



# Livingston Dairy Consulting, Inc.

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

Legacy Ranches #2    WDID 5C54NC00219  
86660 Ave. 96 pixley, CA 93256

- |                                     |                              |
|-------------------------------------|------------------------------|
| <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: Legacy Ranches #2

WDID 5C54NC00219

Facility Address: 8660 Ave. 96 pixley, CA 93256

Original Operation Date: 2/5/2002

Facility APN's: x293 x190 x031 xxxx

RWQCB Basin Plan Designation: Tulare Lake Basin

Check if any information has changed

### **Owner(s)**

Owner(s) Name: Fernandes Brothers

P.O. Box 1149 Tipton, CA 93272

Mailing Address:

Home Phone Number:

Cell Phone Number: 559-308-6241

Check if any information has changed

### **Operator(s)**

Operator(s) Name: Legacy Ranches #2

P.O. Box 1149 Tipton, CA 93272

Mailing Address:

Home Phone Number:

Cell Phone Number: 559-308-6241

Check if any information has changed

## Herd Information

	<b>Milk Cows</b>	<b>Dry Cows</b>	<b>Bred Heifers (12-24 mo)</b>	<b>Heifers (3-12 mo)</b>	<b>Calves (0-3 mo)</b>
<b>Open Confinement:</b>	-	390	1,222	938	760
<b>Number Under Roof</b>	2,587	-	-	-	-
<b>Maximum Number</b>	2,587	390	1,222	938	760
<b>Average Number</b>	2,587	390	1,222	938	760
<b>Average Live Weight (lbs)</b>	950	975	660	660	

**Average Milk Production:** 68

**Predominant Milk Cow Breed:** Jersey

### Manure Generated:

Total manure excreted by the herd:

5,525.38	@40% Moisture	ton/yr
463,151		lbs
52,890		lbs
140,511		lbs
-		lbs

Total salt from manure:

<b>After Ammonia (30% loss applied)</b>
<b>324,205 lbs per reporting period</b>

### Process Wastewater Generated:

Process wastewater generated:	37,770,200	gal
Total nitrogen generated:	167,148	lbs
	47,085	lbs
	239,221	lbs
Total salt (TDS) generated:	1,686,817	lbs

## List of Land Application Areas

## List of Fresh Water Sources

Source Description	Type	Subsurface (Tile) Drainage Sources	Surface Water	No
Dom 6	Ground Water	No		
Barn 8	Ground Water	No		
Barn 9	Ground Water	No		
Barn 10	Ground Water	No		
10 (1)	Ground Water	No		
9 (2)	Ground Water	No		
7 (3)	Ground Water	No		
8 (4)	Ground Water	No		
5	Ground Water	No		
6	Ground Water	No		
11	Ground Water	No		
12	Ground Water	No		
13	Ground Water	No		
14	Ground Water	No		
Barn New 11	Ground Water	No		

**PLANT TISSUE ANALYSIS (Recorded As Received)  
(WINTER)**

PLANT TISSUE ANALYSIS (Recorded As Received)											
(WINTER)		Crop	Moist %	N%	TP %	TK%	Salt	TFS	Sample #:	Date:	Source
2-L10 (Trees)	Trees, Pistachios	-	2.81	0.42	3.09	-	-	-	Book Value	-	-
2-L11 (Trees)	Trees, Pistachios	-	2.81	0.42	3.09	-	-	-	Book Value	-	-
3-L12 E (Trees)	Trees, Pistachios	-	2.81	0.42	3.09	-	-	-	Book Value	-	-
3-L12 W	Wheat, Silage	67.30	0.56	0.13	0.51	-	11.00	5-12H49726	05/12/23	Valley Tech	
3-L13	Wheat, Silage	65.30	0.60	0.14	0.73	-	10.50	6-6H52629	06/06/23	Valley Tech	
3-L14	Alfalfa	10.30	3.01	0.26	2.17	-	10.90	9-14H65430	09/14/23	Valley Tech	
4-L15	Wheat, Silage	71.80	0.45	0.12	0.63	-	10.30	6-1H51924	06/01/23	Valley Tech	
4-L16	Wheat, Silage	62.00	0.52	0.15	0.52	-	7.98	5-12H49726	05/12/23	Valley Tech	
4-L17	Wheat, Silage	65.30	0.50	0.14	0.49	-	11.80	6-1H51924	06/01/23	Valley Tech	
4-L18	Alfalfa	9.30	2.85	0.31	2.01	-	8.65	9-14H65430	09/14/23	Valley Tech	
4-L19	Wheat, Silage	65.10	0.50	0.11	0.41	-	8.74	5-12H49726	05/12/23	Valley Tech	
Detectable Lim		Valley Tech	0.10%	0.05%	0.01%	0.01%	0.01%	0.05%			
Deltavalle			0.001%	0.01%	0.01%	0.003%	0.003%	0.001%			
Detectable Limits											
Valley Tech		0.10%	0.05%	0.01%	0.01%	0.01%	0.01%	0.05%			
Deltavalle		0.001%	0.01%	0.01%	0.01%	0.003%	0.003%	0.001%			

## **(SUMMER) PLANT TISSUE ANALYSIS (Recorded As Received)**

SUMMER PLANT TISSUE ANALYSIS (Recorded As Received)								
Field	Crop	Moist %	N%	TP %	TK%	Salt	Sample #: Date:	Source
2-L10 (Trees)	Trees, Pistachios	-	-	-	-	-	Trees	-
2-L11 (Trees)	Trees, Pistachios	-	-	-	-	-	Trees	-
3-L12 E (Trees)	Trees, Pistachios	-	-	-	-	-	Trees	-
3-L12 W	Corn, Silage	70.80	0.18	0.04	0.32	-	6.49 9-28H67181	09/28/23 Valley Tech
3-L13	Corn, Silage	72.10	0.38	0.06	0.43	-	6.67 10-19H70144	10/19/23 Valley Tech
3-L14	Alfalfa	-	-	-	-	-	See Winter	-
4-L15	Corn, Silage	71.50	0.26	0.04	0.39	-	5.62 9-28H67181	09/28/23 Valley Tech
4-L16	Corn, Silage	64.10	0.51	0.08	0.51	-	5.98 9-14H65429	09/14/23 Valley Tech
4-L17	Corn, Silage	62.70	0.51	0.08	0.43	-	4.80 10-30H71774	10/30/23 Valley Tech
4-L18	Alfalfa	-	-	-	-	-	See Winter	-
4-L19	Corn, Silage	62.50	0.66	0.08	0.54	-	5.13 9-14H65429	09/14/23 Valley Tech

Detectable Limits  
Valley Tech  
Dellavalle

*0.10%*    *0.05%*    *0.01%*    *0.01%*    *0.05%*  
*0.001%*    *0.01%*    *0.01%*    *0.003%*    *0.001%*

Winter Crops & Harvest

Field:	Crop	Plant Date	Harvest Date	Lab #	Moisture %	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS	Reporting Basis
2-110 (Trees)	Trees, Pistachios	2/1/14	11/1/23	Book Value	-	2.81	0.42	3.09	-	-	Dry Weight
2-111 (Trees)	Trees, Pistachios	2/1/15	11/1/23	Book Value	-	2.81	0.42	3.09	-	-	Dry Weight
3-112 E (Trees)	Trees, Pistachios	2/1/14	11/1/23	Book Value	-	2.81	0.42	3.09	-	-	Dry Weight
3-112 W	Wheat, Silage	10/21/22	5/10/23	5-12H49726	67.30	0.56	0.13	0.51	-	11.00	Dry Weight
3-113	Wheat, Silage	11/9/22	5/31/23	6-6H52629	65.30	0.60	0.14	0.73	-	10.50	Dry Weight
3-114	Alfalfa	10/20/20	10/1/23	9-14H65430	10.30	3.01	0.26	2.17	-	10.90	Dry Weight
4-115	Wheat, Silage	11/17/22	5/11/23	6-1H51924	71.80	0.45	0.12	0.63	-	10.30	Dry Weight
4-116	Wheat, Silage	10/27/22	5/20/23	5-12H49726	62.00	0.52	0.15	0.52	-	7.98	Dry Weight
4-117	Wheat, Silage	11/3/22	5/20/23	6-1H51924	65.30	0.50	0.14	0.49	-	11.80	Dry Weight
4-118	Alfalfa	10/8/19	10/1/23	9-14H65430	9.30	2.85	0.31	2.01	-	8.65	Dry Weight
4-119	Wheat, Silage	10/20/22	5/7/23	5-12H49726	65.10	0.50	0.11	0.41	-	8.74	Dry Weight

Detectable L Valley Tech  
Dellavalle

Field:	Crop	Plant Date	Harvest Date	Lab #	Moisture %	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS	Reporting Basis
2-L10 (Trees)	Trees, Pistachios			Trees	-	-	-	-	-	-	-
2-L11 (Trees)	Trees, Pistachios			Trees	-	-	-	-	-	-	-
3-L12 E (Trees)	Trees, Pistachios			Trees	-	-	-	-	-	-	-
3-L12 W	Corn, Silage	6/15/23	9/28/23	9-28H67181	70.80	0.18	0.04	0.32	-	6.49	Dry Weight
3-L13	Corn, Silage	6/26/23	10/13/23	10-19H70144	72.10	0.38	0.06	0.43	-	6.67	Dry Weight
3-L14	Alfalfa			See Winter	-	-	-	-	-	-	-
4-L15	Corn, Silage	6/17/23	9/25/23	9-28H67181	71.50	0.26	0.04	0.39	-	5.62	Dry Weight
4-L16	Corn, Silage	5/27/23	9/6/23	9-14H65429	64.10	0.51	0.08	0.51	-	5.98	Dry Weight
4-L17	Corn, Silage	7/7/23	10/15/23	10-30H71774	62.70	0.51	0.08	0.43	-	4.80	Dry Weight
4-L18	Alfalfa			See Winter	-	-	-	-	-	-	-
4-L19	Corn, Silage	5/25/23	9/4/23	9-14H65429	62.50	0.66	0.08	0.54	-	5.13	Dry Weight

*Detectable L Valley Tech*  
*Dell'ayalle*

## Well / Canal Analysis

Well Name/Number	NO3-N (mg/L)	EC (umhos/cm)	TDS (mg/L)	General Minerals						Lab #:	Date:	Lab:		
				NH4-N (mg/L)	TN (mg/L)	Ca (mg/L)	Mg (mg/L)	Na (mg/L)	HCO3 (mg/L)	CO3 (mg/L)	SO4 (mg/L)			
Dom 6	35.60	943	590	-	35.60	-	-	-	-	-	-	VI 2340871	2/10/2023	FGI Environmental
Barn 8	-	-	-	-	-	-	-	-	-	-	-	Non-Op		
Barn 9	0.40	232	250	-	1.10	-	-	-	-	-	-	VI 2340871	2/10/2023	FGI Environmental
Barn 10	8.10	463	290	-	8.10	-	-	-	-	-	-	VI 2340871	2/10/2023	FGI Environmental
10 (1)	0.80	231	160	-	0.80	-	-	-	-	-	-	VI 2344459	7/11/2023	FGI Environmental
9 (2)	4.20	631	450	-	4.20	-	-	-	-	-	-	VI 2344642	7/18/2023	FGI Environmental
7 (3)	2.10	234	140	-	2.10	-	-	-	-	-	-	VI 2344102	7/6/2023	FGI Environmental
8 (4)	1.70	304	160	-	1.70	-	-	-	-	-	-	VI 2344886	7/27/2023	FGI Environmental
5	1.10	259	200	-	11.00	0.01	43.00	80.00	0.01	10.60	23.00	VI 2344059	7/6/2023	FGI Environmental
6	8.90	482	280	-	8.90	-	-	-	-	-	-	VI 2344717	7/20/2023	FGI Environmental
11	4.70	368	230	-	4.70	-	-	-	-	-	-	VI 2344717	7/20/2023	FGI Environmental
12	3.50	350	200	-	3.50	-	-	-	-	-	-	VI 2344886	7/27/2023	FGI Environmental
13	1.30	248	150	-	1.30	-	-	-	-	-	-	VI 2344886	7/27/2023	FGI Environmental
14	1.60	296	200	-	1.60	-	-	-	-	-	-	VI 2344102	7/6/2023	FGI Environmental
Barn New 11	0.01	282	160	-	5.00	0.01	52.00	70.00	10.00	21.40	29.00	VI 2340858	2/10/2023	FGI Environmental
Canal	0.01	138	37	-	-	-	-	-	-	-	-	558TRA144	7/18/2023	Other

### Detectable Limits

Dellavalle

FGI Environmental

Valley Tech

NR

Soil Analysis (Winter)

*Detectable Limits*  
*Valley Tech*  
Dell/gVg/e

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** Commerical or other nutrient imports entered

**No** Commerical or other nutrient imports entered

100

### Total Dry Manure Exported

100

### Total Process Water Exported

Process Water & Manure Analysis

Qtr	Sample #:	Sample Date:	Source	lbs / Acre In				Material Type
				Inorg N	Org N	P2O5	K2O	
1	3-09L44119	3/9/2023	Valley Tech	64.4	56.7	33.8	194.4	
2	5-12L49730	5/12/2023	Valley Tech	84.3	1.1	30.4	157.3	Corral Solids
3	8-15L61719	8/15/2023	Valley Tech	70.3	1.6	14.9	84.9	Corral Solids
4	10-3L67665	10/3/2023	Valley Tech	63.2	5.2	18.3	60.3	

