

DAIRY FACILITY INFORMATION

A. NAME OF DAIRY OR BUSINESS OPERATING THE DAIRY:

Faial Farms Dairy

Physical address of dairy:

13714 Stine Road

Bakersfield

Kern

93313

Number and Street

City

County

Zip Code

Street and nearest cross street (if no address):

Date facility was originally placed in operation:

01-01-2000

Regional Water Quality Control Board Basin Plan designation:

Tulare Basin

County Assessor Parcel Number(s) for dairy facility:

0184-0391-0017-0000

B. OPERATORS

Manuel Rosa Jr.

Operator Name:

Manuel Rosa Jr.

Telephone no.:

(661) 667-1016

Landline

Cellular

P.O. BOX 456

ARVIN

Kern

93203

Mailing Address Number and Street

City

County

Zip Code

C. OWNERS

Manuel Rosa Jr.

Owner Name:

Manuel Rosa Jr.

Telephone no.:

(661) 667-1016

Landline

Cellular

P.O. BOX 456

ARVIN

Kern

93203

Mailing Address Number and Street

City

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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	1,148	225	365	235	46	0
Number under roof	0	0	0	0	0	0
Maxiumu number	1,150	230	400	250	50	0
Average number	1,148	225	365	235	46	0
Average live weight (lbs)	1400	1450	1000	300		

Predominant milk cow breed: Holsteins

Average Milk Production: 70 pounds per cow per day

B. MANURE GENERATED

Total manure excreted by the herd: 38,626.55 tons per reporting period

Total nitrogen from manure: 485,369.45 lbs per reporting period

After ammonia losses (30% loss applied): 339,758.62 lbs per reporting period

Total phosphorus from manure: 80,403.42 lbs per reporting period

Total potassium from manure: 219,852.59 lbs per reporting period

Total salt from manure: 592,274.55 lbs per reporting period

C. PROCESS WASTEWATER GENERATED

Process wastewater generated: 3,645,407.56 gallons

Total nitrogen generated: 5,071.02 lbs

Total phosphorus generated: 9,925,361.54 lbs

Total potassium generated: 7,381.81 lbs

Total salt generated: 55,266.75 lbs

	3,645,407.56 gallons applied
+	0 gallons exported
-	0 gallons imported
=	3,645,407.56 gallons generated

D. FRESH WATER SOURCES

Source Description	Type
Well #3	Ground Water

E. SUBSURFACE (TILE) DRAINAGE SOURCES

No fresh water sources entered.

F. NUTRIENT IMPORTS

No dry manure nutrient imports entered.

No process wastewater nutrient imports entered.

No commercial or other nutrient imports entered.

G. NUTRIENT EXPORTS

Date	Material type	Quantity	Reporting basis	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	TFS (%)
02/09/2023	Separator solids	6,133 tons	as-is	70.3	28,400.00	6,980.00	24,120.00	34.00
02/16/2023	Separator solids	3,756 tons	as-is	70.8	28,400.00	6,980.00	24,120.00	34.00
09/05/2023	Separator solids	2,398 tons	as-is	64.8	18,300.00	4,860.00	14,780.00	51.00

No process wastewater nutrient exports entered.

Material type	N (lbs)	P (lbs)	K (lbs)	TDS (%)
Dry Manure	649,462.00	161,359.00	547,930.24	9,170,480.00
Process wastewater	0.00	0.00	0.00	0.00
Total exports for all materials	649,462.00	161,359.00	547,930.24	9,170,480.00

APPLICATION AREA

A. LIST OF LAND APPLICATION AREAS

Field name	Controlled acres	Cropable acres	Total harvests	Type of waste applied	Parcel number
1 (R6)	37.67	36.54	3	PROCESS WASTEWATER	0184-0391-0017-0000
Totals for areas that were used for application	37.67	36.54	3.00		
Totals for areas that were not used for application	1.13	1.13			
Land application area totals	37.67	37.67	3.00		

B. CROPS AND HARVESTS**1 (R6)**Field Name: 1 (R6)**10/28/2022: Triticale**Crop: Triticale Acres planted: 36.54 Plant date: 10/28/2022

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
05/02/2023	790.73 ton	As-is		0.00	5,040.00	1,116.00	15,840.00	0.01	0.00

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	26.00	358.80	44.20	195.00	520.00
Total actual harvest content	21.64	218.13	48.30	685.56	0.00

05/08/2023: SudanCrop: Sudan Acres planted: 36.54 Plant date: 05/08/2023

Harvest date	Yield	Reporting basis	Density (lbs/cu ft)	Moisture (%)	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS (%)
07/24/2023	323.38 ton	As-is		0.00	3,945.60	1,159.20	5,352.00	0.05	6.19
09/26/2023	359.92 ton	As-is		0.00	3,945.60	1,159.20	5,352.00	0.05	6.19

	Yield (tons/acre)	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Salt (lbs/acre)
Anticipated harvest content	15.00	360.00	66.00	495.00	300.00
Total actual harvest content	18.70	147.57	43.35	200.16	2,315.81

NUTRIENT BUDGET

A. LAND APPLICATIONS

1 (R6)

