

Livingston Dairy Consulting, Inc.

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

Legacy Ranches #1 WDID 5CS4NC00169

11981 Road 80 Tipton, CA 93272

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

GEO Tracker Confirmation #

Date:

Facility Info

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

Name of the Facility

Dairy Name: Legacy Ranches #1 WDID 5C54NC00169
Facility Address: 11981 Road 80 Tipton, CA 93272
Original Operation Date: 1/1/1930
Facility APN's: x293 x180 x004 xxxx
RWQCB Basin Plan Designation: Tulare Lake Basin Check if any information has changed

Owner(s)

Owner(s) Name: Fernandes Brothers
Mailing Address: P.O. Box 1149 Tipton, CA 93272
Home Phone Number: 559-308-6241
Cell Phone Number: Check if any information has changed

Operator(s)

Operator(s) Name: Legacy Ranches #1
Mailing Address: P.O. Box 1149 Tipton, CA 93272
Home Phone Number: 559-308-6241
 Check if any information has changed

Herd Information

	Milk Cows	Dry Cows	Bred Heifers (12-24 mo)	Heifers (3-12 mo)	Calves (0-3 mo)
Open Confinement:	-	-	850	122	-
Number Under Roof	-	-	-	-	-
Maximum Number			850	122	
Average Number			850	122	
Average Live Weight (lbs)			950	630	

Average Milk Production: 59

Predominant Milk Cow Breed: Jersey-Holstein Cross

Manure Generated:

Total manure excreted by the herd:

1,578.86 @40% Moisture

ton/yr
lbs

89,214

7,136

56,192

-

After Ammonia (30% loss applied)

62,450

lbs per reporting period

Total salt from manure:

Process Wastewater Generated:

Process wastewater generated:

- gal

- lbs

- lbs

- lbs

- lbs

Total nitrogen generated:

- lbs

- lbs

- lbs

- lbs

Total salt (TDS) generated:

List of Land Application Areas

List of Fresh Water Sources

Source Description	Type	Subsurface (Tile) Drainage Sources	
		Canal	Surface Water
Barn	Ground Water	No	No
Dom	Ground Water	No	No
H-Dom	Ground Water	No	No
1/Dom (2)	Ground Water	No	No
2 (1)	Ground Water	No	No
3	Ground Water	No	No
4	Ground Water	No	No

(WINTER) PLANT TISSUE ANALYSIS (Recorded As Received)

(SUMMER) PLANT TISSUE ANALYSIS (Recorded As Received)

(SUMMER) PLANT TISSUE ANALYSIS (Recorded As Received)										
Field	Crop	Moist %	N%	TP %	TK%	Salt	TFS	Sample #:	Date:	Source
1L1	Alfalfa	-	-	-	-	-	-	See Winter	10/19/23	Valley Tech
2L4	Corn, Silage	68.10	0.45	0.07	0.33	-	-	10-19H70145	10/19/23	Valley Tech
2L5	Corn, Silage	66.70	0.41	0.08	0.29	-	-	8-16H61805	08/16/23	Valley Tech
2L6/2L7	Corn, Silage	59.90	0.46	0.08	0.31	-	-	8-16H61805	08/16/23	Valley Tech
3L8	Alfalfa	-	-	-	-	-	-	See Winter	-	-
3L9	Corn, Silage	69.60	0.27	0.06	0.46	-	-	9-28H67180	09/28/23	Valley Tech

Detectable Limits
Valley Tech
Dellavalle

Winter Crops & Harvest

*Detectable Valley Tech
Dellavalle*

0.001% 0.01% 0.05% 0.10% 0.001% 0.01% 0.05% 0.10% 0.0003% 0.001% 0.005% 0.01% 0.0003% 0.001% 0.005% 0.01% 0.001% 0.003% 0.01% 0.05% 0.10% 0.001% 0.005% 0.01% 0.05% 0.10% 0.0001% 0.001% 0.005% 0.01% 0.0001% 0.001% 0.005% 0.01% 0.0001%

Field:	Crop	Plant Date	Harvest Date	Lab #	Moisture %	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS	Reporting Basis
1.1	Alfalfa			See Winter	-	-	-	-	-	-	-
214	Corn, Silage	6/28/23	10/12/23	10-19H70145	68.10	0.45	0.07	0.33	-	4.92	Dry Weight
215	Corn, Silage	4/10/23	8/2/23	8-16H61805	66.70	0.41	0.08	0.29	-	5.86	Dry Weight
216/217	Corn, Silage	4/19/23	8/3/23	8-16H61805	59.50	0.46	0.08	0.31	-	5.36	Dry Weight
318	Alfalfa			See Winter	-	-	-	-	-	-	-
319	Corn, Silage	6/9/23	9/23/23	9-28H67180	69.60	0.27	0.06	0.46	-	4.70	Dry Weight