Description	Sample #:	Date:	As Is/ Dry Weight		Source	Material Type
			Dry Weight	As Is		
Manure	5-12M49744	5/12/2023			Valley Tech	
Manure	10-3M67643	10/6/2023			Valley Tech	Corral Solids

Dry Manure: (As Received)	TN %	TP %	TK %	Ca	Mg	Na	S	Cl	Salt	TFS	Moisture %
Corral	1.11	0.53	1.12	-	-	-	-	-	-	-	54.90
Corral	1.40	0.43	1.42	2.48	0.82	1.06	0.42	0.72	-	31.40	51.70
<i>Detectable Limits</i>											
Valley Tech	0.01%	0.02%	0.02%								
Dellavalle	0.01%	0.01%	0.003%	0.001%	0.001%	0.001%	0.001%	0.001%	0.000%	0.0001%	0.0001%

*Detectable Limits*  
Valley Tech  
*Dellavalle*

### Nutrient Applications

Field Name/Number:		2-L10 (Trees)						Acres:		72.00		
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)
2/1/14	W. Planting	-	-	-	-	-	-	-	-	-	-	-
3/8/23	Canal	-	-	-	1.10	-	0.0	-	-	6	-	-
4/2/23	Canal	-	-	-	1.14	-	0.0	-	-	6	-	-
5/13/23	Canal	-	-	-	2.61	-	0.0	-	-	13	-	-
6/8/23	Canal	-	-	-	6.00	-	0.0	-	-	30	-	-
7/10/23	Canal	-	-	-	8.28	-	0.0	-	-	42	-	-
8/11/23	Canal	-	-	-	7.11	-	0.0	-	-	36	-	-
9/3/23	Canal	-	-	-	5.34	-	0.0	-	-	27	-	-
10/7/23	Canal	-	-	-	2.72	-	0.0	-	-	14	-	-
11/1/23	W. Harvest	-	-	-	-	-	(98.4)	(14.7)	(108.2)	-	-	1.75
Totals:		0.0	0	34.32	0.00	{98}	{15}	{108}	173	0.00	0	1.75

Dry Weight  
As Received

Field Name/Number: 2-L10 (Trees)      Acres: 72

	Total N (lbs/ac)	Total P (lbs/ac)	Total K (lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	0.1	0.0	0.0	172.8
Nutrients Removed at Harvest	-98.4	-14.7	-108.2	0.0
Nutrient Balance	-98.3	-14.7	-108.2	172.8

Winter Nitrogen Crop App / Use Ratio: 0.07

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

Field Name/Number: 2-L10 (Trees)      Acres: 72

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	- Ac In /Ac	-
Canal	34.3 Ac In /Ac	0.1
Atm. Depos.	Yes	7.0
W. Planting	2/1/14	
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	-
Atm. 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-L11 (Trees)						Acres:		72.00		
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)	Actual Yield (tons/ac)			
2/1/15	W. Planting	-	-	-	-	-	-	-	-	-	-	
3/8/23	Canal	-	-	-	1.07	-	0.0	-	-	5	-	
4/2/23	Canal	-	-	-	1.10	-	0.0	-	-	6	-	
5/13/23	Canal	-	-	-	2.58	-	0.0	-	-	13	-	
6/8/23	Canal	-	-	-	5.97	-	0.0	-	-	30	-	
7/10/23	Canal	-	-	-	8.25	-	0.0	-	-	42	-	
8/11/23	Canal	-	-	-	7.07	-	0.0	-	-	36	-	
9/3/23	Canal	-	-	-	5.30	-	0.0	-	-	27	-	
10/7/23	Canal	-	-	-	2.69	-	0.0	-	-	14	-	
11/1/23	W. Harvest	-	-	-	-	-	(98.4)	(14.7)	(108.2)	-	-	
Totals:		0.0	0	34.02	0.00	(98)	(15)	(108)	171	0.00	0	1.75

Field Name/Number: 2-L11 (Trees)      Acres: 72.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	0.1	0.0	0.0	171.3
Nutrients Removed at Harvest	-98.4	-6.4	-89.8	0.0
Nutrient Balance	-98.3	-6.4	-89.8	171.3

Winter Nitrogen Crop App / Use Ratio: 0.07

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

Field Name/Number: 2-L11 (Trees)      Acres: 72

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	- Ac In /Ac	-
Canal	34.0 Ac In /Ac	0.1
Atm. Depos.	Yes	7.0
W. Planting	2/1/15	
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 #N/A T/Ac	#N/A #N/A #N/A

## **Nutrient Applications**

**Field Name/Number:**

3-L12 E {Trees}

**Acres:**

**77.50**

Field Name/Number: 3-L12 E (Trees)      Acres: 77.50

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	0.1	0.0	0.0	163.6
Nutrients Removed at Harvest	-98.4	-6.4	-89.8	0.0
Nutrient Balance	-98.3	-6.4	-89.8	163.6

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

Field Name/Number: 3-L12 E (Trees)      Acres: 77.5

Winter Crop Nutrient Summary :	Trees, Pistachios		N
	Applied		
W. Manure App.	-	T/Ac	-
W. Comm Fert App.	-	lbs/Ac	-
Process Water	Q1	- Ac In /Ac	-
	Q2	- Ac In /Ac	-
Well Water		- Ac In /Ac	-
Canal	32.5	Ac In /Ac	0.1
Atm. Depos.	Yes		7.0
W. Planting	2/1/14		
W. Harvest	11/1/23	1.8 T/Ac	(98.4) (33.7) (129.8)

Summer Crop Nutrient Summary :	Trees, Pistachios		N
	Applied		
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	#N/A T/Ac	#N/A
S. Harvest	#N/A	#N/A	#N/A

## **Nutrient Applications**

**Field Name/Number:**

3-L12 W

**Acres:**

77.50

Field Name/Number: 3-L12 WAcres: 77.50

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	459.0	83.1	805.8	6524.5
Nutrients Removed at Harvest	-436.9	-43.7	-408.5	0.0
Nutrient Balance	22.1	39.4	397.2	6524.5

Winter Nitrogen Crop App / Use Ratio: 1.01

Summer Nitrogen Crop App / Use Ratio: 1.32

Field Name/Number: 3-L12 W Acres: 77.5

Winter Crop Nutrient Summary :	Wheat, Silage		N
	Applied		
W. Manure App.	11.6	T/Ac	103.5
W. Comm Fert App.	-	lbs/Ac	-
Process Water	Q1	2.7 Ac In /Ac	149.1
	Q2	1.4 Ac In /Ac	68.0
Well Water		22.5 Ac In /Ac	8.7
Canal		- Ac In /Ac	-
Atm. Depos.	Yes		7.0
W. Planting	10/21/22		
W. Harvest	5/10/23	30.0 T/Ac	(333.5) (175.2) (364.9)

Summer Crop Nutrient Summary :	Corn, Silage		N
	Applied		
S. Manure App.	-	T/Ac	-
S. Comm Fert App.	-	lbs/Ac	-
Process Water	Q2	- Ac In /Ac	-
	Q3	1.4 Ac In /Ac	115.2
	Q4	- Ac In /Ac	-
Well Water		37.8 Ac In /Ac	14.6
Canal		- Ac In /Ac	-
Atm. Depos.	Yes		7.0
S. Planting	6/15/23		
S. Harvest	9/28/23	29.0 T/Ac	(103.3) (54.3) (225.6)

## Nutrient Applications

Field Name/Number:

3-L13

Acres:

70.00

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)	TPS %	Expected Yield (tons/ac)	Actual Yield (tons/ac)
11/1/22	W. Manure App.	11.43	-	-	-	-	-	101.8	121.6	256.7	-	-	-
11/9/22	W. Planting	-	-	-	-	-	-	-	-	-	-	-	-
11/14/22	9 (2)	-	-	-	6.36	-	6.1	-	-	390	-	-	-
1/6/23	9 (2)	-	-	-	5.76	-	5.5	-	-	352	-	-	-
1/6/23	Process Water	-	-	-	-	1.44	86.1	21.2	232.3	1,478	-	-	-
3/1/23	9 (2)	-	-	-	5.57	-	5.3	-	-	341	-	-	-
3/1/23	Process Water	-	-	-	-	1.39	70.0	20.5	224.7	1,429	-	-	-
4/20/23	9 (2)	-	-	-	5.68	-	5.4	-	-	348	-	-	-
4/20/23	Process Water	-	-	-	-	1.42	68.1	18.9	185.4	1,307	-	-	-
5/31/23	W. Harvest	-	-	-	-	-	(366.4)	(82.1)	(442.2)	-	-	30.34	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
6/15/23	9 (2)	-	-	-	6.55	-	6.2	-	-	401	-	-	-
6/26/23	S. Planting	-	-	-	-	-	-	-	-	-	-	-	-
7/11/23	9 (2)	-	-	-	6.44	-	6.1	-	-	394	-	-	-
7/25/23	9 (2)	-	-	-	5.64	-	5.4	-	-	345	-	-	-
7/25/23	Process Water	-	-	-	-	1.41	119.6	9.2	99.5	1,228	-	-	-
8/7/23	9 (2)	-	-	-	5.72	-	5.4	-	-	350	-	-	-
8/7/23	Process Water	-	-	-	-	1.43	121.2	9.3	100.8	1,245	-	-	-
8/24/23	9 (2)	-	-	-	6.32	-	6.0	-	-	387	-	-	-
9/11/23	9 (2)	-	-	-	6.51	-	6.2	-	-	399	-	-	-
10/13/23	S. Harvest	-	-	-	-	-	(218.6)	(35.4)	(249.1)	-	-	28.80	-
Totals:		11.4		0	60.56	7.09	39	83	408	10,395	0.00	0	59.14

Field Name/Number: 3-L13      Acres: 70.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	624.4	87.6	912.6	10395.2
Nutrients Removed at Harvest	-585.0	-51.3	-573.9	0.0
Nutrient Balance	39.4	36.3	338.7	10395.2

Winter Nitrogen Crop App / Use Ratio: 0.97      Summer Nitrogen Crop App / Use Ratio: 1.30

Field Name/Number: 3-L13      Acres: 70

Winter Crop Nutrient Summary :	Wheat, Silage		N
	Applied		
W. Manure App.	11.4	T/Ac	101.8
W. Comm Fert App.	-	Ibs/Ac	-
Process Water	Q1	2.8 Ac In /Ac	156.1
	Q2	1.4 Ac In /Ac	68.1
Well Water		23.4 Ac In /Ac	22.2
Canal		- Ac In /Ac	-
Atm. Depos.	Yes		7.0
W. Planting	11/9/22		
W. Harvest	5/31/23	30.3 T/Ac	(366.4) (188.1) (530.7)

Summer Crop Nutrient Summary :	Corn, Silage		N
	Applied		
S. Manure App.	-	T/Ac	-
S. Comm Fert App.	-	Ibs/Ac	-
Process Water	Q2	- Ac In /Ac	-
	Q3	2.8 Ac In /Ac	240.7
	Q4	- Ac In /Ac	-
Well Water		37.2 Ac In /Ac	35.4
Canal		- Ac In /Ac	-
Atm. Depos.	Yes		7.0
S. Planting	6/26/23		
S. Harvest	10/13/23	28.8 T/Ac	(218.6) (81.0) (298.9)

### Nutrient Applications

Field Name/Number:		3-L14						Acres:		65.00		
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)	Actual Yield (tons/ac)			
		-	-	-	-	-	-	-	-	-	-	
		-	-	-	-	-	-	-	-	-	-	
10/20/20	W. Planting	-	-	-	-	-	-	-	-	-	-	
2/11/23	Canal	--	--	5.42	-	0.0	-	-	27	-	-	
3/6/23	Canal	--	--	5.18	-	0.0	-	-	26	-	-	
4/2/23	Canal	--	--	5.30	-	0.0	-	-	27	-	-	
5/9/23	Canal	--	--	5.10	-	0.0	-	-	26	-	-	
6/13/23	Canal	--	--	5.34	-	0.0	-	-	27	-	-	
7/5/23	Canal	--	--	5.22	-	0.0	-	-	26	-	-	
8/9/23	Canal	--	--	5.14	-	0.0	-	-	26	-	-	
9/7/23	Canal	--	--	5.55	-	0.0	-	-	28	-	-	
10/1/23	W. Harvest	--	--	-	-	(608.8)	(52.5)	(438.5)	-	-	10.10	
Totals:		0.0	0	42.25	0.00	(609)	(53)	(438)	213	0.00	0	10.10

Field Name/Number: 3-L14Acres: 65.00

Nutrients Applied	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Removed at Harvest	0.1	0.0	0.0	212.7
Nutrient Balance	-608.8	-22.9	-364.0	0.0
	-608.7	-22.9	-364.0	212.7

Winter Nitrogen Crop App / Use Ratio: 0.01Summer Nitrogen Crop App / Use Ratio: #N/AField Name/Number: 3-L14 Acres: 65

Winter Crop	Alfalfa	Nutrient Summary :		
		Applied	N	
W. Manure App.	-	T/Ac	-	-
W. Comm Fert App.	-	Ibs/Ac	-	-
Process Water	Q1	- Ac In /Ac	-	-
	Q2	- Ac In /Ac	-	-
Well Water		- Ac In /Ac	-	-
Canal	42.3	Ac In /Ac	0.1	
Atm. Depos.	Yes		7.0	
W. Planting	10/20/20			
W. Harvest	10/1/23	10.1 T/Ac	(608.8)	(120.3) (526.2)

