



Livingston Dairy Consulting, Inc.

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

LegendDairy Farms **WDID 5D545147N01**
14685 Road 96 Tipton, CA 93272

<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: LegenDairy Farms WDID 5D545147N01
Facility Address: 14685 Road 96 Tipton, CA 93272
Original Operation Date: 12/6/1990
Facility APN's: x228 x250 x005 xxxx
RWQCB Basin Plan Designation: Tulare Lake Basin
☐ Check if any information has changed

Owner(s)

Owner(s) Name: Gary & Victoria Fernandes
Mailing Address: P.O. Box 967 Tipton, CA 93272
Home Phone Number:
Cell Phone Number: 559-308-0696
☐ 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:	-	190	358	-	-
Number Under Roof	1,414	-	-	-	-
Maximum Number	1,414	190	358		
Average Number	1,414	190	358		
Average Live Weight (lbs)	950	975	660		

Average Milk Production: 67

Predominant Milk Cow Breed: Jersey

Manure Generated:

Total manure excreted by the herd:

Total nitrogen from manure:

Total salt from manure:

	1,987.83	@40% Moisture	ton/yr
	128,446		lbs
	13,916		lbs
	62,328		lbs
	-		lbs

After Ammonia (30% loss applied)

89,912 lbs per reporting period

Process Wastewater Generated:

Process wastewater generated:

Total nitrogen generated:

Total salt (TDS) generated:

	20,644,400	gal
	110,757	lbs
	30,825	lbs
	144,835	lbs
	1,100,388	lbs

Winter Crops & Harvest

[illegible]

Detectable L Valley Tech
Dellavalle

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

Detectable Limits

Dellavalle

1992

10111213141516171819202122232425262728293031323334353637383940414243444546474849505152535455565758596061626364656667686970717273747576777879808182838485868788899091929394959697989910010110210310410510610710810911011111211311411511611711811912012112212312412512612712812913013113213313413513613713813914014114214314414514614714814915015115215315415515615715815916016116216316416516616716816917017117217317417517617717817918018118218318418518618718818919019119219319419519619719819920020120220320420520620720820921021121221321421521621721821922022122222322422522622722822923023123223323423523623723823924024124224324424524624724824925025125225325425525625725825926026126226326426526626726826927027127227327427527627727827928028128228328428528628728828929029129229329429529629729829930030130230330430530630730830931031131231331431531631731831932032132232332432532632732832933033133233333433533633733833934034134234334434534634734834935035135235335435535635735835936036136236336436536636736836937037137237337437537637737837938038138238338438538638738838939039139239339439539639739839940040140240340440540640740840941041141241341441541641741841942042142242342442542642742842943043143243343443543643743843944044144244344444544644744844945045145245345445545645745845946046146246346446546646746846947047147247347447547647747847948048148248348448548648748848949049149249349449549649749849950050150250350450550650750850951051151251351451551651751851952052152252352452552652752852953053153253353453553653753853954054154254354454554654754854955055155255355455555655755855956056156256356456556656756856957057157257357457557657757857958058158258358458558658758858959059159259359459559659759859960060160260360460560660760860961061161261361461561661761861962062162262362462562662762862963063163263363463563663763863964064164264364464564664764864965065165265365465565665765865966066166266366466566666766866967067167267367467567667767867968068168268368468568668768868969069169269369469569669769869970070170270370470570670770870971071171271371471571671771871972072172272372472572672772872973073173273373473573673773873974074174274374474574674774874975075175275375475575675775875976076176276376476576676776876977077177277377477577677777877978078178278378478578678778878979079179279379479579679779879980080180280380480580680780880981081181281381481581681781881982082182282382482582682782882983083183283383483583683783883984084184284384484584684784884985085185285385485585685785885986086186286386486586686786886987087187287387487587687787887988088188288388488588688788888989089189289389489589689789889990090190290390490590690790890991091191291391491591691791891992092192292392492592692792892993093193293393493593693793893994094194294394494594694794894995095195295395495595695795895996096196296396496596696796896997097197297397497597697797897998098198298398498598698798898999099199299399499599699799899910001001100210031004100510061007100810091010101110121013101410151016101710181019102010211022102310241025102610271028102910301031103210331034103510361037103810391040104110421043104410451046104710481049105010511052105310541055105610571058105910601061106210631064106510661067106810691070107110721073107410751076107710781079108010811082108310841085108610871088108910901091109210931094109510961097109810991100110111021103110411051106110711081109111011111112111311141115111611171118111911201121112211231124112511261127112811291130113111321133113411351136113711381139114011411142114311441145114611471148114911501151115211531154115511561157115811591160116111621163116411651166116711681169117011711172117311741175117611771178117911801181118211831184118511861187118811891190119111921193119411951196119711981199120012011202120312041205120612071208120912101211121212131214121512161217121812191220122112221223122412251226122712281229123012311232123312341235123612371238123912401241124212431244124512461247124812491250125112521253125412551256125712581259126012611262126312641265126612671268126912701271127212731274127512761277127812791280128112821283128412851286128712881289129012911292129312941295129612971298129913001301130213

Soil Analysis (Winter)

[illegible]

Detectable Limits

Valley Tech 0.1

DellaValle

0.1

0.1

1.1

0.2

0.0015

0.0001%

Soil Analysis (Summer)

[illegible]

Detectable Limits

Valley Tech

DellaValle

0.1

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?

