

Company: HUSKY OIL OPERATIONS LIMITED Well: HUSKY et al KEELE RIVER L-52 Field: NORTH CLOVERLEAF Province: NORTHWEST TERRITORIES		Schlumberger *** MD ***	
Province: NORTHWEST TERRITORIES Field: NORTH CLOVERLEAF Location: LSD: L-52 Well: HUSKY et al KEELE RIVER L-52 Company: HUSKY OIL OPERATIONS LIMITED		HOSTILE NATURAL GAMMA RAY SPECTROSCOPY LOG NEB COPY	
LOCATION LSD: L-52 UMWID: 300L526410124450		Elev.: K.B. 314.42 m G.L. 310.17 m D.F. 314.12 m	
Permanent Datum: GROUND LEVEL Log Measured From: KELLY BUSHING Drilling Measured From: KELLY BUSHING		Elev.: 310.17 m 4.2 m above Perm. Datum	
API Serial No. 2052			
Logging Date	16-Mar-2008		
Run Number	ONE		
Depth Driller	885 m		
Schlumberger Depth	887 m		
Bottom Log Interval	858.6 m		
Top Log Interval	252 m		
Casing Driller Size @ Depth	244 500 mm @ 252 m		
Casing Schlumberger	252 m		
Bit Size	216.000 mm		
Type Fluid In Hole	GEL POLYMER		
Density	1050 kg/m ³		
Fluid Loss	6 cm ³		
Source Of Sample	FLOWLINE		
RM @ Measured Temperature	1.320 ohm.m @ 19 degC		
RMF @ Measured Temperature	2.092 ohm.m @ 18 degC		
RMC @ Measured Temperature	1.204 ohm.m @ 18 degC		
Source RMF	PRESSED		
RM @ MRT	1.089 @ 27 1.721 @ 27		
Maximum Recorded Temperatures	27 degC		
Circulation Stopped	16-Mar-2008		
Logger On Bottom	16-Mar-2008		
Unit Number	4301		
Recorded By	JENNIFER ROLLINGS		
Witnessed By	BARRY JOHNSON		

DEPTH SUMMARY LISTING

Date Created: 16-MAR-2008 22:53:19

Depth System Equipment

Depth Measuring Device		Tension Device		Logging Cable	
Type:	IDW-B	Type:	CMTD-B/A	Type:	7-46A XXS
Serial Number:	6423	Serial Number:	2565	Serial Number:	6199
Calibration Date:	15-FEB-2008	Calibration Date:	15-FEB-2008	Length:	7800.14 M
Calibrator Serial Number:	4	Calibrator Serial Number:	-999	Conveyance Method: Wireline Rig Type: LAND	
Calibration Cable Type:	7-46P	Calibration Gain:	0.88		
Wheel Correction 1:	-4	Calibration Offset:	336.00		
Wheel Correction 2:	-5				

Depth Control Parameters

Log Sequence:	First Log In the Well
Rig Up Length At Surface:	51.60 M
Rig Up Length At Bottom:	51.60 M
Rig Up Length Correction:	0.00 M
Stretch Correction:	0.50 M
Tool Zero Check At Surface:	0.00 M

Depth Control Remarks

1. IDW IS PRIMARY DEPTH MEASUREMENT
2. Z-CHART USED AS SECONDARY DEPTH MEASUREMENT
3. MAIN PASS TIED INTO DOWN LOG AT BOTTOM AS PER SLB DEPTH PROCEDURE
4. CMTD HAS DONE 3 JOBS PRIOR TO THIS RIH
5.
6.

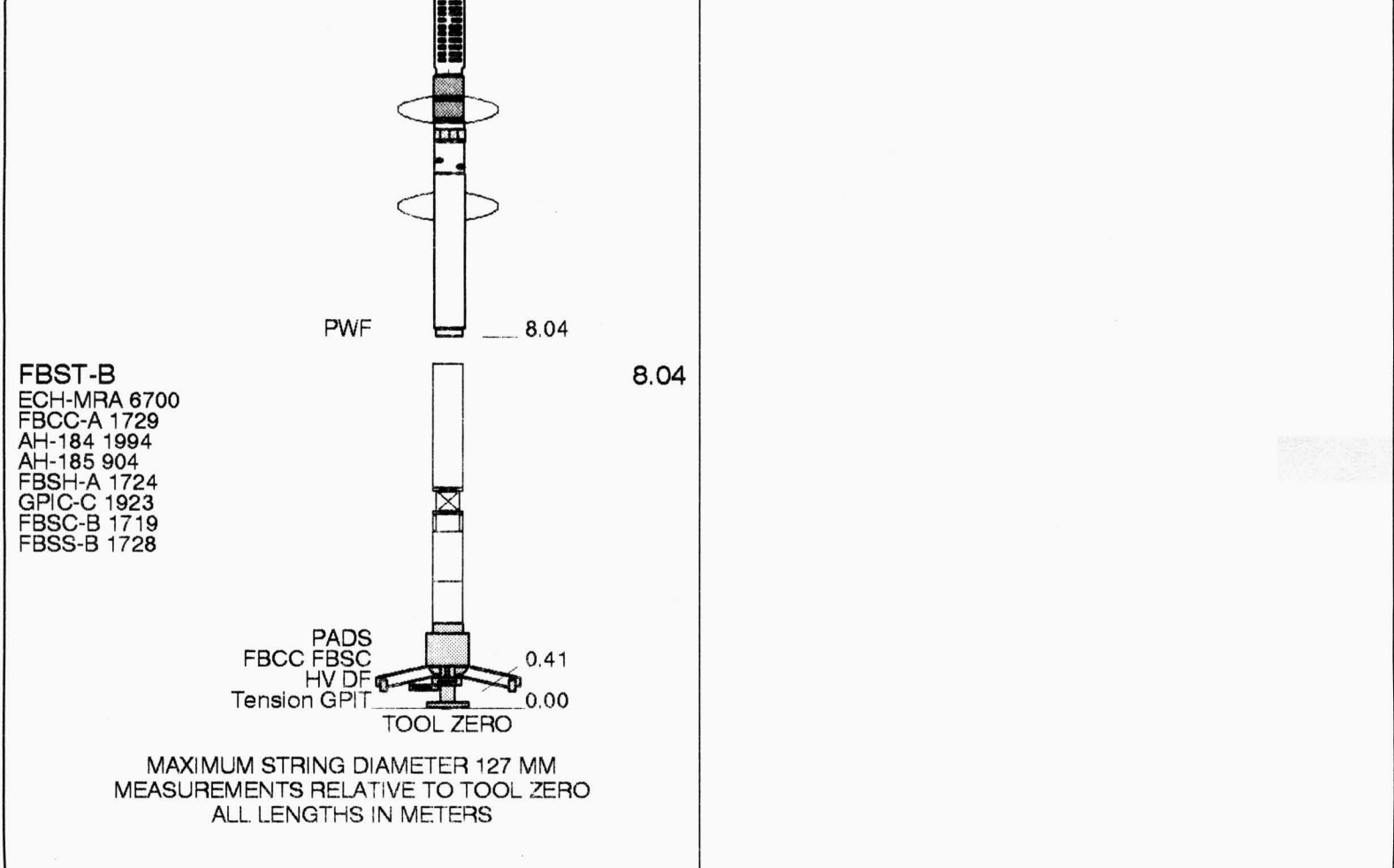
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OTHER SERVICES1			OTHER SERVICES2		
OS1: FMI-DSI-PPC-HNGS			OS1:		
OS2: AIT-PEX-CMR-ECS-TLD2			OS2:		
OS3: MDT POSSIBLE			OS3:		
OS4: MSCT POSSIBLE			OS4:		
OS5:			OS5:		
REMARKS: RUN NUMBER 1			REMARKS: RUN NUMBER 2		
ALL INTERVALS CONFIRMED ON LOCATION					
OPERATOR LICENSE NO. IS 1171, WID IS 2052					
PPC RAN CENTRALIZED FOR CEMENT & HOLE VOLUME, ALL ARMS SET TO POWERED					
PRESSURE APPLIED TO PPC AS REQUIRED					
DSI RAN CENTRALIZED WITH CMEZS AND PPC					
DSI RAN IN P&S MODE AND UPPER & LOWER DIPOLE MODES					
REPEAT PASS: TD -100M ABOVE TD					
ALL INTERVALS: TD-SURFACE CASING					
CALIPER NOT REPEATING DUE TO TOOL IN DIFFERENT AXIS ON MAIN PASS					
LOGGERS DEPTH IS SHALLOW THAN DRILLERS DUE TO FILL IN HOLE					
DSI RELABELLED IN FIELD FOR FINAL PRINTS					
MAXIMUM TEMPERATURE TAKEN FROM HEAD THEROMETERS					
LRAT: READY ON ARRIVAL					
LAT: SUNDAY MARCH 16 11:30					
RIG UP STARTED: MARCH 16 @ 20:00					
RIG: AKITA 14					
CREW: LARRY DUDUS, BILLY LIM, GRANT PROPERZI, RICK JACOBS					
RUN 1			RUN 2		
SERVICE ORDER #:		11958997	SERVICE ORDER #:		
PROGRAM VERSION:		15C0-309	PROGRAM VERSION:		
FLUID LEVEL:			FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

