



Milkaholic Dairy, LLC

2022 Annual Report

<input checked="" type="checkbox"/> Report Form	<input type="checkbox"/> Attachment H
<input checked="" type="checkbox"/> Attachment A	<input type="checkbox"/> Attachment I
<input checked="" type="checkbox"/> Attachment B	<input type="checkbox"/> Attachment J
<input checked="" type="checkbox"/> Attachment C	<input checked="" type="checkbox"/> Manure Tracking Manifests
<input checked="" type="checkbox"/> Attachment D	<input type="checkbox"/> 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"/> Monitoring Well Report
<input checked="" type="checkbox"/> Attachment G	<input type="checkbox"/> 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, 2023.

(See attached delivery confirmation)

Annual Report

Milkaholic Dairy, LLC 2023

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

Facility Information:

Name of Dairy	Milkaholic Dairy, LLC
Facility Address	6267 5th Ave, Hanford CA 93230

Owner/Operator as of 12/31/2023

Operator Name	Joe Mendes & Jacob de Jong
Operator Phone	(559) 587-1553
Owner Name	Steve Dias
Owner Phone	(559) 469-6674

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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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:

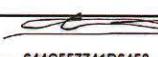


Jacob de Jong

B40BF2B32151472

Signature of Operator of Facility

DocuSigned by:



Steve Dias

644C557741D6458

Signature of Owner of Facility

Joe Mendes & Jacob de Jong

Print Name

6/24/2024

Title and Date

Steve Dias

Print Name

6/26/2024

Title and Date



INNOVATIVE AG SERVICES

Milkaholic Dairy, LLC 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			
Jer Milk Cows	1,325	1,291	Milk Freestall - SS	1,000	30,020.26	334,562.65	56,545.80	75,394.40	607,867.35
Jer Dry Cows	155	145	Flushed	1,100	1,912.10	19,053.00	2,646.25	12,702.00	26,462.50
Jer Heifers (15-24)	345	336	Flushed	700	3,176.22	46,603.20	7,358.40	22,075.20	87,074.40
Jer Heifers (7-14)	285	277	Flushed	600	2,527.49	26,287.30	4,044.20	15,165.75	33,364.65
Jer Calves (4-6)	115	112	Flushed	300	388.36	5,723.20	1,635.20	3,270.40	2,861.60
	2,225	2,161			38,024.43	432,229.35	72,229.85	128,607.75	757,630.50

* 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)**
43,699,789	381.25	53.20	573.25	4,295.00	138,782.34	19,365.82	208,674.03	1,563,462.6

* 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).

Milkaholic Dairy, LLC 2023
Nutrient Applications (Attachment B)

Field Name: Cardoza

Wheat, 78 Acres Planted on 10/29/2022

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)
10/02/2022	Ground Water: Well Avg	4.35	Acre Inches	11.67			mg/L			895	0	0	39,503	
10/02/2022	Waste Water: Main Lagoon	0.40	Acre Inches	406.00	96.00	453.00	mg/L			847,214	2,865	678	3,197	23,995
01/01/2023	Atmospheric Deposit	14.00	Pounds	100.00			%				1,092			
02/27/2023	Ground Water: Well Avg	4.50	Acre Inches	15.82			mg/L				1,256	0	0	45,916
02/27/2023	Waste Water: Main Lagoon	0.50	Acre Inches	435.00	62.10	741.00	mg/L			1,059,018	3,838	548	6,537	36,169
04/16/2023	Ground Water: Well Avg	4.80	Acre Inches	15.82			mg/L				1,339	0	0	48,978
04/16/2023	Waste Water: Main Lagoon	0.50	Acre Inches	435.00	62.10	741.00	mg/L			1,059,018	3,838	548	6,537	36,169
05/20/2023	Harvest	18.90	Tons	61.10	1.19	0.26	0.92 %							13,648
Acre Inches Applied:		15.05		Totals:				2,965,250	15,123	1,773	16,272	230,729	13,648	
Season Nitrogen Ratio:		1.11		Lbs Per Acre:				194	23	209	2,958	175		



Milkaholic Dairy, LLC 2023

Nutrient Applications (Attachment B)

Field Name: Cardoza

Corn, 78 Acres Planted on 06/29/2023

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)
06/07/2023	Ground Water: Well Avg	4.80	Acre Inches	15.82			mg/L		1,339	0	0	48,978		
06/07/2023	Waste Water: Main Lagoon	0.75	Acre Inches	213.00	23.90	163.00	mg/L		1,588,527	2,818	316	2,157	23,024	
07/13/2023	Ground Water: Well Avg	5.00	Acre Inches	15.82			mg/L		1,395	0	0	51,018		
07/24/2023	Ground Water: Well Avg	5.10	Acre Inches	15.82			mg/L		1,424	0	0	52,038		
07/24/2023	Waste Water: Main Lagoon	0.75	Acre Inches	376.00	76.80	715.00	mg/L		1,588,527	4,976	1,016	9,461	77,939	
08/14/2023	Ground Water: Well Avg	5.00	Acre Inches	15.82			mg/L		1,395	0	0	51,018		
08/26/2023	Ground Water: Well Avg	4.80	Acre Inches	15.82			mg/L		1,339	0	0	48,978		
08/26/2023	Waste Water: Main Lagoon	0.75	Acre Inches	376.00	76.80	715.00	mg/L		1,588,527	4,976	1,016	9,461	77,939	
09/15/2023	Ground Water: Well Avg	4.75	Acre Inches	15.82			mg/L		1,325	0	0	48,468		
10/12/2023	Harvest	28.40	Tons	64.30	1.32	0.28	0.67	%						20,877
Acre Inches Applied:		31.70		Totals:					4,765,580	20,987	2,349	21,080	479,400	20,877
Season Nitrogen Ratio:		1.01		Lbs Per Acre:					269	30	270	6,146	268	

Milkaholic Dairy, LLC 2023
Nutrient Applications (Attachment B)

Field Name: Clarence

Wheat, 75 Acres Planted on 11/09/2022

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)
10/12/2022	Ground Water: Well Avg	4.35	Acre Inches	11.67			mg/L			861	0	0	37,984	
10/12/2022	Waste Water: Main Lagoon	0.40	Acre Inches	406.00	96.00	453.00	mg/L		814,629	2,755	652	3,074	23,072	
01/01/2023	Atmospheric Deposit	14.00	Pounds	100.00			%			1,050				
03/06/2023	Ground Water: Well Avg	4.50	Acre Inches	15.82			mg/L			1,208	0	0	44,150	
03/06/2023	Waste Water: Main Lagoon	0.50	Acre Inches	435.00	62.10	741.00	mg/L		1,018,286	3,690	526	6,286	34,778	
04/18/2023	Ground Water: Well Avg	4.80	Acre Inches	15.82			mg/L			1,288	0	0	47,094	
04/18/2023	Waste Water: Main Lagoon	0.50	Acre Inches	435.00	62.10	741.00	mg/L		1,018,286	3,690	526	6,286	34,778	
05/20/2023	Harvest	17.90	Tons	60.20	1.15	0.22	0.88 %							12,290
Acre Inches Applied:		15.05		Totals:				2,851,202	14,541	1,705	15,646	221,855	12,290	
Season Nitrogen Ratio:		1.18		Lbs Per Acre:				194	23	209	2,958	164		

Milkaholic Dairy, LLC 2023
Nutrient Applications (Attachment B)

