



PROJECT: ERDC Site Wide Monitoring Plan (13 002-04)	WELL ID: KV-84N-D	
LOCATION: Keno Hills Silver District (KHSD)	WELL MATERIAL: Fire Hall Deep	
DRILLING CONTRACTOR: Access Consulting Group	NORTHING:	EASTING: Need survey from AXR s
DRILLING EQUIPMENT: Midnight Sun Drilling Inc.	GROUND SURFACE ELEV. (masl):	TOC ELEVATION (m ags): 0.8634984
DRILLING METHOD: Air Rotary	TOTAL DEPTH (m): 88.392	WATER DEPTH (m bgs): 57.068
SAMPLING METHOD: Interval by major lithology	DATE STARTED: 30-Oct-13	DATE COMPLETED: 1-Nov-13

Depth (m)	Graphic Log	Description	Well Construction
-2			
0			
2		Brown silty gravel with cobbles, damp	Sand Pack
4		Gray/brown gravelly silt with sand and cobbles, damp	Bentonite
6		Boulder - quartzite, damp	
8		Gray/brown gravelly silt with sand and cobbles, damp	
10		Gray/brown gravelly silt with sand, damp	
12		Dark gray sand with trace silt, grading to silt at 37', damp	
14		Silt, coarse, trace sand, damp	
16		Gravel with trace silt 1"- but becoming finer (1/4"), clean subrounded (fluvial) grains, damp	
18		Sandy gravel, light gray, damp	
20		Brown fine sand/coarse silt, damp	
22		Wet gray silt, wet	
24		Sandy gravel, medium gray, damp	
26		Fine gravel with trace sand and silt, clean, damp	
28		Sandy gray/brown gravel (1"-), alternating dry and moist, gray and brown	
30		Coarse sand with trace gravel, saturated - 20L water blown from hole after rod change	
32			
34		Gray sandy silt, wet	
36			
38		Silty gravel, damp	
40		Clean gravel with cobbles, wet - appears to be water at 137 feet after water addition stopped	
42			
44		Medium sand with trace silt, moist but no water	
46		Sand and gravel with silt, moist	
48		Gray gravel with some coarse sand, damp	
50		Light gray powdery silt with trace gravel and fine sand, alternating bands drier and moister with more or less gravel/cobbles	
52		Gray sandy gravel with cobbles. Powdery and dry with several boulders encountered to 180, water present at 193'	
54			
56			
58			
60			
62		Silty gravel, saturated, increased fines, wet	
64		Clean gravel with cobbles and boulders, trace sand and silt, wet	
66			
68		Gray silty clay till with gravel, impermeable? More gravel between 225-232, added water	
70			
72		Gray quartzite	Bentonite
74		Interbedded black graphite schist and quartzite, some quartz and pyrite	Sand Pack
76			Bentonite
78		Gray/green muscovite/sericite schist	
80		Light gray hard quartzite, oxidized zone between 262'-267' with groundwater, pyrite in cuttings	Sand Pack
82			
84			
86		Quartzite with thin bedded graphite schist - EOH	Sand Pack
88			
90			

NOTES: Stuck casing near top of bedrock at 234 feet

Bedrock Borehole Diameter: 6"
QZ17-076 - Overburden Diameter: 7 3/8"
Surface Seal Borehole Diameter: 10"