	0.00

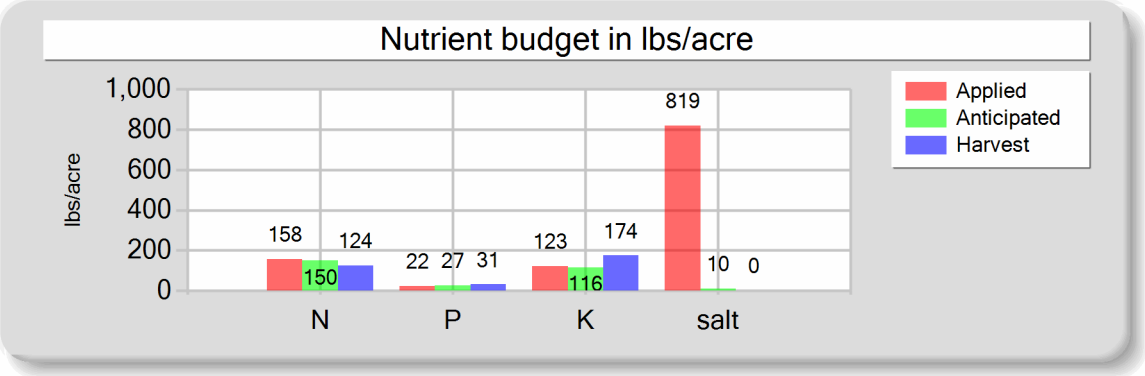
Fresh water applied	
31,475,000.00	*gallons*
1,159.12	*acre-inches*
28.98	*inches/acre*

Process wastewater applied	
1,300,000.00	*gallons*
47.87	*acre-inches*
1.20	*inches/acre*

Total harvests for the crop	
1	*harvests*

Field 4 - 11/04/2023: Triticale, boot stage

Field name: Field 4 Crop: Triticale, boot stage Plant date: 11/04/2023



	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	136.35	22.21	122.62	819.16
Fresh water	14.44	0.00	0.00	0.00
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	157.79	22.21	122.62	819.16
Anticipated crop nutrient removal	150.00	27.00	116.00	10.00
Actual crop nutrient removal	124.47	30.69	173.91	0.00
Nutrient balance	33.33	-8.48	-51.29	819.16
Applied to removed ratio	1.27	0.72	0.71	0.00

Fresh water applied	
8,050,000.00	*gallons*
296.45	*acre-inches*
7.41	*inches/acre*

Process wastewater applied	
955,000.00	*gallons*
35.17	*acre-inches*
0.88	*inches/acre*

Total harvests for the crop	
1	*harvests*

NUTRIENT ANALYSES

A. MANURE ANALYSES

23LO897`

Sample and source description: 23LO897`

Sample date: 12/13/2023 Material type: Corral solids Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 42.0 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Calcium (mg/kg)	Magnesium (mg/kg)	Sodium (mg/kg)	Sulfur (mg/kg)	Chloride (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	15,900.00	3,000.00	20,700.00	0.00	0.00	0.00	0.00	0.00		0.00
DL	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		0.01

B. PROCESS WASTEWATER ANALYSES

23EO367

Sample and source description: 23EO367

Sample date: 05/03/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: 7.40

	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	572.00	417.00	0.00	0.00	109.00	536.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.01	3,040
DL	0.70	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1

23JO178

Sample and source description: 23JO178

Sample date: 10/02/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: 7.40

	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	633.00	447.00	0.00	0.50	104.00	573.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.41	3,920
DL	0.70	0.10	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1

23LO903

Sample and source description: 23LO903

Sample date: 12/14/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: 7.30

	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	574.00	439.00	0.00	0.70	453.00	453.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.02	2,750
DL	0.70	0.10	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1

24C1225

Sample and source description: 24C1225

Sample date: 03/29/2024 Material type: Process wastewater Source of analysis: Lab analysis pH: 7.20

	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	693.00	446.00	0.00	1.60	113.00	624.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.92	4,150
DL	0.70	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1

C. FRESH WATER ANALYSES

Canal

298369

Sample description: 298369

Sample date: 06/26/2019 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	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	28
DL	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1

Domestic #1

Domestic #1

22k1215

Sample description: 22k1215

Sample date: 11/18/2022 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	12.80	0.00	12.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54	0
DL	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1

Domestic #5

22k1215

Sample description: 22k1215

Sample date: 11/18/2022 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	13.00	13.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0
DL	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1

Irrigation #3

22k1215

Sample description: 22k1215

Sample date: 11/18/2023 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	8.60	8.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0
DL	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1

D. SOIL ANALYSES

No soil analyses entered.

