



Fontes Dairy Farms - Dairy 1

2023 Annual Report

<input checked="" type="checkbox"/> Report Form	<input type="checkbox"/> NA Attachment H
<input checked="" type="checkbox"/> Attachment A	<input type="checkbox"/> NA Attachment I
<input checked="" type="checkbox"/> Attachment B	<input type="checkbox"/> NA Attachment J
<input checked="" type="checkbox"/> Attachment C	<input checked="" type="checkbox"/> Manure Tracking Manifests
<input checked="" type="checkbox"/> Attachment D	<input type="checkbox"/> NA New or Revised Waste Water Agreements
<input checked="" type="checkbox"/> Attachment E	<input checked="" type="checkbox"/> Groundwater Monitoring Samples
<input checked="" type="checkbox"/> Attachment F	<input type="checkbox"/> NA Monitoring Well Report
<input checked="" type="checkbox"/> Attachment G	<input type="checkbox"/> NA Owner/Operator Change Form

Enclosed are the required documents to be submitted to the Regional Water Quality Control Board Central Valley Region in compliance with Order No. R5-2013-0122 Waste Discharge Requirements, General Order for Existing Milk Cow Dairies for July 1, 2024.

(See attached delivery confirmation)

Annual Report

Fontes Dairy Farms - Dairy 1 2023

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

Facility Information:

Name of Dairy Fontes Dairy Farms - Dairy 1
Facility Address 5512 W Davis Avenue, Riverdale CA 93656

Owner/Operator as of 12/31/2023

Operator Name Fontes Dairy Farms
Operator Phone (559) 867-6455
Owner Name Jim Fontes, Tony Fontes, Alice Poole, and Maria Schilling
Owner Phone (559) 867-6455

1. Beginning and end dates of the annual reporting period: crops harvested January 1, 2023 through December 31, 2023.
2. Maximum and average number and type of animals (see Attachment A).
3. Estimated amount of total manure and process wastewater generated by the facility (see Attachment A).
4. Estimated amount of total manure and process wastewater applied to each land application area (see Attachment B).
5. Quantified ratio of total nitrogen applied to land application areas and total nitrogen removed by crop harvest (see Attachment B).
6. Estimated amount of total manure and process wastewater transferred to other persons by the facility (see Attachment C).
7. Total number of acres and the Assessor Parcel Numbers for all land application areas that were not used for application of manure or process wastewater (see Attachment D).
8. Total number of acres and the Assessor Parcel Numbers for all land application areas that were used for land application of manure and process wastewater (see Attachment D).

9. Summary of manure and process wastewater discharges from the production area

Provide a summary of all manure and 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, that occurred during the annual reporting period, including the date, time, location, approximate volume, a map showing discharge and sample locations, rationale for sample locations, and method of measuring discharge flows:

- No discharges occurred during the reporting period.
 Yes. _____ Number of discharges occurred (see Attachment H).



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10. Summary of storm water discharges from the production area

Provide a summary of all storm water discharges from the production area to surface water, that occurred during the annual reporting period, including the date, time, approximate volume, duration, location, a map showing discharge and sample locations, rationale for sample locations, and method of measuring discharge flows:

- No discharges occurred during the reporting period.
 Yes. _____ Number of discharges occurred (see Attachment I).

11. Summary of discharges from the land application area

Provide a summary of all discharges from the land application area to surface water, that occurred during the annual reporting period, including the date, time, approximate volume, location, source of discharge (i.e. tailwater, wastewater or blended wastewater), a map showing discharge and sample locations, rationale for sample locations, and method of measuring discharge flows:

- No discharges occurred during the reporting period.
 Yes. _____ Number of discharges occurred (see Attachment J).

12. Nutrient Management Plan update

Has the NMP been updated, and if so, was it updated by a Certified Nutrient Management Specialist?

- No.
 Yes, the new NMP was developed and approved by a Certified Nutrient Management Specialist.

13. Manure/Process Wastewater Tracking Manifests

Did you sell, give away, or otherwise remove manure or process wastewater from your property?

- No.
 Yes, see attached manifests.

14. Written Agreements

Any process wastewater transferred to a third party that receives process wastewater from your dairy for its own use must have a written agreement consistent with State requirements. Attach copies of revised and/or new agreements not submitted previously. Do not resubmit agreements submitted previously.

- Not applicable; no written agreements.
 No changes in agreement(s).
 Yes, a new or revised agreement is attached.

15. Laboratory Analyses for Discharges

If you answered Yes to items #9, 10, or 11 above, attach copies of all laboratory analyses for 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, as applicable. (Results for Manure and process wastewater, storm water, and/or storm water are provided).

- Not Applicable.
 Yes, provided with Attachment H, I, or J for #9, 10 and 11, respectively.

16. Tabulated Nutrient Analytical Data

Attach tabulated analytical data for samples of manure, process wastewater, irrigation water, soil, and plant tissue. The data shall be tabulated to clearly show sample dates, constituents analyzed, constituent concentrations, and detection limits (see Attachment E).

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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
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17. Record-Keeping Results

Attach results of the Record-Keeping Requirements for the production and land application areas specified in Record-Keeping Requirements. These include:

- * Records documenting any corrective actions taken to correct deficiencies noted as a result of the inspections required in the Monitoring Requirements. Deficiencies not corrected in 30 days must be accompanied by an explanation of the factors preventing immediate correction.
- * Records of the date, time, and estimated volume of any overflow or bypass of the wastewater storage or conveyance structures.
- * Expected and actual crop yields (see Attachment F).
- * Identification of crop, acreage, and dates of planting and harvest for each field (see Attachment F).
- * Dates, locations, and approximate weight and moisture content of manure applied to each field (see Attachment B).
- * Dates, locations, and volume of process wastewater applied to each field (see Attachment B).
- * Whether precipitation occurred, or standing water was present at the time of manure and process wastewater applications and for 24 hours prior to and following applications (see Attachment G).
- * Total amount of nitrogen, phosphorus, and potassium actually applied to each field, including documentation of calculations for the total amount applied (see Attachment B).

18. Groundwater Monitoring Section

Groundwater monitoring results are attached.

Monitoring Well results are attached, if applicable.

A. All dischargers must attach groundwater information for supply wells and subsurface (tile) drainage systems including the location of sample collection and all field and laboratory data, including all laboratory analyses (including chain-of-custody forms and laboratory quality assurance/quality control results).

B. Dischargers who have monitoring well systems shall include all laboratory analyses (including chain-of-custody forms and laboratory quality assurance/quality control results) and tabular and graphical summaries of the monitoring data. Data shall be tabulated to clearly show the sample dates, constituents analyzed, constituent concentrations, detection limits, depth to groundwater and groundwater elevations. Graphical summaries of groundwater gradients and flow directions shall also be included. Each groundwater monitoring report shall include a summary data table for all historical and current groundwater elevations and analytical results. The groundwater monitoring results shall be certified by a California registered professional.

19. Storm Water Reporting Section

No significant discharges of storm water occurred from the land application areas.

Yes, significant discharge(s) of storm water occurred from land application areas. The following information shall be submitted for those discharges.

It was not possible to collect any of the required samples or perform visual observations due to adverse climatic conditions.

20. Mortality Management Practices

- * Dead cows are picked up and disposed of by rendering service.

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CENTRAL VALLEY REGION

"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."

DocuSigned by:



6D0EA7D385A41B
Signature of Operator of Facility

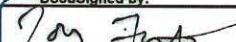
Fontes Dairy Farms

Print Name

6/25/2024

Title and Date

DocuSigned by:



6D0EA7D385A41B
Signature of Owner of Facility

Jim Fontes, Tony Fontes, Alice Poole, and Maria Schilling

Print Name

6/25/2024

Title and Date



INNOVATIVE AG SERVICES

Fontes Dairy Farms - Dairy 1 2023
Estimated Manure and Nutrients Generated (Attachment A)

Animal Type	Maximum No. of Head	Average No. of Head*	Housing Type	Weight	Total Manure Produced (tons/year)	NITROGEN	PHOSPHORUS	POTASSIUM	SALTS
						Net (LB) Available for Land Application			
Hol Milk Cows	600	585	Milk Flushed Lane	1,400	14,846.65	211,389.75	36,299.25	49,110.75	385,626.15
Hol Dry Cows	80	78	Flushed	1,450	1,138.19	14,235.00	1,992.90	9,395.10	20,088.43
Hol Heifers(15-24)	475	463	Dry Scrape	1,000	4,833.04	64,218.10	10,139.70	30,419.10	119,242.87
Hol Heifers (7-14)	400	390	Dry Scrape	750	3,750.74	37,011.00	6,263.40	21,352.50	47,082.26
Hol Calves (4-6)	65	63	Dry Scrape	300	218.45	3,219.30	919.80	1,839.60	1,508.47
	1,620	1,579			24,787.06	330,073.15	55,615.05	112,117.05	573,548.19

* The Average No. of Head is used to calculate manure and nutrient production

Estimated Amount of Total Process Wastewater and Nutrients Generated

Total Gallons of Process Wastewater Generated***	Average TKN Concentration (mg/L)*	Average Total Phosphorus Concentration (mg/L)*	Average Potassium Concentration (mg/L)*	Average Total Dissolved Solids (mg/L)*	Total Nitrogen Generated (lb)**	Total Phosphorus Generated (lb)**	Total Potassium Generated (lb)**	Total Salt Generated (lb)**
13,252,385	215.00	38.45	282.50	2,215.00	23,734.36	4,244.59	31,185.84	244,519.09

* The average Total Kjeldahl Nitrogen, Total Phosphorus, Total Potassium, and Total Salt concentrations are based on an average of all process wastewater sample results for the year.

