

**CALIPER BOREHOLE VOLUME**

Job No. 17073  
 Company U.S. GEOLOGICAL SURVEY  
 Well SDCD  
 Field ESCONDIDO  
 County SAN DIEGO State CA

Location: 14895 SAN PASQUAL VALLEY ROAD  
 GPS: N 33o 05.925' W 117o 01.023'  
 Sec. Twp. Rge. Other Services: ELOG GR/L3 SNC/VDL

Permanent Datum	G.L.	Elevation 377'	Elevation
Log Measured From	G.L.	above perm. datum	K.B. D.F. G.L.
Drilling Measured From	G.L.		
Date	01-29-2013		
Run Number	ONE		
Depth Driller	284'		
Depth Logger	284'		
Bottom Logged Interval	283'		
Top Log Interval	0'		
Casing Driller	N/A		
Casing Logger	N/A		
Bit Size	9.875" TO 123'	7.875" TO 284'	
Type Fluid in Hole	BENTONITE		
Density / Viscosity	N/A		
pH / Fluid Loss	N/A		
Source of Sample	PIT		
Rm @ Meas. Temp	4.6 @ 77F		
Rmf @ Meas. Temp	5.2 @ 77F		
Rmc @ Meas. Temp	N/A		
Source of Rmf / Rmc	MEAS		
Rm @ BHT	N/A		
Time Circulation Stopped	16:00		
Time Logger on Bottom	18:20		
Max. Recorded Temperature	N/A		
Equipment Number	PS-5		
Location	LA		
Recorded By	ABREAU		
Witnessed By	J. NAWIKAS		

<<< Fold Here >>>

All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

Calibration Report

Database File 17073.db  
 Dataset Pathname cal2  
 Dataset Creation Tue Jan 29 19:27:34 2013

Temperature Calibration Report

Serial Number:  
Tool Model:  
Performed:

PS-4\_Short  
GRPH\_CAL  
Fri Jun 29 11:45:25 2012

Point #	Reading		Reference	
1	250.88	cps	4.00	degF
2	1458.28	cps	10.00	degF
3		cps		degF
4		cps		degF
5		cps		degF
6		cps		degF
7		cps		degF
8		cps		degF
9		cps		degF
10		cps		degF

XY Caliper Calibration Report

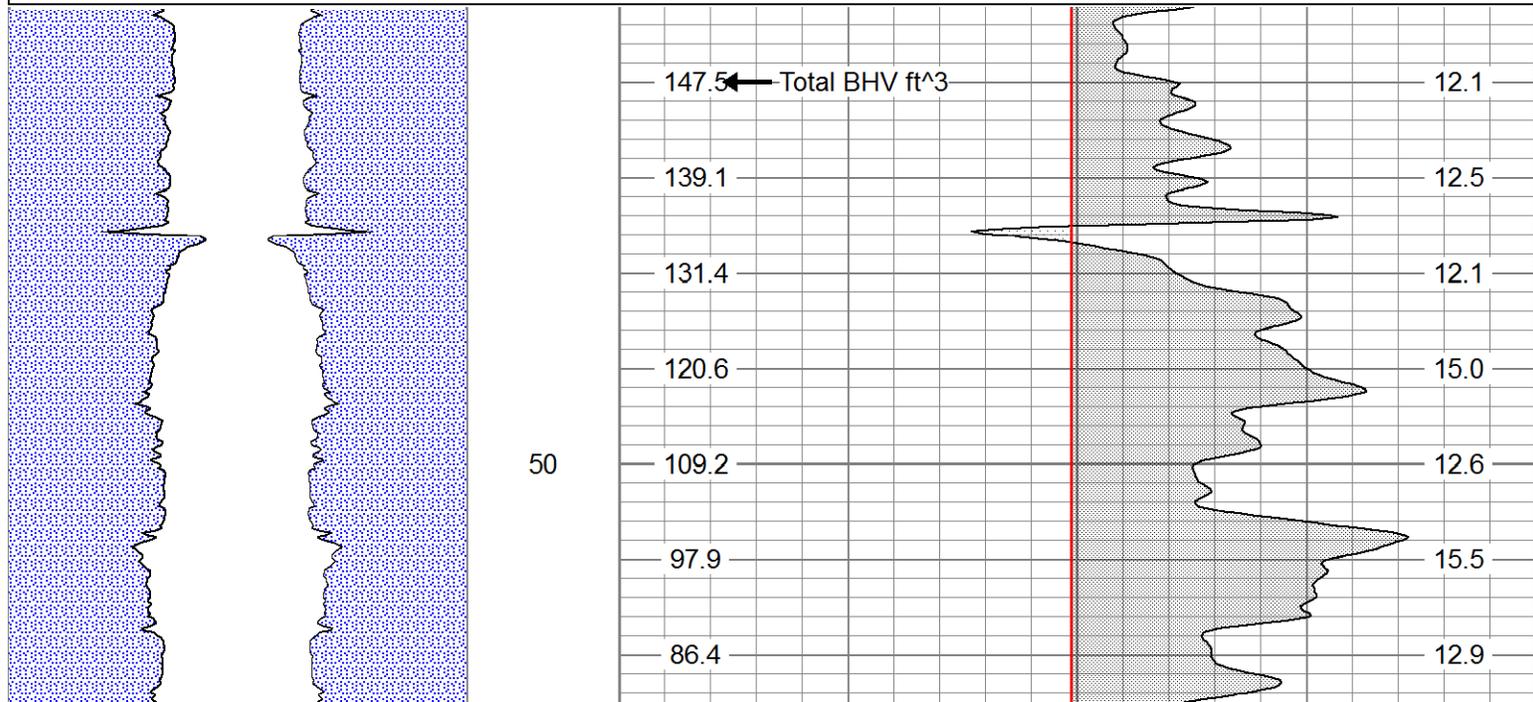
Serial Number/Model:  
Performed:

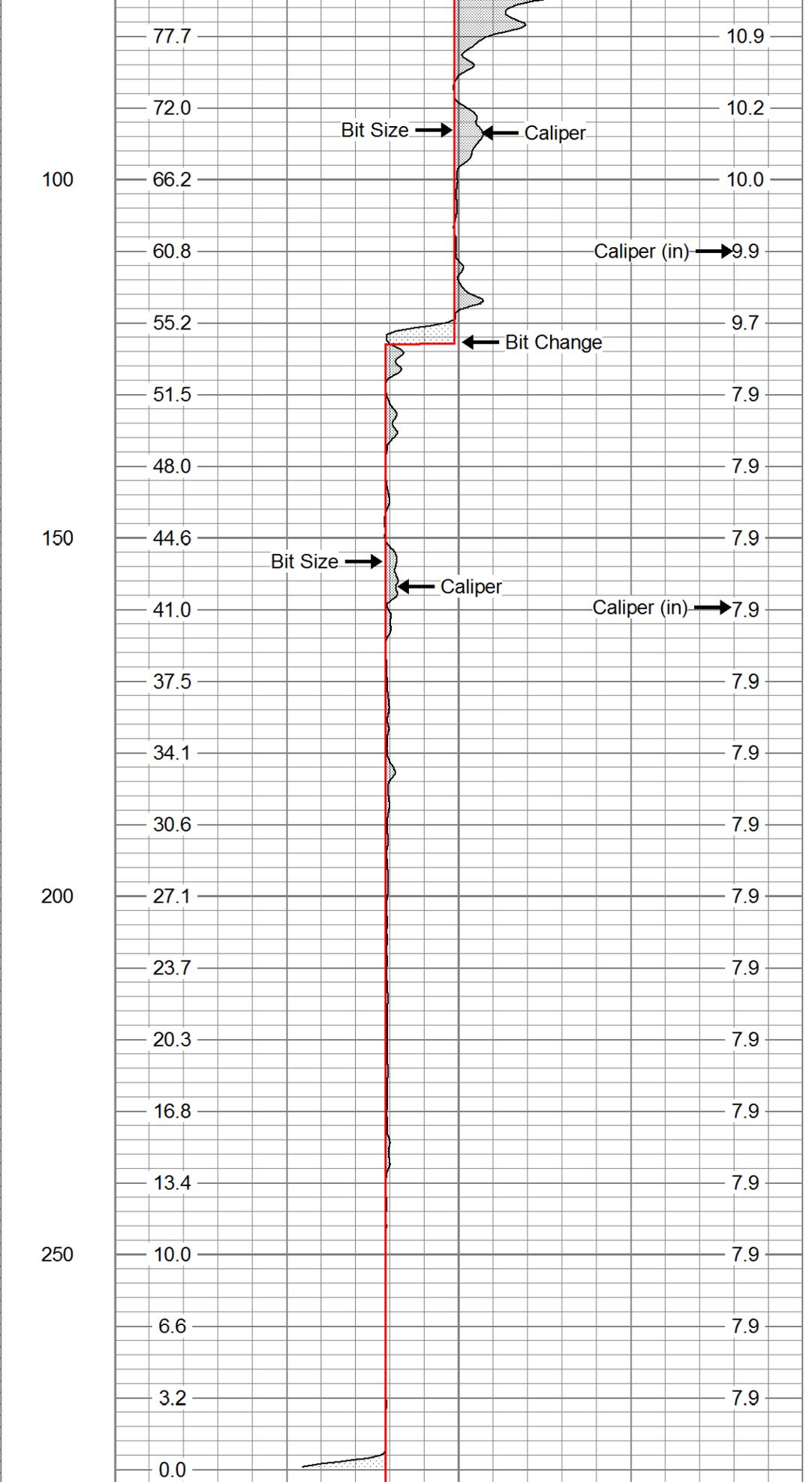
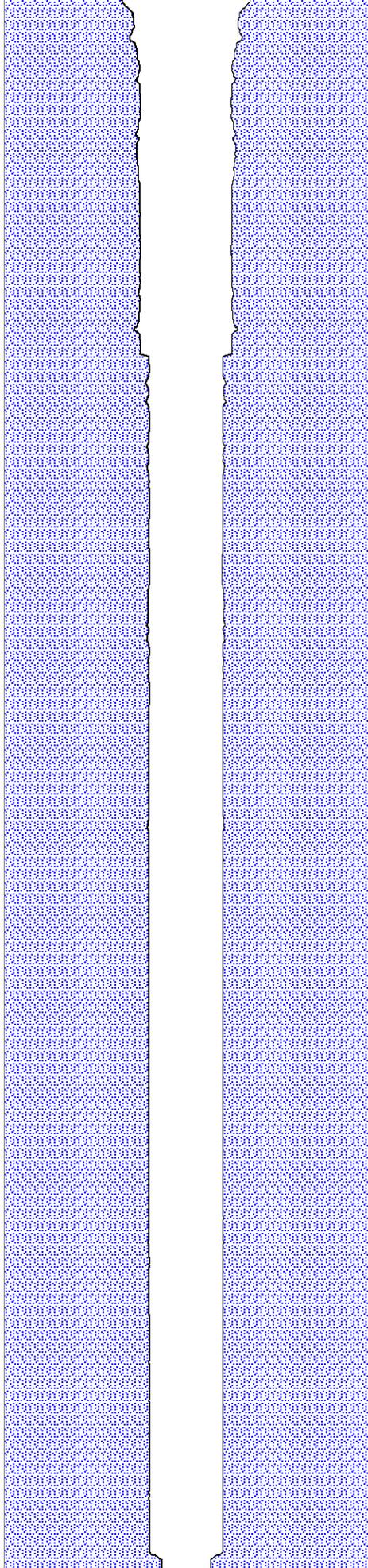
PS-4\_Short-Comprobe  
Tue Jan 24 15:18:50 2012

	Ring		X Caliper		Y Caliper	
1:	8	in	250.882	cps	250.882	cps
2:	14	in	852.679	cps	852.679	cps
3:	20	in	1458.28	cps	1458.28	cps
4:		in		cps		cps
5:		in		cps		cps
6:		in		cps		cps

Database File 17073.db  
Dataset Pathname cal2  
Presentation Format xyc\_gph  
Dataset Creation Tue Jan 29 19:27:34 2013  
Charted by Depth in Feet scaled 1:240

CSG SCHEDULE	0	Caliper (in)	20
Pipe(s) proportional to Hole Size	0	Bit Size (in)	20
total BHV ft <sup>3</sup> (ft3)			Caliper (in)





CSG SCHEDULE

Pipe(s) proportional to Hole Size

0 Caliper (in) 20

0 Bit Size (in) 20

Total BHV ft<sup>3</sup> Caliper (in)

Star DTV (ft3)

Sample (ft3)