

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: Fagundes Agribusiness Dairy

Physical address of dairy:

7546 8-1/2 AVE Number and Street	Hanford City	Kings County	93230 Zip Code
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Street and nearest cross street (if no address): _____

Date facility was originally placed in operation: 01/01/1916

Regional Water Quality Control Board Basin Plan designation: Tulare Basin

County Assessor Parcel Number(s) for dairy facility:

0016-0014-0080-0027	0016-0014-0080-0068
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B. OPERATORS

Fagundes, Bruce A.

Operator name: <u>Fagundes, Bruce A.</u>	Telephone no.: <u>(559) 582-2000</u>	Landline	Cellular
8700 Fargo AVE Mailing Address Number and Street	Hanford City	CA	93230 State Zip Code

This operator is responsible for paying permit fees.

Fagundes, John L. Sr.

Operator name: <u>Fagundes, John L. Sr.</u>	Telephone no.: <u>(559) 582-2000</u>	Landline	Cellular
8700 Fargo AVE Mailing Address Number and Street	Hanford City	CA	93230 State Zip Code

Fagundes, Johnnie L. Jr.

Operator name: <u>Fagundes, Johnnie L. Jr.</u>	Telephone no.: <u>(559) 582-2000</u>	Landline	Cellular
8700 Fargo AVE Mailing Address Number and Street	Hanford City	CA	93230 State Zip Code

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Furtado, Victor

Operator name: Furtado, Victor	Telephone no.:	(559) 362-6252
	Landline	Cellular
3061 Clubhouse Court	Hanford	CA
Mailing Address Number and Street	City	State
		Zip Code

C. OWNERS

Fagundes, Bruce A.

Legal owner name: Fagundes, Bruce A.	Telephone no.:	(559) 582-2000
	Landline	Cellular
8700 Fargo AVE	Hanford	CA
Mailing Address Number and Street	City	State
		Zip Code

This owner is responsible for paying permit fees.

Fagundes, John L. Sr.

Legal owner name: Fagundes, John L. Sr.	Telephone no.:	(559) 582-2000
	Landline	Cellular
8700 Fargo AVE	Hanford	CA
Mailing Address Number and Street	City	State
		Zip Code

Fagundes, Johnnie L. Jr.

Legal owner name: Fagundes, Johnnie L. Jr.	Telephone no.:	(559) 582-2000
	Landline	Cellular
8700 Fargo AVE	Hanford	CA
Mailing Address Number and Street	City	State
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AVAILABLE NUTRIENTS**A. HERD INFORMATION**

	Milk Cows	Dry Cows	Bred Heifers (15-24 mo.)	Heifers (7-14 mo. to breeding)	Calves (4-6 mo.)	Calves (0-3 mo.)
Number open confinement	1	0	0	0	0	0
Number under roof	0	0	0	0	0	0
Maximum number	1	0	0	0	0	0
Average number	1	0	0	0	0	0
Avg live weight (lbs)	1,000	0	0	0		

Predominant milk cow breed: Holstein

Average milk production: 1 pounds per cow per day

B. MANURE GENERATED

Total manure excreted by the herd: 17.50 tons per reporting period

Total nitrogen from manure: 229.50 lbs per reporting period

After ammonia losses (30% loss applied): 160.65 lbs per reporting period

Total phosphorus from manure: 37.31 lbs per reporting period

Total potassium from manure: 146.18 lbs per reporting period

Total salt from manure: 470.85 lbs per reporting period

C. PROCESS WASTEWATER GENERATED

Process wastewater generated: _____ gallons

Total nitrogen generated: _____ lbs

0 gallons applied
+ 0 gallons exported
- 0 gallons imported
= 0 gallons generated

Total phosphorus generated: _____ lbs

Total potassium generated: _____ lbs

Total salt generated: _____ lbs

D. FRESH WATER SOURCES

Source Description	Type
ag 10	Ground water
ag 40	Ground water
ag 80	Ground water
Canal	Surface water

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E. SUBSURFACE (TILE) DRAINAGE SOURCES

No subsurface (tile) drainage sources entered.

F. NUTRIENT IMPORTS

Date	Material type / Description	Quantity	Reporting basis	Moist. (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
04/25/2023	Compost <i>Dry ground chicken manure</i>	420.00 <i>ton</i>	Dry-weight	11.0	12,000.00	3,000.00	10,000.00		6.00

No process wastewater nutrient imports entered.

Date	Material type / Description	Quantity	Reporting basis	Moisture (%)	N (%)	P (%)	K (%)	Salt (%)
01/01/2023	Other solid nutrient source <i>Green waste Compost</i>	100.00 <i>ton</i>	Dry-weight	10.0	1.000000	0.300000	0.800000	0.000000
04/22/2023	Other solid nutrient source <i>Green waste Compost</i>	100.00 <i>ton</i>	Dry-weight	10.0	1.000000	0.300000	0.800000	0.000000

Material type	Total N (lbs)	Total P (lbs)	Total K (lbs)	Total salt (lbs)
Commercial fertilizer / Other	3,600.00	1,080.00	2,880.00	0.00
Dry manure	8,971.20	2,242.80	7,476.00	44,856.00
Process wastewater	0.00	0.00	0.00	0.00
Total imports for all materials	12,571.20	3,322.80	10,356.00	44,856.00

G. NUTRIENT EXPORTS

No solid nutrient exports entered.

No liquid nutrient exports entered.

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APPLICATION AREA**A. LIST OF LAND APPLICATION AREAS**

Field name	Controlled acres	Cropable acres	Total harvests	Type of waste applied	Parcel number
002	14	14	1	none	0014-0142-0027-0000
004	8	8	1	none	0014-0142-0028-0000
005	20	20	2	none	0014-0142-0001-0000
025	25	25	1	none	0014-0080-0041-0000
030	32	32	2	none	0014-0080-0027-0000
035	35	35	1	none	0014-0080-0032-0000 0014-0080-0033-0000 0014-0080-0039-0000 0014-0080-0040-0000
040	38	38	2	none	0014-0142-0002-0000
080	80	80	1	none	0014-0060-0012-0000
Totals for areas that were used for application					
Totals for areas that were not used for application	252	252	11		
Land application area totals	252	252	11		

B. CROPS AND HARVESTS

002

Field name: 002

01/01/2013: Kiwi

Crop: Kiwi

Acres planted: 14 Plant date: 01/01/2013

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
09/20/2023	252.00 ton	Dry-weight		80.0	10,000.00	3,000.00	8,000.00		20.00

	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	24.00	110.40	0.00
Total actual harvest content	18.00	72.00	21.60	57.60	1,440.00

