



MINIPILOT

COMPANY **PARAMOUNT RESOURCES LTD.**
WELL **PARA ET AL CAMERON L-29**
FIELD **CAMERON HILLS**
PROVINCE/COUNTY **NORTHWEST TERRITORIES**
COUNTRY/STATE **CANADA**
LOCATION **300L296010117300**

FIELD PRINT

LSD SEC TWP RGE Other Services

API Number **2041** COMPENSTATED SONIC
MICROLOG

Permanent Datum GROUND LEVEL, Elevation 754.1 metres
Log Measured From 5.4 M above Permanent Datum
Drilling Measured From KB

Elevations:
KB 759.50
DF 754.10
GL

Date **05-FEB-2006**

Run Number **1**

Depth Driller **1515.50** metres

Depth Logger **1516.70** metres

First Reading **1515.40** metre

Last Reading **436.00** metre

Casing Driller **435.50** metres

Casing Logger **436.00** metres

Bit Size **200.00** mm

Hole Fluid Type **GEL CHEM**

Density / Viscosity **1135.0 kg/M3** **80.00 CP**

PH / Fluid Loss **10.50** **10.00 ml/30Min**

Sample Source **FLOWLINE**

Rm @ Measured Temp **0.92 @ 25.0** ohm-m

Rmf @ Measured Temp **0.69 @ 25.0** ohm-m

Rmc @ Measured Temp **1.12 @ 25.0** ohm-m

Source Rmf / Rmc **PRESS** **FILTER**

Rm @ BHT **0.60 @ 49.0** ohm-m

Time Since Circulation **7.0 HRS**

Max Recorded Temp **49.00** deg C

Equipment Name **COMPACT**

Equipment / Base **QUINT** **GPR**

Recorded By **M. BONNELL**

Witnessed By **B. POWELL**

CIRC. STOP TIME **FEB-05 21:00**

Last Line

BOREHOLE RECORD

Last Edited: 5-FEB-2007 23:19

Bit Size millimetres	Depth From metres	Depth To metres
311.000	0.00	435.50
200.000	435.50	1515.50

CASING RECORD

Type	Size millimetres	Depth From metres	Shoe Depth metres	Weight Kg/metre
SURFACE	219.100	0.00	435.50	35.72

REMARKS

- 1) SOFTWARE ISSUE: WLS 7.01.0195.
- 2) CUSTOMER SCALES AND LOGGED INTERVALS USED
- 3) TOOLS RUN: MAI, MSS, MPD, MDN, MML, ISC, MGS, MTC, MFE, MCG RUN IN COMBINATION
- 4) HARDWARE: MAI: TWO 25.4 MM STANDOFFS
MSS: THREE 25.4 MM STANDOFFS
MDN: DUAL BOWSPRING AND INTERSONDE CRANK
MTC: SIX LEAF CENTRALIZER

5) SERVICE ORDER #: 30073223

SAP #: 4146696

FIELD PRINTS = 1

6) RIG: PD 220

7) SONIC FREE PIPE: FOUND FROM 382-386M

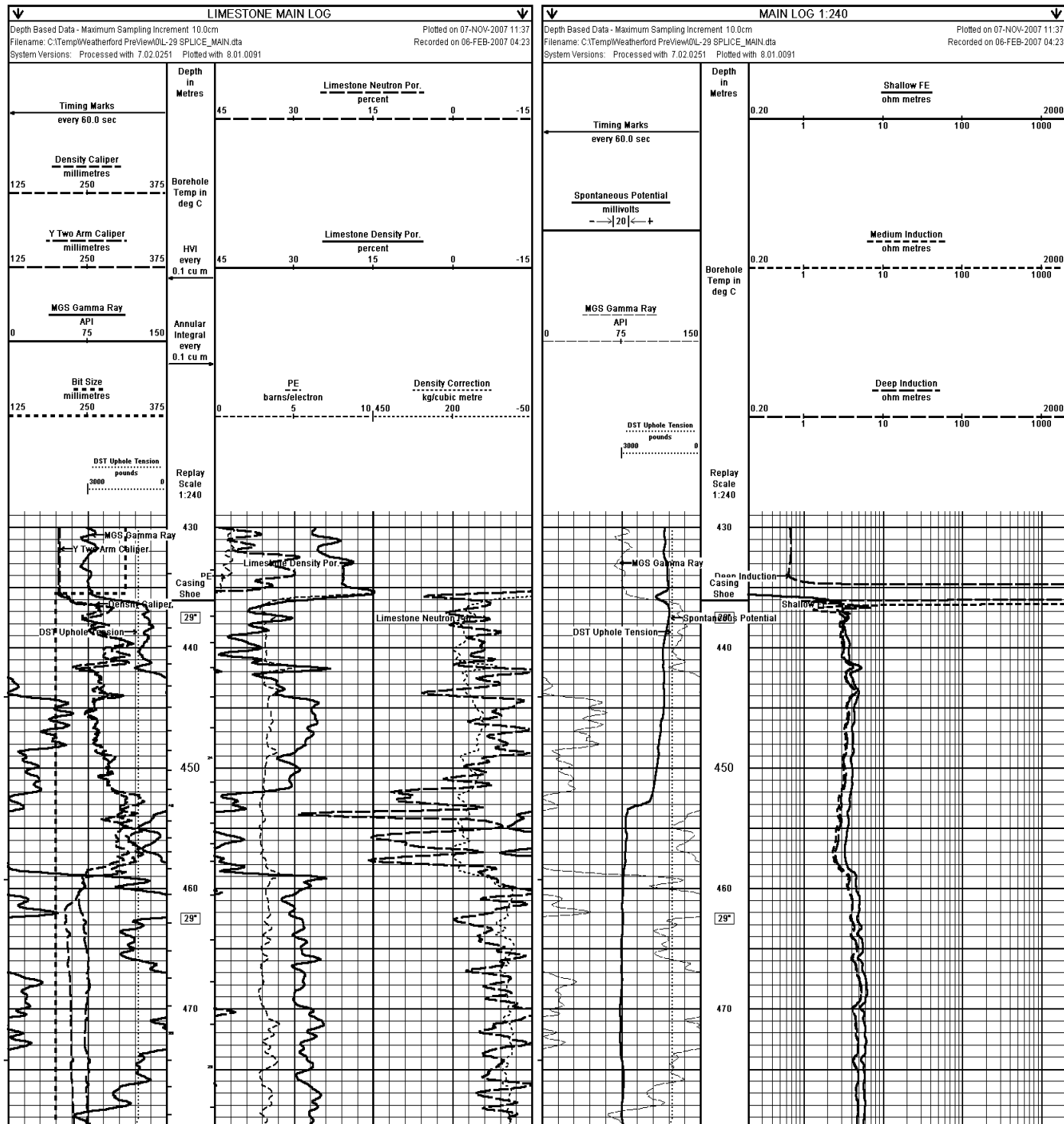
8) HOLE AND CEMENT VOLUMES FROM TD-SURFACE CASING CALCULATED USING DENSITY AND 2-ARM CALIPERS :

HOLE VOLUME = 41.0 CU.M.

