JW WIRELINE COMPANY

CEMENT BOND
GAMMA RAY
COLLAR CORRELATION LOG

Company NOBLE ENERGY INC.
Well EHRLICH STATE PC F 36-31D
Field WATTENBERG
County WELD State COLORADO

Location: API #: 05-123-32549-00
SHL: 1949' FNL & 675' FWL SW/NE
BHL: 1328' FNL & 103' FWL NW/NW
SEC. 36 TWP. 5N RGE. 65W
SEC TWP RGE

Other Services
NONE

Permanent Datum GROUND LEVEL Elevation 4702
Log Measured From KELLY BUSHING
Drilling Measured From KELLY BUSHING

Elevation
K.B. 4715
D.F. 4715
G.L.

Company NOBLE ENERGY INC.
Well EHRLICH STATE PC F 36-31D
Field WATTENBERG
County WELD
State COLORADO

Date	13-JANUARY-2011
Run Number	ONE
Depth Driller	7406
Depth Logger	7325
Bottom Logged Interval	7318
Top Log Interval	1950
Open Hole Size	7 7/8
Type Fluid	WATER
Density / Viscosity	--
Max. Recorded Temp.	255
Estimated Cement Top	2110
Time Well Ready	--
Time Logger on Bottom	--
Equipment Number	2405/YELLOW
Location	BRIGHTON
Recorded By	HAYES
Witnessed By	MR.CASEY RUPPEL

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	24#	SURFACE	614
Prot. String				
Production String	4.5	11.6 #	SURFACE	7388
Liner				

