DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

INNOVATIVE
AG SERVICES

High Roller Dairy

2023 Annual Report

X	Report Form	NA	Attachment H
X	Attachment A	NA	Attachment I
X	Attachment B	NA	Attachment J
X	Attachment C	NA	Manure Tracking Manifests
X	Attachment D	NA	New or Revised Waste Water Agreements
X	Attachment E	X	Groundwater Monitoring Samples
X	Attachment F	NA	Monitoring Well Report
X	Attachment G	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)

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

Annual Report

High Roller Dairy 2023

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

Facility Information:

Name of Dairy	High Roller Dairy
Facility Address	14782 8th Avenue, Hanford CA 93230

Owner/Operator as of 12/31/2023

Operator Name	Joe Mendes
Operator Phone	(559) 707-3768
Owner Name	Jack de Jong
Owner Phone	(559) 707-3766

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:

X No discharges occurred during the reporting period.

__ Yes. ____ Number of discharges occurred (see Attachment H).

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

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:

_X_ 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:

_X_ 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.

_X_ 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?

_X_ 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.

_X_ 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).

_X_ 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).

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

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

X 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

X 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.

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
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: Joe Mendes C1AAFC93D71D470...	DocuSigned by: Jack de Jong 02B1EA6E059941F...
Signature of Operator of Facility	Signature of Owner of Facility
Joe Mendes	Jack de Jong
Print Name	Print Name
6/24/2024	6/25/2024
Title and Date	Title and Date

INNOVATIVE AG SERVICES

High Roller Dairy 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 Net (LB) Available for Land Application	PHOSPHORUS Net (LB) Available for Land Application	POTASSIUM Net (LB) Available for Land Application	SALTS Net (LB) Available for Land Application
Jer Milk Cows	1,875	1,828	Milk Freestall -	1,000	42,507.39	473,726.20	80,066.40	106,755.20	860,713.80
Jer Dry Cows	200	195	Flushed	1,100	2,571.44	25,623.00	3,558.75	17,082.00	35,587.50
Jer Heifers (15-24)	885	855	Flushed	700	8,082.34	118,588.50	18,724.50	56,173.50	221,573.25
Jer Heifers (7-14)	690	650	Flushed	600	5,930.94	61,685.00	9,490.00	35,587.50	78,292.50
Jer Calves (4-6)	280	273	Calves Dry Scrape	300	946.63	13,950.30	3,985.80	7,971.60	6,975.15
	3,930	**3,801**			**60,038.73**	**693,573.00**	**115,825.45**	**223,569.80**	**1,203,142.20**

* 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)**
31,538,633	534.75	85.82	514.25	4,335.00	140,487.82	22,547.67	135,102.12	1,138,877.3

* 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).

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Nutrient Applications (Attachment B)

Field Name: L1

Almonds, 72 Acres Planted on 11/05/2015

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data % Moist.	Nitrogen	Phos.	Potass.	Units	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			%			1,008				
01/22/2023	Ground Water: Well Avg	3.16	Acre Inches		0.10			mg/L			5	0	0	17,086	
02/19/2023	Ground Water: Well Avg	3.34	Acre Inches		0.10			mg/L			6	0	0	18,059	
03/18/2023	Fertilize - UN32	15.00	Gallons		32.00	0.00	0.00	%			2,879	0	0	0	
03/18/2023	Ground Water: Well Avg	3.30	Acre Inches		0.10			mg/L			5	0	0	17,843	
04/15/2023	Ground Water: Well Avg	3.25	Acre Inches		0.10			mg/L			5	0	0	17,572	
05/10/2023	Fertilize - UN32	15.00	Gallons		32.00	0.00	0.00	%			2,879	0	0	0	
05/10/2023	Ground Water: Well Avg	3.43	Acre Inches		0.10			mg/L			6	0	0	18,546	
06/04/2023	Ground Water: Well Avg	3.48	Acre Inches		0.10			mg/L			6	0	0	18,816	
06/29/2023	Ground Water: Well Avg	3.34	Acre Inches		0.10			mg/L			6	0	0	18,059	
07/24/2023	Ground Water: Well Avg	3.02	Acre Inches		0.10			mg/L			5	0	0	16,329	
08/18/2023	Ground Water: Well Avg	3.30	Acre Inches		0.10			mg/L			5	0	0	17,843	
09/14/2023	Harvest	2.00	Tons	6.85	2.22	0.26	1.98	%							5,956
	Acre Inches Applied:	**29.62**						**Totals:**			**6,813**	**0**	**0**	**160,154**	**5,956**
Season Nitrogen Ratio:	1.17							**Lbs Per Acre:**			**95**	**0**	**0**	**2,224**	**83**

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Nutrient Applications (Attachment B)

Field Name: L2

Wheat, 36 Acres Planted on 11/08/2022

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data % Moist.	Nitrogen	Phos.	Potass.	Units	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			%			504				
01/29/2023	Surface Water: Lakeside	5.32	Acre Inches		0.90			mg/L			39	0	0	3,899	
01/29/2023	Waste Water: Main Lagoon	0.23	Acre Inches		524.00	80.90	827.00	mg/L		224,838	981	152	1,549	16,856	
03/28/2023	Surface Water: Lakeside	5.19	Acre Inches		0.90			mg/L			38	0	0	3,804	
03/28/2023	Waste Water: Main Lagoon	0.23	Acre Inches		817.00	178.00	600.00	mg/L		224,838	1,530	333	1,124	7,791	
04/12/2023	Harvest	21.18	Tons	72.20	2.50	0.53	3.62	%							10,598
	Acre Inches Applied:	**10.97**						**Totals:**		**449,675**	**3,092**	**485**	**2,672**	**32,350**	**10,598**
Season Nitrogen Ratio:	1.07							**Lbs Per Acre:**			**86**	**13**	**74**	**899**	**294**

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Nutrient Applications (Attachment B)

Field Name: L2

Corn, 36 Acres Planted on 05/25/2023

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data % Moist.	Nitrogen	Phos.	Potass.	Units	Manure Applied (Tons)	Wastewater Applied (Gallons)	Nitrogen Applied (Lbs)	Phosphorus Applied (Lbs)	Potassium Applied (Lbs)	Salt Applied (Lbs)	Nitrogen Extracted (Lbs)
05/10/2023	Corral Solids: Main Corral	5.00	Tons	25.00	1.32	0.40	0.29	%	180		3,564	1,085	775	0	
06/06/2023	Surface Water: Lakeside	5.71	Acre Inches		0.90			mg/L			42	0	0	4,185	
06/06/2023	Waste Water: Main Lagoon	0.36	Acre Inches		348.00	46.40	373.00	mg/L		351,920	1,020	136	1,093	12,312	
06/21/2023	Surface Water: Lakeside	6.55	Acre Inches		0.90			mg/L			48	0	0	4,800	
07/06/2023	Surface Water: Lakeside	5.86	Acre Inches		0.90			mg/L			43	0	0	4,295	
07/06/2023	Waste Water: Main Lagoon	0.37	Acre Inches		348.00	46.40	373.00	mg/L		361,695	1,048	140	1,124	12,654	
07/10/2023	Ground Water: Well Avg	6.71	Acre Inches		0.10			mg/L			5	0	0	18,140	
08/03/2023	Fertilize - UN32	30.00	Gallons		32.00	0.00	0.00	%			2,879	0	0	0	
08/03/2023	Ground Water: Well Avg	6.07	Acre Inches		0.10			mg/L			5	0	0	16,410	
08/13/2023	Ground Water: Well Avg	5.91	Acre Inches		0.10			mg/L			5	0	0	15,978	
08/24/2023	Harvest	26.80	Tons	67.60	1.24	0.28	1.65	%							7,752
	Acre Inches Applied:	**37.54**						**Totals:**	**180**	**713,615**	**8,659**	**1,361**	**2,992**	**88,775**	**7,752**
Season Nitrogen Ratio:	1.12							**Lbs Per Acre:**			**241**	**38**	**83**	**2,466**	**215**

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Nutrient Applications (Attachment B)

Field Name: L4

Wheat, 32 Acres Planted on 11/08/2022

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data % Moist.	Nitrogen	Phos.	Potass.	Units	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			%			448				
01/27/2023	Surface Water: Lakeside	5.39	Acre Inches		0.90			mg/L			35	0	0	3,511	
01/27/2023	Waste Water: Main Lagoon	0.24	Acre Inches		524.00	80.90	827.00	mg/L		208,545	910	140	1,437	15,635	
03/26/2023	Surface Water: Lakeside	5.24	Acre Inches		0.90			mg/L			34	0	0	3,413	
03/26/2023	Waste Water: Main Lagoon	0.23	Acre Inches		817.00	178.00	600.00	mg/L		199,856	1,360	296	999	6,925	
04/12/2023	Harvest	21.19	Tons	71.90	2.56	0.52	3.60	%							9,756
	Acre Inches Applied:	**11.10**						**Totals:**		**408,401**	**2,788**	**437**	**2,436**	**29,485**	**9,756**
Season Nitrogen Ratio:	1.03							**Lbs Per Acre:**			**87**	**14**	**76**	**921**	**305**

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Nutrient Applications (Attachment B)

Field Name: L4

Corn, 32 Acres Planted on 05/25/2023

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data % Moist.	Nitrogen	Phos.	Potass.	Units	Manure Applied (Tons)	Wastewater Applied (Gallons)	Nitrogen Applied (Lbs)	Phosphorus Applied (Lbs)	Potassium Applied (Lbs)	Salt Applied (Lbs)	Nitrogen Extracted (Lbs)
05/11/2023	Corral Solids: Main Corral	5.00	Tons	25.00	1.32	0.40	0.29	%	160		3,168	965	689	0	
06/04/2023	Surface Water: Lakeside	5.74	Acre Inches		0.90			mg/L			37	0	0	3,739	
06/04/2023	Waste Water: Main Lagoon	0.37	Acre Inches		348.00	46.40	373.00	mg/L		321,507	932	124	999	11,248	
06/19/2023	Surface Water: Lakeside	6.65	Acre Inches		0.90			mg/L			43	0	0	4,332	
07/04/2023	Surface Water: Lakeside	5.91	Acre Inches		0.90			mg/L			38	0	0	3,850	
07/04/2023	Waste Water: Main Lagoon	0.38	Acre Inches		348.00	46.40	373.00	mg/L		330,196	957	128	1,026	11,552	
07/18/2023	Ground Water: Well Avg	6.83	Acre Inches		0.10			mg/L			5	0	0	16,413	
08/01/2023	Fertilize - UN32	30.00	Gallons		32.00	0.00	0.00	%			2,559	0	0	0	
08/01/2023	Ground Water: Well Avg	6.11	Acre Inches		0.10			mg/L			4	0	0	14,683	
08/11/2023	Ground Water: Well Avg	5.93	Acre Inches		0.10			mg/L			4	0	0	14,250	
08/24/2023	Harvest	26.80	Tons	68.80	1.13	0.27	1.64	%							6,047
	Acre Inches Applied:	**37.92**						**Totals:**	**160**	**651,703**	**7,748**	**1,217**	**2,714**	**80,068**	**6,047**
Season Nitrogen Ratio:	1.28							**Lbs Per Acre:**			**242**	**38**	**85**	**2,502**	**189**

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Nutrient Applications (Attachment B)

Field Name: L5

Almonds, 73 Acres Planted on 11/07/2015

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data % Moist.	Nitrogen	Phos.	Potass.	Units	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			%			1,022				
01/20/2023	Ground Water: Well Avg	3.16	Acre Inches		0.10			mg/L			5	0	0	17,324	
02/17/2023	Ground Water: Well Avg	3.34	Acre Inches		0.10			mg/L			6	0	0	18,310	
03/16/2023	Fertilize - UN32	15.00	Gallons		32.00	0.00	0.00	%			2,919	0	0	0	
03/16/2023	Ground Water: Well Avg	3.29	Acre Inches		0.10			mg/L			5	0	0	18,036	
04/13/2023	Ground Water: Well Avg	3.25	Acre Inches		0.10			mg/L			5	0	0	17,816	
05/08/2023	Fertilize - UN32	15.00	Gallons		32.00	0.00	0.00	%			2,919	0	0	0	
05/08/2023	Ground Water: Well Avg	3.43	Acre Inches		0.10			mg/L			6	0	0	18,803	
06/02/2023	Ground Water: Well Avg	3.47	Acre Inches		0.10			mg/L			6	0	0	19,023	
06/27/2023	Ground Water: Well Avg	3.34	Acre Inches		0.10			mg/L			6	0	0	18,310	
07/22/2023	Ground Water: Well Avg	3.03	Acre Inches		0.10			mg/L			5	0	0	16,610	
08/16/2023	Ground Water: Well Avg	3.29	Acre Inches		0.10			mg/L			5	0	0	18,036	
09/14/2023	Harvest	2.20	Tons	6.70	2.64	0.25	1.61	%							7,912
	Acre Inches Applied:	**29.60**						**Totals:**			**6,908**	**0**	**0**	**162,269**	**7,912**
Season Nitrogen Ratio:	0.89							**Lbs Per Acre:**			**95**	**0**	**0**	**2,223**	**108**

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Nutrient Applications (Attachment B)

Field Name: L6

Almonds, 73 Acres Planted on 10/10/2017

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data % Moist.	Nitrogen	Phos.	Potass.	Units	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			%			1,022				
01/24/2023	Ground Water: Well Avg	3.16	Acre Inches		0.10			mg/L			5	0	0	17,324	
02/21/2023	Ground Water: Well Avg	3.34	Acre Inches		0.10			mg/L			6	0	0	18,310	
03/20/2023	Fertilize - UN32	15.00	Gallons		32.00	0.00	0.00	%			2,919	0	0	0	
03/20/2023	Ground Water: Well Avg	3.29	Acre Inches		0.10			mg/L			5	0	0	18,036	
04/17/2023	Ground Water: Well Avg	3.25	Acre Inches		0.10			mg/L			5	0	0	17,816	
05/12/2023	Fertilize - UN32	15.00	Gallons		32.00	0.00	0.00	%			2,919	0	0	0	
05/12/2023	Ground Water: Well Avg	3.43	Acre Inches		0.10			mg/L			6	0	0	18,803	
06/06/2023	Ground Water: Well Avg	3.47	Acre Inches		0.10			mg/L			6	0	0	19,023	
07/01/2023	Ground Water: Well Avg	3.34	Acre Inches		0.10			mg/L			6	0	0	18,310	
07/26/2023	Ground Water: Well Avg	3.03	Acre Inches		0.10			mg/L			5	0	0	16,610	
08/20/2023	Ground Water: Well Avg	3.29	Acre Inches		0.10			mg/L			5	0	0	18,036	
09/14/2023	Harvest	2.20	Tons	6.80	2.33	0.30	1.54	%							6,975
	Acre Inches Applied:	**29.60**						**Totals:**			**6,908**	**0**	**0**	**162,269**	**6,975**
Season Nitrogen Ratio:	1.01							**Lbs Per Acre:**			**95**	**0**	**0**	**2,223**	**96**

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Nutrient Applications (Attachment B)