RUN 1		RUN 2	
SURFACE EQUIPMENT			
GSR-U 1237 GSR-U/Y WITM (DTS)-A			
DOWNHOLE EQUIPMENT			
LEH-QT 2657			32.62
LEH-QT 2657			
DTC-H 9397	CTEM		31.45
ECH-KC 10485	TelStatus		30.82
	ToolStatu		
SGT-N	Gamma Ray		30.54
SGH-K 3161			30.82
SGC-TB 10388			
HNGS-BA	Upper_1		28.44
HNGS-BA 163	Lower_2		28.23
HNSH-BA 160			29.14
HNGC-B	HNGC Stat		26.11
HNGH-A 346			26.64
PPC1-B	Callipers		25.23
PPC1-B 8149			25.58
PPC_CAL_STD 8149	PPC_Cartr		23.59
DSST-B			23.59
SPAC-B 8321			
ECH-SD 8400			
SMDR-BD 8400			
SSIJ-BA 8317			
SMDX-AA 8315			

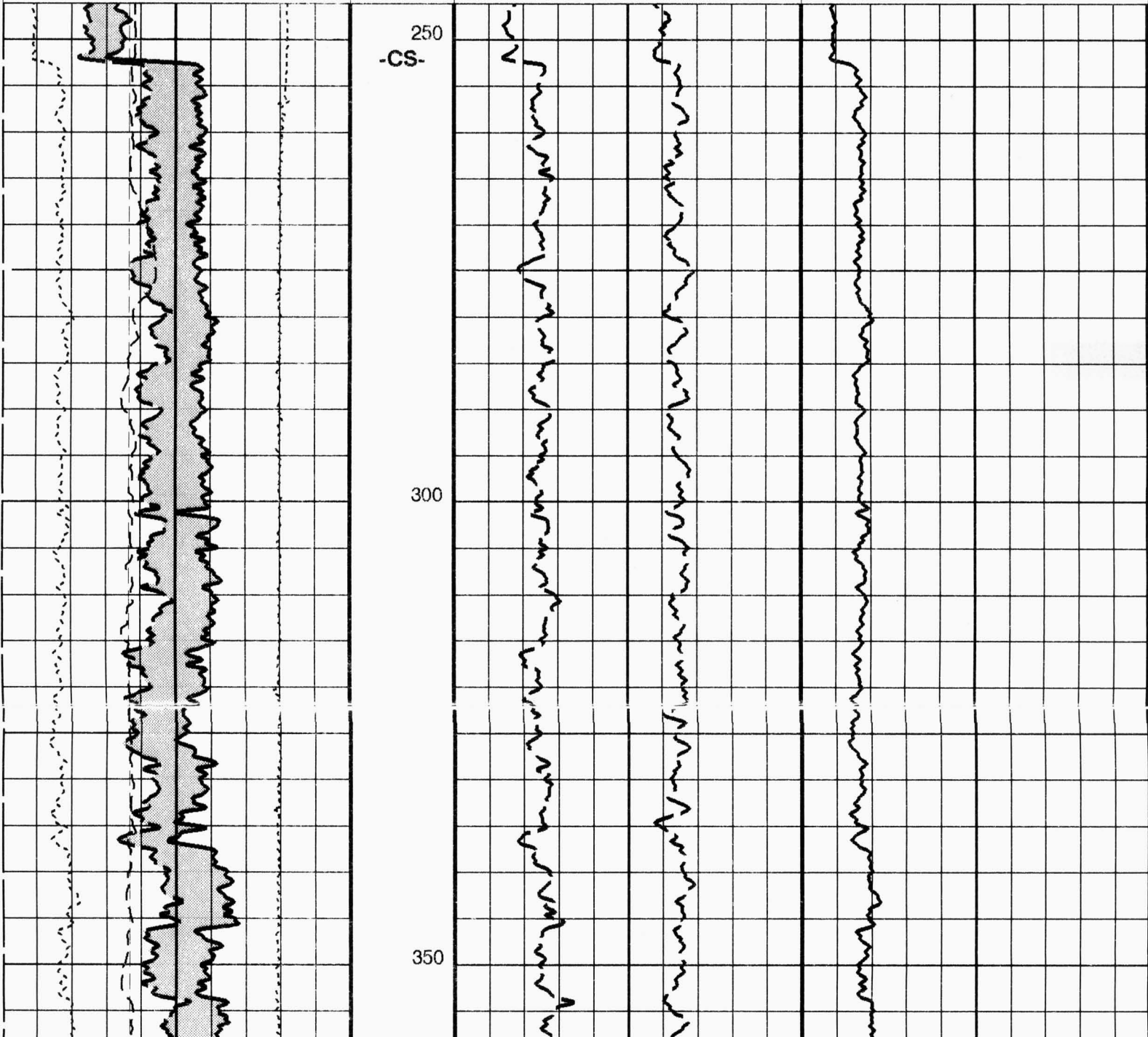
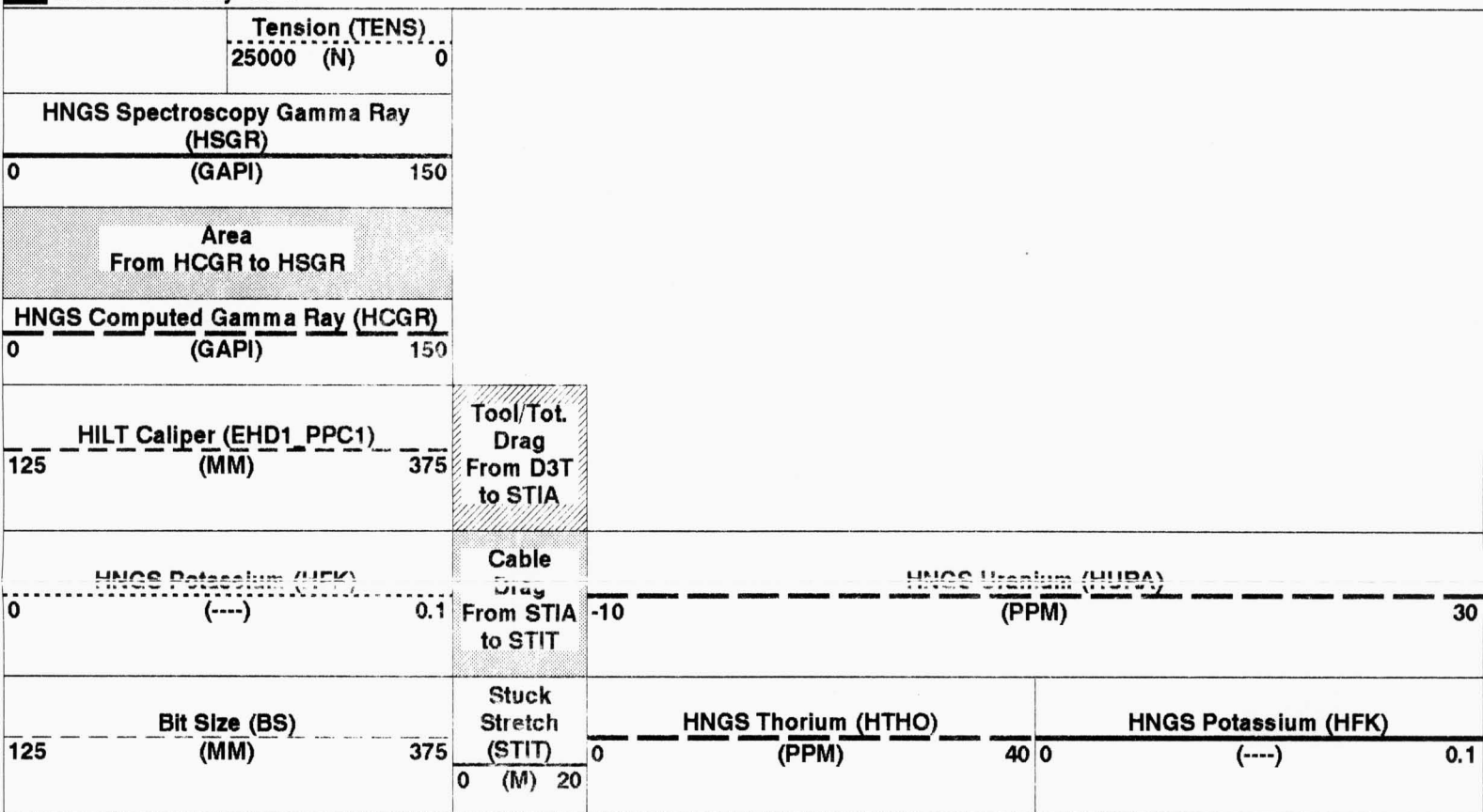


