



Livingston Dairy Consulting, Inc.

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

Moonlight Dairy WIDID5C54NC00025

5061 Avenue 280 Visalia, CA 93277

- | | |
|-------------------------------------|------------------------------|
| <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 |
| <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: Moonlight Dairy WIDID5C54NC00025
Facility Address: 5061 Avenue 280 Visalia, CA 93277
Original Operation Date: 5/1/1997
Facility APN's: x118 x040 x011 xxxx
RWQCB Basin Plan Designation: Tulare Lake Basin Check if any information has changed

Owner(s)

Owner(s) Name: John & Linda Moons
Mailing Address: 4974 Avenue 272 Visalia, CA 93277
Home Phone Number: 559-684-0883
Cell Phone Number: Check if any information has changed

Operator(s)

Operator(s) Name: Same as owner
Mailing Address:
Home Phone Number:
Cell Phone Number: 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:	-	422	1,024	902	250
Number Under Roof	2,668	-	-	-	-
Maximum Number	2,668	422	1,024	902	250
Average Number	2,668	422	1,024	902	250
Average Live Weight (lbs)	1,400	1,450	950	630	

Average Milk Production: 75

Predominant Milk Cow Breed: Holstein

Manure Generated:

Total manure excreted by the herd:

8,733.14 ton/yr

@40% Moisture

lbs

Total nitrogen from manure:

444,424

lbs

48,169

lbs

110,252

lbs

Total salt from manure:

-

Process Wastewater Generated:

Process wastewater generated: 38,952,800 gal

Total nitrogen generated: 242,871

lbs

52,804

lbs

364,645

lbs

2,127,096

lbs

After Ammonia (30% loss applied)

311,097	<i>lbs per reporting period</i>
----------------	---------------------------------

List of Land Application Areas

Field Name	APN	APN Acres	Cropable Acres	Total Harvest	Type of Waste Applied
1	x118x040x011xxxx	186.94	31	2	P.W. & D.M.
2	x118x040x011xxxx		25	2	P.W. & D.M.
3	x118x040x011xxxx		21	2	P.W. & D.M.
4	x118x040x011xxxx		12	2	P.W. & D.M.
5	x118x040x011xxxx		10	2	P.W. & D.M.
6	x118x040x027xxxx	132	60	0	N/A
7	x118x040x027xxxx		23	2	P.W. & D.M.
8	x118x040x027xxxx		32	2	P.W. & D.M.
9	x118x040x007xxxx	80	72	2	P.W. & D.M.
10	x118x040x015xxxx	125.71	60	2	P.W. & D.M.
11	x118x040x015xxxx		50	2	P.W. & D.M.
12	x118x040x026xxxx, x118x040x025xxxx	112.91	72	1	P.W. & D.M.
13	x118x040x026xxxx		20	2	P.W. & D.M.
14	x118x040x025xxxx		13	2	P.W. & D.M.
15	x073x420x032xxxx	72.67	70	0	N/A
Total Crop Acres				571.00	

List of Land Application Areas

List of Fresh Water Sources

Source Description	Type	Subsurface (Tile) Drainage Sources
Barn (Dairy N)	Ground Water	No
Barn 2 (Dairy S)	Ground Water	No
Galhano Dom	Ground Water	No
S Dom	Ground Water	No
W Dom	Ground Water	No
Nash N	Ground Water	No
NW Well	Ground Water	No
NE Well	Ground Water	No
F10 Well	Ground Water	No
North Well	Ground Water	No
Rd 56 Well	Ground Water	No
Galhano S	Ground Water	No
East Well	Ground Water	No
Small Bennetts	Ground Water	No
South Well	Ground Water	No
W Well	Ground Water	No
Hopper W	Ground Water	No
Hopper E	Ground Water	No
Canal	Surface Water	No

(WINTER) PLANT TISSUE ANALYSIS (Recorded As Received)							
Field	Crop	Moist %	N%	TP %	TK%	Salt	TFS
1	Wheat, Silage	65.50	0.65	0.14	0.68	-	9.75
2	Wheat, Silage	68.00	0.59	0.14	0.64	-	8.57
3	Wheat, Silage	67.30	0.57	0.13	0.51	-	13.60
4	Wheat, Silage	68.60	0.58	0.14	0.61	-	10.10
5	Wheat, Silage	66.40	0.64	0.14	0.51	-	14.60
6	W. Fallow	-	-	-	-	-	Fallow
7	Wheat, Silage	62.60	0.70	0.15	0.60	-	11.70
8	Wheat, Silage	65.10	0.66	0.17	0.68	-	12.00
9	Wheat, Silage	68.00	0.62	0.12	0.63	-	9.50
10	Wheat, Silage	67.90	0.62	0.14	0.63	-	13.00
11	Wheat, Silage	67.70	0.55	0.13	0.57	-	10.60
12	W. Fallow	-	-	-	-	-	Fallow
13	Wheat, Silage	69.10	0.57	0.12	0.46	-	15.40
14	Wheat, Silage	66.70	0.57	0.13	0.55	-	11.20
15	Trees, Walnuts	-	1.60	0.24	1.75	-	Book Value
<i>Detectable Lim Valley Tech</i>							
	Dellavalle	0.10%	0.05%	0.01%	0.01%	0.003%	0.05%
	Dellavalle	0.001%	0.01%	0.01%	0.003%	0.001%	0.001%

Detectable Limits

Valley Tech

Dellavalle

0.05%
0.001%

0.05%
0.001%

PLANT TISSUE ANALYSIS (Recorded As Received) (WINTER)

		PLANT TISSUE ANALYSIS (Recorded As Received)									
		Crop	Moist %	N%	TP %	TK%	Salt	TFS	Sample #:	Date:	Source
Field											
1	Corn, Silage	71.40	0.29	0.07	0.48	-	6.92	9-26H66866	09/26/23	Valley Tech	
2	Corn, Silage	62.50	0.50	0.07	0.52	-	5.86	10-19H70149	10/19/23	Valley Tech	
3	Corn, Silage	73.80	0.34	0.05	0.45	-	5.99	9-26H66866	09/26/23	Valley Tech	
4	Corn, Silage	74.50	0.36	0.07	0.47	-	7.65	9-26H66866	09/26/23	Valley Tech	
5	Corn, Silage	66.10	0.40	0.10	0.50	-	6.24	10-19H70149	10/19/23	Valley Tech	
6	S. Fallow	-	-	-	-	-	-	Fallow	-	-	
7	Corn, Silage	71.00	0.46	0.10	0.86	-	9.99	9-26H66866	09/26/23	Valley Tech	
8	Corn, Silage	66.00	0.46	0.10	0.44	-	7.53	10-19H70149	10/19/23	Valley Tech	
9	Corn, Silage	70.80	0.40	0.07	0.35	-	5.49	10-19H70149	10/19/23	Valley Tech	
10	Corn, Silage	71.20	0.38	0.09	0.41	-	6.58	9-26H66866	09/26/23	Valley Tech	
11	Corn, Silage	69.90	0.43	0.10	0.49	-	7.17	10-19H70149	10/19/23	Valley Tech	
12	Corn, Silage	72.00	0.33	0.06	0.49	-	6.37	9-26H66866	09/26/23	Valley Tech	
13	Corn, Silage	70.90	0.37	0.10	0.39	-	6.52	9-26H66866	09/26/23	Valley Tech	
14	Corn, Silage	71.50	0.33	0.07	0.39	-	5.45	9-26H66866	09/26/23	Valley Tech	
15	Trees, Walnuts	-	-	-	-	-	-	Trees	-	-	

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%

PLANT TISSUE ANALYSIS (Recorded As Received) (SUMMER)

Detectable Limits
Valley Tech
Delicaville

0.001% 0.01% 0.01% 0.01% 0.003% 0.001% 0.05%

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
1	Wheat, Silage	10/24/22	5/18/23	7-20H58323	65.50	0.65	0.14	0.68	-	9.75	Dry Weight
2	Wheat, Silage	10/24/22	5/18/23	7-20H58323	68.00	0.59	0.14	0.64	-	8.57	Dry Weight
3	Wheat, Silage	10/24/22	5/14/23	7-20H58323	67.30	0.57	0.13	0.51	-	13.60	Dry Weight
4	Wheat, Silage	11/20/22	5/8/23	7-20H58323	68.60	0.58	0.14	0.61	-	10.10	Dry Weight
5	Wheat, Silage	10/24/22	5/18/23	7-20H58323	66.40	0.64	0.14	0.51	-	14.60	Dry Weight
6	W. Fallow			Fallow	-	-	-	-	-	-	
7	Wheat, Silage	11/21/22	5/19/23	7-20H58323	62.60	0.70	0.15	0.60	-	11.70	Dry Weight
8	Wheat, Silage	11/21/22	5/19/23	7-20H58323	65.10	0.66	0.17	0.68	-	12.00	Dry Weight
9	Wheat, Silage	11/20/22	5/19/23	7-20H58323	68.00	0.62	0.12	0.63	-	9.50	Dry Weight
10	Wheat, Silage	10/26/22	5/19/23	7-20H58323	67.90	0.62	0.14	0.63	-	13.00	Dry Weight
11	Wheat, Silage	10/26/22	5/8/23	7-20H58323	67.70	0.55	0.13	0.57	-	10.60	Dry Weight
12	W. Fallow			Fallow	-	-	-	-	-	-	
13	Wheat, Silage	11/1/22	5/2/23	7-20H58323	69.10	0.57	0.12	0.46	-	15.40	Dry Weight
14	Wheat, Silage	11/20/22	5/20/23	7-20H58323	66.70	0.57	0.13	0.55	-	11.20	Dry Weight
15	Trees, Walnuts	10/12/13	11/1/23	Book Value	-	1.60	0.24	1.75	-	-	Dry Weight

Detectable L Valley Tech
Dellavalle

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

0.05%
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
16	W. Fallow			Fallow	-	-	-	-	-	-	
17	W. Fallow			Fallow	-	-	-	-	-	-	

*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
1	Corn, Silage	6/16/23	9/25/23	9-26H66866	71.40	0.29	0.07	0.48	-	6.92	Dry Weight
2	Corn, Silage	6/21/23	9/30/23	10-19H70149	62.50	0.50	0.07	0.52	-	5.86	Dry Weight
3	Corn, Silage	6/21/23	9/8/23	9-26H66866	73.80	0.34	0.06	0.45	-	5.99	Dry Weight
4	Corn, Silage	6/21/23	9/8/23	9-26H66866	74.50	0.36	0.07	0.47	-	7.65	Dry Weight
5	Corn, Silage	6/28/23	10/17/23	10-19H70149	66.10	0.40	0.10	0.50	-	6.24	Dry Weight
6	S. Fallow			Fallow	-	-	-	-	-	-	
7	Corn, Silage	6/25/23	9/27/23	9-26H66866	71.00	0.46	0.10	0.86	-	9.99	Dry Weight
8	Corn, Silage	6/20/23	10/2/23	10-19H70149	66.00	0.46	0.10	0.44	-	7.53	Dry Weight
9	Corn, Silage	7/3/23	10/18/23	10-19H70149	70.80	0.40	0.07	0.35	-	5.49	Dry Weight
10	Corn, Silage	6/9/23	9/15/23	9-26H66866	71.20	0.38	0.09	0.41	-	6.58	Dry Weight
11	Corn, Silage	6/20/23	9/20/23	10-19H70149	69.90	0.43	0.10	0.49	-	7.17	Dry Weight
12	Corn, Silage	6/20/23	9/15/23	9-26H66866	72.00	0.33	0.06	0.49	-	6.37	Dry Weight
13	Corn, Silage	6/15/23	9/20/23	9-26H66866	70.90	0.37	0.10	0.39	-	6.52	Dry Weight
14	Corn, Silage	6/11/23	9/20/23	9-26H66866	71.50	0.33	0.07	0.39	-	5.45	Dry Weight
15	Trees, Walnuts			Trees	-	-	-	-	-	-	

