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

November 15, 2017

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

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

Dear Ms. Chern:

Pursuant to the groundwater monitoring schedule contained in WPDES Permit WI-0063533-02-1 for the Central Sands Dairy (CSD) facility, RJN Environmental Services, LLC (RJN) sampled the 11 site groundwater monitoring wells on October 17, 2017. Water levels were also measured in all wells and the water level data loggers in wells CSD-1S and CSD-7 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. When the water levels measured on October 17, 2017 were analyzed subsequent to the field visit, it appeared that the water level in CSD-4 was anomalous, in that it was significantly lower than would have been expected. RJN confirmed with site personnel that nearby irrigation well RDO 12 had not been in operation during the field visit. Consequently, RJN returned to the site on October 30, 2017 to re-measure the water levels, which were then found to be consistent with previous data.

Figure 1 shows the water table as measured on October 30, 2017. As in all past measurements, groundwater flow remains in a northwest-to-southeast direction, with a very uniform gradient across the site. Figure 2 presents hydrographs of all wells, dating back to the construction of the initial monitoring network in October 2014. As the figure shows, water levels declined in all wells since the May 2017 measurement, but have again been rising since September 2017. Figure 3 shows the hydrographs from the data logger in CSD-1S since they were last downloaded in September. Even though the data logger for CSD-7 registered adequate battery strength at the time of the September sampling event, the batteries in that logger failed soon

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after the September download. Consequently, because we are now on a quarterly sampling schedule, a member of the CSD staff is being trained to download the data loggers and install new batteries on a monthly schedule.

Groundwater Quality

The field data sheets for the sampling event are provided in Attachment A and 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. Aside from an increase in the nitrite+nitrate concentration in the sample from CSD-7 and a significant drop in ammonia concentration in the sample from CSD-1D, water quality data were stable.

Quarterly monitoring of all site wells will continue in January 2018.

Sincerely,
RJN ENVIRONMENTAL SERVICES, LLC

Robert J. Nauta, P.G.
Hydrogeologist

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

TABLES

TABLE 1
GROUNDWATER ELEVATIONS
CENTRAL SANDS DAIRY, LLC

COMMON NAME	CSD-1S		CSD-1D		CSD-2		CSD-3S		CSD-3D		CSD-4	
UNIQUE NUMBER	VY778		VY779		VU928		VU925		VU926		VU927	
TOP OF CASING[1]	963.61		963.53		961.18		963.26		963.07		963.91	
DATE	DTW[2]	GWE[3]	DTW[2]	GWE[3]	DTW[2]	GWE[3]	DTW[2]	GWE[3]	DTW[2]	GWE[3]	DTW[2]	GWE[3]
Dec 14	20.19	943.42	18.68	944.85	15.94	945.24	15.16	948.10	14.99	948.08	17.20	946.71
Apr 15	21.13	942.48	21.19	942.34	16.83	944.35	16.15	947.11	15.98	947.09	18.16	945.75
Jul 15	21.06	942.55	20.98	942.55	16.77	944.41	15.78	947.48	15.56	947.51	19.10	944.81
Oct 15	20.57	943.04	20.51	943.02	16.31	944.87	15.51	947.75	15.31	947.76	17.93	945.98
Dec-15	20.56	943.05	20.47	943.06	16.01	945.17	14.99	948.27	14.77	948.30	17.22	946.69
Mar-16	20.10	943.51	20.01	943.52	15.86	945.32	15.13	948.13	14.95	948.12	17.14	946.77
Jul-16	19.71	943.90	19.60	943.93	15.40	945.78	14.22	949.04	14.01	949.06	16.56	947.35
Aug-16	19.79	943.82	19.69	943.84	15.52	945.66	14.48	948.78	14.25	948.82	16.50	947.41
Aug-16	19.69	943.92	19.60	943.93	15.45	945.73	14.20	949.06	13.99	949.08	18.02	945.89
Sep-16	17.35	946.26	17.29	946.24	13.09	948.09	11.80	951.46	11.59	951.48	14.09	949.82
Nov-16	17.55	946.06	17.46	946.07	13.29	947.89	12.35	950.91	12.13	950.94	14.40	949.51
Nov-16	17.81	945.80	17.72	945.81	13.50	947.68	12.62	950.64	12.39	950.68	14.69	949.22
Dec-16	17.88	945.73	17.96	945.57	13.60	947.58	12.74	950.52	12.53	950.54	14.80	949.11
Jan-17	18.11	945.50	18.00	945.53	13.67	947.51	12.71	950.55	12.49	950.58	14.74	949.17
Feb-17	17.76	945.85	17.67	945.86	13.41	947.77	12.27	950.99	12.08	950.99	14.50	949.41
Mar-17	17.22	946.39	17.14	946.39	12.79	948.39	11.90	951.36	11.68	951.39	14.06	949.85
Apr-17	17.23	946.38	17.15	946.38	12.74	948.44	11.90	951.36	11.69	951.38	14.02	949.89
May-17	16.51	947.10	16.44	947.09	12.08	949.10	11.19	952.07	10.97	952.10	13.37	950.54
Jun-17	16.83	946.78	16.74	946.79	12.57	948.61	11.86	951.40	11.63	951.44	14.18	949.73
Jul-17	16.99	946.62	16.92	946.61	12.70	948.48	11.73	951.53	11.52	951.55	13.85	950.06
Aug-17	17.80	945.81	17.71	945.82	13.26	947.92	12.70	950.56	12.54	950.53	15.02	948.89
Sep-17	18.67	944.94	18.58	944.95	14.58	946.60	13.96	949.30	13.73	949.34	15.51	948.40

[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-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]
Oct-17	18.43	945.18	18.32	945.21	14.30	946.88	13.50	949.76	13.28	949.79	16.22	947.69
Oct-17	18.31	945.30	18.20	945.33	14.12	947.06	13.41	949.85	13.18	949.89	15.33	948.58

[1] FEET, MSL

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

[3] GROUNDWATER ELEVATION IN FEET, MSL

TABLE 1
GROUNDWATER ELEVATIONS
CENTRAL SANDS DAIRY, LLC

COMMON NAME	CSD-5		CSD-6		CSD-7		CSD-8		CSD-9	
UNIQUE NUMBER	VY742		VY715		VY713		VY744		VY811	
TOP OF CASING[1]	962.72		964.57		963.21		965.02		961.73	
DATE	DTW[2]	GWE[3]	DTW[2]	GWE[3]	DTW[2]	GWE[3]	DTW[2]	GWE[3]	DTW[2]	GWE[3]
Aug-16	18.62	944.10	19.56	945.01	17.65	945.56	18.47	946.55		
Aug-16	18.53	944.19	19.50	945.07	17.64	945.57	18.55	946.47		
Sep-16	16.21	946.51	17.20	947.37	15.40	947.81	16.15	948.87		
Nov-16	16.36	946.36	17.36	947.21	15.49	947.72	16.35	948.67	15.20	946.53
Nov-16	16.65	946.07	17.59	946.98	15.75	947.46	16.63	948.39	15.35	946.38
Dec-16	16.71	946.01	17.77	946.80	15.84	947.37	16.77	948.25	15.61	946.12
Jan-17	16.86	945.86	17.90	946.67	15.95	947.26	16.74	948.28	15.72	946.01
Feb-17	16.50	946.22	17.67	946.90	15.76	947.45	16.56	948.46	15.46	946.27
Mar-17	16.02	946.70	17.08	947.49	15.19	948.02	16.05	948.97	14.94	946.79
Apr-17	16.04	946.68	17.10	947.47	15.13	948.08	16.01	949.01	14.95	946.78
May-17	15.30	947.42	16.38	948.19	14.44	948.77	15.36	949.66	14.24	947.49
Jun-17	15.65	947.07	16.70	947.87	14.85	948.36	15.89	949.13	14.55	947.18
Jul-17	15.78	946.94	16.87	947.70	14.95	948.26	15.84	949.18	14.70	947.03
Aug-17	16.55	946.17	17.67	946.90	15.53	947.68	16.74	948.28	15.52	946.21
Sep-17	17.52	945.20	18.56	946.01	16.75	946.46	17.72	947.30	16.41	945.32
Oct-17	17.27	945.45	18.31	946.26	16.50	946.71	17.44	947.58	16.15	945.58
Oct-17	16.96	945.76	18.17	946.40	16.34	946.87	17.28	947.74	15.71	946.02

[1] FEET, MSL

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

[3] GROUNDWATER ELEVATION IN FEET, MSL

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

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

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

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

	Potassium mg/L	Chloride mg/L	Nitrogen, NO_2+NO_3 mg/L	Total Kjeldahl nitrogen mg/L	Total organic carbon mg/L	Total dissolved solids mg/L	Ammonia (N) mg/L	Chemical oxygen demand mg/L	Total coliform bacteria	E. Coli
PAL	NS	125	2	NS	NS	NS	0.97	NS	(1)	(1)
ES	NS	250	10	NS	NS	NS	9.7	NS	(1)	(1)
Jan-17	21	20 B	**16**	3.8 B F1 F2	2.2	220	*3.8*	7.2 J	<1	<1
Feb-17	19	14 B	**12**	2.7	2.2	130	*2.4*	14	<1	<1
Mar-17	18	16 B	**15**	1.8	2.0	140	*2.1*	8.0 J	<1	<1
Apr-17	15	13	**14**	1.7 B	1.8	170	*1.6*	8.2 J	<1	<1
May-17	17	20	**19**	2.0	1.5	230	*1.9*	8.3 J	<1	<1
Jun-17	17	21	**17**	2.0	2.2	220	*2.1 B*	8.1 J	**1**	<1
Oct-17	18	14	**13**	2.1	1.9	220	*2.2*	<6.0	<1	<1

(1): Presence indicates exceedance
F, J: Result between levels of detection and quantification
F1: MS and/or MSD recovery is outside acceptable limits.
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B: Found in blank and sample.
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TABLE 3
GROUNDWATER QUALITY
CENTRAL SANDS DAIRY, LLC
CSD-1D

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

(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
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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)
Jan-17	27	39 B	**24**	2.8 B	2.7	390	*2.5*	11	**7**	<1
Feb-17	27	39 F1 B	**24**	3.8	2.8	38	3.2	8.9 J	**1**	<1
Mar-17	29	38 B	**24**	4.6	2.7	330	5.7 B	<6.1	**3**	<1
Apr-17	39	42	**31**	9.3 B	2.3	410	**10**	9.1 J	**2**	<1
May-17	38	41	**38**	14	2.9	530	**16**	7.8 J	**31**	<1
Jun-17	38	40	**35**	10	3.2	510	**17 B**	11	**14**	<1
Oct-17	27	28	**19**	11	1.7	320	**13**	<6.0	**140**	<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
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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

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

	Potassium mg/L	Chloride mg/L	Nitrogen, NO_2+NO_3 mg/L	Total Kjeldahl nitrogen mg/L	Total organic carbon mg/L	Total dissolved solids mg/L	Ammonia (N) mg/L	Chemical oxygen demand mg/L	Total coliform bacteria	E. Coli
PAL	NS	125	2	NS	NS	NS	0.97	NS	(1)	(1)
ES	NS	250	10	NS	NS	NS	9.7	NS	(1)	(1)
Jan-17	8.9	7.3 B	*8.2*	0.53 B	1.7	100	0.12 J	12	**6**	**1**
Feb-17	7.7	6.9 B	*4.9*	0.35 J	2.1	64	<0.10	9.4 J	**579**	**1**
Mar-17	9.5	7.4 B	*7.5*	0.36 J	1.7	56	0.18 JB	7.0 J	<1	<1
Apr-17	8.3	7.4	*6.5*	0.72 B	1.6	120	0.12 J	15	**36**	<1
May-17	7.4	6.5	*4.6*	0.66	1.5	110	0.12 J	<6.0	<1	<1
Jun-17	7	5.4	*3.3*	0.41	1.6	74	<0.10	<6.0	<1	<1
Oct-17	7.8	3.8	*4.7*	0.31 J	1.1	110	<0.10	<6.0	**96**	<1

(1): Presence indicates exceedance

F, J: Result between levels of detection and quantification

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

B: Found in blank and sample.

PAL: Preventive action limit

ES: Enforcement standard

NS: No standards established

Itallics indicate PAL exceedance

Bold indicates ES exceedance

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

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

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

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

	Potassium mg/L	Chloride mg/L	Nitrogen, NO_2+NO_3 mg/L	Total Kjeldahl nitrogen mg/L	Total organic carbon mg/L	Total dissolved solids mg/L	Ammonia (N) mg/L	Chemical oxygen demand mg/L	Total coliform bacteria	E. Coli
PAL	NS	125	2	NS	NS	NS	0.97	NS	(1)	(1)
ES	NS	250	10	NS	NS	NS	9.7	NS	(1)	(1)
Jan-17	5.9	17 B	**30**	1.0 B	1.7	270	0.28	8.3 J	**1**	<1
Feb-17	6.1	18 B	**26**	0.88	2.1	210	<0.10	8.4 J	**116**	<1
Mar-17	6.5	38 B	**24**	0.58	1.6	230	0.19 JB	8.0 J	<1	<1
Apr-17	6.2	35	**23**	1.0 B	1.6	270	<0.10	11	<1	<1
May-17	6.1	33	**17**	0.69	1.5	260	<0.10	10	<1	<1
Jun-17	5.3	33	**14**	0.55	1.6	200	<0.10	9.6 J	<1	<1
Oct-17	6.4	14	**18**	0.43	1.4	260	<0.10	<6.0	**1046**	<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 6
GROUNDWATER QUALITY
CENTRAL SANDS DAIRY, LLC
CSD-3D

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

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

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

	Potassium mg/L	Chloride mg/L	Nitrogen, NO_2+NO_3 mg/L	Total Kjeldahl nitrogen mg/L	Total organic carbon mg/L	Total dissolved solids mg/L	Ammonia (N) mg/L	Chemical oxygen demand mg/L	Total coliform bacteria	E. Coli
PAL	NS	125	2	NS	NS	NS	0.97	NS	(1)	(1)
ES	NS	250	10	NS	NS	NS	9.7	NS	(1)	(1)
Jan-17	1.4	8.8 B	**18**	0.53 B	0.32 J	180	0.17 J	<6.1	**248**	<1
Feb-17	1.5	10 B	**20**	0.60	0.53 J	150	<0.10	<6.1	<1	<1
Mar-17	1.6	10 B	**18**	0.36 J	0.53 J	120	0.19 J	<6.1	<1	<1
Apr-17	1.3	6.7	**12**	0.48 B	<0.47	130	<0.10	<6.0	<1	<1
May-17	1.1	5.1	*9.7*	0.66	0.48 J	120	<0.10	12	**19**	<1
Jun-17	1.2	7.5	**11**	0.53	<0.47	110	<0.10	<6.0	<1	<1
Oct-17	1.5	15	**19**	0.69	<0.47	230	<0.10	6.3 J	**1203**	<1

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

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

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

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

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

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

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

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

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

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

TABLE 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)
May-17	38	37	**38**	0.99	4.3	630	0.12 J	12	<1	<1
	39	36	**27**	0.96	4.3	620	0.11 J	11	**3**	<1
Jun-17	36	35	**44**	0.59	4.4	630	<0.10	15	**6**	<1
	36	36	**43**	1.1	4.3	610	<0.10	13	**5**	<1
Oct-17	35	43	**42**	1.1	2.9	620	<0.10	9.4 J	**1553**	<1
	35	39	**37**	1.1	2.9	630	<0.10	6.8 J	**1203**	<1

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

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

	Potassium mg/L	Chloride mg/L	Nitrogen, NO_2+NO_3 mg/L	Total Kjeldahl nitrogen mg/L	Total organic carbon mg/L	Total dissolved solids mg/L	Ammonia (N) mg/L	Chemical oxygen demand mg/L	Total coliform bacteria	E. Coli
PAL	NS	125	2	NS	NS	NS	0.97	NS	(1)	(1)
ES	NS	250	10	NS	NS	NS	9.7	NS	(1)	(1)
Aug-16	24	54	**12**	3.1 B	1.8	280	*3.3*	15	**1986**	<1
Sep-16	37	43	*4.0*	3.6 B	2.6	200	*3.8*	12	**1414**	<1
Oct-16	24	37	*4.3*	2.7 B	2.3	290	*2.4*	<6.1	**155**	<1
Nov-16	27	50 B	*5.3*	1.9 B	2.3	230	*1.6*	12	**7**	<1
Dec-16	19	44 B	*3.3*	1.1 B	2.1 B	240	0.76	6.2 J	**4**	<1
Jan-17	13	19 B	1.8	0.69 B	1.6	140	0.43	9.8 J	**9**	<1
Feb-17	11	9.3 B	0.77	0.32 J	1.5	50	0.22	<6.1	**2**	<1
Mar-17	9.2	9.6 B	0.86	0.30 J	1.3	8.0 J	0.31 B	12	**2**	<1
Apr-17	10	15	0.91	0.53 B	1.5	100	0.18 J	11	**1**	<1
May-17	13	28	*2.4*	0.97	8.6	430	0.54	28	<1	<1
Jun-17	9.5	43	*2.8*	0.64	3.0	170	0.26	13	**1**	<1
Jul-17	11	46	*3.8*	0.98 F1	3.2	230	0.62	11	<1	<1
Oct-17	27	19	*2.8*	4.4	4.9	200	*4.1*	9.9 J	<1	<1

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

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

	Potassium mg/L	Chloride mg/L	Nitrogen, NO_2+NO_3 mg/L	Total Kjeldahl nitrogen mg/L	Total organic carbon mg/L	Total dissolved solids mg/L	Ammonia (N) mg/L	Chemical oxygen demand mg/L	Total coliform bacteria	E. Coli
PAL	NS	125	2	NS	NS	NS	0.97	NS	(1)	(1)
ES	NS	250	10	NS	NS	NS	9.7	NS	(1)	(1)
Aug-16	110	40	**58**	0.96 B	5.2	790	<0.10	18	**>2420**	<1
Sep-16	100	33	**47**	1.2 B	4.3	620	<0.10	15	**488**	<1
Oct-16	100	47	**50**	1.0 B	4.8	730	<0.10	12	**67**	<1
Nov-16	84	33 B	**55**	0.72 B	3.8	510	<0.10	8.7 J	**22**	<1
Dec-16	71	27 B	**38**	0.93 B	4.6 B	430	<0.10	27	**28**	<1
Jan-17	72	22 B	**38**	1.1 B	3.2	460	<0.10	13	**27**	<1
Feb-17	69	40 B	**33**	0.47	4.0	560	<0.10	13	**1**	<1
Mar-17	73	33 B	**37**	0.58	3.5	360	0.19 JB	15	**6**	<1
Apr-17	73	37	**41**	1.1 B	3.0	510	<0.10	15	<1	<1
May-17	73	25	**37**	1.0	3.9	510	<0.10	10	**39**	<1
Jun-17	89	43	**48**	0.80	5.0	630	<0.10	15	**1**	<1
Jul-17	78	36	**42**	0.61	4.1	630	<0.10	17	**1**	**1**
Oct-17	100	31	*8.4*	0.97	4.0	650	<0.10	14	**214**	<1

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

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

	Potassium mg/L	Chloride mg/L	Nitrogen, NO_2+NO_3 mg/L	Total Kjeldahl nitrogen mg/L	Total organic carbon mg/L	Total dissolved solids mg/L	Ammonia (N) mg/L	Chemical oxygen demand mg/L	Total coliform bacteria	E. Coli
PAL	NS	125	2	NS	NS	NS	0.97	NS	(1)	(1)
ES	NS	250	10	NS	NS	NS	9.7	NS	(1)	(1)
Aug-16	65	28	**43**	1.8 B	14	540	0.22	33	**>2420**	<1
Sep-16	68	23	**39**	1.5 B	10	500	0.18 J	26	**>2420**	<1
Oct-16	80	32	**50**	1.6 B	8.7	670	0.32	22	**548**	**4**
Nov-16	85	31 B	**54**	1.7 B	10	590	0.59	29	**>2420**	**7**
Dec-16	88	61 B	**31**	9.7 B	180 B	720	0.86	520	**>2420**	**205**
Jan-17	71	48 B	**48**	2.1 B	13	610	0.49 B	40	**>2420**	**2**
Feb-17	76	24 B	**48**	1.4 B	11	360	0.22	32	**>2420**	<1
Mar-17	72	50 B	**44**	0.82	6	500	0.36 B	21	**921**	**12**
Apr-17	91	47	**59**	1.7 B	9.6	730	0.28	34	**308**	**1**
May-17	73	44	**58**	2.2	10.0	740	0.22	27	**172**	<1
Jun-17	59	61	**38**	1.0	5.9	570	0.39	17	**35**	<1
Jul-17	60	57	**43**	1.3	5.6	710	0.31	20	**131**	<1
Oct-17	88	62	**88**	2.6	22	1100	0.20	66	**1733**	**8**

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

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

	Potassium mg/L	Chloride mg/L	Nitrogen, NO_2+NO_3 mg/L	Total Kjeldahl nitrogen mg/L	Total organic carbon mg/L	Total dissolved solids mg/L	Ammonia (N) mg/L	Chemical oxygen demand mg/L	Total coliform bacteria	E. Coli
PAL	NS	125	2	NS	NS	NS	0.97	NS	(1)	(1)
ES	NS	250	10	NS	NS	NS	9.7	NS	(1)	(1)
Aug-16	42	23	**36**	0.85 B	4.1	620	<0.10	11	**921**	<1
Sep-16	51	22	**42**	0.83 BF1	3.8	580	<0.10	11	**25**	<1
Oct-16	63	31	**64**	0.78 B	5.2	850	0.11 J	10	**88**	<1
Nov-16	65	36 B	**48**	0.87 B	5.5	690	0.10 J	17	**1**	<1
Dec-16	63	43 B	**57**	1.5 B	4.9 B	560	<0.10	14	**1**	<1
Jan-17	65	39 B	**55**	1.3 B	6.0	760	0.23 B	22	**1**	<1
Feb-17	64	38 B	**45**	0.86 B	6.1	680	0.10 J	18	**4**	<1
Mar-17	64	40 B	**53**	0.72	5.5	590	<0.10	21	<1	<1
Apr-17	53	35	**48**	1.0 B	4.4	670	0.10 J	19	<1	<1
May-17	47	35	**40**	1.1	4.4	640	<0.10	9.1 J	<1	<1
Jun-17	44	29	**36**	0.84	4.3	550	<0.10	11	<1	<1
Jul-17	42	33	**36**	1.2	4.1	580	<0.10	14	**9**	<1
Oct-17	56	39	**39**	0.90	4.2	630	<0.10	9.4 J	**488**	<1

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

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

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

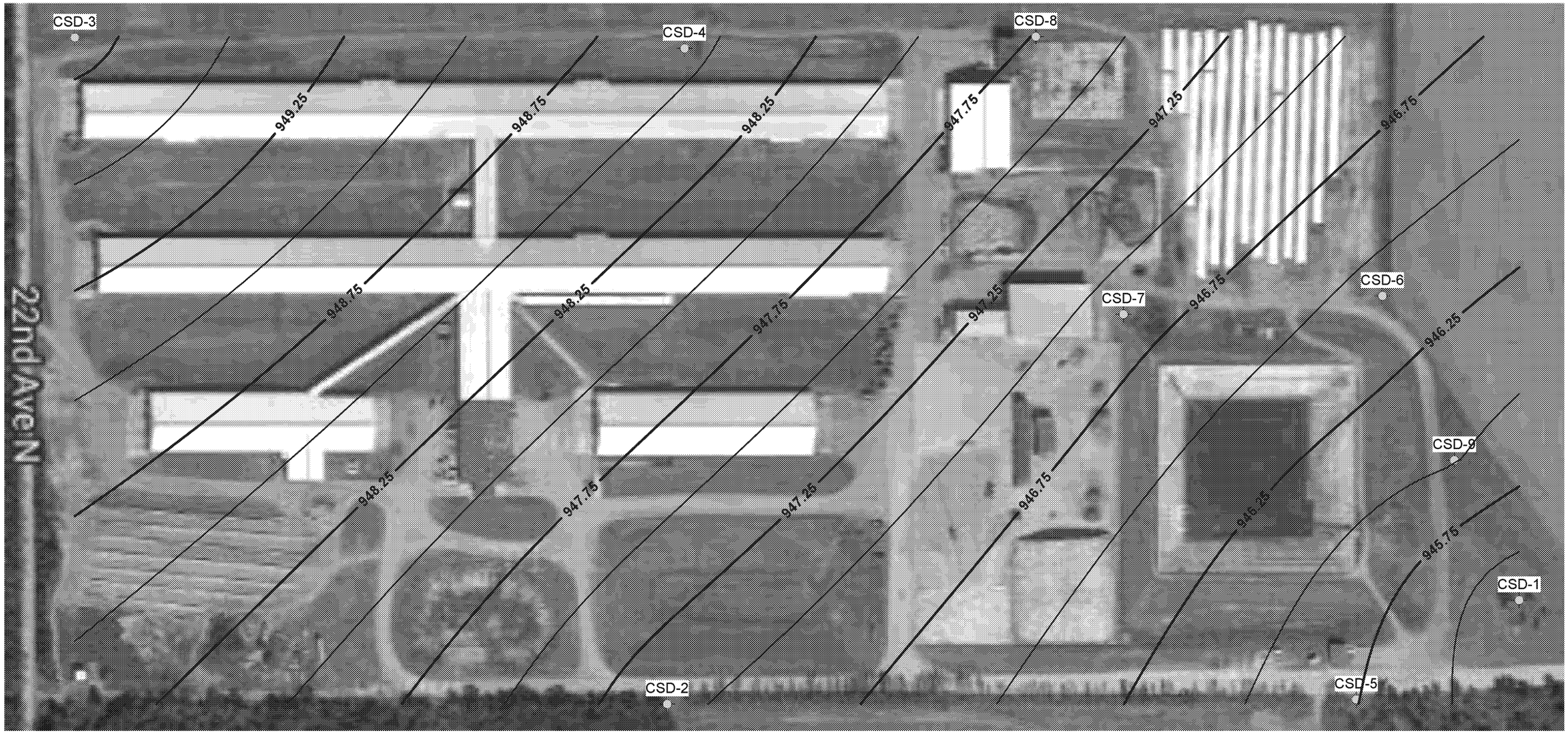
(1): Presence indicates exceedance
F, J: Result between levels of detection and quantification
F1: MS and/or MSD recovery is outside acceptable limits.
B: Found in blank and sample.
PAL: Preventive action limit
ES: Enforcement standard
NS: No standards established
Itallics indicate PAL exceedance
Bold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

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)
May-17	21	7.9	*6.0*	0.58	3.0	180	<0.10	10	**5**	<1
	22	7.5	*6.4*	0.47	2.9	170	<0.10	8.6 J	**6**	<1
Jun-17	25	8.3	*8.3*	0.66	3.4	170	<0.10	12	**1733**	**4**
	27	8.5	*8.7*	0.57	3.4	150	<0.10	8.2 J	**1733**	**4**
Jul-17	27	9.7	*3.3*	0.51	4.1	440	<0.10	14	**5**	<1
	29	10.0	*3.2*	0.47	4.2	130	<0.10	14	**8**	<1
Aug-17	26	8.4	**17**	0.52	2.9	220	<0.10	11	**96**	<1
Sep-17	19	9.9	*7.8*	0.68	1.9	130	<0.10	8.6 J	**>2419.6**	<1
Oct-17	19	8.2	*5.0*	0.58	3.2	140	<0.10	8.4 J	**548**	<1
	20	8.3	*5.7*	0.62	3.2	130	<0.10	11	**866**	<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

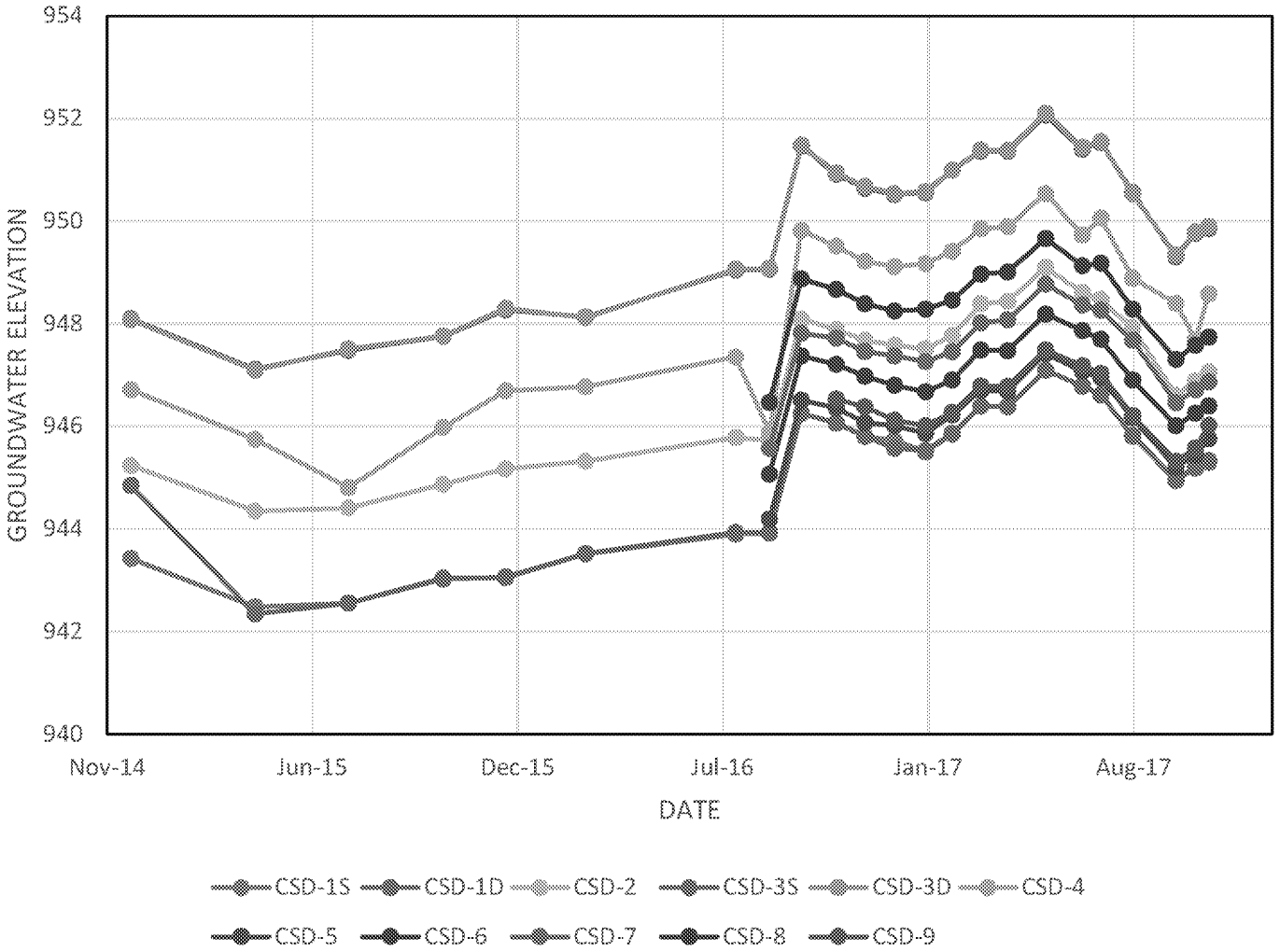
NORTH

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 - 10/30/17

FIGURE 1

DRAWN BY	PROJ. No.	DATE	FILE
RN	14-203	14 NOV 17	WTR TBL 1017



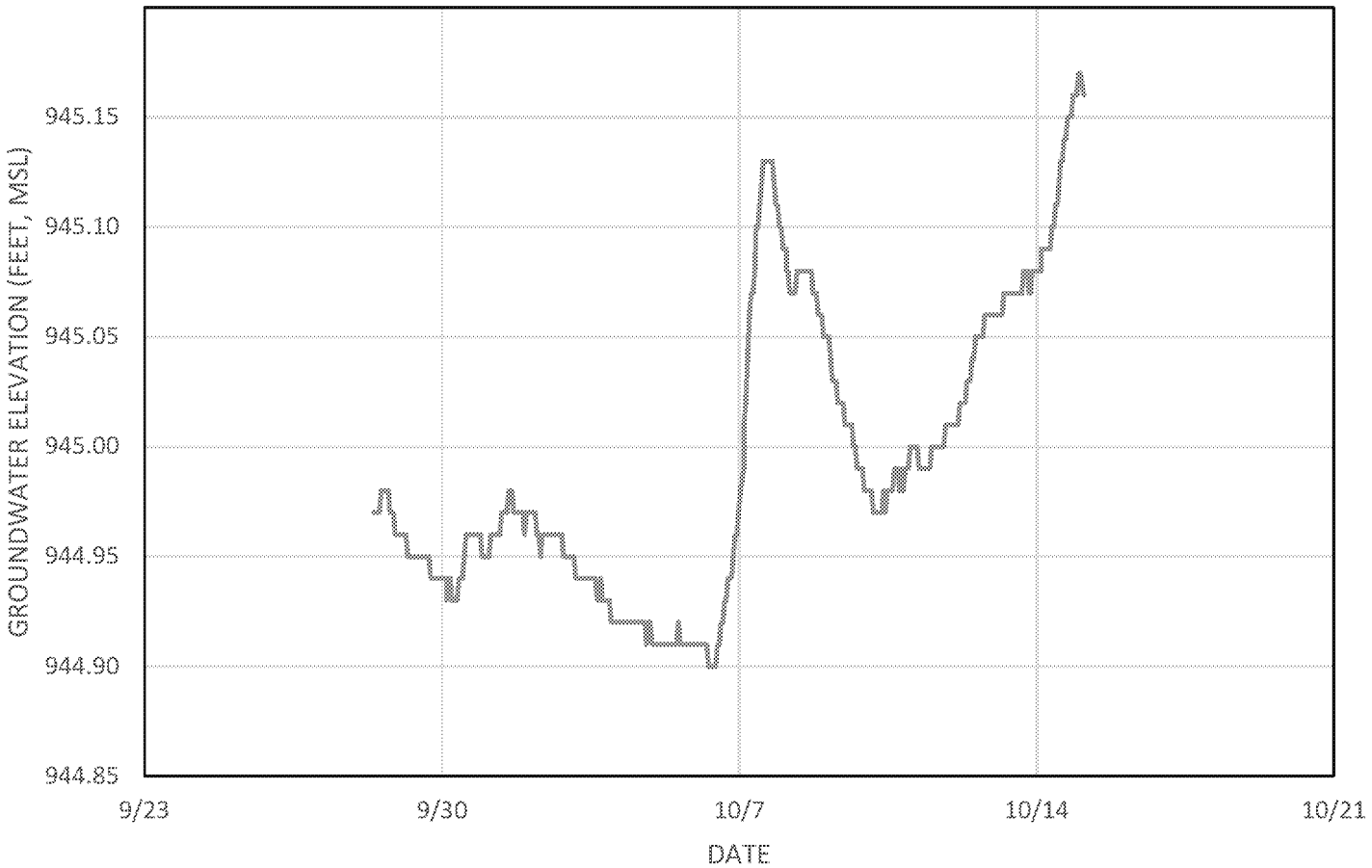
NOTE: WATER LEVELS IN WELLS CSD-3S AND CSD-3D ARE VIRTUALLY IDENTICAL, SO THEY APPEAR AS A SINGLE LINE.

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	14 NOV 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
CSD-1S - JUNE 29 - SEPTEMBER 28, 2017

FIGURE 3

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

ATTACHMENT A

FIELD NOTES

RJN Environmental Services, LLC

Well number:	CSD-1S VY778

Groundwater Sample Collection Record

Client:	Central Sands Dairy	Date:	10/17/17
Project No.:	14-203	Time start:	1310
Site Location:	Juneau County, WI	Finish:	1330
Wether conditions:			

Water Level Data: Well: X Piez: _____

Total Depth: 28.32 Diameter: 2" Water column: 9.89

Depth to water: 18.43 Well volume: 1.58 gal.

Purging data:

Method: Low flow

Acceptance criteria:

Minimum purge volume (3 volumes): 4.75 gal.

Stabilization: pH: +/- 0.1

Temp: +/- 10%

Cond: +/- 5%

Removed	T	pH	mS/cm
2	19.93	5.29	0.263
4	19.86	5.39	0.265
6	19.78	5.45	0.264
8	19.88	5.42	0.265

Sampled

By: Nauta

RJN Environmental Services, LLC

Well number:	CSD-1D
	VY779

Groundwater Sample Collection Record

Client:	Central Sands Dairy	Date:	10/17/17
Project No.:	14-203	Time start:	1215
Site Location:	Juneau County, WI	Finish:	1500
Wether conditions:			

Water Level Data: Well: _____ Piez: X

Total Depth: 49.57 Diameter: 2" Water column: 31.25

Depth to water: 18.32 Well volume: 5 gal.

Purging data:

Method: Low flow

Acceptance criteria:

Minimum purge volume (3 volumes): 15 gal.

Stabilization: pH: +/- 0.1

Temp: +/- 10%

Cond: +/- 5%

Removed	T	pH	mS/cm
5	18.00	6.09	0.523
10	18.14	6.12	0.456
15	18.27	6.10	0.428

.10

Sampled by: Nauta

RJN Environmental Services, LLC

Well number:	CSD-2
	VU928

Groundwater Sample Collection Record

Client:	Central Sands Dairy	Date:	10/17/17
Project No.:	14-203	Time start:	1340
Site Location:	Juneau County, WI	Finish:	1355
Wether conditions:			

Water Level Data: Well: X Piez: _____

Total Depth: 26.22 Diameter: 2" Water column: 11.92

Depth to water: 14.30 Well volume: 1.9 gal.

Purging data:

Method: Low flow

Acceptance criteria:

Minimum purge volume (3 volumes): 5.6 gal.

Stabilization: pH: +/- 0.1

Temp: +/- 10%

Cond: +/- 5%

Removed	T	pH	mS/cm
2	15.37	4.52	0.123
4	15.33	4.52	0.130
6	15.27	4.53	0.137

Sampled by: Nauta

RJN Environmental Services, LLC

Well number:	CSD-3S
	VU925

Groundwater Sample Collection Record

Client:	Central Sands Dairy	Date:	
Project No.:	14-203	Time start:	0915
Site Location:	Juneau County, WI	Finish:	0930
Wether conditions:			

Water Level Data: Well: X Piez: _____

Total Depth: 25.51 Diameter: 2" Water column: 12.01

Depth to water: 13.50 Well volume: 1.9 gal.

Purging data:

Method: Low flow

Acceptance criteria:

Minimum purge volume (3 volumes): 6 gal.

Stabilization: pH: +/- 0.1

Temp: +/- 10%

Cond: +/- 5%

Removed	T	pH	mS/cm
2	12.47	4.38	0.307
4	12.72	4.39	0.302
6	12.79	4.39	0.300

Sampled by: Nauta

RJN Environmental Services, LLC

Well number:	CSD-3D VU926

Groundwater Sample Collection Record

Client:	Central Sands Dairy	Date:	10/17
Project No.:	14-203	Time start:	0820
Site Location:	Juneau County, WI	Finish:	0910
Wether conditions:			

Water Level Data: Well: _____ Piez: X

Total Depth: 46.80 Diameter: 2" Water column: 33.52

Depth to water: 13.28 Well volume: 5.36 gal.

Purging data:

Method: Low flow

Acceptance criteria:

Minimum purge volume (3 volumes): 18 gal.

Stabilization: pH: +/- 0.1

Temp: +/- 10%

Cond: +/- 5%

Removed	T	pH	mS/cm
0	10.65	4.53	0.232
12	10.60	4.65	0.245
18	10.62	4.78	0.245
24	10.53	4.84	0.246
36	10.53	4.91	0.246

Sampled by: Nauta

RJN Environmental Services, LLC

Well number:	CSD-4
	VU927

Groundwater Sample Collection Record

Client:	Central Sands Dairy	Date:	10/17
Project No.:	14-203	Time start:	0940
Site Location:	Juneau County, WI	Finish:	0955
Wether conditions:			

Water Level Data: Well: X Piez: _____

Total Depth: 26.03 Diameter: 2" Water column: 9.81

Depth to water: 16.22 Well volume: ~~[illegible]~~ 1.6 gal.

Purging data:

Method: Low flow

Acceptance criteria:

Minimum purge volume (3 volumes): ~~[illegible]~~ 4.8 gal.

Stabilization: pH: +/- 0.1

Temp: +/- 10%

Cond: +/- 5%

Removed	T	pH	mS/cm
2	14.17	4.37	0.740
4	14.21	4.37	0.742
6	14.25	4.42	0.740

Sampled by: Nauta

RJN Environmental Services, LLC

Well number:	CSD-5
	VY742

Groundwater Sample Collection Record

Client:	Central Sands Dairy	Date:	10/17/12
Project No.:	14-203	Time start:	1410
Site Location:	Juneau County, WI	Finish:	1425
Wether conditions:			

Water Level Data: Well: X Piez: _____

Total Depth: 24.9 Diameter: 2" Water column: 7.63

Depth to water: 17.27 Well volume: 1.22 gal.

Purging data:

Method: Low flow

Acceptance criteria:

Minimum purge volume (3 volumes): 3.66 gal.

Stabilization: pH: +/- 0.1

Temp: +/- 10%

Cond: +/- 5%

5.23

0.511

Removed	T	pH	mS/cm
1.5	17.88	5.23	0.511
3.0	18.71	5.34	0.323
4.5	19.06	5.37	0.330
6.0	19.19	5.41	0.318

Sampled by: Nauta

RJN Environmental Services, LLC

Well number:	CSD-6
	VY715

Groundwater Sample Collection Record

Client:	Central Sands Dairy	Date:	10/17/17
Project No.:	14-203	Time start:	1105
Site Location:	Juneau County, WI	Finish:	1115
Wether conditions:			

Water Level Data: Well: X Piez: _____

Total Depth: 23.7 Diameter: 2" Water column: 5.39

Depth to water: 18.31 Well volume: 0.86 gal.

Purging data:

Method: Low flow

Acceptance criteria:

Minimum purge volume (3 volumes): 2.6 gal.

Stabilization: pH: +/- 0.1

Temp: +/- 10%

Cond: +/- 5%

Removed	T	pH	mS/cm
1	17.59	4.78	0.763
2	17.53	4.73	0.766
3	17.53	4.73	0.766
4			

Sampled by: Nauta

RJN Environmental Services, LLC

Well number:	CSD-7
	VY713

Groundwater Sample Collection Record

Client:	Central Sands Dairy	Date:	10/17
Project No.:	14-203	Time start:	1040
Site Location:	Juneau County, WI	Finish:	1055
Wether conditions:			

Water Level Data: Well: X Piez: _____

Total Depth: 23.5 Diameter: 2" Water column: 7.0

Depth to water: 16.50 Well volume: 1.12 gal.

Purging data:

Method: Low flow

Acceptance criteria:

Minimum purge volume (3 volumes): 3.36 gal.

Stabilization: pH: +/- 0.1

Temp: +/- 10%

Cond: +/- 5%

Removed	T	pH	mS/cm
1.5	16.86	5.52	1.21
3.0	16.75	5.52	1.20
4.5	16.96	5.52	1.20

Sampled by: Nauta

RJN Environmental Services, LLC

Well number:	CSD-8
	VY744

Groundwater Sample Collection Record

Client:	Central Sands Dairy	Date:	
Project No.:	14-203	Time start:	1010
Site Location:	Juneau County, WI	Finish:	1025
Wether conditions:			

Water Level Data: Well: X Piez:

Total Depth: 24.6 Diameter: 2" Water column: 7.16

Depth to water: 17.44 Well volume: 1.15 gal.

Purging data:

Method: Low flow

Acceptance criteria:

Minimum purge volume (3 volumes): 3.45 gal.

Stabilization: pH: +/- 0.1

Temp: +/- 10%

Cond: +/- 5%

Removed	T	pH	mS/cm
1.5	15.82	4.45	0.733
3.0	15.85	4.46	0.737
4.5	15.94	4.47	0.737

Sampled by: Nauta

RJN Environmental Services, LLC

Well number:	CSD-9
	VY811

Groundwater Sample Collection Record

Client:	Central Sands Dairy	Date:	10/17/17
Project No.:	14-203	Time start:	1130
Site Location:	Juneau County, WI	Finish:	1140
Wether conditions:			

Water Level Data: Well: X Piez: _____

Total Depth: 20.1 Diameter: 2" Water column: 3.95

Depth to water: 16.15 Well volume: 0.63 gal.

Purging data:

Method: Low flow

Acceptance criteria:

Minimum purge volume (3 volumes): 1.89 gal.

Stabilization: pH: +/- 0.1

Temp: +/- 10%

Cond: +/- 5%

Removed	T	pH	mS/cm
1	17.30	5.59	0.204
2	17.48	5.63	0.201
3	17.79	5.65	0.198

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: 500-135919-1
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:
11/7/2017 1:29:08 PM

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

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

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Receipt Checklists 37

Job ID: 500-135919-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-135919-1

Comments
No additional comments.

Receipt
The samples were received on 10/19/2017 9:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.9º 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: 500-135919-1

Client Sample ID: CSD-1S — Lab Sample ID: 500-135919-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	18000		500	110	ug/L	1		6020	Total Recoverable
Nitrogen, Nitrate Nitrite	13		1.0	0.41	mg/L	10		353.2	Total/NA
Nitrogen, Kjeldahl	2.1		0.40	0.24	mg/L	1		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	1.9		1.0	0.47	mg/L	1		9060A	Total/NA
Total Dissolved Solids	220		10	4.3	mg/L	1		SM 2540C	Total/NA
Chloride	14		2.0	1.0	mg/L	1		SM 4500 Cl- E	Total/NA
Ammonia	2.2		0.20	0.10	mg/L	1		SM 4500 NH3 G	Total/NA

Client Sample ID: CSD-1D — Lab Sample ID: 500-135919-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	26		2.0	1.0	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: CSD-2 — Lab Sample ID: 500-135919-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	7800		500	110	ug/L	1		6020	Total Recoverable
Nitrogen, Nitrate Nitrite	4.7		0.50	0.21	mg/L	5		353.2	Total/NA
Nitrogen, Kjeldahl	0.31	J	0.40	0.24	mg/L	1		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	1.1		1.0	0.47	mg/L	1		9060A	Total/NA
Total Dissolved Solids	110		10	4.3	mg/L	1		SM 2540C	Total/NA
Chloride	3.8		2.0	1.0	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: CSD-3S — Lab Sample ID: 500-135919-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	6400		500	110	ug/L	1		6020	Total Recoverable
Nitrogen, Nitrate Nitrite	18		1.0	0.41	mg/L	10		353.2	Total/NA
Nitrogen, Kjeldahl	0.43		0.40	0.24	mg/L	1		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	1.4		1.0	0.47	mg/L	1		9060A	Total/NA
Total Dissolved Solids	260		10	4.3	mg/L	1		SM 2540C	Total/NA
Chloride	14		2.0	1.0	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: CSD-3D — Lab Sample ID: 500-135919-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	1500		500	110	ug/L	1		6020	Total Recoverable
Nitrogen, Nitrate Nitrite	19		1.0	0.41	mg/L	10		353.2	Total/NA
Nitrogen, Kjeldahl	0.69		0.40	0.24	mg/L	1		4500 NH3 G	Total/NA
Total Dissolved Solids	230		10	4.3	mg/L	1		SM 2540C	Total/NA
Chloride	15		2.0	1.0	mg/L	1		SM 4500 Cl- E	Total/NA
Chemical Oxygen Demand	6.3	J	10	6.0	mg/L	1		SM 5220C	Total/NA

Client Sample ID: CSD-4 — Lab Sample ID: 500-135919-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	35000		500	110	ug/L	1		6020	Total Recoverable

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: 500-135919-1

Client Sample ID: CSD-4 (Continued) — Lab Sample ID: 500-135919-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nitrogen, Nitrate Nitrite	42		2.5	1.0	mg/L	25		353.2	Total/NA
Nitrogen, Kjeldahl	1.1		0.40	0.24	mg/L	1		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	2.9		1.0	0.47	mg/L	1		9060A	Total/NA
Total Dissolved Solids	620		10	4.3	mg/L	1		SM 2540C	Total/NA
Chloride	43		2.0	1.0	mg/L	1		SM 4500 Cl- E	Total/NA
Chemical Oxygen Demand	9.4	J	10	6.0	mg/L	1		SM 5220C	Total/NA

Client Sample ID: CSD-4 DUP — Lab Sample ID: 500-135919-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	35000		500	110	ug/L	1		6020	Total Recoverable
Nitrogen, Nitrate Nitrite	37		2.5	1.0	mg/L	25		353.2	Total/NA
Nitrogen, Kjeldahl	1.1		0.40	0.24	mg/L	1		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	2.9		1.0	0.47	mg/L	1		9060A	Total/NA
Total Dissolved Solids	630		10	4.3	mg/L	1		SM 2540C	Total/NA
Chloride	39		2.0	1.0	mg/L	1		SM 4500 Cl- E	Total/NA
Chemical Oxygen Demand	6.8	J	10	6.0	mg/L	1		SM 5220C	Total/NA

Client Sample ID: CSD-5 — Lab Sample ID: 500-135919-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	27000		500	110	ug/L	1		6020	Total Recoverable
Nitrogen, Nitrate Nitrite	2.8		0.20	0.082	mg/L	2		353.2	Total/NA
Nitrogen, Kjeldahl	4.4		0.80	0.49	mg/L	2		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	4.9		1.0	0.47	mg/L	1		9060A	Total/NA
Total Dissolved Solids	200		10	4.3	mg/L	1		SM 2540C	Total/NA
Chloride	19		2.0	1.0	mg/L	1		SM 4500 Cl- E	Total/NA
Ammonia	4.1		0.40	0.20	mg/L	2		SM 4500 NH3 G	Total/NA
Chemical Oxygen Demand	9.9	J	10	6.0	mg/L	1		SM 5220C	Total/NA

Client Sample ID: CSD-6 — Lab Sample ID: 500-135919-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	100000		500	110	ug/L	1		6020	Total Recoverable
Nitrogen, Nitrate Nitrite	8.4		1.0	0.41	mg/L	10		353.2	Total/NA
Nitrogen, Kjeldahl	0.97		0.40	0.24	mg/L	1		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	4.0		1.0	0.47	mg/L	1		9060A	Total/NA
Total Dissolved Solids	650		10	4.3	mg/L	1		SM 2540C	Total/NA
Chloride	31		2.0	1.0	mg/L	1		SM 4500 Cl- E	Total/NA
Chemical Oxygen Demand	14		10	6.0	mg/L	1		SM 5220C	Total/NA

Client Sample ID: CSD-7 — Lab Sample ID: 500-135919-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	88000		500	110	ug/L	1		6020	Total Recoverable
Nitrogen, Nitrate Nitrite	88		5.0	2.1	mg/L	50		353.2	Total/NA
Nitrogen, Kjeldahl	2.6		0.40	0.24	mg/L	1		4500 NH3 G	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: 500-135919-1

Client Sample ID: CSD-7 (Continued) — Lab Sample ID: 500-135919-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon - Duplicates	22		1.0	0.47	mg/L	1		9060A	Total/NA
Total Dissolved Solids	1100		10	4.3	mg/L	1		SM 2540C	Total/NA
Chloride	62		2.0	1.0	mg/L	1		SM 4500 Cl- E	Total/NA
Ammonia	0.20		0.20	0.10	mg/L	1		SM 4500 NH3 G	Total/NA
Chemical Oxygen Demand	66		10	6.0	mg/L	1		SM 5220C	Total/NA

Client Sample ID: CSD-8 — Lab Sample ID: 500-135919-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	56000		500	110	ug/L	1		6020	Total Recoverable
Nitrogen, Nitrate Nitrite	39		2.5	1.0	mg/L	25		353.2	Total/NA
Nitrogen, Kjeldahl	0.90		0.40	0.24	mg/L	1		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	4.2		1.0	0.47	mg/L	1		9060A	Total/NA
Total Dissolved Solids	630		10	4.3	mg/L	1		SM 2540C	Total/NA
Chloride	39		2.0	1.0	mg/L	1		SM 4500 Cl- E	Total/NA
Chemical Oxygen Demand	9.4	J	10	6.0	mg/L	1		SM 5220C	Total/NA

Client Sample ID: CSD-9 — Lab Sample ID: 500-135919-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	19000		500	110	ug/L	1		6020	Total Recoverable
Nitrogen, Nitrate Nitrite	5.0		0.50	0.21	mg/L	5		353.2	Total/NA
Nitrogen, Kjeldahl	0.58		0.40	0.24	mg/L	1		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	3.2		1.0	0.47	mg/L	1		9060A	Total/NA
Total Dissolved Solids	140		10	4.3	mg/L	1		SM 2540C	Total/NA
Chloride	8.2		2.0	1.0	mg/L	1		SM 4500 Cl- E	Total/NA
Chemical Oxygen Demand	8.4	J	10	6.0	mg/L	1		SM 5220C	Total/NA

Client Sample ID: CSD-9 DUP — Lab Sample ID: 500-135919-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	20000		500	110	ug/L	1		6020	Total Recoverable
Nitrogen, Nitrate Nitrite	5.7		0.50	0.21	mg/L	5		353.2	Total/NA
Nitrogen, Kjeldahl	0.62		0.40	0.24	mg/L	1		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	3.2		1.0	0.47	mg/L	1		9060A	Total/NA
Total Dissolved Solids	130		10	4.3	mg/L	1		SM 2540C	Total/NA
Chloride	8.3		2.0	1.0	mg/L	1		SM 4500 Cl- E	Total/NA
Chemical Oxygen Demand	11		10	6.0	mg/L	1		SM 5220C	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

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

TestAmerica Job ID: 500-135919-1

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	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 Cl- E	Chloride, Total	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: 500-135919-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-135919-1	CSD-1S	Water	10/17/17 13:30	10/19/17 09:45
500-135919-2	CSD-1D	Water	10/17/17 13:00	10/19/17 09:45
500-135919-3	CSD-2	Water	10/17/17 13:55	10/19/17 09:45
500-135919-4	CSD-3S	Water	10/17/17 09:30	10/19/17 09:45
500-135919-5	CSD-3D	Water	10/17/17 09:10	10/19/17 09:45
500-135919-6	CSD-4	Water	10/17/17 09:55	10/19/17 09:45
500-135919-7	CSD-4 DUP	Water	10/17/17 09:55	10/19/17 09:45
500-135919-8	CSD-5	Water	10/17/17 14:25	10/19/17 09:45
500-135919-9	CSD-6	Water	10/17/17 11:15	10/19/17 09:45
500-135919-10	CSD-7	Water	10/17/17 10:55	10/19/17 09:45
500-135919-11	CSD-8	Water	10/17/17 10:25	10/19/17 09:45
500-135919-12	CSD-9	Water	10/17/17 11:40	10/19/17 09:45
500-135919-13	CSD-9 DUP	Water	10/17/17 11:40	10/19/17 09:45

Client Sample Results

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

TestAmerica Job ID: 500-135919-1

Client Sample ID: CSD-1S

Lab Sample ID: 500-135919-1
Date Collected: 10/17/17 13:30
Matrix: Water
Date Received: 10/19/17 09:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**18000**		500	110	ug/L		10/19/17 16:26	10/20/17 18:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Nitrate Nitrite	**13**		1.0	0.41	mg/L			11/03/17 21:44	10
Nitrogen, Kjeldahl	**2.1**		0.40	0.24	mg/L		10/24/17 07:15	10/24/17 10:02	1
Total Organic Carbon - Duplicates	**1.9**		1.0	0.47	mg/L			10/27/17 04:05	1
Total Dissolved Solids	**220**		10	4.3	mg/L			10/23/17 05:52	1
Chloride	**14**		2.0	1.0	mg/L			11/06/17 01:26	1
Ammonia	**2.2**		0.20	0.10	mg/L		11/03/17 23:30	11/04/17 02:03	1
Chemical Oxygen Demand	<6.0		10	6.0	mg/L		11/01/17 12:31	11/01/17 15:15	1

Client Sample ID: CSD-1D

Lab Sample ID: 500-135919-2
Date Collected: 10/17/17 13:00
Matrix: Water
Date Received: 10/19/17 09:45

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**26**		2.0	1.0	mg/L			11/06/17 01:27	1

Client Sample ID: CSD-2

Lab Sample ID: 500-135919-3
Date Collected: 10/17/17 13:55
Matrix: Water
Date Received: 10/19/17 09:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**7800**		500	110	ug/L		10/19/17 16:26	10/20/17 18:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Nitrate Nitrite	**4.7**		0.50	0.21	mg/L			11/03/17 21:46	5
Nitrogen, Kjeldahl	**0.31**	J	0.40	0.24	mg/L		10/24/17 07:15	10/24/17 10:13	1
Total Organic Carbon - Duplicates	**1.1**		1.0	0.47	mg/L			10/28/17 04:51	1
Total Dissolved Solids	**110**		10	4.3	mg/L			10/23/17 06:02	1
Chloride	**3.8**		2.0	1.0	mg/L			11/06/17 01:28	1
Ammonia	<0.10		0.20	0.10	mg/L		11/03/17 23:30	11/04/17 02:06	1
Chemical Oxygen Demand	<6.0		10	6.0	mg/L		11/01/17 12:31	11/01/17 15:22	1

Client Sample ID: CSD-3S

Lab Sample ID: 500-135919-4
Date Collected: 10/17/17 09:30
Matrix: Water
Date Received: 10/19/17 09:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**6400**		500	110	ug/L		10/19/17 16:26	10/20/17 18:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Nitrate Nitrite	**18**		1.0	0.41	mg/L			11/03/17 21:48	10
Nitrogen, Kjeldahl	**0.43**		0.40	0.24	mg/L		10/24/17 07:15	10/24/17 10:16	1
Total Organic Carbon - Duplicates	**1.4**		1.0	0.47	mg/L			10/28/17 05:09	1

Client Sample ID: CSD-3S

Lab Sample ID: 500-135919-4
Date Collected: 10/17/17 09:30
Matrix: Water
Date Received: 10/19/17 09:45

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**260**		10	4.3	mg/L			10/23/17 06:05	1
Chloride	**14**		2.0	1.0	mg/L			11/06/17 01:31	1
Ammonia	<0.10		0.20	0.10	mg/L		11/03/17 23:30	11/04/17 02:09	1
Chemical Oxygen Demand	<6.0		10	6.0	mg/L		11/01/17 12:31	11/01/17 15:23	1

Client Sample ID: CSD-3D

Lab Sample ID: 500-135919-5
Date Collected: 10/17/17 09:10
Matrix: Water
Date Received: 10/19/17 09:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**1500**		500	110	ug/L		10/19/17 16:26	10/20/17 18:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Nitrate Nitrite	**19**		1.0	0.41	mg/L			11/03/17 21:55	10
Nitrogen, Kjeldahl	**0.69**		0.40	0.24	mg/L		10/24/17 07:15	10/24/17 10:18	1
Total Organic Carbon - Duplicates	<0.47		1.0	0.47	mg/L			10/28/17 05:26	1
Total Dissolved Solids	**230**		10	4.3	mg/L			10/23/17 06:07	1
Chloride	**15**		2.0	1.0	mg/L			11/06/17 01:34	1
Ammonia	<0.10		0.20	0.10	mg/L		11/03/17 23:30	11/04/17 02:12	1
Chemical Oxygen Demand	**6.3**	J	10	6.0	mg/L		11/01/17 12:31	11/01/17 15:24	1

Client Sample ID: CSD-4

Lab Sample ID: 500-135919-6
Date Collected: 10/17/17 09:55
Matrix: Water
Date Received: 10/19/17 09:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**35000**		500	110	ug/L		10/19/17 16:26	10/20/17 18:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Nitrate Nitrite	**42**		2.5	1.0	mg/L			11/03/17 21:57	25
Nitrogen, Kjeldahl	**1.1**		0.40	0.24	mg/L		10/24/17 07:15	10/24/17 10:21	1
Total Organic Carbon - Duplicates	**2.9**		1.0	0.47	mg/L			10/28/17 05:45	1
Total Dissolved Solids	**620**		10	4.3	mg/L			10/23/17 06:10	1
Chloride	**43**		2.0	1.0	mg/L			11/06/17 01:35	1
Ammonia	<0.10		0.20	0.10	mg/L		11/03/17 23:30	11/04/17 02:14	1
Chemical Oxygen Demand	**9.4**	J	10	6.0	mg/L		11/01/17 12:31	11/01/17 15:25	1

Client Sample ID: CSD-4 DUP

Lab Sample ID: 500-135919-7
Date Collected: 10/17/17 09:55
Matrix: Water
Date Received: 10/19/17 09:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**35000**		500	110	ug/L		10/19/17 16:26	10/20/17 18:51	1

Client Sample ID: CSD-4 DUP

Lab Sample ID: 500-135919-7
Date Collected: 10/17/17 09:55
Matrix: Water
Date Received: 10/19/17 09:45

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Nitrate Nitrite	37		2.5	1.0	mg/L			11/03/17 21:59	25
Nitrogen, Kjeldahl	1.1		0.40	0.24	mg/L		10/24/17 07:15	10/24/17 10:24	1
Total Organic Carbon - Duplicates	2.9		1.0	0.47	mg/L			10/28/17 06:24	1
Total Dissolved Solids	630		10	4.3	mg/L			10/23/17 06:12	1
Chloride	39		2.0	1.0	mg/L			11/06/17 01:36	1
Ammonia	<0.10		0.20	0.10	mg/L		11/03/17 23:30	11/04/17 02:23	1
Chemical Oxygen Demand	6.8	J	10	6.0	mg/L		11/01/17 12:31	11/01/17 15:26	1

Client Sample ID: CSD-5

Lab Sample ID: 500-135919-8
Date Collected: 10/17/17 14:25
Matrix: Water
Date Received: 10/19/17 09:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	27000		500	110	ug/L		10/19/17 16:26	10/20/17 18:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Nitrate Nitrite	2.8		0.20	0.082	mg/L			11/03/17 23:13	2
Nitrogen, Kjeldahl	4.4		0.80	0.49	mg/L		10/24/17 07:15	10/24/17 10:33	2
Total Organic Carbon - Duplicates	4.9		1.0	0.47	mg/L			10/28/17 06:44	1
Total Dissolved Solids	200		10	4.3	mg/L			10/23/17 06:15	1
Chloride	19		2.0	1.0	mg/L			11/06/17 01:36	1
Ammonia	4.1		0.40	0.20	mg/L		11/03/17 23:30	11/04/17 02:26	2
Chemical Oxygen Demand	9.9	J	10	6.0	mg/L		11/01/17 12:31	11/01/17 15:27	1

Client Sample ID: CSD-6

Lab Sample ID: 500-135919-9
Date Collected: 10/17/17 11:15
Matrix: Water
Date Received: 10/19/17 09:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	100000		500	110	ug/L		10/19/17 16:26	10/20/17 18:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Nitrate Nitrite	8.4		1.0	0.41	mg/L			11/03/17 22:08	10
Nitrogen, Kjeldahl	0.97		0.40	0.24	mg/L		10/24/17 07:15	10/24/17 10:35	1
Total Organic Carbon - Duplicates	4.0		1.0	0.47	mg/L			10/30/17 06:45	1
Total Dissolved Solids	650		10	4.3	mg/L			10/23/17 06:18	1
Chloride	31		2.0	1.0	mg/L			11/06/17 01:37	1
Ammonia	<0.10		0.20	0.10	mg/L		11/03/17 23:30	11/04/17 02:29	1
Chemical Oxygen Demand	14		10	6.0	mg/L		11/01/17 12:31	11/01/17 15:28	1

Client Sample ID: CSD-7

Lab Sample ID: 500-135919-10
Date Collected: 10/17/17 10:55
Matrix: Water
Date Received: 10/19/17 09:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	88000		500	110	ug/L		10/19/17 16:26	10/20/17 19:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Nitrate Nitrite	88		5.0	2.1	mg/L			11/03/17 22:54	50
Nitrogen, Kjeldahl	2.6		0.40	0.24	mg/L		10/24/17 07:15	10/24/17 10:38	1
Total Organic Carbon - Duplicates	22		1.0	0.47	mg/L			10/30/17 12:09	1
Total Dissolved Solids	1100		10	4.3	mg/L			10/23/17 06:20	1
Chloride	62		2.0	1.0	mg/L			11/06/17 01:37	1
Ammonia	0.20		0.20	0.10	mg/L		11/03/17 23:30	11/04/17 02:37	1
Chemical Oxygen Demand	66		10	6.0	mg/L		11/01/17 12:31	11/01/17 15:29	1

Client Sample ID: CSD-8

Lab Sample ID: 500-135919-11

Date Collected: 10/17/17 10:25
Date Received: 10/19/17 09:45

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	56000		500	110	ug/L		10/19/17 16:26	10/20/17 19:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Nitrate Nitrite	39		2.5	1.0	mg/L			11/03/17 22:55	25
Nitrogen, Kjeldahl	0.90		0.40	0.24	mg/L		10/31/17 07:40	10/31/17 10:07	1
Total Organic Carbon - Duplicates	4.2		1.0	0.47	mg/L			10/30/17 07:24	1
Total Dissolved Solids	630		10	4.3	mg/L			10/23/17 06:23	1
Chloride	39		2.0	1.0	mg/L			11/06/17 01:38	1
Ammonia	<0.10		0.20	0.10	mg/L		11/03/17 23:30	11/04/17 02:40	1
Chemical Oxygen Demand	9.4	J	10	6.0	mg/L		11/01/17 12:31	11/01/17 15:30	1

Client Sample ID: CSD-9

Lab Sample ID: 500-135919-12

Date Collected: 10/17/17 11:40
Date Received: 10/19/17 09:45

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	19000		500	110	ug/L		10/19/17 16:26	10/20/17 19:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Nitrate Nitrite	5.0		0.50	0.21	mg/L			11/03/17 22:14	5
Nitrogen, Kjeldahl	0.58		0.40	0.24	mg/L		10/31/17 07:40	10/31/17 10:16	1
Total Organic Carbon - Duplicates	3.2		1.0	0.47	mg/L			10/30/17 08:02	1
Total Dissolved Solids	140		10	4.3	mg/L			10/23/17 06:25	1
Chloride	8.2		2.0	1.0	mg/L			11/06/17 01:38	1
Ammonia	<0.10		0.20	0.10	mg/L		11/03/17 23:30	11/04/17 02:43	1
Chemical Oxygen Demand	8.4	J	10	6.0	mg/L		11/01/17 12:31	11/01/17 15:31	1

Client Sample ID: CSD-9 DUP

Lab Sample ID: 500-135919-13

Date Collected: 10/17/17 11:40
Date Received: 10/19/17 09:45

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	20000		500	110	ug/L		10/19/17 16:26	10/20/17 19:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Nitrate Nitrite	5.7		0.50	0.21	mg/L			11/03/17 22:16	5

Client Sample Results

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

TestAmerica Job ID: 500-135919-1

Client Sample ID: CSD-9 DUP

Lab Sample ID: 500-135919-13

Date Collected: 10/17/17 11:40
Date Received: 10/19/17 09:45

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Kjeldahl	**0.62**		0.40	0.24	mg/L		10/31/17 07:40	10/31/17 10:19	1
Total Organic Carbon - Duplicates	**3.2**		1.0	0.47	mg/L			10/30/17 08:20	1
Total Dissolved Solids	**130**		10	4.3	mg/L			10/23/17 06:28	1
Chloride	**8.3**		2.0	1.0	mg/L			11/06/17 01:39	1
Ammonia	<0.10		0.20	0.10	mg/L		11/03/17 23:30	11/04/17 02:46	1
Chemical Oxygen Demand	**11**		10	6.0	mg/L		11/01/17 12:31	11/01/17 15:32	1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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.

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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
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: 500-135919-1

Metals

Prep Batch: 406093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-135919-1	CSD-1S	Total Recoverable	Water	3005A	
500-135919-3	CSD-2	Total Recoverable	Water	3005A	
500-135919-4	CSD-3S	Total Recoverable	Water	3005A	
500-135919-5	CSD-3D	Total Recoverable	Water	3005A	
500-135919-6	CSD-4	Total Recoverable	Water	3005A	
500-135919-7	CSD-4 DUP	Total Recoverable	Water	3005A	
500-135919-8	CSD-5	Total Recoverable	Water	3005A	
500-135919-9	CSD-6	Total Recoverable	Water	3005A	
500-135919-10	CSD-7	Total Recoverable	Water	3005A	
500-135919-11	CSD-8	Total Recoverable	Water	3005A	
500-135919-12	CSD-9	Total Recoverable	Water	3005A	
500-135919-13	CSD-9 DUP	Total Recoverable	Water	3005A	
MB 500-406093/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-406093/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 406469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-135919-1	CSD-1S	Total Recoverable	Water	6020	406093
500-135919-3	CSD-2	Total Recoverable	Water	6020	406093
500-135919-4	CSD-3S	Total Recoverable	Water	6020	406093
500-135919-5	CSD-3D	Total Recoverable	Water	6020	406093
500-135919-6	CSD-4	Total Recoverable	Water	6020	406093
500-135919-7	CSD-4 DUP	Total Recoverable	Water	6020	406093
500-135919-8	CSD-5	Total Recoverable	Water	6020	406093
500-135919-9	CSD-6	Total Recoverable	Water	6020	406093
500-135919-10	CSD-7	Total Recoverable	Water	6020	406093
500-135919-11	CSD-8	Total Recoverable	Water	6020	406093
500-135919-12	CSD-9	Total Recoverable	Water	6020	406093
500-135919-13	CSD-9 DUP	Total Recoverable	Water	6020	406093
MB 500-406093/1-A	Method Blank	Total Recoverable	Water	6020	406093
LCS 500-406093/2-A	Lab Control Sample	Total Recoverable	Water	6020	406093

General Chemistry

Analysis Batch: 406409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-135919-1	CSD-1S	Total/NA	Water	SM 2540C	
500-135919-3	CSD-2	Total/NA	Water	SM 2540C	
500-135919-4	CSD-3S	Total/NA	Water	SM 2540C	
500-135919-5	CSD-3D	Total/NA	Water	SM 2540C	
500-135919-6	CSD-4	Total/NA	Water	SM 2540C	
500-135919-7	CSD-4 DUP	Total/NA	Water	SM 2540C	
500-135919-8	CSD-5	Total/NA	Water	SM 2540C	
500-135919-9	CSD-6	Total/NA	Water	SM 2540C	
500-135919-10	CSD-7	Total/NA	Water	SM 2540C	
500-135919-11	CSD-8	Total/NA	Water	SM 2540C	
500-135919-12	CSD-9	Total/NA	Water	SM 2540C	
500-135919-13	CSD-9 DUP	Total/NA	Water	SM 2540C	
MB 500-406409/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-406409/2	Lab Control Sample	Total/NA	Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 406409 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-135919-1 MS	CSD-1S	Total/NA	Water	SM 2540C	
500-135919-1 DU	CSD-1S	Total/NA	Water	SM 2540C	

Prep Batch: 406568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-135919-1	CSD-1S	Total/NA	Water	SM4500Norg_C	
500-135919-3	CSD-2	Total/NA	Water	SM4500Norg_C	
500-135919-4	CSD-3S	Total/NA	Water	SM4500Norg_C	
500-135919-5	CSD-3D	Total/NA	Water	SM4500Norg_C	
500-135919-6	CSD-4	Total/NA	Water	SM4500Norg_C	
500-135919-7	CSD-4 DUP	Total/NA	Water	SM4500Norg_C	
500-135919-8	CSD-5	Total/NA	Water	SM4500Norg_C	
500-135919-9	CSD-6	Total/NA	Water	SM4500Norg_C	
500-135919-10	CSD-7	Total/NA	Water	SM4500Norg_C	
MB 500-406568/1-A	Method Blank	Total/NA	Water	SM4500Norg_C	
LCS 500-406568/2-A	Lab Control Sample	Total/NA	Water	SM4500Norg_C	

Analysis Batch: 406690

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-135919-1	CSD-1S	Total/NA	Water	4500 NH3 G	406568
500-135919-3	CSD-2	Total/NA	Water	4500 NH3 G	406568
500-135919-4	CSD-3S	Total/NA	Water	4500 NH3 G	406568
500-135919-5	CSD-3D	Total/NA	Water	4500 NH3 G	406568
500-135919-6	CSD-4	Total/NA	Water	4500 NH3 G	406568
500-135919-7	CSD-4 DUP	Total/NA	Water	4500 NH3 G	406568
500-135919-8	CSD-5	Total/NA	Water	4500 NH3 G	406568
500-135919-9	CSD-6	Total/NA	Water	4500 NH3 G	406568
500-135919-10	CSD-7	Total/NA	Water	4500 NH3 G	406568
MB 500-406568/1-A	Method Blank	Total/NA	Water	4500 NH3 G	406568
LCS 500-406568/2-A	Lab Control Sample	Total/NA	Water	4500 NH3 G	406568

Analysis Batch: 407343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-135919-1	CSD-1S	Total/NA	Water	9060A	
MB 500-407343/4	Method Blank	Total/NA	Water	9060A	
LCS 500-407343/5	Lab Control Sample	Total/NA	Water	9060A	
500-135919-1 MS	CSD-1S	Total/NA	Water	9060A	
500-135919-1 MSD	CSD-1S	Total/NA	Water	9060A	

Analysis Batch: 407517

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-135919-3	CSD-2	Total/NA	Water	9060A	
500-135919-4	CSD-3S	Total/NA	Water	9060A	
500-135919-5	CSD-3D	Total/NA	Water	9060A	
500-135919-6	CSD-4	Total/NA	Water	9060A	
500-135919-7	CSD-4 DUP	Total/NA	Water	9060A	
500-135919-8	CSD-5	Total/NA	Water	9060A	
MB 500-407517/35	Method Blank	Total/NA	Water	9060A	
LCS 500-407517/36	Lab Control Sample	Total/NA	Water	9060A	
500-135919-6 MS	CSD-4	Total/NA	Water	9060A	
500-135919-6 MSD	CSD-4	Total/NA	Water	9060A	

QC Association Summary

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

TestAmerica Job ID: 500-135919-1

Prep Batch: 407667

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-135919-11	CSD-8	Total/NA	Water	SM4500Norg_C	
500-135919-12	CSD-9	Total/NA	Water	SM4500Norg_C	
500-135919-13	CSD-9 DUP	Total/NA	Water	SM4500Norg_C	
MB 500-407667/1-A	Method Blank	Total/NA	Water	SM4500Norg_C	
LCS 500-407667/2-A	Lab Control Sample	Total/NA	Water	SM4500Norg_C	
500-135919-11 MS	CSD-8	Total/NA	Water	SM4500Norg_C	
500-135919-11 MSD	CSD-8	Total/NA	Water	SM4500Norg_C	

Analysis Batch: 407670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-135919-9	CSD-6	Total/NA	Water	9060A	
500-135919-10	CSD-7	Total/NA	Water	9060A	
500-135919-11	CSD-8	Total/NA	Water	9060A	
500-135919-12	CSD-9	Total/NA	Water	9060A	
500-135919-13	CSD-9 DUP	Total/NA	Water	9060A	
MB 500-407670/38	Method Blank	Total/NA	Water	9060A	
HLCS 500-407670/5	Lab Control Sample	Total/NA	Water	9060A	
LCS 500-407670/39	Lab Control Sample	Total/NA	Water	9060A	
500-135919-11 MS	CSD-8	Total/NA	Water	9060A	
500-135919-11 MSD	CSD-8	Total/NA	Water	9060A	

Analysis Batch: 407786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-135919-11	CSD-8	Total/NA	Water	4500 NH3 G	407667
500-135919-12	CSD-9	Total/NA	Water	4500 NH3 G	407667
500-135919-13	CSD-9 DUP	Total/NA	Water	4500 NH3 G	407667
MB 500-407667/1-A	Method Blank	Total/NA	Water	4500 NH3 G	407667
LCS 500-407667/2-A	Lab Control Sample	Total/NA	Water	4500 NH3 G	407667
500-135919-11 MS	CSD-8	Total/NA	Water	4500 NH3 G	407667
500-135919-11 MSD	CSD-8	Total/NA	Water	4500 NH3 G	407667

Prep Batch: 407995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-135919-1	CSD-1S	Total/NA	Water	SM 5220	
500-135919-3	CSD-2	Total/NA	Water	SM 5220	
500-135919-4	CSD-3S	Total/NA	Water	SM 5220	
500-135919-5	CSD-3D	Total/NA	Water	SM 5220	
500-135919-6	CSD-4	Total/NA	Water	SM 5220	
500-135919-7	CSD-4 DUP	Total/NA	Water	SM 5220	
500-135919-8	CSD-5	Total/NA	Water	SM 5220	
500-135919-9	CSD-6	Total/NA	Water	SM 5220	
500-135919-10	CSD-7	Total/NA	Water	SM 5220	
500-135919-11	CSD-8	Total/NA	Water	SM 5220	
500-135919-12	CSD-9	Total/NA	Water	SM 5220	
500-135919-13	CSD-9 DUP	Total/NA	Water	SM 5220	
LCS 500-407995/2-A	Lab Control Sample	Total/NA	Water	SM 5220	
500-135919-1 MS	CSD-1S	Total/NA	Water	SM 5220	
500-135919-1 MSD	CSD-1S	Total/NA	Water	SM 5220	

Analysis Batch: 408012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-135919-1	CSD-1S	Total/NA	Water	SM 5220C	407995
500-135919-3	CSD-2	Total/NA	Water	SM 5220C	407995

General Chemistry (Continued)

Analysis Batch: 408012 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-135919-4	CSD-3S	Total/NA	Water	SM 5220C	407995
500-135919-5	CSD-3D	Total/NA	Water	SM 5220C	407995
500-135919-6	CSD-4	Total/NA	Water	SM 5220C	407995
500-135919-7	CSD-4 DUP	Total/NA	Water	SM 5220C	407995
500-135919-8	CSD-5	Total/NA	Water	SM 5220C	407995
500-135919-9	CSD-6	Total/NA	Water	SM 5220C	407995
500-135919-10	CSD-7	Total/NA	Water	SM 5220C	407995
500-135919-11	CSD-8	Total/NA	Water	SM 5220C	407995
500-135919-12	CSD-9	Total/NA	Water	SM 5220C	407995
500-135919-13	CSD-9 DUP	Total/NA	Water	SM 5220C	407995
LCS 500-407995/2-A	Lab Control Sample	Total/NA	Water	SM 5220C	407995
500-135919-1 MS	CSD-1S	Total/NA	Water	SM 5220C	407995
500-135919-1 MSD	CSD-1S	Total/NA	Water	SM 5220C	407995

Prep Batch: 408423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-135919-1	CSD-1S	Total/NA	Water	SM 4500 NH3 B	
500-135919-3	CSD-2	Total/NA	Water	SM 4500 NH3 B	
500-135919-4	CSD-3S	Total/NA	Water	SM 4500 NH3 B	
500-135919-5	CSD-3D	Total/NA	Water	SM 4500 NH3 B	
500-135919-6	CSD-4	Total/NA	Water	SM 4500 NH3 B	
500-135919-7	CSD-4 DUP	Total/NA	Water	SM 4500 NH3 B	
500-135919-8	CSD-5	Total/NA	Water	SM 4500 NH3 B	
500-135919-9	CSD-6	Total/NA	Water	SM 4500 NH3 B	
500-135919-10	CSD-7	Total/NA	Water	SM 4500 NH3 B	
500-135919-11	CSD-8	Total/NA	Water	SM 4500 NH3 B	
500-135919-12	CSD-9	Total/NA	Water	SM 4500 NH3 B	
500-135919-13	CSD-9 DUP	Total/NA	Water	SM 4500 NH3 B	
MB 500-408423/1-A	Method Blank	Total/NA	Water	SM 4500 NH3 B	
LCS 500-408423/2-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 B	
500-135919-9 MS	CSD-6	Total/NA	Water	SM 4500 NH3 B	
500-135919-9 MSD	CSD-6	Total/NA	Water	SM 4500 NH3 B	

Analysis Batch: 408506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-135919-1	CSD-1S	Total/NA	Water	SM 4500 NH3 G	408423
500-135919-3	CSD-2	Total/NA	Water	SM 4500 NH3 G	408423
500-135919-4	CSD-3S	Total/NA	Water	SM 4500 NH3 G	408423
500-135919-5	CSD-3D	Total/NA	Water	SM 4500 NH3 G	408423
500-135919-6	CSD-4	Total/NA	Water	SM 4500 NH3 G	408423
500-135919-7	CSD-4 DUP	Total/NA	Water	SM 4500 NH3 G	408423
500-135919-8	CSD-5	Total/NA	Water	SM 4500 NH3 G	408423
500-135919-9	CSD-6	Total/NA	Water	SM 4500 NH3 G	408423
500-135919-10	CSD-7	Total/NA	Water	SM 4500 NH3 G	408423
500-135919-11	CSD-8	Total/NA	Water	SM 4500 NH3 G	408423
500-135919-12	CSD-9	Total/NA	Water	SM 4500 NH3 G	408423
500-135919-13	CSD-9 DUP	Total/NA	Water	SM 4500 NH3 G	408423
MB 500-408423/1-A	Method Blank	Total/NA	Water	SM 4500 NH3 G	408423
LCS 500-408423/2-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 G	408423
500-135919-9 MS	CSD-6	Total/NA	Water	SM 4500 NH3 G	408423
500-135919-9 MSD	CSD-6	Total/NA	Water	SM 4500 NH3 G	408423

QC Association Summary

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

TestAmerica Job ID: 500-135919-1

Analysis Batch: 408514

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-135919-1	CSD-1S	Total/NA	Water	353.2	
500-135919-3	CSD-2	Total/NA	Water	353.2	
500-135919-4	CSD-3S	Total/NA	Water	353.2	
500-135919-5	CSD-3D	Total/NA	Water	353.2	
500-135919-6	CSD-4	Total/NA	Water	353.2	
500-135919-7	CSD-4 DUP	Total/NA	Water	353.2	
500-135919-8	CSD-5	Total/NA	Water	353.2	
500-135919-9	CSD-6	Total/NA	Water	353.2	
500-135919-10	CSD-7	Total/NA	Water	353.2	
500-135919-11	CSD-8	Total/NA	Water	353.2	
500-135919-12	CSD-9	Total/NA	Water	353.2	
500-135919-13	CSD-9 DUP	Total/NA	Water	353.2	
MB 500-408514/12	Method Blank	Total/NA	Water	353.2	
LCS 500-408514/13	Lab Control Sample	Total/NA	Water	353.2	
500-135919-4 MS	CSD-3S	Total/NA	Water	353.2	
500-135919-4 MSD	CSD-3S	Total/NA	Water	353.2	

Analysis Batch: 408685

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-135919-1	CSD-1S	Total/NA	Water	SM 4500 Cl- E	
500-135919-2	CSD-1D	Total/NA	Water	SM 4500 Cl- E	
500-135919-3	CSD-2	Total/NA	Water	SM 4500 Cl- E	
500-135919-4	CSD-3S	Total/NA	Water	SM 4500 Cl- E	
500-135919-5	CSD-3D	Total/NA	Water	SM 4500 Cl- E	
500-135919-6	CSD-4	Total/NA	Water	SM 4500 Cl- E	
500-135919-7	CSD-4 DUP	Total/NA	Water	SM 4500 Cl- E	
500-135919-8	CSD-5	Total/NA	Water	SM 4500 Cl- E	
500-135919-9	CSD-6	Total/NA	Water	SM 4500 Cl- E	
500-135919-10	CSD-7	Total/NA	Water	SM 4500 Cl- E	
500-135919-11	CSD-8	Total/NA	Water	SM 4500 Cl- E	
500-135919-12	CSD-9	Total/NA	Water	SM 4500 Cl- E	
500-135919-13	CSD-9 DUP	Total/NA	Water	SM 4500 Cl- E	
MB 500-408685/4	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 500-408685/5	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
500-135919-3 MS	CSD-2	Total/NA	Water	SM 4500 Cl- E	
500-135919-3 MSD	CSD-2	Total/NA	Water	SM 4500 Cl- E	

QC Sample Results

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

TestAmerica Job ID: 500-135919-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 500-406093/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 406469 — **Prep Batch: 406093**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	<110		500	110	ug/L		10/19/17 16:26	10/20/17 18:08	1

Lab Sample ID: LCS 500-406093/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 406469 — **Prep Batch: 406093**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Potassium	10000	9790		ug/L		98	80 - 120

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 500-408514/12 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 408514

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Nitrate Nitrite	<0.041		0.10	0.041	mg/L			11/03/17 21:40	1

Lab Sample ID: LCS 500-408514/13 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 408514

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Nitrate Nitrite	1.00	0.917		mg/L		92	90 - 110

Lab Sample ID: 500-135919-4 MS — **Client Sample ID: CSD-3S**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 408514

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Nitrate Nitrite	18		1.00	18.4	4	mg/L		25	90 - 110

Lab Sample ID: 500-135919-4 MSD — **Client Sample ID: CSD-3S**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 408514

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrogen, Nitrate Nitrite	18		1.00	20.5	4	mg/L		235	90 - 110	11	20

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

Lab Sample ID: MB 500-406568/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 406690 — **Prep Batch: 406568**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Kjeldahl	<0.24		0.40	0.24	mg/L		10/24/17 07:15	10/24/17 09:25	1

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

Lab Sample ID: LCS 500-406568/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 406690 — **Prep Batch: 406568**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Kjeldahl	2.50	2.40		mg/L		96	80 - 120

Lab Sample ID: MB 500-407667/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 407786 — **Prep Batch: 407667**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Kjeldahl	<0.24		0.40	0.24	mg/L		10/31/17 07:40	10/31/17 09:59	1

Lab Sample ID: LCS 500-407667/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 407786 — **Prep Batch: 407667**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Kjeldahl	2.50	2.22		mg/L		89	80 - 120

Lab Sample ID: 500-135919-11 MS — **Client Sample ID: CSD-8**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 407786 — **Prep Batch: 407667**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Kjeldahl	0.90		2.50	3.17		mg/L		91	75 - 125

Lab Sample ID: 500-135919-11 MSD — **Client Sample ID: CSD-8**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 407786 — **Prep Batch: 407667**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrogen, Kjeldahl	0.90		2.50	3.13		mg/L		89	75 - 125	1	20

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

Lab Sample ID: MB 500-407343/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 407343

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	<0.47		1.0	0.47	mg/L			10/26/17 22:47	1

Lab Sample ID: LCS 500-407343/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 407343

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Duplicates	10.0	9.37		mg/L		94	80 - 120
TOC Result 1	10.0	9.37		mg/L		94	80 - 120
TOC Result 2	10.0	9.36		mg/L		94	80 - 120

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

Lab Sample ID: 500-135919-1 MS — **Client Sample ID: CSD-1S**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 407343

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Duplicates	1.9		10.0	10.9		mg/L		90	75 - 125
TOC Result 1	2.0		10.0	10.9		mg/L		89	75 - 125
TOC Result 2	1.8		10.0	10.9		mg/L		92	75 - 125

Lab Sample ID: 500-135919-1 MSD — **Client Sample ID: CSD-1S**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 407343

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	1.9		10.0	10.9		mg/L		90	75 - 125	0	20
TOC Result 1	2.0		10.0	10.9		mg/L		89	75 - 125	0	20
TOC Result 2	1.8		10.0	10.9		mg/L		91	75 - 125	0	20

Lab Sample ID: MB 500-407517/35 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 407517

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	<0.47		1.0	0.47	mg/L			10/28/17 01:03	1

Lab Sample ID: LCS 500-407517/36 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 407517

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Duplicates	10.0	9.22		mg/L		92	80 - 120
TOC Result 1	10.0	9.16		mg/L		92	80 - 120
TOC Result 2	10.0	9.28		mg/L		93	80 - 120

Lab Sample ID: 500-135919-6 MS — **Client Sample ID: CSD-4**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 407517

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Duplicates	2.9		10.0	12.1		mg/L		92	75 - 125
TOC Result 1	2.9		10.0	12.1		mg/L		92	75 - 125
TOC Result 2	3.0		10.0	12.1		mg/L		91	75 - 125

Lab Sample ID: 500-135919-6 MSD — **Client Sample ID: CSD-4**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 407517

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	2.9		10.0	12.1		mg/L		91	75 - 125	0	20
TOC Result 1	2.9		10.0	12.1		mg/L		91	75 - 125	0	20

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

Lab Sample ID: 500-135919-6 MSD — **Client Sample ID: CSD-4**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 407517

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
TOC Result 2	3.0		10.0	12.1		mg/L		91	75 - 125	0	20

Lab Sample ID: MB 500-407670/38 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 407670

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	<0.47		1.0	0.47	mg/L			10/30/17 06:09	1

Lab Sample ID: HLCS 500-407670/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 407670

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Duplicates	30.0	29.6		mg/L		99	80 - 120
TOC Result 1	30.0	29.5		mg/L		98	80 - 120
TOC Result 2	30.0	29.7		mg/L		99	80 - 120

Lab Sample ID: LCS 500-407670/39 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 407670

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Duplicates	10.0	9.18		mg/L		92	80 - 120
TOC Result 1	10.0	9.18		mg/L		92	80 - 120
TOC Result 2	10.0	9.18		mg/L		92	80 - 120

Lab Sample ID: 500-135919-11 MS — **Client Sample ID: CSD-8**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 407670

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Duplicates	4.2		10.0	13.6		mg/L		93	75 - 125
TOC Result 1	4.3		10.0	13.6		mg/L		93	75 - 125
TOC Result 2	4.2		10.0	13.6		mg/L		94	75 - 125

Lab Sample ID: 500-135919-11 MSD — **Client Sample ID: CSD-8**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 407670

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	4.2		10.0	13.6		mg/L		93	75 - 125	0	20
TOC Result 1	4.3		10.0	13.6		mg/L		93	75 - 125	0	20
TOC Result 2	4.2		10.0	13.6		mg/L		94	75 - 125	0	20

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

Lab Sample ID: MB 500-406409/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 406409

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<4.3		10	4.3	mg/L			10/23/17 05:47	1

Lab Sample ID: LCS 500-406409/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 406409

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	250	266		mg/L		106	80 - 120

Lab Sample ID: 500-135919-1 MS — **Client Sample ID: CSD-1S**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 406409

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	220		250	446		mg/L		91	75 - 125

Lab Sample ID: 500-135919-1 DU — **Client Sample ID: CSD-1S**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 406409

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	220		212		mg/L		3	5

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 500-408685/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 408685

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.0		2.0	1.0	mg/L			11/06/17 01:24	1

Lab Sample ID: LCS 500-408685/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 408685

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	54.2		mg/L		108	85 - 115

Lab Sample ID: 500-135919-3 MS — **Client Sample ID: CSD-2**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 408685

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	3.8		50.0	54.2		mg/L		101	75 - 125

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: 500-135919-3 MSD — **Client Sample ID: CSD-2**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 408685

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	3.8		50.0	53.3		mg/L		99	75 - 125	2	20

Method: SM 4500 NH3 G - Ammonia

Lab Sample ID: MB 500-408423/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 408506 — **Prep Batch: 408423**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	<0.10		0.20	0.10	mg/L		11/03/17 23:30	11/04/17 01:49	1

Lab Sample ID: LCS 500-408423/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 408506 — **Prep Batch: 408423**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	2.50	2.34		mg/L		94	80 - 120

Lab Sample ID: 500-135919-9 MS — **Client Sample ID: CSD-6**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 408506 — **Prep Batch: 408423**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	<0.10		2.50	2.40		mg/L		96	75 - 125

Lab Sample ID: 500-135919-9 MSD — **Client Sample ID: CSD-6**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 408506 — **Prep Batch: 408423**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia	<0.10		2.50	2.38		mg/L		95	75 - 125	1	20

Method: SM 5220C - COD

Lab Sample ID: LCS 500-407995/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 408012 — **Prep Batch: 407995**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	50.0	51.2		mg/L		102	85 - 115

Lab Sample ID: 500-135919-1 MS — **Client Sample ID: CSD-1S**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 408012 — **Prep Batch: 407995**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	<6.0		50.0	58.5		mg/L		117	75 - 125

Method: SM 5220C - COD (Continued)

Lab Sample ID: 500-135919-1 MSD
Matrix: Water
Analysis Batch: 408012

Client Sample ID: CSD-1S
Prep Type: Total/NA
Prep Batch: 407995

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chemical Oxygen Demand	<6.0		50.0	58.0		mg/L		116	75 - 125	1	20

Lab Chronicle

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

TestAmerica Job ID: 500-135919-1

Client Sample ID: CSD-1S

Lab Sample ID: 500-135919-1
Matrix: Water

Date Collected: 10/17/17 13:30
Date Received: 10/19/17 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			406093	10/19/17 16:26	BDE	TAL CHI
Total Recoverable	Analysis	6020		1	406469	10/20/17 18:41	FXG	TAL CHI
Total/NA	Analysis	353.2		10	408514	11/03/17 21:44	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			406568	10/24/17 07:15	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		1	406690	10/24/17 10:02	MTB	TAL CHI
Total/NA	Analysis	9060A		1	407343	10/27/17 04:05	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	406409	10/23/17 05:52	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	408685	11/06/17 01:26	HMW	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			408423	11/03/17 23:30	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	408506	11/04/17 02:03	HMW	TAL CHI
Total/NA	Prep	SM 5220			407995	11/01/17 12:31	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	408012	11/01/17 15:15	MAN	TAL CHI

Client Sample ID: CSD-1D

Lab Sample ID: 500-135919-2
Matrix: Water

Date Collected: 10/17/17 13:00
Date Received: 10/19/17 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	408685	11/06/17 01:27	HMW	TAL CHI

Client Sample ID: CSD-2

Lab Sample ID: 500-135919-3
Matrix: Water

Date Collected: 10/17/17 13:55
Date Received: 10/19/17 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			406093	10/19/17 16:26	BDE	TAL CHI
Total Recoverable	Analysis	6020		1	406469	10/20/17 18:43	FXG	TAL CHI
Total/NA	Analysis	353.2		5	408514	11/03/17 21:46	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			406568	10/24/17 07:15	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		1	406690	10/24/17 10:13	MTB	TAL CHI
Total/NA	Analysis	9060A		1	407517	10/28/17 04:51	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	406409	10/23/17 06:02	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	408685	11/06/17 01:28	HMW	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			408423	11/03/17 23:30	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	408506	11/04/17 02:06	HMW	TAL CHI
Total/NA	Prep	SM 5220			407995	11/01/17 12:31	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	408012	11/01/17 15:22	MAN	TAL CHI

Lab Chronicle

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

TestAmerica Job ID: 500-135919-1

Client Sample ID: CSD-3S — Lab Sample ID: 500-135919-4

Date Collected: 10/17/17 09:30
Date Received: 10/19/17 09:45

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			406093	10/19/17 16:26	BDE	TAL CHI
Total Recoverable	Analysis	6020		1	406469	10/20/17 18:45	FXG	TAL CHI
Total/NA	Analysis	353.2		10	408514	11/03/17 21:48	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			406568	10/24/17 07:15	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		1	406690	10/24/17 10:16	MTB	TAL CHI
Total/NA	Analysis	9060A		1	407517	10/28/17 05:09	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	406409	10/23/17 06:05	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	408685	11/06/17 01:31	HMW	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			408423	11/03/17 23:30	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	408506	11/04/17 02:09	HMW	TAL CHI
Total/NA	Prep	SM 5220			407995	11/01/17 12:31	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	408012	11/01/17 15:23	MAN	TAL CHI

Client Sample ID: CSD-3D — Lab Sample ID: 500-135919-5

Date Collected: 10/17/17 09:10
Date Received: 10/19/17 09:45

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			406093	10/19/17 16:26	BDE	TAL CHI
Total Recoverable	Analysis	6020		1	406469	10/20/17 18:47	FXG	TAL CHI
Total/NA	Analysis	353.2		10	408514	11/03/17 21:55	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			406568	10/24/17 07:15	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		1	406690	10/24/17 10:18	MTB	TAL CHI
Total/NA	Analysis	9060A		1	407517	10/28/17 05:26	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	406409	10/23/17 06:07	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	408685	11/06/17 01:34	HMW	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			408423	11/03/17 23:30	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	408506	11/04/17 02:12	HMW	TAL CHI
Total/NA	Prep	SM 5220			407995	11/01/17 12:31	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	408012	11/01/17 15:24	MAN	TAL CHI

Client Sample ID: CSD-4 — Lab Sample ID: 500-135919-6

Date Collected: 10/17/17 09:55
Date Received: 10/19/17 09:45

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			406093	10/19/17 16:26	BDE	TAL CHI
Total Recoverable	Analysis	6020		1	406469	10/20/17 18:49	FXG	TAL CHI
Total/NA	Analysis	353.2		25	408514	11/03/17 21:57	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			406568	10/24/17 07:15	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		1	406690	10/24/17 10:21	MTB	TAL CHI
Total/NA	Analysis	9060A		1	407517	10/28/17 05:45	HMW	TAL CHI

Lab Chronicle

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

TestAmerica Job ID: 500-135919-1

Client Sample ID: CSD-4

Lab Sample ID: 500-135919-6
Matrix: Water

Date Collected: 10/17/17 09:55
Date Received: 10/19/17 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	406409	10/23/17 06:10	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	408685	11/06/17 01:35	HMW	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			408423	11/03/17 23:30	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	408506	11/04/17 02:14	HMW	TAL CHI
Total/NA	Prep	SM 5220			407995	11/01/17 12:31	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	408012	11/01/17 15:25	MAN	TAL CHI

Client Sample ID: CSD-4 DUP

Lab Sample ID: 500-135919-7
Matrix: Water

Date Collected: 10/17/17 09:55
Date Received: 10/19/17 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			406093	10/19/17 16:26	BDE	TAL CHI
Total Recoverable	Analysis	6020		1	406469	10/20/17 18:51	FXG	TAL CHI
Total/NA	Analysis	353.2		25	408514	11/03/17 21:59	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			406568	10/24/17 07:15	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		1	406690	10/24/17 10:24	MTB	TAL CHI
Total/NA	Analysis	9060A		1	407517	10/28/17 06:24	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	406409	10/23/17 06:12	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	408685	11/06/17 01:36	HMW	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			408423	11/03/17 23:30	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	408506	11/04/17 02:23	HMW	TAL CHI
Total/NA	Prep	SM 5220			407995	11/01/17 12:31	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	408012	11/01/17 15:26	MAN	TAL CHI

Client Sample ID: CSD-5

Lab Sample ID: 500-135919-8
Matrix: Water

Date Collected: 10/17/17 14:25
Date Received: 10/19/17 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			406093	10/19/17 16:26	BDE	TAL CHI
Total Recoverable	Analysis	6020		1	406469	10/20/17 18:57	FXG	TAL CHI
Total/NA	Analysis	353.2		2	408514	11/03/17 23:13	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			406568	10/24/17 07:15	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		2	406690	10/24/17 10:33	MTB	TAL CHI
Total/NA	Analysis	9060A		1	407517	10/28/17 06:44	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	406409	10/23/17 06:15	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	408685	11/06/17 01:36	HMW	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			408423	11/03/17 23:30	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		2	408506	11/04/17 02:26	HMW	TAL CHI
Total/NA	Prep	SM 5220			407995	11/01/17 12:31	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	408012	11/01/17 15:27	MAN	TAL CHI

Lab Chronicle

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

TestAmerica Job ID: 500-135919-1

Client Sample ID: CSD-6

Lab Sample ID: 500-135919-9
Matrix: Water

Date Collected: 10/17/17 11:15
Date Received: 10/19/17 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			406093	10/19/17 16:26	BDE	TAL CHI
Total Recoverable	Analysis	6020		1	406469	10/20/17 18:59	FXG	TAL CHI
Total/NA	Analysis	353.2		10	408514	11/03/17 22:08	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			406568	10/24/17 07:15	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		1	406690	10/24/17 10:35	MTB	TAL CHI
Total/NA	Analysis	9060A		1	407670	10/30/17 06:45	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	406409	10/23/17 06:18	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	408685	11/06/17 01:37	HMW	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			408423	11/03/17 23:30	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	408506	11/04/17 02:29	HMW	TAL CHI
Total/NA	Prep	SM 5220			407995	11/01/17 12:31	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	408012	11/01/17 15:28	MAN	TAL CHI

Client Sample ID: CSD-7

Lab Sample ID: 500-135919-10
Matrix: Water

Date Collected: 10/17/17 10:55
Date Received: 10/19/17 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			406093	10/19/17 16:26	BDE	TAL CHI
Total Recoverable	Analysis	6020		1	406469	10/20/17 19:01	FXG	TAL CHI
Total/NA	Analysis	353.2		50	408514	11/03/17 22:54	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			406568	10/24/17 07:15	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		1	406690	10/24/17 10:38	MTB	TAL CHI
Total/NA	Analysis	9060A		1	407670	10/30/17 12:09	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	406409	10/23/17 06:20	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	408685	11/06/17 01:37	HMW	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			408423	11/03/17 23:30	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	408506	11/04/17 02:37	HMW	TAL CHI
Total/NA	Prep	SM 5220			407995	11/01/17 12:31	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	408012	11/01/17 15:29	MAN	TAL CHI

Client Sample ID: CSD-8

Lab Sample ID: 500-135919-11
Matrix: Water

Date Collected: 10/17/17 10:25
Date Received: 10/19/17 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			406093	10/19/17 16:26	BDE	TAL CHI
Total Recoverable	Analysis	6020		1	406469	10/20/17 19:03	FXG	TAL CHI
Total/NA	Analysis	353.2		25	408514	11/03/17 22:55	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			407667	10/31/17 07:40	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		1	407786	10/31/17 10:07	MTB	TAL CHI
Total/NA	Analysis	9060A		1	407670	10/30/17 07:24	HMW	TAL CHI

Lab Chronicle

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

TestAmerica Job ID: 500-135919-1

Client Sample ID: CSD-8

Lab Sample ID: 500-135919-11
Matrix: Water

Date Collected: 10/17/17 10:25
Date Received: 10/19/17 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	406409	10/23/17 06:23	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	408685	11/06/17 01:38	HMW	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			408423	11/03/17 23:30	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	408506	11/04/17 02:40	HMW	TAL CHI
Total/NA	Prep	SM 5220			407995	11/01/17 12:31	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	408012	11/01/17 15:30	MAN	TAL CHI

Client Sample ID: CSD-9

Lab Sample ID: 500-135919-12
Matrix: Water

Date Collected: 10/17/17 11:40
Date Received: 10/19/17 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			406093	10/19/17 16:26	BDE	TAL CHI
Total Recoverable	Analysis	6020		1	406469	10/20/17 19:05	FXG	TAL CHI
Total/NA	Analysis	353.2		5	408514	11/03/17 22:14	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			407667	10/31/17 07:40	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		1	407786	10/31/17 10:16	MTB	TAL CHI
Total/NA	Analysis	9060A		1	407670	10/30/17 08:02	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	406409	10/23/17 06:25	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	408685	11/06/17 01:38	HMW	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			408423	11/03/17 23:30	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	408506	11/04/17 02:43	HMW	TAL CHI
Total/NA	Prep	SM 5220			407995	11/01/17 12:31	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	408012	11/01/17 15:31	MAN	TAL CHI

Client Sample ID: CSD-9 DUP

Lab Sample ID: 500-135919-13
Matrix: Water

Date Collected: 10/17/17 11:40
Date Received: 10/19/17 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			406093	10/19/17 16:26	BDE	TAL CHI
Total Recoverable	Analysis	6020		1	406469	10/20/17 19:07	FXG	TAL CHI
Total/NA	Analysis	353.2		5	408514	11/03/17 22:16	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			407667	10/31/17 07:40	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		1	407786	10/31/17 10:19	MTB	TAL CHI
Total/NA	Analysis	9060A		1	407670	10/30/17 08:20	HMW	TAL CHI
Total/NA	Analysis	SM 2540C		1	406409	10/23/17 06:28	CLB	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		1	408685	11/06/17 01:39	HMW	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			408423	11/03/17 23:30	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	408506	11/04/17 02:46	HMW	TAL CHI
Total/NA	Prep	SM 5220			407995	11/01/17 12:31	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	408012	11/01/17 15:32	MAN	TAL CHI

Laboratory References:

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

Accreditation/Certification Summary

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

TestAmerica Job ID: 500-135919-1

Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	999580010	08-31-18

TestAmerica

THE LEADER IN ENVIRONMENTAI

2417 Bond Street, University Park, IL 60
Phone: 708.534.5200 Fax: 708.53

500-135919 COC

Report To (optional)
Contact:
Company: Contact: Bob Nauta
Company: Rjn Env. Svc.
Address: Address: 4811 Monona Drive
Address: Address: Monona, WI 53716
Phone: Phone: 608-576-3001
Email: rjnesllc@charter.net
Fax:
E-Mail:

Bill To (optional)
Contact: Kathy Nauta
Email: chevelle7@charter.net
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-135919
Chain of Custody Number:
Page 1 of 2
Temperature °C of Cooler: 4.3, 2.9

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

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	TDS CHLORIDE ALKALINITY (Preservative 8)	TDS CHLORIDE (Preservative 8)	N+N COD NH3 TKN TOC (Preservative 2)	POTASSIUM SODIUM (Preservative 3)	POTASSIUM (Preservative 3)					Comments
1		CSD-1S	10/17	1330	4	W		X	X		X					
2		CSD-1D		1300	4	W	X		X	X						SEE BELOW
3		CSD-2		1355	4	W		X	X		X					
4		CSD-3S		0930	4	W		X	X		X					
5		CSD-3D		0910	4	W		X	X		X					
6		CSD-4		0955	4	W		X	X		X					
7		CSD-4DUP		0955	4	W		X	X		X					
8		CSD-5		1425	4	W		X	X		X					
9		CSD-6		1115	4	W		X	X		X					
10		CSD-7		1055	4	W		X	X		X					

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

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	10/18/17	0915	[signature]	TA-CHL	10/18/17	0945
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier
Shipped: Fed-X
Hand Delivered

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

Client Comments
CSD-1D: 4 DAY TAT. PERFORM MATRIX SPIKES FOR TKN & AMMONIA.

Lab Comments:

TAL-4124-500 (1209)

11/7/2017

ED_004625A_00007689-00077

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

Report To (optional)
Contact: Bob Nauta
Company: Rjn Env. Svc.
Address: 4811 Monona Drive
Address: Monona, WI 53716
Phone: 608-576-3001
Email: rjnesllc@charter.net
Fax:
E-Mail:

Bill To (optional)
Contact: Kathy Nauta
Email: chevelle7@charter.net
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-135919
Chain of Custody Number:
Page 2 of 2
Temperature °C of Cooler:

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

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

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	TDS Chloride (Preservative 8)	N+N COD NH3 TKN TOC (Preservative 2)	Potassium (Preservative 3)							Comments
11		CSD-8	10/17	1025	4	W	X	X	X							
12		CSD-9	10/17	1140	4	W	X	X	X							
13		CSD-9 DUP	10/17	1140	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	10/18/17	0915	[signature]	TA-Chet	10/19/17	0945

Lab Courier
Shipped [signature]
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 (590 (1209) 11/7/2017

ED_004625A_00007689-00078

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

MONONA, WI 53716
UNITED STATES US

SHIP DATE: 13OCT17
ACTWGT: 20.00 LB MAN
CAD: 33264/CAFE3108

TO SAMPLE LOGIN
TESTAMERICA LABS
2417 BOND ST

UNIVERSITY PARK IL 60466
(708) 534-5200
REF: S500-57396

RMA:

FedEx Express

FedEx
TRK# 0221 4059 7166 3961

THU - 19 OCT 10:30A
PRIORITY OVERNIGHT

79 JOTA

60466
IL-US ORD

#72245 10/18 549J4/94FC/104C

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

MONONA, WI 53716
UNITED STATES US

SHIP DATE: 13OCT17
ACTWGT: 20.00 LB MAN
CAD: 33264/CAFE3108

TO SAMPLE LOGIN
TESTAMERICA LABS
2417 BOND ST

UNIVERSITY PARK IL 60466
(708) 534-5200
REF: S500-57396

500-135919 Waybill

RMA:

FedEx Express

FedEx
TRK# 0221 4059 7166 3972

THU - 19 OCT 10:30A
PRIORITY OVERNIGHT

79 JOTA

60466
IL-US ORD

Part # 158148-434 RIT EXP 06/18

#72245 10/18 549J4/94FC/104C

Login Sample Receipt Checklist

Client: RJN Environmental Services LLC

Job Number: 500-135919-1

Login Number: 135919
List Number: 1
Creator: Scott, Sherri L

List Source: TestAmerica Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.3,2.9
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	

TestAmerica

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ANALYTICAL REPORT

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

TestAmerica Job ID: 500-135919-2
Client Project/Site: Central Sands Dairy - 14-203

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

Attn: Robert J Nauta

Therese Hargraves

Authorized for release by:
10/25/2017 5:42:48 PM
Therese Hargraves, Project Manager I
therese.hargraves@testamericainc.com

Designee for

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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Receipt Checklists 19

Job ID: 500-135919-2

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-135919-2

Comments
No additional comments.

Receipt
The samples were received on 10/19/2017 9:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.9º 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: 500-135919-2

Client Sample ID: CSD-1D

Lab Sample ID: 500-135919-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	27000		500	110	ug/L	1		6020	Total Recoverable
Sodium	18000		200	77	ug/L	1		6020	Total Recoverable
Chloride	28		2.0	1.7	mg/L	10		300.0	Total/NA
Nitrogen, Nitrate Nitrite	19		1.0	0.41	mg/L	10		353.2	Total/NA
Nitrogen, Kjeldahl	11		2.0	1.2	mg/L	5		4500 NH3 G	Total/NA
Total Organic Carbon - Duplicates	1.7		1.0	0.47	mg/L	1		9060A	Total/NA
Alkalinity	51		5.0	3.7	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	320		10	4.3	mg/L	1		SM 2540C	Total/NA
Ammonia	13		1.0	0.50	mg/L	5		SM 4500 NH3 G	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: 500-135919-2

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 2320B	Alkalinity	SM	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: 500-135919-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-135919-2	CSD-1D	Water	10/17/17 13:00	10/19/17 09:45

Client Sample Results

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

TestAmerica Job ID: 500-135919-2

Client Sample ID: CSD-1D

Lab Sample ID: 500-135919-2

Date Collected: 10/17/17 13:00
Date Received: 10/19/17 09:45

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**27000**		500	110	ug/L		10/19/17 16:24	10/20/17 19:56	1
Sodium	**18000**		200	77	ug/L		10/19/17 16:24	10/20/17 19:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**28**		2.0	1.7	mg/L			10/25/17 15:11	10
Nitrogen, Nitrate Nitrite	**19**		1.0	0.41	mg/L			10/20/17 22:29	10
Nitrogen, Kjeldahl	**11**		2.0	1.2	mg/L		10/24/17 07:15	10/24/17 10:04	5
Total Organic Carbon - Duplicates	**1.7**		1.0	0.47	mg/L			10/20/17 23:15	1
Alkalinity	**51**		5.0	3.7	mg/L			10/24/17 17:22	1
Total Dissolved Solids	**320**		10	4.3	mg/L			10/23/17 05:59	1
Ammonia	**13**		1.0	0.50	mg/L		10/22/17 19:20	10/23/17 20:46	5
Chemical Oxygen Demand	<6.0		10	6.0	mg/L		10/24/17 12:11	10/24/17 15:59	1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
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.

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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
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: 500-135919-2

Metals

Prep Batch: 406092

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-135919-2	CSD-1D	Total Recoverable	Water	3005A	
MB 500-406092/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-406092/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 406473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-135919-2	CSD-1D	Total Recoverable	Water	6020	406092
MB 500-406092/1-A	Method Blank	Total Recoverable	Water	6020	406092
LCS 500-406092/2-A	Lab Control Sample	Total Recoverable	Water	6020	406092

General Chemistry

Analysis Batch: 406335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-135919-2	CSD-1D	Total/NA	Water	353.2	
MB 500-406335/12	Method Blank	Total/NA	Water	353.2	
LCS 500-406335/13	Lab Control Sample	Total/NA	Water	353.2	

Prep Batch: 406399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-135919-2	CSD-1D	Total/NA	Water	SM 4500 NH3 B	
MB 500-406399/1-A	Method Blank	Total/NA	Water	SM 4500 NH3 B	
LCS 500-406399/2-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 B	
500-135919-2 MS	CSD-1D	Total/NA	Water	SM 4500 NH3 B	
500-135919-2 MSD	CSD-1D	Total/NA	Water	SM 4500 NH3 B	

Analysis Batch: 406409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-135919-2	CSD-1D	Total/NA	Water	SM 2540C	
MB 500-406409/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 500-406409/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Prep Batch: 406568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-135919-2	CSD-1D	Total/NA	Water	SM4500Norg_C	
MB 500-406568/1-A	Method Blank	Total/NA	Water	SM4500Norg_C	
LCS 500-406568/2-A	Lab Control Sample	Total/NA	Water	SM4500Norg_C	
500-135919-2 MS	CSD-1D	Total/NA	Water	SM4500Norg_C	
500-135919-2 MSD	CSD-1D	Total/NA	Water	SM4500Norg_C	

Analysis Batch: 406569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-135919-2	CSD-1D	Total/NA	Water	9060A	
MB 500-406569/4	Method Blank	Total/NA	Water	9060A	
LCS 500-406569/5	Lab Control Sample	Total/NA	Water	9060A	

Analysis Batch: 406610

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-135919-2	CSD-1D	Total/NA	Water	SM 4500 NH3 G	406399
MB 500-406399/1-A	Method Blank	Total/NA	Water	SM 4500 NH3 G	406399

General Chemistry (Continued)

Analysis Batch: 406610 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-406399/2-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 G	406399
500-135919-2 MS	CSD-1D	Total/NA	Water	SM 4500 NH3 G	406399
500-135919-2 MSD	CSD-1D	Total/NA	Water	SM 4500 NH3 G	406399

Analysis Batch: 406690

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-135919-2	CSD-1D	Total/NA	Water	4500 NH3 G	406568
MB 500-406568/1-A	Method Blank	Total/NA	Water	4500 NH3 G	406568
LCS 500-406568/2-A	Lab Control Sample	Total/NA	Water	4500 NH3 G	406568
500-135919-2 MS	CSD-1D	Total/NA	Water	4500 NH3 G	406568
500-135919-2 MSD	CSD-1D	Total/NA	Water	4500 NH3 G	406568

Prep Batch: 406696

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-135919-2	CSD-1D	Total/NA	Water	SM 5220	
MB 500-406696/1-A	Method Blank	Total/NA	Water	SM 5220	
LCS 500-406696/2-A	Lab Control Sample	Total/NA	Water	SM 5220	
500-135919-2 MS	CSD-1D	Total/NA	Water	SM 5220	
500-135919-2 MSD	CSD-1D	Total/NA	Water	SM 5220	

Analysis Batch: 406877

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-135919-2	CSD-1D	Total/NA	Water	SM 2320B	
MB 500-406877/28	Method Blank	Total/NA	Water	SM 2320B	
LCS 500-406877/29	Lab Control Sample	Total/NA	Water	SM 2320B	

Analysis Batch: 406953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-135919-2	CSD-1D	Total/NA	Water	SM 5220C	406696
MB 500-406696/1-A	Method Blank	Total/NA	Water	SM 5220C	406696
LCS 500-406696/2-A	Lab Control Sample	Total/NA	Water	SM 5220C	406696
500-135919-2 MS	CSD-1D	Total/NA	Water	SM 5220C	406696
500-135919-2 MSD	CSD-1D	Total/NA	Water	SM 5220C	406696

Analysis Batch: 406975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-135919-2	CSD-1D	Total/NA	Water	300.0	
MB 500-406975/3	Method Blank	Total/NA	Water	300.0	
LCS 500-406975/4	Lab Control Sample	Total/NA	Water	300.0	

QC Sample Results

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

TestAmerica Job ID: 500-135919-2

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 500-406092/1-A
Matrix: Water
Analysis Batch: 406473

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 406092

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	<110		500	110	ug/L		10/19/17 16:24	10/20/17 19:46	1
Sodium	<77		200	77	ug/L		10/19/17 16:24	10/20/17 19:46	1

Lab Sample ID: LCS 500-406092/2-A
Matrix: Water
Analysis Batch: 406473

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 406092

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Potassium	10000	10200		ug/L		102	80 - 120
Sodium	10000	10200		ug/L		102	80 - 120

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 500-406975/3
Matrix: Water
Analysis Batch: 406975

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.17		0.20	0.17	mg/L			10/25/17 10:14	1

Lab Sample ID: LCS 500-406975/4
Matrix: Water
Analysis Batch: 406975

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	3.00	2.73		mg/L		91	90 - 110

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 500-406335/12
Matrix: Water
Analysis Batch: 406335

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Nitrate Nitrite	<0.041		0.10	0.041	mg/L			10/20/17 21:15	1

Lab Sample ID: LCS 500-406335/13
Matrix: Water
Analysis Batch: 406335

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Nitrate Nitrite	1.00	0.907		mg/L		91	90 - 110

QC Sample Results

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

TestAmerica Job ID: 500-135919-2

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

Lab Sample ID: MB 500-406568/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 406690 — **Prep Batch: 406568**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Kjeldahl	<0.24		0.40	0.24	mg/L		10/24/17 07:15	10/24/17 09:25	1

Lab Sample ID: LCS 500-406568/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 406690 — **Prep Batch: 406568**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Kjeldahl	2.50	2.40		mg/L		96	80 - 120

Lab Sample ID: 500-135919-2 MS — **Client Sample ID: CSD-1D**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 406690 — **Prep Batch: 406568**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Kjeldahl	11		2.50	12.8	4	mg/L		86	75 - 125

Lab Sample ID: 500-135919-2 MSD — **Client Sample ID: CSD-1D**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 406690 — **Prep Batch: 406568**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrogen, Kjeldahl	11		2.50	13.6	4	mg/L		115	75 - 125	6	20

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

Lab Sample ID: MB 500-406569/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 406569

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	<0.47		1.0	0.47	mg/L			10/20/17 18:38	1

Lab Sample ID: LCS 500-406569/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 406569

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Duplicates	10.0	9.92		mg/L		99	80 - 120
TOC Result 1	10.0	9.93		mg/L		99	80 - 120
TOC Result 2	10.0	9.91		mg/L		99	80 - 120

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 500-406877/28 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 406877

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	<3.7		5.0	3.7	mg/L			10/24/17 14:55	1

Lab Sample ID: LCS 500-406877/29 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 406877

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	100	107		mg/L		107	85 - 115

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

Lab Sample ID: MB 500-406409/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 406409

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<4.3		10	4.3	mg/L			10/23/17 05:47	1

Lab Sample ID: LCS 500-406409/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 406409

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	250	266		mg/L		106	80 - 120

Method: SM 4500 NH3 G - Ammonia

Lab Sample ID: MB 500-406399/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 406610 — **Prep Batch: 406399**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	<0.10		0.20	0.10	mg/L		10/22/17 19:20	10/23/17 19:35	1

Lab Sample ID: LCS 500-406399/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 406610 — **Prep Batch: 406399**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	2.50	2.28		mg/L		91	80 - 120

Lab Sample ID: 500-135919-2 MS — **Client Sample ID: CSD-1D**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 406610 — **Prep Batch: 406399**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	13		2.50	15.1	4	mg/L		91	75 - 125

Method: SM 4500 NH3 G - Ammonia (Continued)

Lab Sample ID: 500-135919-2 MSD — **Client Sample ID: CSD-1D**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 406610 — **Prep Batch: 406399**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia	13		2.50	14.8	4	mg/L		81	75 - 125	2	20

Method: SM 5220C - COD

Lab Sample ID: MB 500-406696/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 406953 — **Prep Batch: 406696**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	<6.0		10	6.0	mg/L		10/24/17 12:11	10/24/17 15:58	1

Lab Sample ID: LCS 500-406696/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 406953 — **Prep Batch: 406696**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	50.0	51.8		mg/L		104	85 - 115

Lab Sample ID: 500-135919-2 MS — **Client Sample ID: CSD-1D**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 406953 — **Prep Batch: 406696**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	<6.0		50.0	58.5		mg/L		117	75 - 125

Lab Sample ID: 500-135919-2 MSD — **Client Sample ID: CSD-1D**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 406953 — **Prep Batch: 406696**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chemical Oxygen Demand	<6.0		50.0	58.0		mg/L		116	75 - 125	1	20

Lab Chronicle

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

TestAmerica Job ID: 500-135919-2

Client Sample ID: CSD-1D

Lab Sample ID: 500-135919-2

Date Collected: 10/17/17 13:00
Date Received: 10/19/17 09:45

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			406092	10/19/17 16:24	BDE	TAL CHI
Total Recoverable	Analysis	6020		1	406473	10/20/17 19:56	FXG	TAL CHI
Total/NA	Analysis	300.0		10	406975	10/25/17 15:11	EAT	TAL CHI
Total/NA	Analysis	353.2		10	406335	10/20/17 22:29	HMW	TAL CHI
Total/NA	Prep	SM4500Norg_C			406568	10/24/17 07:15	MTB	TAL CHI
Total/NA	Analysis	4500 NH3 G		5	406690	10/24/17 10:04	MTB	TAL CHI
Total/NA	Analysis	9060A		1	406569	10/20/17 23:15	HMW	TAL CHI
Total/NA	Analysis	SM 2320B		1	406877	10/24/17 17:22	SMO	TAL CHI
Total/NA	Analysis	SM 2540C		1	406409	10/23/17 05:59	CLB	TAL CHI
Total/NA	Prep	SM 4500 NH3 B			406399	10/22/17 19:20	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		5	406610	10/23/17 20:46	HMW	TAL CHI
Total/NA	Prep	SM 5220			406696	10/24/17 12:11	MAN	TAL CHI
Total/NA	Analysis	SM 5220C		1	406953	10/24/17 15:59	MAN	TAL CHI

Laboratory References:

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

Accreditation/Certification Summary

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

TestAmerica Job ID: 500-135919-2

Laboratory: TestAmerica Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	999580010	08-31-18

The following analytes are included in this report, but are not accredited/certified under this accreditation/certification:

Analysis Method	Prep Method	Matrix	Analyte
353.2		Water	Nitrogen, Nitrate Nitrite
SM 2320B		Water	Alkalinity
SM 2540C		Water	Total Dissolved Solids

TestAmerica

THE LEADER IN ENVIRONMENTAL

2417 Bond Street, University Park, IL 60
Phone: 708.534.5200 Fax: 708.534

500-135919 COC

Report To (optional)
Contact:
Company: Contact: Bob Nauta
Company: Rjn Env. Svc.
Address: Address: 4811 Monona Drive
Address: Address: Monona, WI 53716
Phone: Phone: 608-576-3001
Fax: Email: rjnesllc@charter.net
E-Mail:

Bill To (optional)
Contact: Kathy Nauta
Email: chevelle7@charter.net
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-135919
Chain of Custody Number:
Page 1 of 2
Temperature °C of Cooler: 4.3, 2.9

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

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

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	TDS CHLORIDE ALKALINITY (Preservative 8)	TDS CHLORIDE (Preservative 8)	N+N COD NH3 TKN TOC (Preservative 2)	POTASSIUM SODIUM (Preservative 3)	POTASSIUM (Preservative 3)					Comments
1		CSD-1S	10/17	1330	4	W		X	X		X					
2		CSD-1D		1300	4	W	X		X	X						SEE BELOW
3		CSD-2		1355	4	W		X	X		X					
4		CSD-3S		0930	4	W		X	X		X					
5		CSD-3D		0910	4	W		X	X		X					
6		CSD-4		0955	4	W		X	X		X					
7		CSD-4DUP		0955	4	W		X	X		X					
8		CSD-5		1425	4	W		X	X		X					
9		CSD-6		1115	4	W		X	X		X					
10		CSD-7		1055	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	10/18/17	0915	[signature]	TA-CHL	10/18/17	0945
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier
Shipped: Fed-X
Hand Delivered

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

Client Comments
CSD-1D: 4 DAY TAT. PERFORM MATRIX SPIKES FOR TKN & AMMONIA.

Lab Comments:

TAL-4124-500 (1209)

10/25/2017

ED_004625A_00007689-00097

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

Report To (optional)
Contact: Bob Nauta
Company: Rjn Env. Svc.
Address: 4811 Monona Drive
Address: Monona, WI 53716
Phone: 608-576-3001
Email: rjnesllc@charter.net

Bill To (optional)
Contact: Kathy Nauta
Email: chevelle7@charter.net

Fax:
E-Mail:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-135919
Chain of Custody Number:
Page 2 of 2
Temperature °C of Cooler:

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

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

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	TDS CHLORIDE (8)	N+N COD NH3 TKN TOC (2)	POTASSIUM (3)							Comments
11		CSD-8	10/17	1025	4	W	X	X	X							
12		CSD-9	10/17	1140	4	W	X	X	X							
13		CSD-9 DUP	10/17	1140	4	W	✓	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	10/18/17	0915	[signature]	TA-CHI	10/19/17	0945

Lab Courier:
Shipped: Fed X
Hand Delivered:

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

Client Comments

Lab Comments:

TAL 4184-500 (1209)
10/25/2017

ED_004625A_00007689-00098

Login Sample Receipt Checklist

Client: RJN Environmental Services LLC

Job Number: 500-135919-2

Login Number: 135919
List Number: 1
Creator: Scott, Sherri L

List Source: TestAmerica Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.3,2.9
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 - Prof. James J. Schauer, Ph.D., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007, WI00008 WI DATCP ID: 105-415

WSLH Sample: 349692001

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: 10/17/2017 1:30:00 PM
Owner:

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

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

Date Received: 10/18/2017
Date Reported: 10/19/2017
Sample Reason: OTHER

Sample Comments

MON. WELL CSD-1S

Microbiology

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

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Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Prof. James J. Schauer, Ph.D., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007, WI00008 WI DATCP ID: 105-415

WSLH Sample: 349692001

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

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Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Prof. James J. Schauer, Ph.D., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007, WI00008 WI DATCP ID: 105-415

WSLH Sample: 349691001

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: 10/17/2017 1:00:00 PM
Owner:

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

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

Date Received: 10/18/2017
Date Reported: 10/19/2017
Sample Reason: OTHER

Sample Comments

MON. WELL CSD-1D

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 10/18/17 Analysis Date 10/19/17					
Total Coliform - Colilert-MPN QT	SM9223BMPN	140	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 - Prof. James J. Schauer, Ph.D., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007, WI00008 WI DATCP ID: 105-415

WSLH Sample: 349691001

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 - Prof. James J. Schauer, Ph.D., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007, WI00008 WI DATCP ID: 105-415

WSLH Sample: 349690001

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: 10/17/2017 1:55:00 PM
Owner:

Collected By: BOB NAUTA
Well Completion Date: 10/15/14

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

Date Received: 10/18/2017
Date Reported: 10/19/2017
Sample Reason: OTHER

Sample Comments

MON. WELL CSD-2

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 10/18/17 Analysis Date 10/19/17					
Total Coliform - Colilert-MPN QT	SM9223BMPN	96	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 - Prof. James J. Schauer, Ph.D., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007, WI00008 WI DATCP ID: 105-415

WSLH Sample: 349690001

List of Abbreviations:

LOD = Level of detection
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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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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Laboratory Report

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Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007, WI00008 WI DATCP ID: 105-415

WSLH Sample: 349689001

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: 10/17/2017 9:30:00 AM
Owner:

Collected By: BOB NAUTA
Well Completion Date: 10/16/14

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

Date Received: 10/18/2017
Date Reported: 10/19/2017
Sample Reason: OTHER

Sample Comments

MON. WELL CSD-3S

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 10/18/17 Analysis Date 10/19/17					
Total Coliform - Colilert-MPN QT	SM9223BMPN	1046	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 - Prof. James J. Schauer, Ph.D., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007, WI00008 WI DATCP ID: 105-415

WSLH Sample: 349689001

List of Abbreviations:

LOD = Level of detection
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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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 - Prof. James J. Schauer, Ph.D., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007, WI00008 WI DATCP ID: 105-415

WSLH Sample: 349688001

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: 10/17/2017 9:10:00 AM
Owner:

Collected By: BOB NAUTA
Well Completion Date: 10/16/14

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

Date Received: 10/18/2017
Date Reported: 10/19/2017
Sample Reason: OTHER

Sample Comments

MON. WELL CSD-3D

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 10/18/17 Analysis Date 10/19/17					
Total Coliform - Colilert-MPN QT	SM9223BMPN	1203	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 - Prof. James J. Schauer, Ph.D., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007, WI00008 WI DATCP ID: 105-415

WSLH Sample: 349688001

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 - Prof. James J. Schauer, Ph.D., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007, WI00008 WI DATCP ID: 105-415

WSLH Sample: 349686001

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: 10/17/2017 9:55:00 AM
Owner:

Collected By: BOB NAUTA
Well Completion Date: 10/15/14

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

Date Received: 10/18/2017
Date Reported: 10/19/2017
Sample Reason: OTHER

Sample Comments

MON. WELL CSD-4

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 10/18/17 Analysis Date 10/19/17					
Total Coliform - Colilert-MPN QT	SM9223BMPN	1553	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 - Prof. James J. Schauer, Ph.D., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007, WI00008 WI DATCP ID: 105-415

WSLH Sample: 349686001

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
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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 - Prof. James J. Schauer, Ph.D., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007, WI00008 WI DATCP ID: 105-415

WSLH Sample: 349687001

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: 10/17/2017 9:55:00 AM
Owner:

Collected By: BOB NAUTA
Well Completion Date: 10/15/14

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

Date Received: 10/18/2017
Date Reported: 10/19/2017
Sample Reason: OTHER

Sample Comments

MON. WELL CSD-4 DUP

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 10/18/17 Analysis Date 10/19/17					
Total Coliform - Colilert-MPN QT	SM9223BMPN	1203	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 - Prof. James J. Schauer, Ph.D., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007, WI00008 WI DATCP ID: 105-415

WSLH Sample: 349687001

List of Abbreviations:

LOD = Level of detection
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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Metals: DeWayne Kennedy-Parker, Lab Manager, 608-224-6282
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Laboratory Report

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Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007, WI00008 WI DATCP ID: 105-415

WSLH Sample: 349685001

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: 10/17/2017 2:25:00 PM
Owner:

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

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

Date Received: 10/18/2017
Date Reported: 10/19/2017
Sample Reason: OTHER

Sample Comments

MON. WELL CSD-5

Microbiology

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

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http://www.slh.wisc.edu

Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Prof. James J. Schauer, Ph.D., Director

Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007, WI00008 WI DATCP ID: 105-415

WSLH Sample: 349685001

List of Abbreviations:

LOD = Level of detection
LOQ = Level of quantification
ND = None detected. Results are less than the 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
Organic Chemistry: Al Spallato, Lab Manager, 608-224-6269
Emergency Chemical Response: Noel Stanton, Lab Manager, 608-224-6251
Environmental Toxicology: Tracy Hanke, Lab Manager, 608-224-6270

Wisconsin State Laboratory of Hygiene
UNIVERSITY OF WISCONSIN-MADISON

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Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007, WI00008 WI DATCP ID: 105-415

WSLH Sample: 349684001

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: 10/17/2017 11:15:00 AM
Owner:

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

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

Date Received: 10/18/2017
Date Reported: 10/19/2017
Sample Reason: OTHER

Sample Comments

MON. WELL CSD-6

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 10/18/17 Analysis Date 10/19/17					
Total Coliform - Colilert-MPN QT	SM9223BMPN	214	MPN/100 mL		1
E. Coli - Colilert-MPN QT	SM9223BMPN	<1	MPN/100 mL		1

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WSLH Sample: 349684001

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Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007, WI00008 WI DATCP ID: 105-415

WSLH Sample: 349693001

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: 10/17/2017 10:55:00 AM
Owner:

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

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

Date Received: 10/18/2017
Date Reported: 10/19/2017
Sample Reason: OTHER

Sample Comments

MON. WELL

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 10/18/17 Analysis Date 10/19/17					
Total Coliform - Colisure-MPN QT	SM9223BMPN	1733	MPN/100 mL		1
E. Coli - Colisure-MPN QT	SM9223BMPN	8	MPN/100 mL		1

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Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007, WI00008 WI DATCP ID: 105-415

WSLH Sample: 349693001

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WSLH Sample: 349696001

Report To:
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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: 10/17/2017 10:25:00 AM
Owner:

Collected By: BOB NAUTA
Well Completion Date: 08/09/16

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

Date Received: 10/18/2017
Date Reported: 10/19/2017
Sample Reason: OTHER

Sample Comments

MON. WELL CSD-8

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 10/18/17 Analysis Date 10/19/17					
Total Coliform - Colilert-MPN QT	SM9223BMPN	488	MPN/100 mL		1
E. Coli - Colilert-MPN QT	SM9223BMPN	<1	MPN/100 mL		1

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Environmental Health Division

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB ID: WI00007, WI00008 WI DATCP ID: 105-415

WSLH Sample: 349696001

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WSLH Sample: 349695001

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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: 10/17/2017 11:40:00 AM
Owner:

Collected By: BOB NAUTA
Well Completion Date: 10/25/16

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

Date Received: 10/18/2017
Date Reported: 10/19/2017
Sample Reason: OTHER

Sample Comments

MON. WELL CSD-9

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 10/18/17 Analysis Date 10/19/17					
Total Coliform - Colilert-MPN QT	SM9223BMPN	548	MPN/100 mL		1
E. Coli - Colilert-MPN QT	SM9223BMPN	<1	MPN/100 mL		1

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WSLH Sample: 349695001

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OREGON, WI 53575
Customer ID: 340214

Collection Date: 10/17/2017 11:40:00 AM
Owner:

Collected By: BOB NAUTA
Well Completion Date: 10/25/16

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

Date Received: 10/18/2017
Date Reported: 10/19/2017
Sample Reason: OTHER

Sample Comments

MON. WELL CSD-9 DUP

Microbiology

Analyte	Analysis Method	Result	Units	LOD	LOQ
Prep Date 10/18/17 Analysis Date 10/19/17					
Total Coliform - Colilert-MPN QT	SM9223BMPN	866	MPN/100 mL		1
E. Coli - Colilert-MPN QT	SM9223BMPN	<1	MPN/100 mL		1

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