Livingston Dairy Consulting, Inc.

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

West Creek Dairy WDID 5C16NC00033
8409 5th Ave. Hanford, CA 93230

- [X] Annual Report
- [X] Water Analysis Samples
- [X] Manure Manifest
- [N/A] Facility / Land Map
- [X] 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: West Creek Dairy WDID 5C16NC00033

Facility Address: 8409 5th Ave. Hanford, CA 93230

Original Operation Date: 5/5/2005

Facility APN's: x140 x120 x026 xxxx

RWQCB Basin Plan Designation:

☐ Check if any information has changed

Owner(s)

Owner(s) Name: Ben Dragt

Mailing Address: 8157 5th Ave. Hanford, CA 93230

Home Phone Number: 559-280-9363

Cell Phone Number:

☐ Check if any information has changed

Operator(s)

Operator(s) Name: Same as owner

Mailing Address:

Home Phone Number:

Cell Phone Number:

☐ Check if any information has changed

Herd Information

	Milk Cows	Dry Cows	Bred Heifers (12-24 mo)	Heifers (3-12 mo)	Calves (0-3 mo)
Open Confinement:	-	193	643	540	280
Number Under Roof	1,389	-	-	-	-
Maximum Number	1,389	193	643	540	280
Average Number	1,389	193	643	540	280
Average Live Weight (lbs)	1,400	1,450	950	630	

Average Milk Production: 68

Predominant Milk Cow Breed: Holstein

Manure Generated:

Total manure excreted by the herd:	5,759.43	@40% Moisture	*ton/yr*
Total nitrogen from manure:	632,389		*lbs*
	30,828		*lbs*
	105,697		*lbs*
Total salt from manure:	-		*lbs*

After Ammonia (30% loss applied)

442,672 *lbs per reporting period*

Process Wastewater Generated:

Process wastewater generated:	20,279,400	*gal*
Total nitrogen generated:	67,749	*lbs*
	28,137	*lbs*
	115,739	*lbs*
Total salt (TDS) generated:	545,759	*lbs*

List of Land Application Areas

Field Name	APN	APN Acres	Cropable Acres	Total Harvest	Type of Waste Applied
11A	x014 x120 x026 xxxx	159	11	2	P.W. & D.M.
11B	x014 x120 x026 xxxx		33	2	P.W. & D.M.
11C	x014 x120 x026 xxxx		32	2	P.W. & D.M.
12	x014 x120 x028 xxxx, x014 x120 x029 xxxx	146	145	8	N/A
13	x014 x120 x031 xxxx	59	52	2	P.W. & D.M.
14	x014 x120 x030 xxxx, x014 x120 x032 xxxx	151	67	0	N/A
15	x014 x120 x032 xxxx		35	2	P.W. & D.M.
16	x014 x110 x049 xxxx, x014 x110 x050 xxxx	44	56	1	P.W. & D.M.
	Total Crop Acres		431.00		

List of Fresh Water Sources

Source Description	Type	Subsurface (Tile) Drainage Sources
Barn 1	Ground Water	No
Barn 2	Ground Water	No
3	Ground Water	No
4	Ground Water	No
5	Ground Water	No
6	Ground Water	No
7	Ground Water	No
8 (New)	Ground Water	No
Lakeside Canal	Surface Water	No
Settler Canal	Surface Water	No
Canal	Surface Water	No

(WINTER) PLANT TISSUE ANALYSIS (Recorded As Received)										
Field	**Crop**	**Moist %**	**N%**	**TP %**	**TK%**	**Salt**	**TFS**	**Sample #:**	**Date:**	**Source**
11A	Wheat, Silage	62.62	0.53	0.12	0.96	-	10.70	23E2140	06/01/23	Dellavalle
11B	Wheat, Silage	64.20	0.58	0.09	1.08	-	11.20	23E2140	06/01/23	Dellavalle
11C	Wheat, Silage	60.05	0.56	0.10	0.70	-	8.10	23E2140	06/01/23	Dellavalle
12	Alfalfa	8.64	3.10	0.35	2.04	-	11.40	23D1670	04/27/23	Dellavalle
13	Wheat, Silage	61.58	0.75	0.12	1.54	-	12.00	23E2140	06/01/23	Dellavalle
14	W. Fallow	-	-	-	-	-	-	Fallow		-
15	Wheat, Silage	59.23	0.76	0.12	1.21	-	10.30	23E2140	06/01/23	Dellavalle
16	W. Fallow	-	-	-	-	-	-	Fallow		-

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**
11A	Corn, Silage	66.35	0.47	0.11	0.63	-	7.70	23J1124	10/17/23	Dellavalle
11B	Corn, Silage	61.70	0.51	0.08	0.62	-	7.10	23K0273	11/13/23	Dellavalle
11C	Corn, Silage	61.70	0.53	0.11	0.55	-	6.80	23K0273	11/13/23	Dellavalle
12	Alfalfa	-	-	-	-	-	-	See Winter		-
13	Corn, Silage	67.27	0.55	0.10	0.76	-	8.30	23K0273	11/13/13	Dellavalle
14	S. Fallow	-	-	-	-	-	-	Fallow		-
15	Corn, Silage	67.42	0.47	0.09	0.50	-	6.40	23K0273	11/13/23	Dellavalle
16	Corn, Silage	68.53	0.43	0.07	0.48	-	6.10	23K0273	11/13/23	Dellavalle

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
11A	Wheat, Silage	11/22/22	5/23/23	23E2140	62.62	0.53	0.12	0.96	-	10.70	Dry Weight
11B	Wheat, Silage	11/22/22	5/23/23	23E2140	64.20	0.58	0.09	1.08	-	11.20	Dry Weight
11C	Wheat, Silage	11/22/22	5/23/23	23E2140	60.05	0.56	0.10	0.70	-	8.10	Dry Weight
12	Alfalfa	1/1/22	11/1/23	23D1670	8.64	3.10	0.35	2.04	-	11.40	Dry Weight
13	Wheat, Silage	11/22/22	5/22/23	23E2140	61.58	0.75	0.12	1.54	-	12.00	Dry Weight
14	W. Fallow			Fallow	-	-	-	-	-	-	
15	Wheat, Silage	11/23/22	5/22/23	23E2140	59.23	0.76	0.12	1.21	-	10.30	Dry Weight
16	W. Fallow			Fallow	-	-	-	-	-	-	

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
11A	Corn, Silage	6/30/23	10/12/23	23J1124	66.35	0.47	0.11	0.63	-	7.70	Dry Weight
11B	Corn, Silage	7/6/23	10/24/23	23K0273	61.70	0.51	0.08	0.62	-	7.10	Dry Weight
11C	Corn, Silage	6/30/23	10/23/23	23K0273	61.70	0.53	0.11	0.55	-	6.80	Dry Weight
12	Alfalfa			See Winter	-	-	-	-	-	-	
13	Corn, Silage	7/1/23	10/24/23	23K0273	67.27	0.55	0.10	0.76	-	8.30	Dry Weight
14	S. Fallow			Fallow	-	-	-	-	-	-	
15	Corn, Silage	7/6/23	10/31/23	23K0273	67.42	0.47	0.09	0.50	-	6.40	Dry Weight
16	Corn, Silage	7/14/23	10/31/23	23K0273	68.53	0.43	0.07	0.48	-	6.10	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 1	3.50	621	-	-	-	-	-	-	-	-	-	-	23I0759	9/11/2023	Dellavalle
Barn 2	-	-	-	-	-	-	-	-	-	-	-	-	Non-Op		
3	5.50	878	-	-	-	-	-	-	-	-	-	-	23I0841	9/12/2023	Dellavalle
4	-	-	-	-	-	-	-	-	-	-	-	-	Non-Op		
5	9.90	1,660	-	-	-	-	-	-	-	-	-	-	23I0841	9/12/2023	Dellavalle
6	0.01	219	-	-	-	-	-	-	-	-	-	-	23H2339	8/29/2023	Dellavalle
7	0.01	332	-	-	-	-	-	-	-	-	-	-	23H2339	8/29/2023	Dellavalle
8 (New)	-	-	-	-	-	-	-	-	-	-	-	-	Non-Op		
Lakeside Canal	0.20	74	59	-	-	-	-	-	-	-	-	-	23E1355	5/15/2023	Dellavalle
Settler Canal	0.20	72	56	-	-	-	-	-	-	-	-	-	23E1355	5/15/2023	Dellavalle
Canal	-	-	-	-	-	-	-	-	-	-	-	-			
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
11A	6	5.00	-	-	-	-	23E2141	05/25/23	Dellavalle
11B	6	5.00	-	-	-	-	23E2141	05/25/23	Dellavalle
11C	3	2.00	-	-	-	-	23E2141	05/25/23	Dellavalle
12	-	-	-	-	-	-			-
13	61	24.00	-	-	-	-	23E2141	05/25/23	Dellavalle
14	-	-	-	-	-	-			-
15	7	4.00	-	-	-	-	23E2141	05/25/23	Dellavalle
16	8	5.00	-	-	-	-	23E2141	05/25/23	Dellavalle

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
11A	-	-	-	-	-	-			-
11B	-	-	-	-	-	-			-
11C	-	-	-	-	-	-			-
12	-	-	-	-	-	-			-
13	-	-	-	-	-	-			-
14	-	-	-	-	-	-			-
15	-	-	-	-	-	-			-
16	-	-	-	-	-	-			-

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: 6,980

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	281.0	396.0	68.2	514.0	0.9	-	-	-	-	-	-	-	-	6	3,000
2	270.0	343.0	56.0	529.0	0.6	-	-	-	-	-	-	-	-	6	2,710
3	64.5	108.0	22.1	168.0	0.2	-	-	-	-	-	-	-	-	2	1,120
4	220.0	305.0	62.5	429.0	0.0	-	-	-	-	-	-	-	-	-	2,450
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	23C0967	3/31/2023	Dellavalle	63.9	26.1	35.4	140.3
2	23F1351	6/14/2023	Dellavalle	61.3	16.5	29.1	144.4
3	23I0840	9/12/2023	Dellavalle	14.7	9.9	11.5	45.9
4	23K0980	12/1/2023	Dellavalle	49.9	19.3	32.5	117.1

Description	Sample #:	Date:	As Is/ Dry Weight	Source	Material Type
Manure	23E1390	5/23/2023	Dry Weight	Dellavalle	Corral Solids
Manure	23I0740	9/11/2023	Dry Weight	Dellavalle	Corral Solids

Dry Manure: (As Recv'd)	TN %	TP %	TK %	Ca	Mg	Na	S	CL	Salt	TFS	Moisture %
Corral	1.63	0.32	1.35	-	-	-	-	-	-	-	6.58
Corral	1.67	0.22	0.48	-	-	-	-	-	-	-	9.32
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: 11A **Acres:** 11.00

