



Livingston Dairy Consulting, Inc.

1635 E. Prosperity Ave., Ste B, Tulare
559-687-1440

Vitor Borba #2 Dairy
16452 11th Avenue Hanford, CA 93230

- | | | |
|-------------------------------------|------------------------------|--|
| <input checked="" type="checkbox"/> | Annual Report | |
| <input checked="" type="checkbox"/> | Water Analysis Samples | |
| <input checked="" type="checkbox"/> | Manure Manifest | |
| <input checked="" type="checkbox"/> | Facility / Land Map | |
| <input checked="" type="checkbox"/> | CCA Nitrogen Retrofit Report | |
| | | |
| | | |

GEO Tracker Confirmation #

Date:

Facility Info

Reporting Period: 1/1/2023 to 12/31/2023

Name of the Facility

Dairy Name: Vitor Borba #2 Dairy

Facility Address: 16452 11th Avenue Hanford, CA 93230

Original Operation Date:

Facility APN's: x028 x150 x023 xxxx

RWQCB Basin Plan Designation: Tulare Lake Basin

Check if any information has changed

Owner(s)

Owner(s) Name: Adao & Ozzie Fernandes

Mailing Address: 16452 11th Avenue Hanford, CA 93230

Home Phone Number:

Cell Phone Number: 559-707-1783

Check if any information has changed

Operator(s)

Operator(s) Name: Vitor Borba (Leases DAIRY SITE ONLY)

Mailing Address: 7721 Flint Avenue Hanford, CA 93230

Home Phone Number:

Cell Phone Number: 559-904-2583

Check if any information has changed

Herd Information

	Milk Cows	Dry Cows	Bred Heifers (12-24 mo)	Heifers (3-12 mo)	Calves (0-3 mo)
Open Confinement:	-	174	685	690	-
Number Under Roof	963	-	-	-	-
Maximum Number	963	174	685	690	
Average Number	963	174	685	690	
Average Live Weight (lbs)	950	975	660	370	

Average Milk Production: 55

Predominant Milk Cow Breed: Jersey-Holstein Cross

Manure Generated:

Total manure excreted by the herd:

4,025.92 @40% Moisture ton/yr

Total nitrogen from manure:

313,324 lbs

23,459 lbs

88,588 lbs

Total salt from manure: - lbs

Process Wastewater Generated:

Process wastewater generated: 14,059,800 gal

Total nitrogen generated: 93,412 lbs

37,923 lbs

172,863 lbs

1,169,382 lbs

After Ammonia (30% loss applied)

219,327 lbs per reporting period

List of Land Application Areas

List of Fresh Water Sources

Source Description	Type	Subsurface (Tile) Drainage Sources
Barn 1	Ground Water	No
Barn 2	Ground Water	No
Heifer Dom	Ground Water	No
Cat Well	Ground Water	No
Well 1	Ground Water	No
Well 3	Ground Water	No
Canal	Surface Water	No

(WINTER) PLANT TISSUE ANALYSIS (Recorded As Received)

Detectable Lim Valley Tech

Deltaville

Detectable Limits

Valley Tech

Delicate

210

(SUMMER) PLANT TISSUE ANALYSIS (Recorded As Received)

PLANT TISSUE ANALYSIS (Recorded As Received)											
(SUMMER)		Crop	Moist %	N%	TP %	TK%	Salt	TFS	Sample #:	Date:	Source
1 (Trees)	Trees, Pistachios	-	-	-	-	-	-	-	Trees	-	-
2 (Trees)	Trees, Pistachios	-	-	-	-	-	-	-	Trees	-	-
3	Corn, Silage	73.20	0.28	0.06	0.60	-	-	9.78	9-26H66867	09/26/23	Valley Tech
4	Corn, Silage	72.60	0.35	0.05	0.60	-	-	10.00	9-26H66867	09/26/23	Valley Tech
5	Corn, Silage	72.40	0.26	0.07	0.47	-	-	6.89	9-26H66867	09/26/23	Valley Tech
6	Corn, Silage	74.20	0.33	0.09	0.37	-	-	6.11	10-10H68666	10/10/23	Valley Tech

Detectable Limits
Valley Tech
Dellavalle

Winter Crops & Harvest

*Detectable L Valley Tech
Dellavalle*

Detectable Valley Tech
Dellavalle

Well / Canal Analysis

Soil Analysis (Winter)

Detectable limits

<i>Deltavalle</i>	0.1
<i>Valley Tech</i>	0.1

DellaValle

Soil Analysis (Summer)

Detectable Limits
Valley Tech
DellaValle

Nutrient Import & Export

Nutrient Export-Did you sell, give away or otherwise remove slurry, process water or dry manure from your property?

No
X

Yes, Manifest attached (Attachment D)

Nutrient Import

No Dry manure nutrient imports entered

No Process wastewater nutrient imports entered

No Process wastewater nutrient imports entered
No Commercial or other nutrient imports entered

Total Dry Manure Exported

Total Process Water Exported

Process Water & Manure Analysis

Process Water															
Quarters:	NH4N (mg/L)	TKN (mg/L)	TP (mg/L)	TK (mg/L)	NO3N (mg/L)	NH3N (mg/L)	Ca (mg/L)	Mg (mg/L)	Na (mg/L)	CO3 (mg/L)	HCO3 (mg/L)	SO4 (mg/L)	Cl. (mg/L)	EC (ds/m)	TDS (mg/L)
1	520.0	677.0	131.0	1,210.0	1.0	-	-	-	-	-	-	-	-	11	7,040
2	670.0	678.0	121.0	1,210.0	1.0	-	-	-	-	-	-	-	-	13	8,470
3	444.0	453.0	48.9	546.0	1.0	-	34.5	106.0	309.0	0.0	77.7	91.1	9.3	11	7,090
4	474.0	483.0	105.0	567.0	1.0	-	-	-	-	-	-	-	-	-	6,080

Detectable Limits

Valley Tech	2.0	5.0	0.1	0.2	0.01	0.05	0.4	0.10	0.9	3	0.01	0.03	0.10	10
Dellavalle	0.2	0.7	0.02	0.2	0.01	0.05	0.4	0.10	0.9	3	0.01	0.03	0.001	10

Qtr	Sample #:	Sample Date:	Source	Inorg N				Org N		P205		K20	
				lbs / Ac In				Material Type					
1	3-24L44745	3/24/2023	Valley Tech	118.1	35.6	68.0	330.4						
2	5-11L49515	5/11/2023	Valley Tech	152.1	1.8	62.8	330.4						
3	8-17L62130	8/17/2023	Valley Tech	100.9	2.0	25.4	149.1						
4	10-4L67897	10/4/2023	Valley Tech	107.7	2.0	54.5	154.8						

Description	Sample #:	Date:	As Is / Dry Weight		Source	Material Type
			Dry Weight	Dry Weight		
Manure	5-11M49494	5/11/2023			Valley Tech	Corral Solids
Manure	10-4M67855	10/4/2023			Valley Tech	Corral Solids

Dry Manure: (As Rec'd)	TN %	TP %	TK %	Ca	Mg	Na	S	Cl	Salt	TFS	Moisture %
Corral	1.20	0.42	1.63	-	-	-	-	-	-	-	29.00
Corral	1.13	0.16	0.57	0.88	0.39	0.64	0.20	0.37	-	82.20	41.50

Detectable Limits

Valley Tech	0.01%	0.02%	0.001%	0.001%	0.000%	0.001%	0.001%	0.001%	0.001%	0.001%	0.001%
Dellavalle	0.01%	0.01%	0.003%	0.001%	-	-	-	-	-	-	-

