Livingston Dairy Consulting, Inc.

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

Boschma & Sons WDID 5C15NC00019
24794 Sherwood Ave. Wasco, CA 93280

X	Annual Report
X	Water Analysis Samples
N/A	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 **See Notes Page**

Dairy Name: Boschma & Sons WDID 5C15NC00019

Facility Address: 24794 Sherwood Ave. Wasco, CA 93280

Original Operation Date: 9/1/2004

Facility APN's: 059-050-019

RWQCB Basin Plan Designation: Tulare Lake Basin

☐ Check if any information has changed

Owner(s)

Owner(s) Name: Terri-Lynn or Ryan Boschma

Mailing Address: 9032 Elchart Rd. Bakersfield, CA 93314

Home Phone Number: 661-805-3376

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:	-	491	277	-	-
Number Under Roof	3,010	-	-	-	-
Maximum Number	3,010	491	277		
Average Number	3,010	491	277		
Average Live Weight (lbs)	1,400	1,450	950		

Average Milk Production: 68

Predominant Milk Cow Breed: Holstein

Manure Generated:

Total manure excreted by the herd:	6,806.04	@40% Moisture	*ton/yr*
Total nitrogen from manure:	384,301		*lbs*
	41,841		*lbs*
	157,326		*lbs*
Total salt from manure:	-		*lbs*

After Ammonia (30% loss applied)

269,010 *lbs per reporting period*

Process Wastewater Generated:

Process wastewater generated:	43,946,000	*gal*
Total nitrogen generated:	167,716	*lbs*
	75,634	*lbs*
	225,728	*lbs*
Total salt (TDS) generated:	1,589,219	*lbs*

List of Land Application Areas

Field Name	APN	APN Acres	Cropable Acres	Total Harvest	Type of Waste Applied
.7-1	x059 x050 x019 xxxx	640	76	2	P.W. & D.M.
.7-2	x059 x050 x019 xxxx		76	2	P.W. & D.M.
.7-3	x059 x050 x019 xxxx		76	2	P.W. & D.M.
.7-4	x059 x050 x019 xxxx		76	2	P.W. & D.M.
.7-5	x059 x050 x019 xxxx		76	2	P.W. & D.M.
.7-7	x059 x050 x019 xxxx		76	2	P.W. & D.M.
18-1	x059 x130 x048 xxxx	320	76	2	P.W. & D.M.
18-2	x059 x130 x048 xxxx		76	2	P.W. & D.M.
18-3	x059 x130 x048 xxxx		76	2	P.W. & D.M.
18-4	x059 x130 x048 xxxx		76	2	P.W. & D.M.
18-5	x059 x130 x045 xxxx	160	76	2	P.W. & D.M.
18-6	x059 x130 x003 xxxx	40	38	2	P.W. & D.M.
18-7	x059 x130 x045 xxxx		76	2	P.W. & D.M.
	Total Crop Acres		950.00		

List of Land Application Areas

Field Name	APN	APN Acres	Cropable Acres	Total Harvest	Type of Waste Applied
.6-1	x059 x050 x020 xxxx	248	78	1	Dry Manure
.6-2	x059 x050 x020 xxxx		67	1	Dry Manure
.6-3	x059 x050 x045 xxxx		31	1	Dry Manure
.6-4	x059 x050 x045 xxxx		54	1	Dry Manure
	Total Crop Acres		230.00		

List of Fresh Water Sources

Source Description	Type	Subsurface (Tile) Drainage Sources
Barn West	Ground Water	No
Barn East	Ground Water	No
.6-2	Ground Water	No
.7-2	Ground Water	No
.7-3	Ground Water	No
.7-4	Ground Water	No
.7-5	Ground Water	No
.7-7	Ground Water	No
18-2	Ground Water	No
18-4	Ground Water	No
18-7 (Old)	Ground Water	No
18-7	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
.7-1	Wheat, Silage	71.50	0.32	0.07	0.46	-	9.83	5-12H49723	05/12/23	Valley Tech
.7-2	Wheat, Silage	62.50	0.49	0.13	0.68	-	8.41	6-8H53064	06/08/23	Valley Tech
.7-3	Wheat, Silage	66.70	0.45	0.08	0.67	-	9.14	6-8H53064	06/08/23	Valley Tech
.7-4	Wheat, Silage	61.60	0.53	0.12	0.75	-	8.75	6-8H53064	06/08/23	Valley Tech
.7-5	Wheat, Silage	71.00	0.37	0.08	0.37	-	9.39	5-12H49723	05/12/23	Valley Tech
.7-7	Wheat, Silage	69.20	0.48	0.10	0.72	-	10.70	5-12H49723	05/12/23	Valley Tech
18-1	Wheat, Silage	70.10	0.33	0.05	0.59	-	9.14	6-8H53064	06/08/23	Valley Tech
18-2	Wheat, Silage	68.50	0.53	0.09	0.51	-	10.50	6-8H53064	06/08/23	Valley Tech
18-3	Wheat, Silage	61.40	0.71	0.14	0.99	-	10.00	5-12H49723	05/12/23	Valley Tech
18-4	Wheat, Silage	51.20	0.81	0.14	1.12	-	8.55	5-12H49723	05/12/23	Valley Tech
18-5	Wheat, Silage	52.60	0.77	0.16	1.13	-	9.92	5-12H49723	05/12/23	Valley Tech
18-6	Wheat, Silage	65.30	0.53	0.10	0.57	-	8.42	5-12H49723	05/12/23	Valley Tech
18-7	Wheat, Silage	60.00	0.76	0.14	1.06	-	9.17	5-12H49723	05/12/23	Valley Tech
0										
0										

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%*

(WINTER) PLANT TISSUE ANALYSIS (Recorded As Received)										
Field	Crop	Moist %	N%	TP %	TK%	Salt	TFS	Sample #:	Date:	Source
.6-1	Oats, Hay	6.90	0.65	0.14	0.71	-	7.91	6-8H53061	06/08/23	Valley Tech
.6-2	Oats, Hay	7.80	0.89	0.13	0.83	-	8.20	6-8H53061	06/08/23	Valley Tech
.6-3	Oats, Hay	7.40	1.08	0.13	0.75	-	8.48	6-8H53061	06/08/23	Valley Tech
.6-4	Oats, Hay	8.00	0.63	0.12	0.63	-	14.40	6-8H53061	06/08/23	Valley Tech
0										
0										
0										
0										
0										
0										
0										
0										
0										
0										
0										

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
.7-1	Sudangrass Silage	68.80	0.64	0.10	0.97	-	17.40	11-21H73371	11/05/23	Valley Tech
.7-2	Corn, Silage	67.20	0.42	0.07	0.50	-	5.92	10-11H68944	10/11/23	Valley Tech
.7-3	Sudangrass Silage	71.70	0.59	0.09	0.85	-	20.30	11-21H73371	11/05/23	Valley Tech
.7-4	Corn, Silage	60.60	0.46	0.09	0.63	-	6.24	10-11H68944	10/11/23	Valley Tech
.7-5	Sudangrass Silage	69.30	0.55	0.09	0.90	-	18.90	11-21H73371	11/05/23	Valley Tech
.7-7	Sudangrass Silage	70.40	0.60	0.09	0.92	-	19.30	11-21H73371	11/05/23	Valley Tech
18-1	Sudangrass Silage	67.70	0.61	0.10	0.88	-	19.60	11-21H73371	11/05/23	Valley Tech
18-2	Corn, Silage	63.40	0.38	0.07	0.40	-	5.29	10-11H68944	10/11/23	Valley Tech
18-3	Sudangrass Silage	71.00	0.61	0.10	0.85	-	20.80	11-21H73371	11/05/23	Valley Tech
18-4	Corn, Silage	63.50	0.40	0.08	0.44	-	6.15	10-11H68944	10/11/23	Valley Tech
18-5	Sudangrass Silage	63.40	0.81	0.12	1.15	-	22.30	11-21H73371	11/05/23	Valley Tech
18-6	Corn, Silage	50.20	0.68	0.12	0.70	-	6.09	10-11H68944	10/11/23	Valley Tech
18-7	Sudangrass Silage	65.40	0.80	0.11	0.94	-	20.60	11-21H73371	11/05/23	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%*

(SUMMER) PLANT TISSUE ANALYSIS (Recorded As Received)										
Field	Crop	Moist %	N%	TP %	TK%	Salt	TFS	Sample #:	Date:	Source
.6-1	S. Fallow	-	-	-	-	-	-	Fallow		-
.6-2	S. Fallow	-	-	-	-	-	-	Fallow		-
.6-3	S. Fallow	-	-	-	-	-	-	Fallow		-
.6-4	S. Fallow	-	-	-	-	-	-	Fallow		-

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
.7-1	Wheat, Silage	12/21/22	5/11/23	5-12H49723	71.50	0.32	0.07	0.46	-	9.83	Dry Weight
.7-2	Wheat, Silage	12/21/22	5/11/23	6-8H53064	62.50	0.49	0.13	0.68	-	8.41	Dry Weight
.7-3	Wheat, Silage	12/20/22	5/28/23	6-8H53064	66.70	0.45	0.08	0.67	-	9.14	Dry Weight
.7-4	Wheat, Silage	12/21/22	5/11/23	6-8H53064	61.60	0.53	0.12	0.75	-	8.75	Dry Weight
.7-5	Wheat, Silage	12/20/22	5/11/23	5-12H49723	71.00	0.37	0.08	0.37	-	9.39	Dry Weight
.7-7	Wheat, Silage	12/20/22	5/11/23	5-12H49723	69.20	0.48	0.10	0.72	-	10.70	Dry Weight
18-1	Wheat, Silage	12/8/22	6/1/23	6-8H53064	70.10	0.33	0.05	0.59	-	9.14	Dry Weight
18-2	Wheat, Silage	12/10/23	5/30/23	6-8H53064	68.50	0.53	0.09	0.51	-	10.50	Dry Weight
18-3	Wheat, Silage	12/10/22	5/11/23	5-12H49723	61.40	0.71	0.14	0.99	-	10.00	Dry Weight
18-4	Wheat, Silage	12/10/22	4/30/23	5-12H49723	51.20	0.81	0.14	1.12	-	8.55	Dry Weight
18-5	Wheat, Silage	12/8/22	5/11/23	5-12H49723	52.60	0.77	0.16	1.13	-	9.92	Dry Weight
18-6	Wheat, Silage	12/10/22	5/11/23	5-12H49723	65.30	0.53	0.10	0.57	-	8.42	Dry Weight
18-7	Wheat, Silage	12/8/22	5/11/23	5-12H49723	60.00	0.76	0.14	1.06	-	9.17	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%*

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
.6-1	Oats, Hay	11/28/22	6/7/23	6-8H53061	6.90	0.65	0.14	0.71	-	7.91	Dry Weight
.6-2	Oats, Hay	11/28/22	6/7/23	6-8H53061	7.80	0.89	0.13	0.83	-	8.20	Dry Weight
.6-3	Oats, Hay	11/28/22	6/7/23	6-8H53061	7.40	1.08	0.13	0.75	-	8.48	Dry Weight
.6-4	Oats, Hay	11/28/22	6/7/23	6-8H53061	8.00	0.63	0.12	0.63	-	14.40	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
.7-1	Sudangrass Silage	6/1/23	11/5/23	11-21H73371	68.80	0.64	0.10	0.97	-	17.40	Dry Weight
.7-2	Corn, Silage	6/1/23	11/5/23	10-11H68944	67.20	0.42	0.07	0.50	-	5.92	Dry Weight
.7-3	Sudangrass Silage	6/13/23	10/13/23	11-21H73371	71.70	0.59	0.09	0.85	-	20.30	Dry Weight
.7-4	Corn, Silage	6/1/23	11/5/23	10-11H68944	60.60	0.46	0.09	0.63	-	6.24	Dry Weight
.7-5	Sudangrass Silage	6/13/23	10/16/23	11-21H73371	69.30	0.55	0.09	0.90	-	18.90	Dry Weight
.7-7	Sudangrass Silage	6/13/23	10/15/23	11-21H73371	70.40	0.60	0.09	0.92	-	19.30	Dry Weight
18-1	Sudangrass Silage	6/14/23	10/17/23	11-21H73371	67.70	0.61	0.10	0.88	-	19.60	Dry Weight
18-2	Corn, Silage	6/14/23	10/11/23	10-11H68944	63.40	0.38	0.07	0.40	-	5.29	Dry Weight
18-3	Sudangrass Silage	6/14/23	10/14/23	11-21H73371	71.00	0.61	0.10	0.85	-	20.80	Dry Weight
18-4	Corn, Silage	6/14/23	10/11/23	10-11H68944	63.50	0.40	0.08	0.44	-	6.15	Dry Weight
18-5	Sudangrass Silage	6/14/23	11/5/23	11-21H73371	63.40	0.81	0.12	1.15	-	22.30	Dry Weight
18-6	Corn, Silage	6/14/23	10/11/23	10-11H68944	50.20	0.68	0.12	0.70	-	6.09	Dry Weight
18-7	Sudangrass Silage	6/14/23	11/5/23	11-21H73371	65.40	0.80	0.11	0.94	-	20.60	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%*