E. PLANT TISSUE ANALYSES

Field 1 - 05/17/2023: Corn, silage

23IO341

Sample and source description: 23IO341

Sample date: 09/05/2023 Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 65.0 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	5,600.00	1,300.00	8,200.00		0.00
DL	0.01	0.01	0.01		0.01

Field 1 - 11/04/2023: Triticale, boot stage

24C1226

Sample and source description: 24C1226

Sample date: 03/29/2024 Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 65.3 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	6,100.00	1,500.00	9,000.00		0.00
DL	0.01	0.01	0.01		0.01

Field 2 - 05/17/2023: Corn, silage

Field 2 - 05/17/2023: Corn, silage

23IO341

Sample and source description: 23IO341

Sample date: 09/05/2023 Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 64.2 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	5,300.00	1,400.00	8,700.00		0.00
DL	0.01	0.01	0.01		0.01

Field 2 - 11/04/2023: Triticale, boot stage

24C1226

Sample and source description: 24C1226

Sample date: 03/29/2024 Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 67.6 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	7,900.00	1,700.00	10,000.00		0.00
DL	0.01	0.01	0.01		0.01

Field 3 - 05/17/2023: Corn, silage

23IO341

Sample and source description: 23IO341

Sample date: 09/05/2023 Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 63.7 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	5,500.00	1,200.00	7,600.00		0.00
DL	0.01	0.01	0.01		0.01

Field 3 - 11/04/2023: Triticale, boot stage

24C1226

Sample and source description: 24C1226

Sample date: 03/29/2024 Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 69.4 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	7,400.00	1,700.00	9,800.00		0.00
DL	0.01	0.01	0.01		0.01

Field 4 - 05/17/2023: Corn, silage

23IO341

Sample and source description: 23IO341

Sample date: 09/05/2023 Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 65.1 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	5,100.00	1,300.00	8,000.00		0.00
DL	0.01	0.01	0.01		0.01

Field 4 - 11/04/2023: Triticale, boot stage

24c1226

Sample and source description: 24c1226

Sample date: 03/29/2024 Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 63.0 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	63.00	1,800.00	10,200.00		0.00
DL	0.01	0.01	0.01		0.01

F. SUBSURFACE (TILE) DRAINAGE ANALYSES

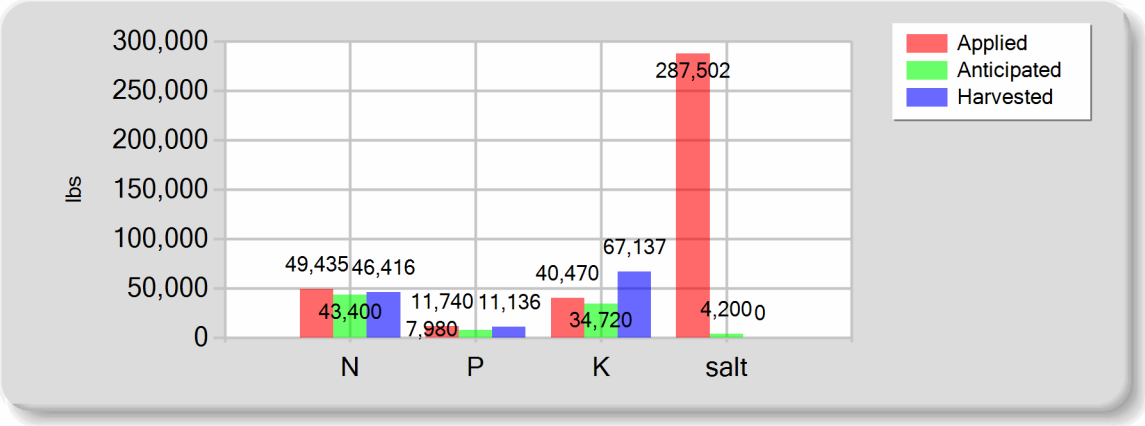
No subsurface (tile) drainage analyses entered.

