Welex

COMPENSATED ACOUSTIC VELOCITY LOG

COMPANY Northwest Geothermal Corp.

WELL Old Maid Flat #1

FIELD N.G.C. (Old Maid Flat)

COUNTY Clackamas STATE Oregon

Location 2400' E of W. Line 500' N of S. Line

Sec. 15 Twp 2S Rge 8E

Other Services: BHGL, CDL/G/N, DIFS, SWC, Temp | F.F

Permanent Datum G.L. Elev. 2750'

Log Measured From KB. 10 Ft. Above Perm. Datum

Drilling Measured From K.B.

Elev.: K.B. 2760' D.F. — G.L. 2750'

Date	8-16-78			
Run No.	ONE			
Depth—Driller	4002'			
Depth—Welex	4002'			
Btm. Log Inter.	3998'			
Top Log Inter.	162			
Casing—Driller	8 5/8 @ 160'	@	@	@
Casing—Welex	162'			
Bit Size	7 7/8			
Type Fluid in Hole	Quik Gel			
	CG-16			
Dens. | Visc.	98 | 40	|	|	|
pH | Fluid Loss	10.0 | N/A ml	| ml	| ml	| ml
Source of Sample	Pit			
R_m @ Meas. Temp.	6.15 @ 60 °F	@ °F	@ °F	@ °F
R_{mf} @ Meas. Temp.	5.92 @ 60 °F	@ °F	@ °F	@ °F
R_{mc} @ Meas. Temp.	6.30 @ 60 °F	@ °F	@ °F	@ °F
Source R_{mf} R_{mc}	M | M	|	|	|
R_m @ BHT	2.22 @ 166 °F	@ °F	@ °F	@ °F
Time Since Circ.	24 Hrs +			
Max. Rec. Temp.	166 °F @ BHT	°F @	°F @	°F @
Equip. | Location	9430 | Woodland	|	|	|
Recorded By	Dale			
Witnessed By	Mr. Calvert			

Fold Here

Service Ticket No. 006981 Remarks:

Change in Mud Type or Additional Samples

Date | Sample No.	|	|
Depth—Driller		
Type Fluid in Hole		
Dens. | Visc.	|	|
ph | Fluid Loss	| ml	|
Source of Sample		
R_m @ Meas. Temp.	@ °F	@ °F
R_{mf} @ Meas. Temp.	@ °F	@ °F
R_{mc} @ Meas. Temp.	@ °F	@ °F
Source: R_{mf} | R_{mc}	|	|
R_m @ BHT	2.22 @ 166 °F	@ °F
R_{mf} BHT	2.13 @ 166 °F	@ °F
R_{mc} BHT	2.26 @ 166 °F	@ °F

SCALE CHANGES

Type Log	Depth	Scale Up Hole	Scale Down Hole
None			

EQUIPMENT DATA

Run No.	Tool Type and No.	Pad Type	Tool Position	Other
One	Vel 19982		Cent	

Welex does not guarantee the accuracy of any interpretation of log data, conversion of log data to physical rock parameters, or recommendations which may be given by Welex personnel or which may appear on the log or in any other form. Any user of such data, interpretations, conversions, or recommendations agrees that Welex is not responsible, except where due to gross negligence or wilful misconduct, for any loss, damages, or expenses resulting from the use thereof.

= 100'

~~POTENTIAL MILLIVOLTS~~

− → ← +

~~GAMMA~~

~~API Gamma Ray Units~~

CALIPER

6" Average Diameter In. 16"

TRAVEL TIME

MICROSECONDS PER FT.

T 3 R₁ ⊥ R₂

140 90 40