



Livingston Dairy Consulting, Inc.

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

Moonstone Dairy

1305 Iona Avenue Hanford, CA 93230

<input checked="" type="checkbox"/>	Annual Report
<input checked="" type="checkbox"/>	Water Analysis Samples
<input checked="" type="checkbox"/>	Manure Manifest
<input checked="" type="checkbox"/>	Facility / Land Map
<input checked="" type="checkbox"/>	CCA Nitrogen Retrofit Report
<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: Moonstone Dairy
Facility Address: 1305 Iona Avenue Hanford, CA 93230
Original Operation Date: 10/1/1985
Facility APN's: x016 x230 x018 xxxx
RWQCB Basin Plan Designation: Tulare Lake Basin ☐ Check if any information has changed

Owner(s)

Owner(s) Name: Moons Properties, LP
Mailing Address: 4974 Avenue 272, Visalia, CA 93277
Home Phone Number: 559-240-1508 John Moons
Cell Phone Number: SEE NOTES PAGE ☒ Check if any information has changed

Operator(s)

Operator(s) Name: Moonstone Dairy
Mailing Address: 5186 Avenue 272, Visalia, CA 93277
Home Phone Number: 559-901-2318 Austin Moons
Cell Phone Number: X 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:	-	240	563	619	437
Number Under Roof	1,811	-	-	-	-
Maximum Number	1,811	240	563	619	437
Average Number	1,811	240	563	619	437
Average Live Weight (lbs)	1,400	1,450	950	630	

Average Milk Production: 65

Predominant Milk Cow Breed: Holstein

Manure Generated:

Total manure excreted by the herd:

Total nitrogen from manure:

Total salt from manure:

6,911.15	@40% Moisture	ton/yr
493,364		lbs
58,495		lbs
153,897		lbs
-		lbs

After Ammonia (30% loss applied)

345,355 lbs per reporting period

Process Wastewater Generated:

Process wastewater generated:

Total nitrogen generated:

Total salt (TDS) generated:

26,440,600	gal
159,336	lbs
44,118	lbs
280,272	lbs
1,729,850	lbs

List of Land Application Areas

[illegible]

List of Fresh Water Sources

[illegible]

Winter Crops & Harvest

[illegible]

Detectable L Valley Tech
Dellavalle

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

Well / Canal Analysis

General Minerals

[illegible]

Detectable Limits

De'llavalle

EGI Environmental

Yellow Tech

Soil Analysis (Winter)

[illegible]

Detectable Limits

Valley Tech

DellaValle

0.1 0.1

0.1 0.1

0.2

0.0001%

Nutrient Import & Export

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

No

X Yes, Manifest attached (Attachment D)

Total Dry Manure Exported	2,900 tons
---------------------------	------------

Nutrient Import

No Dry manure nutrient imports entered

No Process wastewater nutrient imports entered

No Commerical or other nutrient imports entered

Total Process Water Exported

[illegible]

Process Water & Manure Analysis

Process Water																
Quarters:		NH4N (mg/L)	TKN (mg/L)	TP (mg/L)	TK (mg/L)	NO3N (mg/L)	NH3N (mg/L)	Ca (mg/L)	Mg (mg/L)	Na (mg/L)	CO3 (mg/L)	HCO3 (mg/L)	SO4 (mg/L)	CL (mg/L)	EC (ds/m)	TDS (mg/L)
1		414.0	453.0	45.1	755.0	1.0	-	-	-	-	-	-	-	-	7	4,730
2		518.0	584.0	93.0	948.0	1.0	-	-	-	-	-	-	-	-	9	6,200
3		530.0	570.0	57.6	671.0	1.0	-	7.4	131.0	212.0	0.0	64.6	96.7	8.5	10	6,440
4		425.0	471.0	55.4	672.0	1.0	-	-	-	-	-	-	-	-	-	5,190

Detectable Limits

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

Qtr	Sample #:	Sample Date:	Source	lbs / Ac In			
				Inorg N	Org N	P205	K2O
1	3-24L44752	3/24/2023	Valley Tech	94.1	8.8	23.4	206.1
2	5-11L49523	5/11/2023	Valley Tech	117.6	15.0	48.3	258.8
3	8-17L62123	8/17/2023	Valley Tech	120.4	9.1	29.9	183.2
4	10-3L67903	10/16/2023	Valley Tech	96.6	10.4	28.8	183.5

Description	Sample #:	Date:	As Is/ Dry Weight	Source	Material Type
Manure	5-11M49489	5/11/2023	Dry Weight	Valley Tech	Corral Solids
Manure	10-3M67865	10/13/2023	Dry Weight	Valley Tech	Corral Solids

Dry Manure: (As Rec'd)										Moisture %	
TN %	TP %	TK %	Ca	Mg	Na	S	CL	Salt	TFS		
1.31	0.45	1.25	-	-	-	-	-	-	-	27.10	
0.83	0.39	0.98	2.08	0.44	0.22	0.35	0.68	-	62.00	42.00	

Detectable Limits

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

Acres: 25.00

Dry Weight
As Received

Dry Weight
As Received

Field Name/Number: 1

Acres: 25

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	405.1	151.0	840.2	5731.3
Nutrients Removed at Harvest	-371.1	-103.7	-491.4	0.0
Nutrient Balance	34.0	47.3	348.7	5731.3

Winter Nitrogen Crop App / Use Ratio: 1.04

Summer Nitrogen Crop App / Use Ratio: 1.20

Field Name/Number: 1

Acres: 25

Winter Crop Wheat, Silage

Nutrient Summary :		Applied	N			
W. Manure App.		-	T/Ac	-	-	-
W. Comm Fert App.		-	lbs/Ac	-	-	-
Process Water	Q1	-	Ac In /Ac	-	-	-
	Q2	1.7	Ac In /Ac	155.1	80.6	430.7
Well Water		12.73	Ac In /Ac	6.1		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
W. Planting	11/22/22					
W. Harvest	5/20/23	21.6	T/Ac	(161.6)	(129.9)	(295.0)

Summer Crop Corn, Silage

Nutrient Summary :		Applied	N			
S. Manure App.		12.0	T/Ac	79.6	216.8	282.3
S. Comm Fert App.		-	lbs/Ac	-	-	-
Process Water	Q2	-	Ac In /Ac	-	-	-
	Q3	1.6	Ac In /Ac	146.5	48.4	295.2
	Q4	-	Ac In /Ac	-	-	-
Well Water		37.4	Ac In /Ac	17.793259		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
S. Planting	6/16/23					
S. Harvest	10/7/23	30.9	T/Ac	(209.5)	(107.5)	(294.7)

Acres: 20.00

Totals:

Field Name/Number: 2Acres: 20.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	477.0	51.7	769.0	6859.8
Nutrients Removed at Harvest	-405.0	-42.4	-347.9	0.0
Nutrient Balance	72.0	9.3	421.2	6859.8