NUTRIENT APPLICATIONS, POTENTIAL REMOVAL, AND BALANCE

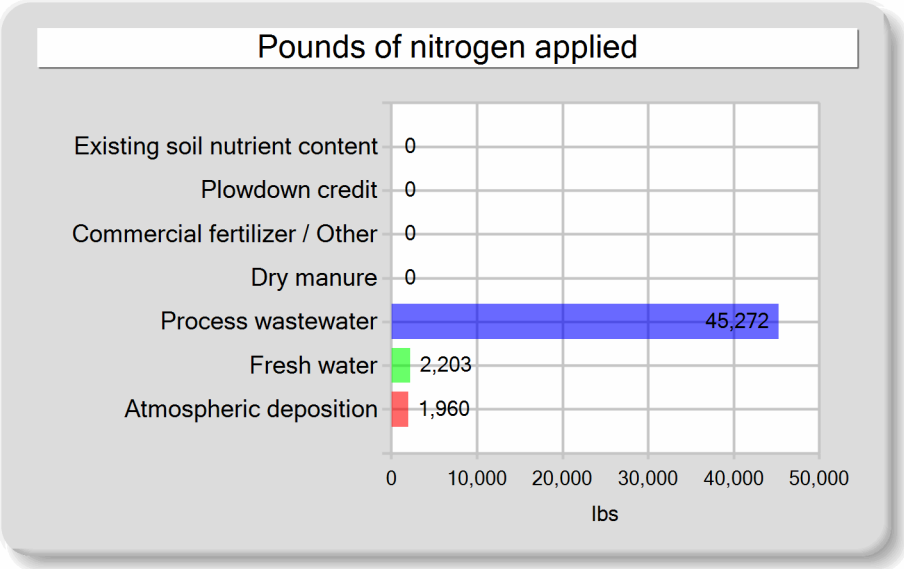
A. SUMMARY OF NUTRIENT APPLICATIONS, POTENTIAL REMOVAL, AND BALANCE

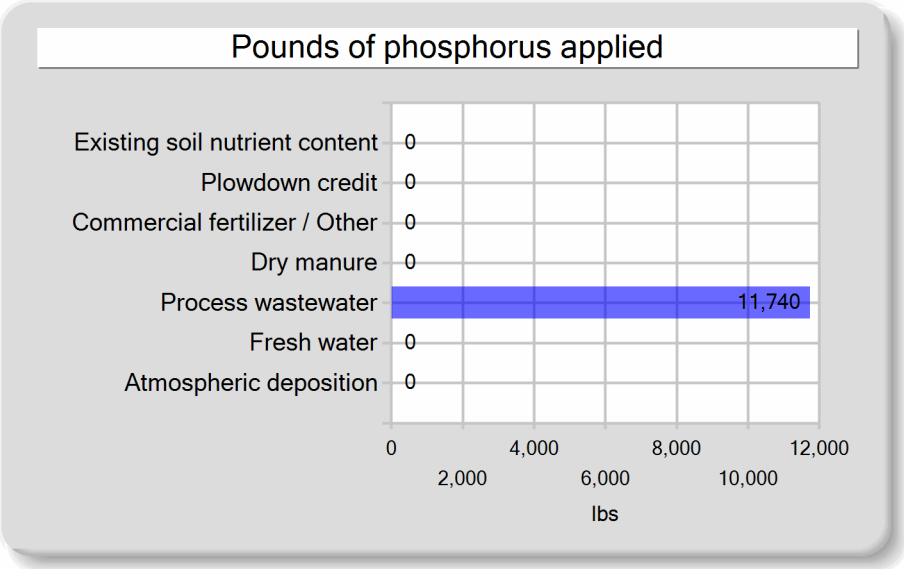
	Total N (lbs)	Total P (lbs)	Total K (lbs)	Total salt (lbs)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	45,271.73	11,739.91	40,470.31	260,618.94
Fresh water	2,203.21	0.00	0.00	26,882.58
Atmospheric deposition	1,960.00	0.00	0.00	0.00
Total nutrients applied	49,434.93	11,739.91	40,470.31	287,501.52
Anticipated crop nutrient removal	43,400.00	7,980.00	34,720.00	4,200.00
Actual crop nutrient removal	46,416.00	11,136.40	67,136.60	0.00
Nutrient balance	3,018.93	603.51	-26,666.29	287,501.52
Applied to removed ratio	1.07	1.05	0.60	0.00

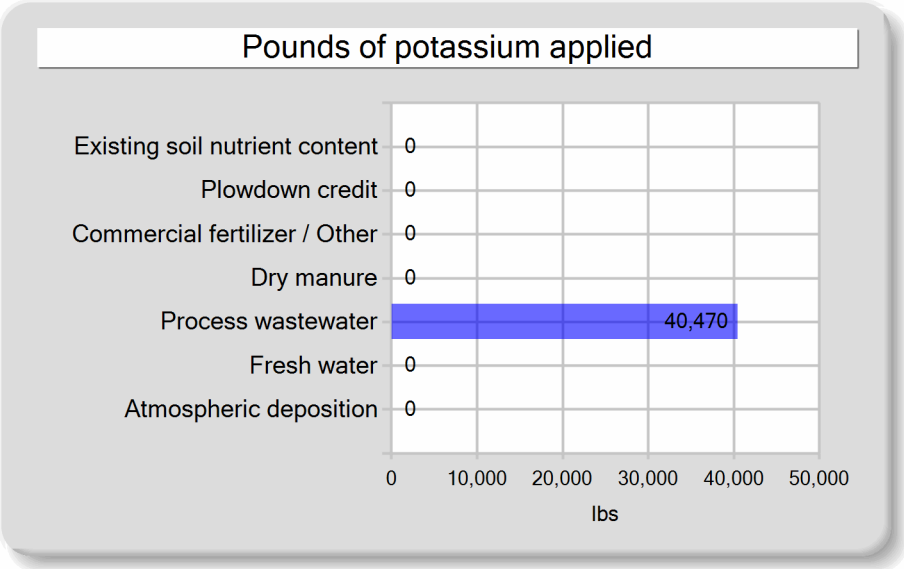
B. POUNDS OF NUTRIENT APPLIED VS. CROP REMOVAL

