



River Ranch Dairy

2023 Annual Report

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

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

(See attached delivery confirmation)

Annual Report

River Ranch Dairy 2023

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

Facility Information:

| | |
|------------------|---------------------------------------|
| Name of Dairy | River Ranch Dairy |
| Facility Address | 6155 Jackson Avenue, Hanford CA 93230 |

Owner/Operator as of 12/31/2023

| | |
|----------------|----------------|
| Operator Name | Jack de Jong |
| Operator Phone | (559) 707-3766 |
| 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:

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



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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:

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

11. Summary of discharges from the land application area

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

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

12. Nutrient Management Plan update

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

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

13. Manure/Process Wastewater Tracking Manifests

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

- No.
 Yes, see attached manifests.

14. Written Agreements

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

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

15. Laboratory Analyses for Discharges

If you answered Yes to items #9, 10, or 11 above, attach copies of all laboratory analyses for all discharges (manure, process wastewater or tailwater), surface water (upstream and downstream of a discharge), and storm water, including chain-of-custody forms and laboratory quality assurance/quality control results, as applicable. (Results for Manure and process wastewater, storm water, and/or storm water are provided).

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

16. Tabulated Nutrient Analytical Data

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

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17. Record-Keeping Results

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

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

18. Groundwater Monitoring Section

Groundwater monitoring results are attached.

Monitoring Well results are attached, if applicable.

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

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

19. Storm Water Reporting Section

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

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

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

20. Mortality Management Practices

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

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"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."

Same as Owner

Signature of Operator of Facility

Jack de Jong

Print Name

6/25/2024

Title and Date

DocuSigned by:



02B1EA0E959941F...

Signature of Owner of Facility

Jack de Jong

Print Name

6/25/2024

Title and Date



INNOVATIVE AG SERVICES

River Ranch 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 | PHOSPHORUS | POTASSIUM | SALTS |
|--------------------|---------------------|----------------------|-------------------|--------|-----------------------------------|---|---|---|---|
| | | | | | | Net (LB) Available for Land Application |
| Hol Milk Cows | 400 | 355 | Milk Flushed Lane | 1,400 | 9,009.51 | 128,279.25 | 22,027.75 | 29,802.25 | 234,012.45 |
| Hol Milk Cows | 5,210 | 5,170 | Milk Freestall - | 1,400 | 131,208.85 | 1,868,179.50 | 320,798.50 | 434,021.50 | 3,408,012.30 |
| Hol Dry Cows | 456 | 390 | Flushed | 1,450 | 5,690.93 | 71,175.00 | 9,964.50 | 46,975.50 | 100,442.16 |
| Hol Dry Cows | 350 | 341 | Flushed | 1,450 | 4,975.91 | 62,232.50 | 8,712.55 | 41,073.45 | 87,822.50 |
| Hol Heifers(15-24) | 1,665 | 1,565 | Flushed | 1,000 | 16,336.29 | 217,065.50 | 34,273.50 | 102,820.50 | 403,056.36 |
| Hol Heifers (7-14) | 1,700 | 1,680 | Flushed | 750 | 16,157.02 | 159,432.00 | 26,980.80 | 91,980.00 | 202,815.90 |
| Hol Calves (4-6) | 685 | 650 | Flushed | 300 | 2,253.88 | 33,215.00 | 9,490.00 | 18,980.00 | 15,563.60 |
| Hol Calves (0-3) | 950 | 755 | Calves Dry Scrape | 150 | 2,617.96 | 5,511.50 | 2,755.75 | 11,023.00 | 6,633.09 |
| | 11,416 | 10,906 | | | 188,250.35 | 2,545,090.25 | 435,003.35 | 776,676.20 | 4,458,358.36 |

* 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)** |
|--|-----------------------------------|--|---|--|---------------------------------|-----------------------------------|----------------------------------|-----------------------------|
| 197,040,562 | 261.50 | 36.72 | 537.50 | 3,485.00 | 429,212.47 | 60,278.50 | 882,224.49 | 5,720,097.3 |

* 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).



River Ranch Dairy 2023 Nutrient Applications (Attachment B)

Field Name: B

| Date | Event/Source | Amount Applied/Yield (per Acre) Units | Lab Sample Data | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|------------------------|----------------------|---------------------------------------|-----------------|-----------------------|------------------------------|------------------------|--------------------------|-------------------------|--------------------|--------------------------|
| 01/01/2023 | Atmospheric Deposit | 14.00 Pounds | 100.00 % | | | 238 | | | | |
| | Acre Inches Applied: | 0.00 | | | Totals: | | 238 | | | |
| Season Nitrogen Ratio: | | | Lbs Per Acre: | | | 14 | | | | |

Season Notes: Fallow.

River Ranch Dairy 2023 Nutrient Applications (Attachment B)

Field Name: B1

Corn, 71 Acres Planted on 05/05/2023

| Date | Event/Source | Amount Applied/Yield (per Acre) | Units | Lab Sample Data | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|------------------------|--------------------------|---------------------------------|-------------|-----------------|-------|--------|-----------------------|------------------------------|------------------------|--------------------------|-------------------------|--------------------|--------------------------|
| 05/17/2023 | Surface Water: Lakeside | 5.96 | Acre Inches | 0.90 | | mg/L | | 86 | 0 | 0 | 8,614 | | |
| 05/17/2023 | Waste Water: Main Lagoon | 0.87 | Acre Inches | 402.00 | 49.70 | 629.00 | mg/L | 1,677,321 | 5,617 | 694 | 8,788 | 60,219 | |
| 06/01/2023 | Surface Water: Lakeside | 6.69 | Acre Inches | 0.90 | | mg/L | | 97 | 0 | 0 | 9,669 | | |
| 06/16/2023 | Surface Water: Lakeside | 6.04 | Acre Inches | 0.90 | | mg/L | | 87 | 0 | 0 | 8,730 | | |
| 06/16/2023 | Waste Water: Main Lagoon | 0.88 | Acre Inches | 402.00 | 49.70 | 629.00 | mg/L | 1,696,601 | 5,681 | 702 | 8,889 | 60,912 | |
| 06/30/2023 | Ground Water: Well Avg | 6.78 | Acre Inches | 4.39 | | mg/L | | 478 | 0 | 0 | 27,688 | | |
| 07/14/2023 | Ground Water: Well Avg | 5.96 | Acre Inches | 4.39 | | mg/L | | 420 | 0 | 0 | 24,340 | | |
| 07/14/2023 | Waste Water: Main Lagoon | 0.87 | Acre Inches | 272.00 | 37.60 | 588.00 | mg/L | 1,677,321 | 3,801 | 525 | 8,215 | 59,242 | |
| 07/24/2023 | Ground Water: Well Avg | 6.34 | Acre Inches | 4.39 | | mg/L | | 447 | 0 | 0 | 25,892 | | |
| 08/04/2023 | Harvest | 32.90 | Tons | 67.40 | 1.30 | 0.29 | 1.01 | % | | | | | 19,799 |
| Acre Inches Applied: | | 40.39 | | Totals: | | | 5,051,243 | 16,713 | 1,922 | 25,893 | 285,306 | | 19,799 |
| Season Nitrogen Ratio: | | 0.84 | | Lbs Per Acre: | | | 235 | 27 | 365 | 4,018 | | | 279 |

River Ranch Dairy 2023 Nutrient Applications (Attachment B)

Field Name: B2

Corn, 50 Acres Planted on 05/09/2023

| Date | Event/Source | Amount Applied/Yield (per Acre) Units | Lab Sample Data | | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|-------------------------------|--------------------------|---------------------------------------|----------------------|--------|-------|--------|-----------------------|------------------------------|------------------------|--------------------------|-------------------------|--------------------|--------------------------|
| 05/21/2023 | Surface Water: Lakeside | 6.03 Acre Inches | | 0.90 | | mg/L | | 62 | 0 | 0 | 0 | 6,138 | |
| 05/21/2023 | Waste Water: Main Lagoon | 0.80 Acre Inches | | 402.00 | 49.70 | 629.00 | mg/L | 1,086,172 | 3,637 | 450 | 5,691 | 38,996 | |
| 06/05/2023 | Surface Water: Lakeside | 6.88 Acre Inches | | 0.90 | | mg/L | | 70 | 0 | 0 | 0 | 7,003 | |
| 06/20/2023 | Surface Water: Lakeside | 6.14 Acre Inches | | 0.90 | | mg/L | | 62 | 0 | 0 | 0 | 6,250 | |
| 06/20/2023 | Waste Water: Main Lagoon | 0.88 Acre Inches | | 402.00 | 49.70 | 629.00 | mg/L | 1,194,789 | 4,001 | 494 | 6,260 | 42,896 | |
| 07/04/2023 | Ground Water: Well Avg | 7.00 Acre Inches | | 4.39 | | mg/L | | 347 | 0 | 0 | 0 | 20,132 | |
| 07/18/2023 | Ground Water: Well Avg | 6.03 Acre Inches | | 4.39 | | mg/L | | 299 | 0 | 0 | 0 | 17,342 | |
| 07/18/2023 | Waste Water: Main Lagoon | 0.80 Acre Inches | | 272.00 | 37.60 | 588.00 | mg/L | 1,086,172 | 2,461 | 340 | 5,320 | 38,362 | |
| 07/28/2023 | Ground Water: Well Avg | 6.38 Acre Inches | | 4.39 | | mg/L | | 316 | 0 | 0 | 0 | 18,348 | |
| 08/08/2023 | Harvest | 30.10 Tons | 64.00 | 1.19 | 0.27 | 1.07 | % | | | | | | 12,895 |
| Acre Inches Applied: | | 40.94 | Totals: | | | | | 3,367,133 | 11,256 | 1,284 | 17,271 | 195,466 | 12,895 |
| Season Nitrogen Ratio: | | 0.87 | Lbs Per Acre: | | | | | 225 | 26 | 345 | 3,909 | 258 | |



River Ranch Dairy 2023 Nutrient Applications (Attachment B)

Field Name: B3

Wheat, 35 Acres Planted on 11/17/2022

| Date | Event/Source | Amount Applied/Yield (per Acre) | Units | Lab Sample Data | | | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|-------------------------------|----------------------------|---------------------------------|-------------|----------------------|----------|-------|---------|-------|-----------------------|------------------------------|------------------------|--------------------------|-------------------------|--------------------|--------------------------|
| | | | | % Moist. | Nitrogen | Phos. | Potass. | Units | | | | | | | |
| 10/21/2022 | Corral Solids: Main Corral | 5.00 | Tons | 43.70 | 2.10 | 0.56 | 1.98 | % | 175 | | 4,138 | 1,098 | 3,901 | 0 | |
| 01/01/2023 | Atmospheric Deposit | 14.00 | Pounds | | 100.00 | | | % | | | 490 | | | | |
| 01/03/2023 | Surface Water: Lakeside | 4.54 | Acre Inches | | 0.90 | | | mg/L | | | 32 | 0 | 0 | 3,235 | |
| 01/03/2023 | Waste Water: Main Lagoon | 0.80 | Acre Inches | | 271.00 | 35.40 | 545.00 | mg/L | | 760,320 | 1,716 | 224 | 3,452 | 22,167 | |
| 03/02/2023 | Surface Water: Lakeside | 4.94 | Acre Inches | | 0.90 | | | mg/L | | | 35 | 0 | 0 | 3,520 | |
| 03/02/2023 | Waste Water: Main Lagoon | 0.87 | Acre Inches | | 271.00 | 35.40 | 545.00 | mg/L | | 826,848 | 1,867 | 244 | 3,754 | 24,107 | |
| 04/29/2023 | Surface Water: Lakeside | 4.87 | Acre Inches | | 0.90 | | | mg/L | | | 35 | 0 | 0 | 3,470 | |
| 04/29/2023 | Waste Water: Main Lagoon | 0.86 | Acre Inches | | 402.00 | 49.70 | 629.00 | mg/L | | 817,344 | 2,737 | 338 | 4,283 | 29,345 | |
| 05/14/2023 | Harvest | 25.80 | Tons | 66.80 | 1.44 | 0.31 | 1.28 | % | | | | | | | 8,634 |
| Acre Inches Applied: | | 16.88 | | Totals: | | | | | 175 | 2,404,513 | 11,050 | 1,904 | 15,390 | 85,843 | 8,634 |
| Season Nitrogen Ratio: | | 1.28 | | Lbs Per Acre: | | | | | | | 316 | 54 | 440 | 2,453 | 247 |



River Ranch Dairy 2023

Nutrient Applications (Attachment B)

Field Name: B3

Corn, 35 Acres Planted on 06/26/2023

| Date | Event/Source | Amount Applied/Yield (per Acre) | Units | Lab Sample Data | | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|-------------------------------|--------------------------|---------------------------------|-------------|----------------------|-------|--------|------|-----------------------|------------------------------|------------------------|--------------------------|-------------------------|--------------------|--------------------------|
| 07/08/2023 | Surface Water: Lakeside | 5.13 | Acre Inches | 0.90 | | mg/L | | | 36 | 0 | 0 | 3,655 | | |
| 07/08/2023 | Waste Water: Main Lagoon | 0.88 | Acre Inches | 272.00 | 37.60 | 588.00 | mg/L | 836,352 | 1,895 | 262 | 4,096 | 29,539 | | |
| 07/23/2023 | Surface Water: Lakeside | 6.14 | Acre Inches | 0.90 | | mg/L | | | 44 | 0 | 0 | 4,375 | | |
| 08/07/2023 | Surface Water: Lakeside | 5.29 | Acre Inches | 0.90 | | mg/L | | | 38 | 0 | 0 | 3,769 | | |
| 08/07/2023 | Waste Water: Main Lagoon | 0.90 | Acre Inches | 272.00 | 37.60 | 588.00 | mg/L | 855,360 | 1,938 | 268 | 4,190 | 30,211 | | |
| 08/21/2023 | Ground Water: Well Avg | 6.35 | Acre Inches | 4.39 | | mg/L | | | 220 | 0 | 0 | 12,783 | | |
| 09/04/2023 | Ground Water: Well Avg | 5.13 | Acre Inches | 4.39 | | mg/L | | | 178 | 0 | 0 | 10,327 | | |
| 09/04/2023 | Waste Water: Main Lagoon | 0.88 | Acre Inches | 272.00 | 37.60 | 588.00 | mg/L | 836,352 | 1,895 | 262 | 4,096 | 29,539 | | |
| 09/14/2023 | Ground Water: Well Avg | 5.43 | Acre Inches | 4.39 | | mg/L | | | 189 | 0 | 0 | 10,931 | | |
| 09/25/2023 | Harvest | 26.30 | Tons | 72.10 | 1.33 | 0.26 | 1.52 | % | | | | | | 6,831 |
| Acre Inches Applied: | | 36.13 | | Totals: | | | | 2,528,065 | 6,433 | 791 | 12,382 | 135,130 | 6,831 | |
| Season Nitrogen Ratio: | | 0.94 | | Lbs Per Acre: | | | | | 184 | 23 | 354 | 3,861 | | 195 |



**River Ranch Dairy 2023
Nutrient Applications (Attachment B)**

Field Name: C1

Corn, 122 Acres Planted on 05/08/2023

| Date | Event/Source | Amount Applied/Yield (per Acre) | Units | Lab Sample Data | | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|-------------------------------|--------------------------|---------------------------------|-------------|----------------------|-------|--------|------|-----------------------|------------------------------|------------------------|--------------------------|-------------------------|--------------------|--------------------------|
| 05/20/2023 | Surface Water: Lakeside | 5.89 | Acre Inches | 0.90 | | mg/L | | | 146 | 0 | 0 | 14,629 | | |
| 05/20/2023 | Waste Water: Main Lagoon | 0.78 | Acre Inches | 402.00 | 49.70 | 629.00 | mg/L | 2,584,003 | 8,653 | 1,070 | 13,540 | 92,771 | | |
| 06/04/2023 | Surface Water: Lakeside | 6.51 | Acre Inches | 0.90 | | mg/L | | | 162 | 0 | 0 | 16,169 | | |
| 06/19/2023 | Surface Water: Lakeside | 5.94 | Acre Inches | 0.90 | | mg/L | | | 148 | 0 | 0 | 14,752 | | |
| 06/19/2023 | Waste Water: Main Lagoon | 0.82 | Acre Inches | 402.00 | 49.70 | 629.00 | mg/L | 2,716,516 | 9,096 | 1,125 | 14,234 | 97,529 | | |
| 07/03/2023 | Ground Water: Well Avg | 6.56 | Acre Inches | 4.39 | | mg/L | | | 794 | 0 | 0 | 46,033 | | |
| 07/17/2023 | Ground Water: Well Avg | 5.89 | Acre Inches | 4.39 | | mg/L | | | 712 | 0 | 0 | 41,331 | | |
| 07/17/2023 | Waste Water: Main Lagoon | 0.78 | Acre Inches | 272.00 | 37.60 | 588.00 | mg/L | 2,584,003 | 5,855 | 809 | 12,656 | 91,265 | | |
| 07/27/2023 | Ground Water: Well Avg | 6.30 | Acre Inches | 4.39 | | mg/L | | | 762 | 0 | 0 | 44,208 | | |
| 08/07/2023 | Harvest | 32.50 | Tons | 67.90 | 1.26 | 0.30 | 1.51 | % | | | | | | 32,074 |
| Acre Inches Applied: | | 39.47 | | Totals: | | | | 7,884,523 | 26,330 | 3,004 | 40,430 | 458,687 | 32,074 | |
| Season Nitrogen Ratio: | | 0.82 | | Lbs Per Acre: | | | | 216 | 25 | 331 | 3,760 | 263 | | |



River Ranch Dairy 2023 Nutrient Applications (Attachment B)

Field Name: C2

Wheat, 134 Acres Planted on 11/13/2022

| Date | Event/Source | Amount Applied/Yield (per Acre) | Units | Lab Sample Data | | | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|-------------------------------|----------------------------|---------------------------------|-------------|----------------------|--------|-------|--------|------|-----------------------|------------------------------|------------------------|--------------------------|-------------------------|--------------------|--------------------------|
| 10/14/2022 | Corral Solids: Main Corral | 5.00 | Tons | 43.70 | 2.10 | 0.56 | 1.98 | % | 670 | | 15,843 | 4,202 | 14,937 | 0 | |
| 01/01/2023 | Atmospheric Deposit | 14.00 | Pounds | | 100.00 | | | % | | | 1,876 | | | | |
| 01/06/2023 | Surface Water: Lakeside | 4.25 | Acre Inches | | 0.90 | | | mg/L | | | 117 | 0 | 0 | 11,594 | |
| 01/06/2023 | Waste Water: Main Lagoon | 0.68 | Acre Inches | | 271.00 | 35.40 | 545.00 | mg/L | | 2,474,300 | 5,585 | 729 | 11,233 | 72,138 | |
| 03/05/2023 | Surface Water: Lakeside | 4.44 | Acre Inches | | 0.90 | | | mg/L | | | 121 | 0 | 0 | 12,112 | |
| 03/05/2023 | Waste Water: Main Lagoon | 0.71 | Acre Inches | | 271.00 | 35.40 | 545.00 | mg/L | | 2,583,460 | 5,832 | 762 | 11,729 | 75,321 | |
| 05/02/2023 | Surface Water: Lakeside | 4.41 | Acre Inches | | 0.90 | | | mg/L | | | 121 | 0 | 0 | 12,031 | |
| 05/02/2023 | Waste Water: Main Lagoon | 0.70 | Acre Inches | | 402.00 | 49.70 | 629.00 | mg/L | | 2,547,073 | 8,529 | 1,055 | 13,345 | 91,446 | |
| 05/17/2023 | Harvest | 18.80 | Tons | 54.60 | 1.82 | 0.32 | 0.80 | % | | | | | | | 41,631 |
| Acre Inches Applied: | | 15.19 | | Totals: | | | | | 670 | 7,604,833 | 38,022 | 6,748 | 51,244 | 274,641 | 41,631 |
| Season Nitrogen Ratio: | | 0.91 | | Lbs Per Acre: | | | | | | | 284 | 50 | 382 | 2,050 | 311 |



River Ranch Dairy 2023

Nutrient Applications (Attachment B)

Field Name: C2

Corn, 134 Acres Planted on 06/20/2023

| Date | Event/Source | Amount Applied/Yield (per Acre) | Units | Lab Sample Data | | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|-------------------------------|--------------------------|---------------------------------------|-------------|----------------------|----------|-------|---------|-----------------------------|------------------------------------|------------------------------|--------------------------------|-------------------------------|--------------------------|--------------------------------|
| | | | | % Moist. | Nitrogen | Phos. | Potass. | | | | | | | |
| 07/02/2023 | Surface Water: Lakeside | 4.88 | Acre Inches | | 0.90 | | | | | 133 | 0 | 0 | 13,312 | |
| 07/02/2023 | Waste Water: Main Lagoon | 1.06 | Acre Inches | | 272.00 | 37.60 | 588.00 | mg/L | | 3,856,997 | 8,739 | 1,209 | 18,891 | 136,226 |
| 07/17/2023 | Surface Water: Lakeside | 5.48 | Acre Inches | | 0.90 | | | mg/L | | | 150 | 0 | 0 | 14,949 |
| 08/01/2023 | Surface Water: Lakeside | 4.92 | Acre Inches | | 0.90 | | | mg/L | | | 134 | 0 | 0 | 13,421 |
| 08/01/2023 | Waste Water: Main Lagoon | 1.07 | Acre Inches | | 272.00 | 37.60 | 588.00 | mg/L | | 3,893,384 | 8,821 | 1,219 | 19,070 | 137,511 |
| 08/15/2023 | Ground Water: Well Avg | 5.53 | Acre Inches | | 4.39 | | | mg/L | | | 736 | 0 | 0 | 42,623 |
| 08/29/2023 | Ground Water: Well Avg | 4.88 | Acre Inches | | 4.39 | | | mg/L | | | 649 | 0 | 0 | 37,612 |
| 08/29/2023 | Waste Water: Main Lagoon | 1.06 | Acre Inches | | 272.00 | 37.60 | 588.00 | mg/L | | 3,856,997 | 8,739 | 1,209 | 18,891 | 136,226 |
| 09/08/2023 | Ground Water: Well Avg | 4.00 | Acre Inches | | 4.39 | | | mg/L | | | 532 | 0 | 0 | 30,829 |
| 09/19/2023 | Harvest | 24.70 | Tons | 66.20 | 1.47 | 0.29 | 1.53 | % | | | | | | 32,890 |
| Acre Inches Applied: | | 32.88 | | Totals: | | | | | 11,607,377 | 28,633 | 3,637 | 56,852 | 562,709 | 32,890 |
| Season Nitrogen Ratio: | | 0.87 | | Lbs Per Acre: | | | | | 214 | 27 | 424 | 4,199 | 245 | |



River Ranch Dairy 2023

Nutrient Applications (Attachment B)

Field Name: Pasture

| Date | Event/Source | Amount Applied/Yield (per Acre) | Units | Lab Sample Data | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|------------------------|----------------------|---------------------------------------|--------|-----------------|-----------------------------|------------------------------------|------------------------------|--------------------------------|-------------------------------|--------------------------|--------------------------------|
| 01/01/2023 | Atmospheric Deposit | 14.00 | Pounds | 100.00 % | | | 280 | | | | |
| | Acre Inches Applied: | 0.00 | | | Totals: | | 280 | | | | |
| Season Nitrogen Ratio: | | | | Lbs Per Acre: | | | 14 | | | | |

Season Notes: Pasture was grazed and not harvested.

