

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:** LU/AR Dairy

Physical address of dairy:

6121 15th AVE
Number and StreetHanford
CityKings
County93230
Zip Code

Street and nearest cross street (if no address):

Date facility was originally placed in operation: 03/01/1939Regional Water Quality Control Board Basin Plan designation: Tulare Basin

County Assessor Parcel Number(s) for dairy facility:

0006-0060-0012-0000

B. OPERATORS

Simas, Julie

Operator name: Simas, JulieTelephone no.: (559) 582-1175

Landline Cellular

6017 13th AVE

Hanford
CityCA
State93230
Zip Code

Mailing Address Number and Street

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

Simas, Julie

Legal owner name: Simas, JulieTelephone no.: (559) 582-1175

Landline Cellular

6017 13th AVE

Hanford
CityCA
State93230
Zip Code

Mailing Address Number and Street

This owner is responsible for paying permit fees.

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

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

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	0	0	0	0	0
Number under roof	1,000	0	0	0	0	0
Maximum number	1,000	0	0	0	0	0
Average number	1,000	0	0	0	0	0
Avg live weight (lbs)	1,300	0	0	0		

Predominant milk cow breed: Holstein

Average milk production: 70 pounds per cow per day

B. MANURE GENERATED

Total manure excreted by the herd: 25,651.50 tons per reporting period

Total nitrogen from manure: 335,380.10 lbs per reporting period

After ammonia losses (30% loss applied): 234,766.07 lbs per reporting period

Total phosphorus from manure: 56,777.83 lbs per reporting period

Total potassium from manure: 191,509.23 lbs per reporting period

Total salt from manure: 470,850.00 lbs per reporting period

C. PROCESS WASTEWATER GENERATED

Process wastewater generated: 24,740,000 gallons

Total nitrogen generated: 125,419.22 lbs

Total phosphorus generated: 16,112.80 lbs

Total potassium generated: 143,567.30 lbs

Total salt generated: 840,107.34 lbs

	24,740,000 gallons applied
+	0 gallons exported
-	0 gallons imported
=	24,740,000 gallons generated

D. FRESH WATER SOURCES

Source Description	Type
Last Chance Ditch	Surface water
LKR Ditch	Surface water
W1M3	Ground water
W2M1	Ground water
W3M1	Ground water

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

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

Source Description	Type
W4M1	Ground water
W4M2	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

No solid nutrient exports entered.

No liquid nutrient exports entered.

Annual Report - General Order No. R5-2007-0035*Reporting period 01/01/2023 to 12/31/2023.***APPLICATION AREA****A. LIST OF LAND APPLICATION AREAS**

Field name	Controlled acres	Cropable acres	Total harvests	Type of waste applied	Parcel number
Field 1	53	53	2	process wastewater	0006-0060-0002-0000 0006-0060-0029-0000
Field 10	132	132	2	manure	0006-0050-0012-0000 0006-0050-0013-0000
Field 11	35	35	2	manure	0004-0090-0013-0000
Field 12	12	12	2	process wastewater	0006-0060-0029-0000
Field 14	92	92	2	process wastewater	0006-0010-0029-0000
Field 16	17	17	0	none	0005-0080-0005-0000
Field 19	80	80	2	manure	0006-0050-0013-0000
Field 21	35	35	2	manure	0006-0050-0023-0000
Field 29	41	41	2	manure	0006-0060-0024-0000
Field 3	10	10	0	none	0006-0050-0018-0000
Field 30/31	94	94	2	manure	0006-0050-0019-0000
Field 32	155	155	2	manure	0005-0010-0002-0000 0005-0010-0003-0000
Field 4 & 5	20	20	2	manure	0006-0050-0012-0000
Field 6	12	12	0	none	0006-0050-0012-0000
Field 7	8	8	2	manure	0006-0050-0012-0000
Field 8	20	20	0	none	0006-0050-0012-0000
Field 9	20	20	2	manure	0006-0050-0013-0000
Pasture	4	4	0	none	0006-0060-0024-0000
Totals for areas that were used for application	777	777	26		
Totals for areas that were not used for application	63	63	0		
Land application area totals	840	840	26		

B. CROPS AND HARVESTS

Field 1
Field name: <u>Field 1</u>

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

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

Field 1

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

Crop: Wheat, silage, soft dough Acres planted: 53 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 (%)
05/11/2023	795.00 ton	Dry-weight		60.6	14,535.00	3,210.00	12,900.00		6.40

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	15.00	165.00	25.50	124.50	0.00
Total actual harvest content	15.00	171.80	37.94	152.48	756.48

05/20/2023: Corn, silage

Crop: Corn, silage Acres planted: 53 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 (%)
08/24/2023	1,325.00 ton	Dry-weight		67.2	32,800.00	2,890.00	13,200.00		17.70

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	25.00	200.00	37.50	165.00	0.00
Total actual harvest content	25.00	537.92	47.40	216.48	2,902.80

Field 10

Field name: Field 10

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

Crop: Wheat, silage, soft dough Acres planted: 132 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 (%)
05/11/2023	1,980.00 ton	Dry-weight		57.6	16,018.00	3,540.00	12,900.00		6.30

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	15.00	165.00	25.50	124.50	0.00
Total actual harvest content	15.00	203.75	45.03	164.09	801.36

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

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

Field 10

05/14/2023: Corn, silage

Crop: Corn, silage Acres planted: 132 Plant date: 05/14/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
08/24/2023	3,300.00 ton	Dry-weight		65.7	36,890.00	3,250.00	14,100.00		17.60

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	25.00	200.00	37.50	165.00	0.00
Total actual harvest content	25.00	632.66	55.74	241.82	3,018.40

Field 11

Field name: Field 11

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

Crop: Wheat, silage, soft dough Acres planted: 35 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 (%)
05/11/2023	525.00 ton	Dry-weight		63.6	24,878.00	3,154.00	9,835.00		6.30

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	15.00	165.00	25.50	124.50	0.00
Total actual harvest content	15.00	271.67	34.44	107.40	687.96

05/14/2023: Corn, silage

Crop: Corn, silage Acres planted: 35 Plant date: 05/14/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
08/24/2023	875.00 ton	Dry-weight		62.7	36,670.00	3,440.00	12,800.00		16.90

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	25.00	200.00	37.50	165.00	0.00
Total actual harvest content	25.00	683.90	64.16	238.72	3,151.85

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

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

Field 12

Field name: Field 12

11/15/2022: Wheat, silage, soft dough

Crop: Wheat, silage, soft dough Acres planted: 12 Plant date: 11/15/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/11/2023	144.00 ton	Dry-weight		57.7	27,242.00	3,100.00	12,400.00		4.80

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	12.00	132.00	20.40	99.60	0.00
Total actual harvest content	12.00	276.56	31.47	125.88	487.30

05/15/2023: Corn, silage

Crop: Corn, silage Acres planted: 12 Plant date: 05/15/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
08/24/2023	300.00 ton	Dry-weight		69.1	36,890.00	3,170.00	15,300.00		15.70

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	25.00	200.00	37.50	165.00	0.00
Total actual harvest content	25.00	569.95	48.98	236.39	2,425.65

Field 14

Field name: Field 14

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

Crop: Wheat, silage, soft dough Acres planted: 92 Plant date: 11/11/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/11/2023	1,380.00 ton	Dry-weight		26.7	28,534.00	3,370.00	8,380.00		6.40

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	15.00	165.00	25.50	124.50	0.00
Total actual harvest content	15.00	627.46	74.11	184.28	1,407.36

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

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

Field 14

05/14/2023: Corn, silage

Crop: Corn, silage Acres planted: 92 Plant date: 05/14/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
08/24/2023	2,300.00 ton	Dry-weight		70.8	29,050.00	2,840.00	15,900.00		11.30

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	25.00	200.00	37.50	165.00	0.00
Total actual harvest content	25.00	424.13	41.46	232.14	1,649.80

Field 19

Field name: Field 19

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

Crop: Wheat, silage, soft dough Acres planted: 80 Plant date: 11/11/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/11/2023	1,200.00 ton	Dry-weight		59.4	26,032.00	3,240.00	11,200.00		5.00

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	15.00	165.00	25.50	124.50	0.00
Total actual harvest content	15.00	317.07	39.46	136.42	609.00

05/14/2023: Corn, silage

Crop: Corn, silage Acres planted: 80 Plant date: 05/14/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
08/24/2023	2,000.00 ton	Dry-weight		65.5	21,700.00	2,630.00	16,200.00		7.90

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	25.00	200.00	37.50	165.00	0.00
Total actual harvest content	25.00	374.33	45.37	279.45	1,362.75

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

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

Field 21

Field name: Field 21

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

Crop: Wheat, silage, soft dough Acres planted: 35 Plant date: 11/11/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/11/2023	525.00 ton	Dry-weight		76.8	27,625.00	3,450.00	8,260.00		5.00

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	15.00	165.00	25.50	124.50	0.00
Total actual harvest content	15.00	192.27	24.01	57.49	348.00

05/15/2023: Corn, silage

Crop: Corn, silage Acres planted: 35 Plant date: 05/15/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
08/24/2023	875.00 ton	Dry-weight		65.5	35,810.00	2,900.00	13,500.00		15.50

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	25.00	200.00	37.50	165.00	0.00
Total actual harvest content	25.00	617.72	50.03	232.88	2,673.75

Field 29

Field name: Field 29

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

Crop: Wheat, silage, soft dough Acres planted: 41 Plant date: 11/11/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/11/2023	615.00 ton	Dry-weight		76.8	27,625.00	3,450.00	8,260.00		5.00

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	15.00	165.00	25.50	124.50	0.00
Total actual harvest content	15.00	192.27	24.01	57.49	348.00

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

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

Field 29

05/15/2023: Corn, silage

Crop: Corn, silage Acres planted: 41 Plant date: 05/15/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
08/24/2023	1,025.00 ton	Dry-weight		65.5	35,810.00	2,900.00	13,500.00		15.50

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	25.00	200.00	37.50	165.00	0.00
Total actual harvest content	25.00	617.72	50.03	232.88	2,673.75

Field 30/31

Field name: Field 30/31

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

Crop: Wheat, silage, soft dough Acres planted: 94 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 (%)
05/11/2023	1,410.00 ton	Dry-weight		65.5	35,810.00	2,900.00	13,500.00		15.50

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	15.00	165.00	25.50	124.50	0.00
Total actual harvest content	15.00	370.63	30.02	139.73	1,604.25

05/15/2023: Corn, silage

Crop: Corn, silage Acres planted: 94 Plant date: 05/15/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
08/24/2023	2,350.00 ton	Dry-weight		65.5	35,810.00	2,900.00	13,500.00		15.50

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	25.00	200.00	37.50	165.00	0.00
Total actual harvest content	25.00	617.72	50.03	232.88	2,673.75

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

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

Field 32

Field name: Field 32

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

Crop: Wheat, silage, soft dough Acres planted: 155 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 (%)
05/11/2023	2,325.00 <i>ton</i>	Dry-weight		54.7	23,503.00	4,230.00	8,990.00		5.40

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	15.00	165.00	25.50	124.50	0.00
Total actual harvest content	15.00	319.41	57.49	122.17	733.86

05/05/2023: Corn, silage

Crop: Corn, silage Acres planted: 155 Plant date: 05/05/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
08/24/2023	3,875.00 <i>ton</i>	Dry-weight		67.2	28,970.00	2,970.00	15,600.00		12.10

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	25.00	200.00	37.50	165.00	0.00
Total actual harvest content	25.00	475.11	48.71	255.84	1,984.40

Field 4 & 5

Field name: Field 4 & 5

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

Crop: Wheat, silage, soft dough Acres planted: 20 Plant date: 11/11/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/11/2023	300.00 <i>ton</i>	Dry-weight		59.4	26,032.00	3,240.00	11,200.00		5.00

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	15.00	165.00	25.50	124.50	0.00
Total actual harvest content	15.00	317.07	39.46	136.42	609.00

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

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

Field 4 & 5

05/16/2023: Corn, silage

Crop: Corn, silage Acres planted: 20 Plant date: 05/16/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
08/24/2023	500.00 ton	Dry-weight		70.5	21,700.00	2,630.00	16,200.00		7.90

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	25.00	200.00	37.50	165.00	0.00
Total actual harvest content	25.00	320.08	38.79	238.95	1,165.25

Field 7

Field name: Field 7

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

Crop: Wheat, silage, soft dough Acres planted: 8 Plant date: 11/11/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/11/2023	120.00 ton	Dry-weight		57.6	16,018.00	3,540.00	9,730.00		6.30

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	15.00	165.00	25.50	99.00	0.00
Total actual harvest content	15.00	203.75	45.03	123.77	801.36

05/15/2023: Corn, silage

Crop: Corn, silage Acres planted: 8 Plant date: 05/15/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
08/24/2023	200.00 ton	Dry-weight		68.6	32,330.00	3,500.00	16,000.00		14.30

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	25.00	275.00	42.50	207.50	0.00
Total actual harvest content	25.00	507.58	54.95	251.20	2,245.10

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

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

Field 9

Field name: Field 9

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

Crop: Wheat, silage, soft dough Acres planted: 20 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 (%)
05/11/2023	300.00 <i>ton</i>	Dry-weight		57.6	16,018.00	3,540.00	9,730.00		6.30

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	15.00	165.00	25.50	124.50	0.00
Total actual harvest content	15.00	203.75	45.03	123.77	801.36

05/05/2023: Corn, silage

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

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
08/24/2023	240.00 <i>ton</i>	Dry-weight		68.9	32,330.00	3,500.00	16,000.00		14.30

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	12.00	96.00	18.00	79.20	0.00
Total actual harvest content	12.00	241.31	26.12	119.42	1,067.35

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

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

NUTRIENT BUDGET

A. LAND APPLICATIONS

Field 1 - 11/12/2022: Wheat, silage, soft dough

Field name: Field 1

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	
11/18/2022	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
Wastewater		Process wastewater	70.32	10.63	78.90	465.03	720,000.00 <i>gal</i>
W3M1		Ground water	0.00	0.00	0.00	70.74	2,880,000.00 <i>gal</i>
Application event totals			70.32	10.63	78.90	535.77	
02/08/2023	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
Wastewater		Process wastewater	140.64	21.27	157.81	930.05	1,440,000.00 <i>gal</i>
LKR Ditch		Surface water	0.00	0.00	0.00	30.84	5,760,000.00 <i>gal</i>
Application event totals			140.64	21.27	157.81	960.89	

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

Field name: Field 1

Crop: Corn, silage

Plant date: 05/20/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application			Precipitation 24 hours following	
05/25/2023	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
Wastewater		Process wastewater	88.48	13.11	124.31	707.40	1,080,000.00 <i>gal</i>
Last Chance Ditch		Surface water	0.00	0.00	0.00	46.25	8,640,000.00 <i>gal</i>
Application event totals			88.48	13.11	124.31	753.66	

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

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

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

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
06/12/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Wastewater	Process wastewater	117.97	17.48	165.74	943.21	1,440,000.00 <i>gal</i>
Last Chance Ditch	Surface water	0.00	0.00	0.00	61.67	11,520,000.00 <i>gal</i>
Application event totals		117.97	17.48	165.74	1,004.88	
07/02/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Wastewater	Process wastewater	176.96	26.22	248.61	1,414.81	2,160,000.00 <i>gal</i>
Last Chance Ditch	Surface water	0.00	0.00	0.00	92.51	17,280,000.00 <i>gal</i>
Application event totals		176.96	26.22	248.61	1,507.31	
07/20/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Wastewater	Process wastewater	147.47	21.85	207.18	1,179.01	1,800,000.00 <i>gal</i>
Last Chance Ditch	Surface water	0.00	0.00	0.00	77.09	14,400,000.00 <i>gal</i>
Application event totals		147.47	21.85	207.18	1,256.10	
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
Wastewater	Process wastewater	115.68	9.47	111.72	667.44	1,080,000.00 <i>gal</i>
Last Chance Ditch	Surface water	0.00	0.00	0.00	46.25	8,640,000.00 <i>gal</i>
Application event totals		115.68	9.47	111.72	713.70	

Field 10 - 11/12/2022: Wheat, silage, soft dough

Field name: Field 10

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

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

Field 10 - 11/12/2022: Wheat, silage, soft dough

Application date	Application method		Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
11/05/2022	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
Dry Manure		Corral solids	200.86	68.42	157.90	2,183.79	700.00 <i>ton</i>
Application event totals			200.86	68.42	157.90	2,183.79	
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
W4M1		Ground water	0.00	0.00	0.00	146.57	8,400,000.00 <i>gal</i>
Application event totals			0.00	0.00	0.00	146.57	
02/02/2023	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
Last Chance Ditch		Surface water	0.00	0.00	0.00	37.14	17,280,000.00 <i>gal</i>
Application event totals			0.00	0.00	0.00	37.14	

Field 10 - 05/14/2023: Corn, silage

Field name: Field 10

Crop: Corn, silage

Plant date: 05/14/2023

Application date	Application method		Precipitation 24 hours prior	Precipitation during application			Precipitation 24 hours following
05/20/2023	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
Dry Manure		Corral solids	172.17	58.65	135.34	1,871.82	600.00 <i>ton</i>
Application event totals			172.17	58.65	135.34	1,871.82	
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
LKR Ditch		Surface water	0.00	0.00	0.00	46.43	21,600,000.00 <i>gal</i>
Application event totals			0.00	0.00	0.00	46.43	

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

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

Field 10 - 05/14/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
06/21/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
UN 32	Liquid commercial fertilizer	100.00	0.00	0.00	0.00	
LKR Ditch	Surface water	0.00	0.00	0.00	61.90	28,800,000.00 <i>gal</i>
Application event totals		100.00	0.00	0.00	61.90	
07/15/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
UN 32	Liquid commercial fertilizer	50.00	0.00	0.00	0.00	
LKR Ditch	Surface water	0.00	0.00	0.00	92.86	43,200,000.00 <i>gal</i>
Application event totals		50.00	0.00	0.00	92.86	
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
LKR Ditch	Surface water	0.00	0.00	0.00	77.38	36,000,000.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	77.38	
08/12/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
LKR Ditch	Surface water	0.00	0.00	0.00	46.43	21,600,000.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	46.43	

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

Field name: Field 11

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

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

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

Application date	Application method		Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
11/05/2022	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
Dry Manure		Corral solids	189.39	64.51	148.87	2,059.00	175.00 <i>ton</i>
Application event totals			189.39	64.51	148.87	2,059.00	
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
W3M1		Ground water	0.00	0.00	0.00	71.41	1,920,000.00 <i>gal</i>
Application event totals			0.00	0.00	0.00	71.41	
02/08/2023	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
Last Chance Ditch		Surface water	0.00	0.00	0.00	31.13	3,840,000.00 <i>gal</i>
Application event totals			0.00	0.00	0.00	31.13	

Field 11 - 05/14/2023: Corn, silage

Field name: Field 11

Crop: Corn, silage

Plant date: 05/14/2023

Application date	Application method		Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following		
05/20/2023	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
Dry Manure			Corral solids	189.39	64.51	148.87	2,059.00	175.00 <i>ton</i>
Application event totals				189.39	64.51	148.87	2,059.00	
05/25/2023	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
UN 32			Liquid commercial fertilizer	50.00	0.00	0.00	0.00	
LKR Ditch			Surface water	0.00	0.00	0.00	46.69	5,760,000.00 <i>gal</i>
Application event totals				50.00	0.00	0.00	46.69	