Field Name: L7

Corn, 57 Acres Planted on 05/05/2023

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data % Moist.	Nitrogen	Phos.	Potass.	Units	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			%			798				
04/20/2023	Corral Solids: Main Corral	5.00	Tons	25.00	1.32	0.40	0.29	%	285		5,643	1,719	1,227	0	
05/15/2023	Surface Water: Lakeside	5.59	Acre Inches		0.90			mg/L			65	0	0	6,487	
05/15/2023	Waste Water: Main Lagoon	0.36	Acre Inches		817.00	178.00	600.00	mg/L		557,206	3,792	826	2,785	19,309	
05/30/2023	Surface Water: Lakeside	6.25	Acre Inches		0.90			mg/L			72	0	0	7,252	
06/14/2023	Surface Water: Lakeside	5.69	Acre Inches		0.90			mg/L			66	0	0	6,602	
06/14/2023	Waste Water: Main Lagoon	0.36	Acre Inches		348.00	46.40	373.00	mg/L		557,206	1,615	215	1,731	19,495	
06/28/2023	Ground Water: Well Avg	6.36	Acre Inches		0.10			mg/L			8	0	0	27,224	
07/12/2023	Fertilize - UN32	30.00	Gallons		32.00	0.00	0.00	%			4,558	0	0	0	
07/12/2023	Ground Water: Well Avg	5.95	Acre Inches		0.10			mg/L			7	0	0	25,469	
07/22/2023	Ground Water: Well Avg	5.85	Acre Inches		0.10			mg/L			7	0	0	25,041	
08/04/2023	Harvest	31.80	Tons	68.90	1.37	0.30	0.90	%							15,446
	Acre Inches Applied:	**36.41**						**Totals:**	**285**	**1,114,412**	**16,633**	**2,760**	**5,743**	**136,879**	**15,446**
Season Nitrogen Ratio:	1.08							**Lbs Per Acre:**			**292**	**48**	**101**	**2,401**	**271**

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Nutrient Applications (Attachment B)

Field Name: L8

Wheat, 37 Acres Planted on 12/10/2022

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data % Moist.	Nitrogen	Phos.	Potass.	Units	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			%			518				
01/03/2023	Surface Water: Lakeside	4.53	Acre Inches		0.90			mg/L			34	0	0	3,412	
01/03/2023	Waste Water: Main Lagoon	0.20	Acre Inches		524.00	80.90	827.00	mg/L		200,942	877	135	1,384	15,065	
03/02/2023	Surface Water: Lakeside	5.31	Acre Inches		0.90			mg/L			40	0	0	4,000	
03/02/2023	Waste Water: Main Lagoon	0.23	Acre Inches		817.00	178.00	600.00	mg/L		231,083	1,572	343	1,155	8,008	
04/29/2023	Surface Water: Lakeside	5.18	Acre Inches		0.90			mg/L			39	0	0	3,902	
04/29/2023	Waste Water: Main Lagoon	0.23	Acre Inches		817.00	178.00	600.00	mg/L		231,083	1,572	343	1,155	8,008	
05/14/2023	Harvest	26.10	Tons	63.30	1.02	0.26	1.39	%							7,230
	Acre Inches Applied:	**15.68**						**Totals:**		**663,108**	**4,653**	**821**	**3,694**	**42,393**	**7,230**
Season Nitrogen Ratio:	1.39							**Lbs Per Acre:**			**126**	**22**	**100**	**1,146**	**195**

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Nutrient Applications (Attachment B)

Field Name: L8

Corn, 37 Acres Planted on 07/07/2023

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data % Moist.	Nitrogen	Phos.	Potass.	Units	Manure Applied (Tons)	Wastewater Applied (Gallons)	Nitrogen Applied (Lbs)	Phosphorus Applied (Lbs)	Potassium Applied (Lbs)	Salt Applied (Lbs)	Nitrogen Extracted (Lbs)
06/20/2023	Corral Solids: Main Corral	5.00	Tons	25.00	1.32	0.40	0.29	%	185		3,663	1,116	797	0	
07/19/2023	Surface Water: Lakeside	5.70	Acre Inches		0.90			mg/L			43	0	0	4,293	
07/19/2023	Waste Water: Main Lagoon	0.36	Acre Inches		348.00	46.40	373.00	mg/L		361,695	1,049	140	1,124	12,654	
08/03/2023	Surface Water: Lakeside	6.53	Acre Inches		0.90			mg/L			49	0	0	4,918	
08/18/2023	Surface Water: Lakeside	5.84	Acre Inches		0.90			mg/L			44	0	0	4,399	
08/18/2023	Waste Water: Main Lagoon	0.37	Acre Inches		348.00	46.40	373.00	mg/L		371,742	1,077	144	1,155	13,006	
09/01/2023	Ground Water: Well Avg	6.68	Acre Inches		0.10			mg/L			6	0	0	18,561	
09/15/2023	Fertilize - UN32	30.00	Gallons		32.00	0.00	0.00	%			2,959	0	0	0	
09/15/2023	Ground Water: Well Avg	6.06	Acre Inches		0.10			mg/L			5	0	0	16,838	
09/25/2023	Ground Water: Well Avg	5.91	Acre Inches		0.10			mg/L			5	0	0	16,421	
10/06/2023	Harvest	23.40	Tons	63.50	1.14	0.22	0.87	%							7,205
	Acre Inches Applied:	**37.45**						**Totals:**	**185**	**733,438**	**8,900**	**1,399**	**3,075**	**91,092**	**7,205**
Season Nitrogen Ratio:	1.24							**Lbs Per Acre:**			**241**	**38**	**83**	**2,462**	**195**

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Nutrient Applications (Attachment B)

Field Name: L9

Wheat, 37 Acres Planted on 12/13/2022

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data % Moist.	Nitrogen	Phos.	Potass.	Units	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			%			518				
01/06/2023	Surface Water: Lakeside	4.53	Acre Inches		0.90			mg/L			34	0	0	3,412	
01/06/2023	Waste Water: Main Lagoon	0.20	Acre Inches		524.00	80.90	827.00	mg/L		200,942	877	135	1,384	15,065	
03/05/2023	Surface Water: Lakeside	5.31	Acre Inches		0.90			mg/L			40	0	0	4,000	
03/05/2023	Waste Water: Main Lagoon	0.23	Acre Inches		817.00	178.00	600.00	mg/L		231,083	1,572	343	1,155	8,008	
05/02/2023	Surface Water: Lakeside	5.18	Acre Inches		0.90			mg/L			39	0	0	3,902	
05/02/2023	Waste Water: Main Lagoon	0.23	Acre Inches		817.00	178.00	600.00	mg/L		231,083	1,572	343	1,155	8,008	
05/17/2023	Harvest	15.70	Tons	62.00	1.86	0.25	0.93	%							8,212
	Acre Inches Applied:	**15.68**						**Totals:**		**663,108**	**4,653**	**821**	**3,694**	**42,393**	**8,212**
Season Nitrogen Ratio:	1.35							**Lbs Per Acre:**			**126**	**22**	**100**	**1,146**	**222**

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Nutrient Applications (Attachment B)

Field Name: L9

Corn, 37 Acres Planted on 07/07/2023

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data % Moist.	Nitrogen	Phos.	Potass.	Units	Manure Applied (Tons)	Wastewater Applied (Gallons)	Nitrogen Applied (Lbs)	Phosphorus Applied (Lbs)	Potassium Applied (Lbs)	Salt Applied (Lbs)	Nitrogen Extracted (Lbs)
06/18/2023	Corral Solids: Main Corral	5.00	Tons	25.00	1.32	0.40	0.29	%	185		3,663	1,116	797	0	
07/17/2023	Surface Water: Lakeside	5.70	Acre Inches		0.90			mg/L			43	0	0	4,293	
07/17/2023	Waste Water: Main Lagoon	0.36	Acre Inches		348.00	46.40	373.00	mg/L		361,695	1,049	140	1,124	12,654	
08/01/2023	Surface Water: Lakeside	6.53	Acre Inches		0.90			mg/L			49	0	0	4,918	
08/16/2023	Surface Water: Lakeside	5.84	Acre Inches		0.90			mg/L			44	0	0	4,399	
08/16/2023	Waste Water: Main Lagoon	0.37	Acre Inches		348.00	46.40	373.00	mg/L		371,742	1,077	144	1,155	13,006	
08/30/2023	Ground Water: Well Avg	6.68	Acre Inches		0.10			mg/L			6	0	0	18,561	
09/13/2023	Fertilize - UN32	30.00	Gallons		32.00	0.00	0.00	%			2,959	0	0	0	
09/13/2023	Ground Water: Well Avg	6.06	Acre Inches		0.10			mg/L			5	0	0	16,838	
09/23/2023	Ground Water: Well Avg	5.91	Acre Inches		0.10			mg/L			5	0	0	16,421	
10/06/2023	Harvest	23.40	Tons	64.50	1.12	0.17	0.89	%							6,885
	Acre Inches Applied:	**37.45**						**Totals:**	**185**	**733,438**	**8,900**	**1,399**	**3,075**	**91,092**	**6,885**
Season Nitrogen Ratio:	1.29							**Lbs Per Acre:**			**241**	**38**	**83**	**2,462**	**186**

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Nutrient Applications (Attachment B)

Field Name: L10

Corn, 38 Acres Planted on 05/08/2023

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data % Moist.	Nitrogen	Phos.	Potass.	Units	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			%			532				
04/22/2023	Corral Solids: Main Corral	5.00	Tons	25.00	1.32	0.40	0.29	%	190		3,762	1,146	818	0	
05/18/2023	Surface Water: Lakeside	5.69	Acre Inches		0.90			mg/L			44	0	0	4,402	
05/18/2023	Waste Water: Main Lagoon	0.36	Acre Inches		817.00	178.00	600.00	mg/L		371,471	2,528	551	1,857	12,872	
06/02/2023	Surface Water: Lakeside	6.51	Acre Inches		0.90			mg/L			51	0	0	5,036	
06/17/2023	Surface Water: Lakeside	5.83	Acre Inches		0.90			mg/L			45	0	0	4,510	
06/17/2023	Waste Water: Main Lagoon	0.37	Acre Inches		348.00	46.40	373.00	mg/L		381,789	1,107	147	1,186	13,357	
07/01/2023	Ground Water: Well Avg	6.66	Acre Inches		0.10			mg/L			6	0	0	19,005	
07/15/2023	Fertilize - UN32	30.00	Gallons		32.00	0.00	0.00	%			3,039	0	0	0	
07/15/2023	Ground Water: Well Avg	6.05	Acre Inches		0.10			mg/L			5	0	0	17,265	
07/25/2023	Ground Water: Well Avg	5.90	Acre Inches		0.10			mg/L			5	0	0	16,837	
08/07/2023	Harvest	36.70	Tons	71.40	1.25	0.25	1.23	%							9,971
	Acre Inches Applied:	**37.37**						**Totals:**	**190**	**753,260**	**11,123**	**1,844**	**3,861**	**93,284**	**9,971**
Season Nitrogen Ratio:	1.12							**Lbs Per Acre:**			**293**	**49**	**102**	**2,455**	**262**

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Nutrient Applications (Attachment B)

Field Name: L11

Corn, 39 Acres Planted on 05/08/2023

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data % Moist.	Nitrogen	Phos.	Potass.	Units	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			%			546				
04/25/2023	Corral Solids: Main Corral	5.00	Tons	25.00	1.32	0.40	0.29	%	195		3,861	1,176	840	0	
05/22/2023	Surface Water: Lakeside	5.68	Acre Inches		0.90			mg/L			45	0	0	4,510	
05/22/2023	Waste Water: Main Lagoon	0.36	Acre Inches		817.00	178.00	600.00	mg/L		381,246	2,595	565	1,906	13,211	
06/06/2023	Surface Water: Lakeside	6.49	Acre Inches		0.90			mg/L			51	0	0	5,153	
06/21/2023	Surface Water: Lakeside	5.82	Acre Inches		0.90			mg/L			46	0	0	4,621	
06/21/2023	Waste Water: Main Lagoon	0.37	Acre Inches		348.00	46.40	373.00	mg/L		391,837	1,136	151	1,218	13,709	
07/05/2023	Ground Water: Well Avg	6.63	Acre Inches		0.10			mg/L			6	0	0	19,418	
07/19/2023	Fertilize - UN32	30.00	Gallons		32.00	0.00	0.00	%			3,119	0	0	0	
07/19/2023	Ground Water: Well Avg	6.04	Acre Inches		0.10			mg/L			5	0	0	17,690	
07/29/2023	Ground Water: Well Avg	5.90	Acre Inches		0.10			mg/L			5	0	0	17,280	
08/07/2023	Harvest	36.70	Tons	69.70	1.49	0.30	1.25	%							12,924
	Acre Inches Applied:	**37.29**						**Totals:**	**195**	**773,083**	**11,415**	**1,892**	**3,963**	**95,590**	**12,924**
Season Nitrogen Ratio:	0.88							**Lbs Per Acre:**			**293**	**49**	**102**	**2,451**	**331**

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Nutrient Applications (Attachment B)

Field Name: L12

Wheat, 38 Acres Planted on 12/13/2022

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data % Moist.	Nitrogen	Phos.	Potass.	Units	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			%			532				
01/03/2023	Surface Water: Lakeside	5.54	Acre Inches		0.90			mg/L			43	0	0	4,286	
01/03/2023	Waste Water: Main Lagoon	0.20	Acre Inches		524.00	80.90	827.00	mg/L		206,373	901	139	1,422	15,472	
03/02/2023	Surface Water: Lakeside	5.29	Acre Inches		0.90			mg/L			41	0	0	4,092	
03/02/2023	Waste Water: Main Lagoon	0.25	Acre Inches		817.00	178.00	600.00	mg/L		257,966	1,756	383	1,289	8,939	
04/29/2023	Surface Water: Lakeside	5.17	Acre Inches		0.90			mg/L			40	0	0	4,000	
04/29/2023	Waste Water: Main Lagoon	0.25	Acre Inches		817.00	178.00	600.00	mg/L		257,966	1,756	383	1,289	8,939	
05/17/2023	Harvest	13.20	Tons	59.20	1.86	0.36	1.03	%							7,613
	Acre Inches Applied:	**16.70**						**Totals:**		**722,304**	**5,068**	**904**	**4,000**	**45,727**	**7,613**
Season Nitrogen Ratio:	1.39							**Lbs Per Acre:**			**133**	**24**	**105**	**1,203**	**200**

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Nutrient Applications (Attachment B)

Field Name: L12

Corn, 38 Acres Planted on 06/14/2023

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data % Moist.	Nitrogen	Phos.	Potass.	Units	Manure Applied (Tons)	Wastewater Applied (Gallons)	Nitrogen Applied (Lbs)	Phosphorus Applied (Lbs)	Potassium Applied (Lbs)	Salt Applied (Lbs)	Nitrogen Extracted (Lbs)
05/28/2023	Corral Solids: Main Corral	5.00	Tons	25.00	1.32	0.40	0.29	%	190		3,762	1,146	818	0	
06/26/2023	Surface Water: Lakeside	5.69	Acre Inches		0.90			mg/L			44	0	0	4,402	
06/26/2023	Waste Water: Main Lagoon	0.36	Acre Inches		348.00	46.40	373.00	mg/L		371,471	1,077	144	1,154	12,996	
07/11/2023	Surface Water: Lakeside	6.51	Acre Inches		0.90			mg/L			51	0	0	5,036	
07/26/2023	Surface Water: Lakeside	5.83	Acre Inches		0.90			mg/L			45	0	0	4,510	
07/26/2023	Waste Water: Main Lagoon	0.37	Acre Inches		348.00	46.40	373.00	mg/L		381,789	1,107	147	1,186	13,357	
08/09/2023	Ground Water: Well Avg	6.66	Acre Inches		0.10			mg/L			6	0	0	19,005	
08/23/2023	Fertilize - UN32	30.00	Gallons		32.00	0.00	0.00	%			3,039	0	0	0	
08/23/2023	Ground Water: Well Avg	6.05	Acre Inches		0.10			mg/L			5	0	0	17,265	
09/02/2023	Ground Water: Well Avg	5.90	Acre Inches		0.10			mg/L			5	0	0	16,837	
09/13/2023	Harvest	23.60	Tons	67.80	1.38	0.26	1.26	%							7,970
	Acre Inches Applied:	**37.37**						**Totals:**	**190**	**753,260**	**9,140**	**1,437**	**3,159**	**93,408**	**7,970**
Season Nitrogen Ratio:	1.15							**Lbs Per Acre:**			**241**	**38**	**83**	**2,458**	**210**

