Baker Hughes | **Baker Atlas**

SEGMENTED BOND TOOL™ / VARIABLE DENSITY LOG / GAMMA RAY LOG

FILE NO.	
API NO.	31-097-51496-00-01
COMPANY	INERGY MIDSTREAM, LLC.
WELL	FINGER LAKES 18
FIELD	US. SALT BRINE FIELD
COUNTY	SCHUYLER
STATE	NEW YORK
LOCATION	LAT 42.423106 LONG 76.896697
PERMANENT DATUM	G.L.
ELEVATION	687 FT
LOG MEASURED FROM	G.L. 0 FT ABOVE P.D.
DRILL. MEAS. FROM	G.L.
ELEVATIONS	KB - DF - GL 687 FT
DATE	22-SEP-2011
RUN	1
TRIP	1
FLUID LEVEL	289 FT

IN MAKING INTERPRETATIONS OF LOGS OUR EMPLOYEES WILL GIVE 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			CASING RECORD				
BIT SIZE	FROM	TO	SIZE	WEIGHT	GRADE	FROM	TO
8.75 IN	718 FT	2065 FT	9.625 IN	40.5 LB/FT	J-55	0 FT	718 FT

REMARKS

RUN 1 TRIP 1: OPERATION 1: GR-SBT-VDL-CCL

FLUID LEVEL AT 289FT

CEMENT MAP WITH THE FOLLOWING PARAMETER

CSG OD: 9.625"
CSG WT: 40.50
CEMENT STRENGTH: 1500PSI

RIG: BAKER HUGHES CRANE
CREW: S. HITE/ J. GARCIA / J. SCOTT/ J. LAUB

EQUIPMENT DATA

RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION
1	1	CCL	2366XA	11808938	CENTRALIZED
1	1	GR	1309XA	10976659	FREE
1	1	SBT ELE	1633XA	11882674	FREE
1	1	CENT	4341XA	12003684	4 ARM
1	1	SBT	1424XA	2118166	PAD DEVICE
1	1	VDL	1424XA	2119560	FREE
1	1	CENT	4341XA	2193684	4ARM

MAIN LOG 5"/100FT SCALE

ECLIPS 6.1i Aug 06, 2010
Updates: 1,38,41

Thu Sep 22 15:14:46 2011

Pcrplt /main/62 Cplot Pdf_Cpp /main/16 Fileview 5.51

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/INERGY_FINGER_LAKES_18_R1/a331d05.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 56.750 ft BOTTOM DEPTH: 753.857 ft

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft) TOP	BOTTOM
GR	FILTER ()	medium (1)		''	''
SBT	FILTER, 2pf	medium (1)		''	''
	FILTER, 4pf	medium (1)		''	''
TENSION	FILTER ()	medium (1)		''	''

SBT PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft) TOP	BOTTOM
SBT	CASING OD	9.625	in	''	''
	CASING WT	40.500	lbm/ft	''	''
	CORR. FACTOR 1	0.313	dB/ft	''	''
	CORR. FACTOR 2	0.161	dB/ft	''	''
	CORR. FACTOR 3	0.526	dB/ft	''	''
	CORR. FACTOR 4	-0.471	dB/ft	''	''
	CORR. FACTOR 5	-0.253	dB/ft	''	''
	CORR. FACTOR 6	-0.275	dB/ft	''	''
	SPACING	0.707	ft	''	''
	SPREADING FACTOR	4.242	dB/ft	''	''
	CEMENT STRENGTH	1500	psi	''	''
	HI CUTOFF	7.897	dB/ft	''	''
	LOW CUTOFF	3.211	dB/ft	''	''

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/INERGY_FINGER_LAKES_18_R1/m970vrtex04.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 83.449 ft BOTTOM DEPTH: 752.864 ft

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft) TOP	BOTTOM
GR MED RES	FILTER ()	medium (1)		''	''
TENSION	FILTER ()	medium (1)		''	''

ACCELERATION PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft) TOP	BOTTOM
ACCEL CORR SWITCH	ACCEL DEPTH CORR	CORRECTION ON		TOP	BOTTOM

ACOUSTIC WAVEFORM FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft) TOP	BOTTOM
WAVEFORM FILTER - CBL	SURFACE WAVE FILTER	ON		TOP	BOTTOM
	LOW FREQ CUTOFF	8000	Hz	''	''
	HIGH FREQ CUTOFF	30000	Hz	''	''