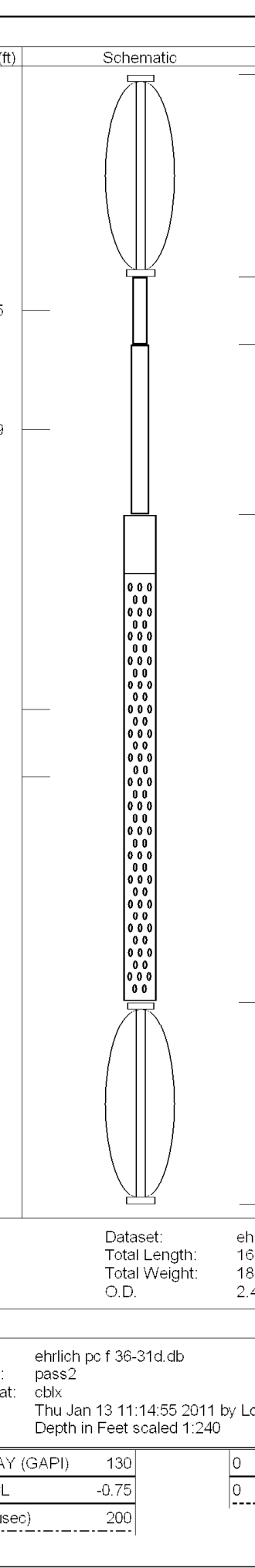
<<< Fold Here >>>

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

LOG CORRELATED TO CD, CN, ML LOG
DATED 22-DECEMBER-2011

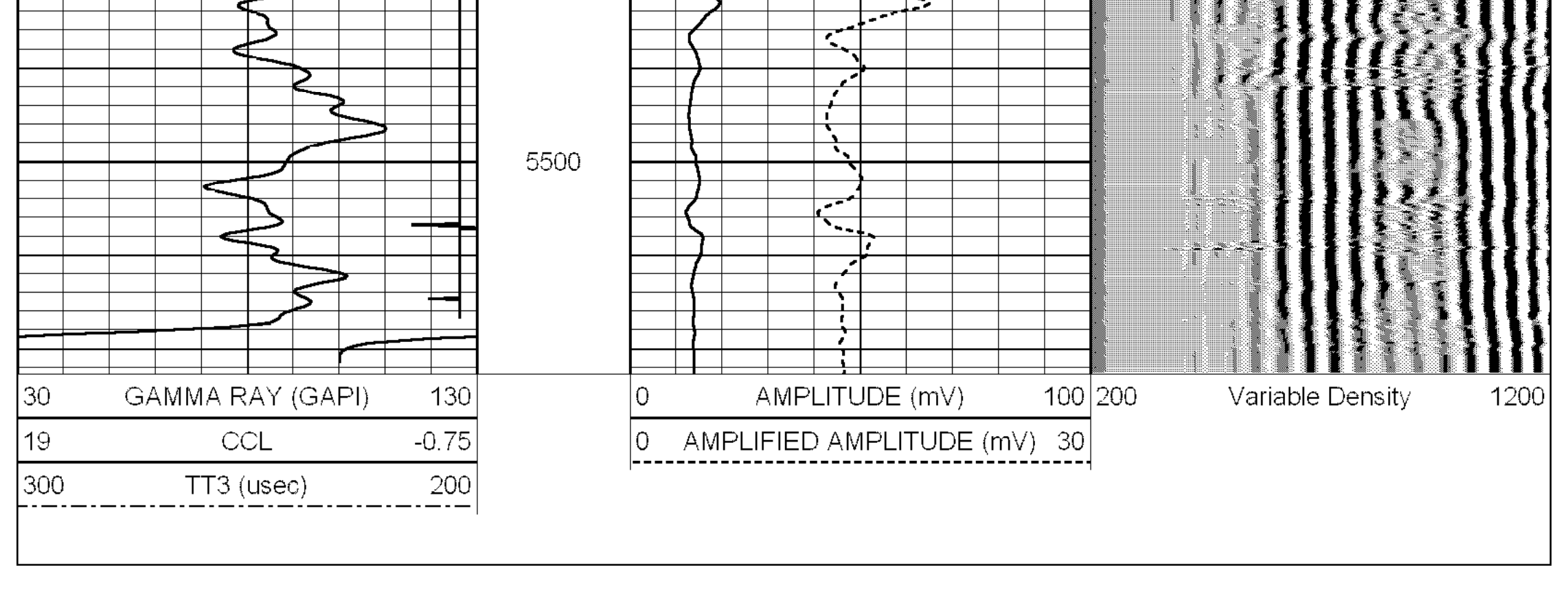
LOG SPLIT FOR CORRELATION PURPOSES



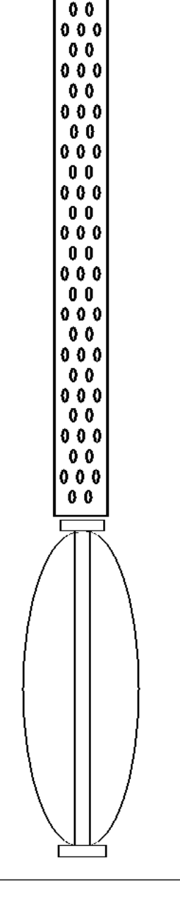
Sensor	Offset (ft)	Description	Len (ft)	OD (in)	Wt (lb)
		CENT-A (1)	3.00	1.69	10.00
CCL	13.25	CCL-GR_1_3/8 (001) 1 3/8 titan ccl	1.00	1.38	11.00
GR	11.49	GR-s_t001 (t001)	2.52	1.69	30.00
WVF5	7.34	CBL-3_5 (001)	7.23	2.44	127.00
WVF3	6.34				
		CENT-B (2)	3.00	1.69	10.00

Dataset: ehrlich pc f 36-31d.db: field/well/run1/pass2
Total Length: 16.75 ft
Total Weight: 188.00 lb
O.D. 2.44 in

Database File: ehrlich pc f 36-31d.db
Dataset Pathname: pass2
Presentation Format: cblx
Dataset Creation: Thu Jan 13 11:14:55 2011 by Log Std Casedhole 08121
Charted by: Depth in Feet scaled 1:240



Database File: ehrlich pc f 36-31d.db
Dataset Pathname: pass1
Presentation Format: cblx
Dataset Creation: Thu Jan 13 10:49:22 2011 by Log Std Casedhole 08121
Charted by: Depth in Feet scaled 1:240

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			CENT-A (1)	3.00	1.69	10.00
CCL	13.25		CCL-GR_1_3/8 (001) 1 3/8 titan ccl	1.00	1.38	11.00
GR	11.49		GR-s_t001 (t001)	2.52	1.69	30.00
WVF5 WVF3	7.34 6.34		CBL-3_5 (001)	7.23	2.44	127.00
			CENT-B (2)	3.00	1.69	10.00

Dataset: ehrlich pc f 36-31d.db: field/well/run1/pass2
Total Length: 16.75 ft
Total Weight: 188.00 lb
O.D. 2.44 in