West Coast Report: *8/12/2017 0:00hrs to 8/13/2017 0:00hrs*

University of Utah 58-32

Present Depth	**3508**	*ft*
Previous Depth	**3238**	*ft*
Footage Cut	**270**	*ft*
Drill hours	**13**	*hrs*
Depth @ 5am	**3575**	*ft*

	Qnty	cost
Daily Cost	**$**	**1,875.00**
Well Cumulative Cost	**$**	**32,570.00**
Travel	$	-
Log/Abate Service	$	1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate			**Bit Info.**	**As Of**	0:00
Current	**10**	*ft/hr*	**Bit Number**	**4**	
Range	**5-25**	*ft/hr*	**Bit Type**	STC 300X	
Average	**20.7**	*ft/hr*	**Rotate Hrs**	13	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
1	**122**	**1631**	**18**		**-**	**-**	**-**

Summary Data

Cooling Tower on @

Depth (ft)	Temp In (deg F)	Temp Out (deg F)

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
1185	0.10		2392	1.20 deg	N83.5E
1471	1.00	N16.0W	2768	0.7 deg	N8.7E
1789	1.30	N33.4E	3077	1.20 deg	N31.16E
2139	1.9 deg	N24.5E	3380	1.20 deg	S56.6E

Lithology

From	To	
90	2080	100% Alluvium
2080	2150	mixed Granite and Alluvium
2150	3330	Granite
3330	3500	Gneiss

Fractures & Mud losses

Date	Time	Depth	Drill Breaks			Losses		
			Baseline ROP (ft/hr)	Peak ROP (ft/hr)	Length sustained (ft)	Initial Loss (Bph)	Sustained loss (Bph)	Total Losses (bbls)

Remarks

Drill f/ 3238-t/3282', POOH, m/u BHA, RIH with new bit, drill f/3282'-t/3508'.

Remarks

West Coast Report: *7/31/2017 0:00hrs to 8/01/2017 0:00hrs*

University of Utah 58-32

Present Depth	**98**	*ft*
Previous Depth	**84**	*ft*
Footage Cut		*ft*
Drill hours	**0.5**	*hrs*
Depth @ 5am	**0**	*ft*

	Qnty	cost
Daily Cost	**$**	**1,875.00**
Well Cumulative Cost	**$**	**9,850.00**
Travel	$	-
Log/Abate Service	$	1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate			**Bit Info.**	**As Of**	0:00
Current	**85**	*ft/hr*	**Bit Number**	**NB#1**	
Range	**34-220**	*ft/hr*	**Bit Type**	HC X3A	
Average	**150.0**	*ft/hr*	**Rotate Hrs**	0.5	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
2	**200**	**450**	**2**	**0**	**-**	**-**	**-**

Summary Data

Cooling Tower on @

Depth (ft)	Temp In (deg F)	Temp Out (deg F)

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.

Lithology

From	To	
84	90	100% Alluvium

Fractures & Mud losses

Date	Time	Depth	Drill Breaks			Losses		
			Baseline ROP (ft/hr)	Peak ROP (ft/hr)	Length sustained (ft)	Initial Loss (Bph)	Sustained loss (Bph)	Total Losses (bbls)

Remarks

Install standpipe, M/U rotary torque sensor, R/U wireline, Measure BHA, Work to open elevator latch, M/U BHA, RIH t/84', Drill ahead f/84' t/98'.

Remarks	

West Coast Report: *8/1/2017 0:00hrs to 8/2/2017 0:00hrs*

University of Utah 58-32

Present Depth	**342**	*ft*
Previous Depth	**98**	*ft*
Footage Cut	**244**	*ft*
Drill hours	**12.5**	*hrs*
Depth @ 5am	**342**	*ft*

	Qnty	cost
Daily Cost	**$**	**1,875.00**
Well Cumulative Cost	**$**	**11,725.00**
Travel	$	-
Log/Abate Service	$	1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate			**Bit Info.**	**As Of**	0:00
Current	**0**	*ft/hr*	**Bit Number**	**1**	
Range	**20-330**	*ft/hr*	**Bit Type**	HG X3A	
Average	**210.0**	*ft/hr*	**Rotate Hrs**	13	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
0	**0**	**0**			**-**	**-**	**-**

Summary Data

Cooling Tower on @

Depth (ft)	Temp In (deg F)	Temp Out (deg F)

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
278	0.30				

Lithology

From	To	
84	340	100% Alluvium

Fractures & Mud losses

Date	Time	Depth	Drill Breaks			Losses		
			Baseline ROP (ft/hr)	Peak ROP (ft/hr)	Length sustained (ft)	Initial Loss (Bph)	Sustained loss (Bph)	Total Losses (bbls)

Remarks

Drill ahead f/98' t/319. Circulate hole clean and survey @ 278'. Drill f/319' t/342'. Wipe hole. POOH.Run casing.

Remarks	5 a.m. update: WOC

West Coast Report: *8/2/2017 0:00hrs to 8/3/2017 0:00hrs*

University of Utah 58-32

Present Depth	**342**	*ft*
Previous Depth	**342**	*ft*
Footage Cut	**0**	*ft*
Drill hours	**0**	*hrs*
Depth @ 5am	**342**	*ft*

	Qnty	cost
Daily Cost	**$**	**1,875.00**
Well Cumulative Cost	**$**	**13,600.00**
Travel	$	-
Log/Abate Service	$	1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	**0**	*ft/hr*
Range	**0**	*ft/hr*
Average	**0.0**	*ft/hr*

Bit Info.	**As Of**	0:00
Bit Number	**1**	
Bit Type	HG X3A	
Rotate Hrs	13	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
0	**0**	**0**			-	-	-

Summary Data

Cooling Tower on @

Depth (ft)	Temp In (deg F)	Temp Out (deg F)

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
278	0.30				

Lithology

From	To	
84	340	100% Alluvium

Fractures & Mud losses

Date	Time	Depth	Drill Breaks: Baseline ROP (ft/hr)	Drill Breaks: Peak ROP (ft/hr)	Drill Breaks: Length sustained (ft)	Losses: Initial Loss (Bph)	Losses: Sustained loss (Bph)	Losses: Total Losses (bbls)

Remarks

RIH w/ 3 stands, M/U cement tools, Circulate, HSM, Cement 13.375" casing, CIP: 5:00, R/D cementers, Work on rig, Cut 20" conductor, M/U wellhead, Test Wellhead, Set and nipple up BOP.

Remarks	Nipple up, Strap BHA,

West Coast Report: *8/3/2017 0:00hrs to 8/4/2017 0:00hrs*

University of Utah 58-32

Present Depth	**532**	*ft*
Previous Depth	**342**	*ft*
Footage Cut	**190**	*ft*
Drill hours	**5**	*hrs*
Depth @ 5am	**728**	*ft*

	Qnty	cost
Daily Cost	**$**	**1,875.00**
Well Cumulative Cost	**$**	**15,475.00**
Travel	$	-
Log/Abate Service	$	1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate			**Bit Info.**	**As Of**	0:00
Current	**50**	*ft/hr*	**Bit Number**	**2**	
Range	**30-280**	*ft/hr*	**Bit Type**	ST XRT	
Average	**117.0**	*ft/hr*	**Rotate Hrs**	5	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
2	**153**	**0**	**3**		**-**	**-**	**-**

Summary Data

Cooling Tower on @

Depth (ft)	Temp In (deg F)	Temp Out (deg F)

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
278	0.30				
582	0.30				

Lithology

From	To	
84	530	100% Alluvium

Fractures & Mud losses

Date	Time	Depth	Drill Breaks			Losses		
			Baseline ROP (ft/hr)	Peak ROP (ft/hr)	Length sustained (ft)	Initial Loss (Bph)	Sustained loss (Bph)	Total Losses (bbls)

Remarks

Test BOP, drill out cement, M/U Kelly, drill ahead f/382-532'

Remarks			
am logger	Noah Abramson	pm logger	Patrick Broderick

West Coast Report: *8/4/2017 0:00hrs to 8/5/2017 0:00hrs*

University of Utah 58-32

Present Depth	**1512**	*ft*
Previous Depth	**532**	*ft*
Footage Cut	**980**	*ft*
Drill hours	**22.5**	*hrs*
Depth @ 5am		*ft*

	Qnty	cost
Daily Cost	**$**	**1,875.00**
Well Cumulative Cost	**$**	**17,350.00**
Travel	$	-
Log/Abate Service	$	1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate			**Bit Info.**	**As Of**	0:00
Current	**0**	*ft/hr*	**Bit Number**	**2**	
Range	**19-200**	*ft/hr*	**Bit Type**	ST XRT	
Average	**120.0**	*ft/hr*	**Rotate Hrs**	27.5	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
2	**151**	**0**	**12**		**-**	**-**	**-**

Summary Data

Cooling Tower on @

Depth (ft)	Temp In (deg F)	Temp Out (deg F)

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
278	0.30				
582	0.30				
868	0.40				
1185	0.10				

Lithology

From	To	
84	1510	100% Alluvium

Fractures & Mud losses

Date	Time	Depth	Drill Breaks: Baseline ROP (ft/hr)	Drill Breaks: Peak ROP (ft/hr)	Drill Breaks: Length sustained (ft)	Losses: Initial Loss (Bph)	Losses: Sustained loss (Bph)	Losses: Total Losses (bbls)

Remarks

Drill ahead f/532-1512', Circulate, perform temp survey.

Remarks			
am logger	Noah Abramson	pm logger	Patrick Broderick

West Coast Report: *8/5/2017 0:00hrs to 8/6/2017 0:00hrs*

University of Utah 58-32

Present Depth	**1957**	*ft*
Previous Depth	**1512**	*ft*
Footage Cut	**445**	*ft*
Drill hours	**19.5**	*hrs*
Depth @ 5am	**2053**	*ft*

	Qnty	cost
Daily Cost	**$**	**1,875.00**
Well Cumulative Cost	**$**	**19,225.00**
Travel	$	-
Log/Abate Service	$	1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate			**Bit Info.**	**As Of**	0:00
Current	**23.8**	*ft/hr*	**Bit Number**	**2**	
Range	**9-45**	*ft/hr*	**Bit Type**	ST XRT	
Average	**20.0**	*ft/hr*	**Rotate Hrs**	47	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
2	**156**	**714**	**16**		**-**	**-**	**-**

Summary Data

Cooling Tower on @

Depth (ft)	Temp In (deg F)	Temp Out (deg F)

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
278	0.30		1471	1.00	
582	0.30		1789	1.30	
868	0.40				
1185	0.10				

Lithology

From	To	
90	1380	100% Alluvium
1380	1950	mixed Alluvium and Tuff

Fractures & Mud losses

Date	Time	Depth	Drill Breaks: Baseline ROP (ft/hr)	Drill Breaks: Peak ROP (ft/hr)	Drill Breaks: Length sustained (ft)	Losses: Initial Loss (Bph)	Losses: Sustained loss (Bph)	Losses: Total Losses (bbls)

Remarks

Drill f/1512 - t/1957, repair rig rotary chain.

Remarks	

West Coast Report: *8/6/2017 0:00hrs to 8/7/2017 0:00hrs*

University of Utah 58-32

Present Depth	**2180**	*ft*
Previous Depth	**1957**	*ft*
Footage Cut	**223**	*ft*
Drill hours	**15.5**	*hrs*
Depth @ 5am	**2180**	*ft*

	Qnty	cost
Daily Cost	**$**	**1,875.00**
Well Cumulative Cost	**$**	**21,100.00**
Travel	$	-
Log/Abate Service	$	1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	**0**	*ft/hr*
Range	**4-75**	*ft/hr*
Average	**14.4**	*ft/hr*

Bit Info.

As Of		0:00
Bit Number	**2**	
Bit Type	ST XRT	
Rotate Hrs	60	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
					-	-	-

Summary Data

Cooling Tower on @

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
1800	120	123
1900	125	127
2000	129	131
2100	129	132

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
278	0.30	N20.59E	1471	1 deg	N16.0W
582	0.30	S20.5W	1789	1.3 deg	N33.4E
868	0.40	N1.0E	2139	1.9 deg	N24.5E
1185	0.10	N14.0W			

Lithology

From	To	
1960	2140	Alluvium and Tuff
2140	2180	Granite and Alluvium

Fractures & Mud losses

Date	Time	Depth	Drill Breaks			Losses		
			Baseline ROP (ft/hr)	Peak ROP (ft/hr)	Length sustained (ft)	Initial Loss (Bph)	Sustained loss (Bph)	Total Losses (bbls)

Remarks

Drill f/1957' t/2180', Circulate, Survey, Wipe hole(No fill), POH,

Remarks

West Coast Report: *8/7/2017 0:00hrs to 8/8/2017 0:00hrs*

University of Utah 58-32

Present Depth	**2180**	*ft*
Previous Depth	**2180**	*ft*
Footage Cut	**0**	*ft*
Drill hours	**0**	*hrs*
Depth @ 5am	**2180**	*ft*

	Qnty	cost
Daily Cost	**$**	**1,875.00**
Well Cumulative Cost	**$**	**22,975.00**
Travel	$	-
Log/Abate Service	$	1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	**0**	*ft/hr*
Range	**4-75**	*ft/hr*
Average	**#DIV/0!**	*ft/hr*

Bit Info.

