

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:** White River Dairy

Physical address of dairy:

20400 Ave. 17 1/2 AVE

Number and Street

Madera

City

Madera

County

93637

Zip Code

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

Date facility was originally placed in operation: 10/01/1960Regional Water Quality Control Board Basin Plan designation: San Joaquin River Basin

County Assessor Parcel Number(s) for dairy facility:

0028-0140-0010-0000**B. OPERATORS**

Hooker, Mark

Operator name: Hooker, MarkTelephone no.: (209) 259-9368

Landline

Cellular

605 Almond CT

Mailing Address Number and Street

Chowchilla

City

CA

State

93610

Zip Code

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

Machado, Corinne

Legal owner name: Machado, CorinneTelephone no.: (559) 674-5580(559) 363-5581

Landline

Cellular

3754 W Birch RD

Mailing Address Number and Street

Fresno

City

CA

State

93711

Zip Code

Machado, Manuel

Legal owner name: Machado, ManuelTelephone no.: (559) 674-5580(559) 363-5581

Landline

Cellular

3754 W Birch RD

Mailing Address Number and Street

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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	0	195	144	570	430	0
Number under roof	1,550	0	0	0	0	0
Maximum number	1,550	195	150	575	440	0
Average number	1,550	195	144	570	430	0
Avg live weight (lbs)	1,400	1,500	1,000	775		

Predominant milk cow breed: Holstein

Average milk production: 74 pounds per cow per day

B. MANURE GENERATED

Total manure excreted by the herd: 51,913.67 tons per reporting period

Total nitrogen from manure: 654,671.91 lbs per reporting period

After ammonia losses (30% loss applied): 458,270.34 lbs per reporting period

Total phosphorus from manure: 107,473.14 lbs per reporting period

Total potassium from manure: 300,912.70 lbs per reporting period

Total salt from manure: 774,657.75 lbs per reporting period

C. PROCESS WASTEWATER GENERATED

Process wastewater generated: 21,420,000 gallons

Total nitrogen generated: 110,648.48 lbs

Total phosphorus generated: 28,620.69 lbs

Total potassium generated: 146,594.19 lbs

Total salt generated: 667,516.09 lbs

	21,420,000 gallons applied
+	0 gallons exported
-	0 gallons imported
=	21,420,000 gallons generated

D. FRESH WATER SOURCES

Source Description	Type
#4 Dairy Barn Well- WRD Dairy	Ground water
#5 Dairy Home	Ground water
#6 Parks Well-WRD Dairy E	Ground water
#7 Jenzens-WRD Calf Ranch	Ground water
#8 Jenzens Deep	Ground water

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Source Description	Type
Canal	Surface water

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

Date	Material type	Quantity	Reporting basis	Moisture (%)	Density (lbs/cu ft)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
10/09/2023	Separator solids	1,081.59 <i>ton</i>	Dry-weight	32.6		24,300.00	16,700.00	41,900.00		0.00
11/20/2023	Separator solids	2,864.65 <i>ton</i>	Dry-weight	32.3		25,300.00	19,500.00	43,100.00		0.00
12/09/2023	Separator solids	583.28 <i>ton</i>	As-is	32.6		24,300.00	16,700.00	41,900.00		0.00

No liquid nutrient exports entered.

Material type	Total N (lbs)	Total P (lbs)	Total K (lbs)	Total salt (lbs)
Dry manure	161,908.43	119,465.23	277,141.89	0.00
Process wastewater	0.00	0.00	0.00	0.00
Total exports for all materials	161,908.43	119,465.23	277,141.89	0.00

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APPLICATION AREA

A. LIST OF LAND APPLICATION AREAS

Field name	Controlled acres	Cropable acres	Total harvests	Type of waste applied	Parcel number
1	58	58	2	process wastewater	X280-X140-X011-XXXX
2	25	25	2	process wastewater	X280-X140-X011-XXXX
3	20	20	2	process wastewater	X280-X140-0012-XXXX
4	43	43	2	process wastewater	X280-X140-0012-XXXX
5	63	63	2	process wastewater	X280-X140-0012-XXXX
Totals for areas that were used for application	209	209	10		
Totals for areas that were not used for application					
Land application area totals	209	209	10		

B. CROPS AND HARVESTS

1

Field name: 1

11/01/2022: Triticale, soft dough

Crop: Triticale, soft dough Acres planted: 55 Plant date: 11/01/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
04/10/2023	900.00 <i>ton</i>	As-is		64.7	7,700.00	2,000.00	13,600.00		11.50

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	12.00	120.00	20.40	90.00	0.00
Total actual harvest content	16.36	252.00	65.45	445.09	1,328.56

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1

05/26/2023: Corn, silage

Crop: Corn, silage Acres planted: 55 Plant date: 05/26/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
09/14/2023	1,157.00 ton	As-is		66.4	4,900.00	1,100.00	6,500.00		6.80

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	25.00	200.00	37.50	165.00	0.00
Total actual harvest content	21.04	206.16	46.28	273.47	961.28

2

Field name: 2

11/07/2022: Triticale, soft dough

Crop: Triticale, soft dough Acres planted: 23 Plant date: 11/07/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
04/17/2023	350.00 ton	As-is		52.3	8,500.00	2,100.00	15,100.00		9.40

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	12.00	120.00	20.40	90.00	0.00
Total actual harvest content	15.22	258.70	63.91	459.57	1,364.63

05/15/2023: Corn, silage

Crop: Corn, silage Acres planted: 23 Plant date: 05/15/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
09/04/2023	400.00 ton	As-is		66.4	4,900.00	1,100.00	6,500.00		6.80

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	25.00	200.00	37.50	165.00	0.00
Total actual harvest content	17.39	170.43	38.26	226.09	794.71

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3

Field name: 3

11/07/2022: Triticale, soft dough

Crop: Triticale, soft dough Acres planted: 18 Plant date: 11/07/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
04/17/2023	300.00 ton	As-is		68.0	9,700.00	1,600.00	12,500.00		10.20

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	12.00	120.00	20.40	90.00	0.00
Total actual harvest content	16.67	323.33	53.33	416.67	1,088.00

05/18/2023: Corn, silage

Crop: Corn, silage Acres planted: 18 Plant date: 05/18/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
09/04/2023	330.00 ton	As-is		62.5	5,600.00	1,000.00	6,600.00		6.80

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	25.00	200.00	37.50	165.00	0.00
Total actual harvest content	18.33	205.33	36.67	242.00	935.00

4

Field name: 4

11/14/2022: Triticale, soft dough

Crop: Triticale, soft dough Acres planted: 38 Plant date: 11/14/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
04/24/2023	500.00 ton	As-is		68.0	9,700.00	1,600.00	12,500.00		10.20

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	12.00	120.00	20.40	90.00	0.00
Total actual harvest content	13.16	255.26	42.11	328.95	858.95

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4

05/11/2023: Corn, silage

Crop: Corn, silage Acres planted: 38 Plant date: 05/11/2023

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	800.00 ton	As-is		66.1	5,000.00	1,100.00	5,700.00		6.00

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	25.00	200.00	37.50	165.00	0.00
Total actual harvest content	21.05	210.53	46.32	240.00	856.42

5

Field name: 5

11/21/2022: Triticale, soft dough

Crop: Triticale, soft dough Acres planted: 56 Plant date: 11/21/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
04/28/2023	800.00 ton	As-is		77.8	7,100.00	1,100.00	8,500.00		12.50

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	12.00	120.00	20.40	90.00	0.00
Total actual harvest content	14.29	202.86	31.43	242.86	792.86

07/04/2023: Corn, silage

Crop: Corn, silage Acres planted: 56 Plant date: 07/04/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
10/22/2023	1,095.00 ton	As-is		66.1	5,000.00	1,100.00	5,700.00		6.00

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	25.00	200.00	37.50	165.00	0.00
Total actual harvest content	19.55	195.54	43.02	222.91	795.44

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NUTRIENT BUDGET

A. LAND APPLICATIONS

1 - 11/01/2022: Triticale, soft dough

Field name: 1

Crop: Triticale, soft dough

Plant date: 11/01/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
12/06/2022	Surface (irrigation)	Light rain	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW Application	Process wastewater	104.91	70.20	137.88	775.41	1,512,000.00 <i>gal</i>
Application event totals		104.91	70.20	137.88	775.41	
02/13/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW Application	Process wastewater	137.31	38.51	169.91	578.95	829,500.00 <i>gal</i>
Application event totals		137.31	38.51	169.91	578.95	
03/06/2023	Surface (irrigation)	No precipitation	Light rain	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW Application	Process wastewater	104.29	29.25	129.04	439.71	630,000.00 <i>gal</i>
Application event totals		104.29	29.25	129.04	439.71	

1 - 05/26/2023: Corn, silage

Field name: 1

Crop: Corn, silage

Plant date: 05/26/2023

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
Canal	Surface water	0.00	0.00	0.00	29.36	9,676,800.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	29.36	

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1 - 05/26/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
06/17/2023	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	25.84	8,515,584.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	25.84	
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
WW Application	Process wastewater	251.59	47.67	368.08	1,820.00	3,360,000.00 <i>gal</i>
Canal	Surface water	0.00	0.00	0.00	18.79	6,193,152.00 <i>gal</i>
Application event totals		251.59	47.67	368.08	1,838.79	
07/13/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	19.58	6,451,200.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	19.58	
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
Canal	Surface water	0.00	0.00	0.00	27.41	9,031,680.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	27.41	
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	23.49	7,741,440.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	23.49	
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
Canal	Surface water	0.00	0.00	0.00	17.62	5,806,080.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	17.62	

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2 - 11/07/2022: Triticale, soft dough

Field name: 2

Crop: Triticale, soft dough

Plant date: 11/07/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
12/10/2022	Surface (irrigation)	No precipitation	Steady rain	Light rain		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW Application	Process wastewater	104.53	22.54	137.38	772.60	630,000.00 <i>gal</i>
Application event totals		104.53	22.54	137.38	772.60	
02/18/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW Application	Process wastewater	133.00	37.30	164.58	560.78	336,000.00 <i>gal</i>
Application event totals		133.00	37.30	164.58	560.78	
03/10/2023	Surface (irrigation)	No precipitation	Steady rain	Steady rain		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW Application	Process wastewater	116.38	32.64	144.01	490.69	294,000.00 <i>gal</i>
Application event totals		116.38	32.64	144.01	490.69	

2 - 05/15/2023: Corn, silage

Field name: 2

Crop: Corn, silage

Plant date: 05/15/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
04/29/2023	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	19.34	2,665,872.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	19.34	