Detectable L Valley Tech
Dellavalle

Well / Canal Analysis

Soil Analysis (Winter)

Detectable Limits
Valley Tech
DellaValle

Soil Analysis (Summer)

Detectable Limits

Valley Tech

Valley Tech
Della Valle

Nutrient Import & Export

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

X

Yes, Manifest attached (Attachment D)

Nutrient Import

No Dry manure nutrient imports entered

No Process wastewater nutrient imports entered

No Commercial or other nutrient imports entered

No Commercial or other nutrient imports entered

Total Dry Manure Exported

Total Process Water Exported

Process Water & Manure Analysis

Process Water															
Quarters:	NH4N (mg/L)	TKN (mg/L)	TP (mg/L)	TK (mg/L)	NO3N (mg/L)	NH3N (mg/L)	Ca (mg/L)	Mg (mg/L)	Na (mg/L)	CO3 (mg/L)	HCO3 (mg/L)	SO4 (mg/L)	Cl (mg/L)	EC (ds/m)	TDS (mg/L)
1	51.0	673.0	53.5	297.0	1.0	-	-	-	-	-	-	-	-	-	1,570
2	24.1	149.0	19.4	171.0	1.0	-	-	-	-	-	-	-	-	-	2,1160
3	32.1	154.0	5.9	105.0	1.0	-	1.0	8.6	39.0	0.0	0.0	24.8	2.9	2	1,010
4	10.6	79.0	0.0	0.0	-	-	-	-	-	-	-	-	-	-	246

Detectable Limits

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

Qtr	Sample #:	Sample Date:	Source	Inorg N				Org N		P2O5		K2O	
				lbs / Ac. in				Inorg N	Org N	P2O5	K2O		
1	3-9144121	3/9/2023	Valley Tech	11.8	141.0	27.8	81.1						
2	5-12L49729	5/12/2023	Valley Tech	5.7	28.3	10.1	46.7						
3	8-15L61720	8/15/2023	Valley Tech	7.5	27.6	3.1	28.7						
4	10-3L67666	10/3/2023	Valley Tech	2.6	15.5	0.0	0.0						

Description	Sample #:	Date:	As Is/ Dry Weight		Source	Material Type
			Dry Weight	Dry Weight		
Manure	5-12M49748	5/12/2023			Valley Tech	Corral Solids
Manure	10-3M67639	10/3/2023			Valley Tech	Corral Solids

Dry Manure: (As Rec'd)	TN %		TP %	TK %	Ca	Mg	Na	S	CL	Salt	TFS	Moisture %
	Corral	Corral										
Valley Tech	0.78	0.21	1.27	-	-	-	-	-	-	-	-	52.90
Dellavalle	0.92	0.24	2.29	1.94	0.40	0.27	0.30	1.51	-	49.20	-	40.00

Detectable Limits

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

Nutrient Applications

Field Name/Number:		1L1						Lab Sample Data				Yield	
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)	N (lbs/Ac)	Total P (lbs/Ac)	Total K (lbs/Ac)	Salt (Lbs/Ac)	TFS %	Expected Yield (tons/ac)	Actual Yield (tons/ac)
10/10/18	W. Planting	-	-	-	-	-	-	-	-	-	-	-	-
2/7/23	Canal	-	-	-	5.54	-	0.0	-	-	28	-	-	-
3/11/23	Canal	-	-	-	5.88	-	0.0	-	-	30	-	-	-
4/9/23	Canal	-	-	-	5.74	-	0.0	-	-	29	-	-	-
5/25/23	Canal	-	-	-	5.40	-	0.0	-	-	27	-	-	-
6/26/23	Canal	-	-	-	5.64	-	0.0	-	-	28	-	-	-
7/22/23	Canal	-	-	-	5.78	-	0.0	-	-	29	-	-	-
8/16/23	Canal	-	-	-	5.59	-	0.0	-	-	28	-	-	-
9/12/23	Canal	-	-	-	5.69	-	0.0	-	-	29	-	-	-
10/1/23	W. Harvest	-	-	-	-	-	(582.0)	(61.3)	(389.2)	-	9.56	-	10.00
Totals:		0.0	0	45.26	0.00	(582)	(61)	(389)	228	9.56	0	-	10.00

Dry Weight
As Received

Field Name/Number: 1L1 Acres: 55

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	0.1	0.0	0.0	227.8
Nutrients Removed at Harvest	-582.0	-61.3	-389.2	0.0
Nutrient Balance	-581.9	-61.3	-389.2	227.8

Winter Nitrogen Crop App / Use Ratio: 0.01 Summer Nitrogen Crop App / Use Ratio: #N/A