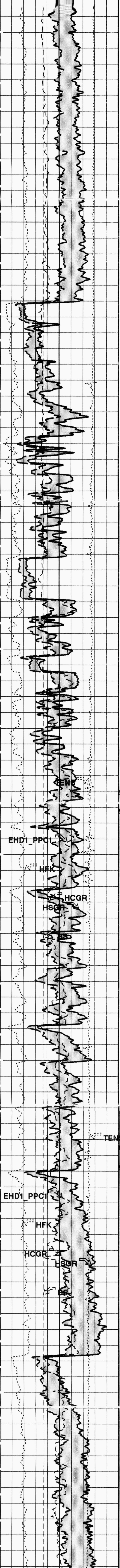
Company: HUSKY OIL OPERATIONS LIMITED Well: HUSKY et al KEELE RIVER L-52

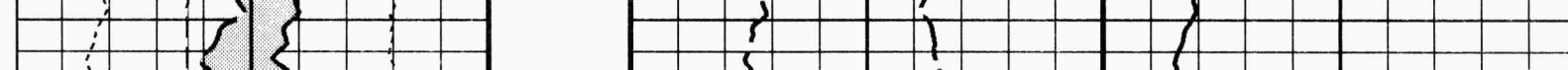
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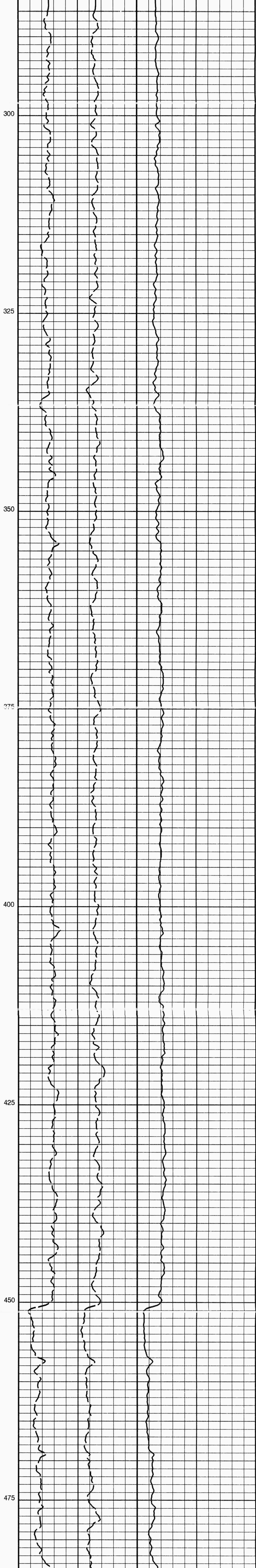
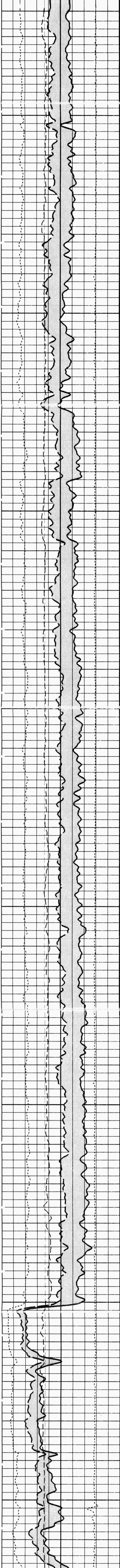
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MCM				
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PPC1-B	15C0-309	HNGC-B	SPC-3530-NUCL	
HNGS-BA	SPC-3530-NUCL	SGT-N	15C0-309	
DTC-H	9397			

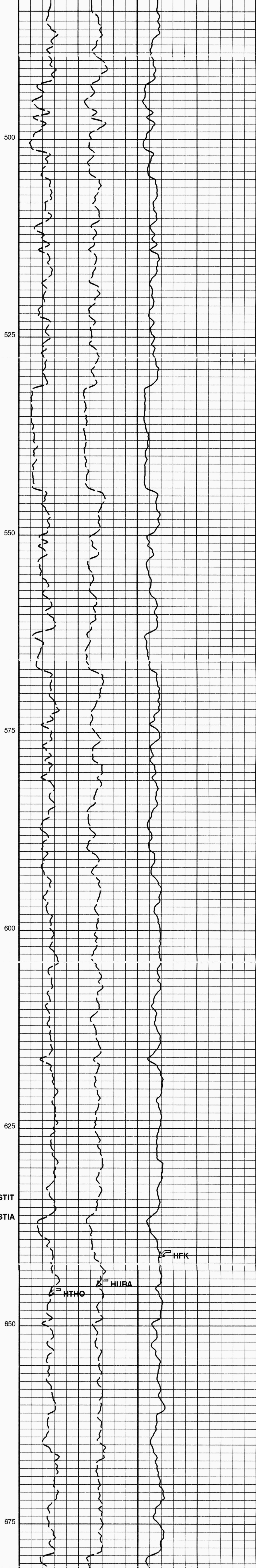
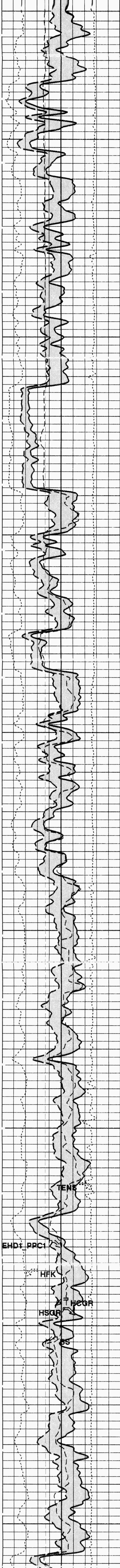
PIP SUMMARY	
Time Mark Every 60 S	

