Livingston Dairy Consulting, Inc.

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

Manuel & Alda Lawrence Dairy WDID 5C16NC00111
12871 Kent Avenue, Hanford 93230

X	Annual Report
X	Water Analysis Samples
X	Manure Manifest
N/A	Facility / Land Map
N/A	CCA Nitrogen Retrofit Report

GEO Tracker Confirmation # **Date:**

Facility Info

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

Name of the Facility

Dairy Name:	Manuel & Alda Lawrence Dairy WDID 5C16NC00111
Facility Address:	12871 Kent Avenue, Hanford 93230
Original Operation Date:	8/18/2005
Facility APN's:	x028 x220 x001 xxxx
RWQCB Basin Plan Designation:	Tulare Lake Basin

☐ Check if any information has changed

Owner(s)

Owner(s) Name:	Manuel & Alda Lawrence
Mailing Address:	P.O. Box 1179, Tulare 93274
Home Phone Number:	559-752-1000
Cell Phone Number:	559-901-2310

☐ 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:	-	305	1,162	810	355
Number Under Roof	2,504	-	-	-	-
Maximum Number	2,504	305	1,162	810	355
Average Number	2,504	305	1,162	810	355
Average Live Weight (lbs)	1,400	1,450	950	630	

Average Milk Production: 72

Predominant Milk Cow Breed: Holstein

Manure Generated:

Total manure excreted by the herd:	9,657.13	@40% Moisture	*ton/yr*
Total nitrogen from manure:	392,331		*lbs*
	41,771		*lbs*
	120,793		*lbs*
Total salt from manure:	-		*lbs*

After Ammonia (30% loss applied)

274,631 *lbs per reporting period*

Process Wastewater Generated:

Process wastewater generated:	36,558,400	*gal*
Total nitrogen generated:	149,275	*lbs*
	86,168	*lbs*
	285,107	*lbs*
Total salt (TDS) generated:	2,267,754	*lbs*

List of Land Application Areas

Field Name	APN	APN Acres	Cropable Acres	Total Harvest	Type of Waste Applied
1N	x028 x220 x077 xxxx	159	77	2	P.W. & D.M.
1S	x028 x220 x077 xxxx		77	8	N/A
2	x028 x220 x076 xxxx	159	153	2	P.W. & D.M.
3	x028 x023 x010 xxxx	138	134	2	P.W. & D.M.
4	x028 x220 x001 xxxx	160	20	0	N/A
5 & 6 (Solar)	x028 x220 x001 xxxx		10	0	N/A
7	x028 x023 x009 xxxx	160	152	2	P.W. & D.M.
	Total Crop Acres		622.00		

List of Fresh Water Sources

Source Description	Type	Subsurface (Tile) Drainage Sources
Barn Well	**Ground Water**	**No**
Deep Well #1	**Ground Water**	**No**
Short Well #1	**Ground Water**	**No**
Deep Well #2	**Ground Water**	**No**
Short Well #2	**Ground Water**	**No**
New Well (Fld 2)	**Ground Water**	**No**
New Domestic	**Ground Water**	**No**
Canal	**Surface Water**	**no**

(WINTER) PLANT TISSUE ANALYSIS (Recorded As Received)										
Field	**Crop**	**Moist %**	**N%**	**TP %**	**TK%**	**Salt**	**TFS**	**Sample #:**	**Date:**	**Source**
1N	Wheat, Silage	64.60	0.48	0.10	0.64	-	7.41	5-11H49497	05/11/23	Valley Tech
1S	Alfalfa	8.60	2.71	0.33	3.20	-	12.70	9-14H65427	09/14/23	Valley Tech
2	Wheat, Silage	68.90	0.35	0.08	0.36	-	6.90	5-11H49497	05/11/23	Valley Tech
3	Wheat, Silage	65.10	0.56	0.09	0.64	-	8.66	5-11H49497	05/11/23	Valley Tech
4	W. Fallow	-	-	-	-	-	-	Fallow		-
5 & 6 (Solar)	W. Fallow	-	-	-	-	-	-	Solar		-
7	Wheat, Silage	68.40	0.39	0.08	0.38	-	10.30	5-11H49497	05/11/23	-

Detectable Lim Valley Tech	*0.10%*	*0.05%*	*0.01%*	*0.01%*	*0.05%*	
Dellavalle	*0.001%*	*0.01%*	*0.01%*	*0.003%*	*0.001%*	
Detectable Limits						
Valley Tech	*0.10%*	*0.05%*	*0.01%*	*0.01%*	*0.05%*	
Dellavalle	*0.001%*	*0.01%*	*0.01%*	*0.003%*	*0.001%*	

(SUMMER) PLANT TISSUE ANALYSIS (Recorded As Received)										
Field	**Crop**	**Moist %**	**N%**	**TP %**	**TK%**	**Salt**	**TFS**	**Sample #:**	**Date:**	**Source**
1N	Sorghum	72.50	0.27	0.07	0.65	-	3.38	9-26H66870	09/26/23	Valley Tech
1S	Alfalfa	-	-	-	-	-	-	See Winter		-
2	Corn, Silage	68.90	0.56	0.07	0.86	-	10.50	9-14H65426	09/14/23	Valley Tech
3	Sorghum	72.40	0.37	0.07	0.58	-	10.60	10-10H68661	10/10/23	Valley Tech
4	S. Fallow	-	-	-	-	-	-	Fallow		-
5 & 6 (Solar)	S. Fallow	-	-	-	-	-	-	Solar		-
7	Sorghum	74.30	0.32	0.06	0.51	-	10.60	10-10H68661	10/10/23	Valley Tech

Detectable Limits					
Valley Tech	*0.10%*	*0.05%*	*0.01%*	*0.01%*	*0.05%*
Dellavalle	*0.001%*	*0.01%*	*0.01%*	*0.003%*	*0.001%*

Winter Crops & Harvest

Field:	Crop	Plant Date	Harvest Date	Lab #	Moisture %	N (mg//kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS	Reporting Basis
1N	Wheat, Silage	11/1/22	4/28/23	5-11H49497	64.60	0.48	0.10	0.64	-	7.41	Dry Weight
1S	Alfalfa	10/31/18	10/1/23	9-14H65427	8.60	2.71	0.33	3.20	-	12.70	Dry Weight
2	Wheat, Silage	11/15/22	4/27/23	5-11H49497	68.90	0.35	0.08	0.36	-	6.90	Dry Weight
3	Wheat, Silage	11/5/22	4/29/23	5-11H49497	65.10	0.56	0.09	0.64	-	8.66	Dry Weight
4	W. Fallow			Fallow	-	-	-	-	-	-	
5 & 6 (Solar)	W. Fallow			Solar	-	-	-	-	-	-	
7	Wheat, Silage	11/22/23	5/11/23	5-11H49497	68.40	0.39	0.08	0.38	-	10.30	Dry Weight

