PHOENIX SURVEYS, INC.

V.D.L. C.C.L. GAMMA RAY CEMENT BOND LOG

Company BLACK RAVEN ENERGY
Well GLENN BIDDLE A-2
Field ADENA
County MORGAN
State COLORADO

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Well GLENN BIDDLE A-2
Field ADENA
County MORGAN State COLORADO
Location: API # :
NW SW
SEC 32 TWP 2N RGE 57W

Other Services
DENSITY
NEUTRON
GAMMA

Permanent Datum	GL	Elevation	
Log Measured From	GL		K.B. --
Drilling Measured From	--		D.F. --
			G.L. --

Date	SEPT. 21 2011
Run Number	ONE
Depth Driller	--
Depth Logger	5588'
Bottom Logged Interval	5576'
Top Log Interval	2890'
Open Hole Size	7.875"
Type Fluid	WATER
Density / Viscosity	N/A
Max. Recorded Temp.	N/A
Estimated Cement Top	N/A
Time Well Ready	N/A
Time Logger on Bottom	N/A
Equipment Number	54
Location	FORT MORGAN
Recorded By	RANDY AZEVEDO
Witnessed By	CHRIS REED

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

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String				
Prot. String	5.5"	15.5 LB	SURFACE	TD
Production String				
Liner				

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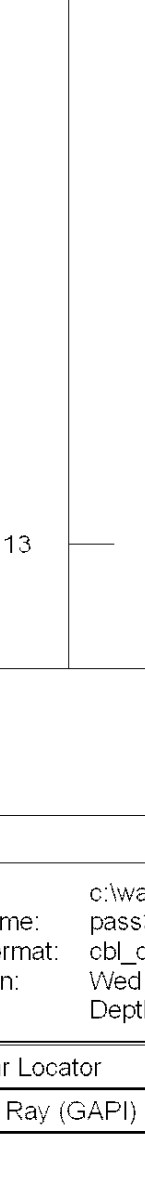
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

THANK YOU FOR USING P.S.I.

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
CCL	19.31		CCL-titan01 (01t)	1.92	2.75	
			SDSCENT Centralizer for testing	3.00	3.25	20.00
WVF3 WVF5	10.92 9.92		CBL-Probe (050215) Probe 2.75" Dual Receiver Bond	8.75	2.75	60.00
			SDSCENT Centralizer for testing	3.00	3.25	20.00
GR	1.13		GR-probe 2.75 (51013)	3.67	2.75	100.00

Dataset: glenn biddle a-2.db: field/well/run1/pass3
Total Length: 20.33 ft
Total Weight: 200.00 lb
O.D. 3.25 in

Database File: c:\warrior\data\black raven\glenn biddle a-2.db
Dataset Pathname: pass3
Presentation Format: cbl_dr
Dataset Creation: Wed Sep 21 08:36:00 2011 by Log SCH 110722
Charted by: Depth in Feet scaled 1:240