River Ranch Dairy 2023

Nutrient Applications (Attachment B)

Field Name: R1

Corn, 53 Acres Planted on 05/26/2023

| Date | Event/Source | Amount Applied/Yield (per Acre) | Units | Lab Sample Data | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) | |
|-------------------------------|--------------------------|---------------------------------------|-------------|-----------------|----------|-------|-----------------------------|------------------------------------|------------------------------|--------------------------------|-------------------------------|--------------------------|--------------------------------|---------------|
| | | | | % Moist. | Nitrogen | Phos. | | | | | | | | |
| 06/07/2023 | Surface Water: Lakeside | 5.01 | Acre Inches | | 0.90 | | | | 54 | 0 | 0 | 5,405 | | |
| 06/07/2023 | Waste Water: Main Lagoon | 1.07 | Acre Inches | | 402.00 | 49.70 | 629.00 | mg/L | | 1,539,920 | 5,157 | 638 | 8,069 | 55,286 |
| 06/22/2023 | Surface Water: Lakeside | 6.84 | Acre Inches | | 0.90 | | | mg/L | | | 74 | 0 | 0 | 7,380 |
| 07/07/2023 | Surface Water: Lakeside | 5.12 | Acre Inches | | 0.90 | | | mg/L | | | 55 | 0 | 0 | 5,524 |
| 07/07/2023 | Waste Water: Main Lagoon | 1.08 | Acre Inches | | 272.00 | 37.60 | 588.00 | mg/L | | 1,554,312 | 3,522 | 487 | 7,613 | 54,897 |
| 07/21/2023 | Ground Water: Well Avg | 6.96 | Acre Inches | | 4.39 | | | mg/L | | | 366 | 0 | 0 | 21,217 |
| 08/04/2023 | Ground Water: Well Avg | 5.10 | Acre Inches | | 4.39 | | | mg/L | | | 268 | 0 | 0 | 15,547 |
| 08/04/2023 | Waste Water: Main Lagoon | 1.07 | Acre Inches | | 272.00 | 37.60 | 588.00 | mg/L | | 1,539,920 | 3,489 | 482 | 7,542 | 54,389 |
| 08/14/2023 | Ground Water: Well Avg | 5.37 | Acre Inches | | 4.39 | | | mg/L | | | 282 | 0 | 0 | 16,370 |
| 08/25/2023 | Harvest | 28.80 | Tons | 59.20 | 1.20 | 0.28 | 1.29 | % | | | | | | 14,947 |
| Acre Inches Applied: | | 37.62 | | | | | | Totals: | 4,634,153 | 13,267 | 1,607 | 23,224 | 236,016 | 14,947 |
| Season Nitrogen Ratio: | | 0.89 | | | | | | Lbs Per Acre: | 250 | 30 | 438 | 4,453 | 282 | |



River Ranch Dairy 2023

Nutrient Applications (Attachment B)

Field Name: R2

Wheat, 85 Acres Planted on 11/20/2022

| Date | Event/Source | Amount Applied/Yield (per Acre) | Units | Lab Sample Data | | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|-------------------------------|----------------------------|---------------------------------|-------------|----------------------|--------|-------|--------|-----------------------|------------------------------|------------------------|--------------------------|-------------------------|--------------------|--------------------------|
| 10/13/2022 | Corral Solids: Main Corral | 5.00 | Tons | 43.70 | 2.10 | 0.56 | 1.98 | % | 425 | 10,050 | 2,666 | 9,475 | 0 | |
| 01/01/2023 | Atmospheric Deposit | 14.00 | Pounds | | 100.00 | | | % | | 1,190 | | | | |
| 01/04/2023 | Surface Water: Lakeside | 4.21 | Acre Inches | | 0.90 | | | mg/L | | 73 | 0 | 0 | 7,285 | |
| 01/04/2023 | Waste Water: Main Lagoon | 0.97 | Acre Inches | | 271.00 | 35.40 | 545.00 | mg/L | 2,238,872 | 5,054 | 660 | 10,164 | 65,274 | |
| 03/03/2023 | Surface Water: Lakeside | 4.52 | Acre Inches | | 0.90 | | | mg/L | | 78 | 0 | 0 | 7,822 | |
| 03/03/2023 | Waste Water: Main Lagoon | 1.02 | Acre Inches | | 271.00 | 35.40 | 545.00 | mg/L | 2,354,278 | 5,314 | 694 | 10,688 | 68,639 | |
| 04/30/2023 | Surface Water: Lakeside | 4.46 | Acre Inches | | 0.90 | | | mg/L | | 77 | 0 | 0 | 7,717 | |
| 04/30/2023 | Waste Water: Main Lagoon | 1.01 | Acre Inches | | 402.00 | 49.70 | 629.00 | mg/L | 2,331,197 | 7,806 | 965 | 12,214 | 83,695 | |
| 05/17/2023 | Harvest | 23.40 | Tons | 62.90 | 1.87 | 0.33 | 1.01 | % | | | | | | 27,598 |
| Acre Inches Applied: | | 16.19 | | Totals: | | | | 425 | 6,924,346 | 29,643 | 4,985 | 42,542 | 240,433 | 27,598 |
| Season Nitrogen Ratio: | | 1.07 | | Lbs Per Acre: | | | | | | 349 | 59 | 500 | 2,829 | 325 |



River Ranch Dairy 2023 Nutrient Applications (Attachment B)

Field Name: R2

Corn, 85 Acres Planted on 07/07/2023

| Date | Event/Source | Amount Applied/Yield (per Acre) | Units | Lab Sample Data | | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|-------------------------------|--------------------------|---------------------------------|-------------|----------------------|-------|--------|------|-----------------------|------------------------------|------------------------|--------------------------|-------------------------|--------------------|--------------------------|
| 07/19/2023 | Surface Water: Lakeside | 4.93 | Acre Inches | 0.90 | | mg/L | | | 85 | 0 | 0 | 8,531 | | |
| 07/19/2023 | Waste Water: Main Lagoon | 0.97 | Acre Inches | 272.00 | 37.60 | 588.00 | mg/L | 2,238,872 | 5,073 | 701 | 10,966 | 79,076 | | |
| 08/03/2023 | Surface Water: Lakeside | 6.62 | Acre Inches | 0.90 | | mg/L | | | 115 | 0 | 0 | 11,455 | | |
| 08/18/2023 | Surface Water: Lakeside | 5.00 | Acre Inches | 0.90 | | mg/L | | | 87 | 0 | 0 | 8,652 | | |
| 08/18/2023 | Waste Water: Main Lagoon | 0.97 | Acre Inches | 272.00 | 37.60 | 588.00 | mg/L | 2,238,872 | 5,073 | 701 | 10,966 | 79,076 | | |
| 09/01/2023 | Ground Water: Well Avg | 6.69 | Acre Inches | 4.39 | | mg/L | | | 564 | 0 | 0 | 32,708 | | |
| 09/15/2023 | Ground Water: Well Avg | 4.93 | Acre Inches | 4.39 | | mg/L | | | 416 | 0 | 0 | 24,103 | | |
| 09/15/2023 | Waste Water: Main Lagoon | 0.97 | Acre Inches | 101.00 | 24.20 | 388.00 | mg/L | 2,238,872 | 1,884 | 451 | 7,236 | 35,248 | | |
| 09/25/2023 | Ground Water: Well Avg | 5.32 | Acre Inches | 4.39 | | mg/L | | | 449 | 0 | 0 | 26,010 | | |
| 10/06/2023 | Harvest | 26.50 | Tons | 68.90 | 0.97 | 0.31 | 1.42 | % | | | | | | 13,632 |
| Acre Inches Applied: | | 36.40 | | Totals: | | | | 6,716,616 | 13,744 | 1,854 | 29,168 | 304,858 | 13,632 | |
| Season Nitrogen Ratio: | | 1.01 | | Lbs Per Acre: | | | | 162 | 22 | 343 | 3,587 | 160 | | |



River Ranch Dairy 2023

Nutrient Applications (Attachment B)

Field Name: R4

Wheat, 94 Acres Planted on 12/17/2022

| Date | Event/Source | Amount Applied/Yield (per Acre) | Units | Lab Sample Data | | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|------------------------------------|--------------------------|---------------------------------|-------------|----------------------|-------|--------|--------|-----------------------|------------------------------|------------------------|--------------------------|-------------------------|--------------------|--------------------------|
| 01/01/2023 | Atmospheric Deposit | 14.00 | Pounds | 100.00 | | % | | | 1,316 | | | | | |
| 01/10/2023 | Surface Water: Lakeside | 5.06 | Acre Inches | 0.90 | | mg/L | | | 97 | 0 | 0 | 9,683 | | |
| 01/10/2023 | Waste Water: Main Lagoon | 1.21 | Acre Inches | 271.00 | 35.40 | 545.00 | mg/L | 3,088,530 | 6,972 | 911 | 14,021 | 90,046 | | |
| 03/09/2023 | Surface Water: Lakeside | 5.40 | Acre Inches | 0.90 | | mg/L | | | 103 | 0 | 0 | 10,333 | | |
| 03/09/2023 | Waste Water: Main Lagoon | 1.28 | Acre Inches | 271.00 | 35.40 | 545.00 | mg/L | 3,267,205 | 7,375 | 964 | 14,832 | 95,256 | | |
| 05/06/2023 | Surface Water: Lakeside | 5.34 | Acre Inches | 0.90 | | mg/L | | | 102 | 0 | 0 | 10,219 | | |
| 05/06/2023 | Waste Water: Main Lagoon | 1.25 | Acre Inches | 402.00 | 49.70 | 629.00 | mg/L | 3,190,630 | 10,684 | 1,321 | 16,718 | 114,551 | | |
| 05/21/2023 | Harvest | 20.00 | Tons | 61.00 | 1.44 | 0.25 | 2.24 % | | | | | | | 21,116 |
| Acre Inches Applied: | | 19.54 | | Totals: | | | | 9,546,366 | 26,650 | 3,195 | 45,571 | 330,089 | 21,116 | |
| Season Nitrogen Ratio: 1.26 | | | | Lbs Per Acre: | | | | 284 | 34 | 485 | 3,512 | 225 | | |



River Ranch Dairy 2023

Nutrient Applications (Attachment B)

Field Name: R4

Corn, 94 Acres Planted on 06/14/2023

| Date | Event/Source | Amount Applied/Yield (per Acre) | Units | Lab Sample Data | | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|-------------------------------|--------------------------|---------------------------------------|-------------|----------------------|----------|-------|---------|-----------------------------|------------------------------------|------------------------------|--------------------------------|-------------------------------|--------------------------|--------------------------------|
| | | | | % Moist. | Nitrogen | Phos. | Potass. | | | | | | | |
| 06/26/2023 | Surface Water: Lakeside | 5.92 | Acre Inches | | 0.90 | | | | | 114 | 0 | 0 | 11,329 | |
| 06/26/2023 | Waste Water: Main Lagoon | 0.87 | Acre Inches | | 272.00 | 37.60 | 588.00 | mg/L | | 2,220,679 | 5,032 | 696 | 10,877 | 78,433 |
| 07/11/2023 | Surface Water: Lakeside | 6.58 | Acre Inches | | 0.90 | | | mg/L | | | 126 | 0 | 0 | 12,591 |
| 07/26/2023 | Surface Water: Lakeside | 5.98 | Acre Inches | | 0.90 | | | mg/L | | | 115 | 0 | 0 | 11,444 |
| 07/26/2023 | Waste Water: Main Lagoon | 0.87 | Acre Inches | | 272.00 | 37.60 | 588.00 | mg/L | | 2,220,679 | 5,032 | 696 | 10,877 | 78,433 |
| 08/09/2023 | Ground Water: Well Avg | 6.65 | Acre Inches | | 4.39 | | | mg/L | | | 620 | 0 | 0 | 35,955 |
| 08/23/2023 | Ground Water: Well Avg | 5.92 | Acre Inches | | 4.39 | | | mg/L | | | 552 | 0 | 0 | 32,008 |
| 08/23/2023 | Waste Water: Main Lagoon | 0.87 | Acre Inches | | 272.00 | 37.60 | 588.00 | mg/L | | 2,220,679 | 5,032 | 696 | 10,877 | 78,433 |
| 09/02/2023 | Ground Water: Well Avg | 6.32 | Acre Inches | | 4.39 | | | mg/L | | | 589 | 0 | 0 | 34,171 |
| 09/13/2023 | Harvest | 22.40 | Tons | 66.80 | 1.40 | 0.27 | 1.43 | % | | | | | | 19,574 |
| Acre Inches Applied: | | 39.98 | | Totals: | | | | | 6,662,036 | 17,211 | 2,087 | 32,630 | 372,796 | 19,574 |
| Season Nitrogen Ratio: | | 0.88 | | Lbs Per Acre: | | | | | 183 | 22 | 347 | 3,966 | 208 | |



River Ranch Dairy 2023 Nutrient Applications (Attachment B)

Field Name: R5

Wheat, 108 Acres Planted on 12/17/2022

| Date | Event/Source | Amount Applied/Yield (per Acre) | Units | Lab Sample Data | | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|-------------------------------|--------------------------|---------------------------------------|-------------|----------------------|-------|--------|------|-----------------------------|------------------------------------|------------------------------|--------------------------------|-------------------------------|--------------------------|--------------------------------|
| 01/01/2023 | Atmospheric Deposit | 14.00 | Pounds | 100.00 | | | % | | | 1,512 | | | | |
| 01/13/2023 | Surface Water: Lakeside | 5.08 | Acre Inches | 0.90 | | | mg/L | | | 111 | 0 | 0 | 11,169 | |
| 01/13/2023 | Waste Water: Main Lagoon | 1.21 | Acre Inches | 271.00 | 35.40 | 545.00 | mg/L | 3,548,524 | 8,010 | 1,047 | 16,109 | 103,458 | | |
| 03/12/2023 | Surface Water: Lakeside | 5.37 | Acre Inches | 0.90 | | | mg/L | | | 118 | 0 | 0 | 11,807 | |
| 03/12/2023 | Waste Water: Main Lagoon | 1.26 | Acre Inches | 271.00 | 35.40 | 545.00 | mg/L | 3,695,157 | 8,342 | 1,090 | 16,776 | 107,732 | | |
| 05/09/2023 | Surface Water: Lakeside | 5.32 | Acre Inches | 0.90 | | | mg/L | | | 117 | 0 | 0 | 11,696 | |
| 05/09/2023 | Waste Water: Main Lagoon | 1.25 | Acre Inches | 402.00 | 49.70 | 629.00 | mg/L | 3,665,830 | 12,275 | 1,517 | 19,208 | 131,612 | | |
| 05/21/2023 | Harvest | 22.80 | Tons | 65.90 | 1.58 | 0.38 | 2.12 | % | | | | | | 26,533 |
| Acre Inches Applied: | | 19.49 | | Totals: | | | | 10,909,512 | 30,485 | 3,654 | 52,093 | 377,474 | 26,533 | |
| Season Nitrogen Ratio: | | 1.15 | | Lbs Per Acre: | | | | | | 282 | 34 | 482 | 3,495 | 246 |



River Ranch Dairy 2023 Nutrient Applications (Attachment B)

Field Name: R5

Corn, 108 Acres Planted on 06/21/2023

| Date | Event/Source | Amount Applied/Yield (per Acre) | Units | Lab Sample Data | | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|-------------------------------|--------------------------|---------------------------------|-------------|----------------------|-------|--------|------|-----------------------|------------------------------|------------------------|--------------------------|-------------------------|--------------------|--------------------------|
| 07/03/2023 | Surface Water: Lakeside | 4.90 | Acre Inches | 0.90 | | | mg/L | | | 108 | 0 | 0 | 10,773 | |
| 07/03/2023 | Waste Water: Main Lagoon | 1.06 | Acre Inches | 272.00 | 37.60 | 588.00 | mg/L | | 3,108,624 | 7,044 | 974 | 15,226 | 109,794 | |
| 07/18/2023 | Surface Water: Lakeside | 5.54 | Acre Inches | 0.90 | | | mg/L | | | 122 | 0 | 0 | 12,180 | |
| 08/02/2023 | Surface Water: Lakeside | 4.95 | Acre Inches | 0.90 | | | mg/L | | | 109 | 0 | 0 | 10,883 | |
| 08/02/2023 | Waste Water: Main Lagoon | 1.07 | Acre Inches | 272.00 | 37.60 | 588.00 | mg/L | | 3,137,951 | 7,110 | 983 | 15,369 | 110,830 | |
| 08/16/2023 | Ground Water: Well Avg | 5.60 | Acre Inches | 4.39 | | | mg/L | | | 600 | 0 | 0 | 34,787 | |
| 08/30/2023 | Ground Water: Well Avg | 4.90 | Acre Inches | 4.39 | | | mg/L | | | 525 | 0 | 0 | 30,439 | |
| 08/30/2023 | Waste Water: Main Lagoon | 1.06 | Acre Inches | 272.00 | 37.60 | 588.00 | mg/L | | 3,108,624 | 7,044 | 974 | 15,226 | 109,794 | |
| 09/09/2023 | Ground Water: Well Avg | 5.31 | Acre Inches | 4.39 | | | mg/L | | | 569 | 0 | 0 | 32,985 | |
| 09/20/2023 | Harvest | 25.00 | Tons | 67.00 | 1.49 | 0.27 | 1.73 | % | | | | | | 26,552 |
| Acre Inches Applied: | | 34.39 | | Totals: | | | | | 9,355,199 | 23,231 | 2,931 | 45,821 | 462,465 | 26,552 |
| Season Nitrogen Ratio: | | 0.87 | | Lbs Per Acre: | | | | | 215 | 27 | 424 | 4,282 | 246 | |



River Ranch Dairy 2023 Nutrient Applications (Attachment B)

Field Name: T1

Wheat, 51 Acres Planted on 12/31/2022

| Date | Event/Source | Amount Applied/Yield (per Acre) | Units | Lab Sample Data | | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|------------------------------------|--------------------------|---------------------------------------|-------------|-----------------|-------|--------|------|-----------------------------|------------------------------------|------------------------------|--------------------------------|-------------------------------|--------------------------|--------------------------------|
| 01/01/2023 | Atmospheric Deposit | 14.00 | Pounds | 100.00 | | % | | | 714 | | | | | |
| 01/09/2023 | Surface Water: Lakeside | 4.97 | Acre Inches | 0.90 | | mg/L | | | 52 | 0 | 0 | 5,160 | | |
| 01/09/2023 | Waste Water: Main Lagoon | 1.40 | Acre Inches | 271.00 | 35.40 | 545.00 | mg/L | 1,938,817 | 4,377 | 572 | 8,802 | 56,526 | | |
| 03/08/2023 | Surface Water: Lakeside | 5.58 | Acre Inches | 0.90 | | mg/L | | | 58 | 0 | 0 | 5,794 | | |
| 03/08/2023 | Waste Water: Main Lagoon | 1.40 | Acre Inches | 271.00 | 35.40 | 545.00 | mg/L | 1,938,817 | 4,377 | 572 | 8,802 | 56,526 | | |
| 05/05/2023 | Surface Water: Lakeside | 5.48 | Acre Inches | 0.90 | | mg/L | | | 57 | 0 | 0 | 5,690 | | |
| 05/05/2023 | Waste Water: Main Lagoon | 1.27 | Acre Inches | 402.00 | 49.70 | 629.00 | mg/L | 1,758,784 | 5,889 | 728 | 9,215 | 63,145 | | |
| 05/17/2023 | Harvest | 25.00 | Tons | 57.30 | 1.78 | 0.27 | 0.71 | % | | | | | | 19,382 |
| Acre Inches Applied: | | 20.10 | | Totals: | | | | 5,636,418 | 15,524 | 1,872 | 26,819 | 192,841 | 19,382 | |
| Season Nitrogen Ratio: 0.80 | | | | | | | | Lbs Per Acre: | | 304 | 37 | 526 | 3,781 | 380 |



River Ranch Dairy 2023 Nutrient Applications (Attachment B)

Field Name: T1

Corn, 51 Acres Planted on 07/14/2023

| Date | Event/Source | Amount Applied/Yield (per Acre) | Units | Lab Sample Data | | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|-------------------------------|--------------------------|---------------------------------|-------------|----------------------|----------|-------|---------|-----------------------|------------------------------|------------------------|--------------------------|-------------------------|--------------------|--------------------------|
| | | | | % Moist. | Nitrogen | Phos. | Potass. | | | | | | | |
| 07/26/2023 | Surface Water: Lakeside | 4.02 | Acre Inches | | 0.90 | | | | | 42 | 0 | 0 | 4,174 | |
| 07/26/2023 | Waste Water: Main Lagoon | 1.07 | Acre Inches | | 272.00 | 37.60 | 588.00 | mg/L | | 1,481,810 | 3,357 | 464 | 7,258 | 52,336 |
| 08/10/2023 | Surface Water: Lakeside | 5.86 | Acre Inches | | 0.90 | | | mg/L | | | 61 | 0 | 0 | 6,084 |
| 08/25/2023 | Surface Water: Lakeside | 4.13 | Acre Inches | | 0.90 | | | mg/L | | | 43 | 0 | 0 | 4,288 |
| 08/25/2023 | Waste Water: Main Lagoon | 1.08 | Acre Inches | | 272.00 | 37.60 | 588.00 | mg/L | | 1,495,659 | 3,389 | 469 | 7,326 | 52,825 |
| 09/08/2023 | Ground Water: Well Avg | 5.99 | Acre Inches | | 4.39 | | | mg/L | | | 303 | 0 | 0 | 17,571 |
| 09/22/2023 | Ground Water: Well Avg | 4.02 | Acre Inches | | 4.39 | | | mg/L | | | 203 | 0 | 0 | 11,792 |
| 09/22/2023 | Waste Water: Main Lagoon | 1.07 | Acre Inches | | 101.00 | 24.20 | 388.00 | mg/L | | 1,481,810 | 1,246 | 299 | 4,789 | 23,329 |
| 10/02/2023 | Ground Water: Well Avg | 4.37 | Acre Inches | | 4.39 | | | mg/L | | | 221 | 0 | 0 | 12,819 |
| 10/13/2023 | Harvest | 23.40 | Tons | 67.80 | 1.23 | 0.23 | 1.36 | % | | | | | | 9,453 |
| Acre Inches Applied: | | 31.61 | | Totals: | | | | | 4,459,279 | 8,866 | 1,232 | 19,373 | 185,219 | 9,453 |
| Season Nitrogen Ratio: | | 0.94 | | Lbs Per Acre: | | | | | 174 | 24 | 380 | 3,632 | 185 | |



River Ranch Dairy 2023 Nutrient Applications (Attachment B)

Field Name: T2

Wheat, 85 Acres Planted on 12/17/2022

| Date | Event/Source | Amount Applied/Yield (per Acre) | Units | Lab Sample Data | | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|------------------------------------|--------------------------|---------------------------------|-------------|----------------------|-------|--------|------|-----------------------|------------------------------|------------------------|--------------------------|-------------------------|--------------------|--------------------------|
| 01/01/2023 | Atmospheric Deposit | 14.00 | Pounds | 100.00 | | | % | | | 1,190 | | | | |
| 01/07/2023 | Surface Water: Lakeside | 5.05 | Acre Inches | 0.90 | | | mg/L | | | 88 | 0 | 0 | 8,739 | |
| 01/07/2023 | Waste Water: Main Lagoon | 1.21 | Acre Inches | 271.00 | 35.40 | 545.00 | mg/L | | 2,792,820 | 6,304 | 824 | 12,679 | 81,425 | |
| 03/06/2023 | Surface Water: Lakeside | 5.42 | Acre Inches | 0.90 | | | mg/L | | | 94 | 0 | 0 | 9,379 | |
| 03/06/2023 | Waste Water: Main Lagoon | 1.26 | Acre Inches | 271.00 | 35.40 | 545.00 | mg/L | | 2,908,226 | 6,565 | 858 | 13,203 | 84,789 | |
| 05/03/2023 | Surface Water: Lakeside | 5.36 | Acre Inches | 0.90 | | | mg/L | | | 93 | 0 | 0 | 9,275 | |
| 05/03/2023 | Waste Water: Main Lagoon | 1.05 | Acre Inches | 402.00 | 49.70 | 629.00 | mg/L | | 2,423,521 | 8,116 | 1,003 | 12,698 | 87,010 | |
| 05/21/2023 | Harvest | 18.60 | Tons | 57.20 | 1.23 | 0.24 | 1.74 | % | | | | | | 16,646 |
| Acre Inches Applied: | | 19.35 | | Totals: | | | | | 8,124,567 | 22,449 | 2,684 | 38,580 | 280,617 | 16,646 |
| Season Nitrogen Ratio: 1.35 | | | | Lbs Per Acre: | | | | | | 264 | 32 | 454 | 3,301 | 196 |



River Ranch Dairy 2023 Nutrient Applications (Attachment B)

Field Name: T2

Corn, 85 Acres Planted on 07/08/2023

| Date | Event/Source | Amount Applied/Yield (per Acre) | Units | Lab Sample Data | | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|-------------------------------|--------------------------|---------------------------------|-------------|----------------------|----------|-------|---------|-----------------------|------------------------------|------------------------|--------------------------|-------------------------|--------------------|--------------------------|
| | | | | % Moist. | Nitrogen | Phos. | Potass. | | | | | | | |
| 07/20/2023 | Surface Water: Lakeside | 5.93 | Acre Inches | | 0.90 | | | | | 103 | 0 | 0 | 10,261 | |
| 07/20/2023 | Waste Water: Main Lagoon | 0.67 | Acre Inches | | 272.00 | 37.60 | 588.00 | mg/L | | 1,546,437 | 3,504 | 484 | 7,574 | 54,619 |
| 08/04/2023 | Surface Water: Lakeside | 6.62 | Acre Inches | | 0.90 | | | mg/L | | | 115 | 0 | 0 | 11,455 |
| 08/19/2023 | Surface Water: Lakeside | 6.00 | Acre Inches | | 0.90 | | | mg/L | | | 104 | 0 | 0 | 10,383 |
| 08/19/2023 | Waste Water: Main Lagoon | 0.67 | Acre Inches | | 272.00 | 37.60 | 588.00 | mg/L | | 1,546,437 | 3,504 | 484 | 7,574 | 54,619 |
| 09/02/2023 | Ground Water: Well Avg | 6.69 | Acre Inches | | 4.39 | | | mg/L | | | 564 | 0 | 0 | 32,708 |
| 09/16/2023 | Ground Water: Well Avg | 5.93 | Acre Inches | | 4.39 | | | mg/L | | | 500 | 0 | 0 | 28,992 |
| 09/16/2023 | Waste Water: Main Lagoon | 0.67 | Acre Inches | | 101.00 | 24.20 | 388.00 | mg/L | | 1,546,437 | 1,301 | 312 | 4,998 | 24,347 |
| 09/26/2023 | Ground Water: Well Avg | 6.32 | Acre Inches | | 4.39 | | | mg/L | | | 533 | 0 | 0 | 30,899 |
| 10/07/2023 | Harvest | 24.20 | Tons | 69.90 | 0.77 | 0.24 | 1.22 | % | | | | | | 9,560 |
| Acre Inches Applied: | | 39.50 | | Totals: | | | | | 4,639,312 | 10,227 | 1,281 | 20,147 | 258,284 | 9,560 |
| Season Nitrogen Ratio: | | 1.07 | | Lbs Per Acre: | | | | | 120 | 15 | 237 | 3,039 | 112 | |



River Ranch Dairy 2023

Nutrient Applications (Attachment B)

Field Name: T3

Wheat, 104 Acres Planted on 12/09/2022

| Date | Event/Source | Amount Applied/Yield (per Acre) | Units | Lab Sample Data | | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|-------------------------------|--------------------------|---------------------------------------|-------------|----------------------|-------|--------|------|-----------------------------|------------------------------------|------------------------------|--------------------------------|-------------------------------|--------------------------|--------------------------------|
| 01/01/2023 | Atmospheric Deposit | 14.00 | Pounds | 100.00 | | | % | | | 1,456 | | | | |
| 01/02/2023 | Surface Water: Lakeside | 5.08 | Acre Inches | 0.90 | | | mg/L | | | 107 | 0 | 0 | 10,756 | |
| 01/02/2023 | Waste Water: Main Lagoon | 0.81 | Acre Inches | 271.00 | 35.40 | 545.00 | mg/L | | 2,287,478 | 5,164 | 675 | 10,384 | 66,691 | |
| 03/01/2023 | Surface Water: Lakeside | 5.37 | Acre Inches | 0.90 | | | mg/L | | | 113 | 0 | 0 | 11,369 | |
| 03/01/2023 | Waste Water: Main Lagoon | 0.86 | Acre Inches | 271.00 | 35.40 | 545.00 | mg/L | | 2,428,681 | 5,483 | 717 | 11,026 | 70,808 | |
| 04/28/2023 | Surface Water: Lakeside | 5.32 | Acre Inches | 0.90 | | | mg/L | | | 112 | 0 | 0 | 11,263 | |
| 04/28/2023 | Waste Water: Main Lagoon | 0.85 | Acre Inches | 402.00 | 49.70 | 629.00 | mg/L | | 2,400,440 | 8,038 | 994 | 12,578 | 86,182 | |
| 05/13/2023 | Harvest | 25.00 | Tons | 69.90 | 1.16 | 0.34 | 1.92 | % | | | | | | 18,156 |
| Acre Inches Applied: | | 18.29 | | Totals: | | | | | 7,116,599 | 20,473 | 2,386 | 33,988 | 257,069 | 18,156 |
| Season Nitrogen Ratio: | | 1.13 | | Lbs Per Acre: | | | | | | 197 | 23 | 327 | 2,472 | 175 |