Nutrient Applications

Field Name/Number:

1 (Trees)

Arres:

74.00

Dry Weight
As Received

Field Name/Number: 1 (Trees)

Acres: 74

Nutrients Applied	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	0.1	0.0	0.0	295.8
Nutrients Removed at Harvest	-98.4	-14.7	-108.2	0.0
Nutrient Balance	-98.2	-14.7	-108.2	295.8

Winter Nitrogen Crop App / Use Ratio: 0.07

Summer Nitrogen Crop App / Use Ratio: #N/A

Field Name/Number: 1 (Trees) Acres: 74

Winter Crop Nutrient Summary :	Trees, Pistachios Applied	N
W. Manure App.	- T/Ac	-
W. Comm Fert App.	- lbs/Ac	-
Process Water	Q1 - Ac In /Ac	-
	Q2 - Ac In /Ac	-
Well Water	4.79 Ac In /Ac	0.0
Canal	29.4 Ac In /Ac	0.1
Atr. Depos.	Yes	7.0
W. Planting	10/1/20	
W. Harvest	11/1/23 1.8 T/Ac	(98.4) (33.7) (129.8)

Summer Crop Nutrient Summary :	Trees, Pistachios Applied	N
S. Manure App.	- T/Ac	-
S. Comm Fert App.	- lbs/Ac	-
Process Water	Q2 - Ac In /Ac	-
	Q3 - Ac In /Ac	-
	Q4 - Ac In /Ac	-
Well Water	- Ac In /Ac	0
Canal	- Ac In /Ac	-
Atr. Depos.	#N/A	#N/A
S. Planting	#N/A	
S. Harvest	#N/A #N/A T/Ac	#N/A #N/A #N/A

Nutrient Applications

Field Name/Number:

2 (Trees)

Acres:

73.00

Field Name/Number: 2 (Trees) Acres: 73.00

Nutrients Applied	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	0.1	0.0	0.0	295.9
Nutrients Removed at Harvest	-98.4	-6.4	-89.8	0.0
Nutrient Balance	-98.2	-6.4	-89.8	295.9

Winter Nitrogen Crop App / Use Ratio: 0.07 Summer Nitrogen Crop App / Use Ratio: #N/A

Field Name/Number: 2 (Trees) Acres: 73

Winter Crop Nutrient Summary :	Trees, Pistachios Applied	N
W. Manure App.	- T/Ac	- - -
W. Comm Fert App.	- lbs/Ac	- -
Process Water	Q1 - Ac In /Ac	- - -
	Q2 - Ac In /Ac	- - -
Well Water	4.8 Ac In /Ac	0.0
Canal	29.7 Ac In /Ac	0.1
Atm. Depos.	Yes	7.0
W. Planting	10/1/20	
W. Harvest	11/1/23 1.8 T/Ac	(98.4) (33.7) (129.8)

Summer Crop Nutrient Summary :	Trees, Pistachios Applied	N
S. Manure App.	- T/Ac	- - -
S. Comm Fert App.	- lbs/Ac	- -
Process Water	Q2 - Ac In /Ac	- - -
	Q3 - Ac In /Ac	- - -
	Q4 - Ac In /Ac	- - -
Well Water	- Ac In /Ac	-
Canal	- Ac In /Ac	-
Atm. Depos.	#N/A	#N/A
S. Planting	#N/A	
S. Harvest	#N/A	T/Ac #N/A #N/A #N/A

Nutrient Applications

Field Name/Number:

3

Acres:

79,00

Field Name/Number: 3Acres: 79.00

Nutrients Applied	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	438.4	54.2	713.4	5125.2
Nutrients Removed at Harvest	-352.3	-35.3	-466.4	0.0
Nutrient Balance	86.0	18.9	247.0	5125.2

Winter Nitrogen Crop App / Use Ratio: 1.24Summer Nitrogen Crop App / Use Ratio: 1.33Field Name/Number: 3 Acres: 79

Winter Crop	Wheat, Silage		N		
Nutrient Summary :	Applied				
W. Manure App.	5.1	T/Ac	48.6	97.1	198.4
W. Comm Fert App.	-	Ibs/Ac	-	-	-
Process Water	Q1	1.6	Ac In /Ac	173.0	109.2
	Q2	-	Ac In /Ac	-	-
Well Water	-	Ac In /Ac	-	-	-
Canal	18.1	Ac In /Ac	0.1	-	-
Atm. Depos.	Yes		7.0	-	-
W. Planting	10/24/22				
W. Harvest	5/23/23	23.1	T/Ac	(184.0)	(96.5)
					(241.0)

Summer Crop	Corn, Silage		N		
Nutrient Summary :	Applied				
S. Manure App.	5.1	T/Ac	46.0	38.0	69.0
S. Comm Fert App.	-	Ibs/Ac	-	-	-
Process Water	Q2	-	Ac In /Ac	-	-
	Q3	1.6	Ac In /Ac	170.6	40.3
	Q4	-	Ac In /Ac	-	-
Well Water	-	Ac In /Ac	(0.0)	-	-
Canal	30.6	Ac In /Ac	0.1	-	-
Atm. Depos.	Yes		7.0	-	-
S. Planting	6/22/23				
S. Harvest	9/25/23	30.2	T/Ac	(168.3)	(89.0)
					(433.2)

Nutrient Applications

Field Name/Number:

4

Acres:

79.00

Date	Event / Source	Dry Manure Applied (tons/ac)	Moist. %	Chem Fert total lbs	Fresh Water Applied (ac-in/ac)	Lagoon Water Applied (ac-in/ac)	Lab Sample Data					Yield	
							N (lbs/Ac)	Total P (lbs/Ac)	Total K (lbs/Ac)	Salt (lbs/Ac)	TFS	%	Expected Yield (tons/ac)
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
10/10/22	W. Planting	-	-	-	-	-	-	-	-	-	-	-	-
11/2/22	Canal	-	-	-	5.30	-	0.0	-	-	2	-	-	-
11/2/22	Process Water	-	-	-	-	1.55	166.6	45.9	424.2	2,468	-	-	-
1/23/23	Canal	-	-	-	5.44	-	0.0	-	-	2	-	-	-
1/23/23	Process Water	-	-	-	-	1.59	114.2	47.1	434.9	2,531	-	-	-
4/13/23	Canal	-	-	-	6.24	-	0.0	-	-	2	-	-	-
5/20/23	W. Harvest	-	-	-	-	-	(228.6)	(58.0)	(223.5)	-	-	-	22.10
-	-	-	-	-	-	-	-	-	-	-	-	-	-
5/21/23	S. Manure App.	10.13	-	-	-	-	91.9	33.2	114.9	-	-	-	-
5/24/23	Canal	-	-	-	6.38	-	0.0	-	-	2	-	-	-
6/16/23	S. Planting	-	-	-	-	-	-	-	-	-	-	-	-
6/20/23	Canal	-	-	-	6.11	-	0.0	-	-	2	-	-	-
7/14/23	Canal	-	-	-	5.37	-	0.0	-	-	2	-	-	-
7/14/23	Process Water	-	-	-	-	1.57	168.5	17.4	193.8	2,517	-	-	-
8/7/23	Canal	-	-	-	6.31	-	0.0	-	-	2	-	-	-
8/31/23	Canal	-	-	-	6.44	-	0.0	-	-	2	-	-	-
9/26/23	S. Harvest	-	-	-	-	-	(205.3)	(32.3)	(352.4)	-	-	-	29.50
Totals:		10.1		0	47.59	4.70	108	53	592	7,530	0.00	0	51.60

