

APPENDIX C:

Water Quality Analysis

Kristin Bisgard

From: Kristin Bisgard
Sent: Wednesday, August 16, 2017 11:49 AM
To: Kristin Bisgard
Subject: RE: updated results

From: Klein, Beverly [mailto:Beverly.Klein@SDSTATE.EDU]
Sent: Tuesday, August 08, 2017 2:55 PM
To: Kristin Bisgard <kristinb@bannerassociates.com>
Subject: RE: updated results



WATER & ENVIRONMENTAL ENGINEERING RESEARCH CENTER
SCEH 112 PO Box 2219
Brookings, SD 57007 605-688-6308

Banner Associates Inc
409 22nd Ave. S
Brookings, SD 57006
ATTN: Kristin Bisgard
Phone: 692-6342

Fax: 692-5714

kristinb@bannerassociates.com>

Sample #	Date Sampled	Sample	Alkalinity	Nitrate	Total Suspended Solids Dried 103°	Total Dissolved Solids Dried 180°	Volatile Suspended Solids Dried 104°	Conductivity	E. coli
			Method: St Meth 2320B	Method: EPA 300.0	Method: Std Method 2540D	Method: Std Met 2540C	Method: Std Met 2540E		
			mg/L as CaCO ₃	mg/L as N	mg/L	mg/L	mg/L	µS/cm	mpn/100 mL
06-291700001	06/29/17	Ottertail Test Well	475.0	0.153	13.0	1689	12.0	2270	<1

Sample #	Date Sampled	Sample	Chloride	Sulfate	Total Hardness	Calcium Hardness	Sodium	Manganese	Iron
			Method: EPA 300.0	Method: EPA 300.0	Method: St Method 2340 C	Method: St Method 3500-Ca D	Method: St Method 3111B	Method: St Method 3111B	Method: St Method 3111B
			mg/L as Cl	mg/L as SO ₄	mg/L as CaCO ₃	mg/L as CaCO ₃	mg/L	mg/L	mg/L
06-291700001	06/29/17	Ottertail Test Well	8.81	1216	723.0	415.0	745.0	2.28	2.51

Sample #	Date Sampled	Sample	Aluminum	Barium	Boron	Cadmium	Calcium	Chromium	Copper
			Method: St Method 3111B	Method: St Method 3111B	Method: St Method 3111B	Method: St Method 3111B	Method: St Method 3111B	Method: St Method 3111B	Method: St Method 3111B
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
06-291700001	06/29/17	Ottertail Test Well	not present	0.010	1.35	not present	377.1	not present	not present

Sample #	Date Sampled	Sample	Lead	Magnesium	Molybdenum	Nickel	Phosphorus	Potassium	Silver
			Method: St Method 3111B	Method: St Method 3111B	Method: St Method 3111B	Method: St Method 3111B	Method: St Method 3111B	Method: St Method 3111B	Method: St Method 3111B
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
06-291700001	06/29/17	Ottertail Test Well	not present	200.0	not present	not present	0.486	36.5	not present

Sample #	Date Sampled	Sample	Vanadium	Zinc	Tin	Strontium	Thalium	Cobalt	Lithium
06-291700001	06/29/17	Ottertail Test Well	Method: St Method 3111B	Method: St Method 3111B	Method: St Method 3111B	Method: St Method 3111B	Method: St Method 3111B	Method: St Method 3111B	Method: St Method 3111B
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
			0.016239	0.000612	0.152	3.40	1.08	0.30	0.02

Beverly Klein
Senior
Chemist
8/8/2017