Date	Event / Source	Dry Manure Applied (tons/ac)	Moist. %	Chem Fert total lbs	Fresh Water Applied (ac-in/ac)	Lagoon Water Applied (ac-in/ac)	Lab Sample Data					Yield	
							N (lbs/Ac)	Total P (lbs/Ac)	Total K (lbs/Ac)	Salt (Lbs/Ac)	TFS %	Expected Yield (tons/ac)	Actual Yield (tons/ac)
	-	-	-	-	-	-	-	-	-	-	-		-
11/15/22	W. Manure App.	15.45	-	-	-	-	201.0	98.2	418.7	-	-		-
11/22/22	W. Planting	-	-	-	-	-	-	-	-	-	-		-
4/21/23	Settler Canal	-	-	-	7.29	-	0.3	-	-	55	-		-
5/23/23	W. Harvest	-	-	-	-	-	(167.2)	(36.2)	(300.5)	-	10.70		15.64
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
8/11/23	S. Comm Fert App.	-	-	40	-	-	40.0	-	-	-	-		-
6/5/23	S. Manure App.	9.18	-	-	-	-	122.6	40.0	88.3	-	-		-
6/15/23	Settler Canal	-	-	-	6.41	-	0.3	-	-	49	-		-
6/30/23	S. Planting	-	-	-	-	-	-	-	-	-	-		-
7/25/23	3.00	-	-	-	6.50	-	8.1	-	-	-	-		-
8/11/23	Settler Canal	-	-	-	4.64	-	0.2	-	-	35	-		-
8/28/23	3.00	-	-	-	5.20	-	6.5	-	-	-	-		-
9/7/23	Settler Canal	-	-	-	3.53	-	0.2	-	-	27	-		-
9/21/23	Settler Canal	-	-	-	3.53	-	0.2	-	-	27	-		-
10/12/23	S. Harvest	-	-	-	-	-	(184.6)	(41.9)	(246.1)	-	7.70		19.45
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
Totals:		24.6		40	37.11	0.00	28	60	(40)	193	18.40	0	35.09

Dry Weight
As Received

Field Name/Number: 11A **Acres:** 11

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	379.3	138.1	506.9	192.5
Nutrients Removed at Harvest	-351.8	-78.1	-546.6	0.0
Nutrient Balance	27.5	60.0	-39.6	192.5

Winter Nitrogen Crop App / Use Ratio: 1.25 **Summer Nitrogen Crop App / Use Ratio:** 1.22

Field Name/Number: 11A **Acres:** 11

Winter Crop **Wheat, Silage**

Nutrient Summary :		Applied		N		
W. Manure App.		15.5	T/Ac	201.0	224.8	502.4
W. Comm Fert App.		-	lbs/Ac	-		
Process Water	Q1	-	Ac In /Ac	-	-	-
	Q2	-	Ac In /Ac	-	-	-
Well Water		7.29	Ac In /Ac	0.3		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
W. Planting	11/22/22					
W. Harvest	5/23/23	15.6	T/Ac	(167.2)	(83.0)	(360.6)

Summer Crop **Corn, Silage**

Nutrient Summary :		Applied		N		
S. Manure App.		9.2	T/Ac	122.6	91.5	105.9
S. Comm Fert App.		40.0	lbs/Ac	40.0	-	-
Process Water	Q2	-	Ac In /Ac	-	-	-
	Q3	-	Ac In /Ac	-	-	-
	Q4	-	Ac In /Ac	-	-	-
Well Water		29.8	Ac In /Ac	55.412362		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
S. Planting	6/30/23					
S. Harvest	10/12/23	19.5	T/Ac	(184.6)	(95.9)	(295.3)

Nutrient Applications

Field Name/Number: 11B **Acres:** 33.00

Date	Event / Source	Dry Manure Applied (tons/ac)	Moist. %	Chem Fert total lbs	Fresh Water Applied (ac-in/ac)	Lagoon Water Applied (ac-in/ac)	Lab Sample Data					Yield	
							N (lbs/Ac)	Total P (lbs/Ac)	Total K (lbs/Ac)	Salt (Lbs/Ac)	TFS %	Expected Yield (tons/ac)	Actual Yield (tons/ac)
	-	-	-	-	-	-	-	-	-	-	-		-
11/15/22	W. Manure App.	4.55	-	-	-	-	59.1	28.9	123.1	-	-		-
11/22/22	W. Planting	-	-	-	-	-	-	-	-	-	-		-
11/28/22	7.00	-	-	-	3.12	-	0.0	-	-	-	-		-
11/28/22	Process Water	-	-	-	-	1.69	106.3	26.1	196.6	1,147	-		-
3/13/23	7.00	-	-	-	1.39	-	0.0	-	-	-	-		-
3/13/23	Process Water	-	-	-	-	0.75	47.2	11.6	87.4	510	-		-
4/23/23	Settler Canal	-	-	-	3.61	-	0.2	-	-	27	-		-
5/23/23	W. Harvest	-	-	-	-	-	(177.4)	(27.5)	(332.8)	-	10.70		15.39
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
8/23/23	S. Comm Fert App.	-	-	40	-	-	40.0	-	-	-	-		-
6/5/23	S. Manure App.	13.64	-	-	-	-	182.0	59.4	131.1	-	-		-
6/18/23	Settler Canal	-	-	-	7.07	-	0.3	-	-	54	-		-
7/6/23	S. Planting	-	-	-	-	-	-	-	-	-	-		-
8/7/23	Settler Canal	-	-	-	4.64	-	0.2	-	-	35	-		-
8/23/23	7.00	-	-	-	2.28	-	0.0	-	-	-	-		-
9/1/23	Settler Canal	-	-	-	2.95	-	0.1	-	-	22	-		-
9/17/23	Settler Canal	-	-	-	3.24	-	0.1	-	-	25	-		-
10/2/23	3.00	-	-	-	3.12	-	3.9	-	-	-	-		-
10/24/23	S. Harvest	-	-	-	-	-	(233.1)	(36.8)	(285.7)	-	7.70		22.88
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
Totals:		**18.2**		**40**	**31.41**	**2.44**	**29**	**62**	**(80)**	**1,820**	**18.40**	**0**	**38.27**

Field Name/Number: 11B **Acres:** 33.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	439.5	54.9	446.7	1820.3
Nutrients Removed at Harvest	-410.5	-28.1	-513.4	0.0
Nutrient Balance	29.0	26.9	-66.6	1820.3

Winter Nitrogen Crop App / Use Ratio: 1.24 **Summer Nitrogen Crop App / Use Ratio:** 1.17

Field Name/Number: 11B **Acres:** 33

Winter Crop	**Wheat, Silage**					
Nutrient Summary :		**Applied**		**N**		
W. Manure App.		4.5	T/Ac	59.1	66.1	147.8
W. Comm Fert App.		-	lbs/Ac	-		
Process Water	Q1	2.4	Ac In /Ac	153.5	86.3	340.7
	Q2	-	Ac In /Ac	-	-	-
Well Water		8.1	Ac In /Ac	0.2		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
W. Planting	11/22/22					
W. Harvest	5/23/23	15.4	T/Ac	(177.4)	(63.1)	(399.3)

Summer Crop	**Corn, Silage**					
Nutrient Summary :		**Applied**		**N**		
S. Manure App.		13.6	T/Ac	182.0	135.9	157.3
S. Comm Fert App.		40.0	lbs/Ac	40.0	-	-
Process Water	Q2	-	Ac In /Ac	-	-	-
	Q3	-	Ac In /Ac	-	-	-
	Q4	-	Ac In /Ac	-	-	-
Well Water		23.3	Ac In /Ac	44.7		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
S. Planting	7/6/23					
S. Harvest	10/24/23	22.9	T/Ac	(233.1)	(84.3)	(342.8)

Nutrient Applications

Field Name/Number: 11C **Acres:** 32.00

Date	Event / Source	Dry Manure Applied (tons/ac)	Moist. %	Chem Fert total lbs	Fresh Water Applied (ac-in/ac)	Lagoon Water Applied (ac-in/ac)	Lab Sample Data					Yield	
							N (lbs/Ac)	Total P (lbs/Ac)	Total K (lbs/Ac)	Salt (Lbs/Ac)	TFS %	Expected Yield (tons/ac)	Actual Yield (tons/ac)
11/15/22	W. Manure App.	15.63	-	-	-	-	203.2	99.3	423.3	-	-		-
11/22/22	W. Planting	-	-	-	-	-	-	-	-	-	-		-
4/17/23	Settler Canal	-	-	-	6.99	-	0.3	-	-	53	-		-
5/23/23	W. Harvest	-	-	-	-	-	(166.0)	(30.8)	(208.7)	-	10.70		14.84
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
8/15/23	S. Comm Fert App.	-	-	40	-	-	40.0	-	-	-	-		-
6/5/23	S. Manure App.	10.31	-	-	-	-	137.7	44.9	99.1	-	-		-
6/13/23	Settler Canal	-	-	-	6.08	-	0.3	-	-	46	-		-
6/30/23	S. Planting	-	-	-	-	-	-	-	-	-	-		-
7/27/23	3.00	-	-	-	5.72	-	7.1	-	-	-	-		-
8/15/23	Settler Canal	-	-	-	3.49	-	0.2	-	-	26	-		-
8/29/23	Settler Canal	-	-	-	2.96	-	0.1	-	-	22	-		-
9/15/23	Settler Canal	-	-	-	3.04	-	0.1	-	-	23	-		-
9/23/23	Settler Canal	-	-	-	2.73	-	0.1	-	-	21	-		-
10/23/23	S. Harvest	-	-	-	-	-	(196.3)	(41.0)	(202.0)	-	7.70		18.44
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
Totals:		25.9		40	31.01	0.00	27	72	112	192	18.40	0	33.28

Field Name/Number: 11C **Acres:** 32.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	389.1	62.9	433.7	191.6
Nutrients Removed at Harvest	-362.3	-31.3	-340.9	0.0
Nutrient Balance	26.8	31.6	92.8	191.6

Winter Nitrogen Crop App / Use Ratio: 1.27 **Summer Nitrogen Crop App / Use Ratio:** 1.18

Field Name/Number: 11C **Acres:** 32

Winter Crop	**Wheat, Silage**					
Nutrient Summary :		**Applied**		**N**		
W. Manure App.		15.6	T/Ac	203.2	227.3	508.0
W. Comm Fert App.		-	lbs/Ac	-		
Process Water	Q1	-	Ac In /Ac	-	-	-
	Q2	-	Ac In /Ac	-	-	-
Well Water		7.0	Ac In /Ac	0.3		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
W. Planting	11/22/22					
W. Harvest	5/23/23	14.8	T/Ac	(166.0)	(70.6)	(250.4)

Summer Crop	**Corn, Silage**					
Nutrient Summary :		**Applied**		**N**		
S. Manure App.		10.3	T/Ac	137.7	102.8	118.9
S. Comm Fert App.		40.0	lbs/Ac	40.0	-	-
Process Water	Q2	-	Ac In /Ac	-	-	-
	Q3	-	Ac In /Ac	-	-	-
	Q4	-	Ac In /Ac	-	-	-
Well Water		24.0	Ac In /Ac	48.0		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
S. Planting	6/30/23					
S. Harvest	10/23/23	18.4	T/Ac	(196.3)	(93.8)	(242.4)