Field Name/Number: 4 Acres: 79.00

Nutrients Applied	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Removed at Harvest	541.5	62.6	969.5	7530.4
Nutrient Balance	-433.9	-39.4	-478.1	0.0
	107.6	23.2	491.4	7530.4

Winter Nitrogen Crop App / Use Ratio: 1.26 Summer Nitrogen Crop App / Use Ratio: 1.30

Field Name/Number: 4 Acres: 79

Winter Crop	Wheat, Silage				
Nutrient Summary :	Applied	N			
W. Manure App.	-	T/Ac	-	-	-
W. Comm Fert App.	-	Ibs/Ac	-	-	-
Process Water	Q1	3.1	Ac In /Ac	280.9	213.0
	Q2	-	Ac In /Ac	-	-
Well Water		-	Ac In /Ac	-	-
Canal		17.0	Ac In /Ac	0.1	
Atm. Depos.	Yes			7.0	
W. Planting	10/10/22				
W. Harvest	5/20/23	22.1	T/Ac	(228.6)	(132.8)
					(268.2)

Summer Crop	Corn, Silage				
Nutrient Summary :	Applied	N			
S. Manure App.	10.1	T/Ac	91.9	76.0	137.9
S. Comm Fert App.	-	Ibs/Ac	-	-	-
Process Water	Q2	-	Ac In /Ac	-	-
	Q3	1.6	Ac In /Ac	168.5	39.8
	Q4	-	Ac In /Ac	-	-
Well Water		-	Ac In /Ac	(0.0)	
Canal		30.6	Ac In /Ac	0.1	
Atm. Depos.	Yes			7.0	
S. Planting	6/16/23				
S. Harvest	9/26/23	29.5	T/Ac	(205.3)	(74.0)
					(422.9)

Nutrient Applications

Field Name/Number:

5

Acres:

50.00

Field Name/Number: 5 Acres: 50.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	412.8	48.6	698.0	7244.7
Nutrients Removed at Harvest	-342.9	-39.8	-390.3	0.0
Nutrient Balance	69.9	8.8	307.8	7244.7

Winter Nitrogen Crop App / Use Ratio: 1.26 Summer Nitrogen Crop App / Use Ratio: 1.23

Field Name/Number: 5 Acres: 50

Winter Crop	Wheat, Silage	Applied				N
Nutrient Summary :						
W. Manure App.		5.0	T/Ac	48.0	95.9	196.0
W. Comm Fert App.		-	Ibs/Ac	-	-	-
Process Water	Q1	1.7	Ac In /Ac	185.0	116.7	565.0
	Q2	-	Ac In /Ac	-	-	-
Well Water		18.2	Ac In /Ac	0.0	-	-
Canal		-	Ac In /Ac	-	-	-
Atm. Depos.		Yes		7.0	-	-
W. Planting	10/26/22					
W. Harvest	5/24/23	22.4	T/Ac	(190.9)	(115.5)	(226.9)

Summer Crop	Corn, Silage	Applied				N
Nutrient Summary :						
S. Manure App.		-	T/Ac	-	-	-
S. Comm Fert App.		-	Ibs/Ac	-	-	-
Process Water	Q2	-	Ac In /Ac	-	-	-
	Q3	1.7	Ac In /Ac	179.7	42.4	248.1
	Q4	-	Ac In /Ac	-	-	-
Well Water		37.6	Ac In /Ac	0.1	-	-
Canal		-	Ac In /Ac	-	-	-
Atm. Depos.		Yes		7.0	-	-
S. Planting	6/14/23					
S. Harvest	9/26/23	29.6	T/Ac	(152.0)	(93.5)	(337.2)

Nutrient Applications

Field Name/Number:

6

Acres:

70.00

Field Name/Number: 6 Acres: 70.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	426.7	52.9	692.3	4970.6
Nutrients Removed at Harvest	-372.3	-41.6	-344.3	0.0
Nutrient Balance	54.4	11.3	348.0	4970.6

Winter Nitrogen Crop App / Use Ratio: 1.20 Summer Nitrogen Crop App / Use Ratio: 1.17

Field Name/Number: 6 Acres: 70

Winter Crop Wheat, Silage

Nutrient Summary :	Applied	N			
W. Manure App.	5.0 T/Ac	48.0	95.9	196.0	
W. Comm Fert App.	- lbs/Ac	-	-	-	
Process Water	Q1 1.5 Ac In /Ac	165.5	104.4	505.4	
	Q2 - Ac In /Ac	-	-	-	
Well Water	- Ac In /Ac	-	-	-	
Canal	17.9 Ac In /Ac	0.1			
Atm. Depos.	Yes	7.0			
W. Planting	10/27/22				
W. Harvest	5/25/23 21.6 T/Ac	(183.5)	(105.8)	(242.7)	

Summer Crop Corn, Silage

Nutrient Summary :	Applied	N			
S. Manure App.	5.0 T/Ac	45.4	37.5	68.1	
S. Comm Fert App.	- lbs/Ac	-	-	-	
Process Water	Q2 - Ac In /Ac	-	-	-	
	Q3 1.6 Ac In /Ac	167.6	39.5	231.3	
	Q4 - Ac In /Ac	-	-	-	
Well Water	- Ac In /Ac	0.0			
Canal	37.0 Ac In /Ac	0.2			
Atm. Depos.	Yes	7.0			
S. Planting	6/23/23				
S. Harvest	10/2/23 28.8 T/Ac	(188.7)	(112.3)	(255.0)	

Notes

Without allowance for the significant amount of rainfall during the winter months of 2022/2023, the irrigation logs on each field page of the annual report, reflect canal and/or well used only during that time frame. The facility did not irrigate during the "Significant Storm Events".

It is inaccurate to present "salt" application without acknowledging that there is substantial uptake and utilization of "salts" by crops. If it is possible to calculate "salt" application, it is also possible to calculate "salt" utilization. That calculation should be included in this report. To calculate "salt" utilization is a lengthy process and cannot be done with the constituents required in the Revised General Order sampling requirements.

The signature(s) affixed to this report does not affirmatively refer to those references to "salt" that we know to be incorrect.

W/B _____
(Initial)

Exception Reporting

Manure , Process Water and Other Dairy Waste Discharges:

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

No, manure or process water discharges occurred during the reporting period

Storm Water Discharges:

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

No, storm water discharges occurred during the reporting period

Land Application Area To Surface Water Discharges:

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

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

Nutrient Management Plan (NMP) & Written Agreement Statement

Nutrient Management Plan Statement:

Was the facility NMP updated in the reporting period?

Yes _____

Was the facility's NMP developed and approved by a certified nutrient management specialist?

Yes _____

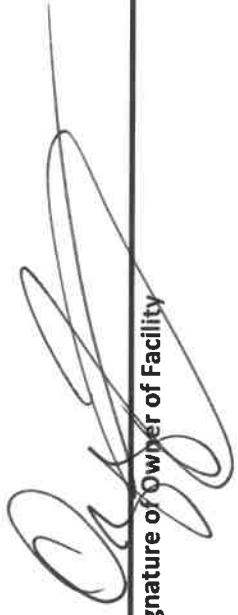
Written Agreements:

Are there any written agreements with third parties to receive manure or process water that are new or were revised within the reporting period?

