FINAL WELL REPORT

PARAMOUNT RESOURCES LTD.

PARA ET AL CAMERON J-04

Grid: 60^0 10', 117^0 30'

DATE: November 30, 2007

COMPANY REPRESENTATIVE:
Dave Block

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D. GEOLOGY Page

A. INTRODUCTION

Paramount Resources Ltd. (Paramount) drilled Para et al Cameron J-04 as a 1449 meter delineation well. The well was spudded on January 26, 2007 and finished drilling on February 14, 2007. The purpose of the well was to evaluate hydrocarbon potential. The primary target was the Sulphur Point Dolomite formation which was encountered at a depth of 1407 mKB. The secondary target was the Slave Point formation which was encountered at a depth of 1342 mKB.

The drilling contractor was Precision Drilling Ltd based out of Calgary, Alberta. Precision's Rig # 129 was used and is a land rig rated for 1600 m. The rig had a mud system capacity of 53 m^3 and was equipped with a boiler.

The well was drilled on Production License No PL-013 in which Paramount has an 88% working interest under Paramount's Operating License No 1159.

The exact co-ordinates of the well are as follows:

Surface: Latitude: 60^0 03' 31.397"
Longitude: 117^0 30' 47.877"

Cancor Rathole Inc. drilled a 610 mm conductor hole to 12.5 meters. From surface to 0.3 meters was snow pad, from 0.3 to 0.6 meters was dry muskeg, from 0.6 - 1.2 meters was permafrost muskeg, from 1.2 - 2.4 meters was permafrost clay, and from 2.4 to 12.5 meters was clay with boulders. A heavy walled 406 mm conductor pipe was cemented at 12.5 meters.

Precision #129 was moved onto the location starting January 25, 2007. The rig was rigged up, a diverter was nippled up and drilling commenced January 26, 2007 at 16:30 hours. A 311 mm surface hole was drilled to 430 mKB. There were some minor mud ring problems, but no major lost circulation problems were encountered in drilling the surface hole. A string of 219.1 mm, 35.7 kg/m, J-55, ST&C surface casing was run to 430 mKB. The casing was cemented with 36.5 t class 'G' cement plus 2.0% $CaCl_2$. There were 8.0 m^3 of cement returned to surface while cementing. The plug was bumped and the float held OK. The plug was down at 20:00 hours on January 30, 2007.

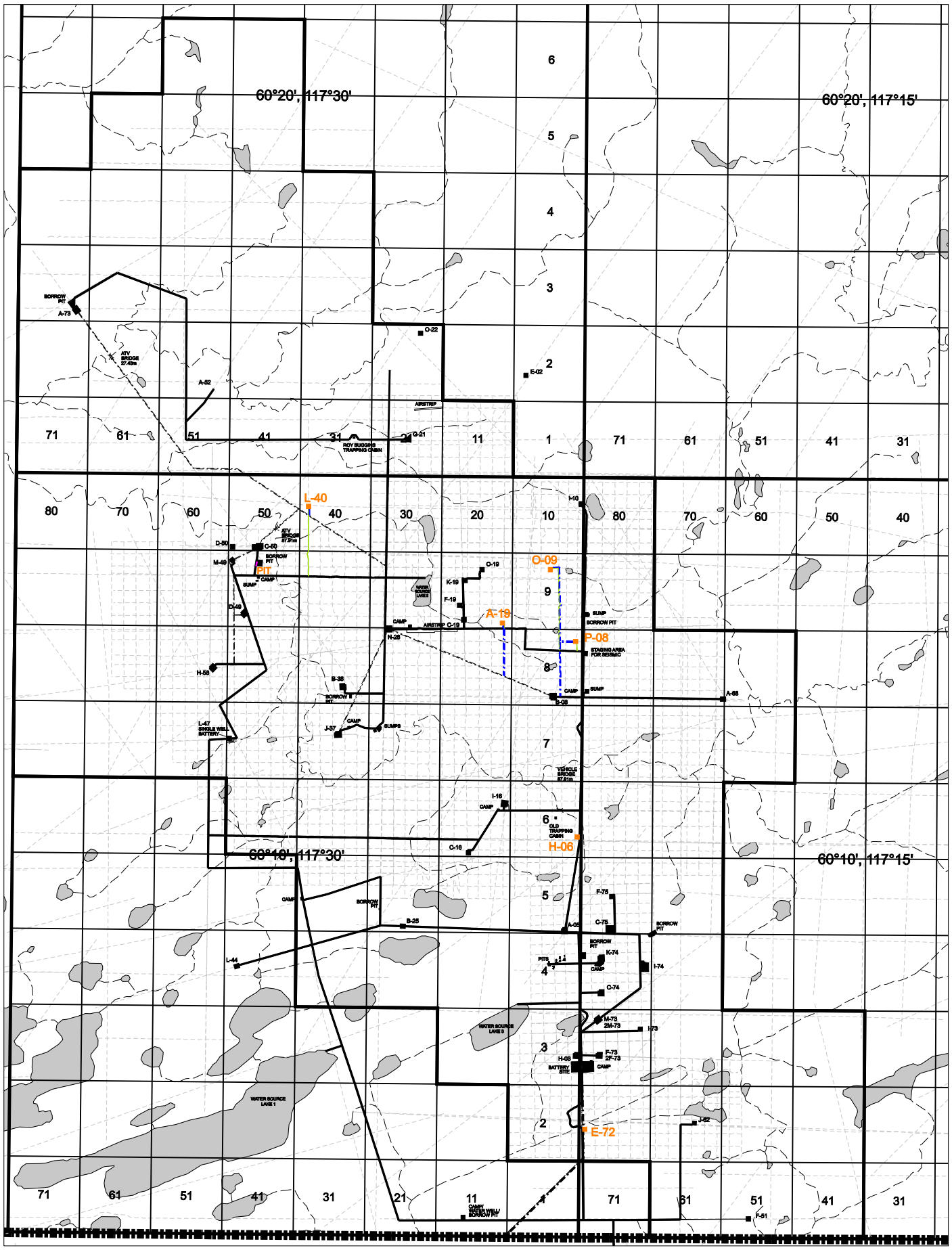
The casing and conductor were trimmed and the casing bowl was welded on. The BOP's were installed and function tested. The BOP's and manifold were pressure tested to 1500 kPa low pressure and 14,000 kPa high pressure. The Hydril was pressure tested to 1500 kPa and 10,500 kPa.