Field Name/Number: 1L1 Acres: 55

Winter Crop	Alfalfa	Nutrient Summary :		
		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	45.3	Ac In /Ac	0.1	
Atm. Depos.	Yes		7.0	
W. Planting	10/10/18			
W. Harvest	10/1/23	10.0 T/Ac	(582.0)	(140.3) (467.1)

Summer Crop	Alfalfa	Nutrient Summary :		
		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	#N/A T/Ac	#N/A	#N/A
S. Harvest	#N/A		#N/A	#N/A

Nutrient Applications

Field Name/Number:

2L4

Acres:

70.00

Field Name/Number: 2L4 Acres: 70.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K (lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	516.3	62.4	984.9	3054.1
Nutrients Removed at Harvest	-487.1	-35.4	-391.4	0.0
Nutrient Balance	29.2	27.0	593.5	3054.1

Winter Nitrogen Crop App / Use Ratio: 1.06 Summer Nitrogen Crop App / Use Ratio: 1.12

Field Name/Number: 2L4 Acres: 70

Winter Crop	Wheat, Silage	N			
Nutrient Summary :	Applied				
W. Manure App.	10.0 T/Ac	62.2	97.1	304.1	
W. Comm Fert App.	- lbs/Ac	-	-	-	
Process Water	Q1 1.8 Ac In /Ac	189.0	49.1	142.8	
	Q2 - Ac In /Ac	-	-	-	
Well Water	24.1 Ac In /Ac	9.8			
Canal	- Ac In /Ac	-			
Atm. Depos.	Yes	7.0			
W. Planting	11/23/22				
W. Harvest	5/19/23	23.4 T/Ac	(252.0)	(105.6)	(355.8)

Summer Crop	Corn, Silage	N			
Nutrient Summary :	Applied				
S. Manure App.	15.0 T/Ac	110.2	164.9	825.1	
S. Comm Fert App.	- lbs/Ac	-	-	-	
Process Water	Q2 - Ac In /Ac	-	-	-	
	Q3 5.3 Ac In /Ac	130.7	16.3	151.8	
	Q4 - Ac In /Ac	-	-	-	
Well Water	35.1 Ac In /Ac	14.3			
Canal	- Ac In /Ac	-			
Atm. Depos.	Yes	7.0			
S. Planting	6/28/23				
S. Harvest	10/12/23	26.1 T/Ac	(235.0)	(80.2)	(210.0)

Nutrient Applications

Field Name/Number:

215

Acres:

72.00

Field Name/Number: 2L5Acres: 72.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	272.1	37.4	680.8	2502.5
Nutrients Removed at Harvest	-253.7	-21.6	-150.7	0.0
Nutrient Balance	18.4	15.8	530.1	2502.5

Winter Nitrogen Crop App / Use Ratio:

#N/A

Summer Nitrogen Crop App / Use Ratio:

1.10

Field Name/Number:

2L5

Acres:

72**Winter Crop W. Fallow**

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		- Ac In /Ac	-	-	-
Atm. Depos.	Yes		7.0		
W. Planting	#N/A				
W. Harvest	1/1/2000	#N/A T/Ac	#N/A	#N/A	#N/A

Summer Crop Corn, Silage

Nutrient Summary :		Applied	N		
S. Manure App.	12.5	T/Ac	91.8	137.4	687.6
S. Comm Fert App.	-	Ibs/Ac	-	-	-
Process Water	Q2	5.3 Ac In /Ac	129.6	53.6	247.8
	Q3	1.7 Ac In /Ac	42.0	5.2	48.7
	Q4	- Ac In /Ac	-	-	-
Well Water		27.5 Ac In /Ac	8.7		
Canal		- Ac In /Ac	-		
Atm. Depos.	Yes		7.0		
S. Planting	4/10/23				
S. Harvest	8/2/23	31.0 T/Ac	(253.7)	(113.4)	(217.8)

Nutrient Applications

Field Name/Number:

2L6/2L7

Acres:

100.00

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)
-	-	-	-	-	-	-	-	-	-	-	-	-	-
	W. Fallow	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
6/15/23	S. Comm Fert App.	-	-	90	-	-	90.0	-	-	-	-	-	-
4/19/23	S. Planting	-	-	-	-	-	-	-	-	-	-	-	-
5/13/23	Canal	-	-	-	5.33	-	0.0	-	-	27	-	-	-
5/13/23	Process Water	-	-	-	-	1.78	42.3	7.8	68.9	467	-	-	-
6/1/23	Canal	-	-	-	5.25	-	0.0	-	-	26	-	-	-
6/1/23	Process Water	-	-	-	-	1.75	43.0	7.7	67.8	460	-	-	-
6/15/23	Canal	-	-	-	6.12	-	0.0	-	-	31	-	-	-
7/3/23	Canal	-	-	-	5.30	-	0.0	-	-	27	-	-	-
7/3/23	Process Water	-	-	-	-	1.77	43.5	2.4	42.1	405	-	-	-
7/17/23	Canal	-	-	-	6.26	-	0.0	-	-	31	-	-	-
8/3/23	S. Harvest	-	-	-	-	-	(258.7)	(45.0)	(175.5)	-	-	28.05	-
Totals:		0.0		90	28.26	5.29	(40)	(27)	3	1,474	0.00	0	28.05