Winter Nitrogen Crop App / Use Ratio: 1.14

Summer Nitrogen Crop App / Use Ratio: 1.28

Field Name/Number: 2Acres: 20**Winter Crop Wheat, Silage**

Nutrient Summary :		Applied	N			
W. Manure App.		5.0 T/Ac	52.5	103.5	149.6	
W. Comm Fert App.		- lbs/Ac	-			
Process Water	Q1	- Ac In /Ac	-	-	-	
	Q2	1.7 Ac In /Ac	156.9	81.6	435.9	
Well Water		12.9 Ac In /Ac	6.2			
Canal		- Ac In /Ac	-			
Atm. Depos.		Yes	7.0			
W. Planting	11/22/22					
W. Harvest	5/20/23	21.8 T/Ac	(194.8)	(129.2)	(260.5)	

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	2.9 Ac In /Ac	261.3	86.2	526.3	
	Q4	- Ac In /Ac	-	-	-	
Well Water		- Ac In /Ac	(0.0)			
Canal		37.1 Ac In /Ac	0.2			
Atm. Depos.		Yes	7.0			
S. Planting	6/16/23					
S. Harvest	10/7/23	29.3 T/Ac	(210.2)	(93.3)	(242.4)	

Nutrient Applications

Field Name/Number: 3

Acres: 75.00

Date	Event / Source	Dry Manure Applied (tons/ac)	Moist. %	Chem Fert total lbs	Fresh Water Applied (ac-in/ac)	Lagoon Water Applied (ac-in/ac)	Lab Sample Data						Yield	
							N (lbs/Ac)	Total P (lbs/Ac)	Total K (lbs/Ac)	Salt (lbs/Ac)	TFS	%	Expected Yield (tons/ac)	Actual Yield (tons/ac)
11/15/22	W. Manure App.	6.67	-	-	-	-	70.0	60.3	166.2	-	-	-	-	-
11/22/22	W. Planting	-	-	-	-	-	-	-	-	-	-	-	-	-
4/13/23	3.00	-	-	-	5.69	-	2.7	-	-	116	-	-	-	-
4/13/23	Process Water	-	-	-	-	1.71	158.3	36.0	366.5	2,397	-	-	-	-
5/2/23	3.00	-	-	-	7.22	-	3.4	-	-	147	-	-	-	-
5/21/23	W. Harvest	-	-	-	-	-	(210.2)	(55.7)	(344.4)	-	8.74	-	-	21.91
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5/25/23	S. Manure App.	8.00	-	-	-	-	53.1	63.1	156.8	-	-	-	-	-
6/1/23	Canal	-	-	-	6.65	-	0.0	-	-	2	-	-	-	-
6/17/23	S. Planting	-	-	-	-	-	-	-	-	-	-	-	-	-
7/10/23	Canal	-	-	-	5.66	-	0.0	-	-	2	-	-	-	-
7/10/23	Process Water	-	-	-	-	1.41	128.1	18.5	215.1	2,064	-	-	-	-
7/24/23	Canal	-	-	-	6.72	-	0.0	-	-	2	-	-	-	-
8/8/23	Canal	-	-	-	5.73	-	0.0	-	-	2	-	-	-	-
8/8/23	Process Water	-	-	-	-	1.43	129.7	18.7	217.8	2,090	-	-	-	-
8/22/23	Canal	-	-	-	6.43	-	0.0	-	-	2	-	-	-	-
9/7/23	Canal	-	-	-	6.54	-	0.0	-	-	2	-	-	-	-
10/18/23	S. Harvest	-	-	-	-	-	(244.5)	(49.2)	(291.9)	-	6.41	-	-	29.71
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals:		14.7		0	50.62	4.55	91	92	486	6,826	15.15		0	51.61

Field Name/Number: 3Acres: 75.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	545.6	85.7	931.7	6826.4
Nutrients Removed at Harvest	-454.6	-45.8	-528.2	0.0
Nutrient Balance	90.9	39.9	403.5	6826.4

Winter Nitrogen Crop App / Use Ratio: 1.15

Summer Nitrogen Crop App / Use Ratio: 1.30

Field Name/Number: 3Acres: 75**Winter Crop Wheat, Silage**

Nutrient Summary :		Applied	N			
W. Manure App.		6.7 T/Ac	70.0	138.0	199.5	
W. Comm Fert App.		- lbs/Ac	-			
Process Water	Q1	- Ac In /Ac	-	-	-	
	Q2	1.7 Ac In /Ac	158.3	82.3	439.8	
Well Water		12.9 Ac In /Ac	6.1			
Canal		- Ac In /Ac	-			
Atm. Depos.		Yes	7.0			
W. Planting	11/22/22					
W. Harvest	5/21/23	21.9 T/Ac	(210.2)	(127.6)	(413.3)	

Summer Crop Corn, Silage

Nutrient Summary :		Applied	N			
S. Manure App.		8.0 T/Ac	53.1	144.5	188.2	
S. Comm Fert App.		- lbs/Ac	-	-	-	
Process Water	Q2	- Ac In /Ac	-	-	-	
	Q3	2.8 Ac In /Ac	257.8	85.1	519.4	
	Q4	- Ac In /Ac	-	-	-	
Well Water		- Ac In /Ac	(0.0)			
Canal		37.7 Ac In /Ac	0.2			
Atm. Depos.		Yes	7.0			
S. Planting	6/17/23					
S. Harvest	10/18/23	29.7 T/Ac	(244.5)	(112.8)	(350.3)	

Acres: **75.00**

Totals:

Field Name/Number: 4Acres: 75.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	394.5	25.6	523.9	6164.2
Nutrients Removed at Harvest	-359.4	-31.9	-410.2	0.0
Nutrient Balance	35.1	-6.3	113.7	6164.2

Winter Nitrogen Crop App / Use Ratio: 1.14

Summer Nitrogen Crop App / Use Ratio: 1.14

Field Name/Number: 4Acres: 75**Winter Crop Wheat, Silage**

Nutrient Summary :	Applied	N			
W. Manure App.	-	T/Ac	-	-	-
W. Comm Fert App.	-	lbs/Ac	-	-	-
Process Water	Q1	Ac In /Ac	-	-	-
	Q2	1.7 Ac In /Ac	160.0	83.2	444.4
Well Water	12.6	Ac In /Ac	19.7		
Canal	-	Ac In /Ac	-		
Atm. Depos.	Yes		7.0		
W. Planting	11/22/22				
W. Harvest	5/21/23	22.1 T/Ac	(164.2)	(77.4)	(179.6)

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	1.7 Ac In /Ac	155.4	51.3	312.9
	Q4	- Ac In /Ac	-	-	-
Well Water	38.0	Ac In /Ac	59.4		
Canal	-	Ac In /Ac	-		
Atm. Depos.	Yes		7.0		
S. Planting	6/12/23				
S. Harvest	9/26/23	31.2 T/Ac	(195.2)	(90.2)	(413.4)

Acres: 76.00

[illegible]

Field Name/Number: 5Acres: 76.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	222.6	44.0	343.1	2715.8
Nutrients Removed at Harvest	-185.3	-17.6	-145.4	0.0
Nutrient Balance	37.3	26.3	197.7	2715.8

