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: West Star North Dairy

Physical address of dairy:

Number and Street	City	County	Zip Code
26953 Riverside ST	Buttonwillow	Kern	93206

Street and nearest cross street (if no address):

Date facility was originally placed in operation: 06/01/2004

Regional Water Quality Control Board Basin Plan designation: Tulare Basin

County Assessor Parcel Number(s) for dairy facility:

X088-X170-XX17-XXXX

B. OPERATORS

Slegers, Bennett

Operator name: Slegers, Bennett

Telephone no.: (661) 387-6513 (Landline) (Cellular)

Mailing Address Number and Street	City	State	Zip Code
26953 Riverside ST	Buttonwillow	CA	93206

This operator is responsible for paying permit fees.

C. OWNERS

Slegers, Bennett

Legal owner name: Slegers, Bennett

Telephone no.: (661) 387-6513 (Landline) (Cellular)

Mailing Address Number and Street	City	State	Zip Code
26953 Riverside ST	Buttonwillow	CA	93206

This owner is responsible for paying permit fees.

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AVAILABLE NUTRIENTS

A. HERD INFORMATION

	Milk Cows	Dry Cows	Bred Heifers (15-24 mo.)	Heifers (7-14 mo. to breeding)	Calves (4-6 mo.)	Calves (0-3 mo.)
Number open confinement	0	615	340	875	360	0
Number under roof	4,680	0	0	0	0	0
Maximum number	4,710	640	350	900	385	0
Average number	4,680	615	340	875	360	0
Avg live weight (lbs)	1,400	1,450	1,000	750		

Predominant milk cow breed: Holstein

Average milk production: 75 *pounds per cow per day*

B. MANURE GENERATED

Total manure excreted by the herd: 145,028.29 *tons per reporting period*

Total nitrogen from manure: 1,851,422.23 *lbs per reporting period*

After ammonia losses (30% loss applied): 1,295,995.56 *lbs per reporting period*

Total phosphorus from manure: 307,951.57 *lbs per reporting period*

Total potassium from manure: 911,636.98 *lbs per reporting period*

Total salt from manure: 2,344,997.25 *lbs per reporting period*

C. PROCESS WASTEWATER GENERATED

Process wastewater generated: 136,892,271 *gallons*

Total nitrogen generated: 466,163.55 *lbs*

Total phosphorus generated: 64,906.58 *lbs*

Total potassium generated: 524,716.08 *lbs*

Total salt generated: 4,674,260.94 *lbs*

	136,892,271	*gallons applied*
+	0	*gallons exported*
-	0	*gallons imported*
=	136,892,271	*gallons generated*

D. FRESH WATER SOURCES

Source Description	Type
201 DW	Ground water
203-N	Ground water
203-S	Ground water
204	Ground water
206 DWE	Ground water

Source Description	Type
206 DWW	Ground water
208	Ground water
210	Ground water
227	Ground water
B-east	Ground water
B-west	Ground water
Canal Water (Semi Tropic ID)	Surface water
S-4	Ground water

E. SUBSURFACE (TILE) DRAINAGE SOURCES

No subsurface (tile) drainage sources entered.

F. NUTRIENT IMPORTS

No dry manure nutrient imports entered.

No process wastewater nutrient imports entered.

No commercial or other nutrient imports entered.

G. NUTRIENT EXPORTS

Date	Material type	Quantity	Reporting basis	Moisture (%)	Density (lbs/cu ft)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
08/15/2023	Corral solids	1,232.00 *ton*	Dry-weight	12.8		27,500.00	10,600.00	45,900.00		0.00
11/30/2023	Corral solids	2,447.06 *ton*	Dry-weight	16.0		27,100.00	11,800.00	40,500.00		0.00

No liquid nutrient exports entered.

Material type	Total N (lbs)	Total P (lbs)	Total K (lbs)	Total salt (lbs)
Dry manure	170,496.47	71,285.76	265,119.07	0.00
Process wastewater	0.00	0.00	0.00	0.00
Total exports for all materials	170,496.47	71,285.76	265,119.07	0.00

APPLICATION AREA

A. LIST OF LAND APPLICATION AREAS

Field name	Controlled acres	Cropable acres	Total harvests	Type of waste applied	Parcel number
201	65	65	2	process wastewater	X088-X230-XX03-XXXX
202	78	78	2	process wastewater	X088-X230-XX03-XXXX
203	77	77	2	process wastewater	X088-X200-XX19-XXXX X088-X200-XX20-XXXX
204	75	75	2	process wastewater	X088-X200-XX19-XXXX
205	84	84	2	process wastewater	X088-X200-XX12-XXXX X088-X200-XX13-XXXX X088-X200-XX14-XXXX
206	70	70	2	process wastewater	X088-X200-XX12-XXXX X088-X200-XX13-XXXX X088-X200-XX14-XXXX
208	70	70	2	process wastewater	X088-X200-XX18-XXXX
209	74	74	2	process wastewater	X088-X200-XX18-XXXX
210	79	79	2	process wastewater	X088-X200-XX17-XXXX
211	68	68	2	process wastewater	X088-X200-XX10-XXXX X088-X200-XX16-XXXX
227	74	74	1	none	X088-X170-XX09-XXXX
228	73	73	2	process wastewater	X088-X170-XX09-XXXX
S-1	64	64	2	process wastewater	X088-X170-XX17-XXXX
S-2	40	40	2	process wastewater	X088-X170-XX17-XXXX
S-3	160	160	2	manure	X088-X170-XX14-XXXX X088-X170-XX20-XXXX
S-4	130	130	1	none	X088-X170-XX14-XXXX
S-5	5	5	1	manure	X088-X170-XX17-XXXX
Totals for areas that were used for application	1,082	1,082	29		
Totals for areas that were not used for application	204	204	2		
Land application area totals	1,286	1,286	31		

B. CROPS AND HARVESTS

201

Field name: 201

201

11/14/2022: Wheat, silage, soft dough

Crop: Wheat, silage, soft dough Acres planted: 65 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 (%)
05/20/2023	1,245.00 *ton*	Dry-weight		71.9	20,100.00	4,400.00	32,200.00		13.60

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	18.00	198.00	30.60	149.40	1,494.00
Total actual harvest content	19.15	216.37	47.36	346.62	1,463.97

06/20/2023: Corn, silage

Crop: Corn, silage Acres planted: 65 Plant date: 06/20/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
10/11/2023	1,987.00 *ton*	Dry-weight		68.8	13,300.00	2,300.00	12,700.00		5.88

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	30.00	240.00	45.00	198.00	1,500.00
Total actual harvest content	30.57	253.70	43.87	242.26	1,121.62

202

Field name: 202

11/12/2022: Wheat, silage, soft dough

Crop: Wheat, silage, soft dough Acres planted: 78 Plant date: 11/12/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/20/2023	1,468.00 *ton*	Dry-weight		70.3	18,900.00	4,300.00	31,100.00		12.50

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	18.00	198.00	30.60	149.40	1,494.00
Total actual harvest content	18.82	211.29	48.07	347.68	1,397.42

202

06/20/2023: Corn, silage

Crop: Corn, silage Acres planted: 78 Plant date: 06/20/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
10/11/2023	2,361.00 *ton*	Dry-weight		69.0	12,200.00	2,400.00	14,200.00		5.90

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	30.00	240.00	45.00	198.00	1,500.00
Total actual harvest content	30.27	228.96	45.04	266.49	1,107.25

203

Field name: 203

11/12/2022: Wheat, silage, soft dough

Crop: Wheat, silage, soft dough Acres planted: 77 Plant date: 11/12/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/30/2023	1,422.00 *ton*	Dry-weight		70.9	17,700.00	3,500.00	15,300.00		10.00

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	18.00	198.00	30.60	149.40	1,494.00
Total actual harvest content	18.47	190.24	37.62	164.45	1,074.81

06/10/2023: Corn, silage

Crop: Corn, silage Acres planted: 77 Plant date: 06/10/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
09/01/2023	2,330.00 *ton*	Dry-weight		66.5	11,500.00	2,300.00	8,200.00		5.64

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	30.00	240.00	45.00	198.00	1,500.00
Total actual harvest content	30.26	233.15	46.63	166.25	1,143.46

204

Field name: 204

11/13/2022: Wheat, silage, soft dough

Crop: Wheat, silage, soft dough Acres planted: 75 Plant date: 11/13/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/30/2023	1,410.00 *ton*	Dry-weight		70.1	19,800.00	3,600.00	22,500.00		10.10

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	18.00	198.00	30.60	149.40	1,494.00
Total actual harvest content	18.80	222.60	40.47	252.95	1,135.48

07/12/2023: Corn, silage

Crop: Corn, silage Acres planted: 75 Plant date: 07/12/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
10/25/2023	2,266.00 *ton*	Dry-weight		69.5	12,800.00	2,800.00	9,400.00		4.71

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	30.00	240.00	45.00	198.00	1,500.00
Total actual harvest content	30.21	235.91	51.60	173.24	868.06

205

Field name: 205

11/12/2022: Wheat, silage, soft dough

Crop: Wheat, silage, soft dough Acres planted: 84 Plant date: 11/12/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/19/2023	1,588.00 *ton*	Dry-weight		71.0	19,300.00	4,200.00	31,400.00		12.80

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	18.00	198.00	30.60	149.40	1,494.00
Total actual harvest content	18.90	211.62	46.05	344.29	1,403.49

205

06/22/2023: Corn, silage

Crop: Corn, silage Acres planted: 84 Plant date: 06/22/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
10/11/2023	2,533.00 *ton*	Dry-weight		69.4	12,000.00	1,900.00	13,900.00		5.46

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	30.00	240.00	45.00	198.00	1,500.00
Total actual harvest content	30.15	221.46	35.06	256.52	1,007.63

206

Field name: 206

11/13/2022: Wheat, silage, soft dough

Crop: Wheat, silage, soft dough Acres planted: 70 Plant date: 11/13/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/19/2023	1,319.00 *ton*	Dry-weight		66.8	15,600.00	2,600.00	13,800.00		10.30

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	18.00	198.00	30.60	149.40	1,494.00
Total actual harvest content	18.84	195.18	32.53	172.66	1,288.70

07/05/2023: Corn, silage

Crop: Corn, silage Acres planted: 70 Plant date: 07/05/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
10/25/2023	2,127.00 *ton*	Dry-weight		67.0	12,600.00	2,000.00	7,600.00		4.27

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	30.00	240.00	45.00	198.00	1,500.00
Total actual harvest content	30.39	252.69	40.11	152.41	856.33

208

Field name: 208

11/14/2022: Wheat, silage, soft dough

Crop: Wheat, silage, soft dough Acres planted: 70 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 (%)
05/28/2023	1,324.00 *ton*	Dry-weight		70.5	19,100.00	3,600.00	22,400.00		10.10

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	18.00	198.00	30.60	149.40	1,494.00
Total actual harvest content	18.91	213.15	40.17	249.97	1,127.10

06/24/2023: Corn, silage

Crop: Corn, silage Acres planted: 70 Plant date: 06/24/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
10/13/2023	2,120.00 *ton*	Dry-weight		69.1	12,900.00	1,800.00	15,000.00		6.20

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	30.00	240.00	45.00	198.00	1,500.00
Total actual harvest content	30.29	241.44	33.69	280.75	1,160.43

209

Field name: 209

11/14/2022: Wheat, silage, soft dough

Crop: Wheat, silage, soft dough Acres planted: 74 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 (%)
05/21/2023	1,369.00 *ton*	Dry-weight		71.8	19,100.00	4,000.00	24,300.00		11.50

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	18.00	198.00	30.60	149.40	1,494.00
Total actual harvest content	18.50	199.29	41.74	253.55	1,199.91

209

06/22/2023: Corn, silage

Crop: Corn, silage Acres planted: 74 Plant date: 06/22/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
10/12/2023	2,245.00 *ton*	Dry-weight		67.8	12,500.00	2,300.00	14,500.00		5.96

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	30.00	240.00	45.00	198.00	1,500.00
Total actual harvest content	30.34	244.22	44.94	283.29	1,164.44

210

Field name: 210

11/14/2022: Wheat, silage, soft dough

Crop: Wheat, silage, soft dough Acres planted: 79 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 (%)
05/27/2023	1,496.00 *ton*	Dry-weight		63.5	14,400.00	4,100.00	21,300.00		11.20

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	18.00	198.00	30.60	149.40	1,494.00
Total actual harvest content	18.94	199.06	56.68	294.45	1,548.27

07/15/2023: Corn, silage

Crop: Corn, silage Acres planted: 79 Plant date: 07/15/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
10/25/2023	2,390.00 *ton*	Dry-weight		66.5	12,600.00	2,800.00	9,600.00		4.66

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	30.00	240.00	45.00	198.00	1,500.00
Total actual harvest content	30.25	255.40	56.75	194.59	944.56

211

Field name: 211

11/16/2022: Wheat, silage, soft dough

Crop: Wheat, silage, soft dough Acres planted: 68 Plant date: 11/16/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/18/2023	1,297.00 *ton*	Dry-weight		66.0	14,300.00	2,600.00	16,500.00		9.73

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	18.00	198.00	30.60	149.40	1,494.00
Total actual harvest content	19.07	185.47	33.72	214.01	1,261.98

06/27/2023: Sorghum-Sudangrass, forage

Crop: Sorghum-Sudangrass, forage Acres planted: 68 Plant date: 06/27/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
10/15/2023	1,804.00 *ton*	Dry-weight		69.5	12,200.00	3,600.00	18,500.00		7.85

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	25.00	180.00	35.00	342.50	1,500.00
Total actual harvest content	26.53	197.43	58.26	299.38	1,270.36

227

Field name: 227

11/11/2017: Alfalfa, hay

Crop: Alfalfa, hay Acres planted: 74 Plant date: 11/11/2017

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
11/07/2023	624.00 *ton*	Dry-weight		10.0	38,100.00	2,800.00	22,100.00		21.20

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	8.00	480.00	43.20	336.00	1,600.00
Total actual harvest content	8.43	578.30	42.50	335.44	3,217.82

228

Field name: 228

11/16/2022: Wheat, silage, soft dough

Crop: Wheat, silage, soft dough Acres planted: 73 Plant date: 11/16/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/29/2023	1,367.00 *ton*	Dry-weight		70.6	19,500.00	3,700.00	21,100.00		10.20

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	18.00	198.00	30.60	149.40	1,494.00
Total actual harvest content	18.73	214.71	40.74	232.33	1,123.11

07/16/2023: Corn, silage

Crop: Corn, silage Acres planted: 73 Plant date: 07/16/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
10/25/2023	2,225.00 *ton*	Dry-weight		66.4	12,500.00	2,800.00	9,000.00		4.56

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	30.00	240.00	45.00	198.00	1,500.00
Total actual harvest content	30.48	256.03	57.35	184.34	933.99

S-1

Field name: S-1

11/17/2022: Wheat, silage, soft dough

Crop: Wheat, silage, soft dough Acres planted: 64 Plant date: 11/17/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/03/2023	1,224.00 *ton*	Dry-weight		71.1	18,800.00	3,100.00	18,200.00		9.62

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	18.00	198.00	30.60	149.40	1,494.00
Total actual harvest content	19.13	207.82	34.27	201.19	1,063.42

S-1

05/20/2023: Corn, silage

Crop: Corn, silage Acres planted: 64 Plant date: 05/20/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
08/30/2023	1,955.00 *ton*	Dry-weight		65.0	11,200.00	2,300.00	7,600.00		4.95

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	30.00	240.00	45.00	198.00	1,500.00
Total actual harvest content	30.55	239.49	49.18	162.51	1,058.45

S-2

Field name: S-2

11/18/2022: Wheat, silage, soft dough

Crop: Wheat, silage, soft dough Acres planted: 40 Plant date: 11/18/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/03/2023	804.00 *ton*	Dry-weight		71.6	18,800.00	3,400.00	20,800.00		9.89

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	18.00	198.00	30.60	149.40	1,494.00
Total actual harvest content	20.10	214.64	38.82	237.47	1,129.12

05/20/2023: Corn, silage

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

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
08/30/2023	1,248.00 *ton*	Dry-weight		66.9	11,700.00	2,200.00	7,200.00		5.17

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	30.00	240.00	45.00	198.00	1,500.00
Total actual harvest content	31.20	241.66	45.44	148.71	1,067.83

S-3

Field name: S-3

11/17/2022: Wheat, silage, soft dough

Crop: Wheat, silage, soft dough Acres planted: 160 Plant date: 11/17/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/29/2023	2,945.00 *ton*	Dry-weight		65.1	15,100.00	3,600.00	15,000.00		10.50

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	18.00	198.00	30.60	149.40	1,494.00
Total actual harvest content	18.41	194.00	46.25	192.71	1,348.99

06/14/2023: Corn, silage

Crop: Corn, silage Acres planted: 160 Plant date: 06/14/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
08/30/2023	4,848.00 *ton*	Dry-weight		65.1	11,400.00	2,000.00	6,500.00		5.08

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	30.00	240.00	45.00	198.00	1,500.00
Total actual harvest content	30.30	241.10	42.30	137.47	1,074.39

S-4

Field name: S-4

11/26/2021: Alfalfa, hay

Crop: Alfalfa, hay Acres planted: 130 Plant date: 11/26/2021

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
11/07/2023	1,066.00 *ton*	Dry-weight		9.4	38,600.00	3,000.00	23,000.00		18.60

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	8.00	480.00	43.20	336.00	1,600.00
Total actual harvest content	8.20	573.53	44.58	341.74	2,763.66

S-5

Field name: S-5

07/16/2023: Corn, silage

Crop: Corn, silage Acres planted: 5 Plant date: 07/16/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
10/25/2023	161.00 *ton*	Dry-weight		66.2	10,400.00	2,800.00	9,000.00		4.37

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	30.00	240.00	45.00	198.00	1,500.00
Total actual harvest content	32.20	226.38	60.95	195.90	951.23

