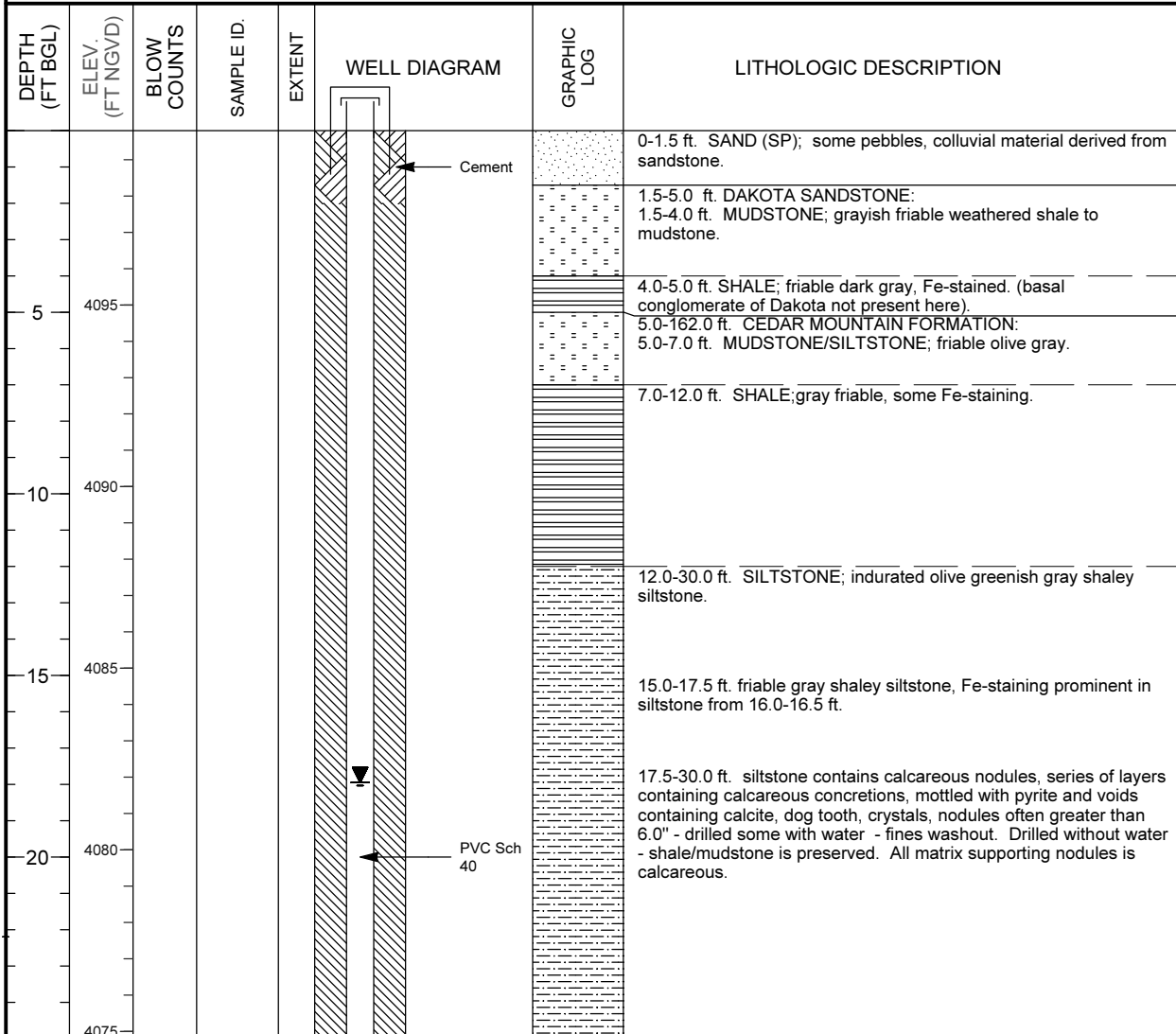


MONITORING WELL COMPLETION LOG GRN01-0182

PROJECT <u>UMTRA GROUND WATER</u>	NORTH COORD. (FT) <u>238388.52</u>	DATE DRILLED <u>06/10/2002 to 06/12/2002</u>
LOCATION <u>GREEN RIVER, UT</u>	EAST COORD. (FT) <u>2386337.03</u>	SURFACE ELEV. (FT NGVD) <u>4099.80</u>
SITE <u>GREEN RIVER</u>	HOLE DEPTH (FT) <u>162.00</u>	TOP OF CASING (FT) <u>4101.52</u>
WELL NUMBER <u>0182</u>	WELL DEPTH (FT) <u>150.00</u>	MEAS. PT. ELEV. (FT) <u>4101.52</u>