** The total pounds of Nitrogen, Phosphorus, Potassium and Total Dissolved Solids generated = Average Concentration (mg/L) X Total Gallons of Wastewater Generated X 8.33 X 0.000001.

*** The total gallons of process wastewater generated is calculated as the total gallons of process wastewater applied to all land application areas (Attachment B) plus the total gallons of process wastewater transferred offsite (Attachment C).



Fontes Dairy Farms - Dairy 1 2023
Nutrient Applications (Attachment B)

Field Name: Burrel
 Almonds, 78 Acres Planted on 11/15/2017

Date	Event/Source	Amount Applied/Yield (per Acre) Units	Lab Sample Data				Manure Applied (Tons)	Wastewater Applied (Gallons)	Nitrogen Applied (Lbs)	Phosphorus Applied (Lbs)	Potassium Applied (Lbs)	Salt Applied (Lbs)	Nitrogen Extracted (Lbs)
01/01/2023	Atmospheric Deposit	14.00 Pounds	100.00	%					1,092				
02/15/2023	Ground Water: Well Avg	3.00 Acre Inches	5.70	mg/L					302	0	0	22,231	
03/07/2023	Ground Water: Well Avg	3.00 Acre Inches	5.70	mg/L					302	0	0	22,231	
04/13/2023	Ground Water: Well Avg	3.00 Acre Inches	5.70	mg/L					302	0	0	22,231	
05/15/2023	Fertilize - UN32	10.00 Gallons	32.00	0.00	0.00	%			2,079	0	0	0	
05/15/2023	Ground Water: Well Avg	3.00 Acre Inches	5.70	mg/L					302	0	0	22,231	
06/03/2023	Ground Water: Well Avg	3.00 Acre Inches	5.70	mg/L					302	0	0	22,231	
06/27/2023	Fertilize - UN32	10.00 Gallons	32.00	0.00	0.00	%			2,079	0	0	0	
06/27/2023	Ground Water: Well Avg	3.00 Acre Inches	5.70	mg/L					302	0	0	22,231	
07/19/2023	Ground Water: Well Avg	3.00 Acre Inches	5.70	mg/L					302	0	0	22,231	
08/11/2023	Ground Water: Well Avg	3.00 Acre Inches	5.70	mg/L					302	0	0	22,231	
08/30/2023	Fertilize - UN32	10.00 Gallons	32.00	0.00	0.00	%			2,079	0	0	0	
08/30/2023	Ground Water: Well Avg	3.00 Acre Inches	5.70	mg/L					302	0	0	22,231	
09/12/2023	Harvest	2.90 Tons	9.79	1.79	0.20	1.51 %							7,305
Acre Inches Applied:		27.00	Totals:						10,047	0	0	200,077	7,305
Season Nitrogen Ratio:		1.38	Lbs Per Acre:						129	0	0	2,565	94

Fontes Dairy Farms - Dairy 1 2023
Nutrient Applications (Attachment B)

Field Name: Chester1

Wheat, 76 Acres Planted on 11/01/2022

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data				Manure Applied (Tons)	Wastewater Applied (Gallons)	Nitrogen Applied (Lbs)	Phosphorus Applied (Lbs)	Potassium Applied (Lbs)	Salt Applied (Lbs)	Nitrogen Extracted (Lbs)
12/10/2022	Ground Water: Well Avg	5.90	Acre Inches	4.78		mg/L		484		0	0	0	34,485	
12/10/2022	Waste Water: Main Lagoon	0.47	Acre Inches	200.00	42.70	266.00	mg/L		969,952	1,616	345	2,149	31,672	
01/01/2023	Atmospheric Deposit	14.00	Pounds	100.00		%				1,064				
02/03/2023	Ground Water: Well Avg	5.90	Acre Inches	5.70		mg/L			578		0	0	42,599	
03/07/2023	Ground Water: Well Avg	5.90	Acre Inches	5.70		mg/L			578		0	0	42,599	
03/07/2023	Waste Water: Main Lagoon	0.47	Acre Inches	196.00	46.50	426.00	mg/L		969,952	1,584	375	3,442	22,380	
04/12/2023	Ground Water: Well Avg	5.90	Acre Inches	5.70		mg/L			578		0	0	42,599	
04/29/2023	Ground Water: Well Avg	5.90	Acre Inches	5.70		mg/L			578		0	0	42,599	
04/29/2023	Waste Water: Main Lagoon	0.47	Acre Inches	254.00	24.80	138.00	mg/L		969,952	2,052	201	1,115	10,908	
05/30/2023	Harvest	18.20	Tons	66.10	1.25	0.29	1.07 %							11,723
Acre Inches Applied:		30.91		Totals:				2,909,855	9,113	921	6,706	269,840	11,723	
Season Nitrogen Ratio:		0.78		Lbs Per Acre:				120	12	88	3,551	154		

Fontes Dairy Farms - Dairy 1 2023
Nutrient Applications (Attachment B)

Field Name: Chester1

Corn, 76 Acres Planted on 06/15/2023

Date	Event/Source	Amount Applied/Yield (per Acre) Units	Lab Sample Data				Manure Applied (Tons)	Wastewater Applied (Gallons)	Nitrogen Applied (Lbs)	Phosphorus Applied (Lbs)	Potassium Applied (Lbs)	Salt Applied (Lbs)	Nitrogen Extracted (Lbs)
06/04/2023	Ground Water: Well Avg	5.30 Acre Inches	5.70		mg/L			519	0	0	0	38,267	
06/30/2023	Ground Water: Well Avg	5.30 Acre Inches	5.70		mg/L			519	0	0	0	38,267	
06/30/2023	Waste Water: Main Lagoon	0.49 Acre Inches	254.00	24.80	138.00	mg/L	1,011,226	2,139	209	1,163	11,372		
07/11/2023	Ground Water: Well Avg	5.30 Acre Inches	5.70		mg/L			519	0	0	0	38,267	
07/29/2023	Ground Water: Well Avg	5.30 Acre Inches	5.70		mg/L			519	0	0	0	38,267	
07/29/2023	Waste Water: Main Lagoon	0.49 Acre Inches	229.00	43.20	310.00	mg/L	1,011,226	1,929	364	2,611	20,553		
08/16/2023	Ground Water: Well Avg	5.30 Acre Inches	5.70		mg/L			519	0	0	0	38,267	
08/30/2023	Ground Water: Well Avg	5.30 Acre Inches	5.70		mg/L			519	0	0	0	38,267	
08/30/2023	Waste Water: Main Lagoon	0.49 Acre Inches	229.00	43.20	310.00	mg/L	1,011,226	1,929	364	2,611	20,553		
09/10/2023	Ground Water: Well Avg	5.30 Acre Inches	5.70		mg/L			519	0	0	0	38,267	
09/10/2023	Waste Water: Main Lagoon	0.49 Acre Inches	229.00	43.20	310.00	mg/L	1,011,226	1,929	364	2,611	20,553		
09/21/2023	Harvest	29.40 Tons	70.70	0.90	0.31	1.18 %							11,785
Acre Inches Applied:		39.06	Totals:				4,044,905	11,560	1,301	8,997	340,900	11,785	
Season Nitrogen Ratio:		0.98	Lbs Per Acre:				152	17	118	4,486	155		

Fontes Dairy Farms - Dairy 1 2023

Nutrient Applications (Attachment B)