Summer Crop	Alfalfa	Nutrient Summary :		
		Applied	N	
S. Manure App.	-	T/Ac	-	-
S. Comm Fert App.	-	Ibs/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	#N/A T/Ac	#N/A #N/A	#N/A

### Nutrient Applications

Field Name/Number:

4-L15

Acres:

87.00

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)	Actual Yield (tons/ac)
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/17/22	W. Planting	-	-	-	-	-	-	-	-	-	-	-	-
11/28/22	11.00	-	-	-	5.21	-	5.5	-	-	163	-	-	-
11/28/22	Process Water	-	-	-	-	1.56	93.4	23.0	252.1	1,604	-	-	-
2/6/23	11.00	-	-	-	5.38	-	5.7	-	-	168	-	-	-
2/6/23	Process Water	-	-	-	-	1.62	81.2	23.8	260.7	1,659	-	-	-
3/24/23	11.00	-	-	-	5.28	-	5.6	-	-	165	-	-	-
3/24/23	Process Water	-	-	-	-	1.58	79.7	23.4	255.8	1,627	-	-	-
4/26/23	11.00	-	-	-	6.37	-	6.8	-	-	199	-	-	-
5/11/23	W. Harvest	-	-	-	-	-	(258.4)	(71.1)	(361.7)	-	-	28.63	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
5/31/23	11.00	-	-	-	6.48	-	6.9	-	-	203	-	-	-
6/17/23	S. Planting	-	-	-	-	-	-	-	-	-	-	-	-
6/28/23	11.00	-	-	-	6.27	-	6.7	-	-	196	-	-	-
7/14/23	11.00	-	-	-	5.15	-	5.5	-	-	161	-	-	-
7/14/23	Process Water	-	-	-	-	1.55	131.1	10.1	109.0	1,346	-	-	-
7/27/23	11.00	-	-	-	6.60	-	7.0	-	-	207	-	-	-
8/18/23	11.00	-	-	-	6.27	-	6.7	-	-	196	-	-	-
8/28/23	11.00	-	-	-	6.35	-	6.8	-	-	199	-	-	-
9/25/23	S. Harvest	-	-	-	-	-	(128.2)	(21.4)	(196.6)	-	-	24.99	-
Totals:		0.0		0	59.37	6.31	62	(12)	319	8,094	0.00	0	53.62

Field Name/Number: 4-L15Acres: 87.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	448.7	35.1	728.4	8094.0
Nutrients Removed at Harvest	-386.6	-40.3	-463.4	0.0
Nutrient Balance	62.1	-5.3	265.0	8094.0

Winter Nitrogen Crop App / Use Ratio: 1.10Summer Nitrogen Crop App / Use Ratio: 1.39Field Name/Number: 4-L15 Acres: 87

Winter Crop Nutrient Summary :	Wheat, Silage		N			
	Applied					
W. Manure App.	-	T/Ac	-			
W. Comm Fert App.	-	lbs/Ac	-			
Process Water	Q1	4.8	Ac In /Ac	254.4	160.9	922.2
	Q2	-	Ac In /Ac	-	-	-
Well Water		22.2	Ac In /Ac	23.7		
Canal		-	Ac In /Ac	-		
Atm. Depos.	Yes			7.0		
W. Planting	11/17/22					
W. Harvest	5/11/23	28.6	T/Ac	(258.4)	(162.7)	(434.1)

Summer Crop Nutrient Summary :	Corn, Silage		N			
	Applied					
S. Manure App.	-	T/Ac	-			
S. Comm Fert App.	-	lbs/Ac	-			
Process Water	Q2	-	Ac In /Ac	-	-	-
	Q3	1.5	Ac In /Ac	131.1	23.0	130.8
	Q4	-	Ac In /Ac	-	-	-
Well Water		37.1	Ac In /Ac	39.6		
Canal		-	Ac In /Ac	-		
Atm. Depos.	Yes			7.0		
S. Planting	6/17/23					
S. Harvest	9/25/23	25.0	T/Ac	(128.2)	(48.9)	(235.9)

## Nutrient Applications

Field Name/Number:

4-L16

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)	Actual Yield (tons/ac)
10/15/22	W. Manure App.	10.13	-	-	-	-	90.2	107.8	227.4	-	-	-	-
10/27/22	W. Planting	-	-	-	-	-	-	-	-	-	-	-	-
1/25/23	12.00	-	-	-	5.31	-	4.2	-	-	145	-	-	-
1/25/23	Process Water	-	-	-	-	1.59	95.4	23.5	257.3	1,637	-	-	-
2/15/23	12.00	-	-	-	5.20	-	4.1	-	-	142	-	-	-
2/15/23	Process Water	-	-	-	-	1.56	78.5	23.0	251.9	1,603	-	-	-
3/1/23	12.00	-	-	-	5.40	-	4.3	-	-	147	-	-	-
3/1/23	Process Water	-	-	-	-	1.62	81.5	23.9	261.3	1,663	-	-	-
4/10/23	12.00	-	-	-	6.18	-	4.9	-	-	168	-	-	-
5/20/23	W. Harvest	-	-	-	-	-	(349.5)	(102.8)	(354.6)	-	-	33.81	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
5/27/23	S. Planting	-	-	-	-	-	-	-	-	-	-	-	-
6/16/23	12.00	-	-	-	6.52	-	5.2	-	-	177	-	-	-
7/5/23	12.00	-	-	-	5.45	-	4.3	-	-	148	-	-	-
7/5/23	Process Water	-	-	-	-	1.64	138.6	10.6	115.3	1,424	-	-	-
7/17/23	12.00	-	-	-	5.37	-	4.3	-	-	146	-	-	-
7/17/23	Process Water	-	-	-	-	1.61	136.5	10.5	113.6	1,402	-	-	-
7/31/23	12.00	-	-	-	5.31	-	4.2	-	-	145	-	-	-
7/31/23	Process Water	-	-	-	-	1.59	135.1	10.4	112.4	1,388	-	-	-
8/15/23	12.00	-	-	-	6.38	-	5.1	-	-	173	-	-	-
9/6/23	S. Harvest	-	-	-	-	-	(366.4)	(59.8)	(369.0)	-	-	36.19	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals:		10.1		0	51.12	9.62	81	47	616	10,508	0.00	0	70.00

Field Name/Number: 4-L16Acres: 79.00

Nutrients Applied	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Removed at Harvest	796.4	91.5	1111.7	10507.8
Nutrient Balance	-715.8	-70.9	-600.6	0.0
	80.5	20.6	511.1	10507.8

Winter Nitrogen Crop App / Use Ratio: 1.06Summer Nitrogen Crop App / Use Ratio: 1.20Field Name/Number: 4-L16 Acres: 79

Winter Crop Nutrient Summary :	Wheat, Silage		N		
	Applied				
W. Manure App.	10.1	T/Ac	90.2	246.8	272.9
W. Comm Fert App.	-	lbs/Ac	-	-	-
Process Water	Q1	4.8	Ac In /Ac	255.3	161.3
	Q2	-	Ac In /Ac	-	924.6
Well Water		22.1	Ac In /Ac	17.5	
Canal		-	Ac In /Ac	-	
Atm. Depos.	Yes			7.0	
W. Planting	10/27/22				
W. Harvest	5/20/23	33.8	T/Ac	(349.5)	(235.4)
					(425.5)

Summer Crop Nutrient Summary :	Corn, Silage		N		
	Applied				
S. Manure App.	-	T/Ac	-	-	-
S. Comm Fert App.	-	lbs/Ac	-	-	-
Process Water	Q2	-	Ac In /Ac	-	-
	Q3	4.8	Ac In /Ac	410.2	72.1
	Q4	-	Ac In /Ac	-	-
Well Water		29.0	Ac In /Ac	23.0	
Canal		-	Ac In /Ac	-	
Atm. Depos.	Yes			7.0	
S. Planting	5/27/23				
S. Harvest	9/6/23	36.2	T/Ac	(366.4)	(136.9)
					(442.8)

## Nutrient Applications

Field Name/Number:		4-L17								Acres:		93.00	
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)
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/3/22	W. Planting	-	-	-	-	-	-	-	-	-	-	-	-
11/14/22	13.00	-	-	-	5.30	-	1.6	-	-	108	-	-	-
11/14/22	Process Water	-	-	-	-	1.59	95.1	23.5	256.5	1,632	-	-	-
1/31/23	13.00	-	-	-	-	5.42	-	1.6	-	-	111	-	-
1/31/23	Process Water	-	-	-	-	1.63	81.7	24.0	262.3	1,669	-	-	-
3/24/23	13.00	-	-	-	-	5.35	-	1.6	-	-	109	-	-
3/24/23	Process Water	-	-	-	-	1.60	80.7	23.7	258.8	1,647	-	-	-
4/26/23	13.00	-	-	-	-	6.27	-	1.8	-	-	128	-	-
5/20/23	W. Harvest	-	-	-	-	-	(274.6)	(74.4)	(266.9)	-	-	-	27.47
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
6/20/23	13.00	-	-	-	-	6.44	-	1.9	-	-	131	-	-
7/7/23	S. Planting	-	-	-	-	-	-	-	-	-	-	-	-
7/22/23	13.00	-	-	-	-	6.63	-	2.0	-	-	135	-	-
8/14/23	13.00	-	-	-	-	5.46	-	1.6	-	-	112	-	-
8/14/23	Process Water	-	-	-	-	-	1.64	138.9	10.7	115.6	1,427	-	-
8/30/23	13.00	-	-	-	-	5.39	-	1.6	-	-	110	-	-
8/30/23	Process Water	-	-	-	-	-	1.62	137.1	10.5	114.1	1,408	-	-
9/15/23	13.00	-	-	-	-	6.68	-	2.0	-	-	136	-	-
10/15/23	S. Harvest	-	-	-	-	-	-	(232.4)	(37.3)	(193.4)	-	-	22.74
Totals:		0.0		0	52.93	8.08	#N/A	-	-	#N/A	0.00	0	50.22

Field Name/Number: 4-L17Acres: 93.00

Nutrients Applied	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Removed at Harvest	549.1	40.3	836.1	8863.1
Nutrient Balance	-507.0	-48.7	-382.1	0.0
	42.1	-8.5	454.0	8863.1

Winter Nitrogen Crop App / Use Ratio: 0.99

Summer Nitrogen Crop App / Use Ratio: 1.26

Field Name/Number: 4-L17Acres: 93

Winter Crop	Wheat, Silage				
Nutrient Summary :	Applied	N			
W. Manure App.	-	T/Ac	-	-	-
W. Comm Fert App.	-	Ibs/Ac	-	-	-
Process Water	Q1	4.8	Ac In /Ac	257.5	162.8
	Q2	-	Ac In /Ac	-	-
Well Water		22.3	Ac In /Ac	6.6	
Canal		-	Ac In /Ac	-	
Atm. Depos.	Yes			7.0	
W. Planting	11/3/22				
W. Harvest	5/20/23	27.5	T/Ac	(274.6)	(170.3)
					(320.3)

Summer Crop	Corn, Silage				
Nutrient Summary :	Applied	N			
S. Manure App.	-	T/Ac	-	-	-
S. Comm Fert App.	-	Ibs/Ac	-	-	-
Process Water	Q2	-	Ac In /Ac	-	-
	Q3	3.3	Ac In /Ac	276.0	48.5
	Q4	-	Ac In /Ac	-	-
Well Water		30.6	Ac In /Ac	9.0	
Canal		-	Ac In /Ac	-	
Atm. Depos.	Yes			7.0	
S. Planting	7/7/23				
S. Harvest	10/15/23	22.7	T/Ac	(232.4)	(85.5)
					(232.1)

## **Nutrient Applications**

**Field Name/Number:**

4-L18

**Acres:**

93.00

Field Name/Number: 4-L18Acres: 93.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	0.1	0.0	0.0	220.3
Nutrients Removed at Harvest	-558.2	-26.4	-327.6	0.0
Nutrient Balance	-558.1	-26.4	-327.6	220.3

Winter Nitrogen Crop App / Use Ratio: 0.01Summer Nitrogen Crop App / Use Ratio: #N/AField Name/Number: 4-L18Acres: 93

Winter Crop	Alfalfa	Applied	N
W. Manure App.	-	T/Ac	-
W. Comm Fert App.	-	Ibs/Ac	-
Process Water	Q1	- Ac In /Ac	-
	Q2	- Ac In /Ac	-
Well Water	-	Ac In /Ac	-
Canal	43.8	Ac In /Ac	0.1
Atm. Depos.	Yes		7.0
W. Planting	10/8/19		
W. Harvest	10/1/23	9.8 T/Ac	(558.2) (138.4) (473.6)

Summer Crop Alfalfa

Summer Crop	Alfalfa	Applied	N
S. Manure App.	-	T/Ac	-
S. Comm Fert App.	-	Ibs/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	#N/A T/Ac	#N/A #N/A #N/A

## **Nutrient Applications**

**Field Name/Number:**

4-L19

**Acres:**

92.00

Field Name/Number: 4-L19Acres: 92.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	640.9	40.7	844.6	9477.8
Nutrients Removed at Harvest	-658.1	-48.2	-448.2	0.0
Nutrient Balance	-17.2	-7.5	396.5	9477.8