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Nutrient Applications (Attachment B)

Field Name: L13

Corn, 29 Acres Planted on 05/08/2023

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data % Moist.	Nitrogen	Phos.	Potass.	Units	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			%			406				
04/25/2023	Corral Solids: Main Corral	4.00	Tons	25.00	1.32	0.40	0.29	%	116		2,297	699	499	0	
05/20/2023	Surface Water: Lakeside	5.16	Acre Inches		0.90			mg/L			30	0	0	3,046	
05/20/2023	Waste Water: Main Lagoon	0.98	Acre Inches		817.00	178.00	600.00	mg/L		771,725	5,252	1,144	3,857	26,742	
06/04/2023	Surface Water: Lakeside	6.74	Acre Inches		0.90			mg/L			40	0	0	3,979	
06/19/2023	Surface Water: Lakeside	5.33	Acre Inches		0.90			mg/L			32	0	0	3,147	
06/19/2023	Waste Water: Main Lagoon	1.02	Acre Inches		348.00	46.40	373.00	mg/L		803,224	2,328	311	2,496	28,102	
07/03/2023	Ground Water: Well Avg	6.94	Acre Inches		0.10			mg/L			5	0	0	15,114	
07/17/2023	Ground Water: Well Avg	6.15	Acre Inches		0.10			mg/L			4	0	0	13,394	
07/27/2023	Ground Water: Well Avg	5.95	Acre Inches		0.10			mg/L			4	0	0	12,958	
08/07/2023	Harvest	34.70	Tons	70.70	1.46	0.33	1.37	%							8,610
	Acre Inches Applied:	**38.27**						**Totals:**	**116**	**1,574,949**	**10,398**	**2,154**	**6,852**	**106,482**	**8,610**
Season Nitrogen Ratio:	1.21							**Lbs Per Acre:**			**359**	**74**	**236**	**3,672**	**297**

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Nutrient Applications (Attachment B)

Field Name: L14

Wheat, 37 Acres Planted on 12/13/2022

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data % Moist.	Nitrogen	Phos.	Potass.	Units	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			%			518				
01/09/2023	Surface Water: Lakeside	4.53	Acre Inches		0.90			mg/L			34	0	0	3,412	
01/09/2023	Waste Water: Main Lagoon	0.20	Acre Inches		524.00	80.90	827.00	mg/L		200,942	877	135	1,384	15,065	
03/08/2023	Surface Water: Lakeside	5.31	Acre Inches		0.90			mg/L			40	0	0	4,000	
03/08/2023	Waste Water: Main Lagoon	0.23	Acre Inches		817.00	178.00	600.00	mg/L		231,083	1,572	343	1,155	8,008	
05/05/2023	Surface Water: Lakeside	5.18	Acre Inches		0.90			mg/L			39	0	0	3,902	
05/05/2023	Waste Water: Main Lagoon	0.23	Acre Inches		817.00	178.00	600.00	mg/L		231,083	1,572	343	1,155	8,008	
05/17/2023	Harvest	12.30	Tons	57.20	1.70	0.29	0.81	%							6,623
	Acre Inches Applied:	**15.68**						**Totals:**		**663,108**	**4,653**	**821**	**3,694**	**42,393**	**6,623**
Season Nitrogen Ratio:	1.35							**Lbs Per Acre:**			**126**	**22**	**100**	**1,146**	**179**

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Nutrient Applications (Attachment B)

Field Name: L14

Corn, 37 Acres Planted on 07/07/2023

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data % Moist.	Nitrogen	Phos.	Potass.	Units	Manure Applied (Tons)	Wastewater Applied (Gallons)	Nitrogen Applied (Lbs)	Phosphorus Applied (Lbs)	Potassium Applied (Lbs)	Salt Applied (Lbs)	Nitrogen Extracted (Lbs)
06/01/2023	Corral Solids: Main Corral	5.00	Tons	25.00	1.32	0.40	0.29	%	185		3,663	1,116	797	0	
07/22/2023	Surface Water: Lakeside	5.70	Acre Inches		0.90			mg/L			43	0	0	4,293	
07/22/2023	Waste Water: Main Lagoon	0.36	Acre Inches		348.00	46.40	373.00	mg/L		361,695	1,049	140	1,124	12,654	
08/06/2023	Surface Water: Lakeside	6.53	Acre Inches		0.90			mg/L			49	0	0	4,918	
08/21/2023	Surface Water: Lakeside	5.84	Acre Inches		0.90			mg/L			44	0	0	4,399	
08/21/2023	Waste Water: Main Lagoon	0.37	Acre Inches		348.00	46.40	373.00	mg/L		371,742	1,077	144	1,155	13,006	
09/04/2023	Ground Water: Well Avg	6.68	Acre Inches		0.10			mg/L			6	0	0	18,561	
09/18/2023	Fertilize - UN32	30.00	Gallons		32.00	0.00	0.00	%			2,959	0	0	0	
09/18/2023	Ground Water: Well Avg	6.06	Acre Inches		0.10			mg/L			5	0	0	16,838	
09/26/2023	Ground Water: Well Avg	5.91	Acre Inches		0.10			mg/L			5	0	0	16,421	
10/06/2023	Harvest	23.80	Tons	67.20	1.15	0.24	1.19	%							6,643
	Acre Inches Applied:	**37.45**						**Totals:**	**185**	**733,438**	**8,900**	**1,399**	**3,075**	**91,092**	**6,643**
Season Nitrogen Ratio:	1.34							**Lbs Per Acre:**			**241**	**38**	**83**	**2,462**	**180**

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Nutrient Applications (Attachment B)

Field Name: L15

Wheat, 39 Acres Planted on 12/16/2022

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data % Moist.	Nitrogen	Phos.	Potass.	Units	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			%			546				
01/09/2023	Surface Water: Lakeside	4.54	Acre Inches		0.90			mg/L			36	0	0	3,604	
01/09/2023	Waste Water: Main Lagoon	0.20	Acre Inches		524.00	80.90	827.00	mg/L		211,804	925	143	1,459	15,879	
03/08/2023	Surface Water: Lakeside	5.28	Acre Inches		0.90			mg/L			42	0	0	4,192	
03/08/2023	Waste Water: Main Lagoon	0.23	Acre Inches		817.00	178.00	600.00	mg/L		243,574	1,658	361	1,217	8,440	
05/05/2023	Surface Water: Lakeside	5.16	Acre Inches		0.90			mg/L			41	0	0	4,097	
05/05/2023	Waste Water: Main Lagoon	0.23	Acre Inches		817.00	178.00	600.00	mg/L		243,574	1,658	361	1,217	8,440	
05/20/2023	Harvest	18.60	Tons	55.00	1.60	0.38	2.06	%							10,446
	Acre Inches Applied:	**15.64**						**Totals:**		**698,952**	**4,904**	**865**	**3,893**	**44,653**	**10,446**
Season Nitrogen Ratio:	1.23							**Lbs Per Acre:**			**126**	**22**	**100**	**1,145**	**268**

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Nutrient Applications (Attachment B)

Field Name: L15

Corn, 39 Acres Planted on 06/20/2023

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data % Moist.	Nitrogen	Phos.	Potass.	Units	Manure Applied (Tons)	Wastewater Applied (Gallons)	Nitrogen Applied (Lbs)	Phosphorus Applied (Lbs)	Potassium Applied (Lbs)	Salt Applied (Lbs)	Nitrogen Extracted (Lbs)
06/10/2023	Corral Solids: Main Corral	5.00	Tons	25.00	1.32	0.40	0.29	%	195		3,861	1,176	840	0	
07/02/2023	Surface Water: Lakeside	5.68	Acre Inches		0.90			mg/L			45	0	0	4,510	
07/02/2023	Waste Water: Main Lagoon	0.36	Acre Inches		348.00	46.40	373.00	mg/L		381,246	1,105	147	1,184	13,338	
07/17/2023	Surface Water: Lakeside	6.49	Acre Inches		0.90			mg/L			51	0	0	5,153	
08/01/2023	Surface Water: Lakeside	5.82	Acre Inches		0.90			mg/L			46	0	0	4,621	
08/01/2023	Waste Water: Main Lagoon	0.37	Acre Inches		348.00	46.40	373.00	mg/L		391,837	1,136	151	1,218	13,709	
08/15/2023	Ground Water: Well Avg	6.63	Acre Inches		0.10			mg/L			6	0	0	19,418	
08/29/2023	Fertilize - UN32	30.00	Gallons		32.00	0.00	0.00	%			3,119	0	0	0	
08/29/2023	Ground Water: Well Avg	6.04	Acre Inches		0.10			mg/L			5	0	0	17,690	
09/08/2023	Ground Water: Well Avg	5.90	Acre Inches		0.10			mg/L			5	0	0	17,280	
09/19/2023	Harvest	24.60	Tons	66.50	1.36	0.26	1.42	%							8,742
	Acre Inches Applied:	**37.29**						**Totals:**	**195**	**773,083**	**9,380**	**1,475**	**3,242**	**95,717**	**8,742**
Season Nitrogen Ratio:	1.07							**Lbs Per Acre:**			**241**	**38**	**83**	**2,454**	**224**

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Nutrient Applications (Attachment B)

Field Name: L16

Wheat, 39 Acres Planted on 12/16/2022

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data % Moist.	Nitrogen	Phos.	Potass.	Units	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			%			546				
01/12/2023	Surface Water: Lakeside	4.54	Acre Inches		0.90			mg/L			36	0	0	3,604	
01/12/2023	Waste Water: Main Lagoon	0.20	Acre Inches		524.00	80.90	827.00	mg/L		211,804	925	143	1,459	15,879	
03/11/2023	Surface Water: Lakeside	5.28	Acre Inches		0.90			mg/L			42	0	0	4,192	
03/11/2023	Waste Water: Main Lagoon	0.23	Acre Inches		817.00	178.00	600.00	mg/L		243,574	1,658	361	1,217	8,440	
05/08/2023	Surface Water: Lakeside	5.16	Acre Inches		0.90			mg/L			41	0	0	4,097	
05/08/2023	Waste Water: Main Lagoon	0.23	Acre Inches		817.00	178.00	600.00	mg/L		243,574	1,658	361	1,217	8,440	
05/20/2023	Harvest	19.60	Tons	63.40	1.90	0.48	2.86	%							10,631
	Acre Inches Applied:	**15.64**						**Totals:**		**698,952**	**4,904**	**865**	**3,893**	**44,653**	**10,631**
Season Nitrogen Ratio:	1.21							**Lbs Per Acre:**			**126**	**22**	**100**	**1,145**	**273**

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Nutrient Applications (Attachment B)

Field Name: L16

Corn, 39 Acres Planted on 07/03/2023

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data % Moist.	Nitrogen	Phos.	Potass.	Units	Manure Applied (Tons)	Wastewater Applied (Gallons)	Nitrogen Applied (Lbs)	Phosphorus Applied (Lbs)	Potassium Applied (Lbs)	Salt Applied (Lbs)	Nitrogen Extracted (Lbs)
06/15/2023	Corral Solids: Main Corral	5.00	Tons	25.00	1.32	0.40	0.29	%	195		3,861	1,176	840	0	
07/15/2023	Surface Water: Lakeside	5.68	Acre Inches		0.90			mg/L			45	0	0	4,510	
07/15/2023	Waste Water: Main Lagoon	0.36	Acre Inches		348.00	46.40	373.00	mg/L		381,246	1,105	147	1,184	13,338	
07/30/2023	Surface Water: Lakeside	6.49	Acre Inches		0.90			mg/L			51	0	0	5,153	
08/14/2023	Surface Water: Lakeside	5.82	Acre Inches		0.90			mg/L			46	0	0	4,621	
08/14/2023	Waste Water: Main Lagoon	0.37	Acre Inches		348.00	46.40	373.00	mg/L		391,837	1,136	151	1,218	13,709	
08/28/2023	Ground Water: Well Avg	6.63	Acre Inches		0.10			mg/L			6	0	0	19,418	
09/11/2023	Fertilize - UN32	25.00	Gallons		32.00	0.00	0.00	%			2,599	0	0	0	
09/11/2023	Ground Water: Well Avg	6.04	Acre Inches		0.10			mg/L			5	0	0	17,690	
09/21/2023	Ground Water: Well Avg	5.90	Acre Inches		0.10			mg/L			5	0	0	17,280	
10/02/2023	Harvest	23.20	Tons	71.60	1.29	0.34	1.21	%							6,630
	Acre Inches Applied:	**37.29**						**Totals:**	**195**	**773,083**	**8,860**	**1,475**	**3,242**	**95,717**	**6,630**
Season Nitrogen Ratio:	1.34							**Lbs Per Acre:**			**227**	**38**	**83**	**2,454**	**170**

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Nutrient Applications (Attachment B)

Field Name: L18

Wheat, 37 Acres Planted on 12/10/2022

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data % Moist.	Nitrogen	Phos.	Potass.	Units	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			%			518				
01/06/2023	Surface Water: Lakeside	4.53	Acre Inches		0.90			mg/L			34	0	0	3,412	
01/06/2023	Waste Water: Main Lagoon	0.20	Acre Inches		524.00	80.90	827.00	mg/L		200,942	877	135	1,384	15,065	
03/05/2023	Surface Water: Lakeside	5.31	Acre Inches		0.90			mg/L			40	0	0	4,000	
03/05/2023	Waste Water: Main Lagoon	0.23	Acre Inches		817.00	178.00	600.00	mg/L		231,083	1,572	343	1,155	8,008	
05/02/2023	Surface Water: Lakeside	5.18	Acre Inches		0.90			mg/L			39	0	0	3,902	
05/02/2023	Waste Water: Main Lagoon	0.23	Acre Inches		817.00	178.00	600.00	mg/L		231,083	1,572	343	1,155	8,008	
05/14/2023	Harvest	20.70	Tons	67.10	1.37	0.40	1.81	%							6,904
	Acre Inches Applied:	**15.68**						**Totals:**		**663,108**	**4,653**	**821**	**3,694**	**42,393**	**6,904**
Season Nitrogen Ratio:	1.37							**Lbs Per Acre:**			**126**	**22**	**100**	**1,146**	**187**

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Nutrient Applications (Attachment B)