Field Name: Clarence

Corn, 75 Acres Planted on 06/19/2023

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)
06/06/2023	Ground Water: Well Avg	4.50	Acre Inches	15.82			mg/L			1,208	0	0	44,150	
06/06/2023	Waste Water: Main Lagoon	1.00	Acre Inches	213.00	23.90	163.00	mg/L		2,036,572	3,614	406	2,765	29,518	
07/10/2023	Ground Water: Well Avg	4.80	Acre Inches	15.82			mg/L			1,288	0	0	47,094	
07/21/2023	Ground Water: Well Avg	5.15	Acre Inches	15.82			mg/L			1,382	0	0	50,528	
07/21/2023	Waste Water: Main Lagoon	0.85	Acre Inches	376.00	76.80	715.00	mg/L		1,731,087	5,422	1,108	10,310	84,934	
08/13/2023	Ground Water: Well Avg	5.00	Acre Inches	15.82			mg/L			1,342	0	0	49,056	
08/22/2023	Ground Water: Well Avg	4.60	Acre Inches	15.82			mg/L			1,234	0	0	45,131	
08/22/2023	Waste Water: Main Lagoon	0.75	Acre Inches	376.00	76.80	715.00	mg/L		1,527,429	4,784	977	9,098	74,942	
09/16/2023	Ground Water: Well Avg	4.80	Acre Inches	15.82			mg/L			1,288	0	0	47,094	
10/04/2023	Harvest	27.80	Tons	69.40	1.23	0.25	1.03	%						15,695
Acre Inches Applied:		31.45		Totals:					5,295,088	21,560	2,491	22,173	472,447	15,695
Season Nitrogen Ratio:		1.37		Lbs Per Acre:					287	33	296	6,299	209	

**Milkaholic Dairy, LLC 2023
Nutrient Applications (Attachment B)**

Field Name: Felipe

Wheat, 76 Acres Planted on 11/02/2022

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)
10/10/2022	Ground Water: Well Avg	4.35	Acre Inches	11.67			mg/L			872	0	0	38,490	
10/10/2022	Waste Water: Main Lagoon	0.40	Acre Inches	406.00	96.00	453.00	mg/L		825,491	2,791	660	3,115	23,380	
01/01/2023	Atmospheric Deposit	14.00	Pounds	100.00			%			1,064				
03/06/2023	Ground Water: Well Avg	5.30	Acre Inches	15.82			mg/L			1,441	0	0	52,693	
03/06/2023	Waste Water: Main Lagoon	0.45	Acre Inches	435.00	62.10	741.00	mg/L		928,677	3,365	480	5,732	31,717	
04/10/2023	Ground Water: Well Avg	5.00	Acre Inches	15.82			mg/L			1,360	0	0	49,710	
04/10/2023	Waste Water: Main Lagoon	0.40	Acre Inches	435.00	62.10	741.00	mg/L		825,491	2,991	427	5,095	28,193	
05/20/2023	Harvest	18.20	Tons	60.30	1.22	0.25	0.86 %							13,399
Acre Inches Applied:		15.90		Totals:				2,579,658	13,885	1,568	13,942	224,183	13,399	
Season Nitrogen Ratio:		1.04		Lbs Per Acre:				183	21	183	2,950	176		

**Milkaholic Dairy, LLC 2023
Nutrient Applications (Attachment B)**

Field Name: Felipe

Corn, 76 Acres Planted on 06/20/2023

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)
06/07/2023	Ground Water: Well Avg	4.50	Acre Inches	15.82			mg/L			1,224	0	0	44,739	
06/07/2023	Waste Water: Main Lagoon	1.20	Acre Inches	213.00	23.90	163.00	mg/L	2,476,472	4,394	493	3,362	35,895		
07/13/2023	Ground Water: Well Avg	5.00	Acre Inches	15.82			mg/L			1,360	0	0	49,710	
07/24/2023	Ground Water: Well Avg	5.00	Acre Inches	15.82			mg/L			1,360	0	0	49,710	
07/24/2023	Waste Water: Main Lagoon	0.80	Acre Inches	376.00	76.80	715.00	mg/L	1,650,981	5,171	1,056	9,833	81,003		
08/14/2023	Ground Water: Well Avg	5.00	Acre Inches	15.82			mg/L			1,360	0	0	49,710	
08/26/2023	Ground Water: Well Avg	5.40	Acre Inches	15.82			mg/L			1,468	0	0	53,687	
08/26/2023	Waste Water: Main Lagoon	1.00	Acre Inches	376.00	76.80	715.00	mg/L	2,063,727	6,464	1,320	12,291	101,254		
09/16/2023	Ground Water: Well Avg	4.70	Acre Inches	15.82			mg/L			1,278	0	0	46,728	
10/12/2023	Harvest	27.00	Tons	65.40	1.30	0.27	0.73	%						18,460
Acre Inches Applied:			32.60					Totals:	6,191,180	24,078	2,870	25,487	512,436	18,460
Season Nitrogen Ratio: 1.30								Lbs Per Acre:		317	38	335	6,743	243

Milkaholic Dairy, LLC 2023
Nutrient Applications (Attachment B)

Field Name: Freitas

Wheat, 78 Acres Planted on 11/07/2022

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)
10/19/2022	Ground Water: Well Avg	4.00	Acre Inches	11.67		mg/L		824		0	0	36,325		
10/19/2022	Waste Water: Main Lagoon	0.60	Acre Inches	406.00	96.00	453.00	mg/L		1,270,821	4,298	1,016	4,795	35,992	
01/01/2023	Atmospheric Deposit	14.00	Pounds	100.00		%			1,092					
02/27/2023	Ground Water: Well Avg	4.80	Acre Inches	15.82		mg/L			1,339		0	0	48,978	
02/27/2023	Waste Water: Main Lagoon	0.55	Acre Inches	435.00	62.10	741.00	mg/L		1,164,919	4,221	603	7,191	39,785	
04/16/2023	Ground Water: Well Avg	4.70	Acre Inches	15.82		mg/L			1,312		0	0	47,958	
04/16/2023	Waste Water: Main Lagoon	0.44	Acre Inches	435.00	62.10	741.00	mg/L		931,936	3,377	482	5,752	31,829	
05/20/2023	Harvest	18.40	Tons	61.80	1.18	0.25	0.83 %							12,939
Acre Inches Applied:		15.09		Totals:				3,367,676	16,463	2,101	17,739	240,866	12,939	
Season Nitrogen Ratio:		1.27		Lbs Per Acre:				211	27	227	3,088	166		

Milkaholic Dairy, LLC 2023
Nutrient Applications (Attachment B)

Field Name: Freitas

Corn, 78 Acres Planted on 06/22/2023

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)
06/11/2023	Ground Water: Well Avg	5.00	Acre Inches	15.82			mg/L		1,395	0	0	51,018		
06/11/2023	Waste Water: Main Lagoon	1.20	Acre Inches	213.00	23.90	163.00	mg/L		2,541,642	4,510	506	3,451	36,839	
06/30/2023	Ground Water: Well Avg	5.00	Acre Inches	15.82			mg/L		1,395	0	0	51,018		
07/11/2023	Ground Water: Well Avg	5.10	Acre Inches	15.82			mg/L		1,424	0	0	52,038		
07/11/2023	Waste Water: Main Lagoon	0.75	Acre Inches	376.00	76.80	715.00	mg/L		1,588,527	4,976	1,016	9,461	77,939	
07/30/2023	Ground Water: Well Avg	5.00	Acre Inches	15.82			mg/L		1,395	0	0	51,018		
08/13/2023	Ground Water: Well Avg	5.00	Acre Inches	15.82			mg/L		1,395	0	0	51,018		
08/23/2023	Waste Water: Main Lagoon	0.75	Acre Inches	376.00	76.80	715.00	mg/L		1,588,527	4,976	1,016	9,461	77,939	
09/13/2023	Ground Water: Well Avg	4.50	Acre Inches	15.82			mg/L		1,256	0	0	45,916		
10/04/2023	Harvest	28.30	Tons	68.20	1.24	0.26	0.86	%					17,409	
Acre Inches Applied:		32.30		Totals:					5,718,696	22,722	2,539	22,374	494,745	17,409
Season Nitrogen Ratio:		1.31		Lbs Per Acre:					291	33	287	6,343	223	



Milkaholic Dairy, LLC 2023
Nutrient Applications (Attachment B)