As Of		0:00
Bit Number	**2**	
Bit Type	ST XRT	
Rotate Hrs	60	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
					-	-	-

Summary Data

Cooling Tower on @

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
1800	120	123
1900	125	127
2000	129	131
2100	129	132

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
278	0.30	N20.59E	1471	1 deg	N16.0W
582	0.30	S20.5W	1789	1.3 deg	N33.4E
868	0.40	N1.0E	2139	1.9 deg	N24.5E
1185	0.10	N14.0W			

Lithology

From	To	
1960	2140	Alluvium and Tuff
2140	2180	Granite and Alluvium

Fractures & Mud losses

Date	Time	Depth	Drill Breaks			Losses		
			Baseline ROP (ft/hr)	Peak ROP (ft/hr)	Length sustained (ft)	Initial Loss (Bph)	Sustained loss (Bph)	Total Losses (bbls)

Remarks

Run 9.625" casing. Cement in place. Service rig. Nipple down.

Remarks	Nipple up.

West Coast Report: *8/8/2017 0:00hrs to 8/9/2017 0:00hrs*

University of Utah 58-32

Present Depth	**2340**	*ft*
Previous Depth	**2180**	*ft*
Footage Cut	**160**	*ft*
Drill hours	**5.5**	*hrs*
Depth @ 5am	**2487**	*ft*

	Qnty	cost
Daily Cost	**$**	**1,875.00**
Well Cumulative Cost	**$**	**24,850.00**
Travel	$	-
Log/Abate Service	$	1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate			**Bit Info.**	**As Of**	0:00
Current	**20.5**	*ft/hr*	**Bit Number**	**3**	
Range	**7-33**	*ft/hr*	**Bit Type**	Reed FHI 28	
Average	**17.8**	*ft/hr*	**Rotate Hrs**	5.5	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
1	**125**	**1014**	**14**		**-**	**-**	**-**

Summary Data

Cooling Tower on @

Depth (ft)	Temp In (deg F)	Temp Out (deg F)

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
278	0.30		1471	1 deg	N16.0W
582	0.30		1789	1.3 deg	N33.4E
868	0.40		2139	1.9 deg	N24.5E
1185	0.10				

Lithology

From	To	
90	2080	100% Alluvium
2080	2150	mixed Granite and Alluvium
2150		Granite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks			Losses		
			Baseline ROP (ft/hr)	Peak ROP (ft/hr)	Length sustained (ft)	Initial Loss (Bph)	Sustained loss (Bph)	Total Losses (bbls)

Remarks

Work on rotary table, Stage BHA, M/U BHA, RIH, test BOP, perform FIT test, Drill ahead f/2187'

Remarks			
am logger	Noah Abramson	pm logger	Patrick Broderick

West Coast Report: *8/9/2017 0:00hrs to 8/10/2017 0:00hrs*

University of Utah 58-32

Present Depth	**2994**	*ft*
Previous Depth	**2340**	*ft*
Footage Cut	**654**	*ft*
Drill hours	**24**	*hrs*
Depth @ 5am	**3140**	*ft*

	Qnty	cost
Daily Cost	**$**	**1,875.00**
Well Cumulative Cost	**$**	**26,725.00**
Travel	$	-
Log/Abate Service	$	1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	**51.2**	*ft/hr*
Range	**10-55**	*ft/hr*
Average	**23.8**	*ft/hr*

Bit Info.

As Of		0:00
Bit Number	**3**	
Bit Type	STC FH 158	
Rotate Hrs	29.5	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
1	**123**	**1592**	**17**		**-**	**-**	**-**

Summary Data

Cooling Tower on @

Depth (ft)	Temp In (deg F)	Temp Out (deg F)

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
582	0.30		1789	1.3 deg	N33.4E
868	0.40		2139	1.9 deg	N24.5E
1185	0.10		2392	1.20 deg	N83.5E
1471	1.00	N16.0W	2768	0.70 deg	N8.7E

Lithology

From	To	
90	2080	100% Alluvium
2080	2150	mixed Granite and Alluvium
2150	2994	Granite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks			Losses		
			Baseline ROP (ft/hr)	Peak ROP (ft/hr)	Length sustained (ft)	Initial Loss (Bph)	Sustained loss (Bph)	Total Losses (bbls)

Remarks

Drill f/2340'- t/2994'.

Remarks	

am logger	Noah Abramson	pm logger	Patrick Broderick

West Coast Report: *8/10/2017 0:00hrs to 8/11/2017 0:00hrs*

University of Utah 58-32

Present Depth	**3187**	*ft*
Previous Depth	**2994**	*ft*
Footage Cut	**193**	*ft*
Drill hours	**13**	*hrs*
Depth @ 5am	**3187**	*ft*

	Qnty	cost
Daily Cost	**$**	**2,095.60**
Well Cumulative Cost	**$**	**28,820.60**
Travel	$	-
Log/Abate Service	$	1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Materials	$	220.60

Penetration Rate

Current	**0**	*ft/hr*
Range	**0-55**	*ft/hr*
Average	**23.8**	*ft/hr*

Bit Info.

As Of		0:00
Bit Number	**3**	
Bit Type	STC FH 158	
Rotate Hrs	37	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
0	**0**	**0**	**0**		**-**	**-**	**-**

Summary Data

Cooling Tower on @

Depth (ft)	Temp In (deg F)	Temp Out (deg F)

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
868	0.30		2139	1.9 deg	N24.5E
1185	0.10		2392	1.20 deg	N83.5E
1471	1.00	N16.0W	2768	0.7 deg	N8.7E
1789	1.3 deg	N33.4E	3077	1.20	N31.16E

Lithology

From	To	
90	2080	100% Alluvium
2080	2150	mixed Granite and Alluvium
2150	3187	Granite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks: Baseline ROP (ft/hr)	Drill Breaks: Peak ROP (ft/hr)	Drill Breaks: Length sustained (ft)	Losses: Initial Loss (Bph)	Losses: Sustained loss (Bph)	Losses: Total Losses (bbls)

Remarks

Drill f/2994'- t/3187', POOH , service rig, wait on fishing tools

Remarks			
am logger	Noah Abramson	pm logger	Patrick Broderick

West Coast Report: *8/11/2017 0:00hrs to 8/12/2017 0:00hrs*

University of Utah 58-32

Present Depth	**3238**	*ft*
Previous Depth	**3187**	*ft*
Footage Cut	**51**	*ft*
Drill hours	**3.5**	*hrs*
Depth @ 5am	**3281**	*ft*

	Qnty	cost
Daily Cost	**$**	**1,875.00**
Well Cumulative Cost	**$**	**30,695.00**
Travel	$	-
Log/Abate Service	$	1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	**0**	*ft/hr*
Range	**12-25**	*ft/hr*
Average	**23.8**	*ft/hr*

Bit Info.

As Of		0:00
Bit Number	**3**	
Bit Type	STC FH 158	
Rotate Hrs	40.5	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
1	**120**	**1620**	**18**		**-**	**-**	**-**

Summary Data

Cooling Tower on @

Depth (ft)	Temp In (deg F)	Temp Out (deg F)

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
868	0.30		2139	1.9 deg	N24.5E
1185	0.10		2392	1.20 deg	N83.5E
1471	1.00	N16.0W	2768	0.7 deg	N8.7E
1789	1.3 deg	N33.4E	3077	1.20	N31.16E

Lithology

From	To	
90	2080	100% Alluvium
2080	2150	mixed Granite and Alluvium
2150	3230	Granite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks: Baseline ROP (ft/hr)	Drill Breaks: Peak ROP (ft/hr)	Drill Breaks: Length sustained (ft)	Losses: Initial Loss (Bph)	Losses: Sustained loss (Bph)	Losses: Total Losses (bbls)

Remarks

wait on fishing tools, RIH t/ 2128', circulate, RIH, tag fish, POOH with fishing tools, M/U BHA, RIH, tag fish, drill on fish f/3187'- t/3190', drill ahead f/3190'

Remarks

am logger	Noah Abramson	pm logger	Patrick Broderick

West Coast Report: *8/12/2017 0:00hrs to 8/13/2017 0:00hrs*

University of Utah 58-32

Present Depth	**3508**	*ft*
Previous Depth	**3238**	*ft*
Footage Cut	**270**	*ft*
Drill hours	**13**	*hrs*
Depth @ 5am	**3575**	*ft*

	Qnty	cost
Daily Cost	**$**	**1,875.00**
Well Cumulative Cost	**$**	**32,570.00**
Travel	$	-
Log/Abate Service	$	1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	**10**	*ft/hr*
Range	**5-25**	*ft/hr*
Average	**20.7**	*ft/hr*

Bit Info.

As Of		0:00
Bit Number	**4**	
Bit Type	STC 300X	
Rotate Hrs	13	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
1	**122**	**1631**	**18**		**-**	**-**	**-**

Summary Data

Cooling Tower on @

Depth (ft)	Temp In (deg F)	Temp Out (deg F)

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
1185	0.10		2392	1.20 deg	N83.5E
1471	1.00	N16.0W	2768	0.7 deg	N8.7E
1789	1.30	N33.4E	3077	1.20 deg	N31.16E
2139	1.9 deg	N24.5E	3380	1.20 deg	S56.6E

Lithology

From	To	
90	2080	100% Alluvium
2080	2150	mixed Granite and Alluvium
2150	3330	Granite
3330	3500	Gneiss

Fractures & Mud losses

Date	Time	Depth	Drill Breaks			Losses		
			Baseline ROP (ft/hr)	Peak ROP (ft/hr)	Length sustained (ft)	Initial Loss (Bph)	Sustained loss (Bph)	Total Losses (bbls)

Remarks

Drill f/ 3238-t/3282', POOH, m/u BHA, RIH with new bit, drill f/3282'-t/3508'.

Remarks

am logger	Noah Abramson	pm logger	Patrick Broderick

West Coast Report: *8/13/2017 0:00hrs to 8/14/2017 0:00hrs*

University of Utah 58-32

Present Depth	**3790**	*ft*
Previous Depth	**3508**	*ft*
Footage Cut	**282**	*ft*
Drill hours	**22.5**	*hrs*
Depth @ 5am	**3822**	*ft*

	Qnty	cost
Daily Cost	**$**	**1,875.00**
Well Cumulative Cost	**$**	**35,945.00**
Travel	$	1,500.00
Log/Abate Service	$	1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	**10**	*ft/hr*
Range	**9-28**	*ft/hr*
Average	**20.7**	*ft/hr*

Bit Info.

As Of		0:00
Bit Number	**4**	
Bit Type	STC 300X	
Rotate Hrs	35.5	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
1	**124**	**1785**	**22**		**-**	**-**	**-**

Summary Data

Cooling Tower on @

Depth (ft)	Temp In (deg F)	Temp Out (deg F)

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
1471	1.00	N16.0W	2768	0.7 deg	N8.7E
1789	1.30	N33.4E	3380	1.2 deg	N31.16E
2139	1.9 deg	N24.5E	3380	1.20 deg	S56.6E
2392	1.2 deg	N83.5E	3697	1.2 deg	E40.0E

Lithology

From	To	
90	2080	100% Alluvium
2080	2150	mixed Granite and Alluvium
2150	3330	Granite
3330	3790	Gneiss

Fractures & Mud losses

Date	Time	Depth	Drill Breaks			Losses		
			Baseline ROP (ft/hr)	Peak ROP (ft/hr)	Length sustained (ft)	Initial Loss (Bph)	Sustained loss (Bph)	Total Losses (bbls)

Remarks

Drill f/ 3508-3765'. Circ bottoms up, Svy @ 3697'. Drill t/3790'.

5AM Remark Drill to 3822'

am logger	Eric Booker	pm logger	Patrick Broderick

West Coast Report: *8/14/2017 0:00hrs to 8/15/2017 0:00hrs*

University of Utah 58-32

Present Depth	**3973**	*ft*
Previous Depth	**3790**	*ft*
Footage Cut	**183**	*ft*
Drill hours	**11.5**	*hrs*
Depth @ 5am	**4045**	*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 37,820.00**
Travel		
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	**16**	*ft/hr*
Range	**9-51**	*ft/hr*
Average	**20.7**	*ft/hr*

Bit Info.	**As Of**	0:00
Bit Number	**4**	
Bit Type	STC 300X	
Rotate Hrs	47	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
1	**124**	**1853**	**22**		**-**	**-**	**-**

Summary Data

Cooling Tower on @

Depth (ft)	Temp In (deg F)	Temp Out (deg F)

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
1471	1.00	N16.0W	2768	0.7 deg	N8.7E
1789	1.30	N33.4E	3380	1.2 deg	N31.16E
2139	1.9 deg	N24.5E	3380	1.20 deg	S56.6E
2392	1.2 deg	N83.5E	3697	1.2 deg	E40.0E

Lithology

From	To	
90	2080	100% Alluvium
2080	2150	mixed Granite and Alluvium
2150	3330	Granite
3330	3790	Gneiss
3800	3830	Diorite
3840	3850	Felsic Dike
3860	3970	20-100% Gneiss, 0-80% Diorite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks			Losses		
			Baseline ROP (ft/hr)	Peak ROP (ft/hr)	Length sustained (ft)	Initial Loss (Bph)	Sustained loss (Bph)	Total Losses (bbls)

Remarks

Drill f/3790-3961'. Circ bottoms up, 147 degF. POH to check bit. M/U new bit, RIH. Tag tight hole at 3777'. Ream f/ 3777-3961'. Fill material: Gneiss and altered Diorite. Drill to 3973' in 100% Gneiss.

