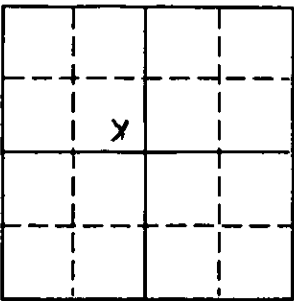


SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location <u>SE 1/4 NW 1/4</u> Sec <u>29</u> Twp <u>19</u> Rg <u>5</u> County <u>Harding</u> Please mark well location with an "X"  Well completion Date <u>7-22-19</u> Distance from nearest potential pollution source (Septic tank, abandoned well, feed lot, etc.) <u>1600 ft. from City Wells</u> (identify source)		Well Owner: <u>City of Buffalo</u> Business Name: <u>Well # 8</u> Address 1: <u>P.O. Box 82</u> Address 2: _____ City, State, Zip: <u>Buffalo SD 57720</u> WELL LOG: <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">FORMATION</th> <th colspan="2">DEPTH</th> </tr> <tr> <th>FROM</th> <th>TO</th> </tr> </thead> <tbody> <tr> <td><u>Clay Lt. Brown</u></td> <td><u>0</u></td> <td><u>4</u></td> </tr> <tr> <td><u>Sand Brown</u></td> <td><u>4</u></td> <td><u>15</u></td> </tr> <tr> <td><u>Clay Brown</u></td> <td><u>15</u></td> <td><u>22</u></td> </tr> <tr> <td><u>Clay and Sand layers</u></td> <td><u>22</u></td> <td><u>62</u></td> </tr> <tr> <td><u>Sand Shaly - Thin Clay layers</u></td> <td><u>62</u></td> <td><u>73</u></td> </tr> <tr> <td><u>Clay Brown</u></td> <td><u>73</u></td> <td><u>79</u></td> </tr> <tr> <td><u>Sand Shaly coarse</u></td> <td><u>79</u></td> <td><u>95</u></td> </tr> <tr> <td><u>Clay Shaly</u></td> <td><u>95</u></td> <td><u>224</u></td> </tr> <tr> <td><u>Sand Shaly medium</u></td> <td><u>224</u></td> <td><u>262</u></td> </tr> <tr> <td><u>Clay Shaly</u></td> <td><u>262</u></td> <td><u>280</u></td> </tr> </tbody> </table>		FORMATION	DEPTH		FROM	TO	<u>Clay Lt. Brown</u>	<u>0</u>	<u>4</u>	<u>Sand Brown</u>	<u>4</u>	<u>15</u>	<u>Clay Brown</u>	<u>15</u>	<u>22</u>	<u>Clay and Sand layers</u>	<u>22</u>	<u>62</u>	<u>Sand Shaly - Thin Clay layers</u>	<u>62</u>	<u>73</u>	<u>Clay Brown</u>	<u>73</u>	<u>79</u>	<u>Sand Shaly coarse</u>	<u>79</u>	<u>95</u>	<u>Clay Shaly</u>	<u>95</u>	<u>224</u>	<u>Sand Shaly medium</u>	<u>224</u>	<u>262</u>	<u>Clay Shaly</u>	<u>262</u>	<u>280</u>
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PROPOSED USE: ☐ Domestic/Stock ☒ Municipal ☐ Business ☐ Test Holes ☐ Irrigation ☐ Industrial ☐ Institutional ☐ Monitoring well		STATIC WATER LEVEL <u>47' top of casing</u> FEET If flowing: closed in pressure _____ PSI GPM flow _____ through _____ inch pipe Controlled by ☐ Valve ☐ Reducers ☐ Other _____ Reduced flow rate _____ GPM Can well be completely shut in? _____																																				
METHOD OF DRILLING: CASING DATA: ☐ Steel ☒ Plastic ☐ Other If other describe _____ <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>PIPEWEIGHT</th> <th>DIAMETER</th> <th>FROM</th> <th>TO</th> <th>HOLE DIAMETER</th> </tr> </thead> <tbody> <tr> <td><u>SDR21 LB/FT</u></td> <td><u>8 IN</u></td> <td><u>+2 FT</u></td> <td><u>224 FT</u></td> <td><u>12 1/4 IN</u></td> </tr> <tr> <td><u>SDR21 LB/FT</u></td> <td><u>8 IN</u></td> <td><u>264 FT</u></td> <td><u>270 FT</u></td> <td><u>12 1/4 IN</u></td> </tr> <tr> <td>LB/FT</td> <td>IN</td> <td>FT</td> <td>FT</td> <td>IN</td> </tr> </tbody> </table>		PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER	<u>SDR21 LB/FT</u>	<u>8 IN</u>	<u>+2 FT</u>	<u>224 FT</u>	<u>12 1/4 IN</u>	<u>SDR21 LB/FT</u>	<u>8 IN</u>	<u>264 FT</u>	<u>270 FT</u>	<u>12 1/4 IN</u>	LB/FT	IN	FT	FT	IN	WELL TEST DATA: ☐ Pumped Describe: <u>air lift with drill pipe</u> ☐ Bailed _____ ☒ Other _____ Pumping Level Below Land Surface <u>180'</u> Ft. After <u>1 1/2</u> Hrs. pumped <u>80</u> GPM <u>260'</u> Ft. After <u>1/2</u> Hrs. pumped <u>120</u> GPM If pump installed, pump rate: <u>80</u> GPM																
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GROUTING DATA: Grout Type <u>Mortarwell</u> No. of Sacks <u>28</u> Grout Weight <u>9.4</u> Lb/gal From <u>0</u> Ft To <u>215</u> Ft Describe grouting procedure <u>pump down with tremie pipe</u>		REMARKS _____ _____ _____																																				
SCREEN: ☐ Perforated pipe ☒ Manufactured Diameter <u>8</u> Inches Length <u>40</u> Feet Material <u>SDR21 PVC</u> Slot Size <u>20</u> Set From <u>224</u> Feet to <u>264</u> Feet Other information <u>Capped Bottom</u> <u>Sand pack</u>		This well was drilled under license # <u>643</u> And this report is true and accurate. Drilling firm: <u>Gregory Water and Energy Inc.</u> Signature of License Representative: <u>Gregory</u> Signature of Well Owner or Equitable Property Holder: <u>[Signature]</u> Date: <u>8/2/19</u> WATER RIGHTS PROGRAM																																				
DISINFECTION: Was well disinfected upon completion? ☒ Yes, How? <u>Chlorine H+H</u> ☐ No, Why Not? _____ Lab sample sent to for water quality analysis _____		RECEIVED JAN 23 2020																																				
WAS A PACKER OR SEAL USED? ☐ Yes ☒ No If so, what material? _____ Describe packer(s) and location _____		Please return White Copy to DENR Water Rights																																				

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523 E. Capitol Ave., Pierre SD 57501