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2 - 05/15/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following																												
06/15/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation																												
<table><tr><th>Source description</th><th>Material type</th><th>N (lbs/acre)</th><th>P (lbs/acre)</th><th>K (lbs/acre)</th><th>Salt (lbs/acre)</th><th>Amount</th></tr><tr><td>WW Application</td><td>Process wastewater</td><td>88.36</td><td>16.74</td><td>129.28</td><td>639.23</td><td>493,500.00 <i>gal</i></td></tr><tr><td>Canal</td><td>Surface water</td><td>0.00</td><td>0.00</td><td>0.00</td><td>16.12</td><td>2,221,560.00 <i>gal</i></td></tr><tr><td>Application event totals</td><td></td><td>88.36</td><td>16.74</td><td>129.28</td><td>655.35</td><td></td></tr></table>					Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount	WW Application	Process wastewater	88.36	16.74	129.28	639.23	493,500.00 <i>gal</i>	Canal	Surface water	0.00	0.00	0.00	16.12	2,221,560.00 <i>gal</i>	Application event totals		88.36	16.74	129.28	655.35	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount																										
WW Application	Process wastewater	88.36	16.74	129.28	639.23	493,500.00 <i>gal</i>																										
Canal	Surface water	0.00	0.00	0.00	16.12	2,221,560.00 <i>gal</i>																										
Application event totals		88.36	16.74	129.28	655.35																											
06/23/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation																												
<table><tr><th>Source description</th><th>Material type</th><th>N (lbs/acre)</th><th>P (lbs/acre)</th><th>K (lbs/acre)</th><th>Salt (lbs/acre)</th><th>Amount</th></tr><tr><td>WW Application</td><td>Process wastewater</td><td>142.74</td><td>27.07</td><td>209.04</td><td>1,033.64</td><td>798,000.00 <i>gal</i></td></tr><tr><td>Canal</td><td>Surface water</td><td>0.00</td><td>0.00</td><td>0.00</td><td>25.79</td><td>3,554,496.00 <i>gal</i></td></tr><tr><td>Application event totals</td><td></td><td>142.74</td><td>27.07</td><td>209.04</td><td>1,059.43</td><td></td></tr></table>					Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount	WW Application	Process wastewater	142.74	27.07	209.04	1,033.64	798,000.00 <i>gal</i>	Canal	Surface water	0.00	0.00	0.00	25.79	3,554,496.00 <i>gal</i>	Application event totals		142.74	27.07	209.04	1,059.43	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount																										
WW Application	Process wastewater	142.74	27.07	209.04	1,033.64	798,000.00 <i>gal</i>																										
Canal	Surface water	0.00	0.00	0.00	25.79	3,554,496.00 <i>gal</i>																										
Application event totals		142.74	27.07	209.04	1,059.43																											
07/05/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation																												
<table><tr><th>Source description</th><th>Material type</th><th>N (lbs/acre)</th><th>P (lbs/acre)</th><th>K (lbs/acre)</th><th>Salt (lbs/acre)</th><th>Amount</th></tr><tr><td>Canal</td><td>Surface water</td><td>0.00</td><td>0.00</td><td>0.00</td><td>17.20</td><td>2,369,664.00 <i>gal</i></td></tr><tr><td>Application event totals</td><td></td><td>0.00</td><td>0.00</td><td>0.00</td><td>17.20</td><td></td></tr></table>					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	17.20	2,369,664.00 <i>gal</i>	Application event totals		0.00	0.00	0.00	17.20								
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	17.20	2,369,664.00 <i>gal</i>																										
Application event totals		0.00	0.00	0.00	17.20																											
07/16/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation																												
<table><tr><th>Source description</th><th>Material type</th><th>N (lbs/acre)</th><th>P (lbs/acre)</th><th>K (lbs/acre)</th><th>Salt (lbs/acre)</th><th>Amount</th></tr><tr><td>Canal</td><td>Surface water</td><td>0.00</td><td>0.00</td><td>0.00</td><td>21.49</td><td>2,962,080.00 <i>gal</i></td></tr><tr><td>Application event totals</td><td></td><td>0.00</td><td>0.00</td><td>0.00</td><td>21.49</td><td></td></tr></table>					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	21.49	2,962,080.00 <i>gal</i>	Application event totals		0.00	0.00	0.00	21.49								
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	21.49	2,962,080.00 <i>gal</i>																										
Application event totals		0.00	0.00	0.00	21.49																											
07/31/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation																												
<table><tr><th>Source description</th><th>Material type</th><th>N (lbs/acre)</th><th>P (lbs/acre)</th><th>K (lbs/acre)</th><th>Salt (lbs/acre)</th><th>Amount</th></tr><tr><td>Canal</td><td>Surface water</td><td>0.00</td><td>0.00</td><td>0.00</td><td>17.20</td><td>2,369,664.00 <i>gal</i></td></tr><tr><td>Application event totals</td><td></td><td>0.00</td><td>0.00</td><td>0.00</td><td>17.20</td><td></td></tr></table>					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	17.20	2,369,664.00 <i>gal</i>	Application event totals		0.00	0.00	0.00	17.20								
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	17.20	2,369,664.00 <i>gal</i>																										
Application event totals		0.00	0.00	0.00	17.20																											
08/19/2023	Surface (irrigation)	No precipitation	Light rain	No precipitation																												
<table><tr><th>Source description</th><th>Material type</th><th>N (lbs/acre)</th><th>P (lbs/acre)</th><th>K (lbs/acre)</th><th>Salt (lbs/acre)</th><th>Amount</th></tr><tr><td>Canal</td><td>Surface water</td><td>0.00</td><td>0.00</td><td>0.00</td><td>19.34</td><td>2,664,872.00 <i>gal</i></td></tr><tr><td>Application event totals</td><td></td><td>0.00</td><td>0.00</td><td>0.00</td><td>19.34</td><td></td></tr></table>					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	19.34	2,664,872.00 <i>gal</i>	Application event totals		0.00	0.00	0.00	19.34								
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	19.34	2,664,872.00 <i>gal</i>																										
Application event totals		0.00	0.00	0.00	19.34																											

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2 - 05/15/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
08/29/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	16.12	2,221,560.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	16.12	

3 - 11/07/2022: Triticale, soft dough

Field name: 3

Crop: Triticale, soft dough

Plant date: 11/07/2022

Application date	Application method		Precipitation 24 hours prior	Precipitation during application			Precipitation 24 hours following
12/12/2022	Surface (irrigation)		Steady rain	Light rain			No precipitation
Source description		Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW Application		Process wastewater	124.66	26.88	163.83	921.40	588,000.00 <i>gal</i>
Application event totals			124.66	26.88	163.83	921.40	
02/20/2023	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
WW Application		Process wastewater	169.95	47.67	210.29	716.56	336,000.00 <i>gal</i>
Application event totals			169.95	47.67	210.29	716.56	
03/12/2023	Surface (irrigation)		Steady rain	No precipitation			Light rain
Source description		Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW Application		Process wastewater	148.71	41.71	184.01	626.99	294,000.00 <i>gal</i>
Application event totals			148.71	41.71	184.01	626.99	

3 - 05/18/2023: Corn, silage

Field name: 3

Crop: Corn, silage

Plant date: 05/18/2023

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3 - 05/18/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following																												
04/29/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation																												
<table><tr><th>Source description</th><th>Material type</th><th>N (lbs/acre)</th><th>P (lbs/acre)</th><th>K (lbs/acre)</th><th>Salt (lbs/acre)</th><th>Amount</th></tr><tr><td>Canal</td><td>Surface water</td><td>0.00</td><td>0.00</td><td>0.00</td><td>32.96</td><td>3,554,496.00 <i>gal</i></td></tr><tr><td>Application event totals</td><td></td><td>0.00</td><td>0.00</td><td>0.00</td><td>32.96</td><td></td></tr></table>					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	32.96	3,554,496.00 <i>gal</i>	Application event totals		0.00	0.00	0.00	32.96								
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	32.96	3,554,496.00 <i>gal</i>																										
Application event totals		0.00	0.00	0.00	32.96																											
06/17/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation																												
<table><tr><th>Source description</th><th>Material type</th><th>N (lbs/acre)</th><th>P (lbs/acre)</th><th>K (lbs/acre)</th><th>Salt (lbs/acre)</th><th>Amount</th></tr><tr><td>WW Application</td><td>Process wastewater</td><td>74.47</td><td>14.11</td><td>108.95</td><td>538.73</td><td>325,500.00 <i>gal</i></td></tr><tr><td>Canal</td><td>Surface water</td><td>0.00</td><td>0.00</td><td>0.00</td><td>20.60</td><td>2,221,560.00 <i>gal</i></td></tr><tr><td>Application event totals</td><td></td><td>74.47</td><td>14.11</td><td>108.95</td><td>559.33</td><td></td></tr></table>					Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount	WW Application	Process wastewater	74.47	14.11	108.95	538.73	325,500.00 <i>gal</i>	Canal	Surface water	0.00	0.00	0.00	20.60	2,221,560.00 <i>gal</i>	Application event totals		74.47	14.11	108.95	559.33	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount																										
WW Application	Process wastewater	74.47	14.11	108.95	538.73	325,500.00 <i>gal</i>																										
Canal	Surface water	0.00	0.00	0.00	20.60	2,221,560.00 <i>gal</i>																										
Application event totals		74.47	14.11	108.95	559.33																											
07/06/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation																												
<table><tr><th>Source description</th><th>Material type</th><th>N (lbs/acre)</th><th>P (lbs/acre)</th><th>K (lbs/acre)</th><th>Salt (lbs/acre)</th><th>Amount</th></tr><tr><td>WW Application</td><td>Process wastewater</td><td>74.47</td><td>14.11</td><td>108.95</td><td>538.73</td><td>325,500.00 <i>gal</i></td></tr><tr><td>Canal</td><td>Surface water</td><td>0.00</td><td>0.00</td><td>0.00</td><td>17.85</td><td>1,925,352.00 <i>gal</i></td></tr><tr><td>Application event totals</td><td></td><td>74.47</td><td>14.11</td><td>108.95</td><td>556.58</td><td></td></tr></table>					Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount	WW Application	Process wastewater	74.47	14.11	108.95	538.73	325,500.00 <i>gal</i>	Canal	Surface water	0.00	0.00	0.00	17.85	1,925,352.00 <i>gal</i>	Application event totals		74.47	14.11	108.95	556.58	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount																										
WW Application	Process wastewater	74.47	14.11	108.95	538.73	325,500.00 <i>gal</i>																										
Canal	Surface water	0.00	0.00	0.00	17.85	1,925,352.00 <i>gal</i>																										
Application event totals		74.47	14.11	108.95	556.58																											
07/16/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation																												
<table><tr><th>Source description</th><th>Material type</th><th>N (lbs/acre)</th><th>P (lbs/acre)</th><th>K (lbs/acre)</th><th>Salt (lbs/acre)</th><th>Amount</th></tr><tr><td>Canal</td><td>Surface water</td><td>0.00</td><td>0.00</td><td>0.00</td><td>24.72</td><td>2,665,872.00 <i>gal</i></td></tr><tr><td>Application event totals</td><td></td><td>0.00</td><td>0.00</td><td>0.00</td><td>24.72</td><td></td></tr></table>					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	24.72	2,665,872.00 <i>gal</i>	Application event totals		0.00	0.00	0.00	24.72								
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	24.72	2,665,872.00 <i>gal</i>																										
Application event totals		0.00	0.00	0.00	24.72																											
07/30/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation																												
<table><tr><th>Source description</th><th>Material type</th><th>N (lbs/acre)</th><th>P (lbs/acre)</th><th>K (lbs/acre)</th><th>Salt (lbs/acre)</th><th>Amount</th></tr><tr><td>Canal</td><td>Surface water</td><td>0.00</td><td>0.00</td><td>0.00</td><td>20.60</td><td>2,221,560.00 <i>gal</i></td></tr><tr><td>Application event totals</td><td></td><td>0.00</td><td>0.00</td><td>0.00</td><td>20.60</td><td></td></tr></table>					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	20.60	2,221,560.00 <i>gal</i>	Application event totals		0.00	0.00	0.00	20.60								
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	20.60	2,221,560.00 <i>gal</i>																										
Application event totals		0.00	0.00	0.00	20.60																											