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

Field:	Crop	Plant Date	Harvest Date	Lab #	Moisture %	N (mg//kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS	Reporting Basis
1N	Sorghum	5/20/23	9/26/23	9-26H66870	72.50	0.27	0.07	0.65	-	3.38	Dry Weight
1S	Alfalfa			See Winter	-	-	-	-	-	-	
2	Corn, Silage	6/1/23	9/14/23	9-14H65426	68.90	0.56	0.07	0.86	-	10.50	Dry Weight
3	Sorghum	5/21/23	10/10/23	10-10H68661	72.40	0.37	0.07	0.58	-	10.60	Dry Weight
4	S. Fallow			Fallow	-	-	-	-	-	-	
5 & 6 (Solar)	S. Fallow			Solar	-	-	-	-	-	-	
7	Sorghum	6/7/23	10/5/23	10-10H68661	74.30	0.32	0.06	0.51	-	10.60	Dry Weight

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

Well / Canal Analysis

General Minerals

Well Name/Number	NO3-N (mg/L)	EC (umhos/cm)	TDS (mg/L)	NH4-N (mg/L)	TN (mg/L)	Ca (mg/L)	Mg (mg/L)	Na (mg/L)	HCO3 (mg/L)	CO3 (mg/L)	SO4 (mg/L)	Cl (mg/L)	Lab #:	Date:	LAB
Barn Well	4.50	2,160	1,400	-	4.50	-	-	-	-	-	-	-	VI2340613	2/1/2023	FGL Enviromental
Deep Well #1	-	-	-	-	-	-	-	-	-	-	-	-	Used Canal		
Short Well #1	-	-	-	-	-	-	-	-	-	-	-	-	Used Canal		
Deep Well #2	-	-	-	-	-	-	-	-	-	-	-	-	Used Canal		
Short Well #2	-	-	-	-	-	-	-	-	-	-	-	-	Used Canal		
New Well (Fld 2)	-	-	-	-	-	-	-	-	-	-	-	-	Used Canal		
New Domestic	0.01	456	300	-	-	4.00	1.00	98.00	250.00	-	7.40	18.00	VI2344785	7/25/2023	FGL Enviromental
Canal	0.02	51	2	-	-	-	-	-	-	-	-	-	BSK	7/1/2023	Other

Detectable Limits

Dellavalle	*0.01*	*1*	*10*	*0.2*	*NR*	*0.1*	*0.1*	*0.15*	*3*	*0.9*	*0.03*	*0.03*
FGL Enviromental	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Valley Tech	*0.1*	*1*	*NR*	*NR*	*NR*	*NR*	*NR*	*NR*	*NR*	*NR*	*NR*	*NR*

Soil Analysis (Winter)

Fields:	0/1ft. NO3-N (mg/kg)	1/2 ft. NO3-N (mg/kg)	0/1 ft. Sol. P (mg/kg)	0/1 ft. K (mg/kg)	0/1 ft. EC (ds/m)	OM %	Lab #	Date	Source
1N	-	-	-	-	-	-			-
1S	-	-	-	-	-	-			-
2	-	-	-	-	-	-			-
3	-	-	-	-	-	-			-
4	-	-	-	-	-	-			-
5 & 6 (Solar)	-	-	-	-	-	-			-
7	-	-	-	-	-	-			-

Detectable Limits

Valley Tech	*0.1*	*0.1*				
DellaValle	*0.1*	*0.1*	*1.1*	*0.2*	*0.0015*	*0.0001%*

Soil Analysis (Summer)

Fields:	0/1ft. NO3-N (mg/kg)	1/2 ft. NO3-N (mg/kg)	0/1 ft. Sol. P (mg/kg)	0/1 ft. K (mg/kg)	0/1 ft. EC (ds/m)	OM %	Lab #	Date	Source
1N	-	-	-	-	-	-			-
1S	-	-	-	-	-	-			-
2	-	-	-	-	-	-			-
3	-	-	-	-	-	-			-
4	-	-	-	-	-	-			-
5 & 6 (Solar)	-	-	-	-	-	-			-
7	-	-	-	-	-	-			-

Detectable Limits

Valley Tech	*0.1*	*0.1*				
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: 5,200

Nutrient Import

No Dry manure nutient imports entered

No Process wastewater nutrient imports entered

Total Process Water Exported:

No Commerical or other nutrient imports entered

Field Name	Type of Manure Applied	As Is / Dry Weight	Source

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	458.0	538.0	61.5	936.0	1.0	-	-	-	-	-	-	-	-	10	6,570
2	334.0	395.0	159.0	656.0	1.0	-	-	-	-	-	-	-	-	8	5,200
3	230.0	235.0	80.1	342.0	1.0	-	0.0	97.6	231.0	0.0	31.2	68.6	4.4	9	5,970
4	216.0	240.0	54.1	307.0	1.0	-	-	-	-	-	-	-	-	-	3,650
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	10

				Inorg N	Org N	P2O5	K2O
Qtr	Sample #:	Sample Date:	Source	lbs / Ac In			
1	3-24L44744	3/24/2023	Valley Tech	104.0	18.1	31.9	255.6
2	5-11L49499	5/11/2023	Valley Tech	75.9	13.8	82.6	179.1
3	8-17L62129	8/17/2023	Valley Tech	52.4	1.1	41.6	93.4
4	10-3L67898	10/3/2023	Valley Tech	49.2	5.4	28.1	83.8

Description	Sample #:	Date:	As Is/ Dry Weight	Source	Material Type
Manure	5-11M49491	5/11/2023	Dry Weight	Valley Tech	Corral Solids
Manure	10-3M67854	10/3/2023	Dry Weight	Valley Tech	Corral Solids

Dry Manure: (As Recv'd)	TN %	TP %	TK %	Ca	Mg	Na	S	CL	Salt	TFS	Moisture %
Corral	0.78	0.27	0.69	-	-	-	-	-	-	-	46.00
Corral	0.44	0.16	0.57	0.78	0.29	0.49	0.14	0.26	-	87.60	22.60
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%	0.000%		0.001%	0.001%

Nutrient Applications

Field Name/Number: 1N **Acres:** 76.50

Date	Event / Source	Dry Manure Applied (tons/ac)	Moist. %	Chem Fert total lbs	Fresh Water Applied (ac-in/ac)	Lagoon Water Applied (ac-in/ac)	Lab Sample Data					Yield	
							N (lbs/Ac)	Total P (lbs/Ac)	Total K (lbs/Ac)	Salt (Lbs/Ac)	TFS %	Expected Yield (tons/ac)	Actual Yield (tons/ac)
	-	-	-	-	-	-	-	-	-	-	-		-
10/6/22	Canal	-	-	-	6.13	-	0.0	-	-	2	-		-
11/1/22	W. Planting	-	-	-	-	-	-	-	-	-	-		-
12/21/22	Canal	-	-	-	5.27	-	0.0	-	-	2	-		-
12/21/22	Process Water	-	-	-	-	1.32	112.6	18.4	279.4	1,961	-		-
2/1/23	Canal	-	-	-	6.34	-	0.0	-	-	2	-		-
3/20/23	Canal	-	-	-	5.34	-	0.0	-	-	2	-		-
3/20/23	Process Water	-	-	-	-	1 33	114.1	18.6	283.1	1,987	-		-
4/28/23	W. Harvest	-	-	-	-	-	(194.0)	(41.1)	(256.3)	-	7.41		20.00
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
5/3/23	Canal	-	-	-	6.52	-	0.0	-	-	2	-		-
5/20/23	S. Planting	-	-	-	-	-	-	-	-	-	-		-
6/10/23	Canal	-	-	-	5.37	-	0.0	-	-	2	-		-
6/10/23	Process Water	-	-	-	-	1.34	84.4	48.4	199.7	1,583	-		-
6/22/23	Canal	-	-	-	6.62	-	0.0	-	-	2	-		-
7/2/23	Canal	-	-	-	5.30	-	0.0	-	-	2	-		-
7/2/23	Process Water	-	-	-	-	1.33	49.6	24.1	102.8	1,794	-		-
8/8/23	Canal	-	-	-	6.52	-	0.0	-	-	2	-		-
9/26/23	S. Harvest	-	-	-	-	-	(109.7)	(28.0)	(263.2)	-	3.38		20.36
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
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	-	-	-	-	-	-	-	-	-	-	-		-
Totals:		**0.0**		**0**	**53.40**	**5.32**	**57**	**40**	**346**	**7,342**	**10.79**	**0**	**40.36**