Field name: 1 (R6) Crop: Sudan Plant date: 05/08/2023

05/08/2023: Sudan

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
Atmospheric Deposition	Atmospheric deposition	14.00	0.00	0.00	0.00	511.56 <i>Lbs</i>
Application event totals		14.00	0.00	0.00	0.00	

05/03/2023	Surface (Irrigation)	No precipitation	No precipitation	No precipitation
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Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Well Water	Ground water	0.01	0.00	7,251.28	147.29	4,961,088.10 <i>gal</i>
Application event totals		0.01	0.00	7,251.28	147.29	

05/24/2023	Surface (Irrigation)	No precipitation	No precipitation	No precipitation
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Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Well Water	Ground water	0.01	0.00	7,323.79	148.76	5,010,699.17 <i>gal</i>
Lagoon Water Effluent	Process wastewater	14.53	37,006.01	23.01	161.16	435,583.55 <i>gal</i>
Application event totals		14.54	37,006.01	7,346.80	309.92	

06/14/2023	Surface (Irrigation)	No precipitation	No precipitation	No precipitation
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Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Well Water	Ground water	0.01	0.00	7,396.31	150.24	5,060,309.77 <i>gal</i>
Lagoon Water Effluent	Process wastewater	9.93	25,288.84	15.72	110.13	297,665.30 <i>gal</i>
Application event totals		9.94	25,288.84	7,412.03	260.37	

07/05/2023	Surface (Irrigation)	No precipitation	No precipitation	No precipitation
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Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Well Water	Ground water	0.01	0.00	7,686.36	156.13	5,258,753.58 <i>gal</i>
Application event totals		0.01	0.00	7,686.36	156.13	

07/21/2023	Surface (Irrigation)	No precipitation	No precipitation	No precipitation
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Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
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Well Water	Ground water	0.01	0.00	7,541.33	153.18	5,159,531.44 <i>gal</i>
Lagoon Water Effluent	Process wastewater	10.26	26,131.80	16.25	113.80	307,587.46 <i>gal</i>
Application event totals		10.27	26,131.80	7,557.58	266.98	

08/10/2023	Surface (Irrigation)	No precipitation	No precipitation	No precipitation
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Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Lagoon Water Effluent	Process wastewater	30.77	64,525.07	33.36	339.00	843,385.00 <i>gal</i>
Well Water	Ground water	0.01	0.00	7,613.84	154.66	5,209,142.51 <i>gal</i>
Application event totals		30.78	64,525.07	7,647.20	493.66	

08/28/2023	Surface (Irrigation)	No precipitation	No precipitation	No precipitation
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Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Well Water	Ground water	0.01	0.00	7,468.82	151.71	5,109,920.84 <i>gal</i>
Lagoon Water Effluent	Process wastewater	16.26	34,084.42	17.62	179.07	445,505.71 <i>gal</i>
Application event totals		16.27	34,084.42	7,486.44	330.78	

10/28/2022: Triticale

Application date	Application method	Precipitation 24 hours prior	Precipitation during application	Precipitation 24 hours following
10/30/2022	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
Well Water	Ground water	12.89	0.00	0.00	1,065.96	4,509,629.16 <i>gal</i>
Lagoon Water Effluent	Process wastewater	6.63	12,263.73	9.83	69.68	203,404.61 <i>gal</i>
Application event totals		19.52	12,263.73	9.83	1,135.64	

11/21/2022	Surface (Irrigation)	No precipitation	No precipitation	No precipitation
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Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Well Water	Ground water	11.12	0.00	0.00	919.37	3,889,493.15 <i>gal</i>
Lagoon Water Effluent	Process wastewater	21.78	40,260.92	32.28	228.76	667,762.44 <i>gal</i>
Application event totals		32.90	40,260.92	32.28	1,148.13	

12/16/2022	Surface (Irrigation)	No precipitation	No precipitation	No precipitation
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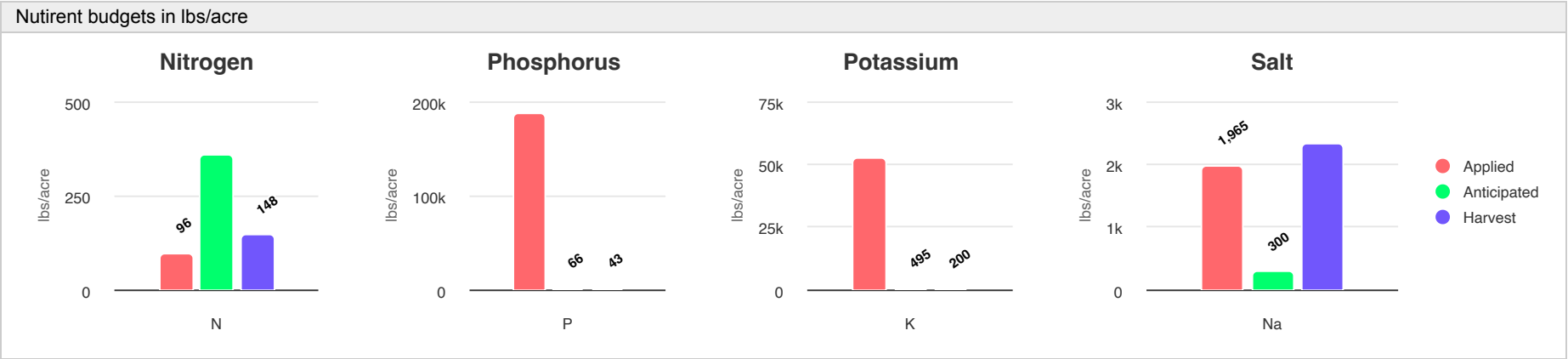
Source description	Material type	N (lbs/acre)	P (lbs/acre)	K (lbs/acre)	Salt (lbs/acre)	Amount
Un 32	Commercial fertilizer / Other: Liquid commercial fertilizer	53.09	0.00	0.00	0.00	548.10 <i>Gal.</i>
Well Water	Ground water	9.30	0.00	0.00	769.27	3,254,473.77 <i>gal</i>
Application event totals		62.39	0.00	0.00	769.27	