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3 - 05/18/2023: Corn, silage

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
WW Application		Process wastewater	80.14	17.28	105.32	592.33	378,000.00 <i>gal</i>
Canal		Surface water	0.00	0.00	0.00	19.23	2,073,456.00 <i>gal</i>
Application event totals			80.14	17.28	105.32	611.55	
08/21/2023	Surface (irrigation)	No precipitation	Light rain			No precipitation	
Source description		Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW Application		Process wastewater	53.43	11.52	70.21	394.89	252,000.00 <i>gal</i>
Canal		Surface water	0.00	0.00	0.00	16.48	1,777,248.00 <i>gal</i>
Application event totals			53.43	11.52	70.21	411.36	
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	21.97	2,369,664.00 <i>gal</i>
Application event totals			0.00	0.00	0.00	21.97	

4 - 11/14/2022: Triticale, soft dough

Field name: 4

Crop: Triticale, soft dough

Plant date: 11/14/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
12/15/2022	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW Application	Process wastewater	84.36	18.19	110.87	623.50	840,000.00 <i>gal</i>
Application event totals		84.36	18.19	110.87	623.50	

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4 - 11/14/2022: Triticale, soft dough

Application date	Application method		Precipitation 24 hours prior		Precipitation during application		Precipitation 24 hours following		
02/23/2023	Surface (irrigation)		Light rain		No precipitation		No precipitation		
Source description			Material type		N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW Application			Process wastewater		150.94	42.34	186.77	636.42	630,000.00 <i>gal</i>
Application event totals					150.94	42.34	186.77	636.42	
03/15/2023	Surface (irrigation)		No precipitation		Steady rain		Light rain		
Source description			Material type		N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW Application			Process wastewater		120.75	33.87	149.42	509.13	504,000.00 <i>gal</i>
Application event totals					120.75	33.87	149.42	509.13	

4 - 05/11/2023: Corn, silage

Field name: 4

Crop: Corn, silage

Plant date: 05/11/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
04/24/2023	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	23.42	5,331,744.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	23.42	
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
Canal	Surface water	0.00	0.00	0.00	28.62	6,516,576.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	28.62	
07/12/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	23.42	5,331,744.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	23.42	

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4 - 05/11/2023: 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
Canal	Surface water	0.00	0.00	0.00	24.72	5,627,952.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	24.72	
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
WW Application	Process wastewater	210.89	45.47	277.16	1,558.76	2,100,000.00 <i>gal</i>
Canal	Surface water	0.00	0.00	0.00	26.02	5,924,160.00 <i>gal</i>
Application event totals		210.89	45.47	277.16	1,584.78	
08/19/2023	Surface (irrigation)	No precipitation	No precipitation	Light rain		
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	18.21	4,146,912.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	18.21	
08/30/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	26.02	5,924,160.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	26.02	

5 - 11/21/2022: Triticale, soft dough

Field name: 5

Crop: Triticale, soft dough

Plant date: 11/21/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
12/20/2022	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW Application	Process wastewater	85.86	18.51	112.85	634.64	1,260,000.00 <i>gal</i>
Application event totals		85.86	18.51	112.85	634.64	

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5 - 11/21/2022: Triticale, soft dough

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
02/27/2023	Surface (irrigation)	Light rain	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW Application	Process wastewater	109.25	30.64	135.19	460.64	672,000.00 <i>gal</i>
Application event totals		109.25	30.64	135.19	460.64	
03/18/2023	Surface (irrigation)	No precipitation	Light rain	Steady rain		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW Application	Process wastewater	81.94	22.98	101.39	345.48	504,000.00 <i>gal</i>
Application event totals		81.94	22.98	101.39	345.48	

5 - 07/04/2023: Corn, silage

Field name: 5

Crop: Corn, silage

Plant date: 07/04/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
07/08/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW Application	Process wastewater	111.19	21.07	162.68	804.37	1,512,000.00 <i>gal</i>
Canal	Surface water	0.00	0.00	0.00	30.90	10,367,280.00 <i>gal</i>
Application event totals		111.19	21.07	162.68	835.27	
07/20/2023	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
WW Application	Process wastewater	61.77	11.70	90.38	446.87	840,000.00 <i>gal</i>
Canal	Surface water	0.00	0.00	0.00	24.72	8,293,824.00 <i>gal</i>
Application event totals		61.77	11.70	90.38	471.59	

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

5 - 07/04/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
08/02/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	25.16	8,441,928.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	25.16	
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
Canal	Surface water	0.00	0.00	0.00	24.72	8,293,824.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	24.72	
08/22/2023	Surface (irrigation)	Light rain	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
WW Application	Process wastewater	80.14	17.28	105.32	592.33	1,176,000.00 <i>gal</i>
Canal	Surface water	0.00	0.00	0.00	30.46	10,219,176.00 <i>gal</i>
Application event totals		80.14	17.28	105.32	622.78	
09/08/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	26.48	8,886,240.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	26.48	

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

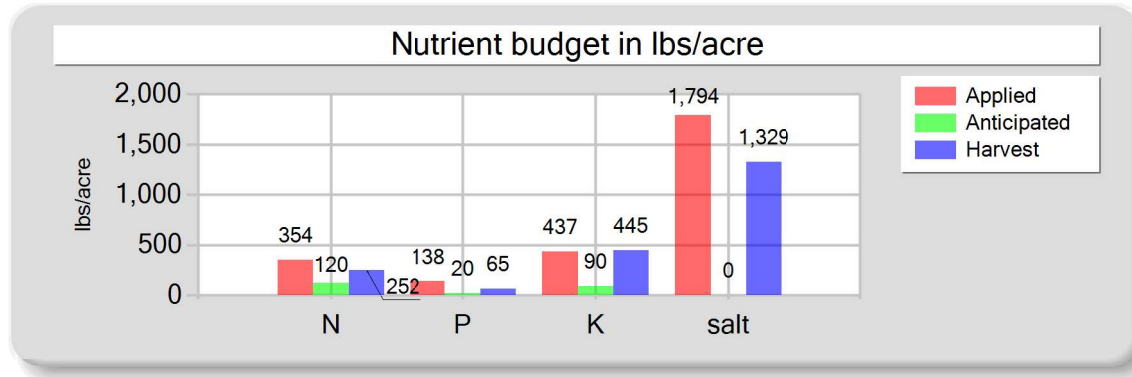
B. NUTRIENT BUDGET

1 - 11/01/2022: Triticale, soft dough

Field name: 1

Crop: Triticale, soft dough

Plant date: 11/01/2022



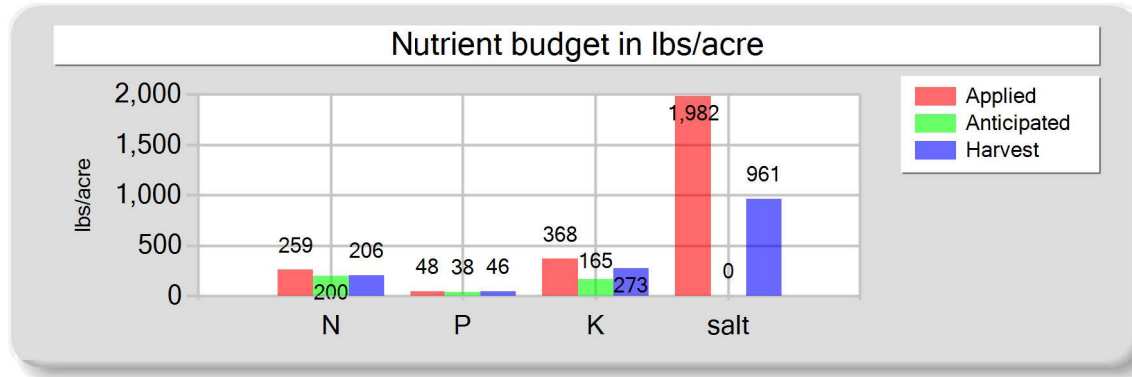
	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)	Fresh water applied
Existing soil nutrient content	0.00	0.00	0.00	0.00	0.00 gallons
Plowdown credit	0.00	0.00	0.00	0.00	0.00 acre-inches
Commercial fertilizer / Other	0.00	0.00	0.00	0.00	0.00 inches/acre
Dry manure	0.00	0.00	0.00	0.00	
Process wastewater	346.51	137.96	436.83	1,794.06	Process wastewater applied
Fresh water	0.00	0.00	0.00	0.00	2,971,500.00 gallons
Atmospheric deposition	7.00	0.00	0.00	0.00	109.43 acre-inches
Total nutrients applied	353.51	137.96	436.83	1,794.06	1.99 inches/acre
Anticipated crop nutrient removal	120.00	20.40	90.00	0.00	
Actual crop nutrient removal	252.00	65.45	445.09	1,328.56	Total harvests for the crop
Nutrient balance	101.51	72.51	-8.26	465.50	1 harvests
Applied to removed ratio	1.40	2.11	0.98	1.35	

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

1 - 05/26/2023: Corn, silage

Field name: 1 Crop: Corn, silage Plant date: 05/26/2023



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)	Fresh water applied
Existing soil nutrient content	0.00	0.00	0.00	0.00	53,415,936.00 <i>gallons</i>
Plowdown credit	0.00	0.00	0.00	0.00	1,967.13 <i>acre-inches</i>
Commercial fertilizer / Other	0.00	0.00	0.00	0.00	35.77 <i>inches/acre</i>
Dry manure	0.00	0.00	0.00	0.00	
Process wastewater	251.59	47.67	368.08	1,820.00	Process wastewater applied
Fresh water	0.00	0.00	0.00	162.09	3,360,000.00 <i>gallons</i>
Atmospheric deposition	7.00	0.00	0.00	0.00	123.74 <i>acre-inches</i>
Total nutrients applied	258.59	47.67	368.08	1,982.09	2.25 <i>inches/acre</i>
Anticipated crop nutrient removal	200.00	37.50	165.00	0.00	
Actual crop nutrient removal	206.16	46.28	273.47	961.28	Total harvests for the crop
Nutrient balance	52.43	1.39	94.61	1,020.81	1 <i>harvests</i>
Applied to removed ratio	1.25	1.03	1.35	2.06	

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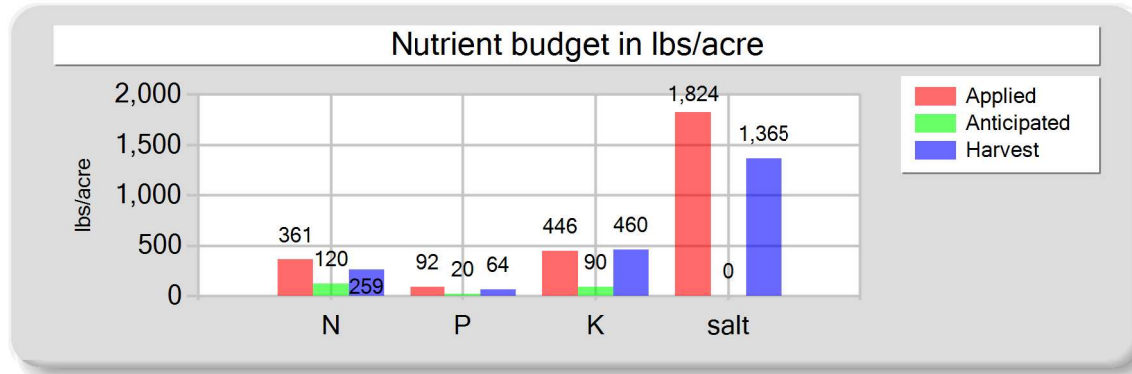
Reporting period 01/01/2023 to 12/31/2023.