	WELL INSTALLATION	INTERVAL (FT)
SURFACE CASING:		
BLANK CASING:	4 in. PVC Sch 40	-1.72 to 140.0
WELL SCREEN:	4 in. 0.02 Slotted PVC	140.0 to 150.0
SUMP/END CAP:		
SURFACE SEAL:	Cement	0.0 to 2.0
GROUT:	Bentonite	2.0 to 132.0
SEAL:	Bentonite Pellets	132.0 to 137.0
UPPER PACK:	20-40 Silica Sand	137.0 to 151.0
LOWER PACK:	10-20 Silica Sand	151.0 to 162.0

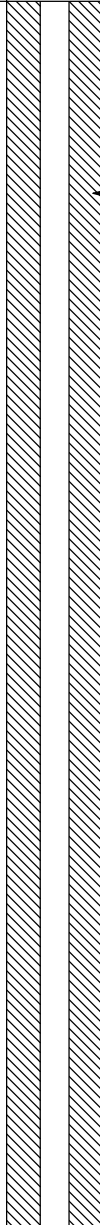
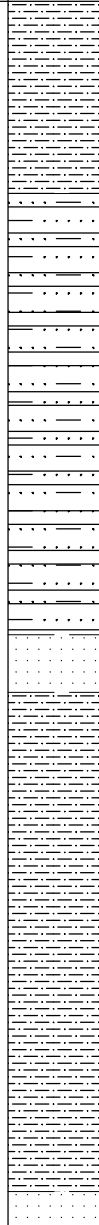
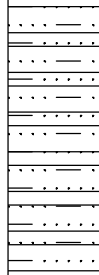

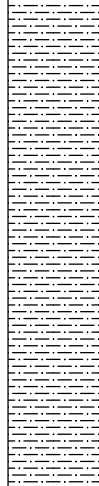

DRILLING METHOD <u>ROTASONIC</u>
SAMPLING METHOD <u>ROTASONIC CORE</u>
DATE DEVELOPED <u>06/18/2002</u>
WATER LEVEL (FT BTOC) <u>19.67 on 06/18/2002</u>
LOGGED BY <u>Dayvault, R.</u>
REMARKS <u>Spent 1 day fishing for 4 pieces of casing. Set well in lower unit of Cedar Mountain Formation.</u>



MONITORING WELL COMPLETION LOG GRN01-0182

PROJECT UMTRA GROUND WATER **WELL NUMBER** 0182
SITE GREEN RIVER **DATES DRILLED** 06/10/2002 to 06/12/2002

Continued from Previous Page

DEPTH (FT BGL)	ELEV. (FT NGVD)	BLOW COUNTS	SAMPLE ID.	EXTENT	WELL DIAGRAM	GRAPHIC LOG	LITHOLOGIC DESCRIPTION
30	4070						30.0-41.5 ft. SILTY SHALE; no nodules.
35	4065						35.0-41.5 more calcareous nodules with pyrite.
40	4060						41.5-43.0 ft. SANDSTONE; fine grained, light gray (N7), slightly calcareous.
45	4055						43.0-56.0 ft. SILTSTONE; light gray to greenish gray siltstone with clays, some very fine pyrite crystals associated with, shaley lenses. Dark greenish gray (5 GY 4/1), calcareous nodules intermittent.
50	4050						56.0-65.0 SANDSTONE; hard zone composed of calcareous
55	4045						

MONITORING WELL COMPLETION LOG GRN01-0182

PROJECT UMTRA GROUND WATER **WELL NUMBER** 0182
SITE GREEN RIVER **DATES DRILLED** 06/10/2002 to 06/12/2002

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DEPTH (FT BGL)	ELEV. (FT NGVD)	BLOW COUNTS	SAMPLE ID.	EXTENT	WELL DIAGRAM	GRAPHIC LOG	LITHOLOGIC DESCRIPTION
60	4040						nodules and associated fine grained light gray sandstone, partings with drusy calcite crystals; drilled with water - not calcareous.
65	4035						65.0-74.0 ft. MUDSTONE; silty calcareous mudstone to siltstone with pyrite as isolated crystals, blebs and clusters to 8mm in tiny octahedrons, mudstone contains numerous rounded lithics to 2 mm.
70	4030						
75	4025						74.0-75.5 ft. SHALE; interbedded with limestone - micritic with shale partings, light gray (5G 6/1), tiny pyrite crystals, vertical veins to 1.0 mm, contains calcite and pyrite.
80	4020						75.5-91.5 ft. SILTSTONE; indurated greenish gray siltstone to shale (5G 6/1) containing rounded clasts to 1 cm, pyrite, veins of calcite 0.5mm thick. Calcareous to 83.0 ft, noncalcareous to 91.5 ft. (except for calcite veins). Nodular zone from 81.5 to 83.0 ft.
85	4015						

