RJN Environmental Services, LLC
Surface Water Studies
Groundwater Studies
Site Investigations

May 11, 2017

Ms. Laura Chern, P.G.
Wisconsin Department of Natural Resources
PO Box 7921
Madison, Wisconsin 53707-7921

RE: Groundwater Monitoring Network Documentation
Results of Groundwater Sampling
Central Sands Dairy, LLC
WPDES Permit No. WI-00063533-02-1
Town of Armenia, Juneau County, Wisconsin

Dear Ms. Chern:

Pursuant to the groundwater monitoring schedule contained in WPDES Permit WI-0063533-02-1 for the Central Sands Dairy (CSD) facility, RJN Environmental Services, LLC (RJN) sampled the CSD site groundwater monitoring wells on April 17, 2017. The data loggers installed in wells CSD-1S, CSD-5, CSD-6, CSD-7 and CSD-9 were downloaded on May 3, 2017.

Groundwater Flow

Table 1 summarizes groundwater elevations as measured during all sampling events since the first phase of the groundwater monitoring network was installed. Figure 1 shows the water table as measured on April 17, 2017. As in all past measurements, groundwater flow remains in a northwest-to-southeast direction, with a very uniform gradient across the site. Figure 2 presents hydrographs of all wells, dating back to the construction of the initial monitoring network in October 2014. Although the water levels were fairly stable since the last sampling event, the water level trends continue to be consistent from well-to-well.

Hourly water levels for the wells with pressure transducers and data loggers are plotted on Figure 3, for the time period since the download in March. Although the water level had previously been rising, it remained relatively constant during this time period. However, also as in previous months, the plot shows that the fluctuations are virtually identical from well-to-well.

4811 Monona Drive, Monona, Wisconsin 53716
Phone: 608.576.3001

Groundwater Quality

Field data sheets for the sampling event are provided in Attachment A. Water quality data are presented in Tables 2 through 12. Laboratory reports for the inorganic parameters are provided in Attachment B, and reports for total coliform and E. coli are provided in Attachment C. The water quality in upgradient wells CSD-3S, CSD-4 and CSD-8 continue to indicate that contaminants are migrating onto the CSD property from upgradient. Note that the State Laboratory of Hygiene has put notices on the reports that the samples were removed from incubation 18 minutes early. However, because the total incubation period is 24 hours, it is the opinion of the laboratory director that the results would not likely change after the additional 18 minutes (personal communication with RJN).

Wells CSD-1S, CSD-5 and CSD-9, which are directly downgradient from the waste storage facility (WSF), continue to have some of the lowest concentrations of nitrates, again, indicating that the WSF is not a source of contaminants.

Groundwater monitoring will proceed in accordance with the schedule in WPDES Permit WI-0063533-02-1.

Sincerely,
RJN ENVIRONMENTAL SERVICES, LLC

Robert J. Nauta, P.G.
Hydrogeologist

Cc: Ex. 6 Personal Privacy (PP) – Central Sands Dairy
Cameron Field, Esq. – Michael, Best & Friedrich

TABLES

TABLE 1
GROUNDWATER ELEVATIONS
CENTRAL SANDS DAIRY, LLC

COMMON NAME	CSD-1S		CSD-1D		CSD-2		CSD-3S		CSD-3D		CSD-4	
UNIQUE NUMBER	VY778		VY779		VU928		VU925		VU926		VU927	
TOP OF CASING[1]	963.61		963.53		961.18		963.26		963.07		963.91	
DATE	DTW[2]	GWE[3]	DTW[2]	GWE[3]	DTW[2]	GWE[3]	DTW[2]	GWE[3]	DTW[2]	GWE[3]	DTW[2]	GWE[3]
Dec 14	20.19	943.42	18.68	944.85	15.94	945.24	15.16	948.10	14.99	948.08	17.20	946.71
Apr 15	21.13	942.48	21.19	942.34	16.83	944.35	16.15	947.11	15.98	947.09	18.16	945.75
Jul 15	21.06	942.55	20.98	942.55	16.77	944.41	15.78	947.48	15.56	947.51	19.10	944.81
Oct 15	20.57	943.04	20.51	943.02	16.31	944.87	15.51	947.75	15.31	947.76	17.93	945.98
Dec-15	20.56	943.05	20.47	943.06	16.01	945.17	14.99	948.27	14.77	948.30	17.22	946.69
Mar-16	20.10	943.51	20.01	943.52	15.86	945.32	15.13	948.13	14.95	948.12	17.14	946.77
Jul-16	19.71	943.90	19.60	943.93	15.40	945.78	14.22	949.04	14.01	949.06	16.56	947.35
Aug-16	19.79	943.82	19.69	943.84	15.52	945.66	14.48	948.78	14.25	948.82	16.50	947.41
Aug-16	19.69	943.92	19.60	943.93	15.45	945.73	14.20	949.06	13.99	949.08	18.02	945.89
Sep-16	17.35	946.26	17.29	946.24	13.09	948.09	11.80	951.46	11.59	951.48	14.09	949.82
Nov-16	17.55	946.06	17.46	946.07	13.29	947.89	12.35	950.91	12.13	950.94	14.40	949.51
Nov-16	17.81	945.80	17.72	945.81	13.50	947.68	12.62	950.64	12.39	950.68	14.69	949.22
Dec-16	17.88	945.73	17.96	945.57	13.60	947.58	12.74	950.52	12.53	950.54	14.80	949.11
Jan-17	18.11	945.50	18.00	945.53	13.67	947.51	12.71	950.55	12.49	950.58	14.74	949.17
Feb-17	17.76	945.85	17.67	945.86	13.41	947.77	12.27	950.99	12.08	950.99	14.50	949.41
Mar-17	17.22	946.39	17.14	946.39	12.79	948.39	11.90	951.36	11.68	951.39	14.06	949.85
Apr-17	17.23	946.38	17.15	946.38	12.74	948.44	11.90	951.36	11.69	951.38	14.02	949.89

[1] FEET, MSL

[2] DEPTH TO WATER IN FEET BELOW TOP OF CASING

[3] GROUNDWATER ELEVATION IN FEET, MSL

TABLE 1
GROUNDWATER ELEVATIONS
CENTRAL SANDS DAIRY, LLC

COMMON NAME	CSD-5		CSD-6		CSD-7		CSD-8		CSD-9	
UNIQUE NUMBER	VY742		VY715		VY713		VY744		VY811	
TOP OF CASING[1]	962.72		964.57		963.21		965.02		961.73	
DATE	DTW[2]	GWE[3]	DTW[2]	GWE[3]	DTW[2]	GWE[3]	DTW[2]	GWE[3]	DTW[2]	GWE[3]
Aug-16	18.62	944.10	19.56	945.01	17.65	945.56	18.47	946.55		
Aug-16	18.53	944.19	19.50	945.07	17.64	945.57	18.55	946.47		
Sep-16	16.21	946.51	17.20	947.37	15.40	947.81	16.15	948.87		
Nov-16	16.36	946.36	17.36	947.21	15.49	947.72	16.35	948.67	15.20	946.53
Nov-16	16.65	946.07	17.59	946.98	15.75	947.46	16.63	948.39	15.35	946.38
Dec-16	16.71	946.01	17.77	946.80	15.84	947.37	16.77	948.25	15.61	946.12
Jan-17	16.86	945.86	17.90	946.67	15.95	947.26	16.74	948.28	15.72	946.01
Feb-17	16.50	946.22	17.67	946.90	15.76	947.45	16.56	948.46	15.46	946.27
Mar-17	16.02	946.70	17.08	947.49	15.19	948.02	16.05	948.97	14.94	946.79
Apr-17	16.04	946.68	17.10	947.47	15.13	948.08	16.01	949.01	14.95	946.78

[1] FEET, MSL
[2] DEPTH TO WATER IN FEET BELOW TOP OF CASING
[3] GROUNDWATER ELEVATION IN FEET, MSL

TABLE 2
GROUNDWATER QUALITY
CENTRAL SANDS DAIRY, LLC
CSD-1S

	Potassium mg/L	Chloride mg/L	Nitrogen, NO_2+NO_3 mg/L	Total Kjeldahl nitrogen mg/L	Total organic carbon mg/L	Total dissolved solids mg/L	Ammonia (N) mg/L	Chemical oxygen demand mg/L	Total coliform bacteria	E. Coli
PAL	NS	125	2	NS	NS	NS	0.97	NS	(1)	(1)
ES	NS	250	10	NS	NS	NS	9.7	NS	(1)	(1)
Dec 14	16.8	16.9	**16.1**	3.01	4	192	*2.77*	3.5	**P**	A
Apr 15	18.4	21.1	**14.0**	2.61	2.11	210	*2.63*	<8.5	**P**	A
Jul 15	21	19	**24**	2.3	2.0	300	*2.6*	10	<1	<1
Oct 15	26	19	**22**	3.2	1.8	350	*3.3 B*	9.4 J	2	<1
Mar-16	26		**16**	1.6			*1.1 B*		1	<1
Jul-16	28		**18**	0.86 B			0.55 B		<1	<1
Aug-16	27	19	**17**	1.5 B	1.5	250	*1.3*	<6.1	<1	<1
Sep-16	24	16	**13**	1.9 BF1	3.3	200	*1.7*	9.0 J	<1	<1
Oct-16	21	13	**11**	2.0 B	1.5	280	*1.7*	<6.1	**3**	<1
Nov-16	22	16 B	**12**	2.8 B	1.5	160	*2.5*	<6.1	<1	<1
Dec-16	22	19 B	**16**	3.3 B	1.5	160	*3.1*	<6.1	<1	<1

(1): Presence indicates exceedance
F, J: Result between levels of detection and quantification
F1: MS and/or MSD recovery is outside acceptable limits.
F2 Exceedance of QA/QC control limit.
B: Found in blank and sample.
PAL: Preventive action limit
ES: Enforcement standard
P: Present
A: Absent
NS: No standards established
Itallics indicate PAL exceedance
Bold indicates ES exceedance

TABLE 2
GROUNDWATER QUALITY
CENTRAL SANDS DAIRY, LLC
CSD-1S

	Potassium mg/L	Chloride mg/L	Nitrogen, NO_2+NO_3 mg/L	Total Kjeldahl nitrogen mg/L	Total organic carbon mg/L	Total dissolved solids mg/L	Ammonia (N) mg/L	Chemical oxygen demand mg/L	Total coliform bacteria	E. Coli
PAL	NS	125	2	NS	NS	NS	0.97	NS	(1)	(1)
ES	NS	250	10	NS	NS	NS	9.7	NS	(1)	(1)
Jan-17	21	20 B	**16**	3.8 B F1 F2	2.2	220	*3.8*	7.2 J	<1	<1
Feb-17	19	14 B	**12**	2.7	2.2	130	*2.4*	14	<1	<1
Mar-17	18	16 B	**15**	1.8	2.0	140	*2.1*	8.0 J	<1	<1
Apr-17	15	13	**14**	1.7 B	1.8	170	*1.6*	8.2 J	<1	<1

(1): Presence indicates exceedance
F, J: Result between levels of detection and quantification
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TABLE 3
GROUNDWATER QUALITY
CENTRAL SANDS DAIRY, LLC
CSD-1D

	Potassium mg/L	Chloride mg/L	Nitrogen, NO_2+NO_3 mg/L	Total Kjeldahl nitrogen mg/L	Total organic carbon mg/L	Total dissolved solids mg/L	Ammonia (N) mg/L	Chemical oxygen demand mg/L	Total coliform bacteria	E. Coli
PAL	NS	125	2	NS	NS	NS	0.97	NS	(1)	(1)
ES	NS	250	10	NS	NS	NS	9.7	NS	(1)	(1)
Dec 14	20.0	28.1	**14.9**	6.9	5	290	*6.44*	7.2	**P**	A
Apr 15	26.1	38.8	**11.9**	5.77	3.16	324	*5.77*	<8.5	**P**	A
Jul 15	33.0	42	**20**	6.5	3.2	480	*6.7*	9.8 J	**11**	<1
Oct 15	35.0	35	**21**	7.6	2.2	430	*9.5 B*	16	**6**	<1
Mar-16	29		**15**	6.1			*6.5 B*		**38**	<1
Jul-16	23		**21** B	4.2 B			*4.7 B*		**140**	<1
Aug-16	29	39	**19**	4.4 B	2.7	430	*5.6*	9.6 J	**55**	<1
Sep-16	26	38 B	**22**	3.0 B	3.4	450	*3.3*	12	**12**	<1
Oct-16	24	37	**24**	2.8 B	2.6	500	*2.2*	<6.1	**921**	<1
Nov-16	24	43 B	**25**	2.3 B	2.5	420	*1.8*	7.2 J	**11**	<1
Dec-16	28	41 B	**24**	2.3 B	2.2	350	*1.8*	7.8 J	**5**	<1

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TABLE 3
GROUNDWATER QUALITY
CENTRAL SANDS DAIRY, LLC
CSD-1D

	Potassium mg/L	Chloride mg/L	Nitrogen, NO_2+NO_3 mg/L	Total Kjeldahl nitrogen mg/L	Total organic carbon mg/L	Total dissolved solids mg/L	Ammonia (N) mg/L	Chemical oxygen demand mg/L	Total coliform bacteria	E. Coli
PAL	NS	125	2	NS	NS	NS	0.97	NS	(1)	(1)
ES	NS	250	10	NS	NS	NS	9.7	NS	(1)	(1)
Jan-17	27	39 B	**24**	2.8 B	2.7	390	*2.5*	11	**7**	<1
Feb-17	27	39 F1 B	**24**	3.8	2.8	38	3.2	8.9 J	**1**	<1
Mar-17	29	38 B	**24**	4.6	2.7	330	5.7 B	<6.1	**3**	<1
Apr-17	39	42	**31**	9.3 B	2.3	410	**10**	9.1 J	**2**	<1

(1): Presence indicates exceedance
F, J: Result between levels of detection and quantification
F1: MS and/or MSD recovery is outside acceptable limits.
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PAL: Preventive action limit
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NS: No standards established
Itallics indicate PAL exceedance
Bold indicates ES exceedance

TABLE 4
GROUNDWATER QUALITY
CENTRAL SANDS DAIRY, LLC
CSD-2

	Potassium mg/L	Chloride mg/L	Nitrogen, NO_2+NO_3 mg/L	Total Kjeldahl nitrogen mg/L	Total organic carbon mg/L	Total dissolved solids mg/L	Ammonia (N) mg/L	Chemical oxygen demand mg/L	Total coliform bacteria	E. Coli
PAL	NS	125	2	NS	NS	NS	0.97	NS	(1)	(1)
ES	NS	250	10	NS	NS	NS	9.7	NS	(1)	(1)
Dec 14	9.4	8.6	**10.8**	0.27	4	158	0.03	5.8	**P**	A
Apr 15	9.38	6.11	*8.5*	0.212	2.31	132	<0.015	<8.5	**P**	A
Jul 15	8.4	7.0	*9.6*	0.54	2.0	130	<0.043	<6.1	<1	<1
Oct 15	8.9	5.4	**11**	0.76	1.5	180	0.057 JB	14	**1**	<1
Mar-16	7.1		*8.7*	0.54			0.12 JB		**9**	<1
Jul-16	7.4		*8.0*	0.48 B			0.16 JB		**6**	<1
Aug-16	7.6	7.7	*7.8*	0.53 B	1.4	160	<0.10	<6.1	**26**	<1
Sep-16	7.4	4.4	*4.1*	0.54 B	2.4	130	<0.10	15	**328**	<1
Oct-16	9.5	7.4	*9.4*	0.56 B	1.6	220	<0.10	<6.1	**39**	<1
Nov-16	9.6	9.3 B	**11**	0.62 B	1.6	140	<0.10	7.7 J	**2**	<1
Dec-16	9.5	8.2 B	*9.3*	0.51 B	1.6	98	<0.10	<6.1	<1	<1

(1): Presence indicates exceedance
F, J: Result between levels of detection and quantification
F1: MS and/or MSD recovery is outside acceptable limits.
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PAL: Preventive action limit
ES: Enforcement standard
P: Present
A: Absent
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TABLE 4
GROUNDWATER QUALITY
CENTRAL SANDS DAIRY, LLC
CSD-2

	Potassium mg/L	Chloride mg/L	Nitrogen, NO_2+NO_3 mg/L	Total Kjeldahl nitrogen mg/L	Total organic carbon mg/L	Total dissolved solids mg/L	Ammonia (N) mg/L	Chemical oxygen demand mg/L	Total coliform bacteria	E. Coli
PAL	NS	125	2	NS	NS	NS	0.97	NS	(1)	(1)
ES	NS	250	10	NS	NS	NS	9.7	NS	(1)	(1)
Jan-17	8.9	7.3 B	*8.2*	0.53 B	1.7	100	0.12 J	12	**6**	**1**
Feb-17	7.7	6.9 B	*4.9*	0.35 J	2.1	64	<0.10	9.4 J	**579**	**1**
Mar-17	9.5	7.4 B	*7.5*	0.36 J	1.7	56	0.18 JB	7.0 J	<1	<1
Apr-17	8.3	7.4	*6.5*	0.72 B	1.6	120	0.12 J	15	**36**	<1

(1): Presence indicates exceedance

F, J: Result between levels of detection and quantification

F1: MS and/or MSD recovery is outside acceptable limits.

B: Found in blank and sample.

PAL: Preventive action limit

ES: Enforcement standard

NS: No standards established

Itallics indicate PAL exceedance

Bold indicates ES exceedance

TABLE 5
GROUNDWATER QUALITY
CENTRAL SANDS DAIRY, LLC
CSD-3S

	Potassium mg/L	Chloride mg/L	Nitrogen, NO_2+NO_3 mg/L	Total Kjeldahl nitrogen mg/L	Total organic carbon mg/L	Total dissolved solids mg/L	Ammonia (N) mg/L	Chemical oxygen demand mg/L	Total coliform bacteria	E. Coli
PAL	NS	125	2	NS	NS	NS	0.97	NS	(1)	(1)
ES	NS	250	10	NS	NS	NS	9.7	NS	(1)	(1)
Dec 14	7.1	35.2	**18.8**	0.21	3	216	0.02	6.1	**P**	A
Apr 15	5.06	63.5	**17.2**	0.222 F	1.79	306	<0.0150	<8.5	**P**	A
Jul 15	5.8	48	**24**	0.50	1.6	480	<0.043	11	**5**	**4**
Oct 15	6.7	34	**22**	0.71	1.5	360	0.05 JB	9.4 J	**2**	<1
Mar-16	5.8		**29**	0.62			0.12 JB		**12**	<1
Jul-16	5.7		**34 B**	0.61 B			0.089 JB		**33**	<1
Aug-16	5.6	26	**37**	0.83 B	1.9	410	<0.10	10	**5**	<1
Sep-16	7.0	17	**34**	0.88 B	2.1	350	<0.10	10	**1**	<1
Oct-16	9.4	16	**38**	0.41 B	1.9	470	<0.10	<6.1	**260**	<1
Nov-16	5.3	17 B	**35**	0.78 B	1.7	280	<0.10	7.2 J	<1	<1
Dec-16	6.1	19 B	**35**	0.56 B	1.7 B	220	0.11 J	<6.1	<1	<1

(1): Presence indicates exceedance
F, J: Result between levels of detection and quantification
F1: MS and/or MSD recovery is outside acceptable limits.
B: Found in blank and sample.
PAL: Preventive action limit
ES: Enforcement standard
P: Present
A: Absent
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TABLE 5
GROUNDWATER QUALITY
CENTRAL SANDS DAIRY, LLC
CSD-3S

	Potassium mg/L	Chloride mg/L	Nitrogen, NO_2+NO_3 mg/L	Total Kjeldahl nitrogen mg/L	Total organic carbon mg/L	Total dissolved solids mg/L	Ammonia (N) mg/L	Chemical oxygen demand mg/L	Total coliform bacteria	E. Coli
PAL	NS	125	2	NS	NS	NS	0.97	NS	(1)	(1)
ES	NS	250	10	NS	NS	NS	9.7	NS	(1)	(1)
Jan-17	5.9	17 B	**30**	1.0 B	1.7	270	0.28	8.3 J	**1**	<1
Feb-17	6.1	18 B	**26**	0.88	2.1	210	<0.10	8.4 J	**116**	<1
Mar-17	6.5	38 B	**24**	0.58	1.6	230	0.19 JB	8.0 J	<1	<1
Apr-17	6.2	35	**23**	1.0 B	1.6	270	<0.10	11	<1	<1