Dry Weight
As Received

Field Name/Number: 1N **Acres:** 76.5

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	361.0	109.4	865.0	7341.9
Nutrients Removed at Harvest	-303.7	-69.1	-519.4	0.0
Nutrient Balance	57.3	40.4	345.6	7341.9

Winter Nitrogen Crop App / Use Ratio: 1.21 **Summer Nitrogen Crop App / Use Ratio:** 1.29

Field Name/Number: 1N **Acres:** 76.5

Winter Crop **Wheat, Silage**

Nutrient Summary :		**Applied**		**N**		
W. Manure App.		-	T/Ac	-	-	-
W. Comm Fert App.		-	lbs/Ac	-		
Process Water	Q1	2.7	Ac In /Ac	226.8	84.6	675.0
	Q2	-	Ac In /Ac	-	-	-
Well Water		-	Ac In /Ac	-		
Canal		23.1	Ac In /Ac	0.1		
Atm. Depos.		Yes		7.0		
W. Planting	11/1/22					
W. Harvest	4/28/23	20.0	T/Ac	(194.0)	(94.0)	(307.6)

Summer Crop **Sorghum**

Nutrient Summary :		**Applied**		**N**		
S. Manure App.		-	T/Ac	-	-	-
S. Comm Fert App.		-	lbs/Ac	-	-	-
Process Water	Q2	1.3	Ac In /Ac	84.4	110.8	239.6
	Q3	1.3	Ac In /Ac	49.6	55.1	123.3
	Q4	-	Ac In /Ac	-	-	-
Well Water		-	Ac In /Ac	7.661E-15		
Canal		30.3	Ac In /Ac	0.1		
Atm. Depos.		Yes		7.0		
S. Planting	5/20/23					
S. Harvest	9/26/23	20.4	T/Ac	(109.7)	(64.1)	(315.8)

Nutrient Applications

Field Name/Number: 1S

Acres: 76.50

							Lab Sample Data					Yield	
Date	Event / Source	Dry Manure Applied (tons/ac)	Moist. %	Chem Fert total lbs	Fresh Water Applied (ac-in/ac)	Lagoon Water Applied (ac-in/ac)	N (lbs/Ac)	Total P (lbs/Ac)	Total K (lbs/Ac)	Salt (Lbs/Ac)	TFS %	Expected Yield (tons/ac)	Actual Yield (tons/ac)
	-	-	-	-	-	-	-	-	-	-	-		-
10/31/18	W. Planting	-	-	-	-	-	-	-	-	-	-		-
2/9/23	Canal	-	-	-	5.27	-	0.0	-	-	2	-		-
3/5/23	Canal	-	-	-	5.54	-	0.0	-	-	2	-		-
4/10/23	Canal	-	-	-	5.37	-	0.0	-	-	2	-		-
5/1/23	Canal	-	-	-	5.51	-	0.0	-	-	2	-		-
6/15/23	Canal	-	-	-	5.20	-	0.0	-	-	2	-		-
7/7/23	Canal	-	-	-	5.61	-	0.0	-	-	2	-		-
8/9/23	Canal	-	-	-	5.44	-	0.0	-	-	2	-		-
9/5/23	Canal	-	-	-	5.30	-	0.0	-	-	2	-		-
10/1/23	W. Harvest	-	-	-	-	-	(465.3)	(56.6)	(550.2)	-	7.41		8.60
	-	-	-	-	-	-	-	-	-	-	-		-
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Totals:		0.0		0	43.25	0.00	(465)	(57)	(550)	13	7.41	0	8.60

Field Name/Number: 1S **Acres:** 76.50

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	0.2	0.0	0.0	12.9
Nutrients Removed at Harvest	-465.3	-24.7	-456.7	0.0
Nutrient Balance	-465.1	-24.7	-456.7	12.9

Winter Nitrogen Crop App / Use Ratio: 0.02 **Summer Nitrogen Crop App / Use Ratio:** #N/A

Field Name/Number: 1S **Acres:** 76.5

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		43.2	Ac In /Ac	0.2		
Atm. Depos.		Yes		7.0		
W. Planting	10/31/18					
W. Harvest	10/1/23	8.6	T/Ac	(465.3)	(129.6)	(660.3)

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

Nutrient Applications

Field Name/Number: 2 **Acres:** 153.00

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.	5.23	-	-	-	-	32.5	28.2	71.7	-	-		-
11/3/22	Canal	-	-	-	6.06	-	0.0	-	-	2	-		-
11/15/22	W. Planting	-	-	-	-	-	-	-	-	-	-		-
1/4/23	Canal	-	-	-	5.46	-	0.0	-	-	2	-		-
1/4/23	Process Water	-	-	-	-	1.36	85.8	19.0	289.5	2,032	-		-
2/15/23	Canal	-	-	-	6.01	-	0.0	-	-	2	-		-
3/29/23	Canal	-	-	-	6.05	-	0.0	-	-	2	-		-
4/27/23	W. Harvest	-	-	-	-	-	(99.3)	(21.8)	(101.0)	-	7.41		14.00
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
5/9/23	Canal	-	-	-	5.34	-	0.0	-	-	2	-		-
5/9/23	Process Water	-	-	-	-	1.33	114.1	48.1	198.4	1,573	-		-
6/1/23	S. Planting	-	-	-	-	-	-	-	-	-	-		-
6/16/23	Canal	-	-	-	5.30	-	0.0	-	-	2	-		-
6/16/23	Process Water	-	-	-	-	1.33	113.4	47.8	197.1	1,563	-		-
6/27/23	Canal	-	-	-	6.05	-	0.0	-	-	2	-		-
7/7/23	Canal	-	-	-	5.37	-	0.0	-	-	2	-		-
7/7/23	Process Water	-	-	-	-	1.34	114.9	24.4	104.1	1,818	-		-
8/11/23	Canal	-	-	-	6.00	-	0.0	-	-	2	-		-
9/14/23	S. Harvest	-	-	-	-	-	(251.0)	(29.4)	(389.8)	-	3.38		22.54
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Totals:		**5.2**		**0**	**51.64**	**5.37**	**111**	**116**	**370**	**7,001**	**10.79**	**0**	**36.54**