Winter Nitrogen Crop App / Use Ratio: 0.98

Summer Nitrogen Crop App / Use Ratio: 1.22

Field Name/Number: 4-L19 Acres: 92

Winter Crop Nutrient Summary :	Wheat, Silage		N		
	Applied				
W. Manure App.	-	T/Ac	-	-	-
W. Comm Fert App.	-	lbs/Ac	-	-	-
Process Water	Q1	4.9	Ac In /Ac	259.8	164.3
	Q2	-	Ac In /Ac	-	-
Well Water		22.5	Ac In /Ac	8.2	
Canal		-	Ac In /Ac	-	
Atm. Depos.	Yes			7.0	
W. Planting	10/20/22				
W. Harvest	5/7/23	28.2	T/Ac	(279.9)	(144.4)
					(279.1)

Summer Crop Nutrient Summary :	Corn, Silage		N		
	Applied				
S. Manure App.	-	T/Ac	-	-	-
S. Comm Fert App.	80.0	lbs/Ac	80.0	-	-
Process Water	Q2	-	Ac In /Ac	-	-
	Q3	3.3	Ac In /Ac	279.6	49.2
	Q4	-	Ac In /Ac	-	-
Well Water		36.7	Ac In /Ac	93.3	
Canal		-	Ac In /Ac	-	
Atm. Depos.	Yes			7.0	
S. Planting	5/25/23				
S. Harvest	9/4/23	28.7	T/Ac	(378.2)	(108.3)
					(368.8)

## 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.



(Initial)

## 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.



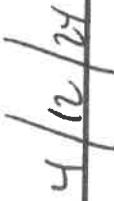
Signature of Owner of Facility

Fernandes Brothers

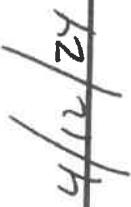
Print Name

Legacy Ranches #2

Print Name



Date



Date

Signature of Operator of Facility

## **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?

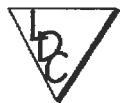
*Yes \_\_\_\_\_*

### **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 \_\_\_\_\_*





# **Livingston Dairy Consulting, Inc.**

## FIELD ACTIVITY REPORT

**Facility Name:** Legacy Ranches #2  
8660 Avenue 96, Pixley  
Tulare 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:**

Date	Well Name	Time	pH	Temp	Ammonium
7-10	Dam 6	8:27	6.5	67	Ø
	Barn 9	8:35	6.8	68	Ø
	Barn 10	8:42	6.7	67	Ø
	Barn New 11	8:57	6.7	68	Ø
7/16	Well #3	9:39	7	67	Ø
	Well #5	9:44	6.5	68	Ø
	Well #14	9:50	7	66	Ø
7/17	Well #1	8:26	7	67	Ø
7/18	Well 9(2)	6:51	6	64	Ø
7/20	6	7:17	7	65	Ø
	11	7:24	7	66	Ø
7/21	13	7:03	6.5	67	Ø
	12	7:11	7	66	Ø
	4	7:18	6	68	Ø

**Sample Preservation Method:** (Circle one)

Ice Chest

## Refrigerator

### **Ice Pack**



March 9, 2023

**Lab No.** : VI 2340871

**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 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
Dom 6	02/10/2023	02/10/2023	VI 2340871-001	DW
Barn 9	02/10/2023	02/10/2023	VI 2340871-002	DW
Barn 10	02/10/2023	02/10/2023	VI 2340871-003	DW

### Sampling and Receipt Information:

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

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

### Test Summary

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

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

KD: JRD

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



Digitally signed by Kelly A. Dunnahoo, B.S.  
 Title: Laboratory Director  
 Date: 2023-03-09

Section: Case Narrative

Page 1 of 5

Page 1 of 5

**Corporate Offices & Laboratory**  
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 Santa Paula, CA 93060  
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**Office & Laboratory**  
 2500 Stagecoach Road  
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 563 E. Lindo Avenue  
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 FAX: (530)343-3807  
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 CA ELAP Certification No. 2775

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

March 9, 2023

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

Description : Dom 6  
 Project : W-6 Legacy #2

Lab No. : VI 2340871-001

Customer No.: 4018505

Sampled On : February 10, 2023 at 08:27

Sampled By : KC / MF

Received On : February 10, 2023 at 10:39

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
<b>Dairy Analysis</b>													
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U	02/23/2023	09:54	sta	EPA 351.2	02/26/2023	22:08	lcr
Nitrate Nitrogen	35.6	0.4	mg/L	10	1		02/21/2023	12:00	lfs	SM 4500-NO3 F	02/21/2023	13:31	lfs
Nitrogen, Total as Nitrogen	35.6	0.5	mg/L		1		02/23/2023	09:54	sta	EPA 351.2	02/26/2023	22:08	lcr
Nitrate + Nitrite as N	35.6	0.4	mg/L	10	1		02/21/2023	12:00	lfs	SM 4500-NO3 F	02/21/2023	13:31	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	02/23/2023	09:54	sta	EPA 351.2	02/26/2023	22:08	lcr
Conductivity	943	1	umhos/cm	1600 <sup>2</sup>	1		02/21/2023	14:01	sta		02/21/2023	14:01	sta
Solids, Total Dissolved (TDS)	590	20	mg/L	1000 <sup>2</sup>	1		02/14/2023	12:50	ctl	SM 2540 C	02/15/2023	12:51	ctl

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

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

Description : Barn 9  
 Project : W-6 Legacy #2

Lab No. : VI 2340871-002  
 Customer No. : 4018505

Sampled On : February 10, 2023 at 08:35  
 Sampled By : KC / MF  
 Received On : February 10, 2023 at 10:39  
 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
<b>Dairy Analysis</b>													
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U	02/23/2023	09:54	sta	EPA 351.2	02/26/2023	22:11	lcr
Nitrate Nitrogen	0.4	0.4	mg/L	10	1		02/21/2023	12:00	lfs	SM 4500-NO3 F	02/21/2023	13:34	lfs
Nitrogen, Total as Nitrogen	1.1	0.5	mg/L		1		02/23/2023	09:54	sta	EPA 351.2	02/26/2023	22:11	lcr
Nitrate + Nitrite as N	1.1	0.4	mg/L	10	1		02/21/2023	12:00	lfs	SM 4500-NO3 F	02/21/2023	13:34	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	02/23/2023	09:54	sta	EPA 351.2	02/26/2023	22:11	lcr
Conductivity	232	1	umhos/cm	1600 <sup>2</sup>	1		03/01/2023	17:08	amm	SM 4500-H+B	03/01/2023	18:18	sta
Solids, Total Dissolved (TDS)	150	20	mg/L	1000 <sup>2</sup>	1		02/15/2023	11:45	ctl	SM 2540 C	02/16/2023	12:13	ctl

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

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

Description : Barn 10  
 Project : W-6 Legacy #2

Lab No. : VI 2340871-003

Customer No.: 4018505

Sampled On : February 10, 2023 at 08:42

Sampled By : KC / MF

Received On : February 10, 2023 at 10:39

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
<b>Dairy Analysis</b>													
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U	02/24/2023	11:30	sta	EPA 351.2	03/01/2023	18:12	lcr
Nitrate Nitrogen	8.1	0.4	mg/L	10	1		02/21/2023	12:00	lfs	SM 4500-NO3 F	02/21/2023	13:36	lfs
Nitrogen, Total as Nitrogen	8.1	0.5	mg/L		1		02/24/2023	11:30	sta	EPA 351.2	03/01/2023	18:12	lcr
Nitrate + Nitrite as N	8.1	0.4	mg/L	10	1		02/21/2023	12:00	lfs	SM 4500-NO3 F	02/21/2023	13:36	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	02/24/2023	11:30	sta	EPA 351.2	03/01/2023	18:12	lcr
Conductivity	463	1	umhos/cm	1600 <sup>2</sup>	1		02/21/2023	14:01	sta		02/21/2023	14:01	sta
Solids, Total Dissolved (TDS)	290	20	mg/L	1000 <sup>2</sup>	1		02/14/2023	12:50	ctl	SM 2540 C	02/15/2023	12:43	ctl

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

**Livingston Dairy Consulting, Inc.**

Lab No. : VI 2340871  
 Customer No. : 4018505

**Quality Control - Wet Chem**

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
<b>Wet Chem</b>								
E. C.	2320B	(VI 2341105-003)	Dup	umhos/cm		0.3%	5	
	2510B	02/21/2023:201893STA	Blank	umhos/cm		ND	<1	
		(VI 2341015-002)	Dup	umhos/cm		0.4%	5	
			Blank	umhos/cm		ND	<1	
			Dup	umhos/cm		0.7%	5	
Solids, Total Dissolved	2540CE	02/14/2023:201630CTL	Blank	mg/L	990.8	ND	<20	
			LCS	mg/L	990.8	98.4 %	90-110	
		(VI 2340882-003)	Dup	mg/L		1.4%	5	
		(VI 2340882-003)	Dup	mg/L		4.5%	5	
	2540CE	02/15/2023:201693CTL	Blank	mg/L	990.8	ND	<20	
			LCS	mg/L	990.8	102 %	90-110	
		(VI 2340896-001)	Dup	mg/L		0.4%	5	
		(VI 2340896-001)	Dup	mg/L		0.7%	5	
Nitrogen, Total Kjeldahl	351.2	02/23/2023:201997STA	Blank	mg/L		ND	<0.5	
			LCS	mg/L	12.00	96.9%	73-124	
			MS	mg/L	12.00	91.7%	54-136	
		(STK2331941-001)	MSD	mg/L	12.00	82.6%	54-136	
			MSRPD	mg/L	12.00	10.3%	≤27	
			MS	mg/L	12.00	86.7%	54-136	
		(SP 2302092-008)	MSD	mg/L	12.00	95.3%	54-136	
			MSRPD	mg/L	12.00	9.5%	≤27	
	351.2	02/24/2023:202049STA	Blank	mg/L		ND	<0.5	
			LCS	mg/L	12.00	91.2%	73-124	
			MS	mg/L	12.00	84.9%	54-136	
		(VI 2340880-001)	MSD	mg/L	12.00	83.6%	54-136	
			MSRPD	mg/L	12.00	1.5%	≤27	
			MS	mg/L	12.00	88.2%	54-136	
		(VI 2340880-002)	MSD	mg/L	12.00	89.0%	54-136	
			MSRPD	mg/L	12.00	0.8%	≤27	
Nitrate + Nitrite as N	4500NO3F	02/21/2023:201925LFS	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	97.5%	80-120	
			MS	mg/L	5.609	97.3%	66-125	
		(SP 2302506-001)	MSD	mg/L	5.609	96.8%	66-125	
			MSRPD	mg/L	5.609	0.2%	≤30.4	
Nitrate Nitrogen	4500NO3F	02/21/2023:201925LFS	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	97.5%	80-120	
			MS	mg/L	5.609	97.3%	66-125	
		(SP 2302506-001)	MSD	mg/L	5.609	96.8%	66-125	
			MSRPD	mg/L	5.609	0.2%	≤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.



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Laboratory Copy (1 of 3)

TEST DESCRIPTION - See Reverse side for Container, Preservative and Sampling information											
Client: Livingston Dairy Consulting, Inc.		Address: Livingston Dairy Consulting, Inc 1635 E. Prosperity Suite B Tulare, CA 93274		Phone: (559)687-1440		Fax:		42086:03/01/2022		TEST DESCRIPTION - See Reverse side for Container, Preservative and Sampling information	
Contact Person: Noreen Livingston		Project Name: W-6 <u>Legacy #2</u>		Purchase Order Number:		Quote Number: VI 20210208-01					
Sampler(s)		Ke /mf		Sampling Fee: _____		Pickup Fee: _____					
Compositor Setup Date: _____ / _____ / _____		Time: _____ / _____									
Lab Number: VI 2340871		4-18505									
Samp Num	Location Description	Date Sampled	Time Sampled								
1	Dam 6	2/10/23	8:27	G		DW P					
2	Barn 9	2/10/23	8:35	G		DW P					
3	Barn 10	2/10/23	8:42	G		DW P					
4				G							
5				G							
6				G							
7				G							
8				G							
9				G							
10				G							
Remarks:		Relinquished		Date: <u>2/10/23</u>		Time: <u>1039</u>		Relinquished		Date: <u>2/11/23</u>	
Received By: <u>MH</u>		Date: <u>2/10/23</u>		Time: <u>1039</u>		Received By: <u>MH</u>		Date: <u>2/11/23</u>		Time: <u>1110</u>	
Remarks:		Relinquished		Date: <u>2/10/23</u>		Time: <u>1039</u>		Relinquished		Date: <u>2/11/23</u>	
Received By: <u>MH</u>		Date: <u>2/10/23</u>		Time: <u>1039</u>		Received By: <u>MH</u>		Date: <u>2/11/23</u>		Time: <u>1110</u>	
Remarks:		Relinquished		Date: <u>2/10/23</u>		Time: <u>1039</u>		Relinquished		Date: <u>2/11/23</u>	
Received By: <u>MH</u>		Date: <u>2/10/23</u>		Time: <u>1039</u>		Received By: <u>MH</u>		Date: <u>2/11/23</u>		Time: <u>1110</u>	

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Visalia, CA 93291  
Phone: (559) 731-8173

### 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: 6.0°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.

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

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): MMH

### 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: 558796176 154

195

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

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): 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 2340871

iv 02/13/2023 10:04:38  
U1 2340871



March 9, 2023

**Lab No.** : VI 2340868  
**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  | (1 page)  | : Results for each sample submitted.        |
| Quality Control | (2 pages) | : Supporting Quality Control (QC) results.  |

### Case Narrative

This Case Narrative pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab No.	Matrix
Barn New 11	02/10/2023	02/10/2023	VI 2340868-001	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 except those as listed in the table below. 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.