2 - 11/07/2022: Triticale, soft dough

Field name: 2

Crop: Triticale, soft dough

Plant date: 11/07/2022



	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	353.91	92.48	445.96	1,824.07
Fresh water	0.00	0.00	0.00	0.00
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	360.91	92.48	445.96	1,824.07
Anticipated crop nutrient removal	120.00	20.40	90.00	0.00
Actual crop nutrient removal	258.70	63.91	459.57	1,364.63
Nutrient balance	102.22	28.57	-13.60	459.44
Applied to removed ratio	1.40	1.45	0.97	1.34

Fresh water applied
0.00 <i>gallons</i>
0.00 <i>acre-inches</i>
0.00 <i>inches/acre</i>

Process wastewater applied
1,260,000.00 <i>gallons</i>
46.40 <i>acre-inches</i>
2.02 <i>inches/acre</i>

Total harvests for the crop
1 <i>harvests</i>

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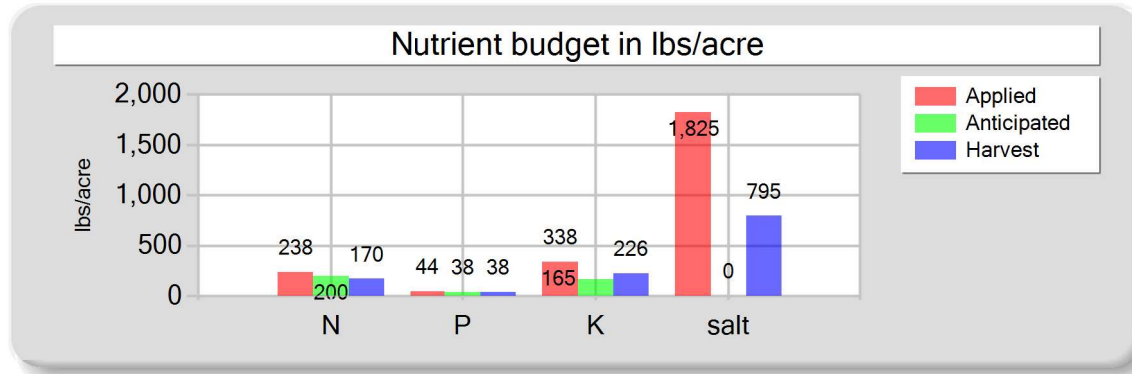
Reporting period 01/01/2023 to 12/31/2023.

2 - 05/15/2023: Corn, silage

Field name: 2

Crop: Corn, silage

Plant date: 05/15/2023



	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	231.10	43.81	338.32	1,672.87
Fresh water	0.00	0.00	0.00	152.60
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	238.10	43.81	338.32	1,825.47
Anticipated crop nutrient removal	200.00	37.50	165.00	0.00
Actual crop nutrient removal	170.43	38.26	226.09	794.71
Nutrient balance	67.67	5.55	112.23	1,030.76
Applied to removed ratio	1.40	1.15	1.50	2.30

Fresh water applied
21,029,768.00 <i>gallons</i>
774.45 <i>acre-inches</i>
33.67 <i>inches/acre</i>

Process wastewater applied
1,291,500.00 <i>gallons</i>
47.56 <i>acre-inches</i>
2.07 <i>inches/acre</i>

Total harvests for the crop
1 <i>harvests</i>

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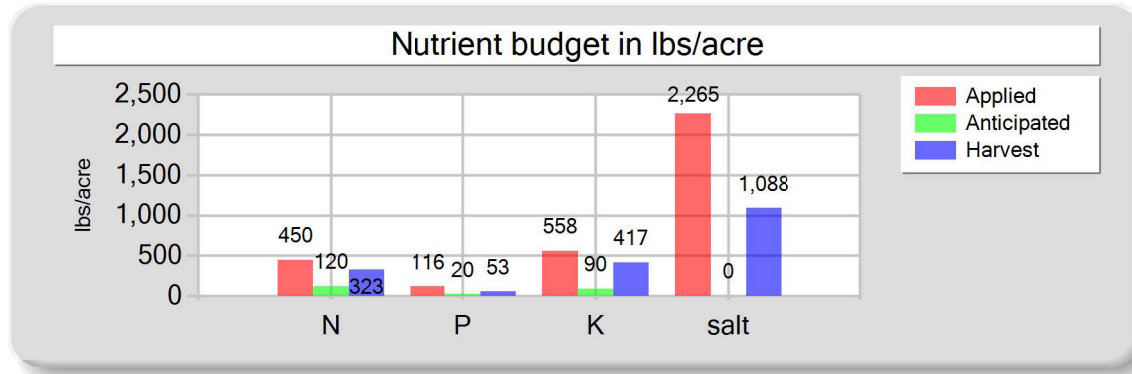
Reporting period 01/01/2023 to 12/31/2023.

3 - 11/07/2022: Triticale, soft dough

Field name: 3

Crop: Triticale, soft dough

Plant date: 11/07/2022



	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	443.32	116.25	558.14	2,264.94
Fresh water	0.00	0.00	0.00	0.00
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	450.32	116.25	558.14	2,264.94
Anticipated crop nutrient removal	120.00	20.40	90.00	0.00
Actual crop nutrient removal	323.33	53.33	416.67	1,088.00
Nutrient balance	126.98	62.92	141.47	1,176.94
Applied to removed ratio	1.39	2.18	1.34	2.08

Fresh water applied
0.00 gallons
0.00 acre-inches
0.00 inches/acre

Process wastewater applied
1,218,000.00 gallons
44.85 acre-inches
2.49 inches/acre

Total harvests for the crop
1 harvests

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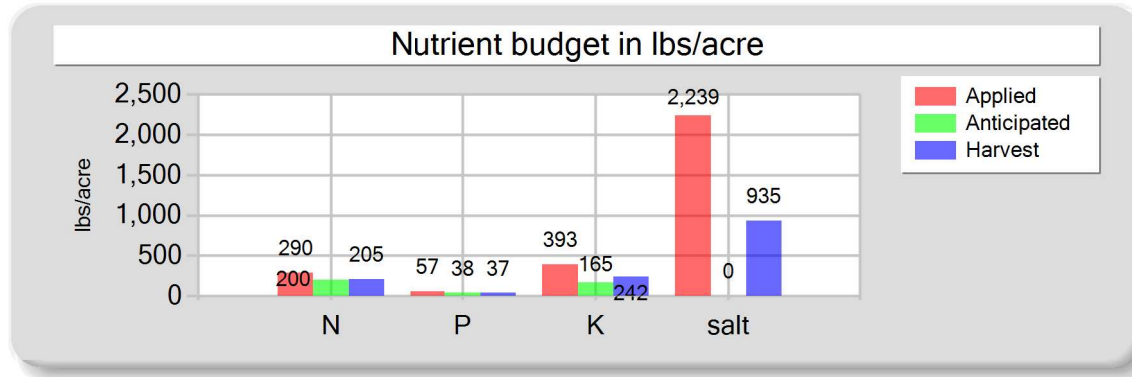
Reporting period 01/01/2023 to 12/31/2023.

3 - 05/18/2023: Corn, silage

Field name: 3

Crop: Corn, silage

Plant date: 05/18/2023



	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	282.51	57.02	393.44	2,064.68
Fresh water	0.00	0.00	0.00	174.40
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	289.51	57.02	393.44	2,239.08
Anticipated crop nutrient removal	200.00	37.50	165.00	0.00
Actual crop nutrient removal	205.33	36.67	242.00	935.00
Nutrient balance	84.18	20.35	151.44	1,304.08
Applied to removed ratio	1.41	1.56	1.63	2.39

Fresh water applied
18,809,208.00 <i>gallons</i>
692.68 <i>acre-inches</i>
38.48 <i>inches/acre</i>

Process wastewater applied
1,281,000.00 <i>gallons</i>
47.17 <i>acre-inches</i>
2.62 <i>inches/acre</i>

Total harvests for the crop
1 <i>harvests</i>

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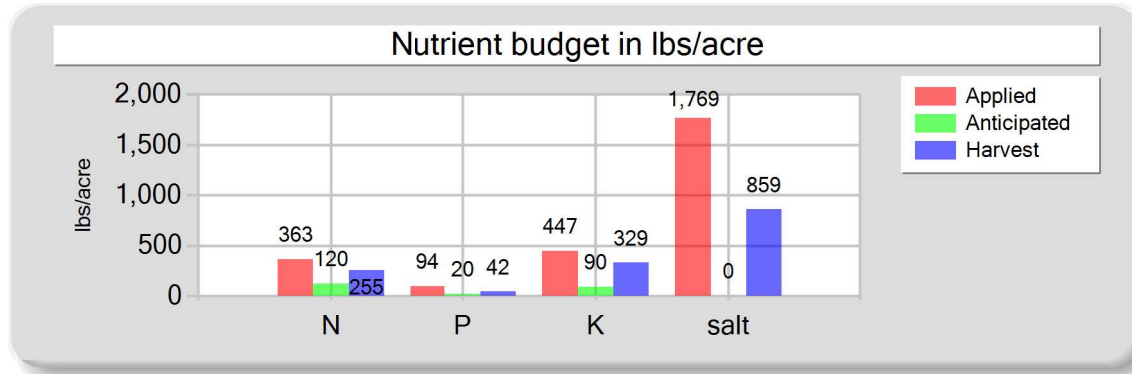
Reporting period 01/01/2023 to 12/31/2023.

4 - 11/14/2022: Triticale, soft dough

Field name: 4

Crop: Triticale, soft dough

Plant date: 11/14/2022



	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	356.05	94.39	447.06	1,769.05
Fresh water	0.00	0.00	0.00	0.00
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	363.05	94.39	447.06	1,769.05
Anticipated crop nutrient removal	120.00	20.40	90.00	0.00
Actual crop nutrient removal	255.26	42.11	328.95	858.95
Nutrient balance	107.79	52.29	118.11	910.10
Applied to removed ratio	1.42	2.24	1.36	2.06

Fresh water applied
0.00 gallons
0.00 acre-inches
0.00 inches/acre

Process wastewater applied
1,974,000.00 gallons
72.70 acre-inches
1.91 inches/acre

Total harvests for the crop
1 harvests

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

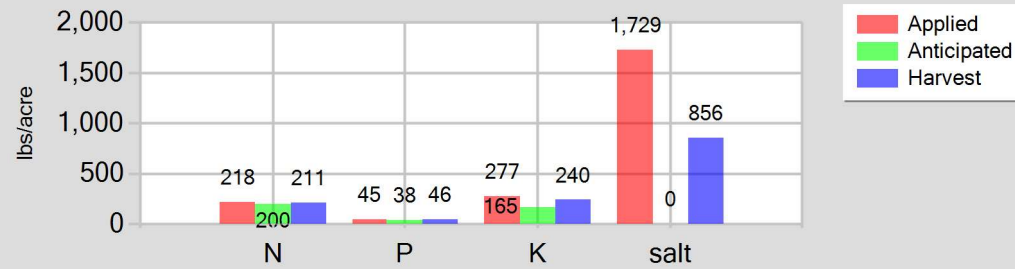
4 - 05/11/2023: Corn, silage

Field name: 4

Crop: Corn, silage

Plant date: 05/11/2023

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	210.89	45.47	277.16	1,558.76
Fresh water	0.00	0.00	0.00	170.43
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	217.89	45.47	277.16	1,729.19
Anticipated crop nutrient removal	200.00	37.50	165.00	0.00
Actual crop nutrient removal	210.53	46.32	240.00	856.42
Nutrient balance	7.37	-0.84	37.16	872.77
Applied to removed ratio	1.03	0.98	1.15	2.02