NUTRIENT BUDGET

A. LAND APPLICATIONS

201 - 11/14/2022: Wheat, silage, soft dough

Field name: 201

Crop: Wheat, silage, soft dough — Plant date: 11/14/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
11/15/2022	Subsurface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	100.70	10.76	99.20	1,166.04	1,457,852.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.64	0.00	0.00	138.27	8,284,559.00 *gal*
Application event totals		101.33	10.76	99.20	1,304.31	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
01/20/2023	Subsurface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	61.79	6.60	60.87	715.50	894,557.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.66	0.00	0.00	143.36	8,589,547.00 *gal*
Application event totals		62.45	6.60	60.87	858.86	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
02/21/2023	Subsurface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	77.73	8.31	76.58	900.15	1,125,412.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.66	0.00	0.00	143.12	8,575,489.00 *gal*
Application event totals		78.39	8.31	76.58	1,043.27	

201 - 06/20/2023: Corn, silage

Field name: 201

Crop: Corn, silage — Plant date: 06/20/2023

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

201 - 06/20/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
06/11/2023	Subsurface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	73.42	14.37	85.33	315.52	1,545,648.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.68	0.00	0.00	146.56	8,781,258.00 *gal*
Application event totals		74.10	14.37	85.33	462.07	

06/30/2023	Subsurface (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 Water (Semi Tropic ID)	Surface water	0.66	0.00	0.00	143.20	8,579,851.00 *gal*
Application event totals		0.66	0.00	0.00	143.20	

07/15/2023	Subsurface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	69.68	13.64	80.98	299.45	1,466,951.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.65	0.00	0.00	141.62	8,485,449.00 *gal*
Application event totals		70.34	13.64	80.98	441.07	

07/30/2023	Subsurface (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 Water (Semi Tropic ID)	Surface water	0.67	0.00	0.00	144.89	8,681,259.00 *gal*
Application event totals		0.67	0.00	0.00	144.89	

08/14/2023	Subsurface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	73.82	10.19	99.48	987.55	1,885,324.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.62	0.00	0.00	134.88	8,081,654.00 *gal*
Application event totals		74.45	10.19	99.48	1,122.43	

201 - 06/20/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/28/2023	Subsurface (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 Water (Semi Tropic ID)	Surface water	0.67	0.00	0.00	144.86	8,679,654.00 *gal*
Application event totals		0.67	0.00	0.00	144.86	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
09/14/2023	Subsurface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	59.85	8.26	80.66	800.67	1,528,547.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.65	0.00	0.00	141.47	8,476,489.00 *gal*
Application event totals		60.51	8.26	80.66	942.14	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
09/30/2023	Subsurface (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 Water (Semi Tropic ID)	Surface water	0.66	0.00	0.00	142.78	8,554,798.00 *gal*
Application event totals		0.66	0.00	0.00	142.78	

202 - 11/12/2022: Wheat, silage, soft dough

Field name: 202

Crop: Wheat, silage, soft dough

Plant date: 11/12/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
11/13/2022	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	80.02	8.55	78.83	926.65	1,390,258.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.70	0.00	0.00	150.77	10,840,115.00 *gal*
Application event totals		80.72	8.55	78.83	1,077.42	

202 - 11/12/2022: Wheat, silage, soft dough

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
01/19/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	76.99	8.23	75.84	891.52	1,337,548.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.57	0.00	0.00	124.53	8,953,698.00 *gal*
Application event totals		77.56	8.23	75.84	1,016.05	

02/15/2023	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
Lagoon	Process wastewater	74.57	7.97	73.46	863.48	1,295,487.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.54	0.00	0.00	116.37	8,366,589.00 *gal*
Application event totals		75.10	7.97	73.46	979.85	

202 - 06/20/2023: Corn, silage

Field name: 202

Crop: Corn, silage

Plant date: 06/20/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
06/11/2023	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
Lagoon	Process wastewater	77.21	15.11	89.73	331.81	1,950,568.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.59	0.00	0.00	128.73	9,255,698.00 *gal*
Application event totals		77.81	15.11	89.73	460.54	

06/29/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.75	0.00	0.00	161.85	11,636,987.00 *gal*
Application event totals		0.75	0.00	0.00	161.85	

202 - 06/20/2023: Corn, silage

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	63.03	12.33	73.26	270.88	1,592,357.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.63	0.00	0.00	135.73	9,758,942.00 *gal*
Application event totals		63.66	12.33	73.26	406.61	

07/27/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.68	0.00	0.00	146.73	10,549,681.00 *gal*
Application event totals		0.68	0.00	0.00	146.73	

08/10/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	65.19	9.00	87.85	872.08	1,997,852.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.68	0.00	0.00	146.59	10,539,654.00 *gal*
Application event totals		65.87	9.00	87.85	1,018.67	

08/25/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.65	0.00	0.00	141.33	10,161,254.00 *gal*
Application event totals		0.65	0.00	0.00	141.33	

09/09/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	57.94	8.00	78.07	775.01	1,775,489.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.58	0.00	0.00	125.98	9,057,841.00 *gal*
Application event totals		58.52	8.00	78.07	900.99	

202 - 06/20/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
09/25/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.64	0.00	0.00	139.72	10,045,889.00 *gal*
Application event totals		0.64	0.00	0.00	139.72	

203 - 11/12/2022: Wheat, silage, soft dough

Field name: 203

Crop: Wheat, silage, soft dough

Plant date: 11/12/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
11/13/2022	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	84.35	9.02	83.10	976.77	1,446,662.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.67	0.00	0.00	146.03	10,364,852.00 *gal*
Application event totals		85.02	9.02	83.10	1,122.80	

01/19/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	67.42	7.21	66.42	780.73	1,156,325.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.66	0.00	0.00	143.10	10,156,951.00 *gal*
Application event totals		68.08	7.21	66.42	923.84	

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
Lagoon	Process wastewater	78.48	8.39	77.31	908.77	1,345,951.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.54	0.00	0.00	116.19	8,246,951.00 *gal*
Application event totals		79.01	8.39	77.31	1,024.96	

203 - 06/10/2023: Corn, silage

203 - 06/10/2023: Corn, silage

Field name: 203

Crop: Corn, silage

Plant date: 06/10/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
06/01/2023	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
Lagoon	Process wastewater	78.83	15.43	91.61	338.76	1,965,887.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.80	0.00	0.00	173.45	12,311,254.00 *gal*
Application event totals		79.63	15.43	91.61	512.21	

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.78	0.00	0.00	169.26	12,013,598.00 *gal*
Application event totals		0.78	0.00	0.00	169.26	

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	74.82	14.64	86.95	321.52	1,865,842.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.79	0.00	0.00	172.09	12,214,598.00 *gal*
Application event totals		75.61	14.64	86.95	493.61	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/11/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.77	0.00	0.00	167.80	11,910,254.00 *gal*
Application event totals		0.77	0.00	0.00	167.80	

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	81.15	11.20	109.35	1,085.50	2,454,896.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.66	0.00	0.00	142.50	10,114,598.00 *gal*
Application event totals		81.80	11.20	109.35	1,228.00	

203 - 06/10/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/04/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.66	0.00	0.00	142.28	10,098,852.00 *gal*
Application event totals		0.66	0.00	0.00	142.28	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/16/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	43.06	5.94	58.02	575.97	1,302,569.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.66	0.00	0.00	143.84	10,209,654.00 *gal*
Application event totals		43.72	5.94	58.02	719.81	

204 - 11/13/2022: Wheat, silage, soft dough

Field name: 204

Crop: Wheat, silage, soft dough

Plant date: 11/13/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
11/14/2022	Subsurface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	90.66	9.69	89.32	1,049.88	1,514,558.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.64	0.00	0.00	138.25	9,557,489.00 *gal*
Application event totals		91.30	9.69	89.32	1,188.12	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
01/17/2023	Subsurface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	97.32	10.40	95.87	1,126.92	1,625,698.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.62	0.00	0.00	134.07	9,268,547.00 *gal*
Application event totals		97.94	10.40	95.87	1,260.99	

204 - 11/13/2022: Wheat, silage, soft dough

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
02/19/2023	Subsurface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	78.74	8.42	77.57	911.86	1,315,448.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.55	0.00	0.00	119.62	8,269,852.00 *gal*
Application event totals		79.30	8.42	77.57	1,031.48	

204 - 07/12/2023: Corn, silage

Field name: 204

Crop: Corn, silage

Plant date: 07/12/2023

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	78.90	15.44	91.70	339.07	1,916,558.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.64	0.00	0.00	138.41	9,568,795.00 *gal*
Application event totals		79.54	15.44	91.70	477.48	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/21/2023	Subsurface (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 Water (Semi Tropic ID)	Surface water	0.63	0.00	0.00	136.34	9,425,441.00 *gal*
Application event totals		0.63	0.00	0.00	136.34	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/04/2023	Subsurface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	66.84	9.23	90.07	894.16	1,969,654.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.77	0.00	0.00	167.58	11,585,647.00 *gal*
Application event totals		67.62	9.23	90.07	1,061.74	

204 - 07/12/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/16/2023	Subsurface (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 Water (Semi Tropic ID)	Surface water	0.64	0.00	0.00	138.88	9,601,365.00 *gal*
Application event totals		0.64	0.00	0.00	138.88	

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	64.00	8.83	86.24	856.12	1,885,852.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.63	0.00	0.00	136.80	9,457,448.00 *gal*
Application event totals		64.63	8.83	86.24	992.92	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
09/08/2023	Subsurface (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 Water (Semi Tropic ID)	Surface water	0.61	0.00	0.00	131.29	9,076,489.00 *gal*
Application event totals		0.61	0.00	0.00	131.29	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
09/23/2023	Subsurface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	66.33	9.16	89.38	887.31	1,954,568.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.65	0.00	0.00	139.97	9,676,842.00 *gal*
Application event totals		66.98	9.16	89.38	1,027.28	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
10/12/2023	Subsurface (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 Water (Semi Tropic ID)	Surface water	0.61	0.00	0.00	131.97	9,123,558.00 *gal*
Application event totals		0.61	0.00	0.00	131.97	

205 - 11/12/2022: Wheat, silage, soft dough

Field name: 205

Crop: Wheat, silage, soft dough

Plant date: 11/12/2022

205 - 11/12/2022: Wheat, silage, soft dough

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
11/13/2022	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	79.95	8.55	78.76	925.84	1,495,896.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.62	0.00	0.00	133.91	10,368,458.00 *gal*
Application event totals		80.57	8.55	78.76	1,059.75	

01/17/2023	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
Lagoon	Process wastewater	87.90	9.39	86.59	1,017.87	1,644,591.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.58	0.00	0.00	125.59	9,724,589.00 *gal*
Application event totals		88.48	9.39	86.59	1,143.46	

02/14/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	72.63	7.76	71.55	841.09	1,358,963.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.54	0.00	0.00	117.00	9,058,963.00 *gal*
Application event totals		73.17	7.76	71.55	958.09	

205 - 06/22/2023: Corn, silage

Field name: 205

Crop: Corn, silage

Plant date: 06/22/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
06/13/2023	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
Lagoon	Process wastewater	67.80	13.27	78.80	291.37	1,844,589.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.59	0.00	0.00	128.07	9,916,548.00 *gal*
Application event totals		68.39	13.27	78.80	419.44	

205 - 06/22/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/03/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.71	0.00	0.00	153.97	11,921,547.00 *gal*
Application event totals		0.71	0.00	0.00	153.97	

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	71.57	14.00	83.17	307.54	1,946,951.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.59	0.00	0.00	128.17	9,924,587.00 *gal*
Application event totals		72.16	14.00	83.17	435.71	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/31/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.66	0.00	0.00	143.67	11,124,587.00 *gal*
Application event totals		0.66	0.00	0.00	143.67	

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	66.87	9.23	90.11	894.54	2,206,951.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.58	0.00	0.00	125.59	9,724,518.00 *gal*
Application event totals		67.45	9.23	90.11	1,020.13	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/26/2023	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 Water (Semi Tropic ID)	Surface water	0.66	0.00	0.00	143.62	11,120,154.00 *gal*
Application event totals		0.66	0.00	0.00	143.62	

205 - 06/22/2023: Corn, silage

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	69.37	9.58	93.48	928.02	2,289,547.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.55	0.00	0.00	119.08	9,220,331.00 *gal*
Application event totals		69.92	9.58	93.48	1,047.10	

09/23/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.73	0.00	0.00	157.71	12,211,548.00 *gal*
Application event totals		0.73	0.00	0.00	157.71	

206 - 11/13/2022: Wheat, silage, soft dough

Field name: 206

Crop: Wheat, silage, soft dough

Plant date: 11/13/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
11/14/2022	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	63.72	6.81	62.78	737.91	993,547.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.61	0.00	0.00	132.47	8,547,852.00 *gal*
Application event totals		64.33	6.81	62.78	870.39	

01/22/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	78.86	8.43	77.69	913.19	1,229,547.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.60	0.00	0.00	130.98	8,451,248.00 *gal*
Application event totals		79.46	8.43	77.69	1,044.17	

206 - 11/13/2022: Wheat, silage, soft dough

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	97.14	10.38	95.70	1,124.89	1,514,586.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.58	0.00	0.00	124.75	8,049,687.00 *gal*
Application event totals		97.72	10.38	95.70	1,249.64	

206 - 07/05/2023: Corn, silage

Field name: 206

Crop: Corn, silage

Plant date: 07/05/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
06/25/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	70.12	13.72	81.49	301.32	1,589,654.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.65	0.00	0.00	140.07	9,037,855.00 *gal*
Application event totals		70.76	13.72	81.49	441.39	

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.68	0.00	0.00	146.26	9,437,309.00 *gal*
Application event totals		0.68	0.00	0.00	146.26	

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	88.29	17.28	102.60	379.39	2,001,548.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.67	0.00	0.00	146.22	9,434,874.00 *gal*
Application event totals		88.96	17.28	102.60	525.62	

206 - 07/05/2023: Corn, silage

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.68	0.00	0.00	146.74	9,468,458.00 *gal*
Application event totals		0.68	0.00	0.00	146.74	

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	64.56	8.91	87.00	863.67	1,775,654.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.68	0.00	0.00	147.94	9,545,874.00 *gal*
Application event totals		65.25	8.91	87.00	1,011.61	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
09/10/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.71	0.00	0.00	154.07	9,941,225.00 *gal*
Application event totals		0.71	0.00	0.00	154.07	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
09/25/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	69.28	9.56	93.36	926.81	1,905,478.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.71	0.00	0.00	154.03	9,938,951.00 *gal*
Application event totals		69.99	9.56	93.36	1,080.85	

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.68	0.00	0.00	146.59	9,458,774.00 *gal*
Application event totals		0.68	0.00	0.00	146.59	

208 - 11/14/2022: Wheat, silage, soft dough

Field name: 208

Crop: Wheat, silage, soft dough

Plant date: 11/14/2022

208 - 11/14/2022: Wheat, silage, soft dough

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
11/15/2022	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
Lagoon	Process wastewater	76.62	8.19	75.48	887.20	1,194,558.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.65	0.00	0.00	140.14	9,042,589.00 *gal*
Application event totals		77.26	8.19	75.48	1,027.34	

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	99.76	10.66	98.28	1,155.24	1,555,449.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.63	0.00	0.00	136.76	8,824,159.00 *gal*
Application event totals		100.39	10.66	98.28	1,292.00	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
02/26/2023	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
Lagoon	Process wastewater	70.91	7.58	69.86	821.18	1,105,664.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.61	0.00	0.00	132.37	8,541,225.00 *gal*
Application event totals		71.53	7.58	69.86	953.55	

208 - 06/24/2023: Corn, silage

Field name: 208

Crop: Corn, silage

Plant date: 06/24/2023

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.61	0.00	0.00	132.37	8,541,227.00 *gal*
Application event totals		0.61	0.00	0.00	132.37	

208 - 06/24/2023: Corn, silage

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	96.36	18.86	111.99	414.09	2,184,596.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.61	0.00	0.00	132.11	8,524,665.00 *gal*
Application event totals		96.97	18.86	111.99	546.21	

07/24/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.65	0.00	0.00	140.09	9,039,569.00 *gal*
Application event totals		0.65	0.00	0.00	140.09	

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
Lagoon	Process wastewater	78.01	10.77	105.13	1,043.59	2,145,568.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.64	0.00	0.00	138.59	8,942,387.00 *gal*
Application event totals		78.65	10.77	105.13	1,182.18	

08/22/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.71	0.00	0.00	154.24	9,952,114.00 *gal*
Application event totals		0.71	0.00	0.00	154.24	

09/05/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	92.88	12.82	125.17	1,242.52	2,554,558.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.62	0.00	0.00	133.80	8,633,456.00 *gal*
Application event totals		93.50	12.82	125.17	1,376.32	

208 - 06/24/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
09/19/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.71	0.00	0.00	154.07	9,941,225.00 *gal*
Application event totals		0.71	0.00	0.00	154.07	

10/06/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.70	0.00	0.00	152.24	9,823,558.00 *gal*
Application event totals		0.70	0.00	0.00	152.24	

209 - 11/14/2022: Wheat, silage, soft dough

Field name: 209

Crop: Wheat, silage, soft dough

Plant date: 11/14/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
11/15/2022	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
Lagoon	Process wastewater	60.43	6.46	59.53	699.72	995,965.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.61	0.00	0.00	133.06	9,076,554.00 *gal*
Application event totals		61.04	6.46	59.53	832.79	

01/17/2023	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
Lagoon	Process wastewater	84.18	9.00	82.93	974.84	1,387,554.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.61	0.00	0.00	131.59	8,975,884.00 *gal*
Application event totals		84.79	9.00	82.93	1,106.43	

209 - 11/14/2022: Wheat, silage, soft dough

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
02/21/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	75.91	8.11	74.78	879.06	1,251,224.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.60	0.00	0.00	129.98	8,865,884.00 *gal*
Application event totals		76.51	8.11	74.78	1,009.03	

209 - 06/22/2023: Corn, silage

Field name: 209

Crop: Corn, silage

Plant date: 06/22/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
06/13/2023	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
Lagoon	Process wastewater	65.07	12.73	75.63	279.64	1,559,562.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.65	0.00	0.00	140.47	9,581,449.00 *gal*
Application event totals		65.72	12.73	75.63	420.10	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/03/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.66	0.00	0.00	143.32	9,776,001.00 *gal*
Application event totals		0.66	0.00	0.00	143.32	

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	69.07	13.52	80.27	296.83	1,655,449.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.65	0.00	0.00	141.91	9,680,114.00 *gal*
Application event totals		69.73	13.52	80.27	438.74	