**No
X**

Yes, Manifest attached (Attachment D)

Total Dry Manure Exported

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	395.0	472.0	66.2	596.0	1.0	-	-	-	-	-	-	-	-	6	4,060
2	500.0	570.0	75.2	721.0	1.0	-	-	-	-	-	-	-	-	8	5,460
3	441.0	452.0	37.0	396.0	1.0	-	0.0	70.8	154.0	0.0	53.2	90.9	5.5	8	5,140
4	347.0	356.0	46.3	303.0	1.0	-	-	-	-	-	-	-	-	-	3,720

Detectable Limits

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

Qtr	Sample #:	Sample Date:	Source	lbs / Ac In			
				Inorg N	Org N	P205	K2O
1	3-24L44734	3/24/2023	Valley Tech	89.8	17.5	34.4	162.7
2	5-11L49501	5/11/2023	Valley Tech	113.6	15.9	39.1	196.9
3	8-17L62141	8/17/2023	Valley Tech	100.2	2.5	19.2	108.1
4	10-4L67884	10/4/2023	Valley Tech	78.9	2.0	24.0	82.7

Description	Sample #:	Date:	As Is/ Dry Weight	Source	Material Type
Manure	5-11M49476	5/11/2023	Dry Weight	Valley Tech	Corral Solids
Manure	10-4M67870	10/4/2023	Dry Weight	Valley Tech	Corral Solids

Dry Manure: (As Rec'd)		TN %	TP %	TK %	Ca	Mg	Na	S	CL	Salt	TFS	Moisture %
Corral		0.98	0.40	2.34	-	-	-	-	-	-	-	48.80
Corral		0.96	0.30	0.79	2.30	0.47	0.20	0.31	0.66	-	38.30	51.50

Detectable Limits

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

76.00

**Dry Weight
As Received**

**Dry Weight
As Received**

Field Name/Number: 6-T1Acres: 76

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	0.1	0.0	0.0	192.6
Nutrients Removed at Harvest	-464.2	-33.4	-429.3	0.0
Nutrient Balance	-464.1	-33.4	-429.3	192.6

Winter Nitrogen Crop App / Use Ratio: **0.02**Summer Nitrogen Crop App / Use Ratio: **#N/A**Field Name/Number: 6-T1 Acres: 76**Winter Crop Alfalfa**

Nutrient Summary :		Applied	N			
W. Manure App.		-	T/Ac	-	-	-
W. Comm Fert App.		-	lbs/Ac	-	-	-
Process Water	Q1	-	Ac In /Ac	-	-	-
	Q2	-	Ac In /Ac	-	-	-
Well Water		-	Ac In /Ac	-	-	-
Canal		-	Ac In /Ac	-	-	-
Atm. Depos.		Yes		7.0		
W. Planting	1/1/19					
W. Harvest	11/1/22	8.3	T/Ac	(464.2)	(76.4)	(515.2)

Summer Crop Alfalfa

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

Acres: **75.00**

Totals:

Field Name/Number: 6-T2 (TREES)Acres: 75.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	3.9	0.0	0.0	651.4
Nutrients Removed at Harvest	-98.4	-6.4	-89.8	0.0
Nutrient Balance	-94.5	-6.4	-89.8	651.4

Winter Nitrogen Crop App / Use Ratio: 0.11

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

Field Name/Number: 6-T2 (TREES)Acres: 75

Winter Crop		Trees, Pistachios				
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		34.2	Ac In /Ac	3.9		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
W. Planting	1/1/16					
W. Harvest	11/1/23	1.8	T/Ac	(98.4)	(33.7)	(129.8)

Summer Crop		Trees, Pistachios				
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					
S. Harvest	#N/A	#N/A	T/Ac	#N/A	#N/A	#N/A

Nutrient Applications

Field Name/Number:

6-T3

Acres:

81.00

		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	
Date	Event / Source	(tons/ac)	%	lbs	(ac-In/ac)	(ac-In/ac)	N (lbs/Ac)	Total P (lbs/Ac)	Total K (lbs/Ac)	Salt (Lbs/Ac)	TFS	%	Expected Yield (tons/ac)	Actual Yield (tons/ac)
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/15/23	W. Planting	-	-	-	-	-	-	-	-	-	-	-	-	-
2/6/23	Canal	-	-	-	5.69	-	0.0	-	-	29	-	-	-	-
2/6/23	Process Water	-	-	-	-	1.19	107.5	17.8	160.3	1,092	-	-	-	-
4/11/23	Canal	-	-	-	5.83	-	0.0	-	-	29	-	-	-	-
4/11/23	Process Water	-	-	-	-	1.21	110.0	20.7	198.4	1,502	-	-	-	-
5/2/23	Canal	-	-	-	5.76	-	0.0	-	-	29	-	-	-	-
5/2/23	Process Water	-	-	-	-	1.20	86.3	20.5	196.2	1,486	-	-	-	-
5/28/23	W. Harvest	-	-	-	-	-	(306.2)	(72.4)	(488.3)	-	10.40	-	-	25.23
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6/18/23	2 New	-	-	-	3.16	-	1.1	-	-	69	-	-	-	-
6/18/23	Canal	-	-	-	3.80	-	0.0	-	-	19	-	-	-	-
7/4/23	S. Planting	-	-	-	-	-	-	-	-	-	-	-	-	-
7/20/23	Canal	-	-	-	6.64	-	0.0	-	-	33	-	-	-	-
8/12/23	Canal	-	-	-	5.73	-	0.0	-	-	29	-	-	-	-
8/12/23	Process Water	-	-	-	-	1.19	89.6	10.0	107.1	1,391	-	-	-	-
9/4/23	Canal	-	-	-	5.83	-	0.0	-	-	29	-	-	-	-
9/4/23	Process Water	-	-	-	-	1.21	91.1	10.2	109.0	1,414	-	-	-	-
10/1/23	Canal	-	-	-	6.38	-	0.0	-	-	32	-	-	-	-
10/23/23	S. Harvest	-	-	-	-	-	(150.2)	(25.0)	(204.2)	-	-	-	-	22.72
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals:		0.0		0	48.82	6.01	29	(18)	78	7,184	10.40		0	47.95