CURVE DESCRIPTION REPORT

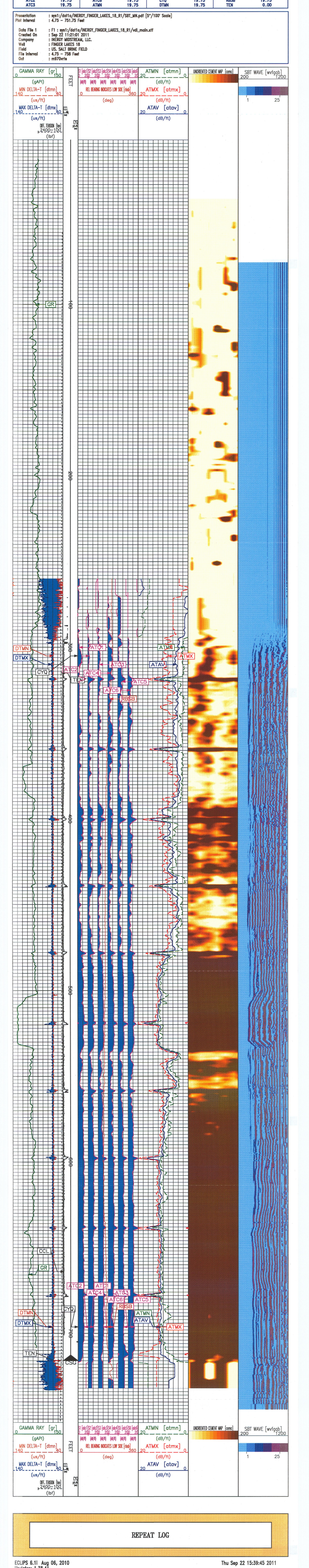
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:ATAV	Sep 22 11:21:01 2011	AVERAGE ATTENUATION
F1:ATC1	Sep 22 11:21:01 2011	ATTENUATION PAD 1
F1:ATC2	Sep 22 11:21:01 2011	ATTENUATION PAD 2
F1:ATC3	Sep 22 11:21:01 2011	ATTENUATION PAD 3
F1:ATC4	Sep 22 11:21:01 2011	ATTENUATION PAD 4
F1:ATC5	Sep 22 11:21:01 2011	ATTENUATION PAD 5
F1:ATC6	Sep 22 11:21:01 2011	ATTENUATION PAD 6
F1:ATMN	Sep 22 11:21:01 2011	ATTENUATION MINIMUM
F1:ATMX	Sep 22 11:21:01 2011	ATTENUATION MAXIMUM
F1:CCL	Sep 22 11:21:01 2011	CASING COLLAR LOCATOR
F1:CEMC	Sep 22 11:21:01 2011	CALIBRATED CEMENT MAP
F1:CYQ	Sep 22 11:21:01 2011	CYCLE QUALITY
F1:DTMN	Sep 22 11:21:01 2011	MINIMAL SLOWNESS
F1:DTMX	Sep 22 11:21:01 2011	MAXIMAL SLOWNESS
F1:GR	Sep 22 14:45:13 2011	GAMMA RAY
F1:RBSB	Sep 22 11:21:01 2011	RELATIVE BEARING (RELATIVE TO BOREHOLE LOW SIDE) FOR SBT
F1:TEN	Sep 22 14:45:13 2011	DIFFERENTIAL TENSION
F1:WVFGQB	Sep 22 14:45:13 2011	GAIN REMOVED WAVEFORM

CURVE MEASURE POINT OFFSET

CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
ATAV	19.75	ATC4	19.75	ATMX	19.75	DTMX	19.75
ATC1	19.75	ATC5	19.75	CCL	52.00	GR	50.25
ATC2	19.75	ATC6	19.75	CYQ	19.75	RBSB	19.75
ATC3	19.75	ATMN	19.75	DTMN	19.75	TEN	0.00

Presentation : sys1:/dat1a/INERGY_FINGER_LAKES_18_R1/SBT_MN.pdf [5"/100' Scale]
Plot Interval : 4.75 - 751.75 Feet

Data File 1 : F1 : sys1:/dat1a/INERGY_FINGER_LAKES_18_R1/vdl_main.xtf
Created On : Sep 22 11:21:01 2011
Company : INERGY MIDSTREAM, LLC.
Well : FINGER LAKES 18
Field : US. SALT BRINE FIELD
File Interval : 4.75 - 758 Feet
Oct : m970vrte



REPEAT LOG

ECLIPS 6.1i Aug 06, 2010
Updates: 1,38,41

Thu Sep 22 15:39:45 2011

Pcrplt /main/62 Cplot Pdf_Cpp /main/16 Fileview 5.51

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/INERGY_FINGER_LAKES_18_R1/m331d04.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 507.000 ft BOTTOM DEPTH: 755.875 ft