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

Summer Nitrogen Crop App / Use Ratio: 1.24

Field Name/Number: 5Acres: 76**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.		10.5	T/Ac	69.8	190.1	247.6
S. Comm Fert App.		-	lbs/Ac	-	-	-
Process Water	Q2	-	Ac In /Ac	-	-	-
	Q3	1.4	Ac In /Ac	123.3	40.7	248.3
	Q4	-	Ac In /Ac	-	-	-
Well Water		38.3	Ac In /Ac	29.5		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
S. Planting	7/2/23					
S. Harvest	10/19/23	29.6	T/Ac	(185.3)	(92.6)	(210.2)

155.00

Totals:

Field Name/Number: 6

Acres: 155.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	471.7	59.8	773.4	6174.9
Nutrients Removed at Harvest	-405.3	-41.7	-373.9	0.0
Nutrient Balance	66.4	18.1	399.5	6174.9

Winter Nitrogen Crop App / Use Ratio: 1.11

Summer Nitrogen Crop App / Use Ratio: 1.28

Field Name/Number: 6

Acres: 155

Winter Crop Wheat, Silage

Nutrient Summary :		Applied	N			
W. Manure App.		7.7 T/Ac	81.3	160.3	231.6	
W. Comm Fert App.		- lbs/Ac	-			
Process Water	Q1	- Ac In /Ac	-	-	-	
	Q2	1.4 Ac In /Ac	131.4	68.3	365.0	
Well Water		- Ac In /Ac	-			
Canal		12.8 Ac In /Ac	0.1			
Atm. Depos.		Yes	7.0			
W. Planting	11/15/22					
W. Harvest	5/21/23	21.7 T/Ac	(197.8)	(134.4)	(267.6)	

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	2.9 Ac In /Ac	258.8	85.4	521.4	
	Q4	- Ac In /Ac	-	-	-	
Well Water		- Ac In /Ac	(0.0)			
Canal		37.9 Ac In /Ac	0.2			
Atm. Depos.		Yes	7.0			
S. Planting	6/16/23					
S. Harvest	10/17/23	29.9 T/Ac	(207.5)	(84.5)	(273.0)	

Nutrient Applications

Field Name/Number: 7

Acres: 155.00

Date	Event / Source	Dry Manure Applied (tons/ac)	Moist. %	Chem Fert total lbs	Fresh Water Applied (ac-in/ac)	Lagoon Water Applied (ac-in/ac)	Lab Sample Data					Yield	
							N (lbs/Ac)	Total P (lbs/Ac)	Total K (lbs/Ac)	Salt (lbs/Ac)	TFS %	Expected Yield (tons/ac)	Actual Yield (tons/ac)
11/1/22	W. Manure App.	6.45	-	-	-	-	67.7	58.3	160.9	-	-	-	-
11/20/22	W. Planting	-	-	-	-	-	-	-	-	-	-	-	-
4/1/23	Canal	-	-	-	5.68	-	0.0	-	-	2	-	-	-
4/1/23	Process Water	-	-	-	-	1.42	131.8	29.9	305.1	1,995	-	-	-
4/19/23	Canal	-	-	-	7.13	-	0.0	-	-	2	-	-	-
5/21/23	W. Harvest	-	-	-	-	-	(169.0)	(40.0)	(167.7)	-	8.74	-	21.28
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
5/25/23	S. Manure App.	6.45	-	-	-	-	42.8	50.9	126.5	-	-	-	-
6/2/23	Canal	-	-	-	6.52	-	0.0	-	-	2	-	-	-
6/26/23	S. Planting	-	-	-	-	-	-	-	-	-	-	-	-
7/15/23	Canal	-	-	-	6.38	-	0.0	-	-	2	-	-	-
7/30/23	Canal	-	-	-	5.73	-	0.0	-	-	2	-	-	-
7/30/23	Process Water	-	-	-	-	1.43	129.8	18.7	217.9	2,091	-	-	-
8/13/23	Canal	-	-	-	6.45	-	0.0	-	-	2	-	-	-
8/27/23	Canal	-	-	-	5.64	-	0.0	-	-	2	-	-	-
8/27/23	Process Water	-	-	-	-	1.41	127.9	18.4	214.6	2,060	-	-	-
9/10/23	Canal	-	-	-	6.31	-	0.0	-	-	2	-	-	-
10/18/23	S. Harvest	-	-	-	-	-	(235.9)	(39.3)	(115.7)	-	6.41	-	30.85
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals:		12.9		0	49.84	4.26	95	97	742	6,162	15.15	0	52.13

Field Name/Number: 7Acres: 155.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	500.2	76.9	850.8	6161.9
Nutrients Removed at Harvest	-404.8	-34.6	-235.3	0.0
Nutrient Balance	95.4	42.3	615.5	6161.9

Winter Nitrogen Crop App / Use Ratio: 1.22

Summer Nitrogen Crop App / Use Ratio: 1.30

Field Name/Number: 7Acres: 155**Winter Crop Wheat, Silage**

Nutrient Summary :		Applied	N			
W. Manure App.		6.5 T/Ac	67.7	133.6	193.0	
W. Comm Fert App.		- lbs/Ac	-			
Process Water	Q1	- Ac In /Ac	-	-	-	
	Q2	1.4 Ac In /Ac	131.8	68.5	366.1	
Well Water		- Ac In /Ac	-			
Canal		12.8 Ac In /Ac	0.1			
Atm. Depos.		Yes	7.0			
W. Planting	11/20/22					
W. Harvest	5/21/23	21.3 T/Ac	(169.0)	(91.6)	(201.2)	

Summer Crop Corn, Silage

Nutrient Summary :		Applied	N			
S. Manure App.		6.5 T/Ac	42.8	116.5	151.8	
S. Comm Fert App.		- lbs/Ac	-	-	-	
Process Water	Q2	- Ac In /Ac	-	-	-	
	Q3	2.8 Ac In /Ac	257.7	85.0	519.0	
	Q4	- Ac In /Ac	-	-	-	
Well Water		- Ac In /Ac	(0.0)			
Canal		37.0 Ac In /Ac	0.2			
Atm. Depos.		Yes	7.0			
S. Planting	6/26/23					
S. Harvest	10/18/23	30.8 T/Ac	(235.9)	(90.0)	(138.9)	

Acres: **158.00**

Totals:

Field Name/Number: 8Acres: 158.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	422.2	91.2	781.9	4065.9
Nutrients Removed at Harvest	-350.5	-40.9	-376.4	0.0
Nutrient Balance	71.7	50.3	405.4	4065.9

Winter Nitrogen Crop App / Use Ratio: 1.24

Summer Nitrogen Crop App / Use Ratio: 1.25

Field Name/Number: 8Acres: 158**Winter Crop Wheat, Silage**

Nutrient Summary :		Applied	N			
W. Manure App.		9.5	T/Ac	99.7	196.5	284.0
W. Comm Fert App.		-	lbs/Ac	-	-	-
Process Water	Q1	-	Ac In /Ac	-	-	-
	Q2	1.4	Ac In /Ac	131.6	68.5	365.6
Well Water		-	Ac In /Ac	-	-	-
Canal		12.9	Ac In /Ac	0.1	-	-
Atm. Depos.		Yes		7.0	-	-
W. Planting	11/16/22					
W. Harvest	5/21/23	21.4	T/Ac	(192.2)	(126.7)	(280.4)

Summer Crop Corn, Silage

Nutrient Summary :		Applied	N			
S. Manure App.		9.5	T/Ac	63.0	171.5	223.3
S. Comm Fert App.		-	lbs/Ac	-	-	-
Process Water	Q2	-	Ac In /Ac	-	-	-
	Q3	1.4	Ac In /Ac	127.7	42.1	257.3
	Q4	-	Ac In /Ac	-	-	-
Well Water		-	Ac In /Ac	(0.0)	-	-
Canal		37.7	Ac In /Ac	0.2	-	-
Atm. Depos.		Yes		7.0	-	-
S. Planting	7/11/23					
S. Harvest	10/19/23	30.5	T/Ac	(158.3)	(88.0)	(263.8)

Notes

New Owner transfer form submitted February, 2024.