Field Name: Chester2

Alfalfa, 76 Acres Planted on 11/10/2019

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data				Manure Applied (Tons)	Wastewater Applied (Gallons)	Nitrogen Applied (Lbs)	Phosphorus Applied (Lbs)	Potassium Applied (Lbs)	Salt Applied (Lbs)	Nitrogen Extracted (Lbs)
12/17/2022	Ground Water: Well Avg	5.09	Acre Inches	4.78			mg/L			418	0	0	29,750	
12/17/2022	Waste Water: Main Lagoon	0.52	Acre Inches	200.00	42.70	266.00	mg/L		1,073,138	1,788	382	2,378	35,042	
01/01/2023	Atmospheric Deposit	14.00	Pounds	100.00			%			1,064				
02/07/2023	Ground Water: Well Avg	5.09	Acre Inches	5.70			mg/L			499	0	0	36,751	
03/20/2023	Ground Water: Well Avg	5.09	Acre Inches	5.70			mg/L			499	0	0	36,751	
03/20/2023	Waste Water: Main Lagoon	0.52	Acre Inches	196.00	46.50	426.00	mg/L		1,073,138	1,752	416	3,808	24,762	
04/27/2023	Ground Water: Well Avg	5.09	Acre Inches	5.70			mg/L			499	0	0	36,751	
05/26/2023	Ground Water: Well Avg	5.09	Acre Inches	5.70			mg/L			499	0	0	36,751	
06/19/2023	Ground Water: Well Avg	5.09	Acre Inches	5.70			mg/L			499	0	0	36,751	
07/27/2023	Ground Water: Well Avg	5.09	Acre Inches	5.70			mg/L			499	0	0	36,751	
08/30/2023	Ground Water: Well Avg	5.09	Acre Inches	5.70			mg/L			499	0	0	36,751	
09/27/2023	Ground Water: Well Avg	5.09	Acre Inches	5.70			mg/L			499	0	0	36,751	
10/16/2023	Ground Water: Well Avg	5.09	Acre Inches	5.70			mg/L			499	0	0	36,751	
11/20/2023	Harvest	8.60	Tons	11.60	3.17	0.33	1.68 %							36,631
Acre Inches Applied:		51.94		Totals:				2,146,276	9,508	797	6,186	420,309	36,631	
Season Nitrogen Ratio:		0.26		Lbs Per Acre:				125	10	81	5,530	482		

Fontes Dairy Farms - Dairy 1 2023
Nutrient Applications (Attachment B)

Field Name: Harold 75

Alfalfa, 76 Acres Planted on 11/18/2022

Date	Event/Source	Amount Applied/Yield (per Acre) Units	Lab Sample Data				Manure Applied (Tons)	Wastewater Applied (Gallons)	Nitrogen Applied (Lbs)	Phosphorus Applied (Lbs)	Potassium Applied (Lbs)	Salt Applied (Lbs)	Nitrogen Extracted (Lbs)
12/17/2022	Ground Water: Well Avg	5.09 Acre Inches	4.78		mg/L			418	0	0	29,750		
01/01/2023	Atmospheric Deposit	14.00 Pounds	100.00		%			1,064					
02/07/2023	Ground Water: Well Avg	5.09 Acre Inches	5.70		mg/L			499	0	0	36,751		
03/20/2023	Ground Water: Well Avg	5.09 Acre Inches	5.70		mg/L			499	0	0	36,751		
04/27/2023	Ground Water: Well Avg	5.09 Acre Inches	5.70		mg/L			499	0	0	36,751		
05/26/2023	Ground Water: Well Avg	5.09 Acre Inches	5.70		mg/L			499	0	0	36,751		
06/19/2023	Ground Water: Well Avg	5.09 Acre Inches	5.70		mg/L			499	0	0	36,751		
07/27/2023	Ground Water: Well Avg	5.09 Acre Inches	5.70		mg/L			499	0	0	36,751		
08/30/2023	Ground Water: Well Avg	5.09 Acre Inches	5.70		mg/L			499	0	0	36,751		
09/27/2023	Ground Water: Well Avg	5.09 Acre Inches	5.70		mg/L			499	0	0	36,751		
10/16/2023	Ground Water: Well Avg	5.09 Acre Inches	5.70		mg/L			499	0	0	36,751		
11/20/2023	Harvest	8.70 Tons	10.90	3.01	0.33	1.67 %							35,465
Acre Inches Applied:		50.90	Totals:						5,969	0	0	360,505	35,465
Season Nitrogen Ratio:		0.17	Lbs Per Acre:						79	0	0	4,743	467

Fontes Dairy Farms - Dairy 1 2023
Nutrient Applications (Attachment B)

Field Name: Homeplace1

Alfalfa, 147 Acres Planted on 11/01/2021

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data				Manure Applied (Tons)	Wastewater Applied (Gallons)	Nitrogen Applied (Lbs)	Phosphorus Applied (Lbs)	Potassium Applied (Lbs)	Salt Applied (Lbs)	Nitrogen Extracted (Lbs)
12/17/2022	Ground Water: Well Avg	5.09	Acre Inches	4.78		mg/L		808		0	0	0	57,543	
12/17/2022	Waste Water: Main Lagoon	0.52	Acre Inches	200.00	42.70	266.00	mg/L		2,075,675	3,457	738	4,600	67,779	
01/01/2023	Atmospheric Deposit	14.00	Pounds	100.00		%				2,058				
02/07/2023	Ground Water: Well Avg	5.09	Acre Inches	5.70		mg/L			964		0	0	71,083	
03/20/2023	Ground Water: Well Avg	5.09	Acre Inches	5.70		mg/L			964		0	0	71,083	
03/20/2023	Waste Water: Main Lagoon	0.52	Acre Inches	196.00	46.50	426.00	mg/L		2,075,675	3,388	804	7,366	47,894	
04/27/2023	Ground Water: Well Avg	5.09	Acre Inches	5.70		mg/L			964		0	0	71,083	
05/26/2023	Ground Water: Well Avg	5.09	Acre Inches	5.70		mg/L			964		0	0	71,083	
06/19/2023	Ground Water: Well Avg	5.09	Acre Inches	5.70		mg/L			964		0	0	71,083	
07/27/2023	Ground Water: Well Avg	5.09	Acre Inches	5.70		mg/L			964		0	0	71,083	
08/30/2023	Ground Water: Well Avg	5.09	Acre Inches	5.70		mg/L			964		0	0	71,083	
09/27/2023	Ground Water: Well Avg	5.09	Acre Inches	5.70		mg/L			964		0	0	71,083	
10/16/2023	Ground Water: Well Avg	5.09	Acre Inches	5.70		mg/L			964		0	0	71,083	
11/20/2023	Harvest	8.75	Tons	9.44	3.30	0.37	2.99 %							76,878
Acre Inches Applied:		51.94		Totals:				4,151,349	18,391	1,542	11,966	812,966	76,878	
Season Nitrogen Ratio:		0.24		Lbs Per Acre:				125	10	81	5,530	523		

Fontes Dairy Farms - Dairy 1 2023
Nutrient Applications (Attachment B)

Field Name: Homeplace2

Wheat, 42 Acres Planted on 11/14/2022

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data					Manure Applied (Tons)	Wastewater Applied (Gallons)	Nitrogen Applied (Lbs)	Phosphorus Applied (Lbs)	Potassium Applied (Lbs)	Salt Applied (Lbs)	Nitrogen Extracted (Lbs)
				% Moist.	Nitrogen	Phos.	Potass.	Units							
12/03/2022	Corral Solids: Main Corral	10.00	Tons	60.20	2.14	0.78	3.94	%	420		7,154	2,604	13,172	0	
01/01/2023	Atmospheric Deposit	14.00	Pounds		100.00			%			588				
01/25/2023	Ground Water: Well Avg	5.20	Acre Inches		5.70			mg/L			281	0	0	20,748	
02/21/2023	Ground Water: Well Avg	5.20	Acre Inches		5.70			mg/L			281	0	0	20,748	
03/19/2023	Ground Water: Well Avg	5.20	Acre Inches		5.70			mg/L			281	0	0	20,748	
04/29/2023	Ground Water: Well Avg	5.20	Acre Inches		5.70			mg/L			281	0	0	20,748	
05/30/2023	Harvest	20.98	Tons	65.80	1.29	0.28	1.06	%							7,775
Acre Inches Applied:		20.80							Totals:	420	8,868	2,604	13,172	82,994	7,775
Season Nitrogen Ratio:		1.14							Lbs Per Acre:		211	62	314	1,976	185

Fontes Dairy Farms - Dairy 1 2023

Nutrient Applications (Attachment B)

Field Name: Homeplace2

Corn, 44 Acres Planted on 06/15/2023

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data				Manure Applied (Tons)	Wastewater Applied (Gallons)	Nitrogen Applied (Lbs)	Phosphorus Applied (Lbs)	Potassium Applied (Lbs)	Salt Applied (Lbs)	Nitrogen Extracted (Lbs)
06/02/2023	Corral Solids: Main Corral	5.00	Tons	39.20	0.53	0.19	0.17 %	220		1,423	519	466	0	
06/27/2023	Ground Water: Well Avg	4.90	Acre Inches		5.70		mg/L			278	0	0	20,482	
07/12/2023	Fertilize - UN32	20.00	Gallons		32.00	0.00	0.00 %			2,346	0	0	0	
07/12/2023	Ground Water: Well Avg	4.90	Acre Inches		5.70		mg/L			278	0	0	20,482	
07/31/2023	Ground Water: Well Avg	5.30	Acre Inches		5.70		mg/L			301	0	0	22,154	
08/19/2023	Fertilize - UN32	20.00	Gallons		32.00	0.00	0.00 %			2,346	0	0	0	
08/19/2023	Ground Water: Well Avg	5.30	Acre Inches		5.70		mg/L			301	0	0	22,154	
09/07/2023	Ground Water: Well Avg	5.30	Acre Inches		5.70		mg/L			301	0	0	22,154	
09/21/2023	Harvest	27.20	Tons	69.80	0.82	0.29	1.05 %							5,949
Acre Inches Applied:		25.70		Totals:				220		7,572	519	466	107,428	5,949
Season Nitrogen Ratio:		1.27		Lbs Per Acre:						172	12	11	2,442	135