The float collar and shoe were drilled out to 437 mKB on January 31, 2007. A leak off test was performed with the leak off gradient found to be 30.3 kPa/m. A 200 mm hole was drilled with a flocculated water system to approximately 900 m. Gel was added to the drilling fluid at that point and the gel/chem mud system was then used to drill to a total depth of 1449 mKB. Minor drilling fluid losses started at 598 m and major losses were noted from 690 - 729 m. The losses were cemented off with four cement plugs. After the plugs were drilled out there were still minor losses which were controlled with LCM's while drilling to TD. Weatherford ran induction, density, and sonic logs from bottom to surface casing and a micro-resistivity log from bottom to 1300 mKB.

139.7 mm, 23.07 kg/m, J-55, LT&C production casing was run and set at 1449 mKB with

a stage tool included in the string at 566 m. It was cemented in two stages with the first stage consisting of 6.0 t Thixlite + 1% SMS followed by 13.0 t Expando LWL + 0.1% CFL-3 + 0.2% LTR + 0.2% SPC-II and the second stage consisting of 11.0 t Thixlite + 1% SMS. There were no cement returns to surface. The plug was bumped and held.

Precision #220 was rigged out and released at 23:45 hours on February 16, 2007.



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LEGEND:

- WELL SITES
- PIPELINE ROW
- ROAD ACCESS
- PIT

Paramount resources ltd.

REVISED:
MODEL: AsBuiltJuly2005_with6Sites

Date: 14-NOV-05
Job No.: 04-1150G
Filename: CH_BASE_NAD83.DGN

Compiled Map Showing
SIX SITES PROGRAM
with
AS-BUILT JULY 2005
Oil & Gas Activity