Field Name/Number: 2 **Acres:** 153.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	460.9	73.1	714.6	7001.0
Nutrients Removed at Harvest	-350.2	-22.3	-407.4	0.0
Nutrient Balance	110.7	50.8	307.3	7001.0

Winter Nitrogen Crop App / Use Ratio: 1.26 **Summer Nitrogen Crop App / Use Ratio:** 1.39

Field Name/Number: 2 **Acres:** 153

Winter Crop **Wheat, Silage**

Nutrient Summary :		Applied		N		
W. Manure App.		5.2	T/Ac	32.5	64.7	86.1
W. Comm Fert App.		-	lbs/Ac	-		
Process Water	Q1	1.4	Ac In /Ac	85.8	43.6	347.4
	Q2	-	Ac In /Ac	-	-	-
Well Water		-	Ac In /Ac	-		
Canal		23.6	Ac In /Ac	0.1		
Atm. Depos.		Yes		7.0		
W. Planting	11/15/22					
W. Harvest	4/27/23	14.0	T/Ac	(99.3)	(49.9)	(121.2)

Summer Crop **Corn, Silage**

Nutrient Summary :		Applied		N		
S. Manure App.		-	T/Ac	-	-	-
S. Comm Fert App.		-	lbs/Ac	-	-	-
Process Water	Q2	2.7	Ac In /Ac	227.5	219.5	474.6
	Q3	1.3	Ac In /Ac	114.9	55.8	124.9
	Q4	-	Ac In /Ac	-	-	-
Well Water		-	Ac In /Ac	(0.0)		
Canal		28.1	Ac In /Ac	0.1		
Atm. Depos.		Yes		7.0		
S. Planting	6/1/23					
S. Harvest	9/14/23	22.5	T/Ac	(251.0)	(67.4)	(467.7)

Nutrient Applications

Field Name/Number: 3 **Acres:** 134.00

Date	Event / Source	Dry Manure Applied (tons/ac)	Moist. %	Chem Fert total lbs	Fresh Water Applied (ac-in/ac)	Lagoon Water Applied (ac-in/ac)	Lab Sample Data					Yield	
							N (lbs/Ac)	Total P (lbs/Ac)	Total K (lbs/Ac)	Salt (Lbs/Ac)	TFS %	Expected Yield (tons/ac)	Actual Yield (tons/ac)
	-	-	-	-	-	-	-	-	-	-	-		-
10/13/22	Canal	-	-	-	6.31	-	0.0	-	-	2	-		-
11/5/22	W. Planting	-	-	-	-	-	-	-	-	-	-		-
1/15/23	Canal	-	-	-	5.56	-	0.0	-	-	2	-		-
1/15/23	Process Water	-	-	-	-	1.39	87.3	19.4	294.9	2,070	-		-
2/28/23	Canal	-	-	-	5.48	-	0.0	-	-	2	-		-
2/28/23	Process Water	-	-	-	-	1.37	86.1	19.1	290.7	2,041	-		-
3/20/23	Canal	-	-	-	6.37	-	0.0	-	-	2	-		-
4/29/23	W. Harvest	-	-	-	-	-	(181.4)	(29.5)	(208.6)	-	7.41		16.24
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
5/1/23	S. Manure App.	13.43	-	-	-	-	47.4	43.7	151.8	-	-		-
5/3/23	Canal	-	-	-	6.43	-	0.0	-	-	2	-		-
5/21/23	S. Planting	-	-	-	-	-	-	-	-	-	-		-
6/10/23	Canal	-	-	-	5.56	-	0.0	-	-	2	-		-
6/10/23	Process Water	-	-	-	-	1.39	118.9	50.1	206.7	1,638	-		-
6/22/23	Canal	-	-	-	6.51	-	0.0	-	-	2	-		-
7/2/23	Canal	-	-	-	6.45	-	0.0	-	-	2	-		-
7/12/23	Canal	-	-	-	6.35	-	0.0	-	-	2	-		-
10/10/23	S. Harvest	-	-	-	-	-	(156.3)	(31.7)	(245.6)	-	3.38		21.29
	-	-	-	-	-	-	-	-	-	-	-		-
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Totals:		**13.4**		**0**	**55.02**	**4.15**	**2**	**71**	**490**	**5,766**	**10.79**	**0**	**37.53**

Field Name/Number: 3 **Acres:** 134.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	340.0	57.7	783.7	5765.8
Nutrients Removed at Harvest	-337.7	-26.7	-377.0	0.0
Nutrient Balance	2.3	31.0	406.7	5765.8

Winter Nitrogen Crop App / Use Ratio: 1.00 **Summer Nitrogen Crop App / Use Ratio:** 1.11

Field Name/Number: 3 **Acres:** 134

Winter Crop **Wheat, Silage**

Nutrient Summary :		**Applied**		**N**		
W. Manure App.		-	T/Ac	-	-	-
W. Comm Fert App.		-	lbs/Ac	-		
Process Water	Q1	2.8	Ac In /Ac	173.4	88.1	702.7
	Q2	-	Ac In /Ac	-	-	-
Well Water		-	Ac In /Ac	-		
Canal		23.7	Ac In /Ac	0.1		
Atm. Depos.		Yes		7.0		
W. Planting	11/5/22					
W. Harvest	4/29/23	16.2	T/Ac	(181.4)	(67.5)	(250.3)

Summer Crop **Sorghum**

Nutrient Summary :		**Applied**		**N**		
S. Manure App.		13.4	T/Ac	47.4	100.0	182.2
S. Comm Fert App.		-	lbs/Ac	-	-	-
Process Water	Q2	1.4	Ac In /Ac	118.9	114.7	248.0
	Q3	-	Ac In /Ac	-	-	-
	Q4	-	Ac In /Ac	-	-	-
Well Water		-	Ac In /Ac	(0.0)		
Canal		31.3	Ac In /Ac	0.1		
Atm. Depos.		Yes		7.0		
S. Planting	5/21/23					
S. Harvest	10/10/23	21.3	T/Ac	(156.3)	(72.7)	(294.7)

Nutrient Applications

Field Name/Number: 4 **Acres:** 20.00

							Lab Sample Data					Yield	
Date	Event / Source	Dry Manure Applied (tons/ac)	Moist. %	Chem Fert total lbs	Fresh Water Applied (ac-in/ac)	Lagoon Water Applied (ac-in/ac)	N (lbs/Ac)	Total P (lbs/Ac)	Total K (lbs/Ac)	Salt (Lbs/Ac)	TFS %	Expected Yield (tons/ac)	Actual Yield (tons/ac)
	-	-	-	-	-	-	-	-	-	-	-		-
	W. Fallow	-	-	-	-	-	-	-	-	-	-		-
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	S. Fallow	-	-	-	-	-	-	-	-	-	-		-
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Totals:		0.0		0	0.00	0.00	-	-	-	-	0.00	0	0.00