Fontes Dairy Farms - Dairy 1 2023
Nutrient Applications (Attachment B)

Field Name: Homeplace3

Wheat, 70 Acres Planted on 11/20/2022

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data					Manure Applied (Tons)	Wastewater Applied (Gallons)	Nitrogen Applied (Lbs)	Phosphorus Applied (Lbs)	Potassium Applied (Lbs)	Salt Applied (Lbs)	Nitrogen Extracted (Lbs)
				% Moist.	Nitrogen	Phos.	Potass.	Units							
10/27/2022	Corral Solids: Main Corral	10.00	Tons	60.20	2.14	0.78	3.94	%	700		11,924	4,341	21,953	0	
11/08/2022	Ground Water: Well Avg	4.30	Acre Inches		4.78			mg/L			325	0	0	23,149	
01/01/2023	Atmospheric Deposit	14.00	Pounds		100.00			%			980				
02/26/2023	Ground Water: Well Avg	5.09	Acre Inches		5.70			mg/L			459	0	0	33,849	
03/11/2023	Ground Water: Well Avg	5.09	Acre Inches		5.70			mg/L			459	0	0	33,849	
04/10/2023	Ground Water: Well Avg	5.09	Acre Inches		5.70			mg/L			459	0	0	33,849	
05/10/2023	Harvest	17.90	Tons	61.30	1.29	0.23	0.76	%							12,510
Acre Inches Applied:		19.57							Totals:	700	14,606	4,341	21,953	124,697	12,510
Season Nitrogen Ratio:		1.17							Lbs Per Acre:		209	62	314	1,781	179

Fontes Dairy Farms - Dairy 1 2023
Nutrient Applications (Attachment B)

Field Name: Homeplace3

Corn, 73 Acres Planted on 06/15/2023

Date	Event/Source	Amount Applied/Yield (per Acre) Units	Lab Sample Data					Manure Applied (Tons)	Wastewater Applied (Gallons)	Nitrogen Applied (Lbs)	Phosphorus Applied (Lbs)	Potassium Applied (Lbs)	Salt Applied (Lbs)	Nitrogen Extracted (Lbs)
05/27/2023	Corral Solids: Main Corral	8.00 Tons	39.20	0.53	0.19	0.17	%	584		3,778	1,378	1,236	0	
06/03/2023	Ground Water: Well Avg	5.35 Acre Inches		5.70			mg/L			504	0	0	37,103	
07/01/2023	Fertilize - UN32	20.00 Gallons		32.00	0.00	0.00	%			3,892	0	0	0	
07/01/2023	Ground Water: Well Avg	5.35 Acre Inches		5.70			mg/L			504	0	0	37,103	
07/25/2023	Ground Water: Well Avg	5.35 Acre Inches		5.70			mg/L			504	0	0	37,103	
08/11/2023	Fertilize - UN32	20.00 Gallons		32.00	0.00	0.00	%			3,892	0	0	0	
08/11/2023	Ground Water: Well Avg	5.35 Acre Inches		5.70			mg/L			504	0	0	37,103	
09/05/2023	Ground Water: Well Avg	5.35 Acre Inches		5.70			mg/L			504	0	0	37,103	
09/21/2023	Harvest	28.00 Tons	70.40	0.84	0.30	1.06	%							10,189
Acre Inches Applied:		26.75						Totals:	584	14,080	1,378	1,236	185,515	10,189
Season Nitrogen Ratio:		1.38						Lbs Per Acre:	193	19	17	2,541	140	

Fontes Dairy Farms - Dairy 1 2023
Nutrient Applications (Attachment B)

Field Name: McClurg 20

Wheat, 20 Acres Planted on 11/14/2022

Date	Event/Source	Amount Applied/Yield (per Acre)	Lab Sample Data					Manure Applied (Tons)	Wastewater Applied (Gallons)	Nitrogen Applied (Lbs)	Phosphorus Applied (Lbs)	Potassium Applied (Lbs)	Salt Applied (Lbs)	Nitrogen Extracted (Lbs)	
			Units	% Moist.	Nitrogen	Phos.	Potass.								
10/27/2022	Corral Solids: Main Corral	10.00 Tons		60.20	2.14	0.78	3.94	%	200		3,407	1,240	6,272	0	
11/03/2022	Ground Water: Well Avg	4.30 Acre Inches			4.78			mg/L			93	0	0	6,614	
01/01/2023	Atmospheric Deposit	14.00 Pounds			100.00			%			280				
02/20/2023	Ground Water: Well Avg	5.09 Acre Inches			5.70			mg/L			131	0	0	9,671	
03/11/2023	Ground Water: Well Avg	5.09 Acre Inches			5.70			mg/L			131	0	0	9,671	
04/10/2023	Ground Water: Well Avg	5.09 Acre Inches			5.70			mg/L			131	0	0	9,671	
05/30/2023	Harvest	19.20 Tons		66.40	1.25	0.28	1.06	%						3,226	
Acre Inches Applied:		19.57						Totals:	200		4,173	1,240	6,272	35,628	3,226
Season Nitrogen Ratio:		1.29						Lbs Per Acre:			209	62	314	1,781	161

Fontes Dairy Farms - Dairy 1 2023 Nutrient Applications (Attachment B)

Field Name: McClurg 20

Corn, 20 Acres Planted on 06/15/2023

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data				Manure Applied (Tons)	Wastewater Applied (Gallons)	Nitrogen Applied (Lbs)	Phosphorus Applied (Lbs)	Potassium Applied (Lbs)	Salt Applied (Lbs)	Nitrogen Extracted (Lbs)
				% Moist.	Nitrogen	Phos.	Potass.							
06/05/2023	Corral Solids: Main Corral	11.00	Tons	39.20	0.53	0.19	0.17	%	220	1,423	519	465	0	
06/08/2023	Ground Water: Well Avg	5.35	Acre Inches		5.70			mg/L		138	0	0	10,165	
07/01/2023	Fertilize - UN32	20.00	Gallons	32.00	0.00	0.00	0.00	%		1,066	0	0	0	
07/01/2023	Ground Water: Well Avg	5.35	Acre Inches		5.70			mg/L		138	0	0	10,165	
07/25/2023	Ground Water: Well Avg	5.35	Acre Inches		5.70			mg/L		138	0	0	10,165	
08/11/2023	Fertilize - UN32	20.00	Gallons	32.00	0.00	0.00	0.00	%		1,066	0	0	0	
08/11/2023	Ground Water: Well Avg	5.35	Acre Inches		5.70			mg/L		138	0	0	10,165	
09/05/2023	Ground Water: Well Avg	5.35	Acre Inches		5.70			mg/L		138	0	0	10,165	
10/04/2023	Harvest	27.70	Tons	69.90	0.95	0.29	1.16	%						3,178
Acre Inches Applied:		26.75		Totals:					220	4,246	519	465	50,826	3,178
Season Nitrogen Ratio:		1.34		Lbs Per Acre:					212	26	23	2,541	159	

Fontes Dairy Farms - Dairy 1 2023
Nutrient Applications (Attachment B)

Field Name: McClurg 35
 Alfalfa, 37 Acres Planted on 12/15/2019

Date	Event/Source	Amount Applied/Yield (per Acre) Units	Lab Sample Data				Manure Applied (Tons)	Wastewater Applied (Gallons)	Nitrogen Applied (Lbs)	Phosphorus Applied (Lbs)	Potassium Applied (Lbs)	Salt Applied (Lbs)	Nitrogen Extracted (Lbs)
12/17/2022	Ground Water: Well Avg	5.09 Acre Inches	4.78		mg/L			204	0	0	14,484		
01/01/2023	Atmospheric Deposit	14.00 Pounds	100.00		%			518					
02/07/2023	Ground Water: Well Avg	5.09 Acre Inches	5.70		mg/L			243	0	0	17,892		
03/20/2023	Ground Water: Well Avg	5.09 Acre Inches	5.70		mg/L			243	0	0	17,892		
04/27/2023	Ground Water: Well Avg	5.09 Acre Inches	5.70		mg/L			243	0	0	17,892		
05/26/2023	Ground Water: Well Avg	5.09 Acre Inches	5.70		mg/L			243	0	0	17,892		
06/19/2023	Ground Water: Well Avg	5.09 Acre Inches	5.70		mg/L			243	0	0	17,892		
07/27/2023	Ground Water: Well Avg	5.09 Acre Inches	5.70		mg/L			243	0	0	17,892		
08/30/2023	Ground Water: Well Avg	5.09 Acre Inches	5.70		mg/L			243	0	0	17,892		
09/27/2023	Ground Water: Well Avg	5.09 Acre Inches	5.70		mg/L			243	0	0	17,892		
10/16/2023	Ground Water: Well Avg	5.09 Acre Inches	5.70		mg/L			243	0	0	17,892		
11/20/2023	Harvest	9.00 Tons	8.33	3.42	0.29	1.62	%						20,880
Acre Inches Applied:		50.90	Totals:					2,906	0	0	175,509	20,880	
Season Nitrogen Ratio:		0.14	Lbs Per Acre:					79	0	0	4,743	564	