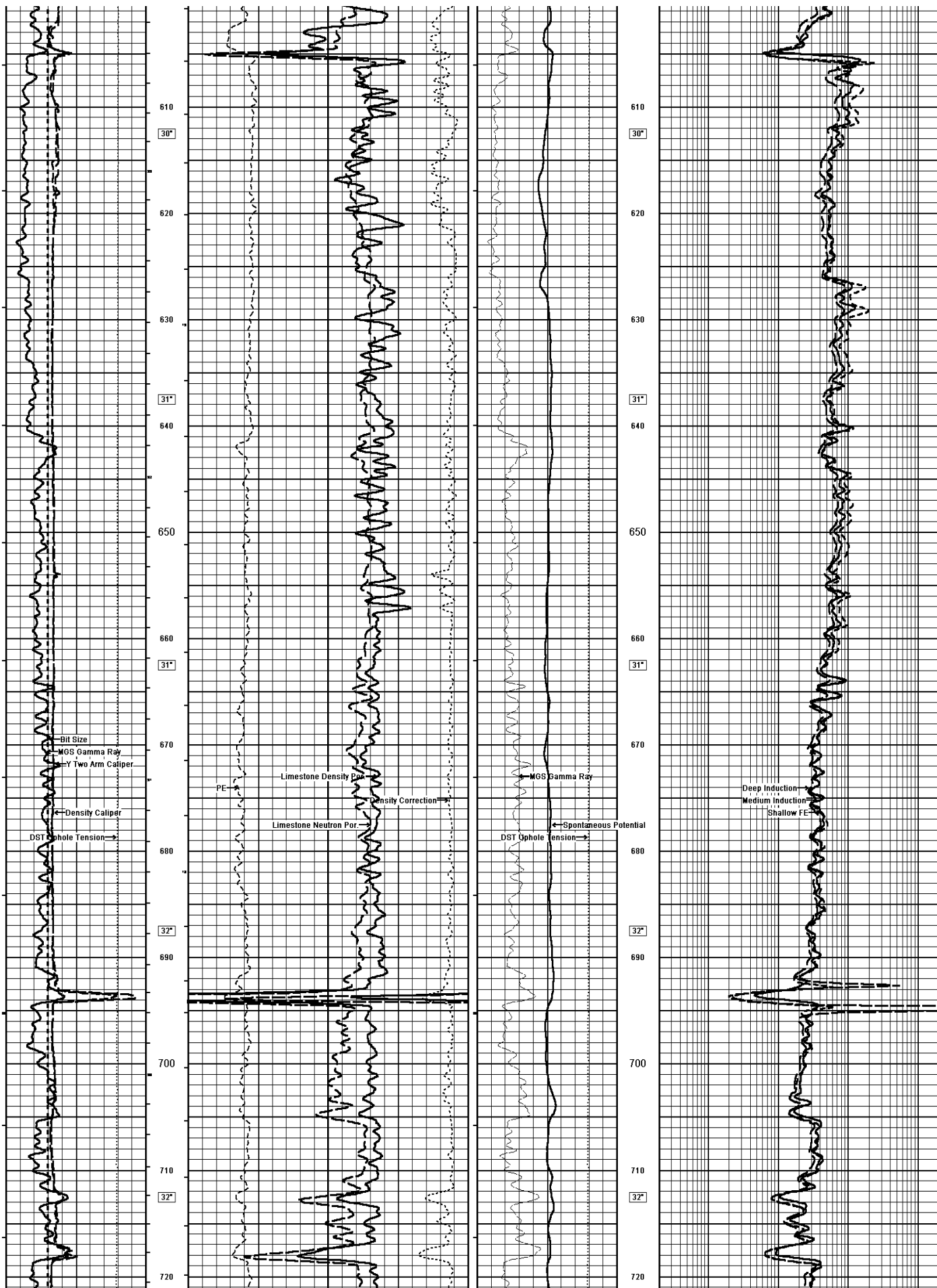
ANNULAR VOLUME USING 139.7 MM PRODUCTION CASING = 24.6 CU.M

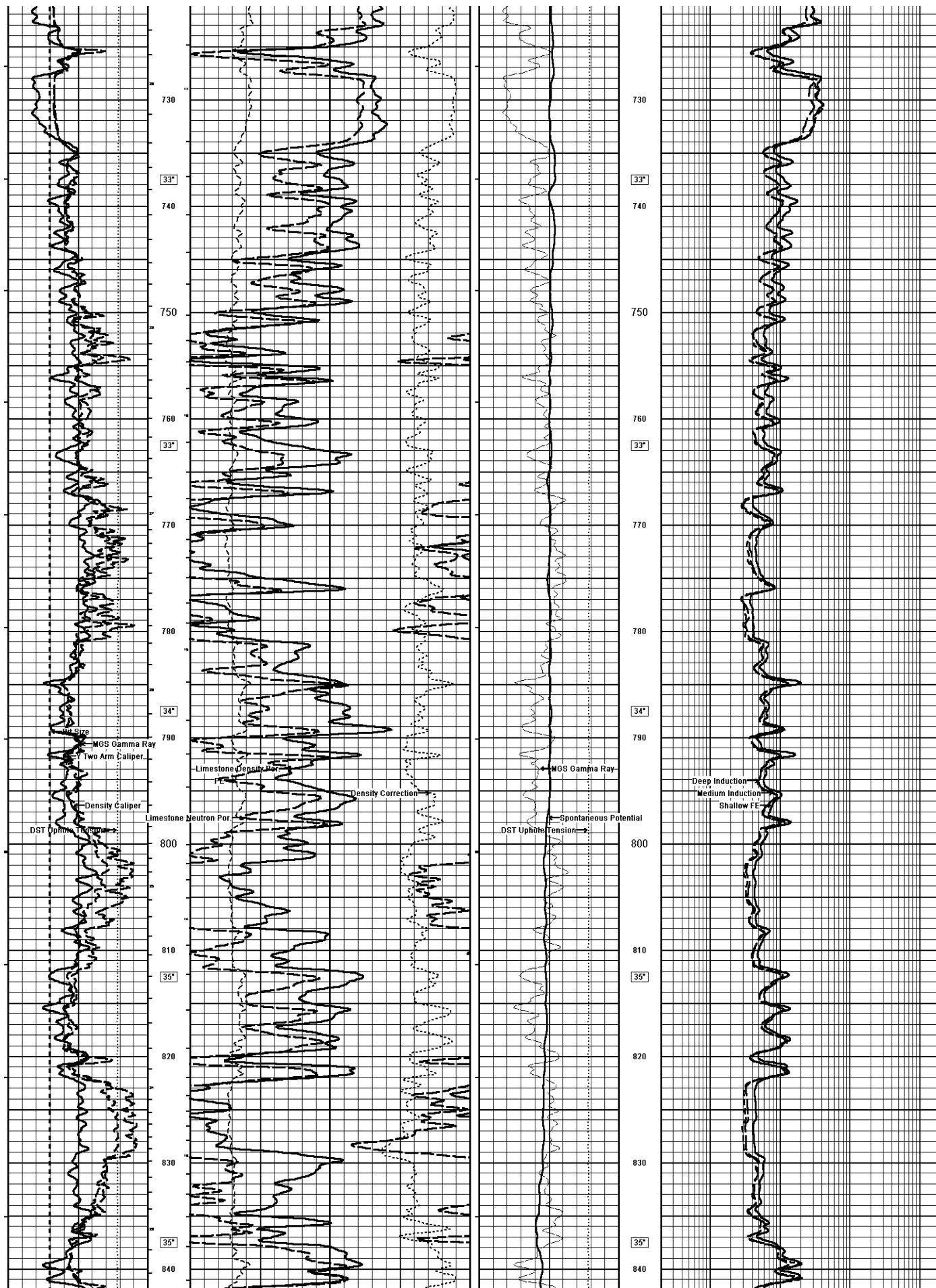
9) SALTY INDUCTION MODEL PRESENTED OFF BOTTOM.