Field Name/Number: 4 **Acres:** 20.00

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

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

Field Name/Number: 4 **Acres:** 20

Winter Crop **W. Fallow**

Nutrient Summary :		**Applied**		**N**		
W. Manure App.		-	T/Ac	-	-	-
W. Comm Fert App.		-	lbs/Ac	-		
Process Water	Q1	-	Ac In /Ac	-	-	-
	Q2	-	Ac In /Ac	-	-	-
Well Water		-	Ac In /Ac	-		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
W. Planting	#N/A					
W. Harvest	1/1/2000	#N/A	T/Ac	#N/A	#N/A	#N/A

Summer Crop **S. Fallow**

Nutrient Summary :		**Applied**		**N**		
S. Manure App.		-	T/Ac	-	-	-
S. Comm Fert App.		-	lbs/Ac	-	-	-
Process Water	Q2	-	Ac In /Ac	-	-	-
	Q3	-	Ac In /Ac	-	-	-
	Q4	-	Ac In /Ac	-	-	-
Well Water		-	Ac In /Ac	-		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
S. Planting	#N/A					
S. Harvest	-	#N/A	T/Ac	#N/A	#N/A	#N/A

Nutrient Applications

Field Name/Number: 5 & 6 (Solar) **Acres:** 10.00

Date	Event / Source	Dry Manure Applied (tons/ac)	Moist. %	Chem Fert total lbs	Fresh Water Applied (ac-in/ac)	Lagoon Water Applied (ac-in/ac)	Lab Sample Data N (lbs/Ac)	Total P (lbs/Ac)	Total K (lbs/Ac)	Salt (Lbs/Ac)	TFS %	Yield Expected Yield (tons/ac)	Actual Yield (tons/ac)
	-	-	-	-	-	-	-	-	-	-	-		-
	W. Fallow	-	-	-	-	-	-	-	-	-	-		-
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	S. Fallow	-	-	-	-	-	-	-	-	-	-		-
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Totals:		0.0		0	0.00	0.00	-	-	-	-	0.00	0	0.00

Field Name/Number: 5 & 6 (Solar) **Acres:** 10.00

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

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

Field Name/Number: 5 & 6 (Solar) **Acres:** 10

Winter Crop	**W. Fallow**					
Nutrient Summary :		**Applied**		**N**		
W. Manure App.		-	T/Ac	-	-	-
W. Comm Fert App.		-	lbs/Ac	-		
Process Water	Q1	-	Ac In /Ac	-	-	-
	Q2	-	Ac In /Ac	-	-	-
Well Water		-	Ac In /Ac	-		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
W. Planting	#N/A					
W. Harvest	1/1/2000	#N/A	T/Ac	#N/A	#N/A	#N/A

Summer Crop	**S. Fallow**					
Nutrient Summary :		**Applied**		**N**		
S. Manure App.		-	T/Ac	-	-	-
S. Comm Fert App.		-	lbs/Ac	-	-	-
Process Water	Q2	-	Ac In /Ac	-	-	-
	Q3	-	Ac In /Ac	-	-	-
	Q4	-	Ac In /Ac	-	-	-
Well Water		-	Ac In /Ac	-		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
S. Planting	#N/A					
S. Harvest	-	#N/A	T/Ac	#N/A	#N/A	#N/A

Nutrient Applications

Field Name/Number: 7 **Acres:** 152.00

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)
11/7/23	Canal				6.19		0.0			2			
11/22/23	W. Planting												
1/2/23	Canal				5.67		0.0			2			
1/2/23	Process Water					1.42	89.1	19.8	300.7	2,111			
2/20/23	Canal				6.12		0.0			2			
3/30/23	Canal				6.16		0.0			2			
5/11/23	W. Harvest						(96.2)	(20.3)	(93.9)		7.41		12.38
5/20/23	Canal				6.38		0.0			2			
6/7/23	S. Planting												
6/27/23	Canal				6.31		0.0			2			
7/12/23	Canal				5.27		0.0			2			
7/12/23	Process Water					1.32	112.6	23.9	102.1	1,782			
7/24/23	Canal				6.40		0.0			2			
8/7/23	Canal				6.37		0.0			2			
10/5/23	S. Harvest						(86.7)	(17.2)	(137.0)		3.38		13.39
Totals:		**0.0**		**0**	**54.87**	**2.73**	**19**	**6**	**172**	**3,909**	**10.79**	**0**	**25.77**

Field Name/Number: 7 **Acres:** 152.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	201.9	19.1	334.4	3909.5
Nutrients Removed at Harvest	-183.0	-16.4	-191.6	0.0
Nutrient Balance	19.0	2.7	142.7	3909.5

Winter Nitrogen Crop App / Use Ratio: 1.00 **Summer Nitrogen Crop App / Use Ratio:** 1.38

Field Name/Number: 7 **Acres:** 152

Winter Crop **Wheat, Silage**

Nutrient Summary :		**Applied**		**N**		
W. Manure App.		-	T/Ac	-	-	-
W. Comm Fert App.		-	lbs/Ac	-		
Process Water	Q1	1.4	Ac In /Ac	89.1	45.2	360.8
	Q2	-	Ac In /Ac	-	-	-
Well Water		-	Ac In /Ac	-		
Canal		17.9	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
W. Planting	11/22/23					
W. Harvest	5/11/23	12.4	T/Ac	(96.2)	(46.6)	(112.7)

Summer Crop **Sorghum**

Nutrient Summary :		**Applied**		**N**		
S. Manure App.		-	T/Ac	-	-	-
S. Comm Fert App.		-	lbs/Ac	-	-	-
Process Water	Q2	-	Ac In /Ac	-	-	-
	Q3	1.3	Ac In /Ac	112.6	54.8	122.5
	Q4	-	Ac In /Ac	-	-	-
Well Water		-	Ac In /Ac	0.0		
Canal		30.7	Ac In /Ac	0.1		
Atm. Depos.		Yes		7.0		
S. Planting	6/7/23					
S. Harvest	10/5/23	13.4	T/Ac	(86.7)	(39.4)	(164.4)

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".

The facility is currently undergoing various projects to bring the facility into compliance and properly expand the facility. Herd numbers are reported higher than permitted, currently the General order does not allow for herd expansion. The facility is undergoing the construction of a digester to allow for the permitted expansion of the herd. In the meantime, the facility is operating within an acceptable nitrogen ratio balance and is to the best of its abilities operating in accordance with environmental impact standards implemented by the General Order. The facility submitted a work plan for the liner replacement of a lined pond condemned by the RWQCB. The facility will be in full compliance after the completion of these underway projects.