Nutrient Applications

Field Name/Number: 12 **Acres:** 145.00

Date	Event / Source	Dry Manure Applied (tons/ac)	Moist. %	Chem Fert total lbs	Fresh Water Applied (ac-in/ac)	Lagoon Water Applied (ac-in/ac)	Lab Sample Data					Yield	
							N (lbs/Ac)	Total P (lbs/Ac)	Total K (lbs/Ac)	Salt (Lbs/Ac)	TFS %	Expected Yield (tons/ac)	Actual Yield (tons/ac)
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
1/1/22	W. Planting	-	-	-	-	-	-	-	-	-	-		-
5/2/23	Settler Canal	-	-	-	3.34	-	0.2	-	-	25	-		-
5/4/23	7.00	-	-	-	2.50	-	0.0	-	-	-	-		-
5/30/23	Settler Canal	-	-	-	3.27	-	0.1	-	-	25	-		-
5/30/23	6.00	-	-	-	2.95	-	0.0	-	-	-	-		-
7/1/23	Settler Canal	-	-	-	2.63	-	0.1	-	-	20	-		-
7/1/23	Lakeside Canal	-	-	-	3.24	-	0.1	-	-	26	-		-
7/31/23	Settler Canal	-	-	-	2.85	-	0.1	-	-	22	-		-
8/2/23	6.00	-	-	-	3.60	-	0.0	-	-	-	-		-
9/8/23	Settler Canal	-	-	-	2.41	-	0.1	-	-	18	-		-
9/13/23	6.00	-	-	-	2.05	-	0.0	-	-	-	-		-
10/13/23	3.00	-	-	-	3.20	-	4.0	-	-	-	-		-
10/14/23	6.00	-	-	-	2.18	-	0.0	-	-	-	-		-
11/1/23	W. Harvest	-	-	-	-	-	(576.1)	(64.6)	(378.9)	-	10.70		9.30
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
Totals:		**0.0**		**0**	**34.22**	**0.00**	**(571)**	**(65)**	**(379)**	**136**	**10.70**	**0**	**9.30**

Field Name/Number: 12 **Acres:** 145.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	4.8	0.0	0.0	135.7
Nutrients Removed at Harvest	-576.1	-28.2	-314.6	0.0
Nutrient Balance	-571.2	-28.2	-314.6	135.7

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

Field Name/Number: 12 **Acres:** 145

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		34.2	Ac In /Ac	4.8		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
W. Planting	1/1/22					
W. Harvest	11/1/23	9.3	T/Ac	(576.1)	(147.9)	(454.7)

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

Nutrient Applications

Field Name/Number: 13 **Acres:** 52.00

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)	TPS %	Expected Yield (tons/ac)	Actual Yield (tons/ac)
	-	-	-	-	-	-	-	-	-	-	-		-
11/15/22	W. Manure App.	4.04	-	-	-	-	52.5	25.7	109.4	-	-		-
11/22/22	W. Planting	-	-	-	-	-	-	-	-	-	-		-
12/21/22	7.00	-	-	-	1.95	-	0.0	-	-	-	-		-
12/21/22	Process Water	-	-	-	-	1.05	66.4	16.3	122.8	717	-		-
4/14/23	7.00	-	-	-	2.55	-	0.0	-	-	-	-		-
4/14/23	Process Water	-	-	-	-	1.38	86.7	17.5	165.1	846	-		-
5/22/23	W. Harvest	-	-	-	-	-	(154.5)	(23.8)	(318.5)	-	10.70		10.31
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
6/5/23	S. Manure App.	6.73	-	-	-	-	89.8	29.3	64.7	-	-		-
6/13/23	6.00	-	-	-	6.28	-	0.0	-	-	-	-		-
6/13/23	Process Water	-	-	-	-	2.04	111.2	25.9	244.6	1,253	-		-
7/1/23	S. Planting	-	-	-	-	-	-	-	-	-	-		-
7/28/23	6.00	-	-	-	5.81	-	0.0	-	-	-	-		-
7/28/23	Process Water	-	-	-	-	2.04	35.0	10.2	77.7	518	-		-
8/18/23	6.00	-	-	-	3.19	-	0.0	-	-	-	-		-
8/29/23	6.00	-	-	-	1.90	-	0.0	-	-	-	-		-
8/29/23	Process Water	-	-	-	-	0.68	11.7	3.4	25.9	173	-		-
9/11/23	6.00	-	-	-	2.19	-	0.0	-	-	-	-		-
9/25/23	6.00	-	-	-	2.14	-	0.0	-	-	-	-		-
10/24/23	S. Harvest	-	-	-	-	-	(186.2)	(35.3)	(256.7)	-	7.70		16.83
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
Totals:		**10.8**		**0**	**26.00**	**7.19**	**113**	**69**	**235**	**3,506**	**18.40**	**0**	**27.14**

Field Name/Number: 13 **Acres:** 52.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	453.4	56.0	672.4	3505.7
Nutrients Removed at Harvest	-340.7	-25.8	-477.4	0.0
Nutrient Balance	112.7	30.2	195.0	3505.7

Winter Nitrogen Crop App / Use Ratio: 1.38 **Summer Nitrogen Crop App / Use Ratio:** 1.37

Field Name/Number: 13 **Acres:** 52

Winter Crop **Wheat, Silage**

Nutrient Summary :		**Applied**		**N**		
W. Manure App.		4.0	T/Ac	52.5	58.7	131.3
W. Comm Fert App.		-	lbs/Ac	-		
Process Water	Q1	1.1	Ac In /Ac	66.4	37.3	147.3
	Q2	1.4	Ac In /Ac	86.7	40.0	198.1
Well Water		4.5	Ac In /Ac	0.0		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
W. Planting	11/22/22					
W. Harvest	5/22/23	10.3	T/Ac	(154.5)	(54.4)	(382.2)

Summer Crop **Corn, Silage**

Nutrient Summary :		**Applied**		**N**		
S. Manure App.		6.7	T/Ac	89.8	67.1	77.6
S. Comm Fert App.		-	lbs/Ac	-	-	-
Process Water	Q2	2.0	Ac In /Ac	111.2	59.3	293.5
	Q3	2.7	Ac In /Ac	46.7	31.2	124.3
	Q4	-	Ac In /Ac	-	-	-
Well Water		21.5	Ac In /Ac	0.0		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
S. Planting	7/1/23					
S. Harvest	10/24/23	16.8	T/Ac	(186.2)	(80.7)	(308.0)

Nutrient Applications

Field Name/Number: 14

Acres: 67.00

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

Field Name/Number: 14 **Acres:** 67.00

	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: 14 **Acres:** 67

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: 15 **Acres:** 35.00

Date	Event / Source	Dry Manure Applied (tons/ac)	Moist. %	Chem Fert total lbs	Fresh Water Applied (ac-in/ac)	Lagoon Water Applied (ac-in/ac)	Lab Sample Data					Yield	
							N (lbs/Ac)	Total P (lbs/Ac)	Total K (lbs/Ac)	Salt (Lbs/Ac)	TFS %	Expected Yield (tons/ac)	Actual Yield (tons/ac)
	-	-	-	-	-	-	-	-	-	-	-		-
11/15/22	W. Manure App.	11.43	-	-	-	-	148.6	72.6	309.6	-	-		-
11/23/22	W. Planting	-	-	-	-	-	-	-	-	-	-		-
2/4/23	7.00	-	-	-	2.66	-	0.0	-	-	-	-		-
2/4/23	Process Water	-	-	-	-	1.21	76.3	18.7	141.2	824	-		-
4/24/23	Lakeside Canal	-	-	-	8.64	-	0.4	-	-	69	-		-
5/22/23	W. Harvest	-	-	-	-	-	(184.7)	(28.6)	(293.3)	-	10.70		12.11
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
6/5/23	S. Manure App.	3.57	-	-	-	-	47.7	15.5	34.3	-	-		-
6/19/23	Lakeside Canal	-	-	-	11.13	-	0.5	-	-	89	-		-
7/6/23	S. Planting	-	-	-	-	-	-	-	-	-	-		-
8/4/23	6.00	-	-	-	5.44	-	0.0	-	-	-	-		-
8/4/23	Process Water	-	-	-	-	1.94	33.4	9.7	74.0	494	-		-
8/25/23	6.00	-	-	-	4.38	-	0.0	-	-	-	-		-
8/25/23	Process Water	-	-	-	-	1.57	26.9	7.8	59.6	397	-		-
9/7/23	6.00	-	-	-	4.45	-	0.0	-	-	-	-		-
9/7/23	Process Water	-	-	-	-	1.59	77.0	8.0	60.6	404	-		-
9/22/23	6.00	-	-	-	4.24	-	0.0	-	-	-	-		-
9/22/23	Process Water	-	-	-	-	1.52	95.4	7.6	57.7	385	-		-
10/2/23	6.00	-	-	-	3.82	-	0.0	-	-	-	-		-
10/31/23	S. Harvest	-	-	-	-	-	(208.2)	(39.3)	(222.7)	-	7.70		22.34
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
Totals:		**15.0**		**0**	**44.77**	**7.83**	**113**	**72**	**221**	**2,662**	**18.40**	**0**	**34.45**

Field Name/Number: 15 **Acres:** 35.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	506.3	61.1	611.9	2661.6
Nutrients Removed at Harvest	-392.8	-29.6	-428.3	0.0
Nutrient Balance	113.4	31.5	183.5	2661.6

Winter Nitrogen Crop App / Use Ratio: 1.26 **Summer Nitrogen Crop App / Use Ratio:** 1.38

Field Name/Number: 15 **Acres:** 35

Winter Crop **Wheat, Silage**

Nutrient Summary :		**Applied**		**N**		
W. Manure App.		11.4	T/Ac	148.6	166.3	371.5
W. Comm Fert App.		-	lbs/Ac	-		
Process Water	Q1	1.2	Ac In /Ac	76.3	42.9	169.5
	Q2	-	Ac In /Ac	-	-	-
Well Water		11.3	Ac In /Ac	0.4		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
W. Planting	11/23/22					
W. Harvest	5/22/23	12.1	T/Ac	(184.7)	(65.6)	(351.9)

Summer Crop **Corn, Silage**

Nutrient Summary :		**Applied**		**N**		
S. Manure App.		3.6	T/Ac	47.7	35.6	41.2
S. Comm Fert App.		-	lbs/Ac	-	-	-
Process Water	Q2	-	Ac In /Ac	-	-	-
	Q3	6.6	Ac In /Ac	232.7	75.9	302.3
	Q4	-	Ac In /Ac	-	-	-
Well Water		33.5	Ac In /Ac	0.6		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
S. Planting	7/6/23					
S. Harvest	10/31/23	22.3	T/Ac	(208.2)	(90.0)	(267.3)