River Ranch Dairy 2023 Nutrient Applications (Attachment B)

Field Name: T3

Corn, 104 Acres Planted on 06/15/2023

| Date | Event/Source | Amount Applied/Yield (per Acre) | Units | Lab Sample Data | | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|-------------------------------|--------------------------|---------------------------------|-------------|----------------------|-------|--------|------|-----------------------|------------------------------|------------------------|--------------------------|-------------------------|--------------------|--------------------------|
| 06/27/2023 | Surface Water: Lakeside | 5.91 | Acre Inches | 0.90 | | mg/L | | | 125 | 0 | 0 | 0 | 12,512 | |
| 06/27/2023 | Waste Water: Main Lagoon | 0.86 | Acre Inches | 272.00 | 37.60 | 588.00 | mg/L | | 2,428,681 | 5,503 | 760 | 11,896 | 85,779 | |
| 07/12/2023 | Surface Water: Lakeside | 6.55 | Acre Inches | 0.90 | | mg/L | | | 138 | 0 | 0 | 0 | 13,867 | |
| 07/27/2023 | Surface Water: Lakeside | 5.96 | Acre Inches | 0.90 | | mg/L | | | 126 | 0 | 0 | 0 | 12,618 | |
| 07/27/2023 | Waste Water: Main Lagoon | 0.87 | Acre Inches | 272.00 | 37.60 | 588.00 | mg/L | | 2,456,921 | 5,567 | 770 | 12,034 | 86,777 | |
| 08/10/2023 | Ground Water: Well Avg | 6.61 | Acre Inches | 4.39 | | mg/L | | | 682 | 0 | 0 | 0 | 39,541 | |
| 08/24/2023 | Ground Water: Well Avg | 5.91 | Acre Inches | 4.39 | | mg/L | | | 609 | 0 | 0 | 0 | 35,353 | |
| 08/24/2023 | Waste Water: Main Lagoon | 0.86 | Acre Inches | 272.00 | 37.60 | 588.00 | mg/L | | 2,428,681 | 5,503 | 760 | 11,896 | 85,779 | |
| 09/03/2023 | Ground Water: Well Avg | 6.31 | Acre Inches | 4.39 | | mg/L | | | 651 | 0 | 0 | 0 | 37,746 | |
| 09/14/2023 | Harvest | 25.60 | Tons | 69.50 | 1.34 | 0.26 | 1.26 | % | | | | | | 21,762 |
| Acre Inches Applied: | | 39.84 | | Totals: | | | | | 7,314,282 | 18,904 | 2,290 | 35,825 | 409,972 | 21,762 |
| Season Nitrogen Ratio: | | 0.87 | | Lbs Per Acre: | | | | | 182 | 22 | 344 | 3,942 | 209 | |



River Ranch Dairy 2023

Nutrient Applications (Attachment B)

Field Name: T4

Corn, 112 Acres Planted on 05/09/2023

| Date | Event/Source | Amount Applied/Yield (per Acre) | Units | Lab Sample Data | | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|-------------------------------|--------------------------|---------------------------------|-------------|----------------------|----------|-------|---------|-----------------------|------------------------------|------------------------|--------------------------|-------------------------|--------------------|--------------------------|
| | | | | % Moist. | Nitrogen | Phos. | Potass. | | | | | | | |
| 05/21/2023 | Surface Water: Lakeside | 5.90 | Acre Inches | | 0.90 | | | | | 134 | 0 | 0 | 13,452 | |
| 05/21/2023 | Waste Water: Main Lagoon | 0.87 | Acre Inches | | 402.00 | 49.70 | 629.00 | mg/L | | 2,645,915 | 8,860 | 1,095 | 13,863 | 94,994 |
| 06/05/2023 | Surface Water: Lakeside | 6.53 | Acre Inches | | 0.90 | | | mg/L | | | 149 | 0 | 0 | 14,888 |
| 06/20/2023 | Surface Water: Lakeside | 5.95 | Acre Inches | | 0.90 | | | mg/L | | | 136 | 0 | 0 | 13,567 |
| 06/20/2023 | Waste Water: Main Lagoon | 0.87 | Acre Inches | | 402.00 | 49.70 | 629.00 | mg/L | | 2,645,915 | 8,860 | 1,095 | 13,863 | 94,994 |
| 07/04/2023 | Ground Water: Well Avg | 6.58 | Acre Inches | | 4.39 | | | mg/L | | | 731 | 0 | 0 | 42,389 |
| 07/18/2023 | Ground Water: Well Avg | 5.90 | Acre Inches | | 4.39 | | | mg/L | | | 655 | 0 | 0 | 38,008 |
| 07/18/2023 | Waste Water: Main Lagoon | 0.86 | Acre Inches | | 272.00 | 37.60 | 588.00 | mg/L | | 2,615,502 | 5,926 | 819 | 12,811 | 92,378 |
| 07/28/2023 | Ground Water: Well Avg | 6.31 | Acre Inches | | 4.39 | | | mg/L | | | 701 | 0 | 0 | 40,649 |
| 08/08/2023 | Harvest | 26.90 | Tons | 64.60 | 1.19 | 0.26 | 1.24 | % | | | | | | 25,384 |
| Acre Inches Applied: | | 39.77 | | Totals: | | | | | 7,907,332 | 26,153 | 3,009 | 40,537 | 445,319 | 25,384 |
| Season Nitrogen Ratio: | | 1.03 | | Lbs Per Acre: | | | | | 234 | 27 | 362 | 3,976 | 227 | |



River Ranch Dairy 2023 Nutrient Applications (Attachment B)

Field Name: T5

Corn, 61 Acres Planted on 05/02/2023

| Date | Event/Source | Amount Applied/Yield (per Acre) | Units | Lab Sample Data | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|-------------------------------|--------------------------|---------------------------------|-------------|----------------------|-------|--------|-----------------------|------------------------------|------------------------|--------------------------|-------------------------|--------------------|--------------------------|
| 05/14/2023 | Surface Water: Lakeside | 4.98 | Acre Inches | 0.90 | | mg/L | | 62 | 0 | 0 | 6,184 | | |
| 05/14/2023 | Waste Water: Main Lagoon | 0.87 | Acre Inches | 402.00 | 49.70 | 629.00 | mg/L | 1,441,079 | 4,826 | 597 | 7,551 | 51,738 | |
| 05/29/2023 | Surface Water: Lakeside | 4.76 | Acre Inches | 0.90 | | mg/L | | 59 | 0 | 0 | 5,911 | | |
| 06/13/2023 | Surface Water: Lakeside | 4.08 | Acre Inches | 0.90 | | mg/L | | 51 | 0 | 0 | 5,067 | | |
| 06/13/2023 | Waste Water: Main Lagoon | 0.88 | Acre Inches | 402.00 | 49.70 | 629.00 | mg/L | 1,457,643 | 4,881 | 603 | 7,637 | 52,333 | |
| 06/27/2023 | Ground Water: Well Avg | 5.86 | Acre Inches | 4.39 | | mg/L | | 354 | 0 | 0 | 20,561 | | |
| 07/11/2023 | Ground Water: Well Avg | 4.98 | Acre Inches | 4.39 | | mg/L | | 301 | 0 | 0 | 17,473 | | |
| 07/11/2023 | Waste Water: Main Lagoon | 0.87 | Acre Inches | 272.00 | 37.60 | 588.00 | mg/L | 1,441,079 | 3,265 | 451 | 7,058 | 50,898 | |
| 07/21/2023 | Ground Water: Well Avg | 4.35 | Acre Inches | 4.39 | | mg/L | | 264 | 0 | 0 | 15,262 | | |
| 08/01/2023 | Harvest | 22.80 | Tons | 66.00 | 1.11 | 0.25 | 1.60 | % | | | | | 10,497 |
| Acre Inches Applied: | | 31.63 | | Totals: | | | | 4,339,800 | 14,063 | 1,651 | 22,246 | 225,426 | 10,497 |
| Season Nitrogen Ratio: | | 1.34 | | Lbs Per Acre: | | | | 231 | 27 | 365 | 3,696 | 172 | |

River Ranch Dairy 2023

Nutrient Applications (Attachment B)

Field Name: T6

Wheat, 83 Acres Planted on 12/09/2022

| Date | Event/Source | Amount Applied/Yield (per Acre) | Units | Lab Sample Data | | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|------------------------------------|--------------------------|---------------------------------------|-------------|----------------------|-------|--------|--------|-----------------------------|------------------------------------|------------------------------|--------------------------------|-------------------------------|--------------------------|--------------------------------|
| 12/28/2022 | Surface Water: Lakeside | 5.05 | Acre Inches | 0.90 | | mg/L | | | 85 | 0 | 0 | 8,533 | | |
| 12/28/2022 | Waste Water: Main Lagoon | 0.85 | Acre Inches | 155.00 | 32.50 | 399.00 | mg/L | 1,915,736 | 2,473 | 519 | 6,367 | 52,502 | | |
| 01/01/2023 | Atmospheric Deposit | 14.00 | Pounds | 100.00 | | % | | | 1,162 | | | | | |
| 02/24/2023 | Surface Water: Lakeside | 5.42 | Acre Inches | 0.90 | | mg/L | | | 91 | 0 | 0 | 9,158 | | |
| 02/24/2023 | Waste Water: Main Lagoon | 0.81 | Acre Inches | 271.00 | 35.40 | 545.00 | mg/L | 1,825,584 | 4,121 | 539 | 8,288 | 53,225 | | |
| 04/23/2023 | Surface Water: Lakeside | 5.36 | Acre Inches | 0.90 | | mg/L | | | 90 | 0 | 0 | 9,057 | | |
| 04/23/2023 | Waste Water: Main Lagoon | 0.86 | Acre Inches | 402.00 | 49.70 | 629.00 | mg/L | 1,938,274 | 6,491 | 803 | 10,156 | 69,589 | | |
| 05/13/2023 | Harvest | 19.10 | Tons | 62.60 | 0.92 | 0.26 | 1.44 % | | | | | | | 10,968 |
| Acre Inches Applied: | | 18.35 | | Totals: | | | | 5,679,593 | 14,514 | 1,860 | 24,810 | 202,064 | 10,968 | |
| Season Nitrogen Ratio: 1.32 | | | | Lbs Per Acre: | | | | | 175 | 22 | 299 | 2,435 | | 132 |



River Ranch Dairy 2023 Nutrient Applications (Attachment B)

Field Name: T6

Corn, 83 Acres Planted on 06/26/2023

| Date | Event/Source | Amount Applied/Yield (per Acre) | Units | Lab Sample Data | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|-------------------------------|--------------------------|---------------------------------|-------------|----------------------|-------|--------|-----------------------|------------------------------|------------------------|--------------------------|-------------------------|--------------------|--------------------------|
| 07/08/2023 | Surface Water: Lakeside | 4.93 | Acre Inches | 0.90 | | mg/L | | | 83 | 0 | 0 | 8,330 | |
| 07/08/2023 | Waste Water: Main Lagoon | 0.87 | Acre Inches | 272.00 | 37.60 | 588.00 | mg/L | 1,960,812 | 4,443 | 614 | 9,604 | 69,254 | |
| 07/23/2023 | Surface Water: Lakeside | 5.63 | Acre Inches | 0.90 | | mg/L | | | 95 | 0 | 0 | 9,513 | |
| 08/07/2023 | Surface Water: Lakeside | 4.00 | Acre Inches | 0.90 | | mg/L | | | 67 | 0 | 0 | 6,759 | |
| 08/07/2023 | Waste Water: Main Lagoon | 0.87 | Acre Inches | 272.00 | 37.60 | 588.00 | mg/L | 1,960,812 | 4,443 | 614 | 9,604 | 69,254 | |
| 08/21/2023 | Ground Water: Well Avg | 5.70 | Acre Inches | 4.39 | | mg/L | | | 469 | 0 | 0 | 27,212 | |
| 09/04/2023 | Ground Water: Well Avg | 4.93 | Acre Inches | 4.39 | | mg/L | | | 406 | 0 | 0 | 23,535 | |
| 09/04/2023 | Waste Water: Main Lagoon | 0.87 | Acre Inches | 272.00 | 37.60 | 588.00 | mg/L | 1,960,812 | 4,443 | 614 | 9,604 | 69,254 | |
| 09/14/2023 | Ground Water: Well Avg | 4.33 | Acre Inches | 4.39 | | mg/L | | | 357 | 0 | 0 | 20,671 | |
| 09/25/2023 | Harvest | 20.60 | Tons | 65.70 | 1.14 | 0.28 | 1.31 | % | | | | | 13,371 |
| Acre Inches Applied: | | 32.13 | | Totals: | | | 5,882,436 | 14,806 | 1,843 | 28,812 | 303,782 | 13,371 | |
| Season Nitrogen Ratio: | | 1.11 | | Lbs Per Acre: | | | 178 | 22 | 347 | 3,660 | 161 | | |

River Ranch Dairy 2023 Nutrient Applications (Attachment B)

Field Name: T7

Wheat, 64 Acres Planted on 11/18/2022

| Date | Event/Source | Amount Applied/Yield (per Acre) Units | Lab Sample Data | | | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|-------------------------------|----------------------------|---------------------------------------|----------------------|--------|-------|--------|------|-----------------------|------------------------------|------------------------|--------------------------|-------------------------|--------------------|--------------------------|
| 10/14/2022 | Corral Solids: Main Corral | 5.00 Tons | 43.70 | 2.10 | 0.56 | 1.98 | % | 320 | | 7,567 | 2,007 | 7,134 | 0 | |
| 01/01/2023 | Atmospheric Deposit | 14.00 Pounds | | 100.00 | | | % | | | 896 | | | | |
| 01/11/2023 | Surface Water: Lakeside | 5.01 Acre Inches | | 0.90 | | | mg/L | | | 65 | 0 | 0 | 6,527 | |
| 01/11/2023 | Waste Water: Main Lagoon | 0.80 Acre Inches | | 271.00 | 35.40 | 545.00 | mg/L | | 1,390,300 | 3,139 | 410 | 6,312 | 40,534 | |
| 03/10/2023 | Surface Water: Lakeside | 5.50 Acre Inches | | 0.90 | | | mg/L | | | 72 | 0 | 0 | 7,166 | |
| 03/10/2023 | Waste Water: Main Lagoon | 0.88 Acre Inches | | 271.00 | 35.40 | 545.00 | mg/L | | 1,529,330 | 3,452 | 451 | 6,943 | 44,588 | |
| 05/07/2023 | Surface Water: Lakeside | 5.42 Acre Inches | | 0.90 | | | mg/L | | | 70 | 0 | 0 | 7,062 | |
| 05/07/2023 | Waste Water: Main Lagoon | 0.86 Acre Inches | | 402.00 | 49.70 | 629.00 | mg/L | | 1,494,573 | 5,005 | 619 | 7,831 | 53,659 | |
| 05/22/2023 | Harvest | 21.80 Tons | 63.60 | 1.52 | 0.33 | 1.30 | % | | | | | | | 15,439 |
| Acre Inches Applied: | | 18.47 | Totals: | | | | | 320 | 4,414,203 | 20,266 | 3,487 | 28,220 | 159,536 | 15,439 |
| Season Nitrogen Ratio: | | 1.31 | Lbs Per Acre: | | | | | | | 317 | 54 | 441 | 2,493 | 241 |

River Ranch Dairy 2023 Nutrient Applications (Attachment B)

Field Name: T7

Corn, 64 Acres Planted on 07/08/2023

| Date | Event/Source | Amount Applied/Yield (per Acre) | Units | Lab Sample Data | | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|-------------------------------|--------------------------|---------------------------------|-------------|----------------------|-------|--------|------|-----------------------|------------------------------|------------------------|--------------------------|-------------------------|--------------------|--------------------------|
| 07/20/2023 | Surface Water: Lakeside | 5.97 | Acre Inches | 0.90 | | mg/L | | | 78 | 0 | 0 | 0 | 7,778 | |
| 07/20/2023 | Waste Water: Main Lagoon | 0.87 | Acre Inches | 272.00 | 37.60 | 588.00 | mg/L | 1,511,951 | 3,426 | 474 | 7,405 | 53,401 | | |
| 08/04/2023 | Surface Water: Lakeside | 5.50 | Acre Inches | 0.90 | | mg/L | | | 72 | 0 | 0 | 0 | 7,166 | |
| 08/19/2023 | Surface Water: Lakeside | 5.42 | Acre Inches | 0.90 | | mg/L | | | 70 | 0 | 0 | 0 | 7,062 | |
| 08/19/2023 | Waste Water: Main Lagoon | 0.88 | Acre Inches | 272.00 | 37.60 | 588.00 | mg/L | 1,529,330 | 3,465 | 479 | 7,491 | 54,015 | | |
| 09/02/2023 | Ground Water: Well Avg | 6.84 | Acre Inches | 4.39 | | mg/L | | | 435 | 0 | 0 | 0 | 25,179 | |
| 09/16/2023 | Ground Water: Well Avg | 5.97 | Acre Inches | 4.39 | | mg/L | | | 379 | 0 | 0 | 0 | 21,976 | |
| 09/16/2023 | Waste Water: Main Lagoon | 0.87 | Acre Inches | 101.00 | 24.20 | 388.00 | mg/L | 1,511,951 | 1,272 | 305 | 4,886 | 23,804 | | |
| 09/26/2023 | Ground Water: Well Avg | 6.35 | Acre Inches | 4.39 | | mg/L | | | 403 | 0 | 0 | 0 | 23,375 | |
| 10/07/2023 | Harvest | 25.20 | Tons | 68.60 | 0.85 | 0.21 | 0.99 | % | | | | | | 8,639 |
| Acre Inches Applied: | | 38.67 | | Totals: | | | | 4,553,233 | 9,600 | 1,257 | 19,782 | 223,756 | 8,639 | |
| Season Nitrogen Ratio: | | 1.11 | | Lbs Per Acre: | | | | 150 | 20 | 309 | 3,496 | 135 | | |



River Ranch Dairy 2023

Nutrient Applications (Attachment B)

Field Name: T8

Wheat, 39 Acres Planted on 12/09/2022

| Date | Event/Source | Amount Applied/Yield (per Acre) | Units | Lab Sample Data | | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) | |
|------------------------------------|--------------------------|---------------------------------------|-------------|----------------------|----------|-------|---------|-----------------------------|------------------------------------|------------------------------|--------------------------------|-------------------------------|--------------------------|--------------------------------|--------------|
| | | | | % Moist. | Nitrogen | Phos. | Potass. | | | | | | | | |
| 12/28/2022 | Surface Water: Lakeside | 4.91 | Acre Inches | | 0.90 | | | | | 39 | 0 | 0 | 3,898 | | |
| 12/28/2022 | Waste Water: Main Lagoon | 0.78 | Acre Inches | | 155.00 | 32.50 | 399.00 | mg/L | | 826,034 | 1,067 | 223 | 2,746 | 22,638 | |
| 01/01/2023 | Atmospheric Deposit | 14.00 | Pounds | | 100.00 | | | % | | | 546 | | | | |
| 02/24/2023 | Surface Water: Lakeside | 5.71 | Acre Inches | | 0.90 | | | mg/L | | | 45 | 0 | 0 | 4,533 | |
| 02/24/2023 | Waste Water: Main Lagoon | 0.91 | Acre Inches | | 271.00 | 35.40 | 545.00 | mg/L | | 963,706 | 2,175 | 284 | 4,375 | 28,097 | |
| 04/23/2023 | Surface Water: Lakeside | 5.57 | Acre Inches | | 0.90 | | | mg/L | | | 44 | 0 | 0 | 4,422 | |
| 04/23/2023 | Waste Water: Main Lagoon | 0.89 | Acre Inches | | 402.00 | 49.70 | 629.00 | mg/L | | 942,526 | 3,156 | 390 | 4,939 | 33,839 | |
| 05/13/2023 | Harvest | 17.10 | Tons | 61.70 | 1.00 | 0.26 | 1.36 | % | | | | | | 5,093 | |
| Acre Inches Applied: | | 18.77 | | | | | | | Totals: | 2,732,266 | 7,073 | 898 | 12,059 | 97,427 | 5,093 |
| Season Nitrogen Ratio: 1.39 | | | | Lbs Per Acre: | | | | | | 181 | 23 | 309 | 2,498 | 131 | |



River Ranch Dairy 2023

Nutrient Applications (Attachment B)

Field Name: T8

Corn, 39 Acres Planted on 07/03/2023

| Date | Event/Source | Amount Applied/Yield (per Acre) | Units | Lab Sample Data | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|-------------------------------|--------------------------|---------------------------------|-------------|----------------------|-------|--------|-----------------------|------------------------------|------------------------|--------------------------|-------------------------|--------------------|--------------------------|
| 07/15/2023 | Surface Water: Lakeside | 4.09 | Acre Inches | 0.90 | | mg/L | | | 32 | 0 | 0 | 3,247 | |
| 07/15/2023 | Waste Water: Main Lagoon | 0.88 | Acre Inches | 272.00 | 37.60 | 588.00 | mg/L | 931,936 | 2,111 | 292 | 4,565 | 32,915 | |
| 07/30/2023 | Surface Water: Lakeside | 6.05 | Acre Inches | 0.90 | | mg/L | | | 48 | 0 | 0 | 4,803 | |
| 08/14/2023 | Surface Water: Lakeside | 4.24 | Acre Inches | 0.90 | | mg/L | | | 34 | 0 | 0 | 3,366 | |
| 08/14/2023 | Waste Water: Main Lagoon | 0.89 | Acre Inches | 272.00 | 37.60 | 588.00 | mg/L | 942,526 | 2,136 | 295 | 4,616 | 33,289 | |
| 08/28/2023 | Ground Water: Well Avg | 4.21 | Acre Inches | 4.39 | | mg/L | | | 163 | 0 | 0 | 9,444 | |
| 09/11/2023 | Ground Water: Well Avg | 4.09 | Acre Inches | 4.39 | | mg/L | | | 158 | 0 | 0 | 9,175 | |
| 09/11/2023 | Waste Water: Main Lagoon | 0.88 | Acre Inches | 101.00 | 24.20 | 388.00 | mg/L | 931,936 | 784 | 188 | 3,012 | 14,672 | |
| 09/21/2023 | Ground Water: Well Avg | 4.41 | Acre Inches | 4.39 | | mg/L | | | 170 | 0 | 0 | 9,893 | |
| 10/02/2023 | Harvest | 21.70 | Tons | 70.70 | 1.15 | 0.26 | 1.09 | % | | | | | 5,703 |
| Acre Inches Applied: | | 29.74 | | Totals: | | | | 2,806,397 | 5,637 | 775 | 12,193 | 120,805 | 5,703 |
| Season Nitrogen Ratio: | | 0.99 | | Lbs Per Acre: | | | | 145 | 20 | 313 | 3,098 | 146 | |



River Ranch Dairy 2023 Nutrient Applications (Attachment B)

Field Name: W-1 E

Wheat, 26 Acres Planted on 11/13/2022

| Date | Event/Source | Amount Applied/Yield (per Acre) | Units | Lab Sample Data | | | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|-------------------------------|----------------------------|---------------------------------|-------------|----------------------|--------|-------|--------|------|-----------------------|------------------------------|------------------------|--------------------------|-------------------------|--------------------|--------------------------|
| 10/15/2022 | Corral Solids: Main Corral | 5.00 | Tons | 43.70 | 2.10 | 0.56 | 1.98 | % | 130 | | 3,074 | 815 | 2,898 | 0 | |
| 01/01/2023 | Atmospheric Deposit | 14.00 | Pounds | | 100.00 | | | % | | | 364 | | | | |
| 01/06/2023 | Surface Water: Lakeside | 4.78 | Acre Inches | | 0.90 | | | mg/L | | | 25 | 0 | 0 | 2,530 | |
| 01/06/2023 | Waste Water: Main Lagoon | 0.76 | Acre Inches | | 271.00 | 35.40 | 545.00 | mg/L | | 536,569 | 1,211 | 158 | 2,436 | 15,644 | |
| 03/05/2023 | Surface Water: Lakeside | 5.97 | Acre Inches | | 0.90 | | | mg/L | | | 32 | 0 | 0 | 3,160 | |
| 03/05/2023 | Waste Water: Main Lagoon | 0.95 | Acre Inches | | 271.00 | 35.40 | 545.00 | mg/L | | 670,711 | 1,514 | 198 | 3,045 | 19,555 | |
| 05/02/2023 | Surface Water: Lakeside | 5.77 | Acre Inches | | 0.90 | | | mg/L | | | 30 | 0 | 0 | 3,054 | |
| 05/02/2023 | Waste Water: Main Lagoon | 0.92 | Acre Inches | | 402.00 | 49.70 | 629.00 | mg/L | | 649,531 | 2,175 | 269 | 3,403 | 23,320 | |
| 05/17/2023 | Harvest | 20.60 | Tons | 61.50 | 1.91 | 0.31 | 0.95 | % | | | | | | | 7,877 |
| Acre Inches Applied: | | 19.15 | | Totals: | | | | | 130 | 1,856,811 | 8,426 | 1,440 | 11,782 | 67,262 | 7,877 |
| Season Nitrogen Ratio: | | 1.07 | | Lbs Per Acre: | | | | | | | 324 | 55 | 453 | 2,587 | 303 |



River Ranch Dairy 2023 Nutrient Applications (Attachment B)