5AM Remark Drill ahead in 100% Gneiss. Attempt survey, POH to retrieve survey tool.

am logger	Eric Booker	pm logger	Patrick Broderick

West Coast Report: *8/14/2017 0:00hrs to 8/15/2017 0:00hrs*

University of Utah 58-32

Present Depth	**4233**	*ft*
Previous Depth	**3973**	*ft*
Footage Cut	**260**	*ft*
Drill hours	**13.5**	*hrs*
Depth @ 5am	**4305**	*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 39,695.00**
Travel		
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	**16**	*ft/hr*
Range	**9-51**	*ft/hr*
Average	**20.7**	*ft/hr*

Bit Info.	**As Of**	0:00
Bit Number	**5**	
Bit Type	BH KM624	
Rotate Hrs	14.5	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
1	**125**	**1825**	**22**		**-**	**-**	**-**

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
4000	143	149
4100	143	148
4200	113	127
4300	104	117

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
2768	0.7 deg	N8.7E	3976	3.8 deg	S73.9W
3380	1.2 deg	N31.2E			
3380	1.2 deg	S56.6E			
3697	1.2 deg	S40.0W			

Lithology

From	To	
3900	3920	100% Diorite
3920	3950	60-80% Granodiorite, 20-40% Gneiss
3950	3960	60% Diorite, 40% Gneiss
3960	4070	Gneiss
4080	4100	Granodiorite
4100	4160	Felsic Dike
4160	4230	Granodiorite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks			Losses		
			Baseline ROP (ft/hr)	Peak ROP (ft/hr)	Length sustained (ft)	Initial Loss (Bph)	Sustained loss (Bph)	Total Losses (bbls)

Remarks

Drill f/3973-4044', attempt survey. Wireline severed, POH to retreive survey tool. RIH to 4044, circ and svy @ 3976'. Drill ahead to 4233'.

5AM Remark Drill ahead.

am logger	Eric Booker	pm logger	Patrick Broderick

West Coast Report: *8/16/2017 0:00hrs to 8/17/2017 0:00hrs*

University of Utah 58-32

Present Depth	**4392**	*ft*
Previous Depth	**4233**	*ft*
Footage Cut	**159**	*ft*
Drill hours	**13.5**	*hrs*
Depth @ 5am	**4430**	*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 41,570.00**
Travel		
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	**16**	*ft/hr*
Range	**5-38**	*ft/hr*
Average	**20.7**	*ft/hr*

Bit Info.

As Of		0:00
Bit Number	**5**	
Bit Type	BH KM624	
Rotate Hrs	30.5	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
1	**125**	**1825**	**22**		4140	-	-

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
4100	143	148
4200	113	127
4300	104	117
4400	104	116

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
2768	0.7 deg	N8.7E	3976	3.8 deg	S73.9W
3380	1.2 deg	N31.2E	4292	6.3 deg	S75.8W
3380	1.2 deg	S56.6E			
3697	1.2 deg	S40.0W			

Lithology

From	To	
3960	4070	Gneiss
4080	4100	Granodiorite
4100	4160	Felsic Dike
4160	4250	Granodiorite
4250	4270	Granite
4270	4370	20-100% Granodiorite, 0-80% Granite
4370	4400	Granite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks			Losses		
			Baseline ROP (ft/hr)	Peak ROP (ft/hr)	Length sustained (ft)	Initial Loss (Bph)	Sustained loss (Bph)	Total Losses (bbls)

Remarks

Drill f/4233-4360', circulate bottoms up, svy @ 4292', drill t/4392'. POH for new BHA. RIH, ream from 4352-4392'. Drill to 4402'.

5AM	Drill ahead from 4430'

am logger	Eric Booker	pm logger	Patrick Broderick

West Coast Report: *8/17/2017 0:00hrs to 8/18/2017 0:00hrs*

University of Utah 58-32

Present Depth	**4593**	*ft*
Previous Depth	**4402**	*ft*
Footage Cut	**191**	*ft*
Drill hours	**23.5**	*hrs*
Depth @ 5am	**4625**	*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 43,445.00**
Travel		
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	**7**	*ft/hr*
Range	**5-57**	*ft/hr*
Average	**20.7**	*ft/hr*

Bit Info.

As Of	0:00	
Bit Number	**5**	
Bit Type	BH KM624	
Rotate Hrs	53.5	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
1	**125**	**1825**	**22**	**-**	4140	-	-

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
4200	113	127
4300	104	117
4400	104	116
4500	105	114

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
2768	0.7 deg	N8.7E	3976	3.8 deg	S73.9W
3380	1.2 deg	N31.2E	4292	6.3 deg	S75.8W
3380	1.2 deg	S56.6E	4569	6.8 deg	S73.8W
3697	1.2 deg	S40.0W			

Lithology

From	To	
3960	4070	Gneiss
4080	4100	Granodiorite
4100	4160	Felsic Dike
4160	4250	Granodiorite
4250	4270	Granite
4270	4370	20-100% Granodiorite, 0-80% Granite
4370	4590	Granite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks			Losses		
			Baseline ROP (ft/hr)	Peak ROP (ft/hr)	Length sustained (ft)	Initial Loss (Bph)	Sustained loss (Bph)	Total Losses (bbls)
8/17/17	7:45	4444	13	65	9	0	0	0

Remarks

Drill from 4402-4593' in Granite. Drill break (fracture) from 4444-4453'. ROP increased from 13 to 65 ft/hr.

5AM

am logger	Eric Booker	pm logger	Patrick Broderick

West Coast Report: *8/18/2017 0:00hrs to 8/19/2017 0:00hrs*

University of Utah 58-32

Present Depth	**4671**	*ft*
Previous Depth	**4593**	*ft*
Footage Cut	**78**	*ft*
Drill hours	**11**	*hrs*
Depth @ 5am	**4721**	*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 45,320.00**
Travel		
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	**7**	*ft/hr*
Range	**7-16**	*ft/hr*
Average	**7.1**	*ft/hr*

Bit Info.

As Of		0:00
Bit Number	**6**	
Bit Type	BH KM624	
Rotate Hrs	5	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
1	**125**	**1825**	**22**	**-**	4140	-	-

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
4400	104	116
4500	105	114
4600	105	115
4700	105	116

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
2768	0.7 deg	N8.7E	3976	3.8 deg	S73.9W
3380	1.2 deg	N31.2E	4292	6.3 deg	S75.8W
3380	1.2 deg	S56.6E	4569	6.8 deg	S73.8W
3697	1.2 deg	S40.0W	4603	7.56 deg	N87.67W

Lithology

From	To	
4160	4250	Granodiorite
4250	4270	Granite
4270	4370	20-100% Granodiorite, 0-80% Granite
4370	4670	Granite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks: Baseline ROP (ft/hr)	Drill Breaks: Peak ROP (ft/hr)	Drill Breaks: Length sustained (ft)	Losses: Initial Loss (Bph)	Losses: Sustained loss (Bph)	Losses: Total Losses (bbls)
8/17/17	7:45	4444	13	65	9	0	0	0

Remarks

Drill from 4593-4630' Survey, POH. M/U directional tools, RIH, drill from 4630-4671'.

5AM	Drill to 4721'

am logger	Eric Booker	pm logger	Patrick Broderick

West Coast Report: *8/19/2017 0:00hrs to 8/20/2017 0:00hrs*

University of Utah 58-32

Present Depth	**4855**	*ft*
Previous Depth	**4671**	*ft*
Footage Cut	**184**	*ft*
Drill hours	**24**	*hrs*
Depth @ 5am	**4875**	*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 47,195.00**
Travel		
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	**7**	*ft/hr*
Range	**6-23**	*ft/hr*
Average	**7.7**	*ft/hr*

Bit Info.

As Of	0:00	
Bit Number	**6**	
Bit Type	BH KM624	
Rotate Hrs	29	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
1	**105**	**1500**	**22**	**-**	4140	**-**	**-**

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
4500	105	114
4600	105	115
4700	105	116
4800	103	114

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
3976	3.80 deg	S73.9W	4739	6.95 deg	N87.8W
4292	6.30 deg	S75.8W	4771	6.90 deg	N88W
4569	6.80 deg	S73.8W	4803	7.22 deg	N88.5W
4603	7.56 deg	N87.67W			

Lithology

From	To	
4160	4250	Granodiorite
4250	4270	Granite
4270	4370	20-100% Granodiorite, 0-80% Granite
4370	4850	Granite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks: Baseline ROP (ft/hr)	Drill Breaks: Peak ROP (ft/hr)	Drill Breaks: Length sustained (ft)	Losses: Initial Loss (Bph)	Losses: Sustained loss (Bph)	Losses: Total Losses (bbls)
8/17/17	7:45	4444	13	65	9	0	0	0

Remarks

Drill from 4671 to 4855' with directional assembly.

5AM	Drill to 4875', POH

am logger	Eric Booker	pm logger	Patrick Broderick

West Coast Report: *8/19/2017 0:00hrs to 8/20/2017 0:00hrs*

University of Utah 58-32

Present Depth	**4937**	*ft*
Previous Depth	**4855**	*ft*
Footage Cut	**82**	*ft*
Drill hours	**12**	*hrs*
Depth @ 5am	**4980**	*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 49,070.00**
Travel		
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	**9**	*ft/hr*
Range	**5-17**	*ft/hr*
Average	**6.8**	*ft/hr*

Bit Info.

As Of	0:00	
Bit Number	**7**	
Bit Type	HTC VG-44CDX	
Rotate Hrs	8.5	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
1	**102**	**1500**	**22**	**-**	4140	**-**	**-**

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
4600	105	115
4700	105	116
4800	103	114
4900	104	116

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
4739	6.95 deg	N87.8W	4865	8.68 deg	N83.63W
4771	6.90 deg	N88W			
4803	7.21 deg	N88.5W			
4833	7.16 deg	N85.8W			

Lithology

From	To	
4160	4250	Granodiorite
4250	4270	Granite
4270	4370	20-100% Granodiorite, 0-80% Granite
4370	4930	Granite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks: Baseline ROP (ft/hr)	Drill Breaks: Peak ROP (ft/hr)	Drill Breaks: Length sustained (ft)	Losses: Initial Loss (Bph)	Losses: Sustained loss (Bph)	Losses: Total Losses (bbls)
8/17/17	7:45	4444	13	65	9	0	0	0

Remarks

Drill from 4859' to 4875' with directional assembly, POH, m/u new bit RIH. Drill to 4937'.

5AM	Drill to 4980'

am logger	Eric Booker	pm logger	Patrick Broderick

West Coast Report: *8/20/2017 0:00hrs to 8/21/2017 0:00hrs*

University of Utah 58-32

Present Depth	**5107**	*ft*
Previous Depth	**4937**	*ft*
Footage Cut	**170**	*ft*
Drill hours	**24**	*hrs*
Depth @ 5am	**5141**	*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 50,945.00**
Travel		
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	**9**	*ft/hr*
Range	**5-12**	*ft/hr*
Average	**7.1**	*ft/hr*

Bit Info.

As Of		0:00
Bit Number	**7**	
Bit Type	HTC VG-44CDX	
Rotate Hrs	32.5	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
1	**102**	**1500**	**35**	**-**	4140	**-**	**-**

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
4800	103	114
4900	104	116
5000	104	115
5100	104	115

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
4897	5.85 deg	N82.66W	5024	2.99 deg	S80.37W
4928	5.27 deg	N81.87W	5055	2.11 deg	S70.53W
4960	4.62 deg	N86.09W	5087	1.54	S71.5W
4992	3.82 deg	S85.82W			

Lithology

From	To	
4160	4250	Granodiorite
4250	4270	Granite
4270	4370	20-100% Granodiorite, 0-80% Granite
4370	5100	Granite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks: Baseline ROP (ft/hr)	Drill Breaks: Peak ROP (ft/hr)	Drill Breaks: Length sustained (ft)	Losses: Initial Loss (Bph)	Losses: Sustained loss (Bph)	Losses: Total Losses (bbls)
8/17/17	7:45	4444	13	65	9	0	0	0

Remarks

Drill from 4937' to 5107' with directional assembly.

5AM	Drill to 5141'

am logger	Eric Booker	pm logger	Patrick Broderick

West Coast Report: *8/21/2017 0:00hrs to 8/22/2017 0:00hrs*

University of Utah 58-32

Present Depth	**5273**	*ft*
Previous Depth	**5107**	*ft*
Footage Cut	**166**	*ft*
Drill hours	**24**	*hrs*
Depth @ 5am	**5310**	*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 52,820.00**
Travel		
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	**9**	*ft/hr*
Range	**6-15**	*ft/hr*
Average	**6.9**	*ft/hr*

Bit Info.