Fresh water applied
38,803,248.00 gallons
1,428.99 acre-inches
37.61 inches/acre
Process wastewater applied
2,100,000.00 gallons
77.34 acre-inches
2.04 inches/acre
Total harvests for the crop
1 harvests

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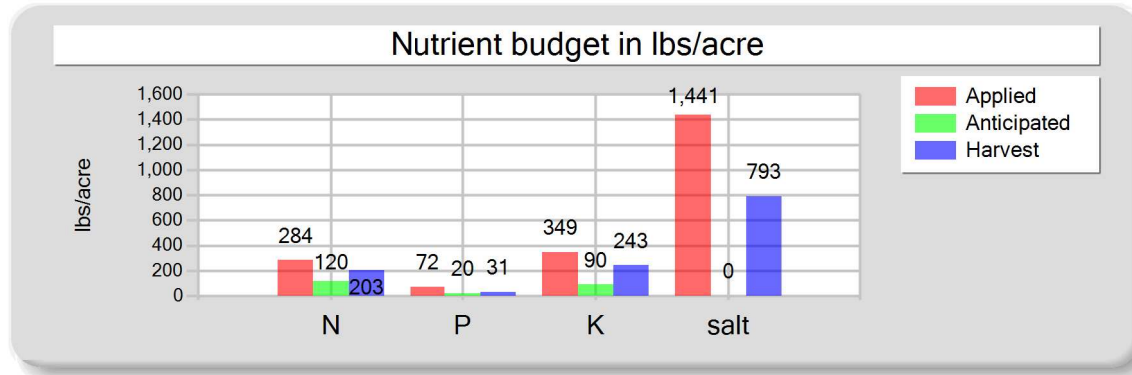
Reporting period 01/01/2023 to 12/31/2023.

5 - 11/21/2022: Triticale, soft dough

Field name: 5

Crop: Triticale, soft dough

Plant date: 11/21/2022



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)	Fresh water applied
Existing soil nutrient content	0.00	0.00	0.00	0.00	0.00 <i>gallons</i>
Plowdown credit	0.00	0.00	0.00	0.00	0.00 <i>acre-inches</i>
Commercial fertilizer / Other	0.00	0.00	0.00	0.00	0.00 <i>inches/acre</i>
Dry manure	0.00	0.00	0.00	0.00	
Process wastewater	277.06	72.14	349.43	1,440.76	Process wastewater applied
Fresh water	0.00	0.00	0.00	0.00	2,436,000.00 <i>gallons</i>
Atmospheric deposition	7.00	0.00	0.00	0.00	89.71 <i>acre-inches</i>
Total nutrients applied	284.06	72.14	349.43	1,440.76	1.60 <i>inches/acre</i>
Anticipated crop nutrient removal	120.00	20.40	90.00	0.00	
Actual crop nutrient removal	202.86	31.43	242.86	792.86	Total harvests for the crop
Nutrient balance	81.20	40.71	106.57	647.91	1 <i>harvests</i>
Applied to removed ratio	1.40	2.30	1.44	1.82	

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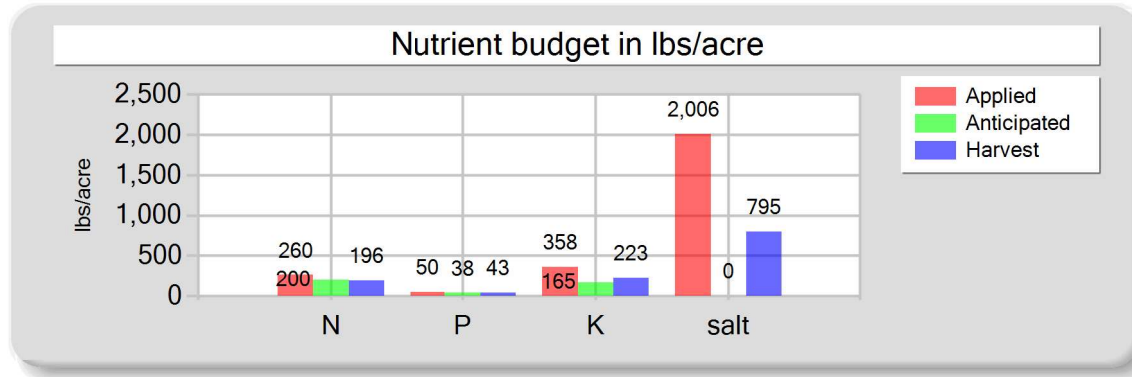
Reporting period 01/01/2023 to 12/31/2023.

5 - 07/04/2023: Corn, silage

Field name: 5

Crop: Corn, silage

Plant date: 07/04/2023



	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	253.11	50.05	358.38	1,843.58
Fresh water	0.00	0.00	0.00	162.44
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	260.11	50.05	358.38	2,006.01
Anticipated crop nutrient removal	200.00	37.50	165.00	0.00
Actual crop nutrient removal	195.54	43.02	222.91	795.44
Nutrient balance	64.57	7.03	135.47	1,210.57
Applied to removed ratio	1.33	1.16	1.61	2.52

Fresh water applied
54,502,272.00 gallons
2,007.13 acre-inches
35.84 inches/acre

Process wastewater applied
3,528,000.00 gallons
129.92 acre-inches
2.32 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

COMPOST

Sample and source description: COMPOST

Sample date: 08/28/2023 Material type: Separator solids Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 32.3 %

	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	25,300.00	19,500.00	43,100.00	19,400.00	8,100.00	5,100.00	5,700.00	10,100.00		
DL	200.00	100.00	300.00	200.00	200.00	300.00	100.00	300.00		

Dairy Manure

Sample and source description: Dairy Manure

Sample date: 08/28/2023 Material type: Separator solids Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 39.8 %

	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	23,300.00	16,300.00	31,900.00	14,900.00	6,700.00	4,200.00	3,800.00	5,900.00		
DL	200.00	100.00	300.00	200.00	200.00	300.00	100.00	300.00		

GVS 1 Dairy Compost

Sample and source description: GVS 1 Dairy Compost

Sample date: 10/01/2023 Material type: Separator solids Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 32.6 %

	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	24,300.00	16,700.00	41,900.00	29,400.00	9,700.00	4,300.00	6,000.00	9,700.00		
DL	200.00	100.00	300.00	200.00	200.00	300.00	100.00	300.00		

B. PROCESS WASTEWATER ANALYSES

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

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

White River Dairy

Sample and source description: White River Dairy

Sample date: 05/11/2023 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	1,090.00	426.00		1.00	306.00	1,350.00								11,700.00	4,600
DL	1.00	0.50		0.10	0.10	0.50								10.00	10

WRD

Sample and source description: WRD

Sample date: 06/29/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: _____

	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	493.00	396.00		0.50	93.50	722.00								7,130.00	3,570
DL	1.00	0.50		0.10	0.10	0.50								10.00	10

WRD Lagoon

Sample and source description: WRD Lagoon

Sample date: 11/09/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: _____

	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	457.00	373.00		0.30	98.60	601.00								6,730.00	3,380
DL	1.00	0.50		0.10	0.10	0.50								10.00	10

C. FRESH WATER ANALYSES

#4 Dairy Barn Well- WRD Dairy

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

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

#4 Dairy Barn Well- WRD Dairy

WRD Dairy

Sample description: WRD Dairy

Sample date: 09/07/2023 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	7.04	0.00	7.00								338.00	240
DL	1.00	0.50	0.10								10.00	10

#6 Parks Well-WRD Dairy E

WRD Dairy East

Sample description: WRD Dairy East

Sample date: 09/07/2023 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	10.00	0.00	10.00								394.00	280
DL	1.00	0.50	0.10								10.00	10

#7 Jenzens-WRD Calf Ranch

WRD Calf Ranch

Sample description: WRD Calf Ranch

Sample date: 09/07/2023 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	5.50	0.00	5.50								404.00	125
DL	1.00	0.50	0.10								10.00	10

Canal

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

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

Canal

MID Canal

Sample description: MID Canal

Sample date: 08/15/2023 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								23.40	20
DL	1.00		0.10								10.00	10

D. SOIL ANALYSES

No soil analyses entered.

E. PLANT TISSUE ANALYSES

1 - 11/01/2022: Triticale, soft dough

Field 1

Sample and source description: Field 1

Sample date: 05/04/2023 Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 64.7 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	7,700.00	2,000.00	13,600.00		11.50
DL	100.00	200.00	100.00		0.01

1 - 05/26/2023: Corn, silage

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

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

1 - 05/26/2023: Corn, silage

Field 1 & 2

Sample and source description: Field 1 & 2

Sample date: 09/18/2023 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	4,900.00	1,100.00	6,500.00		6.80
DL	100.00	100.00	100.00		0.01

2 - 11/07/2022: Triticale, soft dough

Field 2

Sample and source description: Field 2

Sample date: 05/04/2023 Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 52.3 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	8,500.00	2,100.00	15,100.00		9.40
DL	100.00	100.00	100.00		0.01

2 - 05/15/2023: Corn, silage

Field 1 & 2

Sample and source description: Field 1 & 2

Sample date: 09/18/2023 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	4,900.00	1,100.00	6,500.00		6.80
DL	100.00	100.00	100.00		0.01

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

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

3 - 11/07/2022: Triticale, soft dough

Field 3 and 4

Sample and source description: Field 3 and 4

Sample date: 05/10/2023 Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 68.0 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	9,700.00	1,600.00	12,500.00		10.20
DL	100.00	100.00	100.00		0.01

3 - 05/18/2023: Corn, silage

Field 3

Sample and source description: Field 3

Sample date: 09/18/2023 Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 62.5 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	5,600.00	1,000.00	6,600.00		6.80
DL	100.00	100.00	100.00		0.01

4 - 11/14/2022: Triticale, soft dough

Field 3 and 4

Sample and source description: Field 3 and 4

Sample date: 05/10/2023 Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 68.0 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	9,700.00	1,600.00	12,500.00		10.20
DL	100.00	100.00	100.00		0.01

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

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

4 - 05/11/2023: Corn, silage

Field 4 & 5

Sample and source description: Field 4 & 5

Sample date: 09/18/2023 Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 66.1 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	5,000.00	1,100.00	5,700.00		6.00
DL	100.00	100.00	100.00		0.01

5 - 11/21/2022: Triticale, soft dough

Field 5

Sample and source description: Field 5

Sample date: 05/10/2023 Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 77.8 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	7,100.00	1,100.00	8,500.00		12.50
DL	100.00	100.00	100.00		0.01

5 - 07/04/2023: Corn, silage

Field 4 & 5

Sample and source description: Field 4 & 5

Sample date: 09/18/2023 Source of analysis: Lab analysis Method of reporting: As-is

Moisture: 66.1 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	5,000.00	1,100.00	5,700.00		6.00
DL	100.00	100.00	100.00		0.01

F. SUBSURFACE (TILE) DRAINAGE ANALYSES

No subsurface (tile) drainage analyses entered.