0.10% 0.05% 0.01% 0.01%
 0.001% 0.01% 0.01% 0.003% 0.05%
 Detectable L Valley Tech
 Dellavalle 0.001%

Field:	Crop	Plant Date	Harvest Date	Lab #	Moisture %	N (mg/kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS	Reporting Basis
16	Corn, Silage	6/5/23	9/8/23	10-19H70149	68.80	0.43	0.10	0.56	-	7.52	Dry Weight
17	Corn, Silage	6/15/23	9/25/23	9-26H66866	72.70	0.35	0.08	0.58	-	7.12	Dry Weight

Detectable L Valley Tech
Dellavalle

Well / Canal Analysis

Soil Analysis (Winter)

Fields:	0/1ft. NO3-N (mg/kg)	1/2 ft. NO3-N (mg/kg)	0/1 ft. Sol. P (mg/kg)	0/1 ft. K (mg/kg)	0/1 ft. EC (ds/m)	OM %	Lab #	Date	Source
1	13.3	-	108.00	924.00	1.07	3.29	05-11S49642	05/11/23	Valley Tech
2	69.2	-	80.80	659.00	2.16	3.05	05-23551039	05/23/23	Valley Tech
3	72.9	-	60.90	761.00	2.73	1.98	05-11S49642	05/11/23	Valley Tech
4	19.8	-	63.90	924.00	1.22	3.12	05-11S49642	05/11/23	Valley Tech
5	75.5	-	135.00	1,060.00	3.00	3.34	05-11S49642	05/11/23	Valley Tech
6	-	-	-	-	-	-	-	-	-
7	21.7	-	31.80	437.00	1.20	1.66	05-23551039	05/23/23	Valley Tech
8	23.4	-	31.30	374.00	1.03	1.55	05-23551039	05/23/23	Valley Tech
9	12.5	-	38.70	527.00	0.91	1.40	05-23551039	05/23/23	Valley Tech
10	6.7	-	87.00	764.00	0.97	2.60	05-11S49642	05/11/23	Valley Tech
11	26.60	-	95.80	944.00	1.31	2.31	05-11S49642	05/11/23	Valley Tech
12	53.20	38.10	67.70	718.00	1.75	2.90	05-02S48586	05/02/23	Valley Tech
13	16.70	-	93.50	885.00	1.38	2.15	05-23551039	05/23/23	Valley Tech
14	3.20	-	31.10	175.00	0.65	1.39	05-11S49642	05/11/23	Valley Tech
15	-	-	-	-	-	-	-	-	-

Detectable Limits

Valley Tech 0.1 0.1

DeltaVale 0.1 0.1

0.0015 *0.0001%*

Soil Analysis (Winter)

Detectable limits

Volume 2

Valley Tech
Dallas/Ft. Worth

1.1 0.2 0.0015

0.001%

Soil Analysis (Summer)

Fields:	0/1ft. NO3-N (mg/kg)	1/2 ft. NO3-N (mg/kg)	0/1 ft. Sol. P (mg/kg)	0/1 ft. K (mg/kg)	0/1 ft. EC (ds/m)	OM %	Lab #	Date	Source
1	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-

Detectable Limits

<i>Valley Tech</i>	0.1	0.1	0.2	0.0015	0.0001%
<i>DellaValle</i>	0.1	0.1	1.1		

Soil Analysis (Summer)

Detectable Limits

Valley Tech 0.1
DellaValle 0.1

1:1 0.2 0.0015 0.0001%

Nutrient Import & Export

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

X No

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

Total Dry Manure Exported

Total Process Water Exported

Process Water & Manure Analysis

Process Water		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)	SO4 (mg/L)	Cl (mg/L)	EC (dS/m)	TDS (mg/L)
Quarters:															
1	460.0	500.0	63.3	88.70	1.0	-	216.0	109.0	283.0	0.0	4,400.0	-	436.0	7	4,290
2	580.0	670.0	83.0	850.0	1.0	-	-	-	-	-	-	-	-	8	4,220
3	481.0	495.0	32.0	540.0	1.0	-	0.0	98.9	230.0	0.0	56.7	107.0	8.2	9	5,780
4	469.0	485.0	25.7	413.0	1.0	-	-	-	-	-	-	-	-	-	4,540

Detectable Limits
Valley Tech
Dellavalle

Qtr	Sample #:	Sample Date:	Source	Spec / Act In
1	VI 2340951	2/13/2023	FGL Environmental	104.5 9.1 32.9 242.2
2	VI 2343275	5/25/2023	FGL Environmental	131.7 20.4 43.1 232.1
3	8-17L62122	8/17/2023	Valley Tech	109.3 3.2 16.6 147.4
4	10-L67881	10/16/2023	Valley Tech	106.5 3.6 13.3 112.8

Description	Sample #:	Date:	As Is / Dry Weight	Source	Material Type
Manure	VI 2343331	5/25/2023	Dry Weight	FGL Environmental	Corral Solids
Manure	10-3M67856	10/13/2023	Dry Weight	Valley Tech	Corral Solids

Dry Manure: (as Rec'd)	TN %	TP %	TK %	Ca	Mg	Na	S	Cl	Salt	TFS	Moisture %
Corral	0.65	0.17	0.14	1.01	0.32	0.12	0.37	0.08	-	22.60	66.90
Corral	0.88	0.28	1.12	1.56	0.37	0.17	0.29	0.57	-	50.40	25.60

Detectable Limits
Valley Tech
Dellavalle

0.01%	0.02%	0.02%	0.001%	0.001%	0.001%	0.000%	0.001%	0.001%	0.001%	0.001%	0.001%
-------	-------	-------	--------	--------	--------	--------	--------	--------	--------	--------	--------

Nutrient Applications

Field Name/Number:

1

Acres:

31.00

Dry Weight
As Received

Field Name/Number: 1Acres: 31

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	493.9	138.2	1047.8	5463.0
Nutrients Removed at Harvest	-469.2	-106.7	-596.0	0.0
Nutrient Balance	24.7	31.5	451.7	5463.0

Winter Nitrogen Crop App / Use Ratio: 1.03 Summer Nitrogen Crop App / Use Ratio: 1.18Field Name/Number: 1 Acres: 31

Winter Crop Nutrient Summary :	Wheat, Silage		N		
	Applied		T/Ac	-	-
W. Manure App.	-	T/Ac	-	-	-
W. Comm Fert App.	-	lbs/Ac	-	-	-
Process Water	Q1	1.6	Ac In /Ac	128.9	53.3
	Q2	1.6	Ac In /Ac	167.3	67.7
Well Water	-	Ac In /Ac	-	-	-
Canal	17.8	Ac In /Ac	0.0	-	-
Atm. Depos.	Yes		7.0	-	-
W. Planting	10/24/22				
W. Harvest	5/18/23	22.8	T/Ac	(295.8)	(144.1)
					(373.9)

Summer Crop Nutrient Summary :	Corn, Silage		N			
	Applied		T/Ac	68.0	168.2	260.9
S. Manure App.	9.7	T/Ac	-	-	-	-
S. Comm Fert App.	-	lbs/Ac	-	-	-	-
Process Water	Q2	-	Ac In /Ac	-	-	-
	Q3	1.6	Ac In /Ac	129.6	27.3	241.8
	Q4	-	Ac In /Ac	-	-	-
Well Water	-	Ac In /Ac	-1.38E-14	-	-	-
Canal	37.5	Ac In /Ac	0.1	-	-	-
Atm. Depos.	Yes		7.0	-	-	-
S. Planting	6/16/23					
S. Harvest	9/25/23	29.4	T/Ac	(173.4)	(100.2)	(341.3)

Nutrient Applications

Field Name/Number:

2

Acres:

25.00

Field Name/Number: 2Acres: 25.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	399.7	15.0	425.6	3823.2
Nutrients Removed at Harvest	-455.4	-39.3	-402.3	0.0
Nutrient Balance	-55.6	-24.3	23.3	3823.2

Winter Nitrogen Crop App / Use Ratio: 1.19 Summer Nitrogen Crop App / Use Ratio: 1.30Field Name/Number: 2 Acres: 25

Winter Crop	Wheat, Silage				
Nutrient Summary :	Applied	N			
W. Manure App.	-	T/Ac	-	-	-
W. Comm Fert App.	80.0	lbs/Ac	80.0		
Process Water	Q1	1.6	Ac In /Ac	127.9	52.9
	Q2	-	Ac In /Ac	-	-
Well Water		-	Ac In /Ac	80.0	
Canal		18.8	Ac In /Ac	0.0	
Atm. Depos.		Yes		7.0	
W. Planting	10/24/22				
W. Harvest	5/18/23	21.0	T/Ac	(248.2)	(138.2)
					(323.6)

Summer Crop	Corn, Silage				
Nutrient Summary :	Applied	N			
S. Manure App.	-	T/Ac	-	-	-
S. Comm Fert App.	70.0	lbs/Ac	70.0	-	-
Process Water	Q2	-	Ac In /Ac	-	-
	Q3	1.5	Ac In /Ac	121.7	25.7
	Q4	-	Ac In /Ac	-	-
Well Water		-	Ac In /Ac	70.0	
Canal		38.2	Ac In /Ac	0.1	
Atm. Depos.		Yes		7.0	
S. Planting	6/21/23				
S. Harvest	9/30/23	20.8	T/Ac	(207.2)	(67.8)
					(258.0)

Nutrient Applications

Field Name/Number:

3

Acres:

21.00

Field Name/Number: 3Acres: 21.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	417.1	54.4	648.5	3907.2
Nutrients Removed at Harvest	-424.9	-38.3	-383.7	0.0
Nutrient Balance	-7.8	16.0	264.8	3907.2

Winter Nitrogen Crop App / Use Ratio: 1.17 Summer Nitrogen Crop App / Use Ratio: 1.26Field Name/Number: 3 Acres: 21

Winter Crop	Wheat, Silage				
Nutrient Summary :	Applied	N			
W. Manure App.	-	T/Ac	-	-	-
W. Comm Fert App.	80.0	Ibs/Ac	80.0		
Process Water	Q1	1.5	Ac In /Ac	123.0	50.8
	Q2	-	Ac In /Ac	-	373.2
Well Water		-	Ac In /Ac	80.0	
Canal		18.4	Ac In /Ac	0.0	
Atm. Depos.	Yes			7.0	
W. Planting	10/24/22				
W. Harvest	5/14/23	22.0	T/Ac	(248.9)	(131.8)
					(269.3)