Field:	Crop	Plant Date	Harvest Date	Lab #	Moisture %	N (mg//kg)	P (mg/kg)	K (mg/kg)	Salt (mg/kg)	TFS	Reporting Basis
.6-1	S. Fallow			Fallow	-	-	-	-	-	-	
.6-2	S. Fallow			Fallow	-	-	-	-	-	-	
.6-3	S. Fallow			Fallow	-	-	-	-	-	-	
.6-4	S. 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%*	

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 West	0.01	266	150	-	0.01	-	-	-	-	-	-	-	VI 2340874	2/10/2023	FGL Enviromental
Barn East	0.01	251	160	-	0.01	-	-	-	-	-	-	-	VI 2340874	2/10/2023	FGL Enviromental
.6-2	0.40	389	270	-	0.01	-	-	-	-	-	-	-	VI 2347391	11/1/2023	FGL Enviromental
.7-2	-	-	-	-	-	-	-	-	-	-	-	-	Non-Op		
.7-3	-	-	-	-	-	-	-	-	-	-	-	-	Non-Op		
.7-4	0.40	391	260	-	0.01	-	-	-	-	-	-	-	VI 2347391	11/1/2023	FGL Enviromental
.7-5	0.01	403	230	-	0.01	-	-	-	-	-	-	-	VI 2344458	7/11/2023	FGL Enviromental
.7-7	0.01	573	320	-	0.01	-	-	-	-	-	-	-	Non-Op		
18-2	-	-	-	-	-	-	-	-	-	-	-	-	Non-Op		
18-4	-	-	-	-	-	-	-	-	-	-	-	-	Non-Op		
18-7 (Old)	-	-	-	-	-	-	-	-	-	-	-	-	Non-Op		
18-7	0.01	573	320	-	0.01	-	-	-	-	-	-	-	VI 2344458	7/11/2023	FGL Enviromental
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
.7-1	-	-	-	-	-	-			-
.7-2	-	-	-	-	-	-			-
.7-3	-	-	-	-	-	-			-
.7-4	-	-	-	-	-	-			-
.7-5	-	-	-	-	-	-			-
.7-7	-	-	-	-	-	-			-
18-1	-	-	-	-	-	-			-
18-2	-	-	-	-	-	-			-
18-3	-	-	-	-	-	-			-
18-4	-	-	-	-	-	-			-
18-5	-	-	-	-	-	-			-
18-6	-	-	-	-	-	-			-
18-7	-	-	-	-	-	-			-

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

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
.6-1	-	-	-	-	-	-			-
.6-2	-	-	-	-	-	-			-
.6-3	-	-	-	-	-	-			-
.6-4	-	-	-	-	-	-			-

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
.7-1	35.7	27.30	10.60	5,800.00	1.87	119.00	06-09S53393	06/09/23	Valley Tech
.7-2	79.5	54.60	9.78	5,550.00	0.65	113.00	06-09S53393	06/09/23	Valley Tech
.7-3	67.8	58.90	2.31	1,720.00	2.88	78.40	06-09S53393	06/09/23	Valley Tech
.7-4	18.0	7.90	2.81	1,860.00	1.03	125.00	06-09S53393	06/09/23	Valley Tech
.7-5	29.3	14.30	3.03	2,030.00	1.20	59.50	06-09S53393	06/09/23	Valley Tech
.7-7	17.2	19.80	2.84	1,940.00	1.38	88.40	06-09S53393	06/09/23	Valley Tech
18-1	44.7	30.70	3.31	2,090.00	0.98	60.30	06-09S53393	06/09/23	Valley Tech
18-2	7.8	6.30	2.86	1,820.00	1.56	61.00	06-09S53393	06/09/23	Valley Tech
18-3	6.9	4.10	1.97	1,470.00	0.92	34.80	06-09S53393	06/09/23	Valley Tech
18-4	26.6	7.10	2.41	1,700.00	0.97	52.80	06-09S53393	06/09/23	Valley Tech
18-5	17.60	13.80	2.60	1,750.00	1.18	46.90	06-09S53393	06/09/23	Valley Tech
18-6	51.30	41.10	3.09	1,890.00	1.63	65.60	06-09S53393	06/09/23	Valley Tech
18-7	8.40	5.30	2.43	1,650.00	2.18	57.60	06-09S53393	06/09/23	Valley Tech

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
.6-1	-	-	-	-	-	-			-
.6-2	-	-	-	-	-	-			-
.6-3	-	-	-	-	-	-			-
.6-4	-	-	-	-	-	-			-

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?

x No

___ Yes, Manifest attached (Attachment D)

Total Dry Manure Exported

Nutrient Import

No Dry manure nutient imports entered

No Process wastewater nutrient imports entered

No Commerical or other nutrient imports entered

Total Process Water Exported

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	167.0	263.0	64.6	463.0	1.0	-	-	-	-	-	-	-	-	4	2,940
2	348.0	452.0	79.0	523.0	1.0	-	-	-	-	-	-	-	-	6	3,900
3	194.0	271.0	26.8	160.0	1.0	-	0.0	30.2	59.6	0.0	16.1	73.8	3.4	3	2,200
4	311.0	330.0	88.6	330.0	1.0	-	-	-	-	-	-	-	-	-	3,430

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	3-9L44118	3/9/2023	Valley Tech	38.1	21.8	33.6	126.4
2	5-12L49732	5/12/2023	Valley Tech	79.1	23.6	41.0	142.8
3	8-15L61716	8/15/2023	Valley Tech	44.2	17.5	13.9	43.7
4	10-3L67678	10/16/2023	Valley Tech	70.7	4.3	46.0	90.1

Description	Sample #:	Date:	As Is/ Dry Weight	Source	Material Type
Manure	5-12M49742	5/12/2023	Dry Weight	Valley Tech	Corral Solids
Manure	10-3M67650	10/13/2023	Dry Weight	Valley Tech	Corral Solids

Dry Manure: (As Recv'd)	TN %	TP %	TK %	Ca	Mg	Na	S	CL	Salt	TFS	Moisture %
Corral	0.74	0.28	1.07	-	-	-	-	-	-	-	34.20
Corral	0.95	0.34	1.25	1.14	0.30	0.28	0.35	0.51	-	62.00	28.00

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: .7-1 **Acres:** 76.00

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)
	-	-	-	-	-	-	-	-	-	-	-		-
12/21/22	W. Planting	-	-	-	-	-	-	-	-	-	-		-
2/10/23	.7-4	-	-	-	5.23	-	0.5	-	-	185	-		-
2/10/23	Process Water	-	-	-	-	1.74	73.1	25.5	183.1	1,163	-		-
3/18/23	.7-4	-	-	-	5.34	-	0.5	-	-	189	-		-
3/18/23	Process Water	-	-	-	-	1.78	74.5	26.1	186.7	1,186	-		-
4/10/23	.7-4	-	-	-	6.59	-	0.6	-	-	233	-		-
5/11/23	W. Harvest	-	-	-	-	-	(117.7)	(26.5)	(171.8)	-	9.83		18.60
	-	-	-	-	-	-	-	-	-	-	-		-
5/15/23	S. Manure App.	10.53	-	-	-	-	80.0	71.2	262.2	-	-		-
5/20/23	.7-4	-	-	-	6.31	-	0.6	-	-	223	-		-
6/1/23	S. Planting	-	-	-	-	-	-	-	-	-	-		-
6/3/23	.7-4	-	-	-	6.45	-	0.6	-	-	228	-		-
7/1/23	.7-4	-	-	-	5.27	-	0.5	-	-	186	-		-
7/1/23	Process Water	-	-	-	-	1.76	75.8	10.7	63.7	876	-		-
7/27/23	.7-4	-	-	-	5.20	-	0.5	-	-	184	-		-
7/27/23	Process Water	-	-	-	-	1.73	74.8	10.5	62.8	864	-		-
8/23/23	.7-4	-	-	-	5.30	-	0.5	-	-	188	-		-
8/23/23	Process Water	-	-	-	-	1.77	76.3	10.7	64.1	882	-		-
10/6/23	.7-4	-	-	-	6.38	-	0.6	-	-	226	-		-
11/5/23	S. Harvest	-	-	-	-	-	(272.4)	(42.7)	(414.0)	-	17.40		21.40
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
Totals:		10.5		0	52.08	8.78	69	86	237	6,812	27.23	0	40.00

Dry Weight
As Received

Field Name/Number: .7-1 **Acres:** 76

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	459.2	154.8	822.7	6811.9
Nutrients Removed at Harvest	-390.1	-69.2	-585.7	0.0
Nutrient Balance	69.1	85.5	236.9	6811.9

Winter Nitrogen Crop App / Use Ratio: 1.33 **Summer Nitrogen Crop App / Use Ratio:** 1.16

Field Name/Number: .7-1 **Acres:** 76

Winter Crop **Wheat, Silage**

Nutrient Summary :		Applied		N		
W. Manure App.		-	T/Ac	-	-	-
W. Comm Fert App.		-	lbs/Ac	-		
Process Water	Q1	3.5	Ac In /Ac	147.6	118.2	443.8
	Q2	-	Ac In /Ac	-	-	-
Well Water		17.16	Ac In /Ac	1.6		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
W. Planting	12/21/22					
W. Harvest	5/11/23	18.6	T/Ac	(117.7)	(60.7)	(206.1)

Summer Crop **Sudangrass Silage**

Nutrient Summary :		Applied		N		
S. Manure App.		10.5	T/Ac	80.0	163.1	314.7
S. Comm Fert App.		-	lbs/Ac	-	-	-
Process Water	Q2	-	Ac In /Ac	-	-	-
	Q3	5.3	Ac In /Ac	226.9	73.1	228.8
	Q4	-	Ac In /Ac	-	-	-
Well Water		34.9	Ac In /Ac	3.1659027		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
S. Planting	6/1/23					
S. Harvest	11/5/23	21.4	T/Ac	(272.4)	(97.9)	(496.8)

Nutrient Applications

Field Name/Number: .7-2 **Acres:** 76.00

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)
12/15/22	W. Manure App.	10.53	-	-	-	-	62.6	58.2	224.4	-	-		-
12/21/22	W. Planting	-	-	-	-	-	-	-	-	-	-		-
2/10/23	.7-4	-	-	-	5.20	-	0.5	-	-	184	-		-
2/10/23	Process Water	-	-	-	-	1.73	72.6	25.4	181.8	1,155	-		-
3/18/23	.7-4	-	-	-	5.34	-	0.5	-	-	189	-		-
3/18/23	Process Water	-	-	-	-	1.78	74.5	26.1	186.7	1,186	-		-
4/10/23	.7-4	-	-	-	6.35	-	0.6	-	-	225	-		-
5/11/23	W. Harvest	-	-	-	-	-	(179.8)	(46.7)	(247.1)	-	9.83		18.30
	-	-	-	-	-	-	-	-	-	-	-		-
5/15/23	S. Manure App.	10.53	-	-	-	-	80.0	71.2	262.2	-	-		-
5/20/23	.7-4	-	-	-	6.49	-	0.6	-	-	230	-		-
6/1/23	S. Planting	-	-	-	-	-	-	-	-	-	-		-
6/3/23	.7-4	-	-	-	6.17	-	0.6	-	-	218	-		-
7/1/23	.7-4	-	-	-	5.27	-	0.5	-	-	186	-		-
7/1/23	Process Water	-	-	-	-	1.76	75.8	10.7	63.7	876	-		-
7/27/23	.7-4	-	-	-	5.23	-	0.5	-	-	185	-		-
7/27/23	Process Water	-	-	-	-	1.74	75.3	10.6	63.3	870	-		-
8/23/23	.7-4	-	-	-	5.30	-	0.5	-	-	188	-		-
8/23/23	Process Water	-	-	-	-	1.77	76.3	10.7	64.1	882	-		-
10/6/23	.7-4	-	-	-	6.42	-	0.6	-	-	227	-		-
11/5/23	S. Harvest	-	-	-	-	-	(242.0)	(37.5)	(283.3)	-	17.40		28.60
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
Totals:		21.1		0	51.77	8.78	100	129	516	6,799	27.23	0	46.90

Field Name/Number: .7-2 **Acres:** 76.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K (lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	521.8	92.9	868.5	6798.9
Nutrients Removed at Harvest	-421.8	-36.7	-440.2	0.0
Nutrient Balance	100.0	56.1	428.3	6798.9