Field Name/Number: 2L6/2L7 Acres: 100.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K (lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	218.9	7.8	148.4	1474.2
Nutrients Removed at Harvest	-258.7	-19.6	-145.7	0.0
Nutrient Balance	-39.8	-11.8	2.7	1474.2

Winter Nitrogen Crop App / Use Ratio: #N/A Summer Nitrogen Crop App / Use Ratio: 1.22

Field Name/Number: 2L6/2L7 Acres: 100

Winter Crop	W. Fallow	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		- Ac In /Ac	-
Atm. Depos.	Yes		7.0
W. Planting	#N/A		
W. Harvest	1/1/2000	#N/A T/Ac	#N/A #N/A #N/A

Summer Crop	Corn, Silage	Applied	N
S. Manure App.	-	T/Ac	-
S. Comm Fert App.	90.0	Ibs/Ac	90.0
Process Water	Q2	3.5 Ac In /Ac	85.3 35.5 164.0
	Q3	1.8 Ac In /Ac	43.5 5.4 50.5
	Q4	- Ac In /Ac	- - -
Well Water		- Ac In /Ac	90.0
Canal		28.3 Ac In /Ac	0.1
Atm. Depos.	Yes		7.0
S. Planting	4/19/23		
S. Harvest	8/3/23	28.1 T/Ac	(258.7) (103.0) (210.6)

Nutrient Applications

Field Name/Number:		3L8						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)	TFS %	Expected Yield (tons/ac)	Actual Yield (tons/ac)
1/1/23	W. Planting	-	-	-	-	-	-	-	-	-	-	-	-
2/7/23	Canal	-	-	-	5.57	-	0.0	-	-	28	-	-	-
3/11/23	Canal	-	-	-	5.34	-	0.0	-	-	27	-	-	-
4/9/23	Canal	-	-	-	5.11	-	0.0	-	-	26	-	-	-
5/25/23	Canal	-	-	-	5.45	-	0.0	-	-	27	-	-	-
6/26/23	Canal	-	-	-	5.26	-	0.0	-	-	27	-	-	-
7/22/23	Canal	-	-	-	5.38	-	0.0	-	-	27	-	-	-
8/16/23	Canal	-	-	-	5.19	-	0.0	-	-	26	-	-	-
9/12/23	Canal	-	-	-	5.53	-	0.0	-	-	28	-	-	-
10/1/23	W. Harvest	-	-	-	-	-	(526.8)	(48.7)	(449.2)	-	9.56	-	10.00
Totals:		0.0	0	42.83	0.00	(527)	(49)	(449)	216	9.56	0	10.00	

Field Name/Number: 3L8 Acres: 70.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	0.1	0.0	0.0	215.6
Nutrients Removed at Harvest	-526.8	-21.3	-372.9	0.0
Nutrient Balance	-526.7	-21.3	-372.9	215.6

Winter Nitrogen Crop App / Use Ratio: 0.01 Summer Nitrogen Crop App / Use Ratio: #N/A

Field Name/Number: 3L8 Acres: 70

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		42.8	Ac In /Ac	0.1		
Atm. Depos.		Yes		7.0		
W. Planting	1/1/23					
W. Harvest	10/1/23	10.0	T/Ac	(526.8)	(111.5)	(539.0)