As Of	0:00	
Bit Number	**7**	
Bit Type	HTC VG-44CDX	
Rotate Hrs	56.5	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
1	**105**	**1500**	**35**	**-**	4140	**-**	**-**

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
4800	103	114
4900	104	116
5000	104	115
5100	104	115

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
5119	1.76 deg	S87.32W	5246	1.01 deg	N82.49W
5151	1.76 deg	N78.1W			
5183	1.63 deg	N64.97W			
5214	1.49 deg	N69.03W			

Lithology

From	To	
4160	4250	Granodiorite
4250	4270	Granite
4270	4370	20-100% Granodiorite, 0-80% Granite
4370	5270	Granite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks			Losses		
			Baseline ROP (ft/hr)	Peak ROP (ft/hr)	Length sustained (ft)	Initial Loss (Bph)	Sustained loss (Bph)	Total Losses (bbls)

Remarks

Drill from 5107' to 5273' with directional assembly.

5AM	Drill to 5310' in granite

am logger	Eric Booker	pm logger	Patrick Broderick

West Coast Report: *8/23/2017 0:00hrs to 8/24/2017 0:00hrs*

University of Utah 58-32

Present Depth	**5440**	*ft*
Previous Depth	**5273**	*ft*
Footage Cut	**167**	*ft*
Drill hours	**24**	*hrs*
Depth @ 5am		*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 54,685.00**
Travel		
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	**7.5**	*ft/hr*
Range	**5-25**	*ft/hr*
Average	**7.0**	*ft/hr*

Bit Info.

As Of	0:00	
Bit Number	**7**	
Bit Type	HTC VG-44CDX	
Rotate Hrs	80.5	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
1	**108**	**1500**	**35**	**-**	4140	**-**	**-**

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
5100	104	115
5200	104	116
5300	104	115
5400	104	115

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
5183	1.63 deg	N64.97W	5310	1.49 deg	S61.8W
5214	1.49 deg	N69.03W	5341	1.63 deg	S63.5W
5246	1.01 deg	N82.49W	5373	1.27 deg	S51.4W
5278	1.01 deg	S71.7W	5405	0.62 deg	S23.2W

Lithology

From	To	
4160	4250	Granodiorite
4250	4270	Granite
4270	4370	20-100% Granodiorite, 0-80% Granite
4370	5440	Granodiorite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks			Losses		
			Baseline ROP (ft/hr)	Peak ROP (ft/hr)	Length sustained (ft)	Initial Loss (Bph)	Sustained loss (Bph)	Total Losses (bbls)

Remarks

Drill from 5273' to 5440' with directional assembly.

5AM

am logger	Eric Booker	pm logger	Patrick Broderick

West Coast Report: *8/24/2017 0:00hrs to 8/25/2017 0:00hrs*

University of Utah 58-32

Present Depth	**5477**	*ft*
Previous Depth	**5440**	*ft*
Footage Cut	**37**	*ft*
Drill hours	**5.5**	*hrs*
Depth @ 5am	**5477**	*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 56,560.00**
Travel		
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	**7.5**	*ft/hr*
Range	**6-9**	*ft/hr*
Average	**6.7**	*ft/hr*

Bit Info.

As Of		0:00
Bit Number	**8**	
Bit Type	Smith F37HY00	
Rotate Hrs	0	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
1	**108**	**1500**	**35**	**-**	4140	**-**	**-**

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
5100	104	115
5200	104	116
5300	104	115
5400	104	115

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
5183	1.63 deg	N64.97W	5310	1.49 deg	S61.8W
5214	1.49 deg	N69.03W	5341	1.63 deg	S63.5W
5246	1.01 deg	N82.49W	5373	1.27 deg	S51.4W
5278	1.01 deg	S71.7W	5405	0.62 deg	S23.2W

Lithology

From	To	
4160	4250	Granodiorite
4250	4270	Granite
4270	4370	20-100% Granodiorite, 0-80% Granite
4370	5470	Granodiorite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks			Losses		
			Baseline ROP (ft/hr)	Peak ROP (ft/hr)	Length sustained (ft)	Initial Loss (Bph)	Sustained loss (Bph)	Total Losses (bbls)

Remarks

Drill from 5440' to 5477' with directional assembly. Survey, circulate, POH. M/U new bit #8 and BHA, RIH. Tag at 3930' and 4917'.

5AM	Reaming at 5080'

am logger	Eric Booker	pm logger	Patrick Broderick

West Coast Report: *8/25/2017 0:00hrs to 8/26/2017 0:00hrs*

University of Utah 58-32

Present Depth	**5606**	*ft*
Previous Depth	**5477**	*ft*
Footage Cut	**129**	*ft*
Drill hours	**15.5**	*hrs*
Depth @ 5am	**5647**	*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 58,435.00**
Travel		
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	**7.5**	*ft/hr*
Range	**6-24**	*ft/hr*
Average	**8.3**	*ft/hr*

Bit Info.

As Of	0:00	
Bit Number	**8**	
Bit Type	Smith F37HY00	
Rotate Hrs	15.5	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
1	**108**	**1500**	**35**	**-**	4140	**-**	**-**

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
5300	104	115
5400	104	115
5500	107	118
5600	108	119

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
5183	1.63 deg	N64.97W	5310	1.49 deg	S61.8W
5214	1.49 deg	N69.03W	5341	1.63 deg	S63.5W
5246	1.01 deg	N82.49W	5373	1.27 deg	S51.4W
5278	1.01 deg	S71.7W	5405	0.62 deg	S23.2W

Lithology

From	To	
4160	4250	Granodiorite
4250	4270	Granite
4270	4370	20-100% Granodiorite, 0-80% Granite
4370	5530	Granodiorite
5530	5550	70% Granodiorite, 30% Diorite
5550	5600	100% Granodiorite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks: Baseline ROP (ft/hr)	Drill Breaks: Peak ROP (ft/hr)	Drill Breaks: Length sustained (ft)	Losses: Initial Loss (Bph)	Losses: Sustained loss (Bph)	Losses: Total Losses (bbls)

Remarks

Ream f/4905-5477'. Drill f/5477-5606'.

5AM	Drill to 5647'

am logger	Eric Booker	pm logger	Patrick Broderick

West Coast Report: *8/26/2017 0:00hrs to 8/27/2017 0:00hrs*

University of Utah 58-32

Present Depth	**5708**	*ft*
Previous Depth	**5606**	*ft*
Footage Cut	**102**	*ft*
Drill hours	**15**	*hrs*
Depth @ 5am	**5708**	*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 60,310.00**
Travel		
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	**0**	*ft/hr*
Range	**6-16**	*ft/hr*
Average	**6.8**	*ft/hr*

Bit Info.

As Of		0:00
Bit Number	**8**	
Bit Type	Smith F37HY00	
Rotate Hrs	30.5	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
-	-	-	**35**	-	4140	-	-

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
5400	104	115
5500	107	118
5600	108	119
5700	111	122

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
5214	1.49 deg	N69.03W	5341	1.63 deg	S63.5W
5246	1.01 deg	N82.49W	5373	1.27 deg	S51.4W
5278	1.01 deg	S71.7W	5405	0.62 deg	S23.2W
5310	1.49 deg	S61.8W	5674	0.70 deg	S33.7W

Lithology

From	To	
4160	4250	Granodiorite
4250	4270	Granite
4270	4370	20-100% Granodiorite, 0-80% Granite
4370	5530	Granodiorite
5530	5550	70% Granodiorite, 30% Diorite
5550	5700	100% Granodiorite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks			Losses		
			Baseline ROP (ft/hr)	Peak ROP (ft/hr)	Length sustained (ft)	Initial Loss (Bph)	Sustained loss (Bph)	Total Losses (bbls)

Remarks

Drill f/5606-5708', svy, POH.

5AM	RIH

am logger	Eric Booker	pm logger	Patrick Broderick

West Coast Report: *8/27/2017 0:00hrs to 8/28/2017 0:00hrs*

University of Utah 58-32

Present Depth	**5839**	*ft*
Previous Depth	**5708**	*ft*
Footage Cut	**131**	*ft*
Drill hours	**15.5**	*hrs*
Depth @ 5am	**5878**	*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 62,185.00**
Travel		
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	**8.2**	*ft/hr*
Range	**7-21**	*ft/hr*
Average	**8.5**	*ft/hr*

Bit Info.

As Of		0:00
Bit Number	**9**	
Bit Type	Smith F37HY00	
Rotate Hrs	15.5	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
-	-	-	35	-	4140	-	-

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
5500	107	118
5600	108	119
5700	111	122
5800	113	125

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
5214	1.49 deg	N69.03W	5341	1.63 deg	S63.5W
5246	1.01 deg	N82.49W	5373	1.27 deg	S51.4W
5278	1.01 deg	S71.7W	5405	0.62 deg	S23.2W
5310	1.49 deg	S61.8W	5674	0.70 deg	S33.7W

Lithology

From	To	
4160	4250	Granodiorite
4250	4270	Granite
4270	4370	20-100% Granodiorite, 0-80% Granite
4370	5530	Granodiorite
5530	5550	70% Granodiorite, 30% Diorite
5550	5830	100% Granodiorite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks			Losses		
			Baseline ROP (ft/hr)	Peak ROP (ft/hr)	Length sustained (ft)	Initial Loss (Bph)	Sustained loss (Bph)	Total Losses (bbls)

Remarks

RIH, ream f/5696. Drill f/5708-5839'.

5AM	Drill to 5878'

am logger	Eric Booker	pm logger	Patrick Broderick

West Coast Report: *8/28/2017 0:00hrs to 8/29/2017 0:00hrs*

University of Utah 58-32

Present Depth	**6023**	*ft*
Previous Depth	**5839**	*ft*
Footage Cut	**184**	*ft*
Drill hours	**22.5**	*hrs*
Depth @ 5am	**6054**	*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 64,060.00**
Travel		
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	**6**	*ft/hr*
Range	**6-31**	*ft/hr*
Average	**8.2**	*ft/hr*

Bit Info.

As Of	0:00	
Bit Number	**9**	
Bit Type	Smith F37HY00	
Rotate Hrs	37.5	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
-	-	-	**35**	-	4140	-	-

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
5500	107	118
5600	108	119
5700	111	122
5800	113	125

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
5246	1.01 deg	N82.49W	5373	1.27 deg	S51.4W
5278	1.01 deg	S71.7W	5405	0.62 deg	S23.2W
5310	1.49 deg	S61.8W	5674	0.70 deg	S33.7W
5341	1.63 deg	S63.5W	5872	1.5 deg	N43.8W

Lithology

From	To	
4370	5530	Granodiorite
5530	5550	70% Granodiorite, 30% Diorite
5550	5940	100% Granodiorite
5940	5950	90% Granodiorite, 10% Diorite
5950	5970	100% Granodiorite
5970	6020	70-90% Granodiorite, 10-30% Quartz Monzonite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks			Losses		
			Baseline ROP (ft/hr)	Peak ROP (ft/hr)	Length sustained (ft)	Initial Loss (Bph)	Sustained loss (Bph)	Total Losses (bbls)
8/28/17	6:10	5890	10	31	2	0	0	0

Remarks

Drill f/5839-5455' take survey, drill t/6023'

5AM	6054'

am logger	Eric Booker	pm logger	Patrick Broderick

West Coast Report: *8/29/2017 0:00hrs to 8/30/2017 0:00hrs*

University of Utah 58-32

Present Depth	**6176**	*ft*
Previous Depth	**6023**	*ft*
Footage Cut	**153**	*ft*
Drill hours	**15.5**	*hrs*
Depth @ 5am	**6176**	*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 65,935.00**
Travel		
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	**0**	*ft/hr*
Range	**6-21**	*ft/hr*
Average	**9.9**	*ft/hr*

Bit Info.

As Of		0:00
Bit Number	**9**	
Bit Type	Smith F37HY00	
Rotate Hrs	53.5	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
-	-	-	**35**	-	4140	-	-

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
5800	113	125
5900	111	122
6000	113	125
6100	113	125

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
5373	1.27 deg	S51.4W	6062	1.8 deg	N13.4W
5405	0.62 deg	S23.2W			
5674	0.70 deg	S33.7W			
5872	1.5 deg	N43.8W			

Lithology

From	To	
4370	5530	Granodiorite
5530	5550	70% Granodiorite, 30% Diorite
5550	5940	100% Granodiorite
5940	5950	90% Granodiorite, 10% Diorite
5950	5970	100% Granodiorite
5970	6020	70-90% Granodiorite, 10-30% Quartz Monzonite
6020	6170	100% Granodiorite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks			Losses		
			Baseline ROP (ft/hr)	Peak ROP (ft/hr)	Length sustained (ft)	Initial Loss (Bph)	Sustained loss (Bph)	Total Losses (bbls)
8/28/17	6:10	5890	10	31	2	0	0	0
8/29/17	7:00	6073	10	20	4	0	0	0

Remarks

Drill f/6023-6176' take survey, POH, Mag test BHA

5AM	Mag test BHA

am logger	Eric Booker	pm logger	Patrick Broderick

West Coast Report: *8/30/2017 0:00hrs to 8/31/2017 0:00hrs*

University of Utah 58-32

Present Depth	**6232**	*ft*
Previous Depth	**6176**	*ft*
Footage Cut	**56**	*ft*
Drill hours	**5**	*hrs*
Depth @ 7am	**6323**	*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 67,810.00**
Travel		
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	**15**	*ft/hr*
Range	**6-17**	*ft/hr*
Average	**11.2**	*ft/hr*

Bit Info.