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

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

Field 11 - 05/14/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
06/12/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
UN 32	Liquid commercial fertilizer	100.00	0.00	0.00	0.00	
LKR Ditch	Surface water	0.00	0.00	0.00	62.26	7,680,000.00 <i>gal</i>
Application event totals		100.00	0.00	0.00	62.26	
07/02/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
UN 32	Liquid commercial fertilizer	50.00	0.00	0.00	0.00	
LKR Ditch	Surface water	0.00	0.00	0.00	93.39	11,520,000.00 <i>gal</i>
Application event totals		50.00	0.00	0.00	93.39	
07/20/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
LKR Ditch	Surface water	0.00	0.00	0.00	77.82	9,600,000.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	77.82	
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
LKR Ditch	Surface water	0.00	0.00	0.00	46.69	5,760,000.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	46.69	

Field 12 - 11/15/2022: Wheat, silage, soft dough

Field name: Field 12

Crop: Wheat, silage, soft dough

Plant date: 11/15/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
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Annual Report - General Order No. R5-2007-0035

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

Field 12 - 11/15/2022: Wheat, silage, soft dough

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following			
11/22/2022	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
Wastewater		Process wastewater	155.29	23.48	174.24	1,026.94	360,000.00 <i>gal</i>
W3M1		Ground water	0.00	0.00	0.00	70.30	648,000.00 <i>gal</i>
Application event totals			155.29	23.48	174.24	1,097.23	
02/16/2023	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
Wastewater		Process wastewater	73.33	11.09	82.28	484.94	170,000.00 <i>gal</i>
LKR Ditch		Surface water	0.00	0.00	0.00	30.81	1,303,000.00 <i>gal</i>
Application event totals			73.33	11.09	82.28	515.75	

Field 12 - 05/15/2023: Corn, silage

Field name: Field 12

Crop: Corn, silage

Plant date: 05/15/2023

Application date	Application method	Precipitation 24 hours prior		Precipitation during application		Precipitation 24 hours following	
05/28/2023	Surface (irrigation)	No precipitation		No precipitation		No precipitation	
Source description		Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Wastewater		Process wastewater	104.93	15.55	147.42	838.95	290,000.00 <i>gal</i>
LKR Ditch		Surface water	0.00	0.00	0.00	45.40	1,920,000.00 <i>gal</i>
Application event totals			104.93	15.55	147.42	884.35	
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
Wastewater		Process wastewater	130.26	19.30	183.01	1,041.46	360,000.00 <i>gal</i>
LKR Ditch		Surface water	0.00	0.00	0.00	68.10	2,880,000.00 <i>gal</i>
Application event totals			130.26	19.30	183.01	1,109.55	

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

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

Field 12 - 05/15/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following			
07/08/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation			
Source description		Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Wastewater		Process wastewater	113.54	9.30	109.65	655.08	240,000.00 <i>gal</i>
LKR Ditch		Surface water	0.00	0.00	0.00	90.79	3,840,000.00 <i>gal</i>
Application event totals			113.54	9.30	109.65	745.88	
07/25/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation		
Source description		Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Wastewater		Process wastewater	86.84	12.87	122.00	694.30	240,000.00 <i>gal</i>
LKR Ditch		Surface water	0.00	0.00	0.00	79.44	3,360,000.00 <i>gal</i>
Application event totals			86.84	12.87	122.00	773.75	
08/08/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation		
Source description		Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
LKR Ditch		Surface water	0.00	0.00	0.00	45.40	1,920,000.00 <i>gal</i>
Application event totals			0.00	0.00	0.00	45.40	

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

Field name: Field 14

Crop: Wheat, silage, soft dough

Plant date: 11/11/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application			Precipitation 24 hours following	
11/23/2022	Surface (irrigation)	No precipitation	No precipitation			No precipitation	
Source description		Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Wastewater		Process wastewater	127.16	19.23	142.68	840.90	2,260,000.00 <i>gal</i>
Last Chance Ditch		Surface water	0.00	0.00	0.00	71.32	5,040,000.00 <i>gal</i>
Application event totals			127.16	19.23	142.68	912.21	

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

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

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

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
02/17/2023	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
Wastewater	Process wastewater	198.05	29.95	222.22	1,309.72	3,520,000.00 <i>gal</i>
Last Chance Ditch	Surface water	0.00	0.00	0.00	149.43	10,560,000.00 <i>gal</i>
Application event totals		198.05	29.95	222.22	1,459.14	

Field 14 - 05/14/2023: Corn, silage

Field name: Field 14

Crop: Corn, silage

Plant date: 05/14/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
05/26/2023	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
Wastewater	Process wastewater	106.90	16.17	119.95	706.95	1,900,000.00 <i>gal</i>
LKR Ditch	Surface water	0.00	0.00	0.00	44.41	14,400,000.00 <i>gal</i>
Application event totals		106.90	16.17	119.95	751.36	
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
Wastewater	Process wastewater	139.46	11.42	134.68	804.61	2,260,000.00 <i>gal</i>
LKR Ditch	Surface water	0.00	0.00	0.00	62.17	20,160,000.00 <i>gal</i>
Application event totals		139.46	11.42	134.68	866.79	
07/08/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Wastewater	Process wastewater	114.78	9.40	110.85	662.20	1,860,000.00 <i>gal</i>
LKR Ditch	Surface water	0.00	0.00	0.00	91.78	29,760,000.00 <i>gal</i>
Application event totals		114.78	9.40	110.85	753.98	

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

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

Field 14 - 05/14/2023: Corn, silage

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
Wastewater	Process wastewater	96.26	7.88	92.97	555.40	1,560,000.00 <i>gal</i>
LKR Ditch	Surface water	0.00	0.00	0.00	76.98	24,960,000.00 <i>gal</i>
Application event totals		96.26	7.88	92.97	632.37	
08/09/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
LKR Ditch	Surface water	0.00	0.00	0.00	44.41	14,400,000.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	44.41	

Field 19 - 11/11/2022: Wheat, silage, soft dough

Field name: Field 19

Crop: Wheat, silage, soft dough

Plant date: 11/11/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following			
11/05/2022	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
Dry Manure		Corral solids	213.06	72.57	167.48	2,316.38	450.00 <i>ton</i>
Application event totals			213.06	72.57	167.48	2,316.38	
02/10/2023	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
W2M1		Ground water	0.00	0.00	0.00	54.75	3,240,000.00 <i>gal</i>
Application event totals			0.00	0.00	0.00	54.75	
11/19/2023	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
LKR Ditch		Surface water	0.00	0.00	0.00	27.24	7,680,000.00 <i>gal</i>
Application event totals			0.00	0.00	0.00	27.24	

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

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

Field 19 - 05/14/2023: Corn, silage

Field name: Field 19

Crop: Corn, silage

Plant date: 05/14/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
05/20/2023	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
Dry Manure	Corral solids	189.39	64.51	148.87	2,059.00	400.00 <i>ton</i>
Application event totals		189.39	64.51	148.87	2,059.00	
05/26/2023	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
LKR Ditch	Surface water	0.00	0.00	0.00	47.67	13,440,000.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	47.67	
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
UN 32	Liquid commercial fertilizer	100.00	0.00	0.00	0.00	
LKR Ditch	Surface water	0.00	0.00	0.00	61.29	17,280,000.00 <i>gal</i>
Application event totals		100.00	0.00	0.00	61.29	
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
LKR Ditch	Surface water	0.00	0.00	0.00	91.93	25,920,000.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	91.93	
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
LKR Ditch	Surface water	0.00	0.00	0.00	74.90	21,120,000.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	74.90	

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

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

Field 19 - 05/14/2023: 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
LKR Ditch		Surface water	0.00	0.00	0.00	44.26	12,480,000.00 <i>gal</i>
Application event totals			0.00	0.00	0.00	44.26	

Field 21 - 11/11/2022: Wheat, silage, soft dough

Field name: Field 21

Crop: Wheat, silage, soft dough

Plant date: 11/11/2022

Application date	Application method		Precipitation 24 hours prior	Precipitation during application			Precipitation 24 hours following
11/05/2022	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
Dry Manure		Corral solids	189.39	64.51	148.87	2,059.00	175.00 <i>ton</i>
Application event totals			189.39	64.51	148.87	2,059.00	
11/20/2022	Surface (irrigation)		No precipitation	No precipitation			No precipitation
Source description		Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
LKR Ditch		Surface water	0.00	0.00	0.00	0.65	80,000.00 <i>gal</i>
Application event totals			0.00	0.00	0.00	0.65	
02/10/2023	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
LKR Ditch		Surface water	0.00	0.00	0.00	31.13	3,840,000.00 <i>gal</i>
Application event totals			0.00	0.00	0.00	31.13	

Field 21 - 05/15/2023: Corn, silage

Field name: Field 21

Crop: Corn, silage

Plant date: 05/15/2023

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

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

Field 21 - 05/15/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
05/20/2023	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
Dry Manure	Corral solids	189.39	64.51	148.87	2,059.00	175.00 <i>ton</i>
Application event totals		189.39	64.51	148.87	2,059.00	
05/27/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
LKR Ditch	Surface water	0.00	0.00	0.00	46.69	5,760,000.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	46.69	
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
UN 32	Liquid commercial fertilizer	100.00	0.00	0.00	0.00	
LKR Ditch	Surface water	0.00	0.00	0.00	62.26	7,680,000.00 <i>gal</i>
Application event totals		100.00	0.00	0.00	62.26	
07/06/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
UN 32	Liquid commercial fertilizer	50.00	0.00	0.00	0.00	
LKR Ditch	Surface water	0.00	0.00	0.00	93.39	11,520,000.00 <i>gal</i>
Application event totals		50.00	0.00	0.00	93.39	
07/23/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
LKR Ditch	Surface water	0.00	0.00	0.00	77.82	9,600,000.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	77.82	
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
LKR Ditch	Surface water	0.00	0.00	0.00	46.69	5,760,000.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	46.69	

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

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

Field 29 - 11/11/2022: Wheat, silage, soft dough

Field name: Field 29

Crop: Wheat, silage, soft dough

Plant date: 11/11/2022

Application date	Application method	Precipitation 24 hours prior		Precipitation during application			Precipitation 24 hours following	
11/05/2022	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	
Dry Manure		Corral solids	189.39	64.51	148.87	2,059.00	205.00 <i>ton</i>	
Application event totals			189.39	64.51	148.87	2,059.00		
11/21/2022	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	
W4M1		Ground water	0.00	0.00	0.00	134.82	2,400,000.00 <i>gal</i>	
Application event totals			0.00	0.00	0.00	134.82		
02/10/2023	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	
Last Chance Ditch		Surface water	0.00	0.00	0.00	33.22	4,800,000.00 <i>gal</i>	
Application event totals			0.00	0.00	0.00	33.22		

Field 29 - 05/15/2023: Corn, silage

Field name: Field 29

Crop: Corn, silage

Plant date: 05/15/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
05/20/2023	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
Dry Manure	Corral solids	227.26	77.41	178.65	2,470.80	246.00 <i>ton</i>
Application event totals		227.26	77.41	178.65	2,470.80	

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

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

Field 29 - 05/15/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
05/27/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
LKR Ditch	Surface water	0.00	0.00	0.00	46.50	6,720,000.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	46.50	
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
UN 32	Liquid commercial fertilizer	100.00	0.00	0.00	0.00	
LKR Ditch	Surface water	0.00	0.00	0.00	59.79	8,640,000.00 <i>gal</i>
Application event totals		100.00	0.00	0.00	59.79	
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
UN 32	Liquid commercial fertilizer	50.00	0.00	0.00	0.00	
LKR Ditch	Surface water	0.00	0.00	0.00	93.01	13,440,000.00 <i>gal</i>
Application event totals		50.00	0.00	0.00	93.01	
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
LKR Ditch	Surface water	0.00	0.00	0.00	79.72	11,520,000.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	79.72	
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
LKR Ditch	Surface water	0.00	0.00	0.00	46.50	6,720,000.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	46.50	

Field 30/31 - 11/12/2022: Wheat, silage, soft dough

Field name: Field 30/31

Crop: Wheat, silage, soft dough

Plant date: 11/12/2022

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

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

Field 30/31 - 11/12/2022: Wheat, silage, soft dough

Application date	Application method		Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
11/05/2022	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
Dry Manure		Corral solids	201.47	68.63	158.38	2,190.43	500.00 <i>ton</i>
Application event totals			201.47	68.63	158.38	2,190.43	
11/24/2022	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
W4M1		Ground water	0.00	0.00	0.00	125.06	5,104,000.00 <i>gal</i>
Application event totals			0.00	0.00	0.00	125.06	
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
Last Chance Ditch		Surface water	0.00	0.00	0.00	26.08	8,640,000.00 <i>gal</i>
Application event totals			0.00	0.00	0.00	26.08	

Field 30/31 - 05/15/2023: Corn, silage

Field name: Field 30/31

Crop: Corn, silage

Plant date: 05/15/2023

Application date	Application method		Precipitation 24 hours prior	Precipitation during application			Precipitation 24 hours following	
05/20/2023	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
Dry Manure			Corral solids	241.77	82.35	190.05	2,628.51	600.00 <i>ton</i>
Application event totals				241.77	82.35	190.05	2,628.51	
05/29/2023	Surface (irrigation)		No precipitation	No precipitation			No precipitation	
Source description			Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
LKR Ditch			Surface water	0.00	0.00	0.00	47.81	15,840,000.00 <i>gal</i>
Application event totals				0.00	0.00	0.00	47.81	

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

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

Field 30/31 - 05/15/2023: Corn, silage

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
UN 32	Liquid commercial fertilizer	100.00	0.00	0.00	0.00	21,600,000.00 <i>gal</i>
LKR Ditch	Surface water	0.00	0.00	0.00	65.20	
Application event totals		100.00	0.00	0.00	65.20	
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
UN 32	Liquid commercial fertilizer	50.00	0.00	0.00	0.00	30,240,000.00 <i>gal</i>
Last Chance Ditch	Surface water	0.00	0.00	0.00	91.28	
Application event totals		50.00	0.00	0.00	91.28	
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
LKR Ditch	Surface water	0.00	0.00	0.00	78.24	25,920,000.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	78.24	
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
LKR Ditch	Surface water	0.00	0.00	0.00	46.91	15,540,000.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	46.91	

Field 32 - 11/12/2022: Wheat, silage, soft dough

Field name: Field 32

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

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

Field 32 - 11/12/2022: Wheat, silage, soft dough

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following			
11/05/2022	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
Dry Manure		Corral solids	219.93	74.92	172.88	2,391.10	900.00 <i>ton</i>
Application event totals			219.93	74.92	172.88	2,391.10	
11/26/2022	Surface (irrigation)	No precipitation	No precipitation			No precipitation	
Source description		Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
W4M1		Ground water	0.00	0.00	0.00	124.82	8,400,000.00 <i>gal</i>
Application event totals			0.00	0.00	0.00	124.82	
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
Last Chance Ditch		Surface water	0.00	0.00	0.00	30.75	16,800,000.00 <i>gal</i>
Application event totals			0.00	0.00	0.00	30.75	

Field 32 - 05/05/2023: Corn, silage

Field name: Field 32

Crop: Corn, silage

Plant date: 05/05/2023

Application date	Application method		Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following		
05/20/2023	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
Dry Manure			Corral solids	244.37	83.24	192.09	2,656.77	1,000.00 <i>ton</i>
Application event totals				244.37	83.24	192.09	2,656.77	
05/30/2023	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
LKR Ditch			Surface water	0.00	0.00	0.00	47.45	25,920,000.00 <i>gal</i>
Application event totals				0.00	0.00	0.00	47.45	

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

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

Field 32 - 05/05/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
06/19/2023	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
UN 32	Liquid commercial fertilizer	100.00	0.00	0.00	0.00	33,120,000.00 <i>gal</i>
LKR Ditch	Surface water	0.00	0.00	0.00	60.63	
Application event totals		100.00	0.00	0.00	60.63	
07/12/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
UN 32	Liquid commercial fertilizer	50.00	0.00	0.00	0.00	50,400,000.00 <i>gal</i>
LKR Ditch	Surface water	0.00	0.00	0.00	92.26	
Application event totals		50.00	0.00	0.00	92.26	
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
LKR Ditch	Surface water	0.00	0.00	0.00	77.04	42,089,000.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	77.04	
08/11/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation		
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
LKR Ditch	Surface water	0.00	0.00	0.00	47.45	25,920,000.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	47.45	

Field 4 & 5 - 11/11/2022: Wheat, silage, soft dough

Field name: Field 4 & 5

Crop: Wheat, silage, soft dough

Plant date: 11/11/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
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Annual Report - General Order No. R5-2007-0035

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

Field 4 & 5 - 11/11/2022: Wheat, silage, soft dough

Application date	Application method		Precipitation 24 hours prior	Precipitation during application			Precipitation 24 hours following	
11/05/2022	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	
Dry Manure		Corral solids	189.39	64.51	148.87	2,059.00	100.00 <i>ton</i>	
Application event totals			189.39	64.51	148.87	2,059.00		
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	
Last Chance Ditch		Surface water	0.00	0.00	0.00	20.60	1,452,000.00 <i>gal</i>	
Application event totals			0.00	0.00	0.00	20.60		
02/02/2023	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	
W3M1		Ground water	0.00	0.00	0.00	120.29	1,848,000.00 <i>gal</i>	
Application event totals			0.00	0.00	0.00	120.29		

Field 4 & 5 - 05/16/2023: Corn, silage

Field name: Field 4 & 5

Crop: Corn, silage

Plant date: 05/16/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
05/20/2023	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
Dry Manure	Corral solids	189.39	64.51	148.87	2,059.00	100.00 <i>ton</i>
Application event totals		189.39	64.51	148.87	2,059.00	
05/26/2023	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
Last Chance Ditch	Surface water	0.00	0.00	0.00	47.67	3,360,000.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	47.67	

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

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

Field 4 & 5 - 05/16/2023: Corn, silage

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
Last Chance Ditch	Surface water	0.00	0.00	0.00	61.29	4,320,000.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	61.29	
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
Last Chance Ditch	Surface water	0.00	0.00	0.00	95.33	6,720,000.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	95.33	
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
Last Chance Ditch	Surface water	0.00	0.00	0.00	81.71	5,760,000.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	81.71	
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
Last Chance Ditch	Surface water	0.00	0.00	0.00	47.67	3,360,000.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	47.67	

Field 7 - 11/11/2022: Wheat, silage, soft dough

Field name: Field 7

Crop: Wheat, silage, soft dough

Plant date: 11/11/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
11/05/2022	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
Dry Manure	Corral solids	151.51	51.61	119.10	1,647.20	32.00 <i>ton</i>
Application event totals		151.51	51.61	119.10	1,647.20	

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

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

Field 7 - 11/11/2022: Wheat, silage, soft dough

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
W3M1		Ground water	0.00	0.00	0.00	108.05	664,000.00 <i>gal</i>
Application event totals			0.00	0.00	0.00	108.05	
02/02/2023	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
Last Chance Ditch		Surface water	0.00	0.00	0.00	23.50	988,000.00 <i>gal</i>
Application event totals			0.00	0.00	0.00	23.50	