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:		3L9						Acres:		55.00			
Date	Event / Source	Dry Manure Applied (tons/ac)	Moist. %	Chem Fert total lbs	Fresh Water Applied (ac-in/ac)	Lagoon Water Applied (ac-in/ac)	Lab Sample Data					Yield	
							N (lbs/Ac)	Total P (lbs/Ac)	Total K (lbs/Ac)	Salt (Lbs/Ac)	TFS	%	Expected Yield (tons/ac)
-	-	-	-	-	-	-	-	-	-	-	-	-	-
10/18/22	W. Planting	-	-	-	-	-	-	-	-	-	-	-	-
12/12/22	Canal	-	-	-	5.35	-	0.0	-	-	27	-	-	-
12/12/22	Process Water	-	-	-	-	1.78	190.8	21.6	120.1	635	-	-	-
2/9/23	Canal	-	-	-	5.06	-	0.0	-	-	25	-	-	-
2/9/23	Process Water	-	-	-	-	1.69	180.5	20.5	113.6	600	-	-	-
2/23/23	Canal	-	-	-	5.21	-	0.0	-	-	26	-	-	-
2/23/23	Process Water	-	-	-	-	1.74	41.3	21.0	116.8	618	-	-	-
4/3/23	Canal	-	-	-	-	6.03	-	0.0	-	30	-	-	-
5/8/23	W. Harvest	-	-	-	-	-	(341.2)	(64.7)	(284.3)	-	9.56	-	30.07
-	-	-	-	-	-	-	-	-	-	-	-	-	-
5/15/23	S. Manure App.	11.82	-	-	-	-	86.8	56.7	541.7	-	-	-	-
5/24/23	Canal	-	-	-	6.27	-	0.0	-	-	32	-	-	-
6/9/23	S. Planting	-	-	-	-	-	-	-	-	-	-	-	-
6/23/23	Canal	-	-	-	6.12	-	0.0	-	-	31	-	-	-
7/7/23	Canal	-	-	-	5.16	-	0.0	-	-	26	-	-	-
7/7/23	Process Water	-	-	-	-	1.72	42.3	2.3	40.9	394	-	-	-
7/22/23	Canal	-	-	-	5.30	-	0.0	-	-	27	-	-	-
7/22/23	Process Water	-	-	-	-	1.77	43.5	2.4	42.1	405	-	-	-
8/8/23	Canal	-	-	-	5.25	-	0.0	-	-	26	-	-	-
8/8/23	Process Water	-	-	-	-	1.75	43.1	2.3	41.7	401	-	-	-
9/10/23	Canal	-	-	-	-	6.41	-	0.0	-	32	-	-	-
9/23/23	S. Harvest	-	-	-	-	-	(186.6)	(44.0)	(316.7)	-	-	-	34.49
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals:		11.8		0	56.16	10.45	100	18	416	3,335	9.56	0	64.56

Field Name/Number: 3L9 Acres: 55.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	628.3	55.4	844.1	3335.0
Nutrients Removed at Harvest	-527.8	-47.5	-498.9	0.0
Nutrient Balance	100.5	7.9	345.3	3335.0

Winter Nitrogen Crop App / Use Ratio: 1.23 Summer Nitrogen Crop App / Use Ratio: 1.19

Field Name/Number: 3L9 Acres: 55

Winter Crop	Wheat, Silage	Applied	N		
W. Manure App.	-	T/Ac	-	-	-
W. Comm Fert App.	-	lbs/Ac	-	-	-
Process Water	Q1	5.2	Ac In /Ac	412.5	144.6
	Q2	-	Ac In /Ac	-	420.6
Well Water		-	Ac In /Ac	-	-
Canal		21.6	Ac In /Ac	0.0	-
Atm. Depos.		Yes		7.0	-
W. Planting	10/18/22				
W. Harvest	5/8/23	30.1	T/Ac	(341.2)	(148.2)
					(341.2)

Summer Crop	Corn, Silage	Applied	N		
S. Manure App.	-	T/Ac	86.8	129.9	650.1
S. Comm Fert App.	-	lbs/Ac	-	-	-
Process Water	Q2	-	Ac In /Ac	-	-
	Q3	5.2	Ac In /Ac	128.8	16.0
	Q4	-	Ac In /Ac	-	149.6
Well Water		-	Ac In /Ac	-	-
Canal		34.5	Ac In /Ac	0.1	-
Atm. Depos.		Yes		7.0	-
S. Planting	6/9/23				
S. Harvest	9/23/23	34.5	T/Ac	(186.6)	(100.8)
					(380.0)

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?

No _____

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

No _____

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 _____

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.

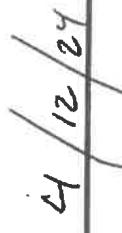

Signature of Owner of Facility

Fernandes Brothers

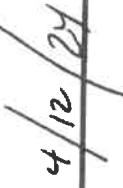
Print Name

Legacy Ranches #1

Print Name


Signature of Operator of Facility

Date


Signature of Operator of Facility

Date



Livingston Dairy Consulting, Inc.

FIELD ACTIVITY REPORT

Facility Name:

Legacy Ranches #1
119414 Rd. 80, Tipton
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

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

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

Sample Type:

Sample Preservation Method: (Circle one)

Ice Chest

Refrigerator

Ice Pack

March 9, 2023

Lab No. : VI 2340870
 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 6 pages divided into 3 sections:

- | | | |
|-----------------|-----------|---|
| Case Narrative | (1 page) | : An overview of the work performed at FGL. |
| Sample Results | (3 pages) | : Results for each sample submitted. |
| Quality Control | (2 pages) | : Supporting Quality Control (QC) results. |

Case Narrative

This Case Narrative pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab No.	Matrix
Domestic	02/10/2023	02/10/2023	VI 2340870-001	DW
1 / Dom	02/10/2023	02/10/2023	VI 2340870-002	DW
H Dom	02/10/2023	02/10/2023	VI 2340870-003	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)
	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