Summer Crop	Corn, Silage				
Nutrient Summary :	Applied	N			
S. Manure App.	11.9	T/Ac	83.6	206.9	321.0
S. Comm Fert App.	-	Ibs/Ac	-	-	-
Process Water	Q2	-	Ac In /Ac	-	-
	Q3	1.7	Ac In /Ac	130.4	27.5
	Q4	-	Ac In /Ac	-	243.4
Well Water		-	Ac In /Ac	0.0	
Canal		38.4	Ac In /Ac	0.1	
Atm. Depos.	Yes			7.0	
S. Planting	6/2/23				
S. Harvest	9/8/23	26.2	T/Ac	(176.0)	(69.3)
					(285.4)

Nutrient Applications

Field Name/Number:

4

Acres:

12.00

Field Name/Number: 4Acres: 12.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	455.6	43.4	607.7	4822.3
Nutrients Removed at Harvest	-472.1	-45.4	-454.2	0.0
Nutrient Balance	-16.5	-2.0	153.5	4822.3

Winter Nitrogen Crop App / Use Ratio: 1.03 Summer Nitrogen Crop App / Use Ratio: 1.29Field Name/Number: 4 Acres: 12

Winter Crop Nutrient Summary :	Wheat, Silage		N		
	Applied				
W. Manure App.	-	T/Ac	-	-	-
W. Comm Fert App.	70.0	lbs/Ac	70.0		
Process Water	Q1	1.6	Ac In /Ac	128.1	52.9
	Q2	-	Ac In /Ac	-	-
Well Water		-	Ac In /Ac	70.0	
Canal		18.6	Ac In /Ac	0.0	
Atm. Depos.	Yes			7.0	
W. Planting	11/20/22				
W. Harvest	5/8/23	23.0	T/Ac	(267.2)	(142.2)
					(336.3)

Summer Crop Nutrient Summary :	Corn, Silage		N		
	Applied				
S. Manure App.	8.3	T/Ac	58.5	144.8	224.7
S. Comm Fert App.	-	lbs/Ac	-	-	-
Process Water	Q2	-	Ac In /Ac	-	-
	Q3	1.8	Ac In /Ac	142.0	30.0
	Q4	-	Ac In /Ac	-	-
Well Water		37.5	Ac In /Ac	56.9	
Canal		-	Ac In /Ac	-	
Atm. Depos.	Yes			7.0	
S. Planting	6/2/23				
S. Harvest	9/8/23	28.3	T/Ac	(204.9)	(95.8)
					(320.3)

Nutrient Applications

Field Name/Number:

5

Acres:

10.00

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)
1/14/23	W. Comm Fert App.	-	-	80	-	-	80.0	-	-	-	-	-	-	-
10/24/22	W. Planting	-	-	-	-	-	-	-	-	-	-	-	-	-
1/14/23	Canal	-	-	-	6.76	-	0.0	-	-	28	-	-	-	-
2/21/23	Canal	-	-	-	5.57	-	0.0	-	-	23	-	-	-	-
2/21/23	Process Water	-	-	-	-	1.62	129.1	23.3	326.5	1,579	-	-	-	-
4/19/23	Canal	-	-	-	6.63	-	0.0	-	-	27	-	-	-	-
5/18/23	W. Harvest	-	-	-	-	-	(242.6)	(54.9)	(194.1)	-	9.75	-	19.00	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6/1/23	S. Manure App.	10.00	-	-	-	-	70.2	75.9	224.7	-	-	-	-	-
6/10/23	Canal	-	-	-	6.23	-	0.0	-	-	25	-	-	-	-
6/28/23	S. Planting	-	-	-	-	-	-	-	-	-	-	-	-	-
7/22/23	Canal	-	-	-	6.36	-	0.0	-	-	26	-	-	-	-
8/3/23	Canal	-	-	-	6.89	-	0.0	-	-	28	-	-	-	-
8/13/23	Canal	-	-	-	6.10	-	0.0	-	-	25	-	-	-	-
8/31/23	Canal	-	-	-	5.83	-	0.0	-	-	24	-	-	-	-
8/31/23	Process Water	-	-	-	-	1.70	133.9	12.3	208.2	2,229	-	-	-	-
9/11/23	Canal	-	-	-	6.63	-	0.0	-	-	27	-	-	-	-
10/17/23	S. Harvest	-	-	-	-	-	(156.9)	(38.9)	(198.5)	-	6.92	-	19.78	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals:		10.0		80	57.00	3.33	14	18	367	4,041	16.67	0	38.78	

Field Name/Number: 5Acres: 10.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	413.4	48.7	630.4	4041.1
Nutrients Removed at Harvest	-399.5	-40.9	-325.9	0.0
Nutrient Balance	13.8	7.7	304.5	4041.1

Winter Nitrogen Crop App / Use Ratio: 1.22 Summer Nitrogen Crop App / Use Ratio: 1.35Field Name/Number: 5 Acres: 10

Winter Crop	Wheat, Silage		N		
Nutrient Summary :	Applied				
W. Manure App.	-	T/Ac	-	-	-
W. Comm Fert App.	80.0	Ibs/Ac	80.0		
Process Water	Q1	1.6	Ac In /Ac	129.1	53.4
	Q2	-	Ac In /Ac	-	-
Well Water		-	Ac In /Ac	80.0	
Canal		19.0	Ac In /Ac	0.0	
Atm. Depos.		Yes		7.0	
W. Planting	10/24/22				
W. Harvest	5/18/23	19.0	T/Ac	(242.6)	(125.7)
					(232.9)

Summer Crop	Corn, Silage		N		
Nutrient Summary :	Applied				
S. Manure App.	10.0	T/Ac	70.2	173.8	269.6
S. Comm Fert App.	-	Ibs/Ac	-	-	-
Process Water	Q2	-	Ac In /Ac	-	-
	Q3	1.7	Ac In /Ac	133.9	28.3
	Q4	-	Ac In /Ac	-	-
Well Water		-	Ac In /Ac	(0.0)	
Canal		38.0	Ac In /Ac	0.1	
Atm. Depos.		Yes		7.0	
S. Planting	6/28/23				
S. Harvest	10/17/23	19.8	T/Ac	(156.9)	(89.1)
					(238.2)

Nutrient Applications

Field Name/Number:

6

Acres:

60.00

Field Name/Number: 6Acres: 60.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K (lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	0.0	0.0	0.0	0.0
Nutrients Removed at Harvest	0.0	0.0	0.0	0.0
Nutrient Balance	0.0	0.0	0.0	0.0

Winter Nitrogen Crop App / Use Ratio:

#N/A

Summer Nitrogen Crop App / Use Ratio:

#N/A

Field Name/Number:

6

Acres:

60**Winter Crop W. Fallow**

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	-	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 S. Fallow

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	-	-	-	-
Canal	-	Ac In /Ac	-	-	-	-
Atm. Depos.	Yes		7.0			
S. Planting	#N/A					
S. Harvest	-	#N/A	T/Ac	#N/A	#N/A	#N/A

Nutrient Applications

Field Name/Number:

π

Acres:

23.00

Field Name/Number: 7Acres: 23.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	513.7	28.2	686.1	5425.4
Nutrients Removed at Harvest	-536.9	-51.0	-577.7	0.0
Nutrient Balance	-23.2	-22.8	108.4	5425.4

Winter Nitrogen Crop App / Use Ratio: 1.03 Summer Nitrogen Crop App / Use Ratio: 1.31Field Name/Number: 7 Acres: 23

Winter Crop	Wheat, Silage				
Nutrient Summary :	Applied	N			
W. Manure App.	- T/Ac	-	-	-	-
W. Comm Fert App.	90.0 lbs/Ac	90.0			
Process Water	Q1 1.6 Ac In /Ac	128.3	53.0	389.4	
	Q2 - Ac In /Ac	-	-	-	
Well Water	- Ac In /Ac	90.0			
Canal	19.0 Ac In /Ac	0.0			
Atm. Depos.	Yes	7.0			
W. Planting	11/21/22				
W. Harvest	5/19/23 22.0 T/Ac	(306.1)	(147.0)	(317.9)	

Summer Crop	Corn, Silage				
Nutrient Summary :	Applied	N			
S. Manure App.	- T/Ac	-	-	-	-
S. Comm Fert App.	- lbs/Ac	-	-	-	-
Process Water	Q2 1.6 Ac In /Ac	168.3	68.1	365.4	
	Q3 1.6 Ac In /Ac	127.0	26.8	237.1	
	Q4 - Ac In /Ac	-	-	-	
Well Water	- Ac In /Ac	0.0			
Canal	37.2 Ac In /Ac	0.1			
Atm. Depos.	Yes	7.0			
S. Planting	6/25/23				
S. Harvest	9/27/23 25.2 T/Ac	(230.8)	(120.4)	(517.1)	

Nutrient Applications

Field Name/Number:

8

Acres:

32.00

Field Name/Number: 8Acres: 32.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	541.6	25.0	694.5	5415.8
Nutrients Removed at Harvest	-565.7	-57.6	-465.8	0.0
Nutrient Balance	-24.1	-32.5	228.7	5415.8

Winter Nitrogen Crop App / Use Ratio: 1.09 Summer Nitrogen Crop App / Use Ratio: 1.29Field Name/Number: 8 Acres: 32

Winter Crop	Wheat, Silage				
Nutrient Summary :	Applied	N			
W. Manure App.	-	T/Ac	-	-	-
W. Comm Fert App.	-	lbs/Ac	-	-	-
Process Water	Q1	3.2	Ac In /Ac	296.0	104.8
	Q2	-	Ac In /Ac	-	-
Well Water		-	Ac In /Ac	-	-
Canal		17.6	Ac In /Ac	0.0	
Atm. Depos.		Yes		7.0	
W. Planting	11/21/22				
W. Harvest	5/19/23	21.0	T/Ac	(277.0)	(161.1)
					(344.8)

Summer Crop	Corn, Silage				
Nutrient Summary :	Applied	N			
S. Manure App.	-	T/Ac	-	-	-
S. Comm Fert App.	120.0	lbs/Ac	120.0	-	-
Process Water	Q2	-	Ac In /Ac	-	-
	Q3	1.6	Ac In /Ac	125.5	26.5
	Q4	-	Ac In /Ac	-	-
Well Water		-	Ac In /Ac	120.0	
Canal		37.2	Ac In /Ac	0.1	
Atm. Depos.		Yes		7.0	
S. Planting	6/20/23				
S. Harvest	10/2/23	31.2	T/Ac	(288.7)	(141.0)
					(328.6)

Nutrient Applications

Field Name/Number:

9

Acres:

72.00

Field Name/Number: 9Acres: 72.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	371.5	10.0	267.1	2364.1
Nutrients Removed at Harvest	-488.5	-40.5	-386.9	0.0
Nutrient Balance	-117.0	-30.5	-119.8	2364.1

Winter Nitrogen Crop App / Use Ratio: 1.15 Summer Nitrogen Crop App / Use Ratio: 1.26Field Name/Number: 9 Acres: 72

Winter Crop	Wheat, Silage				
Nutrient Summary :	Applied	N			
W. Manure App.	- T/Ac	-	-	-	-
W. Comm Fert App.	90.0 lbs/Ac	90.0			
Process Water	Q1 1.6 Ac In /Ac	127.2	52.6	386.1	
	Q2 - Ac In /Ac	-	-	-	
Well Water	- Ac In /Ac	90.0			
Canal	19.3 Ac In /Ac	0.0			
Atm. Depos.	Yes	7.0			
W. Planting	11/20/22				
W. Harvest	5/19/23	22.0 T/Ac	(273.2)	(122.5)	(332.9)