Field 7 - 05/15/2023: Corn, silage

Field name: Field 7

Crop: Corn, silage

Plant date: 05/15/2023

Application date	Application method		Precipitation 24 hours prior	Precipitation during application			Precipitation 24 hours following
05/27/2023	Surface (irrigation)		No precipitation	No precipitation			No precipitation
Source description		Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Last Chance Ditch		Surface water	0.00	0.00	0.00	51.07	1,440,000.00 <i>gal</i>
Application event totals			0.00	0.00	0.00	51.07	
05/22/2023	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
Dry Manure		Corral solids	189.39	64.51	148.87	2,059.00	40.00 <i>ton</i>
Application event totals			189.39	64.51	148.87	2,059.00	
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
Last Chance Ditch		Surface water	0.00	0.00	0.00	51.07	1,440,000.00 <i>gal</i>
Application event totals			0.00	0.00	0.00	51.07	

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

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

Field 7 - 05/15/2023: Corn, silage

Application date	Application method		Precipitation 24 hours prior	Precipitation during application			Precipitation 24 hours following	
07/06/2023	Surface (irrigation)		No precipitation	No precipitation			No precipitation	
Source description		Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount	
Last Chance Ditch		Surface water	0.00	0.00	0.00	85.12	2,400,000.00 <i>gal</i>	
Application event totals			0.00	0.00	0.00	85.12		
07/23/2023	Surface (irrigation)		No precipitation	No precipitation			No precipitation	
Source description		Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount	
Last Chance Ditch		Surface water	0.00	0.00	0.00	85.12	2,400,000.00 <i>gal</i>	
Application event totals			0.00	0.00	0.00	85.12		
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	
Last Chance Ditch		Surface water	0.00	0.00	0.00	51.07	1,440,000.00 <i>gal</i>	
Application event totals			0.00	0.00	0.00	51.07		

Field 9 - 11/12/2022: Wheat, silage, soft dough

Field name: Field 9

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			
11/05/2022	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
Dry Manure		Corral solids	189.39	64.51	148.87	2,059.00	100.00 <i>ton</i>
Application event totals			189.39	64.51	148.87	2,059.00	
11/18/2022	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation		
Source description		Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
W3M1		Ground water	0.00	0.00	0.00	68.74	1,056,000.00 <i>gal</i>
Application event totals			0.00	0.00	0.00	68.74	

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

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

Field 9 - 11/12/2022: Wheat, silage, soft dough

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following		
02/03/2023	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
Last Chance Ditch	Surface water	0.00	0.00	0.00	29.96	2,112,000.00 <i>gal</i>
Application event totals		0.00	0.00	0.00	29.96	

Field 9 - 05/05/2023: Corn, silage

Field name: Field 9

Crop: Corn, silage

Plant date: 05/05/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application			Precipitation 24 hours following	
05/15/2023	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
Dry Manure		Corral solids	265.14	90.31	208.42	2,882.60	140.00 <i>ton</i>
Application event totals			265.14	90.31	208.42	2,882.60	
05/27/2023	Surface (irrigation)	No precipitation	No precipitation			No precipitation	
Source description		Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Last Chance Ditch		Surface water	0.00	0.00	0.00	47.67	3,360,000.00 <i>gal</i>
Application event totals			0.00	0.00	0.00	47.67	
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
Last Chance Ditch		Surface water	0.00	0.00	0.00	61.29	4,320,000.00 <i>gal</i>
Application event totals			0.00	0.00	0.00	61.29	
07/06/2023	Surface (irrigation)	No precipitation	No precipitation			No precipitation	
Source description		Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Last Chance Ditch		Surface water	0.00	0.00	0.00	95.33	6,720,000.00 <i>gal</i>
Application event totals			0.00	0.00	0.00	95.33	

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

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

Field 9 - 05/05/2023: 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
Last Chance Ditch			Surface water	0.00	0.00	0.00	81.71	5,760,000.00 <i>gal</i>
Application event totals				0.00	0.00	0.00	81.71	
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
Last Chance Ditch			Surface water	0.00	0.00	0.00	47.67	3,360,000.00 <i>gal</i>
Application event totals				0.00	0.00	0.00	47.67	

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

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

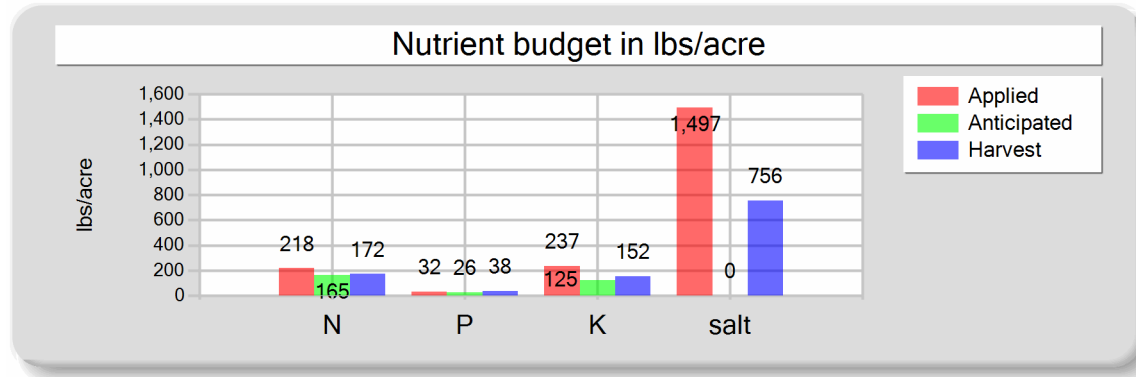
B. NUTRIENT BUDGET

Field 1 - 11/12/2022: Wheat, silage, soft dough

Field name: Field 1

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)	Fresh water applied
Existing soil nutrient content	0.00	0.00	0.00	0.00	8,640,000.00 gallons
Plowdown credit	0.00	0.00	0.00	0.00	318.18 acre-inches
Commercial fertilizer / Other	0.00	0.00	0.00	0.00	6.00 inches/acre
Dry manure	0.00	0.00	0.00	0.00	
Process wastewater	210.96	31.90	236.71	1,395.08	Process wastewater applied
Fresh water	0.00	0.00	0.00	101.58	2,160,000.00 gallons
Atmospheric deposition	7.00	0.00	0.00	0.00	79.55 acre-inches
Total nutrients applied	217.96	31.90	236.71	1,496.66	1.50 inches/acre
Anticipated crop nutrient removal	165.00	25.50	124.50	0.00	
Actual crop nutrient removal	171.80	37.94	152.48	756.48	Total harvests for the crop
Nutrient balance	46.16	-6.04	84.23	740.18	1 harvests
Applied to removed ratio	1.27	0.84	1.55	1.98	

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

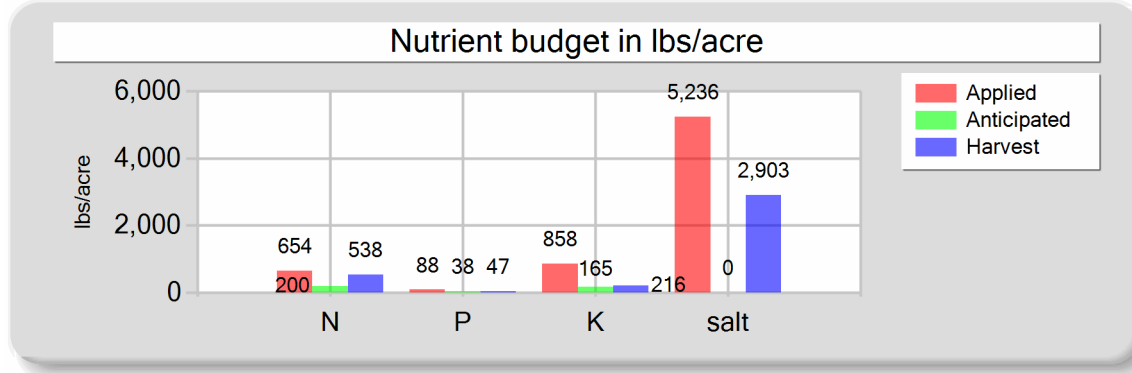
Reporting period 01/01/2023 to 12/31/2023.

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

Field name: Field 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)	Fresh water applied
Existing soil nutrient content	0.00	0.00	0.00	0.00	60,480,000.00 <i>gallons</i>
Plowdown credit	0.00	0.00	0.00	0.00	2,227.27 <i>acre-inches</i>
Commercial fertilizer / Other	0.00	0.00	0.00	0.00	42.02 <i>inches/acre</i>
Dry manure	0.00	0.00	0.00	0.00	
Process wastewater	646.56	88.14	857.56	4,911.87	Process wastewater applied
Fresh water	0.00	0.00	0.00	323.77	7,560,000.00 <i>gallons</i>
Atmospheric deposition	7.00	0.00	0.00	0.00	278.41 <i>acre-inches</i>
Total nutrients applied	653.56	88.14	857.56	5,235.64	5.25 <i>inches/acre</i>
Anticipated crop nutrient removal	200.00	37.50	165.00	0.00	
Actual crop nutrient removal	537.92	47.40	216.48	2,902.80	Total harvests for the crop
Nutrient balance	115.64	40.74	641.08	2,332.84	1 <i>harvests</i>
Applied to removed ratio	1.21	1.86	3.96	1.80	

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

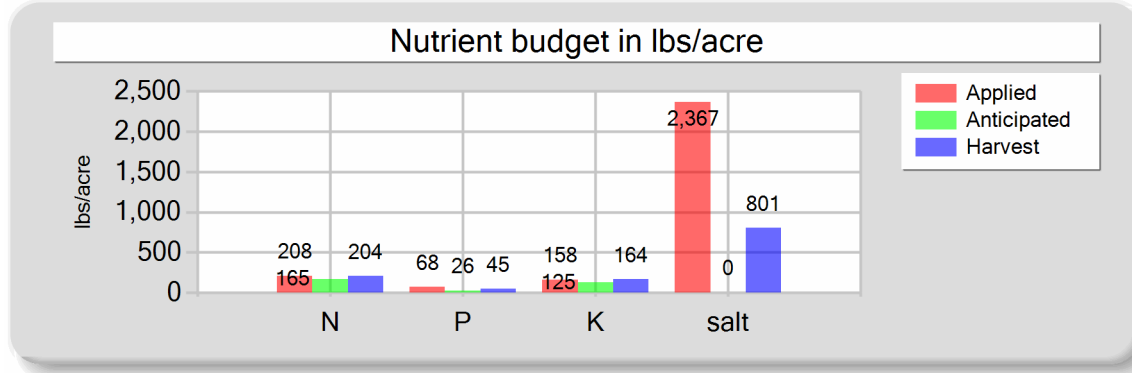
Reporting period 01/01/2023 to 12/31/2023.

Field 10 - 11/12/2022: Wheat, silage, soft dough

Field name: Field 10

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)	Fresh water applied
Existing soil nutrient content	0.00	0.00	0.00	0.00	25,680,000.00 <i>gallons</i>
Plowdown credit	0.00	0.00	0.00	0.00	945.71 <i>acre-inches</i>
Commercial fertilizer / Other	0.00	0.00	0.00	0.00	7.16 <i>inches/acre</i>
Dry manure	200.86	68.42	157.90	2,183.79	
Process wastewater	0.00	0.00	0.00	0.00	
Fresh water	0.00	0.00	0.00	183.71	
Atmospheric deposition	7.00	0.00	0.00	0.00	
Total nutrients applied	207.86	68.42	157.90	2,367.50	
Anticipated crop nutrient removal	165.00	25.50	124.50	0.00	
Actual crop nutrient removal	203.75	45.03	164.09	801.36	
Nutrient balance	4.11	23.39	-6.19	1,566.14	
Applied to removed ratio	1.02	1.52	0.96	2.95	
					Process wastewater applied
					0.00 <i>gallons</i>
					0.00 <i>acre-inches</i>
					0.00 <i>inches/acre</i>
					Total harvests for the crop
					1 <i>harvests</i>

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

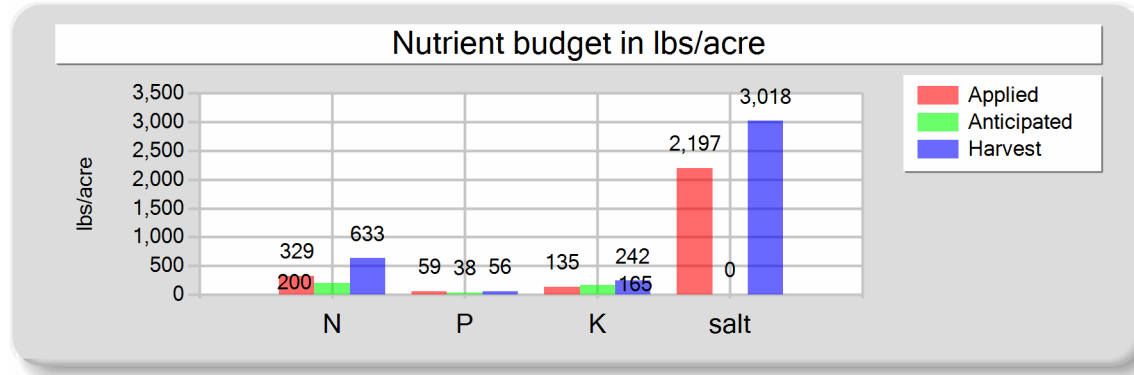
Reporting period 01/01/2023 to 12/31/2023.

Field 10 - 05/14/2023: Corn, silage

Field name: Field 10

Crop: Corn, silage

Plant date: 05/14/2023



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)	Fresh water applied
Existing soil nutrient content	0.00	0.00	0.00	0.00	151,200,000.00 <i>gallons</i>
Plowdown credit	0.00	0.00	0.00	0.00	5,568.18 <i>acre-inches</i>
Commercial fertilizer / Other	150.00	0.00	0.00	0.00	42.18 <i>inches/acre</i>
Dry manure	172.17	58.65	135.34	1,871.82	
Process wastewater	0.00	0.00	0.00	0.00	
Fresh water	0.00	0.00	0.00	325.00	
Atmospheric deposition	7.00	0.00	0.00	0.00	
Total nutrients applied	329.17	58.65	135.34	2,196.82	
Anticipated crop nutrient removal	200.00	37.50	165.00	0.00	
Actual crop nutrient removal	632.66	55.74	241.82	3,018.40	
Nutrient balance	-303.49	2.91	-106.48	-821.58	
Applied to removed ratio	0.52	1.05	0.56	0.73	
					Process wastewater applied
					0.00 <i>gallons</i>
					0.00 <i>acre-inches</i>
					0.00 <i>inches/acre</i>
					Total harvests for the crop
					1 <i>harvests</i>

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

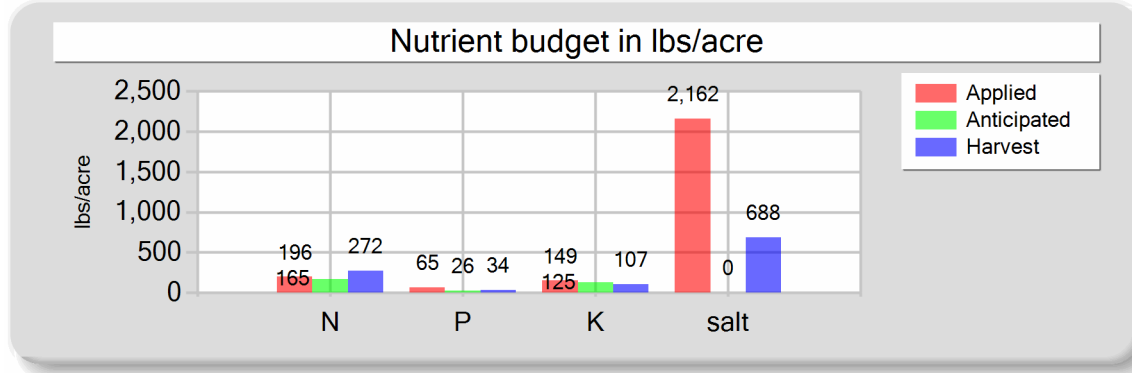
Reporting period 01/01/2023 to 12/31/2023.

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

Field name: Field 11

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	189.39	64.51	148.87	2,059.00
Process wastewater	0.00	0.00	0.00	0.00
Fresh water	0.00	0.00	0.00	102.54
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	196.39	64.51	148.87	2,161.54
Anticipated crop nutrient removal	165.00	25.50	124.50	0.00
Actual crop nutrient removal	271.67	34.44	107.40	687.96
Nutrient balance	-75.28	30.07	41.47	1,473.58
Applied to removed ratio	0.72	1.87	1.39	3.14

Fresh water applied
5,760,000.00 <i>gallons</i>
212.12 <i>acre-inches</i>
6.06 <i>inches/acre</i>

Process wastewater applied
0.00 <i>gallons</i>
0.00 <i>acre-inches</i>
0.00 <i>inches/acre</i>

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

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

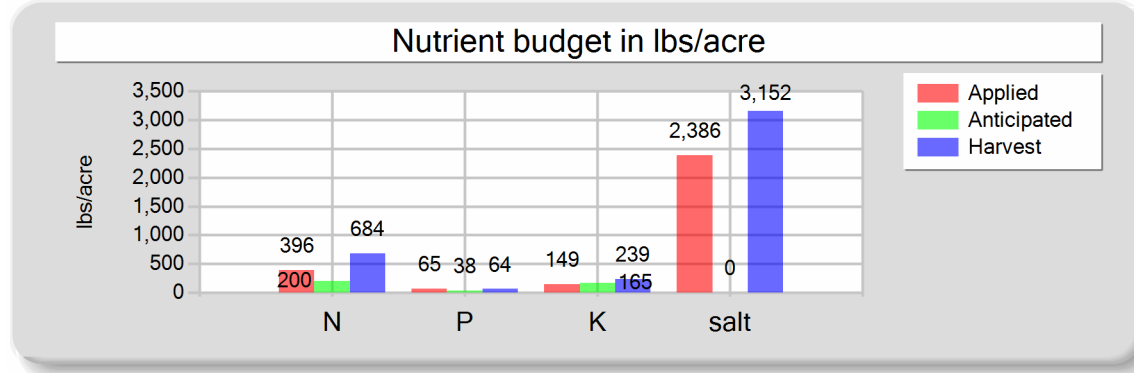
Reporting period 01/01/2023 to 12/31/2023.