Winter Nitrogen Crop App / Use Ratio: 1.21 **Summer Nitrogen Crop App / Use Ratio:** 1.31

Field Name/Number: .7-2 **Acres:** 76

Winter Crop **Wheat, Silage**

Nutrient Summary :		Applied		N		
W. Manure App.		10.5	T/Ac	62.6	133.2	269.3
W. Comm Fert App.		-	lbs/Ac	-		
Process Water	Q1	3.5	Ac In /Ac	147.1	117.8	442.3
	Q2	-	Ac In /Ac	-	-	-
Well Water		16.9	Ac In /Ac	1.5		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
W. Planting	12/21/22					
W. Harvest	5/11/23	18.3	T/Ac	(179.8)	(106.9)	(296.5)

Summer Crop **Corn, Silage**

Nutrient Summary :		Applied		N		
S. Manure App.		10.5	T/Ac	80.0	163.1	314.7
S. Comm Fert App.		-	lbs/Ac	-	-	-
Process Water	Q2	-	Ac In /Ac	-	-	-
	Q3	5.3	Ac In /Ac	227.4	73.3	229.3
	Q4	-	Ac In /Ac	-	-	-
Well Water		34.9	Ac In /Ac	3.2		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
S. Planting	6/1/23					
S. Harvest	11/5/23	28.6	T/Ac	(242.0)	(85.9)	(340.0)

Nutrient Applications

Field Name/Number: .7-3 **Acres:** 76.00

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)
12/15/22	W. Manure App.	6.58	-	-	-	-	39.1	36.4	140.3	-	-		-
12/20/22	W. Planting	-	-	-	-	-	-	-	-	-	-		-
2/3/23	.7-5	-	-	-	5.08	-	0.0	-	-	159	-		-
2/3/23	Process Water	-	-	-	-	1.85	77.5	27.1	194.0	1,232	-		-
3/11/23	.7-5	-	-	-	5.24	-	0.0	-	-	164	-		-
3/11/23	Process Water	-	-	-	-	1.91	79.9	27.9	200.2	1,271	-		-
4/22/23	.7-5	-	-	-	6.08	-	0.0	-	-	190	-		-
5/28/23	W. Harvest	-	-	-	-	-	(174.4)	(29.7)	(258.4)	-	9.83		19.40
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
5/30/23	S. Manure App.	6.58	-	-	-	-	50.0	44.5	163.9	-	-		-
6/4/23	.7-5	-	-	-	6.30	-	0.0	-	-	197	-		-
6/13/23	S. Planting	-	-	-	-	-	-	-	-	-	-		-
6/14/23	.7-5	-	-	-	6.17	-	0.0	-	-	193	-		-
7/15/23	.7-5	-	-	-	5.15	-	0.0	-	-	161	-		-
7/15/23	Process Water	-	-	-	-	1.87	80.8	11.4	67.9	934	-		-
8/12/23	.7-5	-	-	-	5.21	-	0.0	-	-	163	-		-
8/12/23	Process Water	-	-	-	-	1.90	81.8	11.5	68.7	945	-		-
9/2/23	.7-5	-	-	-	5.12	-	0.0	-	-	160	-		-
9/2/23	Process Water	-	-	-	-	1.86	97.7	11.3	67.5	928	-		-
9/23/23	.7-5	-	-	-	6.24	-	0.0	-	-	195	-		-
10/13/23	S. Harvest	-	-	-	-	-	(246.1)	(37.7)	(352.0)	-	17.40		20.80
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
Totals:		13.2		0	50.59	9.39	86	103	292	6,893	27.23	0	40.20

Field Name/Number: .7-3 **Acres:** 76.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	507.0	74.2	749.1	6893.2
Nutrients Removed at Harvest	-420.5	-29.4	-506.7	0.0
Nutrient Balance	86.5	44.8	242.4	6893.2

Winter Nitrogen Crop App / Use Ratio: 1.17 **Summer Nitrogen Crop App / Use Ratio:** 1.29

Field Name/Number: .7-3 **Acres:** 76

Winter Crop **Wheat, Silage**

Nutrient Summary :		Applied		N		
W. Manure App.		6.6	T/Ac	39.1	83.3	168.3
W. Comm Fert App.		-	lbs/Ac	-		
Process Water	Q1	3.8	Ac In /Ac	157.3	126.0	473.0
	Q2	-	Ac In /Ac	-	-	-
Well Water		16.4	Ac In /Ac	0.0		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
W. Planting	12/20/22					
W. Harvest	5/28/23	19.4	T/Ac	(174.4)	(68.1)	(310.1)

Summer Crop **Sudangrass Silage**

Nutrient Summary :		Applied		N		
S. Manure App.		6.6	T/Ac	50.0	102.0	196.7
S. Comm Fert App.		-	lbs/Ac	-	-	-
Process Water	Q2	-	Ac In /Ac	-	-	-
	Q3	5.6	Ac In /Ac	260.3	78.3	245.0
	Q4	-	Ac In /Ac	-	-	-
Well Water		34.2	Ac In /Ac	0.1		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
S. Planting	6/13/23					
S. Harvest	10/13/23	20.8	T/Ac	(246.1)	(86.3)	(422.4)

Nutrient Applications

Field Name/Number: .7-4 **Acres:** 76.00

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)
12/15/22	W. Manure App.	10.53	-	-	-	-	62.6	58.2	224.4	-	-		-
12/21/22	W. Planting	-	-	-	-	-	-	-	-	-	-		-
2/10/23	.7-4	-	-	-	5.41	-	0.5	-	-	191	-		-
2/10/23	Process Water	-	-	-	-	1.80	75.5	26.4	189.2	1,201	-		-
3/18/23	.7-4	-	-	-	5.23	-	0.5	-	-	185	-		-
3/18/23	Process Water	-	-	-	-	1.74	73.1	25.5	183.1	1,163	-		-
4/10/23	.7-4	-	-	-	6.31	-	0.6	-	-	223	-		-
5/11/23	W. Harvest	-	-	-	-	-	(189.7)	(44.0)	(268.1)	-	9.83		17.90
	-	-	-	-	-	-	-	-	-	-	-		-
5/15/23	S. Manure App.	10.53	-	-	-	-	80.0	71.2	262.2	-	-		-
5/20/23	.7-4	-	-	-	6.45	-	0.6	-	-	228	-		-
6/1/23	S. Planting	-	-	-	-	-	-	-	-	-	-		-
6/3/23	.7-4	-	-	-	6.38	-	0.6	-	-	226	-		-
7/1/23	.7-4	-	-	-	5.27	-	0.5	-	-	186	-		-
7/1/23	Process Water	-	-	-	-	1.76	75.8	10.7	63.7	876	-		-
7/27/23	.7-4	-	-	-	5.20	-	0.5	-	-	184	-		-
7/27/23	Process Water	-	-	-	-	1.73	74.8	10.5	62.8	864	-		-
8/23/23	.7-4	-	-	-	5.34	-	0.5	-	-	189	-		-
8/23/23	Process Water	-	-	-	-	1.78	76.8	10.8	64.5	887	-		-
10/6/23	.7-4	-	-	-	6.56	-	0.6	-	-	232	-		-
11/5/23	S. Harvest	-	-	-	-	-	(267.8)	(53.1)	(371.7)	-	17.40		29.30
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
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	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
Totals:		21.1		0	52.15	8.82	66	116	410	6,836	27.23	0	47.20

Field Name/Number: .7-4 **Acres:** 76.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	523.3	93.1	871.5	6835.7
Nutrients Removed at Harvest	-457.5	-42.4	-531.1	0.0
Nutrient Balance	65.8	50.7	340.5	6835.7

Winter Nitrogen Crop App / Use Ratio: 1.16 **Summer Nitrogen Crop App / Use Ratio:** 1.19

Field Name/Number: .7-4 **Acres:** 76

Winter Crop **Wheat, Silage**

Nutrient Summary :		Applied		N		
W. Manure App.		10.5	T/Ac	62.6	133.2	269.3
W. Comm Fert App.		-	lbs/Ac	-		
Process Water	Q1	3.5	Ac In /Ac	148.6	118.9	446.7
	Q2	-	Ac In /Ac	-	-	-
Well Water		17.0	Ac In /Ac	1.5		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
W. Planting	12/21/22					
W. Harvest	5/11/23	17.9	T/Ac	(189.7)	(100.7)	(321.7)

Summer Crop **Corn, Silage**

Nutrient Summary :		Applied		N		
S. Manure App.		10.5	T/Ac	80.0	163.1	314.7
S. Comm Fert App.		-	lbs/Ac	-	-	-
Process Water	Q2	-	Ac In /Ac	-	-	-
	Q3	5.3	Ac In /Ac	227.4	73.3	229.3
	Q4	-	Ac In /Ac	-	-	-
Well Water		35.2	Ac In /Ac	3.2		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
S. Planting	6/1/23					
S. Harvest	11/5/23	29.3	T/Ac	(267.8)	(121.6)	(446.1)

Nutrient Applications

Field Name/Number: .7-5 **Acres:** 76.00

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)
	-	-	-	-	-	-	-	-	-	-	-		-
12/20/22	W. Planting	-	-	-	-	-	-	-	-	-	-		-
2/3/23	.7-5	-	-	-	5.05	-	0.0	-	-	158	-		-
2/3/23	Process Water	-	-	-	-	1.84	77.0	26.9	192.8	1,225	-		-
3/1/23	.7-5	-	-	-	5.12	-	0.0	-	-	160	-		-
3/1/23	Process Water	-	-	-	-	1.86	77.9	27.2	195.3	1,240	-		-
3/29/23	.7-5	-	-	-	6.20	-	0.0	-	-	194	-		-
4/22/23	.7-5	-	-	-	6.36	-	0.0	-	-	199	-		-
5/11/23	W. Harvest	-	-	-	-	-	(136.3)	(27.9)	(137.3)	-	9.83		18.50
	-	-	-	-	-	-	-	-	-	-	-		-
5/25/23	S. Manure App.	7.89	-	-	-	-	60.0	53.4	196.7	-	-		-
6/3/23	.7-5	-	-	-	6.17	-	0.0	-	-	193	-		-
6/13/23	S. Planting	-	-	-	-	-	-	-	-	-	-		-
6/15/23	.7-5	-	-	-	6.40	-	0.0	-	-	200	-		-
7/15/23	.7-5	-	-	-	5.02	-	0.0	-	-	157	-		-
7/15/23	Process Water	-	-	-	-	1.83	78.8	11.1	66.2	911	-		-
8/12/23	.7-5	-	-	-	5.15	-	0.0	-	-	161	-		-
8/12/23	Process Water	-	-	-	-	1.87	80.8	11.4	67.9	934	-		-
9/2/23	.7-5	-	-	-	5.08	-	0.0	-	-	159	-		-
9/2/23	Process Water	-	-	-	-	1.85	97.1	11.2	67.1	922	-		-
9/25/23	.7-5	-	-	-	6.24	-	0.0	-	-	195	-		-
10/16/23	S. Harvest	-	-	-	-	-	(243.1)	(40.5)	(397.1)	-	17.40		22.00
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
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	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
Totals:		7.9		0	56.79	9.25	92	73	251	7,008	27.23	0	40.50

Field Name/Number: .7-5 **Acres:** 76.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K (Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	471.8	61.7	652.4	7008.0
Nutrients Removed at Harvest	-379.4	-29.9	-443.7	0.0
Nutrient Balance	92.4	31.8	208.7	7008.0

Winter Nitrogen Crop App / Use Ratio: 1.19 **Summer Nitrogen Crop App / Use Ratio:** 1.33

Field Name/Number: .7-5 **Acres:** 76

Winter Crop **Wheat, Silage**

Nutrient Summary :		Applied		N		
W. Manure App.		-	T/Ac	-	-	-
W. Comm Fert App.		-	lbs/Ac	-		
Process Water	Q1	3.7	Ac In /Ac	154.9	124.0	465.7
	Q2	-	Ac In /Ac	-	-	-
Well Water		22.7	Ac In /Ac	0.1		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
W. Planting	12/20/22					
W. Harvest	5/11/23	18.5	T/Ac	(136.3)	(63.9)	(164.8)

Summer Crop **Sudangrass Silage**

Nutrient Summary :		Applied		N		
S. Manure App.		7.9	T/Ac	60.0	122.4	236.0
S. Comm Fert App.		-	lbs/Ac	-	-	-
Process Water	Q2	-	Ac In /Ac	-	-	-
	Q3	5.5	Ac In /Ac	256.7	77.2	241.4
	Q4	-	Ac In /Ac	-	-	-
Well Water		34.1	Ac In /Ac	0.1		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
S. Planting	6/13/23					
S. Harvest	10/16/23	22.0	T/Ac	(243.1)	(92.8)	(476.6)