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

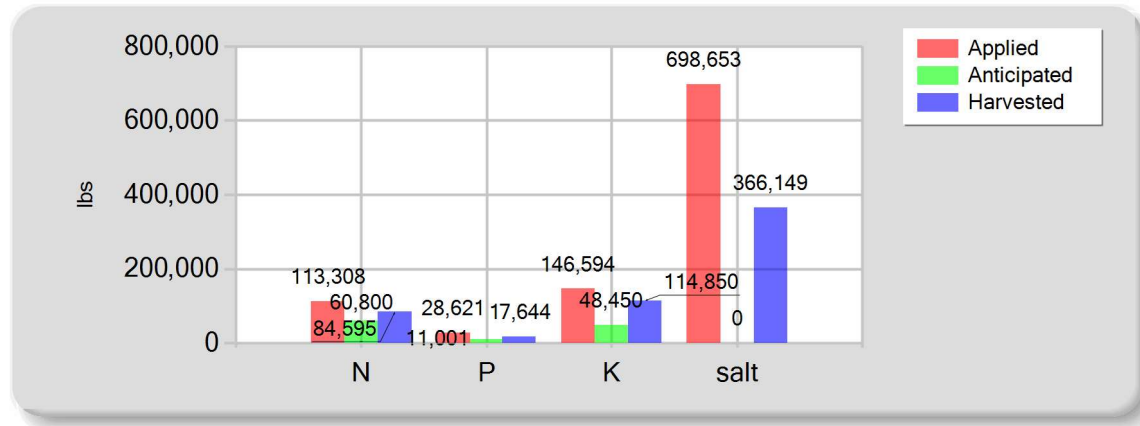
Reporting period 01/01/2023 to 12/31/2023.

NUTRIENT APPLICATIONS, POTENTIAL REMOVAL, AND BALANCE

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

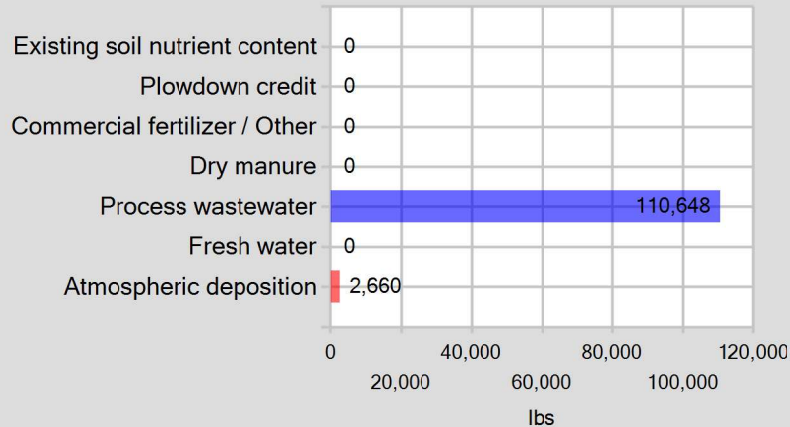
	Total N (lbs)	Total P (lbs)	Total K (lbs)	Total salt (lbs)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	110,648.48	28,620.69	146,594.19	667,516.09
Fresh water	0.00	0.00	0.00	31,136.94
Atmospheric deposition	2,660.00	0.00	0.00	0.00
Total nutrients applied	113,308.48	28,620.69	146,594.19	698,653.03
Anticipated crop nutrient removal	60,800.00	11,001.00	48,450.00	0.00
Actual crop nutrient removal	84,594.60	17,644.40	114,850.00	366,148.87
Nutrient balance	28,713.88	10,976.29	31,744.19	332,504.16
Applied to removed ratio	1.34	1.62	1.28	1.91

B. POUNDS OF NUTRIENT APPLIED VS. CROP REMOVAL

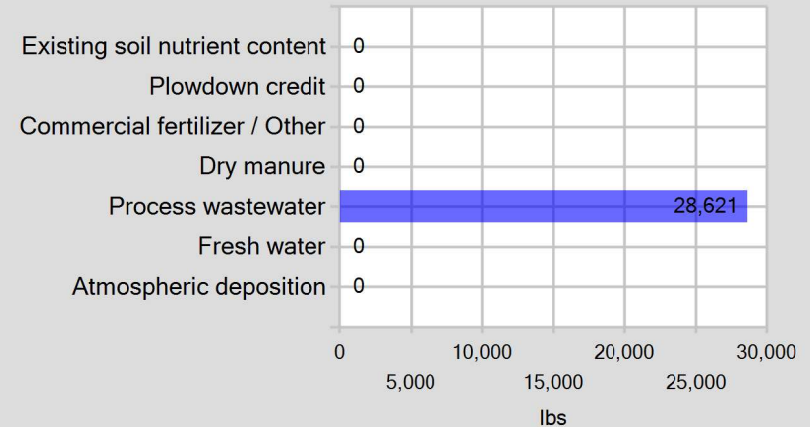


C. POUNDS OF NUTRIENT APPLIED BY MATERIAL TYPE

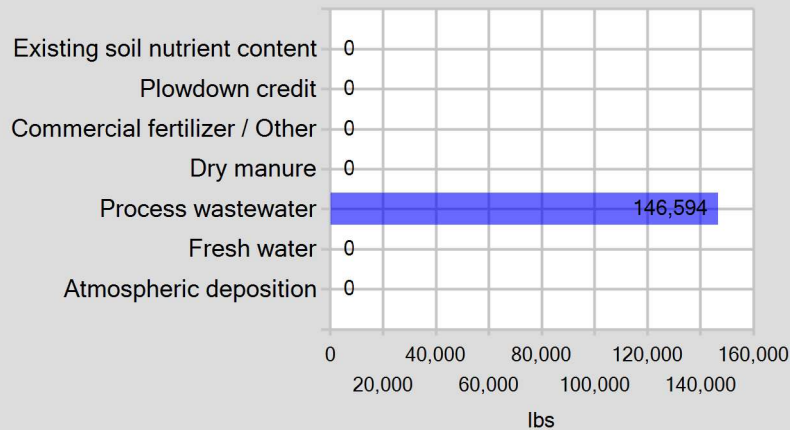
Pounds of nitrogen applied



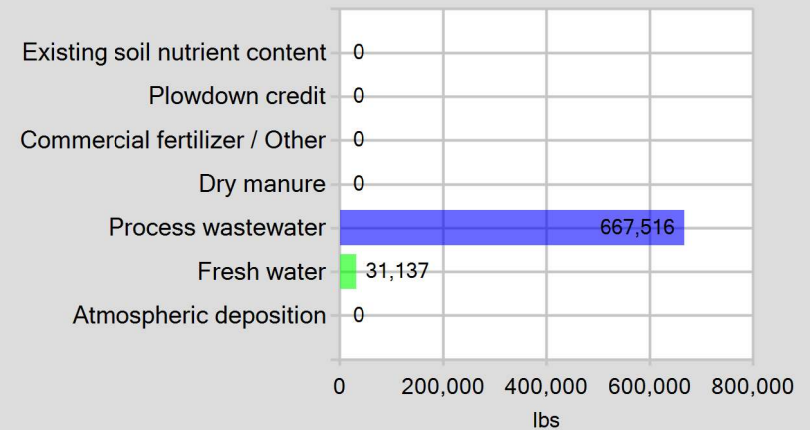
Pounds of phosphorus applied



Pounds of potassium applied



Pounds of salt applied



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

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

EXCEPTION REPORTING

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

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

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

B. STORM WATER DISCHARGES

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

No stormwater discharges occurred during the reporting period.

C. LAND APPLICATION AREA TO SURFACE WATER DISCHARGES

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

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

NUTRIENT MANAGEMENT PLAN AND EXPORT AGREEMENT STATEMENTS

A. NUTRIENT MANAGEMENT PLAN STATEMENTS

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

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

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

B. EXPORT AGREEMENT STATEMENT

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

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

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

ADDITIONAL NOTES

A. NOTES

Wells 1-3 are no longer part of the dairy as the acreage they were on (Former Machado Farms Fields 1&2) were sold in 2023. Well #8 is currently non-operational until electric service can be reestablished with PGE for that location. The dairy house well was mistakenly missed in 2023 but will be sampled in 2024.

No well was available for freshwater irrigations during the 2023 winter forage season, however, a new irrigation well has been installed and will be included in the 2024 Annual Report.

With the current operator transitioning to the facility mid-2022 winter forage crop, 2023 marked their first full year managing the crop season. The operators are still in a learning curve and are working to continue to evaluate and improve their field and nutrient management in an effort to address ratios that are over 1.4.

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.



Manuel Machado (Jun 22, 2024 07:59 PDT)

SIGNATURE OF OWNER OF FACILITY

Manuel Machado

PRINT OR TYPE NAME

06/22/2024

DATE



Mark Hooker (Jun 23, 2024 16:21 PDT)

SIGNATURE OF OPERATOR OF FACILITY

Mark Hooker

PRINT OR TYPE NAME

06/23/2024

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.

Diamond H Dairy
9730 Ave 18 1/2
Chowchilla, CA 93610

Account# 00-0015888
Account Manager: Ben Nydam
Submitted By: Greg Hooker
Ranch: Diamond H Dairy

Received: 09/07/2023 14:19
Reported: 09/15/2023 10:51

Samples in this Report

Lab ID	Sample	Matrix	Sampled By	Crop	Date Sampled
23I0493-01	WRD Dairy	Well Water	Greg Hooker		09/07/2023 8:15
23I0493-02	WRD Calf Ranch	Well Water	Greg Hooker		09/07/2023 8:00
23I0493-03	WRD Dairy East	Well Water	Greg Hooker		09/07/2023 8:30
23I0493-04	1	Well Water	Greg Hooker		09/07/2023 9:00
23I0493-05	12	Well Water	Greg Hooker		09/07/2023 9:00
23I0493-06	16	Well Water	Greg Hooker		09/07/2023 9:15
23I0493-07	52	Well Water	Greg Hooker		09/07/2023 9:15
23I0493-08	101	Well Water	Greg Hooker		09/07/2023 9:30
23I0493-09	103	Well Water	Greg Hooker		09/07/2023 9:30
23I0493-10	Dairy N	Well Water	Greg Hooker		09/07/2023 10:00
23I0493-11	Dairy S	Well Water	Greg Hooker		09/07/2023 10:00

samples not included in
this report as not part
of this dairy

Default Cooler Temperature on Receipt °C: 3.7
Containers Intact
COC/Labels Agree
Received On Ice

Notes and Definitions

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

Scott M. Friedland

Laboratory Director/Technical Manager

ELAP Certification #1595
A2LA Certification #6440.02

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Diamond H Dairy
9730 Ave 18 1/2
Chowchilla, CA 93610

Account# 00-0015888
Account Manager: Ben Nydam
Submitted By: Greg Hooker
Ranch: Diamond H Dairy

Received: 09/07/2023 14:19
Reported: 09/15/2023 10:51

Sample Results

Sample: WRD Dairy
23I0493-01 (Water)