Nutrient Applications

Field Name/Number: 16 **Acres:** 56.00

Date	Event / Source	Dry Manure Applied (tons/ac)	Moist. %	Chem Fert total lbs	Fresh Water Applied (ac-in/ac)	Lagoon Water Applied (ac-in/ac)	Lab Sample Data					Yield	
							N (lbs/Ac)	Total P (lbs/Ac)	Total K (lbs/Ac)	Salt (Lbs/Ac)	TFS %	Expected Yield (tons/ac)	Actual Yield (tons/ac)
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	W. Fallow	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
6/23/23	Lakeside Canal	-	-	-	6.96	-	0.3	-	-	55	-		-
7/14/23	S. Planting	-	-	-	-	-	-	-	-	-	-		-
8/11/23	6.00	-	-	-	8.40	-	0.0	-	-	-	-		-
8/11/23	Process Water	-	-	-	-	3.00	51.5	15.0	114.2	761	-		-
9/2/23	6.00	-	-	-	5.48	-	0.0	-	-	-	-		-
9/2/23	Process Water	-	-	-	-	1.96	33.6	9.8	74.5	497	-		-
9/18/23	6.00	-	-	-	3.93	-	0.0	-	-	-	-		-
9/18/23	Process Water	-	-	-	-	1.40	68.0	7.0	53.5	357	-		-
9/28/23	6.00	-	-	-	4.02	-	0.0	-	-	-	-		-
9/28/23	Process Water	-	-	-	-	1.44	90.4	20.3	139.7	798	-		-
10/31/23	S. Harvest	-	-	-	-	-	(220.7)	(33.8)	(244.9)	-	7.70		25.60
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
Totals:		**0.0**		**0**	**28.79**	**7.80**	**23**	**18**	**137**	**2,468**	**7.70**	**0**	**25.60**

Field Name/Number: 16 **Acres:** 56.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	243.9	22.8	317.0	2467.9
Nutrients Removed at Harvest	-220.7	-14.8	-203.3	0.0
Nutrient Balance	23.1	8.0	113.7	2467.9

Winter Nitrogen Crop App / Use Ratio: #N/A **Summer Nitrogen Crop App / Use Ratio:** 1.14

Field Name/Number: 16 **Acres:** 56

Winter Crop **W. Fallow**

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

Summer Crop **Corn, Silage**

Nutrient Summary :		**Applied**		**N**		
S. Manure App.		-	T/Ac	-	-	-
S. Comm Fert App.		-	lbs/Ac	-	-	-
Process Water	Q2	-	Ac In /Ac	-	-	-
	Q3	7.8	Ac In /Ac	243.5	119.6	458.2
	Q4	-	Ac In /Ac	-	-	-
Well Water		28.8	Ac In /Ac	0.4		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
S. Planting	7/14/23					
S. Harvest	10/31/23	25.6	T/Ac	(220.7)	(77.5)	(293.9)

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.

B.D. _____ *(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? Yes

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

Written Agreements:

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

Signature of Owner of Facility

Signature of Operator of Facility

Ben Dragt

Print Name

Same as owner

Print Name

Date

Date

DELLAVALLE™
LABORATORY INC

March 12, 2024

Re: Evaluation of Nutrient Budget for 2023
West Creek Dairy

Dear Ben,

Enclosed is the 2023 Nutrient Budget for your dairy to satisfy the Regional Water Quality Control Board General Order No. R5-2013-0122 (reissued R5-2007-0035).

Collection of samples, analyses, and calculations were designed to evaluate the amount of nitrogen, phosphorus, and potassium applied to and removed from each field by the crop(s).

2023 Whole Farm Nitrogen Balance
The whole farm nitrogen balance was **0.54** in the 2022/2023 crop year.
The Nitrogen Summary Page shows a balance for each field and for the farm as a whole (Attachment 1)."

This chart explains the ranges:

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

Background of Nitrogen Balance
California Regional Water Quality Control Board (RWQCB) dictates that the amount of nitrogen applied for the whole farm agricultural crops should not be greater than 1.4 times the amount of N removed by the crop.
If greater, that field will be out of compliance with the RWQCB standards. Evaluations revealing a factor of less than 1.65 are within the best management standards of farming.
It is assumed that extra N will travel to the water tables and surface waters, thereby polluting the drinking water aquifers.
Fields with nitrogen balance greater than 1.65 will need to be reviewed during the coming season to balance the nitrogen application
Corrections can be as simple as shifting a greater percentage of manure and/or process water to fields which are low in nitrogen.
Other options include exporting more nitrogen-containing materials from the dairy farm area or reducing the number of animals at the dairy.

DELLAVALLE™
LABORATORY INC

March 12, 2024

West Creek Dairy
8409 5th Avenue
Hanford CA 93230

Re: Nutrient Budget for 2023, Projected Nitrogen Budget for 2024, and RWQCB Nutrient Budget Supporting Documents

Dear Ben,

Enclosed is the Nutrient Budget for 2023, Projected Nitrogen Budget for 2024, and RWQCB Nutrient Budget Supporting Documents to satisfy the General Order No. R5-2013-0122 (reissued R5-2007-0035).
Please review our Evaluation of Nitrogen Budget for 2023 and Projected Nitrogen Budget for 2024 and let us know if there is any problem in the reports.

If satisfactory, please file all the documents.

These documents are not required to submit to the Board. However, All the documents must be maintained on the dairy for at least five years and must be made available to Regional Board staff in the event of an inspection.

If you have any questions, please call. It has been a pleasure serving you.

Sincerely,

Ben Nydam

Ben Nydam
Certified Crop Advisor # 22552

Enclosure

1910 W. McKinley, Suite 110 Fresno CA 93728-1298 (559) 233-6129

DELLAVALLE™
LABORATORY INC

West Creek Dairy
8157 5th Avenue
Hanford, CA 93230

Account# 00-0015790
Account Manager: Ben Nydam
Submitted By: Ben
Ranch: 8409 5th Ave, Hanford

Received: 09/11/2023 14:30
Reported: 09/14/2023 09:23

Sample Results

Sample: Barn Well #1 (Faucet)
23I0759-01 (Water)

Sampled: 9/11/2023 9:37
Sampled By: Cynthia Tiemersma

Analyte	Result	Units	Reporting Limit	DIL	DW MCL	Date/Time Analyzed	Method	Notes	Batch
Electrical Conductivity	**0.62**	mmhos/cm	0.01	1		09/12/23 14:30	SM 2510 B		BEI0309
Electrical Conductivity umhos	**621**	umhos/cm	10.0	1		09/12/23 14:30	SM 2510 B		BEI0309
Ammonia (as N)	ND	mg/L	0.00	1		09/11/23 09:37	Field		BEI0307
Nitrate Nitrogen as NO3N	**3.5**	mg/L	0.1	1	10	09/12/23 03:09	EPA 300.0		BEI0284
pH	**8.5**	units	1.0	1		09/12/23 14:30	SM 4500-H+	H	BEI0309
Temperature	**25.0**	°C	0.0	1		09/12/23 14:30	SM 2510 B		BEI0309

DELLAVALLE™
LABORATORY INC

West Creek Dairy
8157 5th Avenue
Hanford, CA 93230

Account# 00-0015790
Account Manager: Ben Nydam
Submitted By: Ben
Ranch: 8409 5th Ave, Hanford

Received: 09/11/2023 14:30
Reported: 09/14/2023 09:23

Samples in this Report

Lab ID	Sample	Matrix	Sampled By	Crop	Date Sampled
23I0759-01	Barn Well #1 (Faucet)	Ag Water	Cynthia Tiemersma		09/11/2023 9:37

Default Cooler Temperature on Receipt °C: -1.5
Containers Intact
COC/Labels Agree
Received On Ice

Notes and Definitions

Item	Definition
H	Hold Time Exceeded
MCL	Drinking Water Maximum Contaminant Level
ND	Analyte NOT DETECTED at or above the reporting limit.
NES	Not Enough Sample
*	Not Taken
RPD	Relative Percent Difference
%REC	Percent Recovery
Source	Sample that was matrix spiked or duplicated.

Scott McFarland

Laboratory Director/Technical Manager

ELAP Certification #1595
A2LA Certification #6440.02

2310759

09/11/23 14:30 2310759

WATER WORK REQUEST

DELLAVALLE LABORATORY, INC.

1910 W. McKinley Avenue, Suite 110 • Fresno, CA 93728
www.dellavallelab.com 559 233-6129 • 800 228-9896 • Fax 559 268-8174

Acct No: 15790 Conn: 08

Bill To:

Purchase Order No. Results Needed By

No. of Samples No. Bottles

Water Type:
- [x] Ag Water
- [ ] Supply Water
- [ ] Drinking
- [ ] Ground Water
- [ ] Other
- [ ] Wastewater
- [ ] Mon. Well

Client: West Creek Dairy
Address: 8157 5th Avenue
City, State, Zip: Hanford, CA 93230
Email: Mail Reports
noreen@livingstondairyconsulting.com,
marlene@livingstondairyconsulting.com,
Copy to: datatech@livingstondairyconsulting.com

Requested by/Cell: Ben 280-9363

Facility: 8409 5th Ave, Hanford

Date sampled 9/11/23

Sampled by DLI - CT

[x] QA/QC Document [x] Copy of Chain [ ] RWQCB

Analysis and Bottles Required: *(Please Indicate Analysis)*

- [x] DWW1: (EC, pH, NO_3-N, NH_4-N Field Test)
  (1) 1 L plastic, unpreserved (white)
- [ ] DWW2: (DWW1 Plus SO_4, CO_3, HCO_3, Cl, Ca, Mg, Na, TDS)
  (1) 1 L plastic, unpreserved (white)
- [ ] DCW1: (EC, NO_3-N, TDS)
  (1) 1 L plastic, unpreserved (white)
- [ ] DPW1: (EC, pH, NO_3-N, NH_4-N, TKN, TDS, TP, TK)
  (1) 1 L plastic, unpreserved (white)
- [ ] DPW2: (DPW1 Plus Ca, Mg, Na, HCO_3, CO_3, SO_4, Cl)
  (1) 1 L plastic, unpreserved (white)
- [ ] Other

DESCRIPTION OF SAMPLES

			Date Sampled	Time Sampled	Field NH_4-N (mg/L)	Received Temp °C
1.	Barn Well #1	Sampled From faucet	9/11/23	9:37	0	-1.5
2.	~~Well #2~~	~~Sampled From~~				
3.	~~Well #5/8429 5th~~	Sampled From				
4.		Sampled From				
5.		Sampled From				
6.		Sampled From				
7.		Sampled From				
8.		Sampled From				
9.		Sampled From				
10.		Sampled From				

IR Thermometer SN: 200560723
Correction Factor: 0°C
Calibration Due: 9/26/2023
Location: Laboratory

CHAIN OF CUSTODY

Carrier	Signature	Company	Received (Date/Time)	Relinquished (Date/Time)
First	CT	DLI	9/11/23 9:37	9/11/23 2:08
Second				
Third				
Fourth		DLI	9/11 14:30	

I guarantee that as the client, or on behalf of the client named, I have the authority to contract the above requested services. Should it be found that I do not have such authority, I agree to be personally liable for all costs and, if there should be action against me for this breach, reasonable attorney's fees. It is understood that payment is expected to be cash with samples unless terms have been previously arranged. Terms are net 30 days, overdue accounts will be charged a finance fee of 2% per month (annually 24% or $5.00 per month whichever is greater).
If payment is not made when due and a legitimate dispute exists concerning the product or services of Dellavalle Laboratory, Inc., it will be submitted to mediation under the Rules and Procedures of Creative Alternative to Litigation, Inc. (CAL). If the dispute is not resolved at mediation then the dispute will be submitted to binding arbitration through CAL under its Rules and Procedures. The parties will equally bear the costs of mediation/arbitration. However, the mediator declares that no legitimate dispute exists, then either will pay all mediation and arbitration costs, and in the event of arbitration, reasonable attorneys' fees of Dellavalle Laboratory.