Field Name/Number: 6-T3Acres: 81.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	485.6	34.5	639.9	7183.5
Nutrients Removed at Harvest	-456.4	-42.5	-574.9	0.0
Nutrient Balance	29.2	-8.0	65.0	7183.5

Winter Nitrogen Crop App / Use Ratio: 1.01

Summer Nitrogen Crop App / Use Ratio: 1.26

Field Name/Number: 6-T3 Acres: 81**Winter Crop Wheat, Silage**

Nutrient Summary :		Applied	N			
W. Manure App.		-	T/Ac	-	-	-
W. Comm Fert App.		-	lbs/Ac	-	-	-
Process Water	Q1	1.2	Ac In /Ac	107.5	40.8	192.4
	Q2	2.4	Ac In /Ac	196.3	94.2	473.4
Well Water		-	Ac In /Ac	-	-	-
Canal		17.3	Ac In /Ac	-	-	-
Atm. Depos.		Yes		7.0	-	-
W. Planting	11/15/23					
W. Harvest	5/28/23	25.2	T/Ac	(306.2)	(165.8)	(586.0)

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	2.4	Ac In /Ac	180.7	46.2	259.3
	Q4	-	Ac In /Ac	-	-	-
Well Water		3.2	Ac In /Ac	1.1	-	-
Canal		28.4	Ac In /Ac	0.1	-	-
Atm. Depos.		Yes		7.0	-	-
S. Planting	7/4/23					
S. Harvest	10/23/23	22.7	T/Ac	(150.2)	(57.3)	(245.1)

Nutrient Applications

Field Name/Number:

6-T4

Acres:

67.00

[illegible]

Field Name/Number: 6-T4Acres: 67.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	542.8	103.6	1157.9	5547.9
Nutrients Removed at Harvest	-542.9	-51.8	-599.9	0.0
Nutrient Balance	-0.1	51.8	558.0	5547.9

Winter Nitrogen Crop App / Use Ratio: 0.95

Summer Nitrogen Crop App / Use Ratio: 1.15

Field Name/Number: 6-T4 Acres: 67**Winter Crop** **Wheat, Silage**

Nutrient Summary :		Applied		N		
W. Manure App.		13.4	T/Ac	105.6	245.7	756.0
W. Comm Fert App.		-	lbs/Ac	-		
Process Water	Q1	-	Ac In /Ac	-	-	-
	Q2	2.5	Ac In /Ac	199.8	95.9	481.8
Well Water		-	Ac In /Ac	-		
Canal		18.6	Ac In /Ac	0.0		
Atm. Depos.		Yes		7.0		
W. Planting	10/30/22					
W. Harvest	5/15/23	25.4	T/Ac	(330.2)	(193.1)	(640.8)

Summer Crop **Corn, Silage**

Nutrient Summary :		Applied		N		
S. Manure App.		11.9	T/Ac	91.3	164.4	226.5
S. Comm Fert App.		-	lbs/Ac	-	-	-
Process Water	Q2	-	Ac In /Ac	-	-	-
	Q3	1.9	Ac In /Ac	146.0	37.4	209.6
	Q4	-	Ac In /Ac	-	-	-
Well Water		3.0	Ac In /Ac	(0.0)		
Canal		29.1	Ac In /Ac	0.1		
Atm. Depos.		Yes		7.0		
S. Planting	7/1/23					
S. Harvest	10/1/23	26.7	T/Ac	(212.7)	(78.6)	(226.4)

Field Name/Number:	7-T5	Acres:	88.00
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Totals:

Field Name/Number: 7-T5

Acres: 88.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	624.4	40.4	718.6	8618.4
Nutrients Removed at Harvest	-521.5	-51.9	-590.3	0.0
Nutrient Balance	102.9	-11.5	128.3	8618.4

Winter Nitrogen Crop App / Use Ratio: 1.09

Summer Nitrogen Crop App / Use Ratio: 1.36

Field Name/Number: 7-T5 Acres: 88

Winter Crop		Wheat, Silage				
Nutrient Summary :		Applied	N			
W. Manure App.		-	T/Ac	-	-	-
W. Comm Fert App.		-	lbs/Ac	-	-	-
Process Water	Q1	2.2	Ac In /Ac	199.1	75.5	356.2
	Q2	1.1	Ac In /Ac	78.1	42.4	213.0
Well Water		-	Ac In /Ac	-	-	-
Canal		15.8	Ac In /Ac	0.0	-	-
Atm. Depos.		Yes		7.0	-	-
W. Planting	11/10/22					
W. Harvest	5/20/23	21.8	T/Ac	(260.5)	(155.1)	(558.5)