209 - 06/22/2023: 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 Water (Semi Tropic ID)	Surface water	0.78	0.00	0.00	168.25	11,476,554.00 *gal*
Application event totals		0.78	0.00	0.00	168.25	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/16/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	61.41	8.48	82.75	821.49	1,785,449.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.64	0.00	0.00	139.68	9,527,841.00 *gal*
Application event totals		62.06	8.48	82.75	961.17	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
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 Water (Semi Tropic ID)	Surface water	0.80	0.00	0.00	174.23	11,884,557.00 *gal*
Application event totals		0.80	0.00	0.00	174.23	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
09/14/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	66.27	9.15	89.31	886.55	1,926,852.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.69	0.00	0.00	150.56	10,269,852.00 *gal*
Application event totals		66.97	9.15	89.31	1,037.11	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
10/03/2023	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 Water (Semi Tropic ID)	Surface water	0.56	0.00	0.00	120.93	8,248,995.00 *gal*
Application event totals		0.56	0.00	0.00	120.93	

210 - 11/14/2022: Wheat, silage, soft dough

Field name: 210

Crop: Wheat, silage, soft dough

Plant date: 11/14/2022

210 - 11/14/2022: Wheat, silage, soft dough

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
11/15/2022	Subsurface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	87.21	9.32	85.91	1,009.88	1,534,559.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.62	0.00	0.00	135.24	9,848,665.00 *gal*
Application event totals		87.83	9.32	85.91	1,145.13	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
01/16/2023	Subsurface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	94.28	10.08	92.88	1,091.77	1,658,996.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.62	0.00	0.00	135.24	9,848,225.00 *gal*
Application event totals		94.91	10.08	92.88	1,227.01	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
02/21/2023	Subsurface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	74.01	7.91	72.91	856.99	1,302,229.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.57	0.00	0.00	123.11	8,964,885.00 *gal*
Application event totals		74.57	7.91	72.91	980.10	

210 - 07/15/2023: Corn, silage

Field name: 210

Crop: Corn, silage

Plant date: 07/15/2023

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	87.34	17.09	101.50	375.31	2,234,559.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.75	0.00	0.00	163.13	11,879,558.00 *gal*
Application event totals		88.09	17.09	101.50	538.44	

210 - 07/15/2023: Corn, silage

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.71	0.00	0.00	154.43	11,245,889.00 *gal*
Application event totals		0.71	0.00	0.00	154.43	

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	76.03	10.50	102.46	1,017.12	2,359,997.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.72	0.00	0.00	156.13	11,369,885.00 *gal*
Application event totals		76.76	10.50	102.46	1,173.25	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/22/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.73	0.00	0.00	157.18	11,445,951.00 *gal*
Application event totals		0.73	0.00	0.00	157.18	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
09/03/2023	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
Lagoon	Process wastewater	72.81	10.05	98.11	973.92	2,259,779.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.61	0.00	0.00	131.40	9,568,779.00 *gal*
Application event totals		73.41	10.05	98.11	1,105.33	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
09/16/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.64	0.00	0.00	139.02	10,123,558.00 *gal*
Application event totals		0.64	0.00	0.00	139.02	

210 - 07/15/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
09/29/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	34.01	4.69	45.83	454.97	1,055,668.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.61	0.00	0.00	131.69	9,589,779.00 *gal*
Application event totals		34.62	4.69	45.83	586.66	

10/14/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.56	0.00	0.00	121.61	8,855,478.00 *gal*
Application event totals		0.56	0.00	0.00	121.61	

211 - 11/16/2022: Wheat, silage, soft dough

Field name: 211

Crop: Wheat, silage, soft dough

Plant date: 11/16/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
11/17/2022	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	76.60	8.19	75.46	886.97	1,160,115.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.60	0.00	0.00	130.72	8,193,554.00 *gal*
Application event totals		77.20	8.19	75.46	1,017.68	

01/16/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	67.35	7.20	66.35	779.93	1,020,115.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.63	0.00	0.00	137.13	8,595,668.00 *gal*
Application event totals		67.98	7.20	66.35	917.06	

211 - 11/16/2022: Wheat, silage, soft dough

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
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
Lagoon	Process wastewater	80.66	8.62	79.46	933.98	1,221,614.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.66	0.00	0.00	143.55	8,997,882.00 *gal*
Application event totals		81.32	8.62	79.46	1,077.53	

211 - 06/27/2023: Sorghum-Sudangrass, forage

Field name: 211

Crop: Sorghum-Sudangrass, forage

Plant date: 06/27/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
06/18/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	54.49	10.66	63.33	234.17	1,200,114.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.74	0.00	0.00	159.43	9,993,554.00 *gal*
Application event totals		55.23	10.66	63.33	393.61	

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	68.81	13.46	79.97	295.70	1,515,448.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.71	0.00	0.00	152.96	9,587,554.00 *gal*
Application event totals		69.52	13.46	79.97	448.66	

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	53.14	7.33	71.61	710.83	1,419,665.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.73	0.00	0.00	158.03	9,905,775.00 *gal*
Application event totals		53.87	7.33	71.61	868.86	

211 - 06/27/2023: Sorghum-Sudangrass, forage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
09/14/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	43.21	5.97	58.23	578.09	1,154,556.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.71	0.00	0.00	154.70	9,696,554.00 *gal*
Application event totals		43.93	5.97	58.23	732.78	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
09/27/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.71	0.00	0.00	153.08	9,595,184.00 *gal*
Application event totals		0.71	0.00	0.00	153.08	

227 - 11/11/2017: Alfalfa, hay

Field name: 227

Crop: Alfalfa, hay

Plant date: 11/11/2017

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
03/05/2023	Subsurface (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 Water (Semi Tropic ID)	Surface water	0.71	0.00	0.00	154.73	10,554,669.00 *gal*
Application event totals		0.71	0.00	0.00	154.73	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
04/05/2023	Subsurface (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 Water (Semi Tropic ID)	Surface water	0.87	0.00	0.00	188.48	12,856,945.00 *gal*
Application event totals		0.87	0.00	0.00	188.48	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
05/05/2023	Subsurface (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 Water (Semi Tropic ID)	Surface water	0.72	0.00	0.00	156.23	10,656,997.00 *gal*
Application event totals		0.72	0.00	0.00	156.23	

227 - 11/11/2017: Alfalfa, hay

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
06/06/2023	Subsurface (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 Water (Semi Tropic ID)	Surface water	0.73	0.00	0.00	159.21	10,859,874.00 *gal*
Application event totals		0.73	0.00	0.00	159.21	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/07/2023	Subsurface (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 Water (Semi Tropic ID)	Surface water	0.85	0.00	0.00	184.05	12,554,775.00 *gal*
Application event totals		0.85	0.00	0.00	184.05	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/08/2023	Subsurface (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 Water (Semi Tropic ID)	Surface water	0.74	0.00	0.00	160.60	10,954,778.00 *gal*
Application event totals		0.74	0.00	0.00	160.60	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
09/10/2023	Subsurface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
227	Ground water	5.39	0.00	0.00	845.80	10,869,841.00 *gal*
Application event totals		5.39	0.00	0.00	845.80	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
10/11/2023	Subsurface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
227	Ground water	6.38	0.00	0.00	1,000.85	12,862,445.00 *gal*
Application event totals		6.38	0.00	0.00	1,000.85	

228 - 11/16/2022: Wheat, silage, soft dough

Field name: 228

Crop: Wheat, silage, soft dough

Plant date: 11/16/2022

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

228 - 11/16/2022: Wheat, silage, soft dough

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
11/17/2022	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	86.13	9.21	84.85	997.41	1,400,500.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.72	0.00	0.00	156.04	10,500,000.00 *gal*
Application event totals		86.85	9.21	84.85	1,153.45	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
01/17/2023	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
Lagoon	Process wastewater	86.10	9.20	84.82	997.06	1,400,000.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.57	0.00	0.00	123.22	8,291,554.00 *gal*
Application event totals		86.67	9.20	84.82	1,120.28	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
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
Lagoon	Process wastewater	79.95	8.55	78.76	925.84	1,300,000.00 *gal*
227	Ground water	4.02	0.00	0.00	631.02	8,000,000.00 *gal*
Application event totals		83.98	8.55	78.76	1,556.86	

228 - 07/16/2023: Corn, silage

Field name: 228

Crop: Corn, silage

Plant date: 07/16/2023

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	78.74	15.41	91.51	338.36	1,861,558.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.73	0.00	0.00	157.40	10,591,225.00 *gal*
Application event totals		79.46	15.41	91.51	495.75	

228 - 07/16/2023: Corn, silage

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.73	0.00	0.00	157.47	10,596,554.00 *gal*
Application event totals		0.73	0.00	0.00	157.47	

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	66.05	12.92	76.76	283.82	1,561,485.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.73	0.00	0.00	157.45	10,594,885.00 *gal*
Application event totals		66.77	12.92	76.76	441.27	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/19/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.63	0.00	0.00	136.70	9,198,775.00 *gal*
Application event totals		0.63	0.00	0.00	136.70	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
09/03/2023	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
Lagoon	Process wastewater	65.36	9.02	88.08	874.35	1,874,664.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.63	0.00	0.00	135.47	9,115,698.00 *gal*
Application event totals		65.99	9.02	88.08	1,009.82	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
09/16/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.62	0.00	0.00	135.22	9,098,775.00 *gal*
Application event totals		0.62	0.00	0.00	135.22	

228 - 07/16/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
09/28/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	66.10	9.12	89.07	884.16	1,895,684.00 *gal*
227	Ground water	4.63	0.00	0.00	726.14	9,205,885.00 *gal*
Application event totals		70.73	9.12	89.07	1,610.29	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
10/14/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.59	0.00	0.00	127.02	8,546,997.00 *gal*
Application event totals		0.59	0.00	0.00	127.02	

S-1 - 11/17/2022: Wheat, silage, soft dough

Field name: S-1

Crop: Wheat, silage, soft dough

Plant date: 11/17/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
11/18/2022	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	58.05	6.20	57.19	672.25	827,554.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.63	0.00	0.00	137.30	8,100,215.00 *gal*
Application event totals		58.69	6.20	57.19	809.55	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
01/17/2023	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
Lagoon	Process wastewater	84.86	9.07	83.60	982.65	1,209,665.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.61	0.00	0.00	132.22	7,800,248.00 *gal*
Application event totals		85.47	9.07	83.60	1,114.87	

S-1 - 11/17/2022: Wheat, silage, soft dough

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
02/22/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	82.57	8.82	81.34	956.11	1,176,995.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.56	0.00	0.00	122.07	7,201,225.00 *gal*
Application event totals		83.13	8.82	81.34	1,078.18	

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

Field name: S-1

Crop: Corn, silage

Plant date: 05/20/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
05/11/2023	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
Lagoon	Process wastewater	60.62	11.86	70.45	260.51	1,256,547.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.66	0.00	0.00	142.40	8,400,548.00 *gal*
Application event totals		61.28	11.86	70.45	402.90	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
05/31/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.71	0.00	0.00	154.34	9,105,448.00 *gal*
Application event totals		0.71	0.00	0.00	154.34	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
06/14/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	63.06	12.34	73.28	270.97	1,306,991.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.69	0.00	0.00	149.25	8,804,896.00 *gal*
Application event totals		63.74	12.34	73.28	420.22	

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

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.70	0.00	0.00	152.62	9,003,559.00 *gal*
Application event totals		0.70	0.00	0.00	152.62	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/10/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	81.94	16.03	95.23	352.12	1,698,445.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.63	0.00	0.00	135.69	8,004,885.00 *gal*
Application event totals		82.57	16.03	95.23	487.81	

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 Water (Semi Tropic ID)	Surface water	0.69	0.00	0.00	149.31	8,808,554.00 *gal*
Application event totals		0.69	0.00	0.00	149.31	

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	57.69	11.29	67.04	247.89	1,195,687.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.67	0.00	0.00	145.86	8,604,889.00 *gal*
Application event totals		58.36	11.29	67.04	393.75	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/23/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.64	0.00	0.00	137.76	8,126,882.00 *gal*
Application event totals		0.64	0.00	0.00	137.76	

S-2 - 11/18/2022: Wheat, silage, soft dough

Field name: S-2

Crop: Wheat, silage, soft dough

Plant date: 11/18/2022

S-2 - 11/18/2022: Wheat, silage, soft dough

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
11/19/2022	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	73.51	7.86	72.41	851.19	654,896.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.65	0.00	0.00	141.72	5,225,445.00 *gal*
Application event totals		74.16	7.86	72.41	992.91	

01/16/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	88.63	9.47	87.31	1,026.34	789,654.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.60	0.00	0.00	131.04	4,831,554.00 *gal*
Application event totals		89.24	9.47	87.31	1,157.38	

02/22/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	73.50	7.86	72.41	851.16	654,876.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.61	0.00	0.00	131.43	4,845,852.00 *gal*
Application event totals		74.11	7.86	72.41	982.59	

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

Field name: S-2

Crop: Corn, silage

Plant date: 05/20/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
05/11/2023	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
Lagoon	Process wastewater	74.00	14.48	86.00	318.00	958,654.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.63	0.00	0.00	136.51	5,033,254.00 *gal*
Application event totals		74.63	14.48	86.00	454.51	

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

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
06/02/2023	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 Water (Semi Tropic ID)	Surface water	0.69	0.00	0.00	149.92	5,527,810.00 *gal*
Application event totals		0.69	0.00	0.00	149.92	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
06/16/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	68.02	13.31	79.06	292.32	881,245.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.63	0.00	0.00	136.51	5,033,214.00 *gal*
Application event totals		68.65	13.31	79.06	428.83	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
06/30/2023	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 Water (Semi Tropic ID)	Surface water	0.65	0.00	0.00	141.83	5,229,554.00 *gal*
Application event totals		0.65	0.00	0.00	141.83	

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	66.36	12.98	77.12	285.16	859,664.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.58	0.00	0.00	125.69	4,634,551.00 *gal*
Application event totals		66.94	12.98	77.12	410.86	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/25/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.69	0.00	0.00	149.87	5,525,896.00 *gal*
Application event totals		0.69	0.00	0.00	149.87	

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

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon	Process wastewater	61.46	8.48	82.81	822.10	965,825.00 *gal*
Canal Water (Semi Tropic ID)	Surface water	0.69	0.00	0.00	149.98	5,530,125.00 *gal*
Application event totals		62.15	8.48	82.81	972.08	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/19/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.66	0.00	0.00	142.28	5,246,119.00 *gal*
Application event totals		0.66	0.00	0.00	142.28	

S-3 - 11/17/2022: Wheat, silage, soft dough

Field name: S-3

Crop: Wheat, silage, soft dough

Plant date: 11/17/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
11/02/2022	Broadcast/incorporate	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Manure	Corral solids	198.73	66.72	229.58	0.00	650.00 *ton*
Application event totals		198.73	66.72	229.58	0.00	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
11/18/2022	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
227	Ground water	4.25	0.00	0.00	667.22	18,540,115.00 *gal*
Application event totals		4.25	0.00	0.00	667.22	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
01/17/2023	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
227	Ground water	4.03	0.00	0.00	631.32	17,542,551.00 *gal*
Application event totals		4.03	0.00	0.00	631.32	

S-3 - 11/17/2022: Wheat, silage, soft dough

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
02/22/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
227	Ground water	4.26	0.00	0.00	667.72	18,554,110.00 *gal*
Application event totals		4.26	0.00	0.00	667.72	

S-3 - 06/14/2023: Corn, silage

Field name: S-3

Crop: Corn, silage

Plant date: 06/14/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
06/03/2023	Broadcast/incorporate	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Manure	Corral solids	209.83	80.88	350.22	0.00	700.00 *ton*
Application event totals		209.83	80.88	350.22	0.00	

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
227	Ground water	5.75	0.00	0.00	901.90	25,061,225.00 *gal*
Application event totals		5.75	0.00	0.00	901.90	

06/23/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
227	Ground water	5.79	0.00	0.00	908.39	25,241,554.00 *gal*
Application event totals		5.79	0.00	0.00	908.39	

07/03/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
227	Ground water	5.79	0.00	0.00	908.52	25,245,117.00 *gal*
Application event totals		5.79	0.00	0.00	908.52	

S-3 - 06/14/2023: Corn, silage

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
227	Ground water	5.75	0.00	0.00	900.98	25,035,748.00 *gal*
Application event totals		5.75	0.00	0.00	900.98	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
07/28/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
227	Ground water	5.75	0.00	0.00	901.54	25,051,242.00 *gal*
Application event totals		5.75	0.00	0.00	901.54	

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
227	Ground water	5.75	0.00	0.00	901.45	25,048,665.00 *gal*
Application event totals		5.75	0.00	0.00	901.45	

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
227	Ground water	6.21	0.00	0.00	973.51	27,051,223.00 *gal*
Application event totals		6.21	0.00	0.00	973.51	

S-4 - 11/26/2021: Alfalfa, hay

Field name: S-4

Crop: Alfalfa, hay

Plant date: 11/26/2021

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.84	0.00	0.00	182.13	21,824,569.00 *gal*
Application event totals		0.84	0.00	0.00	182.13	

S-4 - 11/26/2021: Alfalfa, hay

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
04/05/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.84	0.00	0.00	182.15	21,826,951.00 *gal*
Application event totals		0.84	0.00	0.00	182.15	

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.81	0.00	0.00	176.58	21,159,885.00 *gal*
Application event totals		0.81	0.00	0.00	176.58	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
06/05/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.76	0.00	0.00	165.14	19,789,665.00 *gal*
Application event totals		0.76	0.00	0.00	165.14	

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

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.84	0.00	0.00	181.91	21,798,664.00 *gal*
Application event totals		0.84	0.00	0.00	181.91	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/05/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.77	0.00	0.00	167.39	20,058,994.00 *gal*
Application event totals		0.77	0.00	0.00	167.39	

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
09/05/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.85	0.00	0.00	183.44	21,981,556.00 *gal*
Application event totals		0.85	0.00	0.00	183.44	

S-4 - 11/26/2021: Alfalfa, hay

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
10/05/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal Water (Semi Tropic ID)	Surface water	0.74	0.00	0.00	159.79	19,147,885.00 *gal*
Application event totals		0.74	0.00	0.00	159.79	