01/10/2023		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		
Well Water		Ground water	0.00	0.00	6,091.08	123.72	4,167,313.82 <i>gal</i>		
Lagoon Water Effluent		Process wastewater	6.41	11,844.97	9.50	67.30	196,459.09 <i>gal</i>		
Application event totals			6.41	11,844.97	6,100.58	191.02			
02/01/2023		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		
Well Water		Ground water	0.00	0.00	6,236.10	126.67	4,266,535.96 <i>gal</i>		
Lagoon Water Effluent		Process wastewater	13.68	12,458.15	27.38	150.06	152,801.51 <i>gal</i>		
Application event totals			13.68	12,458.15	6,263.48	276.73			
02/23/2023		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		
Well Water	Ground water		0.00	0.00	6,671.18	135.51	4,564,200.96 <i>gal</i>		
Un 32	Commercial fertilizer / Other: Liquid commercial fertilizer		53.09	0.00	0.00	0.00	548.10 <i>Gal.</i>		
Application event totals			53.09	0.00	6,671.18	135.51			
03/18/2023		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	Commercial fertilizer / Other: Liquid commercial fertilizer		53.09	0.00	0.00	0.00	548.10 <i>Gal.</i>		
Well Water	Ground water		0.00	0.00	5,360.15	108.88	3,667,236.19 <i>gal</i>		
Application event totals			53.09	0.00	5,360.15	108.88			
04/10/2023		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		
Well Water		Ground water	0.00	0.00	6,888.72	139.93	4,713,033.70 <i>gal</i>		
Lagoon Water Effluent		Process wastewater	8.53	7,766.12	17.07	93.54	95,252.89 <i>gal</i>		
Application event totals			8.53	7,766.12	6,905.79	233.47			

B. NUTRIENT BUDGET

1 (R6) - 05/08/2023: Sudan

Field name: 1 (R6) Crop: Sudan Plant date: 05/08/2023



	Total N (lbs/acre)	Total P (lbs/acre)	Total K (lbs/acre)	Total salt (lbs/acre)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	0.00	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	81.75	187,036.14	105.96	903.16
Fresh water	0.07	0.00	52,281.73	1,061.97
Atmospheric deposition	14.00	0.00	0.00	0.00
Total nutrients applied	95.82	187,036.14	52,387.69	1,965.13
Anticipated crop nutrient removal	360.00	66.00	495.00	300.00
Actual crop nutrient removal	147.57	43.35	200.16	2,315.81
Nutrient balance	-51.75	186,992.79	52,187.53	-350.68
Applied to removed ratio	0.65	4,314.15	261.72	0.85

Fresh water applied	
35,769,445.41	gallons
1,317.27	acre-inches
36.05	inches/acre

Process wastewater applied	
2,329,727.02	gallons
85.80	acre-inches
2.35	inches/acre

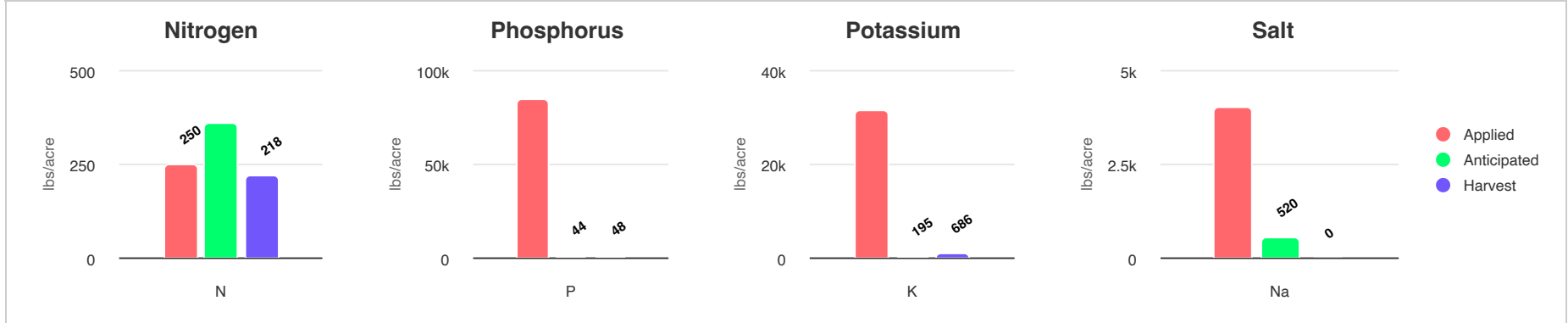
Total Harvests for the crop	
2	harvests

Field name: 1 (R6)

