BAKER HUGHES
Baker Atlas

Gamma Ray Segmented Bond Log

File No:	597518
API No:	
N/A	
Company	Inergy Midstream
Well	U.S. Salt Well # 58
Field	U.S. Salt
County	Schyler
State	New York
Location	
SEC	N/A
TWP	N/A
RGE	N/A
Other Services	JCGR 8.5" High Res. Vertilog
Permanent Datum	G.L.
Elevation	N/A
Log Measured From	M.G 2 ft Above P. D.
Drill Measured From	Kelly Bushing
Elevations	KB N/A, DF N/A, GL N/A

Thank you.

Date	24-March-11
Run	One
Service Order	597518
Depth Driller	2183 ft
Depth Logger	2170 ft
Bottom Logged Interval	2170 ft
Top Logged Interval	-2 ft
Time Started	12:00
Time Finished	14:00
Operator Rig Time	2 Hrs.
Type of Fluid in Hole	BRINE WATER
Fluid Density	N/A
Salinity	N/A
Fluid Level	Surface
Logged Cement Top	Could not be established
Wellhead Pressure	0 psi
Maximum Hole Deviation	N/A
Nominal Logging Speed	30 fpm
Maximum Recorded Temperature	N/A
Reference Log	Baker Atlas Bong Log
Reference Log Date	14-October-11
Equipment No. / Location	9701 / Buckhannon WV
Recorded By	A. Anderson
Witnessed By	Mr. Barry Moon

FOLD HERE

In making interpretations of logs, our employees will give the customer the benefit of their best judgement. But since all interpretations are opinions based on inferences from electrical or other measurements, we cannot, and we do not guarantee the accuracy or correctness of any interpretation. We shall not be liable or responsible for any loss, cost, damages, or expenses whatsoever incurred or sustained by the customer resulting from any interpretation made by any of our employees.

Borehole Record

Bit Size	From	To

Casing Record

Size	Weight	Grade	From	To
9.625 in	36 lbm/ft	J55	0 ft	2183 ft

Remarks

Thank you for choosing Baker Atlas

Crew on your location : M. Cutlip , D. Will
JCGR 8.5" ran to 2170
Estimated Cement top could not be established

N/A = not applicable

Main Pass 5" / 100'

SBT NORMALIZATION RESULTS

CURVE	PARAMETER	VALUE	UNITS	TOP	BOTTOM	COMMENT
ATC1	seg1 cnormf1	0.000	db/ft	26.531	2161.000	
ATC2	seg2 cnormf2	0.000	db/ft	26.531	2161.000	
ATC3	seg3 cnormf3	0.000	db/ft	26.531	2161.000	
ATC4	seg4 cnormf4	0.000	db/ft	26.531	2161.000	
ATC5	seg5 cnormf5	0.000	db/ft	26.531	2161.000	
ATC6	seg6 cnormf6	0.000	db/ft	26.531	2161.000	
ATC1	seg1 dnormf1	-0.144	db/ft	26.531	2161.000	Good Confidence
ATC2	seg2 dnormf2	-0.527	db/ft	26.531	2161.000	Good Confidence
ATC3	seg3 dnormf3	-0.701	db/ft	26.531	2161.000	Good Confidence
ATC4	seg4 dnormf4	-0.012	db/ft	26.531	2161.000	Good Confidence
ATC5	seg5 dnormf5	0.064	db/ft	26.531	2161.000	Good Confidence
ATC6	seg6 dnormf6	1.320	db/ft	26.531	2161.000	Good Confidence

SBT PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
amp	fpamp	57.415	mv	11.099	2161.000
amp	fpattn	1.166	dB/ft	11.099	2161.000
atc	dbspread	4.229	dB/ft	11.099	2161.000
atc	spacing	0.709	feet	11.099	2161.000
cemr	casing od	9.625	inches	11.099	2161.000
cemr	casing wt	36.000	lbm/ft	11.099	2161.000
cemr	compress	1500.000	psi	11.099	2161.000
CN	Bit Size	7.875	inches	26.531	2161.000
CN	Casing Thickness	0.358	inches	11.099	2161.000
CN	Casing/Cement Correction	No		26.531	2161.000
CN	CN Chism	No		26.531	2161.000
CN	Matrix	Limestone		26.531	2161.000
CN	Salinity	0.000	ppm	26.531	2161.000

DEPTH OFFSETS
(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
2346XA	-43.500	CCL					
1309XA	-34.557	GR					
2435XA	-30.250	LSN					
2435XA	-29.750	NEU	SSN				
1424XA	-15.432	ATC1	ATC2	ATC3	ATC4	ATC5	ATC6
		ATAV	ATMN	ATMX	AWAV	DEV	DTMN
		DTMX	RB	XATT	YATT		
1424PA	-4.080	CHV	CYQ	SIG			

Created by : SBT, v5.0.003
Plotted by : PlotMgr, v5.4.504
Company : Inergy Midstream
Well : U.S. Salt Well # 58
File Name : c:\welldata\salt58\main02.xtf
Mode : PlotMgr 5.4.504
Interval : 0.00 - 2184.00 feet UP
Created : 3/24/2011 12:58:52 PM