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	3.5	Ac In /Ac	262.4	67.2	376.6
	Q4	1.1	Ac In /Ac	84.8	27.2	93.1
Well Water		-	Ac In /Ac	0.0	-	-
Canal		29.1	Ac In /Ac	0.1	-	-
Atm. Depos.		Yes		7.0	-	-
S. Planting	6/27/23					
S. Harvest	10/18/23	27.6	T/Ac	(261.0)	(117.2)	(294.8)

70.00

Totals:

Field Name/Number: 7-T7Acres: 70.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	0.1	0.0	0.0	235.1
Nutrients Removed at Harvest	-393.2	-12.9	-384.4	0.0
Nutrient Balance	-393.1	-12.9	-384.4	235.1

Winter Nitrogen Crop App / Use Ratio: 0.02

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

Field Name/Number: 7-T7 Acres: 70

Winter Crop		Alfalfa				
Nutrient Summary :		Applied	N			
W. Manure App.		-	T/Ac	-	-	-
W. Comm Fert App.		-	lbs/Ac	-	-	-
Process Water	Q1	-	Ac In /Ac	-	-	-
	Q2	-	Ac In /Ac	-	-	-
Well Water		-	Ac In /Ac	-	-	-
Canal		46.7	Ac In /Ac	0.1	-	-
Atm. Depos.		Yes		7.0	-	-
W. Planting	1/1/19					
W. Harvest	11/1/23	8.6	T/Ac	(393.2)	(67.6)	(555.7)

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

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?

No

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

No

Written Agreements:


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

No

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

Gary & Victoria Fernandes
Print Name

Same as owner
Print Name

5/1/24
Date

5/1/24
Date

February 17, 2023

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

Lab No. : VI 2340555

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
Barn Dom	01/31/2023	01/31/2023	VI 2340555-001	DW
Dom 1	01/31/2023	01/31/2023	VI 2340555-002	DW
Back Up (Dom)	01/31/2023	01/31/2023	VI 2340555-003	DW

Sampling and Receipt Information:

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

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

Test Summary

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

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

Lab No. : VI 2340555-001

Customer No. : 4018505

Sampled On : January 31, 2023 at 08:45

Sampled By : Marlene / Kaylin

Received On : January 31, 2023 at 14:03

Matrix : Drinking Water

Description : Barn Dom
 Project : W-6 Legen 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	02/14/2023	10:47	sta	EPA 351.2	02/15/2023	16:52	lcr
Nitrate Nitrogen	16.3	0.4	mg/L	10	1		02/01/2023	13:00	lfs	SM 4500-NO3 F	02/01/2023	15:34	lfs
Nitrogen, Total as Nitrogen	16.3	0.5	mg/L		1		02/14/2023	10:47	sta	EPA 351.2	02/15/2023	16:52	lcr
Nitrate + Nitrite as N	16.3	0.4	mg/L	10	1		02/01/2023	13:00	lfs	SM 4500-NO3 F	02/01/2023	15:34	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	02/14/2023	10:47	sta	EPA 351.2	02/15/2023	16:52	lcr
Conductivity	249	1	umhos/cm	1600 ²	1		02/09/2023	14:28	sta		02/09/2023	14:28	sta
Solids, Total Dissolved (TDS)	170	20	mg/L	1000 ²	1		02/03/2023	11:24	ctl	SM 2540 C	02/06/2023	13:07	ctl

DOF 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 17, 2023

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

Lab No. : VI 2340555-002
 Customer No.: 4018505

Sampled On : January 31, 2023 at 08:47
 Sampled By : Marlene / Kaylin
 Received On : January 31, 2023 at 14:03
 Matrix : Drinking Water

Description : Dom 1
 Project : W-6 Legen 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	02/14/2023	10:47	sta	EPA 351.2	02/15/2023	16:54	lcr
Nitrate Nitrogen	0.4	0.4	mg/L	10	1		02/01/2023	13:00	lfs	SM 4500-NO3 F	02/01/2023	15:36	lfs
Nitrogen, Total as Nitrogen	ND	0.5	mg/L		1	U	02/14/2023	10:47	sta	EPA 351.2	02/15/2023	16:54	lcr
Nitrate + Nitrite as N	0.4	0.4	mg/L	10	1		02/01/2023	13:00	lfs	SM 4500-NO3 F	02/01/2023	15:36	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	02/14/2023	10:47	sta	EPA 351.2	02/15/2023	16:54	lcr
Conductivity	990	1	umhos/cm	1600 ²	1		02/09/2023	14:28	sta		02/09/2023	14:28	sta
Solids, Total Dissolved (TDS)	580	20	mg/L	1000 ²	1		02/02/2023	11:53	ctl	SM 2540 C	02/03/2023	12:36	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 17, 2023

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

Lab No. : VI 2340555-003
Customer No. : 4018505

Sampled On : January 31, 2023 at 08:53
Sampled By : Marlene / Kaylin
Received On : January 31, 2023 at 14:03
Matrix : Drinking Water

Description : Back Up (Dom)
Project : W-6 Legen 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	02/14/2023	10:47	sta	EPA 351.2	02/15/2023	16:56	lcr
Nitrate Nitrogen	ND	0.4	mg/L	10	1	U	02/01/2023	13:00	lfs	SM 4500-NO3 F	02/01/2023	15:39	lfs
Nitrogen, Total as Nitrogen	ND	0.5	mg/L		1	U	02/14/2023	10:47	sta	EPA 351.2	02/15/2023	16:56	lcr
Nitrate + Nitrite as N	ND	0.4	mg/L	10	1	U	02/01/2023	13:00	lfs	SM 4500-NO3 F	02/01/2023	15:39	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	02/14/2023	10:47	sta	EPA 351.2	02/15/2023	16:56	lcr
Conductivity	251	1	umhos/cm	1600 ²	1		02/09/2023	14:28	sta		02/09/2023	14:28	sta
Solids, Total Dissolved (TDS)	200	20	mg/L	1000 ²	1		02/02/2023	11:53	ctl	SM 2540 C	02/03/2023	12:38	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 17, 2023
 Livingston Dairy Consulting, Inc.