Field Name: Home 1

Wheat, 10 Acres Planted on 10/27/2022

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)
10/10/2022	Ground Water: Well Avg	4.30	Acre Inches	11.67			mg/L			114	0	0	5,006	
10/10/2022	Waste Water: Main Lagoon	0.45	Acre Inches	406.00	96.00	453.00	mg/L		122,194	413	98	461	3,461	
01/01/2023	Atmospheric Deposit	14.00	Pounds	100.00			%			140				
02/18/2023	Ground Water: Well Avg	4.50	Acre Inches	15.82			mg/L			161	0	0	5,887	
02/18/2023	Waste Water: Main Lagoon	0.55	Acre Inches	435.00	62.10	741.00	mg/L		149,349	541	77	922	5,101	
04/23/2023	Ground Water: Well Avg	5.00	Acre Inches	15.82			mg/L			179	0	0	6,541	
04/23/2023	Waste Water: Main Lagoon	0.50	Acre Inches	435.00	62.10	741.00	mg/L		135,772	492	70	838	4,637	
05/20/2023	Harvest	18.20	Tons	60.20	1.23	0.26	0.91 %							1,782
Acre Inches Applied:		15.30		Totals:				407,314	2,040	245	2,221	30,632	1,782	
Season Nitrogen Ratio:		1.14		Lbs Per Acre:				204	25	222	3,063	178		



Milkaholic Dairy, LLC 2023
Nutrient Applications (Attachment B)

Field Name: Home 2

Wheat, 17 Acres Planted on 11/07/2022

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)
10/07/2022	Ground Water: Well Avg	4.50	Acre Inches	11.67			mg/L			202	0	0	8,907	
10/07/2022	Waste Water: Main Lagoon	0.43	Acre Inches	406.00	96.00	453.00	mg/L		198,498	671	159	749	5,622	
01/01/2023	Atmospheric Deposit	14.00	Pounds	100.00			%			238				
02/22/2023	Ground Water: Well Avg	4.90	Acre Inches	15.82			mg/L			298	0	0	10,897	
02/22/2023	Waste Water: Main Lagoon	0.50	Acre Inches	435.00	62.10	741.00	mg/L		230,812	836	119	1,425	7,883	
04/08/2023	Ground Water: Well Avg	5.10	Acre Inches	15.82			mg/L			310	0	0	11,342	
04/08/2023	Waste Water: Main Lagoon	0.55	Acre Inches	435.00	62.10	741.00	mg/L		253,893	920	131	1,567	8,671	
05/20/2023	Harvest	17.80	Tons	59.10	1.20	0.24	0.83 %							2,970
Acre Inches Applied:		15.98		Totals:					683,202	3,476	410	3,741	53,321	2,970
Season Nitrogen Ratio:		1.17		Lbs Per Acre:						204	24	220	3,137	175



**Milkaholic Dairy, LLC 2023
Nutrient Applications (Attachment B)**

Field Name: Toste

Corn, 80 Acres Planted on 04/12/2023

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.								
01/01/2023	Atmospheric Deposit	14.00	Pounds		100.00		%			1,120					
05/07/2023	Ground Water: Well Avg	4.60	Acre Inches		15.82		mg/L			1,317	0	0	48,140		
05/07/2023	Waste Water: Main Lagoon	0.52	Acre Inches		213.00	23.90	163.00	mg/L		1,129,619	2,004	225	1,534	16,373	
05/25/2023	Ground Water: Well Avg	5.00	Acre Inches		15.82		mg/L			1,431	0	0	52,326		
06/12/2023	Ground Water: Well Avg	4.82	Acre Inches		15.82		mg/L			1,379	0	0	50,442		
06/29/2023	Ground Water: Well Avg	5.10	Acre Inches		15.82		mg/L			1,460	0	0	53,373		
06/29/2023	Waste Water: Main Lagoon	0.55	Acre Inches		213.00	23.90	163.00	mg/L		1,194,789	2,120	238	1,622	17,318	
07/13/2023	Ground Water: Well Avg	4.70	Acre Inches		15.82		mg/L			1,346	0	0	49,187		
07/13/2023	Waste Water: Main Lagoon	0.50	Acre Inches		376.00	76.80	715.00	mg/L		1,086,172	3,402	695	6,469	53,292	
08/01/2023	Ground Water: Well Avg	4.80	Acre Inches		15.82		mg/L			1,374	0	0	50,234		
08/20/2023	Harvest	30.20	Tons	70.40	1.01	0.32	1.42	%						14,446	
Acre Inches Applied:		30.59						Totals:		3,410,580	16,952	1,158	9,625	390,685	14,446
Season Nitrogen Ratio:		1.17						Lbs Per Acre:		212	14	120	4,884	181	

**Milkaholic Dairy, LLC 2023
Nutrient Applications (Attachment B)**

Field Name: Yecny 1

Wheat, 37 Acres Planted on 11/19/2022

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.								
10/20/2022	Ground Water: Well Avg	4.00	Acre Inches		11.67					391	0	0	17,231		
10/20/2022	Waste Water: Main Lagoon	0.40	Acre Inches		406.00	96.00	453.00	mg/L		401,884	1,359	322	1,517	11,382	
01/01/2023	Atmospheric Deposit	14.00	Pounds		100.00			%			518				
02/17/2023	Ground Water: Well Avg	4.20	Acre Inches		15.82			mg/L			556	0	0	20,329	
02/17/2023	Waste Water: Main Lagoon	0.40	Acre Inches		435.00	62.10	741.00	mg/L		401,884	1,456	208	2,480	13,726	
04/21/2023	Ground Water: Well Avg	4.10	Acre Inches		15.82			mg/L			543	0	0	19,845	
05/20/2023	Harvest	22.10	Tons	60.70	1.17	0.25	0.82	%						7,520	
Acre Inches Applied:		13.10							Totals:	803,767	4,823	529	3,997	82,513	7,520
Season Nitrogen Ratio:		0.64							Lbs Per Acre:	130	14	108	2,230	203	

Milkaholic Dairy, LLC 2023

Nutrient Applications (Attachment B)

Field Name: Yecny 1

Corn, 37 Acres Planted on 06/17/2023

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)
06/01/2023	Ground Water: Well Avg	4.80	Acre Inches	15.82		mg/L			635	0	0	23,233	
06/01/2023	Waste Water: Main Lagoon	0.75	Acre Inches	213.00	23.90	163.00	mg/L	753,532	1,337	150	1,023	10,922	
07/13/2023	Ground Water: Well Avg	5.00	Acre Inches	15.82		mg/L			662	0	0	24,201	
07/24/2023	Ground Water: Well Avg	5.10	Acre Inches	15.82		mg/L			675	0	0	24,685	
07/24/2023	Waste Water: Main Lagoon	0.75	Acre Inches	376.00	76.80	715.00	mg/L	753,532	2,360	482	4,488	36,971	
08/14/2023	Ground Water: Well Avg	5.00	Acre Inches	15.82		mg/L			662	0	0	24,201	
08/26/2023	Ground Water: Well Avg	4.80	Acre Inches	15.82		mg/L			635	0	0	23,233	
08/26/2023	Waste Water: Main Lagoon	0.75	Acre Inches	376.00	76.80	715.00	mg/L	753,532	2,360	482	4,488	36,971	
09/15/2023	Ground Water: Well Avg	4.75	Acre Inches	15.82		mg/L			629	0	0	22,991	
10/04/2023	Harvest	28.00	Tons	68.20	1.18	0.26	0.90	%					7,775
Acre Inches Applied:		31.70		Totals:				2,260,595	9,956	1,114	9,999	227,408	7,775
Season Nitrogen Ratio:		1.28		Lbs Per Acre:				269	30	270	6,146	210	



Milkaholic Dairy, LLC 2023
Nutrient Applications (Attachment B)