(1): Presence indicates exceedance
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F1: MS and/or MSD recovery is outside acceptable limits.
B: Found in blank and sample.
PAL: Preventive action limit
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Bold indicates ES exceedance

TABLE 6
GROUNDWATER QUALITY
CENTRAL SANDS DAIRY, LLC
CSD-3D

	Potassium mg/L	Chloride mg/L	Nitrogen, NO_2+NO_3 mg/L	Total Kjeldahl nitrogen mg/L	Total organic carbon mg/L	Total dissolved solids mg/L	Ammonia (N) mg/L	Chemical oxygen demand mg/L	Total coliform bacteria	E. Coli
PAL	NS	125	2	NS	NS	NS	0.97	NS	(1)	(1)
ES	NS	250	10	NS	NS	NS	9.7	NS	(1)	(1)
Dec 14	0.7	1.9	0.3	0.11	2	112	0.02	6.1	**P**	**P**
Apr 15	1.28	6.37	1.25	<0.110	1.03	136	0.0157 F	22.9 F	**P**	**P**
Jul 15	0.88	5.1	*2.3*	<0.29	0.65J	74	0.076 J	8.0 J	**210**	<1
Oct 15	0.54	5.2	1.7	0.57	0.33 J	150	0.056 JB	<6.1	**11**	<1
Mar-16	1.1		*9.1*	0.47			0.13 JB		**38**	<1
Jul-16	1.0		*8.4*	0.42 B			0.071 JB		**82**	<1
Aug-16	1.4	9.2	**19**	0.54 B	0.39 J	260	0.51	<6.1	**60**	<1
Sep-16	0.95	4.1 B	*6.1*	0.45 B	0.58 J	100	<0.10	8.5 J	**51**	<1
Oct-16	0.95	4.5	*7.7*	0.48 B	0.41 J	180	<0.10	<6.1	**50**	<1
Nov-16	7.2	5.7 B	*10*	0.38 JB	0.43 J	98	0.11 J	8.2 J	<1	<1
Dec-16	1.3	9.2 B	**17**	0.44 B	0.51 JB	110	<0.10	8.8 J	<1	<1

(1): Presence indicates exceedance
F, J: Result between levels of detection and quantification
F1: MS and/or MSD recovery is outside acceptable limits.
B: Found in blank and sample.
PAL: Preventive action limit
ES: Enforcement standard
P: Present
A: Absent
NS: No standards established
Itallics indicate PAL exceedance
Bold indicates ES exceedance

TABLE 6
GROUNDWATER QUALITY
CENTRAL SANDS DAIRY, LLC
CSD-3D

	Potassium mg/L	Chloride mg/L	Nitrogen, NO_2+NO_3 mg/L	Total Kjeldahl nitrogen mg/L	Total organic carbon mg/L	Total dissolved solids mg/L	Ammonia (N) mg/L	Chemical oxygen demand mg/L	Total coliform bacteria	E. Coli
PAL	NS	125	2	NS	NS	NS	0.97	NS	(1)	(1)
ES	NS	250	10	NS	NS	NS	9.7	NS	(1)	(1)
Jan-17	1.4	8.8 B	**18**	0.53 B	0.32 J	180	0.17 J	<6.1	**248**	<1
Feb-17	1.5	10 B	**20**	0.60	0.53 J	150	<0.10	<6.1	<1	<1
Mar-17	1.6	10 B	**18**	0.36 J	0.53 J	120	0.19 J	<6.1	<1	<1
Apr-17	1.3	6.7	**12**	0.48 B	<0.47	130	<0.10	<6.0	<1	<1

(1): Presence indicates exceedance
F, J: Result between levels of detection and quantification
F1: MS and/or MSD recovery is outside acceptable limits.
B: Found in blank and sample.
PAL: Preventive action limit
ES: Enforcement standard
NS: No standards established
Itallics indicate PAL exceedance
Bold indicates ES exceedance

TABLE 7
GROUNDWATER QUALITY
CENTRAL SAND DAIRY, LLC
CSD-4

	Potassium mg/L	Chloride mg/L	Nitrogen, NO_2+NO_3 mg/L	Total Kjeldahl nitrogen mg/L	Total organic carbon mg/L	Total dissolved solids mg/L	Ammonia (N) mg/L	Chemical oxygen demand mg/L	Total coliform bacteria	E. Coli
PAL	NS	125	2	NS	NS	NS	0.97	NS	(1)	(1)
ES	NS	250	10	NS	NS	NS	9.7	NS	(1)	(1)
Dec 14	31.1	50.4	**62.5**	0.63	6	628	0.01	12.4	**P**	A
	31.1	50.8	**60.0**	0.63	6	640	0.01	12.1	**P**	A
Apr 15	44.0	58.1	**69.5**	0.505	4.67	770	<0.0150	9.27 F	**P**	A
	44.1	58.0	**69.3**	0.132 F	4.55	704	<0.0150	9.98 F	**P**	A
Jul 15	44	52	**77**	1.2	4.0	790	<0.043	13	<1	<1
	46	51.0	**77**	1.1	4.0	830	<0.043	14	<1	<1
Oct 15	36	24	**38**	1.0	2.8	450	0.072	15	3	<1
	35	25	**36**	0.62	2.8	500	0.062 JB	15	1	<1

(1): Presence indicates exceedance
F, J: Result between levels of detection and quantification
F1: MS and/or MSD recovery is outside acceptable limits.
B: Found in blank and sample.
PAL: Preventive action limit
ES: Enforcement standard
P: Present
A: Absent
NS: No standards established
Itallics indicate PAL exceedance
Bold indicates ES exceedance

TABLE 7
GROUNDWATER QUALITY
CENTRAL SAND DAIRY, LLC
CSD-4

	Potassium mg/L	Chloride mg/L	Nitrogen, NO_2+NO_3 mg/L	Total Kjeldahl nitrogen mg/L	Total organic carbon mg/L	Total dissolved solids mg/L	Ammonia (N) mg/L	Chemical oxygen demand mg/L	Total coliform bacteria	E. Coli
PAL	NS	125	2	NS	NS	NS	0.97	NS	(1)	(1)
ES	NS	250	10	NS	NS	NS	9.7	NS	(1)	(1)
Mar-16	40		**54**	1.1			0.15 JB		**24**	<1
	41		**46**	1.3			0.14 JB		**19**	<1
Jul-16	34		**48**	0.79 B			0.045 JB		**2**	<1
	33		**49 B**	0.74 B			0.045 JB		**5**	<1
Aug-16	23	17	**29**	0.87 B	2.1	380	<0.10	6.6 J	**14**	<1
	22	17	**27**	0.71 B	2.1	440	0.10 J	11	**9**	<1
Sep-16	34	43	**58**	1.3 B	3.1	670	<0.10	13	**5**	<1
	34	43 B	**53**	1.4 B	3.1	660	<0.10	14	**3**	<1
Oct-16	35	49	**58**	1.2 B	3.6	780	<0.10	12	**99**	<1
	31	49	**56**	0.86 B	3.6	820	0.12 J	6.7 J	**102**	<1

(1): Presence indicates exceedance
F, J: Result between levels of detection and quantification
F1: MS and/or MSD recovery is outside acceptable limits.
B: Found in blank and sample.
PAL: Preventive action limit
ES: Enforcement standard
NS: No standards established
Itallics indicate PAL exceedance
Bold indicates ES exceedance

TABLE 7
GROUNDWATER QUALITY
CENTRAL SAND DAIRY, LLC
CSD-4

	Potassium mg/L	Chloride mg/L	Nitrogen, NO_2+NO_3 mg/L	Total Kjeldahl nitrogen mg/L	Total organic carbon mg/L	Total dissolved solids mg/L	Ammonia (N) mg/L	Chemical oxygen demand mg/L	Total coliform bacteria	E. Coli
PAL	NS	125	2	NS	NS	NS	0.97	NS	(1)	(1)
ES	NS	250	10	NS	NS	NS	9.7	NS	(1)	(1)
Nov-16	37	60 B	**70**	0.77 B	3.6	710	<0.10	7.7 J	**1**	<1
	43	52 B	**67**	0.95 B	3.6	680	0.11 J	11	**1**	<1
Dec-16	41	60 B	**75**	1.5 B	3.9 B	680	<0.10	19	<1	<1
	40	58 B	**69**	0.78 B	4.1 B	670	<0.10	11	<1	<1
Jan-17	37	44 B	**56**	0.99 B	4.0	720	0.14 J	13	<1	<1
	37	46 B	**58**	0.66 B	4.0	660	<0.10	14	<1	<1
Feb-17	40	48 B	**54**	0.71	4.1	570	<0.10	15	<1	<1
	39	47 B	**52**	0.86 F1 F2	4.2	590	<0.10	13	<1	<1
Mar-17	38	40 B	**40**	0.87	3.8	530	0.16 JB	13	<1	<1
	39	41 B	**42**	1.0	3.8	530	0.19 JB	14	<1	<1
Apr-17	35	36	**35**	0.96 B	3.1	470	0.13 J	17	<1	<1
	32	37	**38**	0.99 B	3.1	500	<0.10	17	<1	<1

(1): Presence indicates exceedance
F, J: Result between levels of detection and quantification
F1: MS and/or MSD recovery is outside acceptable limits.
B: Found in blank and sample.
PAL: Preventive action limit
ES: Enforcement standard
NS: No standards established
Itallics indicate PAL exceedance
Bold indicates ES exceedance

TABLE 8
GROUNDWATER QUALITY
CENTRAL SANDS DAIRY, LLC
CSD-5

	Potassium mg/L	Chloride mg/L	Nitrogen, NO_2+NO_3 mg/L	Total Kjeldahl nitrogen mg/L	Total organic carbon mg/L	Total dissolved solids mg/L	Ammonia (N) mg/L	Chemical oxygen demand mg/L	Total coliform bacteria	E. Coli
PAL	NS	125	2	NS	NS	NS	0.97	NS	(1)	(1)
ES	NS	250	10	NS	NS	NS	9.7	NS	(1)	(1)
Aug-16	24	54	**12**	3.1 B	1.8	280	*3.3*	15	**1986**	<1
Sep-16	37	43	*4.0*	3.6 B	2.6	200	*3.8*	12	**1414**	<1
Oct-16	24	37	*4.3*	2.7 B	2.3	290	*2.4*	<6.1	**155**	<1
Nov-16	27	50 B	*5.3*	1.9 B	2.3	230	*1.6*	12	**7**	<1
Dec-16	19	44 B	*3.3*	1.1 B	2.1 B	240	0.76	6.2 J	**4**	<1
Jan-17	13	19 B	1.8	0.69 B	1.6	140	0.43	9.8 J	**9**	<1
Feb-17	11	9.3 B	0.77	0.32 J	1.5	50	0.22	<6.1	**2**	<1
Mar-17	9.2	9.6 B	0.86	0.30 J	1.3	8.0 J	0.31 B	12	**2**	<1
Apr-17	10	15	0.91	0.53 B	1.5	100	0.18 J	11	**1**	<1

(1): Presence indicates exceedance
F, J: Result between levels of detection and quantification
F1: MS and/or MSD recovery is outside acceptable limits.
B: Found in blank and sample.
PAL: Preventive action limit
ES: Enforcement standard
NS: No standards established
Itallics indicate PAL exceedance
Bold indicates ES exceedance

TABLE 9
GROUNDWATER QUALITY
CENTRAL SANDS DAIRY, LLC
CSD-6

	Potassium mg/L	Chloride mg/L	Nitrogen, NO_2+NO_3 mg/L	Total Kjeldahl nitrogen mg/L	Total organic carbon mg/L	Total dissolved solids mg/L	Ammonia (N) mg/L	Chemical oxygen demand mg/L	Total coliform bacteria	E. Coli
PAL	NS	125	2	NS	NS	NS	0.97	NS	(1)	(1)
ES	NS	250	10	NS	NS	NS	9.7	NS	(1)	(1)
Aug-16	110	40	**58**	0.96 B	5.2	790	<0.10	18	**>2420**	<1
Sep-16	100	33	**47**	1.2 B	4.3	620	<0.10	15	**488**	<1
Oct-16	100	47	**50**	1.0 B	4.8	730	<0.10	12	**67**	<1
Nov-16	84	33 B	**55**	0.72 B	3.8	510	<0.10	8.7 J	**22**	<1
Dec-16	71	27 B	**38**	0.93 B	4.6 B	430	<0.10	27	**28**	<1
Jan-17	72	22 B	**38**	1.1 B	3.2	460	<0.10	13	**27**	<1
Feb-17	69	40 B	**33**	0.47	4.0	560	<0.10	13	**1**	<1
Mar-17	73	33 B	**37**	0.58	3.5	360	0.19 JB	15	**6**	<1
Apr-17	73	37	**41**	1.1 B	3.0	510	<0.10	15	**<1**	<1

(1): Presence indicates exceedance
F, J: Result between levels of detection and quantification
F1: MS and/or MSD recovery is outside acceptable limits.
B: Found in blank and sample.
PAL: Preventive action limit
ES: Enforcement standard
NS: No standards established
Itallics indicate PAL exceedance
Bold indicates ES exceedance

TABLE 10
GROUNDWATER QUALITY
CENTRAL SANDS DAIRY, LLC
CSD-7

	Potassium mg/L	Chloride mg/L	Nitrogen, NO_2+NO_3 mg/L	Total Kjeldahl nitrogen mg/L	Total organic carbon mg/L	Total dissolved solids mg/L	Ammonia (N) mg/L	Chemical oxygen demand mg/L	Total coliform bacteria	E. Coli
PAL	NS	125	2	NS	NS	NS	0.97	NS	(1)	(1)
ES	NS	250	10	NS	NS	NS	9.7	NS	(1)	(1)
Aug-16	65	28	**43**	1.8 B	14	540	0.22	33	**>2420**	<1
Sep-16	68	23	**39**	1.5 B	10	500	0.18 J	26	**>2420**	<1
Oct-16	80	32	**50**	1.6 B	8.7	670	0.32	22	**548**	**4**
Nov-16	85	31 B	**54**	1.7 B	10	590	0.59	29	**>2420**	**7**
Dec-16	88	61 B	**31**	9.7 B	180 B	720	0.86	520	**>2420**	**205**
Jan-17	71	48 B	**48**	2.1 B	13	610	0.49 B	40	**>2420**	**2**
Feb-17	76	24 B	**48**	1.4 B	11	360	0.22	32	**>2420**	<1
Mar-17	72	50 B	**44**	0.82	6	500	0.36 B	21	**921**	**12**
Apr-17	91	47	**59**	1.7 B	9.6	730	0.28	34	**308**	**1**

(1): Presence indicates exceedance
F, J: Result between levels of detection and quantification
F1: MS and/or MSD recovery is outside acceptable limits.
B: Found in blank and sample.
PAL: Preventive action limit
ES: Enforcement standard
NS: No standards established
Itallics indicate PAL exceedance
Bold indicates ES exceedance

TABLE 11
GROUNDWATER QUALITY
CENTRAL SANDS DAIRY, LLC
CSD-8

	Potassium mg/L	Chloride mg/L	Nitrogen, NO_2+NO_3 mg/L	Total Kjeldahl nitrogen mg/L	Total organic carbon mg/L	Total dissolved solids mg/L	Ammonia (N) mg/L	Chemical oxygen demand mg/L	Total coliform bacteria	E. Coli
PAL	NS	125	2	NS	NS	NS	0.97	NS	(1)	(1)
ES	NS	250	10	NS	NS	NS	9.7	NS	(1)	(1)
Aug-16	42	23	**36**	0.85 B	4.1	620	<0.10	11	**921**	<1
Sep-16	51	22	**42**	0.83 BF1	3.8	580	<0.10	11	**25**	<1
Oct-16	63	31	**64**	0.78 B	5.2	850	0.11 J	10	**88**	<1
Nov-16	65	36 B	**48**	0.87 B	5.5	690	0.10 J	17	**1**	<1
Dec-16	63	43 B	**57**	1.5 B	4.9 B	560	<0.10	14	**1**	<1
Jan-17	65	39 B	**55**	1.3 B	6.0	760	0.23 B	22	**1**	<1
Feb-17	64	38 B	**45**	0.86 B	6.1	680	0.10 J	18	**4**	<1
Mar-17	64	40 B	**53**	0.72	5.5	590	<0.10	21	<1	<1
Apr-17	53	35	**48**	1.0 B	4.4	670	0.10 J	19	<1	<1

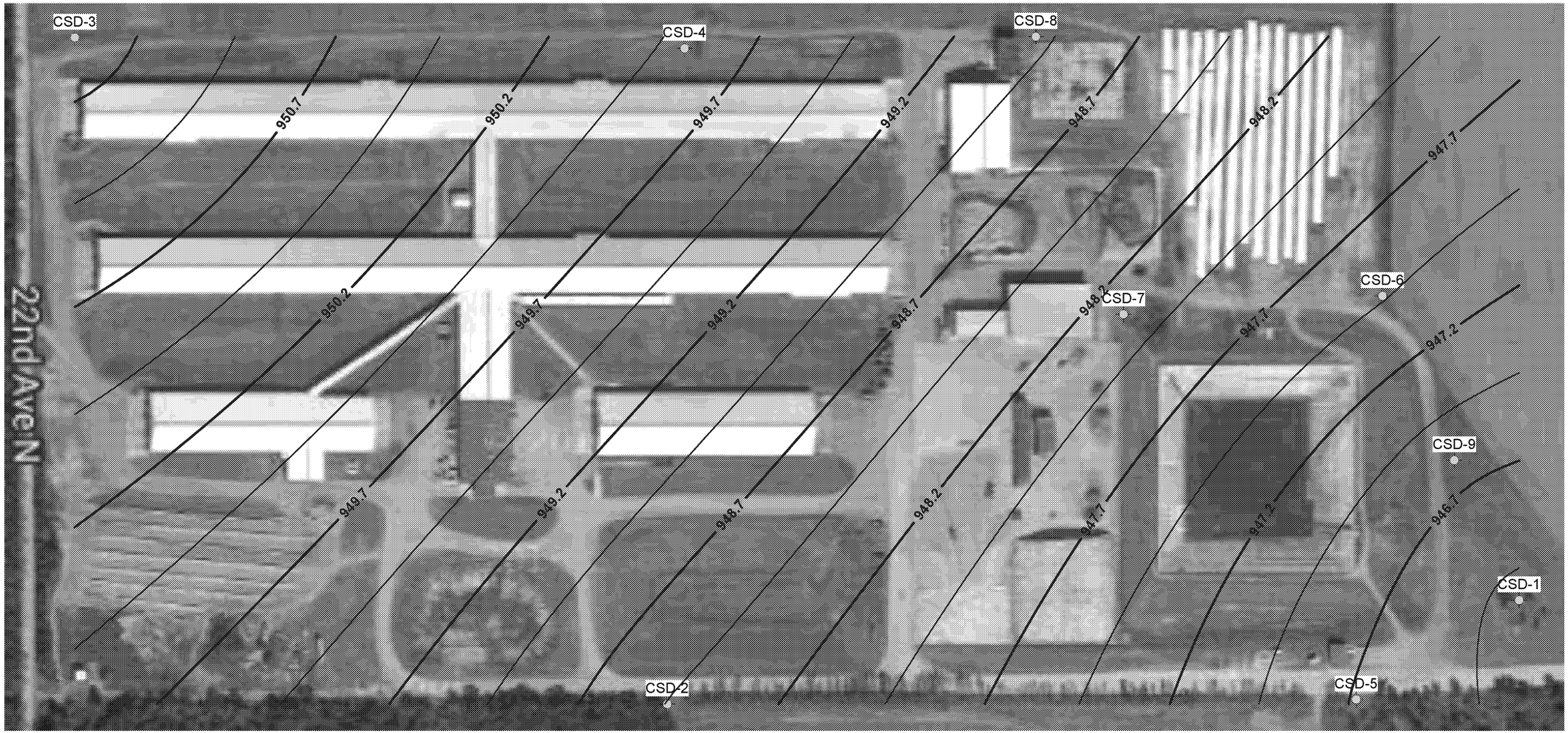
(1): Presence indicates exceedance
F, J: Result between levels of detection and quantification
F1: MS and/or MSD recovery is outside acceptable limits.
B: Found in blank and sample.
PAL: Preventive action limit
ES: Enforcement standard
NS: No standards established
Itallics indicate PAL exceedance
Bold indicates ES exceedance