Summer Crop	Corn, Silage				
Nutrient Summary :	Applied	N			
S. Manure App.	- T/Ac	-	-	-	-
S. Comm Fert App.	110.0 lbs/Ac	110.0	-	-	-
Process Water	Q2 - Ac In /Ac	-	-	-	-
	Q3 - Ac In /Ac	-	-	-	-
	Q4 - Ac In /Ac	-	-	-	-
Well Water	38.3 Ac In /Ac	154.2			
Canal	- Ac In /Ac	-			
Atm. Depos.	Yes	7.0			
S. Planting	7/3/23				
S. Harvest	10/18/23	26.9 T/Ac	(215.4)	(90.0)	(226.4)

Nutrient Applications

Field Name/Number:

10

Acres:

60,00

Field Name/Number: 10Acres: 60.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	482.9	20.7	610.7	6051.7
Nutrients Removed at Harvest	-486.5	-48.2	-420.1	0.0
Nutrient Balance	-3.6	-27.5	190.6	6051.7

Winter Nitrogen Crop App / Use Ratio: 1.11 Summer Nitrogen Crop App / Use Ratio: 1.35Field Name/Number: 10 Acres: 60

Winter Crop	Wheat, Silage				
Nutrient Summary :	Applied	N			
W. Manure App.	- T/Ac	-	-	-	-
W. Comm Fert App.	90.0 lbs/Ac	90.0			
Process Water	Q1 1.6 Ac In /Ac	128.1	52.9	388.7	
	Q2 - Ac In /Ac	-	-	-	
Well Water	- Ac In /Ac	90.0			
Canal	19.0 Ac In /Ac	0.0			
Atm. Depos.	Yes	7.0			
W. Planting	10/26/22				
W. Harvest	5/19/23	23.0 T/Ac	(285.0)	(145.4)	(345.5)

Summer Crop	Corn, Silage				
Nutrient Summary :	Applied	N			
S. Manure App.	- T/Ac	-	-	-	-
S. Comm Fert App.	- lbs/Ac	-	-	-	-
Process Water	Q2 - Ac In /Ac	-	-	-	-
	Q3 3.4 Ac In /Ac	264.8	55.9	494.1	
	Q4 - Ac In /Ac	-	-	-	
Well Water	37.7 Ac In /Ac	-			
Canal	- Ac In /Ac	-			
Atm. Depos.	Yes	7.0			
S. Planting	6/9/23				
S. Harvest	9/15/23	26.3 T/Ac	(201.5)	(107.5)	(261.8)

Nutrient Applications

Field Name/Number:

11

Acres:

50.00

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)
1/2/23	W. Comm Fert App.	-	-	-	-	-	-	-	-	-	-	-	-
10/26/22	W. Planting	-	-	70	-	-	70.0	-	-	-	-	-	-
1/2/23	Canal	-	-	-	6.57	-	0.0	-	-	-	27	-	-
2/22/23	Canal	-	-	-	5.51	-	0.0	-	-	-	23	-	-
2/22/23	Process Water	-	-	-	-	1.61	171.3	23.1	323.4	1,564	-	-	-
4/11/23	Canal	-	-	-	6.68	-	0.0	-	-	-	27	-	-
5/8/23	W. Harvest	-	-	-	-	-	(271.7)	(62.0)	(279.7)	-	9.75	-	24.60
7/23/23	S. Comm Fert App.	-	-	80	-	-	80.0	-	-	-	-	-	-
6/20/23	S. Planting	-	-	-	-	-	-	-	-	-	-	-	-
7/5/23	East Well	-	-	-	6.85	-	-	-	-	-	-	-	-
7/23/23	East Well	-	-	-	6.66	-	-	-	-	-	-	-	-
8/2/23	East Well	-	-	-	6.90	-	-	-	-	-	-	-	-
8/13/23	East Well	-	-	-	5.44	-	-	-	-	-	-	-	-
8/13/23	Process Water	-	-	-	-	1.73	136.3	12.6	212.0	2,270	-	-	-
9/3/23	East Well	-	-	-	6.95	-	-	-	-	-	-	-	-
9/20/23	S. Harvest	-	-	-	-	-	(252.4)	(56.5)	(286.0)	-	6.92	-	29.32
Totals:		0.0		150	51.58	3.34	(67)	(83)	(30)	3,911	16.67	0	53.92

Field Name/Number: 11Acres: 50.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	457.6	15.6	444.5	3910.5
Nutrients Removed at Harvest	-524.2	-51.7	-469.6	0.0
Nutrient Balance	-66.5	-36.1	-25.1	3910.5

Winter Nitrogen Crop App / Use Ratio: 1.17 Summer Nitrogen Crop App / Use Ratio: 1.20Field Name/Number: 11 Acres: 50

Winter Crop	Wheat, Silage	N			
Nutrient Summary :	Applied				
W. Manure App.	- T/Ac	-	-	-	-
W. Comm Fert App.	70.0 lbs/Ac	70.0			
Process Water	Q1 1.6 Ac In /Ac	171.3	52.9	388.1	
	Q2 - Ac In /Ac	-	-	-	
Well Water	- Ac In /Ac	70.0			
Canal	18.8 Ac In /Ac	0.0			
Atm. Depos.	Yes	7.0			
W. Planting	10/26/22				
W. Harvest	5/8/23 24.6 T/Ac	(271.7)	(141.9)	(335.6)	

Summer Crop	Corn, Silage	N			
Nutrient Summary :	Applied				
S. Manure App.	- T/Ac	-	-	-	-
S. Comm Fert App.	80.0 lbs/Ac	80.0	-	-	-
Process Water	Q2 - Ac In /Ac	-	-	-	-
	Q3 1.7 Ac In /Ac	136.3	28.8	254.4	
	Q4 - Ac In /Ac	-	-	-	
Well Water	32.8 Ac In /Ac	80.0			
Canal	- Ac In /Ac	-			
Atm. Depos.	Yes	7.0			
S. Planting	6/20/23				
S. Harvest	9/20/23 29.3 T/Ac	(252.4)	(129.4)	(343.2)	

Nutrient Applications

Field Name/Number:

12

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)
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
W. Fallow	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
6/1/23	S. Manure App.	8.33	-	-	-	-	58.5	63.2	187.2	-	-	-	-
6/20/23	S. Planting	-	-	-	-	-	-	-	-	-	-	-	-
7/5/23	F10 Well	-	-	-	6.75	-	10.3	-	-	147	-	-	-
7/23/23	F10 Well	-	-	-	5.37	-	8.2	-	-	117	-	-	-
7/23/23	Process Water	-	-	-	-	1.88	147.9	13.6	230.1	2,463	-	-	-
8/13/23	F10 Well	-	-	-	6.81	-	10.3	-	-	148	-	-	-
8/23/23	F10 Well	-	-	-	6.54	-	9.9	-	-	142	-	-	-
9/3/23	F10 Well	-	-	-	6.84	-	10.4	-	-	149	-	-	-
9/15/23	S. Harvest	-	-	-	-	-	(212.9)	(36.1)	(317.5)	-	6.92	32.22	-
Totals:		8.3		0	32.31	1.88	43	41	100	3,166	6.92	0	32.22

Field Name/Number: 12Acres: 72.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	255.5	33.5	346.4	3166.1
Nutrients Removed at Harvest	-212.9	-15.7	-263.6	0.0
Nutrient Balance	42.6	17.8	82.8	3166.1

Winter Nitrogen Crop App / Use Ratio: #N/A Summer Nitrogen Crop App / Use Ratio: 1.23

Field Name/Number: 12 Acres: 72**Winter Crop****W. Fallow**

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	- 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.	8.3 T/Ac	58.5 144.8 224.7
S. Comm Fert App.	- lbs/Ac	- - -
Process Water	Q2 - Ac In /Ac	- - -
	Q3 1.9 Ac In /Ac	147.9 31.2 276.1
	Q4 - Ac In /Ac	- - -
Well Water	32.3 Ac In /Ac	49.1
Canal	- Ac In /Ac	-
Atm. Depos.	Yes	7.0
S. Planting	6/20/23	
S. Harvest	9/15/23	32.2 T/Ac (212.9) (82.6) (381.0)

Nutrient Applications

Field Name/Number:

13

Acres:

20.00

Field Name/Number: 13Acres: 20.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	628.0	36.2	443.2	6334.9
Nutrients Removed at Harvest	-494.8	-51.8	-374.8	0.0
Nutrient Balance	133.2	-15.5	68.3	6334.9

Winter Nitrogen Crop App / Use Ratio: 1.21 Summer Nitrogen Crop App / Use Ratio: 1.22

Field Name/Number: 13 Acres: 20

Winter Crop	Wheat, Silage	Applied				N
W. Manure App.		-	T/Ac	-	-	-
W. Comm Fert App.		-	lbs/Ac	-	-	-
Process Water	Q1	1.8	Ac In /Ac	193.5	59.7	438.5
	Q2	-	Ac In /Ac	-	-	-
Well Water		19.0	Ac In /Ac	125.3		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
W. Planting	11/1/22					
W. Harvest	5/2/23	23.6	T/Ac	(269.2)	(133.3)	(258.5)

Summer Crop	Corn, Silage	Applied				N
S. Manure App.		7.5	T/Ac	52.7	130.3	202.2
S. Comm Fert App.		-	lbs/Ac	-	-	-
Process Water	Q2	-	Ac In /Ac	-	-	-
	Q3	-	Ac In /Ac	-	-	-
	Q4	-	Ac In /Ac	-	-	-
Well Water		32.7	Ac In /Ac	215.7		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
S. Planting	6/15/23					
S. Harvest	9/20/23	30.5	T/Ac	(225.5)	(138.3)	(283.4)

Nutrient Applications

Field Name/Number:

14

Acres:

13.09

Field Name/Number: 14Acres: 13.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	524.6	10.1	268.1	6093.0
Nutrients Removed at Harvest	-450.5	-43.9	-392.7	0.0
Nutrient Balance	74.1	-33.8	-124.7	6093.0

Winter Nitrogen Crop App / Use Ratio: 1.07 Summer Nitrogen Crop App / Use Ratio: 1.38Field Name/Number: 14 Acres: 13**Winter Crop Wheat, Silage**

Nutrient Summary :		Applied	N		
W. Manure App.		- T/Ac	-	-	-
W. Comm Fert App.		- lbs/Ac	-	-	-
Process Water	Q1	1.6 Ac In /Ac	171.0	52.8	387.5
	Q2	- Ac In /Ac	-	-	-
Well Water		18.8 Ac In /Ac	113.5		
Canal		- Ac In /Ac	-		
Atm. Depos.		Yes		7.0	
W. Planting	11/20/22				
W. Harvest	5/20/23	24.0 T/Ac	(271.7)	(146.4)	(318.4)

Summer Crop Corn, Silage

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		39.7 Ac In /Ac	240.1		
Canal		- Ac In /Ac	-		
Atm. Depos.		Yes		7.0	
S. Planting	6/11/23				
S. Harvest	9/20/23	26.8 T/Ac	(178.7)	(84.0)	(249.3)