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



Signature of Operator of Facility

Moons Properties, LP

Print Name

Moonstone Dairy

Print Name

Date

Date

February 16, 2023

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

Lab No. : VI 2340544
Customer No. : 4018505

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
9 - Barn #1	01/31/2023	01/31/2023	VI 2340544-001	DW
11 - Barn #2	01/31/2023	01/31/2023	VI 2340544-002	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

	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
EPA 351.2	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
SM 2540 C	Preparation and analysis performed by FGL-Santa Paula (FGL-SP ELAP# 1573)
SM 4500-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: 2023-02-17

February 16, 2023

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

Description : 9 - Barn #1
 Project : W-6 Moonstone Dairy

Lab No. : VI 2340544-001
 Customer No. : 4018505

Sampled On : January 31, 2023 at 12:18
 Sampled By : Marlene / Kaylin
 Received On : January 31, 2023 at 14:03
 Matrix : Drinking Water

Sample Results - Inorganic

Constituent	Result	RL	Units	MCL/AL	Dil.	DQF	Sample Preparation			Sample Analysis			
Dairy Analysis							Date	Time	Who	Method	Date	Time	Who
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U	02/08/2023	08:32	sta	EPA 351.2	02/12/2023	18:00	lcr
Nitrate Nitrogen	5.8	0.4	mg/L	10	1		02/01/2023	13:00	lfs	SM 4500-NO3 F	02/01/2023	16:19	lfs
Nitrogen, Total as Nitrogen	5.8	0.5	mg/L		1		02/08/2023	08:32	sta	EPA 351.2	02/12/2023	18:00	lcr
Nitrate + Nitrite as N	5.8	0.4	mg/L	10	1		02/01/2023	13:00	lfs	SM 4500-NO3 F	02/01/2023	16:19	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	02/08/2023	08:32	sta	EPA 351.2	02/12/2023	18:00	lcr
Conductivity	292	1	umhos/cm	1600 ²	1		02/15/2023	13:59	sta		02/15/2023	13:59	sta
Solids, Total Dissolved (TDS)	170	20	mg/L	1000 ²	1		02/02/2023	13:49	ctl	SM 2540 C	02/03/2023	12:16	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.

February 16, 2023

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

Lab No. : VI 2340544-002
Customer No. : 4018505

Sampled On : January 31, 2023 at 12:32
Sampled By : Marlene / Kaylin
Received On : January 31, 2023 at 14:03
Matrix : Drinking Water

Description : 11 - Barn #2
Project : W-6 Moonstone Dairy

Sample Results - Inorganic

Constituent	Result	RL	Units	MCL/AL	Dil.	DQF	Sample Preparation			Sample Analysis			
Dairy Analysis							Date	Time	Who	Method	Date	Time	Who
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U	02/08/2023	08:32	sta	EPA 351.2	02/12/2023	18:02	lcr
Nitrate Nitrogen	5.8	0.4	mg/L	10	1		02/01/2023	13:00	lfs	SM 4500-NO3 F	02/01/2023	16:21	lfs
Nitrogen, Total as Nitrogen	5.8	0.5	mg/L		1		02/08/2023	08:32	sta	EPA 351.2	02/12/2023	18:02	lcr
Nitrate + Nitrite as N	5.8	0.4	mg/L	10	1		02/01/2023	13:00	lfs	SM 4500-NO3 F	02/01/2023	16:21	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	02/08/2023	08:32	sta	EPA 351.2	02/12/2023	18:02	lcr
Conductivity	290	1	umhos/cm	1600 ²	1		02/09/2023	14:28	sta		02/09/2023	14:28	sta
Solids, Total Dissolved (TDS)	180	20	mg/L	1000 ²	1		02/02/2023	13:49	ctl	SM 2540 C	02/03/2023	12:09	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.

Corporate Offices & Laboratory

853 Corporation Street
Santa Paula, CA 93060
TEL: (805)392-2000
Env FAX: (805)525-4172 / Ag FAX: (805)392-2083
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

February 16, 2023
 Livingston Dairy Consulting, Inc.

Lab No. : VI 2340544
 Customer No. : 4018505

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem E. C.	2510B	02/09/2023:201372STA (STK2331345-001)	Blank	umhos/cm		ND	<1	
			Dup	umhos/cm		0.6%	5	
	2510B	02/15/2023:201667STA (VI 2340657-002)	Blank	umhos/cm		ND	<1	
			Dup	umhos/cm		1.03%	5	
Solids, Total Dissolved	2540CE	02/02/2023:201179CTL (VI 2340550-002) (VI 2340550-002)	Blank	mg/L		ND	<20	
			LCS	mg/L	990.8	101 %	90-110	
			Dup	mg/L		0.4%	5	
			Dup	mg/L		0.5%	5	
Nitrogen, Total Kjeldahl	351.2	02/08/2023:201373STA (STK2331177-001) (CH 2370781-001)	Blank	mg/L		ND	<0.5	
			LCS	mg/L	12.00	93.4%	73-124	
			MS	mg/L	12.00	94.5%	54-136	
			MSD	mg/L	12.00	84.4%	54-136	
			MSRPD	mg/L	12.00	7.7%	≤27	
			MS	mg/L	12.00	87.8%	54-136	
			MSD	mg/L	12.00	92.4%	54-136	
			MSRPD	mg/L	12.00	5.1%	≤27	
Nitrate + Nitrite as N	4500NO3F	02/01/2023:201107LFS (VI 2340568-001)	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	93.8%	80-120	
			MS	mg/L	5.609	90.4%	66-125	
			MSD	mg/L	5.609	90.2%	66-125	
			MSRPD	mg/L	5.609	0.1%	≤30.4	
Nitrate Nitrogen	4500NO3F	02/01/2023:201107LFS (VI 2340568-001)	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	93.8%	80-120	
			MS	mg/L	5.609	90.4%	66-125	
			MSD	mg/L	5.609	90.2%	66-125	
			MSRPD	mg/L	5.609	0.1%	≤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
Laboratory Copy (1 of 3)