TABLE 12
GROUNDWATER QUALITY
CENTRAL SANDS DAIRY, LLC
CSD-9

	Potassium mg/L	Chloride mg/L	Nitrogen, NO_2+NO_3 mg/L	Total Kjeldahl nitrogen mg/L	Total organic carbon mg/L	Total dissolved solids mg/L	Ammonia (N) mg/L	Chemical oxygen demand mg/L	Total coliform bacteria	E. Coli
PAL	NS	125	2	NS	NS	NS	0.97	NS	(1)	(1)
ES	NS	250	10	NS	NS	NS	9.7	NS	(1)	(1)
Oct-16	24	6.8	*8.1*	0.58 B	4.1	260	0.10 J	8.2 J	**980**	<1
	25	7.0	*8.3*	0.68 B	4.1	240	<0.10	6.7 J	**613**	<1
Nov-16	28	12	**16**	0.73 B	3.5	200	<0.10	15	**>2420**	<1
	29	12	**14**	0.82 B	3.5	180	0.12 J	13	**>2420**	<1
Dec-16	22	7.9 B	*10*	0.50 B	2.7 B	110	<0.10	9.3 J	**81**	<1
	21	8.3 B	*9.9*	0.51 B	2.6 B	100	<0.10	8.3 J	**61**	<1
Jan-17	17	6.5 B	*8.1*	0.67 B	2.9	150	0.24 B	11	**12**	<1
	17	6.2 B	*6.2*	0.61 B	2.9	140	0.24 B	22	**20**	<1
Feb-17	15	6.0 B	*7.7*	0.66 B	2.4	78	<0.10	17	**6**	<1
	13	5.9 B	*7.3*	0.55 B	2.4	84	<0.10	8.9 J	**2**	<1
Mar-17	19	6.8 B	*9.1*	0.48	2.4	78	<0.10	10	**4**	<1
	18	7.3 B	*8.8*	0.50	2.4	70	<0.10	11	**5**	<1
Apr-17	21	6.3 F1	**14**	0.58	2.5	210	0.13 J	15	**20**	<1
	21	5.7	**14**	0.60	2.3	210	0.12 J	14	**10**	<1

(1): Presence indicates exceedance
F, J: Result between levels of detection and quantification
F1: MS and/or MSD recovery is outside acceptable limits.
B: Found in blank and sample.
PAL: Preventive action limit
ES: Enforcement standard
NS: No standards established
Itallics indicate PAL exceedance
Bold indicates ES exceedance

FIGURES



WATER TABLE MONITORING WELL

946 GROUNDWATER ELEVATION (FT, MSL)

AERIAL PHOTO: GOOGLE MAPS

SCALE IN FEET

0 100 200 300 400

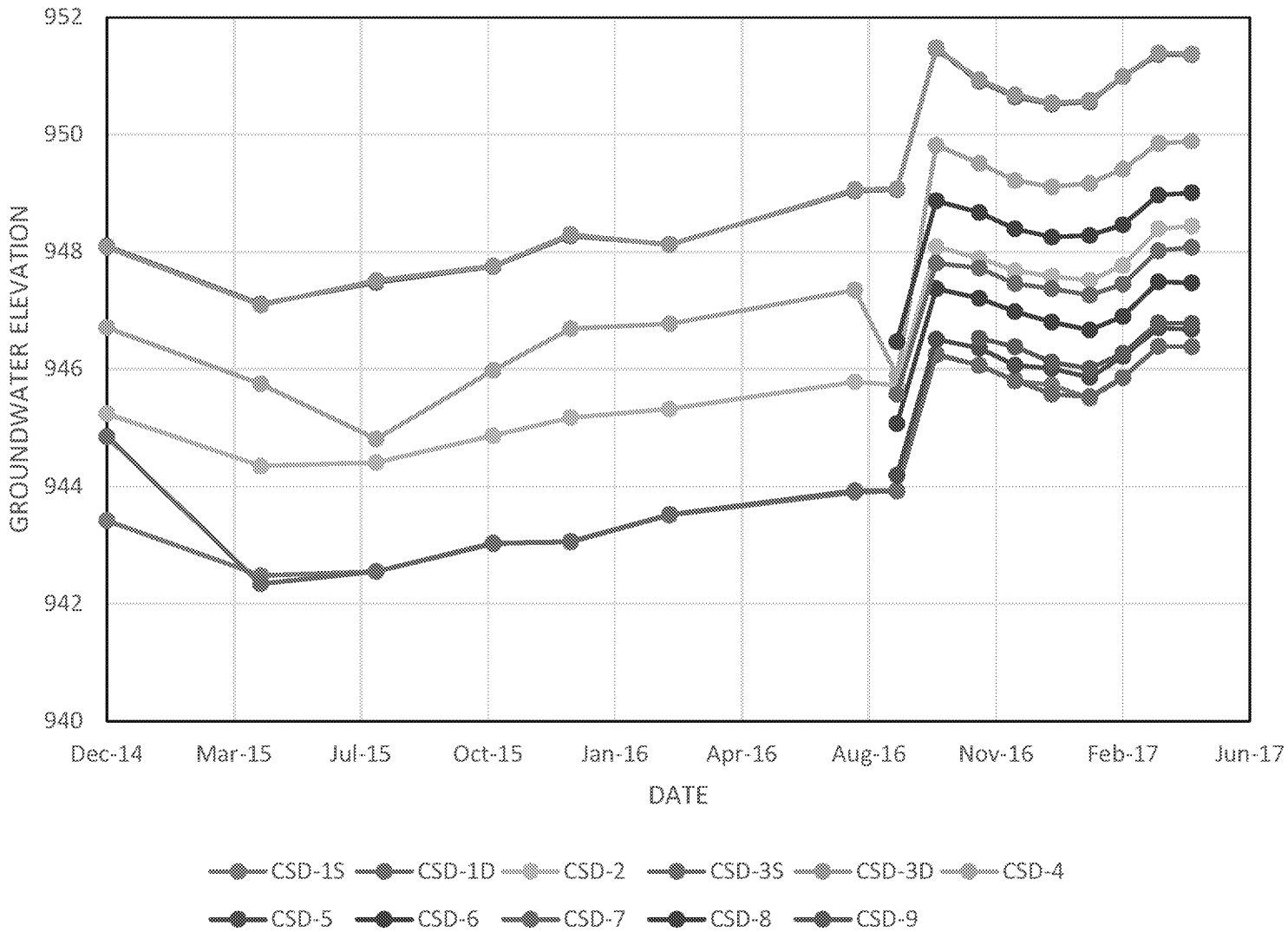
NORTH

RJN Environmental Services, LLC
Surface Water Studies
Groundwater Studies
Site Investigations
4811 MONONA DRIVE, MONONA, WISCONSIN 53716

CENTRAL SANDS DAIRY, LLC
TOWN OF ARMENIA, WISCONSIN
WATER TABLE - 4/17/17

FIGURE 1

DRAWN BY	PROJ. No.	DATE	FILE
RN	14-203	19 APR 17	WTR TBL 0417



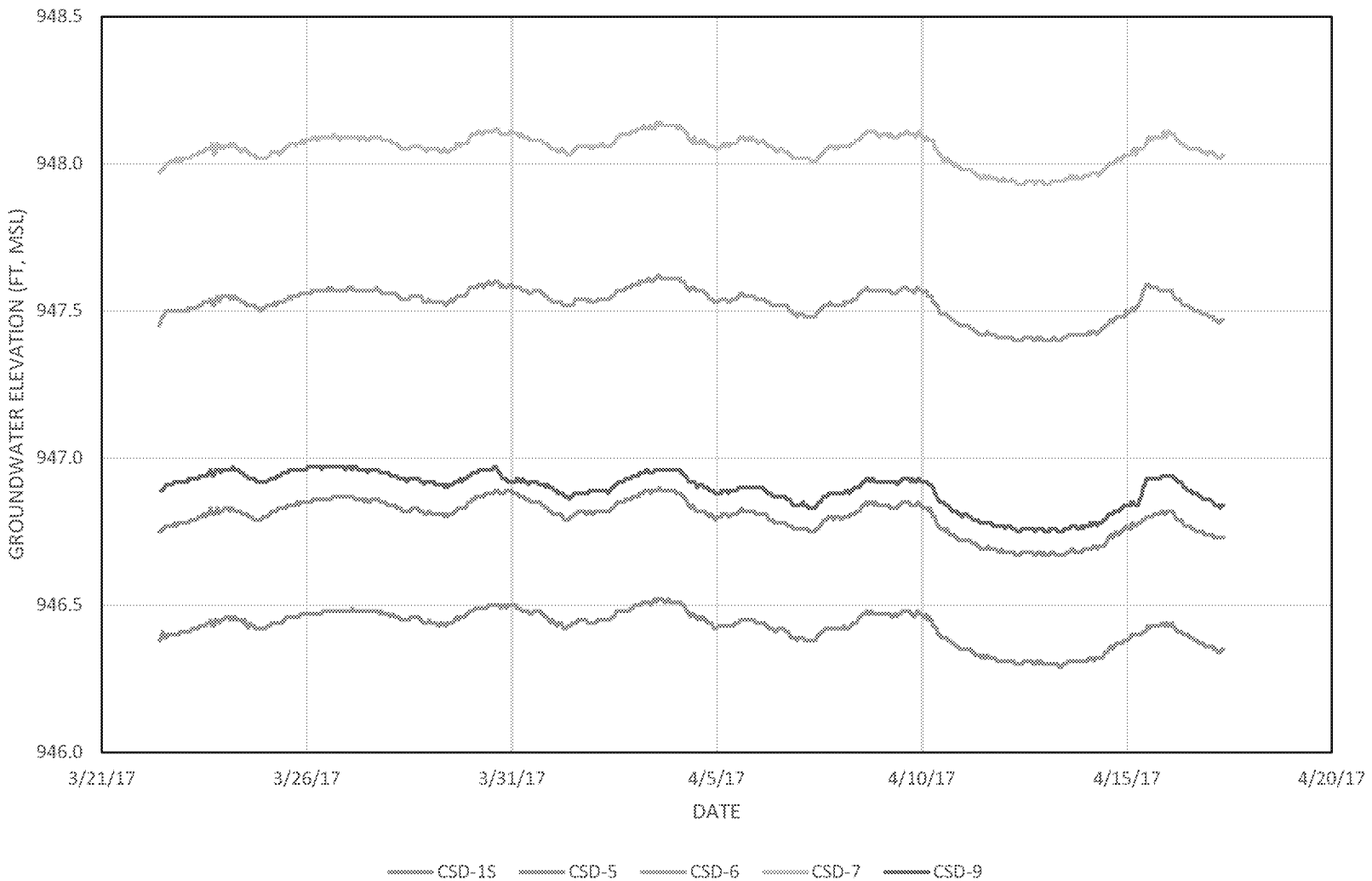
NOTE: WATER LEVELS IN WELLS CSD-3S AND CSD-3D ARE VIRTUALLY IDENTICAL, SO THEY APPEAR AS A SINGLE LINE.

RJN Environmental Services, LLC
Surface Water Studies
Groundwater Studies
Site Investigations
4811 MONONA DRIVE, MONONA, WISCONSIN 53716

CENTRAL SANDS DAIRY, LLC
TOWN OF ARMENIA, WISCONSIN
HYDROGRAPHS

FIGURE 2

DRAWN BY	PROJ. No.	DATE	FILE
RN	14-203	02 MAY 17	HYDROGRAPH



RJN Environmental Services, LLC
Surface Water Studies
Groundwater Studies
Site Investigations
4811 MONONA DRIVE, MONONA, WISCONSIN 53716

CENTRAL SANDS DAIRY, LLC
TOWN OF ARMENIA, WISCONSIN
HOURLY RECORDINGS OF WATER LEVELS
MARCH 22 - APRIL 17, 2017

FIGURE 3

DRAWN BY	PROJ. No.	DATE	FILE
RN	14-203	09 MAY 17	LOGGERS

ATTACHMENT A

FIELD NOTES

RJN Environmental Services, LLC

Well number:	CSD-1S VY778

Groundwater Sample Collection Record

Client:	Central Sands Dairy	Date:	4/17/17
Project No.:	14-203	Time start:	1225
Site Location:	Juneau County, WI	Finish:	1250
Wether conditions:			

Water Level Data: Well: X Piez: _____

Total Depth: 28.32 Diameter: 2" Water column: 11.09

Depth to water: 17.23 Well volume: 1.8 gal.

Purging data:

Method: Low flow

Acceptance criteria:

Minimum purge volume (3 volumes): 5.4 gal.

Stabilization: pH: +/- 0.1

Temp: +/- 10%

Cond: +/- 5%

Removed	T	pH	mS/cm
2	13.44	5.54	0.234
4	13.45	5.58	0.242
6	13.44	5.64	0.245

Sampled

By: Nauta

RJN Environmental Services, LLC

Well number:	CSD-1D VY779

Groundwater Sample Collection Record

Client:	Central Sands Dairy	Date:	4/17/17
Project No.:	14-203	Time start:	1130
Site Location:	Juneau County, WI	Finish:	1220
Wether conditions:			

Water Level Data: Well: _____ Piez: X

Total Depth: 49.57 Diameter: 2" Water column: 32.42

Depth to water: 17.15 Well volume: 5.2 gal.

Purging data:

Method: Low flow

Acceptance criteria:

Minimum purge volume (3 volumes): 15.6 gal.

Stabilization: pH: +/- 0.1

Temp: +/- 10%

Cond: +/- 5%

Removed	T	pH	mS/cm
6	12.17	6.39	0.672
12	12.30	6.41	0.652
18	13.01	6.40	0.655
24	13.11	6.37	0.651

Sampled by: Nauta

RJN Environmental Services, LLC

Well number:	CSD-2 VU928

Groundwater Sample Collection Record

Client:	Central Sands Dairy	Date:	4/17/17
Project No.:	14-203	Time start:	1300
Site Location:	Juneau County, WI	Finish:	1320
Wether conditions:			

Water Level Data: Well: X Piez:

Total Depth: 26.22 Diameter: 2" Water column: 13.48

Depth to water: 12.74 Well volume: 2.2 gal.

Purging data:

Method: Low flow

Acceptance criteria:

Minimum purge volume (3 volumes): 6.6 gal.

Stabilization: pH: +/- 0.1

Temp: +/- 10%

Cond: +/- 5%

Removed	T	pH	mS/cm
2.5	8.98	5.24	0.156
5.0	8.79	5.15	0.172
7.5	8.83	5.17	0.178

Sampled by: Nauta

RJN Environmental Services, LLC

Well number:	CSD-3S VU925

Groundwater Sample Collection Record

Client:	Central Sands Dairy	Date:	4/17/17
Project No.:	14-203	Time start:	0815
Site Location:	Juneau County, WI	Finish:	0835
Wether conditions:			

Water Level Data: Well: X Piez: _____

Total Depth: 25.51 Diameter: 2" Water column: 13.61

Depth to water: 11.90 Well volume: 2.2 gal.

Purging data:

Method: Low flow

Acceptance criteria:

Minimum purge volume (3 volumes): 6.6 gal.

Stabilization: pH: +/- 0.1

Temp: +/- 10%

Cond: +/- 5%

Removed	T	pH	mS/cm
2.5	8.10	4.84	0.377
5.0	8.13	4.78	0.370
7.5	8.13	4.74	0.367

Sampled by: Nauta

RJN Environmental Services, LLC

Well number:	CSD-3D VU926

Groundwater Sample Collection Record

Client:	Central Sands Dairy	Date:	4/17
Project No.:	14-203	Time start:	0715
Site Location:	Juneau County, WI	Finish:	0810
Wether conditions:			

Water Level Data: Well: _____ Piez: X

Total Depth: 46.80 Diameter: 2" Water column: 35.11

Depth to water: 11.69 Well volume: 5.6 gal.

Purging data:

Method: Low flow

Acceptance criteria:

Minimum purge volume (3 volumes): 18 gal.

Stabilization: pH: +/- 0.1

Temp: +/- 10%

Cond: +/- 5%

Removed	T	pH	mS/cm
0	9.57	5.43	0.156
12	9.61	5.21	0.155
18	9.59	5.27	0.151
24	9.60	5.29	0.152

Sampled by: Nauta

RJN Environmental Services, LLC

Well number:	CSD-4 VU927

Groundwater Sample Collection Record

Client:	Central Sands Dairy	Date:	4/17/17
Project No.:	14-203	Time start:	0845
Site Location:	Juneau County, WI	Finish:	0905
Wether conditions:			

Water Level Data: Well: X Piez: _____

Total Depth: 26.03 Diameter: 2" Water column: 12.01

Depth to water: 14.02 Well volume: 1.9 gal.

Purging data:

Method: Low flow

Acceptance criteria:

Minimum purge volume (3 volumes): 6 gal.

Stabilization: pH: +/- 0.1

Temp: +/- 10%

Cond: +/- 5%

Removed	T	pH	mS/cm
2	8.42	4.82	0.693
4	8.23	4.84	0.700
6	8.28	4.82	0.701
8			

Sampled by: Nauta

RJN Environmental Services, LLC

Well number:	CSD-5
	VY742

Groundwater Sample Collection Record

Client:	Central Sands Dairy	Date:	4/17/17
Project No.:	14-203	Time start:	1335
Site Location:	Juneau County, WI	Finish:	1355
Wether conditions:			

Water Level Data: Well: X Piez: _____

Total Depth: 24.9 Diameter: 2" Water column: 8.86

Depth to water: 16.04 Well volume: 1.5 gal.

Purging data:

Method: Low flow

Acceptance criteria:

Minimum purge volume (3 volumes): _____ gal.

Stabilization: pH: +/- 0.1

Temp: +/- 10%

Cond: +/- 5%

Removed	T	pH	mS/cm
1.5	12.19	5.35	0.134
3	12.15	5.39	0.134
4.5	12.28	5.41	0.141

Sampled by: Nauta

RJN Environmental Services, LLC

Well number:	CSD-6
	VY715

Groundwater Sample Collection Record

Client:	Central Sands Dairy	Date:	4/17/17
Project No.:	14-203	Time start:	1035
Site Location:	Juneau County, WI	Finish:	1050
Wether conditions:			

Water Level Data: Well: X Piez: _____

Total Depth: 23.7 Diameter: 2" Water column: 6.6

Depth to water: 17.10 Well volume: 1.0 gal.

Purging data:

Method: Low flow

Acceptance criteria:

Minimum purge volume (3 volumes): 3.3 gal.

Stabilization: pH: +/- 0.1

Temp: +/- 10%

Cond: +/- 5%

Removed	T	pH	mS/cm
1.5	8.91	5.05	0.720
3.0	8.92	5.04	0.711
4.5	8.91	5.02	0.704

Sampled by: Nauta

RJN Environmental Services, LLC

Well number:	CSD-7
	VY713

Groundwater Sample Collection Record

Client:	Central Sands Dairy	Date:	4/17/17
Project No.:	14-203	Time start:	0935
Site Location:	Juneau County, WI	Finish:	0950
Wether conditions:			

Water Level Data: Well: X Piez: _____

Total Depth: 23.5 Diameter: 2" Water column: 8.37

Depth to water: 15.13 Well volume: 1.3 gal.

Purging data:

Method: Low flow

Acceptance criteria:

Minimum purge volume (3 volumes): 3.9 gal.

Stabilization: pH: +/- 0.1

Temp: +/- 10%

Cond: +/- 5%

Removed	T	pH	mS/cm
1.5	8.87	5.97	1.06
3.0	9.02	5.92	1.00
4.5	9.10	5.94	0.999

Sampled by: Nauta

RJN Environmental Services, LLC

Well number:	CSD-8
	VY744

Groundwater Sample Collection Record

Client:	Central Sands Dairy	Date:	9/13/17
Project No.:	14-203	Time start:	1010
Site Location:	Juneau County, WI	Finish:	~~[illegible]~~
Wether conditions:			1020

Water Level Data: Well: X Piez: _____

Total Depth: 24.6 Diameter: 2" Water column: 8.59

Depth to water: 16.01 Well volume: 1.4 gal.

Purging data:

Method: Low flow

Acceptance criteria:

Minimum purge volume (3 volumes): 4.2 gal.