Fontes Dairy Farms - Dairy 1 2023

Nutrient Applications (Attachment B)

Summary of Nutrient Applications, Removal, and Balance

	<u>Total N (Lbs)</u>	<u>Total P (Lbs)</u>	<u>Total K (Lbs)</u>	<u>Total Salts (Lbs)</u>	<u>Total Manure Applied</u>	
Solid Manure	29,109.23	10,601.03	43,564.65	0.00	2,344.00	tons
Process Wastewater	23,562.75	4,561.51	33,855.32	313,468.91	13,252,384.57	gallons
Irrigation Water	38,813.92					
Fertilizer / Total Imports	20,845.38					
Atmospheric Deposition	8,708.00					
Total Nitrogen Applied	121,039.28					
Crop Nitrogen Removal	243,494.87					
Nitrogen Balance	(122,455.59)					
Nitrogen Ratio	0.50					

- Nutrient applications shown in Attachment B are on a crop year basis.
 - Lab sample data results for applications are based on the sample taken closest to the application date. Lab sample data results are shown on 100% dry basis for manure applications and harvest events.
 - Well Avg: Irrigation source representing the average nutrient values of all irrigation wells sampled for the facility during the reporting year.
- ** Book Value: No sample data results were available. For manure applications and plant tissue harvests, the calculations were based off book values.



Fontes Dairy Farms - Dairy 1 2023

Nutrient Applications (Attachment B)

FIELD NITROGEN RATIO Calculation:

"Field Nitrogen Ratio" = "Total Nitrogen Applied to Field" / "Total Nitrogen Extracted from Field at Harvest"

ATMOSHERIC DEPOSITION Applied (lbs) Calculation:

"Nitrogen Applied (Lbs)" = "14 Lbs (per year) * "Acres Planted"

HARVEST Nitrogen Extraction (Lbs) Calculation:

"Nitrogen Extracted (Lbs)" = ("Yield" (tons per acre) * 2000) * ((100 - "% Moisture") / 100 * "Lab Sample Data Nitrogen Value" / 100) * "Acres Planted"

IRRIGATION Nitrogen and Salts Applied (Lbs) Calculations:

"Nitrogen Applied (Lbs)" = "Lbs Applied per Acre" (see below) * ("Lab Sample Data Nitrogen Value" * 0.000001) * "Acres Planted"

"Salts Applied (Lbs)" = "Lbs Applied per Acre" (see below) * ("Lab Sample Data TDS Value" * 0.000001) * "Acres Planted"

PROCESS WASTEWATER Nitrogen, Phosphorus, Potassium and Salts Applied (Lbs) Calculations:

"Nitrogen Applied (Lbs)" = "Lbs Applied per Acre" (see below) * ("Lab Sample Data Nitrogen Value" * 0.000001) * "Acres Planted"

"Phosphorus Applied (Lbs)" = "Lbs Applied per Acre" (see below) * ("Lab Sample Data Phosphorus Value" * 0.000001) * "Acres Planted"

"Potassium Applied (Lbs)" = "Lbs Applied per Acre" (see below) * ("Lab Sample Data Potassium Value" * 0.000001) * "Acres Planted"

"Salt Applied (Lbs)" = "Lbs Applied per Acre" (see below) * ("Lab Sample Data TDS Value" * 0.000001) * "Acres Planted"

SOLID MANURE (Corral, Separator, or Compost) Nitrogen, Phosphorus, Potassium and Salts Applied (Lbs) Calculations:

"Nitrogen Applied (Lbs)" = "Lbs Applied per Acre" (see below) * ((100 - "% Moisture")/100 * "Lab Sample Data Nitrogen Value"/100) * "Acres Planted"

"Phosphorus Applied (Lbs)" = "Lbs Applied per Acre" (see below) * ((100 - "% Moisture")/100 * "Lab Sample Data Phosphorus Value"/100) * "Acres Planted"

"Potassium Applied (Lbs)" = "Lbs Applied per Acre" (see below) * ((100 - "% Moisture")/100 * "Lab Sample Data Potassium Value"/100) * "Acres Planted"

"Salt Applied (Lbs)" = "Lbs Applied per Acre" (see below) * ((100 - "% Moisture")/100 * "Lab Sample Data Ash Value"/100) * "Acres Planted"

"Lbs Applied per Acre" Calculations:

If "Application Units" = Tons, Then "Lbs Applied per Acre" = "Application Amount" (per Acre) * 2000

If "Application Units" = Acres Inches, Then "Lbs Applied per Acre" = "Application Amount" (per Acre) * 8.33 *27,154.3

If "Application Units" = Acre Feet, Then Lbs Applied per Acre" = "Application Amount" (per Acre) * 8.33 * 325,851

If "Application Units" = Gallons, Then "Lbs Applied per Acre" = "Application Amount" (per Acre) * 8.33

Fontes Dairy Farms - Dairy 1 2023
Estimated Manure and Process Wastewater/Nutrients Transferred Off-Site (Attachment C)

A. ESTIMATED TOTAL MANURE TRANSFERRED OFFSITE

Total Manure Exported (tons)*	Total Nitrogen Exported (lbs)**	Total Phosphorus Exported (lbs)**	Total Potassium Exported (lbs)**	Total Salts Exported (lbs)**
912	5,897.12	2,150.45	1,928.76	0.00

* The Total Manure (tons) should be calculated as the sum of all manure transferred offsite as reported in all the Manure/Process Wastewater Tracking Manifests for the reporting period.

** Total (N, P, K, Salts) (lbs) = Sum of (N, P, K, Salts) for each manure export event based on (Manure(tons) x 2000lb/ton) x ((100-moisture%)/100) x (N, P, K, and Ash) Concentration (%, dry weight) / 100 using the samples closest in date to the export event.

B. ESTIMATED TOTAL PROCESS WASTEWATER TRANSFERRED OFFSITE

Total Process Wastewater Exported (gal)*	Total Nitrogen Exported (lbs)**	Total Phosphorus Exported (lbs)**	Total Potassium Exported (lbs)**	Total TDS Exported (lbs)**

* The Total Manure (gals) should be calculated as the sum of all manure transferred offsite as reported in all the Manure/Process Wastewater Tracking Manifests for the reporting period.

** Total (Nitrogen, Phosphorus, Potassium, TDS) (lbs) = Sum of (Nitrogen, Phosphorus, Potassium, TDS) for each wastewater export event based on (Process Wastewater(gals) x 8.33lb/gal) x (NO₃-N or TKN, P, K, TDS) x 10-6 using the samples closest in date to the export event.

Fontes Dairy Farms - Dairy 1 2023
Land Application Area Description Technical Report (Attachment D)

Field Name	Assessor Parcel Number(s)	Acres	Type of Waste Applied
Burrel	x041 x110 x03S xxxx	78	None
Chester1	x053 x070 x14S xxxx	76	Process Wastewater
Chester2	x053 x070 x14S xxxx	76	Process Wastewater
Harold 75	x055 x021 x60S xxxx, x055 x021 x65S xxxx	76	None
Homeplace1	x053 x070 x12S xxxx	147	Process Wastewater
Homeplace2	x053 x070 x12S xxxx	44	Manure
Homeplace3	x053 x070 x12S xxxx	73	Manure
McClurg 20	x055 x021 x37S xxxx	20	Manure
McClurg 35	x055 x021 x52S xxxx	37	None
			627

Production Area APN(s): x053 x070 x12S xxxx

Fontes Dairy Farms - Dairy 1 2023
Lab Results Summary (Attachment E)

Process Wastewater

(mg/l/ppm unless noted otherwise)

Sample Date:	TKN	TP	TK	EC (umhos/cm)	NH4N	NO3N	TDS	pH (units)	General Minerals						
									CA	MG	NA	HCO3	CO3	SO4	CL
03/09/2023	196.00	46.50	426.00	4,180	103.00		2,770.00								
06/16/2023	254.00	24.80	138.00	2,030	47.00	0.01	1,350.00	7.32							
07/14/2023	229.00	43.20	310.00	3,670	49.30		2,440.00								
11/09/2023	181.00	39.30	256.00	3,460	176.00		2,300.00								
Averages:	215.00	38.45	282.50	3,335	93.82	0.01	2,215.00	7.32							

Manure - Corral Solids

(Dry Weight Basis)

Sample Date:	TN	TP	TK	Moisture	Ash	CA	MG	NA	S	CL
06/06/2023	0.53	0.19	0.17	39.20						%
11/09/2023	1.30	0.58	1.20	34.60						%
Averages:	0.92	0.39	0.69	36.90						

Plant Tissue

(Dry Weight Basis)

Field:	Crop #:	Crop	Sample Date:	TN (lbs/ton)	TP (lbs/ton)	TK (lbs/ton)	Moisture (%)	Ash (%)
Burrel	1	Almonds	09/12/2023	35.80	3.92	30.20	9.79	10.30
Chester1	1	Wheat	05/30/2023	25.00	5.80	21.40	66.10	7.12