004

Field name: 004

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004

01/01/2013: Kiwi

Crop: Kiwi Acres planted: 8 Plant date: 01/01/2013

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
09/15/2023	124.00 <i>ton</i>	Dry-weight		80.0	10,000.00	3,000.00	8,000.00		20.00

	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	24.00	110.40	0.00
Total actual harvest content	15.50	62.00	18.60	49.60	1,240.00

005

Field name: 005

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

Crop: Wheat, silage, soft dough Acres planted: 20 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 (%)
04/15/2023	360.00 <i>ton</i>	Dry-weight		60.0	12,000.00	4,000.00	10,000.00		9.00

	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	18.00	172.80	57.60	144.00	1,296.00

05/01/2023: Corn, silage

Crop: Corn, silage Acres planted: 20 Plant date: 05/01/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
10/01/2023	500.00 <i>ton</i>	Dry-weight		60.0	11,000.00	4,000.00	12,000.00		9.00

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	25.00	200.00	37.50	165.00	0.00
Total actual harvest content	25.00	220.00	80.00	240.00	1,800.00

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025Field name: 025

01/01/2013: Kiwi

Crop: Kiwi Acres planted: 25 Plant date: 01/01/2013

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
09/15/2023	450.00 ton	Dry-weight		80.0	10,000.00	3,000.00	8,000.00		20.00

	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	24.00	110.40	0.00
Total actual harvest content	18.00	72.00	21.60	57.60	1,440.00

030Field name: 030

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

Crop: Wheat, silage, soft dough Acres planted: 32 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 (%)
04/15/2023	450.00 ton	Dry-weight		60.0	12,000.00	4,000.00	10,000.00		9.00

	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	14.06	135.00	45.00	112.50	1,012.50

05/01/2023: Corn, silage

Crop: Corn, silage Acres planted: 32 Plant date: 05/01/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
10/01/2023	750.00 ton	Dry-weight		60.0	11,000.00	4,000.00	12,000.00		9.00

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	25.00	200.00	37.50	165.00	0.00
Total actual harvest content	23.44	206.25	75.00	225.00	1,687.50

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035

Field name: 035

01/01/2013: Kiwi

Crop: Kiwi Acres planted: 35 Plant date: 01/01/2013

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
09/10/2023	595.00 ton	Dry-weight		80.0	10,000.00	3,000.00	8,000.00		20.00

	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	24.00	110.40	0.00
Total actual harvest content	17.00	68.00	20.40	54.40	1,360.00

040

Field name: 040

11/10/2022: Wheat, silage, soft dough

Crop: Wheat, silage, soft dough Acres planted: 38 Plant date: 11/10/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
04/15/2023	560.00 ton	Dry-weight		60.0	12,000.00	4,000.00	10,000.00		9.00

	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	14.74	141.47	47.16	117.89	1,061.05

05/01/2023: Corn, silage

Crop: Corn, silage Acres planted: 38 Plant date: 05/01/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
10/01/2023	880.00 ton	Dry-weight		60.0	11,000.00	4,000.00	12,000.00		9.00

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	25.00	200.00	37.50	165.00	0.00
Total actual harvest content	23.16	203.79	74.11	222.32	1,667.37

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080

Field name: 080

01/01/2013: Kiwi

Crop: Kiwi Acres planted: 80 Plant date: 01/01/2013

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
09/16/2023	1,280.00 ton	Dry-weight		80.0	10,000.00	3,000.00	8,000.00		20.00

	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	24.00	110.40	0.00
Total actual harvest content	16.00	64.00	19.20	51.20	1,280.00

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NUTRIENT BUDGET

A. LAND APPLICATIONS

002 - 01/01/2013: Kiwi

Field name: 002

Crop: Kiwi

Plant date: 01/01/2013

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following
03/01/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)
UN 32	Liquid commercial fertilizer	30.00	0.00	0.00	0.00
Canal	Surface water	0.00	0.00	0.00	40.77
Application event totals		30.00	0.00	0.00	40.77
04/01/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)
Canal	Surface water	0.00	0.00	0.00	40.77
Application event totals		0.00	0.00	0.00	40.77
05/01/2023	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)
UN 32	Liquid commercial fertilizer	30.00	0.00	0.00	0.00
Canal	Surface water	0.00	0.00	0.00	81.54
Application event totals		30.00	0.00	0.00	81.54
06/01/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)
Canal	Surface water	0.00	0.00	0.00	122.31
Application event totals		0.00	0.00	0.00	122.31
07/01/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)
Canal	Surface water	0.00	0.00	0.00	163.09
Application event totals		0.00	0.00	0.00	163.09

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002 - 01/01/2013: Kiwi

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
08/01/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	163.09	3,040,000.00 gal
Application event totals		0.00	0.00	0.00	163.09	
09/01/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	81.54	1,520,000.00 gal
Application event totals		0.00	0.00	0.00	81.54	

004 - 01/01/2013: Kiwi

Field name: 004

Crop: Kiwi

Plant date: 01/01/2013

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
03/01/2023	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
UN 32	Liquid commercial fertilizer	30.00	0.00	0.00	0.00	
Canal	Surface water	0.00	0.00	0.00	40.74	434,000.00 gal
Application event totals		30.00	0.00	0.00	40.74	
04/01/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	81.49	868,000.00 gal
Application event totals		0.00	0.00	0.00	81.49	

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004 - 01/01/2013: Kiwi

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
05/01/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
UN 32	Liquid commercial fertilizer	30.00	0.00	0.00	0.00	
Canal	Surface water	0.00	0.00	0.00	81.49	868,000.00 gal
Application event totals		30.00	0.00	0.00	81.49	
06/01/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	81.49	868,000.00 gal
Application event totals		0.00	0.00	0.00	81.49	
07/01/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	163.07	1,737,000.00 gal
Application event totals		0.00	0.00	0.00	163.07	
08/01/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	163.07	1,737,000.00 gal
Application event totals		0.00	0.00	0.00	163.07	
09/01/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	81.49	868,000.00 gal
Application event totals		0.00	0.00	0.00	81.49	

005 - 11/15/2022: Wheat, silage, soft dough

Field name: 005

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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005 - 11/15/2022: Wheat, silage, soft dough

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
11/16/2022	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
imported compost	Other solid nutrient source	180.00	40.00	130.00	0.00	
ag 80	Ground water	4.62	0.00	0.00	233.82	2,172,000.00 gal
Application event totals		184.62	40.00	130.00	233.82	
12/16/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
ag 80	Ground water	4.62	0.00	0.00	233.82	2,172,000.00 gal
Application event totals		4.62	0.00	0.00	233.82	

