

BOTTOM HOLE ASSEMBLY



Company:	Geothermal Resource Group	Hole Size:	8 3/4
Well Name & No.:	MU-ESW1	Date Run:	9/11/2017
Field:		Depth In:	7440
Rig Contractor & No.:	Kanai Rig 10	Depth Out:	7460
BHA Name:	Core number 2	Core #:	2
Bit Type:	MCI905	IADC	M841
Bit S/N:	100014		
TFA:	0.9		

	Description	Length (ft)	Total (ft)	OD (in)	ID (in)	Connection (Pin)	Connection (Box)	Fishing Neck Length (ft)	Fishing Neck OD (in)	Serial No.
1	Core Head	1.30	1.30	8.5	4.000	TP0004P	TP0004B	0.560	7.125	100014
2	Slick	2.50	3.80	8.4	5.625	TP0004P	TP0004B	Slick	7.125	W1092-021
3	Outer Tube	17.50	21.30	7.125	5.625	TP0004P	TP0004B	Slick	7.125	W0135-352
4	Slick	2.50	23.80	8.4	5.625	TP0004P	TP0004B	Slick	7.125	W0134-372
5	Top Head	2.00	25.80	7.125	5.625	TP0004P	TP0004B	Slick	7.125	W1995-039
6	Circulating sub	2.67	28.47	6.5	2.187	4 1/2 IF	4 1/2 IF	Slick	6.5	W1267-070
7	Float Sub	2.67	31.14	6.5	2.813	4 1/2 IF	4 1/2 IF	Slick	6.5	W1898-033
8	Crossover	1.60	32.74	6.25	2.375	4 1/2 IF	4 1/2 XH	Slick	6.25	DCS618
9	Reamer	5.90	38.64	6.75	2.25	4 1/4 XH	4 1/2 XH	Slick		XM2510
10	Coring Jar	17.38	56.02	6.25	2.25	4 1/2 XH	4 1/2 XH	Slick	6.25	HMJ625-151
11	Crossover	1.42	57.44	6.125	2.375	4 1/2 XH	4 1/2 IF	Slick	6.125	DCS035
30										
31	TOTAL BHA LENGTH (FT):		57.44							

Coring Data

Job #

Well Information	
Operator	GEOthermal Resource Group
Contractor	Kanai
Rig	Rig 10
Well Name & #	MU-ESW1
State	Utah
County	Beaver
Reserv. Pressure	psi
TVD	ft

Core # 1	
Date	9/12/2017
Well Angle	3.40
Static Temp.	338 ° F
Drive	Kelly
Off Btm Torque	1 ft-lb
Off Btm Press.	300 psi

Core Barrel	
Size	7 1/8x4
Length	20 ft
Orientated	No
IT Size	4.4 x 4.13
IT Type	H/Moon

Core Head	
Type	M/841
Size	8 1/2 x 4
S/N	1000014
IADC	M/481
TFA (sq in)	0.900
% Worn	0

Mud Properties	
Type	Polymer
WT	8.50 ppg
PV	8 cp
YP	17
GEL	4/6/7
% sand	0.2 %
% Solid	3 %
Viscosity	38 cP
Filtrate	7.8 cm3
Losses	0

Corehead Condition	
At Run Start	New
At Run End	
Previous Footage	0 ft
Run Footage	20 ft
Total Footage	20 ft



Background Parameters			
String Weight	lb	170	
		150	
		145	
Torque Off Bottom	rpm	40	1 ft-lb
		50	2 ft-lb
		60	2 ft-lb
Bottom Pressure	Flow Rate	200 gpm	
	On Bottom	365 psi	
	Off Bottom	300 psi	
Ball Valve Information			
Flow Rate	200 gpm		
SPP Ref 1	282 psi		
SPP Ref 2	454 psi		
Pres. Incr.	172 psi		
Time	13 Min		

BHA	
1	Corehead
2	Core Barrel
3	
4	
5	
6	
7	
8	
9	
10	

Starting Date : 9/12/2017

Pickup Barrel		Start In Hole		Coring		POOH		Core Rec./LD Brl	
Start	13:00	Start	14:30	Start	1:40	Start	18:13	Start	
Stop	14:30	Stop	1:40	Stop	18:13	Stop	#####	Stop	
Interval	1.50 hrs	Interval	7.00 hrs	Interval	16.25 hrs	Interval	##### hrs	Interval	#NAME? hrs

Performance			
Depth	In	Out	7440.0
			7460.0
Cored	ft	ft	20.0
			12.00
Rec.	%	%	60%
			100%
Eff.	%	%	100%
			16.3
Time	hrs	hrs	16.3
			1.2
ROP	ft/hr	ft/hr	

Customer: idy Baldwin/Brian Wat

Corpro

Coring Log & Parameters



CORE #		Well Name & #				Operator			Run Date											
1		MU-ESW1				GEOthermal Resource Group			04 March 2017											
Core Barrel Size		CH Type		Mud Type		Start Coring			Stop Coring											
7 1/8x4		M841		Polymer		15:54			0:04											
Length		Size		Weight		Interval			hrs											
40 ft		8 1/2 x 4		8.50 ppg		8.17			hrs											
Formation Name				Mineral Range		Patholith		Lithology			Granit									
ft		# Cored		Minutes		ft/hr		ROP LOG (ft/hr)			TORQUE LOG		Lithology or Remark							
Depth								Off Bottom			Head RPM									
								Maxi			lb		gpm		psi					
											WOB		Flow		SPP					
7440.0		Starting Depth		Graph Zoom:		20.0		Graph Zoom:			6.0		80		14		200		469	
7441.0		1.0		42.0		1.4		1 3			55		6		200		365			
7442.0		2.0		35.0		1.7		1 2			60		7		200		350			
7443.0		3.0		34.0		1.8		1 2			60		9		200		350			
7444.0		4.0		32.0		1.9		1 2			60		9		200		320			
7445.0		5.0		44.0		1.4		1 2			60		10		200		340			
7446.0		6.0		35.0		1.7		1 3			60		11		200		342			
7447.0		7.0		47.0		1.3		1 3			60		11		200		316			
7448.0		8.0		39.0		1.5		1 3			60		12		200		351			
7449.0		9.0		48.0		1.3		1 3			60		12		200		386			
7450.0		10.0		54.0		1.1		1 2			60		13		200		339			
7451.0		11.0		48.0		1.3		1 2			60		13		200		344			
7452.0		12.0		70.0		0.9		1 2			65		13		200		343			
7453.0		13.0		54.0		1.1		1 2			65		13		200		351			
7454.0		14.0		58.0		1.0		1 2			65		14		200		371			
7455.0		15.0		67.0		0.9		1 2			65		14		200		372			
7456.0		16.0		55.0		1.1		1 2			65		14		200		373			
7457.0		17.0		65.0		0.9		1 2			65		14		200		336			
7458.0		18.0		58.0		1.0		1 2			65		14		200		362			
7459.0		19.0		54.0		1.1		1 2			65		14		200		336			
7460.0		20.0		54.0		1.1		1 2			65		4		200		320			

No Break off Bottom. Check twice for back fill. No back fill

From	To	Cored	Hrs On Bttm	ROP ft/hr	Recovery Lgth %

Run End Reason
Run End Reason