CAMERON HILLS AREA

Northwest Territories
NAD83 UTM Projection

SCALE 1:125 000

B. GENERAL DATA

1. Well Name: Para et al Cameron J-04

   Authority to Drill a Well No: 2034

   Exploration Agreement Number: PL-013

   Location Unit: J

   Section: 04

   Grid Area: 60^0 10’ N, 117^0 30’ W

   Classification: Delineation

2. Coordinates:
   Surface: Latitude: 60^0 03' 31.397"
   Longitude: 117^0 30' 47.877"

3. Unique Well Identifier: 300J046010117300

4. Operator: Paramount Resources Ltd.

5. Contractor: Precision Drilling

6. Drilling Unit: Precision Rig # 129, Land Rig

7. Position Keeping: N/A

8. Support Craft (Helicopter): N/A

9. Drilling Unit Performance: Good

10. Difficulties and Delays: Major lost circulation that was controlled by cementing.

11. Total Well Cost: $1,204,000

12. Bottom Hole Co-ordinates: same as surface

C. SUMMARY OF DRILLING OPERATIONS

1. Elevations:
   Ground: 764.62 m above sea level
   KB: 769.2 m above sea level
   KB to Casing Flange: 4.6 m

2. Total Depth:
   FTD: 1449 mKB
   PBTD: 1436 mKB

3. Date and Hour Spudded: January 26, 2007 at 04:15

4. Date Drilling Completed: February 14, 2007

5. Date of Rig Release: February 16, 2007

6. Well status: Cased and Suspended

7. Hole Sizes and Depths:

Conductor Hole:	610 mm to 12.5 m
Surface Hole:	311 mm to 430 mKB
Main Hole:	200 mm to 1449 mKB

8. Casing and Cementing Record:

   Conductor Hole:

Casing Size:	406 mm
Wall Thickness:	9.5 mm
Depth Set:	12.5 m
Cut Height:	At Surface
Date Set:	January 24, 2007
Cement Volume:	1.7 tonnes
Cement Type:	class 'G'

   Surface Hole:

Casing Make:	Ipsco
Casing Size:	219.1 mm
Casing Weight:	35.7 kg/m
Casing Grade:	J-55
Thread:	ST&C
Number of Joints:	32
Depth Set:	430 mKB
Cut Height:	At surface
Date Set:	January 30, 2007
Cement Volume:	36.5 Tonnes
Float Shoe Depth:	430 mKB
Float Collar Depth:	416 mKB
Cement Type:	Class ‘G’

Additives: 2.0% $CaCl_2$
Cement Top: Surface
Casing Bowl Size: 228 mm x 219 mm x 21 MPa
Casing Bowl Make: ABB Vetco

Main Hole:
Casing Size: 139 mm
Casing Weight: 23.07 kg/m
Casing Grade: J-55
Casing Make: IPSCO
Number of Joints: 108
Thread: LT&C
Depth Set: 1449 mKB
Cut Height: Surface
Date Set: February 16, 2007
Float Shoe Depth: 1449 mKB
Float Collar Depth: 1436 mKB
Stage Tool Depth: 566 mKB
Stage #1:
Cement Volume 1: 6.0 Tonnes
Cement Type 1: Thixlite
Additives 1: 1% SMS
Cement Volume 2: 13.0 Tonnes
Cement Type 2: Expando LWL
Additives 2: 0.1% CFL-3 & 0.2% LTR & 0.2% SPC-II
Stage #2:
Cement Volume 1: 11.0 Tonnes
Cement Type 1: Thixlite
Additives 1: 1% SMS
Cement Top: Close to surface

9. Sidetracked Hole: N/A

10. Drilling Fluid:

Conductor Hole: Water
Properties: N/A

Surface Hole: Gel - Chemical
Properties: Viscosity: 29 - 55 sec/L
Weight: 1010 - 1190 kg/m^3
PH: 9.0 - 10.0

Main (425 – 900 m): Floc water
Properties: Viscosity: 29 sec/L

	Weight:	1000 - 1040 kg/m^3
	PH:	9.0 - 11.0
Main (900 m – TD):	Gel-chem	
Properties:	Viscosity:	4 - 75 sec/L
	Weight:	1030 - 1100 kg/m^3
	PH:	9.0 – 11.0
	Water loss:	11.0 cc
	Solids:	Not reported
	Gels:	Not reported
	Filtrate:	Not reported
	PV / YP:	Not reported

11. Fishing Operations: **N/A**

12. Well Kicks and Well Control Operations: N/A

13. Formation Leak Off Tests:

Depth:	437 m
Fluid Density:	1000 kg/m^3
Applied Pressure:	8800 kPa
Hydrostatic Pressure:	4218 kPa
Mud Weight Equivalent:	3089 kg/m^3
Casing setting depth:	430 mKB

The surface casing leak-off test was taken to a gradient of 30.3 kPa/m before leak off was detected.