Repeat Section

SBT NORMALIZATION RESULTS

CURVE	PARAMETER	VALUE	UNITS	TOP	BOTTOM	COMMENT
ATC1	seg1 cnormf1	0.000	db/ft	1914.753	2198.000	
ATC2	seg2 cnormf2	0.000	db/ft	1914.753	2198.000	
ATC3	seg3 cnormf3	0.000	db/ft	1914.753	2198.000	
ATC4	seg4 cnormf4	0.000	db/ft	1914.753	2198.000	
ATC5	seg5 cnormf5	0.000	db/ft	1914.753	2198.000	
ATC6	seg6 cnormf6	0.000	db/ft	1914.753	2198.000	
ATC1	seg1 dnormf1	-1.079	db/ft	1914.753	2198.000	Good Confidence
ATC2	seg2 dnormf2	-2.058	db/ft	1914.753	2198.000	Low Confidence
ATC3	seg3 dnormf3	3.336	db/ft	1914.753	2198.000	Questionable
ATC4	seg4 dnormf4	-0.485	db/ft	1914.753	2198.000	Good Confidence
ATC5	seg5 dnormf5	-0.094	db/ft	1914.753	2198.000	Good Confidence
ATC6	seg6 dnormf6	0.381	db/ft	1914.753	2198.000	Good Confidence

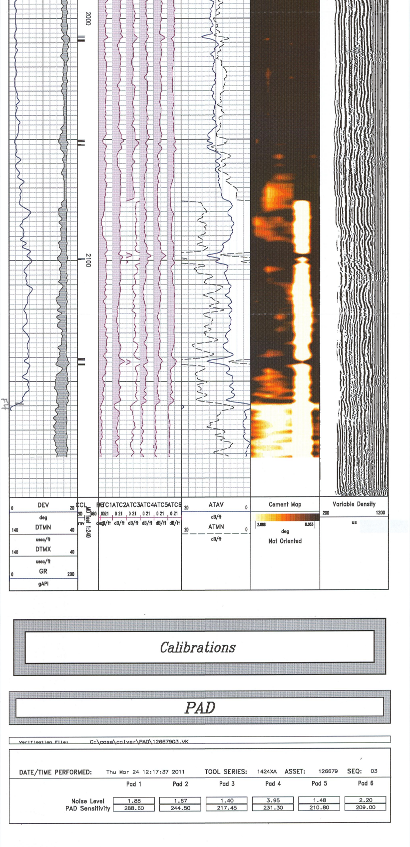
SBT PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	TOP	BOTTOM
amp	fpamp	57.415	mv	1899.321	2198.000
amp	fpattn	1.166	dB/ft	1899.321	2198.000
atc	dbspread	4.229	dB/ft	1899.321	2198.000
atc	spacing	0.709	feet	1899.321	2198.000
cemr	casing od	9.625	inches	1899.321	2198.000
cemr	casing wt	36.000	lbm/ft	1899.321	2198.000
cemr	compress	1500.000	psi	1899.321	2198.000
CN	Bit Size	7.875	inches	1914.753	2198.000
CN	Casing Thickness	0.358	inches	1899.321	2198.000
CN	Casing/Cement Correction	No		1914.753	2198.000
CN	CN Chism	No		1914.753	2198.000
CN	Matrix	Limestone		1914.753	2198.000
CN	Salinity	0.000	ppm	1914.753	2198.000

DEPTH OFFSETS
(for Acquired Curves)

SERIES	DEPTH OFFSET	ACQUIRED CURVES					
2346XA	-43.500	CCL					
1309XA	-34.557	GR					
1424XA	-15.432	ATC1	ATC2	ATC3	ATC4	ATC5	ATC6
		ATAV	ATMN	ATMX	AWAV	DEV	DTMN
		DTMX	RB	XATT	YATT		
2435XA	0.000	LSN					
2435XA	0.000	NEU	SSN				
1424PA	4.070	CHV	CYQ	SIG			

Created by : SBT, v5.0.003
Plotted by : PlotMgr, v5.4.504
Company : US Salt Well
Well : # 18
File Name : c:\welldata\597928\repeat pass2.xtf
Mode : PlotMgr 5.4.504
Interval : 1915.00 - 2198.00 feet UP
Created : 3/29/2011 2:06:20 AM



Calibrations

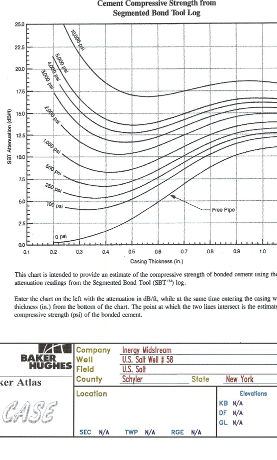
PAD

Verification File: C:\case\caliver\PAD\12667903.VK

DATE/TIME PERFORMED:	Thu Mar 24 12:17:37 2011	TOOL SERIES: 1424XA	ASSET: 126679	SEQ: 03	
	Pad 1	Pad 2	Pad 3	Pad 4	Pad 5	Pad 6

	Pad 1	Pad 2	Pad 3	Pad 4	Pad 5	Pad 6
Noise Level	1.88	1.67	1.40	3.95	1.48	2.20
PAD Sensitivity	288.60	244.50	217.45	231.30	210.80	209.00

Cement Compressive Strength from Segmented Bond Tool Log



This chart is intended to provide an estimate of the compressive strength of bonded cement using the attenuation readings from the Segmented Bond Tool (SBT™) log.

Enter the chart on the left with the attenuation in dB/ft, while at the same time entering the casing wall thickness (in.) from the bottom of the chart. The point at which the two lines intersect is the estimated compressive strength (psi) of the bonded cement.

BAKER HUGHES
Baker Atlas
CASE

Company	Inergy Midstream
Well	U.S. Salt Well # 58
Field	U.S. Salt
County	Schyler
State	New York
Location	
SEC	N/A
TWP	N/A
RGE	N/A
Elevations	KB N/A, DF N/A, GL N/A
File No:	597518
API No:	N/A

Thank you.