S-5 - 07/16/2023: Corn, silage

Field name: S-5

Crop: Corn, silage

Plant date: 07/16/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
06/25/2023	Broadcast/incorporate	No precipitation	No precipitation	No precipitation

Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Manure	Corral solids	239.80	92.43	400.25	0.00	25.00 *ton*
Application event totals		239.80	92.43	400.25	0.00	

07/06/2023	Subsurface (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 Water (Semi Tropic ID)	Surface water	0.65	0.00	0.00	141.06	650,114.00 *gal*
Application event totals		0.65	0.00	0.00	141.06	

07/25/2023	Subsurface (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 Water (Semi Tropic ID)	Surface water	0.65	0.00	0.00	141.33	651,365.00 *gal*
Application event totals		0.65	0.00	0.00	141.33	

08/06/2023	Subsurface (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 Water (Semi Tropic ID)	Surface water	0.65	0.00	0.00	141.04	650,045.00 *gal*
Application event totals		0.65	0.00	0.00	141.04	

S-5 - 07/16/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
08/17/2023	Subsurface (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 Water (Semi Tropic ID)	Surface water	0.65	0.00	0.00	141.83	653,665.00 *gal*
Application event totals		0.65	0.00	0.00	141.83	

08/29/2023	Subsurface (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 Water (Semi Tropic ID)	Surface water	0.66	0.00	0.00	142.54	656,951.00 *gal*
Application event totals		0.66	0.00	0.00	142.54	

09/12/2023	Subsurface (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 Water (Semi Tropic ID)	Surface water	0.66	0.00	0.00	142.73	657,841.00 *gal*
Application event totals		0.66	0.00	0.00	142.73	

09/25/2023	Subsurface (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 Water (Semi Tropic ID)	Surface water	0.66	0.00	0.00	142.88	658,541.00 *gal*
Application event totals		0.66	0.00	0.00	142.88	

10/10/2023	Subsurface (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 Water (Semi Tropic ID)	Surface water	0.65	0.00	0.00	141.30	651,225.00 *gal*
Application event totals		0.65	0.00	0.00	141.30	

B. NUTRIENT BUDGET

201 - 11/14/2022: Wheat, silage, soft dough

Field name: 201 Crop: Wheat, silage, 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	240.22	25.67	236.64	2,781.69
Fresh water	1.96	0.00	0.00	424.75
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	249.18	25.67	236.64	3,206.44
Anticipated crop nutrient removal	198.00	30.60	149.40	1,494.00
Actual crop nutrient removal	216.37	47.36	346.62	1,463.97
Nutrient balance	32.81	-21.69	-109.97	1,742.47
Applied to removed ratio	1.15	0.54	0.68	2.19

Fresh water applied	
25,449,595.00	*gallons*
937.22	*acre-inches*
14.42	*inches/acre*

Process wastewater applied	
3,477,821.00	*gallons*
128.08	*acre-inches*
1.97	*inches/acre*

Total harvests for the crop	
1	*harvests*

201 - 06/20/2023: Corn, silage

Field name: 201 Crop: Corn, silage Plant date: 06/20/2023

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	276.78	46.45	346.45	2,403.18
Fresh water	5.26	0.00	0.00	1,140.27
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	289.05	46.45	346.45	3,543.45
Anticipated crop nutrient removal	240.00	45.00	198.00	1,500.00
Actual crop nutrient removal	253.70	43.87	242.26	1,121.62
Nutrient balance	35.35	2.58	104.19	2,421.83
Applied to removed ratio	1.14	1.06	1.43	3.16

Fresh water applied	
68,320,412.00	*gallons*
2,516.01	*acre-inches*
38.71	*inches/acre*

Process wastewater applied	
6,426,470.00	*gallons*
236.67	*acre-inches*
3.64	*inches/acre*

Total harvests for the crop	
1	*harvests*

202 - 11/12/2022: Wheat, silage, soft dough

Field name: 202 Crop: Wheat, silage, soft dough Plant date: 11/12/2022

	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	231.58	24.75	228.13	2,681.65
Fresh water	1.81	0.00	0.00	391.66
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	240.38	24.75	228.13	3,073.31
Anticipated crop nutrient removal	198.00	30.60	149.40	1,494.00
Actual crop nutrient removal	211.29	48.07	347.68	1,397.42
Nutrient balance	29.09	-23.32	-119.55	1,675.89
Applied to removed ratio	1.14	0.51	0.66	2.20

Fresh water applied	
28,160,402.00	*gallons*
1,037.05	*acre-inches*
13.30	*inches/acre*

Process wastewater applied	
4,023,293.00	*gallons*
148.16	*acre-inches*
1.90	*inches/acre*

Total harvests for the crop	
1	*harvests*

202 - 06/20/2023: Corn, silage

Field name: 202 Crop: Corn, silage Plant date: 06/20/2023

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	263.38	44.44	328.91	2,249.78
Fresh water	5.20	0.00	0.00	1,126.66
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	275.58	44.44	328.91	3,376.44
Anticipated crop nutrient removal	240.00	45.00	198.00	1,500.00
Actual crop nutrient removal	228.96	45.04	266.49	1,107.25
Nutrient balance	46.62	-0.60	62.42	2,269.19
Applied to removed ratio	1.20	0.99	1.23	3.05

Fresh water applied	
81,005,946.00	*gallons*
2,983.17	*acre-inches*
38.25	*inches/acre*

Process wastewater applied	
7,316,266.00	*gallons*
269.43	*acre-inches*
3.45	*inches/acre*

Total harvests for the crop	
1	*harvests*

203 - 11/12/2022: Wheat, silage, soft dough

Field name: 203 Crop: Wheat, silage, soft dough Plant date: 11/12/2022

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	230.25	24.61	226.83	2,666.27
Fresh water	1.87	0.00	0.00	405.32
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	239.12	24.61	226.83	3,071.59
Anticipated crop nutrient removal	198.00	30.60	149.40	1,494.00
Actual crop nutrient removal	190.24	37.62	164.45	1,074.81
Nutrient balance	48.88	-13.01	62.38	1,996.78
Applied to removed ratio	1.26	0.65	1.38	2.86

Fresh water applied	
28,768,754.00	*gallons*
1,059.46	*acre-inches*
13.76	*inches/acre*

Process wastewater applied	
3,948,938.00	*gallons*
145.43	*acre-inches*
1.89	*inches/acre*

Total harvests for the crop	
1	*harvests*

203 - 06/10/2023: Corn, silage

Field name: 203 Crop: Corn, silage Plant date: 06/10/2023

	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	277.85	47.21	345.93	2,321.74
Fresh water	5.13	0.00	0.00	1,111.24
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	289.98	47.21	345.93	3,432.98
Anticipated crop nutrient removal	240.00	45.00	198.00	1,500.00
Actual crop nutrient removal	233.15	46.63	166.25	1,143.46
Nutrient balance	56.83	0.58	179.69	2,289.52
Applied to removed ratio	1.24	1.01	2.08	3.00

Fresh water applied	
78,872,808.00	*gallons*
2,904.62	*acre-inches*
37.72	*inches/acre*

Process wastewater applied	
7,589,194.00	*gallons*
279.48	*acre-inches*
3.63	*inches/acre*

Total harvests for the crop	
1	*harvests*

204 - 11/13/2022: Wheat, silage, soft dough

Field name: 204 Crop: Wheat, silage, soft dough Plant date: 11/13/2022

	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	266.72	28.51	262.76	3,088.66
Fresh water	1.81	0.00	0.00	391.93
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	275.53	28.51	262.76	3,480.59
Anticipated crop nutrient removal	198.00	30.60	149.40	1,494.00
Actual crop nutrient removal	222.60	40.47	252.95	1,135.48
Nutrient balance	52.93	-11.97	9.80	2,345.11
Applied to removed ratio	1.24	0.70	1.04	3.07

Fresh water applied	
27,095,888.00	*gallons*
997.85	*acre-inches*
13.30	*inches/acre*

Process wastewater applied	
4,455,704.00	*gallons*
164.09	*acre-inches*
2.19	*inches/acre*

Total harvests for the crop	
1	*harvests*

204 - 07/12/2023: Corn, silage

Field name: 204 Crop: Corn, silage Plant date: 07/12/2023

	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	276.07	42.66	357.40	2,976.65
Fresh water	5.17	0.00	0.00	1,121.24
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	288.25	42.66	357.40	4,097.89
Anticipated crop nutrient removal	240.00	45.00	198.00	1,500.00
Actual crop nutrient removal	235.91	51.60	173.24	868.06
Nutrient balance	52.34	-8.95	184.15	3,229.83
Applied to removed ratio	1.22	0.83	2.06	4.72

Fresh water applied	
77,515,585.00	*gallons*
2,854.64	*acre-inches*
38.06	*inches/acre*

Process wastewater applied	
7,726,632.00	*gallons*
284.55	*acre-inches*
3.79	*inches/acre*

Total harvests for the crop	
1	*harvests*

205 - 11/12/2022: Wheat, silage, soft dough

Field name: 205 Crop: Wheat, silage, soft dough Plant date: 11/12/2022

	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	240.49	25.70	236.91	2,784.80
Fresh water	1.74	0.00	0.00	376.49
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	249.22	25.70	236.91	3,161.30
Anticipated crop nutrient removal	198.00	30.60	149.40	1,494.00
Actual crop nutrient removal	211.62	46.05	344.29	1,403.49
Nutrient balance	37.60	-20.35	-107.38	1,757.81
Applied to removed ratio	1.18	0.56	0.69	2.25

Fresh water applied	
29,152,010.00	*gallons*
1,073.57	*acre-inches*
12.78	*inches/acre*

Process wastewater applied	
4,499,450.00	*gallons*
165.70	*acre-inches*
1.97	*inches/acre*

Total harvests for the crop	
1	*harvests*

205 - 06/22/2023: Corn, silage

Field name: 205 Crop: Corn, silage Plant date: 06/22/2023

	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	275.61	46.08	345.56	2,421.47
Fresh water	5.08	0.00	0.00	1,099.88
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	287.69	46.08	345.56	3,521.35
Anticipated crop nutrient removal	240.00	45.00	198.00	1,500.00
Actual crop nutrient removal	221.46	35.06	256.52	1,007.63
Nutrient balance	66.23	11.01	89.04	2,513.72
Applied to removed ratio	1.30	1.31	1.35	3.49

Fresh water applied	
85,163,820.00	*gallons*
3,136.29	*acre-inches*
37.34	*inches/acre*

Process wastewater applied	
8,288,038.00	*gallons*
305.22	*acre-inches*
3.63	*inches/acre*

Total harvests for the crop	
1	*harvests*

206 - 11/13/2022: Wheat, silage, soft dough

Field name: 206 Crop: Wheat, silage, soft dough Plant date: 11/13/2022

	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	239.72	25.62	236.16	2,775.99
Fresh water	1.79	0.00	0.00	388.20
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	248.52	25.62	236.16	3,164.20
Anticipated crop nutrient removal	198.00	30.60	149.40	1,494.00
Actual crop nutrient removal	195.18	32.53	172.66	1,288.70
Nutrient balance	53.33	-6.91	63.50	1,875.50
Applied to removed ratio	1.27	0.79	1.37	2.46

Fresh water applied	
25,048,787.00	*gallons*
922.46	*acre-inches*
13.18	*inches/acre*

Process wastewater applied	
3,737,680.00	*gallons*
137.65	*acre-inches*
1.97	*inches/acre*

Total harvests for the crop	
1	*harvests*

206 - 07/05/2023: Corn, silage

Field name: 206 Crop: Corn, silage Plant date: 07/05/2023

	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	292.25	49.47	364.46	2,471.20
Fresh water	5.46	0.00	0.00	1,181.92
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	304.71	49.47	364.46	3,653.11
Anticipated crop nutrient removal	240.00	45.00	198.00	1,500.00
Actual crop nutrient removal	252.69	40.11	152.41	856.33
Nutrient balance	52.02	9.36	212.04	2,796.78
Applied to removed ratio	1.21	1.23	2.39	4.27

Fresh water applied	
76,263,320.00	*gallons*
2,808.52	*acre-inches*
40.12	*inches/acre*

Process wastewater applied	
7,272,334.00	*gallons*
267.82	*acre-inches*
3.83	*inches/acre*

Total harvests for the crop	
1	*harvests*

208 - 11/14/2022: Wheat, silage, soft dough

Field name: 208 Crop: Wheat, silage, 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	247.29	26.43	243.62	2,863.63
Fresh water	1.89	0.00	0.00	409.27
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	256.18	26.43	243.62	3,272.89
Anticipated crop nutrient removal	198.00	30.60	149.40	1,494.00
Actual crop nutrient removal	213.15	40.17	249.97	1,127.10
Nutrient balance	43.04	-13.74	-6.36	2,145.79
Applied to removed ratio	1.20	0.66	0.97	2.90

Fresh water applied	
26,407,973.00	*gallons*
972.52	*acre-inches*
13.89	*inches/acre*

Process wastewater applied	
3,855,671.00	*gallons*
141.99	*acre-inches*
2.03	*inches/acre*

Total harvests for the crop	
1	*harvests*

208 - 06/24/2023: Corn, silage

Field name: 208 Crop: Corn, silage Plant date: 06/24/2023

	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	267.26	42.45	342.28	2,700.21
Fresh water	5.25	0.00	0.00	1,137.51
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	279.51	42.45	342.28	3,837.72
Anticipated crop nutrient removal	240.00	45.00	198.00	1,500.00
Actual crop nutrient removal	241.44	33.69	280.75	1,160.43
Nutrient balance	38.07	8.76	61.53	2,677.29
Applied to removed ratio	1.16	1.26	1.22	3.31

Fresh water applied	
73,398,201.00	*gallons*
2,703.01	*acre-inches*
38.61	*inches/acre*

Process wastewater applied	
6,884,722.00	*gallons*
253.54	*acre-inches*
3.62	*inches/acre*

Total harvests for the crop	
1	*harvests*

209 - 11/14/2022: Wheat, silage, soft dough

Field name: 209 Crop: Wheat, silage, 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	220.52	23.57	217.24	2,553.62
Fresh water	1.82	0.00	0.00	394.63
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	229.34	23.57	217.24	2,948.25
Anticipated crop nutrient removal	198.00	30.60	149.40	1,494.00
Actual crop nutrient removal	199.29	41.74	253.55	1,199.91
Nutrient balance	30.05	-18.17	-36.30	1,748.34
Applied to removed ratio	1.15	0.56	0.86	2.46

Fresh water applied	
26,918,322.00	*gallons*
991.31	*acre-inches*
13.40	*inches/acre*

Process wastewater applied	
3,634,743.00	*gallons*
133.86	*acre-inches*
1.81	*inches/acre*

Total harvests for the crop	
1	*harvests*

209 - 06/22/2023: Corn, silage

Field name: 209 Crop: Corn, silage Plant date: 06/22/2023

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	261.83	43.87	327.96	2,284.51
Fresh water	5.44	0.00	0.00	1,179.34
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	274.27	43.87	327.96	3,463.85
Anticipated crop nutrient removal	240.00	45.00	198.00	1,500.00
Actual crop nutrient removal	244.22	44.94	283.29	1,164.44
Nutrient balance	30.05	-1.06	44.66	2,299.41
Applied to removed ratio	1.12	0.98	1.16	2.97

Fresh water applied	
80,445,363.00	*gallons*
2,962.53	*acre-inches*
40.03	*inches/acre*

Process wastewater applied	
6,927,312.00	*gallons*
255.11	*acre-inches*
3.45	*inches/acre*

Total harvests for the crop	
1	*harvests*

210 - 11/14/2022: Wheat, silage, soft dough

Field name: 210 Crop: Wheat, silage, 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	255.50	27.31	251.70	2,958.64
Fresh water	1.82	0.00	0.00	393.59
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	264.31	27.31	251.70	3,352.24
Anticipated crop nutrient removal	198.00	30.60	149.40	1,494.00
Actual crop nutrient removal	199.06	56.68	294.45	1,548.27
Nutrient balance	65.25	-29.37	-42.75	1,803.97
Applied to removed ratio	1.33	0.48	0.85	2.17

Fresh water applied	
28,661,775.00	*gallons*
1,055.52	*acre-inches*
13.36	*inches/acre*

Process wastewater applied	
4,495,784.00	*gallons*
165.56	*acre-inches*
2.10	*inches/acre*

Total harvests for the crop	
1	*harvests*

210 - 07/15/2023: Corn, silage

Field name: 210 Crop: Corn, silage Plant date: 07/15/2023

	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	270.19	42.33	347.90	2,821.32
Fresh water	5.33	0.00	0.00	1,154.59
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	282.52	42.33	347.90	3,975.92
Anticipated crop nutrient removal	240.00	45.00	198.00	1,500.00
Actual crop nutrient removal	255.40	56.75	194.59	944.56
Nutrient balance	27.12	-14.43	153.31	3,031.35
Applied to removed ratio	1.11	0.75	1.79	4.21

Fresh water applied	
84,078,877.00	*gallons*
3,096.34	*acre-inches*
39.19	*inches/acre*

Process wastewater applied	
7,910,003.00	*gallons*
291.30	*acre-inches*
3.69	*inches/acre*

Total harvests for the crop	
1	*harvests*

211 - 11/16/2022: Wheat, silage, soft dough

Field name: 211 Crop: Wheat, silage, soft dough Plant date: 11/16/2022

	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	224.60	24.00	221.26	2,600.88
Fresh water	1.90	0.00	0.00	411.40
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	233.50	24.00	221.26	3,012.28
Anticipated crop nutrient removal	198.00	30.60	149.40	1,494.00
Actual crop nutrient removal	185.47	33.72	214.01	1,261.98
Nutrient balance	48.03	-9.72	7.26	1,750.30
Applied to removed ratio	1.26	0.71	1.03	2.39

Fresh water applied	
25,787,104.00	*gallons*
949.65	*acre-inches*
13.97	*inches/acre*

Process wastewater applied	
3,401,844.00	*gallons*
125.28	*acre-inches*
1.84	*inches/acre*