### Samples Over Hold Time

Lab No	Analyte Method	Maximum Hold Time	Actual Hold Time
VI 2340868-001	Nitrate Nitrogen	48 hours	146.7 hours

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

### Test Summary

EPA 200.7	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
EPA 300.0	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
SM 2540 C	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
SM 4500-H+B	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)

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

KD: JRD

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

Digitally signed by Kelly A. Dunnahoo, B.S.  
 Title: Laboratory Director  
 Date: 2023-03-09

Section: Case Narrative

Page 1 of 4

Page 1 of 4

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March 9, 2023

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

Lab No. : VI.2340868-001

Customer No.: 4018505

Sampled On : February 10, 2023 at 08:57

Sampled By : KC / MF

Received On : February 10, 2023 at 10:39

Matrix : Drinking Water

Description : Barn New 11  
 Project : W-4 Legacy #2

### Sample Results - Inorganic

Constituent	Result	RL	Units	MCL/AL	Dil.	DQF	Sample Preparation			Sample Analysis			
							Date	Time	Who	Method	Date	Time	Who
<b>Dairy Analysis</b>													
Alkalinity (as CaCO <sub>3</sub> )	70	10	mg/L		1	I	02/19/2023	17:48	amm	SM 4500-H+B	02/19/2023	19:20	amm
Bicarbonate	70	10	mg/L		1	I	02/19/2023	17:48	amm	SM 4500-H+B	02/19/2023	19:20	amm
Carbonate	10	10	mg/L		1		02/19/2023	17:48	amm	SM 4500-H+B	02/19/2023	19:20	amm
Hydroxide	10	10	mg/L		1		02/19/2023	17:48	amm	SM 4500-H+B	02/19/2023	19:20	amm
Chloride	29	1	mg/L	500 <sup>2</sup>	1		02/16/2023	11:39	ldm	EPA 300.0	02/16/2023	15:02	ldm
Nitrate Nitrogen	ND	0.1	mg/L	10	1	JbT	02/16/2023	11:39	ldm	EPA 300.0	02/16/2023	15:02	ldm
Conductivity	282	1	umhos/cm	1600 <sup>2</sup>	1		02/19/2023	17:48	amm	SM 4500-H+B	02/19/2023	19:20	amm
Sulfate	21.4	0.5	mg/L	500 <sup>2</sup>	1		02/16/2023	11:39	ldm	EPA 300.0	02/16/2023	15:02	ldm
Solids, Total Dissolved (TDS)	160	20	mg/L	1000 <sup>2</sup>	1		02/14/2023	12:50	ctl	SM 2540 C	02/15/2023	12:41	ctl
Calcium	5	1	mg/L		1		03/03/2023	07:12	ejc	EPA 200.7	03/03/2023	19:09	ac
Magnesium	ND	1	mg/L		1	J	03/03/2023	07:12	ejc	EPA 200.7	03/03/2023	19:09	ac
Sodium	52	1	mg/L		1		03/03/2023	07:12	ejc	EPA 200.7	03/03/2023	19:09	ac

DQF Flags Definition:

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.

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

T Exceeded method/regulatory-specific holding time.

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

**Livingston Dairy Consulting, Inc.**

Lab No. : VI 2340868

Customer No. : 4018505

**Quality Control - Metals**

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
<b>Metals</b>								
Calcium	200.7	03/03/2023:202328EJC	Blank	mg/L		ND	<1	
			LCS	mg/L	12.00	97.4 %	85-115	
		(SP 2302264-002)	MS	mg/L	12.00	83.1 %	75-125	
			MSD	mg/L	12.00	90.7 %	75-125	
			MSRPD	mg/L	No Ref.	1.0%	≤20.0	
		(CC 2380581-001)	MS	mg/L	12.00	102 %	75-125	
			MSD	mg/L	12.00	70.8 %	<½	
			MSRPD	mg/L	0.8000	3.7%	≤20.0	
Magnesium	200.7	03/03/2023:202328EJC	Blank	mg/L		ND	<1	
			LCS	mg/L	12.00	98.6 %	85-115	
		(SP 2302264-002)	MS	mg/L	12.00	89.4 %	75-125	
			MSD	mg/L	12.00	92.6 %	75-125	
			MSRPD	mg/L	No Ref.	0.8%	≤20	
		(CC 2380581-001)	MS	mg/L	12.00	101 %	75-125	
			MSD	mg/L	12.00	89.3 %	75-125	
			MSRPD	mg/L	0.8000	2.9%	≤20	
Sodium	200.7	03/03/2023:202328EJC	Blank	mg/L		ND	<1	
			LCS	mg/L	12.00	96.0 %	85-115	
		(SP 2302264-002)	MS	mg/L	12.00	41.6 %	<½	
			MSD	mg/L	12.00	60.5 %	<½	
			MSRPD	mg/L	No Ref.	1.9%	≤20.0	
		(CC 2380581-001)	MS	mg/L	12.00	84.0 %	75-125	
			MSD	mg/L	12.00	44.5 %	<½	
			MSRPD	mg/L	0.8000	3.7%	≤20.0	

**Definition**

- <½ : 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.

March 9, 2023

Livingston Dairy Consulting, Inc.

Lab No. : VI 2340868

Customer No. : 4018505

**Quality Control - Wet Chem**

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
<b>Wet Chem</b>								
Alkalinity (as CaCO <sub>3</sub> )	2320B	02/19/2023:201647AMM	ND	mg/L		40.7%	10	
Bicarbonate	2320B	(VI 2341009-001)	Dup	mg/L		42.0%	10	440
E. C.	2320B	(VI 2341009-001)	Dup	umhos/cm		0%	5	
Solids, Total Dissolved	2540CE	02/14/2023:201630CTL	Blank	mg/L		ND	<20	
			LCS	mg/L	990.8	98.4 %	90-110	
			Dup	mg/L		1.4%	5	
			Dup	mg/L		4.5%	5	
Chloride	300.0	02/16/2023:201752LDM	Blank	mg/L		ND	<1	
			LCS	mg/L	25.00	105 %	90-110	
			MS	mg/L	50.00	90.1 %	85-121	
			(VI 2340868-001)	MSD	50.00	94.1 %	85-121	
			MSRPD	mg/L	10.00	2.7%	≤19	
			MS	mg/L	50.00	94.4 %	85-121	
			(SP 2302195-001)	MSD	50.00	98.4 %	85-121	
			MSRPD	mg/L	10.00	3.0%	≤19	
			Blank	mg/L		1	<0.4	
			LCS	mg/L	20.00	105 %	90-110	
Nitrate Nitrogen	300.0	02/16/2023:201752LDM	MS	mg/L	40.00	98.5 %	85-119	
			(VI 2340868-001)	MSD	40.00	103 %	85-119	
			MSRPD	mg/L	10.00	4.2%	≤19	
			MS	mg/L	40.00	99.2 %	85-119	
			(SP 2302195-001)	MSD	40.00	103 %	85-119	
			MSRPD	mg/L	10.00	4.1%	≤19	
			Blank	mg/L		ND	<0.5	
			LCS	mg/L	50.00	106 %	90-110	
			MS	mg/L	100.0	95.8 %	82-124	
			(VI 2340868-001)	MSD	100.0	100 %	82-124	
Sulfate	300.0	02/16/2023:201752LDM	MSRPD	mg/L	10.00	3.6%	≤23	
			MS	mg/L	100.0	92.2 %	82-124	
			(SP 2302195-001)	MSD	100.0	96.2 %	82-124	
			MSRPD	mg/L	10.00	2.8%	≤23	

**Definition**

- Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.
- Dup : Duplicate Sample - A random sample with each batch is prepared and analyzed in duplicate. The relative percent difference is an indication of precision for the preparation and analysis.
- LCS : Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.
- MS : Matrix Spikes - A random sample is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.
- MSD : Matrix Spike Duplicate of MS/MSD pair - A random sample duplicate is spiked with a known amount of 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**

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



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Laharotw: Canto (1 of 2)

### Inter-Laboratory Condition Upon Receipt (Attach to COC)

Sample Receipt at: STK CC CH VI

1. Number of ice chests/packages received: 7 Shipping tracking # OTC
2. Were samples received in a chilled condition? Temps: 10°C / 20°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.
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
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): MMW

### 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: 558796176 154 195

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
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): WDC

### 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 2340868

iv 02/13/2023 10:00:32



VI 2340868

August 3, 2023

**Lab No.** : VI 2344459  
**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
Well #1	07/11/2023	07/11/2023	VI 2344459-001	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: 2023-08-03

Section: Case Narrative

Page 1 of 3

Page 1 of 3

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 CA ELAP Certification No. 281C

August 3, 2023

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

Lab No. : VI 2344459-001

Customer No. : 4018505

Description : Well #1  
Project : W-6 Legacy Ranches #2

Sampled On : July 11, 2023 at 08:26  
Sampled By : Bruce / Noreen  
Received On : July 11, 2023 at 11:38  
Matrix : Ag Water

### Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
							Date	Time	Who	Method	Date	Time	Who
<b>Dairy Analysis</b>													
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U	07/28/2023	08:46	sta	EPA 351.2	07/31/2023	19:51	lcr
Nitrate Nitrogen	0.8	0.4	mg/L		1		07/12/2023	13:00	lfs	SM 4500-NO3 F	07/12/2023	16:14	lfs
Nitrogen, Total as Nitrogen	0.8	0.5	mg/L		1		07/28/2023	08:46	sta	Calc.	07/31/2023	19:51	lcr
Nitrate + Nitrite as N	0.8	0.4	mg/L		1		07/12/2023	13:00	lfs	SM 4500-NO3 F	07/12/2023	16:14	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	07/28/2023	08:46	sta	EPA 351.2	07/31/2023	19:51	lcr
Conductivity	231	1	umhos/cm		1		07/18/2023	14:57	amm	SM 4500-H+B	07/18/2023	19:45	amm
Solids, Total Dissolved (TDS)	160	20	mg/L		1		07/13/2023	11:00	ctl	SM 2540 C	07/14/2023	11:00	ctl

DQF Flags Definition:

U Constituent results were non-detect.

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

August 3, 2023

**Livingston Dairy Consulting, Inc.**

**Lab No.** : VI 2344459  
**Customer No.** : 4018505

**Quality Control - Wet Chem**

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
<b>Wet Chem</b>								
E. C. Solids, Total Dissolved	2320B 2540CE	(SP 2311840-005) 07/13/2023:207664CTL	Dup Blank LCS Dup (SP 2311803-001) (SP 2311803-001)	umhos/cm mg/L mg/L mg/L mg/L	993.7	0% ND 101% 0.03% 1%	5 <20 90-110	
Nitrogen, Total Kjeldahl	351.2	07/28/2023:208341STA	Blank LCS MS (SP 2311944-003) MSRPD	mg/L mg/L mg/L mg/L mg/L	12.00 12.00 12.00 12.00 12.00	94.9% 94.6% 94.6% 0.0% 93.8%	73-124 54-136 54-136 ≤27 54-136	
Nitrate + Nitrite as N	4500NO3F	07/12/2023:207621LFS	Blank LCS MS (STK2339067-001) MSRPD	mg/L mg/L mg/L mg/L mg/L	11.22 5.609 5.609 5.609 0.2%	100% 89.0% 89.7% 0.2% ND	80-120 66-125 66-125 ≤30.4 <0.4	
Nitrate Nitrogen	4500NO3F	07/12/2023:207621LFS	Blank LCS MS (STK2339067-001) MSRPD	mg/L mg/L mg/L mg/L mg/L	11.22 5.609 5.609 5.609 0.2%	100% 89.0% 89.7% 0.2% ND	80-120 66-125 66-125 ≤30.4 <0.4	

**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.



## Special

CHAIN OF CUSTODY  
[www.fglinc.com](http://www.fglinc.com)

Analytical Chemists

AGRICULTURAL

## Laboratory Copy (1 of 2)

Client: Livingston Dairy Consulting, Inc.		420865:04/01/2023		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 Legacy Ranches #2									
Purchase Order Number:										
Quote Number:	VI 20210208-01									
Sampler(s)	Bruce Klooster									
Sampling Fee:	/	Pickup Fee:	/							
Compositor Setup Date:	/ /	Time:	/							
Lab Number:	VI 2344459	418505								
Samp Num	Location Description	Date Sampled	Time Sampled							
1	Well #1	7/1/23	8:26 AM							
2			G							
3			G							
4			G							
5			G							
6			G							
7			G							
8			G							
9			G							
10			G							
Remarks:		Relinquished	Date:	7/1/23	Time:	11:30 AM	Date:	7/1/23	Time:	11:30 AM
		Received By:	Date:	ATD	Time:	7/1/23	Received By:	ATD	Time:	7/1/23
		Relinquished	Date:	7/1/23	Time:	11:30 AM	Date:	7/1/23	Time:	11:30 AM
		Received By:	Date:	ATD	Time:	7/1/23	Received By:	ATD	Time:	7/1/23
		Relinquished	Date:	7/1/23	Time:	11:30 AM	Date:	7/1/23	Time:	11:30 AM
		Received By:	Date:	ATD	Time:	7/1/23	Received By:	ATD	Time:	7/1/23