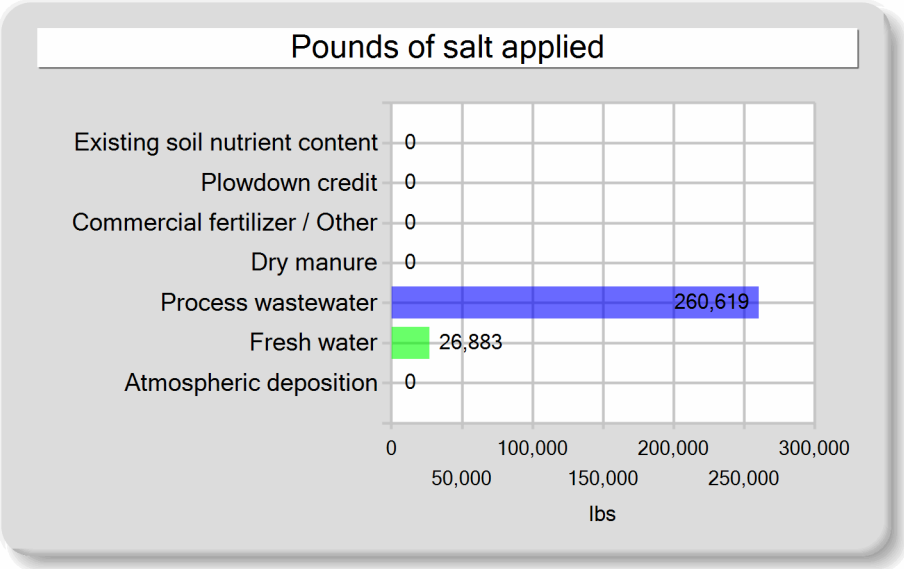


C. POUNDS OF NUTRIENT APPLIED BY MATERIAL TYPE









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

No notes entered for this annual report.

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
Darrell Visser	Travis Visser
PRINT OR TYPE NAME	PRINT OR TYPE NAME
DATE	DATE

Annual Report - General Order No. R5-2007-0035
Reporting period 04/16/2023 to 04/15/2024.

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 04/16/2023 to 04/15/2024.

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.

Darrell Visser

SIGNATURE OF OWNER OF FACILITY

Darrell Visser

PRINT OR TYPE NAME

6/25/24

DATE

SIGNATURE OF OPERATOR OF FACILITY

Travis Visser

PRINT OR TYPE NAME

6/25/24

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: Travis Visser

Name of Dairy Facility: Gerrit Visser + Sons

Facility Address: 18565 S. Marks Ave (Number and Street) Riverdale (City) 93656 (Zip Code)

Contact Person Name and Phone Number: Travis Visser (Name) 559-905-0391 (Phone Number)

Manure/Process Wastewater Hauler Information:

Name of Hauling Company/Person: Burrow Bros.

Address of Hauling Company /Person: 13265 W Jensen (Number and Street) Kerman (City) 93630 (Zip Code)

Contact Person: Danny Burrows (Name) 559-978-1710 (Phone Number)

Destination Information:

Composting Facility / Broker / Farmer / Other (identify) _____ (please circle one)

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

SAME

Name | Number and Street | City | Zip Code | Phone Number

Manure/Process Wastewater Destination Address or Assessor's Parcel Number:

SAME

Number and Street | City | Zip Code | Assessor's Parcel Number

Dates Hauled: June + July 2023

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: 4054 Tons or Cubic Yards (indicate which units used)

Manure Solids Content (if amount reported in tons): 58%

Manure Density (if amount reported in cubic yards): _____

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

Method used to determine amount of manure: Truck Scales

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

Process Wastewater: 0 Gallons

Method used to determine volume of process wastewater: NA

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)

NA Yes _____ No

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

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

Operator's Signature: _____ Date: 6/20/24

Hauler's Signature: Lonnie Burrow Date: 6/20/24

Preliminary Dairy Facility Assessment Report
General Order No. R5-2007-0035

DAIRY FACILITY INFORMATION

A. NAME OF DAIRY OR BUSINESS OPERATING THE DAIRY: Gerrit Visser & Sons

Physical address of dairy:

18565 S Marks AVE	Riverdale	Fresno	93656
Number and Street	City	County	Zip Code

Street and nearest cross street (if no address):

LAND AREA ESTIMATES

A. LAND AREA

Size of the dairy production area (corrals, barns, ponds, feed storage): 60.0 acres

Estimated area (including roofed, impervious, and earthen surfaces) that receives rainfall which drains into the wastewater retention pond(s): 4.0 acres

Size of the crop land area currently used for manure (lagoon and solids) application: 140.0 acres

HERD AND MILKING ESTIMATES

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 / head	1,000	150	400	330	95	1
Avg live weight (lbs)	1,350	1,400	950	500		
Avg milk production (lbs/cow/day)	70					
Daily hours on flush	6	0	0	0	0	0

Predominant animal breed: Holstein

Storage period: 120 days

Average number of milk cows per string sent to milkbarn: 140 milk cows per string

Number of milkings per day: 2.0 milkings per day

Number of times milk tank is emptied each day: 2.0 milk loads per day

Number of hours spent milking each day: 18.0 hours per day

Bulk tank wash and sanitizing: 2 run cycles

Pipeline wash and sanitizing: 2 run cycles

Copies of this assessment shall be maintained for 10 years.

These calculations are preliminary and approximate only. Completion of your Waste Management Plan and Nutrient Management Plan will provide you with more detailed and precise calculations upon which to make important decisions.