Nutrient Applications

Field Name/Number:

15

Acres:

70.00

Field Name/Number: 15Acres: 70.00

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	193.2
Nutrient Balance	-48.0	-3.1	-43.6	0.0
	-47.9	-3.1	-43.6	193.2

Winter Nitrogen Crop App / Use Ratio: 0.15 Summer Nitrogen Crop App / Use Ratio: #N/AField Name/Number: 15 Acres: 70

Winter Crop	Trees, Walnuts	
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	47.3	Ac In /Ac
Atm. Depos.	Yes	0.1
W. Planting	10/12/13	7.0
W. Harvest	11/1/23	1.5 T/Ac
		(48.0) (16.5) (63.0)

Summer Crop	Trees, Walnuts	
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
Canal		- Ac In /Ac
Atm. Depos.	#N/A	#N/A
S. Planting	#N/A	#N/A
S. Harvest	#N/A	T/Ac
		#N/A #N/A #N/A

Nutrient Applications

Field Name/Number:

16

Acres:

40,00

Dry Weight
As Received

Field Name/Number: 16Acres: 40

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	146.0	0.0	0.0	844.1
Nutrients Removed at Harvest	-254.1	-56.7	-327.3	0.0
Nutrient Balance	-108.1	-56.7	-327.3	844.1

Winter Nitrogen Crop App / Use Ratio: #N/A Summer Nitrogen Crop App / Use Ratio: 1.07

Field Name/Number: 16 Acres: 40

Winter Crop	W. Fallow	N			
Nutrient Summary :		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	-	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

Summer Crop	Corn, Silage	N			
Nutrient Summary :		Applied			
S. Manure App.	-	T/Ac	-	-	-
S. Comm Fert App.	120.0	lbs/Ac	120.0	-	-
Process Water	Q2	- Ac In /Ac	-	-	-
	Q3	- Ac In /Ac	-	-	-
	Q4	- Ac In /Ac	-	-	-
Well Water	12.6	Ac In /Ac	145.97479		
Canal	26.3	Ac In /Ac	0.1		
Atm. Depos.	Yes		7.0		
S. Planting	6/5/23				
S. Harvest	9/8/23	29.3	T/Ac	(254.1)	(129.8) (392.7)

Nutrient Applications

Field Name/Number:

17

Acres: 40.00

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	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
7/23/23	S. Comm Fert App.	-	-	100	-	-	100.0	-	-	-	-	-	-
5/29/23	Canal	-	-	-	6.89	-	0.0	-	-	-	28	-	-
6/15/23	S. Planting	-	-	-	-	-	-	-	-	-	-	-	-
7/5/23	Canal	-	-	-	6.96	-	0.0	-	-	-	28	-	-
7/23/23	Canal	-	-	-	6.56	-	0.0	-	-	-	27	-	-
8/11/23	Canal	-	-	-	6.69	-	0.0	-	-	-	27	-	-
8/28/23	Canal	-	-	-	6.83	-	0.0	-	-	-	28	-	-
9/25/23	S. Harvest	-	-	-	-	-	(185.9)	(40.0)	(301.8)	-	7.52	-	26.19
Totals:		0.0		100	33.93	0.00	(86)	(40)	(302)	139	7.52	0	26.19

Winter Crop					
W. Fallow					
Nutrient Summary:					
Total N (lbs/ac)	Total P (lbs/ac)	Total K (lbs/ac)	Total S (lbs/ac)	Acres:	40
100.1	0.0	-85.8	-17.5	1.11	Winter Nitrogen Crop App / Use Ratio: #N/A
Nutrients Applied	Nutrients Removed at Harvest	Nutrient Balance	Nutrients Removed at Harvest	Acres:	Field Name/Number: 17
Total N (lbs/ac)	Total P (lbs/ac)	Total K (lbs/ac)	Total S (lbs/ac)		

Summer Crop					
W. Manure App.					
W. Comm Fert App.					
Total N (lbs/ac)	Total P (lbs/ac)	Total K (lbs/ac)	Total S (lbs/ac)	Acres:	Field Name/Number: 17
100.0	100.0	100.0	100.0	1.00	Summer Nitrogen Crop App / Use Ratio: #N/A
Nutrients Applied	W. Comm Fert App.	W. Manure App.	W. Manure App.	Acres:	Field Name/Number: 17
Total N (lbs/ac)	Total P (lbs/ac)	Total K (lbs/ac)	Total S (lbs/ac)		

Summer Crop					
S. Manure App.					
S. Comm Fert App.					
Total N (lbs/ac)	Total P (lbs/ac)	Total K (lbs/ac)	Total S (lbs/ac)	Acres:	Field Name/Number: 17
100.0	100.0	100.0	100.0	1.00	Summer Nitrogen Crop App / Use Ratio: #N/A
Nutrients Applied	W. Comm Fert App.	S. Manure App.	S. Manure App.	Acres:	Field Name/Number: 17
Total N (lbs/ac)	Total P (lbs/ac)	Total K (lbs/ac)	Total S (lbs/ac)		

Summer Crop					
S. Planting					
S. Harvest					
Total N (lbs/ac)	Total P (lbs/ac)	Total K (lbs/ac)	Total S (lbs/ac)	Acres:	Field Name/Number: 17
9.25/23	26.2	26.2 T/Ac	(185.9)	(91.7)	(362.1)
W. Planting	W. Harvest	W. Harvest	W. Harvest	Acres:	Field Name/Number: 17
Total N (lbs/ac)	Total P (lbs/ac)	Total K (lbs/ac)	Total S (lbs/ac)		

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)

Exception Reporting

Manure , Process Water and Other Dairy Waste Discharges:

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

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

Storm Water Discharges:

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

No, storm water discharges occurred during the reporting period

Land Application Area To Surface Water Discharges:

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

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

Nutrient Management Plan (NMP) & Written Agreement Statement

Nutrient Management Plan Statement:

Was the facility NMP updated in the reporting period?

Yes

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

Yes

Written Agreements:

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

No

Owner and/or Operator Certification

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

Signature of Owner of Facility

John & Linda Moons

Same as owner
Print Name

Date _____

Signature of Operator of Facility

Print Name

Date _____

August 16, 2023

Lab No. : VI 2344719
Customer No. : 4018505

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

Laboratory Report

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

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

Case Narrative

This Case Narrative pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab No.	Matrix
Barn	07/20/2023	07/20/2023	VI 2344719-001	DW
Barn 2	07/20/2023	07/20/2023	VI 2344719-002	DW

Sampling and Receipt Information:

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

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

Test Summary

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

Corporate Offices & Laboratory
853 Corporation Street
Santa Paula, CA 93060
TEL: (805)392-2000
Env FAX: (805)625-4172 / 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 16, 2023

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

Lab No. : VI 2344719-001
 Customer No.: 4018505

Sampled On : July 20, 2023 at 06:01
 Sampled By : Marlene & Noreen
 Received On : July 20, 2023 at 10:32
 Matrix : Drinking Water

Description : Barn
 Project : W-6 Moonlight Dairy

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	08/10/2023	14:22	sta	EPA 351.2	08/12/2023	15:35	lcr
Nitrate Nitrogen	32.3	0.4	mg/L	10	1		07/21/2023	13:00	lfs	SM 4500-NO3 F	07/21/2023	17:20	lfs
Nitrogen, Total as Nitrogen	32.3	0.5	mg/L		1		08/10/2023	14:22	sta	Calc.	08/12/2023	15:35	lcr
Nitrate + Nitrite as N	32.3	0.4	mg/L	10	1		07/21/2023	13:00	lfs	SM 4500-NO3 F	07/21/2023	17:20	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	08/10/2023	14:22	sta	EPA 351.2	08/12/2023	15:35	lcr
Conductivity	837	1	umhos/cm	1600 ²	1		07/31/2023	21:43	amm	SM 4500-H+B	08/01/2023	00:44	amm
Solids, Total Dissolved (TDS)	590	20	mg/L	1000 ²	1		07/25/2023	12:30	ctl	SM 2540 C	07/26/2023	11:30	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.

August 16, 2023

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

Lab No. : VI 2344719-002

Customer No.: 4018505

Sampled On : July 20, 2023 at 06:05

Sampled By : Marlene & Noreen

Received On : July 20, 2023 at 10:32

Matrix : Drinking Water

Description : Barn 2
Project : W-6 Moonlight Dairy

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	08/10/2023	14:22	sta	EPA 351.2	08/12/2023	15:37	lcr	
Nitrate Nitrogen	32.5	0.4	mg/L	10	1		07/21/2023	13:00	lfs	SM 4500-NO3 F	07/21/2023	17:22	lfs	
Nitrogen, Total as Nitrogen	32.5	0.5	mg/L		1		08/10/2023	14:22	sta	Calc.	08/12/2023	15:37	lcr	
Nitrate + Nitrite as N	32.5	0.4	mg/L	10	1		07/21/2023	13:00	lfs	SM 4500-NO3 F	07/21/2023	17:22	lfs	
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	08/10/2023	14:22	sta	EPA 351.2	08/12/2023	15:37	lfs	
Conductivity	837	1	umhos/cm	1600 ²	1		07/31/2023	17:05	amm	SM 4500-H+B	07/31/2023	23:37	amm	
Solids, Total Dissolved (TDS)	590	20	mg/L	1000 ²	1		07/25/2023	12:30	ctl	SM 2540 C	07/26/2023	11:30	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

Page 3 of 4

Page 3 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
Sah 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 16, 2023

Livingston Dairy Consulting, Inc.

Lab No. : VI 2344719
Customer No. : 4018505

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
E. C.	2320B	(VI 2344899-001) (VI 2344724-001)	Dup Dup	umhos/cm umhos/cm		0.3% 0.1%	5 5	
Solids, Total Dissolved	2540CE	07/25/2023:208161CTL	Blank LCS MS (VI 2312499-001) (SP 2312499-001)	mg/L mg/L mg/L mg/L mg/L	991.5	ND 98.9% 2.23% 0.3%	<20 90-110 5 5	
Nitrogen, Total Kjeldahl	351.2	08/10/2023:208886STA	Blank LCS MS (VI 2344744-001) (VI 2344744-003)	mg/L mg/L mg/L mg/L mg/L	12.00 12.00 12.00 12.00 12.00	ND 88.3% 91.6% 92.6% 88.1% 88.0%	<0.5 73-124 54-136 54-136 54-136 54-136	
Nitrate + Nitrite as N	4500NO3F	07/21/2023:208010LFS	Blank LCS MS (CH 2375625-001)	mg/L mg/L mg/L mg/L	11.22 5.609 5.609	ND 95.6% 95.1% 98.1%	<0.4 80-120 66-125 66-125	
Nitrate Nitrogen	4500NO3F	07/21/2023:208010LFS	Blank LCS MS (CH 2375625-001)	mg/L mg/L mg/L mg/L	11.22 5.609 5.609	ND 95.6% 95.1% 98.1%	<0.4 80-120 66-125 66-125	
			MSRPD	mg/L	3.1%	3.1%	<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.