Stabilization: pH: +/- 0.1

Temp: +/- 10%

Cond: +/- 5%

Removed	T	pH	mS/cm
1.5	7.46	5.02	0.919
3.0	7.46	4.96	0.~~[illegible]~~892
4.5	7.50	4.95	0.890

Sampled by: Nauta

RJN Environmental Services, LLC

Well number:	CSD-9
	VY811

Groundwater Sample Collection Record

Client:	Central Sands Dairy	Date:	4/17/17
Project No.:	14-203	Time start:	1100
Site Location:	Juneau County, WI	Finish:	1120
Wether conditions:			

Water Level Data:

Well: X Piez:

Total Depth: 20.1 Diameter: 2" Water column: 5.15

Depth to water: 14.95 Well volume: 0.8 gal.

Purging data:

Method: Low flow

Acceptance criteria:

Minimum purge volume (3 volumes): 2.4 gal.

Stabilization: pH: +/- 0.1

Temp: +/- 10%

Cond: +/- 5%

Removed	T	pH	mS/cm
1	10.03	6.19	0.315
2	10.25	6.15	0.308
3	9.75	6.12	0.327

Sampled by: Nauta

ATTACHMENT B

TEST AMERICA

LAB REPORTS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

TestAmerica Job ID: 500-126777-1
Client Project/Site: Central Sands Dairy - 14-203

For:
RJN Environmental Services LLC
4631 County Road A
Oregon, Wisconsin 53575

Attn: Robert J Nauta

Sandie Fredrick

Authorized for release by:
5/2/2017 4:38:44 PM

Sandie Fredrick, Project Manager II
(920)261-1660
sandie.fredrick@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Job ID: 500-126777-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-126777-1

Comments
No additional comments.

Receipt
The samples were received on 4/19/2017 8:55 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.8º C and 5.0º C.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: RJN Environmental Services LLC
Project/Site: Central Sands Dairy - 14-203

TestAmerica Job ID: 500-126777-1

Client Sample ID: CSD-1S — Lab Sample ID: 500-126777-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	15000		500	110	ug/L	1		6020	Total Recoverable
Chloride	13		1.0	0.85	mg/L	5		300.0	Total/NA
Nitrogen, Nitrate Nitrite	14		1.0	0.41	mg/L	10		353.2	Total/NA
Nitrogen, Kjeldahl	1.7	B	0.40	0.24	mg/L	1		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	1.8		1.0	0.47	mg/L	1		9060A	Total/NA
Total Dissolved Solids	170		10	4.3	mg/L	1		SM 2540C	Total/NA
Ammonia	1.6		0.20	0.10	mg/L	1		SM 4500 NH3 G	Total/NA
Chemical Oxygen Demand	8.2	J	10	6.0	mg/L	1		SM 5220C	Total/NA

Client Sample ID: CSD-1D — Lab Sample ID: 500-126777-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	39000		500	110	ug/L	1		6020	Total Recoverable
Chloride	42		2.0	1.7	mg/L	10		300.0	Total/NA
Nitrogen, Nitrate Nitrite	31		2.5	1.0	mg/L	25		353.2	Total/NA
Nitrogen, Kjeldahl	9.3	B	2.0	1.2	mg/L	5		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	2.3		1.0	0.47	mg/L	1		9060A	Total/NA
Total Dissolved Solids	410		10	4.3	mg/L	1		SM 2540C	Total/NA
Ammonia	10		0.80	0.40	mg/L	4		SM 4500 NH3 G	Total/NA
Chemical Oxygen Demand	9.7	J	10	6.0	mg/L	1		SM 5220C	Total/NA

Client Sample ID: CSD-2 — Lab Sample ID: 500-126777-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	8300		500	110	ug/L	1		6020	Total Recoverable
Chloride	7.4		1.0	0.85	mg/L	5		300.0	Total/NA
Nitrogen, Nitrate Nitrite	6.5		0.50	0.21	mg/L	5		353.2	Total/NA
Nitrogen, Kjeldahl	0.72	B	0.40	0.24	mg/L	1		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	1.6		1.0	0.47	mg/L	1		9060A	Total/NA
Total Dissolved Solids	120		10	4.3	mg/L	1		SM 2540C	Total/NA
Ammonia	0.12	J	0.20	0.10	mg/L	1		SM 4500 NH3 G	Total/NA
Chemical Oxygen Demand	15		10	6.0	mg/L	1		SM 5220C	Total/NA

Client Sample ID: CSD-3S — Lab Sample ID: 500-126777-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	6200		500	110	ug/L	1		6020	Total Recoverable
Chloride	35		1.0	0.85	mg/L	5		300.0	Total/NA
Nitrogen, Nitrate Nitrite	23		2.0	0.82	mg/L	20		353.2	Total/NA
Nitrogen, Kjeldahl	1.0	B	0.40	0.24	mg/L	1		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	1.6		1.0	0.47	mg/L	1		9060A	Total/NA
Total Dissolved Solids	270		10	4.3	mg/L	1		SM 2540C	Total/NA
Chemical Oxygen Demand	11		10	6.0	mg/L	1		SM 5220C	Total/NA

Client Sample ID: CSD-3D — Lab Sample ID: 500-126777-5

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: RJN Environmental Services LLC
Project/Site: Central Sands Dairy - 14-203

TestAmerica Job ID: 500-126777-1

Client Sample ID: CSD-3D (Continued) — Lab Sample ID: 500-126777-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	1300		500	110	ug/L	1		6020	Total Recoverable
Chloride	6.7		1.0	0.85	mg/L	5		300.0	Total/NA
Nitrogen, Nitrate Nitrite	12		1.0	0.41	mg/L	10		353.2	Total/NA
Nitrogen, Kjeldahl	0.48	B	0.40	0.24	mg/L	1		4500 NH3 G	Total/NA
Total Dissolved Solids	130		10	4.3	mg/L	1		SM 2540C	Total/NA

Client Sample ID: CSD-4 — Lab Sample ID: 500-126777-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	35000		500	110	ug/L	1		6020	Total Recoverable
Chloride	36		1.0	0.85	mg/L	5		300.0	Total/NA
Nitrogen, Nitrate Nitrite	35		2.5	1.0	mg/L	25		353.2	Total/NA
Nitrogen, Kjeldahl	0.96	B	0.40	0.24	mg/L	1		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	3.1		1.0	0.47	mg/L	1		9060A	Total/NA
Total Dissolved Solids	470		10	4.3	mg/L	1		SM 2540C	Total/NA
Ammonia	0.13	J	0.20	0.10	mg/L	1		SM 4500 NH3 G	Total/NA
Chemical Oxygen Demand	17		10	6.0	mg/L	1		SM 5220C	Total/NA

Client Sample ID: CSD-4 DUP — Lab Sample ID: 500-126777-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	32000		500	110	ug/L	1		6020	Total Recoverable
Chloride	37		1.0	0.85	mg/L	5		300.0	Total/NA
Nitrogen, Nitrate Nitrite	38		2.5	1.0	mg/L	25		353.2	Total/NA
Nitrogen, Kjeldahl	0.99	B	0.40	0.24	mg/L	1		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	3.1		1.0	0.47	mg/L	1		9060A	Total/NA
Total Dissolved Solids	500		10	4.3	mg/L	1		SM 2540C	Total/NA
Chemical Oxygen Demand	17		10	6.0	mg/L	1		SM 5220C	Total/NA

Client Sample ID: CSD-5 — Lab Sample ID: 500-126777-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	10000		500	110	ug/L	1		6020	Total Recoverable
Chloride	15		2.0	1.7	mg/L	10		300.0	Total/NA
Nitrogen, Nitrate Nitrite	0.91		0.10	0.041	mg/L	1		353.2	Total/NA
Nitrogen, Kjeldahl	0.53	B	0.40	0.24	mg/L	1		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	1.5		1.0	0.47	mg/L	1		9060A	Total/NA
Total Dissolved Solids	100		10	4.3	mg/L	1		SM 2540C	Total/NA
Ammonia	0.18	J	0.20	0.10	mg/L	1		SM 4500 NH3 G	Total/NA
Chemical Oxygen Demand	11		10	6.0	mg/L	1		SM 5220C	Total/NA

Client Sample ID: CSD-6 — Lab Sample ID: 500-126777-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	73000		500	110	ug/L	1		6020	Total Recoverable
Chloride	37		1.0	0.85	mg/L	5		300.0	Total/NA
Nitrogen, Nitrate Nitrite	41		2.5	1.0	mg/L	25		353.2	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: RJN Environmental Services LLC
Project/Site: Central Sands Dairy - 14-203

TestAmerica Job ID: 500-126777-1

Client Sample ID: CSD-6 (Continued) — Lab Sample ID: 500-126777-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nitrogen, Kjeldahl	1.1	B	0.40	0.24	mg/L	1		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	3.0		1.0	0.47	mg/L	1		9060A	Total/NA
Total Dissolved Solids	510		10	4.3	mg/L	1		SM 2540C	Total/NA
Chemical Oxygen Demand	15		10	6.0	mg/L	1		SM 5220C	Total/NA

Client Sample ID: CSD-7 — Lab Sample ID: 500-126777-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	91000		500	110	ug/L	1		6020	Total Recoverable
Chloride	47		2.0	1.7	mg/L	10		300.0	Total/NA
Nitrogen, Nitrate Nitrite	59		5.0	2.1	mg/L	50		353.2	Total/NA
Nitrogen, Kjeldahl	1.7	B	0.40	0.24	mg/L	1		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	9.6		1.0	0.47	mg/L	1		9060A	Total/NA
Total Dissolved Solids	730		10	4.3	mg/L	1		SM 2540C	Total/NA
Ammonia	0.28		0.20	0.10	mg/L	1		SM 4500 NH3 G	Total/NA
Chemical Oxygen Demand	34		10	6.0	mg/L	1		SM 5220C	Total/NA

Client Sample ID: CSD-8 — Lab Sample ID: 500-126777-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	53000		500	110	ug/L	1		6020	Total Recoverable
Chloride	35		2.0	1.7	mg/L	10		300.0	Total/NA
Nitrogen, Nitrate Nitrite	48		5.0	2.1	mg/L	50		353.2	Total/NA
Nitrogen, Kjeldahl	1.0	B	0.40	0.24	mg/L	1		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	4.4		1.0	0.47	mg/L	1		9060A	Total/NA
Total Dissolved Solids	670		10	4.3	mg/L	1		SM 2540C	Total/NA
Ammonia	0.10	J	0.20	0.10	mg/L	1		SM 4500 NH3 G	Total/NA
Chemical Oxygen Demand	19		10	6.0	mg/L	1		SM 5220C	Total/NA

Client Sample ID: CSD-9 — Lab Sample ID: 500-126777-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	21000		500	110	ug/L	1		6020	Total Recoverable
Chloride	6.3	F1	1.0	0.85	mg/L	5		300.0	Total/NA
Nitrogen, Nitrate Nitrite	14		1.0	0.41	mg/L	10		353.2	Total/NA
Nitrogen, Kjeldahl	0.58		0.40	0.24	mg/L	1		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	2.5		1.0	0.47	mg/L	1		9060A	Total/NA
Total Dissolved Solids	210		10	4.3	mg/L	1		SM 2540C	Total/NA
Ammonia	0.13	J	0.20	0.10	mg/L	1		SM 4500 NH3 G	Total/NA
Chemical Oxygen Demand	15		10	6.0	mg/L	1		SM 5220C	Total/NA

Client Sample ID: CSD-9 DUP — Lab Sample ID: 500-126777-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	21000		500	110	ug/L	1		6020	Total Recoverable
Chloride	5.7		1.0	0.85	mg/L	5		300.0	Total/NA
Nitrogen, Nitrate Nitrite	14		1.0	0.41	mg/L	10		353.2	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: RJN Environmental Services LLC
Project/Site: Central Sands Dairy - 14-203

TestAmerica Job ID: 500-126777-1

Client Sample ID: CSD-9 DUP (Continued) — Lab Sample ID: 500-126777-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nitrogen, Kjeldahl	0.60		0.40	0.24	mg/L	1		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	2.3		1.0	0.47	mg/L	1		9060A	Total/NA
Total Dissolved Solids	210		10	4.3	mg/L	1		SM 2540C	Total/NA
Ammonia	0.12	J	0.20	0.10	mg/L	1		SM 4500 NH3 G	Total/NA
Chemical Oxygen Demand	14		10	6.0	mg/L	1		SM 5220C	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: RJN Environmental Services LLC
Project/Site: Central Sands Dairy - 14-203

TestAmerica Job ID: 500-126777-1

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL CHI
300.0	Anions, Ion Chromatography	MCAWW	TAL CHI
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL CHI
4500 NH3 G	4500NH3 G - Nitrogen, Total Kjeldahl'	SM	TAL CHI
9060A	Organic Carbon, Total (TOC)	SW846	TAL CHI
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL CHI
SM 4500 NH3 G	Ammonia	SM	TAL CHI
SM 5220C	COD	SM	TAL CHI

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SM = "Standard Methods For The Examination Of Water And Wastewater",
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: RJN Environmental Services LLC
Project/Site: Central Sands Dairy - 14-203

TestAmerica Job ID: 500-126777-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-126777-1	CSD-1S	Water	04/17/17 12:50	04/19/17 08:55
500-126777-2	CSD-1D	Water	04/17/17 12:20	04/19/17 08:55
500-126777-3	CSD-2	Water	04/17/17 13:20	04/19/17 08:55
500-126777-4	CSD-3S	Water	04/17/17 08:35	04/19/17 08:55
500-126777-5	CSD-3D	Water	04/17/17 08:10	04/19/17 08:55
500-126777-6	CSD-4	Water	04/17/17 09:05	04/19/17 08:55
500-126777-7	CSD-4 DUP	Water	04/17/17 09:05	04/19/17 08:55
500-126777-8	CSD-5	Water	04/17/17 13:55	04/19/17 08:55
500-126777-9	CSD-6	Water	04/17/17 10:50	04/19/17 08:55
500-126777-10	CSD-7	Water	04/17/17 09:50	04/19/17 08:55
500-126777-11	CSD-8	Water	04/17/17 10:20	04/19/17 08:55
500-126777-12	CSD-9	Water	04/17/17 11:20	04/19/17 08:55
500-126777-13	CSD-9 DUP	Water	04/17/17 11:20	04/19/17 08:55

Client Sample Results

Client: RJN Environmental Services LLC
Project/Site: Central Sands Dairy - 14-203

TestAmerica Job ID: 500-126777-1

Client Sample ID: CSD-1S

Lab Sample ID: 500-126777-1
Date Collected: 04/17/17 12:50
Matrix: Water
Date Received: 04/19/17 08:55

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	15000		500	110	ug/L		04/21/17 07:49	04/21/17 16:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13		1.0	0.85	mg/L			04/27/17 21:56	5
Nitrogen, Nitrate Nitrite	14		1.0	0.41	mg/L			04/25/17 22:44	10
Nitrogen, Kjeldahl	1.7	B	0.40	0.24	mg/L		04/20/17 07:50	04/20/17 10:17	1
Total Organic Carbon - Duplicates	1.8		1.0	0.47	mg/L			04/21/17 04:06	1
Total Dissolved Solids	170		10	4.3	mg/L			04/21/17 06:08	1
Ammonia	1.6		0.20	0.10	mg/L		04/23/17 20:45	04/24/17 00:46	1
Chemical Oxygen Demand	8.2	J	10	6.0	mg/L		04/21/17 10:19	04/24/17 10:17	1

Client Sample ID: CSD-1D

Lab Sample ID: 500-126777-2
Date Collected: 04/17/17 12:20
Matrix: Water
Date Received: 04/19/17 08:55

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	39000		500	110	ug/L		04/21/17 07:49	04/21/17 17:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	42		2.0	1.7	mg/L			04/28/17 14:17	10
Nitrogen, Nitrate Nitrite	31		2.5	1.0	mg/L			04/27/17 23:14	25
Nitrogen, Kjeldahl	9.3	B	2.0	1.2	mg/L		04/20/17 07:50	04/20/17 10:31	5
Total Organic Carbon - Duplicates	2.3		1.0	0.47	mg/L			04/21/17 04:45	1
Total Dissolved Solids	410		10	4.3	mg/L			04/21/17 06:10	1
Ammonia	10		0.80	0.40	mg/L		04/23/17 20:45	04/24/17 00:49	4
Chemical Oxygen Demand	9.7	J	10	6.0	mg/L		04/21/17 10:19	04/24/17 10:19	1

Client Sample ID: CSD-2

Lab Sample ID: 500-126777-3
Date Collected: 04/17/17 13:20
Matrix: Water
Date Received: 04/19/17 08:55

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	8300		500	110	ug/L		04/21/17 07:49	04/21/17 17:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.4		1.0	0.85	mg/L			04/27/17 22:22	5
Nitrogen, Nitrate Nitrite	6.5		0.50	0.21	mg/L			04/25/17 22:48	5
Nitrogen, Kjeldahl	0.72	B	0.40	0.24	mg/L		04/20/17 07:50	04/20/17 10:34	1
Total Organic Carbon - Duplicates	1.6		1.0	0.47	mg/L			04/21/17 05:05	1
Total Dissolved Solids	120		10	4.3	mg/L			04/21/17 06:13	1
Ammonia	0.12	J	0.20	0.10	mg/L		04/23/17 20:45	04/24/17 00:58	1
Chemical Oxygen Demand	15		10	6.0	mg/L		04/21/17 10:19	04/24/17 10:20	1

Client Sample Results

Client: RJN Environmental Services LLC
Project/Site: Central Sands Dairy - 14-203

TestAmerica Job ID: 500-126777-1

Client Sample ID: CSD-3S

Lab Sample ID: 500-126777-4
Matrix: Water

Date Collected: 04/17/17 08:35
Date Received: 04/19/17 08:55

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**6200**		500	110	ug/L		04/21/17 07:49	04/21/17 17:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**35**		1.0	0.85	mg/L			04/27/17 22:34	5
Nitrogen, Nitrate Nitrite	**23**		2.0	0.82	mg/L			04/28/17 00:19	20
Nitrogen, Kjeldahl	**1.0**	B	0.40	0.24	mg/L		04/20/17 07:50	04/20/17 10:37	1
Total Organic Carbon - Duplicates	**1.6**		1.0	0.47	mg/L			04/21/17 05:23	1
Total Dissolved Solids	**270**		10	4.3	mg/L			04/21/17 06:15	1
Ammonia	<0.10		0.20	0.10	mg/L		04/23/17 20:45	04/24/17 01:01	1
Chemical Oxygen Demand	**11**		10	6.0	mg/L		04/21/17 10:19	04/24/17 10:21	1

Client Sample ID: CSD-3D

Lab Sample ID: 500-126777-5
Matrix: Water

Date Collected: 04/17/17 08:10
Date Received: 04/19/17 08:55

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**1300**		500	110	ug/L		04/21/17 07:49	04/21/17 17:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.7**		1.0	0.85	mg/L			04/27/17 22:47	5
Nitrogen, Nitrate Nitrite	**12**		1.0	0.41	mg/L			04/25/17 22:52	10
Nitrogen, Kjeldahl	**0.48**	B	0.40	0.24	mg/L		04/20/17 07:50	04/20/17 10:40	1
Total Organic Carbon - Duplicates	<0.47		1.0	0.47	mg/L			04/21/17 06:00	1
Total Dissolved Solids	**130**		10	4.3	mg/L			04/21/17 06:18	1
Ammonia	<0.10		0.20	0.10	mg/L		04/23/17 20:45	04/24/17 01:03	1
Chemical Oxygen Demand	<6.0		10	6.0	mg/L		04/21/17 10:19	04/24/17 10:22	1

Client Sample ID: CSD-4

Lab Sample ID: 500-126777-6
Matrix: Water

Date Collected: 04/17/17 09:05
Date Received: 04/19/17 08:55

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**35000**		500	110	ug/L		04/21/17 07:49	04/21/17 17:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**36**		1.0	0.85	mg/L			04/27/17 23:00	5
Nitrogen, Nitrate Nitrite	**35**		2.5	1.0	mg/L			04/27/17 23:18	25
Nitrogen, Kjeldahl	**0.96**	B	0.40	0.24	mg/L		04/20/17 07:50	04/20/17 10:43	1
Total Organic Carbon - Duplicates	**3.1**		1.0	0.47	mg/L			04/21/17 06:19	1
Total Dissolved Solids	**470**		10	4.3	mg/L			04/21/17 06:21	1
Ammonia	**0.13**	J	0.20	0.10	mg/L		04/23/17 20:45	04/24/17 01:06	1
Chemical Oxygen Demand	**17**		10	6.0	mg/L		04/21/17 10:19	04/24/17 10:23	1