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 durging 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 faciltiy 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 repoting 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.*

Alda M. Lawrence

Signature of Owner of Facility

Signature of Operator of Facility

Manuel & Alda Lawrence

Print Name

Same as owner

Print Name

5/9/2024

Date

Date

Manuel & Alda Lawrence

FGL ENVIRONMENTAL AGRICULTURAL
Analytical Chemists

February 28, 2023

Lab No. : **VI 2340613**
Customer No. : **4018505**

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

Laboratory Report

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

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

Case Narrative

This Case Narrative pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab No.	Matrix
Barn	02/01/2023	02/01/2023	VI 2340613-001	DW

Sampling and Receipt Information:

The Sample was received in acceptable condition and within temperature requirements, unless noted on the Condition Upon Receipt (CUR) form. The Sample was received, prepared and analyzed within the method specified holding times. 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.** FGL Digitally signed by Kelly A. Dunnahoo, B.S. Title: Laboratory Director Date: 2023-02-28

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February 28, 2023

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

Description : Barn
Project : W-6 Manuel & Alda Lawrence

Lab No. : VI 2340613-001
Customer No. : 4018505

Sampled On : February 1, 2023 at 06:35
Sampled By : Marlene & Kaylin
Received On : February 1, 2023 at 14:04
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	UI	02/14/2023	10:47	sta	EPA 351.2	02/19/2023	21:29	lcr
Nitrate Nitrogen	4.5	0.4	mg/L	10	1		02/02/2023	15:00	lfs	SM 4500-NO3 F	02/02/2023	16:54	lfs
Nitrogen, Total as Nitrogen	4.5	0.5	mg/L		1	I	02/14/2023	10:47	sta	EPA 351.2	02/19/2023	21:29	lcr
Nitrate + Nitrite as N	4.5	0.4	mg/L	10	1		02/02/2023	15:00	lfs	SM 4500-NO3 F	02/02/2023	16:54	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	UI	02/14/2023	10:47	sta	EPA 351.2	02/19/2023	21:29	lcr
Conductivity	2160	1	umhos/cm	1600[2]	1		02/09/2023	14:28	sta		02/09/2023	14:28	sta
Solids, Total Dissolved (TDS)	1400	20	mg/L	1000[2]	1		02/03/2023	11:43	ctl	SM 2540 C	02/06/2023	12:15	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
MCL = Maximum Contamination Level. 2 - Secondary Standard. 3 - CDPH Notification Level. AL = Regulatory Action Level.

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February 28, 2023

Livingston Dairy Consulting, Inc.

Lab No. : VI 2340613
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	Blank	umhos/cm		ND	<1	
		(VI 2340831-003)	Dup	umhos/cm		1%	5	
Solids, Total Dissolved	2540CE	02/03/2023:201214CTL	Blank	mg/L		ND	<20	
			LCS	mg/L	990.8	104 %	90-110	
		(VI 2340617-001)	Dup	mg/L		1.1%	5	
		(VI 2340617-001)	Dup	mg/L		1.5%	5	
Nitrogen, Total Kjeldahl	351.2	02/14/2023:201629STA	Blank	mg/L		ND	<0.5	
			LCS	mg/L	12.00	88.1%	73-124	
			MS	mg/L	12.00	62.8%	54-136	
		(VI 2340618-001)	MSD	mg/L	12.00	58.3%	54-136	
			MSRPD	mg/L	12.00	7.6%	≤27	
			MS	mg/L	12.00	47.0%	<Â¼	
		(VI 2340608-002)	MSD	mg/L	12.00	33.6%	54-136	435
			MSRPD	mg/L	12.00	34.7%	≤27	435
Nitrate + Nitrite as N	4500NO3F	02/02/2023:201191LFS	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	106%	80-120	
			MS	mg/L	5.609	102%	66-125	
		(SP 2301608-001)	MSD	mg/L	5.609	102%	66-125	
			MSRPD	mg/L	5.609	0.0%	≤30.4	
Nitrate Nitrogen	4500NO3F	02/02/2023:201191LFS	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	106%	80-120	
			MS	mg/L	5.609	102%	66-125	
		(SP 2301608-001)	MSD	mg/L	5.609	102%	66-125	
			MSRPD	mg/L	5.609	0.0%	≤30.4	

Definition

Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.

DQO : Data Quality Objective - This is the criteria against which the quality control data is compared.

Dup : Duplicate Sample - A random sample with each batch is prepared and analyzed in duplicate. The relative percent difference is an indication of precision for the preparation and analysis.

LCS : Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.

MS : Matrix Spikes - A random sample is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.

MSD : Matrix Spike Duplicate of MS/MSD pair - A random sample duplicate is spiked with a known amount of analyted. The recoveries are an indication of how that sample matrix affects analyte recovery.

MSRPD : MS/MSD Relative Percent Difference (RPD) - The MS relative percent difference is an indication of precision for the preparation and analysis.

ND : Non-detect - Result was below the DQO listed for the analyte.

Explanation

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

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FGL ENVIRONMENTAL AGRICULTURAL
Analytical Chemists

Special

CHAIN OF CUSTODY

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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: **W-6** Manuel & Alda Lawrence

Purchase Order Number:

Quote Number: **VI 20210208-01**

Sampler(s) Marlene & Kaylin

Sampling Fee: _____ Pickup Fee: _____

Compositor Setup Date: ___/___/___ Time: ___/___

Lab Number: **VI** 2346063 **4-18505**

Samp Num	Location Description	Date Sampled	Time Sampled	Method of Sampling: Composite(C) Grab(G)	**SEE REVERSE SIDE** 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 16oz(P)	Sampling-W-6 - Total N - Split Bottle ***VI Lab to Split for Total N*** 8oz(P)-H2SO4								
1	Barn	2/1	6:35AM	G	DW	P			1	1								
2				G					1	1								
3				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:	Time:	Relinquished	Date:	Time:	Relinquished	Date:	Time:
Marlene	2/1/23	2:04				GLS	2/2/23	1140
Received By:	**Date:**	**Time:**	**Received By:**	**Date:**	**Time:**	**Received By:**	**Date:**	**Time:**
	2/1/23	1404		2/1	1720		/	/

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Inter-Laboratory Condition Upon Receipt (Attach to COC)

Sample Receipt at: STK CC CH VI

1. Number of ice chests/packages received: 1 Shipping tracking # GTC
2. Were samples received in a chilled condition? Temps: Yes 4.9 / ____ / ____ / ____ / ____
   Surface water SWTR bact samples: A sample that has a temperature upon receipt of >10° C, whether iced or not, should be flagged unless the time since sample collection has been less than two hours.

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

Sign and date the COC, place in a ziplock and put in the same ice chest as the samples.
Sample Receipt Review completed by (initials): DA

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: 558732941 945 933

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

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

Sample Verification, Labeling and Distribution:

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

Attach labels to the containers and include a copy of the COC for lab delivery.
Sample Receipt, Login and Verification completed by (initials): 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 c contacts)

(4018505)
Livingston Dairy Consulting, Inc.
VI 2340613
mdc 02/02/2023 12:38:58
VI 2340613

M+A Lawrence

FGL ENVIRONMENTAL AGRICULTURAL
Analytical Chemists

August 10, 2023

Lab No. : **VI 2344785**
Customer No. : **4018505**

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

Laboratory Report

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

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

Case Narrative

This Case Narrative pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab No.	Matrix
New Dom	07/25/2023	07/25/2023	VI 2344785-001	DW

Sampling and Receipt Information:

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

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

Test Summary

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

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

KD: EHB

Approved By **Kelly A. Dunnahoo, B.S.** Digitally signed by Kelly A. Dunnahoo, B.S.
Title: Laboratory Director
Date: 2023-08-10