B. MILKBARN EQUIPMENT AND PARLOR FLOOR WASH

All numerical values in gallons per day	Milkbarn/parlor floor wash	Fresh water used in manure flush lanes	Plate coolers	Vacuum pumps / air compressors / chillers
Selected Type:	Traditional Manual Parlor Floor Wash		Well Water Cooled (Water Reused/Recycled)	Well Water Cooled (Water Reused/Recycled)
Estimated:	14,280		32,558	27,000
User-Entered:	4,500	0	7,000	18,000
Volume used in calculations:	4,500	0	7,000	18,000
Source is recycled water:	[X] Yes [ ] No			

C. MISCELLANEOUS EQUIPMENT

Equipment Description	Source	Throughput (gallons per day)	Discharge Destination
Drop Hoses	Fresh Water	250	Sent to pond

D. DRINKING WATER SOURCE

Reused water is the source of herd drinking water: [X] Yes [ ] No

If yes, total amount of reused water consumed: 4 gallons per head per day

E. SPRINKLER PEN

Number of sprinklers in the holding pen: 68 sprinklers

Length of each sprinkler cycle: 4.0 minutes

Number of sprinkler pen cycles per string: 1 cycles/string

Water flow rate of each sprinkler head: 4.0 gallons per minute

Sprinkler pen wastewater volume: 15,542 gallons per day

Sprinklers reuse water from equipment: [X] Yes [ ] No

F. MILKBARN WATER CALCULATIONS

Water available for reuse/recycle: 25,000 gallons per day

Recycled water used again: 27,946 gallons per day

Balance: 0 gallons per day

Milkbarn water sent to pond: 21,392 gallons per day

Milkbarn water leaving system: 0 gallons per day

RETENTION PONDS STORAGE CAPACITY ESTIMATES

A. PONDS

	numerical values in feet						
Basin Name	Earthen Length (EL)	Earthen Width (EW)	Earthen Depth (ED)	Side Slope H:V (S)	Free Board (FB)	Dead Storage Loss (DS)	Storage Volume Corrected for Dead Storage Loss (ft³)
Retention Pond 1	200	200	15	0.5	2	3	372,573
Retention Pond 2	300	100	20	0.5	2	0	463,464

RAINFALL ESTIMATES

A. RAINFALL AND DRAINAGE INFORMATION

Rainfall station nearest the facility: Hanford

Storage period: 120 days

25 year / 24 hour storm event (NOAA Atlas 2, 1973): 2.10 inches

Storage period rainfall (DWR climate data): 5.88 inches

Combined storage period rainfall and 25 year / 24 hour storm event: 7.98 inches

Estimated rainfall onto and drained into the wastewater retention pond: 1,214,983 gallons

NUTRIENT REMOVAL BY CROP ESTIMATES

A. CROPS

Acres Planted	Crop Type	Yield (tons/acre)	Moisture (%)	Protein (%)	Phosphorus (lbs/ton yield)	Nitrogen Removed (lbs)	Phosphorus Removed (lbs)
140	Corn silage	25.0	70.0	10.0	1.5	33,600	5,250
140	Wheat silage boot stage	11.0	65.0	17.0	2.8	29,322	4,312

ANNUAL NUTRIENT IMPORT & EXPORT ESTIMATES

A. ANNUAL NUTRIENT IMPORTS

Combined estimate of nutrients from commercial fertilizers and atmospheric Nitrogen applied to crops:

Nutrient Description	Amount Applied (lbs)
Nitrogen (N)	0
Phosphorus as Orthophosphate (P2O5)	0
Potassium as Potash (K2O)	0
Atmospheric Nitrogen Deposition	1,960

Atmospheric Nitrogen Deposition Rate (ANDR) = 14 lbs N / acre / year.

B. ANNUAL NUTRIENT EXPORTS

Manure Type	Volume Exported	Moisture Content	Total Nitrogen	Total Phosphorus
Separator Solids	0 tons	2.00 %	2.00 %	1.00 %
Corral Solids	7,500 tons	35.00 %	2.35 %	0.80 %
Liquid Manure	0 gallons	N/A	800.00 mg/L	450.00 mg/L

PRELIMINARY DAIRY FACILITY ASSESSMENT SUMMARY

A. LAND USE

Dairy production area (corrals, barns, ponds, feed storage):	60	acres
Estimate the area (including roofed, impervious, and earthen surfaces) that receives rainfall which drains into a wastewater retention pond:	4	acres
Crop land area used for manure application:	140	acres

B. HERD, MILKING, AND MILKBARN/PARLOR

Milk cows:	1,000	head
Dry cows:	150	head
Bred heifers (15 - 24 months):	400	head
Heifers (7 - 14 months to breeding):	330	head
Calves (4 - 6 months):	95	head
Calves (0 - 3 months):	1	head
Total number of animals:	1,976	head
Average number of milk cows per string sent to milk barn:	140	cows per string
Number of milking strings entering milk barn per milking:	7.14	strings per milking
Storage period:	120	days
Total manure production by herd for storage period:	370,162	cu. ft.
Estimated manure production for storage period (to dry lot):	302,791	cu. ft.
Estimated manure production for storage period (to pond):	503,971	gallons
Total milkbarn water volume for storage period (to pond):	2,567,040	gallons

C. ROOFED, IMPERVIOUS, AND EARTHEN RAINFALL RUNOFF AREAS

Total area receiving rainfall and draining to ponds (production area):	174,240	sq. ft.