Client Sample ID: CSD-4 DUP

Lab Sample ID: 500-126777-7
Date Collected: 04/17/17 09:05
Matrix: Water
Date Received: 04/19/17 08:55

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	32000		500	110	ug/L		04/21/17 07:49	04/21/17 17:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	37		1.0	0.85	mg/L			04/27/17 23:12	5
Nitrogen, Nitrate Nitrite	38		2.5	1.0	mg/L			04/27/17 23:20	25
Nitrogen, Kjeldahl	0.99	B	0.40	0.24	mg/L		04/20/17 07:50	04/20/17 10:45	1
Total Organic Carbon - Duplicates	3.1		1.0	0.47	mg/L			04/21/17 06:37	1
Total Dissolved Solids	500		10	4.3	mg/L			04/21/17 06:23	1
Ammonia	<0.10		0.20	0.10	mg/L		04/23/17 20:45	04/24/17 01:09	1
Chemical Oxygen Demand	17		10	6.0	mg/L		04/21/17 10:19	04/24/17 10:24	1

Client Sample ID: CSD-5

Lab Sample ID: 500-126777-8
Date Collected: 04/17/17 13:55
Matrix: Water
Date Received: 04/19/17 08:55

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	10000		500	110	ug/L		04/21/17 07:49	04/21/17 17:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15		2.0	1.7	mg/L			04/28/17 14:29	10
Nitrogen, Nitrate Nitrite	0.91		0.10	0.041	mg/L			04/25/17 21:48	1
Nitrogen, Kjeldahl	0.53	B	0.40	0.24	mg/L		04/20/17 07:50	04/20/17 10:48	1
Total Organic Carbon - Duplicates	1.5		1.0	0.47	mg/L			04/21/17 06:55	1
Total Dissolved Solids	100		10	4.3	mg/L			04/21/17 06:26	1
Ammonia	0.18	J	0.20	0.10	mg/L		04/23/17 20:45	04/24/17 01:12	1
Chemical Oxygen Demand	11		10	6.0	mg/L		04/21/17 10:19	04/24/17 10:25	1

Client Sample ID: CSD-6

Lab Sample ID: 500-126777-9
Date Collected: 04/17/17 10:50
Matrix: Water
Date Received: 04/19/17 08:55

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	73000		500	110	ug/L		04/21/17 07:49	04/21/17 17:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	37		1.0	0.85	mg/L			04/27/17 23:25	5
Nitrogen, Nitrate Nitrite	41		2.5	1.0	mg/L			04/27/17 23:22	25
Nitrogen, Kjeldahl	1.1	B	0.40	0.24	mg/L		04/20/17 07:50	04/20/17 10:51	1
Total Organic Carbon - Duplicates	3.0		1.0	0.47	mg/L			04/21/17 07:13	1
Total Dissolved Solids	510		10	4.3	mg/L			04/21/17 06:28	1
Ammonia	<0.10		0.20	0.10	mg/L		04/23/17 20:45	04/24/17 01:15	1
Chemical Oxygen Demand	15		10	6.0	mg/L		04/21/17 10:19	04/24/17 10:26	1

Client Sample Results

Client: RJN Environmental Services LLC
Project/Site: Central Sands Dairy - 14-203

TestAmerica Job ID: 500-126777-1

Client Sample ID: CSD-7

Lab Sample ID: 500-126777-10
Date Collected: 04/17/17 09:50
Matrix: Water
Date Received: 04/19/17 08:55

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	91000		500	110	ug/L		04/21/17 07:49	04/21/17 17:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	47		2.0	1.7	mg/L			04/28/17 15:06	10
Nitrogen, Nitrate Nitrite	59		5.0	2.1	mg/L			04/27/17 23:25	50
Nitrogen, Kjeldahl	1.7	B	0.40	0.24	mg/L		04/20/17 07:50	04/20/17 10:54	1
Total Organic Carbon - Duplicates	9.6		1.0	0.47	mg/L			04/21/17 07:32	1
Total Dissolved Solids	730		10	4.3	mg/L			04/21/17 06:31	1
Ammonia	0.28		0.20	0.10	mg/L		04/23/17 20:45	04/24/17 01:18	1
Chemical Oxygen Demand	34		10	6.0	mg/L		04/21/17 12:31	04/24/17 13:16	1

Client Sample ID: CSD-8

Lab Sample ID: 500-126777-11
Date Collected: 04/17/17 10:20
Matrix: Water
Date Received: 04/19/17 08:55

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	53000		500	110	ug/L		04/21/17 07:49	04/21/17 17:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	35		2.0	1.7	mg/L			04/28/17 15:19	10
Nitrogen, Nitrate Nitrite	48		5.0	2.1	mg/L			04/27/17 23:27	50
Nitrogen, Kjeldahl	1.0	B	0.40	0.24	mg/L		04/20/17 07:50	04/20/17 10:57	1
Total Organic Carbon - Duplicates	4.4		1.0	0.47	mg/L			04/21/17 07:52	1
Total Dissolved Solids	670		10	4.3	mg/L			04/21/17 06:34	1
Ammonia	0.10	J	0.20	0.10	mg/L		04/23/17 20:45	04/24/17 01:20	1
Chemical Oxygen Demand	19		10	6.0	mg/L		04/21/17 12:31	04/24/17 13:19	1

Client Sample ID: CSD-9

Lab Sample ID: 500-126777-12
Date Collected: 04/17/17 11:20
Matrix: Water
Date Received: 04/19/17 08:55

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	21000		500	110	ug/L		04/21/17 07:49	04/21/17 17:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.3	F1	1.0	0.85	mg/L			04/28/17 00:16	5
Nitrogen, Nitrate Nitrite	14		1.0	0.41	mg/L			04/27/17 23:29	10
Nitrogen, Kjeldahl	0.58		0.40	0.24	mg/L		04/25/17 08:50	04/25/17 11:10	1
Total Organic Carbon - Duplicates	2.5		1.0	0.47	mg/L			04/21/17 08:10	1
Total Dissolved Solids	210		10	4.3	mg/L			04/21/17 06:36	1
Ammonia	0.13	J	0.20	0.10	mg/L		04/23/17 20:45	04/24/17 01:23	1
Chemical Oxygen Demand	15		10	6.0	mg/L		04/21/17 12:31	04/24/17 13:20	1

Client Sample Results

Client: RJN Environmental Services LLC
Project/Site: Central Sands Dairy - 14-203

TestAmerica Job ID: 500-126777-1

Client Sample ID: CSD-9 DUP

Lab Sample ID: 500-126777-13

Date Collected: 04/17/17 11:20
Date Received: 04/19/17 08:55

Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	21000		500	110	ug/L		04/21/17 07:49	04/21/17 17:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.7		1.0	0.85	mg/L			04/28/17 15:31	5
Nitrogen, Nitrate Nitrite	14		1.0	0.41	mg/L			04/27/17 23:30	10
Nitrogen, Kjeldahl	0.60		0.40	0.24	mg/L		04/25/17 08:50	04/25/17 11:13	1
Total Organic Carbon - Duplicates	2.3		1.0	0.47	mg/L			04/21/17 09:05	1
Total Dissolved Solids	210		10	4.3	mg/L			04/21/17 06:39	1
Ammonia	0.12	J	0.20	0.10	mg/L		04/23/17 20:45	04/24/17 01:32	1
Chemical Oxygen Demand	14		10	6.0	mg/L		04/21/17 12:31	04/24/17 13:21	1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: RJN Environmental Services LLC
Project/Site: Central Sands Dairy - 14-203

TestAmerica Job ID: 500-126777-1

Metals

Prep Batch: 381475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-126777-1	CSD-1S	Total Recoverable	Water	3005A	
500-126777-2	CSD-1D	Total Recoverable	Water	3005A	
500-126777-3	CSD-2	Total Recoverable	Water	3005A	
500-126777-4	CSD-3S	Total Recoverable	Water	3005A	
500-126777-5	CSD-3D	Total Recoverable	Water	3005A	
500-126777-6	CSD-4	Total Recoverable	Water	3005A	
500-126777-7	CSD-4 DUP	Total Recoverable	Water	3005A	
500-126777-8	CSD-5	Total Recoverable	Water	3005A	
500-126777-9	CSD-6	Total Recoverable	Water	3005A	
500-126777-10	CSD-7	Total Recoverable	Water	3005A	
500-126777-11	CSD-8	Total Recoverable	Water	3005A	
500-126777-12	CSD-9	Total Recoverable	Water	3005A	
500-126777-13	CSD-9 DUP	Total Recoverable	Water	3005A	
MB 500-381475/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-381475/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-126777-1 MS	CSD-1S	Total Recoverable	Water	3005A	
500-126777-1 MSD	CSD-1S	Total Recoverable	Water	3005A	
500-126777-1 DU	CSD-1S	Total Recoverable	Water	3005A	

Analysis Batch: 381877

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-126777-1	CSD-1S	Total Recoverable	Water	6020	381475
500-126777-2	CSD-1D	Total Recoverable	Water	6020	381475
500-126777-3	CSD-2	Total Recoverable	Water	6020	381475
500-126777-4	CSD-3S	Total Recoverable	Water	6020	381475
500-126777-5	CSD-3D	Total Recoverable	Water	6020	381475
500-126777-6	CSD-4	Total Recoverable	Water	6020	381475
500-126777-7	CSD-4 DUP	Total Recoverable	Water	6020	381475
500-126777-8	CSD-5	Total Recoverable	Water	6020	381475
500-126777-9	CSD-6	Total Recoverable	Water	6020	381475
500-126777-10	CSD-7	Total Recoverable	Water	6020	381475
500-126777-11	CSD-8	Total Recoverable	Water	6020	381475
500-126777-12	CSD-9	Total Recoverable	Water	6020	381475
500-126777-13	CSD-9 DUP	Total Recoverable	Water	6020	381475
MB 500-381475/1-A	Method Blank	Total Recoverable	Water	6020	381475
LCS 500-381475/2-A	Lab Control Sample	Total Recoverable	Water	6020	381475
500-126777-1 MS	CSD-1S	Total Recoverable	Water	6020	381475
500-126777-1 MSD	CSD-1S	Total Recoverable	Water	6020	381475
500-126777-1 DU	CSD-1S	Total Recoverable	Water	6020	381475

General Chemistry

Prep Batch: 381152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-126777-1	CSD-1S	Total/NA	Water	SM4500Norg_C	
500-126777-2	CSD-1D	Total/NA	Water	SM4500Norg_C	
500-126777-3	CSD-2	Total/NA	Water	SM4500Norg_C	
500-126777-4	CSD-3S	Total/NA	Water	SM4500Norg_C	
500-126777-5	CSD-3D	Total/NA	Water	SM4500Norg_C	
500-126777-6	CSD-4	Total/NA	Water	SM4500Norg_C	

General Chemistry (Continued)

Prep Batch: 381152 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-126777-7	CSD-4 DUP	Total/NA	Water	SM4500Norg_C	
500-126777-8	CSD-5	Total/NA	Water	SM4500Norg_C	
500-126777-9	CSD-6	Total/NA	Water	SM4500Norg_C	
500-126777-10	CSD-7	Total/NA	Water	SM4500Norg_C	
500-126777-11	CSD-8	Total/NA	Water	SM4500Norg_C	
MB 500-381152/1-A	Method Blank	Total/NA	Water	SM4500Norg_C	
LCS 500-381152/2-A	Lab Control Sample	Total/NA	Water	SM4500Norg_C	
500-126777-1 MS	CSD-1S	Total/NA	Water	SM4500Norg_C	
500-126777-1 MSD	CSD-1S	Total/NA	Water	SM4500Norg_C	

Analysis Batch: 381306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-126777-1	CSD-1S	Total/NA	Water	4500 NH3 G	381152
500-126777-2	CSD-1D	Total/NA	Water	4500 NH3 G	381152
500-126777-3	CSD-2	Total/NA	Water	4500 NH3 G	381152
500-126777-4	CSD-3S	Total/NA	Water	4500 NH3 G	381152
500-126777-5	CSD-3D	Total/NA	Water	4500 NH3 G	381152
500-126777-6	CSD-4	Total/NA	Water	4500 NH3 G	381152
500-126777-7	CSD-4 DUP	Total/NA	Water	4500 NH3 G	381152
500-126777-8	CSD-5	Total/NA	Water	4500 NH3 G	381152
500-126777-9	CSD-6	Total/NA	Water	4500 NH3 G	381152
500-126777-10	CSD-7	Total/NA	Water	4500 NH3 G	381152
500-126777-11	CSD-8	Total/NA	Water	4500 NH3 G	381152
MB 500-381152/1-A	Method Blank	Total/NA	Water	4500 NH3 G	381152
LCS 500-381152/2-A	Lab Control Sample	Total/NA	Water	4500 NH3 G	381152
500-126777-1 MS	CSD-1S	Total/NA	Water	4500 NH3 G	381152
500-126777-1 MSD	CSD-1S	Total/NA	Water	4500 NH3 G	381152

Analysis Batch: 381451

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-126777-1	CSD-1S	Total/NA	Water	SM 2540C	
500-126777-2	CSD-1D	Total/NA	Water	SM 2540C	
500-126777-3	CSD-2	Total/NA	Water	SM 2540C	
500-126777-4	CSD-3S	Total/NA	Water	SM 2540C	
500-126777-5	CSD-3D	Total/NA	Water	SM 2540C	
500-126777-6	CSD-4	Total/NA	Water	SM 2540C	
500-126777-7	CSD-4 DUP	Total/NA	Water	SM 2540C	
500-126777-8	CSD-5	Total/NA	Water	SM 2540C	
500-126777-9	CSD-6	Total/NA	Water	SM 2540C	
500-126777-10	CSD-7	Total/NA	Water	SM 2540C	
500-126777-11	CSD-8	Total/NA	Water	SM 2540C	
500-126777-12	CSD-9	Total/NA	Water	SM 2540C	
500-126777-13	CSD-9 DUP	Total/NA	Water	SM 2540C	
MB 500-381451/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-381451/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Prep Batch: 381511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-126777-1	CSD-1S	Total/NA	Water	SM 5220	
500-126777-2	CSD-1D	Total/NA	Water	SM 5220	
500-126777-3	CSD-2	Total/NA	Water	SM 5220	

General Chemistry (Continued)

Prep Batch: 381511 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-126777-4	CSD-3S	Total/NA	Water	SM 5220	
500-126777-5	CSD-3D	Total/NA	Water	SM 5220	
500-126777-6	CSD-4	Total/NA	Water	SM 5220	
500-126777-7	CSD-4 DUP	Total/NA	Water	SM 5220	
500-126777-8	CSD-5	Total/NA	Water	SM 5220	
500-126777-9	CSD-6	Total/NA	Water	SM 5220	
MB 500-381511/1-A	Method Blank	Total/NA	Water	SM 5220	
LCS 500-381511/2-A	Lab Control Sample	Total/NA	Water	SM 5220	

Prep Batch: 381512

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-126777-10	CSD-7	Total/NA	Water	SM 5220	
500-126777-11	CSD-8	Total/NA	Water	SM 5220	
500-126777-12	CSD-9	Total/NA	Water	SM 5220	
500-126777-13	CSD-9 DUP	Total/NA	Water	SM 5220	
MB 500-381512/1-A	Method Blank	Total/NA	Water	SM 5220	
LCS 500-381512/2-A	Lab Control Sample	Total/NA	Water	SM 5220	
500-126777-10 MS	CSD-7	Total/NA	Water	SM 5220	
500-126777-10 MSD	CSD-7	Total/NA	Water	SM 5220	

Analysis Batch: 381609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-126777-1	CSD-1S	Total/NA	Water	9060A	
500-126777-2	CSD-1D	Total/NA	Water	9060A	
500-126777-3	CSD-2	Total/NA	Water	9060A	
500-126777-4	CSD-3S	Total/NA	Water	9060A	
500-126777-5	CSD-3D	Total/NA	Water	9060A	
500-126777-6	CSD-4	Total/NA	Water	9060A	
500-126777-7	CSD-4 DUP	Total/NA	Water	9060A	
500-126777-8	CSD-5	Total/NA	Water	9060A	
500-126777-9	CSD-6	Total/NA	Water	9060A	
500-126777-10	CSD-7	Total/NA	Water	9060A	
500-126777-11	CSD-8	Total/NA	Water	9060A	
500-126777-12	CSD-9	Total/NA	Water	9060A	
500-126777-13	CSD-9 DUP	Total/NA	Water	9060A	
MB 500-381609/4	Method Blank	Total/NA	Water	9060A	
LCS 500-381609/5	Lab Control Sample	Total/NA	Water	9060A	
500-126777-1 MS	CSD-1S	Total/NA	Water	9060A	
500-126777-1 MSD	CSD-1S	Total/NA	Water	9060A	
500-126777-12 MS	CSD-9	Total/NA	Water	9060A	
500-126777-12 MSD	CSD-9	Total/NA	Water	9060A	

Prep Batch: 381817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-126777-1	CSD-1S	Total/NA	Water	SM 4500 NH3 B	
500-126777-2	CSD-1D	Total/NA	Water	SM 4500 NH3 B	
500-126777-3	CSD-2	Total/NA	Water	SM 4500 NH3 B	
500-126777-4	CSD-3S	Total/NA	Water	SM 4500 NH3 B	
500-126777-5	CSD-3D	Total/NA	Water	SM 4500 NH3 B	
500-126777-6	CSD-4	Total/NA	Water	SM 4500 NH3 B	
500-126777-7	CSD-4 DUP	Total/NA	Water	SM 4500 NH3 B	

General Chemistry (Continued)

Prep Batch: 381817 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-126777-8	CSD-5	Total/NA	Water	SM 4500 NH3 B	
500-126777-9	CSD-6	Total/NA	Water	SM 4500 NH3 B	
500-126777-10	CSD-7	Total/NA	Water	SM 4500 NH3 B	
500-126777-11	CSD-8	Total/NA	Water	SM 4500 NH3 B	
500-126777-12	CSD-9	Total/NA	Water	SM 4500 NH3 B	
500-126777-13	CSD-9 DUP	Total/NA	Water	SM 4500 NH3 B	
MB 500-381817/1-A	Method Blank	Total/NA	Water	SM 4500 NH3 B	
LCS 500-381817/2-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 B	

Prep Batch: 381892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-126777-12	CSD-9	Total/NA	Water	SM4500Norg_C	
500-126777-13	CSD-9 DUP	Total/NA	Water	SM4500Norg_C	
MB 500-381892/1-A	Method Blank	Total/NA	Water	SM4500Norg_C	
LCS 500-381892/2-A	Lab Control Sample	Total/NA	Water	SM4500Norg_C	

Analysis Batch: 381923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-126777-1	CSD-1S	Total/NA	Water	SM 5220C	381511
500-126777-2	CSD-1D	Total/NA	Water	SM 5220C	381511
500-126777-3	CSD-2	Total/NA	Water	SM 5220C	381511
500-126777-4	CSD-3S	Total/NA	Water	SM 5220C	381511
500-126777-5	CSD-3D	Total/NA	Water	SM 5220C	381511
500-126777-6	CSD-4	Total/NA	Water	SM 5220C	381511
500-126777-7	CSD-4 DUP	Total/NA	Water	SM 5220C	381511
500-126777-8	CSD-5	Total/NA	Water	SM 5220C	381511
500-126777-9	CSD-6	Total/NA	Water	SM 5220C	381511
MB 500-381511/1-A	Method Blank	Total/NA	Water	SM 5220C	381511
LCS 500-381511/2-A	Lab Control Sample	Total/NA	Water	SM 5220C	381511

Analysis Batch: 381929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-126777-10	CSD-7	Total/NA	Water	SM 5220C	381512
500-126777-11	CSD-8	Total/NA	Water	SM 5220C	381512
500-126777-12	CSD-9	Total/NA	Water	SM 5220C	381512
500-126777-13	CSD-9 DUP	Total/NA	Water	SM 5220C	381512
MB 500-381512/1-A	Method Blank	Total/NA	Water	SM 5220C	381512
LCS 500-381512/2-A	Lab Control Sample	Total/NA	Water	SM 5220C	381512
500-126777-10 MS	CSD-7	Total/NA	Water	SM 5220C	381512
500-126777-10 MSD	CSD-7	Total/NA	Water	SM 5220C	381512