As Of		0:00
Bit Number	**10**	
Bit Type	Smith F6Y	
Rotate Hrs	5	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
1	**105**	**1330**	**35**	**0**	4140	-	-

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
6000	113	125
6100	113	125
6200	118	132
6300	116	129

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
5373	1.27 deg	S51.4W	6062	1.8 deg	N13.4W
5405	0.62 deg	S23.2W			
5674	0.70 deg	S33.7W			
5872	1.5 deg	N43.8W			

Lithology

From	To	
5940	5950	90% Granodiorite, 10% Diorite
5950	5970	100% Granodiorite
5970	6020	70-90% Granodiorite, 10-30% Quartz Monzonite
6020	6220	100% Granodiorite
6230	6270	80-90% Granodiroite, 10-20% Diorite
6270	6310	Granodiorite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks: Baseline ROP (ft/hr)	Drill Breaks: Peak ROP (ft/hr)	Drill Breaks: Length sustained (ft)	Losses: Initial Loss (Bph)	Losses: Sustained loss (Bph)	Losses: Total Losses (bbls)
8/28/17	6:10	5890	10	31	2	0	0	0
8/29/17	7:00	6073	10	20	4	0	0	0

Remarks

OOH. Inspect/mag test BHA. RIH t/6090' and ream to 6176'. Drill ahead f/6176'.

7AM	Drill to 6323'

am logger	Eric Booker	pm logger	Patrick Broderick

West Coast Report: *8/31/2017 0:00hrs to 9/1/2017 0:00hrs*

University of Utah 58-32

Present Depth	**6507**	*ft*
Previous Depth	**6232**	*ft*
Footage Cut	**275**	*ft*
Drill hours	**22.5**	*hrs*
Depth @ 7am	**6552**	*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 69,685.00**
Travel		
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	**13**	*ft/hr*
Range	**8-32**	*ft/hr*
Average	**12.2**	*ft/hr*

Bit Info.

As Of		0:00
Bit Number	**10**	
Bit Type	Smith F6Y	
Rotate Hrs	27.5	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
1	**105**	**1330**	**39**	**0**	4140	-	-

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
6200	118	132
6300	116	129
6400	116	129
6500	119	131

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
5373	1.27 deg	S51.4W	6062	1.8 deg	N13.4W
5405	0.62 deg	S23.2W	6478	2.5 deg	N25.1W
5674	0.70 deg	S33.7W			
5872	1.5 deg	N43.8W			

Lithology

From	To	
6020	6220	100% Granodiorite
6230	6270	80-90% Granodiroite, 10-20% Diorite
6270	6350	Granodiorite
6350	6400	40-80% Granodiorite, 20-60% Granite
6400	6550	Granodiorite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks: Baseline ROP (ft/hr)	Drill Breaks: Peak ROP (ft/hr)	Drill Breaks: Length sustained (ft)	Losses: Initial Loss (Bph)	Losses: Sustained loss (Bph)	Losses: Total Losses (bbls)
8/28/17	6:10	5890	10	31	2	0	0	0
8/29/17	7:00	6073	10	20	4	0	0	0

Remarks

Drill f/6232-6507' in Granodiorite and Granite.

7AM	Begin torquing up around 6530'. Drill to 6552', circ, svy POH to inspect bit.

am logger	Eric Booker	pm logger	Patrick Broderick

West Coast Report: *9/1/2017 0:00hrs to 9/2/2017 0:00hrs*

University of Utah 58-32

Present Depth	**6584**	*ft*
Previous Depth	**6507**	*ft*
Footage Cut	**77**	*ft*
Drill hours	**7.5**	*hrs*
Depth @ 7am	**6661**	*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 71,560.00**
Travel		
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	**13**	*ft/hr*
Range	**4-25**	*ft/hr*
Average	**10.3**	*ft/hr*

Bit Info.

As Of		0:00
Bit Number	**6**	
Bit Type	Smith Z713	
Rotate Hrs	37	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
1	**120**	**1330**	**1790**	**0**	4140	-	-

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
6200	118	132
6300	116	129
6400	116	129
6500	119	131

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
5373	1.27 deg	S51.4W	6062	1.8 deg	N13.4W
5405	0.62 deg	S23.2W	6478	2.5 deg	N25.1W
5674	0.70 deg	S33.7W			
5872	1.5 deg	N43.8W			

Lithology

From	To	
6020	6220	100% Granodiorite
6230	6270	80-90% Granodiroite, 10-20% Diorite
6270	6350	Granodiorite
6350	6400	40-80% Granodiorite, 20-60% Granite
6400	6660	Granodiorite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks: Baseline ROP (ft/hr)	Drill Breaks: Peak ROP (ft/hr)	Drill Breaks: Length sustained (ft)	Losses: Initial Loss (Bph)	Losses: Sustained loss (Bph)	Losses: Total Losses (bbls)
8/28/17	6:10	5890	10	31	2	0	0	0
8/29/17	7:00	6073	10	20	4	0	0	0

Remarks

Begin torquing up around 6530'. 170lb pressure drop at 6549. Drill to 6552', circ, svy POH, inspect bha. m/a bha RIH. Ream f/6511-6552'. Drill t/6584'.

7AM	Drill to 6661' in 100% Granodiorite

am logger	Eric Booker	pm logger	Patrick Broderick

West Coast Report: *9/2/2017 0:00hrs to 9/3/2017 0:00hrs*

University of Utah 58-32

Present Depth	**6792**	*ft*
Previous Depth	**6584**	*ft*
Footage Cut	**208**	*ft*
Drill hours	**22.5**	*hrs*
Depth @ 7am	**6800**	*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 73,435.00**
Travel		
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	**8**	*ft/hr*
Range	**8-33**	*ft/hr*
Average	**9.2**	*ft/hr*

Bit Info.

As Of	0:00	
Bit Number	**6**	
Bit Type	Smith Z713	
Rotate Hrs	59.5	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
1	**120**	**1790**	**35**	**0**	4140	-	-

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
6500	119	131
6600	124	136
6700	125	136
6800	123	137

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
5373	1.27 deg	S51.4W	6062	1.8 deg	N13.4W
5405	0.62 deg	S23.2W	6478	2.5 deg	N25.1W
5674	0.70 deg	S33.7W	6605	2.6 deg	N72.7W
5872	1.5 deg	N43.8W	6730	3.8 deg	N85.9W

Lithology

From	To	
6020	6220	100% Granodiorite
6230	6270	80-90% Granodiroite, 10-20% Diorite
6270	6350	Granodiorite
6350	6400	40-80% Granodiorite, 20-60% Granite
6400	6800	Granodiorite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks			Losses		
			Baseline ROP (ft/hr)	Peak ROP (ft/hr)	Length sustained (ft)	Initial Loss (Bph)	Sustained loss (Bph)	Total Losses (bbls)
8/28/17	6:10	5890	10	31	2	0	0	0
8/29/17	7:00	6073	10	20	4	0	0	0
9/2/17	3:00	6619	10	35	2	0	0	0
9/2/17	13:30	6708	9	28	2	0	0	0

Remarks

Drill f/6584-6679', svy. Drill t/6792'.

7AM	Drill to 6800', circ, pump 2 sweeps, svy, POH.

am logger	Eric Booker	pm logger	Patrick Broderick

West Coast Report: *9/4/2017 0:00hrs to 9/5/2017 0:00hrs*

University of Utah 58-32

Present Depth	**6811**	*ft*
Previous Depth	**6800**	*ft*
Footage Cut	**11**	*ft*
Drill hours	**8**	*hrs*
Depth @ 7am		*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 75,310.00**
Travel		
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	**1**	*ft/hr*
Range	**1-2**	*ft/hr*
Average	**1.4**	*ft/hr*

Bit Info.	**As Of**	0:00
Bit Number		
Bit Type		
Rotate Hrs		

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
1	**48**	**520**	**-**	**0**	4140	-	-

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
6500	119	131
6600	124	136
6700	125	136
6800	123	137

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
5373	1.27 deg	S51.4W	6062	1.8 deg	N13.4W
5405	0.62 deg	S23.2W	6478	2.5 deg	N25.1W
5674	0.70 deg	S33.7W	6605	2.6 deg	N72.7W
5872	1.5 deg	N43.8W	6730	3.8 deg	N85.9W

Lithology

From	To	
6020	6220	100% Granodiorite
6230	6270	80-90% Granodiroite, 10-20% Diorite
6270	6350	Granodiorite
6350	6400	40-80% Granodiorite, 20-60% Granite
6400	6800	Granodiorite
6800	6810	Granodiorite (core)

Fractures & Mud losses

Date	Time	Depth	Drill Breaks: Baseline ROP (ft/hr)	Drill Breaks: Peak ROP (ft/hr)	Drill Breaks: Length sustained (ft)	Losses: Initial Loss (Bph)	Losses: Sustained loss (Bph)	Losses: Total Losses (bbls)
8/28/17	6:10	5890	10	31	2	0	0	0
8/29/17	7:00	6073	10	20	4	0	0	0
9/2/17	3:00	6619	10	35	2	0	0	0
9/2/17	13:30	6708	9	28	2	0	0	0

Remarks

Run static temp logs. Max temp @ 24hrs = 327.4 degF, M/U Coring BHA, RIH, Core f/6800' t/6811'.

7AM	Core to 6812'. Retrieve ~8ft of core (granodiorite)

am logger	Eric Booker	pm logger	Patrick Broderick

West Coast Report: *9/4/2017 0:00hrs to 9/5/2017 0:00hrs*

University of Utah 58-32

Present Depth	**6811**	*ft*
Previous Depth	**6800**	*ft*
Footage Cut	**11**	*ft*
Drill hours	**8**	*hrs*
Depth @ 7am		*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 77,185.00**
Travel		
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	**1**	*ft/hr*
Range	**1-2**	*ft/hr*
Average	**1.4**	*ft/hr*

Bit Info.

As Of		0:00
Bit Number	**Core Bit #1**	
Bit Type	MCI905	
Rotate Hrs	10	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
1	**48**	**520**	**-**	**0**	4140	-	-

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
6500	119	131
6600	124	136
6700	125	136
6800	123	137

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
5373	1.27 deg	S51.4W	6062	1.8 deg	N13.4W
5405	0.62 deg	S23.2W	6478	2.5 deg	N25.1W
5674	0.70 deg	S33.7W	6605	2.6 deg	N72.7W
5872	1.5 deg	N43.8W	6730	3.8 deg	N85.9W

Lithology

From	To	
6020	6220	100% Granodiorite
6230	6270	80-90% Granodiroite, 10-20% Diorite
6270	6350	Granodiorite
6350	6400	40-80% Granodiorite, 20-60% Granite
6400	6800	Granodiorite
6800	6810	Granodiorite (core)

Fractures & Mud losses

Date	Time	Depth	Drill Breaks: Baseline ROP (ft/hr)	Drill Breaks: Peak ROP (ft/hr)	Drill Breaks: Length sustained (ft)	Losses: Initial Loss (Bph)	Losses: Sustained loss (Bph)	Losses: Total Losses (bbls)
8/28/17	6:10	5890	10	31	2	0	0	0
8/29/17	7:00	6073	10	20	4	0	0	0
9/2/17	3:00	6619	10	35	2	0	0	0
9/2/17	13:30	6708	9	28	2	0	0	0

Remarks

Run static temp logs. Max temp @ 24hrs = 327.4 degF, M/U Coring BHA, RIH, Core f/6800' t/6811'.

7AM	Core to 6812'. Retrieve ~8ft of core (granodiorite)

am logger	Eric Booker	pm logger	Patrick Broderick

West Coast Report: *9/5/2017 0:00hrs to 9/6/2017 0:00hrs*

University of Utah 58-32

Present Depth	**6812**	*ft*
Previous Depth	**6811**	*ft*
Footage Cut	**1**	*ft*
Drill hours	**2**	*hrs*
Depth @ 7am	**6812**	*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 79,060.00**
Travel		
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	**1**	*ft/hr*
Range	**.1-2**	*ft/hr*
Average	**0.5**	*ft/hr*

Bit Info.

