J-W WIRELINE COMPANY

CEMENT BOND
GAMMA RAY
COLLAR CORRELATION LOG

Company	PETERSON ENERGY OPERATING INC.
Well	HOSHIKO 34-25
Field	WATTENBERG
County	WELD
State	COLORADO

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Well HOSHIKO 34-25
Field WATTENBERG
County WELD State COLORADO

Location: API # : 5-123-36264-00
SHL: 871' FSL & 2322' FEL SW SE
BHL: 782' FSL & 1953' FEL SW SE
SEC 25 TWP 5N RGE 64W

Other Services
NONE

				Elevation
Permanent Datum	GROUND LEVEL	Elevation	4588	K.B. 4603
Log Measured From	KELLY BUSHING			D.F. 4602
Drilling Measured From	KELLY BUSHING			G.L. 4588

Date	27-DECEMBER-2012
Run Number	ONE
Depth Driller	6877
Depth Logger	6793
Bottom Logged Interval	6786
Top Log Interval	2378
Open Hole Size	7 7/8
Type Fluid	WATER
Density / Viscosity	--
Max. Recorded Temp.	NOT RECORDED
Estimated Cement Top	2678
Time Well Ready	--
Time Logger on Bottom	--
Equipment Number	2405/WHITE
Location	BRIGHTON
Recorded By	HAYES
Witnessed By	MR.RICK OHLEMEIER

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	8 5/8	36#	SURFACE	560
Prot. String				
Production String	4.5	11.6#	SURFACE	TOTAL DEPTH
Liner				

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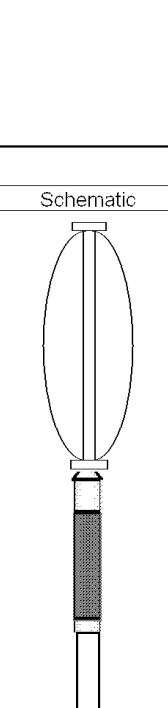
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

LOG CORRELATED TO CD, CN, HRI LOG
DATED 06-DECEMBER-2012

LOG SPLIT FOR CORRELATION PURPOSES

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			CENT-A (1)	3.00	1.69	10.00
CCL	14.06		CCL-275tekco (2.75TEKCO) 2 3/4 TEK CCL Earth Mag	1.96	2.75	20.00
GR	11.49		GR-s_t001 (t001)	2.52	1.69	30.00
WVF5	7.34		CBL-3_5 (001)	7.23	2.44	127.00
WVF3	6.34					
			CENT-B (2)	3.00	1.69	10.00

Dataset: hoshiko 34-25.db: field/well/run1/pass4
Total Length: 17.71 ft
Total Weight: 197.00 lb
O.D. 2.75 in

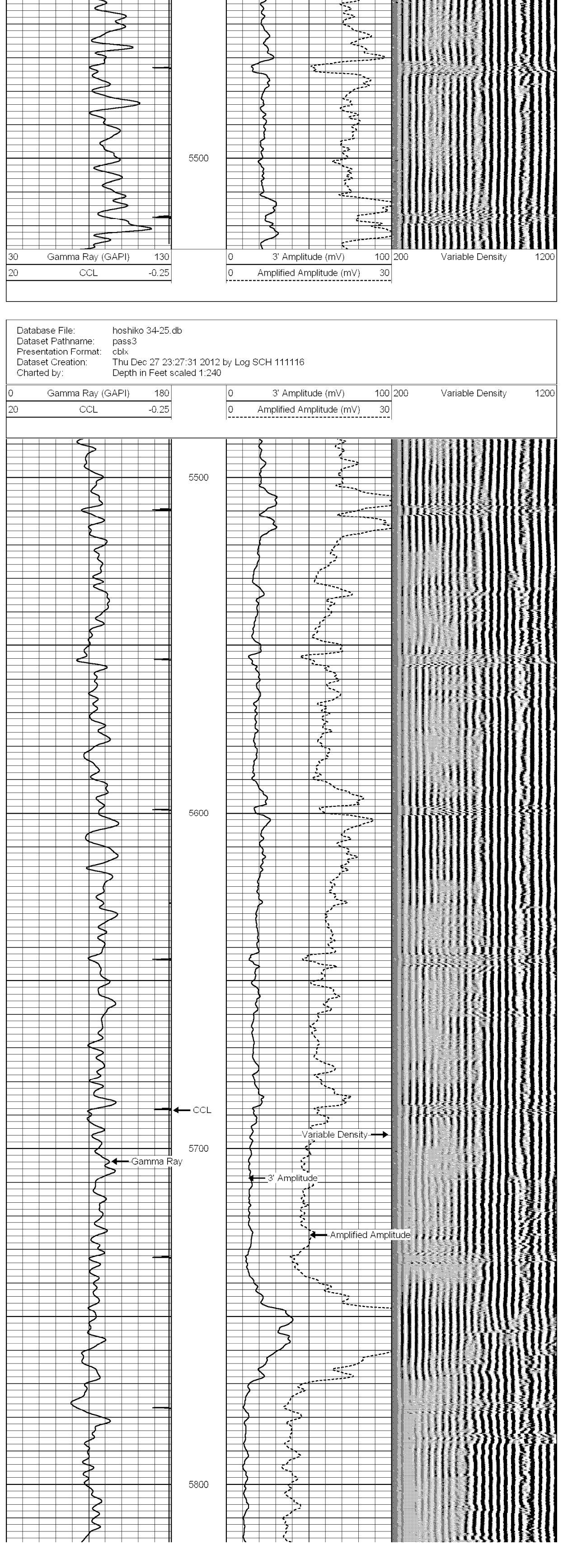
Database File: hoshiko 34-25.db
Dataset Pathname: pass4
Presentation Format: cblx
Dataset Creation: Thu Dec 27 23:49:01 2012 by Log SCH 111116
Charted by: Depth in Feet scaled 1:240

30 Gamma Ray (GAPI) 130	0 3' Amplitude (mV) 100	200 Variable Density 1200
20 CCL -0.25	0 Amplified Amplitude (mV) 30	

30 Gamma Ray (GAPI) 130	0 3' Amplitude (mV) 100	200 Variable Density 1200
20 CCL -0.25	0 Amplified Amplitude (mV) 30	

Database File: hoshiko 34-25.db
Dataset Pathname: pass3
Presentation Format: cblx
Dataset Creation: Thu Dec 27 23:27:31 2012 by Log SCH 111116
Charted by: Depth in Feet scaled 1:240

0 Gamma Ray (GAPI) 180	0 3' Amplitude (mV) 100	200 Variable Density 1200
20 CCL -0.25	0 Amplified Amplitude (mV) 30	



Calibration Report

Database File:	hoshiko 34-25.db
Dataset Pathname:	pass4
Dataset Creation:	Thu Dec 27 23:49:01 2012 by Log SCH 111116

Cement Bond Log Calibration Report

Serial Number:	001		
Tool Model:	3_5		
Performed:	Thu Dec 27 23:09:55 2012		
Depth:	2398.47	ft	
Casing Diameter:	4.5	in	
	3' Spacing	5' Spacing	
Signal Zero:	3	3	mV
Calibrated Amplitude:	81.1961	81.1961	mV
Reading at Signal Zero:	0	0.05	V
Reading in Free Pipe:	2.5	2.5	V
Gain:	31.2784	31.9168	
Offset:	3	1.40416	

Gamma Ray Calibration Report

Serial Number:	t001	
Tool Model:	s_t001	
Performed:	Sun Jun 13 14:33:21 1993	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.0000	GAPI/cps