Analysis Batch: 381991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-126777-1	CSD-1S	Total/NA	Water	SM 4500 NH3 G	381817
500-126777-2	CSD-1D	Total/NA	Water	SM 4500 NH3 G	381817
500-126777-3	CSD-2	Total/NA	Water	SM 4500 NH3 G	381817
500-126777-4	CSD-3S	Total/NA	Water	SM 4500 NH3 G	381817
500-126777-5	CSD-3D	Total/NA	Water	SM 4500 NH3 G	381817
500-126777-6	CSD-4	Total/NA	Water	SM 4500 NH3 G	381817
500-126777-7	CSD-4 DUP	Total/NA	Water	SM 4500 NH3 G	381817
500-126777-8	CSD-5	Total/NA	Water	SM 4500 NH3 G	381817

General Chemistry (Continued)

Analysis Batch: 381991 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-126777-9	CSD-6	Total/NA	Water	SM 4500 NH3 G	381817
500-126777-10	CSD-7	Total/NA	Water	SM 4500 NH3 G	381817
500-126777-11	CSD-8	Total/NA	Water	SM 4500 NH3 G	381817
500-126777-12	CSD-9	Total/NA	Water	SM 4500 NH3 G	381817
500-126777-13	CSD-9 DUP	Total/NA	Water	SM 4500 NH3 G	381817
MB 500-381817/1-A	Method Blank	Total/NA	Water	SM 4500 NH3 G	381817
LCS 500-381817/2-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 G	381817

Analysis Batch: 382118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-126777-12	CSD-9	Total/NA	Water	4500 NH3 G	381892
500-126777-13	CSD-9 DUP	Total/NA	Water	4500 NH3 G	381892
MB 500-381892/1-A	Method Blank	Total/NA	Water	4500 NH3 G	381892
LCS 500-381892/2-A	Lab Control Sample	Total/NA	Water	4500 NH3 G	381892

Analysis Batch: 382608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-126777-1	CSD-1S	Total/NA	Water	353.2	
500-126777-3	CSD-2	Total/NA	Water	353.2	
500-126777-5	CSD-3D	Total/NA	Water	353.2	
500-126777-8	CSD-5	Total/NA	Water	353.2	
MB 500-382608/12	Method Blank	Total/NA	Water	353.2	
LCS 500-382608/13	Lab Control Sample	Total/NA	Water	353.2	

Analysis Batch: 382667

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-126777-2	CSD-1D	Total/NA	Water	353.2	
500-126777-4	CSD-3S	Total/NA	Water	353.2	
500-126777-6	CSD-4	Total/NA	Water	353.2	
500-126777-7	CSD-4 DUP	Total/NA	Water	353.2	
500-126777-9	CSD-6	Total/NA	Water	353.2	
500-126777-10	CSD-7	Total/NA	Water	353.2	
500-126777-11	CSD-8	Total/NA	Water	353.2	
500-126777-12	CSD-9	Total/NA	Water	353.2	
500-126777-13	CSD-9 DUP	Total/NA	Water	353.2	
MB 500-382667/12	Method Blank	Total/NA	Water	353.2	
LCS 500-382667/13	Lab Control Sample	Total/NA	Water	353.2	

Analysis Batch: 382723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-126777-1	CSD-1S	Total/NA	Water	300.0	
500-126777-3	CSD-2	Total/NA	Water	300.0	
500-126777-4	CSD-3S	Total/NA	Water	300.0	
500-126777-5	CSD-3D	Total/NA	Water	300.0	
500-126777-6	CSD-4	Total/NA	Water	300.0	
500-126777-7	CSD-4 DUP	Total/NA	Water	300.0	
500-126777-9	CSD-6	Total/NA	Water	300.0	
500-126777-12	CSD-9	Total/NA	Water	300.0	
MB 500-382723/44	Method Blank	Total/NA	Water	300.0	
LCS 500-382723/46	Lab Control Sample	Total/NA	Water	300.0	
500-126777-12 MS	CSD-9	Total/NA	Water	300.0	

General Chemistry (Continued)

Analysis Batch: 382723 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-126777-12 MSD	CSD-9	Total/NA	Water	300.0	

Analysis Batch: 383096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-126777-2	CSD-1D	Total/NA	Water	300.0	
500-126777-8	CSD-5	Total/NA	Water	300.0	
500-126777-10	CSD-7	Total/NA	Water	300.0	
500-126777-11	CSD-8	Total/NA	Water	300.0	
500-126777-13	CSD-9 DUP	Total/NA	Water	300.0	
MB 500-383096/10	Method Blank	Total/NA	Water	300.0	
LCS 500-383096/11	Lab Control Sample	Total/NA	Water	300.0	

QC Sample Results

Client: RJN Environmental Services LLC
Project/Site: Central Sands Dairy - 14-203

TestAmerica Job ID: 500-126777-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 500-381475/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 381877 — **Prep Batch: 381475**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	<110		500	110	ug/L		04/21/17 07:49	04/21/17 16:20	1

Lab Sample ID: LCS 500-381475/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 381877 — **Prep Batch: 381475**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Potassium	10000	10300		ug/L		103	80 - 120

Lab Sample ID: 500-126777-1 MS — **Client Sample ID: CSD-1S**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 381877 — **Prep Batch: 381475**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Potassium	15000		10000	26300		ug/L		109	75 - 125

Lab Sample ID: 500-126777-1 MSD — **Client Sample ID: CSD-1S**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 381877 — **Prep Batch: 381475**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Potassium	15000		10000	25900		ug/L		104	75 - 125	2	20

Lab Sample ID: 500-126777-1 DU — **Client Sample ID: CSD-1S**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 381877 — **Prep Batch: 381475**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Potassium	15000		15500		ug/L		0.1	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 500-382723/44 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 382723

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.17		0.20	0.17	mg/L			04/27/17 21:31	1

Lab Sample ID: LCS 500-382723/46 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 382723

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	3.00	2.93		mg/L		98	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 500-126777-12 MS — **Client Sample ID: CSD-9**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 382723

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	6.3	F1	5.00	13.2	F1	mg/L		138	80 - 120

Lab Sample ID: 500-126777-12 MSD — **Client Sample ID: CSD-9**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 382723

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	6.3	F1	5.00	12.8	F1	mg/L		131	80 - 120	3	20

Lab Sample ID: MB 500-383096/10 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 383096

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.17		0.20	0.17	mg/L			04/28/17 11:25	1

Lab Sample ID: LCS 500-383096/11 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 383096

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	3.00	2.94		mg/L		98	90 - 110

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 500-382608/12 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 382608

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Nitrate Nitrite	<0.041		0.10	0.041	mg/L			04/25/17 21:20	1

Lab Sample ID: LCS 500-382608/13 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 382608

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Nitrate Nitrite	1.00	0.935		mg/L		94	90 - 110

Lab Sample ID: MB 500-382667/12 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 382667

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Nitrate Nitrite	<0.041		0.10	0.041	mg/L			04/27/17 22:48	1

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: LCS 500-382667/13 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 382667

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Nitrate Nitrite	1.00	1.01		mg/L		101	90 - 110

Method: 4500 NH3 G - 4500NH3 G - Nitrogen, Total Kjeldahl'

Lab Sample ID: MB 500-381152/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 381306 — **Prep Batch: 381152**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Kjeldahl	0.314	J	0.40	0.24	mg/L		04/20/17 07:50	04/20/17 09:57	1

Lab Sample ID: LCS 500-381152/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 381306 — **Prep Batch: 381152**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Kjeldahl	2.50	2.61		mg/L		105	80 - 120

Lab Sample ID: 500-126777-1 MS — **Client Sample ID: CSD-1S**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 381306 — **Prep Batch: 381152**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Kjeldahl	1.7	B	2.50	3.90		mg/L		89	75 - 125

Lab Sample ID: 500-126777-1 MSD — **Client Sample ID: CSD-1S**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 381306 — **Prep Batch: 381152**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrogen, Kjeldahl	1.7	B	2.50	4.04		mg/L		95	75 - 125	4	20

Lab Sample ID: MB 500-381892/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 382118 — **Prep Batch: 381892**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Kjeldahl	<0.24		0.40	0.24	mg/L		04/25/17 08:50	04/25/17 11:05	1

Lab Sample ID: LCS 500-381892/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 382118 — **Prep Batch: 381892**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Kjeldahl	2.50	2.49		mg/L		99	80 - 120

QC Sample Results

Client: RJN Environmental Services LLC
Project/Site: Central Sands Dairy - 14-203

TestAmerica Job ID: 500-126777-1

Method: 9060A - Organic Carbon, Total (TOC)

Lab Sample ID: MB 500-381609/4
Matrix: Water
Analysis Batch: 381609

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	<0.47		1.0	0.47	mg/L			04/21/17 02:47	1

Lab Sample ID: LCS 500-381609/5
Matrix: Water
Analysis Batch: 381609

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Duplicates	10.0	9.72		mg/L		97	80 - 120
TOC Result 1	10.0	9.70		mg/L		97	80 - 120
TOC Result 2	10.0	9.74		mg/L		97	80 - 120

Lab Sample ID: 500-126777-1 MS
Matrix: Water
Analysis Batch: 381609

Client Sample ID: CSD-1S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Duplicates	1.8		10.0	11.2		mg/L		94	75 - 125
TOC Result 1	2.0		10.0	11.2		mg/L		92	75 - 125
TOC Result 2	1.6		10.0	11.2		mg/L		96	75 - 125

Lab Sample ID: 500-126777-1 MSD
Matrix: Water
Analysis Batch: 381609

Client Sample ID: CSD-1S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	1.8		10.0	11.2		mg/L		94	75 - 125	0	20
TOC Result 1	2.0		10.0	11.2		mg/L		92	75 - 125	0	20
TOC Result 2	1.6		10.0	11.2		mg/L		96	75 - 125	0	20

Lab Sample ID: 500-126777-12 MS
Matrix: Water
Analysis Batch: 381609

Client Sample ID: CSD-9
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Duplicates	2.5		10.0	12.2		mg/L		97	75 - 125
TOC Result 1	2.4		10.0	12.2		mg/L		98	75 - 125
TOC Result 2	2.5		10.0	12.2		mg/L		96	75 - 125

Lab Sample ID: 500-126777-12 MSD
Matrix: Water
Analysis Batch: 381609

Client Sample ID: CSD-9
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	2.5		10.0	12.1		mg/L		96	75 - 125	1	20
TOC Result 1	2.4		10.0	12.1		mg/L		97	75 - 125	1	20

Method: 9060A - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: 500-126777-12 MSD — **Client Sample ID: CSD-9**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 381609

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
TOC Result 2	2.5		10.0	12.1		mg/L		95	75 - 125	1	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 500-381451/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 381451

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<4.3		10	4.3	mg/L			04/21/17 06:03	1

Lab Sample ID: LCS 500-381451/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 381451

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	250	290		mg/L		116	80 - 120

Method: SM 4500 NH3 G - Ammonia

Lab Sample ID: MB 500-381817/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 381991 — **Prep Batch: 381817**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	<0.10		0.20	0.10	mg/L		04/23/17 20:45	04/24/17 00:24	1

Lab Sample ID: LCS 500-381817/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 381991 — **Prep Batch: 381817**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	2.50	2.52		mg/L		101	80 - 120

Method: SM 5220C - COD

Lab Sample ID: MB 500-381511/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 381923 — **Prep Batch: 381511**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	<6.0		10	6.0	mg/L		04/21/17 10:19	04/24/17 10:01	1

Lab Sample ID: LCS 500-381511/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 381923 — **Prep Batch: 381511**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	50.0	54.6		mg/L		109	80 - 120

QC Sample Results

Client: RJN Environmental Services LLC
Project/Site: Central Sands Dairy - 14-203

TestAmerica Job ID: 500-126777-1

Lab Sample ID: MB 500-381512/1-A
Matrix: Water
Analysis Batch: 381929

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 381512

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	<6.0		10	6.0	mg/L		04/21/17 12:31	04/24/17 13:14	1

Lab Sample ID: LCS 500-381512/2-A
Matrix: Water
Analysis Batch: 381929

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 381512

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	50.0	55.7		mg/L		111	80 - 120

Lab Sample ID: 500-126777-10 MS
Matrix: Water
Analysis Batch: 381929

Client Sample ID: CSD-7
Prep Type: Total/NA
Prep Batch: 381512

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	34		50.0	82.0		mg/L		96	75 - 125

Lab Sample ID: 500-126777-10 MSD
Matrix: Water
Analysis Batch: 381929

Client Sample ID: CSD-7
Prep Type: Total/NA
Prep Batch: 381512

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chemical Oxygen Demand	34		50.0	81.0		mg/L		94	75 - 125	1	20

Lab Chronicle

Client: RJN Environmental Services LLC
Project/Site: Central Sands Dairy - 14-203

TestAmerica Job ID: 500-126777-1

Client Sample ID: CSD-1S

Lab Sample ID: 500-126777-1
Matrix: Water

Date Collected: 04/17/17 12:50
Date Received: 04/19/17 08:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			381475	04/21/17 07:49	JEF	TAL CHI
Total Recoverable	Analysis	6020		1	381877	04/21/17 16:46	FXG	TAL CHI
Total/NA	Analysis	300.0		5	382723	04/27/17 21:56	PMF	TAL CHI
Total/NA	Analysis	353.2		10	382608	04/25/17 22:44	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			381152	04/20/17 07:50	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		1	381306	04/20/17 10:17	MTB	TAL CHI
Total/NA	Analysis	9060A		1	381609	04/21/17 04:06	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	381451	04/21/17 06:08	CLB	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			381817	04/23/17 20:45	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	381991	04/24/17 00:46	HMW	TAL CHI
Total/NA	Prep	SM 5220			381511	04/21/17 10:19	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	381923	04/24/17 10:17	MAN	TAL CHI

Client Sample ID: CSD-1D

Lab Sample ID: 500-126777-2
Matrix: Water

Date Collected: 04/17/17 12:20
Date Received: 04/19/17 08:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			381475	04/21/17 07:49	JEF	TAL CHI
Total Recoverable	Analysis	6020		1	381877	04/21/17 17:05	FXG	TAL CHI
Total/NA	Analysis	300.0		10	383096	04/28/17 14:17	PMF	TAL CHI
Total/NA	Analysis	353.2		25	382667	04/27/17 23:14	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			381152	04/20/17 07:50	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		5	381306	04/20/17 10:31	MTB	TAL CHI
Total/NA	Analysis	9060A		1	381609	04/21/17 04:45	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	381451	04/21/17 06:10	CLB	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			381817	04/23/17 20:45	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		4	381991	04/24/17 00:49	HMW	TAL CHI
Total/NA	Prep	SM 5220			381511	04/21/17 10:19	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	381923	04/24/17 10:19	MAN	TAL CHI

Client Sample ID: CSD-2

Lab Sample ID: 500-126777-3
Matrix: Water

Date Collected: 04/17/17 13:20
Date Received: 04/19/17 08:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			381475	04/21/17 07:49	JEF	TAL CHI
Total Recoverable	Analysis	6020		1	381877	04/21/17 17:09	FXG	TAL CHI
Total/NA	Analysis	300.0		5	382723	04/27/17 22:22	PMF	TAL CHI
Total/NA	Analysis	353.2		5	382608	04/25/17 22:48	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			381152	04/20/17 07:50	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		1	381306	04/20/17 10:34	MTB	TAL CHI

Lab Chronicle

Client: RJN Environmental Services LLC
Project/Site: Central Sands Dairy - 14-203

TestAmerica Job ID: 500-126777-1

Client Sample ID: CSD-2

Lab Sample ID: 500-126777-3
Matrix: Water

Date Collected: 04/17/17 13:20
Date Received: 04/19/17 08:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060A		1	381609	04/21/17 05:05	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	381451	04/21/17 06:13	CLB	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			381817	04/23/17 20:45	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	381991	04/24/17 00:58	HMW	TAL CHI
Total/NA	Prep	SM 5220			381511	04/21/17 10:19	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	381923	04/24/17 10:20	MAN	TAL CHI

Client Sample ID: CSD-3S

Lab Sample ID: 500-126777-4
Matrix: Water

Date Collected: 04/17/17 08:35
Date Received: 04/19/17 08:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			381475	04/21/17 07:49	JEF	TAL CHI
Total Recoverable	Analysis	6020		1	381877	04/21/17 17:12	FXG	TAL CHI
Total/NA	Analysis	300.0		5	382723	04/27/17 22:34	PMF	TAL CHI
Total/NA	Analysis	353.2		20	382667	04/28/17 00:19	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			381152	04/20/17 07:50	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		1	381306	04/20/17 10:37	MTB	TAL CHI
Total/NA	Analysis	9060A		1	381609	04/21/17 05:23	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	381451	04/21/17 06:15	CLB	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			381817	04/23/17 20:45	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	381991	04/24/17 01:01	HMW	TAL CHI
Total/NA	Prep	SM 5220			381511	04/21/17 10:19	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	381923	04/24/17 10:21	MAN	TAL CHI

Client Sample ID: CSD-3D

Lab Sample ID: 500-126777-5
Matrix: Water

Date Collected: 04/17/17 08:10
Date Received: 04/19/17 08:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			381475	04/21/17 07:49	JEF	TAL CHI
Total Recoverable	Analysis	6020		1	381877	04/21/17 17:16	FXG	TAL CHI
Total/NA	Analysis	300.0		5	382723	04/27/17 22:47	PMF	TAL CHI
Total/NA	Analysis	353.2		10	382608	04/25/17 22:52	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			381152	04/20/17 07:50	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		1	381306	04/20/17 10:40	MTB	TAL CHI
Total/NA	Analysis	9060A		1	381609	04/21/17 06:00	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	381451	04/21/17 06:18	CLB	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			381817	04/23/17 20:45	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	381991	04/24/17 01:03	HMW	TAL CHI
Total/NA	Prep	SM 5220			381511	04/21/17 10:19	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	381923	04/24/17 10:22	MAN	TAL CHI

Lab Chronicle

Client: RJN Environmental Services LLC
Project/Site: Central Sands Dairy - 14-203

TestAmerica Job ID: 500-126777-1

Client Sample ID: CSD-4

Lab Sample ID: 500-126777-6
Date Collected: 04/17/17 09:05
Matrix: Water
Date Received: 04/19/17 08:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			381475	04/21/17 07:49	JEF	TAL CHI
Total Recoverable	Analysis	6020		1	381877	04/21/17 17:20	FXG	TAL CHI
Total/NA	Analysis	300.0		5	382723	04/27/17 23:00	PMF	TAL CHI
Total/NA	Analysis	353.2		25	382667	04/27/17 23:18	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			381152	04/20/17 07:50	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		1	381306	04/20/17 10:43	MTB	TAL CHI
Total/NA	Analysis	9060A		1	381609	04/21/17 06:19	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	381451	04/21/17 06:21	CLB	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			381817	04/23/17 20:45	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	381991	04/24/17 01:06	HMW	TAL CHI
Total/NA	Prep	SM 5220			381511	04/21/17 10:19	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	381923	04/24/17 10:23	MAN	TAL CHI

Client Sample ID: CSD-4 DUP

Lab Sample ID: 500-126777-7
Date Collected: 04/17/17 09:05
Matrix: Water
Date Received: 04/19/17 08:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			381475	04/21/17 07:49	JEF	TAL CHI
Total Recoverable	Analysis	6020		1	381877	04/21/17 17:31	FXG	TAL CHI
Total/NA	Analysis	300.0		5	382723	04/27/17 23:12	PMF	TAL CHI
Total/NA	Analysis	353.2		25	382667	04/27/17 23:20	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			381152	04/20/17 07:50	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		1	381306	04/20/17 10:45	MTB	TAL CHI
Total/NA	Analysis	9060A		1	381609	04/21/17 06:37	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	381451	04/21/17 06:23	CLB	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			381817	04/23/17 20:45	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	381991	04/24/17 01:09	HMW	TAL CHI
Total/NA	Prep	SM 5220			381511	04/21/17 10:19	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	381923	04/24/17 10:24	MAN	TAL CHI