As Of		0:00
Bit Number	**Core Bit #1**	
Bit Type	MCI905	
Rotate Hrs	12	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
-	-	-	-	**0**	4140	-	-

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
6500	119	131
6600	124	136
6700	125	136
6800	123	137

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
5373	1.27 deg	S51.4W	6062	1.8 deg	N13.4W
5405	0.62 deg	S23.2W	6478	2.5 deg	N25.1W
5674	0.70 deg	S33.7W	6605	2.6 deg	N72.7W
5872	1.5 deg	N43.8W	6730	3.8 deg	N85.9W

Lithology

From	To	
6020	6220	100% Granodiorite
6230	6270	80-90% Granodiroite, 10-20% Diorite
6270	6350	Granodiorite
6350	6400	40-80% Granodiorite, 20-60% Granite
6400	6800	Granodiorite
6800	6810	Granodiorite (partial core)

Fractures & Mud losses

Date	Time	Depth	Drill Breaks			Losses		
			Baseline ROP (ft/hr)	Peak ROP (ft/hr)	Length sustained (ft)	Initial Loss (Bph)	Sustained loss (Bph)	Total Losses (bbls)
8/28/17	6:10	5890	10	31	2	0	0	0
8/29/17	7:00	6073	10	20	4	0	0	0
9/2/17	3:00	6619	10	35	2	0	0	0
9/2/17	13:30	6708	9	28	2	0	0	0

Remarks

Core f/6801' t/6812'. POH, retrieve partial core. Part of core barrel left in hole Wait on fishing tools. RIH to retrieve fish.

7AM	RIH with fishing tools, attempt to latch onto fish. POH.

am logger	Eric Booker	pm logger	Patrick Broderick

West Coast Report: *9/6/2017 0:00hrs to 9/7/2017 0:00hrs*

University of Utah 58-32

Present Depth	**6812**	*ft*
Previous Depth	**6812**	*ft*
Footage Cut	**0**	*ft*
Drill hours	**0**	*hrs*
Depth @ 7am	**6839**	*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 80,935.00**
Travel		
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	**1**	*ft/hr*
Range	**.1-2**	*ft/hr*
Average	**#DIV/0!**	*ft/hr*

Bit Info.

As Of		0:00
Bit Number	**11**	
Bit Type	MXB-PS68DX	
Rotate Hrs	0	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
1	**110**	**1050**	**39**	**0**	4140	-	-

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
6500	119	131
6600	124	136
6700	125	136
6800	123	137

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
5373	1.27 deg	S51.4W	6062	1.8 deg	N13.4W
5405	0.62 deg	S23.2W	6478	2.5 deg	N25.1W
5674	0.70 deg	S33.7W	6605	2.6 deg	N72.7W
5872	1.5 deg	N43.8W	6730	3.8 deg	N85.9W

Lithology

From	To	
6020	6220	100% Granodiorite
6230	6270	80-90% Granodiroite, 10-20% Diorite
6270	6350	Granodiorite
6350	6400	40-80% Granodiorite, 20-60% Granite
6400	6800	Granodiorite
6800	6810	Granodiorite (partial core)

Fractures & Mud losses

Date	Time	Depth	Drill Breaks: Baseline ROP (ft/hr)	Drill Breaks: Peak ROP (ft/hr)	Drill Breaks: Length sustained (ft)	Losses: Initial Loss (Bph)	Losses: Sustained loss (Bph)	Losses: Total Losses (bbls)
8/28/17	6:10	5890	10	31	2	0	0	0
8/29/17	7:00	6073	10	20	4	0	0	0
9/2/17	3:00	6619	10	35	2	0	0	0
9/2/17	13:30	6708	9	28	2	0	0	0

Remarks

Retrieve fish. M/U directional tools, RIH.

7AM	RIH with directional tools. Ream cored section. Drill ahead f/6812.9'

am logger	Eric Booker	pm logger	Patrick Broderick

West Coast Report: *9/7/2017 0:00hrs to 9/8/2017 0:00hrs*

University of Utah 58-32

Present Depth	**7009**	*ft*
Previous Depth	**6812**	*ft*
Footage Cut	**197**	*ft*
Drill hours	**20**	*hrs*
Depth @ 7am	**7078**	*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 82,810.00**
Travel		
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	**15**	*ft/hr*
Range	**7-30**	*ft/hr*
Average	**9.9**	*ft/hr*

Bit Info.

As Of		0:00
Bit Number	**11**	
Bit Type	MXB-PS68DX	
Rotate Hrs	20	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
1	**105**	**1500**	**42**	**0**	4140	-	-

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
6700	125	136
6800	123	137
6900	117	134
7000	117	134

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
6730	3.8 deg	N85.9W	6862	3.12 deg	N79.41W
6767	3.87 deg	N80.47W	6894	2.24 deg	N82.84W
6798	4.18 deg	N83.63W			
6830	3.69 deg	N78.88W			

Lithology

From	To	
6350	6400	40-80% Granodiorite, 20-60% Granite
6400	6800	Granodiorite
6800	6810	Granodiorite (partial core)
6810	7010	Granodiorite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks: Baseline ROP (ft/hr)	Drill Breaks: Peak ROP (ft/hr)	Drill Breaks: Length sustained (ft)	Losses: Initial Loss (Bph)	Losses: Sustained loss (Bph)	Losses: Total Losses (bbls)
8/28/17	6:10	5890	10	31	2	0	0	0
8/29/17	7:00	6073	10	20	4	0	0	0
9/2/17	3:00	6619	10	35	2	0	0	0
9/2/17	13:30	6708	9	28	2	0	0	0

Remarks

RIH with directional tools. Ream f/6766-6812'. Drill f/6812-7009'.

7AM	Drill to 7078'

am logger	Eric Booker	pm logger	Patrick Broderick

West Coast Report: *9/8/2017 0:00hrs to 9/9/2017 0:00hrs*

University of Utah 58-32

Present Depth	**7200**	*ft*
Previous Depth	**7009**	*ft*
Footage Cut	**191**	*ft*
Drill hours	**20.5**	*hrs*
Depth @ 7am	**7200**	*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 84,685.00**
Travel		
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	**-**	*ft/hr*
Range	**7-29**	*ft/hr*
Average	**9.3**	*ft/hr*

Bit Info.

As Of		0:00
Bit Number	**11**	
Bit Type	MXB-PS68DX	
Rotate Hrs	40.5	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
-	-	-	42	0	4140	-	-

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
6900	117	134
7000	117	134
7100	118	133
7200	118	134

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
6926	1.58 deg	S85.03W	7053	1.10 deg	N64.9W
6957	1.05 deg	S86.26W	7084	1.19 deg	N83.89W
6989	0.92 deg	S80.81W	7116	1.14 deg	N85.12W
7021	1.14 deg	N78.8W			

Lithology

From	To	
6350	6400	40-80% Granodiorite, 20-60% Granite
6400	6800	Granodiorite
6800	6810	Granodiorite (partial core)
6810	7200	Granodiorite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks: Baseline ROP (ft/hr)	Drill Breaks: Peak ROP (ft/hr)	Drill Breaks: Length sustained (ft)	Losses: Initial Loss (Bph)	Losses: Sustained loss (Bph)	Losses: Total Losses (bbls)
8/28/17	6:10	5890	10	31	2	0	0	0
8/29/17	7:00	6073	10	20	4	0	0	0
9/2/17	3:00	6619	10	35	2	0	0	0
9/2/17	13:30	6708	9	28	2	0	0	0

Remarks

Drill f/7009-7200'. Circ, POH

7AM	POH

am logger	Eric Booker	pm logger	Patrick Broderick

West Coast Report: *9/9/2017 0:00hrs to 9/10/2017 0:00hrs*

University of Utah 58-32

Present Depth	**7200**	*ft*
Previous Depth	**7200**	*ft*
Footage Cut	**0**	*ft*
Drill hours	**0**	*hrs*
Depth @ 7am	**7200**	*ft*

	Qnty	cost
Daily Cost	**$**	**3,375.00**
Well Cumulative Cost	**$**	**84,685.00**
Travel	$	1,500.00
Log/Abate Service	$	1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	**-**	*ft/hr*
Range	**0**	*ft/hr*
Average	**0.0**	*ft/hr*

Bit Info.

As Of		0:00
Bit Number	**13**	
Bit Type	HR-P68DX0	
Rotate Hrs	0	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
-	-	-	-	**0**	4140	-	-

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
6900	117	134
7000	117	134
7100	118	133
7200	118	134

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
6926	1.58 deg	S85.03W	7053	1.10 deg	N64.9W
6957	1.05 deg	S86.26W	7084	1.19 deg	N83.89W
6989	0.92 deg	S80.81W	7116	1.14 deg	N85.12W
7021	1.14 deg	N78.8W			

Lithology

From	To	
6350	6400	40-80% Granodiorite, 20-60% Granite
6400	6800	Granodiorite
6800	6810	Granodiorite (partial core)
6810	7200	Granodiorite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks: Baseline ROP (ft/hr)	Drill Breaks: Peak ROP (ft/hr)	Drill Breaks: Length sustained (ft)	Losses: Initial Loss (Bph)	Losses: Sustained loss (Bph)	Losses: Total Losses (bbls)
8/28/17	6:10	5890	10	31	2	0	0	0
8/29/17	7:00	6073	10	20	4	0	0	0
9/2/17	3:00	6619	10	35	2	0	0	0
9/2/17	13:30	6708	9	28	2	0	0	0

Remarks

POH, L/D bit and mud motor, Wait on mud motor, Make up new bit and BHA, RIH circulating to cool the tool every 10 stands.

7AM	RIH.

am logger	Charley Wahl	pm logger	Patrick Broderick

West Coast Report: *9/10/2017 0:00hrs to 9/11/2017 0:00hrs*

University of Utah 58-32

Present Depth	**7394**	*ft*
Previous Depth	**7200**	*ft*
Footage Cut	**194**	*ft*
Drill hours	**12**	*hrs*
Depth @ 7am	**7440**	*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 86,560.00**
Travel		$ -
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	14.9	*ft/hr*
Range	11-56	*ft/hr*
Average	**16.2**	*ft/hr*

Bit Info.

As Of		0:00
Bit Number	**13**	
Bit Type	HR-P68DX0	
Rotate Hrs	12	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
1	**106**	**1703**	**45**	**45**	4140	-	-

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
7200	118	134
7300	122	139

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
6926	1.58 deg	S85.03W	7053	1.10 deg	N64.9W
6957	1.05 deg	S86.26W	7084	1.19 deg	N83.89W
6989	0.92 deg	S80.81W	7116	1.14 deg	N85.12W
7021	1.14 deg	N78.8W	7358	1.8 deg	N86.0W

Lithology

From	To	
7200	7300	0-100% Granodiorite, 0-100% Granite
7300	7400	100% Granite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks: Baseline ROP (ft/hr)	Drill Breaks: Peak ROP (ft/hr)	Drill Breaks: Length sustained (ft)	Losses: Initial Loss (Bph)	Losses: Sustained loss (Bph)	Losses: Total Losses (bbls)
8/28/17	6:10	5890	10	31	2	0	0	0
8/29/17	7:00	6073	10	20	4	0	0	0
9/2/17	3:00	6619	10	35	2	0	0	0
9/2/17	13:30	6708	9	28	2	0	0	0

Remarks

Circulate, run in 5 stands, circulate, RIH, Circulate, RIH tag@6848', Ream f.6848' t/7200', Drill ahead t/7334', perform drill off test, Drill ahead t/7394'.

7AM	Drill fr/7394' t/7440', circulate, pull 10 stands, RIH, circulate, survey, POH.

am logger	Charley Wahl	pm logger	Patrick Broderick

West Coast Report: *9/11/2017 0:00hrs to 9/12/2017 0:00hrs*

University of Utah 58-32

Present Depth	**7440**	*ft*
Previous Depth	**7394**	*ft*
Footage Cut	**46**	*ft*
Drill hours	**3.5**	*hrs*
Depth @ 7am	**7440**	*ft*

	Qnty	cost
Daily Cost	**$**	**1,875.00**
Well Cumulative Cost	**$**	**88,435.00**
Travel	$	-
Log/Abate Service	$	1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	0	*ft/hr*
Range	12-24	*ft/hr*
Average	**13.1**	*ft/hr*

Bit Info.

As Of		0:00
Bit Number	**13**	
Bit Type	HR-P68DX0	
Rotate Hrs	15.5	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
0	**0**	**0**	**45**	**13**	4140	**-**	**-**

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
7400	121	137

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
6926	1.58 deg	S85.03W	7053	1.10 deg	N64.9W
6957	1.05 deg	S86.26W	7084	1.19 deg	N83.89W
6989	0.92 deg	S80.81W	7116	1.14 deg	N85.12W
7021	1.14 deg	N78.8W	7358	1.8 deg	N86.0W

Lithology

From	To	
7200	7300	0-100% Granodiorite, 0-100% Granite
7300	7400	100% Granite
7400	7440	100% Granite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks: Baseline ROP (ft/hr)	Drill Breaks: Peak ROP (ft/hr)	Drill Breaks: Length sustained (ft)	Losses: Initial Loss (Bph)	Losses: Sustained loss (Bph)	Losses: Total Losses (bbls)
8/28/17	6:10	5890	10	31	2	0	0	0
8/29/17	7:00	6073	10	20	4	0	0	0
9/2/17	3:00	6619	10	35	2	0	0	0
9/2/17	13:30	6708	9	28	2	0	0	0

Remarks

Drill fr/7394' t/7440', circulate, pull 10 stands, RIH, circulate, survey, POH, handle BHA, make-up coring tools, RIH t/2150', slip and cut drilling line, RIH circulating every 10 stands.