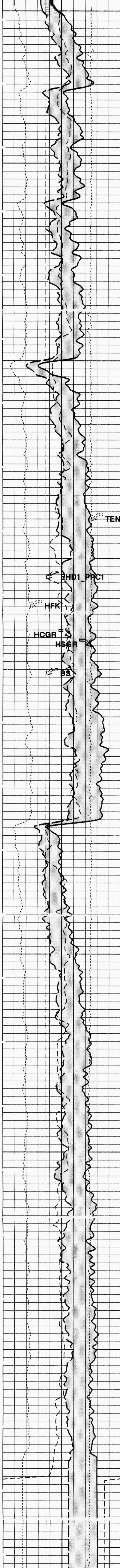












700

725

TENS

STIT

STIA

750

BHD1

PPC1

HFK

HCGR

HGR

BS

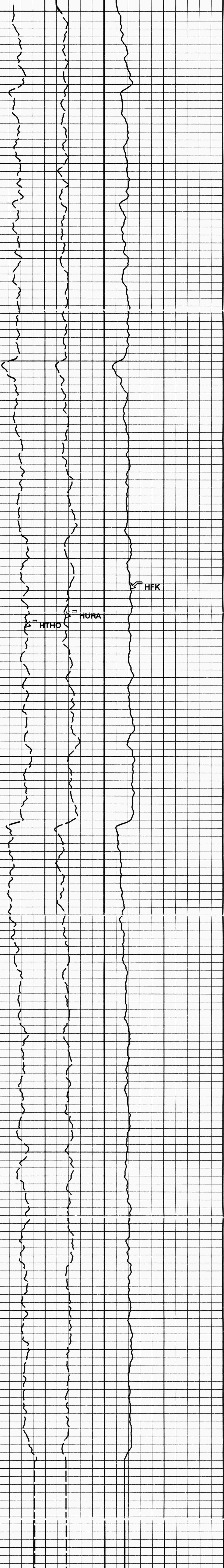
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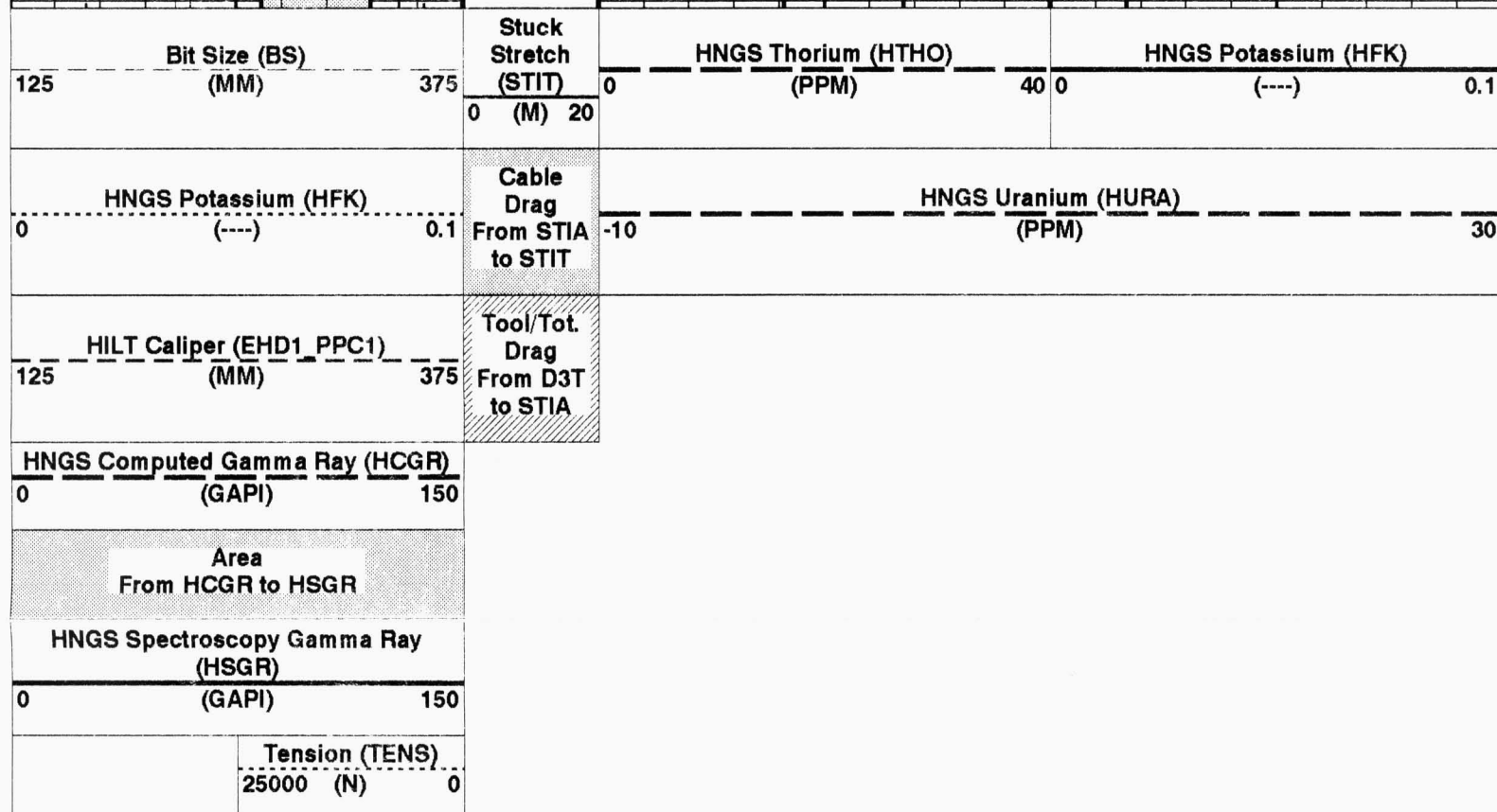
875



HFK

HTHO

HURA



Time Mark Every 60 S

DLIS Name	Description	Value	
BHS	DSST-B: Dipole Shear Imager - B		
GCSE	Borehole Status	OPEN	
	Generalized Caliper Selection	BS	
	PPC1-B: Powered Positioning Device/Caliper 1		
	PPC1 Caliper Type	CAL STD	
CLBD_PPC	PPC Calibration data selection	ROM	
	HNGS-BA: Hostile Natural Gamma Ray Sonde		
BAR1	HNGS Detector 1 Barite Constant	1	
BAR2	HNGS Detector 2 Barite Constant	1	
BHK	HNGS Borehole Potassium Correction Concentration	0	
BHS	Borehole Status	OPEN	
CSD1	Inner Casing Outer Diameter	0	MM
CSD2	Outer Casing Outer Diameter	0	MM
CSW1	Inner Casing Weight	0	KG/M
CSW2	Outer Casing Weight	0	KG/M
DBCC	HNGS Barite Constant Correction Flag	NONE	
GCSE	Generalized Caliper Selection	BS	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	0.000207406	
HALF	HNGS Alpha Filter Length	1524	MM
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	NATU	
HNPE	HNGS Processing Enable	YES	
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	1.3	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	1.3	CPS
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES	
TPOS	Tool Position	CENT	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	1.01443	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.01806	
	SGT-N: Scintillation Gamma Ray Tool - N		
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	BS	
	DIR: Directional Survey Computation		
SPVD	TVD of Starting Point	0	M
TIMD	Along-hole depth of Tie-in Point	260	M
TIVD	TVD of Tie-in Point	260	M
	HOLEV: Integrated Hole/Cement Volume		
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	BS	
	STI: Stuck Tool Indicator		
LBFR	Trigger for MAXIS First Reading Label	TDL	
STKT	STI Stuck Threshold	0.762	M
TDD	Total Depth - Driller	895.00	M
TDL	Total Depth - Logger	887.00	M
	System and Miscellaneous		
BS	Bit Size	216.000	MM
DFD	Drilling Fluid Density	1050.00	K/M3
DO	Depth Offset for Playback	0.0	M
DORL	Depth Offset for Repeat Analysis	0.0	M
PP	Playback Processing	NORMAL	

