Company	Grx Ex LLC
Field	Seaton Hill
County	Stafford
State	Kansas
Date	10-Jul-2012
Time	14:03:10
Depth Reference	KB
Elevation	1846 ft
Log Interval	3500 ft - 4500 ft
Casing Shoe	3500 ft
Bit Size	7.875 in
Mud Type	Water
Mud Density	9.0 lb/gal
Mud Viscosity	50 s/qt
Mud Resistivity	0.08 ohm-m
Max Temp	110 °F
Rmf	0.08 ohm-m @ 110 °F
Rmc	0.06 ohm-m @ 110 °F
Rm	0.05 ohm-m @ 110 °F
Source Rmf	Calc
Source Rmc	Calc
Source Rm	Calc
Rmf Temp	75 °F
Rmc Temp	75 °F
Rm Temp	75 °F
Max Rec Temp	110 °F
Equipment	10-Jul-2012
Recorded By	Jeff Wilson
Witnessed By	Bill Rogers

GEMINI

COMPENSATED DENSITY NEUTRON LOG

Field Print

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 interpretations, 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

St. John south to Hwy. 50. West to SW 20th Ave., S 2.5. W into.

ABHV Calculated for 5.5" Casing.

Thanks for using The Perforators LLC Hays, KS. (785-621-4604)

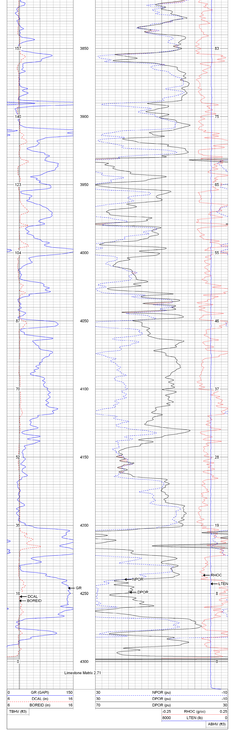
GEMINI

Main Pass

Dataset File: gemini4Fish.db
Dataset Pathname: pass3.1
Presentation Format: main
Dataset Creation: Thu Jul 19 14:03:10 2012 by Calc Open-Cased 100627
Charted by: Depth in Feet scaled 1:240

	GR (GAPI)	150	30	NPOR (pu)	-10
B	DCAL (in)	16	30	DPOR (pu)	-10
R	BORED (in)	16	70	DPOR (pu)	30
				-0.25 RHOC (g/cc)	0.25
TBHV (ft3)				3000 LTEn (lb)	0

ABHV (ft3)



	GR (GAPI)	150	30	NPOR (pu)	-10
B	DCAL (in)	16	30	DPOR (pu)	-10
R	BORED (in)	16	70	DPOR (pu)	30
				-0.25 RHOC (g/cc)	0.25
TBHV (ft3)				3000 LTEn (lb)	0

ABHV (ft3)

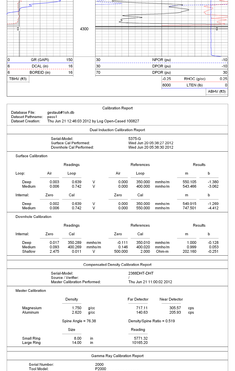
GEMINI

Repeat Pass

Dataset File: gemini4Fish.db
Dataset Pathname: pass4
Presentation Format: main
Dataset Creation: Thu Jul 19 13:03:30 2012 by Calc Open-Cased 100627
Charted by: Depth in Feet scaled 1:240

	GR (GAPI)	150	30	NPOR (pu)	-10
B	DCAL (in)	16	30	DPOR (pu)	-10
R	BORED (in)	16	70	DPOR (pu)	30
				-0.25 RHOC (g/cc)	0.25
TBHV (ft3)				3000 LTEn (lb)	0

ABHV (ft3)



	GR (GAPI)	150	30	NPOR (pu)	-10
B	DCAL (in)	16	30	DPOR (pu)	-10
R	BORED (in)	16	70	DPOR (pu)	30
				-0.25 RHOC (g/cc)	0.25
TBHV (ft3)				3000 LTEn (lb)	0

ABHV (ft3)

Calibration Report

Dataset File: gemini4Fish.db
Dataset Pathname: pass3
Dataset Creation: Thu Jun 21 12:46:03 2012 by Log Open-Cased 100627

Dual Induction Calibration Report

Serial Model	SDT-5
Surface Cal Performed	Wed Jan 20 05:36:27 2011
Downhole Cal Performed	Wed Jan 20 05:36:30 2012

Surface Calibration

	Readings			References			Results		
	Loop	Air		Loop	Air		m	b	
Deep	0.003	0.639	V	0.000	350.000	mmho/m	550.105	-1.380	
Medium	0.008	0.742	V	0.000	400.000	mmho/m	545.466	-0.082	
Internal	Zero	Cal		Zero	Cal		m	b	
Deep	0.002	0.630	V	0.000	350.000	mmho/m	549.915	-1.249	
Medium	0.000	0.742	V	0.000	400.000	mmho/m	547.563	-0.412	

Downhole Calibration

	Readings				References			Results	
Internal	Zero	Cal		Zero	Cal		m	b	
Deep	0.017	350.288	mmho/m	-0.111	350.000	mmho/m	1.000	-0.128	
Medium	0.065	400.288	mmho/m	0.148	400.000	mmho/m	0.999	0.053	
Shallow	2.473	0.011	V	500.000	2.000	Ohm-m	202.166	-0.251	

Compensated Density Calibration Report

Serial Model	2398EHT-DHT
Density Verifier	
Master Calibration Performed	Thu Jan 21 11:50:02 2012

Master Calibration

	Density		For Detector	Near Detector	
Magnesium	1.750	g/cc	717.11	305.57	cps
Aluminum	2.620	g/cc	140.63	205.93	cps

Spine Angle = 76.38 Density/Spine Ratio = 0.5119

	Size		Reading	
Small Ring	4.00	in	5773.32	
Large Ring	14.00	in	10100.20	

Neutron Calibration Report

Serial Number	9438
Tool Model	PNC8E
Performed	Tue May 29 17:59:56 2012
Calibrator Value	1	ravh
Calibrator Reading	1	cps
Sensitivity	1	NAP/cps

Gamma Ray Calibration Report

Serial Number	2000
Tool Model	PGS5
Performed	Tue Jun 19 18:23:54 2012
Calibrator Value	1.0	GAPI
Background Reading	0.0	cps
Calibrator Reading	1.0	cps
Sensitivity	0.2200	GAP/cps

Neutron Calibration Report

Serial Number	9438
Tool Model	PNC8E
Performed	Tue May 29 17:59:56 2012
Calibrator Value	1	ravh
Calibrator Reading	1	cps
Sensitivity	1	NAP/cps

Sensor	Offset (ft)	Schematic	Description	Lev (ft)	OD (in)	Wt (lb)
			Hole	0.15	1.50	0.00
NEU	37.96		NEU-PROBE (5100-2000)	4.92	3.63	65.00
GR	32.57		GR-P2000 (2000)	3.67	3.25	40.00
LSD SCAL SSD HEADVOLT	23.78 21.46 21.24 21.47		CDL-CHT (2398EHT) Cable High Temp CDL Cart	9.69	4.00	201.00
CILD SP	10.60 10.60		DIL-IQ (5375) Gamma	21.47	4.00	345.00
CILM	6.89					
RLL3	1.70					

Dataset
Total Length 42.49 ft
Total Weight 676.00 lb
O.D. 4.00 in

gemini4Fish.db: field=ethun1pass1
Tool Zero