Field Name: Yecny 2

Citrus, 37 Acres Planted on 07/03/2018

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)
07/15/2022	Surface Water: Kaweah	6.00	Acre Inches		0.00	mg/L			0	0	0	2,009	
08/13/2022	Surface Water: Kaweah	6.00	Acre Inches		0.00	mg/L			0	0	0	2,009	
09/14/2022	Ground Water: IW Yecny	6.00	Acre Inches		10.30	mg/L			517	0	0	27,970	
10/17/2022	Ground Water: IW Yecny	6.00	Acre Inches		10.30	mg/L			517	0	0	27,970	
11/08/2022	Ground Water: IW Yecny	6.00	Acre Inches		10.30	mg/L			517	0	0	27,970	
12/08/2022	Ground Water: IW Yecny	6.00	Acre Inches		10.30	mg/L			517	0	0	27,970	
01/01/2023	Atmospheric Deposit	14.00	Pounds		100.00	%			518				
02/12/2023	Surface Water: Kaweah	6.00	Acre Inches		0.00	mg/L			0	0	0	2,009	
03/10/2023	Harvest	5.00	Tons	**	1.15	0.20	1.48	%					4,255
Acre Inches Applied:		42.00		Totals:					2,587	0	0	117,905	4,255
Season Nitrogen Ratio:		0.61		Lbs Per Acre:					70	0	0	3,187	115

Milkaholic Dairy, LLC 2023
Nutrient Applications (Attachment B)

Field Name: Yecny 3

Almonds, 34 Acres Planted on 01/01/2020

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		%				476				
02/05/2023	Ground Water: Well Avg	4.20	Acre Inches	15.82		mg/L				511	0	0	18,681	
03/09/2023	Ground Water: Well Avg	4.35	Acre Inches	15.82		mg/L				529	0	0	19,348	
04/08/2023	Ground Water: Well Avg	4.80	Acre Inches	15.82		mg/L				584	0	0	21,349	
05/19/2023	Ground Water: Well Avg	4.90	Acre Inches	15.82		mg/L				596	0	0	21,794	
06/25/2023	Ground Water: Well Avg	5.00	Acre Inches	15.82		mg/L				608	0	0	22,239	
07/14/2023	Ground Water: Well Avg	4.90	Acre Inches	15.82		mg/L				596	0	0	21,794	
08/02/2023	Ground Water: Well Avg	4.70	Acre Inches	15.82		mg/L				572	0	0	20,905	
08/25/2023	Ground Water: Well Avg	4.60	Acre Inches	15.82		mg/L				560	0	0	20,460	
09/13/2023	Harvest	2.30	Tons	8.20	2.68	0.28	1.80	%						3,848
Acre Inches Applied:		37.45		Totals:						5,032	0	0	166,568	3,848
Season Nitrogen Ratio:		1.31		Lbs Per Acre:						148	0	0	4,899	113

**Milkaholic Dairy, LLC 2023
Nutrient Applications (Attachment B)**

Field Name: Yecny 4

Citrus, 36 Acres Planted on 05/27/2021

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)	
				% Moist.	Nitrogen	Phos.								
07/15/2022	Surface Water: Kaweah	6.00	Acre Inches		0.00				0	0	0	1,954		
08/13/2022	Surface Water: Kaweah	6.00	Acre Inches		0.00				0	0	0	1,954		
09/14/2022	Ground Water: IW Yecny	6.00	Acre Inches		10.30				503	0	0	27,214		
10/17/2022	Ground Water: IW Yecny	6.00	Acre Inches		10.30				503	0	0	27,214		
11/08/2022	Ground Water: IW Yecny	6.00	Acre Inches		10.30				503	0	0	27,214		
12/08/2022	Ground Water: IW Yecny	6.00	Acre Inches		10.30				503	0	0	27,214		
01/01/2023	Atmospheric Deposit	14.00	Pounds		100.00		%		504					
02/12/2023	Surface Water: Kaweah	6.00	Acre Inches		0.00				0	0	0	1,954		
03/10/2023	Harvest	5.20	Tons	**	1.15	0.20	1.48	%					4,306	
Acre Inches Applied:		42.00						Totals:		2,517	0	0	114,719	4,306
Season Nitrogen Ratio:		0.58						Lbs Per Acre:		70	0	0	3,187	120



**Milkaholic Dairy, LLC 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	0.00	0.00	0.00	0.00		tons
Process Wastewater	119,070.50	20,850.75	184,294.19	1,391,350.38	41,299,789.50	gallons
Irrigation Water	69,926.44					
Fertilizer / Total Imports	0.00					
Atmospheric Deposition	7,812.00					
Total Nitrogen Applied	196,808.94					
Crop Nitrogen Removal	171,617.38					
Nitrogen Balance	25,191.56					
Nitrogen Ratio	1.15					

- ▣ 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.



Milkaholic Dairy, LLC 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

Milkaholic Dairy, LLC 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)**
-------------------------------	---------------------------------	-----------------------------------	----------------------------------	------------------------------

* 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)**
2,400,000	4,258.30	477.81	3,258.70	34,786.08

* 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.

Milkaholic Dairy, LLC 2023
Land Application Area Description Technical Report (Attachment D)

Field Name	Assessor Parcel Number(s)	Acres	Type of Waste Applied
Cardoza	x014 x050 x016 xxxx	78	Process Wastewater
Clarence	x014 x050 x034 xxxx	75	Process Wastewater
Felipe	x014 x050 x018 xxxx	76	Process Wastewater
Freitas	x014 x050 x017 xxxx	78	Process Wastewater
Home 1	x014 x050 x013 xxxx	10	Process Wastewater
Home 2	x014 x050 x013 xxxx	17	Process Wastewater
Toste	x014 x050 x033 xxxx	80	Process Wastewater
Yecny 1	x014 x050 x010 xxxx	37	Process Wastewater
Yecny 2	x014 x050 x010 xxxx	37	None
Yecny 3	x014 x050 x010 xxxx	34	None
Yecny 4	x014 x050 x010 xxxx	36	None
		558	

Production Area APN(s): x014 x050 x013 x000



**Milkaholic Dairy, LLC 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	435.00	62.10	741.00	6,180	166.00		4,100.00								
06/16/2023	213.00	23.90	163.00	2,620	88.20	0.03	1,740.00	7.42							
07/14/2023	376.00	76.80	715.00	8,870	359.00		5,890.00								
11/09/2023	501.00	50.00	674.00	8,210	495.00		5,450.00								
Averages:	381.25	53.20	573.25	6,470	277.05	0.03	4,295.00	7.42							

Manure - Corral Solids

(Dry Weight Basis)

Sample Date:	TN	TP	TK	Moisture	Ash	CA	MG	NA	S	CL
06/08/2023	2.00	1.14	2.00	21.10						%
11/09/2023	1.83	0.71	2.11	40.10						%
Averages:	1.92	0.93	2.06	30.60						

Plant Tissue

(Dry Weight Basis)

Field:	Crop #:	Crop	Sample Date:	TN (lbs/ton)	TP (lbs/ton)	TK (lbs/ton)	Moisture (%)	Ash (%)
Cardoza	1	Wheat	05/20/2023	23.80	5.18	18.46	61.10	7.24
Cardoza	2	Corn	10/12/2023	26.40	5.50	13.36	64.30	7.45

**Milkaholic Dairy, LLC 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 (%)
Clarence	1	Wheat	05/20/2023	23.00	4.50	17.56	60.20	7.18
Clarence	2	Corn	10/04/2023	24.60	4.96	20.60	69.40	5.52
Felipe	1	Wheat	05/20/2023	24.40	5.06	17.12	60.30	7.00
Felipe	2	Corn	10/12/2023	26.00	5.34	14.56	65.40	5.60
Freitas	1	Wheat	05/20/2023	23.60	5.02	16.66	61.80	7.34
Freitas	2	Corn	10/04/2023	24.80	5.10	17.22	68.20	5.30
Home 1	1	Wheat	05/20/2023	24.60	5.14	18.24	60.20	7.38
Home 2	1	Wheat	05/20/2023	24.00	4.82	16.54	59.10	7.16
Toste	1	Corn	08/20/2023	20.20	6.34	28.40	70.40	6.99
Yecny 1	1	Wheat	05/20/2023	23.40	4.92	16.38	60.70	7.22
Yecny 1	2	Corn	10/04/2023	23.60	5.12	17.94	68.20	5.05
Yecny 2	1	Citrus		23.00	4.00	29.60	0.00	BV-W
Yecny 3	1	Almonds	09/13/2023	53.60	5.60	36.00	8.20	8.54
Yecny 4	1	Citrus		23.00	4.00	29.60	0.00	BV-W