Format: HNGSNGT S5 Vertical Scale: 1:240 Graphics File Created: 16-Mar-2008 23:14

MCM

FBST-B	15C0-309	DSST-B	15C0-309
PPC1-B	15C0-309	HNGC-B	SPC-3530-NUCL
HNGS-BA	SPC-3530-NUCL	SGT-N	15C0-309
DTC-H	9397		

DEFAULT	FMI DSI CAL NGS 013LUP	FN:21	PRODUCER	16-Mar-2008 21:59
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REDUCED	FMI_DSI_CAL_NGS_015PUP	FN:25	PRODUCER	16-Mar-2008 23:14

Company: HUSKY OIL OPERATIONS LIMITED

Well: HUSKY et al KEELE RIVER L-52

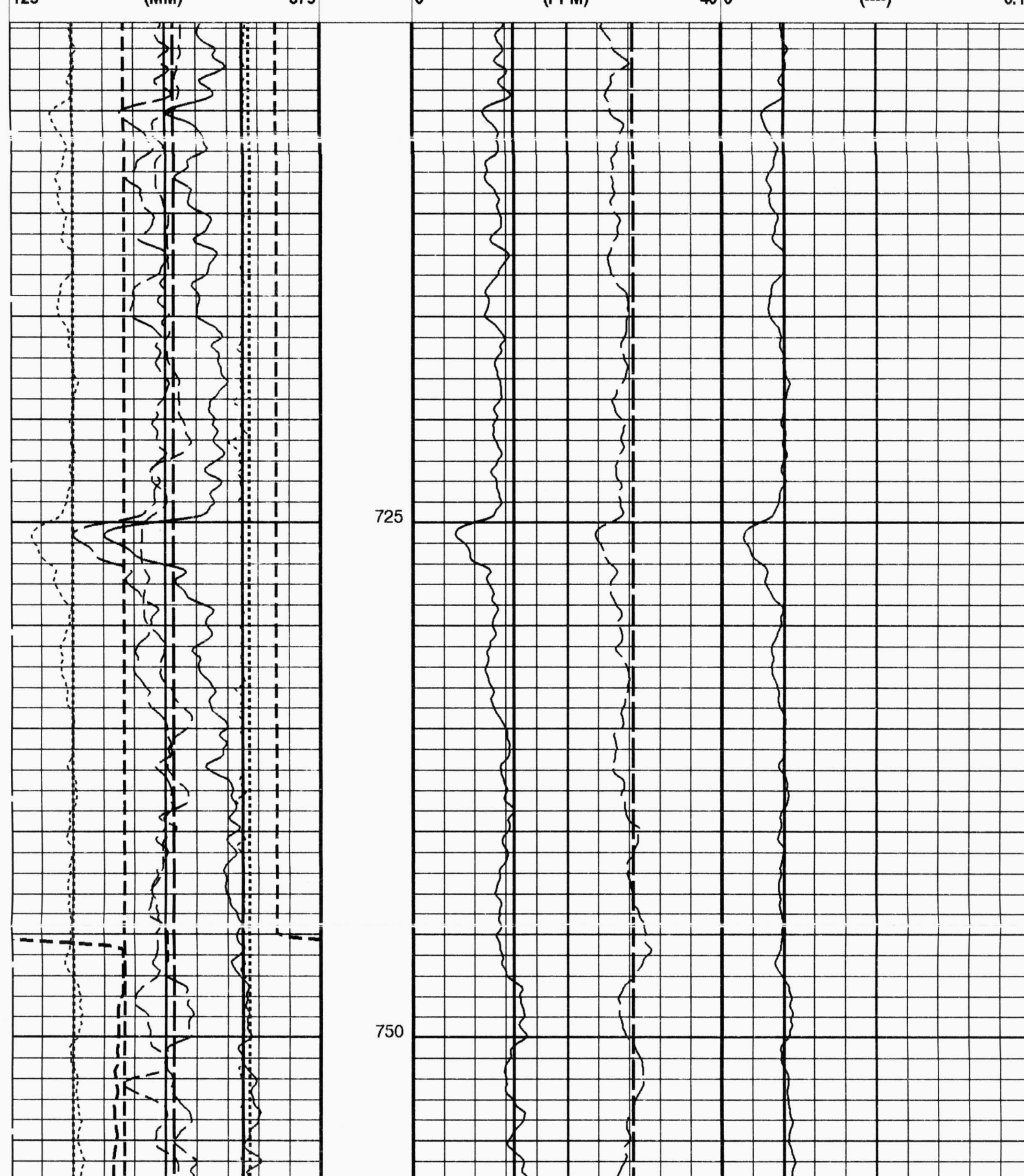
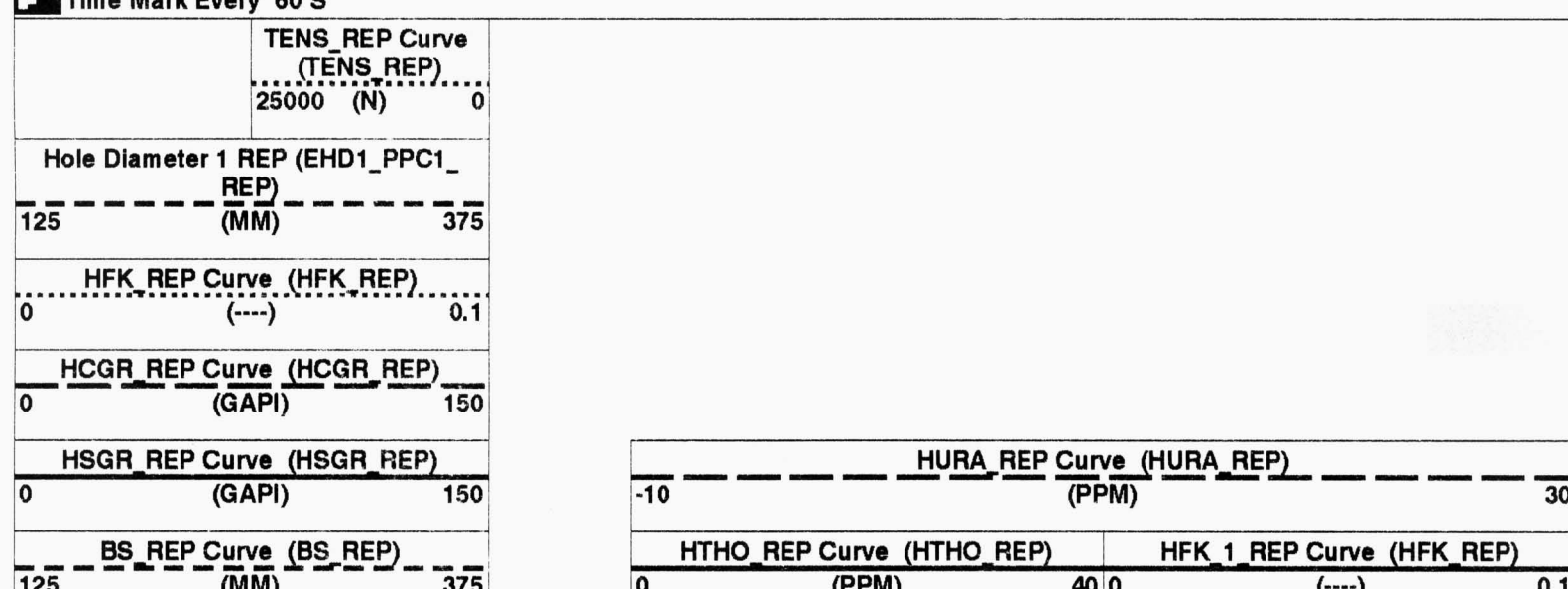
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DEFAULT	FMI_DSI_CAL_NGS_012PUP	FN:19	PRODUCER	16-Mar-2008 21:55	887.4 M	700.6 M