Nutrient Applications

Field Name/Number: .7-7 **Acres:** 76.00

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)
12/15/22	W. Manure App.	7.89	-	-	-	-	47.0	43.6	168.3	-	-		-
12/20/22	W. Planting	-	-	-	-	-	-	-	-	-	-		-
2/3/23	.7-5	-	-	-	5.18	-	0.0	-	-	162	-		-
2/3/23	Process Water	-	-	-	-	1.88	78.9	27.6	197.7	1,256	-		-
3/11/23	.7-5	-	-	-	5.05	-	0.0	-	-	158	-		-
3/11/23	Process Water	-	-	-	-	1.84	77.0	26.9	192.8	1,225	-		-
4/2/23	.7-5	-	-	-	6.20	-	0.0	-	-	194	-		-
4/23/23	.7-5	-	-	-	6.08	-	0.0	-	-	190	-		-
5/11/23	W. Harvest	-	-	-	-	-	(184.7)	(36.5)	(274.1)	-	9.83		19.10
	-	-	-	-	-	-	-	-	-	-	-		-
5/20/23	S. Manure App.	7.89	-	-	-	-	60.0	53.4	196.7	-	-		-
6/3/23	.7-5	-	-	-	6.30	-	0.0	-	-	197	-		-
6/13/23	S. Planting	-	-	-	-	-	-	-	-	-	-		-
6/15/23	.7-5	-	-	-	6.11	-	0.0	-	-	191	-		-
7/16/23	.7-5	-	-	-	5.08	-	0.0	-	-	159	-		-
7/16/23	Process Water	-	-	-	-	1.85	79.8	11.2	67.1	922	-		-
8/11/23	.7-5	-	-	-	5.15	-	0.0	-	-	161	-		-
8/11/23	Process Water	-	-	-	-	1.87	80.8	11.4	67.9	934	-		-
9/3/23	.7-5	-	-	-	5.12	-	0.0	-	-	160	-		-
9/3/23	Process Water	-	-	-	-	1.86	97.7	11.3	67.5	928	-		-
9/25/23	.7-5	-	-	-	6.24	-	0.0	-	-	195	-		-
10/15/23	S. Harvest	-	-	-	-	-	(244.0)	(38.5)	(372.5)	-	17.40		20.30
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
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	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
Totals:		15.8		0	56.50	9.30	93	111	311	7,032	27.23	0	39.40

Field Name/Number: .7-7 **Acres:** 76.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K (lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	521.3	80.9	795.2	7031.9
Nutrients Removed at Harvest	-428.7	-32.7	-536.8	0.0
Nutrient Balance	92.7	48.2	258.4	7031.9

Winter Nitrogen Crop App / Use Ratio: 1.14 **Summer Nitrogen Crop App / Use Ratio:** 1.33

Field Name/Number: .7-7 **Acres:** 76

Winter Crop **Wheat, Silage**

Nutrient Summary :		Applied		N		
W. Manure App.		7.9	T/Ac	47.0	99.9	202.0
W. Comm Fert App.		-	lbs/Ac	-		
Process Water	Q1	3.7	Ac In /Ac	155.9	124.8	468.6
	Q2	-	Ac In /Ac	-	-	-
Well Water		22.5	Ac In /Ac	0.1		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
W. Planting	12/20/22					
W. Harvest	5/11/23	19.1	T/Ac	(184.7)	(83.5)	(329.0)

Summer Crop **Sudangrass Silage**

Nutrient Summary :		Applied		N		
S. Manure App.		7.9	T/Ac	60.0	122.4	236.0
S. Comm Fert App.		-	lbs/Ac	-	-	-
Process Water	Q2	-	Ac In /Ac	-	-	-
	Q3	5.6	Ac In /Ac	258.3	77.7	242.9
	Q4	-	Ac In /Ac	-	-	-
Well Water		34.0	Ac In /Ac	0.1		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
S. Planting	6/13/23					
S. Harvest	10/15/23	20.3	T/Ac	(244.0)	(88.1)	(447.1)

Nutrient Applications

Field Name/Number: 18-1 **Acres:** 76.00

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)
	-	-	-	-	-	-	-	-	-	-	-		-
12/8/22	W. Planting	-	-	-	-	-	-	-	-	-	-		-
2/1/23	18-7	-	-	-	5.23	-	0.0	-	-	228	-		-
2/1/23	Process Water	-	-	-	-	1.74	73.1	25.5	183.1	1,163	-		-
3/16/23	18-7	-	-	-	5.13	-	0.0	-	-	223	-		-
3/16/23	Process Water	-	-	-	-	1.71	71.6	25.0	179.4	1,139	-		-
4/2/23	18-7	-	-	-	6.17	-	0.0	-	-	269	-		-
4/29/23	18-7	-	-	-	6.28	-	0.0	-	-	273	-		-
6/1/23	W. Harvest	-	-	-	-	-	(124.8)	(20.2)	(222.6)	-	9.83		18.80
	-	-	-	-	-	-	-	-	-	-	-		-
6/3/23	S. Manure App.	9.21	-	-	-	-	70.0	62.3	229.5	-	-		-
6/5/23	18-7	-	-	-	6.45	-	0.0	-	-	281	-		-
6/14/23	S. Planting	-	-	-	-	-	-	-	-	-	-		-
6/16/23	18-7	-	-	-	6.35	-	0.0	-	-	276	-		-
7/16/23	18-7	-	-	-	5.16	-	0.0	-	-	225	-		-
7/16/23	Process Water	-	-	-	-	1.72	74.3	10.5	62.4	858	-		-
8/14/23	18-7	-	-	-	5.27	-	0.0	-	-	229	-		-
8/14/23	Process Water	-	-	-	-	1.76	75.8	10.7	63.7	876	-		-
9/5/23	18-7	-	-	-	5.34	-	0.0	-	-	232	-		-
9/5/23	Process Water	-	-	-	-	1.78	93.5	10.8	64.5	887	-		-
9/25/23	18-7	-	-	-	6.38	-	0.0	-	-	278	-		-
10/17/23	S. Harvest	-	-	-	-	-	(255.2)	(41.9)	(368.6)	-	17.40		20.90
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
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	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
Totals:		9.2		0	57.77	8.71	78	83	191	7,438	27.23	0	39.70

Field Name/Number: 18-1 **Acres:** 76.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	458.4	63.2	649.6	7438.1
Nutrients Removed at Harvest	-380.0	-27.1	-490.7	0.0
Nutrient Balance	78.4	36.1	158.9	7438.1

Winter Nitrogen Crop App / Use Ratio: 1.22 **Summer Nitrogen Crop App / Use Ratio:** 1.26

Field Name/Number: 18-1 **Acres:** 76

Winter Crop **Wheat, Silage**

Nutrient Summary :		Applied		N		
W. Manure App.		-	T/Ac	-	-	-
W. Comm Fert App.		-	lbs/Ac	-		
Process Water	Q1	3.5	Ac In /Ac	144.7	115.8	435.0
	Q2	-	Ac In /Ac	-	-	-
Well Water		22.8	Ac In /Ac	0.1		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
W. Planting	12/8/22					
W. Harvest	6/1/23	18.8	T/Ac	(124.8)	(46.3)	(267.1)

Summer Crop **Sudangrass Silage**

Nutrient Summary :		Applied		N		
S. Manure App.		9.2	T/Ac	70.0	142.8	275.3
S. Comm Fert App.		-	lbs/Ac	-	-	-
Process Water	Q2	-	Ac In /Ac	-	-	-
	Q3	5.3	Ac In /Ac	243.5	73.1	228.8
	Q4	-	Ac In /Ac	-	-	-
Well Water		35.0	Ac In /Ac	0.1		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
S. Planting	6/14/23					
S. Harvest	10/17/23	20.9	T/Ac	(255.2)	(95.8)	(442.3)

Nutrient Applications

Field Name/Number: 18-2 **Acres:** 76.00

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)
12/5/23	W. Manure App.	9.21	-	-	-	-	54.8	50.9	196.4	-	-		-
12/10/23	W. Planting	-	-	-	-	-	-	-	-	-	-		-
2/7/23	18-7	-	-	-	5.16	-	0.0	-	-	225	-		-
2/7/23	Process Water	-	-	-	-	1.72	72.1	25.2	180.6	1,147	-		-
3/22/23	18-7	-	-	-	5.13	-	0.0	-	-	223	-		-
3/22/23	Process Water	-	-	-	-	1.71	71.6	25.0	179.4	1,139	-		-
5/6/23	18-7	-	-	-	6.38	-	0.0	-	-	278	-		-
5/30/23	W. Harvest	-	-	-	-	-	(190.6)	(30.4)	(182.7)	-	9.83		17.90
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
6/1/23	S. Manure App.	5.26	-	-	-	-	40.0	35.6	131.1	-	-		-
6/4/23	18-7	-	-	-	6.17	-	0.0	-	-	269	-		-
6/14/23	S. Planting	-	-	-	-	-	-	-	-	-	-		-
6/16/23	18-7	-	-	-	6.42	-	0.0	-	-	279	-		-
7/16/23	18-7	-	-	-	5.06	-	0.0	-	-	220	-		-
7/16/23	Process Water	-	-	-	-	1.69	72.8	10.2	61.2	841	-		-
8/14/23	18-7	-	-	-	5.23	-	0.0	-	-	228	-		-
8/14/23	Process Water	-	-	-	-	1.74	75.3	10.6	63.3	870	-		-
9/5/23	18-7	-	-	-	5.20	-	0.0	-	-	226	-		-
9/5/23	Process Water	-	-	-	-	1.73	91.0	10.5	62.8	864	-		-
9/20/23	18-7	-	-	-	6.35	-	0.0	-	-	276	-		-
10/11/23	S. Harvest	-	-	-	-	-	(223.7)	(40.5)	(230.1)	-	17.40		29.10
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
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	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
Totals:		14.5		0	51.10	8.59	63	97	462	7,086	27.23	0	47.00

Field Name/Number: 18-2 **Acres:** 76.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K (lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	477.7	73.4	726.1	7086.2
Nutrients Removed at Harvest	-414.2	-30.9	-342.6	0.0
Nutrient Balance	63.5	42.4	383.5	7086.2

Winter Nitrogen Crop App / Use Ratio: 1.08 **Summer Nitrogen Crop App / Use Ratio:** 1.28

Field Name/Number: 18-2 **Acres:** 76

Winter Crop **Wheat, Silage**

Nutrient Summary :		Applied		N		
W. Manure App.		9.2	T/Ac	54.8	116.6	235.6
W. Comm Fert App.		-	lbs/Ac	-		
Process Water	Q1	3.4	Ac In /Ac	143.7	115.0	432.0
	Q2	-	Ac In /Ac	-	-	-
Well Water		-	Ac In /Ac	-		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
W. Planting	12/10/23					
W. Harvest	5/30/23	17.9	T/Ac	(190.6)	(69.7)	(219.2)

Summer Crop **Corn, Silage**

Nutrient Summary :		Applied		N		
S. Manure App.		5.3	T/Ac	40.0	81.6	157.3
S. Comm Fert App.		-	lbs/Ac	-	-	-
Process Water	Q2	-	Ac In /Ac	-	-	-
	Q3	5.2	Ac In /Ac	239.1	71.8	224.7
	Q4	-	Ac In /Ac	-	-	-
Well Water		34.4	Ac In /Ac	0.1		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
S. Planting	6/14/23					
S. Harvest	10/11/23	29.1	T/Ac	(223.7)	(92.7)	(276.1)

Nutrient Applications

Field Name/Number: 18-3 **Acres:** 76.00

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)
11/30/22	W. Manure App.	5.26	-	-	-	-	31.3	29.1	112.2	-	-		-
12/10/22	W. Planting	-	-	-	-	-	-	-	-	-	-		-
1/23/23	18-7	-	-	-	5.30	-	0.0	-	-	231	-		-
1/23/23	Process Water	-	-	-	-	1.77	74.0	25.9	185.5	1,178	-		-
3/10/23	18-7	-	-	-	5.16	-	0.0	-	-	225	-		-
3/10/23	Process Water	-	-	-	-	1.72	72.1	25.2	180.6	1,147	-		-
4/1/23	18-7	-	-	-	5.20	-	0.0	-	-	226	-		-
4/1/23	Process Water	-	-	-	-	1.73	124.6	31.0	205.4	1,532	-		-
4/20/23	18-7	-	-	-	6.07	-	0.0	-	-	264	-		-
5/11/23	W. Harvest	-	-	-	-	-	(261.4)	(52.6)	(365.1)	-	9.83		18.40
6/1/23	S. Manure App.	6.58	-	-	-	-	50.0	44.5	163.9	-	-		-
6/4/23	18-7	-	-	-	6.24	-	0.0	-	-	272	-		-
6/14/23	S. Planting	-	-	-	-	-	-	-	-	-	-		-
6/16/23	18-7	-	-	-	6.17	-	0.0	-	-	269	-		-
7/16/23	18-7	-	-	-	5.27	-	0.0	-	-	229	-		-
7/16/23	Process Water	-	-	-	-	1.76	75.8	10.7	63.7	876	-		-
8/14/23	18-7	-	-	-	5.13	-	0.0	-	-	223	-		-
8/14/23	Process Water	-	-	-	-	1.71	73.8	10.4	62.0	853	-		-
9/5/23	18-7	-	-	-	5.34	-	0.0	-	-	232	-		-
9/5/23	Process Water	-	-	-	-	1.78	93.5	10.8	64.5	887	-		-
9/25/23	18-7	-	-	-	6.10	-	0.0	-	-	266	-		-
10/14/23	S. Harvest	-	-	-	-	-	(248.5)	(40.4)	(349.6)	-	17.40		20.50
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
Totals:		11.8		0	55.99	10.47	#N/A	-	-	#N/A	27.23	0	38.90