Page 1 of 4

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August 10, 2023

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

Lab No. : VI 2344785-001
Customer No. : 4018505

Sampled On : July 25, 2023 at 05:52
Sampled By : Marlene/Noreen
Received On : July 25, 2023 at 08:30
Matrix : Drinking Water

Description : New Dom
Project : W-4 M & A Lawence

Sample Results - Inorganic

Constituent	Result	RL	Units	MCL/AL	Dil.	DQF	Sample Preparation			Sample Analysis			
							Date	Time	Who	Method	Date	Time	Who
Dairy Analysis													
Alkalinity (as CaCO3)	200	10	mg/L		1		07/29/2023	18:17	amm	SM 4500-H+B	07/30/2023	07:31	amm
Bicarbonate	250	10	mg/L		1		07/29/2023	18:17	amm	SM 4500-H+B	07/30/2023	07:31	amm
Carbonate	ND	10	mg/L		1	U	07/29/2023	18:17	amm	SM 4500-H+B	07/30/2023	07:31	amm
Hydroxide	ND	10	mg/L		1	U	07/29/2023	18:17	amm	SM 4500-H+B	07/30/2023	07:31	amm
Chloride	18	1	mg/L	500[2]	1		07/27/2023	10:13	ldm	EPA 300.0	07/27/2023	11:07	ldm
Nitrate Nitrogen	ND	0.1	mg/L	10	1	U	07/26/2023	10:51	ldm	EPA 300.0	07/26/2023	18:06	ldm
Conductivity	456	1	umhos/cm	1600[2]	1		07/29/2023	18:17	amm	SM 4500-H+B	07/30/2023	07:31	amm
Sulfate	7.4	0.5	mg/L	500[2]	1		07/27/2023	10:13	ldm	EPA 300.0	07/27/2023	11:07	ldm
Solids, Total Dissolved (TDS)	300	20	mg/L	1000[2]	1		07/27/2023	12:15	ctl	SM 2540 C	07/28/2023	11:20	ctl
Calcium	4	1	mg/L		1		07/28/2023	04:15	ejc	EPA 200.7	07/28/2023	16:02	ac
Magnesium	1	1	mg/L		1		07/28/2023	04:15	ejc	EPA 200.7	07/28/2023	16:02	ac
Sodium	98	1	mg/L		1		07/28/2023	04:15	ejc	EPA 200.7	07/28/2023	16:02	ac

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.

Page 2 of 4

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TEL: (559)734-9473
FAX: (559)734-8435
CA ELAP Certification No. 2810

August 10, 2023

Livingston Dairy Consulting, Inc.

Lab No. : VI 2344785
Customer No. : 4018505

Quality Control - Metals

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Metals								
Calcium	200.7	07/28/2023:208342EJC	Blank	mg/L		ND	<1	
			LCS	mg/L	12.00	94.4%	85-115	
			MS	mg/L	12.00	128%	<¼	406
		(SP 2312806-001)	MSD	mg/L	12.00	45.8%	<1/4	
			MSRPD	mg/L		6.8%	≤20.0	
			MS	mg/L	12.00	126%	<¼	406
		(SP 2312805-002)	MSD	mg/L	12.00	81.7%	75-125	
			MSRPD	mg/L		3.5%	≤20.0	
Magnesium	200.7	07/28/2023:208342EJC	Blank	mg/L		ND	<1	
			LCS	mg/L	12.00	96.3%	85-115	
			MS	mg/L	12.00	97.2%	75-125	
		(SP 2312806-001)	MSD	mg/L	12.00	79.3%	75-125	
			MSRPD	mg/L		4.3%	≤20	
			MS	mg/L	12.00	104%	75-125	
		(SP 2312805-002)	MSD	mg/L	12.00	92.3%	75-125	
			MSRPD	mg/L		2.8%	≤20	
Sodium	200.7	07/28/2023:208342EJC	Blank	mg/L		ND	<1	
			LCS	mg/L	12.00	96.3%	85-115	
			MS	mg/L	12.00	143%	<¼	406
		(SP 2312806-001)	MSD	mg/L	12.00	28.2%	<1/4	
			MSRPD	mg/L		8.0%	≤20.0	
			MS	mg/L	12.00	142%	<¼	406
		(SP 2312805-002)	MSD	mg/L	12.00	72.2%	<1/4	
			MSRPD	mg/L		4.6%	≤20.0	

Definition

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

Explanation

406 : Matrix Spike (MS) not within the Acceptance Range (AR) because of high analyte concentration in the sample. Data was accepted based on the LCS or CCV recovery.

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August 10, 2023

Livingston Dairy Consulting, Inc.

Lab No. : VI 2344785
Customer No. : 4018505

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
Alkalinity (as CaCO3)	2320B	07/29/2023:208395AMM	ND	mg/L		0.9%	10	406
Bicarbonate	2320B	(STK2339871-001)	Dup	mg/L		0.8%	10	
E. C.	2320B	(STK2339871-001)	Dup	umhos/cm		0.2%	5	
Solids, Total Dissolved	2540CE	07/27/2023:208315CTL	Blank	mg/L		ND	<20	
			LCS	mg/L	991.5	98.1%	90-110	
		(SP 2312760-002)	Dup	mg/L		1.71%	5	
		(SP 2312760-002)	Dup	mg/L		0.07%	5	
Chloride	300.0	07/27/2023:208410LDM	Blank	mg/L		ND	<1	
			LCS	mg/L	25.00	101 %	90-110	
			MS	mg/L	50.00	104 %	85-121	
		(STK2339261-001)	MSD	mg/L	50.00	98.9 %	85-121	
			MSRPD	mg/L	10.00	4.6%	≤19	
			MS	mg/L	50.00	102 %	85-121	
		(VI 2344808-001)	MSD	mg/L	50.00	97.6 %	85-121	
			MSRPD	mg/L	10.00	3.8%	≤19	
Nitrate Nitrogen	300.0	07/26/2023:208265LDM	Blank	mg/L		ND	<0.4	
			LCS	mg/L	20.00	99.8 %	90-110	
			MS	mg/L	40.00	98.2 %	85-119	
		(STK2339472-001)	MSD	mg/L	40.00	95.9 %	85-119	
			MSRPD	mg/L	10.00	1.8%	≤19	
			MS	mg/L	40.00	105 %	85-119	
		(STK2339570-001)	MSD	mg/L	40.00	102 %	85-119	
			MSRPD	mg/L	10.00	3.2%	≤19	
Sulfate	300.0	07/27/2023:208410LDM	Blank	mg/L		ND	<0.5	
			LCS	mg/L	50.00	102 %	90-110	
			MS	mg/L	100.0	105 %	82-124	
		(STK2339261-001)	MSD	mg/L	100.0	99.6 %	82-124	
			MSRPD	mg/L	10.00	4.9%	≤23	
			MS	mg/L	100.0	104 %	82-124	
		(VI 2344808-001)	MSD	mg/L	100.0	99.1 %	82-124	
			MSRPD	mg/L	10.00	4.0%	≤23	

Definition

Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.

Dup : Duplicate Sample - A random sample with each batch is prepared and analyzed in duplicate. The relative percent difference is an indication of precision for the preparation and analysis.

LCS : Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.

MS : Matrix Spikes - A random sample is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.

