

# Utah Geological Survey Lithologic Log

Monitor Well # 0818005M00

WIN=431477

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Well ID: AG14BC

Well Location: 2 miles SW of Eskdale, UT

UTM: x 242120 m, y 4329196 m NAD 83 (zone 12N)

$\odot$  N 112 ft,  $\odot$  E 900 ft from NE Corner, Sec 16, T 20  $\odot$  R 19  $\odot$  SLBM USM

Start Date 6/11/8 Completion Date 6/17/8 Driller Roche Well Drilling Inc.

Drilling Method: Mud Rotary Tricone/blade bit from 0 to 317' Total Depth 317'

from \_\_\_\_\_ to \_\_\_\_\_ Static Water Level B:26.56' C:20.12'

from \_\_\_\_\_ to \_\_\_\_\_ Water Level Date 7/9/8

Measured From MP, top of riser

Borehole Diameter <u>8.5"</u> from <u>0</u> to <u>180'</u>	Casing <u>B: 2" Sch 80 PVC</u> from <u>+1.08</u> to <u>120'</u>
<u>6"</u> from <u>180</u> to <u>317'</u>	Type & Diameter <u>C: 2" Sch 80 PVC</u> from <u>+1.47</u> to <u>260'</u>
_____ from _____ to _____	<u>C: 2" Sch 80 PVC</u> from <u>280</u> to <u>317'</u>

Screen B:2" Sch 80 PVC .020" slot from 120 to 140' Ground Elevation: 5009.73'

Type & Diameter C:2" Sch 80 PVC .020" slot from 260 to 280' Logged By: Matt Affolter, UGS

Geophysical Log  Yes  No Other Logs: \_\_\_\_\_

DEPTH	LITHOLOGY	WELL DIAGRAM	DRILLING INFO	LITHOLOGY DESCRIPTION
5			0'-20'= 10 min	0-30 -- Surface sands (25%) and gravel (75%); gravel=up to 1 cm, very well rounded, quartzite (30%) limestone (40%) other (30%)
10				30-40 -- Tan clay (60%) with large gravel (40%); clasts=up to 3 cm, well rounded to subrounded, limestone (60%) quartzite (30%) other (10%)
15				40-50 -- Like above, clay (75%) gravel (25%)
20			20'-40'= 16 min	
25				
30				
35			40'-60'= 13 min	
40				
45				
			Choppy 48-50'	

DEPTH	LITHOLOGY	WELL DIAGRAM	DRILLING INFO	LITHOLOGY DESCRIPTION
				50-55 -- MISSED SAMPLE
55				55-70 -- Up to 1 cm gravel (85%) with sand (15%), rare clay
60				
65				
70			60'-80' = 7 min	70-75 -- MISSED SAMPLE
75				
80			30% Bentonite Grout 0-107'	75-95 -- Gravel (20%) sand (75%) clay (5%); clay=tan speckled; clasts=up to 0.5 cm, well rounded to subrounded, quartzite (60%) limestone (40%)
85				
90			80'-100' = 9 min	
95				95-100 -- Gravel (60%) and clay (40%); clasts=up to 3 cm, well rounded, quartzite (60%) limestone (40%)
100				100-110 -- Sand (50%) clay (35%) gravel (15%); clasts=up to 0.5 cm, subrounded to subangular, limestone (50%) quartzite (40%) other (10%)
105			100% Bentonite 107-109'	
110			100'-120' = 8 min	110-120 -- Like above, clay (60%) gravel (30%) sand (10%); clasts=up to 1 cm, well rounded to subrounded
115				
120			#8 Sand 109-145'	120-125 -- Mostly clay (90%) with sand (5%) and gravel (5%)
125				125-140 -- Gravelly (60%) sand (30%) with clay (10%); clasts=up to 1 cm, well rounded to subrounded, quartzite (70%) limestone (20%) other (10%)
130			120'-140' = 7 min	
135				
140				140-145 -- Like above, decreased clay; clay (40%) gravel (30%) sand (30%)
145				145-150 -- Like above, increased clay; clay (80%) gravel (10%) sand (10%)
			140'-160' = 9 min	

DEPTH	LITHOLOGY	WELL DIAGRAM	DRILLING INFO	LITHOLOGY DESCRIPTION
155				150-180 -- Decreased clay; clay (40%) gravel (30%) sand (30%)
160				
165				
170			160'-180'= 5 min	
175				
180			Bit change: 8 to 6.5" @180'	180-215 -- Like above, more clay; clay (80%) gravel (15%) sand (5%); clasts= up to 1 cm, rounded to subangular
185				
190			180'-200'= 5 min	
195				
200				
205				
210			200'-220'= 6 min	
215			30% Bentonite Grout 145-244'	215-230 -- Like above, coarser; clay (70%) gravel (20%) sand (10%)
220				
225				
230			220'-240'= 6 min	230-240 -- Gravel (60%) with sand (15%) and clay (15%)
235				
240				240-260 -- Clay with gravel; clasts=well rounded to subrounded, limestone (80%) quartzite (20%)
245				
			240'-260'= 7 min	

DEPTH	LITHOLOGY	WELL DIAGRAM	DRILLING INFO	LITHOLOGY DESCRIPTION
255				240-260 -- Clay with gravel; clasts=well rounded to subrounded, limestone (80%) quartzite (20%)
260				260-270 -- Clay (90%) with rare gravel (10%)
265				
270			260'-280'= 6 min	270-285 -- Sand (40%) gravel (30%) with clay (30%)
275				
280				
285				285-290 -- Tan clay (85%) with sand (10%) and gravel (5%)
290			280'-300'= 7 min	290-320 -- Like above, coarser; clay (70%) gravel (20%) sand (10%); clasts= up to 1 cm, limestone (90%) quartzite (10%)
295				
300				
305				
310			300'-320'= 7 min	
315				
320				
325				
330				
335				
340				
345				