005 - 05/01/2023: Corn, silage

Field name: 005

Crop: Corn, silage

Plant date: 05/01/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
04/25/2023	Broadcast/incorporate	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
imported green compost	Other solid nutrient source	180.00	40.00	130.00	0.00	
Application event totals		180.00	40.00	130.00	0.00	
05/07/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	81.56	2,172,000.00 gal
Application event totals		0.00	0.00	0.00	81.56	
06/07/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	162.98	4,340,000.00 gal
Application event totals		0.00	0.00	0.00	162.98	

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005 - 05/01/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
07/07/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	244.69	6,516,000.00 gal
Application event totals		0.00	0.00	0.00	244.69	
08/07/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	162.98	4,340,000.00 gal
Application event totals		0.00	0.00	0.00	162.98	
09/07/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	162.98	4,340,000.00 gal
Application event totals		0.00	0.00	0.00	162.98	

025 - 01/01/2013: Kiwi

Field name: 025

Crop: Kiwi

Plant date: 01/01/2013

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
03/01/2023	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
UN 32	Liquid commercial fertilizer	30.00	0.00	0.00	0.00	
Canal	Surface water	0.00	0.00	0.00	40.77	1,357,000.00 gal
Application event totals		30.00	0.00	0.00	40.77	
04/01/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	81.56	2,715,000.00 gal
Application event totals		0.00	0.00	0.00	81.56	

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025 - 01/01/2013: Kiwi

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
05/01/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
UN 32	Liquid commercial fertilizer	30.00	0.00	0.00	0.00	
Canal	Surface water	0.00	0.00	0.00	81.56	2,715,000.00 gal
Application event totals		30.00	0.00	0.00	81.56	
06/01/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	81.56	2,715,000.00 gal
Application event totals		0.00	0.00	0.00	81.56	
07/01/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	163.13	5,430,000.00 gal
Application event totals		0.00	0.00	0.00	163.13	
08/01/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	122.36	4,073,000.00 gal
Application event totals		0.00	0.00	0.00	122.36	
09/01/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	122.36	4,073,000.00 gal
Application event totals		0.00	0.00	0.00	122.36	

030 - 11/15/2022: Wheat, silage, soft dough

Field name: 030

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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030 - 11/15/2022: Wheat, silage, soft dough

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
09/25/2022	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
kiwi orchard grindings	Plowdown credit	150.00	40.00	100.00	0.00	
Application event totals		150.00	40.00	100.00	0.00	
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
ag 80	Ground water	4.79	0.00	0.00	242.28	3,601,000.00 gal
Application event totals		4.79	0.00	0.00	242.28	
12/22/2022	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
ag 80	Ground water	3.99	0.00	0.00	201.91	3,001,000.00 gal
Application event totals		3.99	0.00	0.00	201.91	

030 - 05/01/2023: Corn, silage

Field name: 030

Crop: Corn, silage

Plant date: 05/01/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
04/25/2023	Broadcast/incorporate	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Import	Other solid nutrient source	130.00	25.00	100.00	0.00	
Application event totals		130.00	25.00	100.00	0.00	
05/05/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
UN 32	Liquid commercial fertilizer	100.00	0.00	0.00	0.00	
Canal	Surface water	0.00	0.00	0.00	133.83	5,702,000.00 gal
Application event totals		100.00	0.00	0.00	133.83	

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030 - 05/01/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
06/05/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	164.36	7,003,000.00 gal
Application event totals		0.00	0.00	0.00	164.36	
07/05/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	223.04	9,503,000.00 gal
Application event totals		0.00	0.00	0.00	223.04	
08/05/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	164.36	7,003,000.00 gal
Application event totals		0.00	0.00	0.00	164.36	
08/25/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	164.36	7,003,000.00 gal
Application event totals		0.00	0.00	0.00	164.36	

035 - 01/01/2013: Kiwi

Field name: 035

Crop: Kiwi

Plant date: 01/01/2013

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
03/01/2023	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
UN 32	Liquid commercial fertilizer	30.00	0.00	0.00	0.00	
Canal	Surface water	0.00	0.00	0.00	40.77	1,900,000.00 gal
Application event totals		30.00	0.00	0.00	40.77	

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035 - 01/01/2013: Kiwi

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
04/01/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	40.77	1,900,000.00 gal
Application event totals		0.00	0.00	0.00	40.77	
05/01/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
UN 32	Liquid commercial fertilizer	30.00	0.00	0.00	0.00	
Canal	Surface water	0.00	0.00	0.00	81.54	3,800,000.00 gal
Application event totals		30.00	0.00	0.00	81.54	
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
Canal	Surface water	0.00	0.00	0.00	81.54	3,800,000.00 gal
Application event totals		0.00	0.00	0.00	81.54	
07/01/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	163.09	7,600,000.00 gal
Application event totals		0.00	0.00	0.00	163.09	
08/01/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	163.09	7,600,000.00 gal
Application event totals		0.00	0.00	0.00	163.09	
08/25/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	81.54	3,800,000.00 gal
Application event totals		0.00	0.00	0.00	81.54	

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040 - 11/10/2022: Wheat, silage, soft dough

Field name: 040

Crop: Wheat, silage, soft dough

Plant date: 11/10/2022

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
10/30/2022	ground up kiwi	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
ground up kiwi	Existing soil nutrient content	150.00	40.00	100.00	0.00	
Application event totals		150.00	40.00	100.00	0.00	
12/23/2022	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
ag 80	Ground water	4.48	0.00	0.00	226.63	4,000,000.00 gal
Application event totals		4.48	0.00	0.00	226.63	
11/25/2023	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
ag 80	Ground water	4.48	0.00	0.00	226.63	4,000,000.00 gal
Application event totals		4.48	0.00	0.00	226.63	

040 - 05/01/2023: Corn, silage

Field name: 040

Crop: Corn, silage

Plant date: 05/01/2023

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
04/25/2023	Broadcast/incorporate	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
imported compost	Other solid nutrient source	130.00	25.00	100.00	0.00	
Application event totals		130.00	25.00	100.00	0.00	

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040 - 05/01/2023: Corn, silage

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
05/15/2023	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	
Canal	Surface water	0.00	0.00	0.00	85.86	4,344,000.00 gal
Application event totals		100.00	0.00	0.00	85.86	
06/15/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	214.64	10,860,000.00 gal
Application event totals		0.00	0.00	0.00	214.64	
07/15/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	214.64	10,860,000.00 gal
Application event totals		0.00	0.00	0.00	214.64	
08/15/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	214.64	10,860,000.00 gal
Application event totals		0.00	0.00	0.00	214.64	
09/05/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	107.32	5,430,000.00 gal
Application event totals		0.00	0.00	0.00	107.32	

080 - 01/01/2013: Kiwi

Field name: 080

Crop: Kiwi

Plant date: 01/01/2013

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
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080 - 01/01/2013: Kiwi

