

Utah Geological Survey Lithologic Log

W.R. # 1168003M00
Well ID: Pavant Area PA-2

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Well Location: (C-17-08)12dca / 6.4 miles W of Delta, Utah

UTM: x 0353958 m, y 4356798 m NAD 83 39.34829 N 112.69485 W (NAD 83)

N 1,133 ft, E 1177 ft from S 1/4 Corner, Sec 12, T 17S N S R 8W K W, SLBM ~~XXSM~~

Start Date 8/5/2012 Completion Date 8/8/2012 Driller USGS, Jack Hennagan

Drilling Method: Mud/Rotary from 0 to 500 ft Total Depth 500 ft

_____ from _____ to _____ Static Water Level UNK

_____ from _____ to _____ Water Level Date _____

Measured From _____

Borehole Diameter 7 7/8-in from 0 to 500 ft Casing 6-in steel & lock cap from +1.5 to 3.5 ft
Type & Diameter 2-in sch-80 PVC
(Sealed) from +1.5 to 500 ft

Screen N/A from _____ to _____ Ground Elevation: Approx. 4599 ft

Screen Type & Diameter N/A from _____ to _____ Logged By: M.L. Gwynn, UGS

Geophysical Log Yes No Other Logs: High-precision Temperature

DEPTH	LITHOLOGY	WELL DIAGRAM	DRILLING INFO	LITHOLOGY DESCRIPTION
5	-----: XX	XX	XX	0-10': 75% Tan to gy-tan and 25% gy-gn hydrated clay; minor med sand.
	-----: XX	8"	XX	
	-----: XX		XX	
	-----: \	B	\	
	-----: \	O	\	
10	-----: \	R	\	
	-----: \	E	\	
	-----: \		\	
	-----: \	H	\	
	-----: \	O	\	
15	-----: \	L	\	10-20': AA
	-----: \	E	\	
	-----: \		\	
	-----: \	H	\	
	-----: \	O	\	
	-----: \	L	\	
20	-----: \	E	\	
	-----: \		\	
	-----: \	W	\	
	-----: \	I	\	
25	-----: \	T	\	20-30': Tan to gy-tan and minor gy-gn hydrated clay to 28'; begin sand & gravel interval described below.
	-----: \	H	\	
	-----: \		\	
	-----: \		\	
	-----: \		\	
	-----: \		\	
	-----: \		\	
	-----: \		\	
	-----: \		\	
	-----: \		\	
30	:o:o:o:- \		\	30-40': Poorly sorted sand and gravel. Approx 45% coarse-very coarse sand, 20% very fine-fine pebble gravel, 20% medium-coarse pebble gravel, and 15% tan hydrated clay. Variable origin/composition for all clasts (light gy, tan, brn, red, blk). Clasts are angular to rounded w/ most being subrounded-rounded. Some finer sand and silt may be present, but would have been filtered out of the cuttings.
	:o:o:o:- \	2"	\	
	:o:o:o:- \		\	
	:o:o:o:- \	S	\	
	:o:o:o:- \	C	\	
	:o:o:o:- \	H	\	
40	:o:o:o:- \		\	
	-----: \	8	\	
	-----: \	O	\	
	-----: \		\	
45	-----: \	P	\	40-50': Light gy-tan sticky hydrated clay w/ some coarse basaltic sand near top of interval.
	-----: \	V	\	
	-----: \		\	
	-----: \	C	\	

DEPTH	LITHOLOGY	WELL DIAGRAM	DRILLING INFO	LITHOLOGY DESCRIPTION
55		8"		50-60': Light gy-tan and some dark tan and gy-gn sticky hydrated clay.
60		B O R E		60-70': Light gy-tan sticky hydrated clay similar to 40-50', but lighter in color. Mix of tan, gn, and white.
65		H O L E		
70		W I T H		70-80': Light gy-tan and some tan and gn hydrated clay; minor coarse basaltic sand (may be from 28-40 ft interval).
75		2"		
80		S C H		80-90': AA
85		8 0		90-100': Similar to above, but more tan at top and more gn at bottom of interval.
90		P V C		
95				100-110': Gy-gn and minor tan sticky hydrated clay.
100				
105				
110				110-120': AA
115				
120				120-130': AA
125				
130				130-140': AA
135				
140				140-150': 75% gy-tan, 20% gy-gn, and 5% brn sticky hydrated clay.
145				

DEPTH	LITHOLOGY	WELL DIAGRAM	DRILLING INFO	LITHOLOGY DESCRIPTION
155		8"		150-160': 65% gy-tan, 30% gy-gn, and 5% brn sticky hydrated clay.
160		B O R E		160-170': AA
165		H O L E		
170		W I T H		170-180': 80% gy-gn, 20% gy-tan hydrated clay; more compact/dense than previous samples.
175		2"		
180		S C H		180-190': 75% gy-tan, 20% gy-gn, and 5% brn sticky hydrated clay.
185		8 0		
190		P V C		190-200': Gy-tan sticky hydrated clay; very uniform composition and color.
195				End of 5 August Drilling
200				200-210': 75% gy-tan, 25% gy-gn sticky hydrated clay; minor coarse sand and very fine pebble gravel (probably settled from 28-40' sand and gravel zone overnight--swelling and bridging noted at about 35-40' during trip in).
205				
210				210-220': AA
215				
220				220-230': 85% gy-tan, 15% gy-gn sticky hydrated clay w/ very minor sand and gravel as noted for 200-210' (possibly being picked up from 28-40' interval).
225				
230				230-240': AA
235				
240				240-250': AA
245				

DEPTH	LITHOLOGY	WELL DIAGRAM	DRILLING INFO	LITHOLOGY DESCRIPTION
255		8"		250-260': 85% gy-tan, 15% gy-gn sticky hydrated clay.
260		B O R E		260-270': AA
265		H O L E		
270		W I T H		270-280': AA
275		2"		
280		S C H		280-290': AA
285		8 0		
290		P V C		290-300': Similar to above, except clay very stiff.
295				
300				300-310': Similar to above, except clay slightly less stiff.
305				
310				310-320': AA
315				
320				320-330': AA
325				
330			Lost circulation about 330-350'. About half of volume lost, then self-sealed.	330-340': Similar to above, except clay is quite soft.
335				
340				340-350': AA
345				

DEPTH	LITHOLOGY	WELL DIAGRAM	DRILLING INFO	LITHOLOGY DESCRIPTION
455	----- : ----- : ----- :	8" B O R E		450-460': 75% gy-tan, 25% gy-gn sticky hydrated clay w/ very minor fine sand and silt. Clay is more gy-gn near bottom.
460	----- ----- -----	H O L E		460-470': Gy-tan sticky hydrated clay; moderately stiff.
465	----- ----- -----	L E		
470	----- ----- -----	W I T H		470-480': AA
475	----- ----- -----	H 2"		
480	----- ----- -----	S C H		480-490': 90% gy-tan sticky hydrated clay; remainder is tan and gy-gn. Soft consistency.
485	----- ----- -----	H 8 O		
490	----- ----- -----	P V C		490-500': AA
495	----- ----- -----			
500	----- ----- -----			TD: 500 ft
505	----- ----- -----			
510	----- ----- -----			
515	----- ----- -----			
520	----- ----- -----			
525	----- ----- -----			
530	----- ----- -----			
535	----- ----- -----			
540	----- ----- -----			
545	----- ----- -----			