Fontes Dairy Farms - Dairy 1 2023
Lab Results Summary (Attachment E)

Plant Tissue

(Dry Weight Basis)

Field:	Crop #:	Crop	Sample Date:	TN (lbs/ton)	TP (lbs/ton)	TK (lbs/ton)	Moisture (%)	Ash (%)
Chester1	2	Corn	09/21/2023	18.00	6.16	23.60	70.70	7.07
Chester2	1	Alfalfa	11/20/2023	63.40	6.58	33.60	11.60	10.70
Harold 75	1	Alfalfa	11/20/2023	60.20	6.68	33.40	10.90	11.00
Homeplace1	1	Alfalfa	11/20/2023	66.00	7.36	59.80	9.44	12.30
Homeplace2	1	Wheat	05/30/2023	25.80	5.66	21.20	65.80	6.94
Homeplace2	2	Corn	09/21/2023	16.46	5.80	21.00	69.80	6.43
Homeplace3	1	Wheat	05/10/2023	25.80	4.66	15.30	61.30	8.93
Homeplace3	2	Corn	09/21/2023	16.84	6.00	21.20	70.40	6.72
McClurg 20	1	Wheat	05/30/2023	25.00	5.50	21.20	66.40	6.94
McClurg 20	2	Corn	10/04/2023	19.06	5.78	23.20	69.90	6.01
McClurg 35	1	Alfalfa	11/20/2023	68.40	5.78	32.40	8.33	10.30

Well / Irrigation Water

(mg/l/ppm unless noted otherwise)

	Sample Date:	NO3N	TP	EC (umhos/cm)	NH4N *	TDS	TN	General Minerals					
								CA	MG	NA	HCO3	CO3	SO4
Dairy													
FDW1	12/08/2023	2.90		591									



INNOVATIVE AG SERVICES

Fontes Dairy Farms - Dairy 1 2023
Lab Results Summary (Attachment E)

Well / Irrigation Water

(mg/l/ppm unless noted otherwise)

	Sample Date:	NO3N	TP	EC (umhos/cm)	NH4N *	TDS	TN	General Minerals					
								CA	MG	NA	HCO3	CO3	SO4
Dairy													
	Averages:	2.90		591									
Domestic													
DW #4	12/08/2023	0.00		491									
FDW2	12/08/2023	10.20		889									
Mc Clurg Dom	12/08/2023	8.70		514									
	Averages:	6.30		631									

Fontes Dairy Farms - Dairy 1 2023
Lab Results Summary (Attachment E)

Well / Irrigation Water

(mg/l/ppm unless noted otherwise)

	Sample Date:	NO3N	TP	EC (umhos/cm)	NH4N *	TDS	TN	General Minerals					
								CA	MG	NA	HCO3	CO3	SO4
Irrigation													
Burrel IW1								Out of service.					
Burrel IW2								Did not run.					
Chester IW								Out of service.					
Chester IWB	11/17/2023	5.70		607		420.00	6.50						
DIW								Did not run.					
IW1								Did not run.					
IW2								Out of service.					
IW3								Out of service.					
IW2B								Did not run.					
IW3B								Did not run.					
Mc Clurg N								Did not run.					
Mc Clurg S								Did not run.					
Averages:		5.70		607		420.00	6.50						

* NH4N was non-detectable unless a value is shown

Fontes Dairy Farms - Dairy 1 2023
Planting and Harvest Information (Attachment F)

Crop #	Crop	Acres Planted	Plant Date	Harvest Date	Estimated Yield (tons)	Tons Harvested	Actual Yield
Field: Burrel							
	1 Almonds	78	11/15/2017	09/12/2023	3.0	226.2	2.9
Field: Chester1							
	1 Wheat	76	11/01/2022	05/30/2023	18.0	1383.2	18.2
	2 Corn	76	06/15/2023	09/21/2023	28.7	2234.4	29.4
Field: Chester2							
	1 Alfalfa	76	11/10/2019	11/20/2023	9.0	653.6	8.6
Field: Harold 75							
	1 Alfalfa	76	11/18/2022	11/20/2023	9.3	661.2	8.7
Field: Homeplace1							
	1 Alfalfa	147	11/01/2021	11/20/2023	8.0	1286.2	8.8
Field: Homeplace2							
	1 Wheat	42	11/14/2022	05/30/2023	21.6	881.2	21.0
	2 Corn	44	06/15/2023	09/21/2023	26.9	1196.8	27.2
Field: Homeplace3							
	1 Wheat	70	11/20/2022	05/10/2023	17.3	1253.0	17.9
	2 Corn	73	06/15/2023	09/21/2023	27.8	2044.0	28.0
Field: McClurg 20							
	1 Wheat	20	11/14/2022	05/30/2023	19.6	384.0	19.2
	2 Corn	20	06/15/2023	10/04/2023	28.1	554.0	27.7
Field: McClurg 35							
	1 Alfalfa	37	12/15/2019	11/20/2023	9.4	333.0	9.0

Fontes Dairy Farms - Dairy 1 2023
Weather Data (Attachment G)

Day	January	February	March	April	May	June	July	August	September	October	November	December
1	None	None	Light	None	None	None	None	None	None	None	None	None
2	Light	None	None	None	None	None	None	None	None	None	None	None
3	None	None	None	None	None	None	None	None	None	None	None	None
4	Light	None	None	None	None	None	None	None	None	None	None	None
5	Heavy	None	Light	None	None	None	None	None	None	None	None	None
6	Light	None	Light	None	None	None	None	None	None	None	None	None
7	None	None	None	None	None	None	None	None	None	None	None	None
8	None	None	None	None	None	None	None	None	None	None	None	None
9	Light	None	Light	None	None	None	None	None	None	None	None	None
10	Light	None	Light	None	None	None	None	None	None	None	None	None
11	None	None	None	None	None	None	None	None	None	None	None	None
12	SWP	None	None	None	None	None	None	None	None	None	None	None
13	Light	None	None	None	None	None	None	None	None	None	None	None
14	SWP	None	None	None	None	None	None	None	None	None	None	None
15	Light	None	Heavy	None	None	None	None	None	None	None	None	None
16	Light	None	None	None	None	None	None	None	None	None	None	None
17	None	None	None	None	None	None	None	None	None	None	None	None
18	None	None	None	None	None	None	None	None	None	None	None	None
19	None	None	Heavy	None	None	None	None	None	None	None	None	Light
20	None	None	None	None	None	None	None	None	None	None	None	SWP
21	None	None	Heavy	None	None	None	None	None	None	None	None	None
22	None	None	Light	None	None	None	None	None	None	None	None	None
23	None	None	None	None	None	None	None	None	None	None	None	None
24	None	SWP	None	None	None	None	None	None	None	None	None	None
25	None	SWP	None	None	None	None	None	None	None	None	None	None
26	None	None	None	None	None	None	None	None	None	None	None	None
27	None	Light	None	None	None	None	None	None	None	None	None	None
28	None	None	Light	None	None	None	None	None	None	None	None	None
29	Light	None	None	None	None	None	None	None	None	None	None	Light
30	None	None	None	None	None	None	None	None	None	None	None	SWP
31	None	None	None	None	None	None	None	None	None	None	None	None

*Note: SWP = Standing Water Present



INNOVATIVE AG SERVICES

ATTACHMENT D

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

Instructions:

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

Operator Information:				
Name of Operator: <u>Fontes Dairy Farms</u>				
Name of Dairy Facility: <u>Fontes Dairy Farms - Dairy 1</u>				
Facility Address: <u>5512 W Davis Avenue</u>		Riverdale, CA	93656	
Number and Street		City	Zip Code	
Contact Person Name and Phone Number: <u>Tony Fontes</u>		<u>Name</u>	<u>559-867-6455</u> <u>Phone Number</u>	
Manure/Process Wastewater Hauler Information:				
Name of Hauling Company/Person: <u>MLT Soil Supplements, Inc.</u>				
Address of Hauling Company /Person: <u>PO. Box 992</u>		Riverdale, CA	93656	
Number and Street		City	Zip Code	
Contact Person: <u>Lindsey Thomas</u>		<u>(559) 906-1406</u>	<u>Phone Number</u>	
Destination Information:				
Composting Facility / Broker / Farmer / Other (identify) _____ (please circle one)				
Contact information of Composting Facility, Broker, Farmer, or Other (as identified above):				
Name	Number and Street	City	Zip Code	Phone Number
Manure/Process Wastewater Destination Address or Assessor's Parcel Number:				
Elkhorn Ranch				
Number and Street	City	Zip Code	Assessor's Parcel Number	
Dates Hauled: <u>4/15/2023</u>				
Amount Hauled:				
Enter the amount of manure hauled in tons or cubic yards (indicate the units used), the manure solids content (if amount reported in tons) or manure density (if amount reported in cubic yards), and the method used to calculate the amount:				
Manure: <u>911.58</u> <u>Tons</u> or Cubic Yards (indicate which units used)				
Manure Solids Content (if amount reported in tons): <u>60.8% Corral Solids</u>				
Manure Density (if amount reported in cubic yards): _____				

Attachment D

D-2

Reissued Waste Discharge Requirements General Order No. R5-2013-0122
Existing Milk Cow Dairies

Method used to determine amount of manure: _____

Enter the amount of process wastewater hauled in gallons and the method used to determine the amount.