Field Name/Number: 18-3 **Acres:** 76.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	595.2	81.9	861.5	8910.0
Nutrients Removed at Harvest	-509.9	-40.6	-593.2	0.0
Nutrient Balance	85.3	41.3	268.3	8910.0

Winter Nitrogen Crop App / Use Ratio: 1.18 **Summer Nitrogen Crop App / Use Ratio:** 1.21

Field Name/Number: 18-3 **Acres:** 76

Winter Crop **Wheat, Silage**

Nutrient Summary :		Applied		N		
W. Manure App.		5.3	T/Ac	31.3	66.6	134.6
W. Comm Fert App.		-	lbs/Ac	-		
Process Water	Q1	3.5	Ac In /Ac	146.1	117.0	439.4
	Q2	1.7	Ac In /Ac	124.6	71.1	246.5
Well Water		21.7	Ac In /Ac	0.0		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
W. Planting	12/10/22					
W. Harvest	5/11/23	18.4	T/Ac	(261.4)	(120.4)	(438.1)

Summer Crop **Sudangrass Silage**

Nutrient Summary :		Applied		N		
S. Manure App.		6.6	T/Ac	50.0	102.0	196.7
S. Comm Fert App.		-	lbs/Ac	-	-	-
Process Water	Q2	-	Ac In /Ac	-	-	-
	Q3	5.2	Ac In /Ac	243.0	73.0	228.3
	Q4	-	Ac In /Ac	-	-	-
Well Water		34.3	Ac In /Ac	0.1		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
S. Planting	6/14/23					
S. Harvest	10/14/23	20.5	T/Ac	(248.5)	(92.6)	(419.5)

Nutrient Applications

Field Name/Number: 18-4 **Acres:** 76.00

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)
11/30/22	W. Manure App.	9.21	-	-	-	-	54.8	50.9	196.4	-	-		-
12/10/22	W. Planting	-	-	-	-	-	-	-	-	-	-		-
1/23/23	18-7	-	-	-	5.06	-	0.0	-	-	220	-		-
1/23/23	Process Water	-	-	-	-	1.69	70.6	24.7	177.0	1,124	-		-
3/10/23	18-7	-	-	-	5.16	-	0.0	-	-	225	-		-
3/10/23	Process Water	-	-	-	-	1.72	72.1	25.2	180.6	1,147	-		-
3/29/23	18-7	-	-	-	5.02	-	0.0	-	-	219	-		-
3/29/23	Process Water	-	-	-	-	1.67	120.4	24.5	175.7	1,116	-		-
4/18/23	18-7	-	-	-	6.35	-	0.0	-	-	276	-		-
4/30/23	W. Harvest	-	-	-	-	-	(295.0)	(51.2)	(404.5)	-	9.83		18.10
5/25/23	S. Manure App.	5.26	-	-	-	-	40.0	35.6	131.1	-	-		-
6/1/23	18-7	-	-	-	6.42	-	0.0	-	-	279	-		-
6/14/23	S. Planting	-	-	-	-	-	-	-	-	-	-		-
6/16/23	18-7	-	-	-	6.28	-	0.0	-	-	273	-		-
7/16/23	18-7	-	-	-	5.13	-	0.0	-	-	223	-		-
7/16/23	Process Water	-	-	-	-	1.71	73.8	10.4	62.0	853	-		-
8/14/23	18-7	-	-	-	5.23	-	0.0	-	-	228	-		-
8/14/23	Process Water	-	-	-	-	1.74	75.3	10.6	63.3	870	-		-
9/5/23	18-7	-	-	-	5.20	-	0.0	-	-	226	-		-
9/5/23	Process Water	-	-	-	-	1.73	91.0	10.5	62.8	864	-		-
9/28/23	18-7	-	-	-	6.52	-	0.0	-	-	284	-		-
10/11/23	S. Harvest	-	-	-	-	-	(226.8)	(45.8)	(251.7)	-	17.40		28.50
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
Totals:		14.5		0	56.37	10.27	76	95	393	8,428	27.23	0	46.60

Field Name/Number: 18-4 **Acres:** 76.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	598.1	84.0	870.7	8427.6
Nutrients Removed at Harvest	-521.8	-42.3	-544.8	0.0
Nutrient Balance	76.3	41.7	325.9	8427.6

Winter Nitrogen Crop App / Use Ratio: 1.10 **Summer Nitrogen Crop App / Use Ratio:** 1.27

Field Name/Number: 18-4 **Acres:** 76

Winter Crop **Wheat, Silage**

Nutrient Summary :		Applied		N		
W. Manure App.		9.2	T/Ac	54.8	116.6	235.6
W. Comm Fert App.		-	lbs/Ac	-		
Process Water	Q1	5.1	Ac In /Ac	263.1	170.4	640.0
	Q2	-	Ac In /Ac	-	-	-
Well Water		21.6	Ac In /Ac	0.0		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
W. Planting	12/10/22					
W. Harvest	4/30/23	18.1	T/Ac	(295.0)	(117.3)	(485.5)

Summer Crop **Corn, Silage**

Nutrient Summary :		Applied		N		
S. Manure App.		5.3	T/Ac	40.0	81.6	157.3
S. Comm Fert App.		-	lbs/Ac	-	-	-
Process Water	Q2	-	Ac In /Ac	-	-	-
	Q3	5.2	Ac In /Ac	240.1	72.2	225.7
	Q4	-	Ac In /Ac	-	-	-
Well Water		34.8	Ac In /Ac	0.1		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
S. Planting	6/14/23					
S. Harvest	10/11/23	28.5	T/Ac	(226.8)	(104.8)	(302.1)

Nutrient Applications

Field Name/Number: 18-5 **Acres:** 76.00

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)
11/30/22	W. Manure App.	6.58	-	-	-	-	39.1	36.4	140.3	-	-		-
12/8/22	W. Planting	-	-	-	-	-	-	-	-	-	-		-
2/1/23	18-7	-	-	-	5.23	-	0.0	-	-	228	-		-
2/1/23	Process Water	-	-	-	-	1.74	73.1	25.5	183.1	1,163	-		-
3/16/23	18-7	-	-	-	5.09	-	0.0	-	-	222	-		-
3/16/23	Process Water	-	-	-	-	1.70	71.1	24.9	178.2	1,132	-		-
4/9/23	18-7	-	-	-	5.13	-	0.0	-	-	223	-		-
4/9/23	Process Water	-	-	-	-	1.71	122.9	30.6	202.7	1,511	-		-
4/29/23	18-7	-	-	-	6.24	-	0.0	-	-	272	-		-
5/11/23	W. Harvest	-	-	-	-	-	(268.8)	(54.7)	(396.5)	-	9.83		17.50
5/25/23	S. Manure App.	10.53	-	-	-	-	80.0	71.2	262.2	-	-		-
6/3/23	18-7	-	-	-	6.38	-	0.0	-	-	278	-		-
6/14/23	S. Planting	-	-	-	-	-	-	-	-	-	-		-
6/15/23	18-7	-	-	-	6.28	-	0.0	-	-	273	-		-
7/16/23	18-7	-	-	-	5.20	-	0.0	-	-	226	-		-
7/16/23	Process Water	-	-	-	-	1.73	74.8	10.5	62.8	864	-		-
8/14/23	18-7	-	-	-	5.27	-	0.0	-	-	229	-		-
8/14/23	Process Water	-	-	-	-	1.76	75.8	10.7	63.7	876	-		-
9/5/23	18-7	-	-	-	5.16	-	0.0	-	-	225	-		-
9/5/23	Process Water	-	-	-	-	1.72	90.4	10.5	62.4	858	-		-
10/10/23	18-7	-	-	-	5.23	-	0.0	-	-	228	-		-
10/10/23	Process Water	-	-	-	-	1.74	73.1	35.0	130.5	1,356	-		-
11/5/23	S. Harvest	-	-	-	-	-	(347.8)	(53.3)	(490.3)	-	17.40		21.40
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
Totals:		17.1		0	55.22	12.11	84	147	399	10,164	27.23	0	38.90

Field Name/Number: 18-5 **Acres:** 76.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K (lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	700.4	111.4	1067.4	10163.9
Nutrients Removed at Harvest	-616.5	-47.1	-736.1	0.0
Nutrient Balance	83.9	64.3	331.2	10163.9

Winter Nitrogen Crop App / Use Ratio: 1.17 **Summer Nitrogen Crop App / Use Ratio:** 1.15

Field Name/Number: 18-5 **Acres:** 76

Winter Crop **Wheat, Silage**

Nutrient Summary :		Applied		N		
W. Manure App.		6.6	T/Ac	39.1	83.3	168.3
W. Comm Fert App.		-	lbs/Ac	-		
Process Water	Q1	3.4	Ac In /Ac	144.2	115.4	433.5
	Q2	1.7	Ac In /Ac	122.9	70.1	243.2
Well Water		21.7	Ac In /Ac	0.0		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
W. Planting	12/8/22					
W. Harvest	5/11/23	17.5	T/Ac	(268.8)	(125.4)	(475.8)

Summer Crop **Sudangrass Silage**

Nutrient Summary :		Applied		N		
S. Manure App.		10.5	T/Ac	80.0	163.1	314.7
S. Comm Fert App.		-	lbs/Ac	-	-	-
Process Water	Q2	-	Ac In /Ac	-	-	-
	Q3	5.2	Ac In /Ac	241.0	72.5	226.7
	Q4	1.7	Ac In /Ac	73.1	80.2	156.6
Well Water		33.5	Ac In /Ac	0.1		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
S. Planting	6/14/23					
S. Harvest	11/5/23	21.4	T/Ac	(347.8)	(122.0)	(588.4)

Nutrient Applications

Field Name/Number: 18-6 **Acres:** 38.00

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)
12/1/22	W. Manure App.	10.53	-	-	-	-	62.6	58.2	224.4	-	-		-
12/10/22	W. Planting	-	-	-	-	-	-	-	-	-	-		-
1/23/23	18-7	-	-	-	5.23	-	0.0	-	-	228	-		-
1/23/23	Process Water	-	-	-	-	1.74	73.1	25.5	183.1	1,163	-		-
3/10/23	18-7	-	-	-	5.37	-	0.0	-	-	234	-		-
3/10/23	Process Water	-	-	-	-	1.79	75.0	26.2	187.9	1,194	-		-
4/18/23	18-7	-	-	-	6.49	-	0.0	-	-	282	-		-
5/11/23	W. Harvest	-	-	-	-	-	(193.3)	(36.6)	(208.4)	-	9.83		18.20
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
6/1/23	S. Manure App.	14.47	-	-	-	-	110.0	98.0	360.6	-	-		-
6/6/23	18-7	-	-	-	6.21	-	0.0	-	-	270	-		-
6/14/23	S. Planting	-	-	-	-	-	-	-	-	-	-		-
6/15/23	18-7	-	-	-	6.35	-	0.0	-	-	276	-		-
7/16/23	18-7	-	-	-	5.16	-	0.0	-	-	225	-		-
7/16/23	Process Water	-	-	-	-	1.72	74.3	10.5	62.4	858	-		-
8/14/23	18-7	-	-	-	5.44	-	0.0	-	-	237	-		-
8/14/23	Process Water	-	-	-	-	1.81	78.3	11.0	65.8	905	-		-
9/5/23	18-7	-	-	-	5.30	-	0.0	-	-	231	-		-
9/5/23	Process Water	-	-	-	-	1.77	92.8	10.7	64.1	882	-		-
9/28/23	18-7	-	-	-	5.09	-	0.0	-	-	222	-		-
9/28/23	Process Water	-	-	-	-	1.70	71.1	34.1	127.0	1,320	-		-
10/11/23	S. Harvest	-	-	-	-	-	(377.9)	(66.7)	(391.8)	-	17.40		27.90
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Totals:		25.0		0	50.65	10.54	66	171	675	8,526	27.23	0	46.10