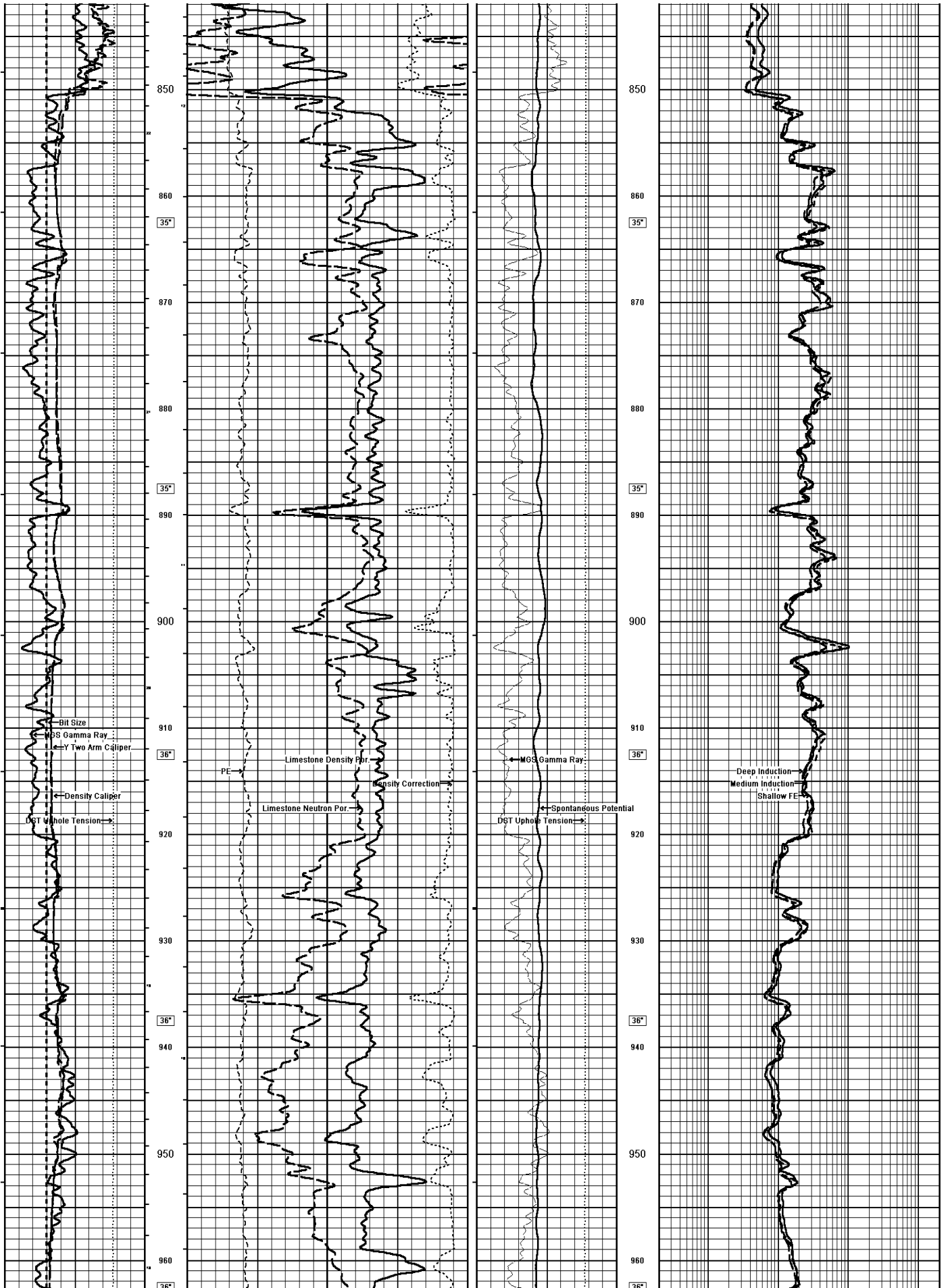
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or wilful negligence on our part, be liable or responsible for any loss, costs,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