BV-W: Book Value from Western Fertilizer Handbook, 9th Edition, Table 4-1 (As Received basis)

**Milkaholic Dairy, LLC 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	CA	General Minerals					
									MG	NA	HCO3	CO3	SO4	CL
Domestic														
Dairy Barn	12/11/2023	8.50			493									
Dom Austin	12/11/2023	8.60			502									
Dom Yency	12/11/2023	21.60			2,610									
Averages:		12.90			1,202									
Irrigation														
IW Cardoza	09/15/2023	20.00			475	700.00	20.00							
IW Felipe	09/15/2023	6.60			528	380.00	6.60							
IW Freitas	09/15/2023	8.80			563	410.00	8.80							
IW Home	12/04/2023	42.30			1,480	1,050.00	42.30							
IW Toste	12/11/2023	12.30			693	510.00	12.30							
IW Yecny #1								Did not run.						
IW Yecny #2	09/12/2023	4.90			688	420.00	4.90							
Averages:		15.82			738	578.33	15.82							
Surface Water														
Kaweah Delta (General)	06/28/2023	0.00			43	40.00	0.00							
Averages:		0.00			43	40.00	0.00							

* NH4N was non-detectable unless a value is shown



**Milkaholic Dairy, LLC 2023
Lab Results Summary (Attachment E)**

Soils

Field	Sample Date:	PO4P (ppm)
Toste	04/19/2023	30.55
Yecny 3	07/05/2023	16.40



Milkaholic Dairy, LLC 2023
Planting and Harvest Information (Attachment F)

Crop #	Crop	Acres Planted	Plant Date	Harvest Date	Estimated Yield (tons)	Tons Harvested	Actual Yield
Field:	Cardoza						
	1 Wheat	78	10/29/2022	05/20/2023	18.5	1474.2	18.9
	2 Corn	78	06/29/2023	10/12/2023	27.2	2215.2	28.4
Field:	Clarence						
	1 Wheat	75	11/09/2022	05/20/2023	17.0	1342.5	17.9
	2 Corn	75	06/19/2023	10/04/2023	27.2	2085.0	27.8
Field:	Felipe						
	1 Wheat	76	11/02/2022	05/20/2023	17.2	1383.2	18.2
	2 Corn	76	06/20/2023	10/12/2023	27.2	2052.0	27.0
Field:	Freitas						
	1 Wheat	78	11/07/2022	05/20/2023	17.6	1435.2	18.4
	2 Corn	78	06/22/2023	10/04/2023	27.2	2207.4	28.3
Field:	Home 1						
	1 Wheat	10	10/27/2022	05/20/2023	17.8	182.0	18.2
Field:	Home 2						
	1 Wheat	17	11/07/2022	05/20/2023	17.0	302.6	17.8
Field:	Toste						
	1 Corn	80	04/12/2023	08/20/2023	27.2	2416.0	30.2
Field:	Yecny 1						
	1 Wheat	37	11/19/2022	05/20/2023	17.1	817.7	22.1
	2 Corn	37	06/17/2023	10/04/2023	27.2	1036.0	28.0
Field:	Yecny 2						
	1 Citrus	37	07/03/2018	03/10/2023	5.0	185.0	5.0
Field:	Yecny 3						
	1 Almonds	34	01/01/2020	09/13/2023	3.0	78.2	2.3



Milkaholic Dairy, LLC 2023
Planting and Harvest Information (Attachment F)

Crop #	Crop	Acres Planted	Plant Date	Harvest Date	Estimated Yield (tons)	Tons Harvested	Actual Yield
Field:	Yecny 4						
1	Citrus	36	05/27/2021	03/10/2023	5.0	187.2	5.2



Milkaholic Dairy, LLC 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	Light
30	None		None	None	None	None	None	None	None	None	None	SWP
31	None		None		None		None	None		None		None

*Note: SWP = Standing Water Present



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:	Joe Mendes & Jacob de Jong		
Name of Operator:			
Name of Dairy Facility:	WILLOW GROVE (Milkaholic Dairy)		
Facility Address:	6267 5th Ave. Hanford, CA 93230		
	Number and Street	City	Zip Code
Contact Person Name and Phone Number:	Jacob de Jong	(559) 587-1553	
	Name	Phone Number	
Manure/Process Wastewater Hauler Information:			
Name of Hauling Company/Person: Netto Ag Inc. / Frank Netto			
Address of Hauling Company / person:	10044 Flint Ave	Hanford CA	93230
	Numer and Street	City	Zip Code
Contact Person:	Frank Netto	559-585-2097	
	Phone Number		
Destination Information:			
Composting Facility / Broker / Farmer / Other (identify)	FARMER	(please circle one)	
Contact information of Composting Facility, Broker, Farmer, or Other (as identified above):			
DUTRA & DUTRA DAIRY			
Name	Number and Street	City	Zip Code
Phone			
Manure/Process Wastewater Destination Address or Assessor's Parcel Number:			
FIELD: 80 ACRES			
Number and Street	City	Zip Code	Assessor's Parcel Number
Dates Hauled:		6/15-6/17/23	
Amount Hauled:			
Enter the amount of manure hauled in tons or cubic yards (indicate the units used), the manure solids content (if amount reported in tons) or manure density (if amount reported in cubic yards), and the method used to calculate the amount:			
Manure:	Tons or Cubic Yards (indicate which units used)		
Manure Solids Content (if amount reported in tons):			
Manure Density (if amount reported in cubic yards):			

Attachment D

D-2

**Waste Discharge Requirements General order No. R-5-2007-0035
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: 2,400,000 Gallons

Method used to determine volume of process wastewater: _____

Written Agreement:

Does the Operator have a written agreement (in compliance with Land Application Specification C.2 of Waste Discharge Requirements General Order No. R5-2007-0035) with any party that receives process wastewater from the Operator for its own use? (please check one)

Yes _____ No _____

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

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

Certification:

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

Operator's Signature: _____

DocuSigned by:

B408F2B32151472...

Date: 6/28/2024

Hauler's Signature: _____

Netto Ag Inc By:

James H. Netto

Date: 6/17/2023

January 2, 2024

Lab No. : VI 2348410

Customer No. : 4018573

Reference : 42150

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
IW Toste	12/11/2023	12/11/2023	VI 2348410-001	AGW
Dairy Barn	12/11/2023	12/11/2023	VI 2348410-002	DW
Dom Austin	12/11/2023	12/11/2023	VI 2348410-003	DW
Dom Yency	12/11/2023	12/11/2023	VI 2348410-004	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

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: 2024-01-02

Section: Case Narrative

Page 1 of 6

Page 1 of 6

Corporate Offices & Laboratory
853 Corporation Street
Santa Paula, CA 93060
TEL: (805)392-2000
Env FAX: (805)525-4172 / Ag FAX: (805)392-2063
CA ELAP Certification No. 1573

Office & Laboratory
2500 Stagecoach Road
Stockton, CA 95215
TEL: (209)942-0182
FAX: (209)942-0423
CA ELAP Certification No. 1563

Office & Laboratory
563 E. Lindo Avenue
Chico, CA 95926
TEL: (530)343-5818
FAX: (530)343-3807
CA ELAP Certification No. 2670

Office & Laboratory
3442 Empresa Drive, Suite D
San Luis Obispo, CA 93401
TEL: (805)783-2940
FAX: (805)783-2912
CA ELAP Certification No. 2775

Office & Laboratory
9415 W. Goshen Avenue
Visalia, CA 93291
TEL: (559)734-9473
FAX: (559)734-8435
CA ELAP Certification No. 2810

January 2, 2024

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

Description : IW Toste
Project : 1158 Milkaholic Dairy

Lab No. : VI 2348410-001
Customer No.: 4018573
Reference : 42150
Sampled On : December 11, 2023 at 11:10
Sampled By : Zeke
Received On : December 11, 2023 at 15:35
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	ND	0.5	mg/L		1	U	12/21/2023	17:10	lcr	EPA 351.2	12/23/2023	21:06	lcr
Nitrate Nitrogen	12.3	0.4	mg/L		1		12/12/2023	13:00	lfs	SM 4500-NO3 F	12/12/2023	18:58	lfs
Nitrogen, Total as Nitrogen	12.3	0.5	mg/L		1		12/21/2023	17:10	lcr	Calc.	12/23/2023	21:06	lcr
Nitrate + Nitrite as N	12.3	0.4	mg/L		1		12/12/2023	13:00	lfs	SM 4500-NO3 F	12/12/2023	18:58	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	12/21/2023	17:10	lcr	EPA 351.2	12/23/2023	21:06	lcr
Conductivity	693	1	umhos/cm		1		12/15/2023	08:07	krh	SM 4500-H+B	12/15/2023	10:45	krh
Solids, Total Dissolved (TDS)	510	20	mg/L		1		12/13/2023	13:20	ctl	SM 2540 C	12/14/2023	11:30	ctl

DQF Flags Definition:

U Constituent results were non-detect.

