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

January 16, 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 December 2016 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 December 28, 2016. Also on that date, the data loggers installed in wells CSD-1S, CSD-5, CSD-6, CSD-7 and CSD-9 were downloaded.

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 December 28, 2016. As in all past measurements, groundwater flow remains in a northwest-to-southeast direction, with a very uniform gradient across the site. The recently-installed wells (CSD-6, CSD-6, CSD-7, CSD-8 and CSD-9) show no deviation from that flow pattern, but rather they confirm it. Figure 2 presents hydrographs of all wells, dating back to the construction of the initial monitoring network in October 2014. The water level trends in all wells continue to mirror each-other, with the minor exception of CSD-4, in July 2015 and August 2016, when nearby irrigation well RDO 12 was pumping.

Hourly water levels for the wells with pressure transducers and data loggers are plotted on Figure 3. The ground was frozen during the plotted time period, so no recharge occurred. The water elevations were relatively stable during this time period, with minimal (i.e., approximately 0.1 foot) fluctuations. However, as the plot shows, 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. Due to the fact that a flow-through cell was not available at the time of sampling, a different approach was taken for the December sampling event. In reviewing the purging data from previous sampling events, it was found that a maximum of six casing volumes was required from any of the wells to stabilize the water quality (the exception was well CSD-9, which required seven the first time it was sampled; however, that was the day it was constructed). Consequently, six casing volumes were removed from each well before collecting a sample.

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. As with previous sampling rounds, the water quality in the CSD-3 nest as well as CSD-4 and CSD-8 continue to indicate that contaminants are migrating onto the CSD property from upgradient.

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

Total coliform concentrations were highest at the more recently-installed wells, with the highest concentration at CSD-7, at a count of greater than 2420. At this location, the December sample also yielded an E. coli count of 205, which is the highest count seen to-date.

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

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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

[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

[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.
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 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 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

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F, J: Result between levels of detection and quantification
F1: MS and/or MSD recovery is outside acceptable limits.
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P: Present
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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)
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
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)
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.
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P: Present
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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

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

(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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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

(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

(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**

(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

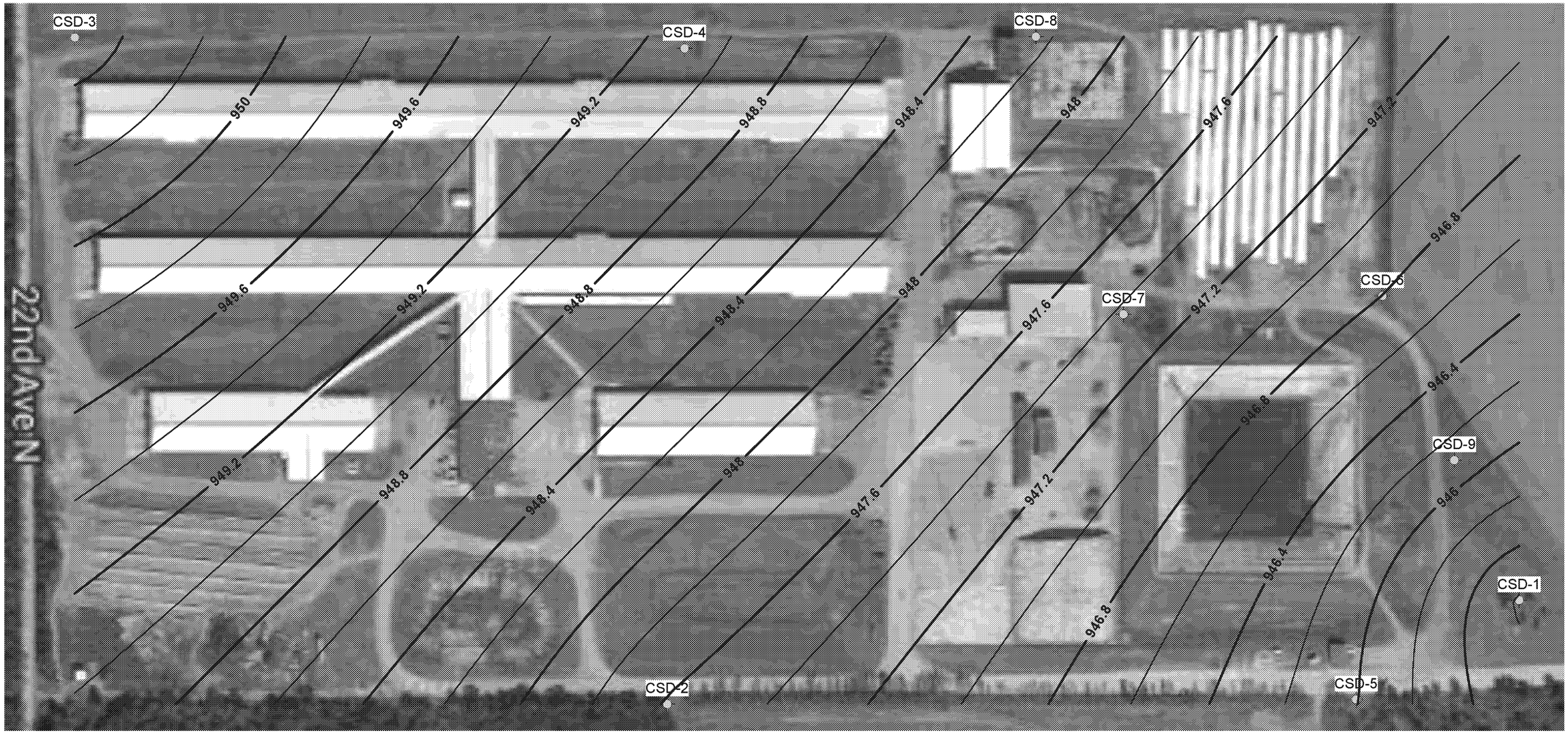
(1): Presence indicates exceedance
F, J: Result between levels of detection and quantification
F1: MS and/or MSD recovery is outside acceptable limits.
B: Found in blank and sample.
PAL: Preventive action limit
ES: Enforcement standard
NS: No standards established
Itallics indicate PAL exceedance
Bold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

(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

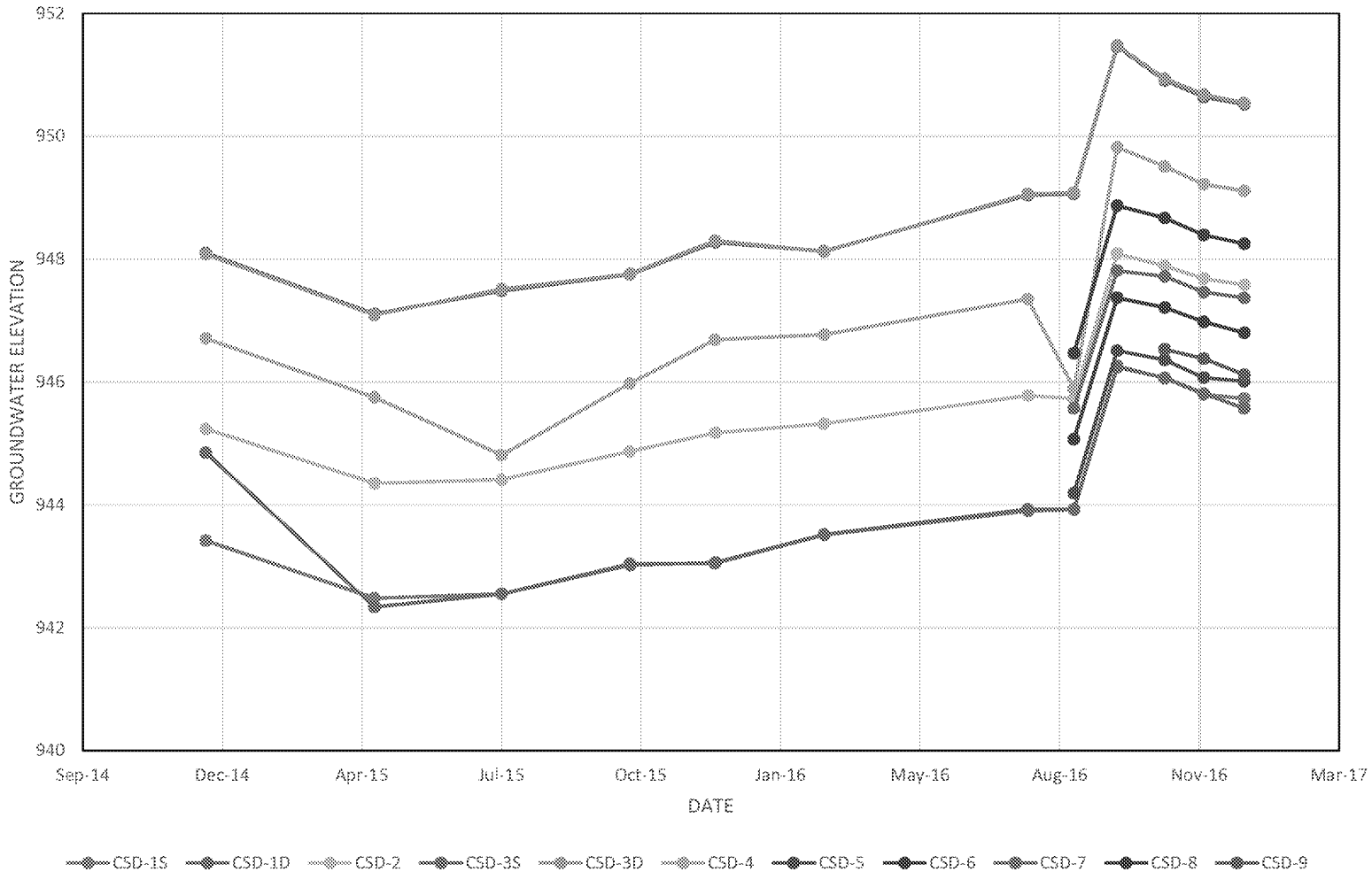
Surface Water Studies
Groundwater Studies
Site Investigations

4811 MONONA DRIVE, MONONA, WISCONSIN 53716

CENTRAL SANDS DAIRY, LLC
TOWN OF ARMENIA, WISCONSIN
WATER TABLE - 12/28/16

FIGURE 1

DRAWN BY	PROJ. No.	DATE	FILE
RN	14-203	29 DEC 16	WTR TBL 1216



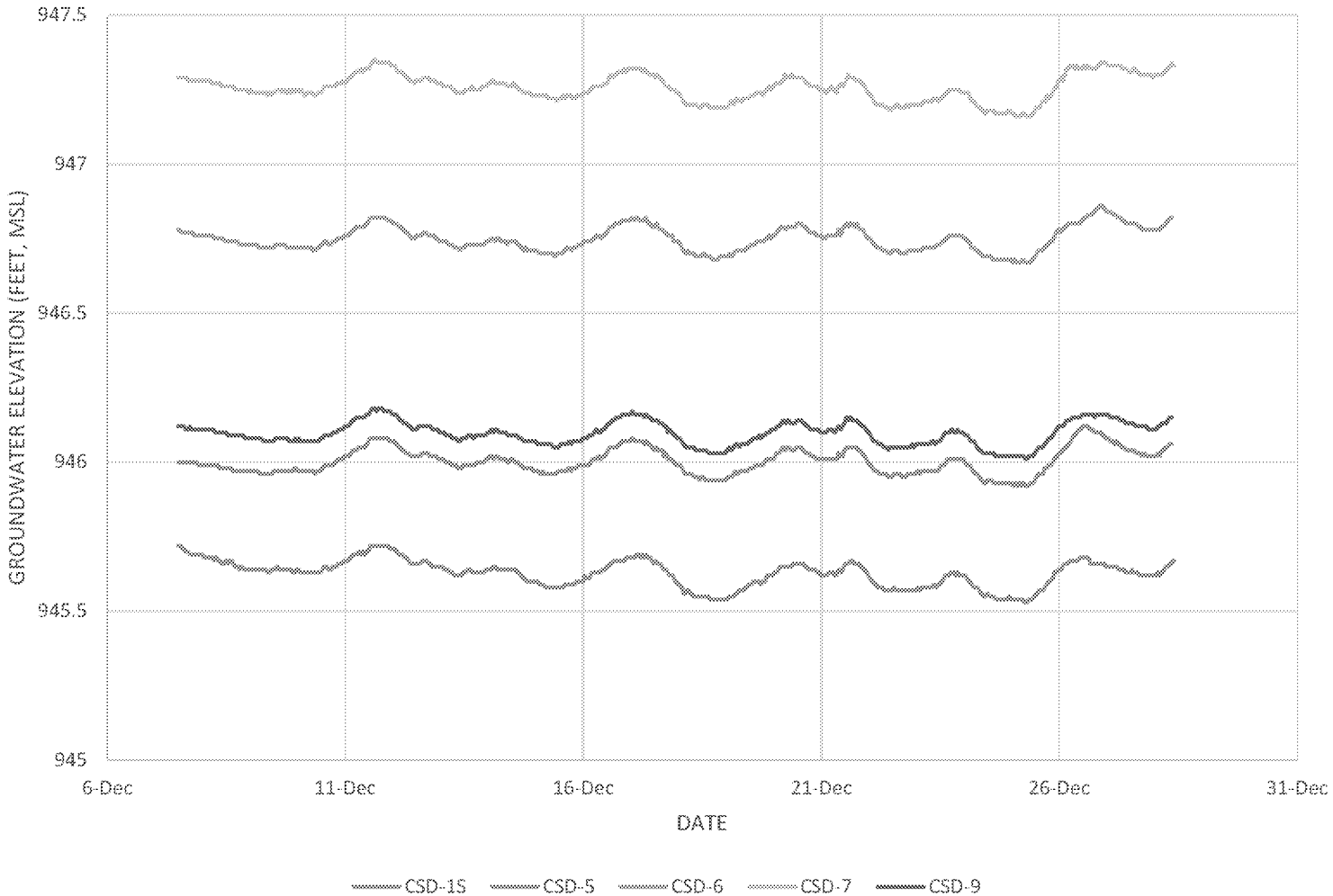
NOTE: WATER LEVELS IN WELLS CSD-3S AND CSD-3D ARE VIRTUALLY IDENTICAL, SO THEY APPEAR AS A SINGLE LINE.

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	12 JAN 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

FIGURE 3

DRAWN BY	PROJ. No.	DATE	FILE
RN	14-203	12 JAN 17	LOGGERS

ATTACHMENT A

FIELD NOTES

RJN Environmental Services, LLC

Well number:	CSD-1D
	VY779

Groundwater Sample Collection Record

Client:	Central Sands Dairy	Date:	12/28/16
Project No.:	14-203	Time start:	1225
Site Location:	Juneau County, WI	Finish:	1330
Wether conditions:			

Water Level Data: Well: _____ Piez: X

Total Depth: 49.57 Diameter: 2" Water column: 31.69

Depth to water: 17.90 Well volume: 5.3 gal.

Purging data:

Method: Low flow

Acceptance criteria:

Minimum purge volume (~~3~~ 6 volumes): 32 gal.

Stabilization: pH: +/- 0.1

Temp: +/- 10%

Cond: +/- 5%

Removed	T	pH	mS/cm

Sampled by: Nauta

RJN Environmental Services, LLC

Well number:	CSD-1S
	VY778

Groundwater Sample Collection Record

Client:	Central Sands Dairy	Date:	12/28/10
Project No.:	14-203	Time start:	1335
Site Location:	Juneau County, WI	Finish:	1410
Wether conditions:			

Water Level Data: Well: X Piez: _____

Total Depth: 28.32 Diameter: 2" Water column: 10.36

Depth to water: 12.96 Well volume: 1.75 gal.

Purging data:

Method: Low flow

Acceptance criteria: 6

Minimum purge volume (~~3~~ volumes): 10.5 gal.

Stabilization: pH: +/- 0.1

Temp: +/- 10%

Cond: +/- 5%

Removed	T	pH	mS/cm

Sampled

By: Nauta

RJN Environmental Services, LLC

Well number:	CSD-2
	VU928

Groundwater Sample Collection Record

Client:	Central Sands Dairy	Date:	12/28/16
Project No.:	14-203	Time start:	1455 [redacted]
Site Location:	Juneau County, WI	Finish:	1530 [redacted]
Wether conditions:			

Water Level Data: Well: X Piez: _____

Total Depth: 26.22 Diameter: 2" Water column: 12.6

Depth to water: 13.60 Well volume: 2.1 gal.

Purging data:

Method: Low flow

Acceptance criteria:

Minimum purge volume (~~3~~ 6 volumes): 12.6 gal.

Stabilization: pH: +/- 0.1

Temp: +/- 10%

Cond: +/- 5%

Removed	T	pH	mS/cm

Sampled by: Nauta

RJN Environmental Services, LLC

Well number:	CSD-3S VU925

Groundwater Sample Collection Record

Client:	Central Sands Dairy	Date:	12/28/16
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: 12.77

Depth to water: 12.74 Well volume: 2.1 gal.

Purging data:

Method: Low flow

Acceptance criteria:

Minimum purge volume (~~3~~ 6 volumes): 12.6 gal.

Stabilization: pH: +/- 0.1

Temp: +/- 10%

Cond: +/- 5%

Removed	T	pH	mS/cm

Sampled by: Nauta

RJN Environmental Services, LLC

Well number:	CSD-3D VU926

Groundwater Sample Collection Record

Client:	Central Sands Dairy	Date:	12/28/10
Project No.:	14-203	Time start:	0700
Site Location:	Juneau County, WI	Finish:	0805
Wether conditions:			

Water Level Data: Well: _____ Piez: X

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

Depth to water: 12.53 Well volume: 5.7 gal.

Purging data:

Method: Low flow

Acceptance criteria:

Minimum purge volume (~~3~~ 6 volumes): 35 gal.

Stabilization: pH: +/- 0.1

Temp: +/- 10%

Cond: +/- 5%

Removed	T	pH	mS/cm

Sampled by: Nauta

RJN Environmental Services, LLC

Well number:	CSD-4
	VU927

Groundwater Sample Collection Record

Client:	Central Sands Dairy	Date:	12/26/16
Project No.:	14-203	Time start:	0940
Site Location:	Juneau County, WI	Finish:	1025
Wether conditions:			

Water Level Data: Well: X Piez: _____

Total Depth: 26.03 Diameter: 2" Water column: 11.2

Depth to water: 14.83 Well volume: 1.9 gal.

Purging data:

Method: Low flow

Acceptance criteria:

Minimum purge volume (~~3~~ 4 volumes): 11 gal.

Stabilization: pH: +/- 0.1

Temp: +/- 10%

Cond: +/- 5%

Removed	T	pH	mS/cm

Sampled by: Nauta

RJN Environmental Services, LLC

Well number:	CSD-5
	VY742

Groundwater Sample Collection Record

Client:	Central Sands Dairy	Date:	12/28/16
Project No.:	14-203	Time start:	1420
Site Location:	Juneau County, WI	Finish:	1445
Wether conditions:			

Water Level Data: Well: X Piez:

Total Depth: 24.9 Diameter: 2" Water column: ~~16.71~~ 8.2

Depth to water: 16.71 Well volume: 1.4 gal.

Purging data:

Method: Low flow

Acceptance criteria:

Minimum purge volume (~~3~~ 6 volumes): 8.4 gal.

Stabilization: pH: +/- 0.1

Temp: +/- 10%

Cond: +/- 5%

Removed	T	pH	mS/cm

Sampled by: Nauta

RJN Environmental Services, LLC

Well number:	CSD-6
	VY715

Groundwater Sample Collection Record

Client:	Central Sands Dairy	Date:	12/28/10
Project No.:	14-203	Time start:	1100
Site Location:	Juneau County, WI	Finish:	1125
Wether conditions:			

Water Level Data: Well: X Piez: _____

Total Depth: 23.7 Diameter: 2" Water column: 5.9

Depth to water: 17.77 Well volume: ~~[illegible]~~ 0.98 gal.

Purging data:

Method: Low flow

Acceptance criteria:

Minimum purge volume (~~3~~ 6 volumes): 6 gal.

Stabilization: pH: +/- 0.1

Temp: +/- 10%

Cond: +/- 5%

Removed	T	pH	mS/cm

Sampled by: Nauta

RJN Environmental Services, LLC

Well number:	CSD-7
	VY713

Groundwater Sample Collection Record

Client:	Central Sands Dairy	Date:	12/28/10
Project No.:	14-203	Time start:	1020
Site Location:	Juneau County, WI	Finish:	1050
Wether conditions:			

Water Level Data: Well: X Piez: _____

Total Depth: 23.5 Diameter: 2" Water column: 7.66

Depth to water: 15.84 Well volume: 1.3 gal.

Purging data:

Method: Low flow

Acceptance criteria:

Minimum purge volume (~~3~~ 6 volumes): 7.8 gal.

Stabilization: pH: +/- 0.1

Temp: +/- 10%

Cond: +/- 5%

Removed	T	pH	mS/cm

Sampled by: Nauta

RJN Environmental Services, LLC

Well number:	CSD-8
	VY744

Groundwater Sample Collection Record

Client:	Central Sands Dairy	Date:	12/28/10
Project No.:	14-203	Time start:	0855
Site Location:	Juneau County, WI	Finish:	0920
Wether conditions:			

Water Level Data: Well: X Piez: _____

Total Depth: 24.6 Diameter: 2" Water column: 7.8

Depth to water: 16.77 Well volume: 1.3 gal.

Purging data:

Method: Low flow

Acceptance criteria:

Minimum purge volume (~~3~~ 4 volumes): 7.8 gal.

Stabilization: pH: +/- 0.1

Temp: +/- 10%

Cond: +/- 5%

Removed	T	pH	mS/cm

Sampled by: Nauta

RJN Environmental Services, LLC

Well number:	CSD-9
	VY811

Groundwater Sample Collection Record

Client:	Central Sands Dairy	Date:	12/28/16
Project No.:	14-203	Time start:	1145
Site Location:	Juneau County, WI	Finish:	1210
Wether conditions:			

Water Level Data: Well: X Piez: _____

Total Depth: 20.1 Diameter: 2" Water column: 4.49

Depth to water: 15.61 Well volume: 0.75 gal.

Purging data:

Method: Low flow

Acceptance criteria:

Minimum purge volume (~~3~~ 6 volumes): 4.5 gal.

Stabilization: pH: +/- 0.1

Temp: +/- 10%

Cond: +/- 5%

Removed	T	pH	mS/cm

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: 500-122074-1
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:
1/13/2017 11:08:58 AM

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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ED_004625A_00007678-00037

Job ID: 500-122074-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-122074-1

Comments
No additional comments.

Receipt
The samples were received on 12/30/2016 10:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.3º C and 4.3º 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: 500-122074-1

Client Sample ID: CSD-1S — Lab Sample ID: 500-122074-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	22000	F1	500	190	ug/L	1		6020	Total Recoverable
Chloride	19	B	2.0	0.76	mg/L	10		300.0	Total/NA
Nitrogen, Nitrate Nitrite	16		1.0	0.45	mg/L	10		353.2	Total/NA
Nitrogen, Kjeldahl	3.3	B	0.40	0.15	mg/L	1		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	1.5		1.0	0.27	mg/L	1		9060A	Total/NA
Total Dissolved Solids	160		10	4.3	mg/L	1		SM 2540C	Total/NA
Ammonia	3.1		0.20	0.10	mg/L	1		SM 4500 NH3 G	Total/NA

Client Sample ID: CSD-1D — Lab Sample ID: 500-122074-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	28000		500	190	ug/L	1		6020	Total Recoverable
Chloride	41	B	2.0	0.76	mg/L	10		300.0	Total/NA
Nitrogen, Nitrate Nitrite	24		2.5	1.1	mg/L	25		353.2	Total/NA
Nitrogen, Kjeldahl	2.3	B	0.40	0.15	mg/L	1		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	2.2		1.0	0.27	mg/L	1		9060A	Total/NA
Total Dissolved Solids	350		10	4.3	mg/L	1		SM 2540C	Total/NA
Ammonia	1.8		0.20	0.10	mg/L	1		SM 4500 NH3 G	Total/NA
Chemical Oxygen Demand	7.8	J	10	6.1	mg/L	1		SM 5220C	Total/NA

Client Sample ID: CSD-2 — Lab Sample ID: 500-122074-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	9500		500	190	ug/L	1		6020	Total Recoverable
Chloride	8.2	B	1.0	0.38	mg/L	5		300.0	Total/NA
Nitrogen, Nitrate Nitrite	9.3		1.0	0.45	mg/L	10		353.2	Total/NA
Nitrogen, Kjeldahl	0.51	B	0.40	0.15	mg/L	1		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	1.6		1.0	0.27	mg/L	1		9060A	Total/NA
Total Dissolved Solids	98		10	4.3	mg/L	1		SM 2540C	Total/NA

Client Sample ID: CSD-3S — Lab Sample ID: 500-122074-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	6100		500	190	ug/L	1		6020	Total Recoverable
Chloride	19	B	2.0	0.76	mg/L	10		300.0	Total/NA
Nitrogen, Nitrate Nitrite	35		2.5	1.1	mg/L	25		353.2	Total/NA
Nitrogen, Kjeldahl	0.56	B	0.40	0.15	mg/L	1		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	1.7	B	1.0	0.27	mg/L	1		9060A	Total/NA
Total Dissolved Solids	220		10	4.3	mg/L	1		SM 2540C	Total/NA
Ammonia	0.11	J	0.20	0.10	mg/L	1		SM 4500 NH3 G	Total/NA

Client Sample ID: CSD-3D — Lab Sample ID: 500-122074-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	1300		500	190	ug/L	1		6020	Total Recoverable
Chloride	9.2	B	0.40	0.15	mg/L	2		300.0	Total/NA
Nitrogen, Nitrate Nitrite	17		1.0	0.45	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: 500-122074-1

Client Sample ID: CSD-3D (Continued) — Lab Sample ID: 500-122074-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nitrogen, Kjeldahl	0.44	B	0.40	0.15	mg/L	1		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	0.51	J B	1.0	0.27	mg/L	1		9060A	Total/NA
Total Dissolved Solids	110		10	4.3	mg/L	1		SM 2540C	Total/NA
Chemical Oxygen Demand	8.8	J	10	6.1	mg/L	1		SM 5220C	Total/NA

Client Sample ID: CSD-4 — Lab Sample ID: 500-122074-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	41000		500	190	ug/L	1		6020	Total Recoverable
Chloride	60	B	5.0	1.9	mg/L	25		300.0	Total/NA
Nitrogen, Nitrate Nitrite	75		5.0	2.3	mg/L	50		353.2	Total/NA
Nitrogen, Kjeldahl	1.5	B	0.40	0.15	mg/L	1		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	3.9	B	1.0	0.27	mg/L	1		9060A	Total/NA
Total Dissolved Solids	680		10	4.3	mg/L	1		SM 2540C	Total/NA
Chemical Oxygen Demand	19		10	6.1	mg/L	1		SM 5220C	Total/NA

Client Sample ID: CSD-4 DUP — Lab Sample ID: 500-122074-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	40000		500	190	ug/L	1		6020	Total Recoverable
Chloride	58	B	4.0	1.5	mg/L	20		300.0	Total/NA
Nitrogen, Nitrate Nitrite	69		5.0	2.3	mg/L	50		353.2	Total/NA
Nitrogen, Kjeldahl	0.78	B	0.40	0.15	mg/L	1		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	4.1	B	1.0	0.27	mg/L	1		9060A	Total/NA
Total Dissolved Solids	670		10	4.3	mg/L	1		SM 2540C	Total/NA
Chemical Oxygen Demand	11		10	6.1	mg/L	1		SM 5220C	Total/NA

Client Sample ID: CSD-5 — Lab Sample ID: 500-122074-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	19000		500	190	ug/L	1		6020	Total Recoverable
Chloride	44	B	4.0	1.5	mg/L	20		300.0	Total/NA
Nitrogen, Nitrate Nitrite	3.3		0.20	0.090	mg/L	2		353.2	Total/NA
Nitrogen, Kjeldahl	1.1	B	0.40	0.15	mg/L	1		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	2.1	B	1.0	0.27	mg/L	1		9060A	Total/NA
Total Dissolved Solids	240		10	4.3	mg/L	1		SM 2540C	Total/NA
Ammonia	0.76		0.20	0.10	mg/L	1		SM 4500 NH3 G	Total/NA
Chemical Oxygen Demand	6.2	J	10	6.1	mg/L	1		SM 5220C	Total/NA

Client Sample ID: CSD-6 — Lab Sample ID: 500-122074-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	71000		500	190	ug/L	1		6020	Total Recoverable
Chloride	27	B	2.0	0.76	mg/L	10		300.0	Total/NA
Nitrogen, Nitrate Nitrite	38		2.5	1.1	mg/L	25		353.2	Total/NA
Nitrogen, Kjeldahl	0.93	B	0.40	0.15	mg/L	1		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	4.6	B	1.0	0.27	mg/L	1		9060A	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: 500-122074-1

Client Sample ID: CSD-6 (Continued) — Lab Sample ID: 500-122074-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	430		10	4.3	mg/L	1		SM 2540C	Total/NA
Chemical Oxygen Demand	27		10	6.1	mg/L	1		SM 5220C	Total/NA

Client Sample ID: CSD-7 — Lab Sample ID: 500-122074-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	88000		500	190	ug/L	1		6020	Total Recoverable
Chloride	61	B	5.0	1.9	mg/L	25		300.0	Total/NA
Nitrogen, Nitrate Nitrite	31		2.5	1.1	mg/L	25		353.2	Total/NA
Nitrogen, Kjeldahl	9.7	B	2.0	0.74	mg/L	5		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	180	B	5.0	1.3	mg/L	5		9060A	Total/NA
Total Dissolved Solids	720		10	4.3	mg/L	1		SM 2540C	Total/NA
Ammonia	0.86		0.20	0.10	mg/L	1		SM 4500 NH3 G	Total/NA
Chemical Oxygen Demand	520		100	61	mg/L	10		SM 5220C	Total/NA

Client Sample ID: CSD-8 — Lab Sample ID: 500-122074-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	63000		500	190	ug/L	1		6020	Total Recoverable
Chloride	43	B	4.0	1.5	mg/L	20		300.0	Total/NA
Nitrogen, Nitrate Nitrite	57		5.0	2.3	mg/L	50		353.2	Total/NA
Nitrogen, Kjeldahl	1.5	B	0.40	0.15	mg/L	1		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	4.9	B	1.0	0.27	mg/L	1		9060A	Total/NA
Total Dissolved Solids	560		10	4.3	mg/L	1		SM 2540C	Total/NA
Chemical Oxygen Demand	14		10	6.1	mg/L	1		SM 5220C	Total/NA

Client Sample ID: CSD-9 — Lab Sample ID: 500-122074-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	22000		500	190	ug/L	1		6020	Total Recoverable
Chloride	7.9	B	0.40	0.15	mg/L	2		300.0	Total/NA
Nitrogen, Nitrate Nitrite	10		1.0	0.45	mg/L	10		353.2	Total/NA
Nitrogen, Kjeldahl	0.50	B	0.40	0.15	mg/L	1		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	2.7	B	1.0	0.27	mg/L	1		9060A	Total/NA
Total Dissolved Solids	110		10	4.3	mg/L	1		SM 2540C	Total/NA
Chemical Oxygen Demand	9.3	J	10	6.1	mg/L	1		SM 5220C	Total/NA

Client Sample ID: CSD-9 DUP — Lab Sample ID: 500-122074-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	21000		500	190	ug/L	1		6020	Total Recoverable
Chloride	8.3	B	0.40	0.15	mg/L	2		300.0	Total/NA
Nitrogen, Nitrate Nitrite	9.9		1.0	0.45	mg/L	10		353.2	Total/NA
Nitrogen, Kjeldahl	0.51	B	0.40	0.15	mg/L	1		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	2.6	B	1.0	0.27	mg/L	1		9060A	Total/NA
Total Dissolved Solids	100		10	4.3	mg/L	1		SM 2540C	Total/NA
Chemical Oxygen Demand	8.3	J	10	6.1	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: 500-122074-1

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: 500-122074-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-122074-1	CSD-1S	Water	12/28/16 13:30	12/30/16 10:20
500-122074-2	CSD-1D	Water	12/28/16 14:10	12/30/16 10:20
500-122074-3	CSD-2	Water	12/28/16 15:30	12/30/16 10:20
500-122074-4	CSD-3S	Water	12/28/16 08:35	12/30/16 10:20
500-122074-5	CSD-3D	Water	12/28/16 08:05	12/30/16 10:20
500-122074-6	CSD-4	Water	12/28/16 10:05	12/30/16 10:20
500-122074-7	CSD-4 DUP	Water	12/28/16 10:05	12/30/16 10:20
500-122074-8	CSD-5	Water	12/28/16 14:45	12/30/16 10:20
500-122074-9	CSD-6	Water	12/28/16 11:25	12/30/16 10:20
500-122074-10	CSD-7	Water	12/28/16 10:50	12/30/16 10:20
500-122074-11	CSD-8	Water	12/28/16 09:20	12/30/16 10:20
500-122074-12	CSD-9	Water	12/28/16 12:10	12/30/16 10:20
500-122074-13	CSD-9 DUP	Water	12/28/16 12:10	12/30/16 10:20

Client Sample Results

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

TestAmerica Job ID: 500-122074-1

Client Sample ID: CSD-1S

Lab Sample ID: 500-122074-1
Date Collected: 12/28/16 13:30
Matrix: Water
Date Received: 12/30/16 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**22000**	**F1**	500	190	ug/L		01/03/17 08:26	01/03/17 15:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**19**	**B**	2.0	0.76	mg/L			01/04/17 19:10	10
Nitrogen, Nitrate Nitrite	**16**		1.0	0.45	mg/L			01/06/17 22:09	10
Nitrogen, Kjeldahl	**3.3**	**B**	0.40	0.15	mg/L		01/10/17 07:20	01/10/17 09:32	1
Total Organic Carbon - Duplicates	**1.5**		1.0	0.27	mg/L			01/09/17 21:49	1
Total Dissolved Solids	**160**		10	4.3	mg/L			01/04/17 01:18	1
Ammonia	**3.1**		0.20	0.10	mg/L		01/04/17 16:33	01/04/17 19:53	1
Chemical Oxygen Demand	<6.1		10	6.1	mg/L		01/03/17 10:28	01/03/17 14:36	1

Client Sample ID: CSD-1D

Lab Sample ID: 500-122074-2
Date Collected: 12/28/16 14:10
Matrix: Water
Date Received: 12/30/16 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**28000**		500	190	ug/L		01/03/17 08:26	01/03/17 15:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**41**	**B**	2.0	0.76	mg/L			01/04/17 19:22	10
Nitrogen, Nitrate Nitrite	**24**		2.5	1.1	mg/L			01/06/17 22:14	25
Nitrogen, Kjeldahl	**2.3**	**B**	0.40	0.15	mg/L		01/10/17 07:20	01/10/17 09:35	1
Total Organic Carbon - Duplicates	**2.2**		1.0	0.27	mg/L			01/09/17 22:26	1
Total Dissolved Solids	**350**		10	4.3	mg/L			01/04/17 01:23	1
Ammonia	**1.8**		0.20	0.10	mg/L		01/04/17 16:33	01/04/17 19:55	1
Chemical Oxygen Demand	**7.8**	**J**	10	6.1	mg/L		01/03/17 10:28	01/03/17 14:41	1

Client Sample ID: CSD-2

Lab Sample ID: 500-122074-3
Date Collected: 12/28/16 15:30
Matrix: Water
Date Received: 12/30/16 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**9500**		500	190	ug/L		01/03/17 08:26	01/03/17 15:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.2**	**B**	1.0	0.38	mg/L			01/04/17 19:35	5
Nitrogen, Nitrate Nitrite	**9.3**		1.0	0.45	mg/L			01/06/17 22:16	10
Nitrogen, Kjeldahl	**0.51**	**B**	0.40	0.15	mg/L		01/10/17 07:20	01/10/17 09:37	1
Total Organic Carbon - Duplicates	**1.6**		1.0	0.27	mg/L			01/09/17 22:43	1
Total Dissolved Solids	**98**		10	4.3	mg/L			01/04/17 01:27	1
Ammonia	<0.10		0.20	0.10	mg/L		01/05/17 16:58	01/05/17 19:59	1
Chemical Oxygen Demand	<6.1		10	6.1	mg/L		01/03/17 10:28	01/03/17 14:42	1

Client Sample Results

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

TestAmerica Job ID: 500-122074-1

Client Sample ID: CSD-3S

Lab Sample ID: 500-122074-4
Matrix: Water

Date Collected: 12/28/16 08:35
Date Received: 12/30/16 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**6100**		500	190	ug/L		01/03/17 08:26	01/03/17 15:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**19**	**B**	2.0	0.76	mg/L			01/04/17 19:48	10
Nitrogen, Nitrate Nitrite	**35**		2.5	1.1	mg/L			01/06/17 22:18	25
Nitrogen, Kjeldahl	**0.56**	**B**	0.40	0.15	mg/L		01/10/17 07:20	01/10/17 09:40	1
Total Organic Carbon - Duplicates	**1.7**	**B**	1.0	0.27	mg/L			01/10/17 19:13	1
Total Dissolved Solids	**220**		10	4.3	mg/L			01/04/17 01:31	1
Ammonia	**0.11**	**J**	0.20	0.10	mg/L		01/05/17 16:58	01/05/17 20:07	1
Chemical Oxygen Demand	<6.1		10	6.1	mg/L		01/03/17 10:28	01/03/17 14:43	1

Client Sample ID: CSD-3D

Lab Sample ID: 500-122074-5
Matrix: Water

Date Collected: 12/28/16 08:05
Date Received: 12/30/16 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**1300**		500	190	ug/L		01/03/17 08:26	01/03/17 15:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9.2**	**B**	0.40	0.15	mg/L			01/04/17 20:00	2
Nitrogen, Nitrate Nitrite	**17**		1.0	0.45	mg/L			01/06/17 22:20	10
Nitrogen, Kjeldahl	**0.44**	**B**	0.40	0.15	mg/L		01/10/17 07:20	01/10/17 09:43	1
Total Organic Carbon - Duplicates	**0.51**	**J B**	1.0	0.27	mg/L			01/10/17 19:29	1
Total Dissolved Solids	**110**		10	4.3	mg/L			01/04/17 01:36	1
Ammonia	<0.10		0.20	0.10	mg/L		01/05/17 16:58	01/05/17 20:10	1
Chemical Oxygen Demand	**8.8**	**J**	10	6.1	mg/L		01/03/17 10:28	01/03/17 14:45	1

Client Sample ID: CSD-4

Lab Sample ID: 500-122074-6
Matrix: Water

Date Collected: 12/28/16 10:05
Date Received: 12/30/16 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**41000**		500	190	ug/L		01/03/17 08:26	01/03/17 15:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**60**	**B**	5.0	1.9	mg/L			01/04/17 21:04	25
Nitrogen, Nitrate Nitrite	**75**		5.0	2.3	mg/L			01/06/17 22:22	50
Nitrogen, Kjeldahl	**1.5**	**B**	0.40	0.15	mg/L		01/10/17 07:20	01/10/17 09:46	1
Total Organic Carbon - Duplicates	**3.9**	**B**	1.0	0.27	mg/L			01/10/17 19:45	1
Total Dissolved Solids	**680**		10	4.3	mg/L			01/04/17 01:40	1
Ammonia	<0.10		0.20	0.10	mg/L		01/05/17 16:58	01/05/17 20:13	1
Chemical Oxygen Demand	**19**		10	6.1	mg/L		01/03/17 10:28	01/03/17 14:46	1

Client Sample ID: CSD-4 DUP

Lab Sample ID: 500-122074-7
Date Collected: 12/28/16 10:05
Matrix: Water
Date Received: 12/30/16 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	40000		500	190	ug/L		01/03/17 08:26	01/03/17 15:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	58	B	4.0	1.5	mg/L			01/04/17 21:16	20
Nitrogen, Nitrate Nitrite	69		5.0	2.3	mg/L			01/06/17 23:34	50
Nitrogen, Kjeldahl	0.78	B	0.40	0.15	mg/L		01/10/17 07:20	01/10/17 09:49	1
Total Organic Carbon - Duplicates	4.1	B	1.0	0.27	mg/L			01/10/17 20:02	1
Total Dissolved Solids	670		10	4.3	mg/L			01/04/17 01:45	1
Ammonia	<0.10		0.20	0.10	mg/L		01/05/17 16:58	01/05/17 20:16	1
Chemical Oxygen Demand	11		10	6.1	mg/L		01/03/17 10:28	01/03/17 14:47	1

Client Sample ID: CSD-5

Lab Sample ID: 500-122074-8
Date Collected: 12/28/16 14:45
Matrix: Water
Date Received: 12/30/16 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	19000		500	190	ug/L		01/03/17 08:26	01/03/17 15:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	44	B	4.0	1.5	mg/L			01/04/17 21:29	20
Nitrogen, Nitrate Nitrite	3.3		0.20	0.090	mg/L			01/06/17 23:35	2
Nitrogen, Kjeldahl	1.1	B	0.40	0.15	mg/L		01/10/17 07:20	01/10/17 09:52	1
Total Organic Carbon - Duplicates	2.1	B	1.0	0.27	mg/L			01/10/17 20:19	1
Total Dissolved Solids	240		10	4.3	mg/L			01/04/17 02:18	1
Ammonia	0.76		0.20	0.10	mg/L		01/05/17 16:58	01/05/17 20:24	1
Chemical Oxygen Demand	6.2	J	10	6.1	mg/L		01/03/17 10:28	01/03/17 14:48	1

Client Sample ID: CSD-6

Lab Sample ID: 500-122074-9
Date Collected: 12/28/16 11:25
Matrix: Water
Date Received: 12/30/16 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	71000		500	190	ug/L		01/03/17 08:26	01/03/17 16:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27	B	2.0	0.76	mg/L			01/04/17 21:42	10
Nitrogen, Nitrate Nitrite	38		2.5	1.1	mg/L			01/06/17 23:36	25
Nitrogen, Kjeldahl	0.93	B	0.40	0.15	mg/L		01/10/17 07:20	01/10/17 10:00	1
Total Organic Carbon - Duplicates	4.6	B	1.0	0.27	mg/L			01/10/17 20:35	1
Total Dissolved Solids	430		10	4.3	mg/L			01/04/17 02:31	1
Ammonia	<0.10		0.20	0.10	mg/L		01/05/17 16:58	01/05/17 20:27	1
Chemical Oxygen Demand	27		10	6.1	mg/L		01/03/17 10:28	01/03/17 14:49	1

Client Sample Results

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

TestAmerica Job ID: 500-122074-1

Client Sample ID: CSD-7

Lab Sample ID: 500-122074-10
Date Collected: 12/28/16 10:50
Matrix: Water
Date Received: 12/30/16 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	88000		500	190	ug/L		01/03/17 08:26	01/03/17 16:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	61	B	5.0	1.9	mg/L			01/04/17 21:54	25
Nitrogen, Nitrate Nitrite	31		2.5	1.1	mg/L			01/06/17 23:37	25
Nitrogen, Kjeldahl	9.7	B	2.0	0.74	mg/L		01/10/17 07:20	01/10/17 10:03	5
Total Organic Carbon - Duplicates	180	B	5.0	1.3	mg/L			01/10/17 20:54	5
Total Dissolved Solids	720		10	4.3	mg/L			01/04/17 02:40	1
Ammonia	0.86		0.20	0.10	mg/L		01/05/17 16:58	01/05/17 20:29	1
Chemical Oxygen Demand	520		100	61	mg/L		01/03/17 10:28	01/03/17 14:14	10

Client Sample ID: CSD-8

Lab Sample ID: 500-122074-11
Date Collected: 12/28/16 09:20
Matrix: Water
Date Received: 12/30/16 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	63000		500	190	ug/L		01/03/17 08:26	01/03/17 16:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	43	B	4.0	1.5	mg/L			01/04/17 22:07	20
Nitrogen, Nitrate Nitrite	57		5.0	2.3	mg/L			01/06/17 23:38	50
Nitrogen, Kjeldahl	1.5	B	0.40	0.15	mg/L		01/10/17 07:20	01/10/17 10:06	1
Total Organic Carbon - Duplicates	4.9	B	1.0	0.27	mg/L			01/10/17 21:16	1
Total Dissolved Solids	560		10	4.3	mg/L			01/04/17 02:45	1
Ammonia	<0.10		0.20	0.10	mg/L		01/05/17 16:58	01/05/17 20:32	1
Chemical Oxygen Demand	14		10	6.1	mg/L		01/03/17 10:28	01/03/17 14:50	1

Client Sample ID: CSD-9

Lab Sample ID: 500-122074-12
Date Collected: 12/28/16 12:10
Matrix: Water
Date Received: 12/30/16 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	22000		500	190	ug/L		01/03/17 08:26	01/03/17 16:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.9	B	0.40	0.15	mg/L			01/04/17 22:20	2
Nitrogen, Nitrate Nitrite	10		1.0	0.45	mg/L			01/06/17 22:36	10
Nitrogen, Kjeldahl	0.50	B	0.40	0.15	mg/L		01/10/17 07:20	01/10/17 10:08	1
Total Organic Carbon - Duplicates	2.7	B	1.0	0.27	mg/L			01/10/17 22:07	1
Total Dissolved Solids	110		10	4.3	mg/L			01/04/17 02:49	1
Ammonia	<0.10		0.20	0.10	mg/L		01/05/17 16:58	01/05/17 20:35	1
Chemical Oxygen Demand	9.3	J	10	6.1	mg/L		01/03/17 10:28	01/03/17 14:51	1

Client Sample Results

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

TestAmerica Job ID: 500-122074-1

Client Sample ID: CSD-9 DUP

Lab Sample ID: 500-122074-13

Date Collected: 12/28/16 12:10
Date Received: 12/30/16 10:20

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**21000**		500	190	ug/L		01/03/17 08:26	01/03/17 16:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.3**	B	0.40	0.15	mg/L			01/04/17 22:32	2
Nitrogen, Nitrate Nitrite	**9.9**		1.0	0.45	mg/L			01/06/17 22:38	10
Nitrogen, Kjeldahl	**0.51**	B	0.40	0.15	mg/L		01/10/17 07:20	01/10/17 10:11	1
Total Organic Carbon - Duplicates	**2.6**	B	1.0	0.27	mg/L			01/10/17 22:23	1
Total Dissolved Solids	**100**		10	4.3	mg/L			01/04/17 02:54	1
Ammonia	<0.10		0.20	0.10	mg/L		01/05/17 16:58	01/05/17 20:38	1
Chemical Oxygen Demand	**8.3**	J	10	6.1	mg/L		01/03/17 10:28	01/03/17 14:52	1

Qualifiers

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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: 500-122074-1

Metals

Prep Batch: 367295

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-122074-1	CSD-1S	Total Recoverable	Water	3005A	
500-122074-2	CSD-1D	Total Recoverable	Water	3005A	
500-122074-3	CSD-2	Total Recoverable	Water	3005A	
500-122074-4	CSD-3S	Total Recoverable	Water	3005A	
500-122074-5	CSD-3D	Total Recoverable	Water	3005A	
500-122074-6	CSD-4	Total Recoverable	Water	3005A	
500-122074-7	CSD-4 DUP	Total Recoverable	Water	3005A	
500-122074-8	CSD-5	Total Recoverable	Water	3005A	
500-122074-9	CSD-6	Total Recoverable	Water	3005A	
500-122074-10	CSD-7	Total Recoverable	Water	3005A	
500-122074-11	CSD-8	Total Recoverable	Water	3005A	
500-122074-12	CSD-9	Total Recoverable	Water	3005A	
500-122074-13	CSD-9 DUP	Total Recoverable	Water	3005A	
MB 500-367295/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-367295/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-122074-1 MS	CSD-1S	Total Recoverable	Water	3005A	
500-122074-1 MSD	CSD-1S	Total Recoverable	Water	3005A	
500-122074-1 DU	CSD-1S	Total Recoverable	Water	3005A	

Analysis Batch: 367413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-122074-1	CSD-1S	Total Recoverable	Water	6020	367295
500-122074-2	CSD-1D	Total Recoverable	Water	6020	367295
500-122074-3	CSD-2	Total Recoverable	Water	6020	367295
500-122074-4	CSD-3S	Total Recoverable	Water	6020	367295
500-122074-5	CSD-3D	Total Recoverable	Water	6020	367295
500-122074-6	CSD-4	Total Recoverable	Water	6020	367295
500-122074-7	CSD-4 DUP	Total Recoverable	Water	6020	367295
500-122074-8	CSD-5	Total Recoverable	Water	6020	367295
500-122074-9	CSD-6	Total Recoverable	Water	6020	367295
500-122074-10	CSD-7	Total Recoverable	Water	6020	367295
500-122074-11	CSD-8	Total Recoverable	Water	6020	367295
500-122074-12	CSD-9	Total Recoverable	Water	6020	367295
500-122074-13	CSD-9 DUP	Total Recoverable	Water	6020	367295
MB 500-367295/1-A	Method Blank	Total Recoverable	Water	6020	367295
LCS 500-367295/2-A	Lab Control Sample	Total Recoverable	Water	6020	367295
500-122074-1 MS	CSD-1S	Total Recoverable	Water	6020	367295
500-122074-1 MSD	CSD-1S	Total Recoverable	Water	6020	367295
500-122074-1 DU	CSD-1S	Total Recoverable	Water	6020	367295

General Chemistry

Prep Batch: 367317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-122074-1	CSD-1S	Total/NA	Water	SM 5220	
500-122074-2	CSD-1D	Total/NA	Water	SM 5220	
500-122074-3	CSD-2	Total/NA	Water	SM 5220	
500-122074-4	CSD-3S	Total/NA	Water	SM 5220	
500-122074-5	CSD-3D	Total/NA	Water	SM 5220	
500-122074-6	CSD-4	Total/NA	Water	SM 5220	

General Chemistry (Continued)

Prep Batch: 367317 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-122074-7	CSD-4 DUP	Total/NA	Water	SM 5220	
500-122074-8	CSD-5	Total/NA	Water	SM 5220	
500-122074-9	CSD-6	Total/NA	Water	SM 5220	
500-122074-11	CSD-8	Total/NA	Water	SM 5220	
500-122074-12	CSD-9	Total/NA	Water	SM 5220	
500-122074-13	CSD-9 DUP	Total/NA	Water	SM 5220	
MB 500-367317/1-A	Method Blank	Total/NA	Water	SM 5220	
LCS 500-367317/2-A	Lab Control Sample	Total/NA	Water	SM 5220	
500-122074-1 MS	CSD-1S	Total/NA	Water	SM 5220	
500-122074-1 MSD	CSD-1S	Total/NA	Water	SM 5220	

Prep Batch: 367318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-122074-10	CSD-7	Total/NA	Water	SM 5220	
MB 500-367318/1-A	Method Blank	Total/NA	Water	SM 5220	
LCS 500-367318/2-A	Lab Control Sample	Total/NA	Water	SM 5220	

Analysis Batch: 367386

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-122074-1	CSD-1S	Total/NA	Water	SM 5220C	367317
500-122074-2	CSD-1D	Total/NA	Water	SM 5220C	367317
500-122074-3	CSD-2	Total/NA	Water	SM 5220C	367317
500-122074-4	CSD-3S	Total/NA	Water	SM 5220C	367317
500-122074-5	CSD-3D	Total/NA	Water	SM 5220C	367317
500-122074-6	CSD-4	Total/NA	Water	SM 5220C	367317
500-122074-7	CSD-4 DUP	Total/NA	Water	SM 5220C	367317
500-122074-8	CSD-5	Total/NA	Water	SM 5220C	367317
500-122074-9	CSD-6	Total/NA	Water	SM 5220C	367317
500-122074-11	CSD-8	Total/NA	Water	SM 5220C	367317
500-122074-12	CSD-9	Total/NA	Water	SM 5220C	367317
500-122074-13	CSD-9 DUP	Total/NA	Water	SM 5220C	367317
MB 500-367317/1-A	Method Blank	Total/NA	Water	SM 5220C	367317
LCS 500-367317/2-A	Lab Control Sample	Total/NA	Water	SM 5220C	367317
500-122074-1 MS	CSD-1S	Total/NA	Water	SM 5220C	367317
500-122074-1 MSD	CSD-1S	Total/NA	Water	SM 5220C	367317

Analysis Batch: 367387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-122074-10	CSD-7	Total/NA	Water	SM 5220C	367318
MB 500-367318/1-A	Method Blank	Total/NA	Water	SM 5220C	367318
LCS 500-367318/2-A	Lab Control Sample	Total/NA	Water	SM 5220C	367318

Analysis Batch: 367405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-122074-1	CSD-1S	Total/NA	Water	SM 2540C	
500-122074-2	CSD-1D	Total/NA	Water	SM 2540C	
500-122074-3	CSD-2	Total/NA	Water	SM 2540C	
500-122074-4	CSD-3S	Total/NA	Water	SM 2540C	
500-122074-5	CSD-3D	Total/NA	Water	SM 2540C	
500-122074-6	CSD-4	Total/NA	Water	SM 2540C	
500-122074-7	CSD-4 DUP	Total/NA	Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 367405 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-367405/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-367405/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 367406

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-122074-8	CSD-5	Total/NA	Water	SM 2540C	
500-122074-9	CSD-6	Total/NA	Water	SM 2540C	
500-122074-10	CSD-7	Total/NA	Water	SM 2540C	
500-122074-11	CSD-8	Total/NA	Water	SM 2540C	
500-122074-12	CSD-9	Total/NA	Water	SM 2540C	
500-122074-13	CSD-9 DUP	Total/NA	Water	SM 2540C	
MB 500-367406/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-367406/2	Lab Control Sample	Total/NA	Water	SM 2540C	
500-122074-8 MS	CSD-5	Total/NA	Water	SM 2540C	
500-122074-8 DU	CSD-5	Total/NA	Water	SM 2540C	
500-122074-9 DU	CSD-6	Total/NA	Water	SM 2540C	

Prep Batch: 367519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-122074-1	CSD-1S	Total/NA	Water	SM 4500 NH3 B	
500-122074-2	CSD-1D	Total/NA	Water	SM 4500 NH3 B	
MB 500-367519/1-A	Method Blank	Total/NA	Water	SM 4500 NH3 B	
LCS 500-367519/2-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 B	

Analysis Batch: 367535

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-122074-1	CSD-1S	Total/NA	Water	300.0	
500-122074-2	CSD-1D	Total/NA	Water	300.0	
500-122074-3	CSD-2	Total/NA	Water	300.0	
500-122074-4	CSD-3S	Total/NA	Water	300.0	
500-122074-5	CSD-3D	Total/NA	Water	300.0	
500-122074-6	CSD-4	Total/NA	Water	300.0	
500-122074-7	CSD-4 DUP	Total/NA	Water	300.0	
500-122074-8	CSD-5	Total/NA	Water	300.0	
500-122074-9	CSD-6	Total/NA	Water	300.0	
500-122074-10	CSD-7	Total/NA	Water	300.0	
500-122074-11	CSD-8	Total/NA	Water	300.0	
500-122074-12	CSD-9	Total/NA	Water	300.0	
500-122074-13	CSD-9 DUP	Total/NA	Water	300.0	
MB 500-367535/23	Method Blank	Total/NA	Water	300.0	
LCS 500-367535/34	Lab Control Sample	Total/NA	Water	300.0	
500-122074-5 MS	CSD-3D	Total/NA	Water	300.0	
500-122074-5 MSD	CSD-3D	Total/NA	Water	300.0	

Analysis Batch: 367539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-122074-1	CSD-1S	Total/NA	Water	SM 4500 NH3 G	367519
500-122074-2	CSD-1D	Total/NA	Water	SM 4500 NH3 G	367519
MB 500-367519/1-A	Method Blank	Total/NA	Water	SM 4500 NH3 G	367519
LCS 500-367519/2-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 G	367519

General Chemistry (Continued)

Prep Batch: 367658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-122074-3	CSD-2	Total/NA	Water	SM 4500 NH3 B	
500-122074-4	CSD-3S	Total/NA	Water	SM 4500 NH3 B	
500-122074-5	CSD-3D	Total/NA	Water	SM 4500 NH3 B	
500-122074-6	CSD-4	Total/NA	Water	SM 4500 NH3 B	
500-122074-7	CSD-4 DUP	Total/NA	Water	SM 4500 NH3 B	
500-122074-8	CSD-5	Total/NA	Water	SM 4500 NH3 B	
500-122074-9	CSD-6	Total/NA	Water	SM 4500 NH3 B	
500-122074-10	CSD-7	Total/NA	Water	SM 4500 NH3 B	
500-122074-11	CSD-8	Total/NA	Water	SM 4500 NH3 B	
500-122074-12	CSD-9	Total/NA	Water	SM 4500 NH3 B	
500-122074-13	CSD-9 DUP	Total/NA	Water	SM 4500 NH3 B	
MB 500-367658/1-A	Method Blank	Total/NA	Water	SM 4500 NH3 B	
LCS 500-367658/2-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 B	
500-122074-3 MS	CSD-2	Total/NA	Water	SM 4500 NH3 B	
500-122074-3 MSD	CSD-2	Total/NA	Water	SM 4500 NH3 B	

Analysis Batch: 367673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-122074-3	CSD-2	Total/NA	Water	SM 4500 NH3 G	367658
500-122074-4	CSD-3S	Total/NA	Water	SM 4500 NH3 G	367658
500-122074-5	CSD-3D	Total/NA	Water	SM 4500 NH3 G	367658
500-122074-6	CSD-4	Total/NA	Water	SM 4500 NH3 G	367658
500-122074-7	CSD-4 DUP	Total/NA	Water	SM 4500 NH3 G	367658
500-122074-8	CSD-5	Total/NA	Water	SM 4500 NH3 G	367658
500-122074-9	CSD-6	Total/NA	Water	SM 4500 NH3 G	367658
500-122074-10	CSD-7	Total/NA	Water	SM 4500 NH3 G	367658
500-122074-11	CSD-8	Total/NA	Water	SM 4500 NH3 G	367658
500-122074-12	CSD-9	Total/NA	Water	SM 4500 NH3 G	367658
500-122074-13	CSD-9 DUP	Total/NA	Water	SM 4500 NH3 G	367658
MB 500-367658/1-A	Method Blank	Total/NA	Water	SM 4500 NH3 G	367658
LCS 500-367658/2-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 G	367658
500-122074-3 MS	CSD-2	Total/NA	Water	SM 4500 NH3 G	367658
500-122074-3 MSD	CSD-2	Total/NA	Water	SM 4500 NH3 G	367658

Analysis Batch: 367813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-122074-1	CSD-1S	Total/NA	Water	353.2	
500-122074-2	CSD-1D	Total/NA	Water	353.2	
500-122074-3	CSD-2	Total/NA	Water	353.2	
500-122074-4	CSD-3S	Total/NA	Water	353.2	
500-122074-5	CSD-3D	Total/NA	Water	353.2	
500-122074-6	CSD-4	Total/NA	Water	353.2	
500-122074-7	CSD-4 DUP	Total/NA	Water	353.2	
500-122074-8	CSD-5	Total/NA	Water	353.2	
500-122074-9	CSD-6	Total/NA	Water	353.2	
500-122074-10	CSD-7	Total/NA	Water	353.2	
500-122074-11	CSD-8	Total/NA	Water	353.2	
500-122074-12	CSD-9	Total/NA	Water	353.2	
500-122074-13	CSD-9 DUP	Total/NA	Water	353.2	
MB 500-367813/12	Method Blank	Total/NA	Water	353.2	
LCS 500-367813/13	Lab Control Sample	Total/NA	Water	353.2	

General Chemistry (Continued)

Analysis Batch: 367813 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-122074-1 MS	CSD-1S	Total/NA	Water	353.2	
500-122074-1 MSD	CSD-1S	Total/NA	Water	353.2	

Prep Batch: 367969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-122074-1	CSD-1S	Total/NA	Water	SM4500Norg_C	
500-122074-2	CSD-1D	Total/NA	Water	SM4500Norg_C	
500-122074-3	CSD-2	Total/NA	Water	SM4500Norg_C	
500-122074-4	CSD-3S	Total/NA	Water	SM4500Norg_C	
500-122074-5	CSD-3D	Total/NA	Water	SM4500Norg_C	
500-122074-6	CSD-4	Total/NA	Water	SM4500Norg_C	
500-122074-7	CSD-4 DUP	Total/NA	Water	SM4500Norg_C	
500-122074-8	CSD-5	Total/NA	Water	SM4500Norg_C	
500-122074-9	CSD-6	Total/NA	Water	SM4500Norg_C	
500-122074-10	CSD-7	Total/NA	Water	SM4500Norg_C	
500-122074-11	CSD-8	Total/NA	Water	SM4500Norg_C	
500-122074-12	CSD-9	Total/NA	Water	SM4500Norg_C	
500-122074-13	CSD-9 DUP	Total/NA	Water	SM4500Norg_C	
MB 500-367969/1-A	Method Blank	Total/NA	Water	SM4500Norg_C	
LCS 500-367969/2-A	Lab Control Sample	Total/NA	Water	SM4500Norg_C	
500-122074-13 MS	CSD-9 DUP	Total/NA	Water	SM4500Norg_C	
500-122074-13 MSD	CSD-9 DUP	Total/NA	Water	SM4500Norg_C	

Analysis Batch: 368105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-122074-1	CSD-1S	Total/NA	Water	4500 NH3 G	367969
500-122074-2	CSD-1D	Total/NA	Water	4500 NH3 G	367969
500-122074-3	CSD-2	Total/NA	Water	4500 NH3 G	367969
500-122074-4	CSD-3S	Total/NA	Water	4500 NH3 G	367969
500-122074-5	CSD-3D	Total/NA	Water	4500 NH3 G	367969
500-122074-6	CSD-4	Total/NA	Water	4500 NH3 G	367969
500-122074-7	CSD-4 DUP	Total/NA	Water	4500 NH3 G	367969
500-122074-8	CSD-5	Total/NA	Water	4500 NH3 G	367969
500-122074-9	CSD-6	Total/NA	Water	4500 NH3 G	367969
500-122074-10	CSD-7	Total/NA	Water	4500 NH3 G	367969
500-122074-11	CSD-8	Total/NA	Water	4500 NH3 G	367969
500-122074-12	CSD-9	Total/NA	Water	4500 NH3 G	367969
500-122074-13	CSD-9 DUP	Total/NA	Water	4500 NH3 G	367969
MB 500-367969/1-A	Method Blank	Total/NA	Water	4500 NH3 G	367969
LCS 500-367969/2-A	Lab Control Sample	Total/NA	Water	4500 NH3 G	367969
500-122074-13 MS	CSD-9 DUP	Total/NA	Water	4500 NH3 G	367969
500-122074-13 MSD	CSD-9 DUP	Total/NA	Water	4500 NH3 G	367969

Analysis Batch: 368125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-122074-1	CSD-1S	Total/NA	Water	9060A	
500-122074-2	CSD-1D	Total/NA	Water	9060A	
500-122074-3	CSD-2	Total/NA	Water	9060A	
MB 500-368125/4	Method Blank	Total/NA	Water	9060A	
LCS 500-368125/5	Lab Control Sample	Total/NA	Water	9060A	
500-122074-1 MS	CSD-1S	Total/NA	Water	9060A	

General Chemistry (Continued)

Analysis Batch: 368125 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-122074-1 MSD	CSD-1S	Total/NA	Water	9060A	

Analysis Batch: 368134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-122074-4	CSD-3S	Total/NA	Water	9060A	
500-122074-5	CSD-3D	Total/NA	Water	9060A	
500-122074-6	CSD-4	Total/NA	Water	9060A	
500-122074-7	CSD-4 DUP	Total/NA	Water	9060A	
500-122074-8	CSD-5	Total/NA	Water	9060A	
500-122074-9	CSD-6	Total/NA	Water	9060A	
500-122074-10	CSD-7	Total/NA	Water	9060A	
500-122074-11	CSD-8	Total/NA	Water	9060A	
500-122074-12	CSD-9	Total/NA	Water	9060A	
500-122074-13	CSD-9 DUP	Total/NA	Water	9060A	
MB 500-368134/4	Method Blank	Total/NA	Water	9060A	
LCS 500-368134/5	Lab Control Sample	Total/NA	Water	9060A	
500-122074-11 MS	CSD-8	Total/NA	Water	9060A	
500-122074-11 MSD	CSD-8	Total/NA	Water	9060A	

QC Sample Results

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

TestAmerica Job ID: 500-122074-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 500-367295/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 367413 — **Prep Batch: 367295**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	<190		500	190	ug/L		01/03/17 08:26	01/03/17 14:56	1

Lab Sample ID: LCS 500-367295/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 367413 — **Prep Batch: 367295**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Potassium	10000	10900		ug/L		109	80 - 120

Lab Sample ID: 500-122074-1 MS — **Client Sample ID: CSD-1S**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 367413 — **Prep Batch: 367295**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Potassium	22000	F1	10000	35600	F1	ug/L		134	75 - 125

Lab Sample ID: 500-122074-1 MSD — **Client Sample ID: CSD-1S**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 367413 — **Prep Batch: 367295**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Potassium	22000	F1	10000	34300		ug/L		120	75 - 125	4	20

Lab Sample ID: 500-122074-1 DU — **Client Sample ID: CSD-1S**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 367413 — **Prep Batch: 367295**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Potassium	22000	F1	22300		ug/L		0.1	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 500-367535/23 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 367535

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.112	J	0.20	0.076	mg/L			01/04/17 15:47	1

Lab Sample ID: LCS 500-367535/34 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 367535

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	3.00	2.85		mg/L		95	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 500-122074-5 MS — **Client Sample ID: CSD-3D**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 367535

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	9.2	B	2.00	11.5	4	mg/L		113	80 - 120

Lab Sample ID: 500-122074-5 MSD — **Client Sample ID: CSD-3D**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 367535

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	9.2	B	2.00	11.7	4	mg/L		123	80 - 120	2	20

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 500-367813/12 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 367813

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Nitrate Nitrite	<0.045		0.10	0.045	mg/L			01/06/17 22:05	1

Lab Sample ID: LCS 500-367813/13 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 367813

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Nitrate Nitrite	1.00	0.994		mg/L		99	90 - 110

Lab Sample ID: 500-122074-1 MS — **Client Sample ID: CSD-1S**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 367813

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Nitrate Nitrite	16		1.00	16.4	4	mg/L		68	90 - 110

Lab Sample ID: 500-122074-1 MSD — **Client Sample ID: CSD-1S**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 367813

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrogen, Nitrate Nitrite	16		1.00	16.8	4	mg/L		105	90 - 110	2	20

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

Lab Sample ID: MB 500-367969/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 368105 — **Prep Batch: 367969**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Kjeldahl	0.167	J	0.40	0.15	mg/L		01/10/17 07:20	01/10/17 09:26	1

Method: 4500 NH3 G - 4500NH3 G - Nitrogen, Total Kjeldahl' (Continued)

Lab Sample ID: LCS 500-367969/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 368105 — **Prep Batch: 367969**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Kjeldahl	2.50	2.42		mg/L		97	80 - 120

Lab Sample ID: 500-122074-13 MS — **Client Sample ID: CSD-9 DUP**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 368105 — **Prep Batch: 367969**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Kjeldahl	0.51	B	2.50	2.67		mg/L		86	75 - 125

Lab Sample ID: 500-122074-13 MSD — **Client Sample ID: CSD-9 DUP**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 368105 — **Prep Batch: 367969**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrogen, Kjeldahl	0.51	B	2.50	2.80		mg/L		91	75 - 125	5	20

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

Lab Sample ID: MB 500-368125/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 368125

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	<0.27		1.0	0.27	mg/L			01/09/17 20:17	1

Lab Sample ID: LCS 500-368125/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 368125

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Duplicates	10.0	9.64		mg/L		96	80 - 120
TOC Result 1	10.0	9.61		mg/L		96	80 - 120
TOC Result 2	10.0	9.67		mg/L		97	80 - 120

Lab Sample ID: 500-122074-1 MS — **Client Sample ID: CSD-1S**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 368125

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Duplicates	1.5		10.0	10.9		mg/L		94	75 - 125
TOC Result 1	1.5		10.0	10.9		mg/L		94	75 - 125
TOC Result 2	1.5		10.0	10.9		mg/L		94	75 - 125

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

Lab Sample ID: 500-122074-1 MSD — **Client Sample ID: CSD-1S**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 368125

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	1.5		10.0	10.9		mg/L		94	75 - 125	0	20
TOC Result 1	1.5		10.0	10.9		mg/L		94	75 - 125	0	20
TOC Result 2	1.5		10.0	10.9		mg/L		93	75 - 125	0	20

Lab Sample ID: MB 500-368134/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 368134

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	0.395	J	1.0	0.27	mg/L			01/10/17 18:41	1

Lab Sample ID: LCS 500-368134/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 368134

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Duplicates	10.0	10.2		mg/L		102	80 - 120
TOC Result 1	10.0	10.2		mg/L		102	80 - 120
TOC Result 2	10.0	10.3		mg/L		103	80 - 120

Lab Sample ID: 500-122074-11 MS — **Client Sample ID: CSD-8**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 368134

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Duplicates	4.9	B	10.0	14.7		mg/L		98	75 - 125
TOC Result 1	5.1	B	10.0	14.7		mg/L		97	75 - 125
TOC Result 2	4.8	B	10.0	14.7		mg/L		99	75 - 125

Lab Sample ID: 500-122074-11 MSD — **Client Sample ID: CSD-8**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 368134

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	4.9	B	10.0	14.8		mg/L		98	75 - 125	0	20
TOC Result 1	5.1	B	10.0	14.8		mg/L		97	75 - 125	0	20
TOC Result 2	4.8	B	10.0	14.8		mg/L		100	75 - 125	0	20

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

Lab Sample ID: MB 500-367405/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 367405

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<4.3		10	4.3	mg/L			01/04/17 00:08	1

QC Sample Results

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

TestAmerica Job ID: 500-122074-1

Lab Sample ID: LCS 500-367405/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 367405

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	250	264		mg/L		106	80 - 120

Lab Sample ID: MB 500-367406/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 367406

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<4.3		10	4.3	mg/L			01/04/17 02:09	1

Lab Sample ID: LCS 500-367406/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 367406

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	250	276		mg/L		110	80 - 120

Lab Sample ID: 500-122074-8 MS — **Client Sample ID: CSD-5**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 367406

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	240		250	446		mg/L		81	75 - 125

Lab Sample ID: 500-122074-8 DU — **Client Sample ID: CSD-5**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 367406

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	240		234		mg/L		4	5

Lab Sample ID: 500-122074-9 DU — **Client Sample ID: CSD-6**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 367406

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	430		420		mg/L		3	5

Method: SM 4500 NH3 G - Ammonia

Lab Sample ID: MB 500-367519/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 367539 — **Prep Batch: 367519**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	<0.10		0.20	0.10	mg/L		01/04/17 16:33	01/04/17 18:41	1

Lab Sample ID: LCS 500-367519/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 367539 — **Prep Batch: 367519**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	2.50	2.43		mg/L		97	80 - 120

QC Sample Results

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

TestAmerica Job ID: 500-122074-1

Lab Sample ID: MB 500-367658/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 367673 — **Prep Batch: 367658**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	<0.10		0.20	0.10	mg/L		01/05/17 16:58	01/05/17 19:51	1

Lab Sample ID: LCS 500-367658/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 367673 — **Prep Batch: 367658**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	2.50	2.39		mg/L		96	80 - 120

Lab Sample ID: 500-122074-3 MS — **Client Sample ID: CSD-2**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 367673 — **Prep Batch: 367658**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	<0.10		2.50	2.46		mg/L		98	75 - 125

Lab Sample ID: 500-122074-3 MSD — **Client Sample ID: CSD-2**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 367673 — **Prep Batch: 367658**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia	<0.10		2.50	2.39		mg/L		95	75 - 125	3	20

Method: SM 5220C - COD

Lab Sample ID: MB 500-367317/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 367386 — **Prep Batch: 367317**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	<6.1		10	6.1	mg/L		01/03/17 10:28	01/03/17 14:34	1

Lab Sample ID: LCS 500-367317/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 367386 — **Prep Batch: 367317**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	50.0	56.0		mg/L		112	80 - 120

Lab Sample ID: 500-122074-1 MS — **Client Sample ID: CSD-1S**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 367386 — **Prep Batch: 367317**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	<6.1		50.0	56.5		mg/L		113	75 - 125

Method: SM 5220C - COD (Continued)

Lab Sample ID: 500-122074-1 MSD — **Client Sample ID: CSD-1S**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 367386 — **Prep Batch: 367317**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chemical Oxygen Demand	<6.1		50.0	57.0		mg/L		114	75 - 125	1	20

Lab Sample ID: MB 500-367318/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 367387 — **Prep Batch: 367318**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	<61		100	61	mg/L		01/03/17 10:28	01/03/17 14:05	10

Lab Sample ID: LCS 500-367318/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 367387 — **Prep Batch: 367318**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	500	464		mg/L		93	80 - 120

Lab Chronicle

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

TestAmerica Job ID: 500-122074-1

Client Sample ID: CSD-1S — Lab Sample ID: 500-122074-1

Date Collected: 12/28/16 13:30
Date Received: 12/30/16 10:20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			367295	01/03/17 08:26	JEF	TAL CHI
Total Recoverable	Analysis	6020		1	367413	01/03/17 15:07	FXG	TAL CHI
Total/NA	Analysis	300.0		10	367535	01/04/17 19:10	EAT	TAL CHI
Total/NA	Analysis	353.2		10	367813	01/06/17 22:09	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			367969	01/10/17 07:20	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		1	368105	01/10/17 09:32	MTB	TAL CHI
Total/NA	Analysis	9060A		1	368125	01/09/17 21:49	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	367405	01/04/17 01:18	CLB	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			367519	01/04/17 16:33	JBJ	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	367539		JBJ	TAL CHI
					(Start)	01/04/17 19:53		
					(End)	01/04/17 19:55		
Total/NA	Prep	SM 5220			367317	01/03/17 10:28	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	367386	01/03/17 14:36	MAN	TAL CHI

Client Sample ID: CSD-1D — Lab Sample ID: 500-122074-2

Date Collected: 12/28/16 14:10
Date Received: 12/30/16 10:20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			367295	01/03/17 08:26	JEF	TAL CHI
Total Recoverable	Analysis	6020		1	367413	01/03/17 15:26	FXG	TAL CHI
Total/NA	Analysis	300.0		10	367535	01/04/17 19:22	EAT	TAL CHI
Total/NA	Analysis	353.2		25	367813	01/06/17 22:14	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			367969	01/10/17 07:20	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		1	368105	01/10/17 09:35	MTB	TAL CHI
Total/NA	Analysis	9060A		1	368125	01/09/17 22:26	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	367405	01/04/17 01:23	CLB	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			367519	01/04/17 16:33	JBJ	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	367539		JBJ	TAL CHI
					(Start)	01/04/17 19:55		
					(End)	01/04/17 19:58		
Total/NA	Prep	SM 5220			367317	01/03/17 10:28	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	367386	01/03/17 14:41	MAN	TAL CHI

Client Sample ID: CSD-2 — Lab Sample ID: 500-122074-3

Date Collected: 12/28/16 15:30
Date Received: 12/30/16 10:20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			367295	01/03/17 08:26	JEF	TAL CHI
Total Recoverable	Analysis	6020		1	367413	01/03/17 15:30	FXG	TAL CHI
Total/NA	Analysis	300.0		5	367535	01/04/17 19:35	EAT	TAL CHI

Lab Chronicle

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

TestAmerica Job ID: 500-122074-1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	353.2		10	367813	01/06/17 22:16	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			367969	01/10/17 07:20	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		1	368105	01/10/17 09:37	MTB	TAL CHI
Total/NA	Analysis	9060A		1	368125	01/09/17 22:43	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	367405	01/04/17 01:27	CLB	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			367658	01/05/17 16:58	JBJ	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	367673		JBJ	TAL CHI
					(Start)	01/05/17 19:59		
					(End)	01/05/17 20:02		
Total/NA	Prep	SM 5220			367317	01/03/17 10:28	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	367386	01/03/17 14:42	MAN	TAL CHI

Client Sample ID: CSD-3S

Lab Sample ID: 500-122074-4

Date Collected: 12/28/16 08:35
Date Received: 12/30/16 10:20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			367295	01/03/17 08:26	JEF	TAL CHI
Total Recoverable	Analysis	6020		1	367413	01/03/17 15:41	FXG	TAL CHI
Total/NA	Analysis	300.0		10	367535	01/04/17 19:48	EAT	TAL CHI
Total/NA	Analysis	353.2		25	367813	01/06/17 22:18	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			367969	01/10/17 07:20	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		1	368105	01/10/17 09:40	MTB	TAL CHI
Total/NA	Analysis	9060A		1	368134	01/10/17 19:13	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	367405	01/04/17 01:31	CLB	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			367658	01/05/17 16:58	JBJ	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	367673		JBJ	TAL CHI
					(Start)	01/05/17 20:07		
					(End)	01/05/17 20:10		
Total/NA	Prep	SM 5220			367317	01/03/17 10:28	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	367386	01/03/17 14:43	MAN	TAL CHI

Client Sample ID: CSD-3D

Lab Sample ID: 500-122074-5

Date Collected: 12/28/16 08:05
Date Received: 12/30/16 10:20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			367295	01/03/17 08:26	JEF	TAL CHI
Total Recoverable	Analysis	6020		1	367413	01/03/17 15:45	FXG	TAL CHI
Total/NA	Analysis	300.0		2	367535	01/04/17 20:00	EAT	TAL CHI
Total/NA	Analysis	353.2		10	367813	01/06/17 22:20	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			367969	01/10/17 07:20	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		1	368105	01/10/17 09:43	MTB	TAL CHI
Total/NA	Analysis	9060A		1	368134	01/10/17 19:29	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	367405	01/04/17 01:36	CLB	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			367658	01/05/17 16:58	JBJ	TAL CHI

Lab Chronicle

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

TestAmerica Job ID: 500-122074-1

Client Sample ID: CSD-3D — Lab Sample ID: 500-122074-5

Date Collected: 12/28/16 08:05
Date Received: 12/30/16 10:20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 NH3 G		1	367673		JBJ	TAL CHI
					(Start)	01/05/17 20:10		
					(End)	01/05/17 20:13		
Total/NA	Prep	SM 5220			367317	01/03/17 10:28	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	367386	01/03/17 14:45	MAN	TAL CHI

Client Sample ID: CSD-4 — Lab Sample ID: 500-122074-6

Date Collected: 12/28/16 10:05
Date Received: 12/30/16 10:20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			367295	01/03/17 08:26	JEF	TAL CHI
Total Recoverable	Analysis	6020		1	367413	01/03/17 15:48	FXG	TAL CHI
Total/NA	Analysis	300.0		25	367535	01/04/17 21:04	EAT	TAL CHI
Total/NA	Analysis	353.2		50	367813	01/06/17 22:22	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			367969	01/10/17 07:20	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		1	368105	01/10/17 09:46	MTB	TAL CHI
Total/NA	Analysis	9060A		1	368134	01/10/17 19:45	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	367405	01/04/17 01:40	CLB	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			367658	01/05/17 16:58	JBJ	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	367673		JBJ	TAL CHI
					(Start)	01/05/17 20:13		
					(End)	01/05/17 20:16		
Total/NA	Prep	SM 5220			367317	01/03/17 10:28	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	367386	01/03/17 14:46	MAN	TAL CHI

Client Sample ID: CSD-4 DUP — Lab Sample ID: 500-122074-7

Date Collected: 12/28/16 10:05
Date Received: 12/30/16 10:20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			367295	01/03/17 08:26	JEF	TAL CHI
Total Recoverable	Analysis	6020		1	367413	01/03/17 15:52	FXG	TAL CHI
Total/NA	Analysis	300.0		20	367535	01/04/17 21:16	EAT	TAL CHI
Total/NA	Analysis	353.2		50	367813	01/06/17 23:34	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			367969	01/10/17 07:20	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		1	368105	01/10/17 09:49	MTB	TAL CHI
Total/NA	Analysis	9060A		1	368134	01/10/17 20:02	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	367405	01/04/17 01:45	CLB	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			367658	01/05/17 16:58	JBJ	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	367673		JBJ	TAL CHI
					(Start)	01/05/17 20:16		
					(End)	01/05/17 20:18		

Lab Chronicle

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

TestAmerica Job ID: 500-122074-1

Client Sample ID: CSD-4 DUP — Lab Sample ID: 500-122074-7

Date Collected: 12/28/16 10:05
Date Received: 12/30/16 10:20
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SM 5220			367317	01/03/17 10:28	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	367386	01/03/17 14:47	MAN	TAL CHI

Client Sample ID: CSD-5 — Lab Sample ID: 500-122074-8

Date Collected: 12/28/16 14:45
Date Received: 12/30/16 10:20
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			367295	01/03/17 08:26	JEF	TAL CHI
Total Recoverable	Analysis	6020		1	367413	01/03/17 15:56	FXG	TAL CHI
Total/NA	Analysis	300.0		20	367535	01/04/17 21:29	EAT	TAL CHI
Total/NA	Analysis	353.2		2	367813	01/06/17 23:35	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			367969	01/10/17 07:20	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		1	368105	01/10/17 09:52	MTB	TAL CHI
Total/NA	Analysis	9060A		1	368134	01/10/17 20:19	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	367406	01/04/17 02:18	CLB	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			367658	01/05/17 16:58	JBJ	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	367673		JBJ	TAL CHI
					(Start)	01/05/17 20:24		
					(End)	01/05/17 20:27		
Total/NA	Prep	SM 5220			367317	01/03/17 10:28	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	367386	01/03/17 14:48	MAN	TAL CHI

Client Sample ID: CSD-6 — Lab Sample ID: 500-122074-9

Date Collected: 12/28/16 11:25
Date Received: 12/30/16 10:20
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			367295	01/03/17 08:26	JEF	TAL CHI
Total Recoverable	Analysis	6020		1	367413	01/03/17 16:00	FXG	TAL CHI
Total/NA	Analysis	300.0		10	367535	01/04/17 21:42	EAT	TAL CHI
Total/NA	Analysis	353.2		25	367813	01/06/17 23:36	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			367969	01/10/17 07:20	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		1	368105	01/10/17 10:00	MTB	TAL CHI
Total/NA	Analysis	9060A		1	368134	01/10/17 20:35	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	367406	01/04/17 02:31	CLB	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			367658	01/05/17 16:58	JBJ	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	367673		JBJ	TAL CHI
					(Start)	01/05/17 20:27		
					(End)	01/05/17 20:29		
Total/NA	Prep	SM 5220			367317	01/03/17 10:28	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	367386	01/03/17 14:49	MAN	TAL CHI

Lab Chronicle

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

TestAmerica Job ID: 500-122074-1

Client Sample ID: CSD-7

Lab Sample ID: 500-122074-10
Matrix: Water

Date Collected: 12/28/16 10:50
Date Received: 12/30/16 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			367295	01/03/17 08:26	JEF	TAL CHI
Total Recoverable	Analysis	6020		1	367413	01/03/17 16:03	FXG	TAL CHI
Total/NA	Analysis	300.0		25	367535	01/04/17 21:54	EAT	TAL CHI
Total/NA	Analysis	353.2		25	367813	01/06/17 23:37	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			367969	01/10/17 07:20	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		5	368105	01/10/17 10:03	MTB	TAL CHI
Total/NA	Analysis	9060A		5	368134	01/10/17 20:54	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	367406	01/04/17 02:40	CLB	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			367658	01/05/17 16:58	JBJ	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	367673		JBJ	TAL CHI
					(Start)	01/05/17 20:29		
					(End)	01/05/17 20:32		
Total/NA	Prep	SM 5220			367318	01/03/17 10:28	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		10	367387	01/03/17 14:14	MAN	TAL CHI

Client Sample ID: CSD-8

Lab Sample ID: 500-122074-11
Matrix: Water

Date Collected: 12/28/16 09:20
Date Received: 12/30/16 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			367295	01/03/17 08:26	JEF	TAL CHI
Total Recoverable	Analysis	6020		1	367413	01/03/17 16:07	FXG	TAL CHI
Total/NA	Analysis	300.0		20	367535	01/04/17 22:07	EAT	TAL CHI
Total/NA	Analysis	353.2		50	367813	01/06/17 23:38	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			367969	01/10/17 07:20	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		1	368105	01/10/17 10:06	MTB	TAL CHI
Total/NA	Analysis	9060A		1	368134	01/10/17 21:16	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	367406	01/04/17 02:45	CLB	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			367658	01/05/17 16:58	JBJ	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	367673		JBJ	TAL CHI
					(Start)	01/05/17 20:32		
					(End)	01/05/17 20:35		
Total/NA	Prep	SM 5220			367317	01/03/17 10:28	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	367386	01/03/17 14:50	MAN	TAL CHI

Client Sample ID: CSD-9

Lab Sample ID: 500-122074-12
Matrix: Water

Date Collected: 12/28/16 12:10
Date Received: 12/30/16 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			367295	01/03/17 08:26	JEF	TAL CHI
Total Recoverable	Analysis	6020		1	367413	01/03/17 16:11	FXG	TAL CHI
Total/NA	Analysis	300.0		2	367535	01/04/17 22:20	EAT	TAL CHI

Lab Chronicle

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

TestAmerica Job ID: 500-122074-1

Client Sample ID: CSD-9

Lab Sample ID: 500-122074-12

Date Collected: 12/28/16 12:10
Date Received: 12/30/16 10:20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	353.2		10	367813	01/06/17 22:36	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			367969	01/10/17 07:20	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		1	368105	01/10/17 10:08	MTB	TAL CHI
Total/NA	Analysis	9060A		1	368134	01/10/17 22:07	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	367406	01/04/17 02:49	CLB	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			367658	01/05/17 16:58	JBJ	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	367673		JBJ	TAL CHI
					(Start)	01/05/17 20:35		
					(End)	01/05/17 20:38		
Total/NA	Prep	SM 5220			367317	01/03/17 10:28	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	367386	01/03/17 14:51	MAN	TAL CHI

Client Sample ID: CSD-9 DUP

Lab Sample ID: 500-122074-13

Date Collected: 12/28/16 12:10
Date Received: 12/30/16 10:20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			367295	01/03/17 08:26	JEF	TAL CHI
Total Recoverable	Analysis	6020		1	367413	01/03/17 16:15	FXG	TAL CHI
Total/NA	Analysis	300.0		2	367535	01/04/17 22:32	EAT	TAL CHI
Total/NA	Analysis	353.2		10	367813	01/06/17 22:38	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			367969	01/10/17 07:20	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		1	368105	01/10/17 10:11	MTB	TAL CHI
Total/NA	Analysis	9060A		1	368134	01/10/17 22:23	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	367406	01/04/17 02:54	CLB	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			367658	01/05/17 16:58	JBJ	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	367673		JBJ	TAL CHI
					(Start)	01/05/17 20:38		
					(End)	01/05/17 20:40		
Total/NA	Prep	SM 5220			367317	01/03/17 10:28	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	367386	01/03/17 14:52	MAN	TAL CHI

Laboratory References:

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

Certification Summary

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

TestAmerica Job ID: 500-122074-1

Laboratory: TestAmerica Chicago

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Wisconsin	State Program	5	999580010	08-31-17

TestAmerica

THE LEADER IN ENVIRONMEN

2417 Bond Street, University Park, Il
Phone: 708.534.5200 Fax: 708.

500-122074 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: rjnesllc@charter.net

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

Chain of Custody Record

Lab Job #: 500-122074

Chain of Custody Number:

Page 1 of ~~3~~ 2

Temperature °C of Cooler: 2.3, 4.3

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	N+N, COD, NH3, TKN, TOC (2)	Potassium (3)	TDS, Chloride (8)							Comments
1		CSD-1S	12/28	1330	4	W	X	X	X							
2		CSD-1D	↓	1410	4	W	X	X	X							
3		CSD-2		1530	4	W	X	X	X							
4		CSD-3S		0835	4	W	X	X	X							
5		CSD-3D		0805	4	W	X	X	X							
6		CSD-4		1005	4	W	X	X	X							
7		CSD-4 Dup		1005	4	W	X	X	X							
8		CSD-5		1445	4	W	X	X	X							
9		CSD-6		1125	4	W	X	X	X							
10		CSD-7		1050	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
[signature]	RJN	12/29/16	0945	[signature]	TA	12/30/16	1020

Lab Courier
Shipped
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-4124-530 (1209)
1/13/2017

ED_004625A_00007678-00070

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: rjnesllc@charter.net

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

Chain of Custody Record

Lab Job #: 500-122074
Chain of Custody Number:
Page 2 of ~~3~~ 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	N+N, COD, NH3, TKN, TOC (Preservative 2)	POTASSIUM (Preservative 3)	TDS CHLORIDE (Preservative 8)							Comments
11		CSD-8	12/28	0920	4	W	X	X	X							
12		CSD-9	12/28	1210	4	W	X	X	X							
13		CSD-9 DUP	12/28	1210	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
[signature]	RJN	12/29/16	0945	[signature]	TA	12/30/16	1020
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier
Shipped
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:

1/13/2017
TAL-4124 (1209)

ED_004625A_00007678-00071

ORIGIN ID:JOTA (708) 534-5200
ROBERT NAUTA
RJN ENVIRONMENTAL SERVICES LLC
4811 MONONA DRIVE

MONONA, WI 53716
UNITED STATES US

SHIP DATE: [illegible]
ACTWGT: 50.00 LB MAN
CAD: 33264/CAFE3010

TO **SAMPLE LOGIN**
TESTAMERICA LABS
2417 BOND ST

UNIVERSITY PARK IL 60466
(708) 534-5200
REF: S500-49912

RMA:

FedEx Express

E

TRK# 0221 6514 8430 2068

RETURNS MON-FR
PRIORITY OVERNIGH

FedEx
TRK# 0221 6514 8430 2068

FRI - 30 DEC 10:30
PRIORITY OVERNIGH

79 JOTA

6046
IL-US OR

48 qt.

ORIGIN ID:JOTA (708) 534-5200
ROBERT NAUTA
RJN ENVIRONMENTAL SERVICES LLC
4811 MONONA DRIVE

MONONA, WI 53716
UNITED STATES US

SHIP DATE: 20DEC16
ACTWGT: 50.00 LB MAN
CAD: 33264/CAFE3010

TO **SAMPLE LOGIN**
TESTAMERICA LABS
2417 BOND ST

UNIVERSITY PARK IL 60466
(708) 534-5200
REF: S500-49912

RMA:

FedEx Express

E

J161016072601uv

540C1/D42F/727F

500-122074 Waybill

TRK# 0221 6514 8430 2079

RETURNS MON-FRI
PRIORITY OVERNIGHT

60466
IL-US

Part # 1J6148V-134 RIT2 APV EXP 11/17

48 qt.

Login Sample Receipt Checklist

Client: RJN Environmental Services LLC

Job Number: 500-122074-1

Login Number: 122074
List Number: 1
Creator: James, Jeff A

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	2.3,4.3
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: 294380001

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: 12/28/2016 2:10:00 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: 12/29/2016
Date Reported: 12/30/2016
Sample Reason: OTHER

Sample Comments

CSD-1S; MON WELL

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 12/29/16 Analysis Date 12/30/16					
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: 294380001

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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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: 294381001

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: 12/28/2016 1:30:00 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: 12/29/2016
Date Reported: 12/30/2016
Sample Reason: OTHER

Sample Comments

CSD-1D; MON WELL

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 12/29/16 Analysis Date 12/30/16					
Total Coliform - Colilert-MPN QT	SM9223BMPN	5	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: 294381001

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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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: 294382001

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: 12/28/2016 3:30:00 PM
Owner:

Collected By: BOB NAUTA
Well Completion Date:

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

Date Received: 12/29/2016
Date Reported: 12/30/2016
Sample Reason: OTHER

Sample Comments

CSD-2; MON WELL

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 12/29/16 Analysis Date 12/30/16					
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: 294382001

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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Responsible Party

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Inorganic Chemistry: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282
Metals: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282
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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: 294383001

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: 12/28/2016 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: 12/29/2016
Date Reported: 12/30/2016
Sample Reason: OTHER

Sample Comments

CSD-3S; MON. WELL

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 12/29/16 Analysis Date 12/30/16					
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: 294383001

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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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: 294384001

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: 12/28/2016 8:05:00 AM
Owner:

Collected By: BOB NAUTA
Well Completion Date: 10/01/2014

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

Date Received: 12/29/2016
Date Reported: 12/30/2016
Sample Reason: OTHER

Sample Comments

CSD-3D; MON. WELL

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 12/29/16 Analysis Date 12/30/16					
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
(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: 294384001

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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Inorganic Chemistry: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282
Metals: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282
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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: 294385001

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: 12/28/2016 10:05:00 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: 12/29/2016
Date Reported: 12/30/2016
Sample Reason: OTHER

Sample Comments

CSD-4; MON. WELL

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 12/29/16 Analysis Date 12/30/16					
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
(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: 294385001

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
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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
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Environmental Toxicology: Tracy Hanke, Lab Manager, 608-224-6270

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UNIVERSITY OF WISCONSIN-MADISON

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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: 294386001

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: 12/28/2016 10:05:00 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: 12/29/2016
Date Reported: 12/30/2016
Sample Reason: OTHER

Sample Comments

CSD-4DUP; MON. WELL

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 12/29/16 Analysis Date 12/30/16					
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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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: 294386001

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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Metals: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282
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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: 294387001

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: 12/28/2016 2:45:00 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: 12/29/2016
Date Reported: 12/30/2016
Sample Reason: OTHER

Sample Comments

CSD-5; MON. WELL

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 12/29/16 Analysis Date 12/30/16					
Total Coliform - Colilert-MPN QT	SM9223BMPN	4	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: 294387001

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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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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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: 294388001

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: 12/28/2016 11:25:00 AM
Owner:

Collected By: BOB NAUTA
Well Completion Date: 08/01/2016

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

Date Received: 12/29/2016
Date Reported: 12/30/2016
Sample Reason: OTHER

Sample Comments

CSD-6; MON. WELL

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 12/29/16 Analysis Date 12/30/16					
Total Coliform - Colilert-MPN QT	SM9223BMPN	28	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: 294388001

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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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: 294389001

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: 12/28/2016 10:50:00 AM
Owner:

Collected By: BOB NAUTA
Well Completion Date: 08/01/2016

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

Date Received: 12/29/2016
Date Reported: 12/30/2016
Sample Reason: OTHER

Sample Comments

CSD-7; MON WELL

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 12/29/16 Analysis Date 12/30/16					
Total Coliform - Colisure-MPN QT	SM9223BMPN	>2420	MPN/100 mL		1
E. Coli - Colisure-MPN QT	SM9223BMPN	205	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: 294389001

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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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: 294390001

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: 12/28/2016 9:20:00 AM
Owner:

Collected By: BOB NAUTA
Well Completion Date: 08/01/2016

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

Date Received: 12/29/2016
Date Reported: 12/30/2016
Sample Reason: OTHER

Sample Comments

CSD-8; MON. WELL

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 12/29/16 Analysis Date 12/30/16					
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: 294390001

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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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: 294391001

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: 12/28/2016 12:10:00 PM
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: 12/29/2016
Date Reported: 12/30/2016
Sample Reason: OTHER

Sample Comments

CSD-9; MON. WELL

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 12/29/16 Analysis Date 12/30/16					
Total Coliform - Colilert-MPN QT	SM9223BMPN	81	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: 294391001

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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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: 294392001

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: 12/28/2016 12:10:00 PM
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: 12/29/2016
Date Reported: 12/30/2016
Sample Reason: OTHER

Sample Comments

CSD-9DUP; MON. WELL

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 12/29/16 Analysis Date 12/30/16					
Total Coliform - Colilert-MPN QT	SM9223BMPN	61	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: 294392001

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

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