Field Name/Number: 18-6 **Acres:** 38.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac	Total Salts (lbs/ac)
Nutrients Applied	637.4	119.7	1058.6	8525.9
Nutrients Removed at Harvest	-571.2	-45.1	-498.2	0.0
Nutrient Balance	66.2	74.6	560.4	8525.9

Winter Nitrogen Crop App / Use Ratio: 1.13 **Summer Nitrogen Crop App / Use Ratio:** 1.15

Field Name/Number: 18-6 **Acres:** 38

Winter Crop **Wheat, Silage**

Nutrient Summary :		Applied		N		
W. Manure App.		10.5	T/Ac	62.6	133.2	269.3
W. Comm Fert App.		-	lbs/Ac	-		
Process Water	Q1	3.5	Ac In /Ac	148.1	118.5	445.2
	Q2	-	Ac In /Ac	-	-	-
Well Water		17.1	Ac In /Ac	0.0		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
W. Planting	12/10/22					
W. Harvest	5/11/23	18.2	T/Ac	(193.3)	(83.9)	(250.1)

Summer Crop **Corn, Silage**

Nutrient Summary :		Applied		N		
S. Manure App.		14.5	T/Ac	110.0	224.3	432.7
S. Comm Fert App.		-	lbs/Ac	-	-	-
Process Water	Q2	-	Ac In /Ac	-	-	-
	Q3	7.0	Ac In /Ac	316.5	151.9	383.2
	Q4	-	Ac In /Ac	-	-	-
Well Water		33.6	Ac In /Ac	0.1		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
S. Planting	6/14/23					
S. Harvest	10/11/23	27.9	T/Ac	(377.9)	(152.7)	(470.2)

Nutrient Applications

Field Name/Number: 18-7 **Acres:** 76.00

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)
12/1/22	W. Manure App.	10.53	-	-	-	-	62.6	58.2	224.4	-	-		-
12/8/22	W. Planting	-	-	-	-	-	-	-	-	-	-		-
2/1/23	18-7	-	-	-	5.16	-	0.0	-	-	225	-		-
2/1/23	Process Water	-	-	-	-	1.72	72.1	25.2	180.6	1,147	-		-
3/16/23	18-7	-	-	-	5.30	-	0.0	-	-	231	-		-
3/16/23	Process Water	-	-	-	-	1.77	74.0	25.9	185.5	1,178	-		-
4/29/23	18-7	-	-	-	5.20	-	0.0	-	-	226	-		-
4/29/23	Process Water	-	-	-	-	1.73	124.6	31.0	205.4	1,532	-		-
5/11/23	W. Harvest	-	-	-	-	-	(293.3)	(52.8)	(411.3)	-	9.83		19.40
	-	-	-	-	-	-	-	-	-	-	-		-
5/25/23	S. Manure App.	10.53	-	-	-	-	80.0	71.2	262.2	-	-		-
6/1/23	18-7	-	-	-	6.42	-	0.0	-	-	279	-		-
6/14/23	S. Planting	-	-	-	-	-	-	-	-	-	-		-
6/16/23	18-7	-	-	-	6.28	-	0.0	-	-	273	-		-
7/16/23	18-7	-	-	-	5.23	-	0.0	-	-	228	-		-
7/16/23	Process Water	-	-	-	-	1.74	75.3	10.6	63.3	870	-		-
8/14/23	18-7	-	-	-	5.13	-	0.0	-	-	223	-		-
8/14/23	Process Water	-	-	-	-	1.71	73.8	10.4	62.0	853	-		-
9/5/23	18-7	-	-	-	5.34	-	0.0	-	-	232	-		-
9/5/23	Process Water	-	-	-	-	1.78	93.5	10.8	64.5	887	-		-
10/16/23	18-7	-	-	-	5.27	-	0.0	-	-	229	-		-
10/16/23	Process Water	-	-	-	-	1.76	73.6	35.3	131.3	1,365	-		-
11/5/23	S. Harvest	-	-	-	-	-	(346.9)	(49.6)	(409.9)	-	17.40		21.70
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Totals:		21.1		0	49.32	12.21	89	176	558	9,979	27.23	0	41.10

Field Name/Number: 18-7 **Acres:** 76.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	729.5	121.6	1145.0	9979.4
Nutrients Removed at Harvest	-640.2	-44.7	-681.7	0.0
Nutrient Balance	89.3	76.9	463.3	9979.4

Winter Nitrogen Crop App / Use Ratio: 1.16 **Summer Nitrogen Crop App / Use Ratio:** 1.16

Field Name/Number: 18-7 **Acres:** 76

Winter Crop **Wheat, Silage**

Nutrient Summary :		Applied		N		
W. Manure App.		10.5	T/Ac	62.6	133.2	269.3
W. Comm Fert App.		-	lbs/Ac	-		
Process Water	Q1	3.5	Ac In /Ac	146.1	117.0	439.4
	Q2	1.7	Ac In /Ac	124.6	71.1	246.5
Well Water		15.7	Ac In /Ac	0.0		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
W. Planting	12/8/22					
W. Harvest	5/11/23	19.4	T/Ac	(293.3)	(120.8)	(493.5)

Summer Crop **Sudangrass Silage**

Nutrient Summary :		Applied		N		
S. Manure App.		10.5	T/Ac	80.0	163.1	314.7
S. Comm Fert App.		-	lbs/Ac	-	-	-
Process Water	Q2	-	Ac In /Ac	-	-	-
	Q3	5.2	Ac In /Ac	242.5	72.8	227.7
	Q4	1.8	Ac In /Ac	73.6	80.8	157.6
Well Water		33.7	Ac In /Ac	0.1		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
S. Planting	6/14/23					
S. Harvest	11/5/23	21.7	T/Ac	(346.9)	(113.5)	(491.9)

Nutrient Applications

Field Name/Number: .6-1 **Acres:** 78.00

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.	9.62	-	-	-	-	57.2	53.1	205.0	-	-		-
11/28/22	W. Planting	-	-	-	-	-	-	-	-	-	-		-
12/15/22	.6-2	-	-	-	5.27	-	-	-	-	-	-		-
2/3/23	.6-2	-	-	-	5.47	-	-	-	-	-	-		-
3/26/23	.6-2	-	-	-	5.32	-	-	-	-	-	-		-
5/3/23	.6-2	-	-	-	5.38	-	-	-	-	-	-		-
6/7/23	W. Harvest	-	-	-	-	-	(54.7)	(11.7)	(59.4)	-	7.91		4.20
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	S. Fallow	-	-	-	-	-	-	-	-	-	-		-
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Totals:		9.6		0	21.44	0.00	2	41	146	-	7.91	0	4.20

Dry Weight
As Received

Field Name/Number: .6-1 **Acres:** 78

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	57.2	53.1	205.0	0.0
Nutrients Removed at Harvest	-54.7	-11.7	-59.4	0.0
Nutrient Balance	2.5	41.4	145.6	0.0

Winter Nitrogen Crop App / Use Ratio: 1.17 **Summer Nitrogen Crop App / Use Ratio:** #N/A

Field Name/Number: .6-1 **Acres:** 78

Winter Crop **Oats, Hay**

Nutrient Summary :		Applied		N		
W. Manure App.		9.6	T/Ac	57.2	121.7	246.0
W. Comm Fert App.		-	lbs/Ac	-		
Process Water	Q1	-	Ac In /Ac	-	-	-
	Q2	-	Ac In /Ac	-	-	-
Well Water		21.44	Ac In /Ac	-		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
W. Planting	11/28/22					
W. Harvest	6/7/23	4.2	T/Ac	(54.7)	(26.9)	(71.3)

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	0		
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: .6-2 **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)
11/15/22	W. Manure App.	9.70	-	-	-	-	57.7	53.6	206.8	-	-		-
11/28/22	W. Planting	-	-	-	-	-	-	-	-	-	-		-
12/15/22	.6-2	-	-	-	5.74	-	-	-	-	-	-		-
2/3/23	.6-2	-	-	-	5.44	-	-	-	-	-	-		-
3/26/23	.6-2	-	-	-	5.57	-	-	-	-	-	-		-
5/3/23	.6-2	-	-	-	5.64	-	-	-	-	-	-		-
6/7/23	W. Harvest	-	-	-	-	-	(69.8)	(10.1)	(64.7)	-	7.91		3.90
	-	-	-	-	-	-	-	-	-	-	-		-
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	S. Fallow	-	-	-	-	-	-	-	-	-	-		-
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Totals:		9.7		0	22.39	0.00	(12)	44	142	-	7.91	0	3.90

Field Name/Number: .6-2 **Acres:** 67.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K (lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	57.7	23.4	171.7	0.0
Nutrients Removed at Harvest	-69.8	-4.4	-53.7	0.0
Nutrient Balance	-12.1	19.0	118.0	0.0

Winter Nitrogen Crop App / Use Ratio: 0.93 **Summer Nitrogen Crop App / Use Ratio:** #N/A

Field Name/Number: .6-2 **Acres:** 67

Winter Crop **Oats, Hay**

Nutrient Summary :		Applied		N		
W. Manure App.		9.7	T/Ac	57.7	122.8	248.2
W. Comm Fert App.		-	lbs/Ac	-		
Process Water	Q1	-	Ac In /Ac	-	-	-
	Q2	-	Ac In /Ac	-	-	-
Well Water		22.4	Ac In /Ac	-		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
W. Planting	11/28/22					
W. Harvest	6/7/23	3.9	T/Ac	(69.8)	(23.1)	(77.7)

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: .6-3 **Acres:** 31.00

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.	11.29	-	-	-	-	67.2	62.4	240.7	-	-		-
11/28/22	W. Planting	-	-	-	-	-	-	-	-	-	-		-
12/15/22	.6-2	-	-	-	5.49	-	-	-	-	-	-		-
2/3/23	.6-2	-	-	-	5.13	-	-	-	-	-	-		-
3/26/23	.6-2	-	-	-	5.35	-	-	-	-	-	-		-
5/3/23	.6-2	-	-	-	5.20	-	-	-	-	-	-		-
6/7/23	W. Harvest	-	-	-	-	-	(82.3)	(9.9)	(57.0)	-	7.91		3.80
	-	-	-	-	-	-	-	-	-	-	-		-
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	-	-	-	-	-	-	-	-	-	-	-		-
	S. Fallow	-	-	-	-	-	-	-	-	-	-		-
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Totals:		11.3		0	21.17	0.00	(15)	53	184	-	7.91	0	3.80

Field Name/Number: .6-3 **Acres:** 31.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K Lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	67.2	27.2	199.8	0.0
Nutrients Removed at Harvest	-82.3	-4.3	-47.3	0.0
Nutrient Balance	-15.2	22.9	152.5	0.0

Winter Nitrogen Crop App / Use Ratio: 0.90 **Summer Nitrogen Crop App / Use Ratio:** #N/A

Field Name/Number: .6-3 **Acres:** 31

Winter Crop **Oats, Hay**

Nutrient Summary :		**Applied**		**N**		
W. Manure App.		11.3	T/Ac	67.2	142.9	288.8
W. Comm Fert App.		-	lbs/Ac	-		
Process Water	Q1	-	Ac In /Ac	-	-	-
	Q2	-	Ac In /Ac	-	-	-
Well Water		21.2	Ac In /Ac	-		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
W. Planting	11/28/22					
W. Harvest	6/7/23	3.8	T/Ac	(82.3)	(22.6)	(68.4)

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: .6-4 **Acres:** 54.00

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.	7.41	-	-	-	-	44.1	40.9	157.9	-	-		-
11/28/22	W. Planting	-	-	-	-	-	-	-	-	-	-		-
12/15/22	.6-2	-	-	-	5.52	-	-	-	-	-	-		-
2/3/23	.6-2	-	-	-	5.44	-	-	-	-	-	-		-
3/26/23	.6-2	-	-	-	5.69	-	-	-	-	-	-		-
5/3/23	.6-2	-	-	-	5.81	-	-	-	-	-	-		-
6/7/23	W. Harvest	-	-	-	-	-	(51.3)	(9.8)	(52.1)	-	7.91		4.10
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	S. Fallow	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
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	-	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-		-
Totals:		7.4		0	22.46	0.00	(7)	31	106	-	7.91	0	4.10

Field Name/Number: .6-4 **Acres:** 54.00

	Total N (lbs/ac)	Total P (lbs/ac)	Total K (lbs/ac)	Total Salts (lbs/ac)
Nutrients Applied	44.1	17.9	131.1	0.0
Nutrients Removed at Harvest	-51.3	-4.3	-43.2	0.0
Nutrient Balance	-7.2	13.6	87.9	0.0

Winter Nitrogen Crop App / Use Ratio: 1.00 **Summer Nitrogen Crop App / Use Ratio:** #N/A

Field Name/Number: .6-4 **Acres:** 54

Winter Crop **Oats, Hay**

Nutrient Summary :		Applied		N		
W. Manure App.		7.4	T/Ac	44.1	93.8	189.5
W. Comm Fert App.		-	lbs/Ac	-		
Process Water	Q1	-	Ac In /Ac	-	-	-
	Q2	-	Ac In /Ac	-	-	-
Well Water		22.5	Ac In /Ac	-		
Canal		-	Ac In /Ac	-		
Atm. Depos.		Yes		7.0		
W. Planting	11/28/22					
W. Harvest	6/7/23	4.1	T/Ac	(51.3)	(22.5)	(62.5)

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

Notes

December, 2023 the Boschma Family sold the facility and land. They will no longer be in business as Boschma & Sons Dairy. The new Owner has a different consultant.