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

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

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

Office & Laboratory
 3442 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

March 9, 2023

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

Description : Domestic
Project : W-6 Legacy #1

Lab No. : VI 2340870-001

Customer No.: 4018505

Sampled On : February 10, 2023 at 09:05

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
Dairy Analysis													
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U	02/23/2023	09:54	sta	EPA 351.2	02/26/2023	22:04	lcr
Nitrate Nitrogen	15.3	0.4	mg/L	10	1		02/22/2023	11:45	lfs	SM 4500-NO3 F	02/22/2023	13:12	lfs
Nitrogen, Total as Nitrogen	19.3	0.5	mg/L		1		02/23/2023	09:54	sta	EPA 351.2	02/26/2023	22:04	lcr
Nitrate + Nitrite as N	19.3	0.4	mg/L	10	1		02/22/2023	11:45	lfs	SM 4500-NO3 F	02/22/2023	13:12	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	02/23/2023	09:54	sta	EPA 351.2	02/26/2023	22:04	lcr
Conductivity	792	1	umhos/cm	1600 ²	1		02/21/2023	14:01	sta		02/21/2023	14:01	sta
Solids, Total Dissolved (TDS)	500	20	mg/L	1000 ²	1		02/14/2023	12:50	ctl	SM 2540 C	02/15/2023	12:35	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 : 1 / Dom
Project : W-6 Legacy #1

Lab No. : VI 2340870-002

Customer No. : 4018505

Sampled On : February 10, 2023 at 09:15

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
Dairy Analysis													
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U	02/23/2023	09:54	sta	EPA 351.2	02/26/2023	22:06	lcr
Nitrate Nitrogen	17.8	0.4	mg/L	10	1		02/22/2023	11:45	lfs	SM 4500-NO3 F	02/22/2023	12:45	lfs
Nitrogen, Total as Nitrogen	20.5	0.5	mg/L		1		02/23/2023	09:54	sta	EPA 351.2	02/26/2023	22:06	lcr
Nitrate + Nitrite as N	20.5	0.4	mg/L	10	1		02/22/2023	11:45	lfs	SM 4500-NO3 F	02/22/2023	12:45	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	02/23/2023	09:54	sta	EPA 351.2	02/26/2023	22:06	lcr
Conductivity	770	1	umhos/cm	1600 ²	1		03/01/2023	17:08	amm	SM 4500-H+B	03/01/2023	20:42	sta
Solids, Total Dissolved (TDS)	510	20	mg/L	1000 ²	1		02/15/2023	11:45	ctl	SM 2540 C	02/16/2023	12:21	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.

Section: Sample Results

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

Office & Laboratory
2500 Stagecoach Road
Stockton, CA 95215
TEL: (209)942-0182
FAX: (209)942-0423
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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

March 9, 2023

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

Description : H Dom
 Project : W-6 Legacy #1

Lab No. : VI 2340870-003

Customer No. : 4018505

Sampled On : February 10, 2023 at 09:18

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
Dairy Analysis													
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U	02/24/2023	11:30	sta	EPA 351.2	03/01/2023	18:05	lcr
Nitrate Nitrogen	14.1	0.4	mg/L	10	1		02/22/2023	13:10	lfs	SM 4500-NO3 F	02/22/2023	13:34	lfs
Nitrogen, Total as Nitrogen	14.1	0.5	mg/L		1		02/24/2023	11:30	sta	EPA 351.2	03/01/2023	18:05	lcr
Nitrate + Nitrite as N	14.1	0.4	mg/L	10	1		02/22/2023	13:10	lfs	SM 4500-NO3 F	02/22/2023	13:34	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	02/24/2023	11:30	sta	EPA 351.2	03/01/2023	18:05	lcr
Conductivity	769	1	umhos/cm	1600 ²	1		02/21/2023	14:01	sta		02/21/2023	14:01	sta
Solids, Total Dissolved (TDS)	520	20	mg/L	1000 ²	1		02/14/2023	15:27	ctl	SM 2540 C	02/15/2023	12:26	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 2340870