Crop: Triticale

Plant date: 10/28/2022

Nutrient budgets 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	159.27	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	57.03	84,593.89	96.06	609.34
Fresh water	33.31	0.00	31,247.23	3,389.31
Atmospheric deposition	0.00	0.00	0.00	0.00
Total nutrients applied	249.61	84,593.89	31,343.29	3,998.65
Anticipated crop nutrient removal	358.80	44.20	195.00	520.00
Actual crop nutrient removal	218.13	48.30	685.56	0.00
Nutrient balance	31.48	84,545.59	30,657.73	3,998.65
Applied to removed ratio	1.14	1,751.41	45.72	0.00

Fresh water applied

33,031,916.70 gallons
 1,216.45 acre-inches
 33.29 inches/acre

Process wastewater applied

1,315,680.54 gallons
 48.45 acre-inches
 1.33 inches/acre

Total Harvests for the crop

1 harvests

NUTRIENT ANALYSES

A. MANURE ANALYSES

T3090016A

Sample and source description name: T3090016A
Sample date: 03/17/2023 Material type: Corral solids Source of analysis: Lab Analysis Method of reporting: As-is
Moisture: 32%

	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	17,160.00	5,310.00	11,260.00	16,030.00	6,150.00	2,570.00	2,500.00	1,063.00	11,260.00	0.00
DL	100.00	200.00	500.00	500.00	500.00	500.00	100.00	.10		.10

T3167044A

Sample and source description name: T3167044A
Sample date: 06/12/2023 Material type: Corral solids Source of analysis: Lab Analysis Method of reporting: As-is
Moisture: 4.2%

	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	18,300.00	4,860.00	14,780.00	15,120.00	6,670.00	6,230.00	3,200.00	1,220.00	14,780.00	0.00
DL	100.00	200.00	500.00	500.00	500.00	500.00	100.00	.10		.10

T3263091A

Sample and source description name: T3263091A
Sample date: 09/15/2023 Material type: Corral solids Source of analysis: Lab Analysis Method of reporting: As-is
Moisture: 3.8%

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Calcium (mg/kg)	Magnesium (mg/kg)	Sodium (mg/kg)	Sulfur (mg/kg)	Chloride (mg/kg)	Total Salt (mg/kg)	TFS (%)
Value	21,900.00	5,540.00	17,690.00	16,510.00	7,510.00	5,160.00	3,860.00	1,238.00	17,690.00	0.00
DL	100.00	200.00	500.00	500.00	500.00	500.00	100.00	.10		.10

T3362026A

Sample and source description name: T3362026A
Sample date: 12/22/2023 Material type: Corral solids Source of analysis: Lab Analysis Method of reporting: As-is

Moisture: 33.7%

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Calcium (mg/kg)	Magnesium (mg/kg)	Sodium (mg/kg)	Sulfur (mg/kg)	Chloride (mg/kg)	Total Salt (mg/kg)	TFS (%)
Value	19,610.00	10,650.00	14,970.00	12,850.00	6,000.00	4,570.00	3,930.00	996.00	14,970.00	0.00
DL	100.00	200.00	500.00	500.00	500.00	500.00	100.00	.10		.10

B. PROCESS WASTEWATER ANALYSES

T3089029A

Sample and source description name: T3089029A

Sample date: 03/17/2023 Material type: Process wastewater Source of analysis: Lab Analysis pH: 0

	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 (mmhos/cm)	TDS (mg/L)
Value	392.00	0.00	249.20	0.13	35.70	784.69	130.32	80.10	214.94	0.00	0.00	180.38	240.27	5.26	4,300.00
DL	0.50	0.50	0.50	0.50	0.20	0.50	0.50	0.50	0.50	2.00	2.00	0.50	0.50	1.00	10

T3167021A

Sample and source description name: T3167021A

Sample date: 06/12/2023 Material type: Process wastewater Source of analysis: Lab Analysis pH: 0

	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 (mmhos/cm)	TDS (mg/L)
Value	145.60	0.00	100.80	0.47	37.20	231.28	84.91	40.51	165.70	0.00	0.00	83.44	109.45	2.57	1,620.00
DL	0.50	0.50	0.50	0.50	0.20	0.50	0.50	0.50	0.50	2.00	2.00	0.50	0.50	1.00	10

T3263058A

Sample and source description name: T3263058A

Sample date: 09/15/2023 Material type: Process wastewater Source of analysis: Lab Analysis pH: 0

	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 (mmhos/cm)	TDS (mg/L)
Value	159.60	0.00	109.20	0.17	33.50	173.19	75.10	32.93	192.61	0.00	0.00	101.13	106.11	2.64	1,760.00
DL	0.50	0.50	0.50	0.50	0.20	0.50	0.50	0.50	0.50	2.00	2.00	0.50	0.50	1.00	10

T3362082A

Sample and source description name:

T3362082A

Sample date:

12/22/2023

Material type:

Process wastewater

Source of analysis:

Lab Analysis

pH:

0

	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 (mmhos/cm)	TDS (mg/L)
Value	165.20	0.00	109.20	0.03	27.00	203.23	64.44	29.56	154.58	0.00	0.00	122.34	106.29	2.61	1,980.00
DL	0.50	0.50	0.50	0.50	0.20	0.50	0.50	0.50	0.50	2.00	2.00	0.50	0.50	1.00	10

C. FRESH WATER ANALYSES

Well #3

T3362067A

Sample and source description name:

T3362067A

Sample date:

12/27/2023

Source of analysis:

Lab Analysis

	Total N (mg/L)	NH4-N (mg/L)	Nitrate-N (mg/L)	Calcium (mg/L)	Magnes. (mg/L)	Sodium (mg/L)	Bicarb. (mg/L)	Carb. (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	EC (mmhos/cm)	TDS (mg/L)
Value	0.00	0.00	0.00	12.70	0.07	67.97	0.00	0.00	40.35	15.47	0.35	130.00
DL	0.50	0.50	0.50	0.50	0.50	0.50	2.00	2.00	0.50	0.50	1.00	10

D. SOIL ANALYSES

No soil analyses entered.

E. PLANT TISSUE ANALYSES

1 (R6) - 05/01/2023: Sudan

ATS-16090441A

Sample description: ATS-16090441A

Sample date: 09/29/2023 Source of analysis: Lab Analysis Method of reporting: Dry

Mositure: 0%

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total Salt (mg/kg)	TFS (%)
Value	16,440.00	4,830.00	22,300.00	0.22	25.80
DL	100.00	200.00	500.00		0.10

1 (R6) - 10/15/2022: Triticale

T3139031A

Sample description: T3139031A

Sample date: 05/15/2023 Source of analysis: Lab Analysis Method of reporting: Dry

Mositure: 0%

	Total N (mg/kg)	Total P (mg/kg)	Total K (mg/kg)	Total Salt (mg/kg)	TFS (%)
Value	14,000.00	3,100.00	44,000.00	0.03	0.00
DL	100.00	200.00	500.00		0.10

F. SUBSURFACE (TILE) DRAINAGE ANALYSES

No subsurface (tile) drainage analyses entered.

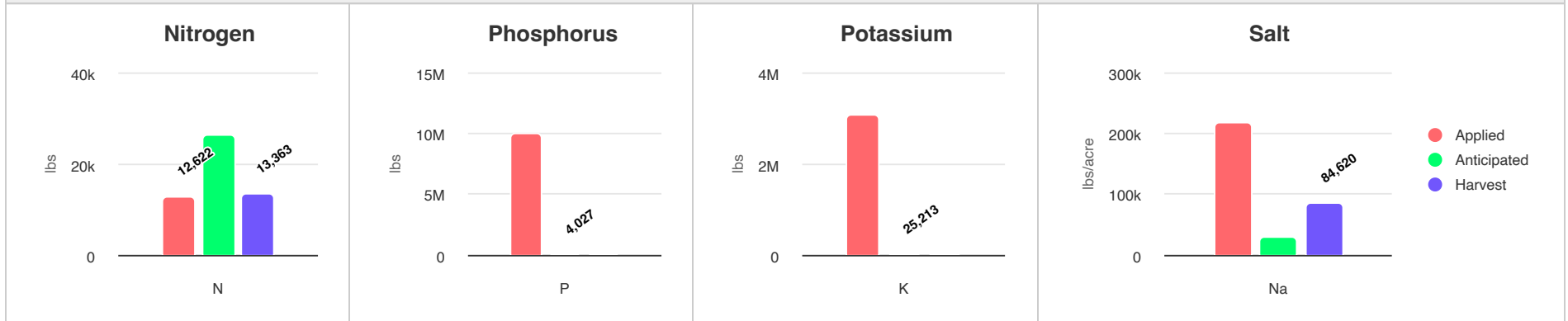
NUTRIENT APPLICATIONS, POTENTIAL REMOVAL, AND BALANCE