Lab No. : VI 2340555
 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	
			Blank	umhos/cm		ND	<1	
			Dup	umhos/cm		1%	5	
Solids, Total Dissolved	2540CE	02/02/2023:201179CTL (SP 2301488-001) (SP 2301488-001)	Blank	mg/L		ND	<20	
			LCS	mg/L	990.8	103 %	90-110	
			Dup	mg/L		2.2%	5	
			Dup	mg/L		0.4%	5	
	2540CE	02/03/2023:201214CTL (VI 2340568-001) (VI 2340568-001)	Blank	mg/L		ND	<20	
			LCS	mg/L	990.8	100 %	90-110	
			Dup	mg/L		2.7%	5	
			Dup	mg/L		1.6%	5	
Nitrogen, Total Kjeldahl	351.2	02/14/2023:201629STA (SP 2301580-001) (CH 2370584-001)	Blank	mg/L		ND	<0.5	
			LCS	mg/L	12.00	94.3%	73-124	
			MS	mg/L	12.00	99.4%	54-136	
			MSD	mg/L	12.00	95.8%	54-136	
			MSRPD	mg/L	12.00	3.7%	≤27	
			MS	mg/L	12.00	97.9%	54-136	
			MSD	mg/L	12.00	94.8%	54-136	
			MSRPD	mg/L	12.00	3.1%	≤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

ENVIRONMENTAL AGRICULTURAL
 Analytical Chemists

Client: **Livingston Dairy Consulting, Inc.**

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

Phone: (559)687-1440 Fax:

Contact Person: **Noreen Livingston**

Project Name: **W-6 Legendairy**

Purchase Order Number:

Quote Number: **VI 20210208-01**

Sampler(s) **Marlene & Kaylin**

Sampling Fee: Pickup Fee:

Compositor Setup Date: / / Time: /

Lab Number: **VI 2346555** 4-18505

Samp Num	Location Description	Date Sampled	Time Sampled
1	Barn Dom	1/31	8:45AM
2	Dom 1	1/31	8:47AM
3	Back-up (Dom)	1/31	8:50AM
4			
5			
6			
7			
8			
9			
10			

Remarks:

42086:03/01/2022				TEST DESCRIPTION - See Reverse side for Container, Preservative and Sampling information									
				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) Other(O) Special(SPL)	Dairy Analysis: W-6-Conductivity, NO3-N, Total N, TDS	Sampling-W-6 - Total N - Split Bottle	802(P)-H2SO4		
				***SEE REVERSE SIDE**									
1	Barn Dom	1/31	8:45AM	DNP	1	1	1	1	1	1	1		
2	Dom 1	1/31	8:47AM		1	1	1	1	1	1	1		
3	Back-up (Dom)	1/31	8:50AM		1	1	1	1	1	1	1		
4					1	1	1	1	1	1	1		
5					1	1	1	1	1	1	1		
6					1	1	1	1	1	1	1		
7					1	1	1	1	1	1	1		
8					1	1	1	1	1	1	1		
9					1	1	1	1	1	1	1		
10					1	1	1	1	1	1	1		

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 # 61 4.3

2. Were samples received in a chilled condition? Temps 61 / 4.3 /
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? | <u>Yes</u> | No | N/A |
| 4. Were samples received intact? (i.e. no broken bottles, leaks etc.) | <u>Yes</u> | No | |
| 5. VOAs checked for Headspace? | <u>Yes</u> | No | <u>N/A</u> |
| 6. Were sample custody seals intact? | <u>Yes</u> | No | <u>N/A</u> |
| 7. If required, was sample split for pH analysis? | <u>Yes</u> | No | <u>N/A</u> |
| 8. Were all analyses within holding times at time of receipt? | <u>Yes</u> | No | |
| 9. Verify sample date, time and sampler name | <u>Yes</u> | 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): DA

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: 558722593 590
584

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

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

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

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

Discrepancy Documentation:

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

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

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

(4018505)
Livingston Dairy Consulting, Inc.

VI 2340555

da0 02/01/2023 12:12:34



UI 2340555

July 31, 2023

Lab No. : VI 2344106

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
Well #3	07/06/2023	07/06/2023	VI 2344106-001	AGW
Well #5	07/06/2023	07/06/2023	VI 2344106-002	AGW

Sampling and Receipt Information:

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

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


Test Summary

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

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

KD: EHB

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


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

July 31, 2023

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

Description : Well #3
 Project : W-6 Legen Dairy

Lab No. : VI 2344106-001
 Customer No. : 4018505

Sampled On : July 6, 2023 at 10:07
 Sampled By : Marlene Ferreira
 Received On : July 6, 2023 at 10:55
 Matrix : Ag Water

Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis				
Dairy Analysis							Date	Time	Who	Method	Date	Time	Who	
	Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U	07/20/2023	11:04	sta	EPA 351.2	07/27/2023	19:01	lcr
	Nitrate Nitrogen	0.5	0.4	mg/L		1		07/07/2023	16:00	lfs	SM 4500-NO3 F	07/07/2023	18:11	lfs
	Nitrogen, Total as Nitrogen	0.5	0.5	mg/L		1	U	07/20/2023	11:04	sta	Calc.	07/27/2023	19:01	lcr
	Nitrate + Nitrite as N	0.5	0.4	mg/L		1		07/07/2023	16:00	lfs	SM 4500-NO3 F	07/07/2023	18:11	lfs
	Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	07/20/2023	11:04	sta	EPA 351.2	07/27/2023	19:01	lcr
	Conductivity	234	1	umhos/cm		1		07/12/2023	14:47	amm	SM 4500-H+B	07/12/2023	18:15	amm
	Solids, Total Dissolved (TDS)	140	20	mg/L		1		07/10/2023	15:00	ctl	SM 2540 C	07/11/2023	11:00	ctl

DQF Flags Definition:

U Constituent results were non-detect.

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

July 31, 2023

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

Lab No. : VI 2344106-002
 Customer No.: 4018505

Sampled On : July 6, 2023 at 10:11
 Sampled By : Marlene Ferreira
 Received On : July 6, 2023 at 10:55
 Matrix : Ag Water

Description : Well #5
 Project : W-6 Legen Dairy

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	U	07/20/2023	11:04	sta	EPA 351.2	07/27/2023	19:04	lcr
Nitrate Nitrogen	0.6	0.4	mg/L		1		07/07/2023	16:00	lfs	SM 4500-NO3 F	07/07/2023	18:14	lfs
Nitrogen, Total as Nitrogen	0.6	0.5	mg/L		1		07/20/2023	11:04	sta	Calc.	07/27/2023	19:04	lcr
Nitrate + Nitrite as N	0.6	0.4	mg/L		1		07/07/2023	16:00	lfs	SM 4500-NO3 F	07/07/2023	18:14	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	07/20/2023	11:04	sta	EPA 351.2	07/27/2023	19:04	lcr
Conductivity	274	1	umhos/cm		1		07/18/2023	14:57	amm	SM 4500-H+B	07/18/2023	22:57	amm
Solids, Total Dissolved (TDS)	210	20	mg/L		1		07/10/2023	15:00	ctl	SM 2540 C	07/11/2023	11:00	ctl

DQF Flags Definition:

U Constituent results were non-detect.

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

July 31, 2023
 Livingston Dairy Consulting, Inc.

Lab No. : VI 2344106
 Customer No. : 4018505

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
E. C.	2320B	(VI 2344111-007)	Dup	umhos/cm		0.6%	5	
	2320B	(SP 2311505-002)	Dup	umhos/cm		0.3%	5	
Solids, Total Dissolved	2540CE	07/10/2023:207515CTL	Blank	mg/L		ND	<20	
			LCS	mg/L	993.7	98.0%	90-110	
			Dup	mg/L		0.8%	5	
			Dup	mg/L		0.8%	5	
Nitrogen, Total Kjeldahl	351.2	07/20/2023:207947STA	Blank	mg/L		ND	<0.5	
			LCS	mg/L	12.00	95.3%	73-124	
			MS	mg/L	12.00	83.2%	54-136	
			(VI 2344102-001) MSD	mg/L	12.00	88.0%	54-136	
			MSRPD	mg/L		5.5%	≤27	
			MS	mg/L	12.00	84.1%	54-136	
			(VI 2344102-002) MSD	mg/L	12.00	85.6%	54-136	
			MSRPD	mg/L		1.7%	≤27	
			Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	93.9%	80-120	
Nitrate + Nitrite as N	4500NO3F	07/07/2023:207444LFS	MS	mg/L	5.609	84.3%	66-125	
			(VI 2344132-002) MSD	mg/L	5.609	90.6%	66-125	
			MSRPD	mg/L		4.1%	≤30.4	
			Blank	mg/L		ND	<0.4	
Nitrate Nitrogen	4500NO3F	07/07/2023:207444LFS	LCS	mg/L	11.22	93.9%	80-120	
			MS	mg/L	5.609	84.3%	66-125	
			(VI 2344132-002) MSD	mg/L	5.609	90.6%	66-125	
			MSRPD	mg/L		4.1%	≤30.4	

Definition

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

42086:04/01/2023		TEST DESCRIPTION - See Reverse side for Container, Preservative and Sampling information													
Client: Livingston Dairy Consulting, Inc.		8oz(P)-H2SO4													
Address: Livingston Dairy Consulting, Inc 1635 E. Prosperity Suite B Tulare, CA 93274		16oz(P)													
Phone: (559)687-1440		Daily Analysis-W-6-Conductivity, NO3-N, Total N, TDS													
Contact Person: Noreen Livingston		Bacti Reason: Routine(RPT) Repeat(RPT) Replace(RPL)													
Project Name: W-6 Legend Dairy		Bacti Type: Other(O) System(SYS) Source(SR) Waste(W)													
Purchase Order Number:		Potable(P) Non-Potable(NP) Ag Water(AgW)													
Quote Number: VI 20210208-01		Type of Sample													
Sampler(s) Marlene		Method of Sampling: Composite(C) Grab(G)													
Sampling Fee: _____		Pickup Fee: _____													
Compositor Setup Date: ____/____/____		Time: ____/____/____													
Lab Number: VI 2344106		4-18505													
Samp Num	Location Description	Date Sampled	Time Sampled												
1	Well #3	7/6	10:51 AM	G	AgW NP	1	1	1	1	1	1				
2	Well #5	7/6	10:11 AM	G	AgW NP	1	1	1	1	1	1				
3				G		1	1	1	1	1	1				
4				G		1	1	1	1	1	1				
5				G		1	1	1	1	1	1				
6				G		1	1	1	1	1	1				
7				G		1	1	1	1	1	1				
8				G		1	1	1	1	1	1				
9				G		1	1	1	1	1	1				
10				G		1	1	1	1	1	1				
Remarks:				Relinquished		Date: 7/6/23		Time: 1055		Relinquished		Date: 7/6/23		Time: 1055	
				Received By: <i>Blayne</i>		Date: 7/6/23		Time: 1055		Received By: <i>Blayne</i>		Date: 7/6/23		Time: 1055	
				Relinquished		Date: 7/6/23		Time: 1055		Relinquished		Date: 7/6/23		Time: 1055	
				Received By: <i>Blayne</i>		Date: 7/6/23		Time: 1055		Received By: <i>Blayne</i>		Date: 7/6/23		Time: 1055	