Field 11 - 05/14/2023: Corn, silage

Field name: Field 11

Crop: Corn, silage

Plant date: 05/14/2023



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)	Fresh water applied
Existing soil nutrient content	0.00	0.00	0.00	0.00	40,320,000.00 <i>gallons</i>
Plowdown credit	0.00	0.00	0.00	0.00	1,484.85 <i>acre-inches</i>
Commercial fertilizer / Other	200.00	0.00	0.00	0.00	42.42 <i>inches/acre</i>
Dry manure	189.39	64.51	148.87	2,059.00	
Process wastewater	0.00	0.00	0.00	0.00	
Fresh water	0.00	0.00	0.00	326.86	
Atmospheric deposition	7.00	0.00	0.00	0.00	
Total nutrients applied	396.39	64.51	148.87	2,385.86	
Anticipated crop nutrient removal	200.00	37.50	165.00	0.00	
Actual crop nutrient removal	683.90	64.16	238.72	3,151.85	
Nutrient balance	-287.51	0.35	-89.85	-765.99	
Applied to removed ratio	0.58	1.01	0.62	0.76	
					Process wastewater applied
					0.00 <i>gallons</i>
					0.00 <i>acre-inches</i>
					0.00 <i>inches/acre</i>
					Total harvests for the crop
					1 <i>harvests</i>

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

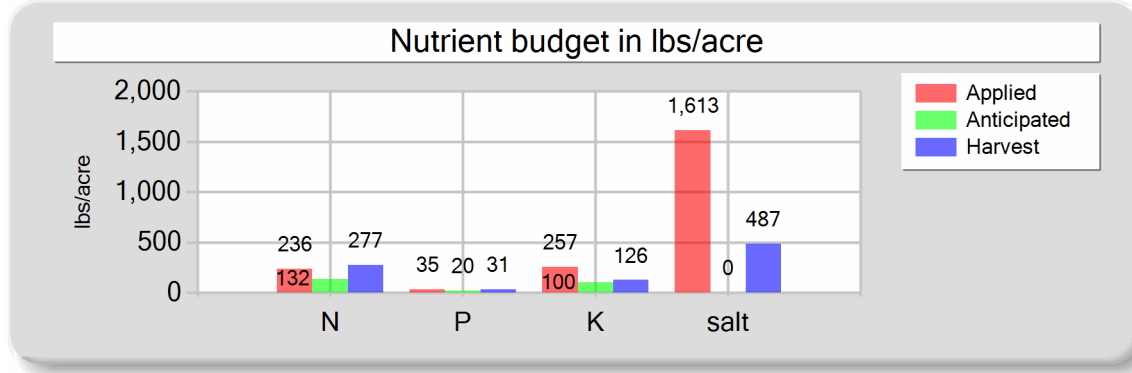
Reporting period 01/01/2023 to 12/31/2023.

Field 12 - 11/15/2022: Wheat, silage, soft dough

Field name: Field 12

Crop: Wheat, silage, soft dough

Plant date: 11/15/2022



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)	Fresh water applied
Existing soil nutrient content	0.00	0.00	0.00	0.00	1,951,000.00 <i>gallons</i>
Plowdown credit	0.00	0.00	0.00	0.00	71.85 <i>acre-inches</i>
Commercial fertilizer / Other	0.00	0.00	0.00	0.00	5.99 <i>inches/acre</i>
Dry manure	0.00	0.00	0.00	0.00	
Process wastewater	228.62	34.57	256.53	1,511.88	Process wastewater applied
Fresh water	0.00	0.00	0.00	101.11	530,000.00 <i>gallons</i>
Atmospheric deposition	7.00	0.00	0.00	0.00	19.52 <i>acre-inches</i>
Total nutrients applied	235.62	34.57	256.53	1,612.98	1.63 <i>inches/acre</i>
Anticipated crop nutrient removal	132.00	20.40	99.60	0.00	
Actual crop nutrient removal	276.56	31.47	125.88	487.30	Total harvests for the crop
Nutrient balance	-40.94	3.10	130.64	1,125.69	1 <i>harvests</i>
Applied to removed ratio	0.85	1.10	2.04	3.31	

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

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

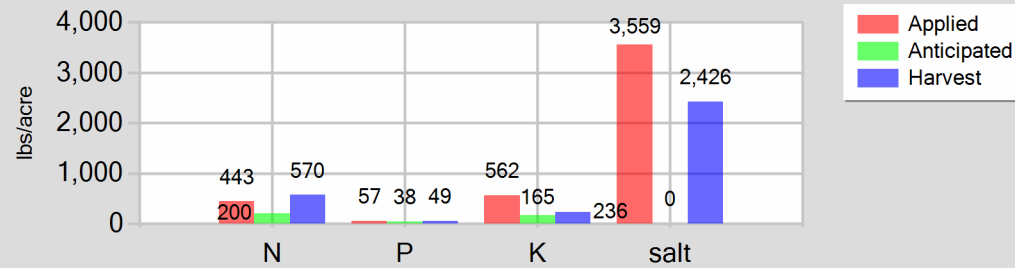
Field 12 - 05/15/2023: Corn, silage

Field name: Field 12

Crop: Corn, silage

Plant date: 05/15/2023

Nutrient budget in lbs/acre



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	435.58	57.02	562.08	3,229.79
Fresh water	0.00	0.00	0.00	329.13
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	442.58	57.02	562.08	3,558.92
Anticipated crop nutrient removal	200.00	37.50	165.00	0.00
Actual crop nutrient removal	569.95	48.98	236.39	2,425.65
Nutrient balance	-127.37	8.04	325.70	1,133.27
Applied to removed ratio	0.78	1.16	2.38	1.47

Fresh water applied
13,920,000.00 gallons
512.63 acre-inches
42.72 inches/acre
Process wastewater applied
1,130,000.00 gallons
41.61 acre-inches
3.47 inches/acre
Total harvests for the crop
1 harvests

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

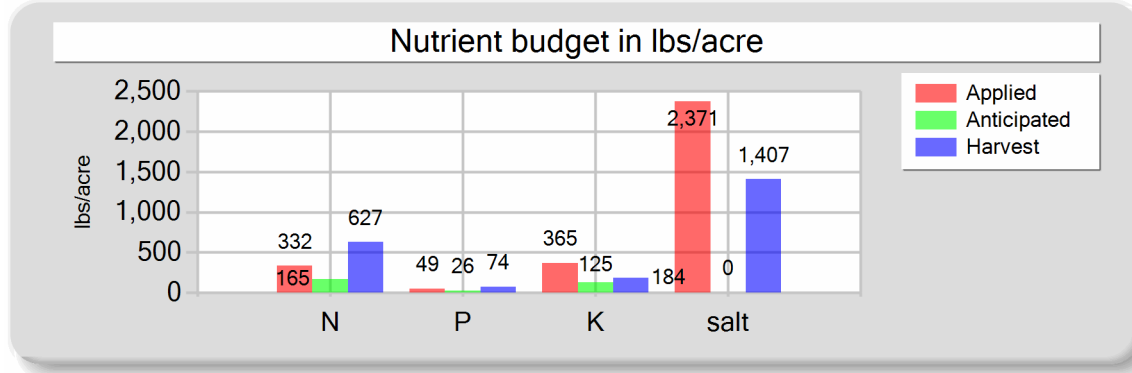
Reporting period 01/01/2023 to 12/31/2023.

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

Field name: Field 14

Crop: Wheat, silage, soft dough

Plant date: 11/11/2022



	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	325.21	49.18	364.90	2,150.61
Fresh water	0.00	0.00	0.00	220.74
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	332.21	49.18	364.90	2,371.36
Anticipated crop nutrient removal	165.00	25.50	124.50	0.00
Actual crop nutrient removal	627.46	74.11	184.28	1,407.36
Nutrient balance	-295.25	-24.93	180.63	964.00
Applied to removed ratio	0.53	0.66	1.98	1.68

Fresh water applied
15,600,000.00 <i>gallons</i>
574.49 <i>acre-inches</i>
6.24 <i>inches/acre</i>

Process wastewater applied
5,780,000.00 <i>gallons</i>
212.86 <i>acre-inches</i>
2.31 <i>inches/acre</i>

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

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

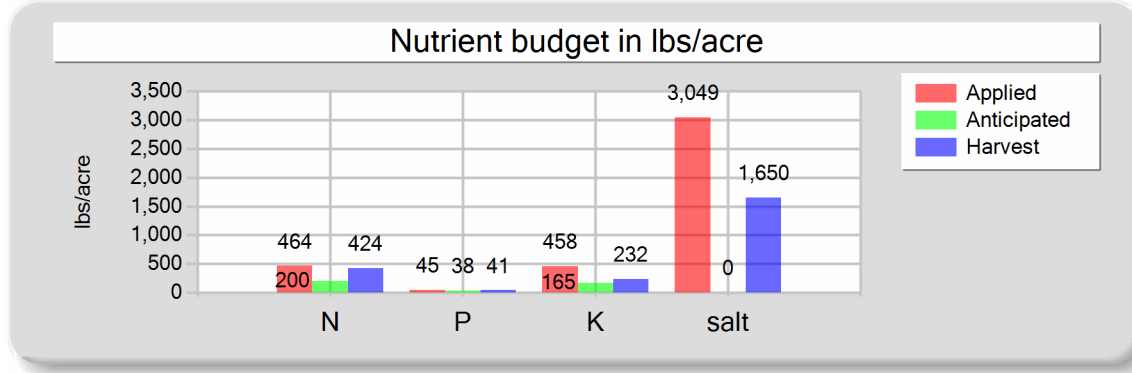
Reporting period 01/01/2023 to 12/31/2023.

Field 14 - 05/14/2023: Corn, silage

Field name: Field 14

Crop: Corn, silage

Plant date: 05/14/2023



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)	Fresh water applied
Existing soil nutrient content	0.00	0.00	0.00	0.00	103,680,000.00 <i>gallons</i>
Plowdown credit	0.00	0.00	0.00	0.00	3,818.18 <i>acre-inches</i>
Commercial fertilizer / Other	0.00	0.00	0.00	0.00	41.50 <i>inches/acre</i>
Dry manure	0.00	0.00	0.00	0.00	
Process wastewater	457.40	44.86	458.45	2,729.16	Process wastewater applied
Fresh water	0.00	0.00	0.00	319.75	7,580,000.00 <i>gallons</i>
Atmospheric deposition	7.00	0.00	0.00	0.00	279.15 <i>acre-inches</i>
Total nutrients applied	464.40	44.86	458.45	3,048.91	3.03 <i>inches/acre</i>
Anticipated crop nutrient removal	200.00	37.50	165.00	0.00	
Actual crop nutrient removal	424.13	41.46	232.14	1,649.80	Total harvests for the crop
Nutrient balance	40.27	3.40	226.31	1,399.11	1 <i>harvests</i>
Applied to removed ratio	1.09	1.08	1.97	1.85	

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

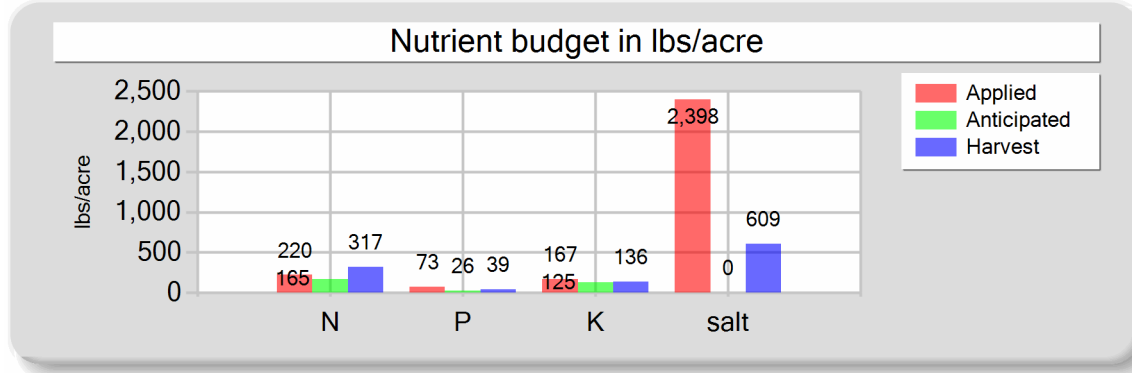
Reporting period 01/01/2023 to 12/31/2023.

Field 19 - 11/11/2022: Wheat, silage, soft dough

Field name: Field 19

Crop: Wheat, silage, soft dough

Plant date: 11/11/2022



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)	Fresh water applied
Existing soil nutrient content	0.00	0.00	0.00	0.00	10,920,000.00 <i>gallons</i>
Plowdown credit	0.00	0.00	0.00	0.00	402.15 <i>acre-inches</i>
Commercial fertilizer / Other	0.00	0.00	0.00	0.00	5.03 <i>inches/acre</i>
Dry manure	213.06	72.57	167.48	2,316.38	
Process wastewater	0.00	0.00	0.00	0.00	
Fresh water	0.00	0.00	0.00	81.99	
Atmospheric deposition	7.00	0.00	0.00	0.00	
Total nutrients applied	220.06	72.57	167.48	2,398.36	
Anticipated crop nutrient removal	165.00	25.50	124.50	0.00	
Actual crop nutrient removal	317.07	39.46	136.42	609.00	
Nutrient balance	-97.01	33.11	31.07	1,789.36	
Applied to removed ratio	0.69	1.84	1.23	3.94	

Process wastewater applied
0.00 <i>gallons</i>
0.00 <i>acre-inches</i>
0.00 <i>inches/acre</i>

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

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

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

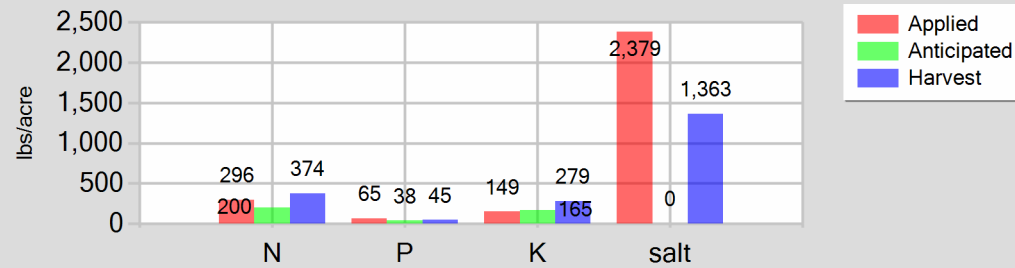
Field 19 - 05/14/2023: Corn, silage

Field name: Field 19

Crop: Corn, silage

Plant date: 05/14/2023

Nutrient budget in lbs/acre



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	100.00	0.00	0.00	0.00
Dry manure	189.39	64.51	148.87	2,059.00
Process wastewater	0.00	0.00	0.00	0.00
Fresh water	0.00	0.00	0.00	320.05
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	296.39	64.51	148.87	2,379.05
Anticipated crop nutrient removal	200.00	37.50	165.00	0.00
Actual crop nutrient removal	374.33	45.37	279.45	1,362.75
Nutrient balance	-77.94	19.14	-130.58	1,016.30
Applied to removed ratio	0.79	1.42	0.53	1.75

Fresh water applied
90,240,000.00 <i>gallons</i>
3,323.23 <i>acre-inches</i>
41.54 <i>inches/acre</i>

Process wastewater applied
0.00 <i>gallons</i>
0.00 <i>acre-inches</i>
0.00 <i>inches/acre</i>

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

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

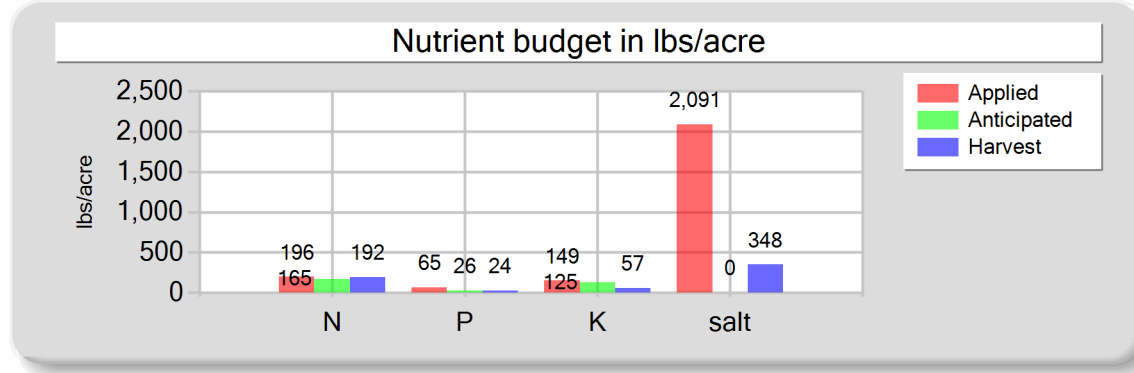
Reporting period 01/01/2023 to 12/31/2023.

Field 21 - 11/11/2022: Wheat, silage, soft dough

Field name: Field 21

Crop: Wheat, silage, soft dough

Plant date: 11/11/2022



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)	Fresh water applied
Existing soil nutrient content	0.00	0.00	0.00	0.00	3,920,000.00 <i>gallons</i>
Plowdown credit	0.00	0.00	0.00	0.00	144.36 <i>acre-inches</i>
Commercial fertilizer / Other	0.00	0.00	0.00	0.00	4.12 <i>inches/acre</i>
Dry manure	189.39	64.51	148.87	2,059.00	
Process wastewater	0.00	0.00	0.00	0.00	
Fresh water	0.00	0.00	0.00	31.78	
Atmospheric deposition	7.00	0.00	0.00	0.00	
Total nutrients applied	196.39	64.51	148.87	2,090.78	
Anticipated crop nutrient removal	165.00	25.50	124.50	0.00	
Actual crop nutrient removal	192.27	24.01	57.49	348.00	
Nutrient balance	4.12	40.50	91.38	1,742.78	
Applied to removed ratio	1.02	2.69	2.59	6.01	
					Process wastewater applied
					0.00 <i>gallons</i>
					0.00 <i>acre-inches</i>
					0.00 <i>inches/acre</i>
					Total harvests for the crop
					1 <i>harvests</i>

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

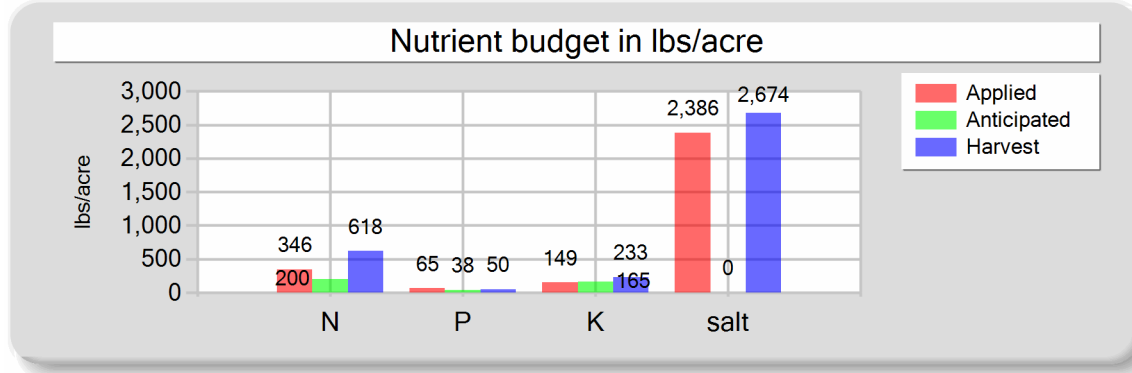
Reporting period 01/01/2023 to 12/31/2023.