No _____

Owner and/or Operator Certification

*I certify under penalty of law that all information submitted as part of this document is accurate and true. Certification signatures by a California Registered Professional have been supplied as needed in Part II. I have personally examined and am familiar with the information submitted in Parts I and II of this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.



Signature of Owner of Facility

Adao & Ozzie Fernandes

Print Name

Vitor Borba (Leases DAIRY SITE ONLY)

Print Name



5-9-24

Date

May 15, 2023

Lab No. : VI 2342522
Customer No. : 4018505

Livingston Dairy Consulting, Inc
1635 E. Prosperity Suite B
Tulare, CA 93274

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
#1	04/26/2023	04/26/2023	VI 2342522-001	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: 2023-05-17

Section: Case Narrative

Page 1 of 3

Page 1 of 3

Corporate Offices & Laboratory 853 Corporation Street Santa Paula, CA 93060 TEL: (805)392-2000 Env FAX: (805)525-4172 / Ag FAX: (805)392-2063 CA ELAP Certification No. 1573	Office & Laboratory 2500 Stagecoach Road Stockton, CA 95215 TEL: (209)942-0182 FAX: (209)942-0423 CA ELAP Certification No. 1563	Office & Laboratory 563 E. Lindo Avenue Chico, CA 95926 TEL: (530)343-5818 FAX: (530)343-3807 CA ELAP Certification No. 2670	Office & Laboratory 3442 Empresa Drive, Suite D San Luis Obispo, CA 93401 TEL: (805)783-2940 FAX: (805)783-2912 CA ELAP Certification No. 2775	Office & Laboratory 9415 W. Goshen Avenue Visalia, CA 93291 TEL: (559)734-9473 FAX: (559)734-8435 CA ELAP Certification No. 2810
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May 15, 2023

Livingston Dairy Consulting, Inc
 1635 E. Prosperity Suite B
 Tulare, CA 93274

Description : #1
 Project : W-6 Vitor Borba #2

Lab No. : VI 2342522-001
 Customer No.: 4018505

Sampled On : April 26, 2023 at 08:34
 Sampled By : Marlene Ferreira
 Received On : April 26, 2023 at 13:18
 Matrix : Ag Water

Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
							Date	Time	Who	Method	Date	Time	Who
Dairy Analysis													
Nitrogen, Total Kjeldahl	0.7	0.5	mg/L		1		05/10/2023	13:10	sta	EPA 351.2	05/11/2023	11:47	lcr
Nitrate Nitrogen	ND	0.4	mg/L		1	U	04/27/2023	14:00	lfs	SM 4500-NO3 F	04/27/2023	18:15	lfs
Nitrogen, Total as Nitrogen	0.7	0.5	mg/L		1		05/10/2023	13:10	sta	Calc.	05/11/2023	11:47	lcr
Nitrate + Nitrite as N	ND	0.4	mg/L		1	U	04/27/2023	14:00	lfs	SM 4500-NO3 F	04/27/2023	18:15	lfs
Kjeldahl Nitrogen	0.7	0.5	mg/L		1		05/10/2023	13:10	sta	EPA 351.2	05/11/2023	11:47	lcr
Conductivity	652	1	umhos/cm		1		05/09/2023	18:02	amm	SM 4500-H+B	05/09/2023	21:17	amm
Solids, Total Dissolved (TDS)	440	20	mg/L		1		05/01/2023	09:39	ctl	SM 2540 C	05/02/2023	12:00	ctl

DQF Flags Definition:

U Constituent results were non-detect.

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

May 15, 2023

Livingston Dairy Consulting, Inc.

Lab No. : VI 2342522

Customer No. : 4018505

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
E. C.	2320B	(SP 2306517-003)	Dup	umhos/cm		0.1%	5	
Solids, Total Dissolved	2540CE	05/01/2023:204649CTL	Blank	mg/L		ND	<20	
			LCS	mg/L	993.7	98.1%	90-110	
		(SP 2306529-001)	Dup	mg/L		0.2%	5	
		(SP 2306529-001)	Dup	mg/L		0.8%	5	
Nitrogen, Total Kjeldahl	351.2	05/10/2023:205052STA	Blank	mg/L		ND	<0.5	
			LCS	mg/L	12.00	91.9%	73-124	
			MS	mg/L	12.00	86.2%	54-136	
		(CH 2372746-001)	MSD	mg/L	12.00	87.8%	54-136	
			MSRPD	mg/L	12.00	1.8%	≤27	
			MS	mg/L	12.00	87.9%	54-136	
		(CH 2372746-002)	MSD	mg/L	12.00	84.7%	54-136	
			MSRPD	mg/L	12.00	3.6%	≤27	
Nitrate + Nitrite as N	4500NO3F	04/27/2023:204546LFS	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	102%	80-120	
			MS	mg/L	5.609	106%	66-125	
		(CH 2372584-001)	MSD	mg/L	5.609	107%	66-125	
			MSRPD	mg/L	5.609	0.5%	≤30.4	
Nitrate Nitrogen	4500NO3F	04/27/2023:204546LFS	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	102%	80-120	
			MS	mg/L	5.609	106%	66-125	
		(CH 2372584-001)	MSD	mg/L	5.609	107%	66-125	
			MSRPD	mg/L	5.609	0.5%	≤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.



AGRICULTURAL

5

AGRICULTURAL,

Analytical Chemists

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www.sgilinc.com

Laboratory Copy (1 of 2)

Client: Livingston Dairy Consulting, Inc.		42086:04/01/2023		TEST DESCRIPTION - See Reverse side for Container, Preservative and Sampling information	
Address: Livingston Dairy Consulting, Inc 1635 E. Prosperity Suite B Tulare, CA 93274					
Phone: (559)687-1440	Fax:				
Contact Person: Noreen Livingston					
Project Name: W-6 <u>Vitor Borba #2</u>					
Purchase Order Number:					
Quote Number: VI 20210208-01					
Sampler(s): Marlene					
Sampling Fee: _____	Pickup Fee: _____				
Compositor Setup Date: ____ / ____ / ____	Time: ____ / ____				
Lab Number: VI 2342522	4-18205				
Samp Num	Location Description	Date Sampled	Time Sampled		
1 #1	4/20 8:35 AM	G			
2		G			
3		G			
4		G			
5		G			
6		G			
7		G			
8		G			
9		G			
10		G			
Relinquished <u>Hawkins</u> 4/20/23	Date: 4/20/23 Time: 13:18	SRQ	Date: 4/20/23 Time: 13:18	Relinquished SRQ	Date: 4/20/23 Time: 13:18
Received By: SRQ	Date: 4/20/23 Time: 13:18	G LS	Date: 4/20/23 Time: 1730	Received By: Date: 4/20/23 Time: 1730	Date: 4/20/23 Time: 1730
Remarks:					

Corporate Offices & Laboratory 1553 Corporation Street
Vancouver, B.C. V6K 1E6

Office & Laboratory
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Stockton, CA 95215
Phone: (209) 942-0182
Fax: (209) 942-0423
563 E. Linda
Chico, CA 95926
Phone: (530) 343-5847
Fax: (530) 343-3807

Office & Laboratory
3442 Empresa Drive, Suite D
San Luis Obispo, CA 93401
Phone: (805) 783-2940
Fax: (805) 783-2912

Office & Laboratory
9415 W. Goshen Avenue
Visalia, CA 93291
Phone: (559) 734-9473
Fax: (559) 734-8435

Inter-Laboratory Condition Upon Receipt (Attach to COC)

Sample Receipt at: STK CC

CH VI

1. Number of ice chests/packages received: 1 Shipping tracking # OTC

2. Were samples received in a chilled condition? Temps: 12.4°C ROT / / /

Surface water SWTR bact samples: A sample that has a temperature upon receipt of >10°C, whether iced or not, should be flagged unless the time since sample collection has been less than two hours.