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

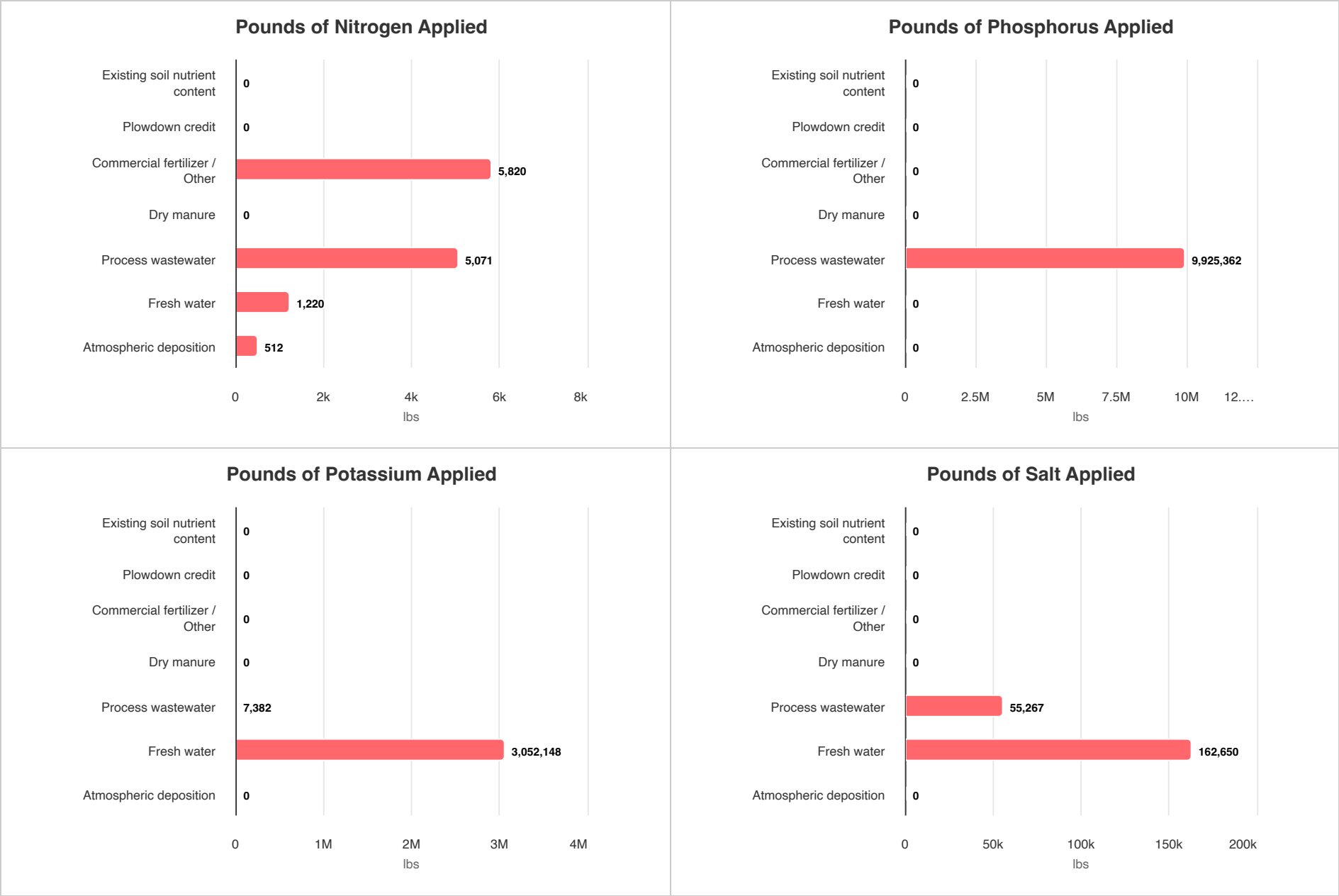
	Total N (lbs)	Total P (lbs)	Total K (lbs)	Total salt (lbs)
Existing soil nutrient content	0.00	0.00	0.00	0.00
Plowdown credit	0.00	0.00	0.00	0.00
Commercial fertilizer / Other	5,819.73	0.00	0.00	0.00
Dry manure	0.00	0.00	0.00	0.00
Process wastewater	5,071.02	9,925,361.54	7,381.81	609.34
Fresh water	1,219.71	0.00	3,052,148.27	3,389.31
Atmospheric deposition	511.56	0.00	0.00	0.00
Total nutrients applied	12,622.01	9,925,361.54	3,059,530.09	217,916.53
Anticipated crop nutrient removal	26,264.95	4,026.71	25,212.60	29,962.80
Actual crop nutrient removal	13,362.56	3,349.06	32,364.21	84,619.63
Nutrient balance	-740.54	9,922,012.49	3,027,165.88	133,296.90
Applied to removed ratio	0.94	2,963.63	94.53	2.58

B. POUNDS OF NUTRIENT APPLIED VS. CROP REMOVAL

Nutrient budgets in lbs/acre



C. POUNDS OF NUTRIENT APPLIED BY MATERIAL TYPE



EXCEPTION REPORTING

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

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

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

B. STORM WATER DISCHARGES

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

No stormwater discharges occurred during the reporting period.

C. LAND APPLICATION AREA TO SURFACE WATER DISCHARGES

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

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

NUTRIENT MANAGEMENT PLAN AND EXPORT AGREEMENT STATEMENTS
--

A. NUTRIENT MANAGEMENT PLAN STATEMENTS

Was the facility's NMP updated in the reporting period?	<u>Yes</u>
Was the facility's NMP developed by a certified nutrient management planner (specialist) as specified in Attachment C of the General Order?	<u>Yes</u>
Was the facility's NMP approved by a certified nutrient management planner (specialist) as specified in Attachment C of the General Order?	<u>Yes</u>

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?	<u>No</u>
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ADDITIONAL NOTES

A. NOTES

No notes entered for this annual report.

CERTIFICATION

A. OWNER AND/OR OPERATOR CERTIFICATION

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



SIGNATURE OF OWNER OF FACILITY

Manuel Rosa Jr.

PRINT OR TYPE NAME

6/29/2024

DATE



SIGNATURE OF OPERATOR OF FACILITY

Manuel Rosa Jr.

PRINT OR TYPE NAME

6/29/2024

DATE

REQUIRED 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 PDF/A 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.