Field Name: L18

Corn, 37 Acres Planted on 07/14/2023

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data % Moist.	Nitrogen	Phos.	Potass.	Units	Manure Applied (Tons)	Wastewater Applied (Gallons)	Nitrogen Applied (Lbs)	Phosphorus Applied (Lbs)	Potassium Applied (Lbs)	Salt Applied (Lbs)	Nitrogen Extracted (Lbs)
06/19/2023	Corral Solids: Main Corral	5.00	Tons	25.00	1.32	0.40	0.29	%	185		3,663	1,116	797	0	
07/26/2023	Surface Water: Lakeside	5.70	Acre Inches		0.90			mg/L			43	0	0	4,293	
07/26/2023	Waste Water: Main Lagoon	0.36	Acre Inches		348.00	46.40	373.00	mg/L		361,695	1,049	140	1,124	12,654	
08/10/2023	Surface Water: Lakeside	6.53	Acre Inches		0.90			mg/L			49	0	0	4,918	
08/25/2023	Surface Water: Lakeside	5.84	Acre Inches		0.90			mg/L			44	0	0	4,399	
08/25/2023	Waste Water: Main Lagoon	0.37	Acre Inches		348.00	46.40	373.00	mg/L		371,742	1,077	144	1,155	13,006	
09/08/2023	Ground Water: Well Avg	6.68	Acre Inches		0.10			mg/L			6	0	0	18,561	
09/22/2023	Fertilize - UN32	30.00	Gallons		32.00	0.00	0.00	%			2,959	0	0	0	
09/22/2023	Ground Water: Well Avg	6.06	Acre Inches		0.10			mg/L			5	0	0	16,838	
10/02/2023	Ground Water: Well Avg	5.91	Acre Inches		0.10			mg/L			5	0	0	16,421	
10/13/2023	Harvest	21.10	Tons	68.40	1.40	0.27	1.54	%							6,908
	Acre Inches Applied:	**37.45**						**Totals:**	**185**	**733,438**	**8,900**	**1,399**	**3,075**	**91,092**	**6,908**
Season Nitrogen Ratio:	1.29							**Lbs Per Acre:**			**241**	**38**	**83**	**2,462**	**187**

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Nutrient Applications (Attachment B)

Field Name: L19

Wheat, 64 Acres Planted on 12/16/2022

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data % Moist.	Nitrogen	Phos.	Potass.	Units	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			%			896				
01/14/2023	Surface Water: Lakeside	4.64	Acre Inches		0.90			mg/L			60	0	0	6,045	
01/14/2023	Waste Water: Main Lagoon	0.20	Acre Inches		524.00	80.90	827.00	mg/L		347,575	1,517	234	2,394	26,058	
03/13/2023	Surface Water: Lakeside	5.09	Acre Inches		0.90			mg/L			67	0	0	6,632	
03/13/2023	Waste Water: Main Lagoon	0.22	Acre Inches		817.00	178.00	600.00	mg/L		382,333	2,602	567	1,911	13,249	
05/10/2023	Surface Water: Lakeside	5.01	Acre Inches		0.90			mg/L			65	0	0	6,527	
05/10/2023	Waste Water: Main Lagoon	0.22	Acre Inches		817.00	178.00	600.00	mg/L		382,333	2,602	567	1,911	13,249	
05/20/2023	Harvest	21.40	Tons	62.90	1.51	0.38	2.11	%							15,345
	Acre Inches Applied:	**15.38**						**Totals:**		**1,112,240**	**7,810**	**1,368**	**6,216**	**71,759**	**15,345**
Season Nitrogen Ratio:	0.99							**Lbs Per Acre:**			**122**	**21**	**97**	**1,121**	**240**

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Nutrient Applications (Attachment B)

Field Name: L19

Corn, 64 Acres Planted on 07/14/2023

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data % Moist.	Nitrogen	Phos.	Potass.	Units	Manure Applied (Tons)	Wastewater Applied (Gallons)	Nitrogen Applied (Lbs)	Phosphorus Applied (Lbs)	Potassium Applied (Lbs)	Salt Applied (Lbs)	Nitrogen Extracted (Lbs)
06/25/2023	Corral Solids: Main Corral	5.00	Tons	25.00	1.32	0.40	0.29	%	320		6,336	1,930	1,378	0	
07/31/2023	Surface Water: Lakeside	5.57	Acre Inches		0.90			mg/L			72	0	0	7,257	
07/31/2023	Waste Water: Main Lagoon	0.36	Acre Inches		348.00	46.40	373.00	mg/L		625,635	1,814	242	1,944	21,889	
08/15/2023	Surface Water: Lakeside	6.20	Acre Inches		0.90			mg/L			81	0	0	8,078	
08/30/2023	Surface Water: Lakeside	5.66	Acre Inches		0.90			mg/L			74	0	0	7,374	
08/30/2023	Waste Water: Main Lagoon	0.36	Acre Inches		348.00	46.40	373.00	mg/L		625,635	1,814	242	1,944	21,889	
09/13/2023	Ground Water: Well Avg	6.29	Acre Inches		0.10			mg/L			9	0	0	30,231	
09/20/2023	Fertilize - UN32	30.00	Gallons		32.00	0.00	0.00	%			5,118	0	0	0	
09/20/2023	Ground Water: Well Avg	5.93	Acre Inches		0.10			mg/L			8	0	0	28,500	
10/02/2023	Ground Water: Well Avg	5.84	Acre Inches		0.10			mg/L			8	0	0	28,068	
10/13/2023	Harvest	24.10	Tons	65.70	1.40	0.27	1.36	%							14,813
	Acre Inches Applied:	**36.21**						**Totals:**	**320**	**1,251,270**	**15,334**	**2,413**	**5,265**	**153,286**	**14,813**
Season Nitrogen Ratio:	1.04							**Lbs Per Acre:**			**240**	**38**	**82**	**2,395**	**231**

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Nutrient Applications (Attachment B)

Field Name: M1

Almonds, 72 Acres Planted on 11/02/2017

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data % Moist.	Nitrogen	Phos.	Potass.	Units	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			%			1,008				
01/26/2023	Ground Water: Well Avg	3.16	Acre Inches		0.10			mg/L			5	0	0	17,086	
02/23/2023	Ground Water: Well Avg	3.34	Acre Inches		0.10			mg/L			6	0	0	18,059	
03/22/2023	Fertilize - UN32	15.00	Gallons		32.00	0.00	0.00	%			2,879	0	0	0	
03/22/2023	Ground Water: Well Avg	3.30	Acre Inches		0.10			mg/L			5	0	0	17,843	
04/19/2023	Ground Water: Well Avg	3.20	Acre Inches		0.10			mg/L			5	0	0	17,302	
05/14/2023	Fertilize - UN32	15.00	Gallons		32.00	0.00	0.00	%			2,879	0	0	0	
05/14/2023	Ground Water: Well Avg	3.30	Acre Inches		0.10			mg/L			5	0	0	17,843	
06/08/2023	Ground Water: Well Avg	3.50	Acre Inches		0.10			mg/L			6	0	0	18,924	
07/03/2023	Ground Water: Well Avg	3.40	Acre Inches		0.10			mg/L			6	0	0	18,384	
07/28/2023	Ground Water: Well Avg	3.00	Acre Inches		0.10			mg/L			5	0	0	16,221	
08/22/2023	Ground Water: Well Avg	3.50	Acre Inches		0.10			mg/L			6	0	0	18,924	
09/14/2023	Harvest	2.10	Tons	6.50	1.89	0.29	1.67	%							5,344
	Acre Inches Applied:	**29.70**						**Totals:**			**6,813**	**0**	**0**	**160,587**	**5,344**
Season Nitrogen Ratio:	1.30							**Lbs Per Acre:**			**95**	**0**	**0**	**2,230**	**74**

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Nutrient Applications (Attachment B)

Field Name: M2

Corn, 73 Acres Planted on 05/10/2023

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data % Moist.	Nitrogen	Phos.	Potass.	Units	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			%			1,022				
04/26/2023	Corral Solids: Main Corral	5.00	Tons	25.00	1.32	0.40	0.29	%	365		7,227	2,201	1,572	0	
05/22/2023	Surface Water: Lakeside	5.20	Acre Inches		0.90			mg/L			77	0	0	7,728	
05/22/2023	Waste Water: Main Lagoon	0.71	Acre Inches		817.00	178.00	600.00	mg/L		1,407,407	9,578	2,087	7,034	48,771	
06/06/2023	Surface Water: Lakeside	6.14	Acre Inches		0.90			mg/L			91	0	0	9,125	
06/21/2023	Surface Water: Lakeside	5.27	Acre Inches		0.90			mg/L			78	0	0	7,831	
06/21/2023	Waste Water: Main Lagoon	0.72	Acre Inches		348.00	46.40	373.00	mg/L		1,427,230	4,138	552	4,435	49,933	
07/05/2023	Ground Water: Well Avg	6.22	Acre Inches		0.10			mg/L			10	0	0	34,098	
07/19/2023	Fertilize - UN32	20.00	Gallons		32.00	0.00	0.00	%			3,892	0	0	0	
07/19/2023	Ground Water: Well Avg	5.91	Acre Inches		0.10			mg/L			9	0	0	32,399	
07/29/2023	Ground Water: Well Avg	5.83	Acre Inches		0.10			mg/L			9	0	0	31,960	
08/09/2023	Harvest	29.90	Tons	65.20	1.23	0.27	0.78	%							18,686
	Acre Inches Applied:	**36.00**						**Totals:**	**365**	**2,834,637**	**26,133**	**4,840**	**13,041**	**221,845**	**18,686**
Season Nitrogen Ratio:	1.40							**Lbs Per Acre:**			**358**	**66**	**179**	**3,039**	**256**

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Nutrient Applications (Attachment B)

Field Name: P1

Wheat, 76 Acres Planted on 12/10/2022

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data % Moist.	Nitrogen	Phos.	Potass.	Units	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			%			1,064				
01/08/2023	Surface Water: Lakeside	4.66	Acre Inches		0.90			mg/L			72	0	0	7,210	
01/08/2023	Waste Water: Main Lagoon	0.60	Acre Inches		524.00	80.90	827.00	mg/L		1,238,236	5,405	834	8,530	92,830	
03/07/2023	Surface Water: Lakeside	5.04	Acre Inches		0.90			mg/L			78	0	0	7,798	
03/07/2023	Waste Water: Main Lagoon	0.50	Acre Inches		817.00	178.00	600.00	mg/L		1,031,863	7,022	1,530	5,157	35,757	
05/04/2023	Surface Water: Lakeside	4.98	Acre Inches		0.90			mg/L			77	0	0	7,705	
05/04/2023	Waste Water: Main Lagoon	0.42	Acre Inches		817.00	178.00	600.00	mg/L		866,765	5,899	1,285	4,332	30,036	
05/14/2023	Harvest	26.80	Tons	69.10	1.24	0.32	1.69	%							15,608
	Acre Inches Applied:	**16.20**						**Totals:**		**3,136,865**	**19,618**	**3,650**	**18,020**	**181,336**	**15,608**
Season Nitrogen Ratio:	1.26							**Lbs Per Acre:**			**258**	**48**	**237**	**2,386**	**205**

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Nutrient Applications (Attachment B)

Field Name: P1

Corn, 76 Acres Planted on 06/27/2023

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data % Moist.	Nitrogen	Phos.	Potass.	Units	Manure Applied (Tons)	Wastewater Applied (Gallons)	Nitrogen Applied (Lbs)	Phosphorus Applied (Lbs)	Potassium Applied (Lbs)	Salt Applied (Lbs)	Nitrogen Extracted (Lbs)
06/08/2023	Corral Solids: Main Corral	4.00	Tons	25.00	1.32	0.40	0.29	%	304		6,019	1,833	1,309	0	
07/14/2023	Surface Water: Lakeside	5.55	Acre Inches		0.90			mg/L			86	0	0	8,586	
07/14/2023	Waste Water: Main Lagoon	0.25	Acre Inches		348.00	46.40	373.00	mg/L		515,932	1,496	199	1,603	18,051	
07/29/2023	Surface Water: Lakeside	6.13	Acre Inches		0.90			mg/L			95	0	0	9,484	
08/13/2023	Surface Water: Lakeside	5.62	Acre Inches		0.90			mg/L			87	0	0	8,695	
08/13/2023	Waste Water: Main Lagoon	0.26	Acre Inches		348.00	46.40	373.00	mg/L		536,569	1,556	207	1,667	18,773	
08/23/2023	Ground Water: Well Avg	6.20	Acre Inches		0.10			mg/L			11	0	0	35,386	
09/03/2023	Fertilize - UN32	20.00	Gallons		32.00	0.00	0.00	%			4,052	0	0	0	
09/03/2023	Ground Water: Well Avg	5.90	Acre Inches		0.10			mg/L			10	0	0	33,673	
09/14/2023	Ground Water: Well Avg	5.83	Acre Inches		0.10			mg/L			10	0	0	33,274	
09/26/2023	Harvest	25.90	Tons	67.60	0.81	0.28	1.07	%							10,357
	Acre Inches Applied:	**35.74**						**Totals:**	**304**	**1,052,501**	**13,420**	**2,240**	**4,579**	**165,922**	**10,357**
Season Nitrogen Ratio:	1.30							**Lbs Per Acre:**			**177**	**29**	**60**	**2,183**	**136**

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Nutrient Applications (Attachment B)

Field Name: P2

Wheat, 114 Acres Planted on 12/13/2022

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data % Moist.	Nitrogen	Phos.	Potass.	Units	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			%			1,596				
01/06/2023	Surface Water: Lakeside	4.71	Acre Inches		0.90			mg/L			109	0	0	10,930	
01/06/2023	Waste Water: Main Lagoon	0.21	Acre Inches		524.00	80.90	827.00	mg/L		650,074	2,837	438	4,478	48,736	
03/05/2023	Surface Water: Lakeside	4.96	Acre Inches		0.90			mg/L			115	0	0	11,511	
03/05/2023	Waste Water: Main Lagoon	0.22	Acre Inches		817.00	178.00	600.00	mg/L		681,030	4,635	1,010	3,404	23,599	
05/02/2023	Surface Water: Lakeside	4.92	Acre Inches		0.90			mg/L			114	0	0	11,418	
05/02/2023	Waste Water: Main Lagoon	0.22	Acre Inches		817.00	178.00	600.00	mg/L		681,030	4,635	1,010	3,404	23,599	
05/17/2023	Harvest	15.00	Tons	63.10	1.82	0.31	1.00	%							22,968
	Acre Inches Applied:	**15.24**						**Totals:**		**2,012,134**	**14,043**	**2,458**	**11,286**	**129,794**	**22,968**
Season Nitrogen Ratio:	1.33							**Lbs Per Acre:**			**123**	**22**	**99**	**1,139**	**201**

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Nutrient Applications (Attachment B)

Field Name: P2

Corn, 114 Acres Planted on 07/03/2023

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data % Moist.	Nitrogen	Phos.	Potass.	Units	Manure Applied (Tons)	Wastewater Applied (Gallons)	Nitrogen Applied (Lbs)	Phosphorus Applied (Lbs)	Potassium Applied (Lbs)	Salt Applied (Lbs)	Nitrogen Extracted (Lbs)
06/14/2023	Corral Solids: Main Corral	5.00	Tons	25.00	1.32	0.40	0.29	%	570		11,286	3,437	2,454	0	
07/15/2023	Surface Water: Lakeside	5.50	Acre Inches		0.90			mg/L			128	0	0	12,765	
07/15/2023	Waste Water: Main Lagoon	0.35	Acre Inches		348.00	46.40	373.00	mg/L		1,083,457	3,141	418	3,366	37,906	
07/30/2023	Surface Water: Lakeside	6.00	Acre Inches		0.90			mg/L			139	0	0	13,925	
08/14/2023	Surface Water: Lakeside	5.55	Acre Inches		0.90			mg/L			129	0	0	12,880	
08/14/2023	Waste Water: Main Lagoon	0.35	Acre Inches		348.00	46.40	373.00	mg/L		1,083,457	3,141	418	3,366	37,906	
08/28/2023	Ground Water: Well Avg	6.05	Acre Inches		0.10			mg/L			16	0	0	51,795	
09/11/2023	Fertilize - UN32	30.00	Gallons		32.00	0.00	0.00	%			9,117	0	0	0	
09/11/2023	Ground Water: Well Avg	5.85	Acre Inches		0.10			mg/L			15	0	0	50,082	
09/21/2023	Ground Water: Well Avg	5.80	Acre Inches		0.10			mg/L			15	0	0	49,654	
10/02/2023	Harvest	23.90	Tons	70.80	1.27	0.26	0.99	%							20,208
	Acre Inches Applied:	**35.45**						**Totals:**	**570**	**2,166,913**	**27,125**	**4,274**	**9,187**	**266,913**	**20,208**
Season Nitrogen Ratio:	1.34							**Lbs Per Acre:**			**238**	**37**	**81**	**2,341**	**177**