3. Do the number of bottles received agree with the COC? Yes No N/A
4. Were samples received intact? (i.e. no broken bottles, leaks etc.) Yes No N/A
5. VOAs checked for Headspace? Yes No N/A
6. Were sample custody seals intact? Yes No N/A
7. If required, was sample split for pH analysis? Yes No N/A
8. Were all analyses within holding times at time of receipt? Yes No N/A
9. Verify sample date, time and sampler name Yes No N/A

Sign and date the COC, place in a ziplock and put in the same ice chest as the samples.

Sample Receipt Review completed by (initials): SRO

Sample Receipt at SP:

1. Were samples received in a chilled condition? Temps: 3 / 3 / 3 / /

Acceptable is above freezing to 6°C. If many packages are received at one time check for tests/H.T.'s/rushes/

2. Shipping tracking numbers:

559261194, 559260321, 559260453

3. Do the number of bottles received agree with the COC? Yes No N/A
4. Were samples received intact? (i.e. no broken bottles, leaks etc.) Yes No N/A
5. Were sample custody seals intact? Yes No N/A

Sign and date the COC, obtain LIMS sample numbers, select methods/tests and print labels.

Sample Verification, Labeling and Distribution:

1. Were all requested analyses understood and acceptable? Yes No
2. Did bottle labels correspond with the client's ID's? Yes No
3. Were all bottles requiring sample preservation properly preserved? Yes No N/A FGL
[Exception: Oil & Grease, VOA and CrVI verified in lab]
4. VOAs checked for Headspace? Yes No N/A
5. Have rush or project due dates been checked and accepted? Yes No N/A
6. Were all analyses within holding times at time of receipt? Yes No N/A

Attach labels to the containers and include a copy of the COC for lab delivery.

Sample Receipt, Login and Verification completed by (initials): LL

Discrepancy Documentation:

Any items above which are "No" or do not meet specifications (i.e. temps) must be resolved.

1. Person Contacted: _____ Phone Number: _____

Initiated By: _____ Date: _____

Problem: _____

Resolution: _____

2. Person Contacted: _____

Initiated By: _____

Problem: _____

Resolution: _____

(Please use the back of this sheet for additional contacts)

Phone # (401)8505
Livingston Dairy Consulting, Inc.
VI 2342522

mdc 04/26/2023 17:04:25


February 28, 2023

Lab No. : VI 2340612
 Customer No. : 4018505

Livingston Dairy Consulting, Inc
 1635 E. Prosperity Suite B
 Tulare, CA 93274

Laboratory Report

Introduction: This report package contains a total of 4 pages divided into 3 sections:

- | | | |
|-----------------|-----------|---|
| Case Narrative | (1 page) | : An overview of the work performed at FGL. |
| Sample Results | (2 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
Barn 1	02/01/2023	02/01/2023	VI 2340612-001	DW
Barn 2	02/01/2023	02/01/2023	VI 2340612-002	DW

Sampling and Receipt Information:

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

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

Test Summary

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

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

KD: JRD

Approved By **Kelly A. Dunnahoo, B.S.**

Digitally signed by Kelly A. Dunnahoo, B.S.
 Title: Laboratory Director
 Date: 2023-02-28

Section: Case Narrative

Page 1 of 4

Page 1 of 4

Corporate Offices & Laboratory 853 Corporation Street Santa Paula, CA 93060 TEL: (805)392-2000 Env FAX: (805)525-4172 / Ag FAX: (805)392-2063 CA ELAP Certification No. 1573	Office & Laboratory 2500 Stagecoach Road Stockton, CA 95215 TEL: (209)942-0182 FAX: (209)942-0423 CA ELAP Certification No. 1563	Office & Laboratory 563 E. Lindo Avenue Chico, CA 95926 TEL: (530)343-5818 FAX: (530)343-3807 CA ELAP Certification No. 2670	Office & Laboratory 3442 Empressa Drive, Suite D San Luis Obispo, CA 93401 TEL: (805)783-2940 FAX: (805)783-2912 CA ELAP Certification No. 2775	Office & Laboratory 9415 W. Goshen Avenue Visalia, CA 93291 TEL: (559)734-9473 FAX: (559)734-8435 CA ELAP Certification No. 2810
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February 28, 2023

Livingston Dairy Consulting, Inc
1635 E. Prosperity Suite B
Tulare, CA 93274

Description : Barn 1
Project : W-6 Vitor Borba #2

Lab No. : VI 2340612-001

Customer No. : 4018505

Sampled On : February 1, 2023 at 06:42
Sampled By : Marlene & Kaylin
Received On : February 1, 2023 at 14:04
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													
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U1	02/14/2023	10:47	sta	EPA 351.2	02/19/2023	21:25	lcr
Nitrate Nitrogen	ND	0.4	mg/L	10	1	U	02/02/2023	15:00	lfs	SM 4500-NO3 F	02/02/2023	16:49	lfs
Nitrogen, Total as Nitrogen	ND	0.5	mg/L		1	U1	02/14/2023	10:47	sta	EPA 351.2	02/19/2023	21:25	lcr
Nitrate + Nitrite as N	ND	0.4	mg/L	10	1	U	02/02/2023	15:00	lfs	SM 4500-NO3 F	02/02/2023	16:49	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U1	02/14/2023	10:47	sta	EPA 351.2	02/19/2023	21:25	lcr
Conductivity	403	1	umhos/cm	1600 ²	1		02/15/2023	13:59	sta		02/15/2023	13:59	sta
Solids, Total Dissolved (TDS)	240	20	mg/L	1000 ²	1		02/03/2023	15:36	ctl	SM 2540 C	02/06/2023	12:18	ctl

DQF Flags Definition:

U Constituent results were non-detect.

I The MS/MSD did not meet QC criteria.

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

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

February 28, 2023

Livingston Dairy Consulting, Inc
1635 E. Prosperity Suite B
Tulare, CA 93274

Description : Barn 2
Project : W-6 Vitor Borba #2

Lab No. : VI 2340612-002

Customer No. : 4018505

Sampled On : February 1, 2023 at 06:48

Sampled By : Marlene & Kaylin

Received On : February 1, 2023 at 14:04

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													
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U	02/14/2023	10:47	sta	EPA 351.2	02/19/2023	21:27	lcr
Nitrate Nitrogen	ND	0.4	mg/L	10	1	U	02/02/2023	15:00	lfs	SM 4500-NO3 F	02/02/2023	16:52	lfs
Nitrogen, Total as Nitrogen	ND	0.5	mg/L		1	U	02/14/2023	10:47	sta	EPA 351.2	02/19/2023	21:27	lcr
Nitrate + Nitrite as N	ND	0.4	mg/L	10	1	U	02/02/2023	15:00	lfs	SM 4500-NO3 F	02/02/2023	16:52	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	02/14/2023	10:47	sta	EPA 351.2	02/19/2023	21:27	lcr
Conductivity	399	1	umhos/cm	1600 ²	1		02/15/2023	13:59	sta		02/15/2023	13:59	sta
Solids, Total Dissolved (TDS)	250	20	mg/L	1000 ²	1		02/03/2023	15:36	ctl	SM 2540 C	02/06/2023	12:12	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 , Dil.=Dilution

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

February 28, 2023

Livingston Dairy Consulting, Inc.