MSD : Matrix Spike Duplicate of MS/MSD pair - A random sample duplicate is spiked with a known amount of analyted. The recoveries are an indication of how that sample matrix affects analyte recovery.

MSRPD : MS/MSD Relative Percent Difference (RPD) - The MS relative percent difference is an indication of precision for the preparation and analysis.

ND : Non-detect - Result was below the DQO listed for the analyte.

Explanation

406 : Matrix Spike (MS) not within the Acceptance Range (AR) because of high analyte concentration in the sample. Data was accepted based on the LCS or CCV recovery.

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FGL ENVIRONMENTAL AGRICULTURAL
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Laboratory Copy (1 of 3)

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-4 M&A Lawrence

Purchase Order Number:

Quote Number: **VI 20210208-01**

Sampler(s) Marlene & Noreen

Sampling Fee: _____ Pickup Fee: _____

Compositor Setup Date: ___/___/___ Time: ___/___

Lab Number: **VI** 2344785 **4-18505**

42085:02/01/2021

TEST DESCRIPTION - See Reverse side for Container, Preservative and Sampling information

Samp Num	Location Description	Date Sampled	Time Sampled	Method of Sampling: Composite(C) Grab(G)	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-4-Alk. (CaCO3),Cl,Conductivity,NO3-N,TDS,SO4,Ca,Na,Mg 16oz(P)
1	NEW DOM	7/25	5:52AM	G	DW	P			1
2				G					1
3				G					1
4				G					1
5				G					1
6				G					1
7				G					1
8				G					1
9				G					1
10				G					1

Remarks:

Relinquished	Date:	Time:	Relinquished	Date:	Time:	Relinquished	Date:	Time:
Marlene	7/25/23	8:30AM	AH	7/25	10	GS	7/26/23	1140
Received By:	**Date:**	**Time:**	**Received By:**	**Date:**	**Time:**	**Received By:**	**Date:**	**Time:**
AH	7/25/23	8:30	CW	7/25	10	Ellen	7/26/23	1140.

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Fax: (559) 734-8435

KL 7.9°C

1140

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: RA / 2.9C / / /
   Surface water SWTR bact samples: A sample that has a temperature upon receipt of >10° C, whether iced or not, should be flagged unless the time since sample collection has been less than two hours.

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

Sign and date the COC, place in a ziplock and put in the same ice chest as the samples.
Sample Receipt Review completed by (initials): MDH

Sample Receipt at SP:

1. Were samples received in a chilled condition? Temps: 5 / 5 / / / /
   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: 559188164 5 + 559828652 6

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

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

Sample Verification, Labeling and Distribution:

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

Attach labels to the containers and include a copy of the COC for lab delivery.
Sample Receipt, Login and Verification completed by (initials): JL

Discrepancy Documentation:

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

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

2. Person Contacted: _____
   Initiated By: _____
   Problem:
   Resolution:

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

(4018505)
Livingston Dairy Consulting, Inc.
VI 2344785
cda 07/25/2023 09:31:49
VI 2344785
2344785

2023 KINGS RIVER WATERSHED CANAL RESULTS

LEMOORE WEIR

					Sample Month and Results											
Constituent	Lab	BPO	RL	Units	January	February	March	April	May	June	July	August	September	October	November	December
Physical Parameters/General Chemistry																
Flow	KRWA			cfs	0	0	0	0	0	45	0	0	0	0	0	0
EC	Field	700		umhos/cm						51.3						
pH	Field	6.5-8.3		pH						7.5						
Dissolved Oxygen	Field	5/7		mg/L						9.44						
Temperature	Field	Δ < 5º 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						
Pathogens																
E. Coli	BSK	320		MPN						46						
Fecal Coliform	BSK	400		MPN/100mL						46						
Nutrients																
Nitrate (+ Nitrite) - N	BSK	10	0.05	mg/L						0.02						
Total Kjeldahl Nitrogen	BSK		0.5	mg/L						0.17						
Ammonia - N	BSK	chart	0.1	mg/L						ND						
Unionized Ammonia	BSK	chart	0.0015	mg/L						ND						
Orthophosphate - P	BSK	-	0.01	mg/L						0.0069						
Phosphorus	BSK		0.1	mg/L						0.014						
Water Column Toxicity																
Toxicity, minnow	PER	> 80%	(96h test)	% survival						100						
Toxicity, water flea	PER	> 80%	(48h test)	% survival						100						
Toxicity, algae	PER		(48h test)	cells/mL						4800000						
Toxicity, algae (control)	PER		(48h test)	cells/mL						2840000						

Livingston Dairy Consulting, Inc.

FIELD ACTIVITY REPORT

Facility Name: Manuel & Alda Lawrence Dairy
12871 Kent 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:

Date	Well Name	Time	PH	Temp	Ammonium
2/1	Barn	6:35	6	63	Ø
7/25	New Dairy	6:52	7	64	Ø

Sample Preservation Method: (Circle one) **Ice Chest Refrigerator Ice Pack**

Manure/Process Wastewater Tracking Manifest For Existing Milk Cow Dairies

Instructions:

1) Complete one manifest for each hauling event, for each destination. A hauling event may last for several days, as long as the manure is being hauled to the same destination.
2) If there are multiple destinations, **complete a separate form for each destination.**
3) The operator must obtain the signature of the hauler upon completion of each manure-hauling event.
4) The operator shall submit copies of manure/process wastewater tracking manifest(s) with the Annual Monitoring Report for Existing Milk Cow Dairies.

Operator Information:

Name of Operator: Manuel & Alda Lawrence

Name of Dairy Facility: M&A Lawrence Dairy

Facility Address: 12823 Kent Ave. Hanford 93230
Number and Street / City / Zip Code

Contact Person Name: Jonathan 559-901-0326
Name / Phone Number

Manure/Process Wastewater Hauler Information:

Name of Hauling Company/Person: _____

Address of Hauling Company /Person: _____
Number and Street / City / Zip Code

Contact Person: _____
Name / Phone Number

Destination Information:

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

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

Jonathan Lawrence _____
Name / Number and Street / City / Zip Code / Phone Number

Manure/Process Wastewater Destination Address or Assessor's Parcel Number:

12th Ave. & Jackson Ave. 93230
Number and Street / City / Zip Code / Assessor's Parcel Number

Dates Hauled: Entire year of 2023

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: 5200 (Tons) or Cubic Yards (indicate which units used)
- Manure Moisture % : _____
- Method used to determine amount of manure: _____

Enter the amount of process wastewater hauled in gallons and the method used to determine the amount.

- Process Wastewater: _____ Gallons
- Method used to determine volume of process wastewater: _____

Written Agreement:

Does the Operator have a written agreement (in compliance with Land Application Specification C.2 of Waste Discharge Requirements General Order No. R5-2007-0035) with any party that receives process wastewater from the Operator for its own use? (please check one)

_____ Yes _____ No

If the answer is no, the Operator agrees to have such a written agreement with any such party for any process wastewater transferred after **31 December 2007** to such party.

_____ (Operator shall provide initials here to acknowledge this requirement).

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: Manuel Lawrence Date: _____

Hauler's Signature: _____ Date: _____