Total harvests for the crop	
1	*harvests*

211 - 06/27/2023: Sorghum-Sudangrass, forage

Field name: 211 Crop: Sorghum-Sudangrass, forage Plant date: 06/27/2023

	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	219.66	37.43	273.14	1,818.79
Fresh water	3.59	0.00	0.00	778.20
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	230.25	37.43	273.14	2,596.99
Anticipated crop nutrient removal	180.00	35.00	342.50	1,500.00
Actual crop nutrient removal	197.43	58.26	299.38	1,270.36
Nutrient balance	32.82	-20.83	-26.25	1,326.63
Applied to removed ratio	1.17	0.64	0.91	2.04

Fresh water applied	
48,778,621.00	*gallons*
1,796.35	*acre-inches*
26.42	*inches/acre*

Process wastewater applied	
5,289,783.00	*gallons*
194.80	*acre-inches*
2.86	*inches/acre*

Total harvests for the crop	
1	*harvests*

227 - 11/11/2017: Alfalfa, hay

Field name: 227 Crop: Alfalfa, hay Plant date: 11/11/2017

	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	0.00	0.00	0.00	0.00
Fresh water	16.41	0.00	0.00	2,849.96
Atmospheric deposition	14.00	0.00	0.00	0.00
Total nutrients applied	30.41	0.00	0.00	2,849.96
Anticipated crop nutrient removal	480.00	43.20	336.00	1,600.00
Actual crop nutrient removal	578.30	42.50	335.44	3,217.82
Nutrient balance	-547.89	-42.50	-335.44	-367.86
Applied to removed ratio	0.05	0.00	0.00	0.89

Fresh water applied	
92,170,324.00	*gallons*
3,394.32	*acre-inches*
45.87	*inches/acre*

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

Total harvests for the crop	
1	*harvests*

228 - 11/16/2022: Wheat, silage, soft dough

Field name: 228 Crop: Wheat, silage, soft dough Plant date: 11/16/2022

	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	252.19	26.95	248.44	2,920.31
Fresh water	5.31	0.00	0.00	910.28
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	264.50	26.95	248.44	3,830.59
Anticipated crop nutrient removal	198.00	30.60	149.40	1,494.00
Actual crop nutrient removal	214.71	40.74	232.33	1,123.11
Nutrient balance	49.79	-13.79	16.11	2,707.47
Applied to removed ratio	1.23	0.66	1.07	3.41

Fresh water applied	
26,791,554.00	*gallons*
986.64	*acre-inches*
13.52	*inches/acre*

Process wastewater applied	
4,100,500.00	*gallons*
151.01	*acre-inches*
2.07	*inches/acre*

Total harvests for the crop	
1	*harvests*

228 - 07/16/2023: Corn, silage

Field name: 228 Crop: Corn, silage Plant date: 07/16/2023

	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	276.24	46.48	345.41	2,380.69
Fresh water	9.28	0.00	0.00	1,732.86
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	292.52	46.48	345.41	4,113.55
Anticipated crop nutrient removal	240.00	45.00	198.00	1,500.00
Actual crop nutrient removal	256.03	57.35	184.34	933.99
Nutrient balance	36.49	-10.87	161.07	3,179.56
Applied to removed ratio	1.14	0.81	1.87	4.40

Fresh water applied	
76,948,794.00	*gallons*
2,833.76	*acre-inches*
38.82	*inches/acre*

Process wastewater applied	
7,193,391.00	*gallons*
264.91	*acre-inches*
3.63	*inches/acre*

Total harvests for the crop	
1	*harvests*

S-1 - 11/17/2022: Wheat, silage, soft dough

Field name: S-1 Crop: Wheat, silage, soft dough Plant date: 11/17/2022

	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	225.48	24.10	222.12	2,611.01
Fresh water	1.81	0.00	0.00	391.59
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	234.28	24.10	222.12	3,002.61
Anticipated crop nutrient removal	198.00	30.60	149.40	1,494.00
Actual crop nutrient removal	207.82	34.27	201.19	1,063.42
Nutrient balance	26.47	-10.17	20.94	1,939.19
Applied to removed ratio	1.13	0.70	1.10	2.82

Fresh water applied	
23,101,688.00	*gallons*
850.76	*acre-inches*
13.29	*inches/acre*

Process wastewater applied	
3,214,214.00	*gallons*
118.37	*acre-inches*
1.85	*inches/acre*

Total harvests for the crop	
1	*harvests*

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

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

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	263.30	51.52	306.00	1,131.49
Fresh water	5.39	0.00	0.00	1,167.23
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	275.69	51.52	306.00	2,298.72
Anticipated crop nutrient removal	240.00	45.00	198.00	1,500.00
Actual crop nutrient removal	239.49	49.18	162.51	1,058.45
Nutrient balance	36.20	2.34	143.49	1,240.27
Applied to removed ratio	1.15	1.05	1.88	2.17

Fresh water applied	
68,859,661.00	*gallons*
2,535.87	*acre-inches*
39.62	*inches/acre*

Process wastewater applied	
5,457,670.00	*gallons*
200.99	*acre-inches*
3.14	*inches/acre*

Total harvests for the crop	
1	*harvests*

S-2 - 11/18/2022: Wheat, silage, soft dough

Field name: S-2 Crop: Wheat, silage, soft dough Plant date: 11/18/2022

	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	235.64	25.18	232.14	2,728.69
Fresh water	1.87	0.00	0.00	404.18
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	244.51	25.18	232.14	3,132.88
Anticipated crop nutrient removal	198.00	30.60	149.40	1,494.00
Actual crop nutrient removal	214.64	38.82	237.47	1,129.12
Nutrient balance	29.87	-13.63	-5.33	2,003.76
Applied to removed ratio	1.14	0.65	0.98	2.77

Fresh water applied	
14,902,851.00	*gallons*
548.82	*acre-inches*
13.72	*inches/acre*

Process wastewater applied	
2,099,426.00	*gallons*
77.31	*acre-inches*
1.93	*inches/acre*

Total harvests for the crop	
1	*harvests*

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

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

	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	269.84	49.26	324.99	1,717.58
Fresh water	5.23	0.00	0.00	1,132.60
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	282.07	49.26	324.99	2,850.18
Anticipated crop nutrient removal	240.00	45.00	198.00	1,500.00
Actual crop nutrient removal	241.66	45.44	148.71	1,067.83
Nutrient balance	40.41	3.82	176.28	1,782.35
Applied to removed ratio	1.17	1.08	2.19	2.67

Fresh water applied	
41,760,523.00	*gallons*
1,537.90	*acre-inches*
38.45	*inches/acre*

Process wastewater applied	
3,665,388.00	*gallons*
134.98	*acre-inches*
3.37	*inches/acre*

Total harvests for the crop	
1	*harvests*

S-3 - 11/17/2022: Wheat, silage, soft dough

Field name: S-3 Crop: Wheat, silage, soft dough Plant date: 11/17/2022

	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	198.73	66.72	229.58	0.00
Process wastewater	0.00	0.00	0.00	0.00
Fresh water	12.54	0.00	0.00	1,966.26
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	218.27	66.72	229.58	1,966.26
Anticipated crop nutrient removal	198.00	30.60	149.40	1,494.00
Actual crop nutrient removal	194.00	46.25	192.71	1,348.99
Nutrient balance	24.27	20.47	36.87	617.26
Applied to removed ratio	1.13	1.44	1.19	1.46

Fresh water applied	
54,636,776.00	*gallons*
2,012.09	*acre-inches*
12.58	*inches/acre*

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

Total harvests for the crop	
1	*harvests*

S-3 - 06/14/2023: Corn, silage

Field name: S-3 Crop: Corn, silage Plant date: 06/14/2023

	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	209.83	80.88	350.22	0.00
Process wastewater	0.00	0.00	0.00	0.00
Fresh water	40.79	0.00	0.00	6,396.29
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	257.61	80.88	350.22	6,396.29
Anticipated crop nutrient removal	240.00	45.00	198.00	1,500.00
Actual crop nutrient removal	241.10	42.30	137.47	1,074.39
Nutrient balance	16.51	38.58	212.75	5,321.90
Applied to removed ratio	1.07	1.91	2.55	5.95

Fresh water applied	
177,734,774.00	*gallons*
6,545.37	*acre-inches*
40.91	*inches/acre*

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

Total harvests for the crop	
1	*harvests*

S-4 - 11/26/2021: Alfalfa, hay

Field name: S-4 Crop: Alfalfa, hay Plant date: 11/26/2021

	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	0.00	0.00	0.00	0.00
Fresh water	6.45	0.00	0.00	1,398.52
Atmospheric deposition	14.00	0.00	0.00	0.00
Total nutrients applied	20.45	0.00	0.00	1,398.52
Anticipated crop nutrient removal	480.00	43.20	336.00	1,600.00
Actual crop nutrient removal	573.53	44.58	341.74	2,763.66
Nutrient balance	-553.08	-44.58	-341.74	-1,365.14
Applied to removed ratio	0.04	0.00	0.00	0.51

Fresh water applied	
167,588,169.00	*gallons*
6,171.70	*acre-inches*
47.47	*inches/acre*

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

Total harvests for the crop	
1	*harvests*

S-5 - 07/16/2023: Corn, silage

Field name: S-5 Crop: Corn, silage Plant date: 07/16/2023

	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	239.80	92.43	400.25	0.00
Process wastewater	0.00	0.00	0.00	0.00
Fresh water	5.24	0.00	0.00	1,134.70
Atmospheric deposition	14.00	0.00	0.00	0.00
Total nutrients applied	259.04	92.43	400.25	1,134.70
Anticipated crop nutrient removal	240.00	45.00	198.00	1,500.00
Actual crop nutrient removal	226.38	60.95	195.90	951.23
Nutrient balance	32.66	31.48	204.34	183.47
Applied to removed ratio	1.14	1.52	2.04	1.19

Fresh water applied
5,229,747.00 *gallons*
192.59 *acre-inches*
38.52 *inches/acre*

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

Total harvests for the crop
1 *harvests*

NUTRIENT ANALYSES

A. MANURE ANALYSES

Manure

Sample and source description: Manure

Sample date: 10/05/2022 Material type: Corral solids Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 11.7 %

	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	27,700.00	9,300.00	32,000.00							
DL	100.00	200.00	200.00							

Manure

Sample and source description: Manure

Sample date: 05/01/2023 Material type: Corral solids Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 12.8 %

	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	27,500.00	10,600.00	45,900.00							
DL	100.00	200.00	200.00							

Manure

Sample and source description: Manure

Sample date: 10/03/2023 Material type: Corral solids Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 16.0 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Calcium (mg/kg)	Magnesium (mg/kg)	Sodium (mg/kg)	Sulfur (mg/kg)	Chloride (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	27,100.00	11,800.00	40,500.00							
DL	100.00	100.00	100.00							

B. PROCESS WASTEWATER ANALYSES

Lagoon

Sample and source description: Lagoon

Sample date: 11/18/2022 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	538.00	478.00	0.00	0.00	57.50	530.00								9,380.00	6,230
DL	10.00	2.00	0.10	0.10	0.20	0.50								100.00	10

Lagoon

Sample and source description: Lagoon

Sample date: 03/08/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: 7.30

	Kjeldahl-N (mg/L)	NH4-N (mg/L)	NH3-N (mg/L)	Nitrate-N (mg/L)	Total P (mg/L)	Total K (mg/L)	Calcium (mg/L)	Magnes. (mg/L)	Sodium (mg/L)	Bicarb. (mg/L)	Carb. (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	EC (µmhos/cm)	TDS (mg/L)
Value	449.00	374.00	0.00	0.00	64.10	654.00								7,490.00	4,970
DL	10.00	2.00	0.10	0.10	0.20	0.50								100.00	10

Lagoon

Sample and source description: Lagoon

Sample date: 05/01/2023 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	370.00	322.00	0.00	0.00	72.40	430.00								2,390.00	1,590
DL	10.00	2.00	0.10	0.10	0.20	0.50								100.00	10

Lagoon

Sample and source description: Lagoon

Sample date: 08/02/2023 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	305.00	299.00	0.00	0.00	42.10	411.00								6,150.00	4,080
DL	10.00	2.00	0.10	0.10	0.20	0.50								100.00	10

Lagoon

Sample and source description: Lagoon

Sample date: 11/07/2023 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	503.00	498.00	0.00	0.00	45.20	664.00								8,640.00	5,740
DL	10.00	2.00	0.10	0.10	0.20	0.50								100.00	10

C. FRESH WATER ANALYSES

227

Irrigation Well

Sample description: Irrigation Well

Sample date: 09/14/2023 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	4.40	0.00	4.40								1,120.00	690
DL	0.20	0.20	0.20								1.00	20

B-west

Domestic Well

Sample description: Domestic Well

Sample date: 11/30/2023 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	6.70	0.00	6.70	123.00	0.00	149.00	30.00	0.00	119.00	240.00	1,490.00	1,130
DL	0.20	0.20	0.20	1.00	1.00	1.00	10.00	10.00	0.67	4.00	1.00	20

Canal Water (Semi Tropic ID)

Canal Water (Semi Tropic ID)

Canal Water (Semi Tropic)

Sample description: Canal Water (Semi Tropic)

Sample date: 07/18/2023 Source of analysis: Lab analysis

	Total N (mg/L)	NH4-N (mg/L)	Nitrate-N (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Bicarbonate (mg/L)	Carbonate (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	EC (µmhos/cm)	TDS (mg/L)
Value	0.60	0.00	0.60								204.00	130
DL	0.50	0.20	0.20								1.00	20

D. SOIL ANALYSES

No soil analyses entered.

E. PLANT TISSUE ANALYSES

201 - 11/14/2022: Wheat, silage, soft dough

Wheat

Sample and source description: Wheat

Sample date: 05/20/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 71.9 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	20,100.00	4,400.00	32,200.00		13.60
DL	500.00	200.00	200.00		0.05

201 - 06/20/2023: Corn, silage

201 - 06/20/2023: Corn, silage

Corn

Sample and source description: Corn

Sample date: 10/11/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 68.8 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	13,300.00	2,300.00	12,700.00		5.88
DL	500.00	200.00	200.00		0.05

202 - 11/12/2022: Wheat, silage, soft dough

Wheat

Sample and source description: Wheat

Sample date: 05/20/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 70.3 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	18,900.00	4,300.00	31,100.00		12.50
DL	500.00	200.00	200.00		0.05

202 - 06/20/2023: Corn, silage

Corn

Sample and source description: Corn

Sample date: 10/11/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 69.0 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	12,200.00	2,400.00	14,200.00		5.90
DL	500.00	200.00	200.00		0.05

203 - 11/12/2022: Wheat, silage, soft dough

Wheat

Sample and source description: Wheat

Sample date: 05/30/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 70.9 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	17,700.00	3,500.00	15,300.00		10.00
DL	500.00	200.00	200.00		0.05

203 - 06/10/2023: Corn, silage

Corn

Sample and source description: Corn

Sample date: 09/01/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 66.5 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	11,500.00	2,300.00	8,200.00		5.64
DL	500.00	200.00	200.00		0.05

204 - 11/13/2022: Wheat, silage, soft dough

Wheat

Sample and source description: Wheat

Sample date: 05/30/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 70.1 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	19,800.00	3,600.00	22,500.00		10.10
DL	500.00	200.00	200.00		0.05

204 - 07/12/2023: Corn, silage

Corn

Sample and source description: Corn

Sample date: 10/25/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 69.5 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	12,800.00	2,800.00	9,400.00		4.71
DL	500.00	200.00	200.00		0.05

205 - 11/12/2022: Wheat, silage, soft dough

Wheat

Sample and source description: Wheat

Sample date: 05/19/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 71.0 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	19,300.00	4,200.00	31,400.00		12.80
DL	500.00	200.00	200.00		0.05

205 - 06/22/2023: Corn, silage

Corn

Sample and source description: Corn

Sample date: 10/11/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 69.4 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	12,000.00	1,900.00	13,900.00		5.46
DL	500.00	200.00	200.00		0.05

206 - 11/13/2022: Wheat, silage, soft dough

Wheat

Sample and source description: Wheat

Sample date: 05/19/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 66.8 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	15,600.00	2,600.00	13,800.00		10.30
DL	500.00	200.00	200.00		0.05

206 - 07/05/2023: Corn, silage

Corn

Sample and source description: Corn

Sample date: 10/25/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 67.0 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	12,600.00	2,000.00	7,600.00		4.27
DL	500.00	200.00	200.00		0.05

208 - 11/14/2022: Wheat, silage, soft dough

Wheat

Sample and source description: Wheat

Sample date: 05/28/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 70.5 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	19,100.00	3,600.00	22,400.00		10.10
DL	500.00	200.00	200.00		0.05

208 - 06/24/2023: Corn, silage

Corn

Sample and source description: Corn

Sample date: 10/13/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 69.1 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	12,900.00	1,800.00	15,000.00		6.20
DL	500.00	200.00	200.00		0.05

209 - 11/14/2022: Wheat, silage, soft dough

Wheat

Sample and source description: Wheat

Sample date: 05/21/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 71.8 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	19,100.00	4,000.00	24,300.00		11.50
DL	500.00	200.00	200.00		0.05

209 - 06/22/2023: Corn, silage

Corn

Sample and source description: Corn

Sample date: 10/12/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 67.8 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	12,500.00	2,300.00	14,500.00		5.96
DL	500.00	200.00	200.00		0.05

210 - 11/14/2022: Wheat, silage, soft dough

Wheat

Sample and source description: Wheat

Sample date: 05/27/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 63.5 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	14,400.00	4,100.00	21,300.00		11.20
DL	500.00	200.00	200.00		0.05

210 - 07/15/2023: Corn, silage

Corn

Sample and source description: Corn

Sample date: 10/25/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 66.5 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	12,600.00	2,800.00	9,600.00		4.66
DL	500.00	200.00	200.00		0.05

211 - 11/16/2022: Wheat, silage, soft dough

Wheat

Sample and source description: Wheat

Sample date: 05/18/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 66.0 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	14,300.00	2,600.00	16,500.00		9.73
DL	500.00	200.00	200.00		0.05

211 - 06/27/2023: Sorghum-Sudangrass, forage

Corn

Sample and source description: Corn

Sample date: 10/15/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 69.5 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	12,200.00	3,600.00	18,500.00		7.85
DL	500.00	200.00	200.00		0.05

227 - 11/11/2017: Alfalfa, hay

Alfalfa

Sample and source description: Alfalfa

Sample date: 11/07/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 10.0 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	38,100.00	2,800.00	22,100.00		21.20
DL	500.00	200.00	200.00		0.05

228 - 11/16/2022: Wheat, silage, soft dough

Wheat

Sample and source description: Wheat

Sample date: 05/29/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 70.6 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	19,500.00	3,700.00	21,100.00		10.20
DL	500.00	200.00	200.00		0.05

228 - 07/16/2023: Corn, silage

Corn

Sample and source description: Corn

Sample date: 10/25/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 66.4 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	12,500.00	2,800.00	9,000.00		4.56
DL	500.00	200.00	200.00		0.05

S-1 - 11/17/2022: Wheat, silage, soft dough

Wheat

Sample and source description: Wheat

Sample date: 05/03/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 71.1 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	18,800.00	3,100.00	18,200.00		9.62
DL	500.00	200.00	200.00		0.05

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

Corn

Sample and source description: Corn

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

Moisture: 65.0 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	11,200.00	2,300.00	7,600.00		4.95
DL	500.00	200.00	200.00		0.05

S-2 - 11/18/2022: Wheat, silage, soft dough

Wheat

Sample and source description: Wheat

Sample date: 05/03/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 71.6 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	18,800.00	3,400.00	20,800.00		9.89
DL	500.00	200.00	200.00		0.05

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

Corn

Sample and source description: Corn

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

Moisture: 66.9 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	11,700.00	2,200.00	7,200.00		5.17
DL	500.00	200.00	200.00		0.05

S-3 - 11/17/2022: Wheat, silage, soft dough

Wheat

Sample and source description: Wheat

Sample date: 05/29/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 65.1 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	15,100.00	3,600.00	15,000.00		10.50
DL	500.00	200.00	200.00		0.05

S-3 - 06/14/2023: Corn, silage

Corn

Sample and source description: Corn

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

Moisture: 65.1 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	11,400.00	2,000.00	6,500.00		5.08
DL	500.00	200.00	200.00		0.05

S-4 - 11/26/2021: Alfalfa, hay

Alfalfa

Sample and source description: Alfalfa

Sample date: 11/07/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 9.4 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	38,600.00	3,000.00	23,000.00		18.60
DL	500.00	200.00	200.00		0.05

S-5 - 07/16/2023: Corn, silage

Corn

Sample and source description: Corn

Sample date: 10/25/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 66.2 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	10,400.00	2,800.00	9,000.00		4.37
DL	500.00	200.00	200.00		0.05

F. SUBSURFACE (TILE) DRAINAGE ANALYSES

No subsurface (tile) drainage analyses entered.