Lab No. : VI 2340612

Customer No. : 4018505

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
E. C.	2510B	02/15/2023:201667STA (STK2331416-001)	Blank Dup Blank Dup	umhos/cm umhos/cm umhos/cm umhos/cm		ND 0.9% ND 1.03%	<1 5 <1 5	
Solids, Total Dissolved	2540CE	02/03/2023:201214CTL (VI 2340630-003) (VI 2340630-003)	Blank LCS Dup Dup	mg/L mg/L mg/L mg/L	990.8	ND 99.8 % 0.3% 3.0%	<20 90-110 5 5	
Nitrogen, Total Kjeldahl	351.2	02/14/2023:201629STA (VI 2340618-001) (VI 2340608-002)	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 88.1% 62.8% 58.3% 7.6% 47.0% 33.6% 34.7%	<0.5 73-124 54-136 54-136 ≤27 <4% 54-136 54-136 435 435	
Nitrate + Nitrite as N	4500NO3F	02/02/2023:201191LFS (SP 2301608-001)	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 106% 102% 102% 0.0%	<0.4 80-120 66-125 66-125 ≤30.4	
Nitrate Nitrogen	4500NO3F	02/02/2023:201191LFS (SP 2301608-001)	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 106% 102% 102% 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 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.



Special

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Laboratory Copy (1 of 3) www.Jguru.com

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Santa Paula, CA 93060
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Chico, CA 95926
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Phone: (805) 783-2940
Fax: (805) 783-2912
Office & Laboratory
9415 W. Goshen Avenue
Visalia, CA 93291
Phone: (559) 734-9473
Fax: (559) 734-8435

Inter-Laboratory Condition Upon Receipt (Attach to COC)

Sample Receipt at: STK CC

CH VI

1. Number of ice chests/packages received: 1 Shipping tracking # 07C
2. Were samples received in a chilled condition? Temps: 14.9 / / /
Surface water SWTR bact samples: A sample that has a temperature upon receipt of >10°C, whether iced or not, should be flagged unless the time since sample collection has been less than two hours.
3. Do the number of bottles received agree with the COC? Yes No N/A
4. Were samples received intact? (i.e. no broken bottles, leaks etc.) Yes No N/A
5. VOAs checked for Headspace? Yes No N/A
6. Were sample custody seals intact? Yes No N/A
7. If required, was sample split for pH analysis? Yes No N/A
8. Were all analyses within holding times at time of receipt? Yes No N/A
9. Verify sample date, time and sampler name Yes No N/A

Sign and date the COC, place in a ziplock and put in the same ice chest as the samples.

Sample Receipt Review completed by (initials): MDC

Sample Receipt at SP:

1. Were samples received in a chilled condition? Temps: 14.9 / / / /
Acceptable is above freezing to 6°C. If many packages are received at one time check for tests/H.T.'s/rushes/
2. Shipping tracking numbers: 558732941 945
933
3. Do the number of bottles received agree with the COC? Yes No N/A
4. Were samples received intact? (i.e. no broken bottles, leaks etc.) Yes No N/A
5. Were sample custody seals intact? Yes No N/A

Sign and date the COC, obtain LIMS sample numbers, select methods/tests and print labels.

Sample Verification, Labeling and Distribution:

1. Were all requested analyses understood and acceptable? Yes No
2. Did bottle labels correspond with the client's ID's? Yes No
3. Were all bottles requiring sample preservation properly preserved? Yes No N/A FGL
[Exception: Oil & Grease, VOA and CrVI verified in lab]
4. VOAs checked for Headspace? Yes No N/A
5. Have rush or project due dates been checked and accepted? Yes No N/A
6. Were all analyses within holding times at time of receipt? Yes No

Attach labels to the containers and include a copy of the COC for lab delivery.

Sample Receipt, Login and Verification completed by (initials): MDC

Discrepancy Documentation:

Any items above which are "No" or do not meet specifications (i.e. temps) must be resolved.

1. Person Contacted: _____ Phone Number: _____
Initiated By: _____ Date: _____
Problem:
Resolution:
2. Person Contacted: _____ Phone Number: _____
Initiated By: _____ (4018505)
Problem:
Resolution:

(Please use the back of this sheet for additional contacts)

Livingston Dairy Consulting, Inc.
VI 2340612

mdc 02/02/2023 12:38:40



UT 2340612

August 18, 2023

Lab No. : VI 2344787
Customer No. : 4018505

Livingston Dairy Consulting, Inc
1635 E. Prosperity Suite B
Tulare, CA 93274

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
Cat Well	07/25/2023	07/25/2023	VI 2344787-001	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: 2023-08-18

August 18, 2023

Livingston Dairy Consulting, Inc
1635 E. Prosperity Suite B
Tulare, CA 93274

Description : Cat Well
Project : W-6 Vitor Borba #2

Lab No. : VI 2344787-001

Customer No. : 4018505

Sampled On : July 25, 2023 at 06:00
Sampled By : Marlene/Noreen
Received On : July 25, 2023 at 08:30
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	08/12/2023	12:25	sta	EPA 351.2	08/16/2023	20:09	lcr
Nitrate Nitrogen	ND	0.4	mg/L		1	Uh	07/26/2023	13:30	lfs	SM 4500-NO3 F	07/26/2023	14:56	lfs
Nitrogen, Total as Nitrogen	ND	0.5	mg/L		1	Uh	08/12/2023	12:25	sta	Calc.	08/16/2023	20:09	lcr
Nitrate + Nitrite as N	ND	0.4	mg/L		1	Uh	07/26/2023	13:30	lfs	SM 4500-NO3 F	07/26/2023	14:56	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	08/12/2023	12:25	sta	EPA 351.2	08/16/2023	20:09	lcr
Conductivity	372	1	umhos/cm		1		07/31/2023	14:51	amm	SM 4500-H+B	07/31/2023	19:26	amm
Solids, Total Dissolved (TDS)	240	20	mg/L		1		07/27/2023	14:45	ctl	SM 2540 C	07/28/2023	11:20	ctl

DQF Flags Definition:

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

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

August 18, 2023

Livingston Dairy Consulting, Inc.

Lab No. : VI 2344787
Customer No. : 4018505

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
E. C.	2320B	(VI 2344636-006)	Dup	umhos/cm		0%	5	
Solids, Total Dissolved	2540CE	07/27/2023:208315CTL (STK2339993-001) (STK2339993-001)	Blank LCS Dup Dup	mg/L mg/L mg/L mg/L	991.5	ND 103% 1.48% 0.9%	<20 90-110 5 5	
Nitrogen, Total Kjeldahl	351.2	08/12/2023:208945STA (VI 2344879-002)	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 91.9% 90.8% 88.9% 2.1% 88.8% 94.8% 6.6%	<0.5 73-124 54-136 54-136 ≤27 54-136 54-136 ≤27	
Nitrate + Nitrite as N	4500NO3F	07/26/2023:208263LFS (CC 2382433-001)	Blank LCS MS MSD MSRPD	mg/L mg/L mg/L mg/L mg/L	11.22 5.609 5.609	ND 104% 140% 163% 6.5%	<0.4 80-120 66-125 66-125 ≤30.4	435
Nitrate Nitrogen	4500NO3F	07/26/2023:208263LFS (CC 2382433-001)	Blank LCS MS MSD MSRPD	mg/L mg/L mg/L mg/L mg/L	11.22 5.609 5.609	ND 104% 140% 163% 6.5%	<0.4 80-120 66-125 66-125 ≤30.4	435

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.