← Bentonite

MONITORING WELL COMPLETION LOG GRN01-0182

PROJECT UMTRA GROUND WATER **WELL NUMBER** 0182
SITE GREEN RIVER **DATES DRILLED** 06/10/2002 to 06/12/2002

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DEPTH (FT BGL)	ELEV. (FT NGVD)	BLOW COUNTS	SAMPLE ID.	EXTENT	WELL DIAGRAM	GRAPHIC LOG	LITHOLOGIC DESCRIPTION
90	4010						@91.5 ft. switched to 4.0" in diameter core, some material washed out, probably continued siltstone, as above.
95	4005						@97.5 ft. clayey fraction, light pink gray (5YR 8/1). 97.5-102.0 ft. SILTSTONE; calcareous nodules with very finely disseminated pyrite.
100	4000						102.0-117.0 ft. SHALE; mauve color - mudstone and siltstone, color is (5R 4/2) and dark gray (N3), calcareous nodules, small areas (up to 1 x 3 cm) are light greenish gray included in mauve host rock that probably represents less oxidized regions. @109.0ft layer is no longer calcareous.
105	3995						
110	3990						
115	3985						
120	3980						117.0-158.5 ft. SANDSTONE; very light gray (N8) with slight greenish cast fine grained, slightly calcareous, possible crossbedding, becomes coarser at 123.0 and 124.0 ft.

MONITORING WELL COMPLETION LOG GRN01-0182

PROJECT <u>UMTRA GROUND WATER</u>	WELL NUMBER <u>0182</u>
SITE <u>GREEN RIVER</u>	DATES DRILLED <u>06/10/2002 to 06/12/2002</u>

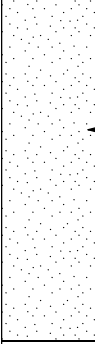
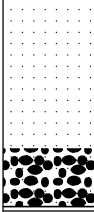
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DEPTH (FT BGL)	ELEV. (FT NGVD)	BLOW COUNTS	SAMPLE ID.	EXTENT	WELL DIAGRAM	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	
-125	3975				<p style="text-align: center;">Bentonite Pellets</p> <p style="text-align: center;">20-40 Silica Sand</p> <p style="text-align: center;">0.020" Slotted PVC</p>	•••••	<p>124.0-137.0 ft. color change, mauve colored mud with dark gray chips of shale to light gray fragments of fine grained sandstone. Becomes calcareous at near 137.0 ft., and from 132.0 to 137.0 ft. color changes to light gray</p>	
-130	3970							
-135	3965							<p>137.0-158.5 ft. prominent fine grained sandstone, very light gray (N8), with slight greenish cast, calcareous but with good porosity, pyrite common - some in veinlets, friable, rounded quartz grains, "sponge" texture.</p>
-140	3960							
-145	3955							
-150	3950							

MONITORING WELL COMPLETION LOG GRN01-0182

PROJECT UMTRA GROUND WATER **WELL NUMBER** 0182
SITE GREEN RIVER **DATES DRILLED** 06/10/2002 to 06/12/2002

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DEPTH (FT BGL)	ELEV. (FT NGVD)	BLOW COUNTS	SAMPLE ID.	EXTENT	WELL DIAGRAM	GRAPHIC LOG	LITHOLOGIC DESCRIPTION
-155	3945				 <p style="margin-left: 20px;">10-20 Silica Sand</p>		157.0-158.0 ft. becomes conglomeratic and arkosic with pebbles of dark chert to (up to 2 cm) mildly calcareous, white to very light gray (N9 to N8).
-160	3940						158.5-162.0 ft. SHALE; Greenish gray shale (5G 6/1), noncalcareous.
-165	3935						Total Depth 162.0 ft.
-170	3930						
-175	3925						
-180	3920						
-185	3915						