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**Office & Laboratory**  
3442 Empresa Drive, Suite D  
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Fax: (805) 343-3807

**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: 101 124 1 1 1

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?              | <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): ADH

### Sample Receipt at SP:

1. Were samples received in a chilled condition? Temps: 5 4 4 6 1

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:

95945395, 95945133, 95945146, 95945137

- |                                                                       |                                      |    |       |
|-----------------------------------------------------------------------|--------------------------------------|----|-------|
| 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?<br><small>[Exception: Oil &amp; Grease, VOA and CrVI verified in lab]</small> | <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): 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: _____ | (4018505)                         |
| Initiated By: _____        | Livingston Dairy Consulting, Inc. |
| Problem: _____             | VI 2344459                        |
| Resolution: _____          | iv 07/12/2023 09:05:18            |

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



UT 2344459

0544459



July 31, 2023

Lab No. : VI 2344102  
 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
Well #3	07/06/2023	07/06/2023	VI 2344102-001	AGW
Well #14	07/06/2023	07/06/2023	VI 2344102-002	AGW

### Sampling and Receipt Information:

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

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

### Test Summary

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

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

KD: EHB

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



Digitally signed by Kelly A. Dunnahoo, B.S.  
 Title: Laboratory Director  
 Date: 2023-07-31

Section: Case Narrative

Page 1 of 4

Page 1 of 4

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July 31, 2023

Lab No. : VI 2344102-001

Customer No. : 4018505

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

Sampled On : July 6, 2023 at 09:39

Sampled By : Marlene Ferreira

Received On : July 6, 2023 at 10:55

Matrix : Ag Water

Description : Well #3  
Project : W-6 Legacy Ranches #2

### Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
							Date	Time	Who	Method	Date	Time	Who
<b>Dairy Analysis</b>													
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U	07/20/2023	11:04	sta	EPA 351.2	07/27/2023	18:43	lcr
Nitrate Nitrogen	2.1	0.4	mg/L		1		07/07/2023	16:00	lfs	SM 4500-NO3 F	07/07/2023	18:27	lfs
Nitrogen, Total as Nitrogen	2.1	0.5	mg/L		1		07/20/2023	11:04	sta	Calc.	07/27/2023	18:43	lcr
Nitrate + Nitrite as N	2.1	0.4	mg/L		1		07/07/2023	16:00	lfs	SM 4500-NO3 F	07/07/2023	18:27	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	07/20/2023	11:04	sta	EPA 351.2	07/27/2023	18:43	lcr
Conductivity	234	1	umhos/cm		1		07/12/2023	14:47	amm	SM 4500-H+B	07/12/2023	17:58	amm
Solids, Total Dissolved (TDS)	140	20	mg/L		1		07/10/2023	15:00	ctl	SM 2540 C	07/11/2023	11:00	ctl

DQF Flags Definition:

U Constituent results were non-detect.

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

July 31, 2023

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

Description : Well #14  
Project : W-6 Legacy Ranches #2

Lab No. : VI 2344102-002  
Customer No.: 4018505

Sampled On : July 6, 2023 at 09:50  
Sampled By : Marlene Ferreira  
Received On : July 6, 2023 at 10:55  
Matrix : Ag Water

### Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
							Date	Time	Who	Method	Date	Time	Who
<b>Dairy Analysis</b>													
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U	07/20/2023	11:04	sta	EPA 351.2	07/27/2023	18:45	lcr
Nitrate Nitrogen	1.6	0.4	mg/L		1		07/07/2023	16:00	lfs	SM 4500-NO3 F	07/07/2023	18:29	lfs
Nitrogen, Total as Nitrogen	1.6	0.5	mg/L		1		07/20/2023	11:04	sta	Calc.	07/27/2023	18:45	lcr
Nitrate + Nitrite as N	1.6	0.4	mg/L		1		07/07/2023	16:00	lfs	SM 4500-NO3 F	07/07/2023	18:29	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	07/20/2023	11:04	sta	EPA 351.2	07/27/2023	18:45	lcr
Conductivity	296	1	umhos/cm		1		07/12/2023	14:47	amm	SM 4500-H+B	07/12/2023	17:28	amm
Solids, Total Dissolved (TDS)	200	20	mg/L		1		07/10/2023	15:00	ctl	SM 2540 C	07/11/2023	11:00	ctl

DQF Flags Definition:

U Constituent results were non-detect.

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

July 31, 2023

**Livingston Dairy Consulting, Inc.**

Lab No. : VI 2344102

Customer No. : 4018505

**Quality Control - Wet Chem**

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
<b>Wet Chem</b>								
E. C.	2320B	(VI 2344100-003) (VI 2344111-007)	Dup	umhos/cm		0.3%	5	
Solids, Total Dissolved	2540CE	07/10/2023:207515CTL	Dup	umhos/cm		0.6%	5	
			Blank	mg/L		ND	<20	
			LCS	mg/L	993.7	98.0%	90-110	
		(VI 2344111-009)	Dup	mg/L		0.8%	5	
		(VI 2344111-009)	Dup	mg/L		0.8%	5	
Nitrogen, Total Kjeldahl	351.2	07/20/2023:207947STA	Blank	mg/L		ND	<0.5	
			LCS	mg/L	12.00	95.3%	73-124	
			MS	mg/L	12.00	83.2%	54-136	
		(VI 2344102-001)	MSD	mg/L	12.00	88.0%	54-136	
			MSRPD	mg/L		5.5%	≤27	
			MS	mg/L	12.00	84.1%	54-136	
		(VI 2344102-002)	MSD	mg/L	12.00	85.6%	54-136	
			MSRPD	mg/L		1.7%	≤27	
Nitrate + Nitrite as N	4500NO3F	07/07/2023:207444LFS	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	93.9%	80-120	
			MS	mg/L	5.609	84.3%	66-125	
		(VI 2344132-002)	MSD	mg/L	5.609	90.6%	66-125	
			MSRPD	mg/L		4.1%	≤30.4	
Nitrate Nitrogen	4500NO3F	07/07/2023:207444LFS	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	93.9%	80-120	
			MS	mg/L	5.609	84.3%	66-125	
		(VI 2344132-002)	MSD	mg/L	5.609	90.6%	66-125	
			MSRPD	mg/L		4.1%	≤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.



### 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: R01 / 8.6 / / / /

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: 3c / / / / /

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: 591719161 181  
165 174

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): MX

### 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:

DL-1000 Number: (4018505)  
Livingston Dairy Consulting, Inc.  
VI 2344102

iv 07/07/2023 10:15:55



UI 2344102

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

August 10, 2023

**Lab No.** : VI 2344099  
**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  | (1 page)  | : Results for each sample submitted.        |
| Quality Control | (2 pages) | : Supporting Quality Control (QC) results.  |

### Case Narrative

This Case Narrative pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab No.	Matrix
Well #5	07/06/2023	07/06/2023	VI 2344099-001	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)
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: 2023-08-10

Section: Case Narrative

Page 1 of 4

Page 1 of 4

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CA ELAP Certification No. 2670

**Office & Laboratory**  
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San Luis Obispo, CA 93401  
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FAX: (805)783-2912  
CA ELAP Certification No. 2775

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

August 10, 2023

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

Description : Well #5  
 Project : W-4 Legacy Ranches #2

Lab No. : VI 2344099-001

Customer No.: 4018505

Sampled On : July 6, 2023 at 09:44  
 Sampled By : Marlene  
 Received On : July 6, 2023 at 10:55  
 Matrix : Ag Water

### Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
							Date	Time	Who	Method	Date	Time	Who
<b>Dairy Analysis</b>													
Alkalinity (as CaCO <sub>3</sub> )	80	10	mg/L		1		07/10/2023	13:15	amm	SM 4500-H+B	07/11/2023	04:47	sta
Bicarbonate	80	10	mg/L		1		07/10/2023	13:15	amm	SM 4500-H+B	07/11/2023	04:47	sta
Carbonate	ND	10	mg/L		1	J	07/10/2023	13:15	amm	SM 4500-H+B	07/11/2023	04:47	sta
Hydroxide	ND	10	mg/L		1	J	07/10/2023	13:15	amm	SM 4500-H+B	07/11/2023	04:47	sta
Chloride	23	1	mg/L		1		07/07/2023	16:18	ldm	EPA 300.0	07/08/2023	06:52	ldm
Nitrate Nitrogen	1.1	0.1	mg/L		1		07/07/2023	16:18	ldm	EPA 300.0	07/08/2023	06:52	ldm
Conductivity	259	1	umhos/cm		1		07/10/2023	13:15	amm	SM 4500-H+B	07/11/2023	04:47	sta
Sulfate	10.6	0.5	mg/L		1		07/07/2023	16:18	ldm	EPA 300.0	07/08/2023	06:52	ldm
Solids, Total Dissolved (TDS)	200	20	mg/L		1		07/11/2023	10:45	ctl	SM 2540 C	07/12/2023	12:00	ctl
Calcium	11	1	mg/L		1		08/02/2023	04:45	ejc	EPA 200.7	08/02/2023	16:24	ac
Magnesium	ND	1	mg/L		1	J	08/02/2023	04:45	ejc	EPA 200.7	08/02/2023	16:24	ac
Sodium	43	1	mg/L		1		08/02/2023	04:45	ejc	EPA 200.7	08/02/2023	16:24	ac

DQF Flags Definition:

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

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August 10, 2023

**Livingston Dairy Consulting, Inc.**

Lab No. : VI 2344099  
Customer No. : 4018505

**Quality Control - Metals**

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
<b>Metals</b>								
Calcium	200.7	08/02/2023:208521EJC	Blank	mg/L		ND	<1	
		(CH 2375893-001)	LCS	mg/L	12.00	100%	85-115	
			MS	mg/L	12.00	102%	75-125	
			MSD	mg/L	12.00	101%	75-125	
			MSRPD	mg/L		0.3%	≤20.0	
		(CH 2375895-002)	MS	mg/L	12.00	95.6%	75-125	
			MSD	mg/L	12.00	98.6%	75-125	
			MSRPD	mg/L		1.5%	≤20.0	
Magnesium	200.7	08/02/2023:208521EJC	Blank	mg/L		ND	<1	
		(CH 2375893-001)	LCS	mg/L	12.00	103%	85-115	
			MS	mg/L	12.00	104%	75-125	
			MSD	mg/L	12.00	104%	75-125	
			MSRPD	mg/L		0.3%	≤20	
		(CH 2375895-002)	MS	mg/L	12.00	102%	75-125	
			MSD	mg/L	12.00	102%	75-125	
			MSRPD	mg/L		0.0%	≤20	
Sodium	200.7	08/02/2023:208521EJC	Blank	mg/L		ND	<1	
		(CH 2375893-001)	LCS	mg/L	12.00	97.7%	85-115	
			MS	mg/L	12.00	97.6%	75-125	
			MSD	mg/L	12.00	100%	75-125	
			MSRPD	mg/L		2.2%	≤20.0	
		(CH 2375895-002)	MS	mg/L	12.00	96.5%	75-125	
			MSD	mg/L	12.00	96.2%	75-125	
			MSRPD	mg/L		0.2%	≤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.

August 10, 2023

Livingston Dairy Consulting, Inc.

Lab No. : VI 2344099  
 Customer No. : 4018505

## Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
<b>Wet Chem</b>								
Alkalinity (as CaCO <sub>3</sub> )	2320B	07/10/2023:207451AMM	ND	mg/L		0.7%	10	
Bicarbonate	2320B	(VI 2344053-001)	Dup	mg/L		0.7%	10	
E. C.	2320B	(VI 2344053-001)	Dup	umhos/cm		0.8%	5	
Solids, Total Dissolved	2540CE	07/11/2023:207527CTL	Blank	mg/L		ND	<20	
		(VI 2344111-006)	LCS	mg/L	993.7	100%	90-110	
		(VI 2344111-006)	Dup	mg/L		1.23%	5	
		(VI 2344111-006)	Dup	mg/L		0.5%	5	
Chloride	300.0	07/07/2023:207466LDM	Blank	mg/L		ND	<1	
		(VI 2344110-001)	LCS	mg/L	25.00	101 %	90-110	
		(VI 2344110-001)	MS	mg/L	50.00	100 %	85-121	
		(VI 2344110-001)	MSD	mg/L	50.00	98.2 %	85-121	
		(VI 2344110-001)	MSRPD	mg/L	10.00	1.9%	≤19	
		(VI 2344098-001)	MS	mg/L	50.00	100 %	85-121	
		(VI 2344098-001)	MSD	mg/L	50.00	98.6 %	85-121	
		(VI 2344098-001)	MSRPD	mg/L	10.00	1.6%	≤19	
Nitrate Nitrogen	300.0	07/07/2023:207466LDM	Blank	mg/L		ND	<0.4	
		(VI 2344110-001)	LCS	mg/L	20.00	101 %	90-110	
		(VI 2344110-001)	MS	mg/L	40.00	103 %	85-119	
		(VI 2344110-001)	MSD	mg/L	40.00	100 %	85-119	
		(VI 2344110-001)	MSRPD	mg/L	10.00	2.3%	≤19	
		(VI 2344098-001)	MS	mg/L	40.00	103 %	85-119	
		(VI 2344098-001)	MSD	mg/L	40.00	101 %	85-119	
		(VI 2344098-001)	MSRPD	mg/L	10.00	1.9%	≤19	
Sulfate	300.0	07/07/2023:207466LDM	Blank	mg/L		ND	<0.5	
		(VI 2344110-001)	LCS	mg/L	50.00	102 %	90-110	
		(VI 2344110-001)	MS	mg/L	100.0	102 %	82-124	
		(VI 2344110-001)	MSD	mg/L	100.0	99.8 %	82-124	
		(VI 2344110-001)	MSRPD	mg/L	10.00	2.1%	≤23	
		(VI 2344098-001)	MS	mg/L	100.0	103 %	82-124	
		(VI 2344098-001)	MSD	mg/L	100.0	101 %	82-124	
		(VI 2344098-001)	MSRPD	mg/L	10.00	1.7%	≤23	

## Definition

- Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.
- Dup : Duplicate Sample - A random sample with each batch is prepared and analyzed in duplicate. The relative percent difference is an indication of precision for the preparation and analysis.
- LCS : Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.
- MS : Matrix Spikes - A random sample is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.
- MSD : Matrix Spike Duplicate of MS/MSD pair - A random sample duplicate is spiked with a known amount of 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.