Field 21 - 05/15/2023: Corn, silage

Field name: Field 21

Crop: Corn, silage

Plant date: 05/15/2023



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)	Fresh water applied
Existing soil nutrient content	0.00	0.00	0.00	0.00	40,320,000.00 <i>gallons</i>
Plowdown credit	0.00	0.00	0.00	0.00	1,484.85 <i>acre-inches</i>
Commercial fertilizer / Other	150.00	0.00	0.00	0.00	42.42 <i>inches/acre</i>
Dry manure	189.39	64.51	148.87	2,059.00	
Process wastewater	0.00	0.00	0.00	0.00	
Fresh water	0.00	0.00	0.00	326.86	
Atmospheric deposition	7.00	0.00	0.00	0.00	
Total nutrients applied	346.39	64.51	148.87	2,385.86	
Anticipated crop nutrient removal	200.00	37.50	165.00	0.00	
Actual crop nutrient removal	617.72	50.03	232.88	2,673.75	
Nutrient balance	-271.34	14.49	-84.00	-287.89	
Applied to removed ratio	0.56	1.29	0.64	0.89	
					Process wastewater applied
					0.00 <i>gallons</i>
					0.00 <i>acre-inches</i>
					0.00 <i>inches/acre</i>
					Total harvests for the crop
					1 <i>harvests</i>

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

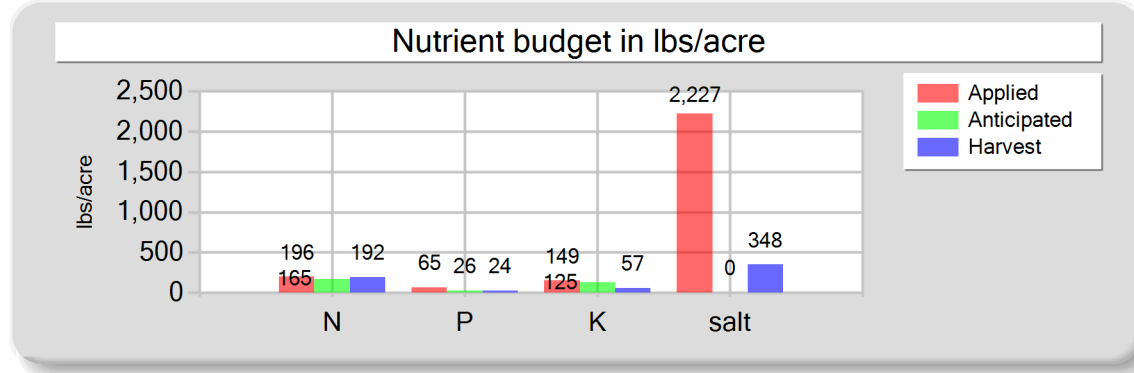
Reporting period 01/01/2023 to 12/31/2023.

Field 29 - 11/11/2022: Wheat, silage, soft dough

Field name: Field 29

Crop: Wheat, silage, soft dough

Plant date: 11/11/2022



	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	189.39	64.51	148.87	2,059.00
Process wastewater	0.00	0.00	0.00	0.00
Fresh water	0.00	0.00	0.00	168.04
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	196.39	64.51	148.87	2,227.04
Anticipated crop nutrient removal	165.00	25.50	124.50	0.00
Actual crop nutrient removal	192.27	24.01	57.49	348.00
Nutrient balance	4.12	40.50	91.38	1,879.04
Applied to removed ratio	1.02	2.69	2.59	6.40

Fresh water applied
7,200,000.00 <i>gallons</i>
265.15 <i>acre-inches</i>
6.47 <i>inches/acre</i>

Process wastewater applied
0.00 <i>gallons</i>
0.00 <i>acre-inches</i>
0.00 <i>inches/acre</i>

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

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

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

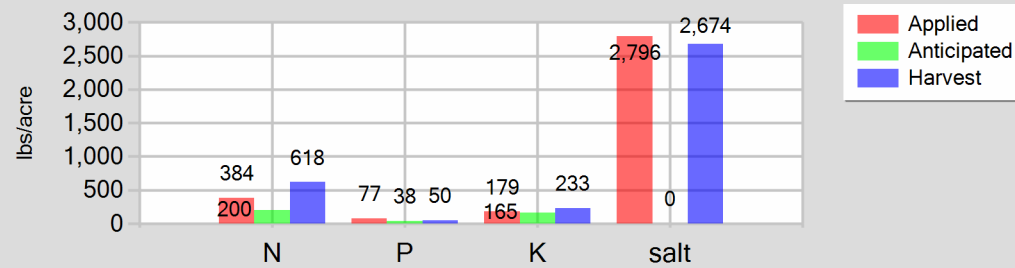
Field 29 - 05/15/2023: Corn, silage

Field name: Field 29

Crop: Corn, silage

Plant date: 05/15/2023

Nutrient budget in lbs/acre



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)	Fresh water applied
Existing soil nutrient content	0.00	0.00	0.00	0.00	47,040,000.00 <i>gallons</i>
Plowdown credit	0.00	0.00	0.00	0.00	1,732.32 <i>acre-inches</i>
Commercial fertilizer / Other	150.00	0.00	0.00	0.00	42.25 <i>inches/acre</i>
Dry manure	227.26	77.41	178.65	2,470.80	
Process wastewater	0.00	0.00	0.00	0.00	
Fresh water	0.00	0.00	0.00	325.53	
Atmospheric deposition	7.00	0.00	0.00	0.00	
Total nutrients applied	384.26	77.41	178.65	2,796.33	
Anticipated crop nutrient removal	200.00	37.50	165.00	0.00	
Actual crop nutrient removal	617.72	50.03	232.88	2,673.75	
Nutrient balance	-233.46	27.39	-54.23	122.58	
Applied to removed ratio	0.62	1.55	0.77	1.05	
					Process wastewater applied
					0.00 <i>gallons</i>
					0.00 <i>acre-inches</i>
					0.00 <i>inches/acre</i>
					Total harvests for the crop
					1 <i>harvests</i>

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

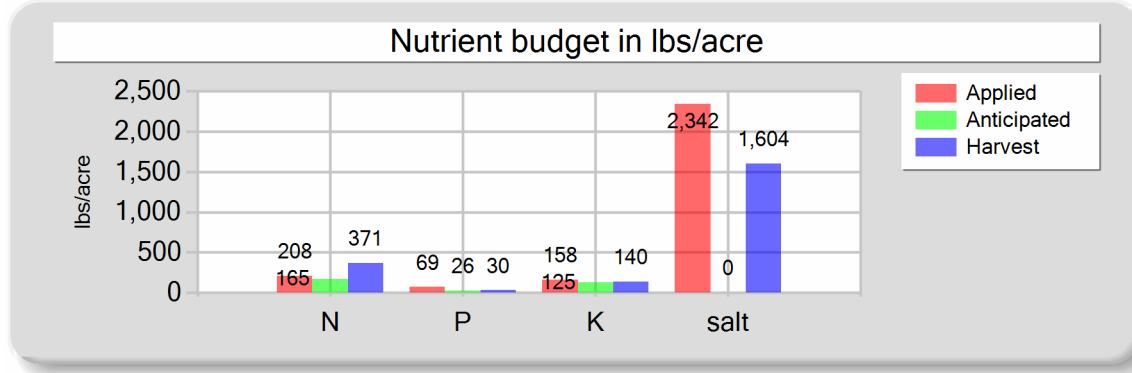
Reporting period 01/01/2023 to 12/31/2023.

Field 30/31 - 11/12/2022: Wheat, silage, soft dough

Field name: Field 30/31

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	201.47	68.63	158.38	2,190.43
Process wastewater	0.00	0.00	0.00	0.00
Fresh water	0.00	0.00	0.00	151.14
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	208.47	68.63	158.38	2,341.56
Anticipated crop nutrient removal	165.00	25.50	124.50	0.00
Actual crop nutrient removal	370.63	30.02	139.73	1,604.25
Nutrient balance	-162.16	38.61	18.65	737.31
Applied to removed ratio	0.56	2.29	1.13	1.46

Fresh water applied
13,744,000.00 <i>gallons</i>
506.14 <i>acre-inches</i>
5.38 <i>inches/acre</i>

Process wastewater applied
0.00 <i>gallons</i>
0.00 <i>acre-inches</i>
0.00 <i>inches/acre</i>

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

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

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

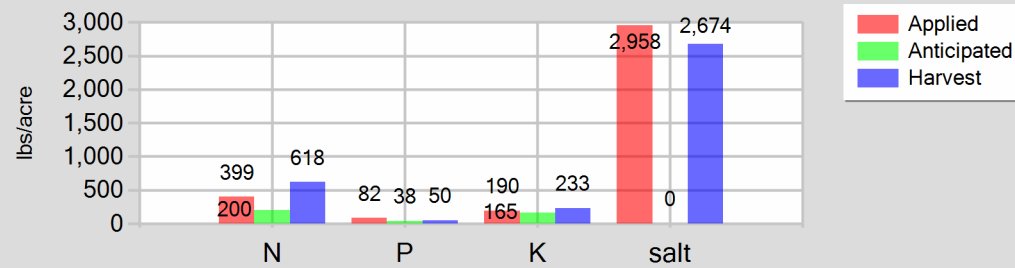
Field 30/31 - 05/15/2023: Corn, silage

Field name: Field 30/31

Crop: Corn, silage

Plant date: 05/15/2023

Nutrient budget in lbs/acre



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	150.00	0.00	0.00	0.00
Dry manure	241.77	82.35	190.05	2,628.51
Process wastewater	0.00	0.00	0.00	0.00
Fresh water	0.00	0.00	0.00	329.43
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	398.77	82.35	190.05	2,957.94
Anticipated crop nutrient removal	200.00	37.50	165.00	0.00
Actual crop nutrient removal	617.72	50.03	232.88	2,673.75
Nutrient balance	-218.95	32.33	-42.82	284.19
Applied to removed ratio	0.65	1.65	0.82	1.11

Fresh water applied
109,140,000.00 <i>gallons</i>
4,019.26 <i>acre-inches</i>
42.76 <i>inches/acre</i>

Process wastewater applied
0.00 <i>gallons</i>
0.00 <i>acre-inches</i>
0.00 <i>inches/acre</i>

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

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

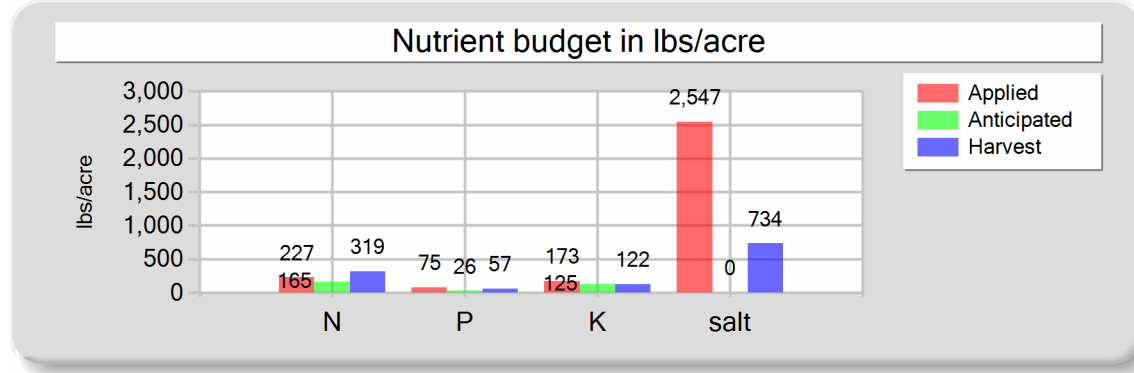
Reporting period 01/01/2023 to 12/31/2023.

Field 32 - 11/12/2022: Wheat, silage, soft dough

Field name: Field 32

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)	Fresh water applied
Existing soil nutrient content	0.00	0.00	0.00	0.00	25,200,000.00 <i>gallons</i>
Plowdown credit	0.00	0.00	0.00	0.00	928.03 <i>acre-inches</i>
Commercial fertilizer / Other	0.00	0.00	0.00	0.00	5.99 <i>inches/acre</i>
Dry manure	219.93	74.92	172.88	2,391.10	
Process wastewater	0.00	0.00	0.00	0.00	
Fresh water	0.00	0.00	0.00	155.57	
Atmospheric deposition	7.00	0.00	0.00	0.00	
Total nutrients applied	226.93	74.92	172.88	2,546.67	
Anticipated crop nutrient removal	165.00	25.50	124.50	0.00	
Actual crop nutrient removal	319.41	57.49	122.17	733.86	
Nutrient balance	-92.47	17.43	50.71	1,812.81	
Applied to removed ratio	0.71	1.30	1.42	3.47	
					Process wastewater applied
					0.00 <i>gallons</i>
					0.00 <i>acre-inches</i>
					0.00 <i>inches/acre</i>
					Total harvests for the crop
					1 <i>harvests</i>

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

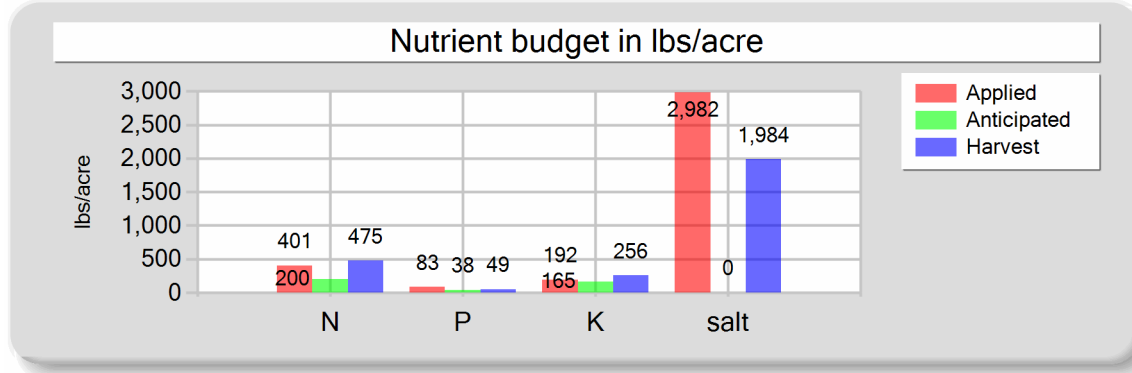
Reporting period 01/01/2023 to 12/31/2023.

Field 32 - 05/05/2023: Corn, silage

Field name: Field 32

Crop: Corn, silage

Plant date: 05/05/2023



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)	Fresh water applied
Existing soil nutrient content	0.00	0.00	0.00	0.00	177,449,000.00 <i>gallons</i>
Plowdown credit	0.00	0.00	0.00	0.00	6,534.84 <i>acre-inches</i>
Commercial fertilizer / Other	150.00	0.00	0.00	0.00	42.16 <i>inches/acre</i>
Dry manure	244.37	83.24	192.09	2,656.77	
Process wastewater	0.00	0.00	0.00	0.00	
Fresh water	0.00	0.00	0.00	324.82	
Atmospheric deposition	7.00	0.00	0.00	0.00	
Total nutrients applied	401.37	83.24	192.09	2,981.60	
Anticipated crop nutrient removal	200.00	37.50	165.00	0.00	
Actual crop nutrient removal	475.11	48.71	255.84	1,984.40	
Nutrient balance	-73.74	34.53	-63.75	997.20	
Applied to removed ratio	0.84	1.71	0.75	1.50	
					Process wastewater applied
					0.00 <i>gallons</i>
					0.00 <i>acre-inches</i>
					0.00 <i>inches/acre</i>
					Total harvests for the crop
					1 <i>harvests</i>

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

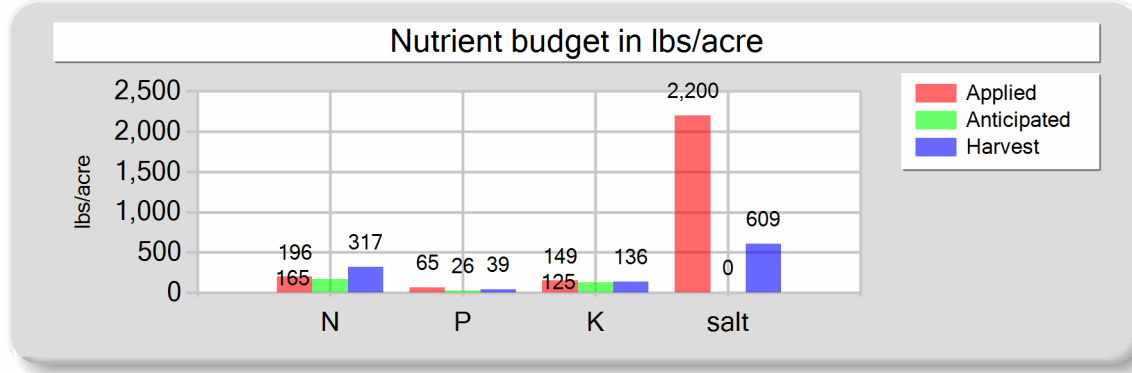
Reporting period 01/01/2023 to 12/31/2023.