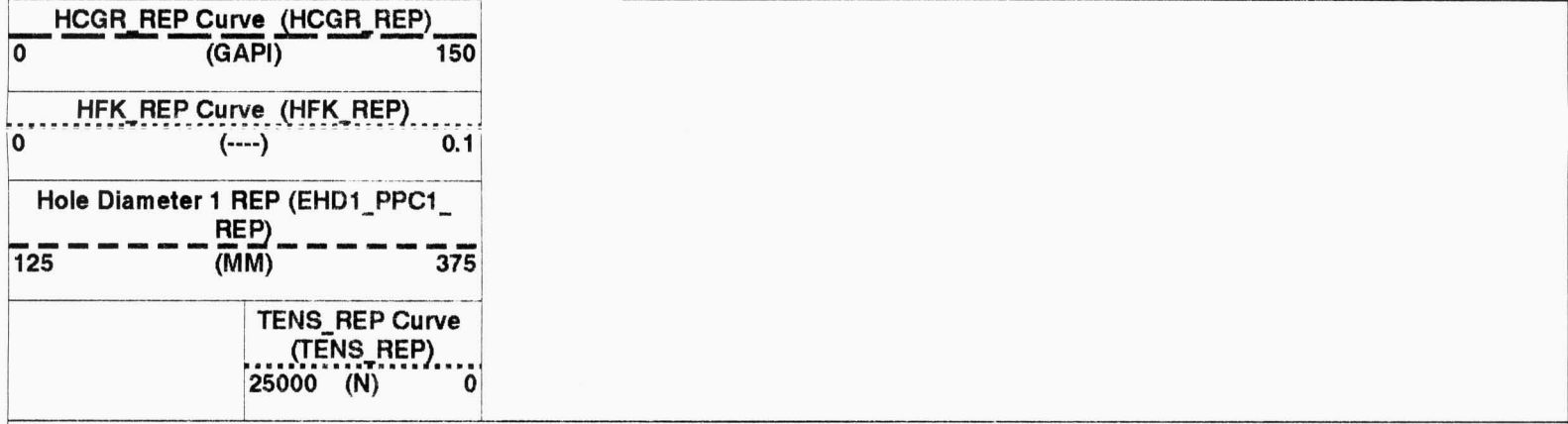
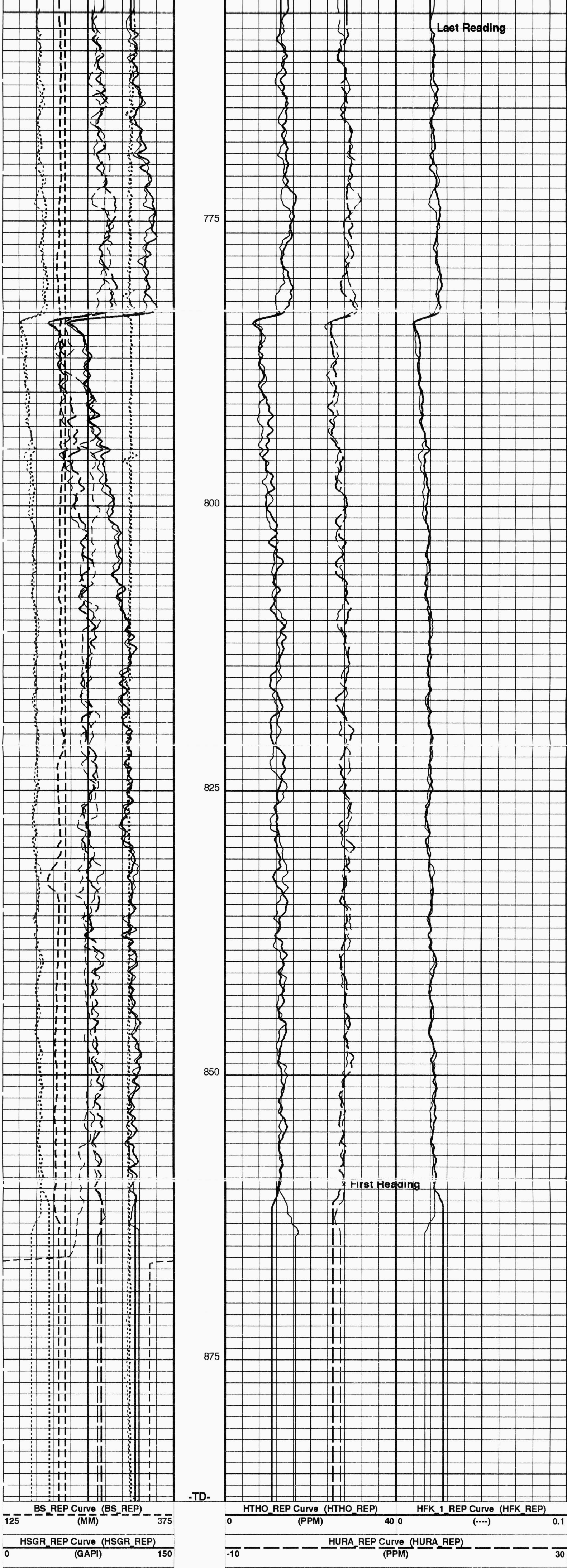
MCM

FBST-B	15C0-309	DSST-B	15C0-309
PPC1-B	15C0-309	HNGC-B	SPC-3530-NUCL
HNGS-BA	SPC-3530-NUCL	SGT-N	15C0-309
DTC-H	9397		

PIP SUMMARY

Time Mark Every 60 S





PIP SUMMARY

Time Mark Every 60 S

Parameters		
DLIS Name	Description	Value
BHS	DSST-B: Dipole Shear Imager - B	
GCSE	Borehole Status	OPEN
	Generalized Caliper Selection	BS
PPC1-B: Powered Positioning Device/Caliper 1	PPC1 Caliper Type	CAL STD
CLBD_PPC	PPC Calibration data selection	ROM
HNGS-BA: Hostile Natural Gamma Ray Sonde		
BAR1	HNGS Detector 1 Barite Constant	1
BAR2	HNGS Detector 2 Barite Constant	1
BHK	HNGS Borehole Potassium Correction Concentration	0
BHS	Borehole Status	OPEN
CSD1	Inner Casing Outer Diameter	0 MM
CSD2	Outer Casing Outer Diameter	0 MM
CSW1	Inner Casing Weight	0 KG/M
CSW2	Outer Casing Weight	0 KG/M
DBCC	HNGS Barite Constant Correction Flag	NONE
GCSE	Generalized Caliper Selection	BS
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW
HABK	HNGS Borehole Potassium Running Average	0.000207406
HALF	HNGS Alpha Filter Length	1524 MM
HCRB	HNGS Apply Borehole Potassium Correction	NONE
HMWM	Mud Weighting Material	NATU
HNPE	HNGS Processing Enable	YES
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	1.3 CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	1.3 CPS
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES
TPQS	Tool Position	CENT
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	1.01443
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.01806
SGT-N: Scintillation Gamma Ray Tool - N		
BHS	Borehole Status	OPEN
GCSE	Generalized Caliper Selection	BS
DIR: Directional Survey Computation		
SPVD	TVD of Starting Point	0 M
TMVD	TVD of Tie-in Point	260 M
TIVD	TVD of Tie-in Point	260 M
HOLEV: Integrated Hole/Cement Volume		
BHS	Borehole Status	OPEN
GCSE	Generalized Caliper Selection	BS
System and Miscellaneous		
BS	Bit Size	216.000 MM
DFD	Drilling Fluid Density	1050.00 K/M3
DO	Depth Offset for Playback	0.0 M
DORL	Depth Offset for Repeat Analysis	0.0 M
PP	Playback Processing	OFF