7AM	RIH circulating every 10 stands t/7440', begin coring run.

am logger	Charley Wahl	pm logger	Patrick Broderick

West Coast Report: *9/12/2017 0:00hrs to 9/13/2017 0:00hrs*

University of Utah 58-32

Present Depth	**7460**	*ft*
Previous Depth	**7440**	*ft*
Footage Cut	**20**	*ft*
Drill hours	**17**	*hrs*
Depth @ 7am	**7460**	*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 90,310.00**
Travel		$ -
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	0	*ft/hr*
Range	0.7-3	*ft/hr*
Average	**1.2**	*ft/hr*

Bit Info.

As Of	0:00	
Bit Number	**14**	
Bit Type	Core bit	
Rotate Hrs	17	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
0	**0**	**0**	**45**	**0**	4140	-	-

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
7400	121	137

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
6926	1.58 deg	S85.03W	7053	1.10 deg	N64.9W
6957	1.05 deg	S86.26W	7084	1.19 deg	N83.89W
6989	0.92 deg	S80.81W	7116	1.14 deg	N85.12W
7021	1.14 deg	N78.8W	7358	1.8 deg	N86.0W

Lithology

From	To	
7200	7300	0-100% Granodiorite, 0-100% Granite
7300	7400	100% Granite
7400	7440	100% Granite
7440	7460	Core

Fractures & Mud losses

Date	Time	Depth	Drill Breaks: Baseline ROP (ft/hr)	Drill Breaks: Peak ROP (ft/hr)	Drill Breaks: Length sustained (ft)	Losses: Initial Loss (Bph)	Losses: Sustained loss (Bph)	Losses: Total Losses (bbls)
8/28/17	6:10	5890	10	31	2	0	0	0
8/29/17	7:00	6073	10	20	4	0	0	0
9/2/17	3:00	6619	10	35	2	0	0	0
9/2/17	13:30	6708	9	28	2	0	0	0

Remarks

RIH circulating every 10 stands t/7440', Core f/7440' t/7460', Circulate bottoms up, POH.

7AM	Handle retrieving core, make-up drilling assembly, RIH.

am logger	Charley Wahl	pm logger	Patrick Broderick

West Coast Report: *9/13/2017 0:00hrs to 9/14/2017 0:00hrs*

University of Utah 58-32

Present Depth	**7536**	*ft*
Previous Depth	**7460**	*ft*
Footage Cut	**76**	*ft*
Drill hours	**6**	*hrs*
Depth @ 7am	**7536**	*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 92,185.00**
Travel		$ -
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	0	*ft/hr*
Range	9-35	*ft/hr*
Average	**12.7**	*ft/hr*

Bit Info.

As Of		0:00
Bit Number	**RRB#13**	
Bit Type	HTC	
Rotate Hrs	21.5	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
0	**0**	**0**	**45**	**12**	4140	**-**	**-**

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
7400	121	137
7500	121	139

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
6926	1.58 deg	S85.03W	7053	1.10 deg	N64.9W
6957	1.05 deg	S86.26W	7084	1.19 deg	N83.89W
6989	0.92 deg	S80.81W	7116	1.14 deg	N85.12W
7021	1.14 deg	N78.8W	7358	1.8 deg	N86.0W

Lithology

From	To	
7440	7460	Core
7470	7490	100% Granite
7490	7530	100% Granodiorite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks: Baseline ROP (ft/hr)	Drill Breaks: Peak ROP (ft/hr)	Drill Breaks: Length sustained (ft)	Losses: Initial Loss (Bph)	Losses: Sustained loss (Bph)	Losses: Total Losses (bbls)
8/28/17	6:10	5890	10	31	2	0	0	0
8/29/17	7:00	6073	10	20	4	0	0	0
9/2/17	3:00	6619	10	35	2	0	0	0
9/2/17	13:30	6708	9	28	2	0	0	0

Remarks

Handle retrieving core, make-up drilling assembly, RIH circulating every 10 stands t/7440', ream core run t/7460', drill t/7536', pressure drop, POH to inspect string.

7AM	POH to inspect string, rubber found in the bit, lay down BHA, RIH open ended.

am logger	Charley Wahl	pm logger	Patrick Broderick

West Coast Report: *9/14/2017 0:00hrs to 9/15/2017 0:00hrs*

University of Utah 58-32

Present Depth	**7536**	*ft*
Previous Depth	**7536**	*ft*
Footage Cut	**0**	*ft*
Drill hours	**0**	*hrs*
Depth @ 7am	**7536**	*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 94,060.00**
Travel		$ -
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	0	*ft/hr*
Range	0	*ft/hr*
Average	**0.0**	*ft/hr*

Bit Info.

As Of		0:00
Bit Number	**RRB#13**	
Bit Type	HTC	
Rotate Hrs	21.5	

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
0	**0**	**0**	**45**	**0**	4140	-	-

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
7400	121	137
7500	121	139

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
6926	1.58 deg	S85.03W	7053	1.10 deg	N64.9W
6957	1.05 deg	S86.26W	7084	1.19 deg	N83.89W
6989	0.92 deg	S80.81W	7116	1.14 deg	N85.12W
7021	1.14 deg	N78.8W	7358	1.8 deg	N86.0W

Lithology

From	To	
7440	7460	Core
7470	7490	100% Granite
7490	7530	100% Granodiorite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks: Baseline ROP (ft/hr)	Drill Breaks: Peak ROP (ft/hr)	Drill Breaks: Length sustained (ft)	Losses: Initial Loss (Bph)	Losses: Sustained loss (Bph)	Losses: Total Losses (bbls)
8/28/17	6:10	5890	10	31	2	0	0	0
8/29/17	7:00	6073	10	20	4	0	0	0
9/2/17	3:00	6619	10	35	2	0	0	0
9/2/17	13:30	6708	9	28	2	0	0	0

Remarks

POH to inspect string, rubber found in the bit, lay down BHA, RIH open ended t/7516', circulate cool down well, POH t/2100', change out kelly and kelly bushing, RIH t/7536', circulate and cool well, POH.

7AM	POH, rig up wireline crew, run logs.

am logger	Charley Wahl	pm logger	Patrick Broderick

West Coast Report: *9/16/2017 0:00hrs to 9/17/2017 0:00hrs*

University of Utah 58-32

Present Depth	**7532**	*ft*
Previous Depth	**7532**	*ft*
Footage Cut	**0**	*ft*
Drill hours	**0**	*hrs*
Depth @ 7am	**7532**	*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 97,810.00**
Travel		$ -
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	0	*ft/hr*
Range	0	*ft/hr*
Average	**0.0**	*ft/hr*

Bit Info.	**As Of**	0:00
Bit Number		
Bit Type		
Rotate Hrs		

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
0	**0**	**0**	**0**	**0**	4140'	-	-

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
7400	121	137
7500	121	139

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
6926	1.58 deg	S85.03W	7053	1.10 deg	N64.9W
6957	1.05 deg	S86.26W	7084	1.19 deg	N83.89W
6989	0.92 deg	S80.81W	7116	1.14 deg	N85.12W
7021	1.14 deg	N78.8W	7358	1.8 deg	N86.0W

Lithology

From	To	
7440	7460	Core
7470	7490	100% Granite
7490	7530	100% Granodiorite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks: Baseline ROP (ft/hr)	Drill Breaks: Peak ROP (ft/hr)	Drill Breaks: Length sustained (ft)	Losses: Initial Loss (Bph)	Losses: Sustained loss (Bph)	Losses: Total Losses (bbls)
8/28/17	6:10	5890	10	31	2	0	0	0
8/29/17	7:00	6073	10	20	4	0	0	0
9/2/17	3:00	6619	10	35	2	0	0	0
9/2/17	13:30	6708	9	28	2	0	0	0

Remarks

Sand back with gravel to 7377', Circulate, POH, Change out rams, R/U casing crew, Run casing, HSM, R/U cementers.

7AM

am logger	Charley Wahl	pm logger	Patrick Broderick

West Coast Report: *9/17/2017 0:00hrs to 9/18/2017 0:00hrs*

University of Utah 58-32

Present Depth	**7532**	*ft*
Previous Depth	**7532**	*ft*
Footage Cut	**0**	*ft*
Drill hours	**0**	*hrs*
Depth @ 7am	**7532**	*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 99,685.00**
Travel		$ -
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	0	*ft/hr*
Range	0	*ft/hr*
Average	**0.0**	*ft/hr*

Bit Info.	**As Of**	0:00
Bit Number		
Bit Type		
Rotate Hrs		

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
0	**0**	**0**	**0**	**0**	4140'	-	-

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
7400	121	137
7500	121	139

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
6926	1.58 deg	S85.03W	7053	1.10 deg	N64.9W
6957	1.05 deg	S86.26W	7084	1.19 deg	N83.89W
6989	0.92 deg	S80.81W	7116	1.14 deg	N85.12W
7021	1.14 deg	N78.8W	7358	1.8 deg	N86.0W

Lithology

From	To	
7440	7460	Core
7470	7490	100% Granite
7490	7530	100% Granodiorite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks: Baseline ROP (ft/hr)	Drill Breaks: Peak ROP (ft/hr)	Drill Breaks: Length sustained (ft)	Losses: Initial Loss (Bph)	Losses: Sustained loss (Bph)	Losses: Total Losses (bbls)
8/28/17	6:10	5890	10	31	2	0	0	0
8/29/17	7:00	6073	10	20	4	0	0	0
9/2/17	3:00	6619	10	35	2	0	0	0
9/2/17	13:30	6708	9	28	2	0	0	0

Remarks

Run Casing, Rig down casing crew, Rig up cementers, pump cement, Wait on cement, Bleed off pressure, Cut casing, Nipple down BOPs, Weld new WH, Nipple up.

7AM

am logger	Charley Wahl	pm logger	Patrick Broderick

West Coast Report: *9/17/2017 0:00hrs to 9/18/2017 0:00hrs*

University of Utah 58-32

Present Depth	**7532**	*ft*
Previous Depth	**7532**	*ft*
Footage Cut	**0**	*ft*
Drill hours	**0**	*hrs*
Depth @ 7am	**7532**	*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 99,685.00**
Travel		$ -
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	0	*ft/hr*
Range	0	*ft/hr*
Average	**0.0**	*ft/hr*

Bit Info.	**As Of**	0:00
Bit Number		
Bit Type		
Rotate Hrs		

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
0	**0**	**0**	**0**	**0**	4140'	-	-

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
7400	121	137
7500	121	139

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
6926	1.58 deg	S85.03W	7053	1.10 deg	N64.9W
6957	1.05 deg	S86.26W	7084	1.19 deg	N83.89W
6989	0.92 deg	S80.81W	7116	1.14 deg	N85.12W
7021	1.14 deg	N78.8W	7358	1.8 deg	N86.0W

Lithology

From	To	
7440	7460	Core
7470	7490	100% Granite
7490	7530	100% Granodiorite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks: Baseline ROP (ft/hr)	Drill Breaks: Peak ROP (ft/hr)	Drill Breaks: Length sustained (ft)	Losses: Initial Loss (Bph)	Losses: Sustained loss (Bph)	Losses: Total Losses (bbls)
8/28/17	6:10	5890	10	31	2	0	0	0
8/29/17	7:00	6073	10	20	4	0	0	0
9/2/17	3:00	6619	10	35	2	0	0	0
9/2/17	13:30	6708	9	28	2	0	0	0

Remarks

Run Casing, Rig down casing crew, Rig up cementers, pump cement, Wait on cement, Bleed off pressure, Cut casing, Nipple down BOPs

7AM	Nipple down BOPs

am logger	Charley Wahl	pm logger	Patrick Broderick

West Coast Report: *9/18/2017 0:00hrs to 9/19/2017 0:00hrs*

University of Utah 58-32

Present Depth	**7532**	*ft*
Previous Depth	**7532**	*ft*
Footage Cut	**0**	*ft*
Drill hours	**0**	*hrs*
Depth @ 7am	**7532**	*ft*

	Qnty	cost
Daily Cost	**$**	**1,875.00**
Well Cumulative Cost	**$**	**101,560.00**
Travel	$	-
Log/Abate Service	$	1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	0	*ft/hr*
Range	0	*ft/hr*
Average	**0.0**	*ft/hr*

Bit Info.	**As Of**	0:00
Bit Number		
Bit Type		
Rotate Hrs		

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
0	**0**	**0**	**0**	**0**	4140'	-	-

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
7400	121	137
7500	121	139

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
6926	1.58 deg	S85.03W	7053	1.10 deg	N64.9W
6957	1.05 deg	S86.26W	7084	1.19 deg	N83.89W
6989	0.92 deg	S80.81W	7116	1.14 deg	N85.12W
7021	1.14 deg	N78.8W	7358	1.8 deg	N86.0W

Lithology

From	To	
7440	7460	Core
7470	7490	100% Granite
7490	7530	100% Granodiorite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks: Baseline ROP (ft/hr)	Drill Breaks: Peak ROP (ft/hr)	Drill Breaks: Length sustained (ft)	Losses: Initial Loss (Bph)	Losses: Sustained loss (Bph)	Losses: Total Losses (bbls)
8/28/17	6:10	5890	10	31	2	0	0	0
8/29/17	7:00	6073	10	20	4	0	0	0
9/2/17	3:00	6619	10	35	2	0	0	0
9/2/17	13:30	6708	9	28	2	0	0	0

Remarks

Nipple down BOP's, cut casing, weld on new well head, build stack, pressure test BOP.