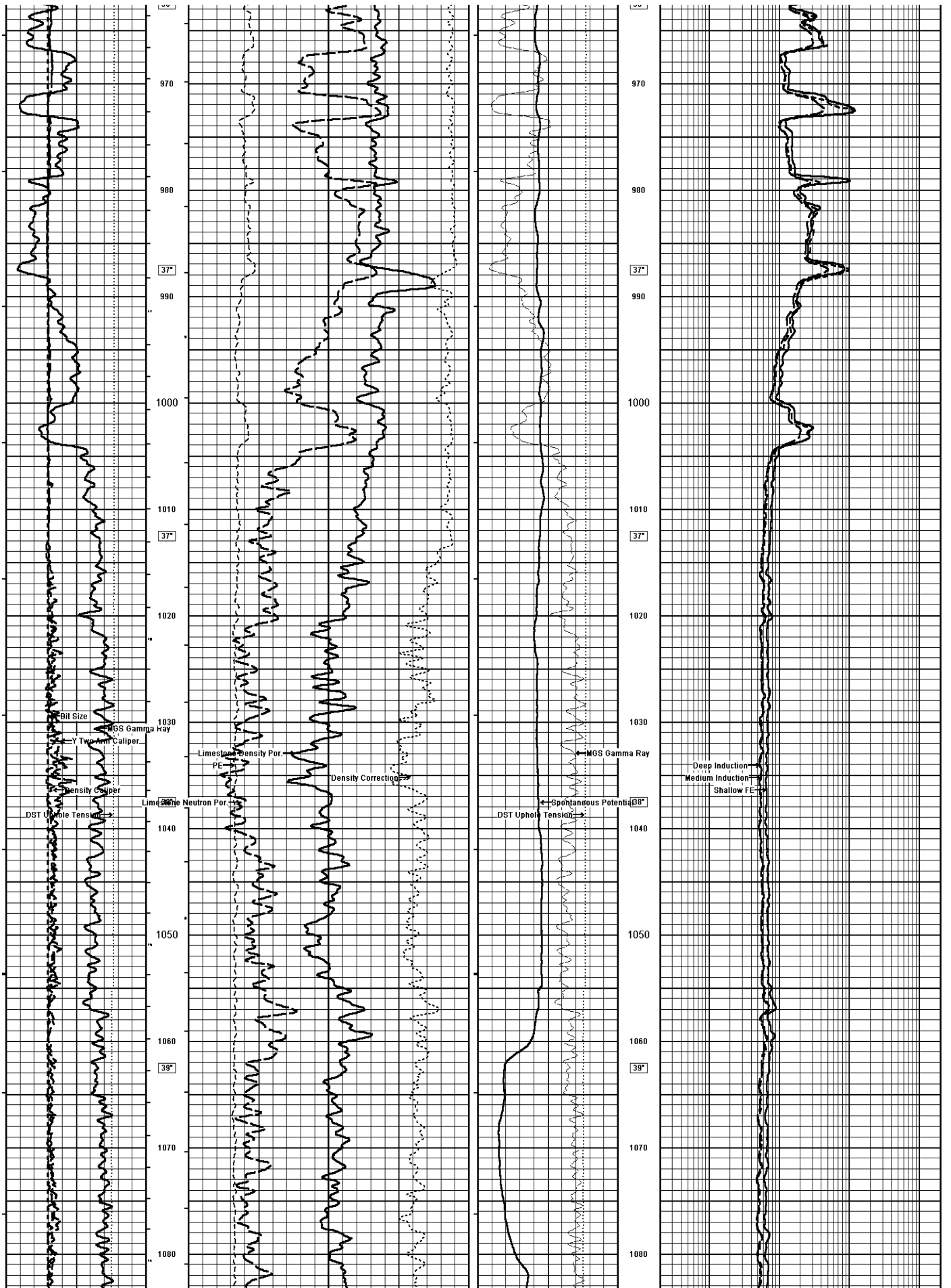


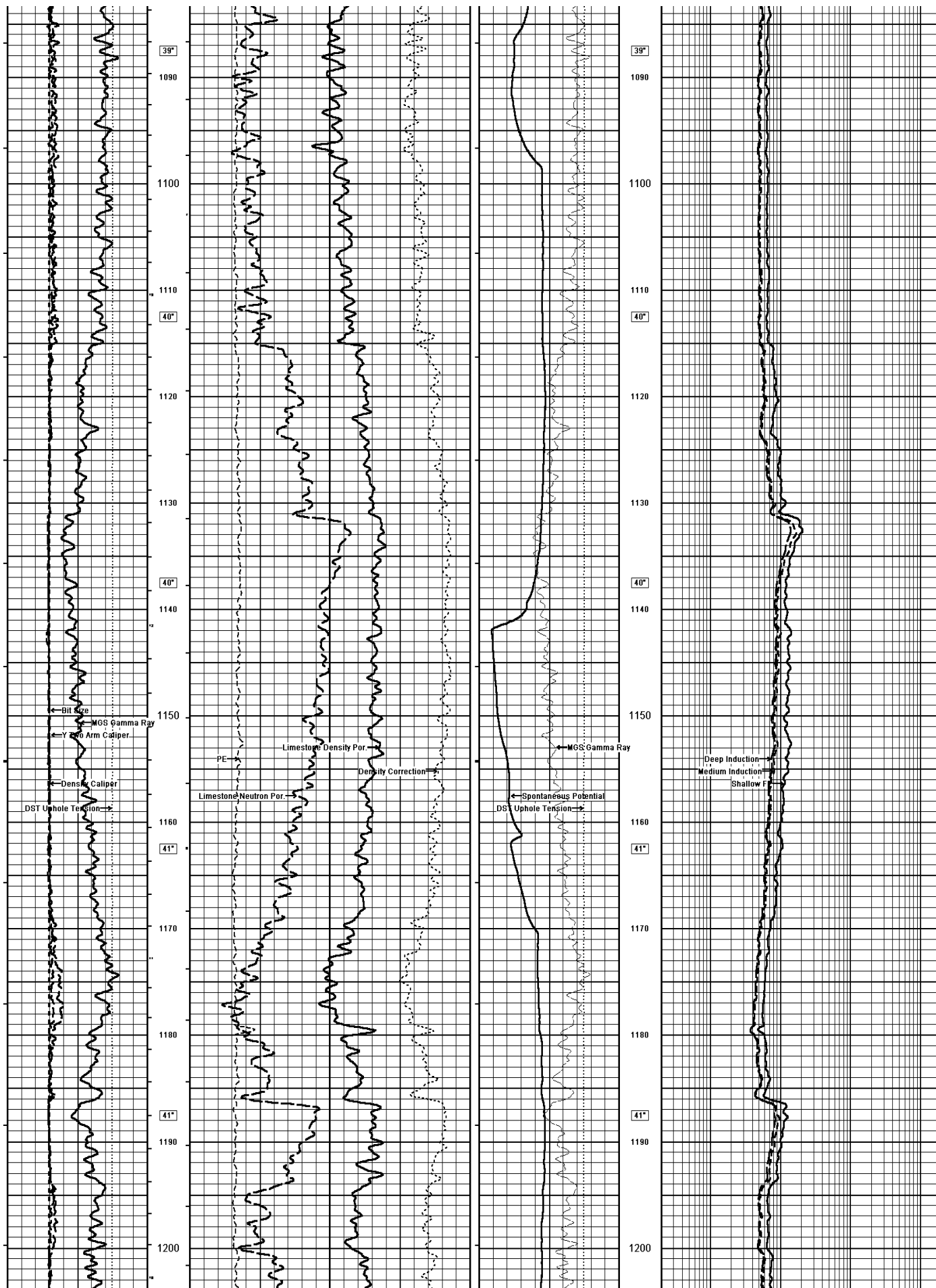


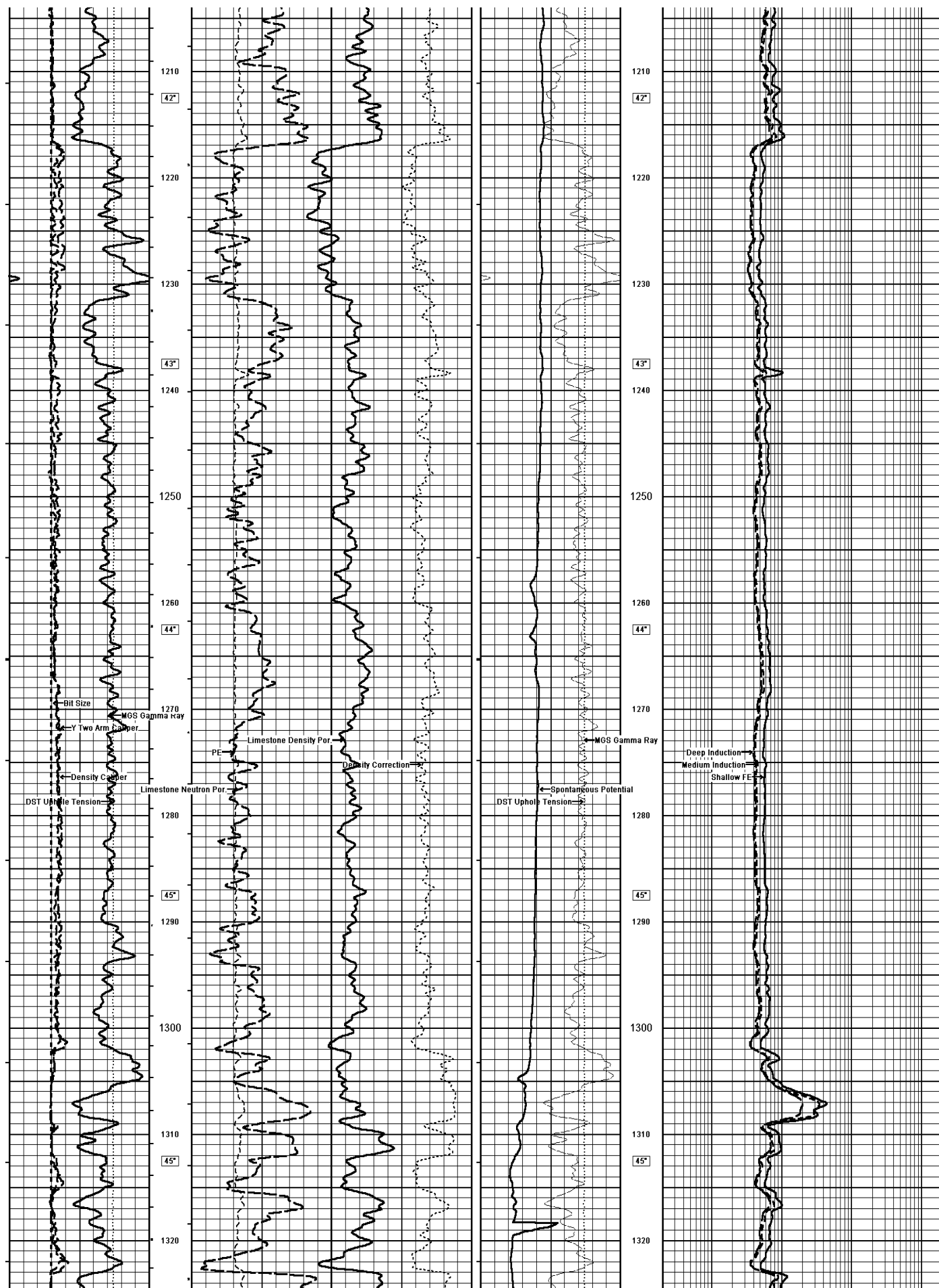


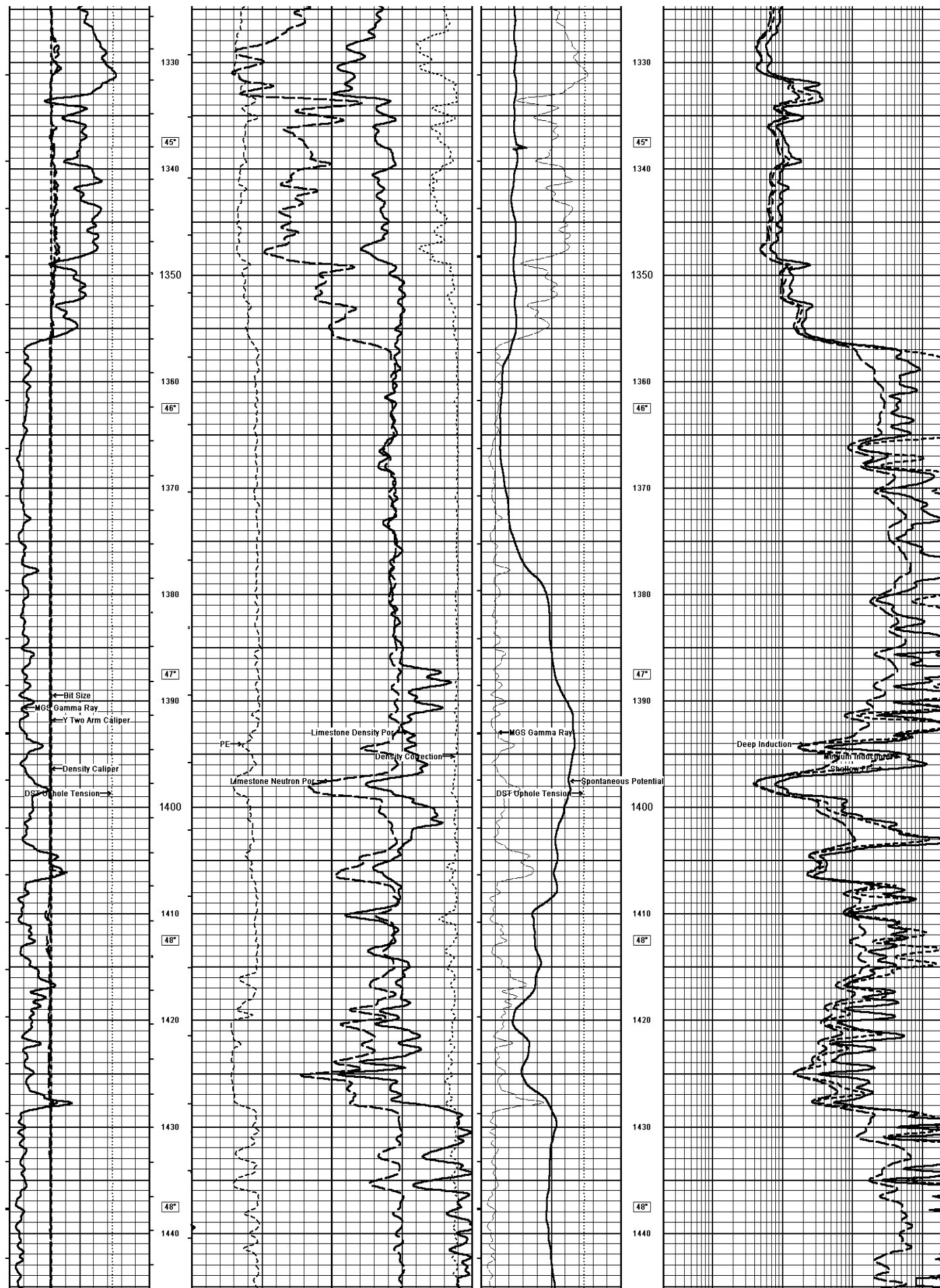


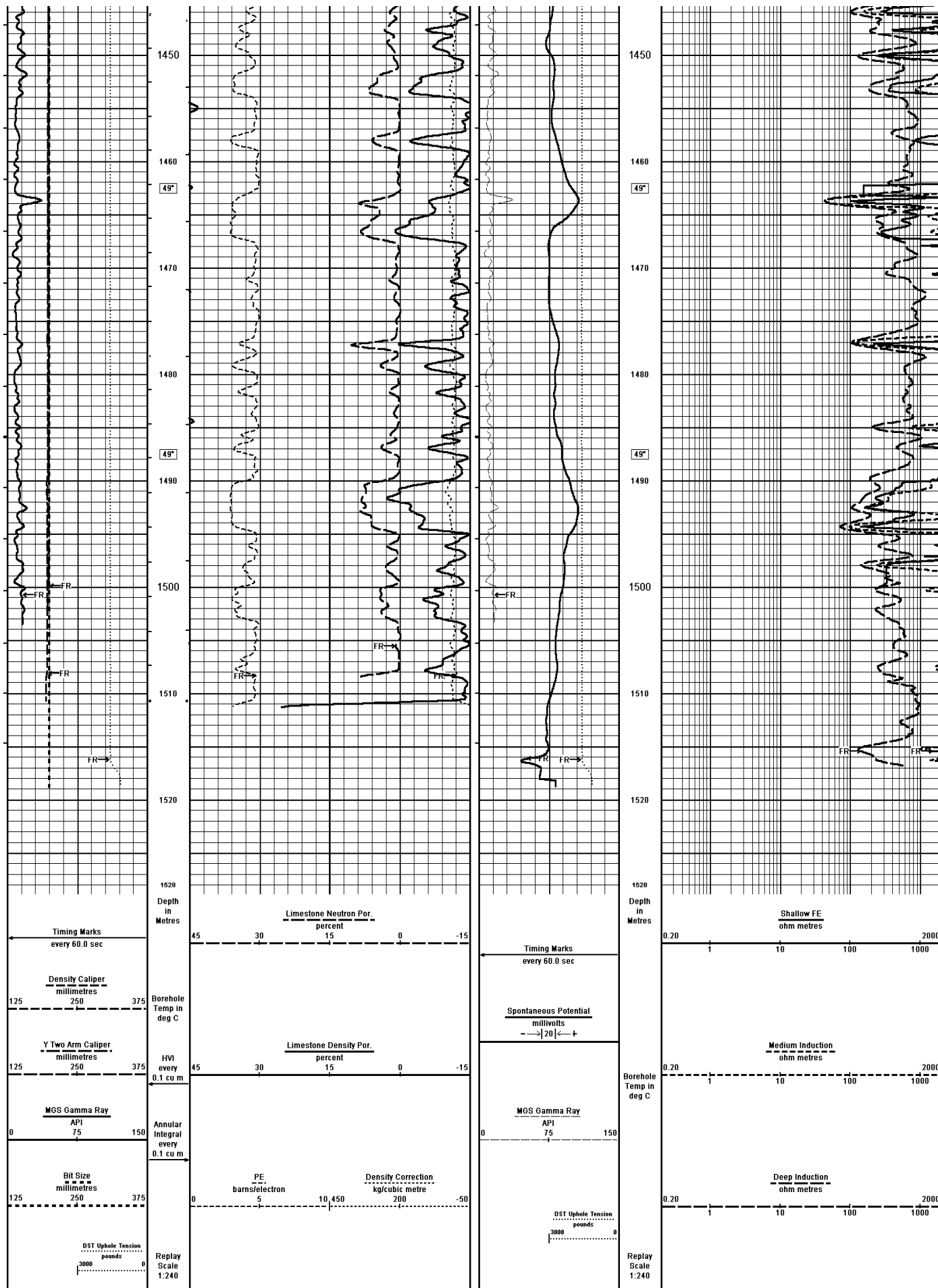