Customer No. : 4018505

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
E. C.	2320B	(VI 2341105-003)	Dup	umhos/cm		0.3%	5	
	2510B	02/21/2023:201893STA (VI 2340956-001)	Blank Dup Blank (VI 2341015-002)	umhos/cm umhos/cm umhos/cm umhos/cm		ND 0.6% ND 0.4%	<1 5 <1 5	
Solids, Total Dissolved	2540CE	02/14/2023:201630CTL (VI 2340882-003) (VI 2340882-003) (STK2331874-006) (STK2331874-006)	Blank LCS Dup Dup Blank LCS Dup Dup	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	990.8 990.8	98.4 % 1.4% 4.5% ND 101 % 1.4% 0.1%	<20 90-110 5 5 <20 90-110 5 5	
	2540CE	02/15/2023:201693CTL (VI 2340896-001) (VI 2340896-001)	Blank LCS Dup Dup	mg/L mg/L mg/L mg/L	990.8	102 % 0.4% 0.7%	<20 90-110 5 5	
Nitrogen, Total Kjeldahl	351.2	02/23/2023:201997STA (STK2331941-001) (SP 2302092-008)	Blank LCS MS MSD MSRPD MS MSD MSRPD	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	12.00 12.00 12.00 12.00 12.00 12.00 12.00 12.00	96.9% 91.7% 82.6% 10.3% 86.7% 95.3% 9.5%	<0.5 73-124 54-136 54-136 54-136 54-136 ≤27	
	351.2	02/24/2023:202049STA (VI 2340880-001) (VI 2340880-002)	Blank LCS MS MSD MSRPD MS MSD MSRPD	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	12.00 12.00 12.00 12.00 12.00 12.00 12.00 12.00	91.2% 84.9% 83.6% 1.5% 88.2% 89.0% 0.8%	73-124 54-136 54-136 ≤27 54-136 54-136 ≤27	
Nitrate + Nitrite as N	4500NO3F	02/22/2023:201947LFS (SP 2302530-001)	Blank LCS MS MSD MSRPD Blank LCS MS MSD MSRPD Blank LCS MS MSD MSRPD	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	11.22 5.609 5.609 5.609 5.609 11.22 5.609 5.609 5.609 5.609 11.22 5.609 5.609 5.609 5.609	98.3% 97.3% 99.4% 1.8% ND 99.4% 94.3% 97.2% 2.7% ND 98.3% 97.3%	<0.4 80-120 66-125 66-125 ≤30.4 <0.4 80-120 66-125 66-125 ≤30.4 <0.4 80-120 66-125 66-125 ≤30.4	
Nitrate Nitrogen	4500NO3F	02/22/2023:201947LFS (SP 2302575-001)	Blank LCS MS MSD MSRPD Blank LCS MS MSD MSRPD	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	11.22 11.22 5.609 5.609 5.609 ND 11.22 5.609 5.609 5.609	98.3% 97.3%	80-120 66-125 66-125 ≤30.4 <0.4 80-120 66-125 66-125 ≤30.4	

Section: Quality Control

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853 Corporation Street

Santa Paula, CA 93060

TEL: (805)392-2000

Env FAX: (805)525-4172 / Ag FAX: (805)392-2063

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TEL: (805)783-2940

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Office & Laboratory

9415 W. Goshen Avenue

Visalia, CA 93291

TEL: (559)734-9473

FAX: (559)734-8436

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March 9, 2023
Livingston Dairy Consulting, Inc.

Lab No. : VI 2340870
Customer No. : 4018505

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
(SP 2302530-001)	MSD	(SP 2302530-001)	mg/L	5.609	99.4%	66-125		
	MSRPD		mg/L	5.609	1.8%	≤30.4		
	Blank		mg/L		ND	<0.4		
	LCS		mg/L	11.22	99.4%	80-120		
	MS		mg/L	5.609	94.3%	66-125		
	MSDP		mg/L	5.609	97.2%	66-125		
(SP 2302575-001)	MSD		mg/L	5.609	2.7%	≤30.4		
	MSRPD		mg/L	5.609				

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: 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 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): MRC

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 N/A
5. Were sample custody seals intact? Yes No N/A

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

Sample Verification, Labeling and Distribution:

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

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

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

Discrepancy Documentation:

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

1. Person Contacted: _____ Phone Number: _____
Initiated By: _____ Date: _____

Problem:

Resolution:

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

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

Livingston Dairy Consulting, Inc.
VI 2340870

iv 02/13/2023 10:03:17



July 28, 2023

Lab No. : VI 2344103
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 2344103-001	AGW
Well #4	07/06/2023	07/06/2023	VI 2344103-002	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

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
19415 W. Goshen Avenue
Visalia, CA 93291
TEL: (559)734-9473
FAX: (559)734-8435
CA ELAP Certification No. 2810