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.

JB _____ *(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.

Terri-Lynn Boschma

Signature of Owner of Facility

Signature of Operator of Facility

Terri-Lynn or Ryan Boschma

Print Name

Same as owner

Print Name

3-13-24

Date

Date

Livingston Dairy Consulting, Inc.

FIELD ACTIVITY REPORT

Facility Name: Boschma & Sons Dairy
24794 Sherwood, Wasco
Kern 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
2-10	Barn W	8:05	6.5	68	Ø
	Barn E	8:12	7.0	68	Ø
7/11	7-5	7:18	7	67	Ø
	18-7	7:23	6.5	67	Ø
11/1	6-2	10:35	6	66	Ø
11/1	7-4	10:42	6.5	67	Ø

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

Livingston Dairy Contuling, Inc. 2020

Doschma & Sons

FGL ENVIRONMENTAL AGRICULTURAL
Analytical Chemists

November 15, 2023

Lab No. : **VI 2347391**
Customer No. : **4018505**

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

Laboratory Report

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

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

Case Narrative

This Case Narrative pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab No.	Matrix
6-2	11/01/2023	11/01/2023	VI 2347391-001	AGW
7-4	11/01/2023	11/01/2023	VI 2347391-002	AGW

Sampling and Receipt Information:

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

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

Test Summary

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

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

KD: JRD

Approved By **Kelly A. Dunnahoo, B.S.** Digitally signed by Kelly A. Dunnahoo, B.S. Title: Laboratory Director Date: 2023-11-15

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CA ELAP Certification No. 2810

November 15, 2023

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

Description : 6-2
Project : W-6 Boschma & Sons

Lab No. : VI 2347391-001
Customer No. : 4018505

Sampled On : November 1, 2023 at 10:35
Sampled By : Not Available
Received On : November 1, 2023 at 15:25
Matrix : Ag Water

Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
Dairy Analysis							Date	Time	Who	Method	Date	Time	Who
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	UI	11/10/2023	12:12	sta	EPA 351.2	11/14/2023	16:04	lcr
Nitrate Nitrogen	0.4	0.4	mg/L		1	J	11/02/2023	13:00	lfs	SM 4500-NO3 F	11/02/2023	16:22	lfs
Nitrogen, Total as Nitrogen	ND	0.5	mg/L		1	UIJ	11/10/2023	12:12	sta	Calc.	11/14/2023	16:04	lcr
Nitrate + Nitrite as N	0.4	0.4	mg/L		1	J	11/02/2023	13:00	lfs	SM 4500-NO3 F	11/02/2023	16:22	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	UI	11/10/2023	12:12	sta	EPA 351.2	11/14/2023	16:04	lcr
Conductivity	389	1	umhos/cm		1		11/08/2023	08:11	krh	SM 4500-H+B	11/08/2023	09:04	krh
Solids, Total Dissolved (TDS)	270	20	mg/L		1		11/03/2023	12:45	ctl	SM 2540 C	11/06/2023	10:50	ctl

DQF Flags Definition:
- U Constituent results were non-detect.
- I The MS/MSD did not meet QC criteria.
- J Reported value is estimated; detected at a concentration below the RL and above the laboratory MDL.

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

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November 15, 2023

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

Lab No. : VI 2347391-002
Customer No. : 4018505

Sampled On : November 1, 2023 at 10:46
Sampled By : Not Available
Received On : November 1, 2023 at 15:25
Matrix : Ag Water

Description : 7-4
Project : W-6 Boschma & Sons

Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
							Date	Time	Who	Method	Date	Time	Who
Dairy Analysis													
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	Ul	11/10/2023	12:12	sta	EPA 351.2	11/14/2023	16:06	lcr
Nitrate Nitrogen	0.4	0.4	mg/L		1		11/02/2023	13:00	lfs	SM 4500-NO3 F	11/02/2023	16:24	lfs
Nitrogen, Total as Nitrogen	ND	0.5	mg/L		1	Ul	11/10/2023	12:12	sta	Calc.	11/14/2023	16:06	lcr
Nitrate + Nitrite as N	0.4	0.4	mg/L		1		11/02/2023	13:00	lfs	SM 4500-NO3 F	11/02/2023	16:24	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	Ul	11/10/2023	12:12	sta	EPA 351.2	11/14/2023	16:06	lcr
Conductivity	391	1	umhos/cm		1		11/08/2023	08:11	krh	SM 4500-H+B	11/08/2023	10:13	krh
Solids, Total Dissolved (TDS)	260	20	mg/L		1		11/03/2023	12:45	ctl	SM 2540 C	11/06/2023	10:50	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

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November 15, 2023
Livingston Dairy Consulting, Inc.

Lab No. : VI 2347391
Customer No. : 4018505

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
E. C.	2320B	(STK2354710-006)	Dup	umhos/cm		0.4%	5	
		(VI 2347513-003)	Dup	umhos/cm		0%	5	
Solids, Total Dissolved	2540CE	11/03/2023:212477CTL	Blank	mg/L		ND	<20	
			LCS	mg/L	991.5	102%	90-110	
		(CC 2383871-001)	Dup	mg/L		0.4%	5	
		(CC 2383871-001)	Dup	mg/L		0.2%	5	
Nitrogen, Total Kjeldahl	351.2	11/10/2023:212776STA	Blank	mg/L		ND	<0.5	
			LCS	mg/L	12.00	89.1%	73-124	
			MS	mg/L	12.00	87.2%	90-110	435
		(VI 2347349-002)	MSD	mg/L	12.00	82.9%	90-110	435
			MSRPD	mg/L		4.9%	≤20	
			MS	mg/L	12.00	85.3%	90-110	435
		(VI 2347349-009)	MSD	mg/L	12.00	87.9%	90-110	435
			MSRPD	mg/L		2.9%	≤20	
Nitrate + Nitrite as N	4500NO3F	11/02/2023:212458LFS	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	98.7%	80-120	
			MS	mg/L	5.609	94.8%	66-125	
		(STK2355139-001)	MSD	mg/L	5.609	100%	66-125	
			MSRPD	mg/L		3.2%	≤30.4	
Nitrate Nitrogen	4500NO3F	11/02/2023:212458LFS	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	98.7%	80-120	
			MS	mg/L	5.609	94.8%	66-125	
		(STK2355139-001)	MSD	mg/L	5.609	100%	66-125	
			MSRPD	mg/L		3.2%	≤30.4	

Definition

Blank : Method Blank - Prepared to verify that the preparation process is not contributing contamination to the samples.
DQO : Data Quality Objective - This is the criteria against which the quality control data is compared.
Dup : Duplicate Sample - A random sample with each batch is prepared and analyzed in duplicate. The relative percent difference is an indication of precision for the preparation and analysis.
LCS : Laboratory Control Standard/Sample - Prepared to verify that the preparation process is not affecting analyte recovery.
MS : Matrix Spikes - A random sample is spiked with a known amount of analyte. The recoveries are an indication of how that sample matrix affects analyte recovery.
MSD : Matrix Spike Duplicate of MS/MSD pair - A random sample duplicate is spiked with a known amount of 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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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-6 Boschma & Sons
Purchase Order Number:
Quote Number: VI 20210208-01

Sampler(s)

Sampling Fee: _____ Pickup Fee: _____
Compositor Setup Date: 11/1/23 Time: 10:35

Lab Number: VI 2347391 4-18505

42086:03/01/2022

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-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	6-2	11/1	1035	G	agw	NP			1	1
2	7-4	11/1	1046	G	agw	NP			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:
[signature]	11/1/23	3:25	[signature]	11/1/23	17:10	GLS	11/2/23	10:45
Received By:	**Date:**	**Time:**	**Received By:**	**Date:**	**Time:**	**Received By:**	**Date:**	**Time:**
[signature]	11/1/23	15:25	[signature]	11/1/23	17:10	JAW	✓	✓

20 19.5°C

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Phone: (559) 734-9473
Fax: (559) 734-9485

Inter-Laboratory Condition Upon Receipt (Attach to COC)

Sample Receipt at: CC CH STK VI

1. Number of ice chests/packages received: 1 Shipping tracking #(s): GTC
2. Temp IR Gun ID #: 407
3. Were samples received on ice? Yes No Temps: 19.5C / ____ / ____ / ____
   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.
4. Do the number of bottles received agree with the COC? Yes No N/A
5. Were samples received intact? (i.e. no broken bottles, leaks etc.) Yes No
6. VOAs checked for Headspace? Yes No N/A
7. Were all analyses within holding times at time of receipt? Yes No
8. 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): AJ-JA

Sample Receipt at SP:

1. Number of ice chests/packages received: 3 Shipping tracking #(s): 5600400229 44 77
2. Temp IR Gun ID #: TH 2608
3. Were samples received on ice? Yes No Temps: 3c / ____ / ____ / ____ / ____
   Acceptable is above freezing to 6°C. If many packages are received at one time check for tests/H.T.'s/rushes/
4. Do the number of bottles received agree with the COC? Yes No N/A
5. Were samples received intact? (i.e. no broken bottles, leaks etc.) Yes No

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

Sample Verification, Labeling and Distribution:

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

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

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:

(4018505)
Livingston Dairy Consulting, Inc.
VI 2347391
iv 11/02/2023 06:37:51
VI 2347391

(Please use the back of this sheet for additional comments or ...)

2347391

Boschma

FGL
ENVIRONMENTAL AGRICULTURAL
Analytical Chemists

March 9, 2023

Lab No. : **VI 2340874**
Customer No. : **4018505**

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

Laboratory Report

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

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

Case Narrative

This Case Narrative pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab No.	Matrix
Barn W	02/10/2023	02/10/2023	VI 2340874-001	DW
Barn E	02/10/2023	02/10/2023	VI 2340874-002	DW

Sampling and Receipt Information:

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

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

Test Summary

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

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

KD: JRD

Approved By **Kelly A. Dunnahoo, B.S.** Digitally signed by Kelly A. Dunnahoo, B.S. Title: Laboratory Director Date: 2023-03-09

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March 9, 2023

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

Description : Barn W
Project : W-6 Boschma & Sons

Lab No. : VI 2340874-001
Customer No. : 4018505

Sampled On : February 10, 2023 at 08:05
Sampled By : KC / MF
Received On : February 10, 2023 at 10:39
Matrix : Drinking Water

Sample Results - Inorganic

Constituent	Result	RL	Units	MCL/AL	Dil.	DQF	Sample Preparation			Sample Analysis			
Dairy Analysis							Date	Time	Who	Method	Date	Time	Who
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U	02/24/2023	11:30	sta	EPA 351.2	03/01/2023	17:30	lcr
Nitrate Nitrogen	ND	0.4	mg/L	10	1	U	02/22/2023	11:45	lfs	SM 4500-NO3 F	02/22/2023	13:17	lfs
Nitrogen, Total as Nitrogen	ND	0.5	mg/L		1	U	02/24/2023	11:30	sta	EPA 351.2	03/01/2023	17:30	lcr
Nitrate + Nitrite as N	ND	0.4	mg/L	10	1	U	02/22/2023	11:45	lfs	SM 4500-NO3 F	02/22/2023	13:17	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	02/24/2023	11:30	sta	EPA 351.2	03/01/2023	17:30	lcr
Conductivity	266	1	umhos/cm	1600[2]	1		03/01/2023	17:08	amm	SM 4500-H+B	03/01/2023	20:05	sta
Solids, Total Dissolved (TDS)	150	20	mg/L	1000[2]	1		02/14/2023	12:50	ctl	SM 2540 C	02/15/2023	12:44	ctl

DQF Flags Definition:
U Constituent results were non-detect.

ND=Non-Detected, RL=Reporting Level , Dil.=Dilution
MCL = Maximum Contamination Level. 2 - Secondary Standard. 3 - CDPH Notification Level. AL = Regulatory Action Level.