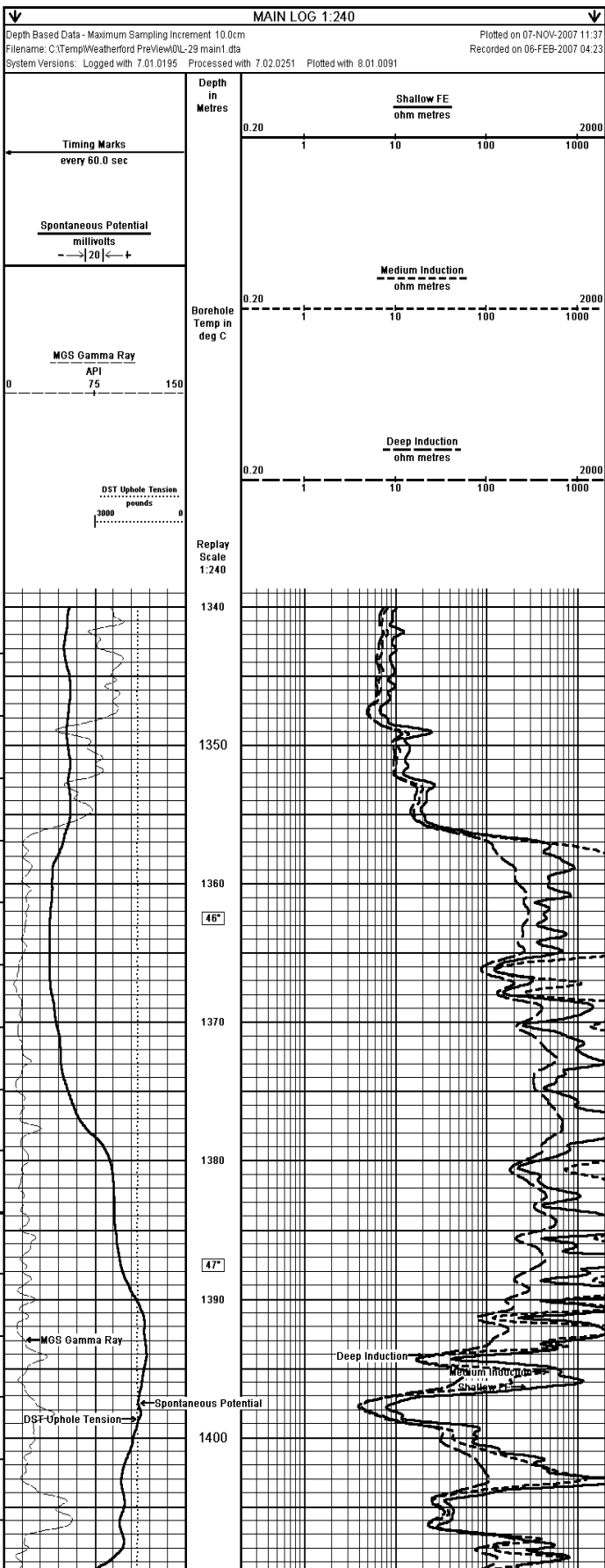
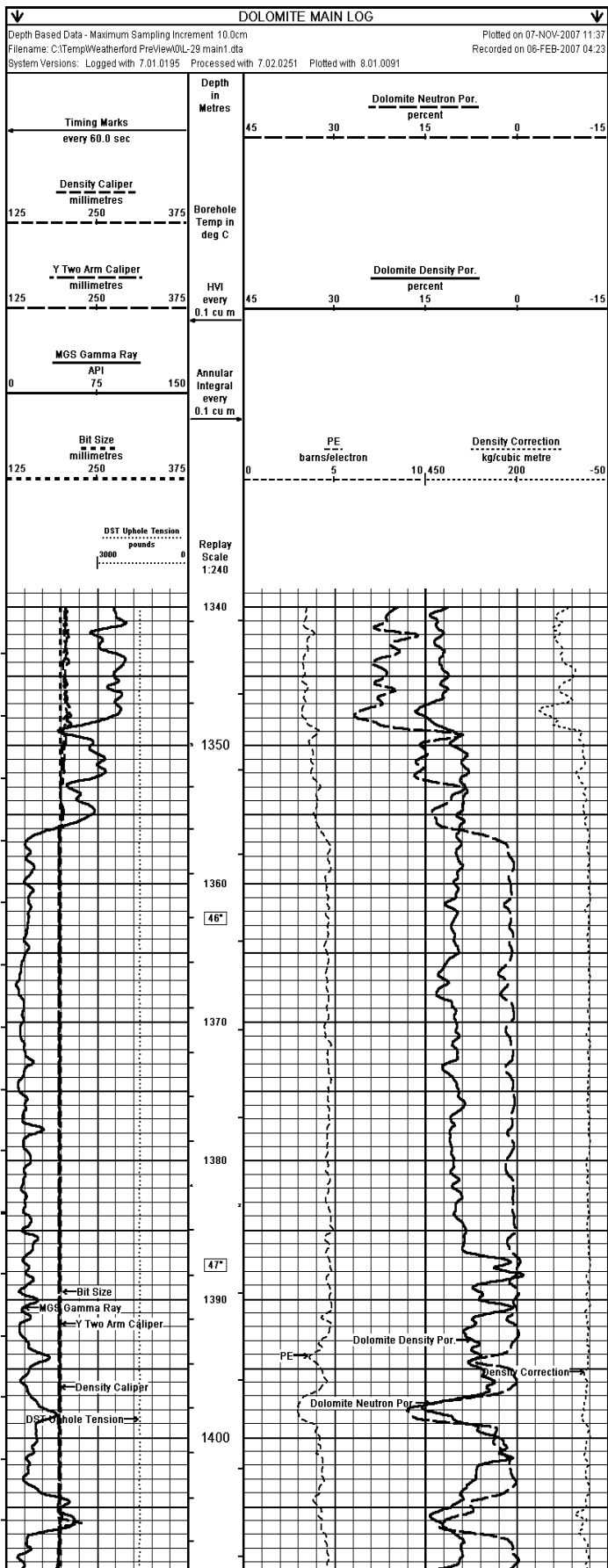




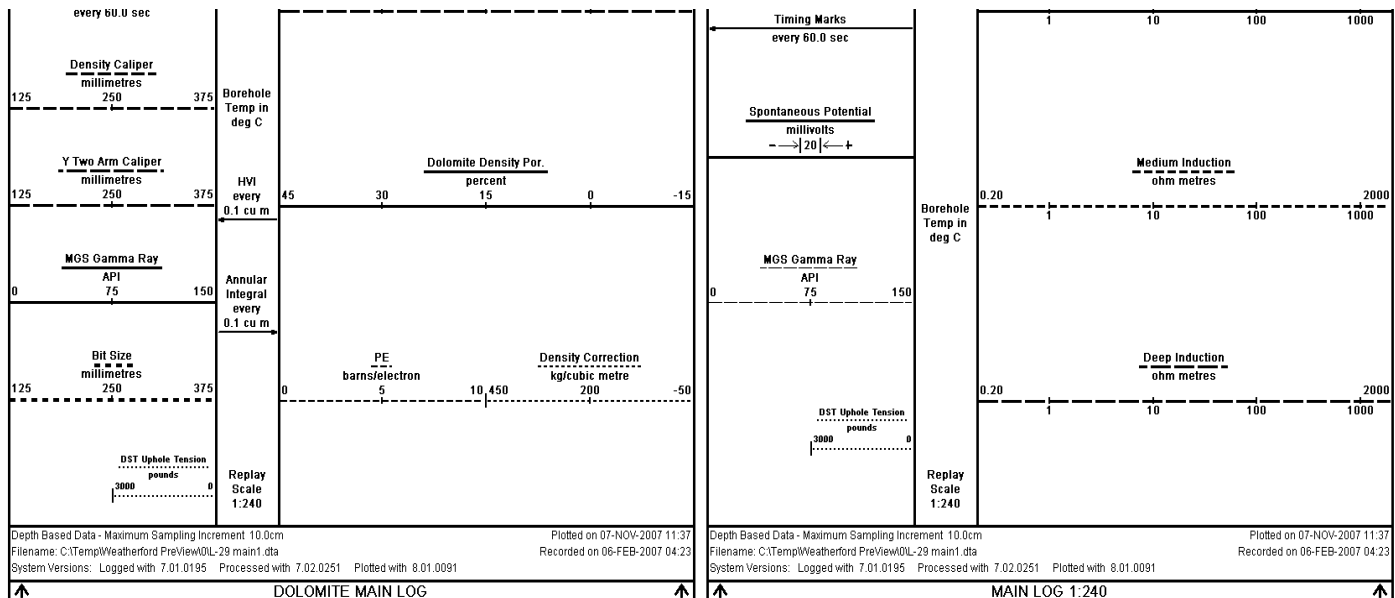












BEFORE SURVEY CALIBRATION

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General Constants All 000

Last Edited on 6-FEB-2007,03:32

General Parameters

Mud Resistivity	0.690	ohm-metres
Mud Resistivity Temperature	25.000	degrees C
Water Level	0.000	metres
Density/Neutron Processing	Wet Hole	