FBST-B	15C0-309	DSST-B	15C0-309
PPC1-B	15C0-309	HNGC-B	SPC-3530-NUCL
HNGS-BA	SPC-3530-NUCL	SGT-N	15C0-309
DTC-H	9397		

Input DLIS Files

DEFAULT	FMI_DSI_CAL_NGS_015PUP	FN:24	PRODUCER	16-Mar-2008 23:14	889.3 M	241.6 M
DEFAULT	FMI_DSI_CAL_NGS_012PUP	FN:19	PRODUCER	16-Mar-2008 21:55	887.4 M	700.6 M

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
Full-Bore Scanner - B Wellsite Calibration - Caliper Calibration							
Before: 11-Mar-2008 11:34							
Caliper 1 Small Jig	203.2	N/A	193.8	N/A	N/A	N/A	MM
Caliper 2 Small Jig	203.2	N/A	200.2	N/A	N/A	N/A	MM
Caliper 1 Large Jig	304.8	N/A	288.1	N/A	N/A	N/A	MM
Caliper 2 Large Jig	304.8	N/A	294.3	N/A	N/A	N/A	MM
Full-Bore Scanner - B Wellsite Calibration - CROUZET ACCELEROMETER PROM HAS BEEN READ CORRECTLY							
Before: 16-Mar-2008 20:48							
TEMPERATURE REFERENCE :	N/A	N/A	20	N/A	N/A	N/A	DEGC
YEAR OF CALIBRATION :	N/A	N/A	6	N/A	N/A	N/A	
MONTH OF CALIBRATION :	N/A	N/A	12	N/A	N/A	N/A	
SERIAL NUMBER :	N/A	N/A	1076	N/A	N/A	N/A	
Full-Bore Scanner - B Wellsite Calibration - CROUZET MAGNETOMETER PROM HAS BEEN READ CORRECTLY							
Before: 16-Mar-2008 20:48							
TEMPERATURE REFERENCE :	N/A	N/A	20	N/A	N/A	N/A	DEGC
YEAR OF CALIBRATION :	N/A	N/A	6	N/A	N/A	N/A	
MONTH OF CALIBRATION :	N/A	N/A	5	N/A	N/A	N/A	
SERIAL NUMBER :	N/A	N/A	725	N/A	N/A	N/A	
Powered Positioning Develce/Caliper 1 Wellsite Calibration - PPC1 Caliper Calibration							
Before: 11-Mar-2008 5:39							
PPC1 Radius 1 Raw Small Radius	88.90	N/A	112.4	N/A	N/A	12.70	MM
PPC1 Radius 1 Raw Large Radius	203.2	N/A	219.8	N/A	N/A	12.70	MM
PPC1 Radius 2 Raw Small Radius	88.90	N/A	85.19	N/A	N/A	12.70	MM
PPC1 Radius 2 Raw Large Radius	203.2	N/A	197.3	N/A	N/A	12.70	MM
PPC1 Radius 3 Raw Small Radius	88.90	N/A	110.5	N/A	N/A	12.70	MM
PPC1 Radius 3 Raw Large Radius	203.2	N/A	217.4	N/A	N/A	12.70	MM
PPC1 Radius 4 Raw Small Radius	88.90	N/A	86.44	N/A	N/A	12.70	MM
PPC1 Radius 4 Raw Large Radius	203.2	N/A	197.8	N/A	N/A	12.70	MM
Hostile Natural Gamma Ray Sonde Wellsite Calibration - Detector 1 Check							
Master: 4-Jan-2008 9:55 Before: 13-Mar-2008 10:56							
Na 511 Peak Loc	40.00	39.78	39.64	N/A	N/A	1.000	
Na 511 Peak Res	15.50	15.38	14.17	N/A	N/A	2.000	%
High Voltage	1150	1258	1230	N/A	N/A	N/A	V
Na 1785 Peak Loc	142.6	143.7	143.0	N/A	N/A	7.000	
Na 1785 Peak Res	8.500	8.442	8.769	N/A	N/A	2.000	%
Temperature	15.50	22.14	6.570	N/A	N/A	N/A	DEGC
Na Count Rate	45.00	35.30	33.29	N/A	N/A	8.000	CPS
Hostile Natural Gamma Ray Sonde Wellsite Calibration - Detector 2 Check							
Master: 4-Jan-2008 9:55 Before: 13-Mar-2008 10:56							
Na 511 Peak Loc	40.00	39.66	39.76	N/A	N/A	1.000	
Na 511 Peak Res	15.50	14.86	15.01	N/A	N/A	2.000	%
High Voltage	1150	1273	1246	N/A	N/A	N/A	V
Na 1785 Peak Loc	142.6	142.7	143.3	N/A	N/A	7.000	
Na 1785 Peak Res	8.500	8.234	8.636	N/A	N/A	2.000	%
Temperature	15.50	21.49	5.965	N/A	N/A	N/A	DEGC
Na Count Rate	45.00	35.28	33.29	N/A	N/A	8.000	CPS
Hostile Natural Gamma Ray Sonde Wellsite Calibration - Ratio Of Detector 1 To Detector 2							
Master: 4-Jan-2008 9:55 Before: 13-Mar-2008 10:56							
Coincidence Count Rate Ratio	1.000	1.001	0.9992	N/A	N/A	0.05000	
Hostile Natural Gamma Ray Sonde Master Calibration - Detector 1 Calibration							
Master: 4-Jan-2008 9:50							
Na 511 Peak Set Point	40.00	41.00	--	--	--	--	
Th Peak Loc	209.6	211.0	--	--	--	--	
Th Peak Res	7.000	6.765	--	--	--	--	%
Background Count Rate	142.5	82.05	--	--	--	--	CPS
Gain Ratio	1.000	1.009	--	--	--	--	
Hostile Natural Gamma Ray Sonde Master Calibration - Detector 2 Calibration							
Master: 4-Jan-2008 9:50							
Na 511 Peak Set Point	40.00	41.00	--	--	--	--	
Th Peak Loc	209.6	211.2	--	--	--	--	
Th Peak Res	7.000	7.094	--	--	--	--	%
Background Count Rate	142.5	80.00	--	--	--	--	CPS
Gain Ratio	1.000	1.013	--	--	--	--	
Scintillation Gamma Ray Tool - N Wellsite Calibration - Detector Calibration							
Before: 13-Mar-2008 8:59							
Gamma Ray (Jig - Bkg)	165.2	N/A	165.2	N/A	N/A	15.02	GAPI
Gamma Ray (Calibrated)	167.0	N/A	167.0	N/A	N/A	15.00	GAPI

Full-Bore Scanner - B / Equipment Identification

Primary Equipment:		
FullBore Scanner Sonde	FBSS - B	1728
FullBore Scanner Sonde Upper part	FBSH - A	1724
FullBore Scanner Sonde Cartridge	FBSC - B	1719
GPIT Cartridge - C	GPIC - C	1923
Insulating Sub	AH - 185	904
Flex Joint	AH - 184	1994
FullBore Scanner Control Cartridge	FBCC - A	1729
Auxiliary Equipment:		
Electronics Cartridge Housing	ECH - MRA	6700

Full-Bore Scanner - B Wellsite Calibration

Caliper Calibration

Phase	Caliper 1 Small Jig MM	Value	Phase	Caliper 2 Small Jig MM	Value
Before		193.8	Before		200.2
	172.7 (Minimum) 203.2 (Nominal) 233.7 (Maximum)			172.7 (Minimum) 203.2 (Nominal) 233.7 (Maximum)	
Phase	Caliper 1 Large Jig MM	Value	Phase	Caliper 2 Large Jig MM	Value
Before		288.1	Before		294.3
	259.1 (Minimum) 304.8 (Nominal) 350.5 (Maximum)			259.1 (Minimum) 304.8 (Nominal) 350.5 (Maximum)	