Field 4 & 5 - 11/11/2022: Wheat, silage, soft dough

Field name: Field 4 & 5

Crop: Wheat, silage, soft dough

Plant date: 11/11/2022



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)	Fresh water applied
Existing soil nutrient content	0.00	0.00	0.00	0.00	3,300,000.00 <i>gallons</i>
Plowdown credit	0.00	0.00	0.00	0.00	121.53 <i>acre-inches</i>
Commercial fertilizer / Other	0.00	0.00	0.00	0.00	6.08 <i>inches/acre</i>
Dry manure	189.39	64.51	148.87	2,059.00	
Process wastewater	0.00	0.00	0.00	0.00	
Fresh water	0.00	0.00	0.00	140.89	
Atmospheric deposition	7.00	0.00	0.00	0.00	
Total nutrients applied	196.39	64.51	148.87	2,199.89	
Anticipated crop nutrient removal	165.00	25.50	124.50	0.00	
Actual crop nutrient removal	317.07	39.46	136.42	609.00	
Nutrient balance	-120.68	25.05	12.46	1,590.89	
Applied to removed ratio	0.62	1.63	1.09	3.61	
					Process wastewater applied
					0.00 <i>gallons</i>
					0.00 <i>acre-inches</i>
					0.00 <i>inches/acre</i>
					Total harvests for the crop
					1 <i>harvests</i>

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

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

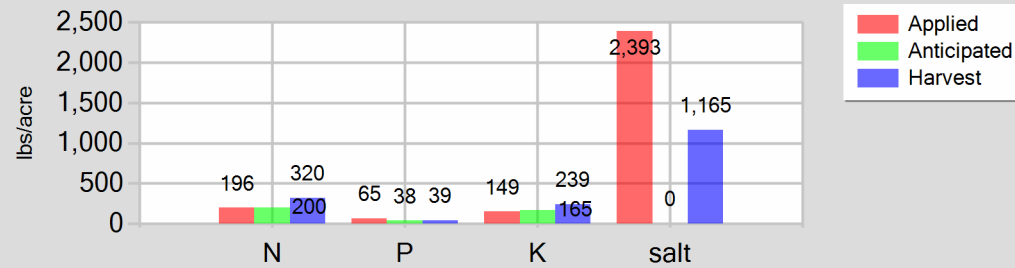
Field 4 & 5 - 05/16/2023: Corn, silage

Field name: Field 4 & 5

Crop: Corn, silage

Plant date: 05/16/2023

Nutrient budget in lbs/acre



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)	Fresh water applied
Existing soil nutrient content	0.00	0.00	0.00	0.00	23,520,000.00 <i>gallons</i>
Plowdown credit	0.00	0.00	0.00	0.00	866.16 <i>acre-inches</i>
Commercial fertilizer / Other	0.00	0.00	0.00	0.00	43.31 <i>inches/acre</i>
Dry manure	189.39	64.51	148.87	2,059.00	
Process wastewater	0.00	0.00	0.00	0.00	
Fresh water	0.00	0.00	0.00	333.67	
Atmospheric deposition	7.00	0.00	0.00	0.00	
Total nutrients applied	196.39	64.51	148.87	2,392.67	
Anticipated crop nutrient removal	200.00	37.50	165.00	0.00	
Actual crop nutrient removal	320.08	38.79	238.95	1,165.25	
Nutrient balance	-123.69	25.72	-90.08	1,227.42	
Applied to removed ratio	0.61	1.66	0.62	2.05	
					Process wastewater applied
					0.00 <i>gallons</i>
					0.00 <i>acre-inches</i>
					0.00 <i>inches/acre</i>
					Total harvests for the crop
					1 <i>harvests</i>

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

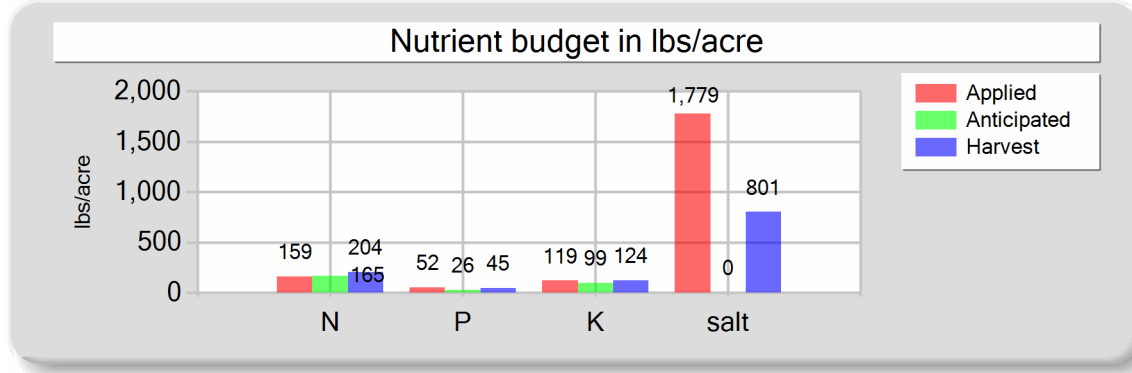
Reporting period 01/01/2023 to 12/31/2023.

Field 7 - 11/11/2022: Wheat, silage, soft dough

Field name: Field 7

Crop: Wheat, silage, soft dough

Plant date: 11/11/2022



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)	Fresh water applied
Existing soil nutrient content	0.00	0.00	0.00	0.00	1,652,000.00 <i>gallons</i>
Plowdown credit	0.00	0.00	0.00	0.00	60.84 <i>acre-inches</i>
Commercial fertilizer / Other	0.00	0.00	0.00	0.00	7.60 <i>inches/acre</i>
Dry manure	151.51	51.61	119.10	1,647.20	
Process wastewater	0.00	0.00	0.00	0.00	
Fresh water	0.00	0.00	0.00	131.55	
Atmospheric deposition	7.00	0.00	0.00	0.00	
Total nutrients applied	158.51	51.61	119.10	1,778.75	
Anticipated crop nutrient removal	165.00	25.50	99.00	0.00	
Actual crop nutrient removal	203.75	45.03	123.77	801.36	
Nutrient balance	-45.24	6.58	-4.67	977.39	
Applied to removed ratio	0.78	1.15	0.96	2.22	
					Process wastewater applied
					0.00 <i>gallons</i>
					0.00 <i>acre-inches</i>
					0.00 <i>inches/acre</i>
					Total harvests for the crop
					1 <i>harvests</i>

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

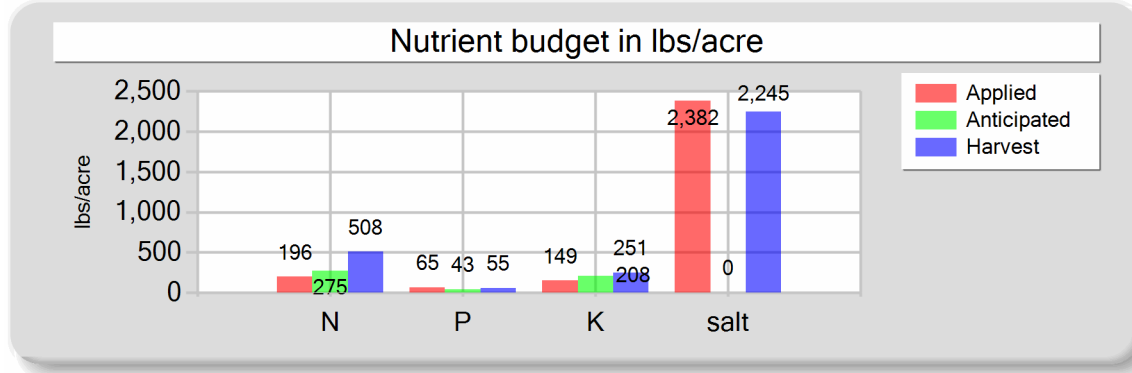
Reporting period 01/01/2023 to 12/31/2023.

Field 7 - 05/15/2023: Corn, silage

Field name: Field 7

Crop: Corn, silage

Plant date: 05/15/2023



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	189.39	64.51	148.87	2,059.00
Process wastewater	0.00	0.00	0.00	0.00
Fresh water	0.00	0.00	0.00	323.45
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	196.39	64.51	148.87	2,382.45
Anticipated crop nutrient removal	275.00	42.50	207.50	0.00
Actual crop nutrient removal	507.58	54.95	251.20	2,245.10
Nutrient balance	-311.20	9.56	-102.33	137.35
Applied to removed ratio	0.39	1.17	0.59	1.06

Fresh water applied
9,120,000.00 <i>gallons</i>
335.86 <i>acre-inches</i>
41.98 <i>inches/acre</i>

Process wastewater applied
0.00 <i>gallons</i>
0.00 <i>acre-inches</i>
0.00 <i>inches/acre</i>

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

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

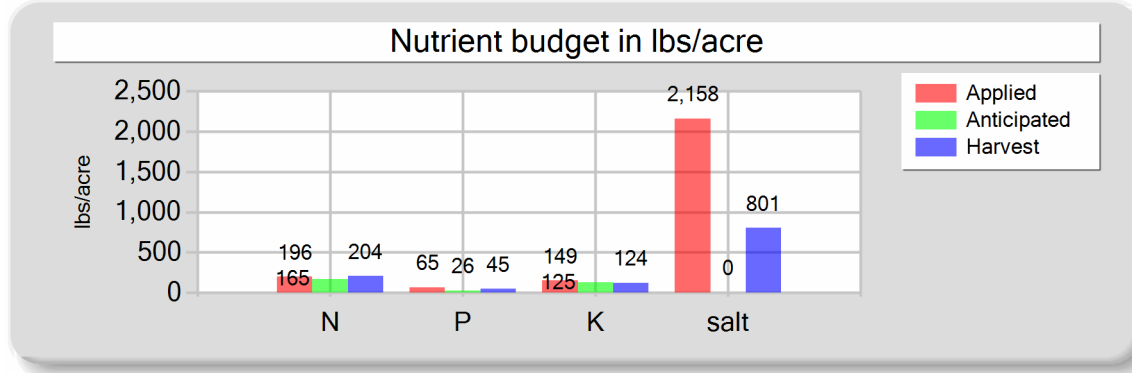
Reporting period 01/01/2023 to 12/31/2023.

Field 9 - 11/12/2022: Wheat, silage, soft dough

Field name: Field 9

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	189.39	64.51	148.87	2,059.00
Process wastewater	0.00	0.00	0.00	0.00
Fresh water	0.00	0.00	0.00	98.70
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	196.39	64.51	148.87	2,157.70
Anticipated crop nutrient removal	165.00	25.50	124.50	0.00
Actual crop nutrient removal	203.75	45.03	123.77	801.36
Nutrient balance	-7.36	19.48	25.11	1,356.34
Applied to removed ratio	0.96	1.43	1.20	2.69

Fresh water applied
3,168,000.00 <i>gallons</i>
116.67 <i>acre-inches</i>
5.83 <i>inches/acre</i>

Process wastewater applied
0.00 <i>gallons</i>
0.00 <i>acre-inches</i>
0.00 <i>inches/acre</i>

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

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

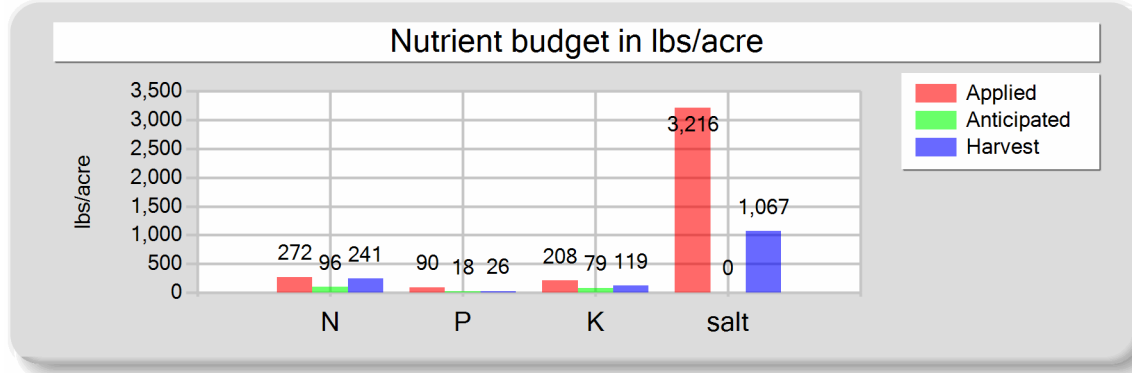
Reporting period 01/01/2023 to 12/31/2023.

Field 9 - 05/05/2023: Corn, silage

Field name: Field 9

Crop: Corn, silage

Plant date: 05/05/2023



	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	265.14	90.31	208.42	2,882.60
Process wastewater	0.00	0.00	0.00	0.00
Fresh water	0.00	0.00	0.00	333.67
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	272.14	90.31	208.42	3,216.27
Anticipated crop nutrient removal	96.00	18.00	79.20	0.00
Actual crop nutrient removal	241.31	26.12	119.42	1,067.35
Nutrient balance	30.83	64.19	89.00	2,148.91
Applied to removed ratio	1.13	3.46	1.75	3.01

Fresh water applied
23,520,000.00 <i>gallons</i>
866.16 <i>acre-inches</i>
43.31 <i>inches/acre</i>

Process wastewater applied
0.00 <i>gallons</i>
0.00 <i>acre-inches</i>
0.00 <i>inches/acre</i>

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

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

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

NUTRIENT ANALYSES

A. MANURE ANALYSES

1st Half Corral Manure

Sample and source description: 1st Half Corral Manure

Sample date: 05/24/2023 Material type: Corral solids Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 16.2 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Calcium (mg/kg)	Magnesium (mg/kg)	Sodium (mg/kg)	Sulfur (mg/kg)	Chloride (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	8,989.00	3,736.00	6,651.00							63.00
DL	500.00	100.00	200.00							0.67

Corral Manure

Sample and source description: Corral Manure

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

Moisture: 29.0 %

	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	26,674.00	9,086.00	20,968.00							29.00
DL	500.00	100.00	200.00							0.67

B. PROCESS WASTEWATER ANALYSES

1st Qtr WW

Sample and source description: 1st Qtr WW

Sample date: 02/02/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: 7.64

	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	620.00	300.10	5.60	0.29	93.80	696.00								6,410.00	4,102
DL	76.00	2.60	2.60	0.01	0.62	4.30								10.00	19

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

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

2nd Qtr WW

Sample and source description: 2nd Qtr WW

Sample date: 05/24/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: 7.58

	Kjeldahl-N (mg/L)	NH4-N (mg/L)	NH3-N (mg/L)	Nitrate-N (mg/L)	Total P (mg/L)	Total K (mg/L)	Calcium (mg/L)	Magnes. (mg/L)	Sodium (mg/L)	Bicarb. (mg/L)	Carb. (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	EC (µmhos/cm)	TDS (mg/L)
Value	520.00	429.10	7.30	0.32	77.10	731.00								6,501.00	4,160
DL	76.00	2.60	2.60	0.01	0.62	4.30								10.00	19

3rd Qtr WW

Sample and source description: 3rd Qtr WW

Sample date: 08/16/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: 7.56

	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	680.00	318.40	5.50	0.30	55.70	657.00								6,133.00	3,925
DL	76.00	2.60	2.60	0.01	0.62	4.30								10.00	19

4th Qtr WW

Sample and source description: 4th Qtr WW

Sample date: 10/11/2023 Material type: Process wastewater Source of analysis: Lab analysis pH: 7.80

	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	530.00	256.20	8.20	0.44	57.30	516.00								4,692.00	3,002
DL	76.00	2.60	2.60	0.01	0.62	4.30								10.00	19

C. FRESH WATER ANALYSES

Last Chance Ditch

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

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

Last Chance Ditch

LC Ditch

Sample description: LC Ditch

Sample date: 07/05/2022 Source of analysis: Other/estimated

	Total N (mg/L)	NH4-N (mg/L)	Nitrate-N (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Bicarbonate (mg/L)	Carbonate (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	EC (µmhos/cm)	TDS (mg/L)
Value	0.00		0.00								38.00	34
DL	1.00		0.01								10.00	19

LKR Ditch

LKR Ditch

Sample description: LKR Ditch

Sample date: 07/05/2022 Source of analysis: Other/estimated

	Total N (mg/L)	NH4-N (mg/L)	Nitrate-N (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Bicarbonate (mg/L)	Carbonate (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	EC (µmhos/cm)	TDS (mg/L)
Value	0.00		0.00								38.00	34
DL	1.00		0.01								10.00	19

W2M1

Ag well

Sample description: Ag well

Sample date: 04/18/2023 Source of analysis: Other/estimated

	Total N (mg/L)	NH4-N (mg/L)	Nitrate-N (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Bicarbonate (mg/L)	Carbonate (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	EC (µmhos/cm)	TDS (mg/L)
Value	0.00		0.00								270.00	
DL	0.10		0.01								10.00	

W3M1

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

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

W3M1

Ag well

Sample description: Ag well

Sample date: 04/18/2022 Source of analysis: Other/estimated

	Total N (mg/L)	NH4-N (mg/L)	Nitrate-N (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Bicarbonate (mg/L)	Carbonate (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	EC (µmhos/cm)	TDS (mg/L)
Value	0.00		0.00								260.00	
DL	0.10		0.01								10.00	

W4M1

Ag well

Sample description: Ag well

Sample date: 04/18/2022 Source of analysis: Other/estimated

	Total N (mg/L)	NH4-N (mg/L)	Nitrate-N (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)	Bicarbonate (mg/L)	Carbonate (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	EC (µmhos/cm)	TDS (mg/L)
Value	0.00		0.00								460.00	
DL	0.10		0.01								10.00	

D. SOIL ANALYSES

No soil analyses entered.

E. PLANT TISSUE ANALYSES

Field 1 - 11/12/2022: Wheat, silage, soft dough

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

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

Field 1 - 11/12/2022: Wheat, silage, soft dough

Wheat

Sample and source description: Wheat

Sample date: 05/11/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 60.6 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	14,535.00	3,210.00	12,900.00		6.40
DL	10.00	100.00	200.00		0.67

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

Corn

Sample and source description: Corn

Sample date: 08/24/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 67.2 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	32,800.00	2,890.00	13,200.00		17.70
DL	10.00	100.00	200.00		0.67

Field 10 - 11/12/2022: Wheat, silage, soft dough

Wheat

Sample and source description: Wheat

Sample date: 05/11/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 57.6 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	16,018.00	3,540.00	12,900.00		6.30
DL	10.00	100.00	200.00		0.67

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

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

Field 10 - 05/14/2023: Corn, silage

Corn

Sample and source description: Corn

Sample date: 08/24/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 65.7 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	36,890.00	3,250.00	14,100.00		17.60
DL	10.00	100.00	200.00		0.67

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

Wheat

Sample and source description: Wheat

Sample date: 05/11/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 63.6 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	24,878.00	3,154.00	9,835.00		6.30
DL	10.00	100.00	200.00		0.67

Field 11 - 05/14/2023: Corn, silage

Corn

Sample and source description: Corn

Sample date: 08/24/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 62.7 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	36,670.00	3,440.00	12,800.00		16.90
DL	10.00	100.00	200.00		0.67

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

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

Field 12 - 11/15/2022: Wheat, silage, soft dough

Wheat

Sample and source description: Wheat

Sample date: 05/11/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 57.7 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	27,242.00	3,100.00	12,400.00		4.80
DL	10.00	100.00	200.00		0.67

Field 12 - 05/15/2023: Corn, silage

Corn

Sample and source description: Corn

Sample date: 08/24/2023 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	36,890.00	3,170.00	15,300.00		15.70
DL	10.00	100.00	200.00		0.67

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

Wheat

Sample and source description: Wheat

Sample date: 05/11/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 26.7 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	28,534.00	3,370.00	8,380.00		6.40
DL	10.00	100.00	200.00		0.67

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

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

Field 14 - 05/14/2023: Corn, silage

Corn

Sample and source description: Corn

Sample date: 08/24/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 70.8 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	29,050.00	2,840.00	15,900.00		11.30
DL	10.00	100.00	200.00		0.67

Field 19 - 11/11/2022: Wheat, silage, soft dough

Wheat

Sample and source description: Wheat

Sample date: 05/11/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 59.4 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	26,032.00	3,240.00	11,200.00		5.00
DL	10.00	100.00	200.00		0.67

Field 19 - 05/14/2023: Corn, silage

Corn

Sample and source description: Corn

Sample date: 08/24/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 65.5 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	21,700.00	2,630.00	16,200.00		7.90
DL	10.00	100.00	200.00		0.67

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

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

Field 21 - 11/11/2022: Wheat, silage, soft dough

Wheat

Sample and source description: Wheat

Sample date: 05/11/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 76.8 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	27,625.00	3,450.00	8,260.00		5.00
DL	10.00	100.00	200.00		0.67

Field 21 - 05/15/2023: Corn, silage

Corn

Sample and source description: Corn

Sample date: 08/24/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 65.5 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	35,810.00	2,900.00	13,500.00		15.50
DL	10.00	100.00	200.00		0.67

Field 29 - 11/11/2022: Wheat, silage, soft dough

Wheat

Sample and source description: Wheat

Sample date: 05/11/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 76.8 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	27,625.00	3,450.00	8,260.00		5.00
DL	10.00	100.00	200.00		0.67

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

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

Field 29 - 05/15/2023: Corn, silage

Corn

Sample and source description: CornSample date: 08/24/2023 Source of analysis: Lab analysis Method of reporting: Dry-weightMoisture: 65.5 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	35,810.00	2,900.00	13,500.00		15.50
DL	10.00	100.00	200.00		0.67