Special

CHAIN OF CUSTODY
www.fglinc.com

Analytical Chemists



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: W-6	Moonlight Dairy					
Purchase Order Number:						
Quote Number: VI 20210208-01						
Sampler(s)	Noreen					
Sampling Fee:		Pickup Fee:				
Compositor Setup Date:	/ /	Time:	/ /			
Lab Number: VI 2344719	4-18505					
Samp Num	Location Description	Date Sampled	Time Sampled			
1	Barn	7/20	6:00AM	G	DNP	
2	Barn 2	7/20	6:05AM	G	DNP	
3				G		
4				G		
5				G		
6				G		
7				G		
8				G		
9				G		
10				G		
Remarks:	<i>Hand Five 7/20/23</i>					
Relinquished	Date:	Time:	Relinquished	Date:	Time:	
Received By: SRO	7/20/23	10:32	SRO	7/20/23	10:32	
Received By: SRO	7/20/23	10:32	GLS	7/20/23	10:32	

Corporate Offices & Laboratory
863 Corporation Street
Santa Paula, CA 93060
Phone: (805) 392-2000
Env Fax: (805) 525-4172 / Ag Fax: (805) 392-2063

Office & Laboratory
563 E. Lindo
Chico, CA 95926
Phone: (530) 343-5818
Fax: (530) 343-3807

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

Office & Laboratory
9415 W. Goshen Avenue
Visalia, CA 93291
Phone: (559) 734-9473
Fax: (559) 734-9425

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: 201 / 4.5°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): SRO

Sample Receipt at SP:

1. Were samples received in a chilled condition? Temps: 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: 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): 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: _____
Initiated By: _____
Problem:
Resolution:

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

(4018505)
Livingston Dairy Consulting, Inc.
VI 2344719
iv 07/20/2023 14:26:02

UT 2344719

August 18, 2023

Lab No. : VI 2344788
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 12 pages divided into 3 sections:

Case Narrative	(2 pages)	: An overview of the work performed at FGL.
Sample Results	(9 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
S Dom	07/25/2023	07/25/2023	VI 2344788-001	DW
Small Bennetts	07/25/2023	07/25/2023	VI 2344788-002	AGW
Rd 56	07/25/2023	07/25/2023	VI 2344788-003	AGW
Galhano Dom	07/25/2023	07/25/2023	VI 2344788-004	DW
Galhano S	07/25/2023	07/25/2023	VI 2344788-005	AGW
F10	07/25/2023	07/25/2023	VI 2344788-006	AGW
NE	07/25/2023	07/25/2023	VI 2344788-007	AGW
W Dom	07/25/2023	07/25/2023	VI 2344788-008	DW
Nash N	07/25/2023	07/25/2023	VI 2344788-009	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

August 18, 2023

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

Description : S Dom
Project : W-6 Moonlight Dairy

Lab No. : VI 2344788-001

Customer No. : 4018505

Sampled On : July 25, 2023 at 06:09
Sampled By : Marlene/Noreen
Received On : July 25, 2023 at 08:30
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	08/12/2023	12:25	sta	EPA 351.2	08/16/2023	19:53	lcr
Nitrate Nitrogen	36.3	0.4	mg/L	10	1		07/26/2023	12:20	lfs	SM 4500-NO3 F	07/26/2023	13:16	lfs
Nitrogen, Total as Nitrogen	36.3	0.5	mg/L		1		08/12/2023	12:25	sta	Calc.	08/16/2023	19:53	lcr
Nitrate + Nitrite as N	36.3	0.4	mg/L	10	1		07/26/2023	12:20	lfs	SM 4500-NO3 F	07/26/2023	13:16	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	08/12/2023	12:25	sta	EPA 351.2	08/16/2023	19:53	lcr
Conductivity	921	1	umhos/cm	1600 ²	1		07/31/2023	14:51	amm	SM 4500-H+B	07/31/2023	17:33	amm
Solids, Total Dissolved (TDS)	700	20	mg/L	1000 ²	1		07/27/2023	12:15	ctl	SM 2540 C	07/28/2023	11:20	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.

August 18, 2023

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

Description : Small Bennetts
Project : W-6 Moonlight Dairy

Lab No. : VI 2344788-002

Customer No. : 4018505

Sampled On : July 25, 2023 at 06:18

Sampled By : Marlene/Noreen

Received On : July 25, 2023 at 08:30

Matrix : Ag Water

Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
							Date	Time	Who	Method	Date	Time	Who
Dairy Analysis													
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U	08/12/2023	12:25	sta	EPA 351.2	08/16/2023	19:41	lcr
Nitrate Nitrogen	5.1	0.4	mg/L		1		07/26/2023	12:20	lfs	SM 4500-NO3 F	07/26/2023	16:34	lfs
Nitrogen, Total as Nitrogen	5.1	0.5	mg/L		1		08/12/2023	12:25	sta	Calc.	08/16/2023	19:41	lcr
Nitrate + Nitrite as N	5.1	0.4	mg/L		1		07/26/2023	12:20	lfs	SM 4500-NO3 F	07/26/2023	16:34	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	08/12/2023	12:25	sta	EPA 351.2	08/16/2023	19:41	lcr
Conductivity	221	1	umhos/cm		1		07/31/2023	14:51	amm	SM 4500-H+B	07/31/2023	18:25	amm
Solids, Total Dissolved (TDS)	140	20	mg/L		1		07/27/2023	12:15	ctl	SM 2540 C	07/28/2023	11:20	ctl

DQF Flags Definition:

U Constituent results were non-detect.

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 2344788-003

Customer No. : 4018505

Sampled On : July 25, 2023 at 06:22

Sampled By : Marlene/Noreen

Received On : July 25, 2023 at 08:30

Matrix : Ag Water

Description : Rd 56
Project : W-6 Moonlight Dairy

Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
							Date	Time	Who	Method	Date	Time	Who
Dairy Analysis													
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U	08/12/2023	12:25	sta	EPA 351.2	08/16/2023	19:39	lcr
Nitrate Nitrogen	29.1	0.4	mg/L		1		07/26/2023	12:20	lfs	SM 4500-NO3 F	07/26/2023	16:36	lfs
Nitrogen, Total as Nitrogen	29.1	0.5	mg/L		1		08/12/2023	12:25	sta	Calc.	08/16/2023	19:39	lcr
Nitrate + Nitrite as N	29.1	0.4	mg/L		1		07/26/2023	12:20	lfs	SM 4500-NO3 F	07/26/2023	16:36	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	08/12/2023	12:25	sta	EPA 351.2	08/16/2023	19:39	lcr
Conductivity	776	1	umhos/cm		1		07/31/2023	14:51	amm	SM 4500-H+B	07/31/2023	16:34	amm
Solids, Total Dissolved (TDS)	580	20	mg/L		1		07/27/2023	12:15	ctl	SM 2540 C	07/28/2023	11:20	ctl

DQF Flags Definition:

U Constituent results were non-detect.

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-2344788-004

Customer No.: 4018505

Sampled On : July 25, 2023 at 06:29

Sampled By : Marlene/Noreen

Received On : July 25, 2023 at 08:30

Matrix : Drinking Water

Description : Galhano Dom
Project : W-6 Moonlight Dairy

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	08/12/2023	12:25	sta	EPA 351.2	08/16/2023	19:44	lcr
Nitrate Nitrogen	26.8	0.4	mg/L	10	1		07/26/2023	12:20	lfs	SM 4500-NO3 F	07/26/2023	16:39	lfs
Nitrogen, Total as Nitrogen	26.8	0.5	mg/L		1		08/12/2023	12:25	sta	Calc.	08/16/2023	19:44	lcr
Nitrate + Nitrite as N	26.8	0.4	mg/L	10	1		07/26/2023	12:20	lfs	SM 4500-NO3 F	07/26/2023	16:39	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	08/12/2023	12:25	sta	EPA 351.2	08/16/2023	19:44	lcr
Conductivity	789	1	umhos/cm	1600 ²	1		07/31/2023	14:51	amm	SM 4500-H+B	07/31/2023	17:30	amm
Solids, Total Dissolved (TDS)	560	20	mg/L	1000 ²	1		07/27/2023	12:15	ctl	SM 2540 C	07/28/2023	11:20	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.

August 18, 2023

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

Description : Galhano S
 Project : W-6 Moonlight Dairy

Lab No. : VI 2344788-005

Customer No. : 4018505

Sampled On : July 25, 2023 at 06:34

Sampled By : Marlene/Noreen

Received On : July 25, 2023 at 08:30

Matrix : Ag Water

Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
							Date	Time	Who	Method	Date	Time	Who
Dairy Analysis													
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U	08/12/2023	12:25	sta	EPA 351.2	08/16/2023	19:55	lcr
Nitrate Nitrogen	26.7	0.4	mg/L		1		07/26/2023	12:20	lfs	SM 4500-NO3 F	07/26/2023	16:41	lfs
Nitrogen, Total as Nitrogen	26.7	0.5	mg/L		1		08/12/2023	12:25	sta	Calc.	08/16/2023	19:55	lcr
Nitrate + Nitrite as N	26.7	0.4	mg/L		1		07/26/2023	12:20	lfs	SM 4500-NO3 F	07/26/2023	16:41	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	08/12/2023	12:25	sta	EPA 351.2	08/16/2023	19:55	lcr
Conductivity	795	1	umhos/cm		1		07/31/2023	14:51	amm	SM 4500-H+B	07/31/2023	16:37	amm
Solids, Total Dissolved (TDS)	570	20	mg/L		1		07/27/2023	12:15	ctl	SM 2540 C	07/28/2023	11:20	ctl

DQF Flags Definition:

U Constituent results were non-detect.

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

August 18, 2023

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

Description : F10
Project : W-6 Moonlight Dairy

Lab No. : VI 2344788-006

Customer No.: 4018505

Sampled On : July 25, 2023 at 06:40
Sampled By : Marlene/Noreen
Received On : July 25, 2023 at 08:30
Matrix : Ag Water

Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
							Date	Time	Who	Method	Date	Time	Who
Dairy Analysis													
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U	08/12/2023	12:25	sta	EPA 351.2	08/16/2023	19:51	lcr
Nitrate Nitrogen	6.7	0.4	mg/L		1		07/26/2023	12:20	lfs	SM 4500-NO3 F	07/26/2023	16:44	lfs
Nitrogen, Total as Nitrogen	6.7	0.5	mg/L		1		08/12/2023	12:25	sta	Calc.	08/16/2023	19:51	lcr
Nitrate + Nitrite as N	6.7	0.4	mg/L		1		07/26/2023	12:20	lfs	SM 4500-NO3 F	07/26/2023	16:44	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	08/12/2023	12:25	sta	EPA 351.2	08/16/2023	19:51	lcr
Conductivity	255	1	umhos/cm		1		07/31/2023	14:51	amm	SM 4500-H+B	07/31/2023	17:18	amm
Solids, Total Dissolved (TDS)	160	20	mg/L		1		07/27/2023	12:15	ctl	SM 2540 C	07/28/2023	11:20	ctl

DQF Flags Definition:

U Constituent results were non-detect.