Sampled: 9/7/2023 8:15
Sampled By: Greg Hooker

Analyte	Result	Units	Reporting Limit	DIL	DW MCL	Date/Time Analyzed	Method	Notes	Batch
Electrical Conductivity	0.34	mmhos/cm	0.01	1		09/08/23 12:00	SM 2510 B		BEI0229
Electrical Conductivity umhos	338	umhos/cm	10.0	1		09/08/23 12:00	SM 2510 B		BEI0229
Ammonia (as N)	ND	mg/L	0.00	1		09/07/23 08:15	Field		BEI0182
Nitrate Nitrogen as NO3N	7.0	mg/L	0.1	1	10	09/07/23 19:01	EPA 300.0		BEI0162
pH	7.8	units	1.0	1		09/08/23 12:00	SM 4500-H+	H	BEI0229
Total Filterable Solids (TDS)	240	mg/L	10.0	1		09/15/23 09:07	SM 2540 C		BEI0386
Temperature	25.0	°C	0.0	1		09/08/23 12:00	SM 2510 B		BEI0229
Kjeldahl Nitrogen (TKN), Total	ND	mg/L	1.00	1		09/11/23 10:20	SM 4500-NH3 C		BEI0222
Total Nitrogen	7.04	mg/L	1.00	1		09/11/23 10:20	SM 4500-NH3 C		BEI0222

Diamond H Dairy
9730 Ave 18 1/2
Chowchilla, CA 93610

Account# 00-0015888
Account Manager: Ben Nydam
Submitted By: Greg Hooker
Ranch: Diamond H Dairy

Received: 09/07/2023 14:19
Reported: 09/15/2023 10:51

Sample Results (Continued)

Sample: WRD Calf Ranch
23I0493-02 (Water)

Sampled: 9/7/2023 8:00
Sampled By: Greg Hooker

Analyte	Result	Units	Reporting Limit	DIL	DW MCL	Date/Time Analyzed	Method	Notes	Batch
Electrical Conductivity	0.40	mmhos/cm	0.01	1		09/08/23 12:01	SM 2510 B		BEI0229
Electrical Conductivity umhos	404	umhos/cm	10.0	1		09/08/23 12:01	SM 2510 B		BEI0229
Ammonia (as N)	ND	mg/L	0.00	1		09/07/23 08:00	Field		BEI0182
Nitrate Nitrogen as NO3N	5.5	mg/L	0.1	1	10	09/07/23 19:21	EPA 300.0		BEI0162
pH	7.6	units	1.0	1		09/08/23 12:01	SM 4500-H+	H	BEI0229
Total Filterable Solids (TDS)	125	mg/L	10.0	1		09/15/23 09:07	SM 2540 C		BEI0386
Temperature	25.0	°C	0.0	1		09/08/23 12:01	SM 2510 B		BEI0229
Kjeldahl Nitrogen (TKN), Total	ND	mg/L	1.00	1		09/11/23 10:22	SM 4500-NH3 C		BEI0222
Total Nitrogen	5.50	mg/L	1.00	1		09/11/23 10:22	SM 4500-NH3 C		BEI0222

Diamond H Dairy
9730 Ave 18 1/2
Chowchilla, CA 93610

Account# 00-0015888
Account Manager: Ben Nydam
Submitted By: Greg Hooker
Ranch: Diamond H Dairy

Received: 09/07/2023 14:19
Reported: 09/15/2023 10:51

Sample Results (Continued)

**Sample: WRD Dairy East
23I0493-03 (Water)**

Sampled: 9/7/2023 8:30
Sampled By: Greg Hooker

Analyte	Result	Units	Reporting Limit	DIL	DW MCL	Date/Time Analyzed	Method	Notes	Batch
Electrical Conductivity	0.39	mmhos/cm	0.01	1		09/08/23 12:03	SM 2510 B		BEI0229
Electrical Conductivity umhos	394	umhos/cm	10.0	1		09/08/23 12:03	SM 2510 B		BEI0229
Ammonia (as N)	ND	mg/L	0.00	1		09/07/23 08:30	Field		BEI0182
Nitrate Nitrogen as NO3N	10.0	mg/L	0.1	1	10	09/07/23 19:40	EPA 300.0		BEI0162
pH	7.8	units	1.0	1		09/08/23 12:03	SM 4500-H+	H	BEI0229
Total Filterable Solids (TDS)	280	mg/L	10.0	1		09/15/23 09:07	SM 2540 C		BEI0386
Temperature	25.0	°C	0.0	1		09/08/23 12:03	SM 2510 B		BEI0229
Kjeldahl Nitrogen (TKN), Total	ND	mg/L	1.00	1		09/11/23 10:24	SM 4500-NH3 C		BEI0222
Total Nitrogen	10.0	mg/L	1.00	1		09/11/23 10:24	SM 4500-NH3 C		BEI0222

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9730 Ave 18 1/2
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Account# 00-0015888
Account Manager: Ben Nydam
Submitted By: Greg Hooker
Ranch: Diamond H Dairy

Received: 09/07/2023 14:19
Reported: 09/15/2023 10:51

Quality Control

Analyte	Result Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BEI0162									
Blank (BEI0162-BLK1)				Prepared & Analyzed: 9/7/2023					
Nitrate Nitrogen as NO3N	ND	0.1	mg/L						
Blank (BEI0162-BLK2)				Prepared & Analyzed: 9/7/2023					
Nitrate Nitrogen as NO3N	ND	0.1	mg/L						
Blank (BEI0162-BLK3)				Prepared: 9/7/2023 Analyzed: 9/8/2023					
Nitrate Nitrogen as NO3N	ND	0.1	mg/L						
LCS (BEI0162-BS1)				Prepared & Analyzed: 9/7/2023					
Nitrate Nitrogen as NO3N	5.6	0.1	mg/L	5.000		112	90-110		
LCS (BEI0162-BS2)				Prepared: 9/7/2023 Analyzed: 9/8/2023					
Nitrate Nitrogen as NO3N	5.3	0.1	mg/L	5.000		106	90-110		
Duplicate (BEI0162-DUP1)		Source: 23I0448-01		Prepared & Analyzed: 9/7/2023					
Nitrate Nitrogen as NO3N	0.1	0.1	mg/L		0.1			1.56	10
Duplicate (BEI0162-DUP2)		Source: 23I0498-02		Prepared: 9/7/2023 Analyzed: 9/8/2023					
Nitrate Nitrogen as NO3N	29.0	0.1	mg/L		29.3			0.765	10
Matrix Spike (BEI0162-MS1)		Source: 23I0448-01		Prepared & Analyzed: 9/7/2023					
Nitrate Nitrogen as NO3N	5.1	0.1	mg/L	5.000	0.1	98.7	90-110		
Matrix Spike (BEI0162-MS2)		Source: 23I0498-02		Prepared: 9/7/2023 Analyzed: 9/8/2023					
Nitrate Nitrogen as NO3N	34.3	0.1	mg/L	5.000	29.3	101	90-110		
Reference (BEI0162-SRM1)				Prepared & Analyzed: 9/7/2023					
Nitrate Nitrogen as NO3N	9.9		mg/L	10.00		98.7	90-110		
Reference (BEI0162-SRM2)				Prepared & Analyzed: 9/7/2023					
Nitrate Nitrogen as NO3N	10.2		mg/L	10.00		102	90-110		
Reference (BEI0162-SRM3)				Prepared: 9/7/2023 Analyzed: 9/8/2023					
Nitrate Nitrogen as NO3N	10.1		mg/L	10.00		101	90-110		

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9730 Ave 18 1/2
Chowchilla, CA 93610

Account# 00-0015888
Account Manager: Ben Nydam
Submitted By: Greg Hooker
Ranch: Diamond H Dairy

Received: 09/07/2023 14:19
Reported: 09/15/2023 10:51

Quality Control (Continued)

Analyte	Result Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BEI0222									
Blank (BEI0222-BLK1)				Prepared: 9/8/2023 Analyzed: 9/11/2023					
Kjeldahl Nitrogen (TKN), Total	ND	1.00	mg/L						
Total Nitrogen	ND	1.00	mg/L						
Blank (BEI0222-BLK2)				Prepared: 9/8/2023 Analyzed: 9/11/2023					
Kjeldahl Nitrogen (TKN), Total	ND	1.00	mg/L						
Total Nitrogen	ND	1.00	mg/L						
Blank (BEI0222-BLK3)				Prepared: 9/8/2023 Analyzed: 9/11/2023					
Kjeldahl Nitrogen (TKN), Total	ND	1.00	mg/L						
Total Nitrogen	ND	1.00	mg/L						
LCS (BEI0222-BS1)				Prepared: 9/8/2023 Analyzed: 9/11/2023					
Kjeldahl Nitrogen (TKN), Total	5.90	1.00	mg/L	5.709		103	90-110		
LCS (BEI0222-BS2)				Prepared: 9/8/2023 Analyzed: 9/11/2023					
Kjeldahl Nitrogen (TKN), Total	5.31	1.00	mg/L	5.709		93.0	90-110		
Duplicate (BEI0222-DUP1)				Source: 23I0493-05		Prepared: 9/8/2023 Analyzed: 9/11/2023			
Kjeldahl Nitrogen (TKN), Total	ND	1.40	mg/L		ND				10
Duplicate (BEI0222-DUP2)				Source: 23I0502-01		Prepared: 9/8/2023 Analyzed: 9/11/2023			
Kjeldahl Nitrogen (TKN), Total	ND	1.40	mg/L		ND				10
Matrix Spike (BEI0222-MS1)				Source: 23I0493-05		Prepared: 9/8/2023 Analyzed: 9/11/2023			
Kjeldahl Nitrogen (TKN), Total	5.99	1.40	mg/L	7.992	ND	74.9	90-110		
Matrix Spike (BEI0222-MS2)				Source: 23I0502-01		Prepared: 9/8/2023 Analyzed: 9/11/2023			
Kjeldahl Nitrogen (TKN), Total	6.60	1.40	mg/L	7.992	ND	82.5	90-110		
Reference (BEI0222-SRM1)				Prepared: 9/8/2023 Analyzed: 9/11/2023					
Kjeldahl Nitrogen (TKN), Total	23.2		mg/L	23.80		97.4	90-110		

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Diamond H Dairy
9730 Ave 18 1/2
Chowchilla, CA 93610

Account# 00-0015888
Account Manager: Ben Nydam
Submitted By: Greg Hooker
Ranch: Diamond H Dairy

Received: 09/07/2023 14:19
Reported: 09/15/2023 10:51

Quality Control (Continued)

Analyte	Result Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BEI0229									
Blank (BEI0229-BLK1)				Prepared & Analyzed: 9/8/2023					
pH	5.2	1.0	units						
Electrical Conductivity	ND	0.01	mmhos/cm						
Temperature	25.0	0.0	°C						
Electrical Conductivity umhos	ND	10.0	umhos/cm						
Blank (BEI0229-BLK2)				Prepared & Analyzed: 9/8/2023					
Electrical Conductivity	ND	0.01	mmhos/cm						
pH	6.2	1.0	units						
Temperature	25.0	0.0	°C						
Electrical Conductivity umhos	ND	10.0	umhos/cm						
Blank (BEI0229-BLK3)				Prepared & Analyzed: 9/8/2023					
Electrical Conductivity	ND	0.01	mmhos/cm						
pH	6.3	1.0	units						
Temperature	25.0	0.0	°C						
Electrical Conductivity umhos	ND	10.0	umhos/cm						
Duplicate (BEI0229-DUP1)				Source: 23I0193-01		Prepared & Analyzed: 9/8/2023			
pH	7.8	1.0	units		7.7			0.515	10
Electrical Conductivity	0.18	0.01	mmhos/cm		0.18			3.27	10
Electrical Conductivity umhos	178	10.0	umhos/cm		184			3.27	10
Duplicate (BEI0229-DUP2)				Source: 23I0498-02		Prepared & Analyzed: 9/8/2023			
pH	7.9	1.0	units		7.9			0.126	10
Electrical Conductivity	0.80	0.01	mmhos/cm		0.81			0.236	10
Electrical Conductivity umhos	803	10.0	umhos/cm		805			0.236	10
Reference (BEI0229-SRM1)				Prepared & Analyzed: 9/8/2023					
Electrical Conductivity	511		umhos/cm		538.0	95.0	90-110		
Reference (BEI0229-SRM2)				Prepared & Analyzed: 9/8/2023					
pH	5.8		units		5.820	100	28178-101.7:		
Reference (BEI0229-SRM3)				Prepared & Analyzed: 9/8/2023					
Electrical Conductivity	958		umhos/cm		1000	95.8	90-110		
Electrical Conductivity umhos	958		umhos/cm		1000	95.8	90-110		
Reference (BEI0229-SRM4)				Prepared & Analyzed: 9/8/2023					
Electrical Conductivity	959		umhos/cm		1000	95.9	90-110		
Electrical Conductivity umhos	959		umhos/cm		1000	95.9	90-110		
Reference (BEI0229-SRM5)				Prepared & Analyzed: 9/8/2023					
Electrical Conductivity	972		umhos/cm		1000	97.2	90-110		