14. Time Distribution

Date	Hours	Activity
07/01/24	0.75	Safety meeting
	19.5	Move rig and camp to site
	3.75	Wait on daylight
07/01/25	2.0	Safety meeting
	7.75	Wait on daylight
	14.25	Move rig and rig up rig
07/01/26	1.25	Safety meeting
	0.25	Rig service
	7.0	Rig up rig
	8.75	Nipple up diverter
	5.0	Drill
	1.75	Survey
07/01/27	0.75	Safety meeting
	0.75	Rig service
	19.5	Drill
	3.0	Survey
07/01/28	0.75	Safety meeting
	0.5	Rig service
	10.5	Drill
	2.0	Survey
	6.75	Trip
	1.25	Reaming
	2.0	Circulate and condition mud
	0.25	Run casing
07/01/29	1.0	Safety meeting
	0.5	Rig service
	11.0	Run casing
	2.5	Circulate and condition mud
	9.0	Trip
07/01/30	0.75	Safety meeting
	0.5	Rig service
	2.75	Trip
	5.5	Reaming
	4.25	Run casing
	5.0	Circulate and condition mud

	1.75	Cement casing
	3.5	Wait on cement
07/01/31	1.0	Safety meeting
	0.25	Rig service
	1.25	Wait on cement
	2.5	Weld casing bowl
	5.75	Nipple up BOP
	6.25	Test BOP's
	1.0	Slip and cut drill line
	2.5	Repair kelly
	2.0	Trip
	1.25	Drill out casing shoe
	0.25	Circulate and condition mud
07/02/01	0.75	Safety meeting
	0.75	Rig service
	0.5	Survey
	14.0	Drill
	2.75	Circulate and condition mud
	0.75	Leak off test
	4.5	Trip
07/02/02	0.75	Safety meeting
	0.5	Rig service
	2.0	Wait on cementers
	5.25	Circulate and condition mud
	9.0	Trip
	6.0	Drill out cement plugs
	0.5	Pump cement plugs
07/02/03	0.75	Safety meeting
	0.75	Rig service
	7.0	Trip
	7.5	Drill out cement plugs
	0.75	Drill
	7.0	Circulate and condition mud
	0.25	Pump cement plugs
07/02/04	1.0	Safety meeting
	0.75	Rig service
	7.0	Trip
	4.25	Circulate and condition mud

	6.25	Pump cement plugs
	4.25	Wait on cement
	0.5	Drill out cement plugs
07/02/05	1.0	Safety meeting
	0.75	Rig service
	6.0	Drill out cement plugs
	12.0	Drill
	3.5	Circulate and condition mud
	0.75	Survey
07/02/06	0.75	Safety meeting
	0.75	Rig service
	1.25	Survey
	14.25	Drill
	4.25	Trip
	0.5	Slip and cut drill line
	2.25	Circulate and condition mud
07/02/07	0.75	Safety meeting
	0.75	Rig service
	0.5	Survey
	8.5	Drill
	13.5	Circulate and condition mud
07/02/08	0.75	Safety meeting
	0.75	Rig service
	5.0	Trip
	2.0	Drill
	15.5	Circulate and condition mud
07/02/09	0.75	Safety meeting
	0.75	Rig service
	13.25	Circulate and condition mud
	4.75	Trip
	1.5	Reaming
	3.0	Drill
07/02/10	0.75	Safety meeting
	0.75	Rig service
	8.75	Drill
	9.5	Circulate and condition mud
	2.0	Trip
	0.5	Thaw kelly

	1.75	Survey
07/02/11	0.75	Safety meeting
	0.75	Rig service
	9.75	Drill
	11.75	Circulate and condition mud
	1.0	Thaw kelly
07/02/12	1.0	Safety meeting
	0.75	Rig service
	1.25	Drill
	3.25	Circulate and condition mud
	10.25	Trip
	6.5	Coring
	1.0	Reaming
07/02/13	1.25	Safety meeting
	0.75	Rig service
	10.25	Coring
	1.0	Circulate and condition mud
	1.5	Reaming
	8.25	Trip
	1.0	Slip and cut drill line
07/02/14	0.75	Safety meeting
	0.75	Rig service
	9.25	Drill
	3.5	Coring
	8.25	Trip
	1.5	Reaming
07/02/15	0.75	Safety meeting
	0.75	Rig service
	0.25	Survey
	12.25	Trip
	7.75	Logging
	2.25	Circulate and condition mud
07/02/16	1.25	Safety meeting
	0.25	Rig service
	6.5	Run casing
	2.0	Circulate and condition mud
	3.0	Cement casing
	3.75	Nipple down BOP's

	7.25	Rig out rig

Time Break Down by Activity:

Activity	Hours
Move on, rig up:	40.75
Wait on daylight	11.5
Drilling:	127.25
Surveying:	11.75
Reaming:	12.25
Tripping:	103.0
Circulate and condition mud:	106.75
Running casing:	22.0
Cementing casing:	4.75
Wait on cement	9.0
Wait on cementers:	2.0
Pump cement plugs:	7.0
Drill out cement plugs:	20.0
Drill out casing shoe:	1.25
Rig service:	14.0
Repair Kelly:	2.5
Thaw Kelly:	1.5
Safety meetings:	22.75
Nipple up diverter:	8.75
Weld casing bowl:	2.5
Nipple up BOP's:	5.75
Pressure test BOP's:	6.25
Leak off tests:	0.75
Coring:	20.25
Logging:	7.75
Slip & cut drill line:	2.5
Nipple down BOP's:	3.75
Rig out:	7.25

15. Deviation Survey: See deviation survey summary on page 12-1 of the Geological Report in the Attachments Section.

16. Abandonment Plugs: N/A

17. Composite Well Record: See the copy of the strip log in the Geological Report in the Attachments Section.

18. Completion Record: Reported in a separate report.

D: GEOLOGY

GEOLOGICAL SUMMARY

Tops: See page 16-1 of the Geological Report in the Attachments Section.

Sample Descriptions: See page 19-1 to 19-9 of the Geological Report in the Attachments Section.

Coring: Core #1: Sulphur Point Dolomite: 1406.0 - 1413.4 mKB
Cut: 7.4 m
Recovered: 7.63 m
Core #2: Sulphur Point & Muskeg: 1413.4 - 1425.0 mKB
Cut: 11.6 m
Recovered: 11.6 m

Total Depth: 1406 mKB

GAS DETECTION REPORT

A gas detector was utilized from the drill out of the conductor pipe to total depth. The gas detector readings are included on the composite geological log at the end of the Geological Report in the Attachments Section.

DRILL STEM TESTS: None.

WELL EVALUATION

The following logs were run:

Array Induction Log:	420 - 1449 mKB
Photo Density Dual Spaced Neutron Log:	0 - 1442 mKB
Compensated Sonic Log:	352 - 1446 mKB
Micro Log:	1300 - 1428 mKB

GAS, OIL, & WATER ANALYSES: N/A

FORMATION STIMULATION: N/A

FORMATION AND TEST RESULTS: N/A

DETAILED TEST PRESSURE DATA READINGS: N/A

E. ENVIRONMENTAL CONSIDERATIONS

There are no known outstanding environmental considerations on this well. The well was drilled sumpless with all drilling fluids being held in tanks on the lease. At the end of the job the water was stripped from the mud system and hauled to L-73 for re-use. The solids were hauled to a remote site at J-04 60^0 10' N, 117^0 30' W where they were disposed of using the mix/bury/cover technique.

Geological Report

On

Para Et Al Cameron J-04

300/J-04-60-10-117-30

For

Paramount resources ltd.

Paramount Resources Ltd.

Prepared For: Llew Williams

Prepared By: M. A. Salam Khan

Khan Petroleum Ltd.
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Table of Contents

The proposed Para Et Al Cameron J-04 an exploratory well was a part of an extensive exploratory drilling program in the Cameron Hills. The well was proposed to drill vertically as a new delineation well. Paramount Resources Ltd. retained the services of Precision Drilling Rig # 129.

The primary objective is to penetrate the prognosticated oil productive zone in the Sulphur Point Dolomite Section of Sulphur Point Formation. Productions are being drawn from some wells.

Secondary targets were to test gas and heavy hydrocarbon possibilities of in the upper limestone section of Sulphur Point and in the Slave Point formation respectively. The Cameron Hills identifies itself with its structure complexity leading to insufficient geological information. The well bore information will validate the seismic picking of the reservoirs and to learn more about the complex reservoir characteristic of the structures.

The well was spudded at 16:00hrs on the January 26, 2007. Drilling of 311mm hole from surface to 353.0m was completed using one rock bit in 34.75 on bottom bit hours. 219.1mm surface casings were run in setting the shoe at 430.0 and cemented as per program.

Partial mudloss was encountered at 598.0m KB during drilling of 200mm hole and total loss encountered at 676.0m KB. Four cement plugs including two cement squeeze jobs failed to prevent from mudloss. Drilling to TD was completed with partial returns by adding LCM materials and Gel in the mud continuously.