Client Sample ID: CSD-5

Lab Sample ID: 500-126777-8
Date Collected: 04/17/17 13:55
Matrix: Water
Date Received: 04/19/17 08:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			381475	04/21/17 07:49	JEF	TAL CHI
Total Recoverable	Analysis	6020		1	381877	04/21/17 17:35	FXG	TAL CHI
Total/NA	Analysis	300.0		10	383096	04/28/17 14:29	PMF	TAL CHI
Total/NA	Analysis	353.2		1	382608	04/25/17 21:48	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			381152	04/20/17 07:50	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		1	381306	04/20/17 10:48	MTB	TAL CHI

Lab Chronicle

Client: RJN Environmental Services LLC
Project/Site: Central Sands Dairy - 14-203

TestAmerica Job ID: 500-126777-1

Client Sample ID: CSD-5

Lab Sample ID: 500-126777-8
Matrix: Water

Date Collected: 04/17/17 13:55
Date Received: 04/19/17 08:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060A		1	381609	04/21/17 06:55	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	381451	04/21/17 06:26	CLB	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			381817	04/23/17 20:45	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	381991	04/24/17 01:12	HMW	TAL CHI
Total/NA	Prep	SM 5220			381511	04/21/17 10:19	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	381923	04/24/17 10:25	MAN	TAL CHI

Client Sample ID: CSD-6

Lab Sample ID: 500-126777-9
Matrix: Water

Date Collected: 04/17/17 10:50
Date Received: 04/19/17 08:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			381475	04/21/17 07:49	JEF	TAL CHI
Total Recoverable	Analysis	6020		1	381877	04/21/17 17:39	FXG	TAL CHI
Total/NA	Analysis	300.0		5	382723	04/27/17 23:25	PMF	TAL CHI
Total/NA	Analysis	353.2		25	382667	04/27/17 23:22	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			381152	04/20/17 07:50	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		1	381306	04/20/17 10:51	MTB	TAL CHI
Total/NA	Analysis	9060A		1	381609	04/21/17 07:13	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	381451	04/21/17 06:28	CLB	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			381817	04/23/17 20:45	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	381991	04/24/17 01:15	HMW	TAL CHI
Total/NA	Prep	SM 5220			381511	04/21/17 10:19	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	381923	04/24/17 10:26	MAN	TAL CHI

Client Sample ID: CSD-7

Lab Sample ID: 500-126777-10
Matrix: Water

Date Collected: 04/17/17 09:50
Date Received: 04/19/17 08:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			381475	04/21/17 07:49	JEF	TAL CHI
Total Recoverable	Analysis	6020		1	381877	04/21/17 17:43	FXG	TAL CHI
Total/NA	Analysis	300.0		10	383096	04/28/17 15:06	PMF	TAL CHI
Total/NA	Analysis	353.2		50	382667	04/27/17 23:25	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			381152	04/20/17 07:50	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		1	381306	04/20/17 10:54	MTB	TAL CHI
Total/NA	Analysis	9060A		1	381609	04/21/17 07:32	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	381451	04/21/17 06:31	CLB	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			381817	04/23/17 20:45	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	381991	04/24/17 01:18	HMW	TAL CHI
Total/NA	Prep	SM 5220			381512	04/21/17 12:31	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	381929	04/24/17 13:16	MAN	TAL CHI

Lab Chronicle

Client: RJN Environmental Services LLC
Project/Site: Central Sands Dairy - 14-203

TestAmerica Job ID: 500-126777-1

Client Sample ID: CSD-8

Lab Sample ID: 500-126777-11
Matrix: Water

Date Collected: 04/17/17 10:20
Date Received: 04/19/17 08:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			381475	04/21/17 07:49	JEF	TAL CHI
Total Recoverable	Analysis	6020		1	381877	04/21/17 17:47	FXG	TAL CHI
Total/NA	Analysis	300.0		10	383096	04/28/17 15:19	PMF	TAL CHI
Total/NA	Analysis	353.2		50	382667	04/27/17 23:27	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			381152	04/20/17 07:50	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		1	381306	04/20/17 10:57	MTB	TAL CHI
Total/NA	Analysis	9060A		1	381609	04/21/17 07:52	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	381451	04/21/17 06:34	CLB	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			381817	04/23/17 20:45	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	381991	04/24/17 01:20	HMW	TAL CHI
Total/NA	Prep	SM 5220			381512	04/21/17 12:31	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	381929	04/24/17 13:19	MAN	TAL CHI

Client Sample ID: CSD-9

Lab Sample ID: 500-126777-12
Matrix: Water

Date Collected: 04/17/17 11:20
Date Received: 04/19/17 08:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			381475	04/21/17 07:49	JEF	TAL CHI
Total Recoverable	Analysis	6020		1	381877	04/21/17 17:50	FXG	TAL CHI
Total/NA	Analysis	300.0		5	382723	04/28/17 00:16	PMF	TAL CHI
Total/NA	Analysis	353.2		10	382667	04/27/17 23:29	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			381892	04/25/17 08:50	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		1	382118	04/25/17 11:10	MTB	TAL CHI
Total/NA	Analysis	9060A		1	381609	04/21/17 08:10	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	381451	04/21/17 06:36	CLB	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			381817	04/23/17 20:45	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	381991	04/24/17 01:23	HMW	TAL CHI
Total/NA	Prep	SM 5220			381512	04/21/17 12:31	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	381929	04/24/17 13:20	MAN	TAL CHI

Client Sample ID: CSD-9 DUP

Lab Sample ID: 500-126777-13
Matrix: Water

Date Collected: 04/17/17 11:20
Date Received: 04/19/17 08:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			381475	04/21/17 07:49	JEF	TAL CHI
Total Recoverable	Analysis	6020		1	381877	04/21/17 17:54	FXG	TAL CHI
Total/NA	Analysis	300.0		5	383096	04/28/17 15:31	PMF	TAL CHI
Total/NA	Analysis	353.2		10	382667	04/27/17 23:30	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			381892	04/25/17 08:50	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		1	382118	04/25/17 11:13	MTB	TAL CHI

Lab Chronicle

Client: RJN Environmental Services LLC
Project/Site: Central Sands Dairy - 14-203

TestAmerica Job ID: 500-126777-1

Client Sample ID: CSD-9 DUP

Lab Sample ID: 500-126777-13

Date Collected: 04/17/17 11:20
Date Received: 04/19/17 08:55

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060A		1	381609	04/21/17 09:05	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	381451	04/21/17 06:39	CLB	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			381817	04/23/17 20:45	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	381991	04/24/17 01:32	HMW	TAL CHI
Total/NA	Prep	SM 5220			381512	04/21/17 12:31	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	381929	04/24/17 13:21	MAN	TAL CHI

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: RJN Environmental Services LLC
Project/Site: Central Sands Dairy - 14-203

TestAmerica Job ID: 500-126777-1

Laboratory: TestAmerica Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	999580010	08-31-17

TestAmerica

THE LEADER IN ENVIRONMENTAL

2417 Bond Street, University Park, IL 604
Phone: 708.534.5200 Fax: 708.534.

500-126777 COC

(optional)
Report To
Contact: BOB NAUTA
Company: RJN ENV. SVC.
Address: 4811 MONONA DR.
Address: MONONA, WI 53716
Phone: 608-576-3001
Fax:
E-Mail:

(optional)
Bill To
Contact: chevelle7@charter.net
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-126777
Chain of Custody Number:
Page 1 of 2
Temperature °C of Cooler: 3.6→3.8, 4.8→5.0

Client: RJN ENV. SVC.
Client Project #: 14-203
Project Name: CENTRAL SANDS DAIRY
Project Location/State: WI
Lab Project #:
Sampler: NAUTA
Lab PM:

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	TDS CHLORIDE (8)	N+N/COD/NH3 TKN/TOC (2)	POTASSIUM (3)							Comments
1		CSD-1S	4/17	1250	4	W	X	X	X							
2		CSD-1D		1220	4	W	X	X	X							
3		CSD-2		1320	4	W	X	X	X							
4		CSD-3S		0835	4	W	X	X	X							
5		CSD-3D		0810	4	W	X	X	X							
6		CSD-4		0905	4	W	X	X	X							
7		CSD-4 DUP		0905 ~~1355~~	4	W	X	X	X							
8		CSD-5		1355	4	W	X	X	X							
9		CSD-6		1050	4	W	X	X	X							
10		CSD-7		0950	4	W	X	X	X							

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other
Requested Due Date _____ STD. TURN

Sample Disposal
☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Rob Nauta	RJN	04/18/17	0945	[signature]	TA-CHI	4/19/17	0855

Lab Courier:
Shipped: Fed-X
Hand Delivered:

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments

Lab Comments:

5/2/2017
TAL 4124-500 (1209)

ED_004625A_00007964-00075

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

(optional)
Report To
Contact: BOB NAUTA
Company: RJN ENV. SVC.
Address: 4811 MONONA DR.
Address: MONONA, WI 53716
Phone: 608-576-3001
Fax:
E-Mail:

(optional)
Bill To
Contact: chevelle7@charter.net
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-126777
Chain of Custody Number:
Page 2 of 2
Temperature °C of Cooler:

Client: RJN ENV. SVC.
Client Project #: 14-203
Project Name: CENTRAL SANDS DAIRY
Project Location/State: WI
Lab Project #:
Sampler: NAUTA
Lab PM:

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	TDS (8)	CHLORIDE (2)	N+N/COD/NH3 TKN/TOC (3)	POTASSIUM							Comments
11		CSD-8	4/17	1020	4	W	X	X	X								
12		CSD-9	↓	1120	4	W	X	X	X								
13		CSD-9DUP	↓	1120	4	W	X	X	X								

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other
Requested Due Date _____

Sample Disposal
☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Rob Nauta	RJN	4/18/17	0945	Shirin Scott	TA-CHI	4/19/17	0855

Lab Courier:
Shipped: Fed X
Hand Delivered:

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments

Lab Comments:

TAL-4124-500 (1209)
5/2/2017

ED_004625A_00007964-00076

Login Sample Receipt Checklist

Client: RJN Environmental Services LLC

Job Number: 500-126777-1

Login Number: 126777
List Number: 1
Creator: Scott, Sherri L

List Source: TestAmerica Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.8,5.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ATTACHMENT C
WISCONSIN STATE LABORATORY OF HYGIENE REPORTS

Wisconsin State Laboratory of Hygiene
UNIVERSITY OF WISCONSIN-MADISON

Wisconsin State Laboratory of Hygiene
2601 Agriculture Drive, PO Box 7996
Madison, WI 53707-7996
(800)442-4618 - FAX (608)224-6213
http://www.slh.wisc.edu

Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Peter Shult, Ph.D., Interim Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 310221001

Report To:
RJN ENVIRONMENTAL SVCS
BOB NAUTA
4631 COUNTY RD A
OREGON, WI 53575

Invoice To:
RJN ENVIRONMENTAL SVCS
BOB NAUTA
4631 COUNTY RD A
OREGON, WI 53575
Customer ID: 340214

Collection Date: 4/17/2017 12:50:00 PM
Owner:

Collected By: BOB NAUTA
Well Completion Date: 10/01/14

Unique Well #: VY778
Well Construction: DRILLED
County: JUNEAU
Driller or Pump Installers License #:
Sampling Location:
Sampling Point: OTHER

Date Received: 4/18/2017
Date Reported: 4/20/2017
Sample Reason: OTHER

Sample Comments

MON. WELL CSD-1S VY778

LABORATORY ERROR: SAMPLE WAS REMOVED FROM INCUBATION 19 MINUTES EARLY. IT IS UNLIKELY THAT RESULTS ARE SIGNIFICANTLY AFFECTED.

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 04/18/17 Analysis Date 04/19/17					
Total Coliform - Colilert-MPN QT	SM9223BMPN	<1	MPN/100 mL		1
E. Coli - Colilert-MPN QT	SM9223BMPN	<1	MPN/100 mL		1

Wisconsin State Laboratory of Hygiene
UNIVERSITY OF WISCONSIN-MADISON

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Madison, WI 53707-7996
(800)442-4618 - FAX (608)224-6213
http://www.slh.wisc.edu

Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Peter Shult, Ph.D., Interim Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 310221001

List of Abbreviations:

LOD = Level of detection
LOQ = Level of quantification
ND = None detected. Results are less than the LOD
F next to result = Result is between LOD and LOQ
Z next to result = Result is between 0 (zero) and LOD
if LOD=LOQ, Limits were not statistically derived

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes see http://www.slh.wisc.edu/about/compliance/nelac-laboratory-accreditation
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The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

Previous Reports

This sample was previously reported under the following report ID(s): 3956189

Responsible Party

Microbiology: Sharon Kluender, Lab Manager, 608-224-6262
Inorganic Chemistry: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282
Metals: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282
Organic Chemistry: Al Spallato, Lab Manager, 608-224-6269
Emergency Chemical Response: Noel Stanton, Lab Manager, 608-224-6251
Environmental Toxicology: Tracy Hanke, Lab Manager, 608-224-6270

Wisconsin State Laboratory of Hygiene
UNIVERSITY OF WISCONSIN-MADISON

Wisconsin State Laboratory of Hygiene
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Madison, WI 53707-7996
(800)442-4618 - FAX (608)224-6213
http://www.slh.wisc.edu

Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Peter Shult, Ph.D., Interim Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 310222001

Report To:
RJN ENVIRONMENTAL SVCS
BOB NAUTA
4631 COUNTY RD A
OREGON, WI 53575

Invoice To:
RJN ENVIRONMENTAL SVCS
BOB NAUTA
4631 COUNTY RD A
OREGON, WI 53575
Customer ID: 340214

Collection Date: 4/17/2017 12:20:00 PM
Owner:

Collected By: BOB NAUTA
Well Completion Date: 10/01/14

Unique Well #: VY779
Well Construction: DRILLED
County: JUNEAU
Driller or Pump Installers License #:
Sampling Location:
Sampling Point: OTHER

Date Received: 4/18/2017
Date Reported: 4/20/2017
Sample Reason: OTHER

Sample Comments

MON. WELL CSD-1D VY779

LABORATORY ERROR: SAMPLE WAS REMOVED FROM INCUBATION 19 MINUTES EARLY. IT IS UNLIKELY THAT RESULTS ARE SIGNIFICANTLY AFFECTED.

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 04/18/17 Analysis Date 04/19/17					
Total Coliform - Colilert-MPN QT	SM9223BMPN	2	MPN/100 mL		1
E. Coli - Colilert-MPN QT	SM9223BMPN	<1	MPN/100 mL		1

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Madison, WI 53707-7996
(800)442-4618 - FAX (608)224-6213
http://www.slh.wisc.edu

Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Peter Shult, Ph.D., Interim Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 310222001

List of Abbreviations:

LOD = Level of detection
LOQ = Level of quantification
ND = None detected. Results are less than the LOD
F next to result = Result is between LOD and LOQ
Z next to result = Result is between 0 (zero) and LOD
if LOD=LOQ, Limits were not statistically derived

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Previous Reports

This sample was previously reported under the following report ID(s): 3956192

Responsible Party

Microbiology: Sharon Kluender, Lab Manager, 608-224-6262
Inorganic Chemistry: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282
Metals: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282
Organic Chemistry: Al Spallato, Lab Manager, 608-224-6269
Emergency Chemical Response: Noel Stanton, Lab Manager, 608-224-6251
Environmental Toxicology: Tracy Hanke, Lab Manager, 608-224-6270

Wisconsin State Laboratory of Hygiene
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Wisconsin State Laboratory of Hygiene
2601 Agriculture Drive, PO Box 7996
Madison, WI 53707-7996
(800)442-4618 - FAX (608)224-6213
http://www.slh.wisc.edu

Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Peter Shult, Ph.D., Interim Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 310223001

Report To:
RJN ENVIRONMENTAL SVCS
BOB NAUTA
4631 COUNTY RD A
OREGON, WI 53575

Invoice To:
RJN ENVIRONMENTAL SVCS
BOB NAUTA
4631 COUNTY RD A
OREGON, WI 53575
Customer ID: 340214

Collection Date: 4/17/2017 1:20:00 PM
Owner:

Collected By: BOB NAUTA
Well Completion Date: 10/01/14

Unique Well #: VU928
Well Construction: DRILLED
County: JUNEAU
Driller or Pump Installers License #:
Sampling Location:
Sampling Point: OTHER

Date Received: 4/18/2017
Date Reported: 4/20/2017
Sample Reason: OTHER

Sample Comments

VU928 CSD-2 MON. WELL

LABORATORY ERROR: SAMPLE WAS REMOVED FROM INCUBATION 19 MINUTES EARLY. IT IS UNLIKELY THAT RESULTS ARE SIGNIFICANTLY AFFECTED.

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 04/18/17 Analysis Date 04/19/17					
Total Coliform - Colilert-MPN QT	SM9223BMPN	36	MPN/100 mL		1
E. Coli - Colilert-MPN QT	SM9223BMPN	<1	MPN/100 mL		1

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http://www.slh.wisc.edu

Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Peter Shult, Ph.D., Interim Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 310223001

List of Abbreviations:

LOD = Level of detection
LOQ = Level of quantification
ND = None detected. Results are less than the LOD
F next to result = Result is between LOD and LOQ
Z next to result = Result is between 0 (zero) and LOD
if LOD=LOQ, Limits were not statistically derived

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Results relate only to the items tested.
This Laboratory Report shall not be reproduced except in full, without written approval of the laboratory.
The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

Previous Reports

This sample was previously reported under the following report ID(s): 3956210

Responsible Party

Microbiology: Sharon Kluender, Lab Manager, 608-224-6262
Inorganic Chemistry: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282
Metals: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282
Organic Chemistry: Al Spallato, Lab Manager, 608-224-6269
Emergency Chemical Response: Noel Stanton, Lab Manager, 608-224-6251
Environmental Toxicology: Tracy Hanke, Lab Manager, 608-224-6270

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Wisconsin State Laboratory of Hygiene
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Madison, WI 53707-7996
(800)442-4618 - FAX (608)224-6213
http://www.slh.wisc.edu

Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Peter Shult, Ph.D., Interim Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 310225001

Report To:
RJN ENVIRONMENTAL SVCS
BOB NAUTA
4631 COUNTY RD A
OREGON, WI 53575

Invoice To:
RJN ENVIRONMENTAL SVCS
BOB NAUTA
4631 COUNTY RD A
OREGON, WI 53575
Customer ID: 340214

Collection Date: 4/17/2017 8:35:00 AM
Owner:

Collected By: BOB NAUTA
Well Completion Date: 10/01/14

Unique Well #: VU925
Well Construction: DRILLED
County: JUNEAU
Driller or Pump Installers License #:
Sampling Location:
Sampling Point: OTHER

Date Received: 4/18/2017
Date Reported: 4/20/2017
Sample Reason: OTHER

Sample Comments

MON. WELL VU925 CSD-3S

LABORATORY ERROR: SAMPLE WAS REMOVED FROM INCUBATION 19 MINUTES EARLY. IT IS UNLIKELY THAT RESULTS ARE SIGNIFICANTLY AFFECTED.

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 04/18/17 Analysis Date 04/19/17					
Total Coliform - Colilert-MPN QT	SM9223BMPN	<1	MPN/100 mL		1
E. Coli - Colilert-MPN QT	SM9223BMPN	<1	MPN/100 mL		1

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UNIVERSITY OF WISCONSIN-MADISON

Wisconsin State Laboratory of Hygiene
2601 Agriculture Drive, PO Box 7996
Madison, WI 53707-7996
(800)442-4618 - FAX (608)224-6213
http://www.slh.wisc.edu

Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Peter Shult, Ph.D., Interim Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 310225001

List of Abbreviations:

LOD = Level of detection
LOQ = Level of quantification
ND = None detected. Results are less than the LOD
F next to result = Result is between LOD and LOQ
Z next to result = Result is between 0 (zero) and LOD
if LOD=LOQ, Limits were not statistically derived

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Results, LOD and LOQ values have been adjusted for analytical dilutions and percent moisture where applicable.
Results relate only to the items tested.
This Laboratory Report shall not be reproduced except in full, without written approval of the laboratory.
The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

Previous Reports

This sample was previously reported under the following report ID(s): 3956213

Responsible Party

Microbiology: Sharon Kluender, Lab Manager, 608-224-6262
Inorganic Chemistry: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282
Metals: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282
Organic Chemistry: Al Spallato, Lab Manager, 608-224-6269
Emergency Chemical Response: Noel Stanton, Lab Manager, 608-224-6251
Environmental Toxicology: Tracy Hanke, Lab Manager, 608-224-6270

Wisconsin State Laboratory of Hygiene
UNIVERSITY OF WISCONSIN-MADISON

Wisconsin State Laboratory of Hygiene
2601 Agriculture Drive, PO Box 7996
Madison, WI 53707-7996
(800)442-4618 - FAX (608)224-6213
http://www.slh.wisc.edu

Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Peter Shult, Ph.D., Interim Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 310226001

Report To:
RJN ENVIRONMENTAL SVCS
BOB NAUTA
4631 COUNTY RD A
OREGON, WI 53575

Invoice To:
RJN ENVIRONMENTAL SVCS
BOB NAUTA
4631 COUNTY RD A
OREGON, WI 53575
Customer ID: 340214

Collection Date: 4/17/2017 8:10:00 AM
Owner:

Collected By: BOB NAUTA
Well Completion Date: 10/01/14

Unique Well #: VU926
Well Construction: DRILLED
County: JUNEAU
Driller or Pump Installers License #:
Sampling Location:
Sampling Point: OTHER

Date Received: 4/18/2017
Date Reported: 4/20/2017
Sample Reason: OTHER

Sample Comments

VU926 CSD-3D MON. WELL

LABORATORY ERROR: SAMPLE WAS REMOVED FROM INCUBATION 19 MINUTES EARLY. IT IS UNLIKELY THAT RESULTS ARE SIGNIFICANTLY AFFECTED.