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
03/02/2023	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	30.00	0.00	0.00	0.00	
Canal	Surface water	0.00	0.00	0.00	40.37	4,300,000.00 gal
Application event totals		30.00	0.00	0.00	40.37	
04/02/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	40.37	4,300,000.00 gal
Application event totals		0.00	0.00	0.00	40.37	
05/02/2023	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
UN 32	Liquid commercial fertilizer	30.00	0.00	0.00	0.00	
Canal	Surface water	0.00	0.00	0.00	56.33	6,000,000.00 gal
Application event totals		30.00	0.00	0.00	56.33	
06/02/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	80.74	8,600,000.00 gal
Application event totals		0.00	0.00	0.00	80.74	
07/02/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	168.99	18,000,000.00 gal
Application event totals		0.00	0.00	0.00	168.99	
08/02/2023	Surface (irrigation)	No precipitation	No precipitation	No precipitation	No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	140.82	15,000,000.00 gal
Application event totals		0.00	0.00	0.00	140.82	

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080 - 01/01/2013: Kiwi

Application date	Application method	Precipitation 24 hours prior	Precipitation during application		Precipitation 24 hours following	
09/02/2023	Surface (irrigation)	No precipitation	No precipitation		No precipitation	
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Canal	Surface water	0.00	0.00	0.00	122.05	13,000,000.00 gal
Application event totals		0.00	0.00	0.00	122.05	

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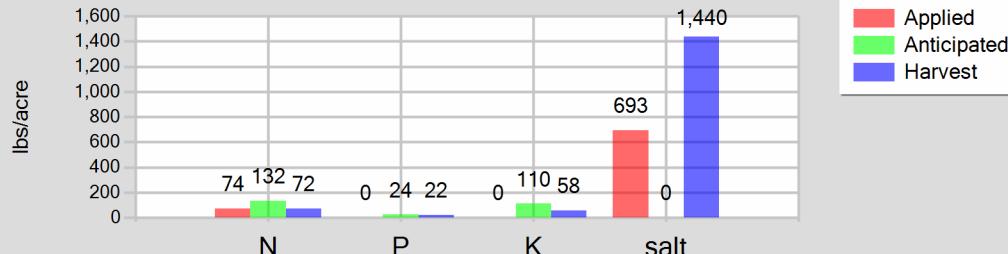
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B. NUTRIENT BUDGET

002 - 01/01/2013: Kiwi

Field name: 002 Crop: Kiwi Plant date: 01/01/2013

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	60.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	0.00	0.00	0.00	0.00
Fresh water	0.00	0.00	0.00	693.11
Atmospheric deposition	14.00	0.00	0.00	0.00
Total nutrients applied	74.00	0.00	0.00	693.11
Anticipated crop nutrient removal	132.00	24.00	110.40	0.00
Actual crop nutrient removal	72.00	21.60	57.60	1,440.00
Nutrient balance	2.00	-21.60	-57.60	-746.89
Applied to removed ratio	1.03	0.00	0.00	0.48

Fresh water applied

12,920,000.00 *gallons*
475.80 *acre-inches*
33.99 *inches/acre*

Process wastewater applied

0.00 *gallons*
0.00 *acre-inches*
0.00 *inches/acre*

Total harvests for the crop

1 *harvests*

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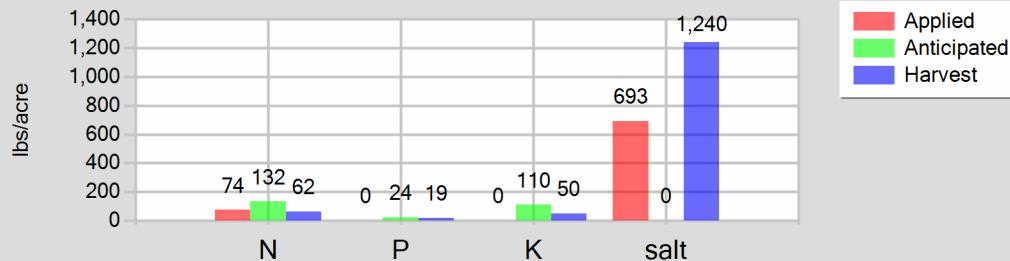
004 - 01/01/2013: Kiwi

Field name: 004

Crop: Kiwi

Plant date: 01/01/2013

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	60.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	0.00	0.00	0.00	0.00
Fresh water	0.00	0.00	0.00	692.84
Atmospheric deposition	14.00	0.00	0.00	0.00
Total nutrients applied	74.00	0.00	0.00	692.84
Anticipated crop nutrient removal	132.00	24.00	110.40	0.00
Actual crop nutrient removal	62.00	18.60	49.60	1,240.00
Nutrient balance	12.00	-18.60	-49.60	-547.16
Applied to removed ratio	1.19	0.00	0.00	0.56

Fresh water applied

7,380,000.00 gallons
271.78 acre-inches
33.97 inches/acre

Process wastewater applied

0.00 gallons
0.00 acre-inches
0.00 inches/acre

Total harvests for the crop

1 harvests

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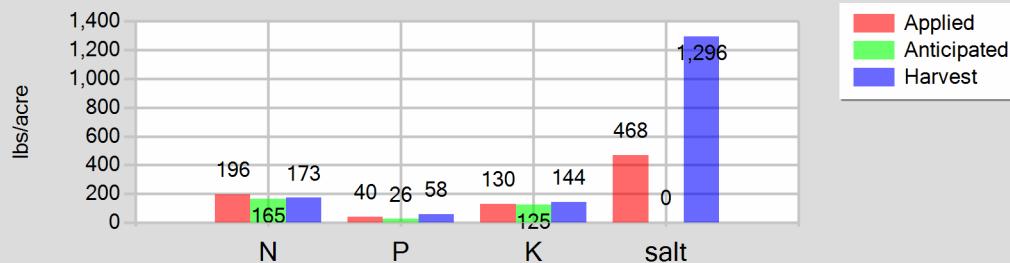
005 - 11/15/2022: Wheat, silage, soft dough

Field name: 005

Crop: Wheat, silage, soft dough

Plant date: 11/15/2022

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	4,344,000.00 gallons
Plowdown credit	0.00	0.00	0.00	0.00	159.97 acre-inches
Commercial fertilizer / Other	180.00	40.00	130.00	0.00	8.00 inches/acre
Dry manure	0.00	0.00	0.00	0.00	
Process wastewater	0.00	0.00	0.00	0.00	
Fresh water	9.24	0.00	0.00	467.63	
Atmospheric deposition	7.00	0.00	0.00	0.00	
Total nutrients applied	196.24	40.00	130.00	467.63	
Anticipated crop nutrient removal	165.00	25.50	124.50	0.00	
Actual crop nutrient removal	172.80	57.60	144.00	1,296.00	
Nutrient balance	23.44	-17.60	-14.00	-828.37	
Applied to removed ratio	1.14	0.69	0.90	0.36	
Process wastewater applied					
0.00 gallons					
0.00 acre-inches					
0.00 inches/acre					
Total harvests for the crop					
1 harvests					