Hole/Annular Volume and Differential Caliper Parameters

HVOL Caliper 1	Density Caliper	
HVOL Caliper 2	Y Two Arm Caliper	
Annular Volume Diameter	139.700	mm
Caliper for Differential Caliper	Density Caliper	

Rwa Parameters

Porosity used	Base Density Porosity
Resistivity used	Deep Induction
RWA Constant A	0.610
RWA Constant M	2.150

Gamma Calibration MCG 159

Field Calibration on 5-FEB-2007,23:16

	Measured	Calibrated (API)
Background	50	34
Calibrator (Gross)	1224	828
Calibrator (Net)	1174	794

Gamma Constants MCG 159

Last Edited on 6-FEB-2007,02:31

Gamma Calibrator Number	GRCC075	
Mud Density	1135.00	kg/m3
Caliper Source for Processing	Density Caliper	
Tool Position	Centred	
Concentration of KCl	0.00	kppm

SP Calibration MCG 159

Field Calibration on 25-JAN-2007 17:35

	Measured	Calibrated (mV)
Reference 1	99.9	99.5

Reference 2	-99.3	-99.5	
High Resolution Temperature Calibration MCG 159			Field Calibration on 28-NOV-2006,15:40
	Measured	Calibrated(Deg C)	
Lower	10.00	10.00	
Upper	50.00	50.00	
High Resolution Temperature Constants MCG 159			Last Edited on 28-NOV-2006,15:40
Pre-filter Length	11		
FE Calibration MFE 017			Base Calibration on 25-JAN-2007 17:46 Field Check on 1-FEB-2007 08:10
Base Calibration			
	Measured	Calibrated (ohm-m)	
Reference 1	0.0	0.0	
Reference 2	971.0	126.8	
Base Check		279.5	
Field Check		280.6	
FE Constants MFE 017			Last Edited on 29-JAN-2007,21:47
Caliper Source for FE correction	Density Caliper		
Rm Source for FE correction	Temperature Corr		
Temp. for Rm Corr.	MCG External Temperature		
Stand-off	Centred	millimetres	
Caliper Calibration MTC 006			Base Calibration on 25-JAN-2007,18:14 Field Calibration on 6-FEB-2007,03:31
Base Calibration			
Reading No	Measured	Calibrator Size (mm)	
1	14734	110.00	
2	17539	162.00	
3	20248	212.00	
4	22990	262.00	
5	25897	311.00	
6	N/A	N/A	
Field Calibration			
	Measured Caliper (mm)	Actual Caliper (mm)	
	208.40	205.70	
Gamma Calibration MGS 010			Field Calibration on 5-FEB-2007,23:15
	Measured	Calibrated (API)	
Background	48	31	
Calibrator (Gross)	1256	825	
Calibrator (Net)	1208	794	
Gamma Constants MGS 010			Last Edited on 6-FEB-2007,02:31
Gamma Calibrator Number	grcc075		
Mud Density	1135.00	kg/m3	
Caliper Source for Processing	Density Caliper		
Tool Position	Centred		
Concentration of KCl	0.00	kppm	
SP Calibration MGS 010			Field Calibration on 8-NOV-2006,19:47
	Measured	Calibrated (mV)	
Reference 1	0.0	0.0	
Reference 2	10.0	10.0	
High Resolution Temperature Calibration MGS 010			

	Measured	Calibrated(Deg C)		
Lower	10.00	10.00		
Upper	50.00	50.00		
High Resolution Temperature Constants MGS 010				
Pre-filter Length	11			
Micro Normal and Micro Inverse Calibration MML 015		Base Calibration on 25-JAN-2007,17:08 Field Check on 31-JAN-2007 18:48		
Base Calibration				
Channel	Resistor 1	Measured Resistor 2	Calibrated (ohm-m) Resistor 1	Resistor 2
Micro Normal	9.9	48.5	5.1	25.6
Micro Inverse	9.9	48.7	3.4	16.9
Channel	Base Check (ohm-m)		Field Check (ohm-m)	
Micro Normal	79.8		0.0	
Micro Inverse	52.6		0.0	
Micro Normal and Micro Inverse Constants MML 015		Last Edited on 5-FEB-2007,23:14		
Micro Normal K Factor	0.5110			
Micro Inverse K Factor	0.3380			
Standoff Offset	N/A		millimetres	
Caliper Calibration MML 015		Base Calibration on 25-JAN-2007,18:15 Field Calibration on 6-FEB-2007,03:32		
Base Calibration				
Reading No	Measured	Calibrator Size (mm)		
1	13860	162.00		
2	17089	212.00		
3	20617	262.00		
4	24375	311.00		
5	27976	355.00		
6	N/A	N/A		
Field Calibration				
	Measured Caliper (mm)	Actual Caliper (mm)		
	211.00	205.70		
Neutron Calibration MDN 144		Base Calibration on 25-JAN-2007 18:05 Field Check on 5-FEB-2007 23:56		
Base Calibration				
	Measured	Calibrated (cps)		
	Near	Far	Near	Far
	2967	93	3714	110
Ratio	31.886		33.764	
Field Calibrator at Base		Calibrated (cps)		
		2065 2999		
Ratio	0.689			
Field Check		Calibrated (cps)		
		2075 3068		
Ratio	0.676			
Neutron Constants MDN 144		Last Edited on 18-JAN-2007,02:18		
Neutron Source Id	16145b			
Neutron Jig Number				
Epithermal Neutron	No			
Caliper Source for Processing	Density Caliper			
Stand-off	0.00	mm		
Mud Density	1000.00	kg/m3		

Limestone Sigma	7.10	cu
Sandstone Sigma	4.26	cu
Dolomite Sigma	4.70	cu
Formation Pressure Source	Constant Value	
Formation Pressure	0.00	kPa
Temperature Source	MCG External Temperature	
Temperature	20.00	degrees C
Mud Salinity	0.00	kppm
Formation Fluid Salinity Source	Constant Value	
Formation Fluid Salinity	0.00	kppm
Barite Mud Correction	Not Applied	

Photo Density Calibration MPD 036 Base Calibration on 23-JAN-2007 04:10
Field Check on 5-FEB-2007 23:46

Field Check on 5-FEB-2007 23:46

Density Calibration		Measured		Calibrated (sdu)	
Base Calibration		Near	Far	Near	Far
Reference 1	52802	28585	60352	31615	
Reference 2	21780	2767	25043	2540	

Field Check at Base	1184.8	1494.9
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	1184.8	1494.9
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Field Check	1184.7	1500.0
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	1184.7	1500.0
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PE Calibration		
Base Calibration	Measured	Calibrated
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9
10	10	10
11	11	11
12	12	12
13	13	13
14	14	14
15	15	15
16	16	16
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88	88	88
89	89	89
90	90	90
91	91	91
92	92	92
93	93	93
94	94	94
95	95	95
96	96	96
97	97	97
98	98	98
99	99	99
100	100	100

Base Calibration		Measured		Calibrated
	WS	WH	Ratio	Ratio
Background	213	1052		
Reference 1	22151	52610	0.425	0.400
Reference 2	5909	21638	0.277	0.272