7AM	Pressure test BOP, attach flowline, make-up drilling asssembly, RIH to clean out cement.

am logger	Charley Wahl	pm logger	Patrick Broderick

West Coast Report: *9/19/2017 0:00hrs to 9/20/2017 0:00hrs*

University of Utah 58-32

Present Depth	**7532**	*ft*
Previous Depth	**7532**	*ft*
Footage Cut	**0**	*ft*
Drill hours	**0**	*hrs*
Depth @ 7am	**7532**	*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 103,435.00**
Travel		$ -
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	0	*ft/hr*
Range	0	*ft/hr*
Average	**0.0**	*ft/hr*

Bit Info.	**As Of**	0:00
Bit Number		
Bit Type		
Rotate Hrs		

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
0	**0**	**0**	**0**	**0**	4140'	-	-

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
7400	121	137
7500	121	139

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
6926	1.58 deg	S85.03W	7053	1.10 deg	N64.9W
6957	1.05 deg	S86.26W	7084	1.19 deg	N83.89W
6989	0.92 deg	S80.81W	7116	1.14 deg	N85.12W
7021	1.14 deg	N78.8W	7358	1.8 deg	N86.0W

Lithology

From	To	
7440	7460	Core
7470	7490	100% Granite
7490	7530	100% Granodiorite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks: Baseline ROP (ft/hr)	Drill Breaks: Peak ROP (ft/hr)	Drill Breaks: Length sustained (ft)	Losses: Initial Loss (Bph)	Losses: Sustained loss (Bph)	Losses: Total Losses (bbls)
8/28/17	6:10	5890	10	31	2	0	0	0
8/29/17	7:00	6073	10	20	4	0	0	0
9/2/17	3:00	6619	10	35	2	0	0	0
9/2/17	13:30	6708	9	28	2	0	0	0

Remarks

Pressure test BOP, make-up drilling asssembly, RIH to clean out cement, clean out cement and float collar t/7367', POH, rig up wireline crew, pressure up well, run CB log.

7AM	Run CB log, moniter well pressure, rig down wireline crew, rig up cement pump truck and line for PT.

am logger	Charley Wahl	pm logger	Patrick Broderick

West Coast Report: *9/20/2017 0:00hrs to 9/21/2017 0:00hrs*

University of Utah 58-32

Present Depth	**7535**	*ft*
Previous Depth	**7535**	*ft*
Footage Cut	**0**	*ft*
Drill hours	**0**	*hrs*
Depth @ 7am	**7535**	*ft*

	Qnty	cost
Daily Cost	**$**	**1,875.00**
Well Cumulative Cost	**$**	**105,310.00**
Travel	$	-
Log/Abate Service	$	1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	0	*ft/hr*
Range	0	*ft/hr*
Average	**0.0**	*ft/hr*

Bit Info.	**As Of**	0:00
Bit Number		
Bit Type		
Rotate Hrs		

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
0	**0**	**0**	**0**	**0**	4140'	-	-

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
7400	121	137
7500	121	139

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
6926	1.58 deg	S85.03W	7053	1.10 deg	N64.9W
6957	1.05 deg	S86.26W	7084	1.19 deg	N83.89W
6989	0.92 deg	S80.81W	7116	1.14 deg	N85.12W
7021	1.14 deg	N78.8W	7358	1.8 deg	N86.0W

Lithology

From	To	
7440	7460	Core
7470	7490	100% Granite
7490	7530	100% Granodiorite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks: Baseline ROP (ft/hr)	Drill Breaks: Peak ROP (ft/hr)	Drill Breaks: Length sustained (ft)	Losses: Initial Loss (Bph)	Losses: Sustained loss (Bph)	Losses: Total Losses (bbls)
8/28/17	6:10	5890	10	31	2	0	0	0
8/29/17	7:00	6073	10	20	4	0	0	0
9/2/17	3:00	6619	10	35	2	0	0	0
9/2/17	13:30	6708	9	28	2	0	0	0

Remarks

Run CB log, moniter well pressure, rig down wireline crew, rig up cement pump truck and line for PT, pressure test casing, rig down pump truck, make-up drilling assembly, RIH, clean out through shoe, clean out t/7525', circulate, POH.

7AM	POH, handle BHA, RIH.

am logger	Charley Wahl	pm logger	Patrick Broderick

West Coast Report: *9/21/2017 0:00hrs to 9/22/2017 0:00hrs*

University of Utah 58-32

Present Depth	**7535**	*ft*
Previous Depth	**7535**	*ft*
Footage Cut	**0**	*ft*
Drill hours	**0**	*hrs*
Depth @ 7am	**7535**	*ft*

	Qnty	cost
Daily Cost	**$**	**1,875.00**
Well Cumulative Cost	**$**	**107,185.00**
Travel	$	-
Log/Abate Service	$	1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	0	*ft/hr*
Range	0	*ft/hr*
Average	**0.0**	*ft/hr*

Bit Info.	**As Of**	0:00
Bit Number		
Bit Type		
Rotate Hrs		

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
0	**0**	**0**	**0**	**0**	4140'	-	-

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
7400	121	137
7500	121	139

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
6926	1.58 deg	S85.03W	7053	1.10 deg	N64.9W
6957	1.05 deg	S86.26W	7084	1.19 deg	N83.89W
6989	0.92 deg	S80.81W	7116	1.14 deg	N85.12W
7021	1.14 deg	N78.8W	7358	1.8 deg	N86.0W

Lithology

From	To	
7440	7460	Core
7470	7490	100% Granite
7490	7530	100% Granodiorite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks: Baseline ROP (ft/hr)	Drill Breaks: Peak ROP (ft/hr)	Drill Breaks: Length sustained (ft)	Losses: Initial Loss (Bph)	Losses: Sustained loss (Bph)	Losses: Total Losses (bbls)
8/28/17	6:10	5890	10	31	2	0	0	0
8/29/17	7:00	6073	10	20	4	0	0	0
9/2/17	3:00	6619	10	35	2	0	0	0
9/2/17	13:30	6708	9	28	2	0	0	0

Remarks

POH, handle BHA, RIH open ended t/7495', reverse circulate gravel out, tag fill @7514', reverse circulate hole clean t/7525', pick up kelly circulate hole clean and change over to water, POH, prep BHA, make-up packer assembly, RIH.

7AM	RIH t/7415, rig up pump truck, test drill pipe t/8000psi, run wireline to break plate, rig down wireline

am logger	Charley Wahl	pm logger	Patrick Broderick

West Coast Report: *9/22/2017 0:00hrs to 9/23/2017 0:00hrs*

University of Utah 58-32

Present Depth	**7535**	*ft*
Previous Depth	**7535**	*ft*
Footage Cut	**0**	*ft*
Drill hours	**0**	*hrs*
Depth @ 7am	**7535**	*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 109,060.00**
Travel		$ -
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	0	*ft/hr*
Range	0	*ft/hr*
Average	**0.0**	*ft/hr*

Bit Info.	**As Of**	0:00
Bit Number		
Bit Type		
Rotate Hrs		

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
0	**0**	**0**	**0**	**0**	4140'	-	-

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
7400	121	137
7500	121	139

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
6926	1.58 deg	S85.03W	7053	1.10 deg	N64.9W
6957	1.05 deg	S86.26W	7084	1.19 deg	N83.89W
6989	0.92 deg	S80.81W	7116	1.14 deg	N85.12W
7021	1.14 deg	N78.8W	7358	1.8 deg	N86.0W

Lithology

From	To	
7440	7460	Core
7470	7490	100% Granite
7490	7530	100% Granodiorite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks: Baseline ROP (ft/hr)	Drill Breaks: Peak ROP (ft/hr)	Drill Breaks: Length sustained (ft)	Losses: Initial Loss (Bph)	Losses: Sustained loss (Bph)	Losses: Total Losses (bbls)
8/28/17	6:10	5890	10	31	2	0	0	0
8/29/17	7:00	6073	10	20	4	0	0	0
9/2/17	3:00	6619	10	35	2	0	0	0
9/2/17	13:30	6708	9	28	2	0	0	0

Remarks

RIH t/7415, rig up pump truck, test drill pipe t/8000psi, run wireline to break plate, rig down wireline, set packer, conduct micro frac/XLOT, monitor pressures.

7AM	Moniter pressures

am logger	Charley Wahl	pm logger	Patrick Broderick

West Coast Report: *9/23/2017 0:00hrs to 9/24/2017 0:00hrs*

University of Utah 58-32

Present Depth	**7535**	*ft*
Previous Depth	**7535**	*ft*
Footage Cut	**0**	*ft*
Drill hours	**0**	*hrs*
Depth @ 7am	**7535**	*ft*

	Qnty	cost
Daily Cost		**$ 1,875.00**
Well Cumulative Cost		**$ 110,935.00**
Travel		$ -
Log/Abate Service		$ 1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up		

Penetration Rate

Current	0	*ft/hr*
Range	0	*ft/hr*
Average	**0.0**	*ft/hr*

Bit Info.	**As Of**	0:00
Bit Number		
Bit Type		
Rotate Hrs		

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
0	**0**	**0**	**0**	**0**	4140'	-	-

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
7400	121	137
7500	121	139

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
6926	1.58 deg	S85.03W	7053	1.10 deg	N64.9W
6957	1.05 deg	S86.26W	7084	1.19 deg	N83.89W
6989	0.92 deg	S80.81W	7116	1.14 deg	N85.12W
7021	1.14 deg	N78.8W	7358	1.8 deg	N86.0W

Lithology

From	To	
7440	7460	Core
7470	7490	100% Granite
7490	7530	100% Granodiorite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks: Baseline ROP (ft/hr)	Drill Breaks: Peak ROP (ft/hr)	Drill Breaks: Length sustained (ft)	Losses: Initial Loss (Bph)	Losses: Sustained loss (Bph)	Losses: Total Losses (bbls)
8/28/17	6:10	5890	10	31	2	0	0	0
8/29/17	7:00	6073	10	20	4	0	0	0
9/2/17	3:00	6619	10	35	2	0	0	0
9/2/17	13:30	6708	9	28	2	0	0	0

Remarks

Conduct micro frac/XLOT, monitor pressures, start bleed off.

7AM	Bleed of through 1/4"valve, unseat packer, POH.

am logger	Charley Wahl	pm logger	Patrick Broderick

West Coast Report: *9/24/2017 0:00hrs to 9/25/2017 0:00hrs*

University of Utah 58-32

Present Depth	**7535**	*ft*
Previous Depth	**7535**	*ft*
Footage Cut	**0**	*ft*
Drill hours	**0**	*hrs*
Depth @ 7am	**7535**	*ft*

	Qnty	cost
Daily Cost	**$**	**5,075.00**
Well Cumulative Cost	**$**	**116,010.00**
Travel	$	1,500.00
Log/Abate Service	$	1,875.00
Mobilization, Travel, and Rig Up		
Misc./ Standby		
Rig Up	$	1,700.00

Penetration Rate

Current	0	*ft/hr*
Range	0	*ft/hr*
Average	**0.0**	*ft/hr*

Bit Info.	**As Of**	0:00
Bit Number		
Bit Type		
Rotate Hrs		

Circulation (at time of report)

# of pumps	SPM	Press in (psig)	Approx lag time (min)	Total Mud losses for day (Bbls)	Cooling Tower start depth	# of air compressors	cfm
0	**0**	**0**	**0**	**0**	4140'	-	-

Summary Data

Cooling Tower on @ 4140

Depth (ft)	Temp In (deg F)	Temp Out (deg F)
7400	121	137
7500	121	139

Survey Results

Depth	Deviation	Direct.	Depth	Deviation	Direct.
6926	1.58 deg	S85.03W	7053	1.10 deg	N64.9W
6957	1.05 deg	S86.26W	7084	1.19 deg	N83.89W
6989	0.92 deg	S80.81W	7116	1.14 deg	N85.12W
7021	1.14 deg	N78.8W	7358	1.8 deg	N86.0W

Lithology

From	To	
7440	7460	Core
7470	7490	100% Granite
7490	7530	100% Granodiorite

Fractures & Mud losses

Date	Time	Depth	Drill Breaks: Baseline ROP (ft/hr)	Drill Breaks: Peak ROP (ft/hr)	Drill Breaks: Length sustained (ft)	Losses: Initial Loss (Bph)	Losses: Sustained loss (Bph)	Losses: Total Losses (bbls)
8/28/17	6:10	5890	10	31	2	0	0	0
8/29/17	7:00	6073	10	20	4	0	0	0
9/2/17	3:00	6619	10	35	2	0	0	0
9/2/17	13:30	6708	9	28	2	0	0	0

Remarks

Conduct micro frac/XLOT, monitor pressures, start bleed off.

7AM	Bleed of through 1/4"valve, unseat packer, POH.

am logger	Charley Wahl	pm logger	Patrick Broderick