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 / 8.6 / / /
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? | <u>Yes</u> | No | N/A |
| 4. Were samples received intact? (i.e. no broken bottles, leaks etc.) | <u>Yes</u> | No | |
| 5. VOAs checked for Headspace? | Yes | No | <u>N/A</u> |
| 6. Were sample custody seals intact? | Yes | No | <u>N/A</u> |
| 7. If required, was sample split for pH analysis? | <u>Yes</u> | No | <u>N/A</u> |
| 8. Were all analyses within holding times at time of receipt? | <u>Yes</u> | No | |
| 9. Verify sample date, time and sampler name | <u>Yes</u> | 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): SPO

Sample Receipt at SP:

1. Were samples received in a chilled condition? Temps: 30 / / / /

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

2. Shipping tracking numbers: 559719161 181
165 174

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

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

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

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

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: _____ | |

(4018505)
Livingston Dairy Consulting, Inc.

VI 2344106

iv 07/07/2023 10:15:38



August 16, 2023

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

Lab No. : VI 2344715

Customer No. : 4018505

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
#2 New	07/20/2023	07/20/2023	VI 2344715-001	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: 2023-08-17

Legen Dairy

August 16, 2023

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

Lab No. : VI 2344715-001
Customer No.: 4018505

Sampled On : July 20, 2023 at 06:59
Sampled By : Marlène / Noreen
Received On : July 20, 2023 at 10:32
Matrix : Ag Water

Description : #2 New
Project : W-6 Legen Dairy

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	U	08/10/2023	14:22	sta	EPA 351.2	08/12/2023	17:29	lcr
Nitrate Nitrogen	1.5	0.4	mg/L		1		07/21/2023	17:00	lfs	SM 4500-NO3 F	07/21/2023	19:32	lfs
Nitrogen, Total as Nitrogen	1.5	0.5	mg/L		1		08/10/2023	14:22	sta	Calc.	08/12/2023	17:29	lcr
Nitrate + Nitrite as N	1.5	0.4	mg/L		1		07/21/2023	17:00	lfs	SM 4500-NO3 F	07/21/2023	19:32	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	08/10/2023	14:22	sta	EPA 351.2	08/12/2023	17:29	lcr
Conductivity	253	1	umhos/cm		1		07/31/2023	17:05	amm	SM 4500-H+B	08/01/2023	00:05	amm
Solids, Total Dissolved (TDS)	160	20	mg/L		1		07/24/2023	12:50	ctl	SM 2540 C	07/25/2023	10:50	ctl

DQF Flags Definition:

U Constituent results were non-detect.

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

August 16, 2023

Livingston Dairy Consulting, Inc.

Lab No. : VI 2344715

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)	Dup	umhos/cm		0.3%	5		
Solids, Total Dissolved	2540CE	07/24/2023:208076CTL	Blank	mg/L	991.5	ND	<20		
			LCS	mg/L		98.4 %	90-110		
			Dup	mg/L		2.1%	5		
Nitrogen, Total Kjeldahl	351.2	08/10/2023:208886STA	Dup	mg/L		1.5%	5		
			Blank	mg/L		ND	<0.5		
			LCS	mg/L	12.00	88.3%	73-124		
			MS	mg/L	12.00	93.5%	54-136		
			(CH 2375698-002)	MSD	mg/L	12.00	92.2%	54-136	
			MSRPD	mg/L		0.9%	≤27		
			MS	mg/L	12.00	91.3%	54-136		
Nitrate + Nitrite as N	4500NO3F	07/21/2023:208010LFS	(CH 2375698-003)	MSD	mg/L	12.00	96.0%	54-136	
			MSRPD	mg/L		4.8%	≤27		
			Blank	mg/L		ND	<0.4		
			LCS	mg/L	11.22	96.8%	80-120		
			MS	mg/L	5.609	88.4%	66-125		
Nitrate Nitrogen	4500NO3F	07/21/2023:208010LFS	(STK2339748-001)	MSD	mg/L	5.609	87.9%	66-125	
			MSRPD	mg/L		0.2%	≤30.4		
			Blank	mg/L		ND	<0.4		
			LCS	mg/L	11.22	96.8%	80-120		
			MS	mg/L	5.609	88.4%	66-125		
			(STK2339748-001)	MSD	mg/L	5.609	87.9%	66-125	
			MSRPD	mg/L		0.2%	≤30.4		