Field 30/31 - 11/12/2022: Wheat, silage, soft dough

Wheat

Sample and source description: WheatSample date: 05/11/2023 Source of analysis: Lab analysis Method of reporting: Dry-weightMoisture: 65.5 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	35,810.00	2,900.00	13,500.00		15.50
DL	10.00	100.00	200.00		0.67

Field 30/31 - 05/15/2023: Corn, silage

Corn

Sample and source description: CornSample date: 08/24/2023 Source of analysis: Lab analysis Method of reporting: Dry-weightMoisture: 65.5 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	35,810.00	2,900.00	13,500.00		15.50
DL	10.00	100.00	200.00		0.67

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

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

Field 32 - 11/12/2022: Wheat, silage, soft dough

Wheat

Sample and source description: Wheat

Sample date: 05/11/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 54.7 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	23,503.00	4,230.00	8,990.00		5.40
DL	10.00	100.00	200.00		0.67

Field 32 - 05/05/2023: Corn, silage

Corn

Sample and source description: Corn

Sample date: 08/24/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 67.2 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	28,970.00	2,970.00	15,600.00		12.10
DL	10.00	100.00	200.00		0.67

Field 4 & 5 - 11/11/2022: Wheat, silage, soft dough

Wheat

Sample and source description: Wheat

Sample date: 05/11/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 59.4 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	26,032.00	3,240.00	11,200.00		5.00
DL	10.00	100.00	200.00		0.67

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

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

Field 4 & 5 - 05/16/2023: Corn, silage

Corn

Sample and source description: Corn

Sample date: 08/24/2023 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	21,700.00	2,630.00	16,200.00		7.90
DL	10.00	100.00	200.00		0.67

Field 7 - 11/11/2022: Wheat, silage, soft dough

Wheat

Sample and source description: Wheat

Sample date: 05/11/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 57.6 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	16,018.00	3,540.00	9,730.00		6.30
DL	10.00	100.00	200.00		0.67

Field 7 - 05/15/2023: Corn, silage

Corn

Sample and source description: Corn

Sample date: 08/24/2023 Source of analysis: Lab analysis Method of reporting: Dry-weight

Moisture: 68.6 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	32,330.00	3,500.00	16,000.00		14.30
DL	10.00	100.00	200.00		0.67

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

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

Field 9 - 11/12/2022: Wheat, silage, soft dough

WheatSample and source description: WheatSample date: 05/11/2023 Source of analysis: Lab analysis Method of reporting: Dry-weightMoisture: 57.6 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	16,018.00	3,540.00	9,730.00		6.30
DL	10.00	100.00	200.00		0.67

Field 9 - 05/05/2023: Corn, silage

CornSample and source description: CornSample date: 08/24/2023 Source of analysis: Lab analysis Method of reporting: Dry-weightMoisture: 68.9 %

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total salt (mg/kg)	TFS (%)
Value	32,330.00	3,500.00	16,000.00		14.30
DL	10.00	100.00	200.00		0.67

F. SUBSURFACE (TILE) DRAINAGE ANALYSES*No subsurface (tile) drainage analyses entered.*

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

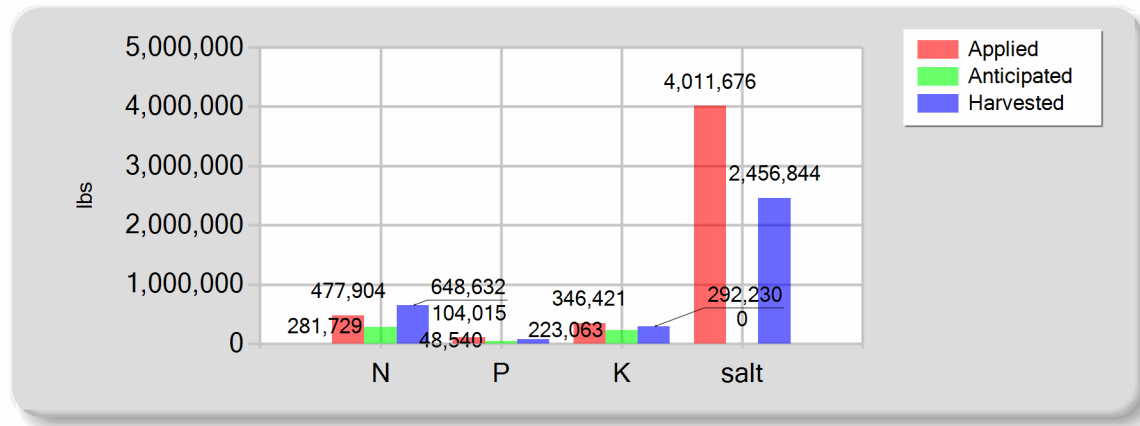
Reporting period 01/01/2023 to 12/31/2023.

NUTRIENT APPLICATIONS, POTENTIAL REMOVAL, AND BALANCE

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

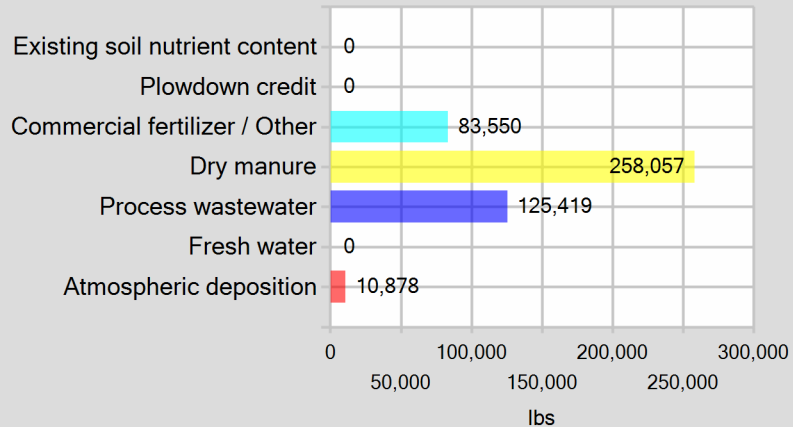
	Total N (lbs)	Total P (lbs)	Total K (lbs)	Total salt (lbs)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	83,550.00	0.00	0.00	0.00
Dry manure	258,056.55	87,902.14	202,854.08	2,805,593.40
Process wastewater	125,419.22	16,112.80	143,567.30	840,107.34
Fresh water	0.00	0.00	0.00	365,975.24
Atmospheric deposition	10,878.00	0.00	0.00	0.00
Total nutrients applied	477,903.77	104,014.94	346,421.37	4,011,675.97
Anticipated crop nutrient removal	281,729.00	48,539.80	223,062.70	0.00
Actual crop nutrient removal	648,632.02	73,057.89	292,230.05	2,456,843.80
Nutrient balance	-170,728.25	30,957.06	54,191.33	1,554,832.17
Applied to removed ratio	0.74	1.42	1.19	1.63

B. POUNDS OF NUTRIENT APPLIED VS. CROP REMOVAL

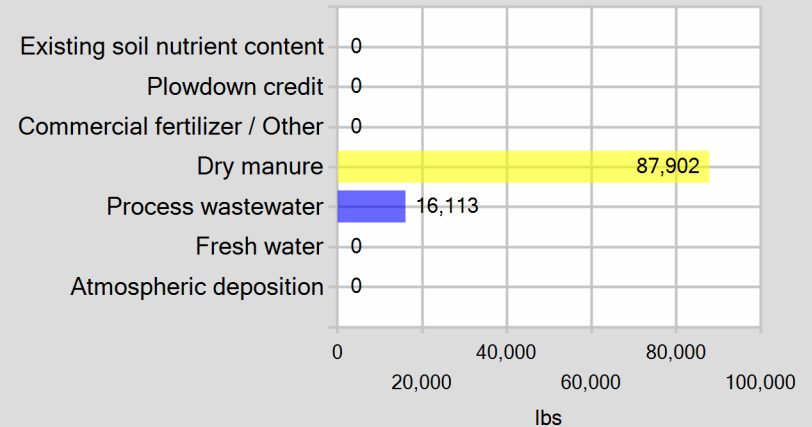


C. POUNDS OF NUTRIENT APPLIED BY MATERIAL TYPE

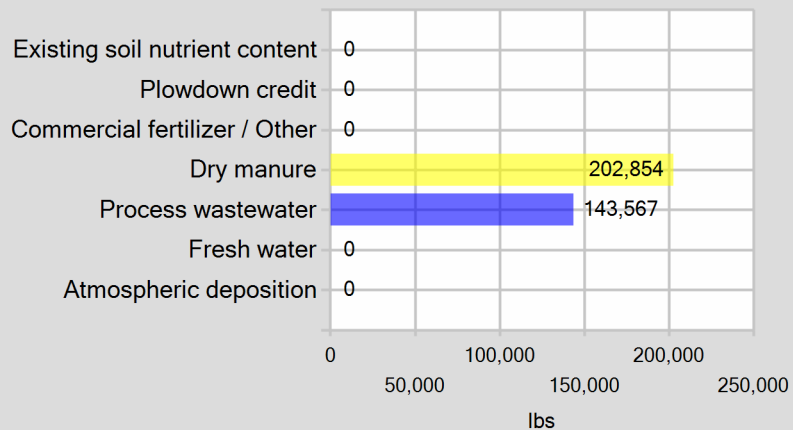
Pounds of nitrogen applied



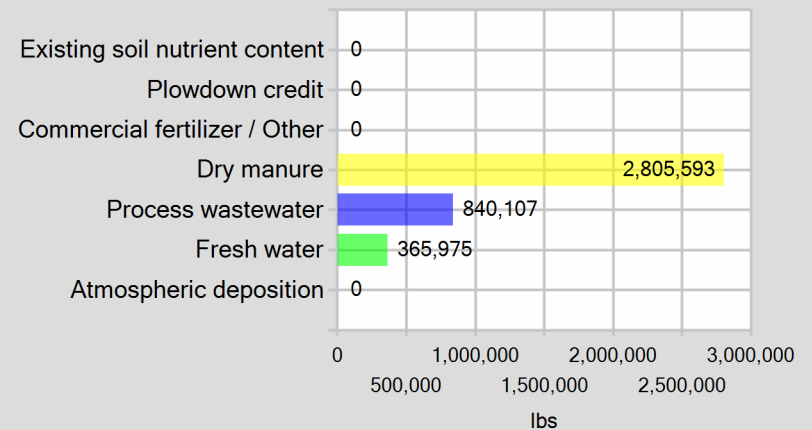
Pounds of phosphorus applied



Pounds of potassium applied



Pounds of salt applied



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

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

EXCEPTION REPORTING

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

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

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

B. STORM WATER DISCHARGES

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

No stormwater discharges occurred during the reporting period.

C. LAND APPLICATION AREA TO SURFACE WATER DISCHARGES

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

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

NUTRIENT MANAGEMENT PLAN AND EXPORT AGREEMENT STATEMENTS

A. NUTRIENT MANAGEMENT PLAN STATEMENTS

Was the facility's NMP updated in the reporting period? No

Was the facility's NMP developed by a certified nutrient management planner (specialist) as specified in Attachment C of the General Order? No

Was the facility's NMP approved by a certified nutrient management planner (specialist) as specified in Attachment C of the General Order? No

B. EXPORT AGREEMENT STATEMENT

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

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

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

ADDITIONAL NOTES

A. NOTES

Dairy was only partially used in 2022, renter moved out in October 2022.

Do to 2023 wet year, Ag wells were left off to avoid PGE demand charges. Ditch water was available early and late into crop season. Initial wheat irrigation was from 2022.

Many of the wheat and corn tissue tests were higher than expected, this is resulting in low nitrogen rations.

The manure test result for spring was low and the fall sample was higher than expected, used fall result.

Manure was stored from last year and used this year.

Annual Report - General Order No. R5-2007-0035
Reporting period 01/01/2023 to 12/31/2023.

CERTIFICATION

A. OWNER AND/OR OPERATOR CERTIFICATION

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

SIGNATURE OF OWNER OF FACILITY

SIGNATURE OF OPERATOR OF FACILITY

Julie Simas

SAME AS OWNER

PRINT OR TYPE NAME

PRINT OR TYPE NAME

DATE

DATE

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

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

ATTACHMENTS

A. REQUIRED ATTACHMENTS

The following lists the required documents that should be attached to the Annual Report when submitted .

Annual Dairy Facility Assessment

Provide an Annual Dairy Facility Assessment (an update to the Preliminary Dairy Facility Assessment in Attachment A) for each reporting period. On the PDFa Final page, click on the ADFA Report button to generate an ADFA report after updating information as needed .

Manure/Process Wastewater Tracking Manifests

Provide copies of all manure/process wastewater tracking manifests for the reporting period, signed by both the owner/operator and the hauler.

Corrective Actions Documents

Provide records documenting any corrective actions taken to correct deficiencies noted as a result of the inspections required in the Monitoring Requirements of the General Order. Deficiencies not corrected in 30 days must be accompanied by an explanation of the factors preventing immediate correction.

Groundwater Monitoring

Dischargers that monitor supply wells or subsurface (tile) drainage systems, or that have monitoring well systems must submit monitoring results as directed in the General Order, Groundwater Reporting Section starting on page MRP-13.

Storm Water Monitoring

Dischargers that are required to monitor storm water more frequently than required in the General Order must submit monitoring results as directed in the General Order, Storm Water Reporting Section on page MRP-14.



JMLORD, INC.

4184 N. KNOLL, FRESNO, CA 93722
PHONE: (559) 268-9755 FAX: (559) 486-6504
WWW.JMLORDINC.COM

2023 Groundwater Well Report

Dairy: LuAr Dairy
Contact: Julie Simas

Address: 6121 15th Avenue
Hanford, CA 93230

Summary

Three wells and no canals were sampled at the LuAr Dairy by JMLord personal. Samples were collected in October 2023. The samples collected are listed below. Electrical conductivity (EC) was measured in the laboratory. Samples were collected in bottles provided by the testing laboratory. The samples were placed in a cooler with ice packs and picked up by JMLord personnel then delivered to BSK Analytical Laboratories, an ELAP laboratory. Well samples were analyzed as defined in the MRP, updated in February 2011. The five year analysis was performed on approximately 20% of the wells sampled.

Wells Sampled

W-4 Map 2
W-2 Map 1
Barn Well

Canals Sampled

W3M1 and W4M1: Wells not sampled, but were used. Both wells had been scheduled for maintenance. Due to maintenance issues these wells had to be utilized for limited use.
Canals were not tested due to changes by the ELAP laboratory and its invoicing policy.
Invoicing issues have been resolved but canal samples were spoiled.

Attached are copies of the field records developed when samples were collected, the Chain of Custody forms and the analytical results from BSK Analytical Laboratories. The following wells were not operated in 2023, due to abundant surface water: W-2 Map 3, W-4 Map 1, W-5 Map 1, W-1 Map 2, W-3 Map 2, W-3 Map 3, W-4 Map 2, W-4 Map 3.

FYI: The regulatory limit for Nitrate as NO₃N is 10 mg/L.



BSK Associates Laboratory Fresno
687 N. Laverne Avenue
Fresno, CA 93727
559-497-2888 (Main)

AGJ2528

10/31/2023

Invoice: AG25849

Dustie Christensen
LuAR Dairy
6017 13th Avenue
Hanford, CA 93230

RE: Report for AGJ2528 RB5 Well

Dear Dustie Christensen,

Thank you for using BSK Associates for your analytical testing needs. In the following pages, you will find the test results for the samples submitted to our laboratory on 10/17/2023. The results have been approved for release by our Laboratory Director as indicated by the authorizing signature below.

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

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Stephane", followed by a horizontal line.

Stephane Maupas, Project Manager



Accredited in Accordance with NELAP
ORELAP #4021

**AGJ2528****RB5 Well****Case Narrative****Project and Report Details**

Client: LuAR Dairy
Report To: Dustie Christensen
Project #: -
Received: 10/17/2023 - 15:04
Report Due: 10/31/2023

Invoice Details

Invoice To: LuAR Dairy
Invoice Attn: Julie Simas
Project PO#: -

Sample Receipt Conditions

Cooler: Default Cooler
Temperature on Receipt °C: 20.0

Containers Intact
COC/Labels Agree
Received On Blue Ice
Sample(s) arrived at lab on same day sampled.
Packing Material - Other
Initial receipt at BSK-FAL

Data Qualifiers

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

None applied

Report Distribution

Recipient(s)	Report Format	CC:
Dustie Christensen	FINAL.RPT	

**AGJ2528****RB5 Well****Certificate of Analysis****Sample ID:** AGJ2528-01**Sampled By:** Dustie Christensen**Sample Description:** Barn Well**Sample Date - Time:** 10/17/2023 - 09:50**Matrix:** Ground Water**Sample Type:** Grab**BSK Associates Laboratory Fresno****General Chemistry**

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
Conductivity @ 25C	SM 2510B	730	1.0	umhos/cm	1	AGJ1444	10/20/23	10/20/23	
Nitrate as N	EPA 300.0	9.5	0.23	mg/L	1	AGJ1227	10/18/23 15:02	10/18/23	



AGJ2528

RB5 Well

BSK Associates Laboratory Fresno
General Chemistry Quality Control Report

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

Batch: AGJ1227

Prepared: 10/18/2023

Prep Method: Method Specific Preparation

Analyst: IDM

Blank (AGJ1227-BLK1)

Nitrate as N	ND	0.23	mg/L							10/18/23	
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Blank Spike (AGJ1227-BS1)

Nitrate as N	22	0.23	mg/L	23	ND	98	90-110			10/18/23	
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Matrix Spike (AGJ1227-MS1), Source: RGJ0035-06

Nitrate as N	15	0.23	mg/L	11	4.0	97	80-120			10/18/23	
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Matrix Spike (AGJ1227-MS2), Source: AGJ2597-04

Nitrate as N	12	0.23	mg/L	11	0.77	99	80-120			10/18/23	
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Matrix Spike Dup (AGJ1227-MSD1), Source: RGJ0035-06

Nitrate as N	15	0.23	mg/L	11	4.0	101	80-120	3	20	10/18/23	
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Matrix Spike Dup (AGJ1227-MSD2), Source: AGJ2597-04

Nitrate as N	12	0.23	mg/L	11	0.77	101	80-120	1	20	10/18/23	
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SM 2510B - Quality Control

Batch: AGJ1444

Prepared: 10/20/2023

Prep Method: Method Specific Preparation

Analyst: BAG

Blank Spike (AGJ1444-BS1)

Conductivity @ 25C	1400	1.0	umhos/cm	1400	ND	98	90-110			10/20/23	
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Blank Spike Dup (AGJ1444-BSD1)

Conductivity @ 25C	1400	1.0	umhos/cm	1400	ND	98	90-110	1	5	10/20/23	
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Duplicate (AGJ1444-DUP1), Source: AGJ2940-02

Conductivity @ 25C	1000	1.0	umhos/cm		1100			1	5	10/20/23	
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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

AGJ2528 Final FINAL 10 31 2023 1628 10312023 1628

Certificate of Analysis

Notes:

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

Certificate of Analysis

Definitions

mg/L:	Milligrams/Liter (ppm)	MDL:	Method Detection Limit	MDA95:	Min. Detected Activity
mg/Kg:	Milligrams/Kilogram (ppm)	RL:	Reporting Limit: DL x Dilution	MPN:	Most Probable Number
µg/L:	Micrograms/Liter (ppb)	ND:	None Detected below MRL/MDL	CFU:	Colony Forming Unit
µg/Kg:	Micrograms/Kilogram (ppb)	pCi/L:	PicoCuries per Liter	Absent:	Less than 1 CFU/100mLs
%:	Percent	RL Mult:	RL Multiplier	Present:	1 or more CFU/100mLs
NR:	Non-Reportable	MCL:	Maximum Contaminant Limit	U:	The analyte was not detected at or above the reported sample quantitation limit.