Invoicing Information:
Contract 2023
Sampling Hrs ___ Miles ___ Consulting ___

Shipping
$ ___ In
$ ___ Out

Amt Paid Rec By Check No Date

Signature

Sample received in cooler with ice?
[ ] Yes [ ] No

DELLAVALLE™
LABORATORY INC

West Creek Dairy
8157 5th Avenue
Hanford, CA 93230

Account# 00-0015790
Account Manager: Ben Nydam
Submitted By: Ben
Ranch: 8409 5th Ave, Hanford

Received: 09/11/2023 14:30
Reported: 09/14/2023 09:23

Quality Control
(Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BEI0309 (Continued)										
Reference (BEI0309-SRM5)					Prepared: 9/11/2023 Analyzed: 9/12/2023					
Electrical Conductivity umhos	940			umhos/cm	1000		94.0	90-110		
Reference (BEI0309-SRM6)					Prepared: 9/11/2023 Analyzed: 9/12/2023					
pH	4.1			units	4.000		102	97.5-102.5		
Reference (BEI0309-SRM7)					Prepared: 9/11/2023 Analyzed: 9/12/2023					
pH	4.1			units	4.000		102	97.5-102.5		
Reference (BEI0309-SRM8)					Prepared: 9/11/2023 Analyzed: 9/12/2023					
pH	4.1			units	4.000		102	97.5-102.5		

DELLAVALLE™
LABORATORY INC

West Creek Dairy
8157 5th Avenue
Hanford, CA 93230

Account# 00-0015790
Account Manager: Ben Nydam
Submitted By: Ben
Ranch: 8409 5th Ave, Hanford

Received: 09/13/2023 7:04
Reported: 09/14/2023 14:56

Samples in this Report

Lab ID	Sample	Matrix	Sampled By	Crop	Date Sampled
23I0841-01	Well #3 (Standpipe)	Ag Water	Cynthia Tiemersma		09/12/2023 9:35
23I0841-02	Well #5/8429 (Faucet)	Ag Water	Cynthia Tiemersma		09/12/2023 9:11

Default Cooler — Temperature on Receipt °C: 0.2
Containers Intact
COC/Labels Agree
Received On Ice

Notes and Definitions

Item	Definition
H	Hold Time Exceeded
MCL	Drinking Water Maximum Contaminant Level
ND	Analyte NOT DETECTED at or above the reporting limit.
NES	Not Enough Sample
*	Not Taken
RPD	Relative Percent Difference
%REC	Percent Recovery
Source	Sample that was matrix spiked or duplicated.

Scott McFarland

Laboratory Director/Technical Manager

ELAP Certification #1595
A2LA Certification #6440.02

DELLAVALLE™
LABORATORY INC

West Creek Dairy
8157 5th Avenue
Hanford, CA 93230

Account# 00-0015790
Account Manager: Ben Nydam
Submitted By: Ben
Ranch: 8409 5th Ave, Hanford

Received: 09/13/2023 7:04
Reported: 09/14/2023 14:56

Sample Results

Sample: Well #3 (Standpipe)
23I0841-01 (Water)

Sampled: 9/12/2023 9:35
Sampled By: Cynthia Tiemersma

Analyte	Result	Units	Reporting Limit	DIL	DW MCL	Date/Time Analyzed	Method	Notes	Batch
Electrical Conductivity	**0.88**	mmhos/cm	0.01	1		09/14/23 11:31	SM 2510 B		BEI0466
Electrical Conductivity umhos	**878**	umhos/cm	10.0	1		09/14/23 11:31	SM 2510 B		BEI0466
Ammonia (as N)	ND	mg/L	0.00	1		09/12/23 09:35	Field		BEI0388
Nitrate Nitrogen as NO3N	**5.5**	mg/L	0.1	1	10	09/14/23 00:56	EPA 300.0		BEI0330
pH	**8.4**	units	1.0	1		09/14/23 11:31	SM 4500-H+	H	BEI0466
Temperature	**25.0**	°C	0.0	1		09/14/23 11:31	SM 2510 B		BEI0466

DELLAVALLE™
LABORATORY INC

West Creek Dairy
8157 5th Avenue
Hanford, CA 93230

Account# 00-0015790
Account Manager: Ben Nydam
Submitted By: Ben
Ranch: 8409 5th Ave, Hanford

Received: 09/13/2023 7:04
Reported: 09/14/2023 14:56

Sample Results
(Continued)

Sample: Well #5/8429 (Faucet)
23I0841-02 (Water)

Sampled: 9/12/2023 9:11
Sampled By: Cynthia Tiemersma

Analyte	Result	Units	Reporting Limit	DIL	DW MCL	Date/Time Analyzed	Method	Notes	Batch
Electrical Conductivity	**1.66**	mmhos/cm	0.01	1		09/14/23 11:32	SM 2510 B		BEI0466
Electrical Conductivity umhos	**1660**	umhos/cm	10.0	1		09/14/23 11:32	SM 2510 B		BEI0466
Ammonia (as N)	ND	mg/L	0.00	1		09/12/23 09:11	Field		BEI0388
Nitrate Nitrogen as NO3N	**9.9**	mg/L	0.1	1	10	09/14/23 01:16	EPA 300.0		BEI0330
pH	**7.8**	units	1.0	1		09/14/23 11:32	SM 4500-H+	H	BEI0466
Temperature	**25.0**	°C	0.0	1		09/14/23 11:32	SM 2510 B		BEI0466

09/13/23 07:04 2:10841

WATER WORK REQUEST

DELLAVALLE LABORATORY, INC.
1910 W. McKinley Avenue, Suite 110 • Fresno, CA 93728
www.dellavallelab.com 559 233-6129 • 800 228-9896 • Fax 559 268-8174

Acct No. / Cons

Bill To: 15790 / 08

No. of Samples: 2 No. Bottles:

Water Type: ☑ Ag Water ☐ Supply Water ☐ Drinking ☐ Ground Water ☐ Wastewater ☐ Mon. Well ☐ Other

Purchase Order No:

Results Needed By:

Client: West Creek Dairy
Address: 8157 5th Avenue
City, State, Zip: Hanford, CA 93230
Email: Mail Reports
noreen@livingstondairyconsulting.com,
marlene@livingstondairyconsulting.com,
Copy to: datatech@livingstondairyconsulting.com

Requested by/Cell: Ben 280-9363

Facility: 8409 5th Ave, Hanford

Date sampled: 9/12/23

Sampled by: DLI - Cynthia Tiemersma

☑ QA/QC Document ☑ Copy of Chain ☐ RWQCB

Analysis and Bottles Required: *(Please Indicate Analysis)*

☑ DWW1: (EC, pH, NO_3-N, NH_4-N Field Test)
(1) 1 L plastic, unpreserved (white)

☐ DWW2: (DWW1 Plus SO_4, CO_3, HCO_3, Cl, Ca, Mg, Na, TDS)
(1) 1 L plastic, unpreserved (white)

☐ DCW1: (EC, NO_3-N, TDS)
(1) 1 L plastic, unpreserved (white)

☐ DPW1: (EC, pH, NO_3-N, NH_4-N, TKN, TDS, TP, TK)
(1) 1 L plastic, unpreserved (white)

☐ DPW2: (DPW1 Plus Ca, Mg, Na, HCO_3, CO_3, SO_4, Cl)
(1) 1 L plastic, unpreserved (white)

☐ Other

DESCRIPTION OF SAMPLES

			Date Sampled	Time Sampled	Field NH4-N (mg/L)	Received Temp °C
1.	Well #3	Sampled From: standpipe	9/12	9:35	0	0.2
2.	Well #5/8429 5th	Sampled From: faucet	9/12	9:11	0	0.1
3.		Sampled From:				
4.		Sampled From:				
5.		Sampled From:				
6.		Sampled From:				
7.		Sampled From:				
8.		Sampled From:				
9.		Sampled From:				
10.		Sampled From:				

IR Thermometer SN: 200560723
Correction Factor: 0°C
Calibration Due: 9/26/2023
Location: Laboratory

CHAIN OF CUSTODY

Carrier	Signature	Company	Received (Date/Time)	Relinquished (Date/Time)
First	CT	DLI	9/12/23 9:11	9/12/23 11:53
Second	MM	DLI	9/13 7:04	
Third				
Fourth				

Invoicing Information:
Contract 2023
Sampling Hrs ____ Miles ____ Consulting ____

Amt Paid ____ Rec By ____ Check No ____ Date ____

Shipping
$ ____ In
$ ____ Out

Signature ____

Sample received in cooler with ice?
[ ] Yes [ ] No

ctl update 2020

DELLAVALLE™
LABORATORY INC

West Creek Dairy
8157 5th Avenue
Hanford, CA 93230

Account# 00-0015790
Account Manager: Ben Nydam
Submitted By: Ben
Ranch: 8409 5th Ave, Hanford

Received: 09/13/2023 7:05
Reported: 09/14/2023 15:05

Samples in this Report

Lab ID	Sample	Matrix	Sampled By	Crop	Date Sampled
23I0842-01	Barn Well #2 (Faucet)	Ag Water	Cynthia Tiemersma		09/12/2023 9:30

Default Cooler Temperature on Receipt °C: -0.3
Containers Intact
COC/Labels Agree
Received On Ice

Notes and Definitions

Item	Definition
H	Hold Time Exceeded
MCL	Drinking Water Maximum Contaminant Level
ND	Analyte NOT DETECTED at or above the reporting limit.
NES	Not Enough Sample
*	Not Taken
RPD	Relative Percent Difference
%REC	Percent Recovery
Source	Sample that was matrix spiked or duplicated.