		42086-03/01/2022		TEST DESCRIPTION - See Reverse side for Container, Preservative and Sampling information					
Client: Livingston Dairy Consulting, Inc. Address: Livingston Dairy Consulting, Inc 1635 E. Prosperity Suite B Tulare, CA 93274 Phone: (559)687-1440 Fax: Contact Person: Noreen Livingston Project Name: <u>W-6 Moonstone Dairy</u> Purchase Order Number: Quote Number: VI 20210208-01 Sampler(s) <u>le / mF</u> Sampling Fee: _____ Pickup Fee: _____ Compositor Setup Date: ____/____/____ Time: ____/____/____ Lab Number: <u>VI 2340544</u> 4-18505		Method of Sampling: Composite(C) Grab(G) Type of Sample Potable(P) Non-Potable(NP) Ag Water(AgW) Bact Type: Other(O) System(SYS) Source(SR) Waste(W) Bact Reason: Routine(ROUT) Repeat(RPT) Replace(RPL) Other(O) Special(SPL) Daily Analysis-W-6-Conductivity, NO3-N, Total N, TDS 16oz(P) Sampling-W-6 - Total N - Split Bottle 8oz(P)-H2SO4 ***VI Lab to Split for Total N***							
Samp Num	Location Description	Date Sampled	Time Sampled	Relinquished	Date	Time	Relinquished	Date	Time
1	9 - Barn #1	1/21/23	12:18	G	1/21/23	1:33	1/21/23	1:33	1/21/23
2	11 - Barn #2	1/21/23	12:32	G	1/21/23	1:33	1/21/23	1:33	1/21/23
3				G					
4				G					
5				G					
6				G					
7				G					
8				G					
9				G					
10				G					
Remarks:				Relinquished By: <u>[Signature]</u>	Date: <u>1/21/23</u>	Time: <u>1:33</u>	Relinquished By: <u>[Signature]</u>	Date: <u>1/21/23</u>	Time: <u>1:33</u>
				Received By: <u>[Signature]</u>	Date: <u>1/21/23</u>	Time: <u>1:33</u>	Received By: <u>[Signature]</u>	Date: <u>1/21/23</u>	Time: <u>1:33</u>

Corporate Offices & Laboratory 853 Corporation Street Santa Paula, CA 93060 Phone: (805) 392-2000 Env Fax: (805) 525-4172 / Ag Fax: (805) 392-2063	Office & Laboratory 2500 Stagecoach Road Stockton, CA 95215 Phone: (209) 942-0182 Fax: (209) 942-0423	Office & Laboratory 563 E. Lindo Chico, CA 95926 Phone: (530) 343-5818 Fax: (530) 343-3807	Office & Laboratory 3442 Empressa Drive, Suite D San Luis Obispo, CA 93401 Phone: (805) 783-2940 Fax: (805) 783-2912	Office & Laboratory 9415 W. Goshen Avenue Visalia, CA 93291 Phone: (559) 734-9473 Fax: (559) 734-8435
---	--	---	---	--

Inter-Laboratory Condition Upon Receipt (Attach to COC)

Sample Receipt at: STK CC CH VI

1. Number of ice chests/packages received: 1 Shipping tracking # 61C

2. Were samples received in a chilled condition? Temps: for 14.3 / / / /
Surface water SWTR bact samples: A sample that has a temperature upon receipt of $>10^{\circ}\text{C}$, whether iced or not, should be flagged unless the time since sample collection has been less than two hours.

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

Sample Receipt at SP:

1. Were samples received in a chilled condition? Temps: 2C / / / /
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: 558722543 540
584
- | | | | |
|---|---|----|-----|
| 3. Do the number of bottles received agree with the COC? | <input checked="" type="checkbox"/> Yes | No | N/A |
| 4. Were samples received intact? (i.e. no broken bottles, leaks etc.) | <input checked="" type="checkbox"/> Yes | No | |
| 5. Were sample custody seals intact? | <input checked="" type="checkbox"/> Yes | No | N/A |

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

Sample Verification, Labeling and Distribution:

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

Discrepancy Documentation:

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

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

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

(4018505)
Livingston Dairy Consulting, Inc.

VI 2340544

iv 02/01/2023 09:27:15



VI 2340544

Joan Stone

July 7, 2023

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

Lab No. : VI 2343653

Customer No. : 4018505

Laboratory Report

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

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

Case Narrative

This Case Narrative pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab No.	Matrix
8	06/08/2023	06/08/2023	VI 2343653-001	AGW
7	06/08/2023	06/08/2023	VI 2343653-002	AGW
5W	06/08/2023	06/08/2023	VI 2343653-003	AGW

Sampling and Receipt Information:

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

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


Test Summary

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

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

KD: EHB

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

 Digitally signed by Kelly A. Dunnahoo, B.S.
 Title: Laboratory Director
 Date: 2023-07-10

July 7, 2023

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

Description : 8
Project : W-6 Moonstone

Lab No. : VI 2343653-001
Customer No. : 4018505

Sampled On : June 8, 2023 at 08:12
Sampled By : Marlene Ferreira
Received On : June 8, 2023 at 14:34
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	UI	06/20/2023	07:26	sta	EPA 351.2	06/22/2023	16:33	lcr
Nitrate Nitrogen	12.7	0.4	mg/L		1		06/09/2023	13:00	lfs	SM 4500-NO3 F	06/09/2023	14:11	lfs
Nitrogen, Total as Nitrogen	12.7	0.5	mg/L		1	I	06/20/2023	07:26	sta	Calc.	06/22/2023	16:33	lcr
Nitrate + Nitrite as N	12.7	0.4	mg/L		1		06/09/2023	13:00	lfs	SM 4500-NO3 F	06/09/2023	14:11	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	UI	06/20/2023	07:26	sta	EPA 351.2	06/22/2023	16:33	lcr
Conductivity	569	1	umhos/cm		1		06/20/2023	15:13	amm	SM 4500-H+B	06/20/2023	18:58	amm
Solids, Total Dissolved (TDS)	340	20	mg/L		1		06/12/2023	15:00	ctl	SM 2540 C	06/13/2023	12:00	ctl

DQF Flags Definition:

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

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

July 7, 2023

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

Description : 7
Project : W-6 Moonstone

Lab No. : VI 2343653-002
Customer No. : 4018505

Sampled On : June 8, 2023 at 08:19
Sampled By : Marlene Ferreira
Received On : June 8, 2023 at 14:34
Matrix : Ag Water

Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
Dairy Analysis							Date	Time	Who	Method	Date	Time	Who
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	UI	06/20/2023	07:26	sta	EPA 351.2	06/22/2023	16:35	lcr
Nitrate Nitrogen	13.5	0.4	mg/L		1		06/09/2023	13:00	lfs	SM 4500-NO3 F	06/09/2023	14:13	lfs
Nitrogen, Total as Nitrogen	13.5	0.5	mg/L		1	1	06/20/2023	07:26	sta	Calc.	06/22/2023	16:35	lcr
Nitrate + Nitrite as N	13.5	0.4	mg/L		1		06/09/2023	13:00	lfs	SM 4500-NO3 F	06/09/2023	14:13	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	UI	06/20/2023	07:26	sta	EPA 351.2	06/22/2023	16:35	lcr
Conductivity	515	1	umhos/cm		1		06/20/2023	15:13	amm	SM 4500-H+B	06/20/2023	18:00	amm
Solids, Total Dissolved (TDS)	330	10	mg/L		1		06/12/2023	15:45	ctl	SM 2540 C	06/13/2023	12:00	ctl