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Nutrient Applications (Attachment B)

Field Name: P3

Corn, 76 Acres Planted on 05/05/2023

Date	Event/Source	Amount Applied/Yield (per Acre)	Units	Lab Sample Data % Moist.	Nitrogen	Phos.	Potass.	Units	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			%			1,064				
04/20/2023	Corral Solids: Main Corral	5.00	Tons	25.00	1.32	0.40	0.29	%	380		7,524	2,291	1,636	0	
05/19/2023	Surface Water: Lakeside	5.79	Acre Inches		0.90			mg/L			90	0	0	8,958	
05/19/2023	Waste Water: Main Lagoon	0.37	Acre Inches		817.00	178.00	600.00	mg/L		763,579	5,197	1,132	3,817	26,460	
06/03/2023	Surface Water: Lakeside	6.39	Acre Inches		0.90			mg/L			99	0	0	9,886	
06/18/2023	Surface Water: Lakeside	5.86	Acre Inches		0.90			mg/L			90	0	0	9,067	
06/18/2023	Waste Water: Main Lagoon	0.37	Acre Inches		348.00	46.40	373.00	mg/L		763,579	2,213	295	2,373	26,715	
07/02/2023	Ground Water: Well Avg	6.47	Acre Inches		0.10			mg/L			11	0	0	36,927	
07/16/2023	Fertilize - UN32	30.00	Gallons		32.00	0.00	0.00	%			6,078	0	0	0	
07/16/2023	Ground Water: Well Avg	6.16	Acre Inches		0.10			mg/L			11	0	0	35,158	
07/26/2023	Ground Water: Well Avg	6.08	Acre Inches		0.10			mg/L			11	0	0	34,701	
08/04/2023	Harvest	32.70	Tons	69.10	1.40	0.24	1.28	%							21,502
	Acre Inches Applied:	**37.49**						**Totals:**	**380**	**1,527,158**	**22,387**	**3,719**	**7,826**	**187,871**	**21,502**
Season Nitrogen Ratio:	1.04							**Lbs Per Acre:**			**295**	**49**	**103**	**2,472**	**283**

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Nutrient Applications (Attachment B)

Summary of Nutrient Applications, Removal, and Balance

	Total N (Lbs)	Total P (Lbs)	Total K (Lbs)	Total Salts (Lbs)	Total Manure Applied	
Solid Manure	86,823.00	26,441.55	18,881.39	0.00	4,385.00	tons
Process Wastewater	144,485.39	26,568.56	136,277.48	1,263,452.63	31,538,633.28	gallons
Irrigation Water	5,506.19					
Fertilizer / Total Imports	88,190.12					
Atmospheric Deposition	16,632.00					
Total Nitrogen Applied	**341,636.70**					
Crop Nitrogen Removal	355,418.92					
Nitrogen Balance	**(13,782.22)**					
Nitrogen Ratio	**0.96**					

- **Nutrient applications shown in Attachment B are on a calendar 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.**

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 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

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 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)**

* 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 (N03-N or TKN, P, K, TDS) x 10-6 using the samples closest in date to the export event.

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Land Application Area Description Technical Report (Attachment D)

Field Name	Assessor Parcel Number(s)	Acres	Type of Waste Applied
L1	x016 x260 x014 x000	72	None
L2	x016 x260 x014 x000	36	Both
L4	x016 x260 x014 x000	32	Both
L5	x016 x260 x001 x000	73	None
L6	x016 x260 x001 x000	73	None
L7	x028 x050 x016 x000	57	Both
L8	x016 x270 x020 x000	37	Both
L9	x016 x270 x020 x000	37	Both
L10	x028 x040 x029 x000	38	Both
L11	x028 x040 x015 x000	39	Both
L12	x028 x040 x016 x000	38	Both
L13	x016 x270 x020 x000	29	Both
L14	x028 x040 x029 x000	37	Both
L15	x028 x040 x015 x000	39	Both
L16	x028 x040 x016 x000	39	Both
L18	x028 x040 x018 x000	37	Both
L19	x028 x040 x018 x000, x028 x040 x019 x000	64	Both
M1	x016 x260 x015 x000	72	None
M2	x016 x260 x015 x000	73	Both
P1	x016 x270 x018 x000	76	Both
P2	x016 x270 x022 x000, x016 x270 x043 x000	114	Both
P3	x028 x040 x033 x000	76	Both
		1,188	

Production Area APN(s): x028 x040 x016 x000

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Lab Results Summary (Attachment E)

Process Wastewater

(mgl/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
02/16/2023	281.00	78.80	356.00	4,320	156.00		2,870.00								
04/25/2023	817.00	178.00	600.00	6,270	301.00	0.00	4,160.00	7.44							
07/13/2023	348.00	46.40	373.00	6,330	328.00		4,200.00								
11/07/2023	693.00	40.10	728.00	9,200	690.00		6,110.00								
Averages:	534.75	85.82	514.25	6,530	368.75	0.00	4,335.00	7.44							

Manure - Corral Solids

(Dry Weight Basis)

Sample Date:	TN	TP	TK	Moisture	Ash	CA	MG	NA	S	CL
06/02/2023	1.32	0.40	0.29	25.00						%
11/08/2023	1.65	0.35	0.35	45.20						%
Averages:	1.48	0.38	0.32	35.10						

Plant Tissue

(Dry Weight Basis)

Field:	Crop #:	Crop	Sample Date:	TN (lbs/ton)	TP (lbs/ton)	TK (lbs/ton)	Moisture (%)	Ash (%)
L1	1	Almonds	09/14/2023	44.40	5.14	39.60	6.85	7.32
L2	1	Wheat	04/12/2023	50.00	10.62	72.40	72.20	13.10

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 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 (%)
L2	2	Corn	08/24/2023	24.80	5.66	33.00	67.60	6.83
L4	1	Wheat	04/12/2023	51.20	10.36	72.00	71.90	13.60
L4	2	Corn	08/24/2023	22.60	5.40	32.80	68.80	6.62
L5	1	Almonds	09/14/2023	52.80	5.04	32.20	6.70	5.73
L6	1	Almonds	09/14/2023	46.60	5.96	30.80	6.80	6.00
L7	1	Corn	08/04/2023	27.40	5.94	17.94	68.90	5.99
L8	1	Wheat	05/14/2023	20.40	5.28	27.80	63.30	7.29
L8	2	Corn	10/06/2023	22.80	4.38	17.44	63.50	6.43
L9	1	Wheat	05/17/2023	37.20	5.08	18.58	62.00	7.07
L9	2	Corn	10/06/2023	22.40	3.40	17.80	64.50	5.79
L10	1	Corn	08/07/2023	25.00	5.04	24.60	71.40	7.15
L11	1	Corn	08/07/2023	29.80	5.96	25.00	69.70	6.20
L12	1	Wheat	05/17/2023	37.20	7.30	20.60	59.20	5.92
L12	2	Corn	09/13/2023	27.60	5.24	25.20	67.80	5.73
L13	1	Corn	08/07/2023	29.20	6.62	27.40	70.70	7.00
L14	1	Wheat	05/17/2023	34.00	5.82	16.20	57.20	5.84
L14	2	Corn	10/06/2023	23.00	4.88	23.80	67.20	7.03
L15	1	Wheat	05/20/2023	32.00	7.64	41.20	55.00	7.63

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 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 (%)
L15	2	Corn	09/19/2023	27.20	5.18	28.40	66.50	6.06
L16	1	Wheat	05/20/2023	38.00	9.54	57.20	63.40	9.64
L16	2	Corn	10/02/2023	25.80	6.82	24.20	71.60	6.65
L18	1	Wheat	05/14/2023	27.40	7.90	36.20	67.10	11.00
L18	2	Corn	10/13/2023	28.00	5.48	30.80	68.40	6.35
L19	1	Wheat	05/20/2023	30.20	7.66	42.20	62.90	8.81
L19	2	Corn	10/13/2023	28.00	5.48	27.20	65.70	5.81
M1	1	Almonds	09/14/2023	37.80	5.80	33.40	6.50	6.26
M2	1	Corn	08/09/2023	24.60	5.34	15.60	65.20	5.74
P1	1	Wheat	05/14/2023	24.80	6.36	33.80	69.10	9.07
P1	2	Corn	09/26/2023	16.24	5.68	21.40	67.60	5.78
P2	1	Wheat	05/17/2023	36.40	6.16	19.90	63.10	8.23
P2	2	Corn	10/02/2023	25.40	5.26	19.78	70.80	5.21
P3	1	Corn	08/04/2023	28.00	4.74	25.60	69.10	6.73

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Lab Results Summary (Attachment E)

Well / Irrigation Water

(mgl/ppm unless noted otherwise)

							General Minerals						
	Sample Date:	**NO3N**	**TP**	**EC (umhos/cm)**	**NH4N ***	**TDS**	**TN**	**CA**	**MG**	**NA**	**HCO3**	**CO3**	**SO4**	**CL**
Domestic														
D12							Out of service.							
D13							Out of service.							
D14	12/14/2023	45.00		1,560		990.00		105.00	6.00	148.00	310.00	0.00	20.50	220.00
D17	02/01/2023	1.80		637		370.00		32.00	2.00	93.00	80.00	0.00	14.40	108.00
	Averages:	23.40		1,098		680.00		68.50	4.00	120.50	195.00	0.00	17.45	164.00

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Lab Results Summary (Attachment E)

Well / Irrigation Water

(mgl/ppm unless noted otherwise)

	Sample Date:	NO3N	TP	EC (umhos/cm)	NH4N *	TDS	TN	General Minerals CA	MG	NA	HCO3	CO3	SO4	CL
Irrigation														
1								Did not run.						
2	09/26/2023	0.00		377		260.00	0.00	16.00	1.00	54.00	120.00	0.00	7.10	42.00
4								Out of service.						
5	10/11/2023	0.00		550		340.00	0.00							
6								Out of service.						
8	10/11/2023	0.00		743		470.00	0.00							
9								Did not run.						
10	10/11/2023	0.30		539		340.00	0.00							
11								Did not run.						
12	10/11/2023	0.20		423		250.00	0.00							
13								Out of service.						
14								Out of service.						
	Averages:	0.10		526		332.00	0.00	16.00	1.00	54.00	120.00	0.00	7.10	42.00
Surface Water														
Lakeside (General)	06/28/2023	0.90		158		90.00	0.90							
	Averages:	0.90		158		90.00	0.90							

* NH4N was non-detectable unless a value is shown

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Lab Results Summary (Attachment E)

Soils

Field	Sample Date:	PO4P (ppm)
L16	12/14/2023	71.60
L18	12/14/2023	70.90

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Planting and Harvest Information (Attachment F)

	Crop #	Crop	Acres Planted	Plant Date	Harvest Date	Estimated Yield (tons)	Tons Harvested	Actual Yield
Field: L1								
	1	Almonds	72	11/05/2015	09/14/2023	1.8	144.0	2.0
Field: L2								
	1	Wheat	36	11/08/2022	04/12/2023	23.6	762.5	21.2
	2	Corn	36	05/25/2023	08/24/2023	29.6	964.8	26.8
Field: L4								
	1	Wheat	32	11/08/2022	04/12/2023	25.8	678.1	21.2
	2	Corn	32	05/25/2023	08/24/2023	30.1	857.6	26.8
Field: L5								
	1	Almonds	73	11/07/2015	09/14/2023	1.9	160.6	2.2
Field: L6								
	1	Almonds	73	10/10/2017	09/14/2023	2.0	160.6	2.2
Field: L7								
	1	Corn	57	05/05/2023	08/04/2023	28.7	1812.6	31.8
Field: L8								
	1	Wheat	37	12/10/2022	05/14/2023	17.7	965.7	26.1
	2	Corn	37	07/07/2023	10/06/2023	29.0	865.8	23.4
Field: L9								
	1	Wheat	37	12/13/2022	05/17/2023	16.0	580.9	15.7
	2	Corn	37	07/07/2023	10/06/2023	29.5	865.8	23.4
Field: L10								
	1	Corn	38	05/08/2023	08/07/2023	29.0	1394.6	36.7
Field: L11								
	1	Corn	39	05/08/2023	08/07/2023	29.0	1431.3	36.7

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Planting and Harvest Information (Attachment F)

	Crop #	Crop	Acres Planted	Plant Date	Harvest Date	Estimated Yield (tons)	Tons Harvested	Actual Yield
Field: L12								
	1	Wheat	38	12/13/2022	05/17/2023	21.3	501.6	13.2
	2	Corn	38	06/14/2023	09/13/2023	27.2	896.8	23.6
Field: L13								
	1	Corn	29	05/08/2023	08/07/2023	30.9	1006.3	34.7
Field: L14								
	1	Wheat	37	12/13/2022	05/17/2023	18.0	455.1	12.3
	2	Corn	37	07/07/2023	10/06/2023	28.4	880.6	23.8
Field: L15								
	1	Wheat	39	12/16/2022	05/20/2023	22.0	725.4	18.6
	2	Corn	39	06/20/2023	09/19/2023	27.6	959.4	24.6
Field: L16								
	1	Wheat	39	12/16/2022	05/20/2023	21.7	764.4	19.6
	2	Corn	39	07/03/2023	10/02/2023	25.5	904.8	23.2
Field: L18								
	1	Wheat	37	12/10/2022	05/14/2023	21.2	765.9	20.7
	2	Corn	37	07/14/2023	10/13/2023	28.2	780.7	21.1
Field: L19								
	1	Wheat	64	12/16/2022	05/20/2023	14.2	1369.6	21.4
	2	Corn	64	07/14/2023	10/13/2023	28.8	1542.4	24.1
Field: M1								
	1	Almonds	72	11/02/2017	09/14/2023	2.0	151.2	2.1
Field: M2								
	1	Corn	73	05/10/2023	08/09/2023	30.5	2182.7	29.9

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Planting and Harvest Information (Attachment F)

	Crop #	Crop	Acres Planted	Plant Date	Harvest Date	Estimated Yield (tons)	Tons Harvested	Actual Yield
Field: P1								
	1	Wheat	76	12/10/2022	05/14/2023	16.7	2036.8	26.8
	2	Corn	76	06/27/2023	09/26/2023	27.7	1968.4	25.9
Field: P2								
	1	Wheat	114	12/13/2022	05/17/2023	16.7	1710.0	15.0
	2	Corn	114	07/03/2023	10/02/2023	26.0	2724.6	23.9
Field: P3								
	1	Corn	76	05/05/2023	08/04/2023	28.4	2485.2	32.7

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

High Roller Dairy 2023

Weather Data (Attachment G)