Before: 11-Mar-2008 11:34

Powered Positioning Develce/Caliper 1 / Equipment Identification

Primary Equipment:		
PPC Powered Positioning Device/Caliper	PPC1 - B	8149
PPC1 Caliper Standard	PPC_ -	8149
Auxiliary Equipment:		

Powered Positioning Develce/Caliper 1 Wellsite Calibration

PPC1 Caliper Calibration

Phase	PPC1 Radius 1 Raw Small Radius MM	Value	Phase	PPC1 Radius 1 Raw Large Radius MM	Value
Before		112.4	Before		219.8
	30.48 (Minimum) 88.90 (Nominal) 142.2 (Maximum)			154.9 (Minimum) 203.2 (Nominal) 246.4 (Maximum)	
Phase	PPC1 Radius 2 Raw Small Radius MM	Value	Phase	PPC1 Radius 2 Raw Large Radius MM	Value
Before		85.19	Before		197.3
	30.48 (Minimum) 88.90 (Nominal) 142.2 (Maximum)			154.9 (Minimum) 203.2 (Nominal) 246.4 (Maximum)	
Phase	PPC1 Radius 3 Raw Small Radius MM	Value	Phase	PPC1 Radius 3 Raw Large Radius MM	Value
Before		110.5	Before		217.4
	30.48 (Minimum) 88.90 (Nominal) 142.2 (Maximum)			154.9 (Minimum) 203.2 (Nominal) 246.4 (Maximum)	
Phase	PPC1 Radius 4 Raw Small Radius MM	Value	Phase	PPC1 Radius 4 Raw Large Radius MM	Value
Before		86.44	Before		197.8
	30.48 (Minimum) 88.90 (Nominal) 142.2 (Maximum)			154.9 (Minimum) 203.2 (Nominal) 246.4 (Maximum)	

Before: 11-Mar-2008 5:39

Hostile Natural Gamma Ray Cartridge - B / Equipment Identification

Primary Equipment:		
HNGC Cartridge	HNGC - B 4	405
Auxiliary Equipment:		
HNGC Housing	HNGH - A	346

Hostile Natural Gamma Ray Sonde / Equipment Identification

Primary Equipment:		
HNGS Sonde	HNGS - BA	163
Auxiliary Equipment:		
HNGS Sonde Housing	HNSH - BA	160
Gamma Source Radioactive	GSR - U	1237

Hostile Natural Gamma Ray Sonde Wellsite Calibration

Detector 1 Check

Phase	Na 511 Peak Loc	Value	Phase	Na 511 Peak Res %	Value	Phase	High Voltage V	Value
Master		39.73	Master		15.38	Master		1258
Before		39.64	Before		14.17	Before		1230
	37.50 (Minimum) 40.00 (Nominal) 43.50 (Maximum)			12.00 (Minimum) 15.50 (Nominal) 19.00 (Maximum)			900.0 (Minimum) 1150 (Nominal) 1600 (Maximum)	
Phase	Na 1785 Peak Loc	Value	Phase	Na 1785 Peak Res %	Value	Phase	Temperature DEGC	Value
Master		143.7	Master		8.442	Master		22.14
Before		143.0	Before		8.769	Before		6.570
	135.0 (Minimum) 142.6 (Nominal) 150.3 (Maximum)			7.000 (Minimum) 8.500 (Nominal) 11.00 (Maximum)			-28.89 (Minimum) 15.50 (Nominal) 60.00 (Maximum)	
Phase	Na Count Rate CPS	Value						
Master		35.30						
Before		33.29						
	10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)							
Master: 4 Jan 2008 9:55 Before: 13 Mar 2008 10:56								

Hostile Natural Gamma Ray Sonde Wellsite Calibration

Detector 2 Check

Phase	Na 511 Peak Loc	Value	Phase	Na 511 Peak Res %	Value	Phase	High Voltage V	Value
Master		39.66	Master		14.86	Master		1273
Before		39.76	Before		15.01	Before		1246
	37.50 (Minimum) 40.00 (Nominal) 43.50 (Maximum)			12.00 (Minimum) 15.50 (Nominal) 19.00 (Maximum)			900.0 (Minimum) 1150 (Nominal) 1600 (Maximum)	
Phase	Na 1785 Peak Loc	Value	Phase	Na 1785 Peak Res %	Value	Phase	Temperature DEGC	Value
Master		142.7	Master		8.234	Master		21.49
Before		143.3	Before		8.636	Before		5.965
	135.0 (Minimum) 142.6 (Nominal) 150.3 (Maximum)			7.000 (Minimum) 8.500 (Nominal) 11.00 (Maximum)			-28.89 (Minimum) 15.50 (Nominal) 60.00 (Maximum)	
Phase	Na Count Rate CPS	Value						
Master		35.28						
Before		33.29						
	10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)							

Hostile Natural Gamma Ray Sonde Wellsite Calibration		
Ratio Of Detector 1 To Detector 2		
Phase	Coincidence Count Rate Ratio	Value
Master		1.001
Before		0.9992
0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)		
Master: 4-Jan-2008 9:55		
Before: 13-Mar-2008 10:56		

Hostile Natural Gamma Ray Sonde Master Calibration														
Detector 1 Calibration														
Phase	Na 511 Peak Set Point		Value	Phase	Th Peak Loc		Value	Phase	Th Peak Res %		Value			
Master			41.00	Master			211.0	Master			6.765			
38.00 (Minimum)			40.00 (Nominal)	201.0 (Minimum)			209.6 (Nominal)	5.000 (Minimum)			7.000 (Nominal)	9.000 (Maximum)		
Phase	Background Count Rate CPS		Value	Phase	Gain Ratio		Value							
Master			82.05	Master			1.009							
10.00 (Minimum)			142.5 (Nominal)	0.9400 (Minimum)			1.000 (Nominal)					1.060 (Maximum)		
Master: 4-Jan-2008 9:50														

Hostile Natural Gamma Ray Sonde Master Calibration																
Detector 2 Calibration																
Phase	Na 511 Peak Set Point		Value	Phase	Th Peak Loc		Value	Phase	Th Peak Res %		Value					
Master			41.00	Master			211.2	Master			7.094					
38.00 (Minimum)			40.00 (Nominal)	43.00 (Maximum)			201.0 (Minimum)	209.6 (Nominal)	218.3 (Maximum)			5.000 (Minimum)	7.000 (Nominal)	9.000 (Maximum)		
Phase	Background Count Rate CPS		Value	Phase	Gain Ratio		Value									
Master			80.00	Master			1.013									
10.00 (Minimum)			142.5 (Nominal)	265.0 (Maximum)			0.9400 (Minimum)						1.000 (Nominal)	1.060 (Maximum)		
Master: 4-Jan-2008 9:50																

Scintillation Gamma Ray Tool - N / Equipment Identification			
Primary Equipment:			
Scintillation Gamma Cartridge	SGC - TB	10388	
Scintillation Gamma Detector	SGD - TAB		
Auxiliary Equipment:			
Scintillation Gamma Housing	SGH - K	3161	
Gamma Source Radioactive	GSR - U/Y		

Scintillation Gamma Ray Tool - N Wellsite Calibration											
Detector Calibration											
Phase	Gamma Ray Background	GAPI	value	Phase	Gamma Ray (Jig - Bkg)	GAPI	Value	Phase	Gamma Ray (Calibrated)	GAPI	Value
Before			10.66	Before			165.2	Before			167.0
0				150.2				152.0			
30.00				165.2				167.0			
120.0				180.2				182.0			
(Minimum)				(Minimum)				(Minimum)			
(Nominal)				(Nominal)				(Nominal)			
(Maximum)				(Maximum)				(Maximum)			
Before: 13-Mar-2008 8:59											

DTS Telemetry Tool / Equipment Identification			
Primary Equipment:			
DTC-H Auxiliary Cartridge	DTCH - A	9397	
DTC-H Telemetry Cartridge	DTCH - A	9397	
Auxiliary Equipment:			
DTCH Telemetry Cartridge Housing	ECH - KC	10485	