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**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: 20 / -6 / / / / /  
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): EPO

**Sample Receipt at SP:**

1. Were samples received in a chilled condition? Temps: 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: 559719161 181  
165 174
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): 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 co contacts)

Livingston Dairy Consulting, Inc.  
VI 2344099

iv 07/07/2023 10:16:12



U1 2344099

August 16, 2023

**Lab No.** : VI 2344717  
**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
#6	07/20/2023	07/20/2023	VI 2344717-001	AGW
#11	07/20/2023	07/20/2023	VI 2344717-002	AGW

### Sampling and Receipt Information:

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

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

### Test Summary

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

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

KD: EHB

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

Digitally signed by Kelly A. Dunnahoo, B.S.  
  
Title: Laboratory Director  
Date: 2023-08-17

Section: Case Narrative

Page 1 of 4

Page 1 of 4

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August 16, 2023

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

Lab No. : VI 2344717-001  
Customer No.: 4018505

Description : #6  
Project : W-6 Legacy Ranches 2

Sampled On : July 20, 2023 at 07:17  
Sampled By : Marlene & Noreen  
Received On : July 20, 2023 at 10:32  
Matrix : Ag Water

### Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
							Date	Time	Who	Method	Date	Time	Who
<b>Dairy Analysis</b>													
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U	08/10/2023	14:22	sta	EPA 351.2	08/12/2023	15:51	lcr
Nitrate Nitrogen	8.9	0.4	mg/L		1		07/21/2023	17:00	lfs	SM 4500-NO3 F	07/21/2023	19:17	lfs
Nitrogen, Total as Nitrogen	8.9	0.5	mg/L		1		08/10/2023	14:22	sta	Calc.	08/12/2023	15:51	lcr
Nitrate + Nitrite as N	8.9	0.4	mg/L		1		07/21/2023	17:00	lfs	SM 4500-NO3 F	07/21/2023	19:17	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	08/10/2023	14:22	sta	EPA 351.2	08/12/2023	15:51	lcr
Conductivity	482	1	umhos/cm		1		07/31/2023	21:43	amm	SM 4500-H+B	08/01/2023	00:35	amm
Solids, Total Dissolved (TDS)	280	20	mg/L		1		07/24/2023	12:50	ctl	SM 2540 C	07/25/2023	10:50	ctl

**DQF Flags Definition:**

U Constituent results were non-detect.

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

August 16, 2023

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

Lab No. : VI 2344717-002

Customer No.: 4018505

Description : #11  
Project : W-6 Legacy Ranches 2

Sampled On : July 20, 2023 at 07:24  
Sampled By : Marlene & Noreen  
Received On : July 20, 2023 at 10:32  
Matrix : Ag Water

### Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
							Date	Time	Who	Method	Date	Time	Who
<b>Dairy Analysis</b>													
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U	08/10/2023	14:22	sta	EPA 351.2	08/12/2023	16:01	lcr
Nitrate Nitrogen	4.7	0.4	mg/L		1		07/21/2023	17:00	lfs	SM 4500-NO3 F	07/21/2023	19:19	lfs
Nitrogen, Total as Nitrogen	4.7	0.5	mg/L		1		08/10/2023	14:22	sta	Calc.	08/12/2023	16:01	lcr
Nitrate + Nitrite as N	4.7	0.4	mg/L		1		07/21/2023	17:00	lfs	SM 4500-NO3 F	07/21/2023	19:19	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	08/10/2023	14:22	sta	EPA 351.2	08/12/2023	16:01	lcr
Conductivity	368	1	umhos/cm		1		07/31/2023	17:05	amm	SM 4500-H+B	07/31/2023	20:28	amm
Solids, Total Dissolved (TDS)	230	20	mg/L		1		07/24/2023	12:50	ctl	SM 2540 C	07/25/2023	10:50	ctl

DQF Flags Definition:

U Constituent results were non-detect.

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

August 16, 2023

**Livingston Dairy Consulting, Inc.**

**Lab No.** : VI 2344717

**Customer No.** : 4018505

**Quality Control - Wet Chem**

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
<b>Wet Chem</b>								
E. C.	2320B	(VI 2344710-008) (VI 2344724-001)	Dup Dup	umhos/cm umhos/cm		0.3% 0.1%	5 5	
Solids, Total Dissolved	2540CE	07/24/2023:208076CTL	Blank	mg/L	991.5	ND	<20	90-110
		(SP 2312486-005) (SP 2312486-005)	LCS Dup Dup	mg/L mg/L mg/L	98.4 % 2.1% 1.5%	98.4 % 2.1% 1.5%	5 5	
Nitrogen, Total Kjeldahl	351.2	08/10/2023:208886STA	Blank	mg/L	ND	ND	<0.5	
		(VI 2344744-001)	LCS MS MSD MSRPD	mg/L mg/L mg/L mg/L	12.00 12.00 12.00 12.00	88.3% 91.6% 92.6% 1.1%	73-124 54-136 54-136 ≤27	
		(VI 2344744-003)	MS MSD MSRPD	mg/L mg/L mg/L	12.00 12.00 12.00	88.1% 88.0% 88.0%	54-136 54-136 54-136	
Nitrate + Nitrite as N	4500NO3F	07/21/2023:208010LFS	Blank	mg/L	0.1%	ND	≤27	
			LCS MS MSD MSRPD	mg/L mg/L mg/L mg/L	11.22 5.609 5.609 5.609	96.8% 88.4% 87.9% 0.2%	80-120 66-125 66-125 ≤30.4	
Nitrate Nitrogen	4500NO3F	07/21/2023:208010LFS	Blank	mg/L	ND	ND	<0.4	
		(STK2339748-001)	LCS MS MSD MSRPD	mg/L mg/L mg/L mg/L	11.22 5.609 5.609 5.609	96.8% 88.4% 87.9% 0.2%	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.
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- 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.



Spec

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Phone: (559) 734-9473  
Fax: (559) 734-9425

### 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: 20 / 8.5°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.
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): SRC

### Sample Receipt at SP:

1. Were samples received in a chilled condition? Temps: 10 / / / / / / / /  
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: 559803345 3297  
3542 3359
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): MDL

### 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 2344717

mdc 07/21/2023 11:51:44



August 11, 2023

Lab No. : VI 2344642  
 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
Well 9 (2)	07/18/2023	07/18/2023	VI 2344642-001	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: 2023-08-11

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

August 11, 2023

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

Description : Well 9 (2)  
Project : W-6 Legacy Ranches #2

Lab No. : VI 2344642-001

Customer No. : 4018505

Sampled On : July 18, 2023 at 06:51  
Sampled By : Marlene / Noreen  
Received On : July 18, 2023 at 10:00  
Matrix : Ag Water

### Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
							Date	Time	Who	Method	Date	Time	Who
<b>Dairy Analysis</b>													
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U	08/08/2023	08:55	sta	EPA 351.2	08/10/2023	17:41	lcr
Nitrate Nitrogen	4.2	0.4	mg/L		1		07/19/2023	12:15	lfs	SM 4500-NO3 F	07/19/2023	13:56	lfs
Nitrogen, Total as Nitrogen	4.2	0.5	mg/L		1		08/08/2023	08:55	sta	Calc.	08/10/2023	17:41	lcr
Nitrate + Nitrite as N	4.2	0.4	mg/L		1		07/19/2023	12:15	lfs	SM 4500-NO3 F	07/19/2023	13:56	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	08/08/2023	08:55	sta	EPA 351.2	08/10/2023	17:41	lcr
Conductivity	631	1	umhos/cm		1		07/31/2023	17:05	amm	SM 4500-H+B	07/31/2023	21:52	amm
Solids, Total Dissolved (TDS)	450	20	mg/L		1		07/20/2023	16:15	ctl	SM 2540 C	07/21/2023	11:10	ctl

**DQF Flags Definition:**

U Constituent results were non-detect.

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

August 11, 2023

**Livingston Dairy Consulting, Inc.**

Lab No.: VI 2344642  
Customer No.: 4018505

**Quality Control - Wet Chem**

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
<b>Wet Chem</b>								
E. C.	2320B	(VI 2344633-001)	Dup	umhos/cm		0.2%	5	
Solids, Total Dissolved	2540CE	07/20/2023:207946CTL	Blank	mg/L	ND	<20		
		(STK2339578-001)	LCS	mg/L	993.7	102%	90-110	
		(STK2339578-001)	Dup	mg/L		0.4%	5	
		(STK2339578-001)	Dup	mg/L		1.98%	5	
Nitrogen, Total Kjeldahl	351.2	08/08/2023:208707STA	Blank	mg/L	ND	<0.5		
			LCS	mg/L	12.00	91.3%	73-124	
			MS	mg/L	12.00	85.5%	54-136	
		(VI 2344654-002)	MSD	mg/L	12.00	85.3%	54-136	
			MSRPD	mg/L		0.3%	≤27	
			MS	mg/L	12.00	82.8%	54-136	
		(VI 2344644-003)	MSD	mg/L	12.00	82.5%	54-136	
			MSRPD	mg/L		0.3%	≤27	
Nitrate + Nitrite as N	4500NO3F	07/19/2023:207926LFS	Blank	mg/L	ND	<0.4		
			LCS	mg/L	11.22	97.7%	80-120	
			MS	mg/L	5.609	90.8%	66-125	
		(SP 2312214-001)	MSD	mg/L	5.609	92.7%	66-125	
			MSRPD	mg/L		1.0%	≤30.4	
Nitrate Nitrogen	4500NO3F	07/19/2023:207926LFS	Blank	mg/L	ND	<0.4		
			LCS	mg/L	11.22	97.7%	80-120	
			MS	mg/L	5.609	90.8%	66-125	
		(SP 2312214-001)	MSD	mg/L	5.609	92.7%	66-125	
			MSRPD	mg/L		1.0%	≤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.



## Special

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Analytical Chemists

## Laboratory Copy (1 of 2)

		TEST DESCRIPTION - See Reverse side for Container, Preservative and Sampling information	
		4/08/2023	
Client: Livingston Dairy Consulting, Inc.		4/08/2023	
Address: Livingston Dairy Consulting, Inc 1635 E. Prosperity Suite B Tulare, CA 93274		4/08/2023	
Phone: (559)687-1440 Fax:		4/08/2023	
Contact Person: Noreen Livingston		4/08/2023	
Project Name: W-6 Legacy Ranches #2		4/08/2023	
Purchase Order Number:		4/08/2023	
Quote Number: VI 20210208-01		4/08/2023	
Sampler(s): Noreen & Noreen		4/08/2023	
Sampling Fee: _____		Pickup Fee: _____	
Compositor Setup Date: _____ / _____ / _____		Time: _____ / _____	
Lab Number: VI 2344642 4-18505		4/08/2023	
Samp Num	Location Description	Date Sampled	Time Sampled
1	NCL 9 (2)	4/18/23	6:51 AM
2		G	
3		G	
4		G	
5		G	
6		G	
7		G	
8		G	
9		G	
10		G	
Method of Sampling: Composite(C) Grab(G)		Type of Sample: *SEE REVERSE SIDE**	
Portable(P) Non-Potable(NP) Ag Water(AGW)		Batch Type: Other(O) System(SYS) Source(SR) Waste(W)	
Dairy Analysis-W-6-Conductivity, NO3-N, Total N, TDS 16oz(P)		Batch Reason: Routine(ROUT) Repeat(RPT) Replace(RPL) Other(O) Special(SPL)	
Bottles/Containers Split Fee 8oz(P)-H2SO4		Dairy Analysis Split Fee	
Received By: Noreen		Date: 7/18/23 Time: 10:00 SRO	
Remarks: <i>Wade H. 7/18/23</i>		Date: 7/18/23 Time: Relinquished 1730 GLS	
Received By: SRO		Date: 7/18/23 Time: Received By: Date: 7/18/23 Time: Relinquished 1730 GLS	
Corporate Offices & Laboratory		Office & Laboratory	
250 Stagecoach Road Stockton, CA 95215 Phone: (209) 942-0182 Fax: (209) 942-0423		563 E. Linda Chico, CA 95926 Phone: (530) 343-5818 Fax: (530) 343-3807	
Santa Paula, CA 93060 Phone: (805) 392-2000 Env Fax: (805) 525-4172 / Ag Fax: (805) 392-2063		9415 W. Goshen Avenue Visalia, CA 93291 Phone: (559) 783-2940 Fax: (805) 783-2912	
Corporate Offices & Laboratory		Office & Laboratory	
250 Stagecoach Road Stockton, CA 95215 Phone: (209) 942-0182 Fax: (209) 942-0423		3442 Empresa Drive, Suite D San Luis Obispo, CA 93401 Phone: (805) 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: 20°C / 4.4°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.
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°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: 59787246  
6015