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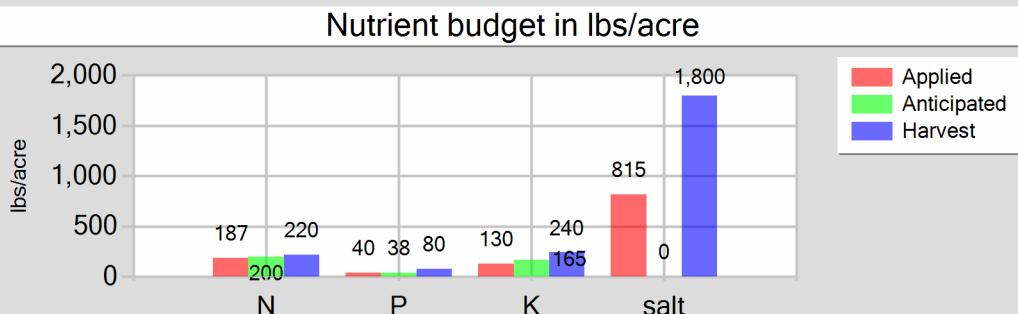
Reporting period 01/01/2023 to 12/31/2023.

005 - 05/01/2023: Corn, silage

Field name: 005

Crop: Corn, silage

Plant date: 05/01/2023



	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	180.00	40.00	130.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	0.00	0.00	0.00	0.00
Fresh water	0.00	0.00	0.00	815.19
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	187.00	40.00	130.00	815.19
Anticipated crop nutrient removal	200.00	37.50	165.00	0.00
Actual crop nutrient removal	220.00	80.00	240.00	1,800.00
Nutrient balance	-33.00	-40.00	-110.00	-984.81
Applied to removed ratio	0.85	0.50	0.54	0.45

Fresh water applied

21,708,000.00 gallons
799.43 acre-inches
39.97 inches/acre

Process wastewater applied

0.00 gallons
0.00 acre-inches
0.00 inches/acre

Total harvests for the crop

1 harvests

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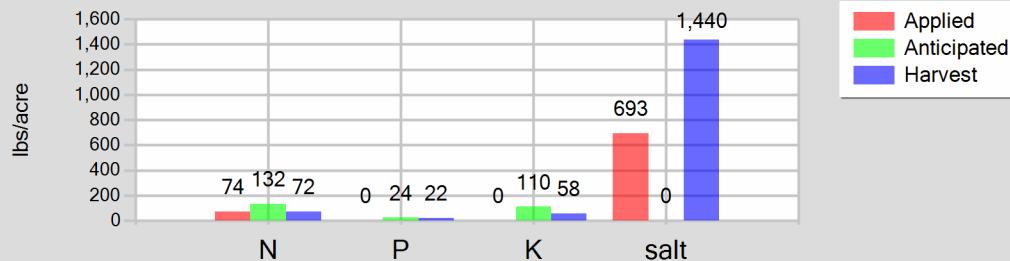
025 - 01/01/2013: Kiwi

Field name: 025

Crop: Kiwi

Plant date: 01/01/2013

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	60.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	0.00	0.00	0.00	0.00
Fresh water	0.00	0.00	0.00	693.31
Atmospheric deposition	14.00	0.00	0.00	0.00
Total nutrients applied	74.00	0.00	0.00	693.31
Anticipated crop nutrient removal	132.00	24.00	110.40	0.00
Actual crop nutrient removal	72.00	21.60	57.60	1,440.00
Nutrient balance	2.00	-21.60	-57.60	-746.69
Applied to removed ratio	1.03	0.00	0.00	0.48

Fresh water applied

23,078,000.00 gallons
849.88 acre-inches
34.00 inches/acre

Process wastewater applied

0.00 gallons
0.00 acre-inches
0.00 inches/acre

Total harvests for the crop

1 harvests

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

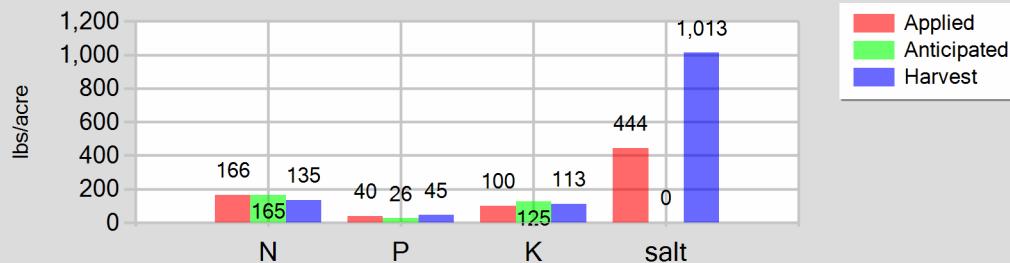
030 - 11/15/2022: Wheat, silage, soft dough

Field name: 030

Crop: Wheat, silage, soft dough

Plant date: 11/15/2022

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	6,602,000.00 gallons
Plowdown credit	150.00	40.00	100.00	0.00	243.13 acre-inches
Commercial fertilizer / Other	0.00	0.00	0.00	0.00	7.60 inches/acre
Dry manure	0.00	0.00	0.00	0.00	
Process wastewater	0.00	0.00	0.00	0.00	
Fresh water	8.78	0.00	0.00	444.19	
Atmospheric deposition	7.00	0.00	0.00	0.00	
Total nutrients applied	165.78	40.00	100.00	444.19	
Anticipated crop nutrient removal	165.00	25.50	124.50	0.00	
Actual crop nutrient removal	135.00	45.00	112.50	1,012.50	
Nutrient balance	30.78	-5.00	-12.50	-568.31	
Applied to removed ratio	1.23	0.89	0.89	0.44	
Total harvests for the crop					1 harvests

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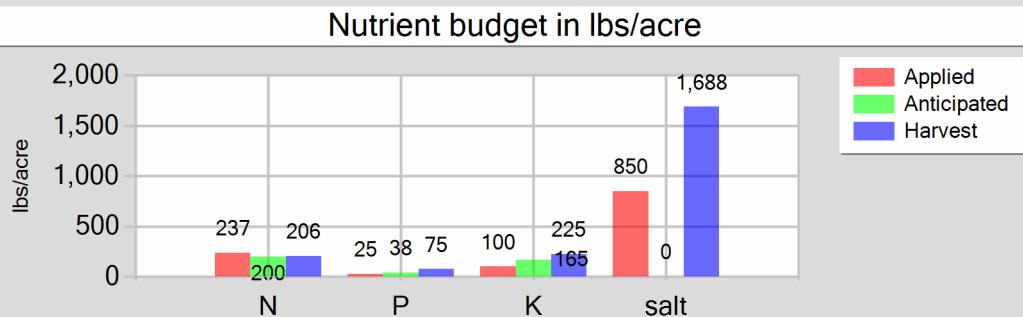
Reporting period 01/01/2023 to 12/31/2023.