Discharge Maps

Provide map(s) showing the discharge and sample locations for each discharge or release of waste to land areas (land application areas or otherwise) or surface water.

Discharge Lab Reports

Provide copies of laboratory analyses of all discharges (manure, process wastewater, or tailwater), surface water (upstream and downstream of a discharge), and storm water, including chain-of-custody forms and laboratory quality assurance/quality control results.

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.

Solid/Liquid Manure Tracking Manifest

Waste Generator Information:

Name: Manuel Rosa Jr.
Facility Name: Faial Farms Dairy
Facility Address: 13714 Stine Road
Facility City/State: Bakersfield, CA 93313

Contact:

Name: Manuel Rosa Jr.
Number: (661) 667-1016

Manure Hauler / Processor Information:

Name: Brachena Ag Services, Inc
Facility Address: 9442 Bear Mountain Blvd.
Facility City/State: Bakersfield, CA 93311

Contact:

Name: Fred Amirfar
Number: (661) 978-9321

Manure Destination Composting Facility

Destination Information:

Name: T/M Composting
Facility Address: 4322 Saco Rd,
Facility City/State: Bakersfield, CA

Contact:

Name: Trina Payne
Number: 800 995 8331

Dates Hauled / Transferred	Amount Hauled / Transferred	Units	Moisture %
Feb 1, 2023 - Feb, 28 2023	9,889	ton	71 %
Sep 1, 2023 - Sep, 30 2023	2,398	ton	65 %
Total	12,287		

If amount hauled / transferred is liquid, then a "Waste Water Agreement" is required in compliance with Land Application Specification C.2 of the General Order R5-2007-0035.

Does the operator have an agreement, and is a Waste Water Agreement on file with the RWQCD? NO

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

Signature of Owner:



Date:

12/30/2023

Signature of Hauler:



Date:

12/30/2023

**Denele Analytical, Inc.**

865 South Kilroy Avenue Turlock, CA 95380
Phone (209) 634-9055 - Fax (209) 634-9057
www.denelelabs.com

40 N. East Street, Woodland, CA 95776
Phone (530) 666-9056 - Fax (530) 666-9058

Compliance Analysis Report

Customer

Faial Farms
PO Box 456
Arvin, CA 93203

Grower**Consultant:**

Icon Ag
9530 Hageman Rd, Ste B. #292
Bakersfield, CA 93312

PURCHASE ORDER:

RECEIVED DATE: 12/28/23 12:00 PM
SUBMITTED BY: Courier
ANALYZED DATE: 1/3/24

Boron (B)
SOURCE: Well Water

Sample ID	Lab ID	Analyte	Method Ref	Result	Units
Well #3	T3362067A	Boron (B)	EPA 200.7	0.130	ppm

Laboratory Quality Control	LCS %	MS %	MSD %	RPD %
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The warranty of Denele Analytical is limited to the accuracy of the analyses of the samples as received. Denele Analytical assumes no responsibility for which the customer uses our test results, nor liability for any other warranties, express or implied. These terms and conditions shall supercede any conflicting terms and conditions submitted on customer purchase orders or other forms submitted for work.



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Compliance Analysis Report

Customer

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PO Box 456
Arvin, CA 93203

Grower

Consultant:

Icon Ag
9530 Hageman Rd, Ste B. #292
Bakersfield, CA 93312

PURCHASE ORDER:

RECEIVED DATE: 12/28/23 12:00 PM

SUBMITTED BY: Courier

ANALYZED DATE: 1/2/24

Irrigation /Ground Water (H14)

SOURCE: Well Water

Sample ID	Lab ID	Analyte	Method Ref	Result	Units
Well #3	T3362067A	Electrical Conductivity (EC)	EPA 120.1 and	0.349	mmhos/cm
		Bicarbonate Alkalinity (ALK-B)	SM 2320B-2011	100	mg/L
		Carbonate Alkalinity (Carb)	SM 2320B-2011	< 2.00	mg/L
		Sulfate (SO ₄)	EPA 375.2	40.4	mg/L
		Sodium (Na)	EPA 200.7	68.0	mg/L
		Ammonia Nitrogen (NH ₃ -N)	SM 4500-NH ₃ D,C	< 0.500	mg/L
		Magnesium (Mg)	EPA 200.7	< 0.500	mg/L
		Nitrate Nitrogen (NO ₃ -N)	EPA 353.2	< 0.140	mg/L
		Total Dissolved Solids (TDS)	SM 2540 C-1997 and	130	mg/L
		Calcium (Ca)	EPA 200.7	12.7	mg/L
		Chloride (Cl)	SM 4500-Cl D-2011	15.5	mg/L
		Soluble Salts (SALT-SOL)	Calculation	224	mg/L

Laboratory Quality Control	LCS %	MS %	MSD %	Sample mg/L	Dup mg/L	RPD %
Ammonia Nitrogen (NH ₃ -N)	90.6	95.8 (T3362012A)	94.0 (T3362012A)			1.89
Calcium (Ca)	98.8	103 (W4002001A)	109 (W4002001A)			5.58
Chloride (Cl)	106	110 (W4002001A)	108 (W4002001A)			1.91
Magnesium (Mg)	107	88.2 (W4002001A)	93.5 (W4002001A)			5.85
Nitrate Nitrogen (NO ₃ -N)	103	96.7 (W4002001A)	95.2 (W4002001A)			1.58
Sodium (Na)	104	112 (W4002001A)	119 (W4002001A)			5.80
Sulfate (SO ₄)	102	111 (W4002001A)	108 (W4002001A)			3.31
Total Dissolved Solids (TDS)	105			130 (T3362071B)	135 (Dup)	3.77