Inter-Laboratory Condition Upon Receipt (Attach to COC)

Sample Receipt at: STK CC

CH VI

1. Number of ice chests/packages received: 1 Shipping tracking # OTC
2. Were samples received in a chilled condition? Temps: 46.1 / 7.9 / /
Surface water SWTR bact samples: A sample that has a temperature upon receipt of >10°C, whether iced or not, should be flagged unless the time since sample collection has been less than two hours.
3. Do the number of bottles received agree with the COC? Yes No N/A
4. Were samples received intact? (i.e. no broken bottles, leaks etc.) Yes No N/A
5. VOAs checked for Headspace? Yes No N/A
6. Were sample custody seals intact? Yes No N/A
7. If required, was sample split for pH analysis? Yes No N/A
8. Were all analyses within holding times at time of receipt? Yes No N/A
9. Verify sample date, time and sampler name Yes No N/A

Sign and date the COC, place in a ziplock and put in the same ice chest as the samples.
Sample Receipt Review completed by (initials): ADH

Sample Receipt at SP:

1. Were samples received in a chilled condition? Temps: 5 / 5 / / /
Acceptable is above freezing to 6°C. If many packages are received at one time check for tests/H.T.'s/rushes/
2. Shipping tracking numbers: 55482810520 + 5548281045

3. Do the number of bottles received agree with the COC? Yes No N/A
4. Were samples received intact? (i.e. no broken bottles, leaks etc.) Yes No N/A
5. Were sample custody seals intact? Yes No N/A

Sign and date the COC, obtain LIMS sample numbers, select methods/tests and print labels.

Sample Verification, Labeling and Distribution:

1. Were all requested analyses understood and acceptable? Yes No
2. Did bottle labels correspond with the client's ID's? Yes No
3. Were all bottles requiring sample preservation properly preserved? Yes No N/A FGL
[Exception: Oil & Grease, VOA and CrVI verified in lab]
4. VOAs checked for Headspace? Yes No N/A
5. Have rush or project due dates been checked and accepted? Yes No N/A
6. Were all analyses within holding times at time of receipt? Yes No N/A

Attach labels to the containers and include a copy of the COC for lab delivery.

Sample Receipt, Login and Verification completed by (initials): CLW

Discrepancy Documentation:

Any items above which are "No" or do not meet specifications (i.e. temps) must be resolved.

1. Person Contacted: _____ Phone Number: _____
Initiated By: _____ Date: _____
Problem:
Resolution:
2. Person Contacted: _____ Phone Number: _____
Initiated By: _____ (4018505)
Problem:
Resolution:

(Please use the back of this sheet for additional contacts)

Livingston Dairy Consulting, Inc.
VI 2344787
cda 07/25/2023 09:31:38

October 4, 2023

Lab No. : VI 2346252
 Customer No. : 4018505

Livingston Dairy Consulting, Inc
 1635 E. Prosperity Suite B
 Tulare, CA 93274

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
Heifer Dom	09/14/2023	09/14/2023	VI 2346252-001	DW

Sampling and Receipt Information:

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

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

Test Summary

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

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

KD: EHB

Approved By **Kelly A. Dunnahoo, B.S.**



Digitally signed by Kelly A. Dunnahoo, B.S.
 Title: Laboratory Director
 Date: 2023-10-05

Section: Case Narrative

Page 1 of 3

Page 1 of 3

Corporate Offices & Laboratory
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 CA ELAP Certification No. 1573

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

October 4, 2023

Livingston Dairy Consulting, Inc
1635 E. Prosperity Suite B
Tulare, CA 93274

Description : Heifer Dom
Project : W-6 Vitor Borba #2

Lab No. : VI 2346252-001

Customer No. : 4018505

Sampled On : September 14, 2023 at 07:30
Sampled By : Marlene Ferreira
Received On : September 14, 2023 at 13:45
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													
Nitrogen, Total Kjeldahl	1	0.5	mg/L		1	I	09/28/2023	10:26	sta	EPA 351.2	10/03/2023	23:08	lcr
Nitrate Nitrogen	ND	0.4	mg/L	10	1	U	09/15/2023	12:00	lfs	SM 4500-NO3 F	09/15/2023	14:02	lfs
Nitrogen, Total as Nitrogen	1	0.5	mg/L		1	I	09/28/2023	10:26	sta	Calc.	10/03/2023	23:08	lcr
Nitrate + Nitrite as N	ND	0.4	mg/L	10	1	U	09/15/2023	12:00	lfs	SM 4500-NO3 F	09/15/2023	14:02	lfs
Kjeldahl Nitrogen	1	0.5	mg/L		1	I	09/28/2023	10:26	sta	EPA 351.2	10/03/2023	23:08	lcr
Conductivity	383	1	umhos/cm	1600 ²	1	I	09/21/2023	11:31	krh	SM 4500-H+B	09/21/2023	16:04	krh
Solids, Total Dissolved (TDS)	280	20	mg/L	1000 ²	1		09/19/2023	11:20	ctl	SM 2540 C	09/20/2023	11:00	ctl

DQF Flags Definition:

I The MS/MSD did not meet QC criteria.

U Constituent results were non-detect.

I The RPD for the laboratory duplicate exceeded laboratory criteria.

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

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

October 4, 2023

Livingston Dairy Consulting, Inc.

Lab No. : VI 2346252
Customer No. : 4018505

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
E. C.	2320B	(VI 2346257-001)	Dup	umhos/cm		110%	5	440
Solids, Total Dissolved	2540CE	09/19/2023:210493CTL	Blank	mg/L		ND	<20	
			LCS	mg/L	991.5	101%	90-110	
		(CC 2383155-001)	Dup	mg/L		0.4%	5	
		(CC 2383155-001)	Dup	mg/L		2.89%	5	
Nitrogen, Total Kjeldahl	351.2	09/28/2023:210923STA	Blank	mg/L		ND	<0.5	
			LCS	mg/L	12.00	91.0%	73-124	
			MS	mg/L	12.00	89.3%	90-110	435
		(SP 2315701-001)	MSD	mg/L	12.00	89.7%	90-110	435
			MSRPD	mg/L		0.4%	≤20	
			MS	mg/L	12.00	89.9%	90-110	435
		(SP 2315701-003)	MSD	mg/L	12.00	92.8%	90-110	
			MSRPD	mg/L		3.2%	≤20	
Nitrate + Nitrite as N	4500NO3F	09/15/2023:210406LFS	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	96.1%	80-120	
			MS	mg/L	5.609	94.3%	66-125	
		(CH 2377865-001)	MSD	mg/L	5.609	96.9%	66-125	
			MSRPD	mg/L		1.8%	≤30.4	
Nitrate Nitrogen	4500NO3F	09/15/2023:210406LFS	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	96.1%	80-120	
			MS	mg/L	5.609	94.3%	66-125	
		(CH 2377865-001)	MSD	mg/L	5.609	96.9%	66-125	
			MSRPD	mg/L		1.8%	≤30.4	

Definition

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

Explanation

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

Inter-Laboratory Condition Upon Receipt (Attach to COC)

Sample Receipt at: STK CC

CH VI

1. Number of ice chests/packages received: _____ Shipping tracking # OTC

2. Were samples received in a chilled condition? Temps 2°C / 4-7°C / /

Surface water SWTR bact samples: A sample that has a temperature upon receipt of >10°C, whether iced or not, should be flagged unless the time since sample collection has been less than two hours.