Copies of this assessment shall be maintained for 10 years.

These calculations are preliminary and approximate only. Completion of your Waste Management Plan and Nutrient Management Plan will provide you with more detailed and precise calculations upon which to make important decisions.

D. RETENTION POND AND SETTLING BASIN ESTIMATES

Liquid storage surface area (retention ponds only):	70,000	sq. ft.
Rainfall onto and drained into retention ponds for storage period:	1,214,983	gallons
Waste production as manure:	503,971	gallons
Milkbarn water:	2,567,040	gallons
Milkbarn water comparative estimate:	21	gallons per cow per day
Fresh flush water for storage period:	0	gallons
25 year / 24 hour storm event (NOAA Atlas 2, 1973):	2.10	inches
Critical storage period rainfall (DWR Climate Data):	5.88	inches
Combined critical storage period and 25 year / 24 hour storm event:	7.98	inches
Total storage capacity required:	4,285,994	gallons
	572,954	cu. ft.
Existing storage capacity (adjusted for dead storage loss):	6,253,994	gallons
	836,037	cu. ft.
Existing capacity meets estimated storage needs:	Yes	

E. NITROGEN (N) AND PHOSPHORUS (P) EXCRETION ESTIMATES

Daily gross nitrogen excretion estimates:	1,197	lbs nitrogen per day
Annual gross nitrogen excretion estimates:	436,862	lbs nitrogen per year
Nitrogen to pond storage after ammonia losses (30% loss applied):	58,678	lbs nitrogen per year
Nitrogen to drylot storage after ammonia losses (30% loss applied):	247,125	lbs nitrogen per year
Total nitrogen in storage (ponds and drylot combined):	305,803	lbs nitrogen per year
Daily gross phosphorus excretion estimates:	198	lbs phosphorus per day
Annual gross phosphorus excretion estimates:	72,384	lbs phosphorus per year
Phosphorus to pond storage:	14,175	lbs phosphorus per year
Phosphorus to drylot storage:	58,209	lbs phosphorus per year
Total phosphorus in storage (ponds and drylot combined):	72,384	lbs phosphorus per year

F. NITROGEN AND PHOSPHORUS IMPORT ESTIMATES

Total nitrogen imports onto facility as commercial fertilizers:	0	lbs nitrogen per year
Atmospheric Nitrogen Deposition (ANDR):	1,960	lbs nitrogen per year
Total phosphorus imports onto facility as commercial fertilizers:	0	lbs phosphorus per year

G. NITROGEN AND PHOSPHORUS EXPORT ESTIMATES

Total nitrogen exports off facility as manure:	229,125	lbs nitrogen per year
Total phosphorus exports off facility as manure:	78,000	lbs phosphorus per year

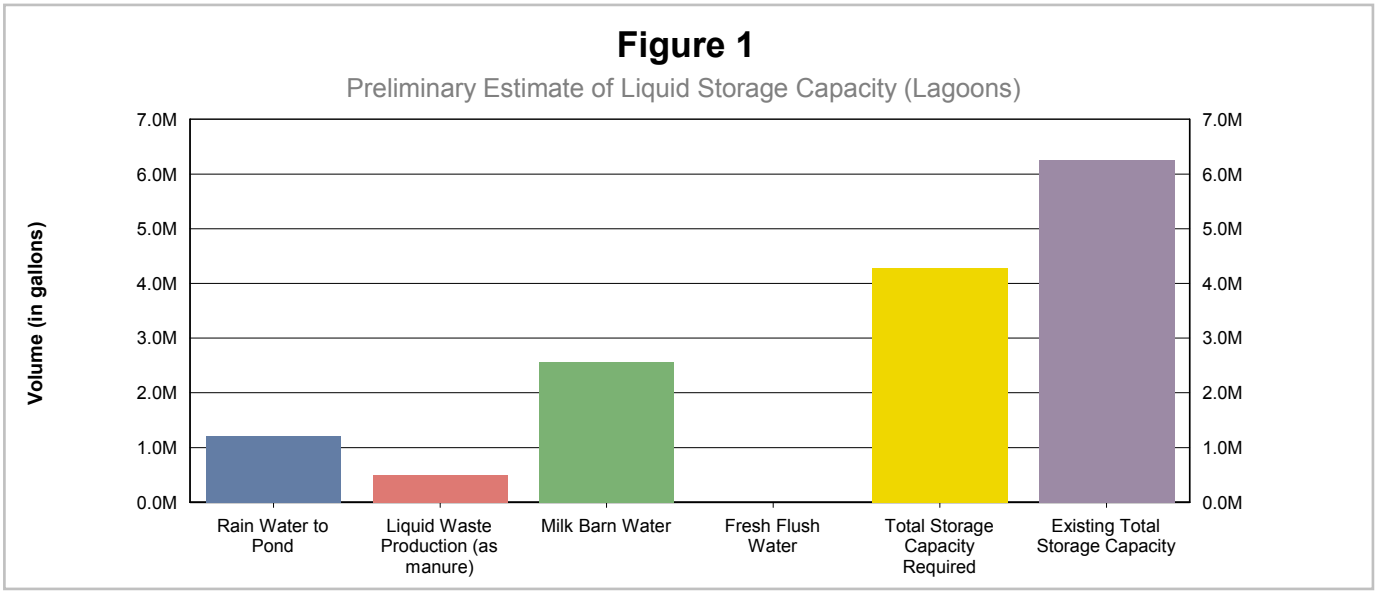
H. ANNUAL NITROGEN AND PHOSPHORUS BALANCE ESTIMATE