Scott McFriedland

Laboratory Director/Technical Manager

ELAP Certification #1595
A2LA Certification #6440.02

DELLAVALLE™
LABORATORY INC

West Creek Dairy
8157 5th Avenue
Hanford, CA 93230

Account# 00-0015790
Account Manager: Ben Nydam
Submitted By: Ben
Ranch: 8409 5th Ave, Hanford

Received: 09/13/2023 7:05
Reported: 09/14/2023 15:05

Sample Results

Sample: Barn Well #2 (Faucet)
23I0842-01 (Water)

Sampled: 9/12/2023 9:30
Sampled By: Cynthia Tiemersma

Analyte	Result	Units	Reporting Limit	DIL	DW MCL	Date/Time Analyzed	Method	Notes	Batch
Electrical Conductivity	**0.47**	mmhos/cm	0.01	1		09/14/23 11:39	SM 2510 B		BEI0466
Electrical Conductivity umhos	**467**	umhos/cm	10.0	1		09/14/23 11:39	SM 2510 B		BEI0466
Ammonia (as N)	ND	mg/L	0.00	1		09/12/23 09:30	Field		BEI0389
Nitrate Nitrogen as NO3N	ND	mg/L	0.1	1	10	09/14/23 01:36	EPA 300.0		BEI0330
pH	**8.8**	units	1.0	1		09/14/23 11:39	SM 4500-H+	H	BEI0466
Temperature	**25.0**	°C	0.0	1		09/14/23 11:39	SM 2510 B		BEI0466

09/13/23 07:05   2310842   *[handwritten initials]*

WATER WORK REQUEST

Bill To: Acct No 15790 Cons 08

Purchase Order No ________ Results Needed By ________

DELLAVALLE LABORATORY, INC.

1910 W. McKinley Avenue, Suite 110 • Fresno, CA 93728
www.dellavallelab.com 559 233-6129 • 800 228-9896 • Fax 559 268-8174

No. of Samples 1   No. Bottles ____

Water Type:
- ☐ Drinking
- ☐ Wastewater
- ☑ Ag Water
- ☐ Ground Water
- ☐ Mon. Well
- ☐ Supply Water
- ☐ Other ________

Client	West Creek Dairy
Address	8157 5th Avenue
City, State, Zip	Hanford, CA 93230
Email:	Mail Reports
Copy to:	noreen@livingstondairyconsulting.com, marlene@livingstondairyconsulting.com, datatech@livingstondairyconsulting.com
Requested by/Cell:	Ben 280-9363
Facility:	8409 5th Ave, Hanford
Date sampled	9/12/23
Sampled by	DCI - Cynthia Tiemersma

☑ QA/QC Document ☑ Copy of Chain ☐ RWQCB

Analysis and Bottles Required: *(Please Indicate Analysis)*

- ☐ DWW1: (EC, pH, NO_3-N, **NH_4-N Field Test)**
  (1) 1 L plastic, unpreserved (white)
- ☑ **DWW2: (DWW1 Plus SO_4, CO_3, HCO_3, Cl, Ca, Mg, Na, TDS)**
  (1) 1 L plastic, unpreserved (white)
- ☐ DCW1: (EC, NO_3-N, TDS)
  (1) 1 L plastic, unpreserved (white)
- ☐ DPW1: (EC, pH, NO_3-N, NH_4-N, TKN, TDS, TP, TK)
  (1) 1 L plastic, unpreserved (white)
- ☐ DPW2: (DPW1 Plus Ca, Mg, Na, HCO_3, CO_3, SO_4, Cl)
  (1) 1 L plastic, unpreserved (white)
- ☐ Other ________

DESCRIPTION OF SAMPLES

	Description	Sampled From	Date Sampled	Time Sampled	Field NH4-N (mg/L)	Received Temp °C
1.	Barn Well #2	faucet	9/12	9:30	0	-0.3
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						

IR Thermometer SN: 200560723
Correction Factor: 0°C
Calibration Due: 9/26/2023
Location: Laboratory

CHAIN OF CUSTODY

Carrier	Signature	Company	Received (Date/Time)	Relinquished (Date/Time)
First	CTT	DCI	9/12/23 9:30	9/12/23 11:55
Second	MM	DLI	9/13 7:05	
Third				
Fourth				

[illegible]

Invoicing Information:
Contract 2023

Sampling Hrs ____ Miles ____ Consulting ____

Shipping
$ ________ In
$ ________ Out

Amt Paid ____ Rec By ____ Check No ____ Date ____

Signature ________

Sample received in cooler with ice?
[ ] Yes [ ] No

DELLAVALLE™
LABORATORY INC

West Creek Dairy
8157 5th Avenue
Hanford, CA 93230

Account# 00-0015790
Account Manager: Ben Nydam
Submitted By: Ben
Ranch: 8409 5th Ave, Hanford

Received: 09/13/2023 7:05
Reported: 09/14/2023 15:05

Quality Control
(Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BEI0466 (Continued)										
Reference (BEI0466-SRM5)					Prepared & Analyzed: 9/14/2023					
Electrical Conductivity umhos	962			umhos/cm	1000		96.2	90-110		
Reference (BEI0466-SRM6)					Prepared & Analyzed: 9/14/2023					
pH	4.0			units	4.000		101	97.5-102.5		
Reference (BEI0466-SRM7)					Prepared & Analyzed: 9/14/2023					
pH	4.0			units	4.000		101	97.5-102.5		
Reference (BEI0466-SRM8)					Prepared & Analyzed: 9/14/2023					
pH	4.0			units	4.000		100	97.5-102.5		

09/13/23 07:05 23-0842

Shipping Information: Shipped In ☐ Picked-Up ☐ Walk In ☐ DLI Sampler ☑ Other ☐ _____

☐ Samples refrigerated before pick up ☐ Picked up samples placed in Ice chest

Container: Ice Chest ☑ Box ☐ None ☐ **Refrigerant:** Wet Ice ☑ Blue Ice ☐ None ☐

Samples Preserved with HNO_3 or H_2SO_4 were: ☑ Received Preserved ☐ Preserved Upon Receipt at Laboratory

	Type of Container(s) Received	Sample Number 1	2	3	4	5	6	7	8	9	10
Sample Containers for Internal (DLI) Use *(Containers that go into the Lab)*											
Plastics	100 mL sterile plastic $Na_2S_2O_3$ (Green)										
	250 mL unpreserved (White) Plastic										
	[illegible]										
	[illegible]										
	250 mL H_2SO_4 (Yellow) Plastic										
	* pH Value										
	500 mL unpreserved (White) Plastic										
	1 L unpreserved (White) Plastic										
	1 L unpreserved (BOD) (Purple) Plastic										
Special	500mL unpreserved (White) Glass										
	PO4-P Kit										
	Other:										
Sample Containers for Subcontracted ("Send Out") Analyses *(Containers that go in the Subcontract ("Send Out") Refrigerator)*											
Plastics	100 mL sterile plastic $Na_2S_2O_3$ (Green)										
	250 mL unpreserved (White) Plastic										
	[illegible]										
	250 mL H_2SO_4 (Yellow) Plastic										
	[illegible]										
	1 L unpreserved (White) Plastic										
	1 L unpreserved (BOD) (Purple) Plastic										
	[illegible]										
VOA Vials	40 mL VOA, $Na_2S_2O_3$ + MCAA (EPA531)										
	40 mL VOA, $Na_2S_2O_3$ (EPA547)										
	40mL AG VOA unpreserved (White) (Set of 3)										
	40 mL AG VOA, $Na_2S_2O_3$ (Green) (Set of 3)										
	40mL VOA, H_3PO_4 (Set of 3)										
	40 mL VOA, HCl (Blue) (Set of 3)										
	40 mL VOA, $Na_2S_2O_3$ (Green) (Set of 3)										
Glass	250 mL AG unpreserved (White)										
	250 mL AG H_2SO_4 (Yellow)										
	250 mL AG $Na_2S_2O_3$ (Green)										
	250 mL AG $Na_2S_2O_3$ + MCAA										
	500 mL glass unpreserved (White)										
	500 mL AG HCl (Blue)										
	1 L AG unpreserved (White)										
	1 L AG H_2SO_4 (Yellow)										
	1 L AG $Na_2S_2O_3$ (Green)										
	1 L AG HCl (Blue)										
Special	Cr^{6+} - 50mL Plastic w/Borate/HCO_3/CO_3										
	Cyanide - 500 mL NaOH										
	Asbestos - 1L P wrapped in foil (Set of 2)										
	Sulfide - 1 L AG or P NaOH + ZnAc										
	Chlorite/Bromate - 250 mL AG with EDA										
	HAA5 - 250mL AG Ammonium Chlorite										
	DO KIT										
	Other:										

DELLAVALLE™
LABORATORY INC

West Creek Dairy
8157 5th Avenue
Hanford, CA 93230

Account# 00-0015790
Account Manager: Ben Nydam
Submitted By: Ben
Ranch: 8409 5th Ave, Hanford

Received: 08/30/2023 6:50
Reported: 08/31/2023 11:46

Samples in this Report

Lab ID	Sample	Matrix	Sampled By	Crop	Date Sampled
23H2339-01	Well #6 (Well)	Ag Water	Moises Barajas		08/29/2023 14:02
23H2339-02	Well #7/Fld 1 (Well)	Ag Water	Moises Barajas		08/29/2023 13:51

Default Cooler — Temperature on Receipt °C: 0.9
Containers Intact
COC/Labels Agree
Received On Ice

Notes and Definitions

Item	Definition
MCL	Drinking Water Maximum Contaminant Level
ND	Analyte NOT DETECTED at or above the reporting limit.
NES	Not Enough Sample
*	Not Taken

Scott McFarland

Laboratory Director/Technical Manager

ELAP Certification #1595
A2LA Certification #6440.02

DELLAVALLE™
LABORATORY INC

West Creek Dairy
8157 5th Avenue
Hanford, CA 93230

Account# 00-0015790
Account Manager: Ben Nydam
Submitted By: Ben
Ranch: 8409 5th Ave, Hanford

Received: 08/30/2023 6:50
Reported: 08/31/2023 11:46

Sample Results

Sample: Well #6 (Well)
23H2339-01 (Water)

Sampled: 8/29/2023 14:02
Sampled By: Moises Barajas

Analyte	Result	Units	Reporting Limit	DIL	DW MCL	Date/Time Analyzed	Method	Notes	Batch
Electrical Conductivity	**0.22**	mmhos/cm	0.01	1		08/30/23 11:41	SM 2510 B		BEH1424
Electrical Conductivity umhos	**219**	umhos/cm	10.0	1		08/30/23 11:41	SM 2510 B		BEH1424
Ammonia (as N)	ND	mg/L	0.00	1		08/29/23 14:02	Field		BEH1421
Nitrate Nitrogen as NO3N	ND	mg/L	0.1	1	10	08/30/23 16:03	EPA 300.0		BEH1343
pH	**9.4**	units	1.0	1		08/30/23 11:41	SM 4500-H+		BEH1424
Temperature	**25.0**	°C	0.0	1		08/30/23 11:41	SM 2510 B		BEH1424

DELLAVALLE™
LABORATORY INC

West Creek Dairy
8157 5th Avenue
Hanford, CA 93230

Account# 00-0015790
Account Manager: Ben Nydam
Submitted By: Ben
Ranch: 8409 5th Ave, Hanford

Received: 08/30/2023 6:50
Reported: 08/31/2023 11:46

Sample Results
(Continued)

Sample: Well #7/Fld 1 (Well)
23H2339-02 (Water)

Sampled: 8/29/2023 13:51
Sampled By: Moises Barajas

Analyte	Result	Units	Reporting Limit	DIL	DW MCL	Date/Time Analyzed	Method	Notes	Batch
Electrical Conductivity	**0.33**	mmhos/cm	0.01	1		08/30/23 11:42	SM 2510 B		BEH1424
Electrical Conductivity umhos	**332**	umhos/cm	10.0	1		08/30/23 11:42	SM 2510 B		BEH1424
Ammonia (as N)	ND	mg/L	0.00	1		08/29/23 13:51	Field		BEH1421
Nitrate Nitrogen as NO3N	ND	mg/L	0.1	1	10	08/30/23 16:44	EPA 300.0		BEH1343
pH	**9.1**	units	1.0	1		08/30/23 11:42	SM 4500-H+		BEH1424
Temperature	**25.0**	°C	0.0	1		08/30/23 11:42	SM 2510 B		BEH1424

08/30/23 06:50 23H2339

MM

DELLAVALLE LABORATORY, INC.