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

January 2, 2024

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

Description : Dairy Barn
Project : 1158 Milkaholic Dairy

Lab No. : VI 2348410-002
Customer No.: 4018573
Reference : 42150
Sampled On : December 11, 2023 at 10:45
Sampled By : Zeke
Received On : December 11, 2023 at 15:35
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	8.5	0.4	mg/L	10	1		12/12/2023	13:00	lfs	SM 4500-NO3 F	12/12/2023	19:01	lfs
Conductivity	493	1	umhos/cm	1600 ²	1		12/13/2023	08:05	krh	SM 4500-H+B	12/13/2023	10:57	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.

January 2, 2024

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

Description : Dom Austin
Project : 1158 Milkaholic Dairy

Lab No. : VI 2348410-003
Customer No.: 4018573
Reference : 42150
Sampled On : December 11, 2023 at 10:55
Sampled By : Zeke
Received On : December 11, 2023 at 15:35
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	8.6	0.4	mg/L	10	1		12/12/2023	13:00	lfs	SM 4500-NO3 F	12/12/2023	19:03	lfs
Conductivity	502	1	umhos/cm	1600 ²	1		12/13/2023	08:05	krh	SM 4500-H+B	12/13/2023	12:18	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.

January 2, 2024

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

Description : Dom Yency
Project : 1158 Milkaholic Dairy

Lab No. : VI 2348410-004
Customer No.: 4018573
Reference : 42150
Sampled On : December 11, 2023 at 10:30
Sampled By : Zeke
Received On : December 11, 2023 at 15:35
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	21.6	0.4	mg/L	10	1		12/12/2023	13:00	lfs	SM 4500-NO3 F	12/12/2023	19:06	lfs
Conductivity	2610	1	umhos/cm	1600 ²	1		12/15/2023	08:07	krh	SM 4500-H+B	12/15/2023	11:00	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.

January 2, 2024

Innovative Ag Services, LLC
Lab No. : VI 2348410
Customer No. : 4018573
Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
E. C.	2320B	(VI 2348337-001) (CH 2379819-006)	Dup Dup	umhos/cm umhos/cm		0.3% 0.3%	5 5	
	2320B	(VI 2348428-001)	Dup	umhos/cm		0.2%	5	
Solids, Total Dissolved	2540CE	12/13/2023:214037CTL (VI 2348409-002) (VI 2348409-002)	Blank LCS Dup Dup	mg/L mg/L mg/L mg/L	991.5	ND 99.8% 0.5% 0.3%	<20 90-110 5 5	
Nitrogen, Total Kjeldahl	351.2	12/21/2023:214421LCR (STK2356930-002) (STK2356930-004)	Blank LCS MS MSDP MS MSDP	mg/L mg/L mg/L mg/L mg/L mg/L	12.00 12.00 12.00 12.00 12.00 12.00	ND 106% 97.8% 101% 95.8% 102%	<0.5 73-124 90-110 90-110 90-110 90-110	
Nitrate + Nitrite as N	4500NO3F	12/12/2023:214004LFS (VI 2348370-001)	Blank LCS MS MSDP	mg/L mg/L mg/L mg/L	11.22 5.609 5.609 5.609	ND 98.1% 88.1% 90.1% 0.6%	<0.4 80-120 66-125 66-125 ≤30.4	
Nitrate Nitrogen	4500NO3F	12/12/2023:214004LFS (VI 2348370-001)	Blank LCS MS MSDP	mg/L mg/L mg/L mg/L	11.22 5.609 5.609 5.609	ND 98.1% 88.1% 90.1% 0.6%	<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 42150

ID: # 1158

SITE NAME: MILKATHOLIC DAIRY

Billing: FAS

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	IRR TEST	W2	12-11 11:10	Zelle			
2	Dairy Barn	W1	10:45				
3	Dom Austin	1	10:55	1			
4	Dom Yancy	1	10:30	1			
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: 201 8.9 °C 1D#TH407

CHAIN OF CUSTODY RECORDING

	Signature	Company	Received Date & Time	Relinquished Date & Time
1st	<u>JAS</u>	<u>FGL</u>		12-11-23 / 12:55
2nd	<u>ASB</u>	<u>FGL</u>	12-11-23 15:35	
3rd	<u>ASB</u>	<u>FGL</u>		12-11-23 15:54
4th	<u>SPD</u>	<u>FGL</u>	12-11-23 16:44	
Laboratory Use Only		<u>GLS</u>	12-11-23 17:00	12-11-23 17:00
Logged In By:		Total Samples:		Laboratory #:

GLS mle 12/12/23 1013

December 18, 2023

Lab No. : VI 2348137

Customer No. : 4018573

Reference : 42128

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
IW Home	12/04/2023	12/04/2023	VI 2348137-001	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: 2023-12-18

December 18, 2023

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

Description : IW Home
Project : 1158 Milkaholics Dairy

Lab No. : VI 2348137-001
Customer No.: 4018573
Reference : 42128
Sampled On : December 4, 2023 at 14:10
Sampled By : Zeke
Received On : December 4, 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	ND	0.5	mg/L		1	U1	12/14/2023	07:10	lcr	EPA 351.2	12/17/2023	17:40	lcr
Nitrate Nitrogen	42.3	0.4	mg/L		1		12/05/2023	13:30	lfs	SM 4500-NO3 F	12/05/2023	15:32	lfs
Nitrogen, Total as Nitrogen	42.3	0.5	mg/L		1	1	12/14/2023	07:10	lcr	Calc.	12/17/2023	17:40	lcr
Nitrate + Nitrite as N	42.3	0.4	mg/L		1		12/05/2023	13:30	lfs	SM 4500-NO3 F	12/05/2023	15:32	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U1	12/14/2023	07:10	lcr	EPA 351.2	12/17/2023	17:40	lcr
Conductivity	1480	1	umhos/cm		1		12/07/2023	07:47	krh	SM 4500-H+B	12/07/2023	10:49	krh
Solids, Total Dissolved (TDS)	1050	20	mg/L		1		12/06/2023	11:00	ctl	SM 2540 C	12/07/2023	11:00	ctl

DQF Flags Definition:

U Constituent results were non-detect.

I The MS/MSD did not meet QC criteria.