Due to continuous mudloss with partial returns drilling parameters could not be kept consistently. This resulted problems in collecting ditch samples and proper gas show recordings.

Two cores were cut from 1406.0m to 1413.4m and 1425.0m KB respectively with 100% recovery. 200mm hole drilled down to 1449.0m - TD of the well.

Two bits were used in drilling 200mm hole section consuming 92.0 on bottom bit hours including the coring time. Gel Chem mud was used for the surface hole and displaced with Floc water till 850.0m and back to Gel Chem during the last section of drilling.

The well was cased for production tests. The ECP was set at 568.64m KB with the 139.7mm production casing string. The Casing shoe was set at 1449.50m KB.

The Para Et Al Cameron J-04 well data is a source of geological information of the morphological changes and reservoirs characteristics of the crater of the complex of Cameron Hills. The fractured and faulted (?) section in the Wabamun Formation leads to mudloss through its crater and encountered in all the wells drilled. The geology section in the Strip Log gives a brief representation of the individual stratigraphic formations.

The Sulphur Point Limestone section was 10.7m thick from at 1389.0m to 1407.2m RKB. It is comparatively less porous than that of the dolomite section varying between 3% - 8%. No returns were received during drilling of the Limestone Section.

The Dolomite Section was cored and is 16.6m thick. Detail descriptions are given in the core description.

The Slave Point fromation was picked up at 1342.5m and 41m thick. Gas shows were noticed although the section with maximum 511/56 units and 640/56 units at 1362.0m and 1372.5m RKB respectively. The section was drilled with partial returns. The Sulphur Point Limestone section was of predominately tan, brown, greenish brown, dark brown, partly light yellow with dark brown stain and rare creamy color. They are friable to crumpled and moderately hard, blocky to subblocky, smooth to gritty, predominately microcrystalline to very fine crystalline debris, partly cryptocrystalline, predominately wackestone, partly mudstone, partly grainy, intraclasts & occasionally bioclastic debris and calcarenite. They are partly argillaceous, traces of fine crystalline dolomite, rare siltstone stringer inclusion, traces of greenish brown shale fragments, and traces of disseminated granular pyrite are found as accessories.

Weak odor of oil was noticed from the beginning of drilling this interval. Traces of light brown oil show was noticed which gradually increased between 1360m to 1375m RKB and faded away with the boundary section of the underline F4 Marker which hardly can be recognized from the drilling parameters and ditch cuttings.

The open hole logging was completed by Weatherford Logging Services.
MAI/MSS/MPD/MDN/MML/ISC/MGS/MTC/MFE/MCG tools were run in. From the ROP and gas data, ditch cuttings and logs the Sulphur Point Dolomite Section does carry positive reservoir properties for production including good oil shows. Limestone section of the Sulphur Point possesses comparatively tight porosity than that of the Dolomite Section. The Slave Point has got good reservoir properties and could be tested for the commercial viability.

Further evaluation and studies are also proposed for the quest of geological interest in the Cameron Hills Field.

Well Summary

Storage Units: Metric

Well Information

Operator:	**Paramount Resources Ltd.**
Well Name:	**Para Et Al Cameron J-04**
Location:	**300/J-04-60-10-117-30**
UWI:	300J04601011730
Pool:	Sulphur Point & Slave Point.
Field:	Cameron Hills
State / Province:	Northwest Territory
Country:	Canada
License Number:	1159
Well Status:	**Cased for production testing.**

Surface Co-ordinates

Hole Type: Vertical **Fault Indicator:**
Latitude: 60°3'31.3" **Longitude:** 117°30'47.8"
N / S:
E / W:

Bottom Hole Co-ordinates

Latitude: 60°3'31.3" **Longitude:** 117°30'47.8"
N / S:
E / W:

Elevations

		Reference:	MSL
Ground Elevation:	765.20	**Kelly Bushing to Ground:**	4.00
Kelly Bushing Elevation:	769.20	**Cut (-):**	0.00
Casing Flange Elevation:	4.00	**Fill (+):**	0.60

Total Depth

	Measured Depth	**True Vertical Depth**
Total Depth Driller (Tally) :	1,449.00	1,449.00
Total Depth Driller (Strap or SLM):	1,449.00	1,449.00
Total Depth Logger:	1,449.50	1,449.50