DQF Flags Definition:

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

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

July 7, 2023

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

Lab No. : VI 2343653-003
 Customer No.: 4018505

Sampled On : June 8, 2023 at 08:24
 Sampled By : Marlene Ferreira
 Received On : June 8, 2023 at 14:34
 Matrix : Ag Water

Description : 5W
 Project : W-6 Moonstone

Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
Dairy Analysis							Date	Time	Who	Method	Date	Time	Who
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	UI	06/20/2023	07:26	sta	EPA 351.2	06/22/2023	16:37	lcr
Nitrate Nitrogen	3.4	0.4	mg/L		1		06/09/2023	13:00	lfs	SM 4500-NO3 F	06/09/2023	14:16	lfs
Nitrogen, Total as Nitrogen	3.8	0.5	mg/L		1	I	06/20/2023	07:26	sta	Calc.	06/22/2023	16:37	lcr
Nitrate + Nitrite as N	3.8	0.4	mg/L		1		06/09/2023	13:00	lfs	SM 4500-NO3 F	06/09/2023	14:16	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	UI	06/20/2023	07:26	sta	EPA 351.2	06/22/2023	16:37	lcr
Conductivity	231	1	umhos/cm		1		06/20/2023	15:13	amm	SM 4500-H+B	06/20/2023	18:28	amm
Solids, Total Dissolved (TDS)	140	20	mg/L		1		06/13/2023	11:35	ctl	SM 2540 C	06/14/2023	11:10	ctl

DQF Flags Definition:

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

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

July 7, 2023

Livingston Dairy Consulting, Inc.

Lab No. : VI 2343653

Customer No. : 4018505

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
E. C.	2320B	(VI 2343675-001)	Dup	umhos/cm		0.2%	5	
		(SP 2309644-001)	Dup	umhos/cm		0.2%	5	
Solids, Total Dissolved	2540CE	06/12/2023:206427CTL	Blank	mg/L		ND	<10	
			LCS	mg/L	993.7	97.4%	90-110	
			Dup	mg/L		0.5%	12.2	
			Dup	mg/L		1.03%	12.2	
	2540CE	06/12/2023:206412CTL	Blank	mg/L		ND	<20	
			LCS	mg/L	993.7	99.7%	90-110	
			Dup	mg/L		1.38%	5	
			Dup	mg/L		0.5%	5	
	2540CE	06/13/2023:206468CTL	Blank	mg/L		ND	<20	
			LCS	mg/L	993.7	101%	90-110	
Nitrogen, Total Kjeldahl	351.2	06/20/2023:206750STA	Dup	mg/L		0.1%	5	
			Dup	mg/L		1.87%	5	
			Blank	mg/L		ND	<0.5	
			LCS	mg/L	12.00	96.8%	73-124	
	(VI 2343654-001)		MS	mg/L	12.00	40.6%	54-136	435
			MSD	mg/L	12.00	55.9%	54-136	
			MSRPD	mg/L		31.3%	≤27	435
			MS	mg/L	12.00	28.5%	54-136	435
	(VI 2343654-002)		MSD	mg/L	12.00	31.3%	54-136	435
			MSRPD	mg/L		9.2%	≤27	
Nitrate + Nitrite as N	4500NO3F	06/09/2023:206353LFS	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	99.2%	80-120	
			MS	mg/L	5.609	97.5%	66-125	
			(VI 2343661-001)	MSD	mg/L	101%	66-125	
			MSRPD	mg/L		3.5%	≤30.4	
Nitrate Nitrogen	4500NO3F	06/09/2023:206353LFS	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	99.2%	80-120	
			MS	mg/L	5.609	97.5%	66-125	
			(VI 2343661-001)	MSD	mg/L	101%	66-125	
			MSRPD	mg/L		3.5%	≤30.4	

Definition

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

Explanation

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

Specimen

42086:04/01/2023		TEST DESCRIPTION - See Reverse side for Container, Preservative and Sampling information										
Client: Livingston Dairy Consulting, Inc. Address: Livingston Dairy Consulting, Inc 1635 E. Prosperity Suite B Tulare, CA 93274		Bacti Reason: Routine(ROUT) Repeat(RPT) Replace(RPL) Bacti Type: Other(O) System(SYS) Source(SR) Waste(W) Potable(P) Non-Potable(NP) Ag Water(AgW) Other(O) Special(SPL) Dairy Analysis-W-6-Conductivity, NO3-N, Total N, TDS 16oz(P) 8oz(P)-H2SO4 Bottles/Containers Split Fee										
Phone: (559)687-1440 Fax: (559)687-1440												
Contact Person: Noreen Livingston												
Project Name: W-6 Monstone												
Purchase Order Number:												
Quote Number: VI 20210208-01												
Sampler(s) Martene												
Sampling Fee: Pickup Fee:												
Compositor Setup Date: / / Time: /												
Lab Number: VI 2843653												
Samp Num	Location Description	Date Sampled	Time Sampled	Method of Sampling: Composite(C) Grab(G)	Type of Sample	Potable(P) Non-Potable(NP) Ag Water(AgW)	Bacti Type: Other(O) System(SYS) Source(SR) Waste(W)	Bacti Reason: Routine(ROUT) Repeat(RPT) Replace(RPL)	Dairy Analysis-W-6-Conductivity, NO3-N, Total N, TDS	16oz(P)	8oz(P)-H2SO4	Bottles/Containers Split Fee
1	8	6/8	8:12 AM	G	AgW NP					1	1	1
2	7	6/8	8:19 AM	G	AgW NP					1	1	1
3	5 W	6/8	8:24 AM	G	AgW NP					1	1	1
4				G						1	1	1
5				G						1	1	1
6				G						1	1	1
7				G						1	1	1
8				G						1	1	1
9				G						1	1	1
10				G						1	1	1

Remarks:		Relinquished		Retained		Relinquished		Retained	
Date	Time	Date	Time	Date	Time	Date	Time	Date	Time
6/8/23	12:14	6/8/23	12:14	6/8/23	12:14	6/8/23	12:14	6/8/23	12:14
Received By: [Signature]		Received By: [Signature]		Received By: [Signature]		Received By: [Signature]		Received By: [Signature]	

Corporate Offices & Laboratory 853 Corporation Street Santa Paula, CA 93060 Phone: (805) 392-2000 Env Fax: (805) 525-4172 / Ag Fax: (805) 392-2063	Office & Laboratory 2500 Stagecoach Road Stockton, CA 95215 Phone: (209) 942-0182 Fax: (209) 942-0423	Office & Laboratory 563 E. Lindo Chico, CA 95926 Phone: (530) 343-5818 Fax: (530) 343-3807	Office & Laboratory 3442 Empressa Drive, Suite D San Luis Obispo, CA 93401 Phone: (805) 783-2940 Fax: (805) 783-2912	Office & Laboratory 9415 W. Goshen Avenue Visalia, CA 93291 Phone: (559) 734-9473 Fax: (559) 734-8435
---	--	---	---	--