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft) TOP	BOTTOM
GR	FILTER ()	medium (1)		TOP	BOTTOM
SBT	FILTER, 2pf	medium (1)		''	''
	FILTER, 4pf	medium (1)		''	''
TENSION	FILTER ()	medium (1)		''	''

SBT PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft) TOP	BOTTOM
SBT	CASING OD	9.625	in	TOP	BOTTOM
	CASING WT	40.500	lbm/ft	''	''
	CORR. FACTOR 1	0.313	dB/ft	''	''
	CORR. FACTOR 2	0.161	dB/ft	''	''
	CORR. FACTOR 3	0.526	dB/ft	''	''
	CORR. FACTOR 4	-0.471	dB/ft	''	''
	CORR. FACTOR 5	-0.253	dB/ft	''	''
	CORR. FACTOR 6	-0.275	dB/ft	''	''
	SPACING	0.707	ft	''	''
	SPREADING FACTOR	4.242	dB/ft	''	''
	CEMENT STRENGTH	1500	psi	''	''
	HI CUTOFF	7.897	dB/ft	''	''
	LOW CUTOFF	3.211	dB/ft	''	''

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/INERGY_FINGER_LAKES_18_R1/m970vrtex01.prm
LOGGING MODE: DEPTH DIRECTION: DOWN
TOP DEPTH: 358.715 ft BOTTOM DEPTH: 2048.863 ft

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft) TOP	BOTTOM
GR MED RES	FILTER ()	medium (1)		TOP	BOTTOM
TENSION	FILTER ()	medium (1)		''	''

ACCELERATION PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft) TOP	BOTTOM
ACCEL CORR SWITCH	ACCEL DEPTH CORR	CORRECTION ON		TOP	BOTTOM

ACOUSTIC WAVEFORM FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft) TOP	BOTTOM
WAVEFORM FILTER - CBL	SURFACE WAVE FILTER	ON		TOP	BOTTOM
	LOW FREQ CUTOFF	8000	Hz	''	''
	HIGH FREQ CUTOFF	30000	Hz	''	''

CURVE DESCRIPTION REPORT

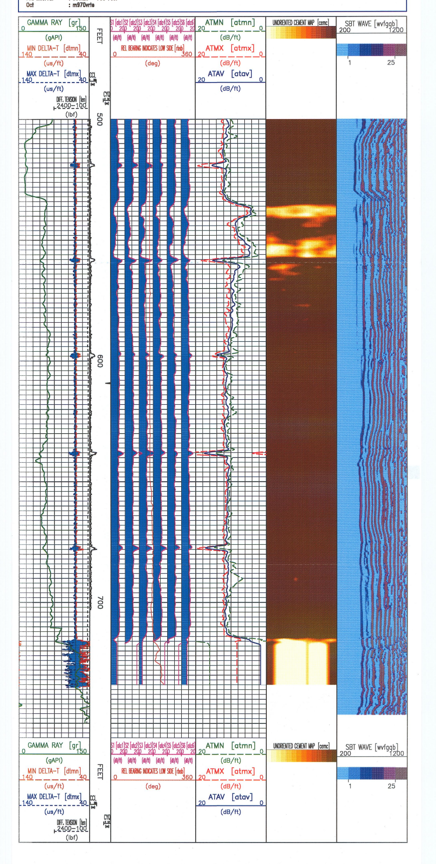
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:ATAV	Sep 22 11:07:31 2011	AVERAGE ATTENUATION
F1:ATC1	Sep 22 11:07:31 2011	ATTENUATION PAD 1
F1:ATC2	Sep 22 11:07:31 2011	ATTENUATION PAD 2
F1:ATC3	Sep 22 11:07:31 2011	ATTENUATION PAD 3
F1:ATC4	Sep 22 11:07:31 2011	ATTENUATION PAD 4
F1:ATC5	Sep 22 11:07:31 2011	ATTENUATION PAD 5
F1:ATC6	Sep 22 11:07:31 2011	ATTENUATION PAD 6
F1:ATMN	Sep 22 11:07:31 2011	ATTENUATION MINIMUM
F1:ATMX	Sep 22 11:07:31 2011	ATTENUATION MAXIMUM
F1:CCL	Sep 22 11:07:31 2011	CASING COLLAR LOCATOR
F1:CEMC	Sep 22 11:07:31 2011	CALIBRATED CEMENT MAP
F1:CYQ	Sep 22 11:07:31 2011	CYCLE QUALITY
F1:DTMN	Sep 22 11:07:31 2011	MINIMAL SLOWNESS
F1:DTMX	Sep 22 11:07:31 2011	MAXIMAL SLOWNESS
F1:GR	Sep 22 13:00:04 2011	GAMMA RAY
F1:RBSB	Sep 22 11:07:31 2011	RELATIVE BEARING (RELATIVE TO BOREHOLE LOW SIDE) FOR SBT
F1:TEN	Sep 22 13:00:04 2011	DIFFERENTIAL TENSION
F1:WVFGQB	Sep 22 13:00:04 2011	GAIN REMOVED WAVEFORM