NUTRIENT APPLICATIONS, POTENTIAL REMOVAL, AND BALANCE

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

	Total N (lbs)	Total P (lbs)	Total K (lbs)	Total salt (lbs)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	66,567.83	24,078.11	94,768.76	0.00
Process wastewater	466,163.55	64,906.58	524,716.08	4,674,260.94
Fresh water	17,554.44	0.00	0.00	3,202,859.73
Atmospheric deposition	18,004.00	0.00	0.00	0.00
Total nutrients applied	568,289.82	88,984.69	619,484.84	7,877,120.67
Anticipated crop nutrient removal	566,766.00	89,779.00	453,509.80	3,558,438.00
Actual crop nutrient removal	595,537.43	104,568.68	559,453.61	3,105,145.43
Nutrient balance	-27,247.62	-15,583.99	60,031.23	4,771,975.24
Applied to removed ratio	0.95	0.85	1.11	2.54

B. POUNDS OF NUTRIENT APPLIED VS. CROP REMOVAL

C. POUNDS OF NUTRIENT APPLIED BY MATERIAL TYPE

EXCEPTION REPORTING

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

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

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

B. STORM WATER DISCHARGES

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

No stormwater discharges occurred during the reporting period.

C. LAND APPLICATION AREA TO SURFACE WATER DISCHARGES

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

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

NUTRIENT MANAGEMENT PLAN AND EXPORT AGREEMENT STATEMENTS

A. NUTRIENT MANAGEMENT PLAN STATEMENTS

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

ADDITIONAL NOTES

A. NOTES

~Wells~ S-4, 203-N, 203-S, 204, 208, 210, B-East, 201DW, 206DWW, 206DWE, were Out of Services in 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.

CERTIFICATION

A. OWNER AND/OR OPERATOR CERTIFICATION

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

SIGNATURE OF OWNER OF FACILITY	SIGNATURE OF OPERATOR OF FACILITY
Bennett Siegers	SAME AS OWNER
PRINT OR TYPE NAME	PRINT OR TYPE NAME
6-14-24	6-14-24
DATE	DATE

ENVIRONMENTAL AGRICULTURAL
Analytical Chemists

August 11, 2023

Sentry Ag Services
Attn: Monique Baldivez
P.O. Box 7750
Visalia, CA 93290

Lab No. : **VI 2344660**
Customer No. : **4019696**
Reference : **3057**

Laboratory Report

Introduction: This report package contains a total of 3 pages divided into 3 sections:

Case Narrative	(1 page)	: An overview of the work performed at FGL.
Sample Results	(1 page)	: Results for each sample submitted.
Quality Control	(1 page)	: Supporting Quality Control (QC) results.

Case Narrative

This Case Narrative pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab No.	Matrix
Semi Tropic ID	07/18/2023	07/18/2023	VI 2344660-001	AGW

Sampling and Receipt Information:

The Sample was received in acceptable condition and within temperature requirements, unless noted on the Condition Upon Receipt (CUR) form. The Sample was received, prepared and analyzed within the method specified holding times. All samples arrived on ice. All samples were checked for pH if acid or base preservation is required (except for VOAs). For details of sample receipt information, please see the associated Chain of Custody and Condition Upon Receipt Form.

Quality Control: All samples were prepared and analyzed according to established quality control criteria. Any exceptions are noted in the Quality Control Section of this report.

Test Summary	
EPA 351.2	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
SM 2540 C	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
SM 4500-H+B	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
SM 4500-NO3 F	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)

Certification: I certify that this data package is in compliance with ELAP standards, both technically and for completeness, except for any conditions listed above and in the QC Section. Release of the data contained in this data package is authorized by the Laboratory Director or his designee, as verified by the following electronic signature. This report shall not be reproduced except in full, without the written approval of the laboratory.

KD: EHB

Approved By **Kelly A. Dunnahoo, B.S.** Digitally signed by Kelly A. Dunnahoo, B.S.
Title: Laboratory Director
Date: 2023-08-14

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August 11, 2023

Sentry Ag Services
Attn: Monique Baldivez
P.O. Box 7750
Visalia, CA 93290

Description : Semi Tropic ID
Project : Semi Tropic ID

Lab No. : VI 2344660-001
Customer No. : 4019696
Reference : 3057
Sampled On : July 18, 2023 at 08:30
Sampled By : Klay
Received On : July 18, 2023 at 15:17
Matrix : Ag Water

Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
Dairy Analysis							Date	Time	Who	Method	Date	Time	Who
Nitrogen, Total Kjeldahl	0.6	0.5	mg/L		1		08/08/2023	08:55	sta	EPA 351.2	08/10/2023	17:40	lcr
Nitrate Nitrogen	ND	0.4	mg/L		1	U	07/19/2023	12:15	lfs	SM 4500-NO3 F	07/19/2023	15:06	lfs
Nitrogen, Total as Nitrogen	0.6	0.5	mg/L		1		08/08/2023	08:55	sta	Calc.	08/10/2023	17:40	lcr
Nitrate + Nitrite as N	ND	0.4	mg/L		1	U	07/19/2023	12:15	lfs	SM 4500-NO3 F	07/19/2023	15:06	lfs
Kjeldahl Nitrogen	0.6	0.5	mg/L		1		08/08/2023	08:55	sta	EPA 351.2	08/10/2023	17:40	lcr
Conductivity	204	1	umhos/cm		1		07/31/2023	17:05	amm	SM 4500-H+B	07/31/2023	20:34	amm
Solids, Total Dissolved (TDS)	130	20	mg/L		1		07/21/2023	09:30	ctl	SM 2540 C	07/24/2023	11:00	ctl

DQF Flags Definition:
U Constituent results were non-detect.

ND=Non-Detected, RL=Reporting Level , Dil.=Dilution

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August 11, 2023
Sentry Ag Service

Lab No. : VI 2344660
Customer No. : 4019696

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
E. C.	2320B	(VI 2344710-008)	Dup	umhos/cm		0.3%	5	
Solids, Total Dissolved	2540CE	07/21/2023:207986CTL	Blank	mg/L		ND	<20	
			LCS	mg/L	991.5	101%	90-110	
		(SP 2312256-003)	Dup	mg/L		0.2%	5	
		(SP 2312256-003)	Dup	mg/L		3.10%	5	
Nitrogen, Total Kjeldahl	351.2	08/08/2023:208707STA	Blank	mg/L		ND	<0.5	
			LCS	mg/L	12.00	91.3%	73-124	
			MS	mg/L	12.00	85.5%	54-136	
		(VI 2344654-002)	MSD	mg/L	12.00	85.3%	54-136	
			MSRPD	mg/L		0.3%	≤27	
			MS	mg/L	12.00	82.8%	54-136	
		(VI 2344644-003)	MSD	mg/L	12.00	82.5%	54-136	
			MSRPD	mg/L		0.3%	≤27	
Nitrate + Nitrite as N	4500NO3F	07/19/2023:207926LFS	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	97.8%	80-120	
			MS	mg/L	5.609	91.9%	66-125	
		(STK2339515-001)	MSD	mg/L	5.609	94.5%	66-125	
			MSRPD	mg/L		1.2%	≤30.4	
Nitrate Nitrogen	4500NO3F	07/19/2023:207926LFS	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	97.8%	80-120	
			MS	mg/L	5.609	91.9%	66-125	
		(STK2339515-001)	MSD	mg/L	5.609	94.5%	66-125	
			MSRPD	mg/L		1.2%	≤30.4	

Definition

Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.
DQO : Data Quality Objective - This is the criteria against which the quality control data is compared.
Dup : Duplicate Sample - A random sample with each batch is prepared and analyzed in duplicate. The relative percent difference is an indication of precision for the preparation and analysis.
LCS : Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.
MS : Matrix Spikes - A random sample is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.
MSD : Matrix Spike Duplicate of MS/MSD pair - A random sample duplicate is spiked with a known amount of analyted. The recoveries are an indication of how that sample matrix affects analyte recovery.
MSRPD : MS/MSD Relative Percent Difference (RPD) - The MS relative percent difference is an indication of precision for the preparation and analysis.
ND : Non-detect - Result was below the DQO listed for the analyte.

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2344660

Laboratory Analysis Work Order

3057

SITE NAME: Semi Tropic ID

LABORATORY: VT | FGL 4-19696

Billing: Sentry Ag Services, LLC
P.O. Box 7750, Visalia, CA 93290

Authorized Copy Release to:
labs@sentryagservices.com

ANALYSIS TO BE COMPLETED

Irrigation/Ground Water (ELAP Standards)

- W1 EC, NO_3N (Dom)
- W2 EC, NO_3N, TDS, TN (Irr)
- W3 NH_4-N (Ammonium)
- W4 EC, NO_3N, Ca, Mg, Na, HCO_3, CO_3, SO_4S, Cl, TDS (Dom, GM)
- W5 EC, NO_3N, TDS, TN, Ca, Mg, Na, HCO_3, CO_3, SO_4S, Cl (Irr, GM)
- W6 NO_3N, NO_2 (Dom ILRP, Annually)
- W7 Ca, Mg, Na, K, HCO_3, CO_3, SO_4, Cl + Lab Filtering (GWM)
- W8 Other: _____

Plant Tissue

- P1 TN, NO_3N, PO_4P, K (Mid Season - Wheat)
- P2 TN, P, K (Mid-season - Corn)
- P3 TN, TP, TK, Ash, %M (At Harvest)
- P4 TN, %M
- P5 % Moisture
- P6 NIR
- P7 Other: _____

Process Waste Water (lagoon)

- L1 EC, NH_4N, TKN, TP, TK, TDS (Quarterly)
- L2 EC, NO_3N, NH_4N, TKN, TP, TK, TDS, pH (Annually)
- L3 Ca, Mg, Na, HCO_3,CO_3, SO_4S, Cl (Biennially)
- L4 Other: _____

Manure

- M1 TN, TP, TK, %M (2/year)
- M2 TN, TP, K, %M, Ca, Mg, Na, S, Cl, ash (Biennially)
- M3 Other: _____

Soil

- S1 SP%, pH, EC, Ca, Mg, Na, K, ESP, LP, B, NO_3N, PO_4P, K-AA, Zn, Mn, Fe, Cu, SO_4S
- S2 S1 + CEC, CaCO3, OM, C:N, TN
- S3 NO_3N, NH_4N
- S4 Other: _____

	Sample ID	Description	Analysis	Date/Time	Sampled by	SAS USE ONLY: FIELD TESTS NH_3N *	pH	Temp
1	Semi Tropic ID	Canal H20	W2	7/18/23 8:30	Klay	–		
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								

* Field Test of ammonium nitrogen may only be made by a trained technician. Positive test to be analyzed for ammonium nitrogen by the laboratory.

All samples are to follow the procedures noted in the Sampling & Analysis Plan of the NMP and the RWQCB specifications. Any samples taken outside of these procedures shall provide the procedures on the notes below. Additionally, if any preservatives are used in the collections or processing of sampes, please note below.

NOTES:

CHAIN OF CUSTODY RECORDING

	Signature	Company	Received Date & Time	Relinquished Date & Time
1st	Klay [illegible]	SAS		7/18/23 15:17
2nd	SRO	FGL	7/18/23 1517	
3rd	SRO	FGL		7/18/23 1730
4th		GLS	7/18/23 1730	

LABORATORY USE ONLY
Logged In By: _____ **Total Samples:** _____ **Laboratory No.:** _____

R01 GLS 7/19/23
5.3°C MC 1100

Inter-Laboratory Condition Upon Receipt (Attach to COC)

Sample Receipt at: STK CC CH VI

1. Number of ice chests/packages received: 1 Shipping tracking # OTC
2. Were samples received in a chilled condition? Temps: RO1 / 5.3°c / ____ / ____ / ____
   Surface water SWTR bact samples: A sample that has a temperature upon receipt of >10° C, whether iced or not, should be flagged unless the time since sample collection has been less than two hours.

3.	Do the number of bottles received agree with the COC?	Yes	No	N/A
4.	Were samples received intact? (i.e. no broken bottles, leaks etc.)	Yes	No	
5.	VOAs checked for Headspace?	Yes	No	N/A
6.	Were sample custody seals intact?	Yes	No	N/A
7.	If required, was sample split for pH analysis?	Yes	No	N/A
8.	Were all analyses within holding times at time of receipt?	Yes	No	
9.	Verify sample date, time and sampler name	Yes	No	

Sign and date the COC, place in a ziplock and put in the same ice chest as the samples.
Sample Receipt Review completed by (initials): SRO

Sample Receipt at SP:

1. Were samples received in a chilled condition? Temps: 3c / ____ / ____ / ____ / ____
   Acceptable is above freezing to 6° C. If many packages are received at one time check for tests/H.T.'s/rushes/
2. Shipping tracking numbers: 559787246 6815

3.	Do the number of bottles received agree with the COC?	Yes	No	N/A
4.	Were samples received intact? (i.e. no broken bottles, leaks etc.)	Yes	No	
5.	Were sample custody seals intact?	Yes	No	N/A

Sign and date the COC, obtain LIMS sample numbers, select methods/tests and print labels.

Sample Verification, Labeling and Distribution:

1.	Were all requested analyses understood and acceptable?	Yes	No		
2.	Did bottle labels correspond with the client's ID's?	Yes	No		
3.	Were all bottles requiring sample preservation properly preserved? [Exception: Oil & Grease, VOA and CrVI verified in lab]	Yes	No	N/A	FGL
4.	VOAs checked for Headspace?	Yes	No	N/A	
5.	Have rush or project due dates been checked and accepted?	Yes	No	N/A	
6.	Were all analyses within holding times at time of receipt?	Yes	No		

Attach labels to the containers and include a copy of the COC for lab delivery.
Sample Receipt, Login and Verification completed by (initials): MYC

Discrepancy Documentation:

Any items above which are "No" or do not meet specifications (i.e. temps) must be resolved.

1. Person Contacted:_____ Phone Number:_____
   Initiated By:_____ Date:_____
   Problem:
   Resolution:

2. Person Contacted:_____ Phone Number:
   Initiated By:_____
   Problem:
   Resolution:

(Please use the back of this sheet for additional c
contacts)

(4019696)
Sentry Ag Service
VI 2344660
iv 07/19/2023 08:11:16
VI 2344660

October 4, 2023

Sentry Ag Services
Attn: Monique Baldivez
P.O. Box 7750
Visalia, CA 93290

Lab No. : **VI 2346273**
Customer No. : **4019696**
Reference : **3158**

Laboratory Report

Introduction: This report package contains a total of 5 pages divided into 3 sections:

Case Narrative	(1 page)	: An overview of the work performed at FGL.
Sample Results	(1 page)	: Results for each sample submitted.
Quality Control	(3 pages)	: Supporting Quality Control (QC) results.

Case Narrative

This Case Narrative pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab No.	Matrix
227	09/14/2023	09/14/2023	VI 2346273-001	AGW

Sampling and Receipt Information:

The Sample was received in acceptable condition and within temperature requirements, unless noted on the Condition Upon Receipt (CUR) form. The Sample was received, prepared and analyzed within the method specified holding times. All samples arrived on ice. All samples were checked for pH if acid or base preservation is required (except for VOAs). For details of sample receipt information, please see the associated Chain of Custody and Condition Upon Receipt Form.

Quality Control: All samples were prepared and analyzed according to established quality control criteria. Any exceptions are noted in the Quality Control Section of this report.

Test Summary	
EPA 200.7	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
EPA 300.0	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
EPA 351.2	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
SM 2540 C	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
SM 4500-H+B	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)

Certification: I certify that this data package is in compliance with ELAP standards, both technically and for completeness, except for any conditions listed above and in the QC Section. Release of the data contained in this data package is authorized by the Laboratory Director or his designee, as verified by the following electronic signature. This report shall not be reproduced except in full, without the written approval of the laboratory.