Miscellaneous Depths

Plugback Depth: **Water Depth Reference:**
Sidetrack Depth: **Water Depth:**

Well Summary

Drilling Contractor: Precision Rig# 129. **Spud Date:** Jan 26, 2007 @ 16:00
Rig Release Date: Feb 16, 2007 @ 23:59 **Total Depth Date:** Feb 15, 2007 @ 00:00

Cores

#	Formation	Interval		Cut	Recovered	%
2	Sulphur Point & Muskeg	1,413.40	1,425.00	11.60	11.60	100.00
1	Sulphur Point Dol.	1,406.00	1,413.40	7.40	7.63	103.11

Casing Summary

Casing Type	Casing Size	Landed Depth	Hole Size
Surface	219.1	430.00	311.0
Production	139.7	1,449.00	200.0

Date	Depth	Progress	Rotating Hours	Avg. P.R.	Daily Operational Summary
Jan 26, 07	0.00		0.00	0.0	Rig up drilling equipments. Safety meeting . Nipple up diverter line.
Jan 27, 07	194.00	194.00	11.20	17.3	Nippling up diverter line. Rig up all drilling equipments. Test diverter hydril. Pre-spud safety meeting. Spud the well at 1600hrs. Drilling of 311mm hole from surface to 194.0m. Conduct periodical surveys. Continue drilling.
Jan 28, 07	388.00	194.00	17.50	11.1	Continue drilling of 311mm surface hole from 194.0m to 388.0m with periodical surveys. Encounter mud ring at 387.0m Trip out for mud ring at 387.0m.
Jan 29, 07	430.00	42.00	0.00	0.0	Trip out for cleaning up mud ring encountered at 387.0m. Safety meeting. RIH to 302.0m. Ream down to bottom. Resume drilling and drill down to 430.0m - TD of the surface hole section. Conduct periodical surveys. Circulation and mud conditioning to 1170kg/m3 and FV: 90 sec. Wiper trip to BHA length 180m. Mud conditioning to MW: 1190 kg/m3 and FV: 120 sec. Safety meeting with Power Tongs guys. RIH 219.1mm surface casings. Encounter gravel at 65m. POOH casings and lay out the same. RIH with a rock bit and clean up assembly.
Jan 30, 07	430.00	0.00	0.00	0.0	RIH with a rock bit and clean up assembly. Ream down the tight spots. Circulation and mud conditioning to 1200kg/m3 and FV: 120sec. Safety meeting. POOH. Rig up casing equipments. RIH of 219.1mm surface casing. Casing bridged out at 80m for boulders. POOH and lay down casings. Safety meeting prior to RIH with a rock bit. RIH - reaming off the tight spots. Present bit depth 261m.
Jan 31, 07	430.00	0.00	0.00	0.0	Continue reaming from 56.0m to 143.0m and 180.0m to 205.0m. POOH. Pre-job safety meeting with the casing hands. RIH 219.1mm surface casings. Circulation and mud conditioning through the casing string. Mud conditioned to 1170kg/m3 and FV: 50sec. Run 32 joints: 431.11m; 219.1mm; 35.72kg/m; IPSCO; J-55 surface casings. Set the casing shoe at 430.0m. Conduct cement job with Sangel - pre-mix 36.5 tones 0.1.0 Class "G" + 2% CaCl2. Plug down at 2015hrs. 8m3 good cement return. WOC. Safety meeting. Cut and dress casing string. Nipples up BOP stack.

Date	Depth	Progress	Rotating Hours	Avg. P.R.	Daily Operational Summary
Feb 1, 07	600.00	170.00	6.70	25.4	Nipples up BOP stack. Test BOPs with Rainbow Pressure Testers. Pressure tested Manifold valves, chokes, all flanges, casing bowl, HCR and manual valves, Blind Rams, kill lines, check valve drilling spool, stabbing valve, inside BOP, Pipe Rams, and annular BOP. Safety meeting. Slip and cut drill line. RIH with a new 200mm PDC bit on drilling BHA, Safety meeting. Tag cement at 416.0m. Drill out float shoe, cement, shoe and 7m new formation. Circulation and mud conditioning. Conduct LOT with Floc water mud at 880kPa equivalent to 30.28kPa/m. Resume drilling and drill down to 600m. Max FG: 1835/241 units against 485.m. Continue drilling.
Feb 2, 07	729.00	129.00	8.20	15.7	Continue drilling from 600.0m to 690.0m with periodical surveys. Lost circulation. Mix and pump LCM. Drill ahead with partial return to 729.0 - 14m inside Fort Simpson Formation. POOH. Safety meeting. Run in hole with open ended drill pipe. RIH to bottom. Circulate out LCM till lost circulation. Safety meeting with Sangel. Set plug between 729.0m to 539.0m. POOH to 10 stands. Circulate and clean out cementing string. RIH and tag cement top at 538.0m
Feb 3, 07	729.00	0.00	0.00	0.0	Circulation and clean up string after POOH 10 stands of DP. Trip in and tag cement top at 593.0m. Drill out cement from 593m to 612m. Lost circulation. Mix and pump LCM. Drill ahead cement plug with partial recovery to 729.0m. Maximum 352 units gas recorded during cement drilling. Circulate out to clean the hole. RIH with open ended drill pipe with periodical flow check. Circulate out LCM with water. Pre-job safety meeting with Sangel. Set Cement Plug# 2 between 729.0m to 523.0m. POOH 13 stands. Circulate to clean out the string - no cement return. RIH to tag cement top.