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Diamond H Dairy
9730 Ave 18 1/2
Chowchilla, CA 93610

Account# 00-0015888
Account Manager: Ben Nydam
Submitted By: Greg Hooker
Ranch: Diamond H Dairy

Received: 09/07/2023 14:19
Reported: 09/15/2023 10:51

Quality Control (Continued)

Analyte	Result Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BEI0229 (Continued)									
Reference (BEI0229-SRM5)									
Electrical Conductivity umhos	972		umhos/cm	1000		97.2	90-110		
Reference (BEI0229-SRM6)									
pH	4.0		units	4.000		101	97.5-102.5		
Reference (BEI0229-SRM7)									
pH	4.0		units	4.000		101	97.5-102.5		
Reference (BEI0229-SRM8)									
pH	4.0		units	4.000		101	97.5-102.5		

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Diamond H Dairy
9730 Ave 18 1/2
Chowchilla, CA 93610

Account# 00-0015888
Account Manager: Ben Nydam
Submitted By: Greg Hooker
Ranch: Diamond H Dairy

Received: 09/07/2023 14:19
Reported: 09/15/2023 10:51

Quality Control (Continued)

Analyte	Result Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BEI0386									
Blank (BEI0386-BLK1)									
Total Filterable Solids (TDS)	ND	10.0	mg/L						
Prepared: 9/12/2023 Analyzed: 9/15/2023									
LCS (BEI0386-BS1)									
Total Filterable Solids (TDS)	30.0	10.0	mg/L	2000		1.50	0-200		
Prepared: 9/12/2023 Analyzed: 9/15/2023									
Duplicate (BEI0386-DUP1)									
Total Filterable Solids (TDS)	620	10.0	mg/L		600			3.28	10
Prepared: 9/12/2023 Analyzed: 9/15/2023									
Duplicate (BEI0386-DUP2)									
Total Filterable Solids (TDS)	1100	10.0	mg/L		1120			1.80	10
Prepared: 9/12/2023 Analyzed: 9/15/2023									
Reference (BEI0386-SRM1)									
Total Filterable Solids (TDS)	307		mg/L	325.0		94.4	90-110		
Prepared: 9/12/2023 Analyzed: 9/15/2023									

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09/07/23 14:19

2310493

DELLAVALLE LABORATORY, INC.

1910 W. McKinley Avenue, Suite 110 • Fresno, CA 93728

www.dellavallelab.com 559 233-6129 • 800 228-9896 • Fax 559 268-8174

Purchase Order No

Bill To:

15888

08

Acct #

Cons #

Results Need By

Name: Diamond H Dairy

Address: 9730 Avenue 18 1/2

City: Chowchilla State: CA Zip: 93610

Telephone: (209) 595-4548 Fax: (559) 665-5465

Cell/Email: ghooker@aol.com

COPY TO: Agri-Valley Consulting; P & P

REQUESTED BY: Greg Hooker

PROJECT: Diamond H Dairy

CROP:

[X] Copy of Chain [X] QA/QC Documents

Sampled By:

Greg Hooker

No. Samples:

No of Bottles:

Water Type:

[] Drinking Water

[] Wastewater

[] Ag Water

[X] Groundwater

[] Monitoring Well

Other:

Analysis and Bottles Required: (Please indicate Analysis)

(X) DWW1: EC, NO₃-N, TDS, TKN, TN *NH₄-N Field Test

(1-1 Liter Plastic, Unpreserved) White Per Sample

() DWW2: DWW1 Plus SO₄, CO₃, HCO₃, Cl, Ca, Mg, Na, TDS

(1-1 Liter Plastic, Unpreserved) White Per Sample

() DCW1: EC, NO₃-N, TKN, TN, TDS, *NH₄-N Field Test

(1-1 Liter Plastic, Unpreserved) White Per Sample

() DPW1: EC, NO₃-N, NH₄-N, TKN, TDS, TP, TK

(1-1 Liter Plastic, Unpreserved) White Per Sample

() DPW2: DPW1 Plus Ca, Mg, Na, HCO₃, CO₃, SO₄, Cl

(1-1 Liter Plastic, Unpreserved) White Per Sample

() Other

*If Field NH₄-N detected Run NH₄-N, UnNH₃-N***NEED FIELD TEMP & FIELD pH FOR UnNH₄-N

	Description of Samples	Field pH	Field Temp	Date Sampled	Time Sampled	Rec'd Temp °C	Field NH ₄ -N
1	WRD Dairy			9/7	8:15 AM	3.7	< 1
2	WRD Calfranch			9/7	8 AM	4.4	< 1
3	WRD Dairy East			9/7	8:30 AM	2.0	< 1
4	1			9/7	9 AM	1.2	< 1
5	12			9/7	9 AM	2.8	< 1
6	16			9/7	9:15 AM	2.8	< 1
7	52			9/7	9:15 AM	2.8	< 1
8	101			9/7	9:30 AM	1.9	< 1

CHAIN OF CUSTODY

Carrier	Signature	Company	Received (Date/Time)	Relinquished (Date/Time)
First		Diamond H		
Second				
Third				
Fourth			9-7-23 14:19	

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

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

Invoicing Information:		Shipping	
Sampling hrs	\$	In	
Miles	\$	Out	
Consulting			
Amt Paid	Rec By	Check #	Date

Signature

Sample received in cooler with ice (coolant)

[] Yes [] No

1 of 2

Shipping Container: Ice Chest ☒ None ☐ Box ☐

Refrigerant: Wet Ice: ☒ Blue Ice: ☐ None: ☐Page 19 of 21

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

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

INSTRUCTIONS

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

OPERATOR INFORMATION

Name of Operator: White River Dairy

Name of Dairy Facility: White River Dairy

Facility Address:

20400 Ave. 17 1/2 AVE	Madera	Madera	93637
Number and Street	City	County	Zip Code

Contact Person Name and Phone Number:	Mark Hooker	(209) 259-9368
	Name	Phone Number

MANURE HAULER INFORMATION

Name of Hauling Company/Person: Green Valley Soils

Address of Hauling Company/Person:

3754 W Birch AVE	Madera	CA	93711
Number and Street	City	State	Zip Code

Contact Person:	Ryan Machado	(559) 474-2377
	Name	Phone Number

DESTINATION INFORMATION

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

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

Green Valley Soils	(559) 474-2377
Name	Phone Number

3754 W Birch AVE	Fresno	CA	93711
Address	City	State	Zip Code

Destination Address or Assessor's Parcel Number:

3757 W Birch AVE	Fresno	93711
Address	City	Zip Code

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

Assessor's Parcel Number	Assessor's Parcel Number County
--------------------------	---------------------------------

Last date hauled: 10/09/2023

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

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

MANURE AMOUNT HAULED

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

Manure: 1,081.59 tons

Manure Solids Content: 67.4 %

Method used to determine amount of manure:

Total Loads Multiplied by Average Load Weight

CERTIFICATION

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

Mark Hooker
Mark Hooker (Jun 21, 2024 10:34 PDT)

Operator Signature

06/21/2024

Date

Ryan machado

Hauler Signature

06/21/2024

Date

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

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

INSTRUCTIONS

- 1) Complete one manifest for each hauling event, for each destination. A hauling event may last for several days, as long as the manure is being hauled to the same destination.
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- 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: White River Dairy

Name of Dairy Facility: White River Dairy

Facility Address:

20400 Ave. 17 1/2 AVE	Madera	Madera	93637
Number and Street	City	County	Zip Code

Contact Person Name and Phone Number:	Mark Hooker	(209) 259-9363
	Name	Phone Number

MANURE HAULER INFORMATION

Name of Hauling Company/Person: Green Valley Soils

Address of Hauling Company/Person:

3754 W Birch AVE	Madera	CA	93711
Number and Street	City	State	Zip Code

Contact Person:	Ryan Machado	(559) 474-2377
	Name	Phone Number

DESTINATION INFORMATION

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

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

Green Valley Soils	(559) 474-2377
Name	Phone Number

3754 W Birch AVE	Fresno	CA	93711
Address	City	State	Zip Code

Destination Address or Assessor's Parcel Number:

17527 Road 21	Madera	93637
Address	City	Zip Code

Street and nearest cross street (if no address)	Madera
	County

Assessor's Parcel Number	Assessor's Parcel Number County
--------------------------	---------------------------------

Last date hauled: 11/20/2023

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

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

MANURE AMOUNT HAULED

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

Manure: 2,864.65 tons

Manure Solids Content: 67.7 %

Method used to determine amount of manure:

Total Loads Hauled by Average Load Weight

CERTIFICATION

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

Mark Hooker

06/21/2024

Operator Signature

Date

Ryan Machado

06/21/2024

Hauler Signature

Date

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

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

INSTRUCTIONS

- 1) Complete one manifest for each hauling event, for each destination. A hauling event may last for several days, as long as the manure is being hauled to the same destination.
- 2) If there are multiple destinations, complete a separate form for each destination.
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- 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: White River Dairy

Name of Dairy Facility: White River Dairy

Facility Address:

20400 Ave. 17 1/2 AVE	Madera	Madera	93637
Number and Street	City	County	Zip Code

Contact Person Name and Phone Number:	Mark Hooker	(209) 259-9363
	Name	Phone Number

MANURE HAULER INFORMATION

Name of Hauling Company/Person: Green Valley Soils

Address of Hauling Company/Person:

3754 W Birch AVE	Madera	CA	93711
Number and Street	City	State	Zip Code

Contact Person:	Ryan Machado	(559) 474-2377
	Name	Phone Number

DESTINATION INFORMATION

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

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

Green Valley Soils	(559) 474-2377
Name	Phone Number

3754 W Birch AVE	Fresno	CA	93711
Address	City	State	Zip Code

Destination Address or Assessor's Parcel Number:

17527 Road 21	Madera	93637
Address	City	Zip Code

Street and nearest cross street (if no address)	Madera
	County

Assessor's Parcel Number	Assessor's Parcel Number County
--------------------------	---------------------------------

Last date hauled: 12/09/2023

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

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

MANURE AMOUNT HAULED

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

Manure: 583.28 tons

Manure Solids Content: 67.4 %

Method used to determine amount of manure:

Total Loads Hauled by Average Load Weight

CERTIFICATION

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

Mark Hooker
Mark Hooker (Jun 21, 2024 10:34 PDT)

Operator Signature

06/21/2024

Date

Ryan Machado
Hauler Signature

06/21/2024

Date