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Compliance Analysis Report

Customer

Faial Farms
PO Box 456
Arvin, CA 93203

Grower**Consultant:**

Icon Ag
9530 Hageman Rd, Ste B. #292
Bakersfield, CA 93312

PURCHASE ORDER:

RECEIVED DATE: 12/28/23 12:00 PM
SUBMITTED BY: Courier
ANALYZED DATE: 1/2/24

Icon Sampling Fee (ISF)

SOURCE: Well Water

Sample ID	Lab ID	Analyte	Method Ref	Result	Units
Well #3	T3362067A	Icon Sampling Fee (ISF)	N/A	0.000	N/A

Laboratory Quality Control	LCS %	MS %	MSD %	RPD %
----------------------------	-------	------	-------	-------

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Compliance Analysis Report

Customer

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Grower**Consultant:**

Icon Ag
9530 Hageman Rd, Ste B. #292
Bakersfield, CA 93312

PURCHASE ORDER:

RECEIVED DATE: 12/28/23 12:00 PM
SUBMITTED BY: Courier
ANALYZED DATE: 1/10/24

pH (pH)

SOURCE: Well Water

Sample ID	Lab ID	Analyte	Method Ref	Result	Units
Well #3	T3362067A	pH (pH)	SM4500-H+ B-2000	7.9	S.U.

Laboratory Quality Control	LCS %	MS %	MSD %	RPD %
----------------------------	-------	------	-------	-------

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Compliance Analysis Report

Customer

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PO Box 456
Arvin, CA 93203

Grower**Consultant:**

Icon Ag
9530 Hageman Rd, Ste B. #292
Bakersfield, CA 93312

PURCHASE ORDER:

RECEIVED DATE: 12/28/23 12:00 PM
SUBMITTED BY: Courier
ANALYZED DATE: 1/4/24

Total Nitrogen (TN)
SOURCE: Well Water

Sample ID	Lab ID	Analyte	Method Ref	Result	Units
Well #3	T3362067A	Total Nitrogen (TN)	SM 4500-NH3 D,C	< 1.50	%

Laboratory Quality Control	LCS %	MS %	MSD %	RPD %
----------------------------	-------	------	-------	-------

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Irrigation / Ground / Tile Water



9530 Hageman Rd. Ste B, #292 Bakersfield, CA 93312

Dominic Patino

☎ (661) 333-7776

☎ (661) 215-5168

✉ dpatino@iconaginc.com

Date

12-27-23

Sampled By

TONY

Lab Name

Dencle

Faial Farms Dairy

Ranch: Faial Farms Dairy

***Required Field Measurement

NH4-N ☒ Check here if performed

Analysis Types

W5 - Ag Suitability (Non-Compliance)

W2 - W1 + Ca, Mg, Na, Bicard, SO4, Cl, B

W4 - pH, SpCon, TDS, Ca, CO3, Ca, Mg, Na, K, SO4, Cl, B (Reg 3 comp)

W1 - EC, pH, NO3-N, TN, TDS, NH4-N*** (Reg 5 comp)

W3 - W2 + TP, NH4-N, Carb (tile drain)

Weather Conditions

SH - Sunny & Hot

CC - Cold & Cloudy

SW - Sunny & Warm

CCL - Cold & Clear

R - Rainy

1. Location:			
Analysis	Weather	Temp (°F)	# of Bags/Bottles
W2	CC	60	1

CHAIN Faial Farms Dairy

Well #3 W

Ranch: Faial Farms Dairy 11:50

Date: 12-27-23 am

IW 35.230057, -119.056445

2. Location:			
Analysis	Weather	Temp (°F)	# of Bags/Bottles

Place CHAIN Label Here

Place additional labels on sample bags/bottles

3. Location:			
Analysis	Weather	Temp (°F)	# of Bags/Bottles

Place CHAIN Label Here

Place additional labels on sample bags/bottles

4. Location:			
Analysis	Weather	Temp (°F)	# of Bags/Bottles

Place CHAIN Label Here

Place additional labels on sample bags/bottles

5. Location:			
Analysis	Weather	Temp (°F)	# of Bags/Bottles

Place CHAIN Label Here

Place additional labels on sample bags/bottles

6. Location:			
Analysis	Weather	Temp (°F)	# of Bags/Bottles

Place CHAIN Label Here

Place additional labels on sample bags/bottles

Chain of Custody Recording Log

	Signature	Company	Received Date/Time	Relinquished Date/Time	Laboratory Use Only	
1st	Antonio Vera	Icon Ag		12-27-23 3:00 pm	Logged in By:	Laboratory #
2nd	Dominic Patino	ICON Ag	12/28 5:130A	12/28 11:51A		
3rd	Albert Mottus Jr		12-28-23	12-28-23 10:15		
4th	Dencle		12-28-23 12:00		T3362067	