Day	January	February	March	April	May	June	July	August	September	October	November	December
1	Light	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	Light	None	None	None	None	None	None	None
5	Heavy	Light	Light	None	None	None	None	None	None	None	None	None
6	None	None	None	None	None	None	None	None	None	None	None	None
7	None	None	None	None	None	SWP	None	None	None	None	None	None
8	None	None	None	None	None	None	None	None	None	None	None	None
9	SWP	None	Light	None	None	None	None	None	None	None	None	None
10	Light	None	SWP	None	None	None	None	None	None	None	None	None
11	None	None	None	None	None	None	None	None	None	None	None	None
12	None	None	None	None	None	None	None	None	None	None	None	None
13	None	None	None	None	None	None	None	None	None	None	None	None
14	Heavy	None	SWP	None	None	None	None	None	None	None	None	None
15	Light	None	Heavy	None	None	None	None	None	None	None	None	None
16	Heavy	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	Light	None	None	None	None	Light	None	None	None	None
20	None	None	None	None	None	None	None	SWP	None	None	None	None
21	None	None	SWP	None	None	None	None	None	None	None	None	None
22	None	Light	Light	None	None	None	None	None	None	None	None	None
23	None	None	None	None	None	None	None	None	None	Heavy	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	Heavy	Light	None	None	None	None	None	None	None	None	None
29	Light		Heavy	None	None	None	None	None	None	None	None	None
30	None		Light	None	None	None	None	None	None	None	None	Light
31	None		None		None		None	None		None		None

*Note: SWP = Standing Water Present

INNOVATIVE AG SERVICES

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

ENVIRONMENTAL AGRICULTURAL
Analytical Chemists

February 28, 2023

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

Lab No. : **VI 2340628**
Customer No. : **4018573**
Reference : **40161**

Laboratory Report

Introduction: This report package contains a total of 4 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	(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
D17	02/01/2023	02/01/2023	VI 2340628-001	DW

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 200.7	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
EPA 300.0	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)

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: 2023-02-28

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

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

ENVIRONMENTAL AGRICULTURAL
Analytical Chemists

February 28, 2023

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

Description : D17
Project : 0108 High Roller Dairy

Lab No. : VI 2340628-001
Customer No. : 4018573
Reference : 40161
Sampled On : February 1, 2023 at 14:45
Sampled By : Sean
Received On : February 1, 2023 at 15:30
Matrix : Drinking Water

Sample Results - Inorganic

Constituent	Result	RL	Units	MCL/AL	Dil.	DQF	Sample Preparation			Sample Analysis			
Dairy Analysis							Date	Time	Who	Method	Date	Time	Who
Alkalinity (as CaCO3)	60	10	mg/L		1		02/04/2023	20:41	amm	SM 4500-H+B	02/05/2023	08:17	amm
Bicarbonate	80	10	mg/L		1		02/04/2023	20:41	amm	SM 4500-H+B	02/05/2023	08:17	amm
Carbonate	ND	10	mg/L		1	U	02/04/2023	20:41	amm	SM 4500-H+B	02/05/2023	08:17	amm
Hydroxide	ND	10	mg/L		1	U	02/04/2023	20:41	amm	SM 4500-H+B	02/05/2023	08:17	amm
Chloride	108	2*	mg/L	500[2]	2		02/02/2023	12:02	ldm	EPA 300.0	02/03/2023	14:28	ldm
Nitrate Nitrogen	1.8	0.1	mg/L	10	1		02/02/2023	12:02	ldm	EPA 300.0	02/02/2023	19:38	ldm
Conductivity	637	1	umhos/cm	1600[2]	1		02/04/2023	20:41	amm	SM 4500-H+B	02/05/2023	08:17	amm
Sulfate Sulfur	14.4	0.17	mg/L		1		02/02/2023	12:02	ldm	EPA 300.0	02/02/2023	19:38	ldm
Solids, Total Dissolved (TDS)	370	20	mg/L	1000[2]	1		02/03/2023	11:43	ctl	SM 2540 C	02/06/2023	12:29	ctl
Calcium	32	1	mg/L		1		02/22/2023	05:45	ejc	EPA 200.7	02/22/2023	19:04	ac
Magnesium	2	1	mg/L		1		02/22/2023	05:45	ejc	EPA 200.7	02/22/2023	19:04	ac
Potassium	2	1	mg/L		1		02/22/2023	05:45	ejc	EPA 200.7	02/22/2023	19:04	ac
Sodium	93	1	mg/L		1		02/22/2023	05:45	ejc	EPA 200.7	02/22/2023	19:04	ac

DQF Flags Definition:
U Constituent results were non-detect.

ND=Non-Detected, RL=Reporting Level * RL adusted for dilution, Dil.=Dilution
MCL = Maximum Contamination Level. 2 - Secondary Standard. 3 - CDPH Notification Level. AL = Regulatory Action Level.

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

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

ENVIRONMENTAL AGRICULTURAL
Analytical Chemists

February 28, 2023
Innovative Ag Services, LLC

Lab No. : VI 2340628
Customer No. : 4018573

Quality Control - Metals

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Metals								
Calcium	200.7	02/22/2023:201941EJC	Blank	mg/L		ND	<1	
			LCS	mg/L	12.00	104 %	85-115	
			MS	mg/L	12.00	79.2 %	75-125	
		(CC 2380442-001)	MSD	mg/L	12.00	97.7 %	75-125	
			MSRPD	mg/L	0.8000	3.8%	≤20.0	
			MS	mg/L	12.00	111 %	75-125	
		(CC 2380517-002)	MSD	mg/L	12.00	66.0 %	<¼	
			MSRPD	mg/L	0.8000	5.9%	≤20.0	
Magnesium	200.7	02/22/2023:201941EJC	Blank	mg/L		ND	<1	
			LCS	mg/L	12.00	105 %	85-115	
			MS	mg/L	12.00	95.0 %	75-125	
		(CC 2380442-001)	MSD	mg/L	12.00	106 %	75-125	
			MSRPD	mg/L	0.8000	4.0%	≤20	
			MS	mg/L	12.00	108 %	75-125	
		(CC 2380517-002)	MSD	mg/L	12.00	87.5 %	75-125	
			MSRPD	mg/L	0.8000	5.2%	≤20	
Potassium	200.7	02/22/2023:201941EJC	Blank	mg/L		ND	<1	
			LCS	mg/L	12.00	99.6 %	85-115	
			MS	mg/L	12.00	98.9 %	75-125	
		(CC 2380442-001)	MSD	mg/L	12.00	110 %	75-125	
			MSRPD	mg/L	0.8000	4.0%	≤20.0	
			MS	mg/L	12.00	114 %	75-125	
		(CC 2380517-002)	MSD	mg/L	12.00	106 %	75-125	
			MSRPD	mg/L	0.8000	3.8%	≤20.0	
Sodium	200.7	02/22/2023:201941EJC	Blank	mg/L		ND	<1	
			LCS	mg/L	12.00	99.6 %	85-115	
			MS	mg/L	12.00	27.1 %	<¼	
		(CC 2380442-001)	MSD	mg/L	12.00	73.1 %	<¼	
			MSRPD	mg/L	0.8000	3.2%	≤20.0	
			MS	mg/L	12.00	111 %	75-125	
		(CC 2380517-002)	MSD	mg/L	12.00	59.2 %	<¼	
			MSRPD	mg/L	0.8000	4.1%	≤20.0	

Definition

<¼	: High Sample Background - Spike concentration was less than one forth of the sample concentration.
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.
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.

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

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

February 28, 2023
Innovative Ag Services, LLC

Lab No. : VI 2340628
Customer No. : 4018573

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
Alkalinity (as CaCO3)	2320B	02/04/2023:201239AMM	ND	mg/L		0.2%	10	
Bicarbonate	2320B	(VI 2340484-001)	Dup	mg/L		0.2%	10	
E. C.	2320B	(VI 2340484-001)	Dup	umhos/cm		0.1%	5	
Solids, Total Dissolved	2540CE	02/03/2023:201214CTL	Blank	mg/L		ND	<20	
			LCS	mg/L	990.8	104 %	90-110	
		(VI 2340617-001)	Dup	mg/L		1.1%	5	
		(VI 2340617-001)	Dup	mg/L		1.5%	5	
Chloride	300.0	02/02/2023:201219LDM	Blank	mg/L		ND	<1	
			LCS	mg/L	25.00	97.1 %	90-110	
			MS	mg/L	50.00	99.4 %	85-121	
		(STK2331230-003)	MSD	mg/L	50.00	100 %	85-121	
			MSRPD	mg/L	10.00	0.7%	≤19	
			MS	mg/L	50.00	101 %	85-121	
		(CH 2370567-001)	MSD	mg/L	50.00	96.8 %	85-121	
			MSRPD	mg/L	10.00	4.3%	≤19	
Nitrate Nitrogen	300.0	02/02/2023:201219LDM	Blank	mg/L		ND	<0.4	
			LCS	mg/L	20.00	97.0 %	90-110	
			MS	mg/L	40.00	101 %	85-119	
		(STK2331230-003)	MSD	mg/L	40.00	101 %	85-119	
			MSRPD	mg/L	10.00	0.7%	≤19	
			MS	mg/L	40.00	104 %	85-119	
		(CH 2370567-001)	MSD	mg/L	40.00	98.8 %	85-119	
			MSRPD	mg/L	10.00	4.5%	≤19	
Sulfate Sulfur	300.0	02/02/2023:201219LDM	Blank	mg/L		ND	<0.5	
			LCS	mg/L	50.00	98.5 %	90-110	
			MS	mg/L	100.0	100 %	82-124	
		(STK2331230-003)	MSD	mg/L	100.0	101 %	82-124	
			MSRPD	mg/L	10.00	0.7%	≤23	
			MS	mg/L	100.0	104 %	82-124	
		(CH 2370567-001)	MSD	mg/L	100.0	98.7 %	82-124	
			MSRPD	mg/L	10.00	4.7%	≤23	

Definition

Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.

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.

Page 4 of 4

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

Laboratory Analysis Work Order

Nº 40161

ID: # 0108 2340628 LABORATORY: FGL

SITE NAME: HIGH ROLLER DAIRY

Billing: IAS

Authorized Copy Release to:

Innnovative Ag Services LLC

(559) 587-2800

ANALYSIS TO BE COMPLETED:

Irrigation/Ground Water (ELAP Standards)

W1 EC, NO_3N (Dom)

W2 EC, NO_3N, TDS, TN (Irr) 801 19.5

W3 NH_4-N (Ammonium)

W4 EC, NO_3N, Ca, Mg, Na, K, HCO_3, CO_3, SO_4S, Cl, TDS (Dom, GM)

W5 EC, NO_3N, TDS, TN, Ca, Mg, Na, HCO_3, CO_3, SO_4S, Cl (Irr, GM)

W6 NO_3N, NO_2 (Dom ILRP, Annually)

W7 Ca, Mg, Na, K, HCO_3, CO_3, SO_4, Cl + Lab Filtering (GWM)

W8 Other: _____

Process Waste Water (lagoon)

L1 EC, NH_4N, TKN, TP, TK, TDS (Quarterly)

L2 EC, NO_3N, NH_4N, TKN, TP, TK, TDS, pH (Annually)

L3 L1 + Ca, Mg, Na, HCO_3,CO_3, SO_4S, 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: _____

Plant Tissue

P1 TN, NO_3N, PO_4P, 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: _____

Soil

S1 SP%, pH, EC, Ca, Mg, Na, K, ESP, LP, B, NO_3N, PO_4P, K-AA, Zn, Mn, Fe, Cu, SO_4S

S2 S1 + CEC, CaCO3, OM, C:N, TN

S3 NO_3N, NH_4N

S4 Other: _____

	Sample ID	Description	Analysis	Date/Time	Sampled by	IAS USE ONLY: FIELD TESTS NH_3N *	pH	Temp
1	D17	Dom	W4	2/1/23 2:45	SEAN	¢		
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 sampes, please note below.

NOTES:

CHAIN OF CUSTODY RECORDING

	Signature	Company	Received Date & Time	Relinquished Date & Time
1st	[signature]	IAS		2/1/23 3:30
2nd	[signature]	FGL	2-1-23 1530	
3rd	[signature]	FGL		2-1-23 1600
4th	[signature]		2/1/23 1600	

LABORATORY USE ONLY

Logged In By: [signature] Total Samples: 2/1/23 1725 Laboratory #: _____

GLS MC 2/2/23 1140

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

ENVIRONMENTAL FGL AGRICULTURAL
Analytical Chemists

October 13, 2023

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

Lab No. : **VI 2346506**
Customer No. : **4018573**
Reference : **41409**

Laboratory Report

Introduction: This report package contains a total of 4 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	(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
2	09/26/2023	09/26/2023	VI 2346506-001	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 200.7	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
EPA 300.0	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
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: 2023-10-13

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

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

ENVIRONMENTAL AGRICULTURAL
Analytical Chemists

October 13, 2023

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

Description : 2
Project : 0108 High Roller Dairy

Lab No. : VI 2346506-001
Customer No. : 4018573
Reference : 41409
Sampled On : September 26, 2023 at 11:45
Sampled By : Zeke
Received On : September 26, 2023 at 16:00
Matrix : Ag Water

Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
Dairy Analysis							Date	Time	Who	Method	Date	Time	Who
Alkalinity (as CaCO3)	100	10	mg/L		1		10/09/2023	11:41	amm	SM 4500-H+B	10/10/2023	00:39	amm
Bicarbonate	120	10	mg/L		1		10/09/2023	11:41	amm	SM 4500-H+B	10/10/2023	00:39	amm
Carbonate	ND	10	mg/L		1	U	10/09/2023	11:41	amm	SM 4500-H+B	10/10/2023	00:39	amm
Hydroxide	ND	10	mg/L		1	U	10/09/2023	11:41	amm	SM 4500-H+B	10/10/2023	00:39	amm
Chloride	42	1	mg/L		1		10/10/2023	12:11	ldm	EPA 300.0	10/10/2023	23:14	ldm
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U	10/06/2023	09:12	sta	EPA 351.2	10/10/2023	17:17	lcr
Nitrate Nitrogen	ND	0.4	mg/L		1	U	09/27/2023	12:30	lfs	SM 4500-NO3 F	09/27/2023	14:00	lfs
Nitrogen, Total as Nitrogen	ND	0.5	mg/L		1	U	10/06/2023	09:12	sta	Calc.	10/10/2023	17:17	lcr
Nitrate + Nitrite as N	ND	0.4	mg/L		1	U	09/27/2023	12:30	lfs	SM 4500-NO3 F	09/27/2023	14:00	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	10/06/2023	09:12	sta	EPA 351.2	10/10/2023	17:17	lcr
Conductivity	377	1	umhos/cm		1		10/09/2023	11:41	amm	SM 4500-H+B	10/10/2023	00:39	amm
Sulfate Sulfur	7.1	0.17	mg/L		1		10/10/2023	12:11	ldm	EPA 300.0	10/10/2023	23:14	ldm
Solids, Total Dissolved (TDS)	260	20	mg/L		1		09/28/2023	17:00	ctl	SM 2540 C	09/29/2023	15:00	ctl
Calcium	16.0	1	mg/L		1		09/28/2023	06:23	ejc	EPA 200.7	10/03/2023	19:51	ac
Magnesium	1.0	1	mg/L		1		09/28/2023	06:23	ejc	EPA 200.7	10/03/2023	19:51	ac
Sodium	54.0	1	mg/L		1		09/28/2023	06:23	ejc	EPA 200.7	10/03/2023	19:51	ac

DQF Flags Definition:
U Constituent results were non-detect.