CURVE MEASURE POINT OFFSET

CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
ATAV	19.75	ATC4	19.75	ATMX	19.75	DTMX	19.75
ATC1	19.75	ATC5	19.75	CCL	52.00	GR	50.25
ATC2	19.75	ATC6	19.75	CYQ	19.75	RBSB	19.75
ATC3	19.75	ATMN	19.75	DTMN	19.75	TEN	0.00

Presentation : sys1:/dat1a/INERGY_FINGER_LAKES_18_R1/SBT_RPT.pdf [5"/100' Scale]
Plot Interval : 500 - 755 Feet

Data File 1 : F1 : sys1:/dat1a/INERGY_FINGER_LAKES_18_R1/vdl_repeat.xtf
Created On : Sep 22 11:07:31 2011
Company : INERGY MIDSTREAM, LLC.
Well : FINGER LAKES 18
Field : US. SALT BRINE FIELD
File Interval : 306.25 - 755 Feet
Oct : m970vrte



CALIBRATION / VERIFICATION SUMMARY

Source File: /dat1a/INERGY_FINGER_LAKES_18_R1/m331d.tp1

SBT PRIMARY CALIBRATION SUMMARY

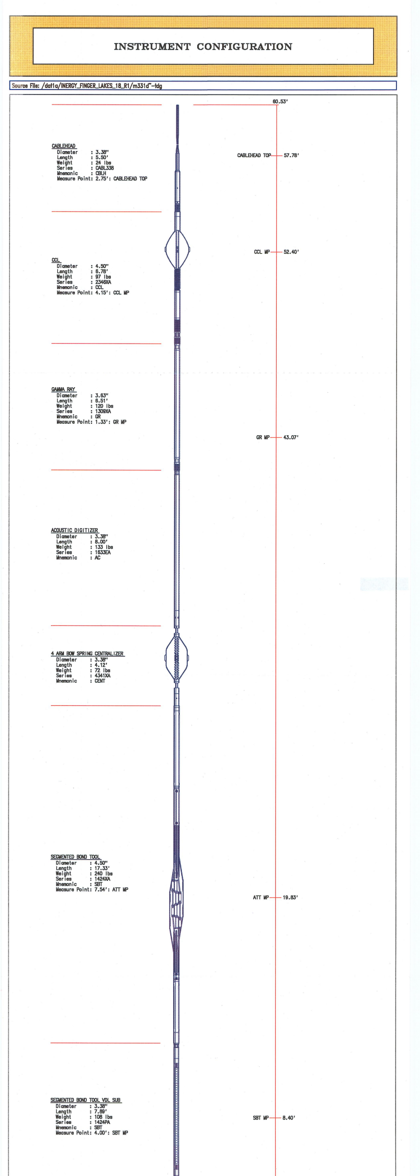
TOOL #: 1424XA Z118166 DATE/TIME PERFORMED: Wed Sep 21 14:27:13 2011

UNIT #: 3880TA ML4288

	PAD 1	PAD 2	PAD 3	PAD 4	PAD 5	PAD 6
NOISE LEVEL	2.9	3.7	4.9	4.8	5.5	4.7
	10.0	10.0	10.0	10.0	10.0	10.0
PAD SENS	302.2	246.1	270.2	266.0	277.0	263.0
	150.0	150.0	150.0	150.0	150.0	150.0

INSTRUMENT CONFIGURATION

Source File: /dat1a/INERGY_FINGER_LAKES_18_R1/m331d"-tdg



Baker Hughes | **Baker Atlas** | **ECLIPS**

COMPANY	INERGY MIDSTREAM, LLC.	FILE NO:	
WELL	FINGER LAKES 18	API NO:	31-097-51496-00-01
FIELD	US. SALT BRINE FIELD		
COUNTY	SCHUYLER	STATE	NEW YORK
LOCATION:		ELEVATIONS: KB - DF - GL 687 FT	MEASURED DEPTH
LAT 42.423106	LONG 76.896697	DATE	22-SEP-2011