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): 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 2344642

iv 07/18/2023 11:29:31



UI 2344642



August 18, 2023

**Lab No.** : VI 2344886  
**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 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
#13	07/27/2023	07/27/2023	VI 2344886-001	AGW
#12	07/27/2023	07/27/2023	VI 2344886-002	AGW
#4	07/27/2023	07/27/2023	VI 2344886-003	AGW

### Sampling and Receipt Information:

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

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

### Test Summary

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

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

KD: EHB

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



Digitally signed by Kelly A. Dunnahoo, B.S.  
 Title: Laboratory Director  
 Date: 2023-08-18

Section: Case Narrative

Page 1 of 5

Page 1 of 5

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---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------

August 18, 2023

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

Lab No. : VI 2344886-001

Customer No.: 4018505

Sampled On : July 27, 2023 at 07:03

Sampled By : Marlene/Noreen

Received On : July 27, 2023 at 09:18

Matrix : Ag Water

Description : #13  
 Project : W-6 Legacy Ranches #2

### Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
							Date	Time	Who	Method	Date	Time	Who
<b>Dairy Analysis</b>													
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U1	08/12/2023	12:25	sta	EPA 351.2	08/16/2023	20:44	lcr
Nitrate Nitrogen	1.3	0.4	mg/L		1		07/28/2023	12:30	lfs	SM 4500-NO3 F	07/28/2023	15:05	lfs
Nitrogen, Total as Nitrogen	1.3	0.5	mg/L		1	I	08/12/2023	12:25	sta	Calc.	08/16/2023	20:44	lcr
Nitrate + Nitrite as N	1.3	0.4	mg/L		1		07/28/2023	12:30	lfs	SM 4500-NO3 F	07/28/2023	15:05	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U1	08/12/2023	12:25	sta	EPA 351.2	08/16/2023	20:44	lcr
Conductivity	248	1	umhos/cm		1		07/31/2023	21:43	amm	SM 4500-H+B	08/01/2023	01:53	amm
Solids, Total Dissolved (TDS)	150	20	mg/L		1		07/31/2023	11:30	ctl	SM 2540 C	08/02/2023	11:30	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

August 18, 2023

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

Lab No. : VI 2344886-002

Customer No. : 4018505

Sampled On : July 27, 2023 at 07:11

Sampled By : Marlene/Noreen

Received On : July 27, 2023 at 09:18

Matrix : Ag Water

Description : #12  
 Project : W-6 Legacy Ranches #2

### Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
							Date	Time	Who	Method	Date	Time	Who
<b>Dairy Analysis</b>													
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U1	08/12/2023	12:25	sta	EPA 351.2	08/16/2023	20:49	lcr
Nitrate Nitrogen	3.5	0.4	mg/L		1		07/28/2023	12:30	lfs	SM 4500-NO3 F	07/28/2023	15:07	lfs
Nitrogen, Total as Nitrogen	3.5	0.5	mg/L		1	I	08/12/2023	12:25	sta	Calc.	08/16/2023	20:49	lcr
Nitrate + Nitrite as N	3.5	0.4	mg/L		1		07/28/2023	12:30	lfs	SM 4500-NO3 F	07/28/2023	15:07	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U1	08/12/2023	12:25	sta	EPA 351.2	08/16/2023	20:49	lfs
Conductivity	350	1	umhos/cm		1		07/31/2023	21:43	amm	SM 4500-H+B	08/01/2023	12:42	amm
Solids, Total Dissolved (TDS)	200	20	mg/L		1		07/31/2023	11:30	ctl	SM 2540 C	08/02/2023	11:30	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

August 18, 2023

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

Description : #4  
 Project : W-6 Legacy Ranches #2

Lab No. : VI 2344886-003

Customer No.: 4018505

Sampled On : July 27, 2023 at 07:18  
 Sampled By : Marlene/Noreen  
 Received On : July 27, 2023 at 09:18  
 Matrix : Ag Water

**Sample Results - Inorganic**

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
							Date	Time	Who	Method	Date	Time	Who
<b>Dairy Analysis</b>													
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U1	08/12/2023	12:25	sta	EPA 351.2	08/16/2023	20:46	lcr
Nitrate Nitrogen	1.7	0.4	mg/L		1		07/28/2023	12:30	lfs	SM 4500-NO3 F	07/28/2023	15:09	lfs
Nitrogen, Total as Nitrogen	1.7	0.5	mg/L		1	I	08/12/2023	12:25	sta	Calc.	08/16/2023	20:46	lcr
Nitrate + Nitrite as N	1.7	0.4	mg/L		1		07/28/2023	12:30	lfs	SM 4500-NO3 F	07/28/2023	15:09	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U1	08/12/2023	12:25	sta	EPA 351.2	08/16/2023	20:46	lcr
Conductivity	304	1	umhos/cm		1		07/31/2023	21:43	amm	SM 4500-H+B	08/01/2023	12:39	amm
Solids, Total Dissolved (TDS)	160	20	mg/L		1		07/31/2023	11:30	ctl	SM 2540 C	08/02/2023	11:30	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

August 18, 2023

Livingston Dairy Consulting, Inc.

Lab No. : VI 2344886

Customer No. : 4018505

**Quality Control - Wet Chem**

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
<b>Wet Chem</b>								
E. C.	2320B	(CC 2382398-001)	Dup	umhos/cm		0.2%	5	
Solids, Total Dissolved	2540CE	07/31/2023:208416CTL	Blank	mg/L		ND	<20	
			LCS	mg/L	991.5	100%	90-110	
		(SP 2312860-001)	Dup	mg/L		1.70%	5	
		(SP 2312860-001)	Dup	mg/L		2.72%	5	
Nitrogen, Total Kjeldahl	351.2	08/12/2023:208945STA	Blank	mg/L		ND	<0.5	
			LCS	mg/L	12.00	90.7%	73-124	
			MS	mg/L	12.00	87.7%	54-136	
		(STK2339763-002)	MSD	mg/L	12.00	88.5%	54-136	
			MSRPD	mg/L		0.8%	≤27	
			MS	mg/L	12.00	64.2%	54-136	
		(VI 2344850-001)	MSD	mg/L	12.00	22.3%	54-136	435
			MSRPD	mg/L		96.1%	≤27	435
Nitrate + Nitrite as N	4500NO3F	07/28/2023:208385LFS	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	98.1%	80-120	
			MS	mg/L	5.609	98.1%	66-125	
		(VI 2344894-001)	MSD	mg/L	5.609	99.3%	66-125	
			MSRPD	mg/L		1.1%	≤30.4	
Nitrate Nitrogen	4500NO3F	07/28/2023:208385LFS	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	98.1%	80-120	
			MS	mg/L	5.609	98.1%	66-125	
		(VI 2344894-001)	MSD	mg/L	5.609	99.3%	66-125	
			MSRPD	mg/L		1.1%	≤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.



ENVIRONMENTAL AGRICULTURAL

Analytical Chemists

## Special

## CHAIN OF CUSTODY

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Laboratory Copy (1 of 3)

Client: Livingston Dairy Consulting, Inc.		42086:03/01/2022		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:	<b>W-6 Legacy Ranches #2</b>					
Purchase Order Number:						
Quo Number:	VI 20210208-01					
Sampler(s)	<b>Marilyn &amp; Noreen</b>					
Sampling Fee:		Pickup Fee:				
Compositor Setup Date:	/ /	Time:	/ /			
Lab Number:	<b>VI 2344866</b>		<b>4-18505</b>			
Samp Num	Location Description	Date Sampled	Time Sampled			
1	#13	7/27	1:03AM	G		
2	#12		1:11AM	G		
3	#4		1:18AM	G		
4				G		
5				G		
6				G		
7				G		
8				G		
9				G		
10				G		
Remarks:	<b>Marked for 7/27/2018</b>					
Relinquished	Date:	Time:	Relinquished	Date:	Time:	
Received By:	Date:	Time:	Received By:	Date:	Time:	
<b>ADH</b>	<b>7/27/2018</b>	<b>9:18 AM</b>	<b>ADH</b>	<b>7/27/2018</b>	<b>10:15 AM</b>	
Office & Laboratory	Office & Laboratory	Office & Laboratory	Office & Laboratory	Office & Laboratory	Office & Laboratory	
2500 Stagecoach Road	563 E. Lindo	3442 Empresa Drive, Suite D	9415 W. Goshen Avenue	9415 W. Goshen Avenue	9415 W. Goshen Avenue	
Stockton, CA 95215	Chico, CA 95926	San Luis Obispo, CA 93401	Visalia, CA 93291	Visalia, CA 93291	Visalia, CA 93291	
Phone: (209) 942-0182	Phone: (530) 343-5818	Phone: (805) 783-2940	Phone: (559) 734-9473	Phone: (559) 734-9473	Phone: (559) 734-9473	
Fax: (209) 942-0423	Fax: (530) 343-3807	Fax: (805) 392-2063	Fax: (559) 734-9473	Fax: (559) 734-9473	Fax: (559) 734-9473	

### 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: 21.5-4°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.

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

XD#  
TH 407

### Sample Receipt at SP:

1. Were samples received in a chilled condition? Temps: 21.4, 11, 13, 12  
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: 559845351 / 85 / 94 / 443 / 455

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): ODA

### 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 contacts)

Livingston Dairy Consulting, Inc.  
VI 2344886

cda 07/27/2023 15:46:15



UI 2344886



# 2023 Canal Results

## 558TRA144 - Tule River at Road 144

Constituent	Field/Lab	WQTL	MDL	PQL	Units	Oct-22	Nov-22	Dec-22	1/17/23	2/13/23	March-23	4/17/23	5/15/23	6/19/23	7/18/23
Flow	Field				cfs	0	0	0	220	280		180	150	250	400
EC	BSK	700			umhos/cm				151.2	115.3		134.4	128.3	131	138.4
pH	BSK	6.5-8.3			pH				7.59	6.5		7.1	6.8	6.4	8.53
Temperature	BSK				Celsius				10	11.3		15.9	21.4	20.3	19.6
Dissolved Oxygen	BSK	Min. 7.0			mg/L				10.87	12.7		9.49	**	14.37	8
TDS	BSK	450	4.4	10	mg/L				30	50		110	96	33	37
Turbidity	BSK			0.1	NTU				56	15		11	6.4	15	21
Nitrate + Nitrite as N	BSK	10	0.028	0.2	mg/L				1.3	0.24		0.022	0.61	0.077	ND
Orthophosphate-P	BSK		0.0051	0.6	mg/L				1.9	0.019		0.021	0.038	0.011	0.015
Ammonia-N	BSK	1.5	0.05	0.5	mg/L				ND	ND		ND	ND	ND	ND
Unionized Ammonia	BSK				mg/L				ND	ND		ND	ND	ND	ND
TKN	BSK		0.267	0.5	mg/L				0.17	0.43		ND	0.16	ND	0.16
Phosphorus	BSK		8.1	50	ug/L				1.8	0.044		0.091	0.048	0.034	0.02
Arsenic	BSK	10	0.041	0.2	ug/L				2.2	1.7		1.6	1.3	1.1	1.1
Boron	BSK	700	4.5	10	ug/L				30	23		22	17	8.1	5
Cadmium	BSK	5	0.025	0.2	ug/L				ND	ND		ND	ND	ND	ND
Copper	BSK	1300	0.36	0.5	ug/L				3.3	5		2.8	2.4	2.7	4.8
Lead	BSK	15	0.034	0.2	ug/L				1.4	0.63		0.83	0.48	0.45	0.55
Nickel	BSK	100	0.2	0.5	ug/L				1.5	0.79		1.5	0.86	0.75	0.85
Selenium	BSK	50	0.29	1	ug/L				1.1	0.33		0.77	0.62	ND	0.32
Zinc	BSK		0.68	20	ug/L				7.1	3.9		6.1	7.4	2.9	5.1
Molybdenum	BSK	10	0.15	0.5	ug/L				1.5	1.2		1.2	0.98	0.68	0.59
Hardness	BSK		1	1	mg/L				58	22		50	40	12	8
TSS	BSK	na	10	mg/L					30	32		36	12	22	32
TOC	BSK		0.085	0.5	mg/L				3.1	3.2		3.6	2.6	2.2	1.8
E. coli	BSK	235		1.1	MPN				130	4.5		49	240	130	79
Fecal Coliform	BSK	400		1.1	MPN				130	4.5		49	240	130	79
Toxicity, minnow	ABC			96h					100	100		100	100	100	87.5
Toxicity, water flea	ABC			48h					100	100		100	100	100	100
Toxicity, algae	ABC			48h					100	100		100	100	100	100
2,4-D Acids & Salts	BSK														

Core & Assessment Constituents



# **Livingston Dairy Consulting, Inc.**

**1635 E. Prosperity Ave. Ste. B**

**Tulare, CA 93274**

**559-687-1440**

Sunday, April 21, 2024

Re: 2023 NMP

Legacy Ranches #2    WDID 5C54NC00219  
8660 Ave. 96 pixley, CA 93256

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 **0.77**  
Nitrogen Summary will show the balances for each field and for the whole farm.

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

<b><u>Factor</u></b>	<b><u>Status</u></b>	<b><u>Evaluation</u></b>
> 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 #95629

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.