Process Wastewater: _____ Gallons

Method used to determine volume of process wastewater: _____

Written Agreement:

Does the Operator have a written agreement (in compliance with Land Application Specification E.3 of Reissued Waste Discharge Requirements General Order No. R5-2013-0122) with any party that receives process wastewater from the Operator for its own use? (please check one)

Yes No

If the answer is no, the Operator agrees to have such a written agreement with any such party for any process wastewater transferred after **31 December 2007** to such party.

_____ (Operator shall provide initials here to acknowledge this requirement).

Certification:

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

Operator's Signature:  DocuSigned by:
6D0EAE7D385A41B... Date: 6/25/2024

Hauler's Signature: _____ Date: _____

November 28, 2023

Lab No. : VI 2347826
Customer No. : 4018573
Reference : 42067

Innovative Ag Services, LLC
 1201 Delta View Road
 Suite 5
 Hanford, CA 93230

Laboratory Report

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

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

Case Narrative

This Case Narrative pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab No.	Matrix
Chester IWB	11/17/2023	11/17/2023	VI 2347826-001	AGW

Sampling and Receipt Information:

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

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

Test Summary

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

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

KD: JRD

Approved By **Kelly A. Dunnahoo, B.S.**  Digitally signed by Kelly A. Dunnahoo, B.S.
 Title: Laboratory Director
 Date: 2023-11-28

November 28, 2023

Innovative Ag Services, LLC
 1201 Delta View Road
 Suite 5
 Hanford, CA 93230

Description : Chester IWB
 Project : 0086 Fontes Dairy #1

Lab No. : VI 2347826-001
 Customer No.: 4018573
 Reference : 42067
 Sampled On : November 17, 2023 at 09:50
 Sampled By : Zeke
 Received On : November 17, 2023 at 16:10
 Matrix : Ag Water

Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
							Date	Time	Who	Method	Date	Time	Who
Dairy Analysis													
Nitrogen, Total Kjeldahl	0.8	0.5	mg/L		1	1	11/21/2023	14:22	sta	EPA 351.2	11/25/2023	14:02	lcr
Nitrate Nitrogen	5.7	0.4	mg/L		1		11/22/2023	11:30	lfs	SM 4500-NO3 F	11/22/2023	13:53	lfs
Nitrogen, Total as Nitrogen	6.5	0.5	mg/L		1	1	11/21/2023	14:22	sta	Calc.	11/25/2023	14:02	lcr
Nitrate + Nitrite as N	5.7	0.4	mg/L		1		11/22/2023	11:30	lfs	SM 4500-NO3 F	11/22/2023	13:53	lfs
Kjeldahl Nitrogen	0.8	0.5	mg/L		1	1	11/21/2023	14:22	sta	EPA 351.2	11/25/2023	14:02	lcr
Conductivity	607	1	umhos/cm		1		11/27/2023	09:13	krh	SM 4500-H+B	11/27/2023	12:02	krh
Solids, Total Dissolved (TDS)	420	20	mg/L		1		11/20/2023	10:20	ctl	SM 2540 C	11/21/2023	12:00	ctl

DQF Flags Definition:

1 The MS/MSD did not meet QC criteria.

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

November 28, 2023

Innovative Ag Services, LLC
Lab No. : VI 2347826
Customer No. : 4018573
Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
E. C.	2320B	(VI 2347877-002)	Dup	umhos/cm		0.3%	5	
Solids, Total Dissolved	2540CE	11/20/2023:213202CTL (CH 2379794-001) (CH 2379794-001)	Blank LCS Dup Dup	mg/L mg/L mg/L mg/L	991.5	ND 102% 2.15% 1.67%	<20 90-110 5 5	
Nitrogen, Total Kjeldahl	351.2	11/21/2023:213242STA (VI 2347758-001) (VI 2347724-001)	Blank LCS MS MSD MSRPD MS MSD MSRPD	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	12.00 12.00 12.00 12.00 0.9% 12.00 12.00 0.4%	ND 82.1% 82.9% 82.1% 80.2% 79.8% 80.2% ≤20	<0.5 73-124 90-110 435 90-110 435 90-110 435 90-110 435 90-110 435 ≤20	
Nitrate + Nitrite as N	4500NO3F	11/22/2023:213299LFS (SP 2319413-001)	Blank LCS MS MSD MSRPD	mg/L mg/L mg/L mg/L mg/L	11.22 5.609 5.609 5.609 2.0%	ND 97.5% 95.7% 92.8% 2.0%	<0.4 80-120 66-125 66-125 ≤30.4	
Nitrate Nitrogen	4500NO3F	11/22/2023:213299LFS (SP 2319413-001)	Blank LCS MS MSD MSRPD	mg/L mg/L mg/L mg/L mg/L	11.22 5.609 5.609 5.609 2.0%	ND 97.5% 95.7% 92.8% 2.0%	<0.4 80-120 66-125 66-125 ≤30.4	

Definition

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

Explanation

- 435 : Sample matrix may be affecting this analyte. Data was accepted based on the LCS or CCV recovery.



Laboratory Analysis Work Order

Nº 42067

ID: # 0086

8.7°C ROT

ID#407

2347826

LABORATORY: FGL

SITE NAME: FONTE'S DAIRY #1

Billing: 1A5

Authorized Copy Release to:

Innovative Ag Services LLC

(559) 587-2800

ANALYSIS TO BE COMPLETED:

Irrigation/Ground Water (ELAP Standards)

W1 EC, NO₃N (Dom)

~~W2~~ EC, NO₃N, TDS, TN (Irr)

W3 NH₄-N (Ammonium)

W4 EC, NO₃N, Ca, Mg, Na, K, HCO₃, CO₃, SO₄S, Cl, TDS (Dom, GM)

W5 EC, NO₃N, TDS, TN, Ca, Mg, Na, HCO₃, CO₃, SO₄S, Cl (Irr, GM)

W6 NO₃N, NO₂ (Dom ILRP, Annually)

W7 Ca, Mg, Na, K, HCO₃, CO₃, SO₄, Cl + Lab Filtering (GWM)

W8 Other: _____

Process Waste Water (lagoon)

L1 EC, NH₄N, TKN, TP, TK, TDS (Quarterly)

L2 EC, NO₃N, NH₄N, TKN, TP, TK, TDS, pH (Annually)

L3 L1 + Ca, Mg, Na, HCO₃, CO₃, SO₄S, Cl (Biennially)

L4 Other: _____

Manure

M1 TN, TP, TK, %M (2/year)

M2 TN, TP, K, %M, Ca, Mg, Na, S, Cl, ash (Biennially)

M3 Other: _____

Soil

S1 SP%, pH, EC, Ca, Mg, Na, K, ESP, LP, B, NO₃N, PO₄P, K-AA, Zn, Mn, Fe, Cu, SO₄S

S2 S1 + CEC, CaCO₃, OM, C:N, TN

S3 NO₃N, NH₄N

S4 Other: _____

Plant Tissue

P1 TN, NO₃N, PO₄P, K (Mid Season - Wheat)

P2 TN, P, K (Mid-season - Corn)

P3 TN, TP, TK, Ash, %M (At Harvest)

P4 TN, %M

P5 % Moisture

P6 NIR

P7 Other: _____

Sample ID	Description	Analysis	Date/Time	Sampled by	IAS USE ONLY: FIELD TESTS		
					NH ₃ N*	pH	Temp
1 Chester 1WB	IRN	W2	11-17/9:50	ZLG			
2							
3							
4							
5							
6							
7							
8							

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

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

NOTES: _____

CHAIN OF CUSTODY RECORDING

	Signature	Company	Received Date & Time	Relinquished Date & Time
1 st		IAS		11-17-23 / 2:30
2 nd	ASB	FGL	11/17/23 1553	
3 rd	ASB	FGL		11/17/23 1610
4 th	ASB	FGL	11-17-2023 1610	
RELEASER: 6008		11-17-2023	1730	11-18-23
Logged In By: _____		Total Samples: _____	Laboratory #:	11-18-23

December 21, 2023

Lab No. : VI 2348354
Customer No. : 4018573
Reference : 42146

Innovative Ag Services, LLC
 1201 Delta View Road
 Suite 5
 Hanford, CA 93230

Laboratory Report

Introduction: This report package contains a total of 6 pages divided into 3 sections:

- | | | |
|-----------------|-----------|---|
| Case Narrative | (1 page) | : An overview of the work performed at FGL. |
| Sample Results | (4 pages) | : Results for each sample submitted. |
| Quality Control | (1 page) | : Supporting Quality Control (QC) results. |