Definition

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

Special



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 Legend Dairy Purchase Order Number: Quote Number: VI 20210208-01 Sampler(s): Martene & Noreen Sampling Fee: _____ Pickup Fee: _____ Compositor Setup Date: ____/____/____ Time: ____/____/____		42086:04/01/2023 TEST DESCRIPTION - See Reverse side for Container, Preservative and Sampling information	
Lab Number: VI 2344715 4-18505		Method of Sampling: Composite(C) Grab(G)	
Samp Num	Location Description	Date Sampled	Time Sampled
1	#2 NEW	7/20	6:54 AM
2			
3			
4			
5			
6			
7			
8			
9			
10			

Type of Sample **SEE REVERSE SIDE** 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) Other(O) Special(SPL) Dairy Analysis-W-6-Conductivity, NO3-N, Total N, TDS 16oz(P) Bottles/Containers Split Fee 8oz(P)-H2SO4	Relinquished Date: 7/20/23 Time: 1730 Received By: SRO	Relinquished Date: 7/21/23 Time: 1120 Received By: GLS
--	---	---

Remarks: Mark Fair 7/20/23 10:32
 Received By: SRO Date: 7/20/23 Time: 1032

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 / 8.5°C / / /
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? | <u>Yes</u> | No | N/A |
| 4. Were samples received intact? (i.e. no broken bottles, leaks etc.) | <u>Yes</u> | No | |
| 5. VOAs checked for Headspace? | Yes | No | <u>N/A</u> |
| 6. Were sample custody seals intact? | Yes | No | <u>N/A</u> |
| 7. If required, was sample split for pH analysis? | <u>Yes</u> | No | <u>N/A</u> |
| 8. Were all analyses within holding times at time of receipt? | <u>Yes</u> | No | |
| 9. Verify sample date, time and sampler name | <u>Yes</u> | 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): JRO

Sample Receipt at SP:

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

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 4959

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

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

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

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

Discrepancy Documentation:

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

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

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

(4018505)
Livingston Dairy Consulting, Inc.

VI 2344715

iv 07/20/2023 14:27:04



UI 2344715

2023 Canal Results

558TRA144 - Tule River at Road 144

Constituent	Field/Lab	WQTL	MDL	PQL	Units	Oct-22	Nov-22	Dec-22	1/17/23	2/13/23	March-23	4/17/23	5/15/23	6/19/23	7/18/23
Flow	Field				cfs	0	0	0	220	280	Due to Record Flood Conditions, No Surface Water Analysis in March 2023				
EC	BSK	700			umhos/cm				151.2	115.3		134.4	128.3	131	138.4
pH	BSK	6.5-8.3			pH				7.59	6.5		7.1	6.8	6.4	8.53
Temperature	BSK				Celsius				10	11.3		15.9	21.4	20.3	19.6
Dissolved Oxygen	BSK	Min. 7.0			mg/L				10.87	12.7		9.49	**	14.37	8
TDS	BSK	450	4.4	10	mg/L				30	50		110	96	33	37
Turbidity	BSK			0.1	NTU				56	15		11	6.4	15	21
Nitrate + Nitrite as N	BSK	10	0.028	0.2	mg/L				1.3	0.24		0.022	0.61	0.077	ND
Orthophosphate-P	BSK		0.0051	0.6	mg/L				1.9	0.019		0.021	0.038	0.011	0.015
Ammonia-N	BSK	1.5	0.05	0.5	mg/L				ND	ND		ND	ND	ND	ND
Unionized Ammonia	BSK				mg/L				ND	ND		ND	ND	ND	ND
TKN	BSK		0.267	0.5	mg/L				0.17	0.43		ND	0.16	ND	0.16
Phosphorus	BSK		8.1	50	ug/L				1.8	0.044		0.091	0.048	0.034	0.02
Arsenic	BSK	10	0.041	0.2	ug/L				2.2	1.7		1.6	1.3	1.1	1.1
Boron	BSK	700	4.5	10	ug/L				30	23		22	17	8.1	5
Cadmium	BSK	5	0.025	0.2	ug/L				ND	ND		ND	ND	ND	ND
Copper	BSK	1300	0.36	0.5	ug/L				3.3	5		2.8	2.4	2.7	4.8
Lead	BSK	15	0.034	0.2	ug/L				1.4	0.63		0.83	0.48	0.45	0.55
Nickel	BSK	100	0.2	0.5	ug/L				1.5	0.79		1.5	0.86	0.75	0.85
Selenium	BSK	50	0.29	1	ug/L				1.1	0.33		0.77	0.62	ND	0.32
Zinc	BSK		0.68	20	ug/L				7.1	3.9		6.1	7.4	2.9	5.1
Molybdenum	BSK	10	0.15	0.5	ug/L				1.5	1.2		1.2	0.98	0.68	0.59
Hardness	BSK		1	1	mg/L				58	22		50	40	12	8
TSS	BSK		na	10	mg/L				30	32		36	12	22	32
TOC	BSK		0.085	0.5	mg/L				3.1	3.2		3.6	2.6	2.2	1.8
E. coli	BSK	235		1.1	MPN				130	4.5		49	240	130	79
Fecal Coliform	BSK	400		1.1	MPN				130	4.5		49	240	130	79
Toxicity, minnow	ABC				96h				100	100		100	100	100	87.5
Toxicity, water flea	ABC				48h				100	100		100	100	100	100
Toxicity, algae	ABC				48h				100	100		100	100	100	100
2,4-D Acids & Salts	BSK														