ID# TH407

- | | | | |
|---|--------------------------------------|----|-----|
| 3. Do the number of bottles received agree with the COC? | <input checked="" type="radio"/> Yes | No | N/A |
| 4. Were samples received intact? (i.e. no broken bottles, leaks etc.) | <input checked="" type="radio"/> Yes | No | |
| 5. VOAs checked for Headspace? | <input checked="" type="radio"/> Yes | No | N/A |
| 6. Were sample custody seals intact? | <input checked="" type="radio"/> Yes | No | N/A |
| 7. If required, was sample split for pH analysis? | <input checked="" type="radio"/> Yes | No | N/A |
| 8. Were all analyses within holding times at time of receipt? | <input checked="" type="radio"/> Yes | No | |
| 9. Verify sample date, time and sampler name | <input checked="" type="radio"/> Yes | No | |

Sign and date the COC, place in a ziplock and put in the same ice chest as the samples.

Sample Receipt Review completed by (initials): SRO

Sample Receipt at SP:

1. Were samples received in a chilled condition? Temps: 2°C / / / /
Acceptable is above freezing to 6°C. If many packages are received at one time check for tests/H.T.'s/rushes/
2. Shipping tracking numbers: SL0126075
068

- | | | | |
|---|--------------------------------------|----|-----|
| 3. Do the number of bottles received agree with the COC? | <input checked="" type="radio"/> Yes | No | N/A |
| 4. Were samples received intact? (i.e. no broken bottles, leaks etc.) | <input checked="" type="radio"/> Yes | No | |
| 5. Were sample custody seals intact? | <input checked="" type="radio"/> Yes | No | N/A |

Sign and date the COC, obtain LIMS sample numbers, select methods/tests and print labels.

Sample Verification, Labeling and Distribution:

- | | | | |
|--|--------------------------------------|----|---------|
| 1. Were all requested analyses understood and acceptable? | <input checked="" type="radio"/> Yes | No | |
| 2. Did bottle labels correspond with the client's ID's? | <input checked="" type="radio"/> Yes | No | |
| 3. Were all bottles requiring sample preservation properly preserved?
[Exception: Oil & Grease, VOA and CrVI verified in lab] | <input checked="" type="radio"/> Yes | No | N/A FGL |
| 4. VOAs checked for Headspace? | <input checked="" type="radio"/> Yes | No | N/A |
| 5. Have rush or project due dates been checked and accepted? | <input checked="" type="radio"/> Yes | No | N/A |
| 6. Were all analyses within holding times at time of receipt? | <input checked="" type="radio"/> Yes | No | |

Attach labels to the containers and include a copy of the COC for lab delivery.

Sample Receipt, Login and Verification completed by (initials): VX

Discrepancy Documentation:

Any items above which are "No" or do not meet specifications (i.e. temps) must be resolved.

1. Person Contacted: _____ Phone Number: _____
Initiated By: _____ Date: _____
Problem: _____
Resolution: _____
2. Person Contacted: _____
Initiated By: _____ (4018505)
Problem: _____
Resolution: _____

(Please use the back of this sheet for additional contact)

Livingston Dairy Consulting, Inc.

VI 2346252

mdc 09/14/2023 18:03:44



U 2346252

2023 KINGS RIVER WATERSHED CANAL RESULTS

LEMOORE WEIR

Constituent	Lab	BPO	RL	Units	Sample Month and Results											
					January	February	March	April	May	June	July	August	September	October	November	December
Physical Parameters/General Chemistry																
Flow	KRWA	Field ✓	700	cfs	0	0	0	0	0	45	0	0	0	0	0	0
EC	Field ✓	6.5-8.3		umhos/cm											51.3	
pH	Field			pH											7.5	
Dissolved Oxygen	Field	5/7		mg/L											9.44	
Temperature	Field	Δ < 5° C		°C											17.7	
Turbidity	BSK	No adv eff.	0.2	NTU											2.2	
TDS	BSK ✓	450	10	mg/L											2.2	
TSS	BSK	-	10	mg/L											ND	
Hardness (as CaCO ₃)	BSK	-	2.5	mg/L											14	
TOC	BSK	-	0.3	mg/L											1.8	
E. Coli	BSK	320		MPN											46	
Fecal Coliform	BSK	400		MPN/100mL											46	
Nutrients																
Nitrate (+ Nitrite) - N	BSK ✓	10	0.05	mg/L											0.02	
Total Kjeldahl Nitrogen	BSK		0.5	mg/L											0.17	
Ammonia - N	BSK	chart	0.1	mg/L											ND	
Unionized Ammonia	BSK	chart	0.0015	mg/L											ND	
Orthophosphate - P	BSK	-	0.01	mg/L											0.0069	
Phosphorus	BSK		0.1	mg/L											0.014	
Water Column Toxicity																
Toxicity, minnow	PER	> 80%	(96h test)	% survival											100	
Toxicity, water flea	PER	> 80%	(48h test)	% survival											100	
Toxicity, algae	PER		(48h test)	cells/mL											4800000	
Toxicity, algae (control)	PER		(48h test)	cells/mL											2840000	



Livingston Dairy Consulting, Inc.

FIELD ACTIVITY REPORT

Facility Name: Vitor Borba Dairy #2
16452 11th ave, Hanford
Kings County

2023

Sample Collection Equipment: Bottle Container

Sample Container: (Circle one)

Bottle Container: 8 fl oz 16 fl oz 32 fl oz

Sample Collection Location: (Circle one)

Discharge Pipe Spigot/Faucet

Sample Collection Method: (Circle one) *All Samples are labeled with the facility name, date, contents, location and description ** Please see the Sample and Analysis Plan for more detailed descriptions.

Well: Sample taken at the Discharge Pipe, Spigot or Faucet using a sample container provided by laboratory.

Sample Type:

Sample Preservation Method: (Circle one)

Ice Chest

Refrigerator

Ice Pack



Livingston Dairy Consulting, Inc.

1635 E. Prosperity Ave. Ste. B

Tulare, CA 93274

559-687-1440

Sunday, April 21, 2024

Re: 2023 NMP

Vitor Borba #2 Dairy (previously Fernandes Dairy)

16452 11th Avenue Hanford, CA 93230

Enclosed is the 2023/2024 Nutrient Budget for your facility to comply with the California Regional Water Quality Control Board General Order No. R5-2007-0035.

***2023 Whole Farm Nitrogen Balance**

The whole farm nitrogen balance for the crop year 2022 was **1.10**

Nitrogen Summary will show the balances for each field and for the whole farm.

***Ranges for the Whole Farm Nitrogen Balance**

<u>Factor</u>	<u>Status</u>	<u>Evaluation</u>
> 1.65	Excessive	Too much nitrogen applied
1.4 - 1.65	Slightly High	Nitrogen is satisfactory to slightly high
0.9 - 1.4	Normal	Normal to slightly low
< 0.9	Low	Low nitrogen status, additional nitrogen needed

***Nutrient Management Plan/ Nutrient Budget Certification**

This Nutrient Budget was prepared by a Certified Crop Advisor as required by the California Regional Water Quality Control Board.


Butch Brazil
Certified Crop Advisor #35629

This Nutrient Management Plan / Nutrient Budget is based on samples collected and analyzed by a third party laboratory. This Certified Crop Advisor was not involved in oversight of outside laboratory sample collection, transportation, or analyses. Interpretation of the data is based on submitted information. Where data was incomplete, book values and / or historical data was used. The third party laboratory or Certified Crop Advisor was not involved with the agronomic growth of the crops and the Nutrient Budget is based on information provided by the owner.