030 - 05/01/2023: Corn, silage

Field name: 030

Crop: Corn, silage

Plant date: 05/01/2023



	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	230.00	25.00	100.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	0.00	0.00	0.00	0.00
Fresh water	0.00	0.00	0.00	849.95
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	237.00	25.00	100.00	849.95
Anticipated crop nutrient removal	200.00	37.50	165.00	0.00
Actual crop nutrient removal	206.25	75.00	225.00	1,687.50
Nutrient balance	30.75	-50.00	-125.00	-837.55
Applied to removed ratio	1.15	0.33	0.44	0.50

Fresh water applied
36,214,000.00 gallons
1,333.64 acre-inches
41.68 inches/acre

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

Total harvests for the crop
1 harvests

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

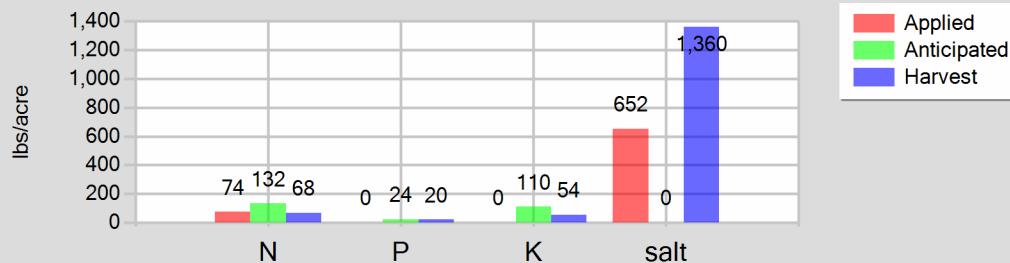
035 - 01/01/2013: Kiwi

Field name: 035

Crop: Kiwi

Plant date: 01/01/2013

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	60.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	0.00	0.00	0.00	0.00
Fresh water	0.00	0.00	0.00	652.34
Atmospheric deposition	14.00	0.00	0.00	0.00
Total nutrients applied	74.00	0.00	0.00	652.34
Anticipated crop nutrient removal	132.00	24.00	110.40	0.00
Actual crop nutrient removal	68.00	20.40	54.40	1,360.00
Nutrient balance	6.00	-20.40	-54.40	-707.66
Applied to removed ratio	1.09	0.00	0.00	0.48

Fresh water applied

30,400,000.00 gallons
1,119.53 acre-inches
31.99 inches/acre

Process wastewater applied

0.00 gallons
0.00 acre-inches
0.00 inches/acre

Total harvests for the crop

1 harvests

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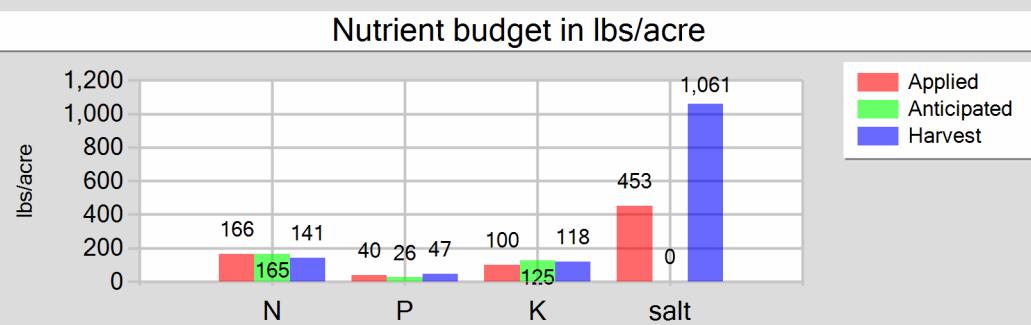
Reporting period 01/01/2023 to 12/31/2023.

040 - 11/10/2022: Wheat, silage, soft dough

Field name: 040

Crop: Wheat, silage, soft dough

Plant date: 11/10/2022



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)	Fresh water applied
Existing soil nutrient content	150.00	40.00	100.00	0.00	8,000,000.00 gallons
Plowdown credit	0.00	0.00	0.00	0.00	294.61 acre-inches
Commercial fertilizer / Other	0.00	0.00	0.00	0.00	7.75 inches/acre
Dry manure	0.00	0.00	0.00	0.00	
Process wastewater	0.00	0.00	0.00	0.00	
Fresh water	8.96	0.00	0.00	453.27	
Atmospheric deposition	7.00	0.00	0.00	0.00	
Total nutrients applied	165.96	40.00	100.00	453.27	Process wastewater applied
Anticipated crop nutrient removal	165.00	25.50	124.50	0.00	0.00 gallons
Actual crop nutrient removal	141.47	47.16	117.89	1,061.05	0.00 acre-inches
Nutrient balance	24.49	-7.16	-17.89	-607.79	0.00 inches/acre
Applied to removed ratio	1.17	0.85	0.85	0.43	Total harvests for the crop
					1 harvests

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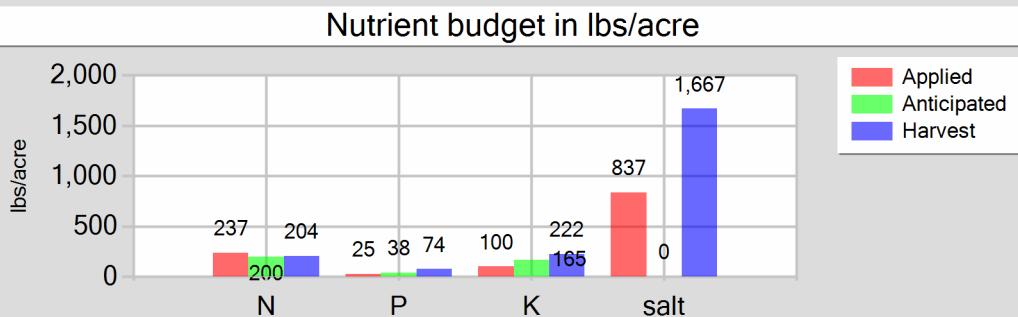
Reporting period 01/01/2023 to 12/31/2023.