Inter-Laboratory Condition Upon Receipt (Attach to COC)

Sample Receipt at: STK CC

CH VI

1. Number of ice chests/packages received: 2 Shipping tracking # DTC

2. Were samples received in a chilled condition? Temps: 16 / 16 / 9 / 1 / 1 / 1

Surface water SWTR bact samples: A sample that has a temperature upon receipt of $>10^{\circ}\text{C}$, 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

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): [Signature]

Sample Receipt at SP:

1. Were samples received in a chilled condition? Temps: 16 / 16 / 9 / 1 / 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: 559556833
836

3. Do the number of bottles received agree with the COC? ☒ Yes No N/A

4. Were samples received intact? (i.e. no broken bottles, leaks etc.) ☒ Yes No N/A

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

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

Sample Verification, Labeling and Distribution:

1. Were all requested analyses understood and acceptable? ☒ Yes No

2. Did bottle labels correspond with the client's ID's? ☒ Yes No

3. Were all bottles requiring sample preservation properly preserved? ☒ Yes No N/A FGL
[Exception: Oil & Grease, VOA and CrVI verified in lab]

4. VOAs checked for Headspace? ☒ Yes No N/A

5. Have rush or project due dates been checked and accepted? ☒ Yes No N/A

6. Were all analyses within holding times at time of receipt? ☒ Yes No

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

Sample Receipt, Login and Verification completed by (initials): [Signature]

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 cc contacts)

(4018505)
Livingston Dairy Consulting, Inc.
VI 2343653

cda 06/08/2023 16:48:35



VI 2343653

May 11, 2023

Lab No. : VI 2342607

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

Customer No. : 4018505

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
#3	04/20/2023	04/20/2023	VI 2342607-001	AGW
#4	04/20/2023	04/20/2023	VI 2342607-002	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: 2023-05-11

May 11, 2023

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

Description : #3
 Project : W-6 Moonstone Dairy

Lab No. : VI 2342607-001
 Customer No. : 4018505

Sampled On : April 20, 2023 at 08:11
 Sampled By : Bruce Livingston
 Received On : April 20, 2023 at 13:57
 Matrix : Ag Water

Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
Dairy Analysis							Date	Time	Who	Method	Date	Time	Who
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	UI	05/08/2023	11:52	sta	EPA 351.2	05/10/2023	20:27	lcr
Nitrate Nitrogen	2.1	0.4	mg/L		1		04/21/2023	14:00	lfs	SM 4500-NO3 F	04/21/2023	14:59	lfs
Nitrogen, Total as Nitrogen	2.1	0.5	mg/L		1	1	05/08/2023	11:52	sta	Calc.	05/10/2023	20:27	lcr
Nitrate + Nitrite as N	2.1	0.4	mg/L		1		04/21/2023	14:00	lfs	SM 4500-NO3 F	04/21/2023	14:59	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	UI	05/08/2023	11:52	sta	EPA 351.2	05/10/2023	20:27	lcr
Conductivity	229	1	umhos/cm		1		05/09/2023	18:02	amm	SM 4500-H+B	05/09/2023	22:16	amm
Solids, Total Dissolved (TDS)	150	20	mg/L		1		04/24/2023	14:00	ctl	SM 2540 C	04/25/2023	11:30	ctl

DQF Flags Definition:

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

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

May 11, 2023

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

Description : #4
 Project : W-6 Moonstone Dairy

Lab No. : VI 2342607-002
 Customer No. : 4018505

Sampled On : April 20, 2023 at 08:19
 Sampled By : Bruce Livingston
 Received On : April 20, 2023 at 13:57
 Matrix : Ag Water

Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
Dairy Analysis							Date	Time	Who	Method	Date	Time	Who
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	UI	05/08/2023	11:52	sta	EPA 351.2	05/10/2023	20:29	lcr
Nitrate Nitrogen	6.9	0.4	mg/L		1		04/21/2023	14:00	lfs	SM 4500-NO3 F	04/21/2023	15:01	lfs
Nitrogen, Total as Nitrogen	6.9	0.5	mg/L		1	I	05/08/2023	11:52	sta	Calc.	05/10/2023	20:29	lcr
Nitrate + Nitrite as N	6.9	0.4	mg/L		1		04/21/2023	14:00	lfs	SM 4500-NO3 F	04/21/2023	15:01	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	UI	05/08/2023	11:52	sta	EPA 351.2	05/10/2023	20:29	lcr
Conductivity	283	1	umhos/cm		1		05/08/2023	16:26	amm	SM 4500-H+B	05/09/2023	07:12	amm
Solids, Total Dissolved (TDS)	180	20	mg/L		1		04/24/2023	14:00	ctl	SM 2540 C	04/25/2023	11:30	ctl

DQF Flags Definition:

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

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

May 11, 2023
 Livingston Dairy Consulting, Inc.

Lab No. : VI 2342607
 Customer No. : 4018505

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
E. C.	2320B	(CC 2381201-001)	Dup	umhos/cm		0%	5	
	2320B	(VI 2342609-002)	Dup	umhos/cm		0.2%	5	
Solids, Total Dissolved	2540CE	04/24/2023:204299CTL	Blank	mg/L		ND	<20	
			LCS	mg/L	993.4	99.6%	90-110	
		(VI 2342404-001)	Dup	mg/L		2.02%	5	
		(VI 2342404-001)	Dup	mg/L		0.2%	5	
Nitrogen, Total Kjeldahl	351.2	05/08/2023:204783STA	Blank	mg/L		ND	<0.5	
			LCS	mg/L	12.00	91.4%	73-124	
			MS	mg/L	12.00	33.7%	<1/4	
		(VI 2342421-001)	MSD	mg/L	12.00	46.2%	54-136	435
			MSRPD	mg/L	12.00	31.7%	≤27	435
			MS	mg/L	12.00	13.5%	<1/4	
		(VI 2342421-002)	MSD	mg/L	12.00	0.292%	54-136	435
			MSRPD	mg/L	12.00	201.5%	≤27	435
Nitrate + Nitrite as N	4500NO3F	04/21/2023:204301LFS	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	95.9 %	80-120	
			MS	mg/L	5.609	95.6 %	66-125	
		(CH 2372613-001)	MSD	mg/L	5.609	95.6 %	66-125	
			MSRPD	mg/L	5.609	0.02%	≤30.4	
Nitrate Nitrogen	4500NO3F	04/21/2023:204301LFS	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	95.9 %	80-120	
			MS	mg/L	5.609	95.6 %	66-125	
		(CH 2372613-001)	MSD	mg/L	5.609	95.6 %	66-125	
			MSRPD	mg/L	5.609	0.02%	≤30.4	