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

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

Odor Diisopropyl ether (DIPE) by EPA 524.2

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

Total Nitrogen Aggressive Index Trivalent Chromium

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

****NA****

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

Fresno

State of California - ELAP	1180	State of Hawaii	4021
Los Angeles CSD	9254479	NELAP certified	4021-022
State of Nevada	CA000792024-03	State of Oregon - NELAP	4021-022
EPA UCMR5	CA00079	State of Washington	C997-23

Sacramento

State of California - ELAP	1180-S1
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San Bernardino

State of California - ELAP	1180-S2	Los Angeles CSD	9254478
NELAP certified	4119-008	State of Oregon - NELAP	4119-008

Vancouver

NELAP certified	WA100008-016	State of Oregon - NELAP	WA100008-016
State of Washington	C824-23		

Sample Integrity

BSK Bottles: Yes No

Page 1 of 1



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

Scanned: Rush/Short HT Page: Time:



1414 Stanislaus St., Fresno, CA 93706
(559) 497-2888 · Fax (559) 497-2893
www.bskassociates.com

Turnaround Time Request
☐ Standard - 10 business days
☐ Rush (Surcharge may apply)
Date needed:



Company/Client Name: **U-A-R Dairy** Report Attention: **Additional cc's: dushicjmlordinc.com** Temp: **28.0 °F** Invoice To: **28.0 °F** Phone: Fax:

Address: **14017 13th Ave** City: **Hanford** State: **CA** Zip: **93230** E-mail:

Project: **14017 13th Ave** Project #: **14017 13th Ave** How would you like to receive your completed results? ☐ E-Mail ☐ Fax ☐ Mail

Reporting Options: ☐ Trace (J-Flag) ☐ Swamp ☐ EDD Type: ☐ Regulatory Carbon Copies ☐ SWRCB (Drinking Water) ☐ EDT to California SWRCB (Drinking Water)

Sampler Name (Printed/Signature): **Dushicjmlordinc.com** ☐ Merced Co ☐ Fresno Co ☐ Madera Co ☐ Tulare Co ☐ System Number: ☐ Geotracker #:

Matrix Types: SW=Surface Water BW=Bottled Water GW=Ground Water WW=Waste Water STW=Storm Water DW=Drinking Water SO=Solid

Sample Description: **1** **Barrel well** **10/1/23** **9:50** **6m** **Matrix** **Comments / Station Code / WTRAX**

RB5-Well **RB5 Well-5 Year Well test** **RB5-Surface**

Received by (Signature and Printed Name): **Dushicjmlordinc.com** Date: **10/17/23** Time: **3:00 PM** Received by (Signature and Printed Name):

Requested by (Signature and Printed Name): **Dushicjmlordinc.com** Company: **JM Lord Inc** Date: **10/17/23** Time: **3:00 PM** Received by (Signature and Printed Name):

Shipping Method: **ONTRAC** **UPS** **GSO** **WALK-IN** **FED EX** **Courier:** **10/17/23** **RSY** **10/17/23** **RSY** **10/17/23** **RSY**

Coding Method: **Wet** **Blue** **None** **WALK-IN** **FED EX** **Courier:** **10/17/23** **RSY** **10/17/23** **RSY** **10/17/23** **RSY**

Chilling Process Begun: Y / N Amount: **Y / N** PIA# **Y / N** Check **Y / N** Cash **Y / N**

Payment for services rendered as noted herein must be paid within 30 days from the date of invoice. If not so paid, account balances are subject to monthly service charges and interest specified in BSK's current Standard Terms and Conditions for Laboratory Services. The person signing for the client/company acknowledges that they are either the Client or an authorized agent to the Client, that the Client agrees to be responsible for payment for the services on this Chain of Custody, and agrees to BSK's terms and conditions for laboratory services unless contractually bound otherwise. BSK's current terms and conditions can be found at www.bskassociates.com/BSK%20Terms%20Conditions.pdf



BSK Associates Laboratory Fresno
687 N. Laverne Avenue
Fresno, CA 93727
559-497-2888 (Main)

AGJ2979

11/02/2023

Invoice: AG26022

Dustie Christensen
LuAR Dairy
6017 13th Avenue
Hanford, CA 93230

RE: Report for AGJ2979 RB5 Well

Dear Dustie Christensen,

Thank you for using BSK Associates for your analytical testing needs. In the following pages, you will find the test results for the samples submitted to our laboratory on 10/19/2023. The results have been approved for release by our Laboratory Director as indicated by the authorizing signature below.

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

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Stephane", followed by a horizontal line.

Stephane Maupas, Project Manager



Accredited in Accordance with NELAP
ORELAP #4021



Case Narrative

Project and Report Details

Client: LuAR Dairy
Report To: Dustie Christensen
Project #: -
Received: 10/19/2023 - 15:40
Report Due: 11/02/2023

Invoice Details

Invoice To: LuAR Dairy
Invoice Attn: Julie Simas
Project PO#: -

Sample Receipt Conditions

Cooler: Default Cooler
Temperature on Receipt °C: 18.0

Containers Intact
COC/Labels Agree
Received On Wet Ice
Sample(s) arrived at lab on same day sampled.
Sample(s) were received in temperature range.
Initial receipt at BSK-FAL

Data Qualifiers

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

None applied

Report Distribution

Recipient(s)	Report Format	CC:
Dustie Christensen	FINAL.RPT	

**AGJ2979****RB5 Well****Certificate of Analysis****Sample ID:** AGJ2979-01**Sampled By:** Dustie Christensen**Sample Description:** W-2 map #1 (Field 21)**Sample Date - Time:** 10/19/2023 - 12:45**Matrix:** Ground Water**Sample Type:** Grab**BSK Associates Laboratory Fresno****General Chemistry**

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
Conductivity @ 25C	SM 2510B	340	1.0	umhos/cm	1	AGJ1604	10/24/23	10/24/23	
Nitrate as N	EPA 300.0	ND	0.23	mg/L	1	AGJ1409	10/19/23 23:08	10/19/23	

**AGJ2979****RB5 Well****Certificate of Analysis****Sample ID:** AGJ2979-02**Sampled By:** Dustie Christensen**Sample Description:** W-4 map #2 (Field 8)**Sample Date - Time:** 10/19/2023 - 12:55**Matrix:** Ground Water**Sample Type:** Grab**BSK Associates Laboratory Fresno****General Chemistry**

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
Conductivity @ 25C	SM 2510B	190	1.0	umhos/cm	1	AGJ1604	10/24/23	10/24/23	
Nitrate as N	EPA 300.0	ND	0.23	mg/L	1	AGJ1400	10/19/23 23:01	10/19/23	

BSK Associates Laboratory Fresno
General Chemistry Quality Control Report

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

Batch: AGJ1400
Prepared: 10/19/2023
Prep Method: Method Specific Preparation
Analyst: AAS
Blank (AGJ1400-BLK1)

Nitrate as N	ND	0.23	mg/L							10/19/23
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Blank Spike (AGJ1400-BS1)

Nitrate as N	23	0.23	mg/L	23	ND	104	90-110			10/19/23
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Matrix Spike (AGJ1400-MS1), Source: AGJ2955-04

Nitrate as N	12	0.23	mg/L	11	0.92	103	80-120			10/19/23
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Matrix Spike (AGJ1400-MS2), Source: AGJ2979-02

Nitrate as N	12	0.23	mg/L	11	ND	101	80-120			10/19/23
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Matrix Spike Dup (AGJ1400-MSD1), Source: AGJ2955-04

Nitrate as N	13	0.23	mg/L	11	0.92	104	80-120	1	20	10/19/23
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Matrix Spike Dup (AGJ1400-MSD2), Source: AGJ2979-02

Nitrate as N	12	0.23	mg/L	11	ND	102	80-120	1	20	10/19/23
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EPA 300.0 - Quality Control

Batch: AGJ1409
Prepared: 10/19/2023
Prep Method: Method Specific Preparation
Analyst: GJA
Blank (AGJ1409-BLK1)

Nitrate as N	ND	0.23	mg/L							10/19/23
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Blank Spike (AGJ1409-BS1)

Nitrate as N	23	0.23	mg/L	23	ND	101	90-110			10/19/23
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Matrix Spike (AGJ1409-MS1), Source: AGJ2994-01

Nitrate as N	11	0.23	mg/L	11	ND	97	80-120			10/19/23
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Matrix Spike (AGJ1409-MS2), Source: AGJ2869-02

Nitrate as N	15	0.23	mg/L	11	3.4	101	80-120			10/20/23
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Matrix Spike Dup (AGJ1409-MSD1), Source: AGJ2994-01

Nitrate as N	11	0.23	mg/L	11	ND	99	80-120	2	20	10/19/23
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Matrix Spike Dup (AGJ1409-MSD2), Source: AGJ2869-02

Nitrate as N	15	0.23	mg/L	11	3.4	102	80-120	1	20	10/20/23
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SM 2510B - Quality Control

Batch: AGJ1604
Prepared: 10/24/2023
Prep Method: Method Specific Preparation
Analyst: CEG
Blank Spike (AGJ1604-BS1)

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

AGJ2979 Final FINAL 11 02 2023 1343 11022023 1343



AGJ2979

RB5 Well

BSK Associates Laboratory Fresno
General Chemistry Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
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SM 2510B - Quality Control

Batch: AGJ1604

Prepared: 10/24/2023

Prep Method: Method Specific Preparation

Analyst: CEG

Blank Spike (AGJ1604-BS1)

Conductivity @ 25C	1400	1.0	umhos/cm	1400	ND	101	90-110			10/24/23	
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Blank Spike Dup (AGJ1604-BSD1)

Conductivity @ 25C	1400	1.0	umhos/cm	1400	ND	101	90-110	0	5	10/24/23	
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Duplicate (AGJ1604-DUP1), Source: AGJ2998-01

Conductivity @ 25C	640	1.0	umhos/cm		650			1	5	10/24/23	
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Certificate of Analysis

Notes:

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

Certificate of Analysis

Definitions

mg/L:	Milligrams/Liter (ppm)	MDL:	Method Detection Limit	MDA95:	Min. Detected Activity
mg/Kg:	Milligrams/Kilogram (ppm)	RL:	Reporting Limit: DL x Dilution	MPN:	Most Probable Number
µg/L:	Micrograms/Liter (ppb)	ND:	None Detected below MRL/MDL	CFU:	Colony Forming Unit
µg/Kg:	Micrograms/Kilogram (ppb)	pCi/L:	PicoCuries per Liter	Absent:	Less than 1 CFU/100mLs
%:	Percent	RL Mult:	RL Multiplier	Present:	1 or more CFU/100mLs
NR:	Non-Reportable	MCL:	Maximum Contaminant Limit	U:	The analyte was not detected at or above the reported sample quantitation limit.

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

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

Odor Diisopropyl ether (DIPE) by EPA 524.2

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

Total Nitrogen Aggressive Index Trivalent Chromium

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

****NA****

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

Fresno

State of California - ELAP	1180	State of Hawaii	4021
Los Angeles CSD	9254479	NELAP certified	4021-022
State of Nevada	CA000792024-03	State of Oregon - NELAP	4021-022
EPA UCMR5	CA00079	State of Washington	C997-23

Sacramento

State of California - ELAP	1180-S1
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San Bernardino

State of California - ELAP	1180-S2	Los Angeles CSD	9254478
NELAP certified	4119-008	State of Oregon - NELAP	4119-008

Vancouver

NELAP certified	WA100008-016	State of Oregon - NELAP	WA100008-016
State of Washington	C824-23		



Sample Integrity

BSK Bottles: Yes No

Page

1 of 1

COC Info	Was temperature within range? Chemistry $\leq 6^{\circ}\text{C}$ Micro $< 8^{\circ}\text{C}$	Yes	No	NA	Were correct containers and preservatives received for the tests requested?	Yes	No	NA
	If samples were taken today, is there evidence that chilling has begun?	Yes	No	NA	Bubbles Present VOAs (524.2/TTHM/TCP)?	Yes	No	NA
	Did all bottles arrive unbroken and intact?	Yes	No		TB Received? (Check Method Below)	Yes	No	NA
	Did all bottle labels agree with COC?	Yes	No		Was a sufficient amount of sample received?	Yes	No	
	Was sodium thiosulfate added to CN sample(s) until chlorine was no longer present?	Yes	NA		Do samples have a hold time <72 hours?	Yes	No	
	PM: _____ By/Time: _____	Yes	No	NA				
Bottles Received means preservation/chlorine checks are either N/A or are performed in the lab	250ml(A) 500ml(B) 1Liter(C) 40mlVOA(V) 125ml(D)	Checks*	Passed?					
	Bacti $\text{Na}_2\text{S}_2\text{O}_3$	—	—					
	None (P) White Cap	—	—					
	Cr6 (P) Lt. Green Label/Blue Cap $\text{NH}_4\text{OH}(\text{NH}_4)_2\text{SO}_4$ DW	Cl, pH > 8	P F					
	Cr6 (P) Pink Label/Blue Cap $\text{NH}_4\text{OH}(\text{NH}_4)_2\text{SO}_4$ WW	pH 9.3-9.7	P F					
	Cr6 (P) Black Label/Blue Cap $\text{NH}_4\text{OH}(\text{NH}_4)_2\text{SO}_4$ 7199 ***24 HOUR HOLD TIME***	pH 9.0-9.5	P F					
	HNO_3 (P) Red Cap or HCl (P) Purple Cap/Lt. Blue Label	—	—					
	H_2SO_4 (P) or (AG) Yellow Cap/Label	pH < 2	P F					
	NaOH (P) Green Cap	Cl, pH > 10	P F					
	$\text{NaOH} + \text{ZnAc}$ (P)	pH > 9	P F					
	Dissolved Oxygen 300ml (g)	—	—					
	None (AG) 608/8081/8082, 625, 632/8321, 8151, 8270	—	—					
	HCl (AG) Lt. Blue Label O&G, Diesel, TCP	—	—					
	Ascorbic, EDTA, KH_2Ct (AG) Pink Label 525	—	—					
	Na_2SO_3 250mL (AG) Neon Green Label 515	—	—					
	$\text{Na}_2\text{S}_2\text{O}_3$ 1 Liter (Brown P) 549	—	—					
	$\text{Na}_2\text{S}_2\text{O}_3$ (AG) Blue Label 548, THM, 524	—	—					
	$\text{Na}_2\text{S}_2\text{O}_3$ (CG) Blue Label 504, 505, 547	—	—					
	$\text{Na}_2\text{S}_2\text{O}_3 + \text{MCAA}$ (CG) Orange Label 531	pH < 3	P F					
	NH_4Cl (AG) Purple Label 552	—	—					
	EDA (P) or (AG) Brown Label DBPs	—	—					
	HCL (CG) 524.2, BTEX, Gas, MTBE, 8260/624	—	—					
	Buffer pH 4 (CG)	—	—					
	H_3PO_4 (CG) Salmon Label	—	—					
	Trizma - EPA 537.1 Light Blue Label FB	---	---					
	Ammonia Acetate - EPA 533 Purple Label FB	---	---					
	Bottled Water	—	—					
	Asbestos 1L (P) w/ Foil / LL Metals Bottle	—	—					
	Clear Glass	—	—					
	OTHER:	—	—					
Split	Container	Preservative	Lot #	Initials	Date/Time	Preservation	Check	
	S P					pH Lot #		
	S P					Cl Lot #		
Comments	*Preservation check completed by lab performing analysis.			✓ Indicates Blanks Received				
	Labeled by: _____			504 _____ 524.2 _____ TTHM _____ 537/533 _____ TCP _____				
	Labels Checked by: _____			✓ MS/MSD Received Method: _____				

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

BSK ASSOCIATES

1414 Stanislaus St., Fresno, CA 93706
(559) 497-2888 · Fax (559) 497-2893
www.bskassociates.com

Turnaround Time Request

- ☐ Standard - 10 business days
☐ Rush (Surcharge may apply)
☐ Date needed:

AG12979 Iurdo755 10/19/2023
10

Company/Client Name: **Required Fields** Report Attention: **Temp:** *18.8 4799* Invoice To: **Phone:** **Fax:**

Address: **LU-AR Dairy** Additional cc's: **dustie@jmlordinc.com** P.O.#: **State:** **Zip:** E-mail:

Project: **Project #:** How would you like to receive your completed results?
☐ E-Mail ☐ Fax ☐ Mail

Reporting Options: ☐ Trace (J-F-Tag) ☐ Swamp ☐ EDD Type: ☐ Regulatory Carbon Copies
☐ SWRCB (Drinking Water) ☐ Merced Co ☐ Fresno Co ☐ Tulare Co
☐ Geotracker #:

Sampler Name (Printed/Signature): **Dustie Christensen Data Clerk** ☐ EDT to California SWRCB (Drinking Water) System Number: ☐ DW=Drinking Water SO=Solid

Matrix Types: SW=Surface Water BW=Bottled Water GW=Ground Water WW=Waste Water STW=Storm Water

#	Sample Description	Sampled		Matrix	Comments / Station Code / WTRAX
		Date	Time		
1	W-2 Map #1 (Field 21)	10/19	12:45	GW	RB5-Well
2	W-4 Map #2 (Field 8)	10/19	12:55	GW	RB5 Well-5 Year Well test
					RB5-Surface

Relinquished by (Signature and Printed Name): *[Signature]* **Dustie Christensen** Company: **JM Lord Inc** Date: **10/19/23** Time: **3:30** Received by (Signature and Printed Name): **Received by:** (Signature and Printed Name)

Relinquished by (Signature and Printed Name): **Relinquished by:** (Signature and Printed Name)

Received for (Signature and Printed Name): **Received for:** (Signature and Printed Name)

Shipping Method: **ONIRAC** **UPS** **GSO** **WALK-IN** **FED EX** **Courier:** **Amount:** **Plu#:** **Check** **Int.** **Cash**

Cooling Method: **Wet** **Blue** **Note**

Chilling Process Begun: **Y / N**

Project for services rendered as ordered herein are due in full within 30 days from the date involved. If not so paid, account balances are deemed delinquent. Delinquent balances are subject to monthly service charges and interest specified in BSK's current Standard Terms and Conditions for Laboratory Services. The person signing for the Client/Company acknowledges that they are either the Client or an authorized agent to the Client, that the Client agrees to be responsible for payment for the services on this Chain of Custody, and agrees to BSK's terms and conditions for laboratory services unless contractually bound otherwise. BSK's current terms and conditions can be found at www.bskassociates.com/BSKChainTermsConditions.pdf