PIONEER
Pioneer Energy Services

Radial Bond Log C.C.L. Gamma-Ray & V.D.L.

Company	ANADARKO PETROLEUM CORP.
Well	Howard 10N-22HZ
Field	Wattenberg
County	Weld
State	Colorado

Company ANADARKO PETROLEUM CORP.
Well Howard 10N-22HZ
Field Wattenberg
County Weld State Colorado
Location: API # : 05123382300000
FNL 531' , FWL 2158'
SEC 27 TWP 1N RGE 67W
Other Services
NONE

Permanent Datum	GL	Elevation 5033	Elevation
Log Measured From	KB		K.B. 5048'
Drilling Measured From	KB		D.F. na
			G.L. 5033'

Date	1-5-14
Run Number	1
Depth Driller	14729'
Depth Logger	6974
Bottom Logged Interval	6962
Top Log Interval	70'
Open Hole Size	8.75"
Type Fluid	WATER
Density / Viscosity	NA
Max. Recorded Temp.	217
Estimated Cement Top	SURFACE
Time Well Ready	ROA
Time Logger on Bottom	pm
Equipment Number	41
Location	FORT MORGAN
Recorded By	Nathan Bivens
Witnessed By	Erik Wenzel

Borehole Record

Run Number	Bit	From	To

Tubing Record

Size	Weight	From	To

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String				
Prot. String				
Production String	7"	23#	SUFACE	
Liner				

<<< Fold Here >>>

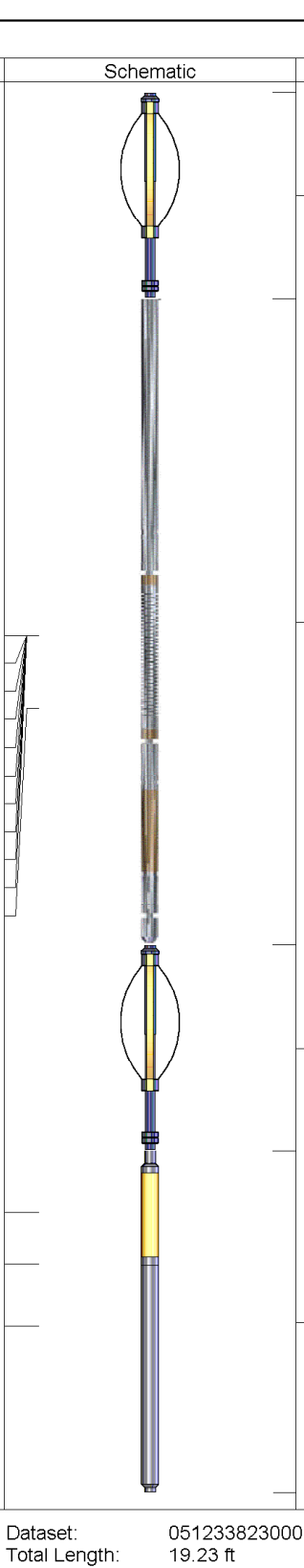
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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

S.O.# 2-204544
CORRECTED TO LINER TOP, CORRECTED WIRELINE DEPTH 23' FROM KB

WCR 4 & WCR 19, East.4, North .2 east into

THANK YOU FOR USING PIONEER ENERGY SERVICES



Sensor	Offset (ft)	Description	Len (ft)	OD (in)	Wt (lb)
		PTS275	2.83	2.75	
WVF3FT WVFCAL WVFS1 WVFS2 WVFS3 WVFS4 WVFS5 WVFS6 WVFS7 WVFS8 WVF5FT	11.78 11.78 11.78 11.78 11.78 11.78 11.78 11.78 11.78 11.78 10.78	RBT-Probe (4.5040904) Prototype Probe Radii Bond Tool with Digital Telemetry	8.88	2.75	90.00
		PTS275	2.83	2.75	
CCL TEMP GR	3.84 3.14 2.30	GCT-GRCCLTEMP (130608) Probe GCT	4.69	2.75	100.00

Dataset:	05123382300000_howard_10n_22hz_rbl.db: field/well/run1/pass1
Total Length:	19.23 ft
Total Weight:	190.00 lb
O.D.	2.75 in

Database File:	05123382300000_howard_10n_22hz_rbl.db
Dataset Pathname:	pass1
Presentation Format:	scbl02
Dataset Creation:	Mon Jan 06 15:44:40 2014 by Log 7.0 B1
Charted by:	Depth in Feet scaled 1:240

3600
3700
3800
3900
4000
4100
4200
4300
4400
4500
4600
4700
4800
4900
5000
5100
5200
5300
5400
5500
5600
5700
5800
5900
6000
6100
6200
6300
6400
6500
6600
6700
6800
6900
Liner
GR
VDL
5 CCL -5
362 TT (usec) 262
0 GR (GAPI) 150
0 AMP (mV) 100
0 AMPx5 (mV) 20
0 AMPAVG 150
0 AMPMAX 150
0 AMPMIN 150
200 VDL 1200
1 SECTOR MAP 8
25 75