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March 9, 2023

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

Lab No. : VI 2340874-002
Customer No. : 4018505

Sampled On : February 10, 2023 at 08:12
Sampled By : KC / MF
Received On : February 10, 2023 at 10:39
Matrix : Drinking Water

Description : Barn E
Project : W-6 Boschma & Sons

Sample Results - Inorganic

Constituent	Result	RL	Units	MCL/AL	Dil.	DQF	Sample Preparation			Sample Analysis			
Dairy Analysis							Date	Time	Who	Method	Date	Time	Who
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U	02/24/2023	11:30	sta	EPA 351.2	03/01/2023	17:32	lcr
Nitrate Nitrogen	ND	0.4	mg/L	10	1	U	02/22/2023	11:45	lfs	SM 4500-NO3 F	02/22/2023	13:14	lfs
Nitrogen, Total as Nitrogen	ND	0.5	mg/L		1	U	02/24/2023	11:30	sta	EPA 351.2	03/01/2023	17:32	lcr
Nitrate + Nitrite as N	ND	0.4	mg/L	10	1	U	02/22/2023	11:45	lfs	SM 4500-NO3 F	02/22/2023	13:14	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	02/24/2023	11:30	sta	EPA 351.2	03/01/2023	17:32	lcr
Conductivity	251	1	umhos/cm	1600[2]	1		02/21/2023	14:01	sta		02/21/2023	14:01	sta
Solids, Total Dissolved (TDS)	160	20	mg/L	1000[2]	1		02/14/2023	12:50	ctl	SM 2540 C	02/15/2023	12:40	ctl

DQF Flags Definition:
U Constituent results were non-detect.

ND=Non-Detected, RL=Reporting Level , Dil.=Dilution
MCL = Maximum Contamination Level. 2 - Secondary Standard. 3 - CDPH Notification Level. AL = Regulatory Action Level.

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March 9, 2023
Livingston Dairy Consulting, Inc.

Lab No. : VI 2340874
Customer No. : 4018505

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
E. C.	2320B	(VI 2341105-003)	Dup	umhos/cm		0.3%	5	
	2510B	02/21/2023:201893STA	Blank	umhos/cm		ND	<1	
		(VI 2340883-001)	Dup	umhos/cm		0.7%	5	
Solids, Total Dissolved	2540CE	02/14/2023:201630CTL	Blank	mg/L		ND	<20	
			LCS	mg/L	990.8	98.4 %	90-110	
		(VI 2340882-003)	Dup	mg/L		1.4%	5	
		(VI 2340882-003)	Dup	mg/L		4.5%	5	
Nitrogen, Total Kjeldahl	351.2	02/24/2023:202049STA	Blank	mg/L		ND	<0.5	
			LCS	mg/L	12.00	91.2%	73-124	
			MS	mg/L	12.00	84.9%	54-136	
		(VI 2340880-001)	MSD	mg/L	12.00	83.6%	54-136	
			MSRPD	mg/L	12.00	1.5%	≤27	
			MS	mg/L	12.00	88.2%	54-136	
		(VI 2340880-002)	MSD	mg/L	12.00	89.0%	54-136	
			MSRPD	mg/L	12.00	0.8%	≤27	
Nitrate + Nitrite as N	4500NO3F	02/22/2023:201947LFS	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	98.3%	80-120	
			MS	mg/L	5.609	97.3%	66-125	
		(SP 2302530-001)	MSD	mg/L	5.609	99.4%	66-125	
			MSRPD	mg/L	5.609	1.8%	≤30.4	
Nitrate Nitrogen	4500NO3F	02/22/2023:201947LFS	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	98.3%	80-120	
			MS	mg/L	5.609	97.3%	66-125	
		(SP 2302530-001)	MSD	mg/L	5.609	99.4%	66-125	
			MSRPD	mg/L	5.609	1.8%	≤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.

Page 4 of 4

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Analytical Chemists

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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 Boschma & Sons
Purchase Order Number:
Quote Number: VI 20210208-01

Sampler(s) MF/KC

Sampling Fee: _____ Pickup Fee: _____
Compositor Setup Date: ___/___/___ Time: ___/___

Lab Number: VI 2310874 4-18505

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-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 W	2/10/23	8:05	G	DW	P			1	1								
2	Barn E	2/10/23	8:12	G	DW	P			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:
[illegible]	2/10/23	1039	MRC	2/10/23	1734	GLS	2/11/23	1210
Received By:	**Date:**	**Time:**	**Received By:**	**Date:**	**Time:**	**Received By:**	**Date:**	**Time:**
MRC	2-10-23	1039	GLS	2/10/23	1734			

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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 # OTC
2. Were samples received in a chilled condition? Temps: 6.02 Rol / ____ / ____ / ____
   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): MBC

Sample Receipt at SP:

1. Were samples received in a chilled condition? Temps: 2C / ____ / ____ / ____ / ____
   Acceptable is above freezing to 6° C. If many packages are received at one time check for tests/H.T.'s/rushes/
2. Shipping tracking numbers: 558 796176 154
   195

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): MDC

Discrepancy Documentation:

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

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

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

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

(4018505)
Livingston Dairy Consulting, Inc.
VI 2340874
iv 02/13/2023 10:09:34

Boschma

FGL ENVIRONMENTAL AGRICULTURAL
Analytical Chemists

August 3, 2023

Lab No. : **VI 2344458**
Customer No. : **4018505**

Livingston Dairy Consulting, Inc
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Tulare, CA 93274

Laboratory Report

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

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

Case Narrative

This Case Narrative pertains to the following samples:

Sample Description	Date Sampled	Date Received	FGL Lab No.	Matrix
7-5	07/11/2023	07/11/2023	VI 2344458-001	AGW
18-7	07/11/2023	07/11/2023	VI 2344458-002	AGW

Sampling and Receipt Information:

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

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

Test Summary

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

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

KD: EHB

Approved By **Kelly A. Dunnahoo, B.S.** Digitally signed by Kelly A. Dunnahoo, B.S.
Title: Laboratory Director
Date: 2023-08-03

Page 1 of 4

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August 3, 2023

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

Lab No. : VI 2344458-001
Customer No. : 4018505

Sampled On : July 11, 2023 at 07:18
Sampled By : Bruce / Noreen
Received On : July 11, 2023 at 11:38
Matrix : Ag Water

Description : 7-5
Project : W-6 Boschma

Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
Dairy Analysis							Date	Time	Who	Method	Date	Time	Who
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U	07/28/2023	08:46	sta	EPA 351.2	07/31/2023	19:47	lcr
Nitrate Nitrogen	ND	0.4	mg/L		1	U	07/12/2023	13:00	lfs	SM 4500-NO3 F	07/12/2023	15:14	lfs
Nitrogen, Total as Nitrogen	ND	0.5	mg/L		1	U	07/28/2023	08:46	sta	Calc.	07/31/2023	19:47	lcr
Nitrate + Nitrite as N	ND	0.4	mg/L		1	U	07/12/2023	13:00	lfs	SM 4500-NO3 F	07/12/2023	15:14	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	07/28/2023	08:46	sta	EPA 351.2	07/31/2023	19:47	lcr
Conductivity	403	1	umhos/cm		1		07/18/2023	14:57	amm	SM 4500-H+B	07/18/2023	15:59	amm
Solids, Total Dissolved (TDS)	230	20	mg/L		1		07/13/2023	11:00	ctl	SM 2540 C	07/14/2023	11:00	ctl

DQF Flags Definition:
U Constituent results were non-detect.

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

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August 3, 2023

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

Lab No. : VI 2344458-002
Customer No. : 4018505

Sampled On : July 11, 2023 at 07:23
Sampled By : Bruce / Noreen
Received On : July 11, 2023 at 11:38
Matrix : Ag Water

Description : 18-7
Project : W-6 Boschma

Sample Results - Inorganic

Constituent	Result	RL	Units	Note	Dil.	DQF	Sample Preparation			Sample Analysis			
							Date	Time	Who	Method	Date	Time	Who
Dairy Analysis													
Nitrogen, Total Kjeldahl	ND	0.5	mg/L		1	U	07/28/2023	08:46	sta	EPA 351.2	07/31/2023	19:49	lcr
Nitrate Nitrogen	ND	0.4	mg/L		1	U	07/12/2023	13:00	lfs	SM 4500-NO3 F	07/12/2023	15:17	lfs
Nitrogen, Total as Nitrogen	ND	0.5	mg/L		1	U	07/28/2023	08:46	sta	Calc.	07/31/2023	19:49	lcr
Nitrate + Nitrite as N	ND	0.4	mg/L		1	U	07/12/2023	13:00	lfs	SM 4500-NO3 F	07/12/2023	15:17	lfs
Kjeldahl Nitrogen	ND	0.5	mg/L		1	U	07/28/2023	08:46	sta	EPA 351.2	07/31/2023	19:49	lcr
Conductivity	573	1	umhos/cm		1		07/18/2023	14:57	amm	SM 4500-H+B	07/18/2023	16:59	amm
Solids, Total Dissolved (TDS)	320	20	mg/L		1		07/13/2023	09:40	ctl	SM 2540 C	07/14/2023	11:00	ctl

DQF Flags Definition:
U Constituent results were non-detect.

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

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August 3, 2023
Livingston Dairy Consulting, Inc.

Lab No. : VI 2344458
Customer No. : 4018505

Quality Control - Wet Chem

Constituent	Method	Date/ID	Type	Units	Conc.	QC Data	DQO	Note
Wet Chem								
E. C.	2320B	(VI 2344461-007)	Dup	umhos/cm		0.6%	5	
		(VI 2344444-001)	Dup	umhos/cm		0.6%	5	
Solids, Total Dissolved	2540CE	07/13/2023:207664CTL	Blank	mg/L		ND	<20	
			LCS	mg/L	993.7	102%	90-110	
		(VI 2344526-001)	Dup	mg/L		4.00%	5	
		(VI 2344526-001)	Dup	mg/L		3.93%	5	
			Blank	mg/L		ND	<20	
			LCS	mg/L	993.7	96.6%	90-110	
		(STK2339157-001)	Dup	mg/L		1.07%	5	
		(STK2339157-001)	Dup	mg/L		0.9%	5	
Nitrogen, Total Kjeldahl	351.2	07/28/2023:208341STA	Blank	mg/L		ND	<0.5	
			LCS	mg/L	12.00	94.9%	73-124	
			MS	mg/L	12.00	94.6%	54-136	
		(SP 2311944-003)	MSD	mg/L	12.00	94.6%	54-136	
			MSRPD	mg/L		0.0%	≤27	
			MS	mg/L	12.00	93.8%	54-136	
		(SP 2311944-004)	MSD	mg/L	12.00	92.6%	54-136	
			MSRPD	mg/L		1.2%	≤27	
Nitrate + Nitrite as N	4500NO3F	07/12/2023:207621LFS	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	101%	80-120	
			MS	mg/L	5.609	96.6%	66-125	
		(SP 2311816-001)	MSD	mg/L	5.609	96.5%	66-125	
			MSRPD	mg/L		0.0%	≤30.4	
Nitrate Nitrogen	4500NO3F	07/12/2023:207621LFS	Blank	mg/L		ND	<0.4	
			LCS	mg/L	11.22	101%	80-120	
			MS	mg/L	5.609	96.6%	66-125	
		(SP 2311816-001)	MSD	mg/L	5.609	96.5%	66-125	
			MSRPD	mg/L		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.

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Laboratory Copy (1 of 2)

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 Boschma
Purchase Order Number:
Quote Number: VI 20210208-01

Sampler(s) Bruce / Noreen

Sampling Fee: _____ Pickup Fee: _____
Compositor Setup Date: ___/___/___ Time: ___/___

Lab Number: VI 2344458 4-18505

42086:04/01/2023

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-6-Conductivity,NO3-N,Total N,TDS 16oz(P)	Bottles/Containers Split Fee 8oz(P)-H2SO4
1	7-5	7/11/23	7:18 AM	G	AgW	NP			1	1
2	18-7	7/11/23	7:23 AM	G	AgW	NP			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:
[signature]	7/11/23	11:38	ADH	7/11/23	12:00	GW	7/11/23	1210
Received By:	**Date:**	**Time:**	**Received By:**	**Date:**	**Time:**	**Received By:**	**Date:**	**Time:**
ADH	7/11/23	1138	[signature]	7/11/23	12:00	[signature]	7/11/23	1210

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R01 7.4

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: 0.1 / 2.4 / ____ / ____ / ____

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

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

Sample Receipt at SP:

1. Were samples received in a chilled condition? Temps: 3 / 4 / 4 / 4 / ____

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

   5597145137, 5597145395, 5597145146, 5597145133

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): LL

Discrepancy Documentation:

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

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

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

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

(4018505)
Livingston Dairy Consulting, Inc.
VI 2344458
iv 07/12/2023 09:05:14
VI 2344458