Field Name: W-1 E

Corn, 26 Acres Planted on 06/26/2023

| Date | Event/Source | Amount Applied/Yield (per Acre) | Units | Lab Sample Data | | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|-------------------------------|--------------------------|---------------------------------|-------------|----------------------|-------|--------|------|-----------------------|------------------------------|------------------------|--------------------------|-------------------------|--------------------|--------------------------|
| 07/08/2023 | Surface Water: Lakeside | 5.24 | Acre Inches | 0.90 | | mg/L | | | 28 | 0 | 0 | 0 | 2,773 | |
| 07/08/2023 | Waste Water: Main Lagoon | 0.89 | Acre Inches | 272.00 | 37.60 | 588.00 | mg/L | 628,351 | 1,424 | 197 | 3,078 | 22,193 | | |
| 07/23/2023 | Surface Water: Lakeside | 6.45 | Acre Inches | 0.90 | | mg/L | | | 34 | 0 | 0 | 0 | 3,414 | |
| 08/07/2023 | Surface Water: Lakeside | 4.46 | Acre Inches | 0.90 | | mg/L | | | 24 | 0 | 0 | 0 | 2,361 | |
| 08/07/2023 | Waste Water: Main Lagoon | 0.91 | Acre Inches | 272.00 | 37.60 | 588.00 | mg/L | 642,471 | 1,456 | 201 | 3,147 | 22,692 | | |
| 08/21/2023 | Ground Water: Well Avg | 5.69 | Acre Inches | 4.39 | | mg/L | | | 147 | 0 | 0 | 0 | 8,509 | |
| 09/04/2023 | Ground Water: Well Avg | 4.26 | Acre Inches | 4.39 | | mg/L | | | 110 | 0 | 0 | 0 | 6,371 | |
| 09/04/2023 | Waste Water: Main Lagoon | 0.89 | Acre Inches | 272.00 | 37.60 | 588.00 | mg/L | 628,351 | 1,424 | 197 | 3,078 | 22,193 | | |
| 09/14/2023 | Ground Water: Well Avg | 5.49 | Acre Inches | 4.39 | | mg/L | | | 142 | 0 | 0 | 0 | 8,210 | |
| 09/25/2023 | Harvest | 26.10 | Tons | 67.10 | 0.80 | 0.28 | 1.25 | % | | | | | | 3,577 |
| Acre Inches Applied: | | 34.28 | | Totals: | | | | 1,899,172 | 4,787 | 595 | 9,302 | 98,716 | 3,577 | |
| Season Nitrogen Ratio: | | 1.34 | | Lbs Per Acre: | | | | 184 | 23 | 358 | 3,797 | 138 | | |



River Ranch Dairy 2023 Nutrient Applications (Attachment B)

Field Name: W-1 W

Wheat, 39 Acres Planted on 11/13/2022

| Date | Event/Source | Amount Applied/Yield (per Acre) | Units | Lab Sample Data | | | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|-------------------------------|----------------------------|---------------------------------|-------------|----------------------|--------|-------|--------|------|-----------------------|------------------------------|------------------------|--------------------------|-------------------------|--------------------|--------------------------|
| 10/15/2022 | Corral Solids: Main Corral | 5.00 | Tons | 43.70 | 2.10 | 0.56 | 1.98 | % | 195 | | 4,611 | 1,223 | 4,347 | 0 | |
| 01/01/2023 | Atmospheric Deposit | 14.00 | Pounds | | 100.00 | | | % | | | 546 | | | | |
| 01/05/2023 | Surface Water: Lakeside | 4.91 | Acre Inches | | 0.90 | | | mg/L | | | 39 | 0 | 0 | 3,898 | |
| 01/05/2023 | Waste Water: Main Lagoon | 0.78 | Acre Inches | | 271.00 | 35.40 | 545.00 | mg/L | | 826,034 | 1,865 | 244 | 3,750 | 24,083 | |
| 03/04/2023 | Surface Water: Lakeside | 5.71 | Acre Inches | | 0.90 | | | mg/L | | | 45 | 0 | 0 | 4,533 | |
| 03/04/2023 | Waste Water: Main Lagoon | 0.91 | Acre Inches | | 271.00 | 35.40 | 545.00 | mg/L | | 963,706 | 2,175 | 284 | 4,375 | 28,097 | |
| 05/01/2023 | Surface Water: Lakeside | 5.57 | Acre Inches | | 0.90 | | | mg/L | | | 44 | 0 | 0 | 4,422 | |
| 05/01/2023 | Waste Water: Main Lagoon | 0.89 | Acre Inches | | 402.00 | 49.70 | 629.00 | mg/L | | 942,526 | 3,156 | 390 | 4,939 | 33,839 | |
| 05/17/2023 | Harvest | 22.60 | Tons | 61.20 | 1.79 | 0.31 | 0.97 | % | | | | | | 12,243 | |
| Acre Inches Applied: | | 18.77 | | Totals: | | | | | 195 | 2,732,266 | 12,482 | 2,141 | 17,411 | 98,872 | 12,243 |
| Season Nitrogen Ratio: | | 1.02 | | Lbs Per Acre: | | | | | | | 320 | 55 | 446 | 2,535 | 314 |



River Ranch Dairy 2023 Nutrient Applications (Attachment B)

Field Name: W-1 W

Corn, 39 Acres Planted on 07/03/2023

| Date | Event/Source | Amount Applied/Yield (per Acre) Units | Lab Sample Data | | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|-------------------------------|--------------------------|---------------------------------------|----------------------|----------|-------|---------|-----------------------|------------------------------|------------------------|--------------------------|-------------------------|--------------------|--------------------------|
| | | | % Moist. | Nitrogen | Phos. | Potass. | | | | | | | |
| 07/15/2023 | Surface Water: Lakeside | 4.09 Acre Inches | | 0.90 | | mg/L | | | 32 | 0 | 0 | 3,247 | |
| 07/15/2023 | Waste Water: Main Lagoon | 0.88 Acre Inches | | 272.00 | 37.60 | 588.00 | mg/L | | 931,936 | 2,111 | 292 | 4,565 | 32,915 |
| 07/30/2023 | Surface Water: Lakeside | 6.05 Acre Inches | | 0.90 | | mg/L | | | 48 | 0 | 0 | 4,803 | |
| 08/14/2023 | Surface Water: Lakeside | 5.24 Acre Inches | | 0.90 | | mg/L | | | 42 | 0 | 0 | 4,160 | |
| 08/14/2023 | Waste Water: Main Lagoon | 0.89 Acre Inches | | 272.00 | 37.60 | 588.00 | mg/L | | 942,526 | 2,136 | 295 | 4,616 | 33,289 |
| 08/28/2023 | Ground Water: Well Avg | 6.21 Acre Inches | | 4.39 | | mg/L | | | 240 | 0 | 0 | 13,930 | |
| 09/11/2023 | Ground Water: Well Avg | 4.09 Acre Inches | | 4.39 | | mg/L | | | 158 | 0 | 0 | 9,175 | |
| 09/11/2023 | Waste Water: Main Lagoon | 0.88 Acre Inches | | 101.00 | 24.20 | 388.00 | mg/L | | 931,936 | 784 | 188 | 3,012 | 14,672 |
| 09/21/2023 | Ground Water: Well Avg | 4.41 Acre Inches | | 4.39 | | mg/L | | | 170 | 0 | 0 | 9,893 | |
| 10/02/2023 | Harvest | 23.90 Tons | 73.00 | 1.26 | 0.21 | 1.25 | % | | | | | | 6,342 |
| Acre Inches Applied: | | 32.74 | Totals: | | | | | 2,806,397 | 5,722 | 775 | 12,193 | 126,085 | 6,342 |
| Season Nitrogen Ratio: | | 0.90 | Lbs Per Acre: | | | | | 147 | 20 | 313 | 3,233 | | 163 |



River Ranch Dairy 2023

Nutrient Applications (Attachment B)

Field Name: Y1

Corn, 39 Acres Planted on 05/25/2023

| Date | Event/Source | Amount Applied/Yield (per Acre) | Units | Lab Sample Data | | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|-------------------------------|--------------------------|---------------------------------|-------------|----------------------|-------|--------|------|-----------------------|------------------------------|------------------------|--------------------------|-------------------------|--------------------|--------------------------|
| 06/06/2023 | Surface Water: Lakeside | 4.09 | Acre Inches | 0.90 | | mg/L | | | 32 | 0 | 0 | 0 | 3,247 | |
| 06/06/2023 | Waste Water: Main Lagoon | 0.88 | Acre Inches | 402.00 | 49.70 | 629.00 | mg/L | | 931,936 | 3,121 | 386 | 4,883 | 33,458 | |
| 06/21/2023 | Surface Water: Lakeside | 5.05 | Acre Inches | 0.90 | | mg/L | | | 40 | 0 | 0 | 0 | 4,010 | |
| 07/06/2023 | Surface Water: Lakeside | 4.24 | Acre Inches | 0.90 | | mg/L | | | 34 | 0 | 0 | 0 | 3,366 | |
| 07/06/2023 | Waste Water: Main Lagoon | 0.89 | Acre Inches | 272.00 | 37.60 | 588.00 | mg/L | | 942,526 | 2,136 | 295 | 4,616 | 33,289 | |
| 07/20/2023 | Ground Water: Well Avg | 6.21 | Acre Inches | 4.39 | | mg/L | | | 240 | 0 | 0 | 0 | 13,930 | |
| 08/03/2023 | Ground Water: Well Avg | 4.09 | Acre Inches | 4.39 | | mg/L | | | 158 | 0 | 0 | 0 | 9,175 | |
| 08/03/2023 | Waste Water: Main Lagoon | 0.88 | Acre Inches | 272.00 | 37.60 | 588.00 | mg/L | | 931,936 | 2,111 | 292 | 4,565 | 32,915 | |
| 08/13/2023 | Ground Water: Well Avg | 5.41 | Acre Inches | 4.39 | | mg/L | | | 209 | 0 | 0 | 0 | 12,136 | |
| 08/24/2023 | Harvest | 22.60 | Tons | 61.50 | 1.15 | 0.26 | 1.26 | % | | | | | | 7,805 |
| Acre Inches Applied: | | 31.74 | | Totals: | | | | | 2,806,397 | 8,082 | 973 | 14,064 | 145,527 | 7,805 |
| Season Nitrogen Ratio: | | 1.04 | | Lbs Per Acre: | | | | | 207 | 25 | 361 | 3,731 | 200 | |



River Ranch Dairy 2023 Nutrient Applications (Attachment B)

Field Name: Y2

Corn, 41 Acres Planted on 05/09/2023

| Date | Event/Source | Amount Applied/Yield (per Acre) | Units | Lab Sample Data | | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|-------------------------------|--------------------------|---------------------------------|-------------|----------------------|-------|--------|--------|-----------------------|------------------------------|------------------------|--------------------------|-------------------------|--------------------|--------------------------|
| 05/21/2023 | Surface Water: Lakeside | 4.08 | Acre Inches | 0.90 | | mg/L | | | 34 | 0 | 0 | 0 | 3,405 | |
| 05/21/2023 | Waste Water: Main Lagoon | 0.88 | Acre Inches | 402.00 | 49.70 | 629.00 | mg/L | 979,727 | 3,281 | 405 | 5,133 | 35,174 | | |
| 06/05/2023 | Surface Water: Lakeside | 5.01 | Acre Inches | 0.90 | | mg/L | | | 42 | 0 | 0 | 0 | 4,182 | |
| 06/20/2023 | Surface Water: Lakeside | 5.22 | Acre Inches | 0.90 | | mg/L | | | 43 | 0 | 0 | 0 | 4,357 | |
| 06/20/2023 | Waste Water: Main Lagoon | 0.89 | Acre Inches | 402.00 | 49.70 | 629.00 | mg/L | 990,860 | 3,318 | 410 | 5,192 | 35,574 | | |
| 07/04/2023 | Ground Water: Well Avg | 6.16 | Acre Inches | 4.39 | | mg/L | | | 251 | 0 | 0 | 0 | 14,527 | |
| 07/18/2023 | Ground Water: Well Avg | 4.08 | Acre Inches | 4.39 | | mg/L | | | 166 | 0 | 0 | 0 | 9,621 | |
| 07/18/2023 | Waste Water: Main Lagoon | 0.88 | Acre Inches | 272.00 | 37.60 | 588.00 | mg/L | 979,727 | 2,220 | 307 | 4,799 | 34,603 | | |
| 07/28/2023 | Ground Water: Well Avg | 4.40 | Acre Inches | 4.39 | | mg/L | | | 179 | 0 | 0 | 0 | 10,376 | |
| 08/08/2023 | Harvest | 24.40 | Tons | 65.10 | 1.05 | 0.27 | 1.19 % | | | | | | | 7,332 |
| Acre Inches Applied: | | 31.60 | | Totals: | | | | 2,950,315 | 9,533 | 1,123 | 15,124 | 151,820 | 7,332 | |
| Season Nitrogen Ratio: | | 1.30 | | Lbs Per Acre: | | | | 233 | 27 | 369 | 3,703 | 179 | | |



River Ranch Dairy 2023

Nutrient Applications (Attachment B)

Field Name: Y3

Wheat, 80 Acres Planted on 12/17/2022

| Date | Event/Source | Amount Applied/Yield (per Acre) Units | Lab Sample Data | | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|-------------------------------|--------------------------|---------------------------------------|----------------------|-------|-------------|--------|-----------------------|------------------------------|------------------------|--------------------------|-------------------------|--------------------|--------------------------|
| 01/01/2023 | Atmospheric Deposit | 14.00 Pounds | 100.00 | | % | | | 1,120 | | | | | |
| 01/09/2023 | Surface Water: Lakeside | 5.05 Acre Inches | 0.90 | | mg/L | | | | 82 | 0 | 0 | 8,225 | |
| 01/09/2023 | Waste Water: Main Lagoon | 0.80 Acre Inches | 271.00 | 35.40 | 545.00 mg/L | | 1,737,875 | 3,923 | 513 | 7,890 | 50,668 | | |
| 03/08/2023 | Surface Water: Lakeside | 5.43 Acre Inches | 0.90 | | mg/L | | | 89 | 0 | 0 | 8,843 | | |
| 03/08/2023 | Waste Water: Main Lagoon | 0.87 Acre Inches | 271.00 | 35.40 | 545.00 mg/L | | 1,889,939 | 4,266 | 558 | 8,580 | 55,101 | | |
| 05/05/2023 | Surface Water: Lakeside | 5.37 Acre Inches | 0.90 | | mg/L | | | 87 | 0 | 0 | 8,746 | | |
| 05/05/2023 | Waste Water: Main Lagoon | 0.86 Acre Inches | 402.00 | 49.70 | 629.00 mg/L | | 1,868,216 | 6,256 | 774 | 9,789 | 67,074 | | |
| 05/21/2023 | Harvest | 20.70 Tons | 60.20 | 1.33 | 0.24 | 1.69 % | | | | | | | 17,532 |
| Acre Inches Applied: | | 18.38 | Totals: | | | | 5,496,030 | 15,824 | 1,844 | 26,258 | 198,656 | 17,532 | |
| Season Nitrogen Ratio: | | 0.90 | Lbs Per Acre: | | | | 198 | 23 | 328 | 2,483 | 219 | | |



River Ranch Dairy 2023 Nutrient Applications (Attachment B)

Field Name: Y3

Corn, 80 Acres Planted on 06/20/2023

| Date | Event/Source | Amount Applied/Yield (per Acre) | Units | Lab Sample Data | | | Manure Applied (Tons) | Wastewater Applied (Gallons) | Nitrogen Applied (Lbs) | Phosphorus Applied (Lbs) | Potassium Applied (Lbs) | Salt Applied (Lbs) | Nitrogen Extracted (Lbs) |
|-------------------------------|--------------------------|---------------------------------|-------------|----------------------|-------|--------|-----------------------|------------------------------|------------------------|--------------------------|-------------------------|--------------------|--------------------------|
| 07/05/2023 | Surface Water: Lakeside | 4.94 | Acre Inches | 0.90 | | mg/L | | | 81 | 0 | 0 | 8,046 | |
| 07/05/2023 | Waste Water: Main Lagoon | 0.88 | Acre Inches | 272.00 | 37.60 | 588.00 | mg/L | 1,911,663 | 4,331 | 598 | 9,363 | 67,518 | |
| 07/20/2023 | Surface Water: Lakeside | 5.65 | Acre Inches | 0.90 | | mg/L | | | 92 | 0 | 0 | 9,202 | |
| 08/04/2023 | Surface Water: Lakeside | 4.01 | Acre Inches | 0.90 | | mg/L | | | 66 | 0 | 0 | 6,530 | |
| 08/04/2023 | Waste Water: Main Lagoon | 0.87 | Acre Inches | 272.00 | 37.60 | 588.00 | mg/L | 1,889,939 | 4,282 | 592 | 9,257 | 66,751 | |
| 08/18/2023 | Ground Water: Well Avg | 4.72 | Acre Inches | 4.39 | | mg/L | | | 374 | 0 | 0 | 21,719 | |
| 09/01/2023 | Ground Water: Well Avg | 4.95 | Acre Inches | 4.39 | | mg/L | | | 393 | 0 | 0 | 22,778 | |
| 09/01/2023 | Waste Water: Main Lagoon | 0.87 | Acre Inches | 272.00 | 37.60 | 588.00 | mg/L | 1,889,939 | 4,282 | 592 | 9,257 | 66,751 | |
| 09/11/2023 | Ground Water: Well Avg | 5.33 | Acre Inches | 4.39 | | mg/L | | | 423 | 0 | 0 | 24,526 | |
| 09/22/2023 | Harvest | 23.40 | Tons | 70.10 | 1.30 | 0.28 | 1.58 % | | | | | | 14,553 |
| Acre Inches Applied: | | 32.22 | | Totals: | | | | 5,691,541 | 14,325 | 1,782 | 27,877 | 293,821 | 14,553 |
| Season Nitrogen Ratio: | | 0.98 | | Lbs Per Acre: | | | | 179 | 22 | 348 | 3,673 | 182 | |

River Ranch Dairy 2023 Nutrient Applications (Attachment B)

Summary of Nutrient Applications, Removal, and Balance

| | <u>Total N (Lbs)</u> | <u>Total P (Lbs)</u> | <u>Total K (Lbs)</u> | <u>Total Salts (Lbs)</u> | <u>Total Manure Applied</u> |
|-------------------------------|----------------------|----------------------|----------------------|--------------------------|-----------------------------|
| Solid Manure | 45,282.09 | 12,010.88 | 42,693.01 | 0.00 | 1,915.00 tons |
| Process Wastewater | 485,786.55 | 64,790.65 | 945,219.99 | 6,480,659.74 | 197,040,561.72 gallons |
| Irrigation Water | 34,958.10 | | | | |
| Fertilizer / Total Imports | 0.00 | | | | |
| Atmospheric Deposition | 14,896.00 | | | | |
| Total Nitrogen Applied | 580,922.74 | | | | |
| Crop Nitrogen Removal | 572,021.40 | | | | |
| Nitrogen Balance | 8,901.34 | | | | |
| Nitrogen Ratio | 1.02 | | | | |

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



River Ranch 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"

ATMOSPHERIC 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

River Ranch 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)** |
|-------------------------------|---------------------------------|-----------------------------------|----------------------------------|------------------------------|
| 16,376 | 387,221.22 | 102,705.82 | 365,094.30 | 0.00 |

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

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

B. ESTIMATED TOTAL PROCESS WASTEWATER TRANSFERRED OFFSITE

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

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

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



River Ranch Dairy 2023
Land Application Area Description Technical Report (Attachment D)

| Field Name | Assessor Parcel Number(s) | Acres | Type of Waste Applied |
|------------|---|-------|-----------------------|
| B | x028 x070 x021 x000 | 17 | None |
| B1 | 0280 5003 6000 xxxx | 71 | Process Wastewater |
| B2 | 0280 5003 2000 xxxx | 50 | Process Wastewater |
| B3 | 0280 8002 9000 xxxx | 35 | Both |
| C1 | x028 x080 x021 x000 | 122 | Process Wastewater |
| C2 | x028 x080 x021 x000 | 134 | Both |
| Pasture | x028 x070 x020 x000 | 20 | None |
| R1 | x028 x080 x026 x000 | 53 | Process Wastewater |
| R2 | x028 x070 x021 x000, x028 x080 x025 x000 | 85 | Both |
| R4 | x028 x070 x011 x000, x028 x070 x014 x000, x028 x070 x021 x000 | 94 | Process Wastewater |
| R5 | x028 x070 x011 x000, x028 x070 x021 x000 | 108 | Process Wastewater |
| T1 | x028 x080 x008 x000 | 51 | Process Wastewater |
| T2 | x028 x080 x008 x000, x028 x080 x018 x000 | 85 | Process Wastewater |
| T3 | x028 x170 x040 x000 | 104 | Process Wastewater |
| T4 | x028 x170 x040 x000, x028 x170 x041 x000 | 112 | Process Wastewater |
| T5 | x028 x160 x011 x000 | 61 | Process Wastewater |
| T6 | x028 x170 x010 x000, x028 x170 x028 x000 | 83 | Process Wastewater |
| T7 | x028 x170 x010 x000, x028 x170 x022 x000, x028 x170 x028 x000 | 64 | Both |
| T8 | x028 x170 x021 x000 | 39 | Process Wastewater |
| W-1 E | x028 x080 x015 x000 | 26 | Both |
| W-1 W | x028 x080 x015 x000 | 39 | Both |
| Y1 | x028 x080 x017 x000 | 39 | Process Wastewater |
| Y2 | x028 x080 x017 x000 | 41 | Process Wastewater |
| Y3 | x028 x080 x017 x000 | 80 | Process Wastewater |

River Ranch Dairy 2023

1,613

Production Area APN(s): x028 x070 x021 x000, x028 x070 x022 x000, x028 x080 x024 x000, x028 x080 x026 x000



**River Ranch Dairy 2023
Lab Results Summary (Attachment E)**

Process Wastewater

(mg/l/ppm unless noted otherwise)

| Sample Date: | TKN | TP | TK | EC (umhos/cm) | NH4N | NO3N | TDS | pH (units) | General Minerals | | | | | | |
|------------------|--------|-------|--------|------------------|--------|------|----------|---------------|------------------|----|----|------|-----|-----|----|
| | | | | | | | | | CA | MG | NA | HCO3 | CO3 | SO4 | CL |
| 02/13/2023 | 271.00 | 35.40 | 545.00 | 5,280 | 218.00 | | 3,500.00 | | | | | | | | |
| 06/09/2023 | 402.00 | 49.70 | 629.00 | 6,490 | 324.00 | 0.01 | 4,310.00 | 8.00 | | | | | | | |
| 07/12/2023 | 272.00 | 37.60 | 588.00 | 6,380 | 211.00 | | 4,240.00 | | | | | | | | |
| 11/06/2023 | 101.00 | 24.20 | 388.00 | 2,840 | 30.70 | | 1,890.00 | | | | | | | | |
| Averages: | 261.50 | 36.72 | 537.50 | 5,248 | 195.92 | 0.01 | 3,485.00 | 8.00 | | | | | | | |

Manure - Compost Solids

(Dry Weight Basis)

| Sample Date: | TN | TP | TK | Moisture | Ash | CA | MG | NA | S | CL |
|------------------|------|------|------|----------|-----|----|----|----|---|----|
| 06/08/2023 | 1.72 | 0.52 | 1.38 | 43.90 | | | | | | % |
| 11/06/2023 | 0.91 | 0.35 | 1.07 | 27.60 | | | | | | % |
| Averages: | 1.31 | 0.44 | 1.22 | 35.75 | | | | | | |

Manure - Corral Solids

(Dry Weight Basis)

| Sample Date: | TN | TP | TK | Moisture | Ash | CA | MG | NA | S | CL |
|------------------|------|------|------|----------|-----|----|----|----|---|----|
| 06/08/2023 | 2.58 | 0.71 | 1.96 | 10.80 | | | | | | % |
| 11/06/2023 | 1.98 | 0.77 | 3.58 | 45.10 | | | | | | % |
| Averages: | 2.28 | 0.74 | 2.77 | 27.95 | | | | | | |



River Ranch 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 (%) |
|---------|---------|---------|--------------|-----------------|-----------------|-----------------|-----------------|------------|
| B | 1 | FALLOW | | | | | | |
| B1 | 1 | Corn | 08/04/2023 | 26.00 | 5.76 | 20.20 | 67.40 | 6.27 |
| B2 | 1 | Corn | 08/08/2023 | 23.80 | 5.32 | 21.40 | 64.00 | 6.05 |
| B3 | 1 | Wheat | 05/14/2023 | 28.80 | 6.20 | 25.60 | 66.80 | 8.05 |
| B3 | 2 | Corn | 09/25/2023 | 26.60 | 5.22 | 30.40 | 72.10 | 5.82 |
| C1 | 1 | Corn | 08/07/2023 | 25.20 | 5.92 | 30.20 | 67.90 | 7.33 |
| C2 | 1 | Wheat | 05/17/2023 | 36.40 | 6.30 | 16.04 | 54.60 | 6.79 |
| C2 | 2 | Corn | 09/19/2023 | 29.40 | 5.76 | 30.60 | 66.20 | 6.18 |
| Pasture | 1 | Pasture | | 30.60 | 3.40 | 16.80 | | BV-H |
| R1 | 1 | Corn | 08/25/2023 | 24.00 | 5.70 | 25.80 | 59.20 | 5.82 |
| R2 | 1 | Wheat | 05/17/2023 | 37.40 | 6.52 | 20.20 | 62.90 | 7.61 |
| R2 | 2 | Corn | 10/06/2023 | 19.46 | 6.20 | 28.40 | 68.90 | 6.61 |
| R4 | 1 | Wheat | 05/21/2023 | 28.80 | 5.06 | 44.80 | 61.00 | 9.35 |
| R4 | 2 | Corn | 09/13/2023 | 28.00 | 5.38 | 28.60 | 66.80 | 6.56 |
| R5 | 1 | Wheat | 05/21/2023 | 31.60 | 7.68 | 42.40 | 65.90 | 12.10 |
| R5 | 2 | Corn | 09/20/2023 | 29.80 | 5.40 | 34.60 | 67.00 | 7.11 |
| T1 | 1 | Wheat | 05/17/2023 | 35.60 | 5.48 | 14.16 | 57.30 | 6.58 |