1910 W. McKinley Avenue, Suite 110 • Fresno, CA 93728
www.dellavallelab.com 559 233-6129 • 800 228-9896 • Fax 559 268-8174

WATER WORK REQUEST

Bill To: Acct No 15790 Cons 08

Purchase Order No ______ Results Needed By ______

No. of Samples ______ No. Bottles ______

Water Type: ☐ Drinking ☐ Wastewater ☑ Ag Water ☐ Ground Water ☐ Mon. Well ☐ Supply Water ☐ Other ______

Client: West Creek Dairy
Address: 8157 5th Avenue
City, State, Zip: Hanford, CA 93230
Email: Mail Reports
Copy to: noreen@livingstondairyconsulting.com, marlene@livingstondairyconsulting.com, datatech@livingstondairyconsulting.com

Requested by/Cell: Ben 280-9363

Facility: 8409 5th Ave, Hanford

Date sampled: 8-29-23

Sampled by: MOISES BARAJAS DLI

☑ QA/QC Document ☑ Copy of Chain ☐ RWQCB

Analysis and Bottles Required: *(Please Indicate Analysis)*

☑ DWW1: (EC, pH, NO_3-N, NH_4-N Field Test)
(1) 1 L plastic, unpreserved (white)

☐ DWW2: (DWW1 Plus SO_4, CO_3, HCO_3, Cl, Ca, Mg, Na, TDS)
(1) 1 L plastic, unpreserved (white)

☐ DCW1: (EC, NO_3-N, TDS)
(1) 1 L plastic, unpreserved (white)

☐ DPW1: (EC, pH, NO_3-N, NH_4-N, TKN, TDS, TP, TK)
(1) 1 L plastic, unpreserved (white)

☐ DPW2: (DPW1 Plus Ca, Mg, Na, HCO_3, CO_3, SO_4, Cl)
(1) 1 L plastic, unpreserved (white)

☐ Other ______

DESCRIPTION OF SAMPLES

#	Description	Sampled From	Date Sampled	Time Sampled	Field NH4-N (mg/L)	Received Temp °C
1.	Barn Well #1					
2.	Well #3					
3.	Well #5/8429 5th					
4.	Well #6	WELL	8-29-23	2:02PM	0	0.9
5.	Well #7/fld 1	WELL	8-29-23	1:51PM	0	0.4
6.						
7.						
8.						
9.						
10.						

IR Thermometer SN: 200560723
Correction Factor: 0°C
Calibration Due: 9/26/2023
Location: Laboratory

CHAIN OF CUSTODY

Carrier	Signature	Company	Received (Date/Time)	Relinquished (Date/Time)
First	MOISES BARAJAS	DLI		8-29-23 2:37PM
Second	MM	DLI	8/30 6:50	
Third				
Fourth				

[illegible]

Invoicing Information:
Contract 2023
Sampling Hrs ___ Miles ___ Consulting ___
Amt Paid ___ Rec By ___ Check No ___

Shipping
$ ______ In
$ ______ Out
Date ______

Signature ______
Sample received in cooler with ice?
[ ] Yes [ ] No

08/30/23 06:50 2 H2339

Shipping Information: Shipped In ☐ Picked-Up ☐ Walk In ☐ DLI Sampler ☑ Other ☐ _____

☐ Samples refrigerated before pick up ☐ Picked up samples placed in ice chest

Container: Ice Chest ☑ Box ☐ None ☐ **Refrigerant:** Wet Ice ☑ Blue Ice ☐ None ☐

Samples Preserved with HNO_3 or H_2SO_4 were: ☐ Received Preserved ☐ Preserved Upon Receipt at Laboratory

	Type of Container(s) Received	Sample Number									
		1	2	3	4	5	6	7	8	9	10
	Sample Containers for Internal (DLI) Use *(Containers that go into the Lab)*										
Plastics	100 mL sterile plastic $Na_2S_2O_3$ (Green)										
Plastics	250 mL unpreserved (White) Plastic										
Plastics	250 mL H_2SO_4 (Yellow) Plastic										
	* pH Value										
Plastics	500 mL unpreserved (White) Plastic										
Plastics	1 L unpreserved (White) Plastic										
Plastics	1 L unpreserved (BOD) (Purple) Plastic										
Special	500mL unpreserved (White) Glass										
Special	PO4-P Kit										
Special	Other:										
	Sample Containers for Subcontracted ("Send Out") Analyses *(Containers that go in the Subcontract ("Send Out") Refrigerator)*										
Plastics	100 mL sterile plastic $Na_2S_2O_3$ (Green)										
Plastics	250 mL unpreserved (White) Plastic										
Plastics	250 mL H_2SO_4 (Yellow) Plastic										
Plastics	1 L unpreserved (White) Plastic										
Plastics	1 L unpreserved (BOD) (Purple) Plastic										
VOA Vials	40 mL VOA, $Na_2S_2O_3$ + MCAA (EPA531)										
VOA Vials	40 mL VOA, $Na_2S_2O_3$ (EPA547)										
VOA Vials	40mL AG VOA unpreserved (White) (Set of 3)										
VOA Vials	40 mL AG VOA, $Na_2S_2O_3$ (Green) (Set of 3)										
VOA Vials	40mL VOA, H_3PO_4 (Set of 3)										
VOA Vials	40 mL VOA, HCl (Blue) (Set of 3)										
VOA Vials	40 mL VOA, $Na_2S_2O_3$ (Green) (Set of 3)										
Glass	250 mL AG unpreserved (White)										
Glass	250 mL AG H_2SO_4 (Yellow)										
Glass	250 mL AG $Na_2S_2O_3$ (Green)										
Glass	250 mL AG $Na_2S_2O_3$ + MCAA										
Glass	500 mL glass unpreserved (White)										
Glass	500 mL AG HCl (Blue)										
Glass	1 L AG unpreserved (White)										
Glass	1 L AG H_2SO_4 (Yellow)										
Glass	1 L AG $Na_2S_2O_3$ (Green)										
Glass	1 L AG HCl (Blue)										
Special	Cr^{6+} - 50mL Plastic w/Borate/HCO_3/CO_3										
Special	Cyanide - 500 mL NaOH										
Special	Asbestos - 1L P wrapped in foil (Set of 2)										
Special	Sulfide - 1 L AG or P NaOH + ZnAc										
Special	Chlorite/Bromate - 250 mL AG with EDA										
Special	HAA5 - 250mL AG Ammonium Chlorite										
Special	DO KIT										
Special	Other:										

DELLAVALLE™
LABORATORY INC

West Creek Dairy
8157 5th Avenue
Hanford, CA 93230

Account# 00-0015790
Account Manager: Ben Nydam
Submitted By:
Ranch: 8409 5th Ave, Hanford

Received: 05/16/2023 7:21
Reported: 06/05/2023 16:10

Samples in this Report

Lab ID	Sample	Matrix	Sampled By	Crop	Date Sampled
23E1355-01	Lakeside Canal (Canal)	Ag Water	Cynthia Tiemersma		05/15/2023 10:00
23E1355-02	Settler Canal (Canal)	Ag Water	Cynthia Tiemersma		05/15/2023 10:21

Default Cooler — Temperature on Receipt °C: 1.3
Containers Intact
COC/Labels Agree
Received On Ice

Notes and Definitions

Item	Definition
H	Hold Time Exceeded
MCL	Drinking Water Maximum Contaminant Level
ND	Analyte NOT DETECTED at or above the reporting limit.
NES	Not Enough Sample
*	Not Taken
RPD	Relative Percent Difference
%REC	Percent Recovery
Source	Sample that was matrix spiked or duplicated.

Scott McFarland

Laboratory Director/Technical Manager

ELAP Certification #1595
A2LA Certification #6440.02

DELLAVALLE™
LABORATORY INC

West Creek Dairy
8157 5th Avenue
Hanford, CA 93230

Account# 00-0015790
Account Manager: Ben Nydam
Submitted By:
Ranch: 8409 5th Ave, Hanford

Received: 05/16/2023 7:21
Reported: 06/05/2023 16:10

Sample Results

Sample: Lakeside Canal (Canal)
23E1355-01 (Water)

Sampled: 5/15/2023 10:00
Sampled By: Cynthia Tiemersma

Analyte	Result	Units	Reporting Limit	DIL	DW MCL	Date/Time Analyzed	Method	Notes	Batch
Electrical Conductivity	**0.07**	mmhos/cm	0.01	1		05/17/23 10:33	SM 2510 B		BEE0618
Electrical Conductivity umhos	**74.4**	umhos/cm	10.0	1		05/17/23 10:33	SM 2510 B		BEE0618
Nitrate Nitrogen as NO3N	**0.2**	mg/L	0.1	1	10	05/16/23 14:57	EPA 300.0		BEE0562
pH	**7.6**	units	1.0	1		05/17/23 10:33	SM 4500-H+	H	BEE0618
Total Filterable Solids (TDS)	**58.6**	mg/L	10.0	1		06/02/23 12:06	SM 2540 C		BEE0499
Temperature	**25.0**	°C	0.0	1		05/17/23 10:33	SM 2510 B		BEE0618

DELLAVALLE™
LABORATORY INC

West Creek Dairy
8157 5th Avenue
Hanford, CA 93230

Account# 00-0015790
Account Manager: Ben Nydam
Submitted By:
Ranch: 8409 5th Ave, Hanford

Received: 05/16/2023 7:21
Reported: 06/05/2023 16:10

Sample Results
(Continued)

Sample: Settler Canal (Canal)
23E1355-02 (Water)

Sampled: 5/15/2023 10:21
Sampled By: Cynthia Tiemersma

Analyte	Result	Units	Reporting Limit	DIL	DW MCL	Date/Time Analyzed	Method	Notes	Batch
Electrical Conductivity	**0.07**	mmhos/cm	0.01	1		05/17/23 10:34	SM 2510 B		BEE0618
Electrical Conductivity umhos	**71.8**	umhos/cm	10.0	1		05/17/23 10:34	SM 2510 B		BEE0618
Nitrate Nitrogen as NO3N	**0.2**	mg/L	0.1	1	10	05/16/23 15:18	EPA 300.0		BEE0562
pH	**7.7**	units	1.0	1		05/17/23 10:34	SM 4500-H+	H	BEE0618
Total Filterable Solids (TDS)	**55.7**	mg/L	10.0	1		06/02/23 12:06	SM 2540 C		BEE0499
Temperature	**25.0**	°C	0.0	1		05/17/23 10:34	SM 2510 B		BEE0618

05/16/23 07:21 23E1355

MM

WATER WORK REQUEST

Bill To: Acct No 15790 Cons 08

Purchase Order No ____ Results Needed By ____

Client: West Creek Dairy
Address: 8157 5th Avenue
City, State, Zip: Hanford, CA 93230
Email: Mail Reports
noreen@livingstondairyconsulting.com,
marlene@livingstondairyconsulting.com,
Copy to: datatech@livingstondairyconsulting.com

Requested by/Cell: Ben 280-9363

Facility: 8409 5th Ave, Hanford

Date sampled: 5/15/23

Sampled by: Cynthia Tiemersma

☑ QA/QC Document ☑ Copy of Chain ☐ RWQCB

DELLAVALLE LABORATORY, INC.