KD: EHB

Approved By **Kelly A. Dunnahoo, B.S.** Digitally signed by Kelly A. Dunnahoo, B.S.
Title: Laboratory Director
Date: 2023-10-05

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October 4, 2023

Sentry Ag Services
Attn: Monique Baldivez
P.O. Box 7750
Visalia, CA 93290

Description : 227
Project : West Star North

Lab No. : VI 2346273-001
Customer No. : 4019696
Reference : 3158
Sampled On : September 14, 2023 at 09:20
Sampled By : Klay
Received On : September 14, 2023 at 15:14
Matrix : Ag Water

Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
Dairy Analysis							Date	Time	Who	Method	Date	Time	Who
Alkalinity (as CaCO3)	20	10	mg/L		1		09/20/2023	17:39	amm	SM 4500-H+B	09/21/2023	04:15	amm
Bicarbonate	30	10	mg/L		1		09/20/2023	17:39	amm	SM 4500-H+B	09/21/2023	04:15	amm
Carbonate	ND	10	mg/L		1	U	09/20/2023	17:39	amm	SM 4500-H+B	09/21/2023	04:15	amm
Hydroxide	ND	10	mg/L		1	U	09/20/2023	17:39	amm	SM 4500-H+B	09/21/2023	04:15	amm
Chloride	142	3*	mg/L		3		09/15/2023	11:30	ldm	EPA 300.0	09/16/2023	18:15	ldm
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	Ul	09/28/2023	10:26	sta	EPA 351.2	10/03/2023	22:18	lcr
Nitrate Nitrogen	4.4	0.1	mg/L		1		09/15/2023	11:30	ldm	EPA 300.0	09/15/2023	23:19	ldm
Nitrogen, Total as Nitrogen	4.4	0.5	mg/L		1	l	09/28/2023	10:26	sta	Calc.	10/03/2023	22:18	lcr
Nitrate + Nitrite as N	4.4	0.1	mg/L		1		09/15/2023	11:30	ldm	EPA 300.0	09/15/2023	23:19	ldm
Kjeldahl Nitrogen	ND	0.5	mg/L		1	Ul	09/28/2023	10:26	sta	EPA 351.2	10/03/2023	22:18	lcr
Conductivity	1120	1	umhos/cm		1		09/20/2023	17:39	amm	SM 4500-H+B	09/21/2023	04:15	amm
Sulfate Sulfur	86.1	0.5*	mg/L		3		09/15/2023	11:30	ldm	EPA 300.0	09/16/2023	18:15	ldm
Solids, Total Dissolved (TDS)	690	20	mg/L		1		09/18/2023	15:20	ctl	SM 2540 C	09/19/2023	11:30	ctl
Calcium	73	1	mg/L		1		09/20/2023	06:32	ejc	EPA 200.7	09/20/2023	14:48	ac
Magnesium	ND	1	mg/L		1	J	09/20/2023	06:32	ejc	EPA 200.7	09/20/2023	14:48	ac
Sodium	146	1	mg/L		1		09/20/2023	06:32	ejc	EPA 200.7	09/20/2023	14:48	ac

DQF Flags Definition:
U Constituent results were non-detect.
l The MS/MSD did not meet QC criteria.
J Reported value is estimated; detected at a concentration below the RL and above the laboratory MDL.

ND=Non-Detected, RL=Reporting Level * RL adjusted for dilution, Dil.=Dilution

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CA ELAP Certification No. 2810

October 4, 2023
Sentry Ag Service

Lab No. : VI 2346273
Customer No. : 4019696

Quality Control - Metals

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Metals								
Calcium	200.7	09/20/2023:210534EJC	Blank	mg/L		ND	<1	
			LCS	mg/L	12.00	105%	85-115	
			MS	mg/L	12.00	110%	75-125	
		(STK2352697-001)	MSD	mg/L	12.00	106%	75-125	
			MSRPD	mg/L		1.8%	≤20.0	
			MS	mg/L	12.00	100%	75-125	
		(STK2352697-002)	MSD	mg/L	12.00	95.8%	75-125	
			MSRPD	mg/L		2.2%	≤20.0	
Magnesium	200.7	09/20/2023:210534EJC	Blank	mg/L		ND	<1	
			LCS	mg/L	12.00	106%	85-115	
			MS	mg/L	12.00	131%	<¼	406
		(STK2352697-001)	MSD	mg/L	12.00	117%	75-125	
			MSRPD	mg/L		2.2%	≤20	
			MS	mg/L	12.00	120%	75-125	
		(STK2352697-002)	MSD	mg/L	12.00	113%	75-125	
			MSRPD	mg/L		0.9%	≤20	
Sodium	200.7	09/20/2023:210534EJC	Blank	mg/L		ND	<1	
			LCS	mg/L	12.00	111%	85-115	
			MS	mg/L	12.00	223%	<¼	406
		(STK2352697-001)	MSD	mg/L	12.00	138%	<1/4	
			MSRPD	mg/L		3.7%	≤20.0	
			MS	mg/L	12.00	-445%	<¼	406
		(STK2352697-002)	MSD	mg/L	12.00	-440%	<1/4	
			MSRPD	mg/L		0.1%	≤20.0	

Definition

Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.
DQO : Data Quality Objective - This is the criteria against which the quality control data is compared.
LCS : Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.
MS : Matrix Spikes - A random sample is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.
MSD : Matrix Spike Duplicate of MS/MSD pair - A random sample duplicate is spiked with a known amount of analyted. The recoveries are an indication of how that sample matrix affects analyte recovery.
MSRPD : MS/MSD Relative Percent Difference (RPD) - The MS relative percent difference is an indication of precision for the preparation and analysis.
ND : Non-detect - Result was below the DQO listed for the analyte.

Explanation

406 : Matrix Spike (MS) not within the Acceptance Range (AR) because of high analyte concentration in the sample. Data was accepted based on the LCS or CCV recovery.

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October 4, 2023
Sentry Ag Service

Lab No. : VI 2346273
Customer No. : 4019696

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
Alkalinity (as CaCO3)	2320B	09/20/2023:210530AMM	ND	mg/L		0.4%	10	406
Bicarbonate	2320B	(SP 2315663-001)	Dup	mg/L		0.3%	10	
E. C.	2320B	(SP 2315663-001)	Dup	umhos/cm		0%	5	
Solids, Total Dissolved	2540CE	09/18/2023:210471CTL	Blank	mg/L		ND	<20	
			LCS	mg/L	991.5	99.6%	90-110	
		(VI 2346273-001)	Dup	mg/L		4.44%	5	
		(VI 2346273-001)	Dup	mg/L		1.47%	5	
Chloride	300.0	09/15/2023:210454LDM	Blank	mg/L		ND	<1	
			LCS	mg/L	25.00	102 %	90-110	
			MS	mg/L	50.00	93.4 %	67-117	
		(SP 2315608-003)	MSD	mg/L	50.00	93.6 %	67-117	
			MSRPD	mg/L	10.00	0.2%	≤7	
			MS	mg/L	50.00	71.3 %	67-117	
		(SP 2315650-002)	MSD	mg/L	50.00	68.1 %	67-117	
			MSRPD	mg/L	10.00	1.1%	≤7	
Nitrate + Nitrite as N	300.0	09/15/2023:210454LDM	Blank	mg/L		ND	<0.4	
			LCS	mg/L	20.00	102 %	90-110	
			MS	mg/L	40.00	92.6 %	86-112	
		(SP 2315608-003)	MSD	mg/L	40.00	91.9 %	86-112	
			MSRPD	mg/L	10.00	0.4%	≤7	
			MS	mg/L	40.00	100 %	86-112	
		(SP 2315650-002)	MSD	mg/L	40.00	100 %	86-112	
			MSRPD	mg/L	10.00	0.03%	≤7	
Nitrate Nitrogen	300.0	09/15/2023:210454LDM	Blank	mg/L		ND	<0.4	
			LCS	mg/L	20.00	102 %	90-110	
			MS	mg/L	40.00	92.6 %	86-112	
		(SP 2315608-003)	MSD	mg/L	40.00	91.9 %	86-112	
			MSRPD	mg/L	10.00	0.4%	≤7	
			MS	mg/L	40.00	100 %	86-112	
		(SP 2315650-002)	MSD	mg/L	40.00	100 %	86-112	
			MSRPD	mg/L	10.00	0.03%	≤7	
Sulfate Sulfur	300.0	09/15/2023:210454LDM	Blank	mg/L		ND	<0.5	
			LCS	mg/L	50.00	102 %	90-110	
			MS	mg/L	100.0	64.9 %	18-165	
		(SP 2315608-003)	MSD	mg/L	100.0	64.2 %	18-165	
			MSRPD	mg/L	10.00	0.3%	≤7	
			MS	mg/L	100.0	100 %	18-165	
		(SP 2315650-002)	MSD	mg/L	100.0	99.8 %	18-165	
			MSRPD	mg/L	10.00	0.2%	≤7	
Nitrogen, Total Kjeldahl	351.2	09/28/2023:210923STA	Blank	mg/L		ND	<0.5	
			LCS	mg/L	12.00	91.0%	73-124	
			MS	mg/L	12.00	89.3%	90-110	435
		(SP 2315701-001)	MSD	mg/L	12.00	89.7%	90-110	435
			MSRPD	mg/L		0.4%	≤20	
			MS	mg/L	12.00	89.9%	90-110	435
		(SP 2315701-003)	MSD	mg/L	12.00	92.8%	90-110	
			MSRPD	mg/L		3.2%	≤20	

Page 4 of 5

Definition		
Blank	:	Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.
Dup	:	Duplicate Sample - A random sample with each batch is prepared and analyzed in duplicate. The relative percent difference is an indication of precision for the preparation and analysis.
LCS	:	Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.
MS	:	Matrix Spikes - A random sample is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.
MSD	:	Matrix Spike Duplicate of MS/MSD pair - A random sample duplicate is spiked with a known amount of analyted. The recoveries are an indication of how that sample matrix affects analyte recovery.
MSRPD	:	MS/MSD Relative Percent Difference (RPD) - The MS relative percent difference is an indication of precision for the preparation and analysis.
ND	:	Non-detect - Result was below the DQO listed for the analyte.

Explanation		
406	:	Matrix Spike (MS) not within the Acceptance Range (AR) because of high analyte concentration in the sample. Data was accepted based on the LCS or CCV recovery.
435	:	Sample matrix may be affecting this analyte. Data was accepted based on the LCS or CCV recovery.

Page 5 of 5

Laboratory Analysis Work Order

3158

SITE NAME: West Star North 2346273

LABORATORY: VT FGL 4-19696

Billing: Sentry Ag Services, LLC
P.O. Box 7750, Visalia, CA 93290

Authorized Copy Release to:
labs@sentryagservices.com

ANALYSIS TO BE COMPLETED

Irrigation/Ground Water (ELAP Standards)

- W1 EC, NO_3N (Dom)
- W2 EC, NO_3N, TDS, TN (Irr)
- W3 NH_4-N (Ammonium)
- W4 EC, NO_3N, Ca, Mg, Na, HCO_3, CO_3, SO_4S, Cl, TDS (Dom, GM)
- W5 EC, NO_3N, TDS, TN, Ca, Mg, Na, HCO_3, CO_3, SO_4S, Cl (Irr, GM)
- W6 NO_3N, NO_2 (Dom ILRP, Annually)
- W7 Ca, Mg, Na, K, HCO_3, CO_3, SO_4, Cl + Lab Filtering (GWM)
- W8 Other: _____

Rel H.OC FDA# 1H407

Plant Tissue

- P1 TN, NO_3N, PO_4P, K (Mid Season - Wheat)
- P2 TN, P, K (Mid-season - Corn)
- P3 TN, TP, TK, Ash, %M (At Harvest)
- P4 TN, %M
- P5 % Moisture
- P6 NIR
- P7 Other: _____

Process Waste Water (lagoon)

- L1 EC, NH_4N, TKN, TP, TK, TDS (Quarterly)
- L2 EC, NO_3N, NH_4N, TKN, TP, TK, TDS, pH (Annually)
- L3 Ca, Mg, Na, HCO_3,CO_3, SO_4S, Cl (Biennially)
- L4 Other: _____

Manure

- M1 TN, TP, TK, %M (2/year)
- M2 TN, TP, K, %M, Ca, Mg, Na, S, Cl, ash (Biennially)
- M3 Other: _____

Soil

- S1 SP%, pH, EC, Ca, Mg, Na, K, ESP, LP, B, NO_3N, PO_4P, K-AA, Zn, Mn, Fe, Cu, SO_4S
- S2 S1 + CEC, CaCO3, OM, C:N, TN
- S3 NO_3N, NH_4N
- S4 Other: _____

	Sample ID	Description	Analysis	Date/Time	Sampled by	SAS USE ONLY: FIELD TESTS NH_3N *	pH	Temp
1	227	Irr. Well	W5	9/14/23 9:20	Klay	–		
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								

* Field Test of ammonium nitrogen may only be made by a trained technician. Positive test to be analyzed for ammonium nitrogen by the laboratory.

All samples are to follow the procedures noted in the Sampling & Analysis Plan of the NMP and the RWQCB specifications. Any samples taken outside of these procedures shall provide the procedures on the notes below. Additionally, if any preservatives are used in the collections or processing of sampes, please note below.

NOTES:

CHAIN OF CUSTODY RECORDING

	Signature	Company	Received Date & Time	Relinquished Date & Time
1st	Klay Nutt	SAS		9/14/23 17:14
2nd	[illegible]	FGL	9/14/23 1514	
3rd	[illegible]			9/14/23 1730
4th	[illegible]		9/14/23 1730	

LABORATORY USE ONLY
Logged In By: _____ Total Samples: _____ Laboratory No.: _____

GLS 9/15/23
mc 1145

Inter-Laboratory Condition Upon Receipt (Attach to COC)

Sample Receipt at: STK CC CH VI

1. Number of ice chests/packages received: 1 Shipping tracking # OTL
2. Were samples received in a chilled condition? Temps: 4.1 / 14.0C / ____ / ____
   Surface water SWTR bact samples: A sample that has a temperature upon receipt of >10° C, whether iced or not, should be flagged unless the time since sample collection has been less than two hours.

3. Do the number of bottles received agree with the COC?	Yes	No	N/A
4. Were samples received intact? (i.e. no broken bottles, leaks etc.)	Yes	No	
5. VOAs checked for Headspace?	Yes	No	N/A
6. Were sample custody seals intact?	Yes	No	N/A
7. If required, was sample split for pH analysis?	Yes	No	N/A
8. Were all analyses within holding times at time of receipt?	Yes	No	
9. Verify sample date, time and sampler name	Yes	No	

Sign and date the COC, place in a ziplock and put in the same ice chest as the samples.
Sample Receipt Review completed by (initials): [illegible] 7/14/07

Sample Receipt at SP:

1. Were samples received in a chilled condition? Temps: 2c / ____ / ____ / ____ / ____
   Acceptable is above freezing to 6° C. If many packages are received at one time check for tests/H.T.'s/rushes/
2. Shipping tracking numbers: 560126075 068

3. Do the number of bottles received agree with the COC?	Yes	No	N/A
4. Were samples received intact? (i.e. no broken bottles, leaks etc.)	Yes	No	
5. Were sample custody seals intact?	Yes	No	N/A

Sign and date the COC, obtain LIMS sample numbers, select methods/tests and print labels.

Sample Verification, Labeling and Distribution:

1. Were all requested analyses understood and acceptable?	Yes	No		
2. Did bottle labels correspond with the client's ID's?	Yes	No		
3. Were all bottles requiring sample preservation properly preserved? [Exception: Oil & Grease, VOA and CrVI verified in lab]	Yes	No	N/A	FGL
4. VOAs checked for Headspace?	Yes	No	N/A	
5. Have rush or project due dates been checked and accepted?	Yes	No	N/A	
6. Were all analyses within holding times at time of receipt?	Yes	No		

Attach labels to the containers and include a copy of the COC for lab delivery.
Sample Receipt, Login and Verification completed by (initials): YDL

Discrepancy Documentation:

Any items above which are "No" or do not meet specifications (i.e. temps) must be resolved.

1. Person Contacted:_____ Phone Number:_____
   Initiated By:_____ Date:_____
   Problem:
   Resolution:

2. Person Contacted:_____
   Initiated By:_____
   Problem:
   Resolution:

(Please use the back of this sheet for additional c
contacts)

(4019696)
Sentry Ag Service
VI 2346273
mdc 09/14/2023 18:05:36
VI 2346273

December 13, 2023

Sentry Ag Services
Attn: Monique Baldivez
P.O. Box 7750
Visalia, CA 93290

Lab No. : **VI 2348029**
Customer No. : **4019696**
Reference : **3445**

Laboratory Report

Introduction: This report package contains a total of 4 pages divided into 3 sections:

Case Narrative	(1 page)	: An overview of the work performed at FGL.
Sample Results	(1 page)	: Results for each sample submitted.
Quality Control	(2 pages)	: Supporting Quality Control (QC) results.

Case Narrative

This Case Narrative pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab No.	Matrix
B-West	11/30/2023	11/30/2023	VI 2348029-001	DW

Sampling and Receipt Information:

The Sample was received in acceptable condition and within temperature requirements, unless noted on the Condition Upon Receipt (CUR) form. The Sample was received, prepared and analyzed within the method specified holding times. All samples arrived on ice. All samples were checked for pH if acid or base preservation is required (except for VOAs). For details of sample receipt information, please see the associated Chain of Custody and Condition Upon Receipt Form.

Quality Control: All samples were prepared and analyzed according to established quality control criteria. Any exceptions are noted in the Quality Control Section of this report.

Test Summary	
EPA 200.7	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
EPA 300.0	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
SM 2540 C	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
SM 4500-H+B	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)

Certification: I certify that this data package is in compliance with ELAP standards, both technically and for completeness, except for any conditions listed above and in the QC Section. Release of the data contained in this data package is authorized by the Laboratory Director or his designee, as verified by the following electronic signature. This report shall not be reproduced except in full, without the written approval of the laboratory.