**River Ranch 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 (%) |
|--------|---------|-------|--------------|-----------------|-----------------|-----------------|-----------------|------------|
| T1 | 2 | Corn | 10/13/2023 | 24.60 | 4.54 | 27.20 | 67.80 | 5.70 |
| T2 | 1 | Wheat | 05/21/2023 | 24.60 | 4.82 | 34.80 | 57.20 | 8.48 |
| T2 | 2 | Corn | 10/07/2023 | 15.44 | 4.86 | 24.40 | 69.90 | 5.85 |
| T3 | 1 | Wheat | 05/13/2023 | 23.20 | 6.88 | 38.40 | 69.90 | 9.36 |
| T3 | 2 | Corn | 09/14/2023 | 26.80 | 5.14 | 25.20 | 69.50 | 5.59 |
| T4 | 1 | Corn | 08/08/2023 | 23.80 | 5.16 | 24.80 | 64.60 | 5.54 |
| T5 | 1 | Corn | 08/01/2023 | 22.20 | 4.98 | 32.00 | 66.00 | 6.57 |
| T6 | 1 | Wheat | 05/13/2023 | 18.50 | 5.28 | 28.80 | 62.60 | 7.24 |
| T6 | 2 | Corn | 09/25/2023 | 22.80 | 5.70 | 26.20 | 65.70 | 4.85 |
| T7 | 1 | Wheat | 05/22/2023 | 30.40 | 6.66 | 26.00 | 63.60 | 8.66 |
| T7 | 2 | Corn | 10/07/2023 | 17.06 | 4.20 | 19.82 | 68.60 | 5.52 |
| T8 | 1 | Wheat | 05/13/2023 | 19.94 | 5.18 | 27.20 | 61.70 | 6.47 |
| T8 | 2 | Corn | 10/02/2023 | 23.00 | 5.20 | 21.80 | 70.70 | 4.90 |
| W-1 E | 1 | Wheat | 05/17/2023 | 38.20 | 6.20 | 18.96 | 61.50 | 7.16 |
| W-1 E | 2 | Corn | 09/25/2023 | 16.02 | 5.50 | 25.00 | 67.10 | 5.29 |
| W-1 W | 1 | Wheat | 05/17/2023 | 35.80 | 6.18 | 19.42 | 61.20 | 7.69 |
| W-1 W | 2 | Corn | 10/02/2023 | 25.20 | 4.22 | 25.00 | 73.00 | 6.08 |
| Y1 | 1 | Corn | 08/24/2023 | 23.00 | 5.26 | 25.20 | 61.50 | 6.59 |

River Ranch 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 (%) |
|--------|---------|-------|--------------|-----------------|-----------------|-----------------|-----------------|------------|
| Y2 | 1 | Corn | 08/08/2023 | 21.00 | 5.46 | 23.80 | 65.10 | 6.18 |
| Y3 | 1 | Wheat | 05/21/2023 | 26.60 | 4.80 | 33.80 | 60.20 | 10.00 |
| Y3 | 2 | Corn | 09/22/2023 | 26.00 | 5.68 | 31.60 | 70.10 | 5.39 |

BV-H: Book Value from CCA Experience / Actual History (As Received basis)

Well / Irrigation Water

(mg/l/ppm unless noted otherwise)

| | Sample Date: | NO3N | TP | EC (umhos/cm) | NH4N * | TDS | TN | General Minerals | | | | | | |
|------------------|--------------|-------|-------|------------------|--------|-------|-------|------------------|-------|--------|-------|-------|--------|------|
| | | | | | | | | CA | MG | NA | HCO3 | CO3 | SO4 | CL |
| Dairy | | | | | | | | | | | | | | |
| DB-1 | 04/04/2023 | 0.00 | | 152 | | 90.00 | | 1.00 | 0.00 | 32.00 | 50.00 | 0.00 | 2.10 | 6.00 |
| DB-2 | | | | | | | | Out of service | | | | | | |
| Old D | 03/02/2023 | 0.00 | | 230 | | | | | | | | | | |
| Averages: | | | 0.00 | 191 | 90.00 | | 1.00 | 0.00 | 32.00 | 50.00 | 0.00 | 2.10 | 6.00 | |
| Domestic | | | | | | | | | | | | | | |
| T4 Dom | 04/04/2023 | 16.20 | | 935 | 600.00 | 16.20 | | | | | | | | |
| T7 Dom | 04/04/2023 | 10.80 | | 460 | 270.00 | | 29.00 | 0.00 | 70.00 | 110.00 | 0.00 | 11.20 | 43.00 | |
| Y2 Dom | 04/04/2023 | 10.20 | | 751 | 470.00 | | 57.00 | 0.00 | 90.00 | 30.00 | 0.00 | 20.90 | 156.00 | |
| Averages: | | | 12.40 | 715 | 446.67 | 16.20 | 43.00 | 0.00 | 80.00 | 70.00 | 0.00 | 16.05 | 99.50 | |



**River Ranch Dairy 2023
Lab Results Summary (Attachment E)**

Well / Irrigation Water

(mg/l/ppm unless noted otherwise)

| | Sample Date: | NO3N | TP | EC (umhos/cm) | NH4N * | TDS | TN | General Minerals | | | | | |
|-------------------|--------------|-------|----|------------------|--------|--------|-------|------------------|------|-------|-------|-------|------|
| | | | | | | | | CA | MG | NA | HCO3 | CO3 | SO4 |
| Irrigation | | | | | | | | | | | | | |
| B2 | | | | | | | | Did not run | | | | | |
| B3 | | | | | | | | Did not run | | | | | |
| Well 1 | 10/10/2023 | 0.00 | | 340 | | 220.00 | 0.00 | | | | | | |
| Well 2 | | | | | | | | Out of service | | | | | |
| Well 4 | | | | | | | | Out of service | | | | | |
| Well 5 | 06/21/2023 | 0.00 | | 297 | | 170.00 | 0.00 | 3.00 | 0.00 | 60.00 | 80.00 | 20.00 | 2.30 |
| Well 6 | 10/04/2023 | 26.70 | | 798 | | 570.00 | 26.70 | | | | | | |
| Well 11 | | | | | | | | Out of service | | | | | |
| Well 12 | | | | | | | | Out of service | | | | | |
| Well 13 | | | | | | | | Out of service | | | | | |
| Well 14 | | | | | | | | Out of service | | | | | |
| Well 15 | | | | | | | | Out of service | | | | | |
| Well 16 | 12/04/2023 | 0.00 | | 170 | | 210.00 | 0.00 | | | | | | |
| Well 17 | | | | | | | | Out of service | | | | | |
| Well 18 | | | | | | | | Out of service. | | | | | |
| Well 19 | | | | | | | | Did not run | | | | | |
| Well 20 | 06/26/2023 | 0.00 | | 199 | | 140.00 | 0.00 | | | | | | |
| Well 21 | | | | | | | | Did not run | | | | | |
| Well 22 | 10/04/2023 | 0.00 | | 261 | | 200.00 | 0.00 | | | | | | |



River Ranch Dairy 2023 Lab Results Summary (Attachment E)

Well / Irrigation Water

(mg/l/ppm unless noted otherwise)

| | Sample Date: | NO3N | TP | EC (umhos/cm) | NH4N * | TDS | TN | General Minerals | | | | | | |
|----------------------|--------------|------|----|------------------|--------|--------|------|------------------|------|-------|-------|-------|------|-------|
| | | | | | | | | CA | MG | NA | HCO3 | CO3 | SO4 | CL |
| Irrigation | | | | | | | | | | | | | | |
| Well 23 | 10/04/2023 | 4.00 | | 422 | | 270.00 | 4.30 | | | | | | | |
| Averages: | | 4.39 | | 355 | | 254.29 | 4.43 | 3.00 | 0.00 | 60.00 | 80.00 | 20.00 | 2.30 | 31.00 |
| 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

Soils

| Field | Sample Date: | PO4P (ppm) |
|-------|--------------|---------------|
| B | 12/14/2023 | 20.90 |

River Ranch Dairy 2023
Planting and Harvest Information (Attachment F)

| Crop # | Crop | Acres Planted | Plant Date | Harvest Date | Estimated Yield (tons) | Tons Harvested | Actual Yield |
|-----------|---------|---------------|------------|--------------|------------------------|----------------|--------------|
| Field: B1 | | | | | | | |
| | 1 Corn | 71 | 05/15/2023 | 08/04/2023 | 30.0 | 2335.9 | 32.9 |
| Field: B2 | | | | | | | |
| | 1 Corn | 50 | 05/09/2023 | 08/08/2023 | 30.0 | 1505.0 | 30.1 |
| Field: B3 | | | | | | | |
| | 1 Wheat | 35 | 11/17/2022 | 05/14/2023 | 21.0 | 903.0 | 25.8 |
| | 2 Corn | 35 | 06/26/2023 | 09/25/2023 | 30.0 | 920.5 | 26.3 |
| Field: C1 | | | | | | | |
| | 1 Corn | 122 | 05/08/2023 | 08/07/2023 | 26.7 | 3965.0 | 32.5 |
| Field: C2 | | | | | | | |
| | 1 Wheat | 134 | 11/13/2022 | 05/17/2023 | 20.0 | 2519.2 | 18.8 |
| | 2 Corn | 134 | 06/20/2023 | 09/19/2023 | 27.4 | 3309.8 | 24.7 |
| Field: R1 | | | | | | | |
| | 1 Corn | 53 | 05/26/2023 | 08/25/2023 | 28.0 | 1526.4 | 28.8 |
| Field: R2 | | | | | | | |
| | 1 Wheat | 85 | 11/20/2022 | 05/17/2023 | 16.1 | 1989.0 | 23.4 |
| | 2 Corn | 85 | 07/07/2023 | 10/06/2023 | 27.3 | 2252.5 | 26.5 |
| Field: R4 | | | | | | | |
| | 1 Wheat | 94 | 12/17/2022 | 05/21/2023 | 21.4 | 1880.0 | 20.0 |
| | 2 Corn | 94 | 06/14/2023 | 09/13/2023 | 28.4 | 2105.6 | 22.4 |
| Field: R5 | | | | | | | |
| | 1 Wheat | 108 | 12/17/2022 | 05/21/2023 | 18.7 | 2462.4 | 22.8 |
| | 2 Corn | 108 | 06/21/2023 | 09/20/2023 | 28.4 | 2700.0 | 25.0 |
| Field: T1 | | | | | | | |
| | 1 Wheat | 51 | 12/31/2022 | 05/17/2023 | 22.7 | 1275.0 | 25.0 |
| | 2 Corn | 51 | 07/14/2023 | 10/13/2023 | 26.0 | 1193.4 | 23.4 |



River Ranch Dairy 2023
Planting and Harvest Information (Attachment F)

| | Crop # | Crop | Acres Planted | Plant Date | Harvest Date | Estimated Yield (tons) | Tons Harvested | Actual Yield |
|---------------|--------|-------|---------------|------------|--------------|------------------------|----------------|--------------|
| Field: | T2 | | | | | | | |
| | 1 | Wheat | 85 | 12/17/2022 | 05/21/2023 | 20.0 | 1581.0 | 18.6 |
| | 2 | Corn | 85 | 07/08/2023 | 10/07/2023 | 27.3 | 2057.0 | 24.2 |
| Field: | T3 | | | | | | | |
| | 1 | Wheat | 104 | 12/09/2022 | 05/13/2023 | 16.9 | 2600.0 | 25.0 |
| | 2 | Corn | 104 | 06/15/2023 | 09/14/2023 | 27.0 | 2662.4 | 25.6 |
| Field: | T4 | | | | | | | |
| | 1 | Corn | 112 | 05/09/2023 | 08/08/2023 | 27.8 | 3012.8 | 26.9 |
| Field: | T5 | | | | | | | |
| | 1 | Corn | 61 | 05/02/2023 | 08/01/2023 | 26.3 | 1390.8 | 22.8 |
| Field: | T6 | | | | | | | |
| | 1 | Wheat | 83 | 12/09/2022 | 05/13/2023 | 21.9 | 1585.3 | 19.1 |
| | 2 | Corn | 83 | 06/26/2023 | 09/25/2023 | 30.0 | 1709.8 | 20.6 |
| Field: | T7 | | | | | | | |
| | 1 | Wheat | 64 | 11/18/2022 | 05/22/2023 | 23.3 | 1395.2 | 21.8 |
| | 2 | Corn | 64 | 07/08/2023 | 10/07/2023 | 30.2 | 1612.8 | 25.2 |
| Field: | T8 | | | | | | | |
| | 1 | Wheat | 39 | 12/09/2022 | 05/13/2023 | 19.6 | 666.9 | 17.1 |
| | 2 | Corn | 39 | 07/03/2023 | 10/02/2023 | 26.3 | 846.3 | 21.7 |
| Field: | W-1 E | | | | | | | |
| | 1 | Wheat | 26 | 11/13/2022 | 05/17/2023 | 20.0 | 535.6 | 20.6 |
| | 2 | Corn | 26 | 06/26/2023 | 09/25/2023 | 26.8 | 678.6 | 26.1 |
| Field: | W-1 W | | | | | | | |
| | 1 | Wheat | 39 | 11/13/2022 | 05/17/2023 | 19.9 | 881.4 | 22.6 |
| | 2 | Corn | 39 | 07/03/2023 | 10/02/2023 | 26.7 | 932.1 | 23.9 |

River Ranch Dairy 2023
Planting and Harvest Information (Attachment F)

| Crop # | Crop | Acres Planted | Plant Date | Harvest Date | Estimated Yield (tons) | Tons Harvested | Actual Yield |
|-----------|---------|---------------|------------|--------------|------------------------|----------------|--------------|
| Field: Y1 | | | | | | | |
| | 1 Corn | 39 | 05/25/2023 | 08/24/2023 | 30.6 | 881.4 | 22.6 |
| Field: Y2 | | | | | | | |
| | 1 Corn | 41 | 05/09/2023 | 08/08/2023 | 30.4 | 1000.4 | 24.4 |
| Field: Y3 | | | | | | | |
| | 1 Wheat | 80 | 12/17/2022 | 05/21/2023 | 22.5 | 1656.0 | 20.7 |
| | 2 Corn | 80 | 06/20/2023 | 09/22/2023 | 26.9 | 1872.0 | 23.4 |



River Ranch 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



ATTACHMENT D

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

Instructions:

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

Operator Information:Name of Operator: Jack de JongName of Dairy Facility: River Ranch Dairy

| | | |
|--|----------------|--------------|
| Facility Address: <u>6155 Jackson Ave.</u> | <u>Hanford</u> | <u>93230</u> |
| Number and Street | City | Zip Code |

| | |
|---|---------------------|
| Contact Person Name and Phone Number: <u>Jack de Jong</u> | <u>559-707-3766</u> |
| Name | Phone Number |

Manure/Process Wastewater Hauler Information:Name of Hauling Company/Person: Luma Ag

| | | |
|--|----------------|--------------|
| Address of Hauling Company /Person: <u>1654 Oriole St.</u> | <u>Hanford</u> | <u>93230</u> |
| Number and Street | City | Zip Code |

| | | |
|--------------------------------------|------|--------------|
| Contact Person: <u>Luis Canchola</u> | Name | Phone Number |
|--------------------------------------|------|--------------|

Destination Information:Composting Facility / Broker / Farmer / Other (identify) Broker (please circle one)

Contact information of Composting Facility, Broker, Farmer, or Other (as identified above):

| | | | |
|----------------|------------------------|----------------|--------------|
| <u>Luma Ag</u> | <u>1654 Oriole St.</u> | <u>Hanford</u> | <u>93230</u> |
| Name | Number and Street | City | Zip Code |

Manure/Process Wastewater Destination Address or Assessor's Parcel Number:

| | | | |
|-------------------|------|----------|--------------------------|
| Number and Street | City | Zip Code | Assessor's Parcel Number |
|-------------------|------|----------|--------------------------|

Dates Hauled: 1/1/2023 - 11/29/2023**Amount Hauled:**

Enter the amount of manure hauled in tons or cubic yards (indicate the units used), the manure solids content (if amount reported in tons) or manure density (if amount reported in cubic yards), and the method used to calculate the amount:

Manure: 4818.31 Tons or Cubic Yards (indicate which units used)Manure Solids Content (if amount reported in tons): 54.9% Corral Solids

Manure Density (if amount reported in cubic yards): _____

Attachment D

D-2

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

Method used to determine amount of manure: Truck Weights

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

Process Wastewater: _____ Gallons

Method used to determine volume of process wastewater: _____

Written Agreement:

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

Yes No

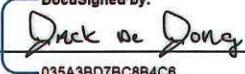
If the answer is no, the Operator agrees to have such a written agreement with any such party for any process wastewater transferred after **31 December 2007** to such party.

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

Certification:

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

Operator's Signature: _____

DocuSigned by:

035A3BD7BC8B4C6...

6/27/2024

Date: _____

Hauler's Signature: _____

Date: _____

ATTACHMENT D

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

Instructions:

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

Operator Information:

| | | | |
|-------------------|--------------|--|--|
| Name of Operator: | Jack de Jong | | |
|-------------------|--------------|--|--|

| | | | |
|-------------------------|-------------------|--|--|
| Name of Dairy Facility: | River Ranch Dairy | | |
|-------------------------|-------------------|--|--|

| | | | |
|-------------------|-------------------|---------|----------|
| Facility Address: | 6155 Jackson Ave. | Hanford | 93230 |
| | Number and Street | City | Zip Code |

| | | |
|---------------------------------------|--------------|--------------|
| Contact Person Name and Phone Number: | Jack de Jong | 559-707-3766 |
| | Name | Phone Number |

Manure/Process Wastewater Hauler Information:

| | | | |
|---------------------------------|--------|--|--|
| Name of Hauling Company/Person: | TI Inc | | |
|---------------------------------|--------|--|--|

| | | | |
|-------------------------------------|-------------------|---------|----------|
| Address of Hauling Company /Person: | 13802 Avenue 352 | Visalia | 93292 |
| | Number and Street | City | Zip Code |

| | | |
|-----------------|------------|----------------|
| Contact Person: | Bryce Iden | (559) 972-1475 |
| | Name | Phone Number |

Destination Information:

| | | |
|--|--------|---------------------|
| Composting Facility / Broker / Farmer / Other (identify) | Broker | (please circle one) |
|--|--------|---------------------|

Contact information of Composting Facility, Broker, Farmer, or Other (as identified above):

| | | | | |
|--------|-------------------|---------|----------|----------------|
| TI Inc | 13802 Avenue 352 | Visalia | 93292 | (559) 972-1475 |
| Name | Number and Street | City | Zip Code | Phone Number |

Manure/Process Wastewater Destination Address or Assessor's Parcel Number:

| | | |
|--------------------------|---------|----------|
| 13802 Avenue 352 | Visalia | 93292 |
| Number and Street | City | Zip Code |
| Assessor's Parcel Number | | |

Dates Hauled: 2/3/2023 - 12/21/2023

Amount Hauled:

Enter the amount of manure hauled in tons or cubic yards (indicate the units used), the manure solids content (if amount reported in tons) or manure density (if amount reported in cubic yards), and the method used to calculate the amount:

Manure: 11557.45 **Tons** or Cubic Yards (indicate which units used)

Manure Solids Content (if amount reported in tons): 54.9% Corral Solids

Manure Density (if amount reported in cubic yards): _____

Attachment D

D-2

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

Method used to determine amount of manure: Truck Weights

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

Process Wastewater: _____ Gallons

Method used to determine volume of process wastewater: _____

Written Agreement:

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

Yes No

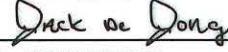
If the answer is no, the Operator agrees to have such a written agreement with any such party for any process wastewater transferred after **31 December 2007** to such party.

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

Certification:

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

Operator's Signature: _____

DocuSigned by:

035A3BD7BC8B4C6...

Date: 6/27/2024

Hauler's Signature: _____

Date: _____

March 9, 2023

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

Lab No. : VI 2341302
Customer No. : 4018573
Reference : 40260

Laboratory Report

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

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

Case Narrative

This Case Narrative pertains to the following samples:

| Sample Description | Date Sampled | Date Received | FGL Lab No. | Matrix |
|--------------------|--------------|---------------|----------------|--------|
| Old D | 03/02/2023 | 03/03/2023 | VI 2341302-001 | 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

| | |
|---------------|---|
| 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: 2023-03-14

March 9, 2023

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

Description : Old D
Project : 0263 River Ranch Dairy

Lab No. : VI 2341302-001
Customer No.: 4018573
Reference : 40260
Sampled On : March 2, 2023 at 11:45
Sampled By : Alex
Received On : March 3, 2023 at 16:00
Matrix : Drinking Water

Sample Results - Inorganic

| Constituent | Result | RL | Units | MCL/AL | Dil. | DQF | Sample Preparation | | | Sample Analysis | | | | |
|-----------------------|--------|-----|----------|-------------------|------|-----|--------------------|-------|-----|-----------------|------------|-------|-----|--|
| | | | | | | | Date | Time | Who | Method | Date | Time | Who | |
| Dairy Analysis | | | | | | | | | | | | | | |
| Nitrate Nitrogen | ND | 0.4 | mg/L | 10 | 1 | U | 03/03/2023 | 16:05 | Ifs | SM 4500-NO3 F | 03/03/2023 | 14:29 | Ifs | |
| Conductivity | 230 | 1 | umhos/cm | 1600 ² | 1 | | 03/07/2023 | 21:02 | amm | SM 4500-H+B | 03/08/2023 | 00:51 | amm | |

DQF Flags Definition:

U Constituent results were non-detect.

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

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

March 9, 2023

Innovative Ag Services, LLCLab No. : VI 2341302
Customer No. : 4018573**Quality Control - Wet Chem**

| Constituent | Method | Date/ID | Type | Units | Conc. | QC Data | DQO | Note |
|------------------|----------|--|------------------------------------|--------------------------------------|---|---------------------------------|---|------|
| Wet Chem | | | | | | | | |
| E. C. | 2320B | (STK2332250-004) | Dup | umhos/cm | | 0% | 5 | |
| Nitrate Nitrogen | 4500NO3F | 03/03/2023:202354LFS (SP 2303078-001) | Blank LCS MS MSD MSRPD | mg/L mg/L mg/L mg/L mg/L | 11.22 5.609 5.609 5.609 5.609 | 98.3% 93.2% 95.6% 1.5% | <0.4 80-120 66-125 66-125 ≤30.4 | |

Definition

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



Laboratory Analysis Work Order

Nº 40260

ID: # 0263

2341302

SITE NAME: River Ranch Dairy

Billing: IAS

ANALYSIS TO BE COMPLETED:

Irrigation/Ground Water (ELAP Standards)

W1 EC, NO₃N (Dom)

W2 EC, NO₃N, TDS, TN (Irr)

W3 NH₄-N (Ammonium)

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

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

W6 NO₃N, NO₂ (Dom ILRP, Annually)

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

W8 Other: _____

701 74

Plant Tissue

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

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

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

P4 TN, %M

P5 % Moisture

P6 NIR

P7 Other: _____

LABORATORY: FGL

Authorized Copy Release to:

Innovative Ag Services LLC

(559) 587-2800

Process Waste Water (lagoon)

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

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

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

L4 Other: _____

Manure

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

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

M3 Other: _____

Soil

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

S2 S1 + CEC, CaCO₃, OM, C:N, TN

S3 NO₃N, NH₄N

S4 Other: _____

| IAS USE ONLY: FIELD TESTS | | | | |
|-------------------------------|---------------------|----|------|--|
| | NH ₃ N * | pH | Temp | |
| 1 01d D Dom W1 3/2 11:45 Alex | — | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |
| 6 | | | | |
| 7 | | | | |
| 8 | | | | |

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

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

NOTES: _____

CHAIN OF CUSTODY RECORDING

| | Signature | Company | Received Date & Time | Relinquished Date & Time |
|-----------------|-----------|---------|----------------------|--------------------------|
| 1 st | Alfred Rm | IAS | | 3/2/23 2:10 |
| 2 nd | SG/B | FGL | 3-2-23 15:45 | |
| 3 rd | SG/B | FGL | | 3-2-23 16:00 |
| 4 th | | | 3/2/23 16:00 | |

LABORATORY USE ONLY

Logged In By: _____

GLS MUC

3/3/23

1222

Total Samples: 20/25

77

Laboratory #: _____

April 26, 2023

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

Lab No. : VI 2342017
Customer No. : 4018573
Reference : 40347

Laboratory Report

Introduction: This report package contains a total of 10 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 | (5 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 |
|--------------------|--------------|---------------|----------------|--------|
| DB-1 | 04/04/2023 | 04/04/2023 | VI 2342017-001 | AGW |
| Y2 | 04/04/2023 | 04/04/2023 | VI 2342017-002 | AGW |
| T7 | 04/04/2023 | 04/04/2023 | VI 2342017-003 | AGW |
| T4 | 04/04/2023 | 04/04/2023 | VI 2342017-004 | 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 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: 2023-04-26

Section: Case Narrative

Page 1 of 10

Page 1 of 10

| | | | | |
|--|--|--|--|--|
| 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 | Office & Laboratory 563 E. Lindo Avenue Chico, CA 95926 TEL: (530)343-5818 FAX: (530)343-3807 | Office & Laboratory 3442 Empresa Drive, Suite D San Luis Obispo, CA 93401 TEL: (805)783-2940 FAX: (805)783-2912 | Office & Laboratory 9415 W. Goshen Avenue Visalia, CA 93291 TEL: (559)734-9473 FAX: (559)734-8435 |
| | | | CA ELAP Certification No. 2670 | CA ELAP Certification No. 2775 |

April 26, 2023

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

Description : DB-1
Project : 0263 River Ranch

Lab No. : VI 2342017-001
Customer No.: 4018573
Reference : 40347
Sampled On : April 4, 2023 at 12:30
Sampled By : Henry
Received On : April 4, 2023 at 15:35
Matrix : Ag Water

Sample Results - Inorganic

| Constituent | Result | RL | Units | Note | Dil. | DQF | Sample Preparation | | | Sample Analysis | | | |
|------------------------------------|--------|------|----------|------|------|-----|--------------------|-------|-----|-----------------|------------|-------|-----|
| | | | | | | | Date | Time | Who | Method | Date | Time | Who |
| Dairy Analysis | | | | | | | | | | | | | |
| Alkalinity (as CaCO ₃) | 60 | 10 | mg/L | | 1 | | 04/11/2023 | 14:02 | amm | SM 4500-H+B | 04/11/2023 | 19:27 | amm |
| Bicarbonate | 50 | 10 | mg/L | | 1 | | 04/11/2023 | 14:02 | amm | SM 4500-H+B | 04/11/2023 | 19:27 | amm |
| Carbonate | ND | 10 | mg/L | | 1 | U | 04/11/2023 | 14:02 | amm | SM 4500-H+B | 04/11/2023 | 19:27 | amm |
| Hydroxide | ND | 10 | mg/L | | 1 | U | 04/11/2023 | 14:02 | amm | SM 4500-H+B | 04/11/2023 | 19:27 | amm |
| Chloride | 6 | 1 | mg/L | | 1 | | 04/05/2023 | 17:07 | ldm | EPA 300.0 | 04/06/2023 | 11:36 | ldm |
| Nitrate Nitrogen | ND | 0.1 | mg/L | | 1 | J | 04/05/2023 | 17:07 | ldm | EPA 300.0 | 04/06/2023 | 11:36 | ldm |
| Conductivity | 152 | 1 | umhos/cm | | 1 | | 04/11/2023 | 14:02 | amm | SM 4500-H+B | 04/11/2023 | 19:27 | amm |
| Sulfate Sulfur | 2.10 | 0.17 | mg/L | | 1 | | 04/05/2023 | 17:07 | ldm | EPA 300.0 | 04/06/2023 | 11:36 | ldm |
| Solids, Total Dissolved (TDS) | 90 | 20 | mg/L | | 1 | | 04/06/2023 | 11:15 | ctl | SM 2540 C | 04/07/2023 | 11:15 | ctl |
| Calcium | 1 | 1 | mg/L | | 1 | | 04/19/2023 | 08:15 | ejc | EPA 200.7 | 04/20/2023 | 18:10 | ac |
| Magnesium | ND | 1 | mg/L | | 1 | J | 04/19/2023 | 08:15 | ejc | EPA 200.7 | 04/20/2023 | 18:10 | ac |
| Potassium | ND | 1 | mg/L | | 1 | J | 04/19/2023 | 08:15 | ejc | EPA 200.7 | 04/20/2023 | 18:10 | ac |
| Sodium | 32 | 1 | mg/L | | 1 | | 04/19/2023 | 08:15 | ejc | EPA 200.7 | 04/20/2023 | 18:10 | ac |

DQF Flags Definition:

U Constituent results were non-detect.