Total nitrogen in storage (after 30% ammonia loss):	305,803	lbs
Nitrogen imported (as commercial fertilizer and ANDR):	1,960	lbs
Nitrogen exported as manure:	229,125	lbs
Nitrogen removed by crops:	62,922	lbs
Excess nitrogen (N generated - N removed):	15,717	lbs
Whole farm nitrogen balance ratio:	1.25	

Total phosphorus in storage:	72,384	lbs
Phosphorus imported as commercial fertilizer:	0	lbs
Phosphorus exported as manure:	78,000	lbs
Phosphorus removed by crops:	9,562	lbs
Excess phosphorus (P generated - P removed):	-15,178	lbs

CHARTS

A. FIGURE 1



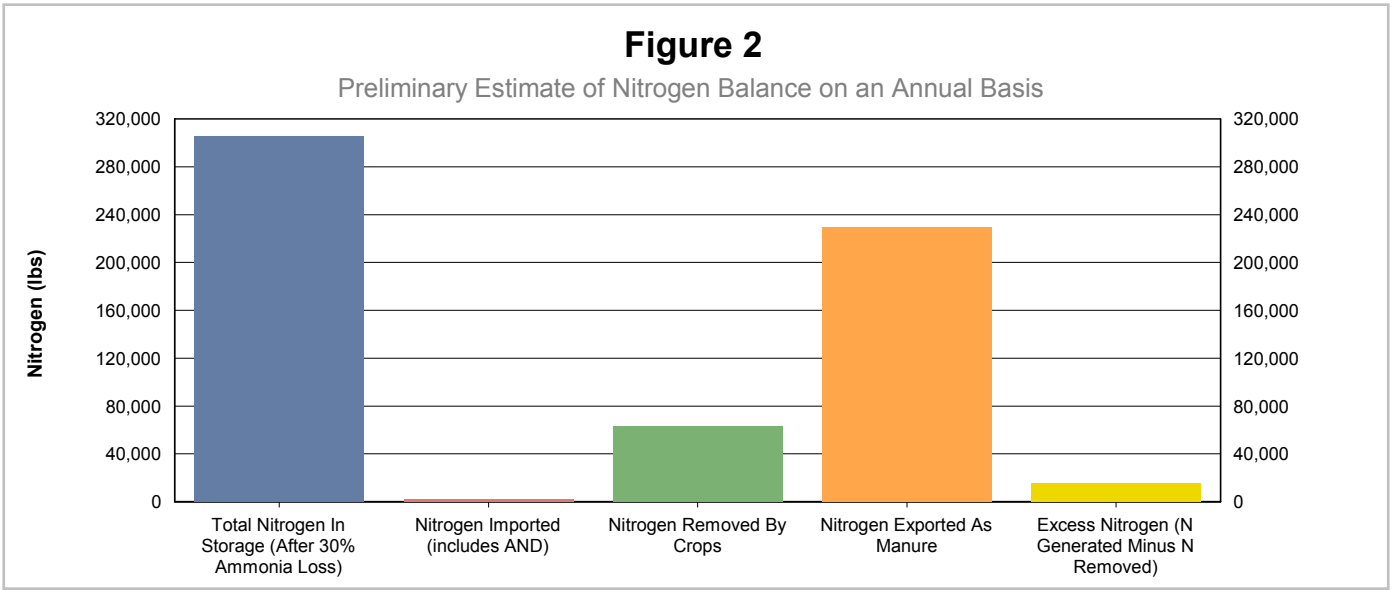
This graph estimates how many gallons of water and waste are sent to the wastewater storage ponds (lagoons) on your dairy during the selected 120 day storage period.

Your wastewater storage ponds (lagoons) must be very close to empty as a result of applying nutrients to crops over the last year starting in the beginning of October and should not fill before February.

Existing Storage Capacity:	6,253,994	gallons
Required Storage Capacity:	4,285,994	gallons
Storage Capacity Difference:	1,968,000	gallons

The estimated pond capacity appears to be adequate.

B. FIGURE 2



This graph estimates the total pounds of nitrogen excreted from the herd ending up in storage, imported, removed by all crops associated with the dairy, exported (typically as dry manure), and balance, excess, or deficiency on an annual basis.

Nutrients must be applied at rates and times appropriate for the crop to prevent surfacewater and groundwater degradation.