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

December 18, 2023

Innovative Ag Services, LLC

Lab No. : VI 2348137
Customer No. : 4018573

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
E. C.	2320B	(VI 2348142-001)	Dup	umhos/cm		0.2%	5	
Solids, Total Dissolved	2540CE	12/06/2023:213726CTL (CC 2384245-003) (CC 2384245-003)	Blank LCS Dup Dup	mg/L mg/L mg/L mg/L	991.5	ND 101% 2.09% 0.3%	<20 90-110 5 5	
Nitrogen, Total Kjeldahl	351.2	12/14/2023:214086LCR (VI 2348210-001) (VI 2348215-001)	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 4.2% 12.00 12.00 1.5%	ND 91.0% 82.9% 86.4% ≤20 85.6% 84.4% ≤20	<0.5 73-124 <1/4 <1/4 ≤20 90-110 90-110 90-110	406 435 435
Nitrate + Nitrite as N	4500NO3F	12/05/2023:213707LFS (VI 2348086-001)	Blank LCS MS MSD MSRPD	mg/L mg/L mg/L mg/L mg/L	11.22 5.609 5.609 5.609 2.5%	ND 96.6% 93.5% 95.9% ≤30.4	<0.4 80-120 66-125 66-125 ≤30.4	
Nitrate Nitrogen	4500NO3F	12/05/2023:213707LFS (VI 2348086-001)	Blank LCS MS MSD MSRPD	mg/L mg/L mg/L mg/L mg/L	11.22 5.609 5.609 5.609 2.5%	ND 96.6% 93.5% 95.9% ≤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.

Explanation

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



Laboratory Analysis Work Order

Nº 42128

ID: # 1158

2348137

LABORATORY: FGL

SITE NAME: Milwaukee Dairy

Billing: LMG

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	1W HOME	TKR	W2	12-4 / 2:10	Zek		
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		FGL		12-4-23 / 3:05
2 nd		FGL	12-4-23 15:58	
3 rd		FGL		12-4-23 16:10
4 th			12-4-23 16:10	

LABORATORY USE ONLY

Logged In By:

Total Samples: 170

Laboratory #:

GCS Inc 12/15/23 1155

THE PRINTER INC. - 559-992-5127

October 5, 2023

Lab No. : VI 2346291

Customer No. : 4018573

Reference : 41360

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 | (3 pages) | : Results for each sample submitted. |
| Quality Control | (2 pages) | : Supporting Quality Control (QC) results. |

Case Narrative

This Case Narrative pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab No.	Matrix
1W Cardoza	09/15/2023	09/15/2023	VI 2346291-001	AGW
1W Felipe	09/15/2023	09/15/2023	VI 2346291-002	AGW
1W Freitas	09/15/2023	09/15/2023	VI 2346291-003	AGW

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

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

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

KD: EHB

Approved By **Kelly A. Dunnahoo, B.S.**  Digitally signed by Kelly A. Dunnahoo, B.S.
Title: Laboratory Director
Date: 2023-10-06

Section: Case Narrative

Page 1 of 6

Page 1 of 6

Corporate Offices & Laboratory 853 Corporation Street Santa Paula, CA 93060 TEL: (805)392-2000 Env FAX: (805)525-4172 / Ag FAX: (805)392-2063 CA ELAP Certification No. 1573	Office & Laboratory 2500 Stagecoach Road Stockton, CA 95215 TEL: (209)842-0182 FAX: (209)942-0423 CA ELAP Certification No. 1563	Office & Laboratory 563 E. Lindo Avenue Chico, CA 95926 TEL: (530)343-5818 FAX: (530)343-3807 CA ELAP Certification No. 1563	Office & Laboratory 3442 Empresa Drive, Suite D San Luis Obispo, CA 93401 TEL: (805)783-2940 FAX: (805)783-2912 CA ELAP Certification No. 2670	Office & Laboratory 9415 W. Goshen Avenue Visalia, CA 93291 TEL: (559)734-9473 FAX: (559)734-8435 CA ELAP Certification No. 2775
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------

October 5, 2023

Innovative Ag Services, LLC

1201 Delta View Road
Suite 5
Hanford, CA 93230

Description : 1W Cardoza
Project : 1158 Milkaholic Dairy

Lab No. : VI 2346291-001
Customer No. : 4018573
Reference : 41360
Sampled On : September 15, 2023 at 14:05
Sampled By : Zeke
Received On : September 15, 2023 at 15:50
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	ND	0.5	mg/L		1	U	09/28/2023	10:26	sta	EPA 351.2	09/29/2023	15:11	lcr
Nitrate Nitrogen	20.0	0.4	mg/L		1		09/29/2023	12:00	lfs	SM 4500-NO3 F	09/29/2023	14:00	lfs
Nitrogen, Total as Nitrogen	20.0	0.5	mg/L		1		09/28/2023	10:26	sta	Calc.	09/29/2023	15:11	lcr
Nitrate + Nitrite as N	20.0	0.4	mg/L		1		09/29/2023	12:00	lfs	SM 4500-NO3 F	09/29/2023	14:00	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	09/28/2023	10:26	sta	EPA 351.2	09/29/2023	15:11	lcr
Conductivity	475	1	umhos/cm		1	I	09/21/2023	11:31	krh	SM 4500-H+B	09/21/2023	14:37	krh
Solids, Total Dissolved (TDS)	700	20	mg/L		1		09/20/2023	09:30	ctl	SM 2540 C	09/21/2023	11:45	ctl

DQF Flags Definition:

U Constituent results were non-detect.

I The RPD for the laboratory duplicate exceeded laboratory criteria.

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

October 5, 2023

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

Description : 1W Felipe
 Project : 1158 Milkaholic Dairy

Lab No. : VI 2346291-002
 Customer No. : 4018573
 Reference : 41360
 Sampled On : September 15, 2023 at 14:15
 Sampled By : Zeke
 Received On : September 15, 2023 at 15:50
 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	ND	0.5	mg/L		1	U	09/28/2023	10:26	sta	EPA 351.2	09/29/2023	15:13	lcr
Nitrate Nitrogen	6.6	0.4	mg/L		1		09/29/2023	12:00	lfs	SM 4500-NO3 F	09/29/2023	14:01	lfs
Nitrogen, Total as Nitrogen	6.6	0.5	mg/L		1		09/28/2023	10:26	sta	Calc.	09/29/2023	15:13	lcr
Nitrate + Nitrite as N	6.6	0.4	mg/L		1		09/29/2023	12:00	lfs	SM 4500-NO3 F	09/29/2023	14:01	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	09/28/2023	10:26	sta	EPA 351.2	09/29/2023	15:13	lcr
Conductivity	528	1	umhos/cm		1	I	09/21/2023	11:31	krh	SM 4500-H+B	09/21/2023	14:28	krh
Solids, Total Dissolved (TDS)	380	20	mg/L		1		09/20/2023	09:30	ctl	SM 2540 C	09/21/2023	11:45	ctl

DQF Flags Definition:

U Constituent results were non-detect.

I The RPD for the laboratory duplicate exceeded laboratory criteria.

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

October 5, 2023

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

Description : 1W Freitas
Project : 1158 Milkaholic Dairy

Lab No. : VI 2346291-003
Customer No.: 4018573
Reference : 41360
Sampled On : September 15, 2023 at 13:50
Sampled By : Zeke
Received On : September 15, 2023 at 15:50
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	ND	0.5	mg/L		1	U	09/28/2023	10:26	sta	EPA 351.2	09/29/2023	15:16	lcr
Nitrate Nitrogen	8.8	0.4	mg/L		1		09/20/2023	10:00	lfs	SM 4500-NO3 F	09/20/2023	11:58	lfs
Nitrogen, Total as Nitrogen	8.8	0.5	mg/L		1		09/28/2023	10:26	sta	Calc.	09/29/2023	15:16	lcr
Nitrate + Nitrite as N	8.8	0.4	mg/L		1		09/20/2023	10:00	lfs	SM 4500-NO3 F	09/20/2023	11:58	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	09/28/2023	10:26	sta	EPA 351.2	09/29/2023	15:16	lcr
Conductivity	563	1	umhos/cm		1	I	09/21/2023	11:31	krh	SM 4500-H+B	09/21/2023	14:25	krh
Solids, Total Dissolved (TDS)	410	20	mg/L		1		09/20/2023	09:30	ctl	SM 2540 C	09/21/2023	11:45	ctl

DQF Flags Definition:

U Constituent results were non-detect.

I The RPD for the laboratory duplicate exceeded laboratory criteria.