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

April 26, 2023

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

Description : Y2
Project : 0263 River Ranch

Lab No. : VI 2342017-002
Customer No.: 4018573
Reference : 40347
Sampled On : April 4, 2023 at 13:00
Sampled By : Henry
Received On : April 4, 2023 at 15:35
Matrix : Ag Water

Sample Results - Inorganic

| Constituent | Result | RL | Units | Note | Dil. | DQF | Sample Preparation | | | Sample Analysis | | | |
|------------------------------------|--------|------|----------|------|------|-----|--------------------|-------|-----|-----------------|------------|-------|-----|
| | | | | | | | Date | Time | Who | Method | Date | Time | Who |
| Dairy Analysis | | | | | | | | | | | | | |
| Alkalinity (as CaCO ₃) | 20 | 10 | mg/L | | 1 | | 04/11/2023 | 14:02 | amm | SM 4500-H+B | 04/11/2023 | 22:26 | amm |
| Bicarbonate | 30 | 10 | mg/L | | 1 | | 04/11/2023 | 14:02 | amm | SM 4500-H+B | 04/11/2023 | 22:26 | amm |
| Carbonate | ND | 10 | mg/L | | 1 | U | 04/11/2023 | 14:02 | amm | SM 4500-H+B | 04/11/2023 | 22:26 | amm |
| Hydroxide | ND | 10 | mg/L | | 1 | U | 04/11/2023 | 14:02 | amm | SM 4500-H+B | 04/11/2023 | 22:26 | amm |
| Chloride | 156 | 3* | mg/L | | 3 | | 04/05/2023 | 17:07 | ldm | EPA 300.0 | 04/07/2023 | 06:02 | ldm |
| Nitrate Nitrogen | 10.2 | 0.1 | mg/L | | 1 | | 04/05/2023 | 17:07 | ldm | EPA 300.0 | 04/06/2023 | 17:11 | ldm |
| Conductivity | 751 | 1 | umhos/cm | | 1 | | 04/11/2023 | 14:02 | amm | SM 4500-H+B | 04/11/2023 | 22:26 | amm |
| Sulfate Sulfur | 20.9 | 0.17 | mg/L | | 1 | | 04/05/2023 | 17:07 | ldm | EPA 300.0 | 04/06/2023 | 17:11 | ldm |
| Solids, Total Dissolved (TDS) | 470 | 20 | mg/L | | 1 | I | 04/06/2023 | 10:00 | ctl | SM 2540 C | 04/07/2023 | 11:15 | ctl |
| Calcium | 57 | 1 | mg/L | | 1 | | 04/13/2023 | 07:45 | ejc | EPA 200.7 | 04/14/2023 | 15:20 | ac |
| Magnesium | ND | 1 | mg/L | | 1 | Jl | 04/13/2023 | 07:45 | ejc | EPA 200.7 | 04/14/2023 | 15:20 | ac |
| Potassium | ND | 1 | mg/L | | 1 | J | 04/13/2023 | 07:45 | ejc | EPA 200.7 | 04/14/2023 | 15:20 | ac |
| Sodium | 90 | 1 | mg/L | | 1 | | 04/13/2023 | 07:45 | ejc | EPA 200.7 | 04/17/2023 | 11:30 | ac |

DQF Flags Definition:

U Constituent results were non-detect.

I The RPD for the laboratory duplicate exceeded laboratory criteria.

J Reported value is estimated; detected at a concentration below the RL and above the laboratory MDL.

l The MS/MSD did not meet QC criteria.

ND=Non-Detected, RL=Reporting Level * RL adjusted for dilution, Dil.=Dilution

April 26, 2023

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

Description : T7
Project : 0263 River Ranch

Lab No. : VI 2342017-003
Customer No.: 4018573
Reference : 40347
Sampled On : April 4, 2023 at 13:10
Sampled By : Henry
Received On : April 4, 2023 at 15:35
Matrix : Ag Water

Sample Results - Inorganic

| Constituent | Result | RL | Units | Note | Dil. | DQF | Sample Preparation | | | Sample Analysis | | | |
|------------------------------------|--------|------|----------|------|------|-----|--------------------|-------|-----|-----------------|------------|-------|-----|
| | | | | | | | Date | Time | Who | Method | Date | Time | Who |
| Dairy Analysis | | | | | | | | | | | | | |
| Alkalinity (as CaCO ₃) | 90 | 10 | mg/L | | 1 | | 04/11/2023 | 14:02 | amm | SM 4500-H+B | 04/11/2023 | 21:57 | amm |
| Bicarbonate | 110 | 10 | mg/L | | 1 | | 04/11/2023 | 14:02 | amm | SM 4500-H+B | 04/11/2023 | 21:57 | amm |
| Carbonate | ND | 10 | mg/L | | 1 | U | 04/11/2023 | 14:02 | amm | SM 4500-H+B | 04/11/2023 | 21:57 | amm |
| Hydroxide | ND | 10 | mg/L | | 1 | U | 04/11/2023 | 14:02 | amm | SM 4500-H+B | 04/11/2023 | 21:57 | amm |
| Chloride | 43 | 1 | mg/L | | 1 | b | 04/05/2023 | 17:40 | ldm | EPA 300.0 | 04/06/2023 | 21:22 | ldm |
| Nitrate Nitrogen | 10.8 | 0.1 | mg/L | | 1 | | 04/05/2023 | 17:40 | ldm | EPA 300.0 | 04/06/2023 | 21:22 | ldm |
| Conductivity | 460 | 1 | umhos/cm | | 1 | | 04/11/2023 | 14:02 | amm | SM 4500-H+B | 04/11/2023 | 21:57 | amm |
| Sulfate Sulfur | 11.2 | 0.17 | mg/L | | 1 | | 04/05/2023 | 17:40 | ldm | EPA 300.0 | 04/06/2023 | 21:22 | ldm |
| Solids, Total Dissolved (TDS) | 270 | 20 | mg/L | | 1 | | 04/06/2023 | 13:15 | ctl | SM 2540 C | 04/07/2023 | 11:15 | ctl |
| Calcium | 29 | 1 | mg/L | | 1 | | 04/11/2023 | 05:45 | ejc | EPA 200.7 | 04/12/2023 | 15:16 | ac |
| Magnesium | ND | 1 | mg/L | | 1 | J | 04/11/2023 | 05:45 | ejc | EPA 200.7 | 04/12/2023 | 15:16 | ac |
| Potassium | ND | 1 | mg/L | | 1 | J | 04/11/2023 | 05:45 | ejc | EPA 200.7 | 04/12/2023 | 15:16 | ac |
| Sodium | 70 | 1 | mg/L | | 1 | | 04/11/2023 | 05:45 | ejc | EPA 200.7 | 04/12/2023 | 15:16 | ac |

DQF Flags Definition:

U Constituent results were non-detect.

b The Blank was positive for constituent but less than the PQL

J Reported value is estimated; detected at a concentration below the RL and above the laboratory MDL.

ND=Non-Detected, RL=Reporting Level * RL adjusted for dilution, Dil.=Dilution

April 26, 2023

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

Description : T4
Project : 0263 River Ranch

Lab No. : VI 2342017-004
Customer No.: 4018573
Reference : 40347
Sampled On : April 4, 2023 at 13:35
Sampled By : Henry
Received On : April 4, 2023 at 15:35
Matrix : Ag Water

Sample Results - Inorganic

| Constituent | Result | RL | Units | Note | Dil. | DQF | Sample Preparation | | | Sample Analysis | | | |
|-------------------------------|--------|-----|----------|------|------|-----|--------------------|-------|-----|-----------------|------------|-------|-----|
| | | | | | | | Date | Time | Who | Method | Date | Time | Who |
| Dairy Analysis | | | | | | | | | | | | | |
| Nitrogen, Total Kjeldahl | ND | 0.5 | mg/L | | 1 | U1 | 04/18/2023 | 12:00 | sta | EPA 351.2 | 04/20/2023 | 18:42 | lcr |
| Nitrate Nitrogen | 16.2 | 0.4 | mg/L | | 1 | | 04/05/2023 | 15:45 | lfs | SM 4500-NO3 F | 04/05/2023 | 17:21 | lfs |
| Nitrogen, Total as Nitrogen | 16.2 | 0.5 | mg/L | | 1 | 1 | 04/18/2023 | 12:00 | sta | EPA 351.2 | 04/20/2023 | 18:42 | lcr |
| Nitrate + Nitrite as N | 16.2 | 0.4 | mg/L | | 1 | | 04/05/2023 | 15:45 | lfs | SM 4500-NO3 F | 04/05/2023 | 17:21 | lfs |
| Kjeldahl Nitrogen | ND | 0.5 | mg/L | | 1 | U1 | 04/18/2023 | 12:00 | sta | EPA 351.2 | 04/20/2023 | 18:42 | lcr |
| Conductivity | 935 | 1 | umhos/cm | | 1 | | 04/17/2023 | 19:02 | amm | SM 4500-H+B | 04/17/2023 | 21:58 | amm |
| Solids, Total Dissolved (TDS) | 600 | 20 | mg/L | | 1 | | 04/06/2023 | 13:15 | ctl | SM 2540 C | 04/07/2023 | 11:15 | ctl |

DQF Flags Definition:

U Constituent results were non-detect.

1 The MS/MSD did not meet QC criteria.

ND=Non-Detected, RL=Reporting Level * RL adjusted for dilution, Dil.=Dilution

April 26, 2023

Innovative Ag Services, LLC

Lab No. : VI 2342017
Customer No. : 4018573

Quality Control - Metals

| Constituent | Method | Date/ID | Type | Units | Conc. | QC Data | DQO | Note |
|---------------|--------|--|--|--|--|--|--|------------|
| Metals | | | | | | | | |
| Calcium | 200.7 | 04/11/2023:203803EJC (VI 2341990-003) | Blank LCS MS MSD MSRPD MS MSD MSRPD | mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L | 12.00 12.00 12.00 0.8000 12.00 12.00 12.00 0.8000 | ND 99.9 % 107 % 106 % 0.2% 105 % 92.6 % 2.0% | <1 85-115 75-125 75-125 ≤20.0 75-125 75-125 ≤20.0 | |
| | 200.7 | 04/13/2023:203925EJC (SP 2305246-001) | Blank LCS MS MSD MSRPD MS MSD MSRPD | mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L | 12.00 12.00 12.00 12.00 4.000 12.00 12.00 4.000 | ND 92.6 % 172 % 98.4 % 6.7% 124 % 119 % 0.9% | <1 85-115 <¼ 75-125 ≤20.0 75-125 75-125 ≤20.0 | |
| | 200.7 | 04/19/2023:204166EJC (VI 2342268-002) | Blank LCS MS MSD MSRPD MS MSD MSRPD | mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L | 12.00 12.00 12.00 12.00 4.000 12.00 12.00 4.000 | ND 95.3 % 95.6 % 102 % 5.6% 98.0 % 99.1 % 1.0% | <1 85-115 75-125 75-125 ≤20.0 75-125 75-125 ≤20.0 | |
| Magnesium | 200.7 | 04/11/2023:203803EJC (VI 2341990-003) | Blank LCS MS MSD MSRPD MS MSD MSRPD | mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L | 12.00 12.00 12.00 12.00 0.8000 12.00 12.00 0.8000 | ND 101 % 110 % 110 % 0.1% 106 % 96.3 % 2.2% | <1 85-115 75-125 75-125 ≤20 75-125 75-125 ≤20 | |
| | 200.7 | 04/13/2023:203925EJC (SP 2305246-001) | Blank LCS MS MSD MSRPD MS MSD MSRPD | mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L | 12.00 12.00 12.00 12.00 4.000 12.00 12.00 4.000 | ND 94.8 % -122 % -138 % 4.5% 42.3 % 39.5 % 1.3% | <1 85-115 <¼ <¼ ≤20 75-125 75-125 ≤20 | 435 435 |
| | 200.7 | 04/19/2023:204166EJC (VI 2342268-002) | Blank LCS MS MSD MSRPD MS | mg/L mg/L mg/L mg/L mg/L mg/L | 12.00 12.00 12.00 12.00 4.000 12.00 | ND 95.0 % 100 % 107 % 6.5% 102 % | <1 85-115 75-125 75-125 ≤20 75-125 | |

April 26, 2023
Innovative Ag Services, LLC

Lab No. : VI 2342017
 Customer No. : 4018573

Quality Control - Metals

| Constituent | Method | Date/ID | Type | Units | Conc. | QC Data | DQO | Note |
|-------------|------------------|----------------------|-------|-------|--------|---------|--------|------|
| | | (VI 2342268-001) | MSD | mg/L | 12.00 | 104 % | 75-125 | |
| Potassium | 200.7 | 04/11/2023:203803EJC | MSRPD | mg/L | 4.000 | 2.4% | ≤20 | |
| | | | Blank | mg/L | | ND | <1 | |
| | | | LCS | mg/L | 12.00 | 99.1 % | 85-115 | |
| | | | MS | mg/L | 12.00 | 109 % | 75-125 | |
| | | | MSD | mg/L | 12.00 | 109 % | 75-125 | |
| | | | MSRPD | mg/L | 0.8000 | 0.05% | ≤20.0 | |
| | | | MS | mg/L | 12.00 | 111 % | 75-125 | |
| | | | MSD | mg/L | 12.00 | 111 % | 75-125 | |
| | | | MSRPD | mg/L | 0.8000 | 0.7% | ≤20.0 | |
| | | | Blank | mg/L | | ND | <1 | |
| | 200.7 | 04/13/2023:203925EJC | LCS | mg/L | 12.00 | 90.5 % | 85-115 | |
| | | | MS | mg/L | 12.00 | 123 % | 75-125 | |
| | | | MSD | mg/L | 12.00 | 117 % | 75-125 | |
| | | | MSRPD | mg/L | 4.000 | 2.1% | ≤20.0 | |
| | | | MS | mg/L | 12.00 | 125 % | 75-125 | |
| | | | MSD | mg/L | 12.00 | 120 % | 75-125 | |
| | | | MSRPD | mg/L | 4.000 | 1.7% | ≤20.0 | |
| | | | Blank | mg/L | | 1 | <1 | |
| | | | LCS | mg/L | 12.00 | 91.6 % | 85-115 | |
| | | | MS | mg/L | 12.00 | 96.9 % | 75-125 | |
| Sodium | 200.7 | 04/19/2023:204166EJC | MSD | mg/L | 12.00 | 102 % | 75-125 | |
| | | | MSRPD | mg/L | 4.000 | 4.7% | ≤20.0 | |
| | | | MS | mg/L | 12.00 | 99.2 % | 75-125 | |
| | | | MSD | mg/L | 12.00 | 97.9 % | 75-125 | |
| | | | MSRPD | mg/L | 4.000 | 1.2% | ≤20.0 | |
| | | | Blank | mg/L | | ND | <1 | |
| | | | LCS | mg/L | 12.00 | 104 % | 85-115 | |
| | | | MS | mg/L | 12.00 | 90.1 % | 75-125 | |
| | | | MSD | mg/L | 12.00 | 96.0 % | 75-125 | |
| | | | MSRPD | mg/L | 0.8000 | 0.7% | ≤20.0 | |
| | 200.7 | 04/13/2023:203925EJC | MS | mg/L | 12.00 | 116 % | 75-125 | |
| | | | MSD | mg/L | 12.00 | 109 % | 75-125 | |
| | | | MSRPD | mg/L | 0.8000 | 2.2% | ≤20.0 | |
| | | | Blank | mg/L | | ND | <1 | |
| | | | LCS | mg/L | 12.00 | 93.5 % | 85-115 | |
| | | | MS | mg/L | 12.00 | -577 % | <¼ | |
| | | | MSD | mg/L | 12.00 | -641 % | <¼ | |
| | | | MSRPD | mg/L | 4.000 | 7.5% | ≤20.0 | |
| | | | MS | mg/L | 12.00 | -153 % | <¼ | |
| | | | MSD | mg/L | 12.00 | -156 % | <¼ | |
| | 200.7 | 04/19/2023:204166EJC | MSRPD | mg/L | 4.000 | 0.5% | ≤20.0 | |
| | | | Blank | mg/L | | ND | <1 | |
| | | | LCS | mg/L | 12.00 | 92.0 % | 85-115 | |
| | | | MS | mg/L | 12.00 | 79.7 % | 75-125 | |
| | | | MSD | mg/L | 12.00 | 88.0 % | 75-125 | |
| | | | MSRPD | mg/L | 4.000 | 2.0% | ≤20.0 | |
| | | | MS | mg/L | 12.00 | 80.8 % | 75-125 | |
| | 200.7 | (VI 2342268-002) | MSD | mg/L | 12.00 | 83.2 % | 75-125 | |
| | | | MSRPD | mg/L | 4.000 | 0.6% | ≤20.0 | |
| | (VI 2342268-001) | | MS | mg/L | 12.00 | | | |
| | | | MSD | mg/L | 12.00 | | | |
| | | | MSRPD | mg/L | 4.000 | | | |

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 analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.
- MSRPD : MS/MSD Relative Percent Difference (RPD) - The MS relative percent difference is an indication of precision for the preparation and analysis.
- ND : Non-detect - Result was below the DQO listed for the analyte.

Explanation

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

April 26, 2023
Innovative Ag Services, LLC

Lab No. : VI 2342017
Customer No. : 4018573

Quality Control - Wet Chem

| Constituent | Method | Date/ID | Type | Units | Conc. | QC Data | DQO | Note |
|-------------------------|--------|----------------------|-------|----------|-------|---------|--------|------|
| Wet Chem | | | | | | | | |
| Alkalinity (as CaCO3) | 2320B | 04/11/2023:203842AMM | ND | mg/L | | 0.4% | 10 | 435 |
| Bicarbonate | 2320B | (VI 2342017-001) | Dup | mg/L | | 1.36% | 10 | |
| Carbonate | 2320B | (VI 2342017-001) | Dup | mg/L | | 2.90% | 10 | |
| E. C. | 2320B | (VI 2342017-001) | Dup | umhos/cm | | 1.95% | 5 | |
| | 2320B | (SP 2305421-005) | Dup | umhos/cm | | 0.2% | 5 | |
| Solids, Total Dissolved | 2540CE | 04/06/2023:203642CTL | Blank | mg/L | | ND | <20 | |
| | | (CC 2381012-005) | LCS | mg/L | 993.4 | 99.9% | 90-110 | |
| | | (CC 2381012-005) | Dup | mg/L | | 5.08% | 5 | |
| | | | Dup | mg/L | | 0.2% | 5 | |
| | | | Blank | mg/L | | ND | <20 | |
| | | (CC 2380993-001) | LCS | mg/L | 993.4 | 98.3% | 90-110 | |
| | | (CC 2380993-001) | Dup | mg/L | | 3.43% | 5 | |
| | | | Dup | mg/L | | 3.12% | 5 | |
| | | | Blank | mg/L | | ND | <20 | |
| | | (CC 2380982-001) | LCS | mg/L | 993.4 | 99.8% | 90-110 | |
| | | (CC 2380982-001) | Dup | mg/L | | 0.9% | 5 | |
| | | | Dup | mg/L | | 0.5% | 5 | |
| Chloride | 300.0 | 04/05/2023:203708LDM | Blank | mg/L | | ND | <1 | |
| | | (STK2333929-009) | LCS | mg/L | 25.00 | 103 % | 90-110 | |
| | | | MS | mg/L | 50.00 | 99.5 % | 85-121 | |
| | | | MSD | mg/L | 50.00 | 107 % | 85-121 | |
| | | | MSRPD | mg/L | 100.0 | 7.4% | ≤19 | |
| | | | MS | mg/L | 50.00 | 101 % | 85-121 | |
| | | (VI 2342017-001) | MSD | mg/L | 50.00 | 105 % | 85-121 | |
| | | | MSRPD | mg/L | 100.0 | 3.6% | ≤19 | |
| | | | Blank | mg/L | | 1 | <1 | |
| | | | LCS | mg/L | 25.00 | 103 % | 90-110 | |
| | | | MS | mg/L | 50.00 | 98.8 % | 85-121 | |
| | | (VI 2342020-001) | MSD | mg/L | 50.00 | 97.0 % | 85-121 | |
| | | | MSRPD | mg/L | 40.00 | 1.3% | ≤19 | |
| Nitrate Nitrogen | 300.0 | 04/05/2023:203708LDM | Blank | mg/L | | ND | <0.4 | |
| | | (STK2333929-009) | LCS | mg/L | 20.00 | 103 % | 90-110 | |
| | | | MS | mg/L | 40.00 | 101 % | 85-119 | |
| | | | MSD * | mg/L | 40.00 | 109 % | 85-119 | |
| | | | MSRPD | mg/L | 100.0 | 7.5% | ≤19 | |
| | | | MS | mg/L | 40.00 | 104 % | 85-119 | |
| | | (VI 2342017-001) | MSD | mg/L | 40.00 | 108 % | 85-119 | |
| | | | MSRPD | mg/L | 100.0 | 4.0% | ≤19 | |
| | | | Blank | mg/L | | ND | <0.4 | |
| | | | LCS | mg/L | 20.00 | 105 % | 90-110 | |
| | | | MS | mg/L | 40.00 | 89.9 % | 85-119 | |
| | | (VI 2342020-001) | MSD | mg/L | 40.00 | 89.9 % | 85-119 | |
| | | | MSRPD | mg/L | 40.00 | 0.03% | ≤19 | |
| Sulfate Sulfur | 300.0 | 04/05/2023:203708LDM | Blank | mg/L | | ND | <0.5 | |
| | | (STK2333929-009) | LCS | mg/L | 50.00 | 103 % | 90-110 | |
| | | | MS | mg/L | 100.0 | 100 % | 82-124 | |
| | | | MSD | mg/L | 100.0 | 108 % | 82-124 | |
| | | | MSRPD | mg/L | 100.0 | 7.6% | ≤23 | |
| | | | MS | mg/L | 100.0 | 102 % | 82-124 | |
| | | (VI 2342017-001) | MSD | mg/L | 100.0 | 107 % | 82-124 | |

April 26, 2023
Innovative Ag Services, LLC

Lab No. : VI 2342017
Customer No. : 4018573

Quality Control - Wet Chem

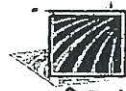
| Constituent | Method | Date/ID | Type | Units | Conc. | QC Data | DQO | Note |
|--------------------------|----------|--|-------|-------|-------|---------|-------------------|------|
| Nitrogen, Total Kjeldahl | 351.2 | 04/18/2023:204137STA (CC 2381025-003) (SP 2304924-001) | MSRPD | mg/L | 100.0 | 3.9% | ≤23 | |
| | | | Blank | mg/L | ND | <0.5 | | |
| | | | LCS | mg/L | 50.00 | 104 % | 90-110 | |
| | | | MS | mg/L | 100.0 | 104 % | 82-124 | |
| | | | MSD | mg/L | 100.0 | 102 % | 82-124 | |
| | | | MSRPD | mg/L | 40.00 | 1.6% | ≤23 | |
| | | | MSRPD | mg/L | 40.00 | 1.6% | ≤23 | |
| Nitrate + Nitrite as N | 4500NO3F | 04/05/2023:203618LFS (VI 2341987-001) | Blank | mg/L | ND | <0.5 | | |
| | | | LCS | mg/L | 12.00 | 90.7% | 73-124 | |
| | | | MS | mg/L | 12.00 | 84.8% | 54-136 | |
| | | | MSD | mg/L | 12.00 | 74.8% | 54-136 | |
| | | | MSRPD | mg/L | 12.00 | 12.8% | ≤27 | |
| | | | MS | mg/L | 12.00 | 22.5% | <Å ^{1/4} | |
| | | | MSD | mg/L | 12.00 | 34.3% | 54-136 | 435 |
| Nitrate Nitrogen | 4500NO3F | 04/05/2023:203618LFS (VI 2341987-001) | MSRPD | mg/L | 12.00 | 43.3% | ≤27 | 435 |
| | | | Blank | mg/L | ND | <0.4 | | |
| | | | LCS | mg/L | 11.22 | 93.5% | 80-120 | |
| | | | MS | mg/L | 5.609 | 94.3% | 66-125 | |
| | | | MSD | mg/L | 5.609 | 93.2% | 66-125 | |
| | | | MSRPD | mg/L | 5.609 | 0.6% | ≤30.4 | |
| | | | MSRPD | mg/L | 5.609 | 0.6% | ≤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 analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.
- MSRPD : MS/MSD Relative Percent Difference (RPD) - The MS relative percent difference is an indication of precision for the preparation and analysis.
- ND : Non-detect - Result was below the DQO listed for the analyte.