Case Narrative

This Case Narrative pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab No.	Matrix
DW#4	12/08/2023	12/08/2023	VI 2348354-001	DW
FDW1	12/08/2023	12/08/2023	VI 2348354-002	DW
FDW2	12/08/2023	12/08/2023	VI 2348354-003	DW
McClurg Dom	12/08/2023	12/08/2023	VI 2348354-004	DW

Sampling and Receipt Information:

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

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

Test Summary

SM 4500-H+B	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
SM 4500-NO3 F	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)

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

KD: JRD

Approved By **Kelly A. Dunnahoo, B.S.**  Digitally signed by Kelly A. Dunnahoo, B.S.
 Title: Laboratory Director
 Date: 2023-12-22

December 21, 2023

Innovative Ag Services, LLC
 1201 Delta View Road
 Suite 5
 Hanford, CA 93230

Description : DW#4
 Project : 0086 Fontes Dairy Farms - Dairy #1

Lab No. : VI 2348354-001
 Customer No.: 4018573
 Reference : 42146
 Sampled On : December 8, 2023 at 10:40
 Sampled By : Zeke
 Received On : December 8, 2023 at 15:51
 Matrix : Drinking Water

Sample Results - Inorganic

Constituent	Result	RL	Units	MCL/AL	Dil.	DQF	Sample Preparation			Sample Analysis			
							Date	Time	Who	Method	Date	Time	Who
Dairy Analysis													
Nitrate Nitrogen	ND	0.4	mg/L	10	1	U	12/15/2023	13:00	lfs	SM 4500-NO3 F	12/15/2023	13:46	lfs
Conductivity	491	1	umhos/cm	1600 ²	1		12/13/2023	08:05	krh	SM 4500-H+B	12/13/2023	11:44	krh

DQF Flags Definition:

U Constituent results were non-detect.

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

MCL = Maximum Contamination Level. 2 - Secondary Standard. 3 - CDPH Notification Level. AL = Regulatory Action Level.

December 21, 2023

Innovative Ag Services, LLC
 1201 Delta View Road
 Suite 5
 Hanford, CA 93230

Description : FDW1
 Project : 0086 Fontes Dairy Farms - Dairy #1

Lab No. : VI 2348354-002
 Customer No.: 4018573
 Reference : 42146
 Sampled On : December 8, 2023 at 10:30
 Sampled By : Zeke
 Received On : December 8, 2023 at 15:51
 Matrix : Drinking Water

Sample Results - Inorganic

Constituent	Result	RL	Units	MCL/AL	Dil.	DQF	Sample Preparation			Sample Analysis			
							Date	Time	Who	Method	Date	Time	Who
Dairy Analysis													
Nitrate Nitrogen	2.9	0.4	mg/L	10	1		12/18/2023	10:00	lfs	SM 4500-NO3 F	12/18/2023	12:23	lfs
Conductivity	591	1	umhos/cm	1600 ²	1		12/13/2023	08:05	krh	SM 4500-H+B	12/13/2023	11:35	krh

DQF Flags Definition:

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

MCL = Maximum Contamination Level. 2 - Secondary Standard. 3 - CDPH Notification Level. AL = Regulatory Action Level.

December 21, 2023

Innovative Ag Services, LLC
 1201 Delta View Road
 Suite 5
 Hanford, CA 93230

Description : FDW2
 Project : 0086 Fontes Dairy Farms - Dairy #1

Lab No. : VI 2348354-003
 Customer No.: 4018573
 Reference : 42146
 Sampled On : December 8, 2023 at 10:25
 Sampled By : Zeke
 Received On : December 8, 2023 at 15:51
 Matrix : Drinking Water

Sample Results - Inorganic

Constituent	Result	RL	Units	MCL/AL	Dil.	DQF	Sample Preparation			Sample Analysis			
							Date	Time	Who	Method	Date	Time	Who
Dairy Analysis													
Nitrate Nitrogen	10.2	0.4	mg/L	10	1		12/19/2023	10:00	lfs	SM 4500-NO3 F	12/19/2023	13:54	lfs
Conductivity	889	1	umhos/cm	1600 ²	1		12/13/2023	08:05	krh	SM 4500-H+B	12/13/2023	09:51	krh

DQF Flags Definition:

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

MCL = Maximum Contamination Level. 2 - Secondary Standard. 3 - CDPH Notification Level. AL = Regulatory Action Level.

December 21, 2023

Innovative Ag Services, LLC
1201 Delta View Road
Suite 5
Hanford, CA 93230

Description : McClurg Dom
Project : 0086 Fontes Dairy Farms - Dairy #1

Lab No. : VI 2348354-004
Customer No.: 4018573
Reference : 42146
Sampled On : December 8, 2023 at 11:50
Sampled By : Zeke
Received On : December 8, 2023 at 15:51
Matrix : Drinking Water

Sample Results - Inorganic

Constituent	Result	RL	Units	MCL/AL	Dil.	DQF	Sample Preparation			Sample Analysis			
							Date	Time	Who	Method	Date	Time	Who
Dairy Analysis													
Nitrate Nitrogen	8.7	0.4	mg/L	10	1		12/15/2023	13:00	lfs	SM 4500-NO3 F	12/15/2023	14:16	lfs
Conductivity	514	1	umhos/cm	1600 ²	1		12/13/2023	08:05	krh	SM 4500-H+B	12/13/2023	09:53	krh

DQF Flags Definition:

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

MCL = Maximum Contamination Level. 2 - Secondary Standard. 3 - CDPH Notification Level. AL = Regulatory Action Level.

December 21, 2023

Innovative Ag Services, LLC
Lab No. : VI 2348354
Customer No. : 4018573
Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
E. C.	2320B	(SP 2320394-001) (CH 2379819-006)	Dup Dup	umhos/cm umhos/cm		0.3% 0.3%	5 5	
Nitrate Nitrogen	4500NO3F	12/15/2023:214153LFS (STK2356868-001)	Blank LCS MS MSD MSRPD	mg/L mg/L mg/L mg/L mg/L	11.22 5.609 5.609 5.609 0.6%	ND 95.6% 92.2% 93.9% ≤30.4	<0.4 80-120 66-125 66-125 ≤30.4	
	4500NO3F	12/18/2023:214226LFS (CC 2384499-009)	Blank LCS MS MSD MSRPD	mg/L mg/L mg/L mg/L mg/L	11.22 5.609 5.609 5.609 2.8%	ND 98.6% 99.6% 96.8% ≤30.4	<0.4 80-120 66-125 66-125 ≤30.4	
	4500NO3F	12/19/2023:214315LFS (SP 2320711-001)	Blank LCS MS MSD MSRPD	mg/L mg/L mg/L mg/L mg/L	11.22 5.609 5.609 5.609 0.0%	ND 97.6% 93.0% 93.1% ≤30.4	<0.4 80-120 66-125 66-125 ≤30.4	

Definition

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



Laboratory Analysis Work Order

Nº 42146

ID: # 0086

168°C ROI
ID#TH407

2348354

LABORATORY: FGL

SITE NAME: Fontes Dairy #1

Billing: IAS

ANALYSIS TO BE COMPLETED:

Irrigation/Ground Water (ELAP Standards)

W1 EC, NO₃N (Dom)W2 EC, NO₃N, TDS, TN (Irr)W3 NH₄-N (Ammonium)W4 EC, NO₃N, Ca, Mg, Na, K, HCO₃, CO₃, SO₄S, Cl, TDS (Dom, GM)W5 EC, NO₃N, TDS, TN, Ca, Mg, Na, HCO₃, CO₃, SO₄S, Cl (Irr, GM)W6 NO₃N, NO₂ (Dom ILRP, Annually)W7 Ca, Mg, Na, K, HCO₃, CO₃, SO₄, Cl + Lab Filtering (GWM)

W8 Other: _____

Plant Tissue

P1 TN, NO₃N, PO₄P, K (Mid Season - Wheat)

P2 TN, P, K (Mid-season - Corn)

P3 TN, TP, TK, Ash, %M (At Harvest)

P4 TN, %M

P5 % Moisture

P6 NIR

P7 Other: _____

Sample ID	Description	Analysis	Date/Time	Sampled by	IAS USE ONLY: FIELD TESTS		
					NH ₃ N *	pH	Temp
1 DW#4	Dom	W1	12-8 10:40	Zake			
2 FDW1	1	1	10:30				
3 FDW2	1	1	10:25				
4 McClung Dom	1	1	11:50				
5							
6							
7							
8							

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

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

NOTES: *12/8/23 15:35*

CHAIN OF CUSTODY RECORDING

	Signature	Company	Received Date & Time	Relinquished Date & Time
1 st	<i>E</i>	IAS		12-8-23 / 2:35
2 nd	<i>AB</i>	FGL	12/8/23 15:35	
3 rd	<i>AB</i>	FGL		12/8/23 15:51
4 th	<i>0098</i>	FGL	12-8-2023 1551	
Rel:				
LABORATORY USE ONLY Rec'd	GLS	12-8-2023	1730	Total Samples: _____
Logged In By:				Laboratory #: _____