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

August 18, 2023

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

Description : NE
Project : W-6 Moonlight Dairy

Lab No. : VI 2344788-007

Customer No. : 4018505

Sampled On : July 25, 2023 at 06:46
Sampled By : Marlene/Noreen
Received On : July 25, 2023 at 08:30
Matrix : Ag Water

Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
							Date	Time	Who	Method	Date	Time	Who
Dairy Analysis													
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U	08/12/2023	12:25	sta	EPA 351.2	08/16/2023	20:08	lcr
Nitrate Nitrogen	42.8	0.4	mg/L		1		07/26/2023	12:20	lfs	SM 4500-NO3 F	07/26/2023	16:46	lfs
Nitrogen, Total as Nitrogen	42.8	0.5	mg/L		1		08/12/2023	12:25	sta	Calc.	08/16/2023	20:08	lcr
Nitrate + Nitrite as N	42.8	0.4	mg/L		1		07/26/2023	12:20	lfs	SM 4500-NO3 F	07/26/2023	16:46	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	08/12/2023	12:25	sta	EPA 351.2	08/16/2023	20:08	lcr
Conductivity	1250	1	umhos/cm		1		07/31/2023	14:51	amm	SM 4500-H+B	07/31/2023	18:28	amm
Solids, Total Dissolved (TDS)	920	20	mg/L		1		07/27/2023	12:15	ctl	SM 2540 C	07/28/2023	11:20	ctl

DQF Flags Definition:

U Constituent results were non-detect.

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

August 18, 2023

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

Description : W Dom
 Project : W-6 Moonlight Dairy

Lab No. : VI 2344788-008

Customer No. : 4018505

Sampled On : July 25, 2023 at 06:51
 Sampled By : Marlene/Noreen
 Received On : July 25, 2023 at 08:30
 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	08/12/2023	12:25	sta	EPA 351.2	08/16/2023	19:48	lcr
Nitrate Nitrogen	23.3	0.4	mg/L	10	1		07/26/2023	12:20	lfs	SM 4500-NO3 F	07/26/2023	16:49	lfs
Nitrogen, Total as Nitrogen	23.3	0.5	mg/L		1		08/12/2023	12:25	sta	Calc.	08/16/2023	19:48	lcr
Nitrate + Nitrite as N	23.3	0.4	mg/L	10	1		07/26/2023	12:20	lfs	SM 4500-NO3 F	07/26/2023	16:49	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	08/12/2023	12:25	sta	EPA 351.2	08/16/2023	19:48	lcr
Conductivity	998	1	umhos/cm	1600 ²	1		07/31/2023	14:51	amm	SM 4500-H+B	07/31/2023	17:39	amm
Solids, Total Dissolved (TDS)	660	20	mg/L	1000 ²	1		07/27/2023	12:15	ctl	SM 2540 C	07/28/2023	11:20	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

Page 10 of 12

Page 10 of 12

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 18, 2023

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

Description : Nash N
Project : W-6 Moonlight Dairy

Lab No. : VI 2344788-009

Customer No. : 4018505

Sampled On : July 25, 2023 at 06:59

Sampled By : Marlene/Noreen

Received On : July 25, 2023 at 08:30

Matrix : Ag Water

Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
							Date	Time	Who	Method	Date	Time	Who
Dairy Analysis													
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U	08/12/2023	12:25	sta	EPA 351.2	08/16/2023	19:46	lcr
Nitrate Nitrogen	9.1	0.4	mg/L		1		07/26/2023	12:20	lfs	SM 4500-NO3 F	07/26/2023	16:51	lfs
Nitrogen, Total as Nitrogen	9.1	0.5	mg/L		1		08/12/2023	12:25	sta	Calc.	08/16/2023	19:46	lcr
Nitrate + Nitrite as N	9.1	0.4	mg/L		1		07/26/2023	12:20	lfs	SM 4500-NO3 F	07/26/2023	16:51	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	08/12/2023	12:25	sta	EPA 351.2	08/16/2023	19:46	lcr
Conductivity	677	1	umhos/cm		1		07/31/2023	14:51	amm	SM 4500-H+B	07/31/2023	17:21	amm
Solids, Total Dissolved (TDS)	430	20	mg/L		1		07/27/2023	12:15	ctl	SM 2540 C	07/28/2023	11:20	ctl

DQF Flags Definition:

U Constituent results were non-detect.

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

August 18, 2023

Livingston Dairy Consulting, Inc.

Lab No. : VI 2344788
Customer No. : 4018505

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
E. C.	2320B	(SP 2312486-006) (VI 2344788-008)	Dup Dup	umhos/cm umhos/cm		0.09% 0.1%	5 5	
Solids, Total Dissolved	2540CE	07/27/2023:208315CTL (SP 2312760-002) (SP 2312760-002)	Blank LCS Dup Dup	mg/L mg/L mg/L mg/L	991.5	ND 98.1% 1.71% 0.07%	<20 90-110 5 5	
Nitrogen, Total Kjeldahl	351.2	08/12/2023:208945STA (VI 2344879-002)	Blank LCS MS MSD MSRPD MS MSD MSRPD	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	12.00 12.00 12.00 12.00 2.1% 12.00 12.00 6.6%	ND 91.9% 90.8% 88.9% ≤27 88.8% 94.8% ≤27	<0.5 73-124 54-136 54-136 54-136 54-136 ≤27	
Nitrate + Nitrite as N	4500NO3F	07/26/2023:208263LFS (SP 2312670-001)	Blank LCS MS MSD MSRPD	mg/L mg/L mg/L mg/L mg/L	11.22 5.609 5.609 5.609 20.0%	ND 95.1% 108% 69.6% ≤30.4	<0.4 80-120 66-125 66-125 ≤30.4	
Nitrate Nitrogen	4500NO3F	07/26/2023:208263LFS (SP 2312670-001)	Blank LCS MS MSD MSRPD	mg/L mg/L mg/L mg/L mg/L	11.22 5.609 5.609 5.609 20.0%	ND 95.1% 108% 69.6% ≤30.4	<0.4 80-120 66-125 66-125 ≤30.4	

Definition

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



FGL AGRICULTURAL

ENVIRONMENTAL

CHAIN OF CUSTODY
www.fglinc.com

CHAIN OF CUSTODY
www.fginc.com

Special

Client: Livingston Dairy Consulting, Inc.		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: Norreen Livingston	Project Name: W-6 <u>Moonlight Dairy</u>										
Purchase Order Number:	Quote Number: VI 20210208-01										
Sampler(s) <u>Marlene & Norreen</u>											
Sampling Fee: _____ Pickup Fee: _____											
Compositor Setup Date: _____ / _____ / _____ Time: _____ / _____											
Lab Number: VI 2344788 4-18505											
Samp Num	Location Description	Date Sampled	Time Sampled	Type of Sample		Method of Sampling:		TEST DESCRIPTION - See Reverse side for Container, Preservative and Sampling information			
1	S DOM	7/15	6:00AM	G	DN P	C	Composite(C)	Sampling-W-6 - Total N - Split Bottle			
2	Small Berriots		6:18AM	G	Avg NP			***VI Lab to Split for Total N*** 8oz(P)-H2SO4			
3	Ed. 52		6:22AM	G	Avg NP			Dairy Analysis-W-6 Conductivity, NO3-N, Total N, TDS 16oz(P)			
4	Gallhard DOM		6:24AM	G	DN P			Batch Reason: Routine(ROUT) Repeat(RPT) Replace(RPL) Other(O) Special(SPL)			
5	Gallhard S		6:34AM	G	Avg NP			Batch Type: Other(O) System(SYS) Source(SR) Waste(W) Portable(P) Non-Portable(NP) Avg Water(AgW)			
6	FID		6:40AM	G	Avg NP			Dairy Analysis-W-6 Conductivity, NO3-N, Total N, TDS 16oz(P)			
7	NE		6:41AM	G	Avg NP			Batch Reason: Routine(ROUT) Repeat(RPT) Replace(RPL) Other(O) Special(SPL)			
8	W DOM		6:51AM	G	DN P			Batch Type: Other(O) System(SYS) Source(SR) Waste(W) Portable(P) Non-Portable(NP) Avg Water(AgW)			
9	Nash N		6:53AM	G	Avg NP			Dairy Analysis-W-6 Conductivity, NO3-N, Total N, TDS 16oz(P)			
10				G				Batch Reason: Routine(ROUT) Repeat(RPT) Replace(RPL) Other(O) Special(SPL)			
Remarks: <u>Under training</u>		Relinquished Date: <u>7/25/2021</u>	Time: <u>12:00 PM</u>	Relinquished Date: <u>7/25/2021</u>	Time: <u>12:00 PM</u>	Relinquished Date: <u>7/25/2021</u>	Time: <u>12:00 PM</u>	Relinquished Date: <u>7/25/2021</u>	Time: <u>12:00 PM</u>	Relinquished Date: <u>7/25/2021</u>	Time: <u>12:00 PM</u>
Received By: <u>ADC</u>		Date: <u>7/25/2021</u>	Time: <u>12:00 PM</u>	Received By: <u>ADC</u>	Date: <u>7/25/2021</u>	Time: <u>12:00 PM</u>	Received By: <u>ADC</u>	Date: <u>7/25/2021</u>	Time: <u>12:00 PM</u>	Received By: <u>ADC</u>	Date: <u>7/25/2021</u>
Received By: <u>ADC</u>		Date: <u>7/25/2021</u>	Time: <u>12:00 PM</u>	Received By: <u>ADC</u>	Date: <u>7/25/2021</u>	Time: <u>12:00 PM</u>	Received By: <u>ADC</u>	Date: <u>7/25/2021</u>	Time: <u>12:00 PM</u>	Received By: <u>ADC</u>	Date: <u>7/25/2021</u>
Remarks: <u>Under training</u>		Relinquished Date: <u>7/25/2021</u>	Time: <u>12:00 PM</u>	Relinquished Date: <u>7/25/2021</u>	Time: <u>12:00 PM</u>	Relinquished Date: <u>7/25/2021</u>	Time: <u>12:00 PM</u>	Relinquished Date: <u>7/25/2021</u>	Time: <u>12:00 PM</u>	Relinquished Date: <u>7/25/2021</u>	Time: <u>12:00 PM</u>
Received By: <u>ADC</u>		Date: <u>7/25/2021</u>	Time: <u>12:00 PM</u>	Received By: <u>ADC</u>	Date: <u>7/25/2021</u>	Time: <u>12:00 PM</u>	Received By: <u>ADC</u>	Date: <u>7/25/2021</u>	Time: <u>12:00 PM</u>	Received By: <u>ADC</u>	Date: <u>7/25/2021</u>
Received By: <u>ADC</u>		Date: <u>7/25/2021</u>	Time: <u>12:00 PM</u>	Received By: <u>ADC</u>	Date: <u>7/25/2021</u>	Time: <u>12:00 PM</u>	Received By: <u>ADC</u>	Date: <u>7/25/2021</u>	Time: <u>12:00 PM</u>	Received By: <u>ADC</u>	Date: <u>7/25/2021</u>

Corporate Offices & Laboratory
8553 Corporation Street
Santa Paula, CA 93060
Phone: (805) 392-2000
E-mail: info@pacificgas.com

Office & Laboratory
2800 Stagecoach Road
Stockton, CA 95215
Phone: (209) 942-0182

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

Office & Laboratory
9415 W. Goshen Avenue
Visalia, CA 93291
Phone: (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: 80 7.9 °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 | |
| 9. Verify sample date, time and sampler name | 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): ASH

Sample Receipt at SP:

1. Were samples received in a chilled condition? Temps: 51 51 / / /
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:

5518286520 + 55988005

- | | | | |
|---|-----|----|-------|
| 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?
<small>[Exception: Oil & Grease, VOA and CrVI verified in lab]</small> | Yes | No | N/A FGL |
| 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): CLS

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 contacts)

Livingston Dairy Consulting, Inc.