Explanation

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



Laboratory Analysis Work Order

Nº 40347

ID: # 0263

SITE NAME: River Ranch

Billing: IAS

23410 2342017

LABORATORY: FGL

Authorized Copy Release to:

Innovative Ag Services LLC

(559) 587-2800

ANALYSIS TO BE COMPLETED:

Irrigation/Ground Water (ELAP Standards)

- W1 EC, NO₃N (Dom)
 W2 EC, NO₃N, TDS, TN (Irr)
 W3 NH₄-N (Ammonium)
 W4 EC, NO₃N, Ca, Mg, Na, K, HCO₃, CO₃, SO₄S, Cl, TDS (Dom, GM)
 W5 EC, NO₃N, TDS, TN, Ca, Mg, Na, HCO₃, CO₃, SO₄S, Cl (Irr, GM)
 W6 NO₃N, NO₂ (Dom ILRP, Annually)
 W7 Ca, Mg, Na, K, HCO₃, CO₃, SO₄, Cl + Lab Filtering (GWM)
 W8 Other: _____
- 701 14.5

Plant Tissue

- P1 TN, NO₃N, PO₄P, K (Mid Season - Wheat)
 P2 TN, P, K (Mid-season - Corn)
 P3 TN, TP, TK, Ash, %M (At Harvest)
 P4 TN, %M
 P5 % Moisture
 P6 NIR
 P7 Other: _____

Process Waste Water (lagoon)

- L1 EC, NH₄N, TKN, TP, TK, TDS (Quarterly)
 L2 EC, NO₃N, NH₄N, TKN, TP, TK, TDS, pH (Annually)
 L3 L1 + Ca, Mg, Na, HCO₃, CO₃, SO₄S, Cl (Biennially)
 L4 Other: _____

Manure

- M1 TN, TP, TK, %M (2/year)
 M2 TN, TP, K, %M, Ca, Mg, Na, S, Cl, ash (Biennially)
 M3 Other: _____

Soil

- S1 SP%, pH, EC, Ca, Mg, Na, K, ESP, LP, B, NO₃N, PO₄P, K-AA, Zn, Mn, Fe, Cu, SO₄S
 S2 S1 + CEC, CaCO₃, OM, C:N, TN
 S3 NO₃N, NH₄N
 S4 Other: _____

| Sample ID | Description | Analysis | Date/Time | Sampled by | IAS USE ONLY: FIELD TESTS | | |
|-----------|-------------|----------|-----------|------------|---------------------------|----|------|
| | | | | | NH ₃ N* | pH | Temp |
| 1 DR-1 | Dom | W4 | 12:30 4-4 | Henry | ✓ | | |
| 2 Y2 | 1 | 1 | 1:00 4-4 | ✓ | — | | |
| 3 T7 | 1 | 1 | 1:10 4-4 | ✓ | — | | |
| 4 T4 | 1 | W2 | 1:35 4-4 | ✓ | ✓ | | |
| 5 | | | | | | | |
| 6 | | | | | | | |
| 7 | | | | | | | |
| 8 | | | | | | | |

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

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

NOTES: _____

CHAIN OF CUSTODY RECORDING

| | Signature | Company | Received Date & Time | Relinquished Date & Time |
|-----------------|-----------|---------|----------------------|--------------------------|
| 1 st | | IAS | | 2:00 4-4-23 |
| 2 nd | EPA | FGL | 4/4/23 15:05 | |
| 3 rd | EPA | FGL | | 4/4/23 15:35 |
| 4 th | | | 4/4/23 15:35 | |

LABORATORY USE ONLY

Logged In By:

Total Samples: 1103 1106

Laboratory #: _____

GLS IAS 4/5/23 1256

July 11, 2023

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

Lab No. : VI 2343957
Customer No. : 4018573
Reference : 40898

Laboratory Report

Introduction: This report package contains a total of 5 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 | (3 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 |
|--------------------|--------------|---------------|----------------|--------|
| Well 5 | 06/21/2023 | 06/21/2023 | VI 2343957-001 | 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) |

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: 2023-07-11

Section: Case Narrative

Page 1 of 5

Page 1 of 5

| Corporate Offices & Laboratory | Office & Laboratory | Office & Laboratory | Office & Laboratory | Office & 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 | 2500 Stagecoach Road Stockton, CA 95215 TEL: (209)942-0182 FAX: (209)942-0423 CA ELAP Certification No. 1563 | 563 E. Lindo Avenue Chico, CA 95926 TEL: (530)343-5818 FAX: (530)343-3807 CA ELAP Certification No. 1563 | 3442 Empresa Drive, Suite D San Luis Obispo, CA 93401 TEL: (805)783-2940 FAX: (805)783-2912 CA ELAP Certification No. 2670 | 9415 W. Goshen Avenue Visalia, CA 93291 TEL: (559)734-9473 FAX: (559)734-8435 CA ELAP Certification No. 2775 |

July 11, 2023

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

Description : Well 5
Project : 0263 River Ranch Dairy

Lab No. : VI 2343957-001
Customer No.: 4018573
Reference : 40898
Sampled On : June 21, 2023 at 13:17
Sampled By : Not Available
Received On : June 21, 2023 at 16:12
Matrix : Ag Water

Sample Results - Inorganic

| Constituent | Result | RL | Units | Note | Dil. | DQF | Sample Preparation | | | Sample Analysis | | | |
|------------------------------------|--------|------|----------|------|------|-----|--------------------|-------|-----|-----------------|------------|-------|-----|
| | | | | | | | Date | Time | Who | Method | Date | Time | Who |
| Dairy Analysis | | | | | | | | | | | | | |
| Alkalinity (as CaCO ₃) | 90 | 10 | mg/L | | 1 | | 06/26/2023 | 16:44 | amm | SM 4500-H+B | 06/26/2023 | 22:08 | amm |
| Bicarbonate | 80 | 10 | mg/L | | 1 | | 06/26/2023 | 16:44 | amm | SM 4500-H+B | 06/26/2023 | 22:08 | amm |
| Carbonate | 20 | 10 | mg/L | | 1 | | 06/26/2023 | 16:44 | amm | SM 4500-H+B | 06/26/2023 | 22:08 | amm |
| Hydroxide | 20 | 10 | mg/L | | 1 | | 06/26/2023 | 16:44 | amm | SM 4500-H+B | 06/26/2023 | 22:08 | amm |
| Chloride | 31 | 1 | mg/L | | 1 | I | 06/22/2023 | 13:43 | ldm | EPA 300.0 | 06/22/2023 | 19:23 | ldm |
| Nitrogen, Total Kjeldahl | ND | 0.5 | mg/L | | 1 | U | 07/03/2023 | 12:54 | sta | EPA 351.2 | 07/07/2023 | 19:14 | lcr |
| Nitrate Nitrogen | ND | 0.1 | mg/L | | 1 | J | 06/22/2023 | 13:43 | ldm | EPA 300.0 | 06/22/2023 | 19:23 | ldm |
| Nitrogen, Total as Nitrogen | ND | 0.5 | mg/L | | 1 | UJ | 07/03/2023 | 12:54 | sta | Calc. | 07/07/2023 | 19:14 | lcr |
| Nitrate + Nitrite as N | ND | 0.1 | mg/L | | 1 | J | 06/22/2023 | 13:43 | ldm | EPA 300.0 | 06/22/2023 | 19:23 | ldm |
| Kjeldahl Nitrogen | ND | 0.5 | mg/L | | 1 | U | 07/03/2023 | 12:54 | sta | EPA 351.2 | 07/07/2023 | 19:14 | lcr |
| Conductivity | 297 | 1 | umhos/cm | | 1 | | 06/26/2023 | 16:44 | amm | SM 4500-H+B | 06/26/2023 | 22:08 | amm |
| Sulfate Sulfur | 2.30 | 0.17 | mg/L | | 1 | | 06/22/2023 | 13:43 | ldm | EPA 300.0 | 06/22/2023 | 19:23 | ldm |
| Solids, Total Dissolved (TDS) | 170 | 20 | mg/L | | 1 | | 06/23/2023 | 12:40 | ctl | SM 2540 C | 06/26/2023 | 11:45 | ctl |
| Calcium | 3 | 1 | mg/L | | 1 | | 06/22/2023 | 22:49 | ejc | EPA 200.7 | 06/23/2023 | 10:42 | ac |
| Magnesium | ND | 1 | mg/L | | 1 | J | 06/22/2023 | 22:49 | ejc | EPA 200.7 | 06/23/2023 | 10:42 | ac |
| Sodium | 60 | 1 | mg/L | | 1 | | 06/22/2023 | 22:49 | ejc | EPA 200.7 | 06/23/2023 | 10:42 | ac |

DQF Flags Definition:

I The MS/MSD did not meet QC criteria.

U Constituent results were non-detect.

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

July 11, 2023

Innovative Ag Services, LLC

Lab No. : VI 2343957

Customer No. : 4018573

Quality Control - Metals

| Constituent | Method | Date/ID | Type | Units | Conc. | QC Data | DQO | Note |
|--------------------|---------------|----------------------|-------------|--------------|--------------|----------------|------------|-------------|
| Metals | | | | | | | | |
| Calcium | 200.7 | 06/22/2023:206896EJC | Blank | mg/L | | ND | <1 | |
| | | (STK2338115-001) | LCS | mg/L | 12.00 | 92.2% | 85-115 | |
| | | | MS | mg/L | 12.00 | 191% | <¼ | 406 |
| | | | MSD | mg/L | 12.00 | 97.0% | 75-125 | |
| | | | MSRPD | mg/L | | 7.7% | ≤20.0 | |
| | | (SP 2310519-001) | MS | mg/L | 12.00 | 49.5% | <¼ | 406 |
| | | | MSD | mg/L | 12.00 | 61.4% | <1/4 | |
| | | | MSRPD | mg/L | | 1.2% | ≤20.0 | |
| Magnesium | 200.7 | 06/22/2023:206896EJC | Blank | mg/L | | ND | <1 | |
| | | (STK2338115-001) | LCS | mg/L | 12.00 | 102% | 85-115 | |
| | | | MS | mg/L | 12.00 | 135% | <¼ | 406 |
| | | | MSD | mg/L | 12.00 | 96.0% | 75-125 | |
| | | | MSRPD | mg/L | | 7.1% | ≤20 | |
| | | (SP 2310519-001) | MS | mg/L | 12.00 | 81.4% | 75-125 | |
| | | | MSD | mg/L | 12.00 | 86.9% | 75-125 | |
| | | | MSRPD | mg/L | | 1.3% | ≤20 | |
| Sodium | 200.7 | 06/22/2023:206896EJC | Blank | mg/L | | ND | <1 | |
| | | (STK2338115-001) | LCS | mg/L | 12.00 | 96.6% | 85-115 | |
| | | | MS | mg/L | 12.00 | 343% | <¼ | 406 |
| | | | MSD | mg/L | 12.00 | 95.4% | 75-125 | |
| | | | MSRPD | mg/L | | 8.1% | ≤20.0 | |
| | | (SP 2310519-001) | MS | mg/L | 12.00 | 63.2% | <¼ | 406 |
| | | | MSD | mg/L | 12.00 | 58.4% | <1/4 | |
| | | | MSRPD | mg/L | | 0.5% | ≤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 analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.

MSRPD : MS/MSD Relative Percent Difference (RPD) - The MS relative percent difference is an indication of precision for the preparation and analysis.

ND : Non-detect - Result was below the DQO listed for the analyte.

Explanation

406 : Matrix Spike (MS) not within the Acceptance Range (AR) because of high analyte concentration in the sample. Data was accepted based on the LCS or CCV recovery.

July 11, 2023
Innovative Ag Services, LLC

Lab No. : VI 2343957
Customer No. : 4018573

Quality Control - Wet Chem

| Constituent | Method | Date/ID | Type | Units | Conc. | QC Data | DQO | Note |
|--------------------------|--------|--|-------|----------|-------|---------|--------|------|
| Wet Chem | | | | | | | | |
| Alkalinity (as CaCO3) | 2320B | 06/26/2023:207047AMM | ND | mg/L | | 0.5% | 10 | 406 |
| Bicarbonate | 2320B | (VI 2343957-001) | Dup | mg/L | | 0% | 10 | |
| Carbonate | 2320B | (VI 2343957-001) | Dup | mg/L | | 1.44% | 10 | |
| E. C. | 2320B | (VI 2343957-001) | Dup | umhos/cm | | 0% | 5 | |
| Solids, Total Dissolved | 2540CE | 06/23/2023:206926CTL (SP 2310601-001) (SP 2310601-001) | Blank | mg/L | 993.7 | ND | <20 | |
| | | | LCS | mg/L | | 98.8% | 90-110 | |
| | | | Dup | mg/L | | 1.33% | 5 | |
| | | | Dup | mg/L | | 1.20% | 5 | |
| Chloride | 300.0 | 06/22/2023:206935LDM (VI 2343952-033) (VI 2343952-035) | Blank | mg/L | | ND | <1 | |
| | | | LCS | mg/L | | 101 % | 90-110 | |
| | | | MS | mg/L | | 86.0 % | 85-121 | |
| | | | MSD | mg/L | | 83.4 % | 85-121 | 435 |
| | | | MSRPD | mg/L | | 1.3% | ≤19 | |
| | | | MS | mg/L | | 92.9 % | 85-121 | |
| | | | MSD | mg/L | | 89.7 % | 85-121 | |
| | | | MSRPD | mg/L | | 2.0% | ≤19 | |
| | | | MS | mg/L | | | | |
| Nitrate + Nitrite as N | 300.0 | 06/22/2023:206935LDM (VI 2343952-033) (VI 2343952-035) | Blank | mg/L | | ND | <0.4 | |
| | | | LCS | mg/L | | 102 % | 90-110 | |
| | | | MS | mg/L | | 103 % | 85-119 | |
| | | | MSD | mg/L | | 99.9 % | 85-119 | |
| | | | MSRPD | mg/L | | 3.3% | ≤19 | |
| | | | MS | mg/L | | 103 % | 85-119 | |
| | | | MSD | mg/L | | 99.0 % | 85-119 | |
| | | | MSRPD | mg/L | | 3.7% | ≤19 | |
| | | | MS | mg/L | | | | |
| Nitrate Nitrogen | 300.0 | 06/22/2023:206935LDM (VI 2343952-033) (VI 2343952-035) | Blank | mg/L | | ND | <0.4 | |
| | | | LCS | mg/L | | 102 % | 90-110 | |
| | | | MS | mg/L | | 103 % | 85-119 | |
| | | | MSD | mg/L | | 99.9 % | 85-119 | |
| | | | MSRPD | mg/L | | 3.3% | ≤19 | |
| | | | MS | mg/L | | 103 % | 85-119 | |
| | | | MSD | mg/L | | 99.0 % | 85-119 | |
| | | | MSRPD | mg/L | | 3.7% | ≤19 | |
| | | | MS | mg/L | | | | |
| Sulfate Sulfur | 300.0 | 06/22/2023:206935LDM (VI 2343952-033) (VI 2343952-035) | Blank | mg/L | | ND | <0.5 | |
| | | | LCS | mg/L | | 102 % | 90-110 | |
| | | | MS | mg/L | | 103 % | 82-124 | |
| | | | MSD | mg/L | | 99.4 % | 82-124 | |
| | | | MSRPD | mg/L | | 3.0% | ≤23 | |
| | | | MS | mg/L | | 102 % | 82-124 | |
| | | | MSD | mg/L | | 98.4 % | 82-124 | |
| | | | MSRPD | mg/L | | 3.7% | ≤23 | |
| | | | MS | mg/L | | | | |
| Nitrogen, Total Kjeldahl | 351.2 | 07/03/2023:207257STA (VI 2343914-005) (VI 2343914-006) | Blank | mg/L | | ND | <0.5 | |
| | | | LCS | mg/L | | 102% | 73-124 | |
| | | | MS | mg/L | | 89.5% | 54-136 | |
| | | | MSD | mg/L | | 96.2% | 54-136 | |
| | | | MSRPD | mg/L | | 6.8% | ≤27 | |
| | | | MS | mg/L | | 97.0% | 54-136 | |
| | | | MSD | mg/L | | 98.6% | 54-136 | |
| | | | MSRPD | mg/L | | 1.6% | ≤27 | |
| | | | MS | mg/L | | | | |

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 analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.
- MSRPD : MS/MSD Relative Percent Difference (RPD) - The MS relative percent difference is an indication of precision for the preparation and analysis.
- ND : Non-detect - Result was below the DQO listed for the analyte.

Explanation

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

2348957

Laboratory Analysis Work Order

Nº 40898

ID: # 0263

SITE NAME: River Ranch Dairy
Billing: IASR01
15.3

LABORATORY: FGL

Authorized Copy Release to:

Innovative Ag Services LLC
(559) 587-2800

ANALYSIS TO BE COMPLETED:

Irrigation/Ground Water (ELAP Standards)

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

W8 Other: _____

Plant Tissue

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

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

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

P4 TN, %M

P5 % Moisture

P6 NIR

P7 Other: _____

Process Waste Water (lagoon)

L1 EC, NH₄N, TKN, TP, TK, TDS (Quarterly)L2 EC, NO₃N, NH₄N, TKN, TP, TK, TDS, pH (Annually)L3 L1 + Ca, Mg, Na, HCO₃, CO₃, SO₄S, Cl (Biennially)

L4 Other: _____

Manure

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

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

M3 Other: _____

Soil

S1 SP%, pH, EC, Ca, Mg, Na, K, ESP, LP, B, NO₃N, PO₄P, K-AA, Zn, Mn, Fe, Cu, SO₄SS2 S1 + CEC, CaCO₃, OM, C:N, TNS3 NO₃N, NH₄N

S4 Other: _____

| Sample ID | Description | Analysis | Date/Time | Sampled by | IAS USE ONLY: FIELD TESTS | | |
|-----------|-------------|----------|-----------|------------|---------------------------|----|------|
| | | | | | NH ₃ N * | pH | Temp |
| 1 Well 5 | Irr | W5 | 1:17 6/21 | 6/21 | — | | |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | | | | | | | |
| 6 | | | | | | | |
| 7 | | | | | | | |
| 8 | | | | | | | |

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

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

NOTES:

GLS 6/21/23
CDA 0934

CHAIN OF CUSTODY RECORDING

| Signature | Company | Received Date & Time | Relinquished Date & Time |
|-----------|---------|----------------------|--------------------------|
| 1st AJB | IAS | | 6/21/23 |
| 2nd AJB | FGL | 6/21/23 1555 | |
| 3rd AJB | FGL | | 6/21/23 1612 |
| 4th SRC | FGL | 6/21/23 1612 | |

| LABORATORY USE ONLY | Total Samples: | Laboratory #: |
|---------------------|----------------|---------------|
| Logged In By: _____ | GLS | 1730 |

July 12, 2023

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

Lab No. : VI 2344245
Customer No. : 4018573
Reference : 40970

Laboratory Report

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

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

Case Narrative

This Case Narrative pertains to the following samples:

| Sample Description | Date Sampled | Date Received | FGL Lab No. | Matrix |
|--------------------|--------------|---------------|----------------|--------|
| Well 20 | 06/26/2023 | 06/26/2023 | VI 2344245-001 | AGW |

Sampling and Receipt Information:

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

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

Test Summary

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

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

KD: EHB

Approved By **Kelly A. Dunnahoo, B.S.**  Digitally signed by Kelly A. Dunnahoo, B.S.
Title: Laboratory Director
Date: 2023-07-12

July 12, 2023

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

Description : Well 20
Project : 0263 River Ranch Dairy

Lab No. : VI 2344245-001
Customer No.: 4018573
Reference : 40970
Sampled On : June 26, 2023 at 11:35
Sampled By : Henry
Received On : June 26, 2023 at 15:40
Matrix : Ag Water

Sample Results - Inorganic

| Constituent | Result | RL | Units | Note | Dil. | DQF | Sample Preparation | | | Sample Analysis | | | |
|-------------------------------|--------|-----|----------|------|------|-----|--------------------|-------|-----|-----------------|------------|-------|-----|
| | | | | | | | Date | Time | Who | Method | Date | Time | Who |
| Dairy Analysis | | | | | | | | | | | | | |
| Nitrogen, Total Kjeldahl | ND | 0.5 | mg/L | | 1 | U | 07/06/2023 | 12:12 | sta | EPA 351.2 | 07/11/2023 | 21:42 | lcr |
| Nitrate Nitrogen | ND | 0.4 | mg/L | | 1 | U | 06/27/2023 | 13:00 | lfs | SM 4500-NO3 F | 06/27/2023 | 15:16 | lfs |
| Nitrogen, Total as Nitrogen | ND | 0.5 | mg/L | | 1 | U | 07/06/2023 | 12:12 | sta | Calc. | 07/11/2023 | 21:42 | lcr |
| Nitrate + Nitrite as N | ND | 0.4 | mg/L | | 1 | U | 06/27/2023 | 13:00 | lfs | SM 4500-NO3 F | 06/27/2023 | 15:16 | lfs |
| Kjeldahl Nitrogen | ND | 0.5 | mg/L | | 1 | U | 07/06/2023 | 12:12 | sta | EPA 351.2 | 07/11/2023 | 21:42 | lcr |
| Conductivity | 199 | 1 | umhos/cm | | 1 | | 07/05/2023 | 14:10 | amm | SM 4500-H+B | 07/05/2023 | 21:10 | sta |
| Solids, Total Dissolved (TDS) | 140 | 20 | mg/L | | 1 | | 06/28/2023 | 12:45 | ctl | SM 2540 C | 06/29/2023 | 11:30 | ctl |

DQF Flags Definition:

U Constituent results were non-detect.

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

July 12, 2023
Innovative Ag Services, LLC

Lab No. : VI 2344245
Customer No. : 4018573

Quality Control - Wet Chem

| Constituent | Method | Date/ID | Type | Units | Conc. | QC Data | DQO | Note |
|--------------------------|----------|--|--|--|--|--|--|------|
| Wet Chem | | | | | | | | |
| E. C. | 2320B | (VI 2343664-001) | Dup | umhos/cm | | 0.2% | 5 | |
| Solids, Total Dissolved | 2540CE | 06/28/2023:207137CTL (SP 2311026-004) (SP 2311026-004) | Blank LCS Dup Dup | mg/L mg/L mg/L mg/L | 993.7 | ND 100% 0.3% 3.53% | <20 90-110 5 5 | |
| Nitrogen, Total Kjeldahl | 351.2 | 07/06/2023:207387STA (STK2338278-002) (VI 2344324-002) | Blank LCS MS MSD MSRPD MS MSD MSRPD | mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L | 12.00 12.00 12.00 12.00 12.00 12.00 12.00 12.00 | ND 93.4% 88.8% 92.3% 3.2% 72.8% 59.5% 20.3% | <0.5 73-124 54-136 54-136 ≤27 54-136 54-136 ≤27 | |
| Nitrate + Nitrite as N | 4500NO3F | 06/27/2023:207091LFS (STK2338308-001) | Blank LCS MS MSD MSRPD | mg/L mg/L mg/L mg/L mg/L | 11.22 5.609 5.609 5.609 5.609 | ND 100% 99.4% 99.4% 0.0% | <0.4 80-120 66-125 66-125 ≤30.4 | |
| Nitrate Nitrogen | 4500NO3F | 06/27/2023:207091LFS (STK2338308-001) | Blank LCS MS MSD MSRPD | mg/L mg/L mg/L mg/L mg/L | 11.22 5.609 5.609 5.609 5.609 | ND 100% 99.4% 99.4% 0.0% | <0.4 80-120 66-125 66-125 ≤30.4 | |

Definition

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

2344245

Laboratory Analysis Work Order

Nº 40970

ID: #0263

SITE NAME: River Ranch Dairy

Billing: IAS

P01
0.1°

LABORATORY: FGL

Authorized Copy Release to:

Innovative Ag Services LLC

(559) 587-2800

ANALYSIS TO BE COMPLETED:

Irrigation/Ground Water (ELAP Standards)

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

W8 Other: _____

Plant Tissue

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

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

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

P4 TN, %M

P5 % Moisture

P6 NIR

P7 Other: _____

| Sample ID | Description | Analysis | Date/Time | Sampled by | IAS USE ONLY: FIELD TESTS | | |
|------------|-------------|----------|------------|------------|---------------------------|----|------|
| | | | | | NH ₃ N * | pH | Temp |
| 1 Well 2.0 | Irr | W2 | 11:35 6/26 | Henry | — | | |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | | | | | | | |
| 6 | | | | | | | |
| 7 | | | | | | | |
| 8 | | | | | | | |

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

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

NOTES: _____

CHAIN OF CUSTODY RECORDING

| | Signature | Company | Received Date & Time | Relinquished Date & Time |
|-----------------|---|---------|----------------------|--------------------------|
| 1 st |  | IAS | | 2:00 6/26/23 |
| 2 nd | AJB | FGL | 6/26/23 1540 | |
| 3 rd | AJR | FGL | | 6/26/23 1558 |
| 4 th | SRO | FGL | 6/26/23 1558 | |

LABORATORY USE ONLY SRC FGL GLS

Logged In By: _____ Total Samples: _____ Laboratory #: _____

GLS MC 6/27/23 1214

October 19, 2023

Lab No. : VI 2346748

Customer No. : 4018573

Reference : 41462

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

Laboratory Report

Introduction: This report package contains a total of 5 pages divided into 3 sections:

- | | | |
|-----------------|-----------|---|
| Case Narrative | (1 page) | : An overview of the work performed at FGL. |
| Sample Results | (3 pages) | : Results for each sample submitted. |
| Quality Control | (1 page) | : Supporting Quality Control (QC) results. |

Case Narrative

This Case Narrative pertains to the following samples:

| Sample Description | Date Sampled | Date Received | FGL Lab No. | Matrix |
|--------------------|--------------|---------------|----------------|--------|
| Well 22 | 10/04/2023 | 10/04/2023 | VI 2346748-001 | AGW |
| Well 23 | 10/04/2023 | 10/04/2023 | VI 2346748-002 | AGW |
| Well 6 | 10/04/2023 | 10/04/2023 | VI 2346748-003 | AGW |

Sampling and Receipt Information:

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

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

Test Summary

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

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

KD: JRD

Approved By **Kelly A. Dunnahoo, B.S.**  Digitally signed by Kelly A. Dunnahoo, B.S.
Title: Laboratory Director
Date: 2023-10-20

Section: Case Narrative

Page 1 of 5

Page 1 of 5

| | | | | |
|--|--|---|--|--|
| 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. Lido 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 |
|--|--|---|--|--|

October 19, 2023

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

Description : Well 22
Project : 0263 River Ranch Dairy

Lab No. : VI 2346748-001
Customer No.: 4018573
Reference : 41462
Sampled On : October 4, 2023 at 07:30
Sampled By : Zeke
Received On : October 4, 2023 at 16:17
Matrix : Ag Water

Sample Results - Inorganic

| Constituent | Result | RL | Units | Note | Dil. | DQF | Sample Preparation | | | Sample Analysis | | | |
|-------------------------------|--------|-----|----------|------|------|-----|--------------------|-------|-----|-----------------|------------|-------|-----|
| | | | | | | | Date | Time | Who | Method | Date | Time | Who |
| Dairy Analysis | | | | | | | | | | | | | |
| Nitrogen, Total Kjeldahl | ND | 0.5 | mg/L | | 1 | U | 10/16/2023 | 06:40 | lcr | EPA 351.2 | 10/17/2023 | 17:11 | lcr |
| Nitrate Nitrogen | ND | 0.4 | mg/L | | 1 | U | 10/05/2023 | 16:25 | lfs | SM 4500-NO3 F | 10/05/2023 | 15:09 | lfs |
| Nitrogen, Total as Nitrogen | ND | 0.5 | mg/L | | 1 | U | 10/16/2023 | 06:40 | lcr | Calc. | 10/17/2023 | 17:11 | lcr |
| Nitrate + Nitrite as N | ND | 0.4 | mg/L | | 1 | U | 10/05/2023 | 16:25 | lfs | SM 4500-NO3 F | 10/05/2023 | 15:09 | lfs |
| Kjeldahl Nitrogen | ND | 0.5 | mg/L | | 1 | U | 10/16/2023 | 06:40 | lcr | EPA 351.2 | 10/17/2023 | 17:11 | lcr |
| Conductivity | 261 | 1 | umhos/cm | | 1 | I | 10/12/2023 | 08:04 | krh | SM 4500-H+B | 10/12/2023 | 11:27 | krh |
| Solids, Total Dissolved (TDS) | 200 | 20 | mg/L | | 1 | | 10/09/2023 | 09:40 | ctl | SM 2540 C | 10/10/2023 | 09:00 | ctl |

DQF Flags Definition:

U Constituent results were non-detect.