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

Page 2 of 4

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

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

ENVIRONMENTAL FGL AGRICULTURAL
Analytical Chemists

October 13, 2023
Innovative Ag Services, LLC

Lab No. : VI 2346506
Customer No. : 4018573

Quality Control - Metals

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Metals								
Calcium	200.7	09/28/2023:210922EJC	Blank	mg/L		ND	<1	
			LCS	mg/L	12.00	93.3%	85-115	
			MS	mg/L	12.00	95.6%	75-125	
		(STK2352873-001)	MSD	mg/L	12.00	83.1%	75-125	
			MSRPD	mg/L		6.1%	≤20.0	
			MS	mg/L	12.00	104%	75-125	
		(STK2352873-002)	MSD	mg/L	12.00	99.8%	75-125	
			MSRPD	mg/L		2.2%	≤20.0	
Magnesium	200.7	09/28/2023:210922EJC	Blank	mg/L		ND	<1	
			LCS	mg/L	12.00	94.8%	85-115	
			MS	mg/L	12.00	83.3%	75-125	
		(STK2352873-001)	MSD	mg/L	12.00	64.5%	<1/4	
			MSRPD	mg/L		3.1%	≤20	
			MS	mg/L	12.00	123%	75-125	
		(STK2352873-002)	MSD	mg/L	12.00	120%	75-125	
			MSRPD	mg/L		0.4%	≤20	
Sodium	200.7	09/28/2023:210922EJC	Blank	mg/L		ND	<1	
			LCS	mg/L	12.00	94.9%	85-115	
			MS	mg/L	12.00	97.9%	75-125	
		(STK2352873-001)	MSD	mg/L	12.00	47.9%	<1/4	
			MSRPD	mg/L		2.4%	≤20.0	

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.
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.

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

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

October 13, 2023
Innovative Ag Services, LLC

Lab No. : VI 2346506
Customer No. : 4018573

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
Alkalinity (as CaCO3)	2320B	10/09/2023:211348AMM	ND	mg/L		0.03%	10	
Bicarbonate	2320B	(SP 2316661-004)	Dup	mg/L		0.07%	10	
E. C.	2320B	(SP 2316661-004)	Dup	umhos/cm		0.09%	5	
Solids, Total Dissolved	2540CE	09/28/2023:210921CTL	Blank	mg/L		ND	<20	
			LCS	mg/L	991.5	99.7%	90-110	
		(SP 2316265-002)	Dup	mg/L		1.81%	5	
		(SP 2316265-002)	Dup	mg/L		0.3%	5	
Chloride	300.0	10/10/2023:211417LDM	Blank	mg/L		ND	<1	
			LCS	mg/L	25.00	100%	90-110	
			MS	mg/L	50.00	94.5%	67-117	
		(SP 2317042-001)	MSD	mg/L	50.00	95.0%	67-117	
			MSRPD	mg/L		0.4%	≤7	
			MS	mg/L	50.00	98.1%	67-117	
		(STK2352938-031)	MSD	mg/L	50.00	98.4%	67-117	
			MSRPD	mg/L		0.3%	≤7	
Sulfate Sulfur	300.0	10/10/2023:211417LDM	Blank	mg/L		ND	<0.5	
			LCS	mg/L	50.00	100%	90-110	
			MS	mg/L	100.0	93.3%	18-165	
		(SP 2317042-001)	MSD	mg/L	100.0	93.8%	18-165	
			MSRPD	mg/L		0.3%	≤7	
			MS	mg/L	100.0	99.7%	18-165	
		(STK2352938-031)	MSD	mg/L	100.0	99.9%	18-165	
			MSRPD	mg/L		0.2%	≤7	
Nitrogen, Total Kjeldahl	351.2	10/06/2023:211241STA	Blank	mg/L		ND	<0.5	
			LCS	mg/L	12.00	93.9%	73-124	
			MS	mg/L	12.00	90.9%	90-110	
		(CH 2378308-009)	MSD	mg/L	12.00	93.9%	90-110	
			MSRPD	mg/L		3.3%	≤20	
			MS	mg/L	12.00	90.1%	90-110	
		(CH 2378308-010)	MSD	mg/L	12.00	95.2%	90-110	
			MSRPD	mg/L		5.4%	≤20	
Nitrate + Nitrite as N	4500NO3F	09/27/2023:210858LFS	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	99.0%	80-120	
			MS	mg/L	5.609	95.3%	66-125	
		(STK2353327-001)	MSD	mg/L	5.609	99.2%	66-125	
			MSRPD	mg/L		2.1%	≤30.4	
Nitrate Nitrogen	4500NO3F	09/27/2023:210858LFS	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	99.0%	80-120	
			MS	mg/L	5.609	95.3%	66-125	
		(STK2353327-001)	MSD	mg/L	5.609	99.2%	66-125	
			MSRPD	mg/L		2.1%	≤30.4	

Definition

Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.

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.

Page 4 of 4

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

Laboratory Analysis Work Order

Nº 41409

ID: # 0103 23465506

LABORATORY: FGL

SITE NAME: HIGH ROLLER DAIRY

Billing: IAS

Authorized Copy Release to:

Innnovative Ag Services LLC

(559) 587-2800

ANALYSIS TO BE COMPLETED:

Irrigation/Ground Water (ELAP Standards)

W1 EC, NO_3N (Dom)
W2 EC, NO_3N, TDS, TN (Irr)
W3 NH_4-N (Ammonium)
W4 EC, NO_3N, Ca, Mg, Na, K, HCO_3, CO_3, SO_4S, Cl, TDS (Dom, GM)
W5 EC, NO_3N, TDS, TN, Ca, Mg, Na, HCO_3, CO_3, SO_4S, Cl (Irr, GM)
W6 NO_3N, NO_2 (Dom ILRP, Annually)
W7 Ca, Mg, Na, K, HCO_3, CO_3, SO_4, Cl + Lab Filtering (GWM)
W8 Other: _____

pH 8.42 Temp # 17.4°C

Process Waste Water (lagoon)

L1 EC, NH_4N, TKN, TP, TK, TDS (Quarterly)
L2 EC, NO_3N, NH_4N, TKN, TP, TK, TDS, pH (Annually)
L3 L1 + Ca, Mg, Na, HCO_3,CO_3, SO_4S, 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: _____

Plant Tissue

P1 TN, NO_3N, PO_4P, 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: _____

Soil

S1 SP%, pH, EC, Ca, Mg, Na, K, ESP, LP, B, NO_3N, PO_4P, K-AA, Zn, Mn, Fe, Cu, SO_4S
S2 S1 + CEC, CaCO3, OM, C:N, TN
S3 NO_3N, NH_4N
S4 Other: _____

	Sample ID	Description	Analysis	Date/Time	Sampled by	IAS USE ONLY: FIELD TESTS NH_3N *	pH	Temp
1	2	IRR	W5	9-26/11:45	Zolc			
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 sampes, please note below.

NOTES:

CHAIN OF CUSTODY RECORDING

	Signature	Company	Received Date & Time	Relinquished Date & Time
1st		IAS		9-26-23 / 3:05
2nd		FGL	9-26-23 15:50	
3rd		FGL		9-26-23 16:00
4th			9/26/23 1600	

LABORATORY USE ONLY

Logged In By: _____ Total Samples: 9/26/23 1,1,1,1 Laboratory #: 9/27/23

THE PRINTER INC. - 559-992-5127

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

ENVIRONMENTAL AGRICULTURAL
Analytical Chemists

November 2, 2023

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

Lab No. : **VI 2346889**
Customer No. : **4018573**
Reference : **41486**

Laboratory Report

Introduction: This report package contains a total of 7 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	(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
5	10/11/2023	10/11/2023	VI 2346889-001	AGW
8	10/11/2023	10/11/2023	VI 2346889-002	AGW
10	10/11/2023	10/11/2023	VI 2346889-003	AGW
12	10/11/2023	10/11/2023	VI 2346889-004	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 300.0	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
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)

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: 2023-11-03

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

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

ENVIRONMENTAL FGL AGRICULTURAL
Analytical Chemists

November 2, 2023

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

Description : 5
Project : 0108 High Roller Dairy

Lab No. : VI 2346889-001
Customer No. : 4018573
Reference : 41486
Sampled On : October 11, 2023 at 08:30
Sampled By : Zeke
Received On : October 11, 2023 at 16:14
Matrix : Ag Water

Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
Dairy Analysis							Date	Time	Who	Method	Date	Time	Who
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	Ul	10/25/2023	12:24	sta	EPA 351.2	10/29/2023	16:47	lcr
Nitrate Nitrogen	ND	0.1	mg/L		1	U	10/12/2023	16:14	ldm	EPA 300.0	10/13/2023	10:13	ldm
Nitrogen, Total as Nitrogen	ND	0.5	mg/L		1	UlJ	10/25/2023	12:24	sta	Calc.	10/29/2023	16:47	lcr
Nitrate + Nitrite as N	ND	0.1	mg/L		1	J	10/12/2023	16:14	ldm	EPA 300.0	10/13/2023	10:13	ldm
Kjeldahl Nitrogen	ND	0.5	mg/L		1	Ul	10/25/2023	12:24	sta	EPA 351.2	10/29/2023	16:47	lcr
Conductivity	550	1	umhos/cm		1		11/02/2023	09:02	krh	SM 4500-H+B	11/02/2023	14:08	krh
Solids, Total Dissolved (TDS)	340	20	mg/L		1		10/13/2023	13:30	ctl	SM 2540 C	10/16/2023	11:00	ctl

DQF Flags Definition:
U Constituent results were non-detect.
I The MS/MSD did not meet QC criteria.
J Reported value is estimated; detected at a concentration below the RL and above the laboratory MDL.

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

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

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

ENVIRONMENTAL AGRICULTURAL
Analytical Chemists

November 2, 2023

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

Description : 8
Project : 0108 High Roller Dairy

Lab No. : VI 2346889-002
Customer No. : 4018573
Reference : 41486
Sampled On : October 11, 2023 at 08:40
Sampled By : Zeke
Received On : October 11, 2023 at 16:14
Matrix : Ag Water

Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
Dairy Analysis							Date	Time	Who	Method	Date	Time	Who
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	Ul	10/25/2023	12:24	sta	EPA 351.2	10/29/2023	18:04	lcr
Nitrate Nitrogen	ND	0.1	mg/L		1	U	10/12/2023	16:14	ldm	EPA 300.0	10/13/2023	10:33	ldm
Nitrogen, Total as Nitrogen	ND	0.5	mg/L		1	UlJ	10/25/2023	12:24	sta	Calc.	10/29/2023	18:04	lcr
Nitrate + Nitrite as N	ND	0.1	mg/L		1	J	10/12/2023	16:14	ldm	EPA 300.0	10/13/2023	10:33	ldm
Kjeldahl Nitrogen	ND	0.5	mg/L		1	Ul	10/25/2023	12:24	sta	EPA 351.2	10/29/2023	18:04	lcr
Conductivity	743	1	umhos/cm		1		10/19/2023	09:41	krh	SM 4500-H+B	10/19/2023	13:26	krh
Solids, Total Dissolved (TDS)	470	20	mg/L		1		10/16/2023	10:40	ctl	SM 2540 C	10/17/2023	11:00	ctl

DQF Flags Definition:
U Constituent results were non-detect.
l The MS/MSD did not meet QC criteria.
J Reported value is estimated; detected at a concentration below the RL and above the laboratory MDL.

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

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

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

ENVIRONMENTAL FGL AGRICULTURAL
Analytical Chemists

November 2, 2023

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

Description : 10
Project : 0108 High Roller Dairy

Lab No. : VI 2346889-003
Customer No. : 4018573
Reference : 41486
Sampled On : October 11, 2023 at 08:50
Sampled By : Zeke
Received On : October 11, 2023 at 16:14
Matrix : Ag Water

Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
Dairy Analysis							Date	Time	Who	Method	Date	Time	Who
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	Ul	10/25/2023	12:24	sta	EPA 351.2	10/29/2023	18:06	lcr
Nitrate Nitrogen	0.3	0.1	mg/L		1		10/12/2023	16:14	ldm	EPA 300.0	10/13/2023	11:13	ldm
Nitrogen, Total as Nitrogen	ND	0.5	mg/L		1	Ul	10/25/2023	12:24	sta	Calc.	10/29/2023	18:06	lcr
Nitrate + Nitrite as N	0.3	0.1	mg/L		1		10/12/2023	16:14	ldm	EPA 300.0	10/13/2023	11:13	ldm
Kjeldahl Nitrogen	ND	0.5	mg/L		1	Ul	10/25/2023	12:24	sta	EPA 351.2	10/29/2023	18:06	lcr
Conductivity	539	1	umhos/cm		1		11/02/2023	09:02	krh	SM 4500-H+B	11/02/2023	14:17	krh
Solids, Total Dissolved (TDS)	340	20	mg/L		1		10/16/2023	10:40	ctl	SM 2540 C	10/17/2023	11:00	ctl

DQF Flags Definition:
U Constituent results were non-detect.
l The MS/MSD did not meet QC criteria.

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

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

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

ENVIRONMENTAL FGL AGRICULTURAL
Analytical Chemists

November 2, 2023

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

Description : 12
Project : 0108 High Roller Dairy

Lab No. : VI 2346889-004
Customer No. : 4018573
Reference : 41486
Sampled On : October 11, 2023 at 09:10
Sampled By : Zeke
Received On : October 11, 2023 at 16:14
Matrix : Ag Water

Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
Dairy Analysis							Date	Time	Who	Method	Date	Time	Who
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	Ul	10/25/2023	12:24	sta	EPA 351.2	10/29/2023	18:37	lcr
Nitrate Nitrogen	0.2	0.1	mg/L		1		10/12/2023	16:14	ldm	EPA 300.0	10/13/2023	09:33	ldm
Nitrogen, Total as Nitrogen	ND	0.5	mg/L		1	Ul	10/25/2023	12:24	sta	Calc.	10/29/2023	18:37	lcr
Nitrate + Nitrite as N	0.2	0.1	mg/L		1		10/12/2023	16:14	ldm	EPA 300.0	10/13/2023	09:33	ldm
Kjeldahl Nitrogen	ND	0.5	mg/L		1	Ul	10/25/2023	12:24	sta	EPA 351.2	10/29/2023	18:37	lcr
Conductivity	423	1	umhos/cm		1		11/02/2023	09:02	krh	SM 4500-H+B	11/02/2023	13:53	krh
Solids, Total Dissolved (TDS)	250	20	mg/L		1		10/13/2023	13:30	ctl	SM 2540 C	10/16/2023	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

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

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

ENVIRONMENTAL FGL AGRICULTURAL
Analytical Chemists

November 2, 2023
Innovative Ag Services, LLC

Lab No. : VI 2346889
Customer No. : 4018573

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
E. C.	2320B	(CC 2383472-001)	Dup	umhos/cm		0%	5	
	2320B	(CH 2378562-001)	Dup	umhos/cm		0.3%	5	
		(CC 2383609-002)	Dup	umhos/cm		0.1%	5	
Solids, Total Dissolved	2540CE	10/13/2023:211549CTL	Blank	mg/L		ND	<20	
			LCS	mg/L	991.5	101%	90-110	
		(SP 2317317-001)	Dup	mg/L		0.8%	5	
		(SP 2317317-001)	Dup	mg/L		0.7%	5	
	2540CE	10/16/2023:211599CTL	Blank	mg/L		ND	<20	
			LCS	mg/L	991.5	102%	90-110	
		(CC 2383616-003)	Dup	mg/L		2.89%	5	
		(CC 2383616-003)	Dup	mg/L		1.60%	5	
Nitrate + Nitrite as N	300.0	10/12/2023:211643LDM	Blank	mg/L		ND	<0.4	
			LCS	mg/L	20.00	99.9%	90-110	
			MS	mg/L	40.00	101%	86-112	
		(VI 2346884-002)	MSD	mg/L	40.00	100%	86-112	
			MSRPD	mg/L		1.0%	≤7	
			MS	mg/L	40.00	102%	86-112	
		(STK2354238-001)	MSD	mg/L	40.00	103%	86-112	
			MSRPD	mg/L		1.0%	≤7	
Nitrate Nitrogen	300.0	10/12/2023:211643LDM	Blank	mg/L		ND	<0.4	
			LCS	mg/L	20.00	99.9%	90-110	
			MS	mg/L	40.00	101%	86-112	
		(VI 2346884-002)	MSD	mg/L	40.00	100%	86-112	
			MSRPD	mg/L		1.0%	≤7	
			MS	mg/L	40.00	102%	86-112	
		(STK2354238-001)	MSD	mg/L	40.00	103%	86-112	
			MSRPD	mg/L		1.0%	≤7	
Nitrogen, Total Kjeldahl	351.2	10/25/2023:212045STA	Blank	mg/L		ND	<0.5	
			LCS	mg/L	12.00	90.0%	73-124	
			MS	mg/L	12.00	86.6%	90-110	435
		(STK2354201-003)	MSD	mg/L	12.00	84.0%	90-110	435
			MSRPD	mg/L		2.8%	≤20	
			MS	mg/L	12.00	83.1%	90-110	435
		(VI 2346889-001)	MSD	mg/L	12.00	81.7%	90-110	435
			MSRPD	mg/L		1.8%	≤20	
			Blank	mg/L		ND	<0.5	
			LCS	mg/L	12.00	85.2%	73-124	
			MS	mg/L	12.00	82.9%	90-110	435
		(VI 2346889-002)	MSD	mg/L	12.00	84.1%	90-110	435
			MSRPD	mg/L		1.4%	≤20	
			MS	mg/L	12.00	80.5%	90-110	435
		(VI 2346889-003)	MSD	mg/L	12.00	83.2%	90-110	435
			MSRPD	mg/L		3.3%	≤20	

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

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

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.

Page 7 of 7

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

Laboratory Analysis Work Order

Nº 41486

ID: # 0108 23466889

LABORATORY: ~~IAS~~ FGL

SITE NAME: HIGH ROLLER DAIRY

Billing: IAS

Authorized Copy Release to:

Innnovative Ag Services LLC

(559) 587-2800

ANALYSIS TO BE COMPLETED:

Irrigation/Ground Water (ELAP Standards)

W1 EC, NO_3N (Dom)
W2 EC, NO_3N, TDS, TN (Irr)
W3 NH_4-N (Ammonium)
W4 EC, NO_3N, Ca, Mg, Na, K, HCO_3, CO_3, SO_4S, Cl, TDS (Dom, GM)
W5 EC, NO_3N, TDS, TN, Ca, Mg, Na, HCO_3, CO_3, SO_4S, Cl (Irr, GM)
W6 NO_3N, NO_2 (Dom ILRP, Annually)
W7 Ca, Mg, Na, K, HCO_3, CO_3, SO_4, Cl + Lab Filtering (GWM)
W8 Other: _____

201 10.80 Jeff TH407

Process Waste Water (lagoon)

L1 EC, NH_4N, TKN, TP, TK, TDS (Quarterly)
L2 EC, NO_3N, NH_4N, TKN, TP, TK, TDS, pH (Annually)
L3 L1 + Ca, Mg, Na, HCO_3,CO_3, SO_4S, 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: _____

Plant Tissue

P1 TN, NO_3N, PO_4P, 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: _____

Soil

S1 SP%, pH, EC, Ca, Mg, Na, K, ESP, LP, B, NO_3N, PO_4P, K-AA, Zn, Mn, Fe, Cu, SO_4S
S2 S1 + CEC, CaCO3, OM, C:N, TN
S3 NO_3N, NH_4N
S4 Other: _____

	Sample ID	Description	Analysis	Date/Time	Sampled by	IAS USE ONLY: FIELD TESTS NH_3N *	pH	Temp
1	5	IRR	W2	10-11 / 8:30	Zeke			
2	8			10-11 / 8:40				
3	10			10-11 / 8:50				
4	12			10-11 / 9:10				
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 sampes, please note below.

NOTES:

CHAIN OF CUSTODY RECORDING

	Signature	Company	Received Date & Time	Relinquished Date & Time
1st		IAS		10-11-23 / 7:00
2nd	AJB	FGL	10/11/23 1557	
3rd	AJB	FGL		10/11/23 1614
4th			10/11/23 1614	

LABORATORY USE ONLY

Logged In By: _____ Total Samples: 10/11/23 176 Laboratory #: 10/10/23 1445

THE PRINTER INC. - 559-992-5127

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

ENVIRONMENTAL FGL AGRICULTURAL
Analytical Chemists

December 22, 2023

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

Lab No. : **VI 2348568**
Customer No. : **4018573**
Reference : **42180**

Laboratory Report

Introduction: This report package contains a total of 4 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	(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
D14	12/14/2023	12/14/2023	VI 2348568-001	DW

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 200.7	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
EPA 300.0	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)

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: 2023-12-26

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

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

ENVIRONMENTAL FGL AGRICULTURAL
Analytical Chemists

December 22, 2023

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

Description : D14
Project : 0108 High Roller Dairy

Lab No. : VI 2348568-001
Customer No. : 4018573
Reference : 42180
Sampled On : December 14, 2023 at 10:00
Sampled By : Zeke
Received On : December 14, 2023 at 15:50
Matrix : Drinking Water

Sample Results - Inorganic

Constituent	Result	RL	Units	MCL/AL	Dil.	DQF	Sample Preparation			Sample Analysis			
Dairy Analysis							Date	Time	Who	Method	Date	Time	Who
Alkalinity (as CaCO3)	260	10	mg/L		1		12/19/2023	17:12	amm	SM 4500-H+B	12/20/2023	04:27	amm
Bicarbonate	310	10	mg/L		1		12/19/2023	17:12	amm	SM 4500-H+B	12/20/2023	04:27	amm
Carbonate	ND	10	mg/L		1	U	12/19/2023	17:12	amm	SM 4500-H+B	12/20/2023	04:27	amm
Hydroxide	ND	10	mg/L		1	U	12/19/2023	17:12	amm	SM 4500-H+B	12/20/2023	04:27	amm
Chloride	220	4*	mg/L	500[2]	4		12/15/2023	16:05	ldm	EPA 300.0	12/16/2023	12:42	ldm
Nitrate Nitrogen	45	0.4*	mg/L	10	4		12/15/2023	16:05	ldm	EPA 300.0	12/16/2023	12:42	ldm
Conductivity	1560	1	umhos/cm	1600[2]	1		12/19/2023	17:12	amm	SM 4500-H+B	12/20/2023	04:27	amm
Sulfate Sulfur	20.5	0.17	mg/L		1		12/15/2023	16:05	ldm	EPA 300.0	12/15/2023	23:07	ldm
Solids, Total Dissolved (TDS)	990	20	mg/L	1000[2]	1		12/18/2023	11:45	ctl	SM 2540 C	12/19/2023	10:45	ctl
Calcium	105	1	mg/L		1	h	12/20/2023	07:00	ac	EPA 200.7	12/20/2023	20:17	ac
Magnesium	6	1	mg/L		1		12/20/2023	07:00	ac	EPA 200.7	12/20/2023	20:17	ac
Potassium	ND	1	mg/L		1	U	12/20/2023	07:00	ac	EPA 200.7	12/20/2023	20:17	ac
Sodium	148	1	mg/L		1	hl	12/20/2023	07:00	ac	EPA 200.7	12/20/2023	20:17	ac

DQF Flags Definition:
U Constituent results were non-detect.
h The MS/MSD did not meet QC criteria.
l The MS/MSD did not meet QC criteria.

ND=Non-Detected, RL=Reporting Level * RL adjusted for dilution, Dil.=Dilution
MCL = Maximum Contamination Level. 2 - Secondary Standard. 3 - CDPH Notification Level. AL = Regulatory Action Level.

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

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

ENVIRONMENTAL FGL AGRICULTURAL
Analytical Chemists

December 22, 2023
Innovative Ag Services, LLC

Lab No. : VI 2348568
Customer No. : 4018573

Quality Control - Metals

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Metals								
Calcium	200.7	12/20/2023:214322AC	Blank	mg/L		ND	<1	
			LCS	mg/L	12.00	102%	85-115	
			MS	mg/L	12.00	135%	<¼	406
		(VI 2348243-001)	MSD	mg/L	12.00	108%	75-125	
			MSRPD	mg/L		4.0%	≤20.0	
			MS	mg/L	12.00	153%	75-125	435
		(VI 2348281-001)	MSD	mg/L	12.00	88.7%	75-125	
			MSRPD	mg/L		15.2%	≤20.0	
Magnesium	200.7	12/20/2023:214322AC	Blank	mg/L		ND	<1	
			LCS	mg/L	12.00	98.7%	85-115	
			MS	mg/L	12.00	102%	75-125	
		(VI 2348243-001)	MSD	mg/L	12.00	95.7%	75-125	
			MSRPD	mg/L		5.1%	≤20	
			MS	mg/L	12.00	114%	75-125	
		(VI 2348281-001)	MSD	mg/L	12.00	104%	75-125	
			MSRPD	mg/L		6.0%	≤20	
Potassium	200.7	12/20/2023:214322AC	Blank	mg/L		ND	<1	
			LCS	mg/L	12.00	101%	85-115	
			MS	mg/L	12.00	105%	75-125	
		(VI 2348243-001)	MSD	mg/L	12.00	100%	75-125	
			MSRPD	mg/L		4.9%	≤20.0	
			MS	mg/L	12.00	111%	75-125	
		(VI 2348281-001)	MSD	mg/L	12.00	104%	75-125	
			MSRPD	mg/L		5.0%	≤20.0	
Sodium	200.7	12/20/2023:214322AC	Blank	mg/L		ND	<1	
			LCS	mg/L	12.00	95.8%	85-115	
			MS	mg/L	12.00	130%	<¼	406
		(VI 2348243-001)	MSD	mg/L	12.00	91.8%	75-125	
			MSRPD	mg/L		4.4%	≤20.0	
			MS	mg/L	12.00	154%	75-125	435
		(VI 2348281-001)	MSD	mg/L	12.00	69.1%	75-125	435
			MSRPD	mg/L		18.5%	≤20.0	

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.
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

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.

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

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

December 22, 2023
Innovative Ag Services, LLC

Lab No. : VI 2348568
Customer No. : 4018573

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
Alkalinity (as CaCO3)	2320B	12/19/2023:214317AMM	ND	mg/L		0.9%	10	435
Bicarbonate	2320B	(STK2356929-003)	Dup	mg/L		0.9%	10	
E. C.	2320B	(STK2356929-003)	Dup	umhos/cm		0.7%	5	
Solids, Total Dissolved	2540CE	12/18/2023:214216CTL	Blank	mg/L		ND	<20	
			LCS	mg/L	991.5	99.9%	90-110	
		(VI 2348568-001)	Dup	mg/L		0.2%	5	
		(VI 2348568-001)	Dup	mg/L		2.01%	5	
Chloride	300.0	12/15/2023:214156LDM	Blank	mg/L		ND	<1	
			LCS	mg/L	25.00	104%	90-110	
			MS	mg/L	50.00	104%	67-117	
		(STK2357029-001)	MSD	mg/L	50.00	105%	67-117	
			MSRPD	mg/L		0.3%	≤7	
Nitrate Nitrogen	300.0	12/15/2023:214156LDM	Blank	mg/L		ND	<0.4	
			LCS	mg/L	20.00	106%	90-110	
			MS	mg/L	40.00	105%	86-112	
		(STK2357124-002)	MSD	mg/L	40.00	105%	86-112	
			MSRPD	mg/L		0.0%	≤7	
			MS	mg/L	40.00	106%	86-112	
		(STK2357029-001)	MSD	mg/L	40.00	106%	86-112	
			MSRPD	mg/L		0.1%	≤7	
Sulfate Sulfur	300.0	12/15/2023:214156LDM	Blank	mg/L		ND	<0.5	
			LCS	mg/L	50.00	102%	90-110	
			MS	mg/L	100.0	100%	18-165	
		(STK2357124-002)	MSD	mg/L	100.0	100%	18-165	
			MSRPD	mg/L		0.2%	≤7	
			MS	mg/L	100.0	102%	18-165	
		(STK2357029-001)	MSD	mg/L	100.0	103%	18-165	
			MSRPD	mg/L		0.5%	≤7	

Definition

Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.

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.

Page 4 of 4

DocuSign Envelope ID: 5C6B374C-E097-494C-ACFC-5E16606ADDAE

Laboratory Analysis Work Order

Nº 42180

ID: # 0108 23485568

LABORATORY: FGL

SITE NAME: High Roller Dairy

Billing: IAS

Authorized Copy Release to:

Innnovative Ag Services LLC

(559) 587-2800

ANALYSIS TO BE COMPLETED:

Irrigation/Ground Water (ELAP Standards)

W1 EC, NO_3N (Dom)
W2 EC, NO_3N, TDS, TN (Irr)
W3 NH_4-N (Ammonium)
W4 EC, NO_3N, Ca, Mg, Na, K, HCO_3, CO_3, SO_4S, Cl, TDS (Dom, GM)
W5 EC, NO_3N, TDS, TN, Ca, Mg, Na, HCO_3, CO_3, SO_4S, Cl (Irr, GM)
W6 NO_3N, NO_2 (Dom ILRP, Annually)
W7 Ca, Mg, Na, K, HCO_3, CO_3, SO_4, Cl + Lab Filtering (GWM)
W8 Other: _____

20' 8.1°C Tot# 47407

Process Waste Water (lagoon)

L1 EC, NH_4N, TKN, TP, TK, TDS (Quarterly)
L2 EC, NO_3N, NH_4N, TKN, TP, TK, TDS, pH (Annually)
L3 L1 + Ca, Mg, Na, HCO_3,CO_3, SO_4S, 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: _____

Plant Tissue

P1 TN, NO_3N, PO_4P, 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: _____

Soil

S1 SP%, pH, EC, Ca, Mg, Na, K, ESP, LP, B, NO_3N, PO_4P, K-AA, Zn, Mn, Fe, Cu, SO_4S
S2 S1 + CEC, CaCO3, OM, C:N, TN
S3 NO_3N, NH_4N
S4 Other: _____

	Sample ID	Description	Analysis	Date/Time	Sampled by	IAS USE ONLY: FIELD TESTS NH_3N *	pH	Temp
1	D14	DOM	W4	12-14/10:00	Zoke			
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 sampes, please note below.

NOTES:

CHAIN OF CUSTODY RECORDING

	Signature	Company	Received Date & Time	Relinquished Date & Time
1st		IAS		12-14-23/3:00
2nd		FGL	12-14-23 15:50	
3rd		FGL		12-14-23 16:05
4th			12/14/23 1608	

LABORATORY USE ONLY

Logged In By: _____ Total Samples: 12/14/23 174 Laboratory #: 12/15/23 1155

THE PRINTER INC. - 559-992-5127