July 28, 2023

Lab No. : VI 2344103-001

Customer No. : 4018505

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

Sampled On : July 6, 2023 at 09:25

Sampled By : Marlene Ferreira

Received On : July 6, 2023 at 10:55

Matrix : Ag Water

Description : Well #3
Project : W-6 Legacy Ranches #1

Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
							Date	Time	Who	Method	Date	Time	Who
Dairy Analysis													
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U	07/20/2023	11:04	sta	EPA 351.2	07/24/2023	22:01	lcr
Nitrate Nitrogen	1.8	0.4	mg/L		1		07/07/2023	16:00	lfs	SM 4500-NO3 F	07/07/2023	18:39	lfs
Nitrogen, Total as Nitrogen	1.8	0.5	mg/L		1		07/20/2023	11:04	sta	Calc.	07/24/2023	22:01	lcr
Nitrate + Nitrite as N	1.8	0.4	mg/L		1		07/07/2023	16:00	lfs	SM 4500-NO3 F	07/07/2023	18:39	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	07/20/2023	11:04	sta	EPA 351.2	07/24/2023	22:01	lcr
Conductivity	262	1	umhos/cm		1		07/12/2023	14:47	amm	SM 4500-H+B	07/12/2023	18:01	amm
Solids, Total Dissolved (TDS)	150	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 28, 2023

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

Description : Well #4
Project : W-6 Legacy Ranches #1

Lab No. : VI 2344103-002
Customer No.: 4018505

Sampled On : July 6, 2023 at 09:32
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
Dairy Analysis													
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U	07/20/2023	11:04	sta	EPA 351.2	07/24/2023	22:03	lcr
Nitrate Nitrogen	1.4	0.4	mg/L		1		07/07/2023	16:00	lfs	SM 4500-NO3 F	07/07/2023	18:41	lfs
Nitrogen, Total as Nitrogen	1.4	0.5	mg/L		1		07/20/2023	11:04	sta	Calc.	07/24/2023	22:03	lcr
Nitrate + Nitrite as N	1.4	0.4	mg/L		1		07/07/2023	16:00	lfs	SM 4500-NO3 F	07/07/2023	18:41	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	07/20/2023	11:04	sta	EPA 351.2	07/24/2023	22:03	lfs
Conductivity	312	1	umhos/cm		1		07/12/2023	14:47	amm	SM 4500-H+B	07/12/2023	17:46	amm
Solids, Total Dissolved (TDS)	190	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 28, 2023

Livingston Dairy Consulting, Inc.

Lab No. : VI 2344103

Customer No. : 4018505

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
E. C.	2320B	(VI 2344100-003)	Dup	umhos/cm		0.3%	5	
		(VI 2344111-007)	Dup	umhos/cm		0.6%	5	
Solids, Total Dissolved	2540CE	07/10/2023:207515CTL	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	101%	73-124	
			MS	mg/L	12.00	88.3%	54-136	
		(SP 2311517-001)	MSD	mg/L	12.00	91.9%	54-136	
			MSRPD	mg/L		3.8%	≤27	
			MS	mg/L	12.00	90.2%	54-136	
		(SP 2311518-001)	MSD	mg/L	12.00	92.0%	54-136	
			MSRPD	mg/L		1.9%	≤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 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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www.fgllnc.com

Analytical Chemists



Client: Livingston Dairy Consulting, Inc.

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 Ranch

Purchase Order Number:

Quote Number: VI 20210208-01

Sampler(s): Marlon

Sampling Fee: _____

Pickup Fee:

Compositor Setup Date: _____ / _____ / _____ Time: _____ / _____

Lab Number: VI 2344103

4-18505

Sample Num

Location Description

Date Sampled

Time Sampled

1 Well #3

2 Well #4

3

4

5

6

7

8

9

10

Type of Sample: **SEE REVERSE SIDE**
 Method of Sampling: Composite(C) Grab(G)
 Pollutant: Non-Pollutant(NP) Ag Water(AGW)
 Basic Type: Other(O) System(SYS) Source(SR) Waste(W)
 Basic Reason: Routine(ROUT) Repeat(RPT) Replace(RPL)
 Other(O) SpeciaL(SPL)

Dairy Analysis-W-6-Conductivity, NO3-N, Total N, TDS
16oz(P)Bottles/Containers Split Fee
8oz(P)-H2SO4

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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 # GTC
 2. Were samples received in a chilled condition? Temps: 201 / 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: 30 / / / / /
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): YDC

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: _____
Problem:
Resolution:

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

Livingston Dairy Consulting, Inc.
VI 2344103

iv 07/07/2023 10:15:51


2023 Canal Results

558TR144 - 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	155.3		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	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

Due to Record Flood Conditions, No Surface Water Analysis in March 2023

Livingston Dairy Consulting, Inc.

1635 E. Prosperity Ave. Ste. B

Tulare, CA 93274

559-687-1440

Monday, May 13, 2024

Re: 2023 NMP

Legacy Ranches #1 WDID 5C54NC00169
11981 Road 80 Tipton, CA 93272

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 **0.43**
Nitrogen Summary will show the balances for each field and for the whole farm.

*Ranges for the Whole Farm Nitrogen Balance

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

*Nutrient Management Plan/ Nutrient Budget Certification

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


Butch Brazil
Certified Crop Advisor #35629

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