I The MS/MSD did not meet QC criteria.

I The RPD for the laboratory duplicate exceeded laboratory criteria.

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

October 19, 2023

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

Description : Well 23
Project : 0263 River Ranch Dairy

Lab No. : VI 2346748-002
Customer No.: 4018573
Reference : 41462
Sampled On : October 4, 2023 at 07:45
Sampled By : Zeke
Received On : October 4, 2023 at 16:17
Matrix : Ag Water

Sample Results - Inorganic

| Constituent | Result | RL | Units | Note | Dil. | DQF | Sample Preparation | | | Sample Analysis | | | |
|-------------------------------|--------|-----|----------|------|------|-----|--------------------|-------|-----|-----------------|------------|-------|-----|
| | | | | | | | Date | Time | Who | Method | Date | Time | Who |
| Dairy Analysis | | | | | | | | | | | | | |
| Nitrogen, Total Kjeldahl | ND | 0.5 | mg/L | | 1 | U1 | 10/16/2023 | 06:40 | lcr | EPA 351.2 | 10/17/2023 | 17:23 | lcr |
| Nitrate Nitrogen | 4.0 | 0.4 | mg/L | | 1 | | 10/05/2023 | 16:25 | lfs | SM 4500-NO3 F | 10/05/2023 | 15:12 | lfs |
| Nitrogen, Total as Nitrogen | 4.3 | 0.5 | mg/L | | 1 | I | 10/16/2023 | 06:40 | lcr | Calc. | 10/17/2023 | 17:23 | lcr |
| Nitrate + Nitrite as N | 4.3 | 0.4 | mg/L | | 1 | | 10/05/2023 | 16:25 | lfs | SM 4500-NO3 F | 10/05/2023 | 15:12 | lfs |
| Kjeldahl Nitrogen | ND | 0.5 | mg/L | | 1 | U1 | 10/16/2023 | 06:40 | lcr | EPA 351.2 | 10/17/2023 | 17:23 | lcr |
| Conductivity | 422 | 1 | umhos/cm | | 1 | I | 10/12/2023 | 08:04 | krh | SM 4500-H+B | 10/12/2023 | 11:30 | krh |
| Solids, Total Dissolved (TDS) | 270 | 20 | mg/L | | 1 | | 10/09/2023 | 09:40 | ctl | SM 2540 C | 10/10/2023 | 09:00 | ctl |

DQF Flags Definition:

U Constituent results were non-detect.

I The MS/MSD did not meet QC criteria.

I The RPD for the laboratory duplicate exceeded laboratory criteria.

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

October 19, 2023

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

Description : Well 6
Project : 0263 River Ranch Dairy

Lab No. : VI 2346748-003
Customer No.: 4018573
Reference : 41462
Sampled On : October 4, 2023 at 08:00
Sampled By : Zeke
Received On : October 4, 2023 at 16:17
Matrix : Ag Water

Sample Results - Inorganic

| Constituent | Result | RL | Units | Note | Dil. | DQF | Sample Preparation | | | Sample Analysis | | | |
|-------------------------------|--------|-----|----------|------|------|-----|--------------------|-------|-----|-----------------|------------|-------|-----|
| | | | | | | | Date | Time | Who | Method | Date | Time | Who |
| Dairy Analysis | | | | | | | | | | | | | |
| Nitrogen, Total Kjeldahl | ND | 0.5 | mg/L | | 1 | U1 | 10/16/2023 | 06:40 | lcr | EPA 351.2 | 10/17/2023 | 17:25 | lcr |
| Nitrate Nitrogen | 26.7 | 0.4 | mg/L | | 1 | | 10/05/2023 | 16:25 | lfs | SM 4500-NO3 F | 10/05/2023 | 15:14 | lfs |
| Nitrogen, Total as Nitrogen | 26.7 | 0.5 | mg/L | | 1 | I | 10/16/2023 | 06:40 | lcr | Calc. | 10/17/2023 | 17:25 | lcr |
| Nitrate + Nitrite as N | 26.7 | 0.4 | mg/L | | 1 | | 10/05/2023 | 16:25 | lfs | SM 4500-NO3 F | 10/05/2023 | 15:14 | lfs |
| Kjeldahl Nitrogen | ND | 0.5 | mg/L | | 1 | U1 | 10/16/2023 | 06:40 | lcr | EPA 351.2 | 10/17/2023 | 17:25 | lcr |
| Conductivity | 798 | 1 | umhos/cm | | 1 | | 10/12/2023 | 14:37 | krh | SM 4500-H+B | 10/12/2023 | 17:24 | krh |
| Solids, Total Dissolved (TDS) | 570 | 20 | mg/L | | 1 | I | 10/06/2023 | 12:30 | ctl | SM 2540 C | 10/09/2023 | 11:00 | ctl |

DQF Flags Definition:

U Constituent results were non-detect.

I The MS/MSD did not meet QC criteria.

I The RPD for the laboratory duplicate exceeded laboratory criteria.

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

October 19, 2023

Innovative Ag Services, LLC
 Lab No. : VI 2346748
 Customer No. : 4018573
Quality Control - Wet Chem

| Constituent | Method | Date/ID | Type | Units | Conc. | QC Data | DQO | Note |
|--------------------------|----------|--|--|--|--|---|--|--|
| Wet Chem | | | | | | | | |
| E. C. | 2320B | (VI 2346626-002) | Dup | umhos/cm | | 55.0% | 5 | 440 |
| | 2320B | (SP 2316192-001) | Dup | umhos/cm | | 0.09% | 5 | |
| Solids, Total Dissolved | 2540CE | 10/06/2023:211243CTL (CC 2383501-002) (CC 2383501-002) | Blank LCS Dup Dup | mg/L mg/L mg/L mg/L | 991.5 | ND 102% 2.54% 6.50% | <20 90-110 5 5 | 440 |
| | 2540CE | 10/09/2023:211328CTL (SP 2316848-001) | Blank LCS Dup | mg/L mg/L mg/L | 991.5 | ND 104% 1.67% | <20 90-110 5 | |
| Nitrogen, Total Kjeldahl | 351.2 | 10/16/2023:211697LCR (CH 2378341-001) (CH 2378341-002) | Blank LCS MS MSD MSRPD MS MSD MSRPD | mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L | 12.00 12.00 12.00 12.00 12.00 12.00 12.00 12.00 | ND 89.7% 85.6% 87.6% 2.3% 83.3% 79.3% 2.9% | <0.5 73-124 90-110 90-110 ≤20 90-110 90-110 ≤20 | 435 435 435 435 435 435 435 435 |
| Nitrate + Nitrite as N | 4500NO3F | 10/05/2023:211212LFS (VI 2346732-001) | Blank LCS MS MSD MSRPD | mg/L mg/L mg/L mg/L mg/L | 11.22 5.609 5.609 5.609 5.609 | ND 98.4% 90.2% 92.0% 0.7% | <0.4 80-120 66-125 66-125 ≤30.4 | |
| Nitrate Nitrogen | 4500NO3F | 10/05/2023:211212LFS (VI 2346732-001) | Blank LCS MS MSD MSRPD | mg/L mg/L mg/L mg/L mg/L | 11.22 5.609 5.609 5.609 5.609 | ND 98.4% 90.2% 92.0% 0.7% | <0.4 80-120 66-125 66-125 ≤30.4 | |

Definition

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

Explanation

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



Laboratory Analysis Work Order

Nº 41462

ID: # 0263

2346748

SITE NAME: RIVER RANCH DAIRY

Billing: IAS

ANALYSIS TO BE COMPLETED:

Irrigation/Ground Water (ELAP Standards)

W1 EC, NO₃N (Dom)

~~W2~~ EC, NO₃N, TDS, TN (Irr)

W3 NH₄-N (Ammonium)

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

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

W6 NO₃N, NO₂ (Dom ILRP, Annually)

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

W8 Other: _____

Q1 14.4 °C 14.0°

Plant Tissue

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

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

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

P4 TN, %M

P5 % Moisture

P6 NIR

P7 Other: _____

LABORATORY: FGL

Authorized Copy Release to:

Innovative Ag Services LLC

(559) 587-2800

Process Waste Water (lagoon)

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

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

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

L4 Other: _____

Manure

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

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

M3 Other: _____

Soil

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

S2 S1 + CEC, CaCO₃, OM, C:N, TN

S3 NO₃N, NH₄N

S4 Other: _____

| Sample ID | Description | Analysis | Date/Time | Sampled by | IAS USE ONLY: FIELD TESTS | | |
|-----------|-------------|----------|-----------|------------|---------------------------|----|------|
| | | | | | NH ₃ N * | pH | Temp |
| 1 WELL 22 | IRR | W2 | 10/4 7:30 | Zeke | | | |
| 2 23 | 1 | 1 | 7:45 | 1 | | | |
| 3 6 | 1 | 1 | 8:00 | 1 | | | |
| 4 | | | | | | | |
| 5 | | | | | | | |
| 6 | | | | | | | |
| 7 | | | | | | | |
| 8 | | | | | | | |

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

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

NOTES: _____

CHAIN OF CUSTODY RECORDING

| | Signature | Company | Received Date & Time | Relinquished Date & Time |
|-----------------|------------|---------|----------------------|--------------------------|
| 1 st | <u>L</u> | IAS | | 10-4-23 / 1:50 |
| 2 nd | <u>ADB</u> | FGL | 10/4/23 1602 | |
| 3 rd | <u>ADB</u> | FGL | | 10/4/23 1617 |
| 4 th | <u>ADB</u> | | 10/4/23 1617 | |

LABORATORY USE ONLY

Logged In By: GLS

Total Samples: 1128

Laboratory #: 775

GLS MLC 10/5/23

1128

November 2, 2023

Lab No. : VI 2346935

Customer No. : 4018573

Reference : 41518

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

Laboratory Report

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

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

Case Narrative

This Case Narrative pertains to the following samples:

| Sample Description | Date Sampled | Date Received | FGL Lab No. | Matrix |
|--------------------|--------------|---------------|----------------|--------|
| Well 1 | 10/10/2023 | 10/10/2023 | VI 2346935-001 | AGW |

Sampling and Receipt Information:

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

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

Test Summary

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

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

KD: JRD

Approved By **Kelly A. Dunnahoo, B.S.**  Digitally signed by Kelly A. Dunnahoo, B.S.
Title: Laboratory Director
Date: 2023-11-03

November 2, 2023

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

Description : Well 1
Project : 0263 River Ranch Dairy

Lab No. : VI 2346935-001
Customer No.: 4018573
Reference : 41518
Sampled On : October 10, 2023 at 13:10
Sampled By : Zeke
Received On : October 10, 2023 at 16:13
Matrix : Ag Water

Sample Results - Inorganic

| Constituent | Result | RL | Units | Note | Dil. | DQF | Sample Preparation | | | Sample Analysis | | | |
|-------------------------------|--------|-----|----------|------|------|-----|--------------------|-------|-----|-----------------|------------|-------|-----|
| | | | | | | | Date | Time | Who | Method | Date | Time | Who |
| Dairy Analysis | | | | | | | | | | | | | |
| Nitrogen, Total Kjeldahl | ND | 0.5 | mg/L | | 1 | U | 10/20/2023 | 11:25 | sta | EPA 351.2 | 10/26/2023 | 17:23 | lcr |
| Nitrate Nitrogen | ND | 0.4 | mg/L | | 1 | U | 10/11/2023 | 11:50 | lfs | SM 4500-NO3 F | 10/11/2023 | 15:30 | lfs |
| Nitrogen, Total as Nitrogen | ND | 0.5 | mg/L | | 1 | U | 10/20/2023 | 11:25 | sta | Calc. | 10/26/2023 | 17:23 | lcr |
| Nitrate + Nitrite as N | ND | 0.4 | mg/L | | 1 | U | 10/11/2023 | 11:50 | lfs | SM 4500-NO3 F | 10/11/2023 | 15:30 | lfs |
| Kjeldahl Nitrogen | ND | 0.5 | mg/L | | 1 | U | 10/20/2023 | 11:25 | sta | EPA 351.2 | 10/26/2023 | 17:23 | lcr |
| Conductivity | 340 | 1 | umhos/cm | | 1 | | 11/02/2023 | 09:02 | krh | SM 4500-H+B | 11/02/2023 | 14:28 | krh |
| Solids, Total Dissolved (TDS) | 220 | 20 | mg/L | | 1 | | 10/13/2023 | 11:00 | ctl | SM 2540 C | 10/16/2023 | 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

November 2, 2023
Innovative Ag Services, LLC

Lab No. : VI 2346935
 Customer No. : 4018573

Quality Control - Wet Chem

| Constituent | Method | Date/ID | Type | Units | Conc. | QC Data | DQO | Note |
|--------------------------|----------|--|--|--|---|--|---|--------------------------|
| Wet Chem | | | | | | | | |
| E. C. | 2320B | (CC 2383609-002) | Dup | umhos/cm | | 0.1% | 5 | |
| Solids, Total Dissolved | 2540CE | 10/13/2023:211549CTL (STK2354061-001) (STK2354061-001) | Blank LCS Dup Dup | mg/L mg/L mg/L mg/L | 991.5 | ND 101% 1.64% 0.4% | <20 90-110 5 5 | |
| Nitrogen, Total Kjeldahl | 351.2 | 10/20/2023:211875STA (VI 2346935-001) (CC 2383569-001) | Blank LCS MS MSD MSRPD MS MSD MSRPD | mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L | 12.00 12.00 12.00 12.00 0.7% 12.00 12.00 12.00 | ND 94.6% 88.4% 87.8% ≤20 87.5% 83.4% 4.6% | <0.5 73-124 90-110 90-110 90-110 90-110 90-110 ≤20 | 435 435 435 435 |
| Nitrate + Nitrite as N | 4500NO3F | 10/11/2023:211472LFS (CH 2378768-001) | Blank LCS MS MSD MSRPD | mg/L mg/L mg/L mg/L mg/L | 11.22 5.609 5.609 5.609 | ND 100% 98.0% 99.3% 1.2% | <0.4 80-120 66-125 66-125 ≤30.4 | |
| Nitrate Nitrogen | 4500NO3F | 10/11/2023:211472LFS (CH 2378768-001) | Blank LCS MS MSD MSRPD | mg/L mg/L mg/L mg/L mg/L | 11.22 5.609 5.609 5.609 | ND 100% 98.0% 99.3% 1.2% | <0.4 80-120 66-125 66-125 ≤30.4 | |

Definition

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

Explanation

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

Laboratory Analysis Work Order

ID: # 0247

12.2nd ROI
ID# 407

JAW

Nº 41518

SITE NAME: RIVER RANCH DATA 4

Billing: IAS

LABORATORY: FGL

Authorized Copy Release to:

Innovative Ag Services LLC

(559) 587-2800

ANALYSIS TO BE COMPLETED:

Irrigation/Ground Water (ELAP Standards)

W1 EC, NO₃N (Dom)

W2 EC, NO₃N, TDS, TN (Irr)

W3 NH₄-N (Ammonium)

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

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

W6 NO₃N, NO₂ (Dom ILRP, Annually)

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

W8 Other: _____

23/10/23
New Lab

Plant Tissue

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

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

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

P4 TN, %M

P5 % Moisture

P6 NIR

P7 Other: _____

Process Waste Water (lagoon)

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

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

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

L4 Other: _____

Manure

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

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

M3 Other: _____

Soil

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

S2 S1 + CEC, CaCO₃, OM, C:N, TN

S3 NO₃N, NH₄N

S4 Other: _____

| Sample ID | Description | Analysis | Date/Time | Sampled by | IAS USE ONLY: FIELD TESTS | | |
|-----------|-------------|----------|---------------|------------|---------------------------|----|------|
| | | | | | NH ₃ N * | pH | Temp |
| 1 WELL 1 | IRR | W2 | 10-10 / 11:10 | Zelke | | | |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | | | | | | | |
| 6 | | | | | | | |
| 7 | | | | | | | |
| 8 | | | | | | | |

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

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

NOTES: _____

CHAIN OF CUSTODY RECORDING

| | Signature | Company | Received Date & Time | Relinquished Date & Time |
|-----------------|-----------|---------|----------------------|--------------------------|
| 1 st | E | IAS | | 10-10-23 / 3:20 |
| 2 nd | AJR | FGL | 10/10/23 15:59 | |
| 3 rd | AJR | FGL | | 10/10/23 16:13 |
| 4 th | LOD | FGL | 10-10-2023 16:13 | |

Laboratory Use Only
Rec'd GLS
Logged In By: _____ Total Samples: _____ Laboratory #: _____

JAW

FGL

10-10-2023 17:30

10:13 JAW

10/11/23 11:05

December 18, 2023

Lab No. : VI 2348140

Customer No. : 4018573

Reference : 42125

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

Laboratory Report

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

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

Case Narrative

This Case Narrative pertains to the following samples:

| Sample Description | Date Sampled | Date Received | FGL Lab No. | Matrix |
|--------------------|--------------|---------------|----------------|--------|
| Well 16 | 12/04/2023 | 12/04/2023 | VI 2348140-001 | AGW |

Sampling and Receipt Information:

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

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

Test Summary

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

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

KD: JRD

Approved By **Kelly A. Dunnahoo, B.S.**  Digitally signed by Kelly A. Dunnahoo, B.S.
Title: Laboratory Director
Date: 2023-12-18

December 18, 2023

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

Description : Well 16
Project : 0263 River Ranch Dairy

Lab No. : VI 2348140-001
Customer No.: 4018573
Reference : 42125
Sampled On : December 4, 2023 at 08:00
Sampled By : Zeke
Received On : December 4, 2023 at 16:10
Matrix : Ag Water

Sample Results - Inorganic

| Constituent | Result | RL | Units | Note | Dil. | DQF | Sample Preparation | | | Sample Analysis | | | |
|-------------------------------|--------|-----|----------|------|------|-----|--------------------|-------|-----|-----------------|------------|-------|-----|
| | | | | | | | Date | Time | Who | Method | Date | Time | Who |
| Dairy Analysis | | | | | | | | | | | | | |
| Nitrogen, Total Kjeldahl | ND | 0.5 | mg/L | | 1 | U | 12/12/2023 | 08:00 | sta | EPA 351.2 | 12/13/2023 | 16:50 | lcr |
| Nitrate Nitrogen | ND | 0.4 | mg/L | | 1 | U | 12/05/2023 | 13:30 | lfs | SM 4500-NO3 F | 12/05/2023 | 15:19 | lfs |
| Nitrogen, Total as Nitrogen | ND | 0.5 | mg/L | | 1 | U | 12/12/2023 | 08:00 | sta | Calc. | 12/13/2023 | 16:50 | lcr |
| Nitrate + Nitrite as N | ND | 0.4 | mg/L | | 1 | U | 12/05/2023 | 13:30 | lfs | SM 4500-NO3 F | 12/05/2023 | 15:19 | lfs |
| Kjeldahl Nitrogen | ND | 0.5 | mg/L | | 1 | U | 12/12/2023 | 08:00 | sta | EPA 351.2 | 12/13/2023 | 16:50 | lcr |
| Conductivity | 170 | 1 | umhos/cm | | 1 | | 12/07/2023 | 07:47 | krh | SM 4500-H+B | 12/07/2023 | 10:59 | krh |
| Solids, Total Dissolved (TDS) | 210 | 20 | mg/L | | 1 | | 12/06/2023 | 09:45 | ctl | SM 2540 C | 12/07/2023 | 11:00 | ctl |

DQF Flags Definition:

U Constituent results were non-detect.

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

December 18, 2023

Innovative Ag Services, LLC
Lab No. : VI 2348140
Customer No. : 4018573
Quality Control - Wet Chem

| Constituent | Method | Date/ID | Type | Units | Conc. | QC Data | DQO | Note |
|--------------------------|----------|--|--|--|--|---|--|------|
| Wet Chem | | | | | | | | |
| E. C. | 2320B | (VI 2348142-001) | Dup | umhos/cm | | 0.2% | 5 | |
| Solids, Total Dissolved | 2540CE | 12/06/2023:213726CTL (SP 2320049-001) (SP 2320049-001) | Blank LCS Dup Dup | mg/L mg/L mg/L mg/L | 991.5 | ND 103% 1.91% 0.3% | <20 90-110 5 5 | |
| Nitrogen, Total Kjeldahl | 351.2 | 12/12/2023:213992STA (SP 2319783-001) (VI 2348053-002) | Blank LCS MS MSD MSRPD MS MSD MSRPD | mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L | 12.00 12.00 12.00 12.00 12.00 12.00 12.00 12.00 | ND 95.8% 91.8% 90.7% 1.2% 84.4% 84.3% 0.1% | <0.5 73-124 90-110 90-110 ≤20 <1/4 <1/4 ≤20 | |
| Nitrate + Nitrite as N | 4500NO3F | 12/05/2023:213707LFS (VI 2348086-001) | Blank LCS MS MSD MSRPD | mg/L mg/L mg/L mg/L mg/L | 11.22 5.609 5.609 5.609 5.609 | ND 96.6% 93.5% 95.9% 2.5% | <0.4 80-120 66-125 66-125 ≤30.4 | |
| Nitrate Nitrogen | 4500NO3F | 12/05/2023:213707LFS (VI 2348086-001) | Blank LCS MS MSD MSRPD | mg/L mg/L mg/L mg/L mg/L | 11.22 5.609 5.609 5.609 5.609 | ND 96.6% 93.5% 95.9% 2.5% | <0.4 80-120 66-125 66-125 ≤30.4 | |

Definition

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



Laboratory Analysis Work Order

Nº 42125

ID: # 0263

2348140

SITE NAME: River Ranch Dairy

Billing: 205

ANALYSIS TO BE COMPLETED:

Irrigation/Ground Water (ELAP Standards)

W1 EC, NO₃N (Dom)

~~W2~~ EC, NO₃N, TDS, TN (Irr)

W3 NH₄-N (Ammonium)

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

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

W6 NO₃N, NO₂ (Dom ILRP, Annually)

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

W8 Other: _____

Q1 J. av X 2020

Plant Tissue

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

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

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

P4 TN, %M

P5 % Moisture

P6 NIR

P7 Other: _____

| Sample ID | Description | Analysis | Date/Time | Sampled by | IAS USE ONLY: FIELD TESTS | | |
|-----------|-------------|----------|-------------|------------|---------------------------|----|------|
| | | | | | NH ₃ N * | pH | Temp |
| 1 Well 16 | 1pp | W2 | 12-4 / 8:00 | Zek | | | |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | | | | | | | |
| 6 | | | | | | | |
| 7 | | | | | | | |
| 8 | | | | | | | |

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

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

NOTES:

CHAIN OF CUSTODY RECORDING

| | Signature | Company | Received Date & Time | Relinquished Date & Time |
|-----------------|-----------|---------|----------------------|--------------------------|
| 1 st | | EAS | | 12-4-23 / 8:00 |
| 2 nd | | FGL | 12-4-23 15:50 | |
| 3 rd | | FGL | | 12-4-23 16:10 |
| 4 th | | | 12-4-23 16:10 | |

LABORATORY USE ONLY

Logged In By:

Total Samples: _____

Laboratory #: _____

GCS mrc 12/15/23 1155