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

October 5, 2023

Innovative Ag Services, LLC

Lab No. : VI 2346291
Customer No. : 4018573

Quality Control - Wet Chem

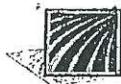
Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
E. C.	2320B	(VI 2346187-004)	Dup	umhos/cm		66.0%	5	440
Solids, Total Dissolved	2540CE	09/20/2023:210540CTL (SP 2315701-001) (SP 2315701-001)	Blank LCS Dup Dup	mg/L mg/L mg/L mg/L	991.5	ND 98.1% 1.42% 0.4%	<20 90-110 5 5	
Nitrogen, Total Kjeldahl	351.2	09/28/2023:210923STA (SP 2315704-001) (SP 2315704-002)	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 0.2% 12.00 12.00 5.3%	ND 91.1% 90.8% 91.0% ≤20 87.3% 92.0% ≤20	<0.5 73-124 90-110 90-110 ≤20 <1/4 90-110 ≤20	406
Nitrate + Nitrite as N	4500NO3F	09/20/2023:210580LFS (SP 2315880-001)	Blank LCS MS MSD MSRPD	mg/L mg/L mg/L mg/L mg/L	11.22 5.609 5.609 5.609 0.7%	ND 99.9% 98.4% 97.6% ≤30.4	<0.4 80-120 66-125 66-125 ≤30.4	
	4500NO3F	09/29/2023:210984LFS (SP 2316421-002)	Blank LCS MS MSD MSRPD	mg/L mg/L mg/L mg/L mg/L	11.22 5.609 5.609 5.609 0.2%	ND 98.2% 83.3% 82.2% ≤30.4	<0.4 80-120 66-125 66-125 ≤30.4	
Nitrate Nitrogen	4500NO3F	09/20/2023:210580LFS (SP 2315880-001)	Blank LCS MS MSD MSRPD	mg/L mg/L mg/L mg/L mg/L	11.22 5.609 5.609 5.609 0.7%	ND 99.9% 98.4% 97.6% ≤30.4	<0.4 80-120 66-125 66-125 ≤30.4	
	4500NO3F	09/29/2023:210984LFS (SP 2316421-002)	Blank LCS MS MSD MSRPD	mg/L mg/L mg/L mg/L mg/L	11.22 5.609 5.609 5.609 0.2%	ND 98.2% 83.3% 82.2% ≤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.

Explanation

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



Laboratory Analysis Work Order

2346291

Nº 41360

ID: # 1158

SITE NAME: MILKAHOLIC DAIRY

Billing: JAS

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	IW Carolla	Ier	W2	9-15 2:05	Zek		
2	IW Felipe	I	I	1 2:15	I		
3	IW Freitas	I	I	1:50			
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: 1158 / 9/16/23

1145

CHAIN OF CUSTODY RECORDING

	Signature	Company	Received Date & Time	Relinquished Date & Time
1 st	E	JAS		9-15-23 / 2:45
2 nd	EMV	FGL	9/15/23 15:37	
3 rd	EMV	FGL		9/15/23 15:50
4 th	SRC	FGL	9/15/23 1550	
LABORATORY USE ONLY		FGL	9/15/23 1730	
Logged In By: _____		GILS	9/15/23 1730	
Total Samples: _____			Laboratory #: _____	

R01

3.2°C ID#TH407

October 4, 2023

Lab No. : VI 2346190

Customer No. : 4018573

Reference : 41335

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
IW Yecny #2	09/12/2023	09/12/2023	VI 2346190-001	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)

Discussion of Analytical Results:

Amended Note - 10/4/23 - Amended to correct project name.

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: MKH

Approved By **Kelly A. Dunnahoo, B.S.**  Digitally signed by Kelly A. Dunnahoo, B.S.
Title: Laboratory Director
Date: 2023-10-04

Section: Case Narrative

Page 1 of 3

Amended

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Corporate Offices & Laboratory 853 Corporation Street Santa Paula, CA 93060 TEL: (805)392-2000 Env FAX: (805)525-4172 / Ag FAX: (805)392-2063 CA ELAP Certification No. 1573	Office & Laboratory 2500 Stagecoach Road Stockton, CA 95215 TEL: (209)942-0182 FAX: (209)942-0423 CA ELAP Certification No. 1563	Office & Laboratory 563 E. Lindo Avenue Chico, CA 95926 TEL: (530)343-5818 FAX: (530)343-3807 CA ELAP Certification No. 2670	Office & Laboratory 3442 Empressa Drive, Suite D San Luis Obispo, CA 93401 TEL: (805)783-2940 FAX: (805)783-2912 CA ELAP Certification No. 2775	Office & Laboratory 9415 W. Goshen Avenue Visalia, CA 93291 TEL: (559)734-9473 FAX: (559)734-8435 CA ELAP Certification No. 2810
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October 4, 2023

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

Description : IW Yecny #2
Project : 1158 Milkaholic Dairy

Lab No. : VI 2346190-001
Customer No.: 4018573
Reference : 41335
Sampled On : September 12, 2023 at 11:20
Sampled By : Zeke
Received On : September 12, 2023 at 16:19
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	ND	0.5	mg/L		1	U1	09/26/2023	09:55	sta	EPA 351.2	09/29/2023	17:26	lcr
Nitrate Nitrogen	4.9	0.4	mg/L		1		09/13/2023	12:15	lfs	SM 4500-NO3 F	09/13/2023	13:41	lfs
Nitrogen, Total as Nitrogen	4.9	0.5	mg/L		1	1	09/26/2023	09:55	sta	Calc.	09/29/2023	17:26	lcr
Nitrate + Nitrite as N	4.9	0.4	mg/L		1		09/13/2023	12:15	lfs	SM 4500-NO3 F	09/13/2023	13:41	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U1	09/26/2023	09:55	sta	EPA 351.2	09/29/2023	17:26	lcr
Conductivity	688	1	umhos/cm		1		09/15/2023	09:09	krh	SM 4500-H+B	09/15/2023	10:12	krh
Solids, Total Dissolved (TDS)	420	20	mg/L		1		09/14/2023	10:30	ctl	SM 2540 C	09/15/2023	11:00	ctl

DQF Flags Definition:

- U Constituent results were non-detect.
- I The MS/MSD did not meet QC criteria.

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

October 4, 2023

Innovative Ag Services, LLC

Lab No. : VI 2346190
Customer No. : 4018573

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
E. C.	2320B	(VI 2346608-002)	Dup	umhos/cm		0.2%	5	
Solids, Total Dissolved	2540CE	09/14/2023:210327CTL (STK2352324-006) (STK2352324-006)	Blank LCS Dup Dup	mg/L mg/L mg/L mg/L	991.5	ND 101% 1.83% 2.52%	<20 90-110 5 5	
Nitrogen, Total Kjeldahl	351.2	09/26/2023:210792STA (STK2352326-001) (STK2352326-002)	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 2.5% 12.00 12.00 1.4%	ND 92.1% 91.7% 94.2% 89.4% 90.7% ≤20	<0.5 73-124 90-110 90-110 90-110 90-110 ≤20	
Nitrate + Nitrite as N	4500NO3F	09/13/2023:210275LFS (SP 2315466-001)	Blank LCS MS MSD MSRPD	mg/L mg/L mg/L mg/L mg/L	11.22 5.609 5.609	ND 97.3% 94.1% 96.5% 2.1%	<0.4 80-120 66-125 66-125 ≤30.4	
Nitrate Nitrogen	4500NO3F	09/13/2023:210275LFS (SP 2315466-001)	Blank LCS MS MSD MSRPD	mg/L mg/L mg/L mg/L mg/L	11.22 5.609 5.609	ND 97.3% 94.1% 96.5% 2.1%	<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.

Explanation

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



Laboratory Analysis Work Order

Nº 41335

ID: # 1158

28460190

SITE NAME: MILKATHOLIC DAIRY

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	IW YECNY#2	IRR	W2 9-12 / 11:20	Zek			
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
1st		IAS	9/12/23 1600	9-12-23 / 3:20
2nd	AJB	FGL	9/12/23 1600	
3rd	AJB	FGL	9/12/23 1619	9/12/23 1619
4th			9/12/23 1619	

LABORATORY USE ONLY

Logged In By:

Total Samples:

Laboratory #: