

ANALYTICAL REPORT

Client: Crystal Ridge
 Attn: Terry Owen
 7731 Freeland Court
 Greendale, WI 53129

NLS Project: 275155

NLS Customer: 98702

Phone: 414 803 7232

Project: 1st Qtr Monitoring Wells

2 NLS ID: 974391

COC: 204525:1 Matrix: GW

Collected: 02/20/17 10:15 Received: 02/21/17

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Field color	tan					02/20/17	NA	NA
Field conductivity	771	umho@25C	1			02/20/17	EPA 120.1	NA
Field odor	none detected					02/20/17	NA	NA
Field pH	7.35	s.u.	1			02/20/17	SW846 9040	NA
Field temperature	7.5	deg. C	1			02/20/17	NA	NA
Field turbidity	sandy					02/20/17	NA	NA
Field depth to water	9.20	ft.	1			02/20/17	NA	NA
Alkalinity, tot. as CaCO3 (filtered)	680	mg/L	10	10	20	02/28/17	2320 B-1997	721026460
Arsenic, tot. recoverable as As by ICP-MS	11	ug/L	1	1.0*	2.0*	03/01/17	EPA 200.8, Rev 5.4	721026460
Barium, tot. recoverable as Ba by ICP-MS	210	ug/L	1	0.25*	0.50*	03/01/17	EPA 200.8, Rev 5.4	721026460
Cadmium, tot. recoverable as Cd by ICP-MS	1.0	ug/L	1	0.25*	0.50*	03/01/17	EPA 200.8, Rev 5.4	721026460
Calcium, tot. recoverable as Ca by ICP-MS	290	mg/L	1	0.15*	0.30*	03/01/17	EPA 200.8, Rev 5.4	721026460
Chloride, as Cl (filtered)	55	mg/L	10	2.5	5.0	02/27/17	SW846 9056	721026460
Chromium, tot. recoverable as Cr by ICP-MS	35	ug/L	1	0.50*	1.0*	03/01/17	EPA 200.8, Rev 5.4	721026460
Copper, tot. recoverable as Cu by ICP-MS	48	ug/L	1	1.0*	2.0*	03/01/17	EPA 200.8, Rev 5.4	721026460
Hardness, tot. recoverable as CaCO3 (calc/unfilt/icpms)	1300	mg/L	1	1.0*	2.0*	03/01/17	EPA 200.8, Rev 5.4	721026460
Iron, dis. as Fe by ICP-MS	ND	mg/L	1	0.018*	0.064*	02/28/17	EPA 200.8, Rev 5.4	721026460
Lead, tot. recoverable as Pb by ICP-MS	25	ug/L	1	0.25*	0.50*	03/01/17	EPA 200.8, Rev 5.4	721026460
Magnesium, tot. recoverable as Mg by ICP-MS	130	mg/L	1	0.15*	0.30*	03/01/17	EPA 200.8, Rev 5.4	721026460
Manganese, dis. as Mn by ICP-MS	[1.3]	ug/L	1	1.0*	2.0*	02/28/17	EPA 200.8, Rev 5.4	721026460
Manganese, tot. recoverable as Mn by ICP-MS	1100	ug/L	1	1.0*	2.0*	03/01/17	EPA 200.8, Rev 5.4	721026460
Nitrogen, NO2 + NO3 as N (filtered)	2.2	mg/L	1	0.019	0.062	02/23/17	4500-NO3 F-2000	721026460
Nitrogen, Kjeldahl as N (filtered)	1.4	mg/L	1	0.10	0.33	02/28/17	EPA 351.2, Rev 2	721026460
Nitrogen, total as N (filtered)	3.6	mg/L	1	0.10	0.33	03/01/17	calculation	721026460
Selenium, tot. recoverable as Se by ICP-MS	ND	ug/L	1	2.0*	4.0*	03/01/17	EPA 200.8, Rev 5.4	721026460
Sodium, tot. recoverable as Na by ICP-MS	12	mg/L	1	0.15*	0.30*	03/07/17	EPA 200.8, Rev 5.4	721026460
Sulfate, as SO4 (filtered)	37	mg/L	10	2.5	5.0	02/27/17	SW846 9056	721026460
Zinc, tot. recoverable as Zn by ICP-MS	180	ug/L	1	5.0*	10*	03/01/17	EPA 200.8, Rev 5.4	721026460
Metals digestion - tot. recov. ICP-MS	yes					02/22/17	EPA 200.8M, Rev 5.4	721026460
VOCs (water) by GC/MS	see attached					02/22/17	SW846 8260C	721026460