VI 2344788

cda 07/25/2023 09:31:28



001100

October 12, 2023

Lab No. : VI 2346475

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
Hopper W	09/26/2023	09/26/2023	VI 2346475-001	AGW
Hopper E	09/26/2023	09/26/2023	VI 2346475-002	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: JRD

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



Digitally signed by Kelly A. Dunnahoo, B.S.
Title: Laboratory Director
Date: 2023-10-12

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

October 12, 2023

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

Description : Hopper W
Project : W-6 Moonlight

Lab No. : VI 2346475-001

Customer No.: 4018505

Sampled On : September 26, 2023 at 12:01

Sampled By : Marlene Ferreira

Received On : September 26, 2023 at 15:40

Matrix : Ag Water

Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
							Date	Time	Who	Method	Date	Time	Who
Dairy Analysis													
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U	10/06/2023	09:12	sta	EPA 351.2	10/10/2023	16:44	lcr
Nitrate Nitrogen	23.2	0.4	mg/L		1		09/27/2023	12:30	lfs	SM 4500-NO3 F	09/27/2023	13:51	lfs
Nitrogen, Total as Nitrogen	23.2	0.5	mg/L		1		10/06/2023	09:12	sta	Calc.	10/10/2023	16:44	lcr
Nitrate + Nitrite as N	23.2	0.4	mg/L		1		09/27/2023	12:30	lfs	SM 4500-NO3 F	09/27/2023	13:51	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	10/06/2023	09:12	sta	EPA 351.2	10/10/2023	16:44	lcr
Conductivity	564	1	umhos/cm		1		10/05/2023	10:18	krh	SM 4500-H+B	10/05/2023	13:30	krh
Solids, Total Dissolved (TDS)	440	20	mg/L		1		09/28/2023	10:00	ctl	SM 2540 C	09/29/2023	15:00	ctl

DQF Flags Definition:

U Constituent results were non-detect.

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

October 12, 2023

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

Description : Hopper E
 Project : W-6 Moonlight

Lab No. : VI 2346475-002

Customer No.: 4018505

Sampled On : September 26, 2023 at 12:12

Sampled By : Marlene Ferreira

Received On : September 26, 2023 at 15:40

Matrix : Ag Water

Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
							Date	Time	Who	Method	Date	Time	Who
Dairy Analysis													
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U	10/06/2023	09:12	sta	EPA 351.2	10/10/2023	16:47	lcr
Nitrate Nitrogen	23.2	0.4	mg/L		1		09/27/2023	12:30	lfs	SM 4500-NO3 F	09/27/2023	13:53	lfs
Nitrogen, Total as Nitrogen	23.2	0.5	mg/L		1		10/06/2023	09:12	sta	Calc.	10/10/2023	16:47	lcr
Nitrate + Nitrite as N	23.2	0.4	mg/L		1		09/27/2023	12:30	lfs	SM 4500-NO3 F	09/27/2023	13:53	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	10/06/2023	09:12	sta	EPA 351.2	10/10/2023	16:47	lcr
Conductivity	569	1	umhos/cm		1		10/05/2023	10:18	krh	SM 4500-H+B	10/05/2023	14:23	krh
Solids, Total Dissolved (TDS)	410	20	mg/L		1		09/28/2023	10:00	ctl	SM 2540 C	09/29/2023	15:00	ctl

DQF Flags Definition:

U Constituent results were non-detect.

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

October 12, 2023

Livingston Dairy Consulting, Inc.

Lab No. : VI 2346475

Customer No. : 4018505

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
E. C.	2320B	(VI 2346425-001) (VI 2346312-001)	Dup Dup	umhos/cm umhos/cm		0.08% 0.1%	5 5	
Solids, Total Dissolved	2540CE	09/28/2023:210921CTL	Blank LCS (SP 2316295-001) (SP 2316295-001)	mg/L mg/L mg/L mg/L	991.5	ND 101% 0.3% 1.87%	<20 90-110 5 5	
Nitrogen, Total Kjeldahl	351.2	10/06/2023:211241STA	Blank LCS MS (CH 2378308-009)	mg/L mg/L mg/L mg/L	12.00	ND 93.9% 90.9% 93.9% 3.3%	<0.5 73-124 90-110 90-110 ≤20	
			MSRPD (CH 2378308-010)	mg/L mg/L	12.00	90.1% 95.2%	90-110 90-110	
			MSRPD	mg/L	12.00	5.4%	≤20	
Nitrate + Nitrite as N	4500NO3F	09/27/2023:210858LFS	Blank LCS MS (STK2353327-001)	mg/L mg/L mg/L mg/L	11.22	ND 99.0% 95.3% 99.2%	<0.4 80-120 66-125 66-125	
			MSRPD	mg/L		2.1%	≤30.4	
Nitrate Nitrogen	4500NO3F	09/27/2023:210858LFS	Blank LCS MS (STK2353327-001)	mg/L mg/L mg/L mg/L	11.22	ND 99.0% 95.3% 99.2%	<0.4 80-120 66-125 66-125	
			MSRPD	mg/L		2.1%	≤30.4	

Definition

- Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.
- 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: _____ Shipping tracking # OTC

2. Were samples received in a chilled condition? Temps: 61, 22.5°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) RDH THFC

Sample Receipt at SP:

1. Were samples received in a chilled condition? Temps: 61, 61, 1, 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:

5L00191167 + 5L0190843

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): JL

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:
Resolution:
VI 2346475

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

cda 09/26/2023 19:05:45



August 3, 2023

Lab No. : VI 2344454
 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
Canal-Packwood Creek	07/11/2023	07/11/2023	VI 2344454-001	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

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

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

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

Office & Laboratory
 3442 Empressa Drive, Suite D
 San Luis Obispo, CA 93401
 TEL: (805)783-2940
 FAX: (805)783-2912
 CA ELAP Certification No. 2775

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

August 3, 2023

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

Description : Canal-Packwood Creek
Project : W-6 Canal-Packwood Creek Livingston

Lab No. : VI 2344454-001

Customer No.: 4018505

Sampled On : July 11, 2023 at 08:30

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
Dairy Analysis													
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U	07/28/2023	08:46	sta	EPA 351.2	07/31/2023	19:24	lcr
Nitrate Nitrogen	ND	0.4	mg/L		1	U	07/12/2023	13:00	lfs	SM 4500-NO3 F	07/12/2023	16:12	lfs
Nitrogen, Total as Nitrogen	ND	0.5	mg/L		1	U	07/28/2023	08:46	sta	Calc.	07/31/2023	19:24	lcr
Nitrate + Nitrite as N	ND	0.4	mg/L		1	U	07/12/2023	13:00	lfs	SM 4500-NO3 F	07/12/2023	16:12	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	07/28/2023	08:46	sta	EPA 351.2	07/31/2023	19:24	lcr
Conductivity	36	1	umhos/cm		1		07/18/2023	14:57	amm	SM 4500-H+B	07/18/2023	16:11	amm
Solids, Total Dissolved (TDS)	30	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



Special

CHAIN OF CUSTODY
www.fglinc.com

Laboratory Copy (1 of 2)

Client: Livingston Dairy Consulting, Inc.		42086:04/01/2023		TEST DESCRIPTION - See Reverse side for Container, Preservative and Sampling information	
Address: Livingston Dairy Consulting, Inc 1635 E. Prosperity Suite B Tulare, CA 93274					
Phone:	(559)687-1440	Fax:			
Contact Person:	Noreen Livingston				
Project Name:	W-6 Canal-Lakewood Creek				
Purchase Order Number:	VI 20210208-01				
Quote Number:					
Sampler(s)	<i>Bruce / Hope</i>				
Sampling Fee:	/	Pickup Fee:	/	Time:	/
Compositor Setup Date:	/	/	/	Time:	/
Lab Number:	VI 2314454	4-18505			
Samp Num	Location Description	Date Sampled	Time Sampled		
1	Lakewood Creek	7/16/23	8:29 AM	G	Af
2				G	Af
3				G	
4				G	
5				G	
6				G	
7				G	
8				G	
9				G	
10				G	
Remarks:					
Relinquished	Date:	Time:	Relinquished	Date:	Time:
<i>ADH</i>	<i>7/16/23</i>	<i>11:30</i>	<i>ADH</i>	<i>7/16/23</i>	<i>11:30</i>
Received By:	Date:	Time:	Received By:	Date:	Time:
<i>ADH</i>	<i>7/16/23</i>	<i>11:30</i>	<i>ADH</i>	<i>7/16/23</i>	<i>11:30</i>
Office & Laboratory					
853 Corporation Street					
Santa Paula, CA 93060					
Phone: (805) 392-2000					
Env Fax: (805) 525-4172 Ag Fax: (805) 392-2063					

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

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

Office & Laboratory
563 E. Lindo
Chico, CA 95926
Phone: (530) 343-5818
Fax: (530) 343-3807

Inter-Laboratory Condition Upon Receipt (Attach to COC)

Sample Receipt at: STK CC

CH VI

1. Number of ice chests/packages received: _____ Shipping tracking # 51

2. Were samples received in a chilled condition? Temps: 51 17.4, / / / /

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

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

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

Sample Receipt Review completed by (initials): ADH

Sample Receipt at SP:

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

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:

559745133, 95745345, 95745131, 95745144

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

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

Sample Verification, Labeling and Distribution:

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

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

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

Discrepancy Documentation:

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

1. Person Contacted: _____ Phone Number: _____

Initiated By: _____ Date: _____

Problem:

Resolution:

2. Person Contacted: _____

Initiated By: _____

Problem:

Resolution:

(4/18/05)

Livingston Dairy Consulting, Inc.

VI 2344454

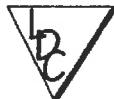
iv 07/12/2023 09:04:56



UJ 2344454

here

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



Livingston Dairy Consulting, Inc.

FIELD ACTIVITY REPORT

Facility Name:

Moonlight Dairy

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
7/20	barn	6:01	7	64	Ø
	barn 2	6:05	7	65	Ø
7/25	S Dart	6:09	6.5	66	Ø
	Small Bennett S	6:18	6	65	Ø
	Rd 56	6:22	7	67	Ø
	Galhardo Dam	6:29	6.5	66	Ø
	Galhardo S	6:34	6	65	Ø
	FID	6:40	7	67	Ø
	NE	6:44	7	66	Ø
	W Dam	6:51	6	68	Ø
	Nash N	6:59	6.5	67	Ø
9/26	Hopper W	12:01	7	68	Ø
	Hopper E	12:12	6.5	67	Ø

Sample Preservation Method: (Circle one)

Ice Chest

Refrigerator

Ice Pack

Livingston Dairy Consulting, Inc.

1635 E. Prosperity Ave. Ste. B

Tulare, CA 93274

559-687-1440

Sunday, April 21, 2024

Re: 2023 NMP

Moonlight Dairy WDID5C54NC00025
5061 Avenue 280 Visalia, CA 93277

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

*2023 Whole Farm Nitrogen Balance

The whole farm nitrogen balance for the crop year 2022 was **1.17**
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.