040 - 05/01/2023: Corn, silage

Field name: 040

Crop: Corn, silage

Plant date: 05/01/2023



	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	230.00	25.00	100.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	0.00	0.00	0.00	0.00
Fresh water	0.00	0.00	0.00	837.10
Atmospheric deposition	7.00	0.00	0.00	0.00
Total nutrients applied	237.00	25.00	100.00	837.10
Anticipated crop nutrient removal	200.00	37.50	165.00	0.00
Actual crop nutrient removal	203.79	74.11	222.32	1,667.37
Nutrient balance	33.21	-49.11	-122.32	-830.26
Applied to removed ratio	1.16	0.34	0.45	0.50

Fresh water applied

42,354,000.00 gallons
1,559.75 acre-inches
41.05 inches/acre

Process wastewater applied

0.00 gallons
0.00 acre-inches
0.00 inches/acre

Total harvests for the crop

1 harvests

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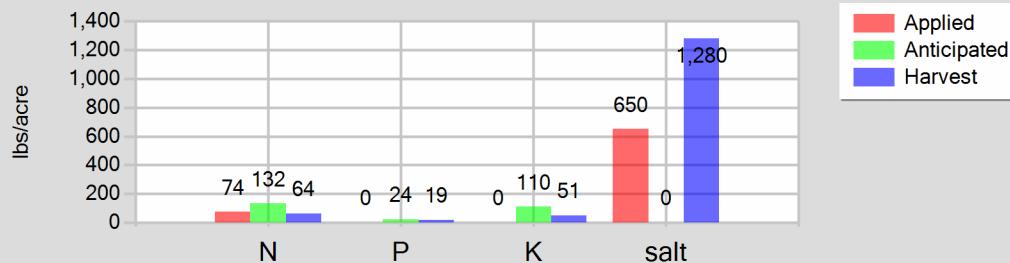
080 - 01/01/2013: Kiwi

Field name: 080

Crop: Kiwi

Plant date: 01/01/2013

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	60.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	0.00	0.00	0.00	0.00
Fresh water	0.00	0.00	0.00	649.66
Atmospheric deposition	14.00	0.00	0.00	0.00
Total nutrients applied	74.00	0.00	0.00	649.66
Anticipated crop nutrient removal	132.00	24.00	110.40	0.00
Actual crop nutrient removal	64.00	19.20	51.20	1,280.00
Nutrient balance	10.00	-19.20	-51.20	-630.34
Applied to removed ratio	1.16	0.00	0.00	0.51

Fresh water applied

69,200,000.00 gallons
2,548.40 acre-inches
31.86 inches/acre

Process wastewater applied

0.00 gallons
0.00 acre-inches
0.00 inches/acre

Total harvests for the crop

1 harvests

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NUTRIENT ANALYSES**A. MANURE ANALYSES***No manure analyses entered.***B. PROCESS WASTEWATER ANALYSES***No process wastewater analyses entered.***C. FRESH WATER ANALYSES**

ag 10

Ag well 10Sample description: Ag well 10Sample date: 06/01/2019 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	7.30	0.00	7.30								400.00	
DL	0.10	0.01	0.01								10.00	

ag 40

Ag Well 40Sample description: Ag Well 40Sample date: 06/01/2019 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	4.90	0.00	4.90								390.00	270
DL	0.10	0.01	0.01								10.00	1

ag 80

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

ag 80

Ag Well 80Sample description: Ag Well 80Sample date: 06/01/2019 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 (μ mhos/cm)	TDS (mg/L)
Value	5.10	0.00	5.10								430.00	
DL	0.10	0.01	0.01								10.00	

Canal**Canal 1**Sample description: Canal 1Sample date: 06/01/2023 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 (μ mhos/cm)	TDS (mg/L)
Value	0.00		0.00								150.00	
DL	0.10		0.01								10.00	

D. SOIL ANALYSES

No soil analyses entered.

E. PLANT TISSUE ANALYSES

No plant tissue analyses entered.

F. SUBSURFACE (TILE) DRAINAGE ANALYSES

No subsurface (tile) drainage analyses entered.

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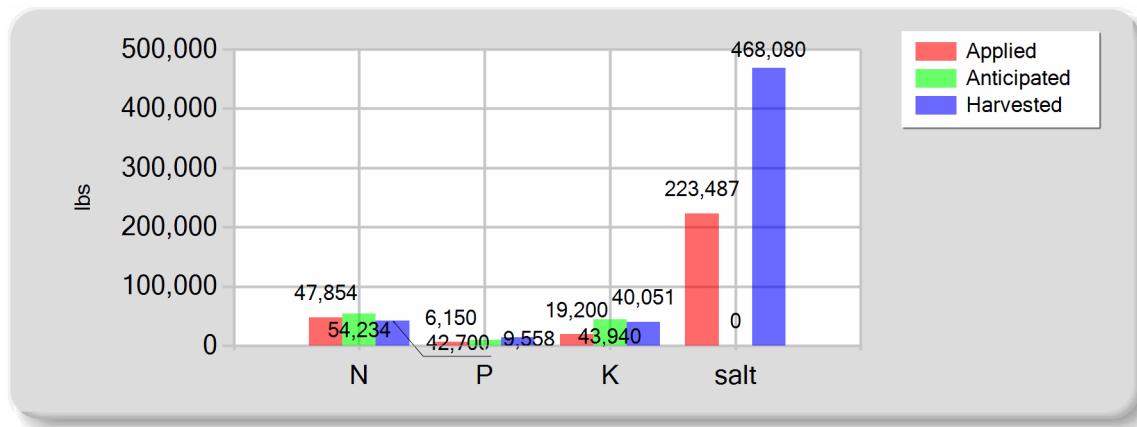
Reporting period 01/01/2023 to 12/31/2023.

NUTRIENT APPLICATIONS, POTENTIAL REMOVAL, AND BALANCE

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

	Total N (lbs)	Total P (lbs)	Total K (lbs)	Total salt (lbs)
Existing soil nutrient content	5,700.00	1,520.00	3,800.00	0.00
Plowdown credit	4,800.00	1,280.00	3,200.00	0.00
Commercial fertilizer / Other	33,020.00	3,350.00	12,200.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	0.00	0.00	0.00	0.00
Fresh water	806.33	0.00	0.00	223,486.84
Atmospheric deposition	3,528.00	0.00	0.00	0.00
Total nutrients applied	47,854.33	6,150.00	19,200.00	223,486.84
Anticipated crop nutrient removal	54,234.00	9,558.00	43,939.80	0.00
Actual crop nutrient removal	42,700.00	14,441.20	40,051.20	468,080.00
Nutrient balance	5,154.33	-8,291.20	-20,851.20	-244,593.16
Applied to removed ratio	1.12	0.43	0.48	0.48