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 04/18/17 Analysis Date 04/19/17					
Total Coliform - Colilert-MPN QT	SM9223BMPN	<1	MPN/100 mL		1
E. Coli - Colilert-MPN QT	SM9223BMPN	<1	MPN/100 mL		1

Wisconsin State Laboratory of Hygiene
UNIVERSITY OF WISCONSIN-MADISON

Wisconsin State Laboratory of Hygiene
2601 Agriculture Drive, PO Box 7996
Madison, WI 53707-7996
(800)442-4618 - FAX (608)224-6213
http://www.slh.wisc.edu

Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Peter Shult, Ph.D., Interim Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 310226001

List of Abbreviations:

LOD = Level of detection
LOQ = Level of quantification
ND = None detected. Results are less than the LOD
F next to result = Result is between LOD and LOQ
Z next to result = Result is between 0 (zero) and LOD
if LOD=LOQ, Limits were not statistically derived

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Previous Reports

This sample was previously reported under the following report ID(s): 3956216

Responsible Party

Microbiology: Sharon Kluender, Lab Manager, 608-224-6262
Inorganic Chemistry: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282
Metals: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282
Organic Chemistry: Al Spallato, Lab Manager, 608-224-6269
Emergency Chemical Response: Noel Stanton, Lab Manager, 608-224-6251
Environmental Toxicology: Tracy Hanke, Lab Manager, 608-224-6270

Wisconsin State Laboratory of Hygiene
UNIVERSITY OF WISCONSIN-MADISON

Wisconsin State Laboratory of Hygiene
2601 Agriculture Drive, PO Box 7996
Madison, WI 53707-7996
(800)442-4618 - FAX (608)224-6213
http://www.slh.wisc.edu

Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Peter Shult, Ph.D., Interim Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 310227001

Report To:
RJN ENVIRONMENTAL SVCS
BOB NAUTA
4631 COUNTY RD A
OREGON, WI 53575

Invoice To:
RJN ENVIRONMENTAL SVCS
BOB NAUTA
4631 COUNTY RD A
OREGON, WI 53575
Customer ID: 340214

Collection Date: 4/17/2017 9:05:00 AM
Owner:

Collected By: BOB NAUTA
Well Completion Date: 10/01/14

Unique Well #: VU927
Well Construction: DRILLED
County: JUNEAU
Driller or Pump Installers License #:
Sampling Location:
Sampling Point: OTHER

Date Received: 4/18/2017
Date Reported: 4/20/2017
Sample Reason: OTHER

Sample Comments

CSD-4 VU927 MON. WELL

LABORATORY ERROR: SAMPLE WAS REMOVED FROM INCUBATION 19 MINUTES EARLY. IT IS UNLIKELY THAT RESULTS ARE SIGNIFICANTLY AFFECTED.

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 04/18/17 Analysis Date 04/19/17					
Total Coliform - Colilert-MPN QT	SM9223BMPN	<1	MPN/100 mL		1
E. Coli - Colilert-MPN QT	SM9223BMPN	<1	MPN/100 mL		1

Wisconsin State Laboratory of Hygiene
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Wisconsin State Laboratory of Hygiene
2601 Agriculture Drive, PO Box 7996
Madison, WI 53707-7996
(800)442-4618 - FAX (608)224-6213
http://www.slh.wisc.edu

Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Peter Shult, Ph.D., Interim Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 310227001

List of Abbreviations:

LOD = Level of detection
LOQ = Level of quantification
ND = None detected. Results are less than the LOD
F next to result = Result is between LOD and LOQ
Z next to result = Result is between 0 (zero) and LOD
if LOD=LOQ, Limits were not statistically derived

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes see http://www.slh.wisc.edu/about/compliance/nelac-laboratory-accreditation
Results, LOD and LOQ values have been adjusted for analytical dilutions and percent moisture where applicable.
Results relate only to the items tested.
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The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

Previous Reports

This sample was previously reported under the following report ID(s): 3956219

Responsible Party

Microbiology: Sharon Kluender, Lab Manager, 608-224-6262
Inorganic Chemistry: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282
Metals: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282
Organic Chemistry: Al Spallato, Lab Manager, 608-224-6269
Emergency Chemical Response: Noel Stanton, Lab Manager, 608-224-6251
Environmental Toxicology: Tracy Hanke, Lab Manager, 608-224-6270

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Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Peter Shult, Ph.D., Interim Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 310228001

Report To:
RJN ENVIRONMENTAL SVCS
BOB NAUTA
4631 COUNTY RD A
OREGON, WI 53575

Invoice To:
RJN ENVIRONMENTAL SVCS
BOB NAUTA
4631 COUNTY RD A
OREGON, WI 53575
Customer ID: 340214

Collection Date: 4/17/2017 9:05:00 AM
Owner:

Collected By: BOB NAUTA
Well Completion Date: 10/01/14

Unique Well #: VU927
Well Construction: DRILLED
County: JUNEAU
Driller or Pump Installers License #:
Sampling Location:
Sampling Point: OTHER

Date Received: 4/18/2017
Date Reported: 4/20/2017
Sample Reason: OTHER

Sample Comments

VU927 CSD-4 DUP MON. WELL

LABORATORY ERROR: SAMPLE WAS REMOVED FROM INCUBATION 19 MINUTES EARLY. IT IS UNLIKELY THAT RESULTS ARE SIGNIFICANTLY AFFECTED.

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 04/18/17 Analysis Date 04/19/17					
Total Coliform - Colilert-MPN QT	SM9223BMPN	<1	MPN/100 mL		1
E. Coli - Colilert-MPN QT	SM9223BMPN	<1	MPN/100 mL		1

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Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Peter Shult, Ph.D., Interim Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 310228001

List of Abbreviations:

LOD = Level of detection
LOQ = Level of quantification
ND = None detected. Results are less than the LOD
F next to result = Result is between LOD and LOQ
Z next to result = Result is between 0 (zero) and LOD
if LOD=LOQ, Limits were not statistically derived

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The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

Previous Reports

This sample was previously reported under the following report ID(s): 3956222

Responsible Party

Microbiology: Sharon Kluender, Lab Manager, 608-224-6262
Inorganic Chemistry: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282
Metals: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282
Organic Chemistry: Al Spallato, Lab Manager, 608-224-6269
Emergency Chemical Response: Noel Stanton, Lab Manager, 608-224-6251
Environmental Toxicology: Tracy Hanke, Lab Manager, 608-224-6270

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Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Peter Shult, Ph.D., Interim Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 310230001

Report To:
RJN ENVIRONMENTAL SVCS
BOB NAUTA
4631 COUNTY RD A
OREGON, WI 53575

Invoice To:
RJN ENVIRONMENTAL SVCS
BOB NAUTA
4631 COUNTY RD A
OREGON, WI 53575
Customer ID: 340214

Collection Date: 4/17/2017 1:55:00 PM
Owner:

Collected By: BOB NAUTA
Well Completion Date: 08/01/16

Unique Well #: VY742
Well Construction: DRILLED
County: JUNEAU
Driller or Pump Installers License #:
Sampling Location:
Sampling Point: OTHER

Date Received: 4/18/2017
Date Reported: 4/20/2017
Sample Reason: OTHER

Sample Comments

VY742 CSD-5 MON. WELL

LABORATORY ERROR: SAMPLE WAS REMOVED FROM INCUBATION 19 MINUTES EARLY. IT IS UNLIKELY THAT RESULTS ARE SIGNIFICANTLY AFFECTED.

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 04/18/17 Analysis Date 04/19/17					
Total Coliform - Colilert-MPN QT	SM9223BMPN	1	MPN/100 mL		1
E. Coli - Colilert-MPN QT	SM9223BMPN	<1	MPN/100 mL		1

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http://www.slh.wisc.edu

Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Peter Shult, Ph.D., Interim Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 310230001

List of Abbreviations:

LOD = Level of detection
LOQ = Level of quantification
ND = None detected. Results are less than the LOD
F next to result = Result is between LOD and LOQ
Z next to result = Result is between 0 (zero) and LOD
if LOD=LOQ, Limits were not statistically derived

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The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

Previous Reports

This sample was previously reported under the following report ID(s): 3956225

Responsible Party

Microbiology: Sharon Kluender, Lab Manager, 608-224-6262
Inorganic Chemistry: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282
Metals: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282
Organic Chemistry: Al Spallato, Lab Manager, 608-224-6269
Emergency Chemical Response: Noel Stanton, Lab Manager, 608-224-6251
Environmental Toxicology: Tracy Hanke, Lab Manager, 608-224-6270

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Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Peter Shult, Ph.D., Interim Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 310231001

Report To:
RJN ENVIRONMENTAL SVCS
BOB NAUTA
4631 COUNTY RD A
OREGON, WI 53575

Invoice To:
RJN ENVIRONMENTAL SVCS
BOB NAUTA
4631 COUNTY RD A
OREGON, WI 53575
Customer ID: 340214

Collection Date: 4/17/2017 10:50:00 AM
Owner:

Collected By: BOB NAUTA
Well Completion Date: 08/01/16

Unique Well #: VY715
Well Construction: DRILLED
County: JUNEAU
Driller or Pump Installers License #:
Sampling Location:
Sampling Point: OTHER

Date Received: 4/18/2017
Date Reported: 4/20/2017
Sample Reason: OTHER

Sample Comments

VY715 CSD-6 MON. WELL

LABORATORY ERROR: SAMPLE WAS REMOVED FROM INCUBATION 19 MINUTES EARLY. IT IS UNLIKELY THAT RESULTS ARE SIGNIFICANTLY AFFECTED.

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 04/18/17 Analysis Date 04/19/17					
Total Coliform - Colilert-MPN QT	SM9223BMPN	<1	MPN/100 mL		1
E. Coli - Colilert-MPN QT	SM9223BMPN	<1	MPN/100 mL		1

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Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Peter Shult, Ph.D., Interim Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 310231001

List of Abbreviations:

LOD = Level of detection
LOQ = Level of quantification
ND = None detected. Results are less than the LOD
F next to result = Result is between LOD and LOQ
Z next to result = Result is between 0 (zero) and LOD
if LOD=LOQ, Limits were not statistically derived

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The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

Previous Reports

This sample was previously reported under the following report ID(s): 3956195

Responsible Party

Microbiology: Sharon Kluender, Lab Manager, 608-224-6262
Inorganic Chemistry: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282
Metals: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282
Organic Chemistry: Al Spallato, Lab Manager, 608-224-6269
Emergency Chemical Response: Noel Stanton, Lab Manager, 608-224-6251
Environmental Toxicology: Tracy Hanke, Lab Manager, 608-224-6270

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http://www.slh.wisc.edu

Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Peter Shult, Ph.D., Interim Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 310232001

Report To:
RJN ENVIRONMENTAL SVCS
BOB NAUTA
4631 COUNTY RD A
OREGON, WI 53575

Invoice To:
RJN ENVIRONMENTAL SVCS
BOB NAUTA
4631 COUNTY RD A
OREGON, WI 53575
Customer ID: 340214

Collection Date: 4/17/2017 9:50:00 AM
Owner:

Collected By: BOB NAUTA
Well Completion Date: 08/01/16

Unique Well #: VY713
Well Construction: DRILLED
County: JUNEAU
Driller or Pump Installers License #:
Sampling Location:
Sampling Point: OTHER

Date Received: 4/18/2017
Date Reported: 4/20/2017
Sample Reason: OTHER

Sample Comments

VY713 CSD-7 MON WELL

LABORATORY ERROR: SAMPLE WAS REMOVED FROM INCUBATION 19 MINUTES EARLY. IT IS UNLIKELY THAT RESULTS ARE SIGNIFICANTLY AFFECTED.

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 04/18/17 Analysis Date 04/19/17					
Total Coliform - Colilert-MPN QT	SM9223BMPN	308	MPN/100 mL		1
E. Coli - Colilert-MPN QT	SM9223BMPN	1	MPN/100 mL		1

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Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Peter Shult, Ph.D., Interim Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 310232001

List of Abbreviations:

LOD = Level of detection
LOQ = Level of quantification
ND = None detected. Results are less than the LOD
F next to result = Result is between LOD and LOQ
Z next to result = Result is between 0 (zero) and LOD
if LOD=LOQ, Limits were not statistically derived

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Results relate only to the items tested.
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The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

Previous Reports

This sample was previously reported under the following report ID(s): 3956198

Responsible Party

Microbiology: Sharon Kluender, Lab Manager, 608-224-6262
Inorganic Chemistry: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282
Metals: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282
Organic Chemistry: Al Spallato, Lab Manager, 608-224-6269
Emergency Chemical Response: Noel Stanton, Lab Manager, 608-224-6251
Environmental Toxicology: Tracy Hanke, Lab Manager, 608-224-6270

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(800)442-4618 - FAX (608)224-6213
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Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Peter Shult, Ph.D., Interim Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 310241001

Report To:
RJN ENVIRONMENTAL SVCS
BOB NAUTA
4631 COUNTY RD A
OREGON, WI 53575

Invoice To:
RJN ENVIRONMENTAL SVCS
BOB NAUTA
4631 COUNTY RD A
OREGON, WI 53575
Customer ID: 340214

Collection Date: 4/17/2017 10:20:00 AM
Owner:

Collected By: BOB NAUTA
Well Completion Date: 08/01/16

Unique Well #: VY744
Well Construction: DRILLED
County: JUNEAU
Driller or Pump Installers License #:
Sampling Location:
Sampling Point: OTHER

Date Received: 4/18/2017
Date Reported: 4/20/2017
Sample Reason: OTHER

Sample Comments

VY744 CSD-8 MON. WELL

LABORATORY ERROR: SAMPLE WAS REMOVED FROM INCUBATION 19 MINUTES EARLY. IT IS UNLIKELY THAT RESULTS ARE SIGNIFICANTLY AFFECTED.

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 04/18/17 Analysis Date 04/19/17					
Total Coliform - Colilert-MPN QT	SM9223BMPN	<1	MPN/100 mL		1
E. Coli - Colilert-MPN QT	SM9223BMPN	<1	MPN/100 mL		1

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Madison, WI 53707-7996
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http://www.slh.wisc.edu

Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Peter Shult, Ph.D., Interim Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 310241001

List of Abbreviations:

LOD = Level of detection
LOQ = Level of quantification
ND = None detected. Results are less than the LOD
F next to result = Result is between LOD and LOQ
Z next to result = Result is between 0 (zero) and LOD
if LOD=LOQ, Limits were not statistically derived

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Results, LOD and LOQ values have been adjusted for analytical dilutions and percent moisture where applicable.
Results relate only to the items tested.
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The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

Previous Reports

This sample was previously reported under the following report ID(s): 3956201

Responsible Party

Microbiology: Sharon Kluender, Lab Manager, 608-224-6262
Inorganic Chemistry: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282
Metals: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282
Organic Chemistry: Al Spallato, Lab Manager, 608-224-6269
Emergency Chemical Response: Noel Stanton, Lab Manager, 608-224-6251
Environmental Toxicology: Tracy Hanke, Lab Manager, 608-224-6270

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Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Peter Shult, Ph.D., Interim Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 310242001

Report To:
RJN ENVIRONMENTAL SVCS
BOB NAUTA
4631 COUNTY RD A
OREGON, WI 53575

Invoice To:
RJN ENVIRONMENTAL SVCS
BOB NAUTA
4631 COUNTY RD A
OREGON, WI 53575
Customer ID: 340214

Collection Date: 4/17/2017 11:20:00 AM
Owner:

Collected By: BOB NAUTA
Well Completion Date: 10/01/16

Unique Well #: VY811
Well Construction: DRILLED
County: JUNEAU
Driller or Pump Installers License #:
Sampling Location:
Sampling Point: OTHER

Date Received: 4/18/2017
Date Reported: 4/20/2017
Sample Reason: OTHER

Sample Comments

VY811 CSD-9 MON. WELL

LABORATORY ERROR: SAMPLE WAS REMOVED FROM INCUBATION 19 MINUTES EARLY. IT IS UNLIKELY THAT RESULTS ARE SIGNIFICANTLY AFFECTED.

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 04/18/17 Analysis Date 04/19/17					
Total Coliform - Colilert-MPN QT	SM9223BMPN	20	MPN/100 mL		1
E. Coli - Colilert-MPN QT	SM9223BMPN	<1	MPN/100 mL		1

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Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Peter Shult, Ph.D., Interim Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 310242001

List of Abbreviations:

LOD = Level of detection
LOQ = Level of quantification
ND = None detected. Results are less than the LOD
F next to result = Result is between LOD and LOQ
Z next to result = Result is between 0 (zero) and LOD
if LOD=LOQ, Limits were not statistically derived

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Results, LOD and LOQ values have been adjusted for analytical dilutions and percent moisture where applicable.
Results relate only to the items tested.
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The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

Previous Reports

This sample was previously reported under the following report ID(s): 3956204

Responsible Party

Microbiology: Sharon Kluender, Lab Manager, 608-224-6262
Inorganic Chemistry: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282
Metals: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282
Organic Chemistry: Al Spallato, Lab Manager, 608-224-6269
Emergency Chemical Response: Noel Stanton, Lab Manager, 608-224-6251
Environmental Toxicology: Tracy Hanke, Lab Manager, 608-224-6270

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Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Peter Shult, Ph.D., Interim Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 310243001

Report To:
RJN ENVIRONMENTAL SVCS
BOB NAUTA
4631 COUNTY RD A
OREGON, WI 53575

Invoice To:
RJN ENVIRONMENTAL SVCS
BOB NAUTA
4631 COUNTY RD A
OREGON, WI 53575
Customer ID: 340214

Collection Date: 4/17/2017 11:20:00 AM
Owner:

Collected By: BOB NAUTA
Well Completion Date: 10/01/16

Unique Well #: VY811
Well Construction: DRILLED
County: JUNEAU
Driller or Pump Installers License #:
Sampling Location:
Sampling Point: OTHER

Date Received: 4/18/2017
Date Reported: 4/20/2017
Sample Reason: OTHER

Sample Comments

VY811 CSD-9 DUP MON. WELL

LABORATORY ERROR: SAMPLE WAS REMOVED FROM INCUBATION 19 MINUTES EARLY. IT IS UNLIKELY THAT RESULTS ARE SIGNIFICANTLY AFFECTED.

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 04/18/17 Analysis Date 04/19/17					
Total Coliform - Colilert-MPN QT	SM9223BMPN	10	MPN/100 mL		1
E. Coli - Colilert-MPN QT	SM9223BMPN	<1	MPN/100 mL		1

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Laboratory Report

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Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007 WI DATCP ID: 105-415

WSLH Sample: 310243001

List of Abbreviations:

LOD = Level of detection
LOQ = Level of quantification
ND = None detected. Results are less than the LOD
F next to result = Result is between LOD and LOQ
Z next to result = Result is between 0 (zero) and LOD
if LOD=LOQ, Limits were not statistically derived

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes see http://www.slh.wisc.edu/about/compliance/nelac-laboratory-accreditation
Results, LOD and LOQ values have been adjusted for analytical dilutions and percent moisture where applicable.
Results relate only to the items tested.
This Laboratory Report shall not be reproduced except in full, without written approval of the laboratory.
The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

Previous Reports

This sample was previously reported under the following report ID(s): 3956207

Responsible Party

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