Definition

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

Explanation

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

Client: Livingston Dairy Consulting, Inc. Address: Livingston Dairy Consulting, Inc 1635 E. Prosperity Suite B Tulare, CA 93274 Phone: (559)687-1440 Fax: Contact Person: Noreen Livingston Project Name: W-6 Moonstone Dairy Purchase Order Number: Quote Number: VI 20210208-01 Sampler(s): Bruce Sampling Fee: _____ Pickup Fee: _____ Compositor Setup Date: 1/1/2023 Time: 1:07 PM Lab Number: VI 2342400 4-18505				42086-03/01/2022		TEST DESCRIPTION - See Reverse side for Container, Preservative and Sampling information													
Method of Sampling: Composite(C) Gmb(G) Type of Sample: **SEE REVERSE SIDE** Possible(P) Non-Possible(NP) Ag Water(AgW) Bacti Type: Other(O) System(SYS) Source(SR) Wastes(W) Bacti Reason: Routine(ROUT) Repeat(RPT) Replace(RPL) Other(O) Special(SPL) Dairy Analysis: W-6-Conductivity, NO3-N, Total N, TDS 16oz(P) Sampling: W-6 - Total N - Split Bottle ***VI Lab to Split for Total N*** 8oz(P)-H2SO4 																			
Samp Num	Location Description	Date Sampled	Time Sampled	Method of Sampling	Type of Sample	Possible(P)	Bacti Type	Bacti Reason	Other(O)	Dairy Analysis	Sampling								
1	#3	4/20	8:11 AM	G	AgW	NP				1	1								
2	#4	4/20	8:19 AM	G						1	1								
3	#5	4/20	8:25 AM	G						1	1								
4				G						1	1								
5				G						1	1								
6				G						1	1								
7				G						1	1								
8				G						1	1								
9				G						1	1								
10				G						1	1								
Remarks:				Relinquished Date: 4/20/23 Time: 1:35 PM Received By: MRL		Relinquished Date: 4/20/23 Time: 1:35 PM Received By: MRL		Relinquished Date: 4/21/23 Time: 1:34 PM Received By: MRL		Relinquished Date: 4/21/23 Time: 1:34 PM Received By: MRL									

Corporate Offices & Laboratory
 853 Corporation Street
 Santa Paula, CA 93080
 Phone: (805) 392-2000
 Env Fax: (805) 525-4172 / Ag Fax: (805) 392-2063

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

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

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

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

Inter-Laboratory Condition Upon Receipt (Attach to COC)

Sample Receipt at: **STK CC**

CH VI

1. Number of ice chests/packages received: 1 Shipping tracking # OTC
2. Were samples received in a chilled condition? Temps: 22 / / /
Surface water SWTR bact samples: A sample that has a temperature upon receipt of $>10^{\circ}\text{C}$, 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): MM

Sample Receipt at SP:

1. Were samples received in a chilled condition? Temps: 22 / / /
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: 559 243851
882
3. Do the number of bottles received agree with the COC? ☒ Yes ☐ No ☐ N/A
4. Were samples received intact? (i.e. no broken bottles, leaks etc.) ☒ Yes ☐ No ☐ N/A
5. Were sample custody seals intact? ☒ Yes ☐ No ☒ N/A

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

Sample Verification, Labeling and Distribution:

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

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

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

Discrepancy Documentation:

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

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

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

(4018505)
Livingston Dairy Consulting, Inc.

VI 2342607

da0 04/21/2023 09:46:25



VI 2342607

2023 KINGS RIVER WATERSHED CANAL RESULTS

LEMOORE WEIR

Constituent	Lab	BPO	RL	Units	Sample Month and Results											
					Physical Parameters/General Chemistry											
Flow	KRWA				cfs	0	0	0	0	0	0	0	0	0	0	0
EC	Field	700			umhos/cm							45	51.3			
pH	Field	6.5-8.3			pH							7.5				
Dissolved Oxygen	Field	5/7			mg/L							9.44				
Temperature	Field	Δ < 5° C			°C							17.7				
Turbidity	BSK	No adv eff.	0.2		NTU							2.2				
TDS	BSK	450	10		mg/L							2.2				
TSS	BSK	-	10		mg/L							ND				
Hardness (as CaCO3)	BSK	-	2.5		mg/L							14				
TOC	BSK	-	0.3		mg/L							1.8				
E. Coll					Pathogens											
Fecal Coliform	BSK	320			MPN							46				
	BSK	400			MPN/100mL							46				
Nitrate (+ Nitrite) - N					Nutrients											
Total Kjeldahl Nitrogen	BSK	10	0.05		mg/L							0.02				
Ammonia - N	BSK	chart	0.5		mg/L							0.17				
Unionized Ammonia	BSK	chart	0.0015		mg/L							ND				
Orthophosphate - P	BSK	-	0.01		mg/L							ND				
Phosphorus	BSK		0.1		mg/L							0.0069				
												0.014				
Toxicity, minnow					Water Column Toxicity											
Toxicity, water flea	PER	> 80%	(96h test)		% survival							100				
Toxicity, algae	PER	> 80%	(48h test)		% survival							100				
Toxicity, algae (control)	PER		(48h test)		cells/mL							4800000				
			(48h test)		cells/mL							2840000				



FIELD ACTIVITY REPORT

Facility Name: Moonstone Dairy
1305 Iona Ave, Hanford
Kings County

2023

Sample Collection Equipment:
Bottle Container

Sample Container: (Circle one)
Bottle Container: 8 fl oz 16 fl oz 32 fl oz

Sample Collection Location: (Circle one)

Discharge Pipe Spigot/Faucet

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

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

Sample Type:

[illegible]

Sample Preservation Method: (Circle one)

Ice Chest

Refrigerator

Ice Pack



Manure Tracking Manifest

Operator Information:

Name of Operator: _____

Name of Dairy Facility: MOONSTONE DAIRY

Facility Address: 4974 AVE. 272 VISALIA 93277
Number and Street City Zip Code

Contact Person Name and Phone Number: _____

Manure Hauler Information:

Name of Hauling Company/Person: Fragoso Custom Harvesting, Inc.

Address of Hauling Company/Person: 7871 Houston Avenue Hanford 93230
Number and Street City Zip Code

Contact Person Name and Phone Number: Jared Fragoso (559) 381-5229

Destination Information:

Composting Facility / Broker Farmer Other (Identify) _____ (please circle one)

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

MOONSTONE DAIRY 4974 AVE 272 VISALIA 93277
Name Number and Street City Zip Code Phone Number

Manure Destination Address or Assessor's Parcel Number:

#8 (HOUSTON 2ND)
Number and Street City Zip Code Assessor's Parcel Number

Dates Hauled: 11-7/11-8/11-9

Amount Hauled:

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

Manure: 2900 Tons or Cubic Yards (Indicate which units used)

Manure Solids Content (If amount reported in tons): _____

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

Method used to determine amount of manure: 145 loads at approximately 20 tons

Certification:

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

Operator's Signature: _____

Date: _____

Hauler's Signature: [Signature]

Date: 12-1-23

Livingston Dairy Consulting, Inc.

1635 E. Prosperity Ave. Ste. B

Tulare, CA 93274

559-687-1440

Sunday, April 21, 2024

Re: 2023 NMP

Moonstone Dairy

1305 Iona Avenue Hanford, CA 93230

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

*2023 Whole Farm Nitrogen Balance

The whole farm nitrogen balance for the crop year 2022 was **1.06**
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.