Total nitrogen in storage (after 30% ammonia loss):	305,803	pounds
Nitrogen imported (includes AND*):	1,960	pounds
Nitrogen exported (as manure):	229,125	pounds
Nitrogen removed by crops:	62,922	pounds
Nitrogen excess or deficiency:	15,717	pounds
Whole farm nitrogen balance ratio:	1.25	(regulatory limit 1.65**)

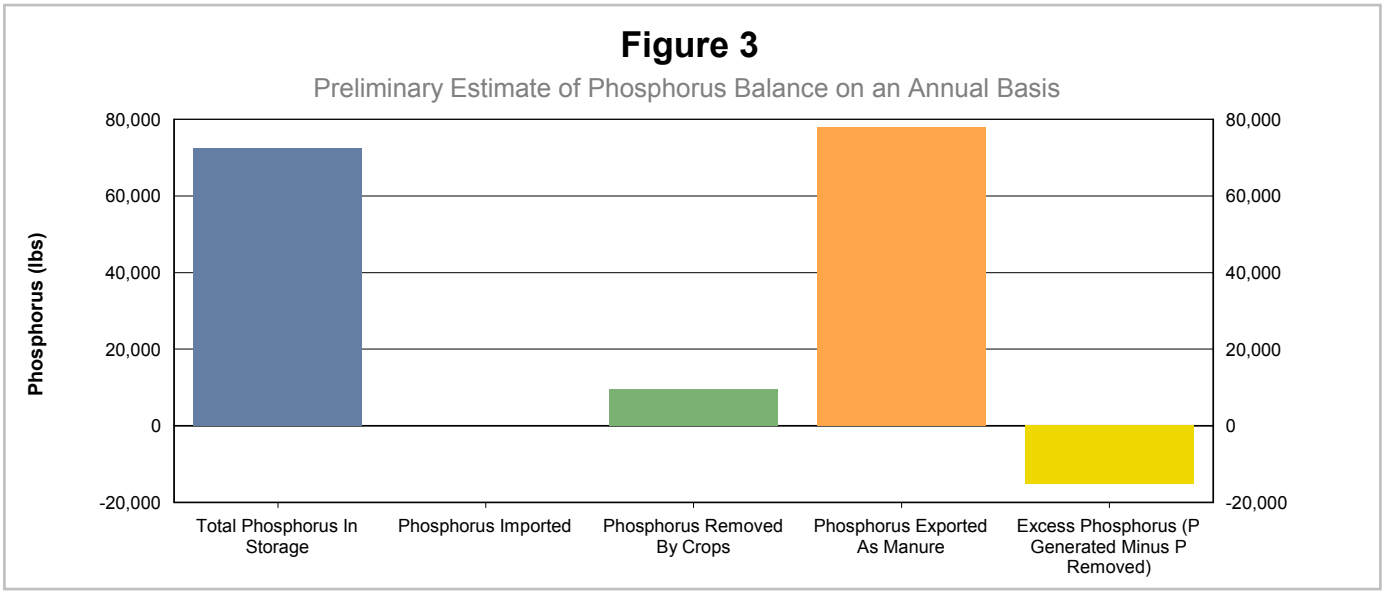
It appears that the crop rotation may be capable of removing the nitrogen applied on an annual basis.

*** AND = Atmospheric Nitrogen Deposition**

**** Whole Farm Nitrogen Balance alone does not assure compliance, you cannot list cropland acreage or claim nutrient uptake for cropland that lacks infrastructure for controlled nutrient applications at agronomic rates and times.**

Nitrogen balance ratio = (Total nitrogen in storage - Nitrogen exported + Nitrogen in irrigation water + Nitrogen imports) / Crop removal

C. FIGURE 3



This graph estimates the total pounds of phosphorus excreted from the herd ending up in storage, imported, removed by all crops associated with the dairy, exported (typically as dry manure), and balance, excess, or deficiency on an annual basis.

Nutrients must be applied at rates and times appropriate for the crop to prevent surfacewater and groundwater degradation.

Total phosphorus in storage:	72,384	pounds
Phosphorus imported:	0	pounds
Phosphorus exported (as manure):	78,000	pounds
Phosphorus removed by crops:	9,562	pounds
Phosphorus excess or deficiency:	-15,178	pounds

It appears that the crop rotation may be capable of removing the phosphorus applied on an annual basis.

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. IN ADDITION, I CERTIFY THAT THE PROVISIONS OF WASTE DISCHARGE REQUIREMENTS GENERAL ORDER NO. R5-2007-0035, INCLUDING THE DEVELOPMENT AND IMPLEMENTATION OF A NUTRIENT MANAGEMENT PLAN AND WASTE MANAGEMENT PLAN, WILL BE COMPLIED WITH."

SIGNATURE OF OWNER OF FACILITY	SIGNATURE OF OPERATOR OF FACILITY
PRINT OR TYPE NAME	PRINT OR TYPE NAME
TITLE AND DATE	TITLE AND DATE

Copies of this assessment shall be maintained for 10 years.

These calculations are preliminary and approximate only. Completion of your Waste Management Plan and Nutrient Management Plan will provide you with more detailed and precise calculations upon which to make important decisions.

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Darrell Visser	
SIGNATURE OF OWNER OF FACILITY	SIGNATURE OF OPERATOR OF FACILITY
Darrell Visser	Travis Visser
PRINT OR TYPE NAME	PRINT OR TYPE NAME
Partner 6/25/24	Partner 6/25/24
TITLE AND DATE	TITLE AND DATE

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