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4 NLS ID: 974392

COC: 204525:3 Matrix: GW

Collected: 02/20/17 10:45 Received: 02/21/17

Parameter	Result	Units	Dilution	LOD	LOQ	Analyzed	Method	Lab
Field color	tan					02/20/17	NA	NA
Field conductivity	999	umho@25C	1			02/20/17	EPA 120.1	NA
Field odor	none detected					02/20/17	NA	NA
Field pH	7.39	s.u.	1			02/20/17	SW846 9040	NA
Field temperature	8.9	deg. C	1			02/20/17	NA	NA
Field turbidity	sandy					02/20/17	NA	NA
Field depth to water	7.40	ft.	1			02/20/17	NA	NA
Alkalinity, tot. as CaCO3 (filtered)	690	mg/L	10	10	20	02/28/17	2320 B-1997	721026460
Arsenic, tot. recoverable as As by ICP-MS	52	ug/L	1	1.0*	2.0*	03/01/17	EPA 200.8, Rev 5.4	721026460
Barium, tot. recoverable as Ba by ICP-MS	170	ug/L	1	0.25*	0.50*	03/01/17	EPA 200.8, Rev 5.4	721026460
Cadmium, tot. recoverable as Cd by ICP-MS	1.1	ug/L	1	0.25*	0.50*	03/01/17	EPA 200.8, Rev 5.4	721026460
Calcium, tot. recoverable as Ca by ICP-MS	210	mg/L	1	0.15*	0.30*	03/01/17	EPA 200.8, Rev 5.4	721026460
Chloride, as Cl (filtered)	78	mg/L	20	5.0	10	02/27/17	SW846 9056	721026460
Chromium, tot. recoverable as Cr by ICP-MS	21	ug/L	1	0.50*	1.0*	03/01/17	EPA 200.8, Rev 5.4	721026460
Copper, tot. recoverable as Cu by ICP-MS	53	ug/L	1	1.0*	2.0*	03/01/17	EPA 200.8, Rev 5.4	721026460
Hardness, tot. recoverable as CaCO3 (calc/unfilt/icpms)	940	mg/L	1	1.0*	2.0*	03/01/17	EPA 200.8, Rev 5.4	721026460
Iron, dis. as Fe by ICP-MS	ND	mg/L	1	0.018*	0.064*	02/28/17	EPA 200.8, Rev 5.4	721026460
Lead, tot. recoverable as Pb by ICP-MS	40	ug/L	1	0.25*	0.50*	03/01/17	EPA 200.8, Rev 5.4	721026460
Magnesium, tot. recoverable as Mg by ICP-MS	100	mg/L	1	0.15*	0.30*	03/01/17	EPA 200.8, Rev 5.4	721026460
Manganese, dis. as Mn by ICP-MS	170	ug/L	1	1.0*	2.0*	02/28/17	EPA 200.8, Rev 5.4	721026460
Manganese, tot. recoverable as Mn by ICP-MS	860	ug/L	1	1.0*	2.0*	03/01/17	EPA 200.8, Rev 5.4	721026460
Nitrogen, NO2 + NO3 as N (filtered)	0.20	mg/L	1	0.019	0.062	02/23/17	4500-NO3 F-2000	721026460
Nitrogen, Kjeldahl as N (filtered)	1.5	mg/L	2	0.20	0.66	02/28/17	EPA 351.2, Rev 2	721026460
Nitrogen, total as N (filtered)	1.7	mg/L	1	0.10	0.33	03/01/17	calculation	721026460
Selenium, tot. recoverable as Se by ICP-MS	ND	ug/L	1	2.0*	4.0*	03/01/17	EPA 200.8, Rev 5.4	721026460
Sodium, tot. recoverable as Na by ICP-MS	36	mg/L	1	0.15*	0.30*	03/07/17	EPA 200.8, Rev 5.4	721026460
Sulfate, as SO4 (filtered)	90	mg/L	20	5.0	10	02/27/17	SW846 9056	721026460
Zinc, tot. recoverable as Zn by ICP-MS	160	ug/L	1	5.0*	10*	03/01/17	EPA 200.8, Rev 5.4	721026460
Metals digestion - tot. recov. ICP-MS	yes					02/22/17	EPA 200.8M, Rev 5.4	721026460
VOCs (water) by GC/MS	see attached					02/22/17	SW846 8260C	721026460

Values in brackets represent results greater than or equal to the LOD but less than the LOQ and are within a region of "Less-Certain Quantitation". Results greater than or equal to the LOQ are considered to be in the region of "Certain Quantitation". LOD and/or LOQ tagged with an asterisk(*) are considered Reporting Limits. All LOD/LOQs adjusted to reflect dilution and/or solids content.

ND = Not Detected (< LOD) LOD = Limit of Detection LOQ = Limit of Quantitation NA = Not Applicable
 DWB = Dry Weight Basis %DWB = (mg/kg DWB) / 10000 1000 ug/L = 1 mg/L
 MCL = Maximum Contaminant Levels for Drinking Water Samples. Shaded results indicate >MCL.

Reviewed by:



Authorized by:
 R. T. Krueger
 President