1910 W. McKinley Avenue, Suite 110 • Fresno, CA 93728
www.dellavallelab.com 559 233-6129 • 800 228-9896 • Fax 559 268-8174

No. of Samples: 2 No. Bottles: ____

Water Type: ☐ Drinking ☐ Wastewater ☐ Ag Water ☐ Ground Water ☐ Mon. Well ☑ Supply Water ☐ Other ____

Analysis and Bottles Required: *(Please Indicate Analysis)*

☐ DWW1: (EC, pH, NO_3-N, NH_4-N Field Test)
(1) 1 L plastic, unpreserved (white)

☐ DWW2: (DWW1 Plus SO_4, CO_3, HCO_3, Cl, Ca, Mg, Na, TDS)
(1) 1 L plastic, unpreserved (white)

☑ DCW1: (EC, NO_3-N, TDS)
(1) 1 L plastic, unpreserved (white)

☐ DPW1: (EC, pH, NO_3-N, NH_4-N, TKN, TDS, TP, TK)
(1) 1 L plastic, unpreserved (white)

☐ DPW2: (DPW1 Plus Ca, Mg, Na, HCO_3, CO_3, SO_4, Cl)
(1) 1 L plastic, unpreserved (white)

☐ Other ____

DESCRIPTION OF SAMPLES

No.	Description	Sampled From	Date Sampled	Time Sampled	Field NH4-N (mg/L)	Received Temp °C
1.	Lakeside Canal	Canal	5/15	10:00		1.3
2.	Settler Canal	Canal	"	10:21		0.6
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						

CHAIN OF CUSTODY

Carrier	Signature	Company	Received (Date/Time)	Relinquished (Date/Time)
First	CTT	DCT	5/15/23 10:00	5/15/23 11:45
Second	MM	DLI	5/16/23 7:21	
Third				
Fourth				

I guarantee that I am the client or on behalf of the client named. I have the authority to contract the above requested services. Should it be found that I do not have such authority, I agree to be personally liable for all costs and if there should be action against me for the breach, reasonable attorney fees. It is understood that payment is expected to be made with samples unless terms have been previously arranged. Terms are net 30 days, after which accounts will be charged a late fee... If payment is not made when due and a legitimate dispute exists concerning the product or services of Dellavalle Laboratory, Inc., it will be submitted to mediation under the Rules and Procedures... If the dispute is not resolved in mediation, then the dispute will be submitted to binding arbitration... of arbitration, reasonable attorneys' fees of Dellavalle Laboratory.

Invoicing Information:
Contract 2023
Sampling Hrs ____ Miles ____ Consulting ____
Amt Paid ____ Rec By ____ Check No ____

Shipping
$ ____ In
$ ____ Out
Date ____

Signature ____
Sample received in cooler with ice?
[ ] Yes [ ] No

IR Thermometer SN: 200560723
Correction Factor: 0°C
Calibration Due: 6/30/2023
Location: Laboratory

05/16/23 07:21 23E1355

Shipping Information: Shipped In ☐ Picked-Up ☐ Walk In ☐ DLI Sampler ☑ Other ☐ _____

☐ Samples refrigerated before pick up ☑ Picked up samples placed in ice chest

Container: Ice Chest ☑ Box ☐ None ☐ **Refrigerant:** Wet Ice ☑ Blue Ice ☐ None ☐

Samples Preserved with HNO_3 or H_2SO_4 were: ☑ Received Preserved ☐ Preserved Upon Receipt at Laboratory

Type of Container(s) Received		Sample Number									
		1	2	3	4	5	6	7	8	9	10
Sample Containers for Internal (DLI) Use *(Containers that go into the Lab)*											
Plastics	100 mL sterile plastic $Na_2S_2O_3$ (Green)										
	250 mL unpreserved (White) Plastic										
	250 mL H_2SO_4 (Yellow) Plastic										
	* pH Value										
	500 mL unpreserved (White) Plastic										
	1 L unpreserved (White) Plastic	1	1								
	1 L unpreserved (BOD) (Purple) Plastic										
Special	500mL unpreserved (White) Glass										
	PO4-P Kit										
	Other:										
Sample Containers for Subcontracted ("Send Out") Analyses *(Containers that go in the Subcontract ("Send Out") Refrigerator)*											
Plastics	100 mL sterile plastic $Na_2S_2O_3$ (Green)										
	250 mL unpreserved (White) Plastic										
	250 mL H_2SO_4 (Yellow) Plastic										
	1 L unpreserved (White) Plastic										
	1 L unpreserved (BOD) (Purple) Plastic										
VOA Vials	40 mL VOA, $Na_2S_2O_3$ + MCAA (EPA531)										
	40 mL VOA, $Na_2S_2O_3$ (EPA547)										
	40mL AG VOA unpreserved (White) (Set of 3)										
	40 mL AG VOA, $Na_2S_2O_3$ (Green) (Set of 3)										
	40mL VOA, H_3PO_4 (Set of 3)										
	40 mL VOA, HCl (Blue) (Set of 3)										
	40 mL VOA, $Na_2S_2O_3$ (Green) (Set of 3)										
Glass	250 mL AG unpreserved (White)										
	250 mL AG H_2SO_4 (Yellow)										
	250 mL AG $Na_2S_2O_3$ (Green)										
	250 mL AG $Na_2S_2O_3$ + MCAA										
	500 mL glass unpreserved (White)										
	500 mL AG HCl (Blue)										
	1 L AG unpreserved (White)										
	1 L AG H_2SO_4 (Yellow)										
	1 L AG $Na_2S_2O_3$ (Green)										
	1 L AG HCl (Blue)										
Special	Cr^{6+} - 50mL Plastic w/Borate/HCO_3/CO_3										
	Cyanide - 500 mL NaOH										
	Asbestos - 1L P wrapped in foil (Set of 2)										
	Sulfide - 1 L AG or P NaOH + ZnAc										
	Chlorite/Bromate - 250 mL AG with EDA										
	HAA5 - 250mL AG Ammonium Chlorite										
	DO KIT										
	Other:										

1

2023

ATTACHMENT D

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: Ben Dragt

Name of Dairy Facility: West Creek Dairy

Facility Address: 8409 5th Ave Hanford
Number and Street / City / Zip Code

Contact Person Name and Phone Number: Ben 280-9363
Name / Phone Number

Manure/Process Wastewater Hauler Information:

Name of Hauling Company/Person: B-Mello Ag Services

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

Contact Person: Bryan Mellow 816-3889
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):

M:D Swanson P.O. Box 828 Kingsburg 93631
Name / Number and Street / City / Zip Code / Phone Number

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

Denver Ave W of 6th Ave
Number and Street / City / Zip Code / Assessor's Parcel Number

Dates Hauled: 2-4-23 : 2-5-23

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: 320 Tons or Cubic Yards (indicate which units used)
Manure Solids Content (if amount reported in tons): _____
Manure Density (if amount reported in cubic yards): _____

Method used to determine amount of manure: _____

_____

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: _____ Date: 3-5-23

Hauler's Signature: _____ Date: _____

2023

ATTACHMENT D

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: Ben Dragt

Name of Dairy Facility: West Creek Dairy

Facility Address: 8409 5th Ave Hanford CA 93230
Number and Street / City / Zip Code

Contact Person Name and Phone Number: Ben 280-9363
Name / Phone Number

Manure/Process Wastewater Hauler Information:

Name of Hauling Company/Person: Rodriguez Bros Inc

Address of Hauling Company /Person: 10071 6th Ave Hanford 93230
Number and Street / City / Zip Code

Contact Person: Jorge Rodriguez (559) 410-3806
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):

Blanchard
Name / Number and Street / City / Zip Code / Phone Number

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

7th Ave Hanford
Number and Street / City / Zip Code / Assessor's Parcel Number

Dates Hauled: 5/10/23

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: 960 Tons or Cubic Yards (indicate which units used)
Manure Solids Content (if amount reported in tons): _____
Manure Density (if amount reported in cubic yards): _____

Method used to determine amount of manure: Scale

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: _____ Date: 5-19-23

Hauler's Signature: Jose Rodriguez Date: 5/17/23

2023

ATTACHMENT D

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: Ben Dragt

Name of Dairy Facility: West Creek Dairy

Facility Address: 8409 5th Ave Hanford
Number and Street / City / Zip Code

Contact Person Name and Phone Number: Ben 280-9363
Name / Phone Number

Manure/Process Wastewater Hauler Information:

Name of Hauling Company/Person: B mello Ag Services

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

Contact Person: Bryan 816-3889
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):

Wild Oak Farms 5142 Denver Ave Kingsburg 93631
Name / Number and Street / City / Zip Code / Phone Number

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

SW Corner 7th & Elder Hanford
Number and Street / City / Zip Code / Assessor's Parcel Number

Dates Hauled: 10-24-23 10-26-23

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: 2600 Tons or Cubic Yards (indicate which units used)
Manure Solids Content (if amount reported in tons): _____
Manure Density (if amount reported in cubic yards): _____

2023

ATTACHMENT D

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: Ben Dmyt

Name of Dairy Facility: West Creek Dairy

Facility Address: 8409 5th Ave
Number and Street City Zip Code

Contact Person Name and Phone Number: Ben 280-9363
Name Phone Number

Manure/Process Wastewater Hauler Information:

Name of Hauling Company/Person: B Mello Ag Services

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

Contact Person: Bryan Mello 816-3889
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):

Wild Oak Farms 5142 Denver Ave Kingsburg 93631
Name Number and Street City Zip Code Phone Number

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

SW Corner 7th & Elder Hanford CA
Number and Street City Zip Code Assessor's Parcel Number

Dates Hauled: 12-4-23

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: 3100 Tons or Cubic Yards (indicate which units used)
Manure Solids Content (if amount reported in tons): _____
Manure Density (if amount reported in cubic yards): _____

Method used to determine amount of manure: _____

_____

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: _____ Date: 12-15-23

Hauler's Signature: _____ Date: _____