Field Check at Base	213.1	1051.7
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213.1	1051.7
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Field Check	211.7	1051.4
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211.7	1051.4
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Density Constants MPD 036 Last Edited on 6-FEB-2007,02:32

Density Constants MPD 036 Last Edited on 6-FEB-2007,02:32

Density Source Id	2834GW	
Nylon Calibrator Number	608	
Aluminium/Fe Calibrator Number	608	
Density Shoe Profile	4 inch	
Caliper Source for Processing	Density Caliper	
PE Correction to Density	Not Applied	
Mud Density	1135.00	kg/m3
Mud Density Z/A Correction	1.11	
Mud Filtrate Density	1000.00	kg/m3
Dry Hole Mud Filtrate Density	1000.00	kg/m3
DNCT	0.00	kg/m3
CRCT	0.00	kg/m3
Density Z/A Correction	0	

[illegible]

Caliper Calibration MPD 036

Base Calibration on 23-JAN-2007 04:20

Field Calibration on 6-FEB-2007,03:32

Base Calibration

Reading No	Measured	Calibrator Size (mm)
1	18576	110.00
2	28032	162.00
3	37841	212.00
4	48080	262.00
5	57920	311.00
6	N/A	N/A

Field Calibration

Measured Caliper (mm)	Actual Caliper (mm)
206.00	205.70

Sonic Constants MSS 060

Last Edited on 6-FEB-2007,03:32

Maximum Boundary Contrast	328.08	micro-sec/m
Fluid Transit Time	620.08	micro-sec/m
Limestone Transit Time	155.84	micro-sec/m
Sandstone Transit Time	182.09	micro-sec/m
Dolomite Transit Time	142.72	micro-sec/m
Sonic used for Porosities	3-5' Compensated Sonic	
Correction for Sonde Skew	Applied	
Cycle Stretch Algorithm	Applied	
MN3FT	N/A	micro-sec
MX3FT	N/A	micro-sec
Hunt-Raymer Constant	0.00	0

Fixed Gate Parameters

Start Time (micro-sec)	End Time (micro-sec)	Discriminator (mV)	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Down Hole Fixed Gate Parameters

Gate Start	N/A	micro-sec
Gate Width	N/A	micro-sec
Initial Discriminator Level	0.0000	mVolts

Full Waveform Parameters

Use 3' Waveform to derive TR	N/A	
Use 4' Waveform to derive TR	N/A	
Use 5' Waveform to derive TR	N/A	
Use 6' Waveform to derive TR	N/A	
3' Waveform Discriminator Level	N/A	mV
4' Waveform Discriminator Level	N/A	mV
5' Waveform Discriminator Level	N/A	mV
6' Waveform Discriminator Level	N/A	mV
3' Waveform Filter	N/A	
4' Waveform Filter	N/A	
5' Waveform Filter	N/A	
6' Waveform Filter	N/A	
Semblance Level	N/A	
Semblance Window Width	N/A	micro-sec
Sonic 1 Despiker	N/A	N/A
Sonic 2 Despiker	N/A	N/A

Induction Calibration MAI 072

Base Calibration on 25-JAN-2007,18:16

Field Check on 6-FEB-2007 03:36

Base Calibration

Test Loop Calibration	Measured	Calibrated (mmho/m)
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Test Loop Calibration		Measured		Calibrated (mmho/m)	
Channel		Low	High	Low	High
1		13.9	459.6	9.3	966.2
2		5.3	373.2	7.6	821.4
3		2.9	254.1	5.2	566.0
4		1.3	130.4	2.6	279.2
Array Temperature		18.5		Deg C	
		Base Check (mmho/m)		Field Check (mmho/m)	
Channel		Low	High	Low	High
1		18.0	3925.2	21.4	3925.8
2		31.0	3598.6	33.0	3598.2
3		29.0	3101.3	30.5	3101.0
4		20.3	2105.9	21.3	2105.5
Deep		18.4	2019.9	19.5	2019.8
Medium		40.9	4089.6	42.7	4089.1
Shallow		45.6	5324.4	48.5	5323.6
Array Temperature		18.5		32.0	Deg C

Induction Constants MAI 072

Last Edited on 6-FEB-2007,03:33

Induction Model		VECTAR	
Caliper for Borehole Corr.		Density Caliper	
Hole Size for Borehole Correction		N/A	
Stand-off		25.40	
Number of Fins on Stand-off		5.0000	
Stand-off Fin Width		25.4000	
Borehole Corr. Rm Source		Temperature Corr	
Temp. for Rm Corr.		MCG External Temperature	
Squasher Start		0.0020	
Borehole Normalisation			
DRM1	0.0000	DRC1	0.0000
DRM2	0.0000	DRC2	0.0000
MRM1	0.0000	MRC1	0.0000
MRM2	0.0000	MRC2	0.0000
SRM1	0.0000	SRC1	0.0000
SRM2	0.0000	SRC2	0.0000
Calibration Site Corrections			
Channel 1		0.00	mmhos/metre
Channel 2		0.00	mmhos/metre
Channel 3		0.00	mmhos/metre
Channel 4		0.00	mmhos/metre
Apparent Porosity and Water Saturation Constants			
Archie Constant (A)		1.00	
Cementation Exponent (M)		2.00	
Saturation Exponent (N)		2.00	
Saturation of Water for Apor		100.00	percent
Resistivity of Water for Apor and Sw		0.05	ohm-m
Resistivity of Mud Filtrate for Sw		0.00	ohm-m

High Resolution Temperature Calibration MAI 072

Field Calibration on 11-NOV-2006,04:00

	Measured	Calibrated(Deg C)
Lower	1.00	1.00
Upper	10.00	10.00

High Resolution Temperature Constants MAI 072

Pre-filter Length	11
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DOWNHOLE EQUIPMENT

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Compact Gamma
MCG 159 Length: 2.65 m Weight: 63.9 lb

20.78 m GRGC - Gamma Ray
19.90 m CGXT - MCG External Temperature

Compact Focussed Electric
MFE 17 Length: 1.84 m Weight: 48.5 lb

18.79 m FEFE - Shallow FE

Compact Two Arm Caliper
MTC 6 Length: 2.17 m Weight: 61.7 lb

16.33 m CLYC - Y Two Arm Caliper

Compact Short Gamma
MGS 10 Length: 1.04 m Weight: 24.3 lb

15.46 m GRGM - MGS Gamma Ray

Compact InterSonde Crank
ISC 159 Length: 0.70 m Weight: 24.3 lb

Compact Micro-log
MML 15 Length: 2.43 m Weight: 81.6 lb

12.10 m MINV - Micro-inverse
12.10 m MNRL - Micro-normal
12.10 m MLTC - MML Caliper

Compact Neutron
MDN 144 Length: 1.53 m Weight: 50.7 lb

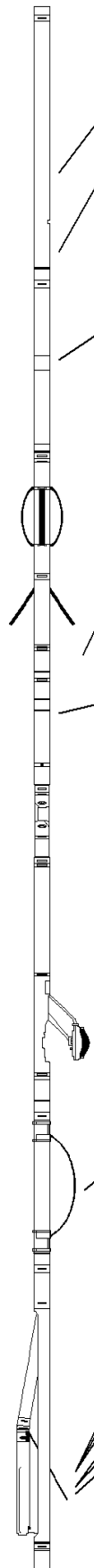
10.64 m NPRS - Sandstone Neutron Por.

Compact Density/Caliper
MPD 36 Length: 2.92 m Weight: 90.4 lb

8.06 m AVOL - Annular Volume
8.06 m HVOL - Hole Volume
8.06 m CLDC - Density Caliper
7.85 m DPRS - Sandstone Density Por.
7.85 m DCOR - Density Correction
7.83 m PDPE - PE

Compact Sonic

3.95 m TR21 - 3' Transit Time



MINI PLOT