B. POUNDS OF NUTRIENT APPLIED VS. CROP REMOVAL

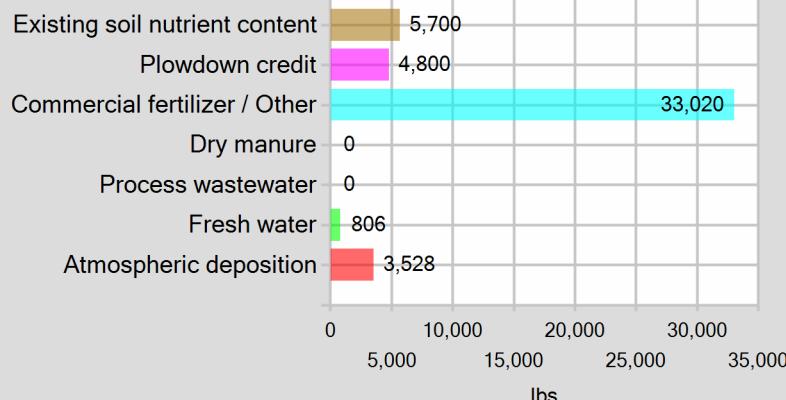


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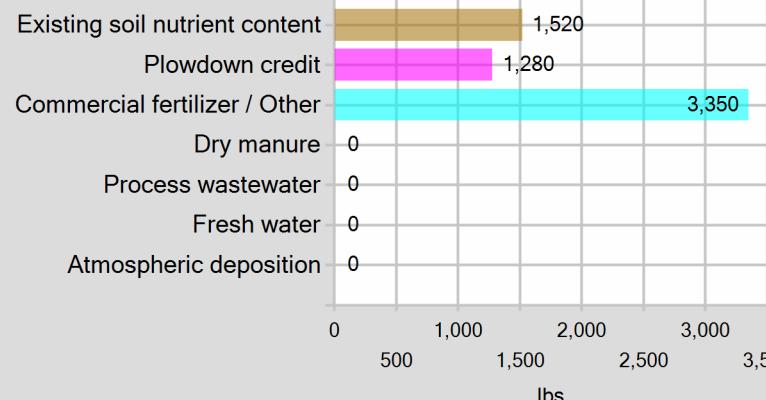
Reporting period 01/01/2023 to 12/31/2023.

C. POUNDS OF NUTRIENT APPLIED BY MATERIAL TYPE

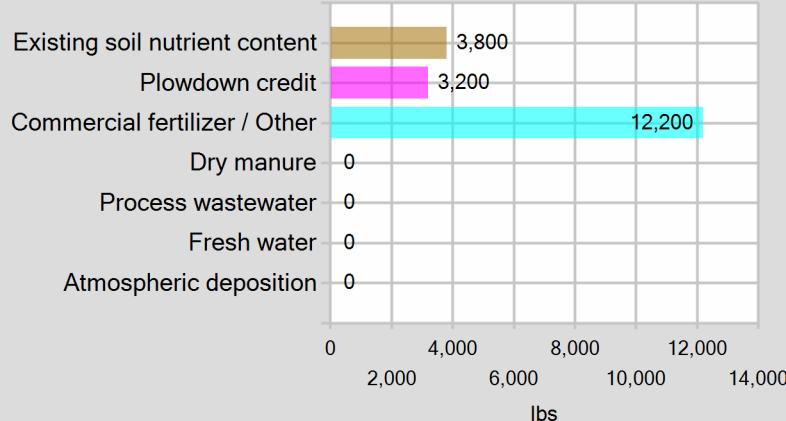
Pounds of nitrogen applied



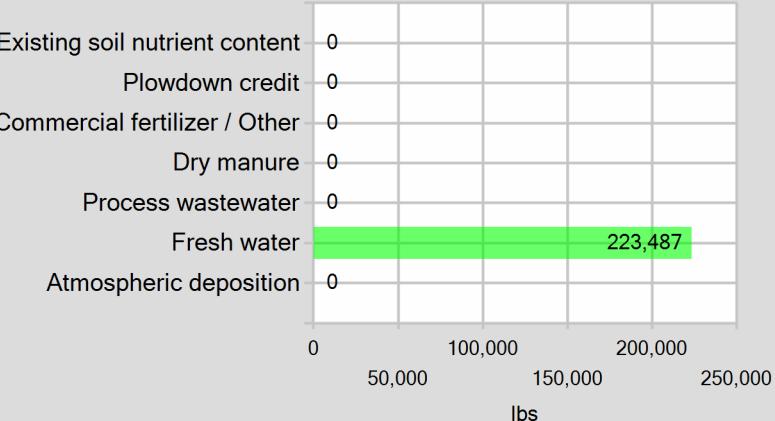
Pounds of phosphorus applied



Pounds of potassium applied



Pounds of salt applied



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

EXCEPTION REPORTING

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

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

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

B. STORM WATER DISCHARGES

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

No stormwater discharges occurred during the reporting period.

C. LAND APPLICATION AREA TO SURFACE WATER DISCHARGES

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

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

NUTRIENT MANAGEMENT PLAN AND EXPORT AGREEMENT STATEMENTS

A. NUTRIENT MANAGEMENT PLAN STATEMENTS

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

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

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

B. EXPORT AGREEMENT STATEMENT

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

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

ADDITIONAL NOTES

A. NOTES

Dairy has 1 cow listed for report, no dairy cows on-site (1 beef cow on site). No liquid or dry manure generated. Dairy is held for rent, but not currently rented. No cattle liquid or dry manure applied.

Field 030 and 040, previous trees were ground up and spread on fields. No analysis done. Research from UC Davis on bound up tree nutrient for kiwi trees is 150/50/80 of N/P/K.

Ground up trees nutrients are not completely available until the second year of decomposition.

Field 030 and 040 used chicken manure compost as a nutrient source for corn. Nutrient values are estimated from UC Davis values for chicken manure compost.

Field 05 used green waste compost as a imported nutrient source, the import feature would not let me put in correct date for the import, import was in 2022 prior to planting wheat. Green waste was used for wheat and corn.

Harvest nutrient values are estimated, no tissue samples were taken, no dairy manure applied.

Irrigation events not listed due to no dairy liquid or dry manure applied.

Kiwi had no dairy nutrients source this year. The kiwi tissue value is estimated, the tissue values for kiwi are estimated based on Frep data from UC Davis.

Water analysis was estimated, only 1 well was used (ag well 80), the water allocation from canal was sufficient for irrigation.

Kiwi irrigation is drip, it is applied weekly but here the monthly amount is listed to avoid 4-5 irrigation per month

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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

Bruce A. Fagundes



SIGNATURE OF OPERATOR OF FACILITY

SAME AS OWNER

PRINT OR TYPE NAME

6/21/24

PRINT OR TYPE NAME

DATE

DATE

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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.