KD: JRD

Approved By **Kelly A. Dunnahoo, B.S.** Digitally signed by Kelly A. Dunnahoo, B.S.
Title: Laboratory Director
Date: 2023-12-14

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December 13, 2023

Sentry Ag Services
Attn: Monique Baldivez
P.O. Box 7750
Visalia, CA 93290

Description : B-West
Project : West Star North

Lab No. : VI 2348029-001
Customer No. : 4019696
Reference : 3445
Sampled On : November 30, 2023 at 09:00
Sampled By : Klay
Received On : November 30, 2023 at 13:40
Matrix : Drinking Water

Sample Results - Inorganic

Constituent	Result	RL	Units	MCL/AL	Dil.	DQF	Sample Preparation			Sample Analysis			
Dairy Analysis							Date	Time	Who	Method	Date	Time	Who
Alkalinity (as CaCO3)	20	10	mg/L		1		12/03/2023	15:56	amm	SM 4500-H+B	12/04/2023	05:17	amm
Bicarbonate	30	10	mg/L		1		12/03/2023	15:56	amm	SM 4500-H+B	12/04/2023	05:17	amm
Carbonate	ND	10	mg/L		1	U	12/03/2023	15:56	amm	SM 4500-H+B	12/04/2023	05:17	amm
Hydroxide	ND	10	mg/L		1	U	12/03/2023	15:56	amm	SM 4500-H+B	12/04/2023	05:17	amm
Chloride	240	4*	mg/L	500[2]	4		12/01/2023	16:32	ldm	EPA 300.0	12/02/2023	12:56	ldm
Nitrate Nitrogen	6.7	0.1	mg/L	10	1		12/01/2023	16:32	ldm	EPA 300.0	12/01/2023	18:00	ldm
Conductivity	1490	1	umhos/cm	1600[2]	1		12/03/2023	15:56	amm	SM 4500-H+B	12/04/2023	05:17	amm
Sulfate Sulfur	119	0.67*	mg/L		4		12/01/2023	16:32	ldm	EPA 300.0	12/02/2023	12:56	ldm
Solids, Total Dissolved (TDS)	1130	20	mg/L	1000[2]	1		12/04/2023	10:45	ctl	SM 2540 C	12/05/2023	11:00	ctl
Calcium	123	1	mg/L		1		12/02/2023	08:13	ejc	EPA 200.7	12/05/2023	15:35	ac
Magnesium	ND	1	mg/L		1	Ul	12/02/2023	08:13	ejc	EPA 200.7	12/05/2023	15:35	ac
Potassium	ND	1	mg/L		1	U	12/02/2023	08:13	ejc	EPA 200.7	12/05/2023	15:35	ac
Sodium	149	1	mg/L		1		12/02/2023	08:13	ejc	EPA 200.7	12/05/2023	15:35	ac

DQF Flags Definition:
U Constituent results were non-detect.
l The MS/MSD did not meet QC criteria.

ND=Non-Detected, RL=Reporting Level * RL adjusted for dilution, Dil.=Dilution
MCL = Maximum Contamination Level. 2 - Secondary Standard. 3 - CDPH Notification Level. AL = Regulatory Action Level.

Page 2 of 4

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December 13, 2023
Sentry Ag Service

Lab No. : VI 2348029
Customer No. : 4019696

Quality Control - Metals

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Metals								
Calcium	200.7	12/02/2023:213621EJC	Blank	mg/L		ND	<1	
			LCS	mg/L	12.00	90.1%	85-115	
			MS	mg/L	12.00	80.7%	75-125	
		(SP 2319783-001)	MSD	mg/L	12.00	57.1%	<1/4	
			MSRPD	mg/L		2.5%	≤20.0	
			MS	mg/L	12.00	90.6%	75-125	
		(CH 2379819-006)	MSD	mg/L	12.00	27.0%	<1/4	
			MSRPD	mg/L		7.8%	≤20.0	
Magnesium	200.7	12/02/2023:213621EJC	Blank	mg/L		ND	<1	
			LCS	mg/L	12.00	93.9%	85-115	
			MS	mg/L	12.00	89.8%	75-125	
		(SP 2319783-001)	MSD	mg/L	12.00	89.0%	75-125	
			MSRPD	mg/L		0.3%	≤20	
			MS	mg/L	12.00	91.4%	75-125	
		(CH 2379819-006)	MSD	mg/L	12.00	57.8%	75-125	435
			MSRPD	mg/L		7.8%	≤20	
Potassium	200.7	12/02/2023:213621EJC	Blank	mg/L		ND	<1	
			LCS	mg/L	12.00	89.9%	85-115	
			MS	mg/L	12.00	93.5%	75-125	
		(SP 2319783-001)	MSD	mg/L	12.00	98.4%	75-125	
			MSRPD	mg/L		4.4%	≤20.0	
			MS	mg/L	12.00	98.3%	75-125	
		(CH 2379819-006)	MSD	mg/L	12.00	92.5%	75-125	
			MSRPD	mg/L		5.8%	≤20.0	
Sodium	200.7	12/02/2023:213621EJC	Blank	mg/L		ND	<1	
			LCS	mg/L	12.00	90.0%	85-115	
			MS	mg/L	12.00	85.7%	75-125	
		(SP 2319783-001)	MSD	mg/L	12.00	77.5%	75-125	
			MSRPD	mg/L		1.8%	≤20.0	
			MS	mg/L	12.00	84.0%	75-125	
		(CH 2379819-006)	MSD	mg/L	12.00	28.6%	<1/4	
			MSRPD	mg/L		7.5%	≤20.0	

Definition

Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.
DQO : Data Quality Objective - This is the criteria against which the quality control data is compared.
LCS : Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.
MS : Matrix Spikes - A random sample is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.
MSD : Matrix Spike Duplicate of MS/MSD pair - A random sample duplicate is spiked with a known amount of analyted. The recoveries are an indication of how that sample matrix affects analyte recovery.
MSRPD : MS/MSD Relative Percent Difference (RPD) - The MS relative percent difference is an indication of precision for the preparation and analysis.
ND : Non-detect - Result was below the DQO listed for the analyte.

Explanation

435 : Sample matrix may be affecting this analyte. Data was accepted based on the LCS or CCV recovery.

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December 13, 2023
Sentry Ag Service

Lab No. : VI 2348029
Customer No. : 4019696

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
Alkalinity (as CaCO3)	2320B	12/03/2023:213630AMM	ND	mg/L		1.42%	10	435
Bicarbonate	2320B	(VI 2347991-001)	Dup	mg/L		1.25%	10	
E. C.	2320B	(VI 2347991-001)	Dup	umhos/cm		0.9%	5	
Solids, Total Dissolved	2540CE	12/04/2023:213647CTL	Blank	mg/L		ND	<20	
			LCS	mg/L	991.5	100%	90-110	
		(SP 2319811-001)	Dup	mg/L		0.5%	5	
		(SP 2319811-001)	Dup	mg/L		3.84%	5	
Chloride	300.0	12/01/2023:213676LDM	Blank	mg/L		ND	<1	
			LCS	mg/L	25.00	105%	90-110	
			MS	mg/L	50.00	105%	67-117	
		(CH 2379092-005)	MSD	mg/L	50.00	104%	67-117	
			MSRPD	mg/L		0.8%	≤7	
			MS	mg/L	50.00	107%	67-117	
		(SP 2319540-001)	MSD	mg/L	50.00	106%	67-117	
			MSRPD	mg/L		0.3%	≤7	
Nitrate Nitrogen	300.0	12/01/2023:213676LDM	Blank	mg/L		ND	<0.4	
			LCS	mg/L	20.00	104%	90-110	
			MS	mg/L	40.00	105%	86-112	
		(CH 2379092-005)	MSD	mg/L	40.00	104%	86-112	
			MSRPD	mg/L		1.1%	≤7	
			MS	mg/L	40.00	106%	86-112	
		(SP 2319540-001)	MSD	mg/L	40.00	106%	86-112	
			MSRPD	mg/L		0.4%	≤7	
Sulfate Sulfur	300.0	12/01/2023:213676LDM	Blank	mg/L		ND	<0.5	
			LCS	mg/L	50.00	105%	90-110	
			MS	mg/L	100.0	103%	18-165	
		(CH 2379092-005)	MSD	mg/L	100.0	102%	18-165	
			MSRPD	mg/L		0.7%	≤7	
			MS	mg/L	100.0	107%	18-165	
		(SP 2319540-001)	MSD	mg/L	100.0	107%	18-165	
			MSRPD	mg/L		0.2%	≤7	

Definition

Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.

Dup : Duplicate Sample - A random sample with each batch is prepared and analyzed in duplicate. The relative percent difference is an indication of precision for the preparation and analysis.

LCS : Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.

MS : Matrix Spikes - A random sample is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.

MSD : Matrix Spike Duplicate of MS/MSD pair - A random sample duplicate is spiked with a known amount of analyted. The recoveries are an indication of how that sample matrix affects analyte recovery.

MSRPD : MS/MSD Relative Percent Difference (RPD) - The MS relative percent difference is an indication of precision for the preparation and analysis.

ND : Non-detect - Result was below the DQO listed for the analyte.

Explanation

435 : Sample matrix may be affecting this analyte. Data was accepted based on the LCS or CCV recovery.

Page 4 of 4

Laboratory Analysis Work Order 2348029

3445

SITE NAME: West Star North

LABORATORY: VT | FGL 4-19696

Billing: Sentry Ag Services, LLC
P.O. Box 7750, Visalia, CA 93290

Authorized Copy Release to:
labs@sentryagservices.com

ANALYSIS TO BE COMPLETED

Irrigation/Ground Water (ELAP Standards)

- W1 EC, NO_3N (Dom)
- W2 EC, NO_3N, TDS, TN (Irr)
- W3 NH_4-N (Ammonium)
- W4 EC, NO_3N, Ca, Mg, Na, HCO_3, CO_3, SO_4S, Cl, TDS (Dom, GM)
- W5 EC, NO_3N, TDS, TN, Ca, Mg, Na, HCO_3, CO_3, SO_4S, Cl (Irr, GM)
- W6 NO_3N, NO_2 (Dom ILRP, Annually)
- W7 Ca, Mg, Na, K, HCO_3, CO_3, SO_4, Cl + Lab Filtering (GWM)
- W8 Other: _____

201 5.40 I-# 17407

Process Waste Water (lagoon)

- L1 EC, NH_4N, TKN, TP, TK, TDS (Quarterly)
- L2 EC, NO_3N, NH_4N, TKN, TP, TK, TDS, pH (Annually)
- L3 Ca, Mg, Na, HCO_3,CO_3, SO_4S, Cl (Biennially)
- L4 Other: _____

Manure

- M1 TN, TP, TK, %M (2/year)
- M2 TN, TP, K, %M, Ca, Mg, Na, S, Cl, ash (Biennially)
- M3 Other: _____

Plant Tissue

- P1 TN, NO_3N, PO_4P, K (Mid Season - Wheat)
- P2 TN, P, K (Mid-season - Corn)
- P3 TN, TP, TK, Ash, %M (At Harvest)
- P4 TN, %M
- P5 % Moisture
- P6 NIR
- P7 Other: _____

Soil

- S1 SP%, pH, EC, Ca, Mg, Na, K, ESP, LP, B, NO_3N, PO_4P, K-AA, Zn, Mn, Fe, Cu, SO_4S
- S2 S1 + CEC, CaCO3, OM, C:N, TN
- S3 NO_3N, NH_4N
- S4 Other: _____

	Sample ID	Description	Analysis	Date/Time	Sampled by	SAS USE ONLY: FIELD TESTS NH_3N *	pH	Temp
1	B-West	Dom. Well	W4	11/30/23 9:00	Klay	–		
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								

* Field Test of ammonium nitrogen may only be made by a trained technician. Positive test to be analyzed for ammonium nitrogen by the laboratory.

All samples are to follow the procedures noted in the Sampling & Analysis Plan of the NMP and the RWQCB specifications. Any samples taken outside of these procedures shall provide the procedures on the notes below. Additionally, if any preservatives are used in the collections or processing of sampes, please note below.

NOTES:

CHAIN OF CUSTODY RECORDING

	Signature	Company	Received Date & Time	Relinquished Date & Time
1st	Klay Mitzel	SAS		11/30/23 13:40
2nd	CDA	FGL	11/30/23 1340	
3rd	ADA			11/30/23 1730
4th	GLS		11/30/23 1730	

LABORATORY USE ONLY
Logged In By: GLS 12/1/23 **Total Samples:** _____ **Laboratory No.:** _____
CDA 1143

Inter-Laboratory Condition Upon Receipt (Attach to COC)

Sample Receipt at: CC CH STK VI

1. Number of ice chests/packages received: 1 Shipping tracking #(s): OTC
2. Temp IR Gun ID #: 407
3. Were samples received on ice? (Yes) No Temps: 5.4 / ___ / ___ / ___
   Surface water SWTR bact samples: A sample that has a temperature upon receipt of >10° C, whether iced or not, should be flagged unless the time since sample collection has been less than two hours.
4. Do the number of bottles received agree with the COC? (Yes) No N/A
5. Were samples received intact? (i.e. no broken bottles, leaks etc.) (Yes) No
6. VOAs checked for Headspace? Yes No (N/A)
7. Were all analyses within holding times at time of receipt? (Yes) No
8. Verify sample date, time and sampler name (Yes) No

Sign and date the COC, place in a ziplock and put in the same ice chest as the samples.
Sample Receipt Review completed by (initials): DH

Sample Receipt at SP:

1. Number of ice chests/packages received: 2 Shipping tracking #(s): 560553707 / 15
2. Temp IR Gun ID #: 263
3. Were samples received on ice? (Yes) No Temps: 2 / 3 / ___ / ___ / ___
   Acceptable is above freezing to 6°C. If many packages are received at one time check for tests/H.T.'s/rushes/
4. Do the number of bottles received agree with the COC? (Yes) No N/A
5. Were samples received intact? (i.e. no broken bottles, leaks etc.) (Yes) No

Sign and date the COC, obtain LIMS sample numbers, select methods/tests and print labels.

Sample Verification, Labeling and Distribution:

1. Were all requested analyses understood and acceptable? (Yes) No
2. Did bottle labels correspond with the client's ID's? (Yes) No
3. Were all bottles requiring sample preservation properly preserved? (Yes) No N/A FGL
   [Exception: Oil & Grease, VOA and CrVI verified in lab]
4. VOAs checked for Headspace? Yes No (N/A)
5. Have rush or project due dates been checked and accepted? Yes No (N/A)
6. Were all analyses within holding times at time of receipt? (Yes) No

Attach labels to the containers and include a copy of the COC for lab delivery.
Sample Receipt, Login and Verification completed by (initials): CDA

Discrepancy Documentation:

Any items above which are "No" or do not meet specifications (i.e. temps) must be resolved.

1. Person Contacted: _____ Phone Number: _____
   Initiated By: _____ Date: _____
   Problem:
   Resolution:
2. Person Contacted: _____ Phone Number: _____
   Initiated By: _____
   Problem:
   Resolution:

(4019696)
Sentry Ag Service
VI 2348029
iv 12/01/2023 07:26:27
VI 2348029

(Please use the back of this sheet for additional comments or con

ATTACHMENT D

Manure/Process Wastewater Tracking Manifest
For
Existing Milk Cow Dairies

Instructions:

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

Operator Information:

Name of Operator: _____

Name of Dairy Facility: WEST STAR NORTH DAIRY

Facility Address: 26953 RIVERSIDE ST B-WLLW 93206
Number and Street | City | Zip Code

Contact Person Name and Phone Number: _____ 661-746-0777
Name | Phone Number

Manure/Process Wastewater Hauler Information:

Name of Hauling Company/Person: R.K.S

Address of Hauling Company /Person: 9442 BERR MTN BKRS 93311
Number and Street | City | Zip Code

Contact Person: FRED AMIREN 661-978-9321
Name | Phone Number

Destination Information:

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

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

ALFALFA PALM FARMS 327 COW CAMP B-WLW 93206 661-746-5320
Name | Number and Street | City | Zip Code | Phone Number

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

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

Dates Hauled: 11/11 – 30/23

Amount Hauled:

Enter the amount of manure hauled in tons or cubic yards (indicate the units used), the manure solids content (if amount reported in tons) or manure density (if amount reported in cubic yards), and the method used to calculate the amount:

Manure: 2447.06 SEPARATOR Tons or Cubic Yards (indicate which units used)

Manure Solids Content (if amount reported in tons): 62%

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

Method used to determine amount of manure: Dairy

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

Process Wastewater: _____ Gallons

Method used to determine volume of process wastewater: _____

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

____ Yes _____ No

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

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

Operator's Signature: [signature] Date: 6-14-24

Hauler's Signature: [signature] Date: 6/4/24

ATTACHMENT D

Manure/Process Wastewater Tracking Manifest
For
Existing Milk Cow Dairies

Instructions:

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

Operator Information:

Name of Operator: _____

Name of Dairy Facility: WEST STAR NORTH DAIRY

Facility Address: 26953 RIVERSIDE ST B-WELLS 93206
Number and Street City Zip Code

Contact Person Name and Phone Number: _____ 661-746-0777
Name Phone Number

Manure/Process Wastewater Hauler Information:

Name of Hauling Company/Person: B&S

Address of Hauling Company /Person: 9452 BEAR VIEW BAKER 93311
Number and Street City Zip Code

Contact Person: FRED AMIREN 661-978-9321
Name Phone Number

Destination Information:

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

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

B-BONE FARM 23951 SNOW RD BAKER 93314 661-588-2821
Name Number and Street City Zip Code Phone Number

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

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

Dates Hauled: 8/15/23

Amount Hauled:

Enter the amount of manure hauled in tons or cubic yards (indicate the units used), the manure solids content (if amount reported in tons) or manure density (if amount reported in cubic yards), and the method used to calculate the amount:

SEPERATOR

Manure: 1232 Tons or Cubic Yards (indicate which units used)
Manure Solids Content (if amount reported in tons): 64%
Manure Density (if amount reported in cubic yards): _____

Method used to determine amount of manure: Pull

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

Process Wastewater: _____ Gallons

Method used to determine volume of process wastewater: _____

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

____ Yes _____ No

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

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

Operator's Signature: _____ Date: 6-14-24

Hauler's Signature: _____ Date: 6/4/24