Date	Depth	Progress	Rotating Hours	Avg. P.R.	Daily Operational Summary
Feb 4, 07	758.00	29.00	1.20	24.2	RIH and tag cement top at 572.0m. POOH. Lay down cementing string. Pick up drilling BHA. RIH. Flow check at 430.0m & 572.0m - static. Drill out cement from 572.0m to 720.0m. 640units TG recorded at 572.0m while maximum 452units gas recorded during cement drilling. Lost circulation encountered at 719.0m. Mix & pump LCM pill. Drill out cement from 720.0m to 729.0m.Drilled down to 758.0m with partial loss. Ditch cuttings by passed shaker screen as to save LCM materials. Circulation & mud conditioning. POOH. RIH with open ended drill pipe. Circulate out LCM material. Safety meeting with Sangel. Set Cement Plug# 3.
Feb 5, 07	758.00	0.00	0.00	0.0	Set Cement Plug# 3 between 758m to 567m. POOH 12 stands. Squeeze job. 1.3m3 cement slurry was squeezed at 50 lit/min with maximum 2mPa pressure. WOC. RIH. Feel cement at 618m. Safety meeting with Sangel. Set Cement Plug# 4 between the intervals 618m to 534m. POOH six stands to 487m. Squeeze 1.2m3 cement slurry at 50 lit/min with maximum 3mPa pressures. WOC. POOH 13 stands and lay down by singles. Safety meeting. RIH with the Bit# 3 and BHA. Flow check at 430m - static. Tag cement top at 566m. Drill out cement from 566m to 758m. TG at 566m was 612units while maximum359 units gas recorded during cement drilling.
Feb 6, 07	930.00	172.00	8.50	20.2	Resume drilling from 758.0m to 846.0m. Conduct deviation survey at 785.55m. Lost circulation - mix and pump LCM pills. Ditch cuttings by passed shale shaker's screen. Drilling continued with partial loss and low pressure to 895.0m. Normal drilling from 895.0m to 914.0m. Jets plugged. POOH. Flow check at 910.0m, 865.0m, 430.0m and 0m. RIH. TG at 914.0m is 387/56 units. Resume drilling to 930.0m. Drilling continued.
Feb 7, 07	1,072.00	142.00	19.00	7.5	Continue drilling with partial mud loss from 930.0m to 1072.0m. Conduct periodical surveys. Returns were by passed shaker's screen as to save LCM pills. Drilling continued.
Feb 8, 07	1,117.00	45.00	2.00	22.5	Continue drilling 200mm hole from 1062m to 1117m.Mix LCM plug and displace down the hole and drill the hole - drilling continued with partial return. Survey at 1085m. Returns were by passed shaker's screen as to accumulate LCM pills. Drilling continued.

Date	Depth	Progress	Rotating Hours	Avg. P.R.	Daily Operational Summary
Feb 9, 07	1,117.00	0.00	0.00	0.0	POOH to 588m. Mix LCM slug and displace down the hole. Restored circulation partially. RIH to 700m. Mix LCM slug and pump down the hole. No return. Mix and pump thicker LCM pill down the hole - partial return. RIH to 900m. Mix and displace thicker LCM slug down the hole - partial return. RIH to 1100m. Ream down to 1117.0m with partial return. Well control continued with close observation.
Feb 10, 07	1,147.00	30.00	5.70	5.3	Ream down from 1100m to 1117m. Drilling from 1117m to 1122m. Returns by passed shaker's screen due to mud loss. Bit balled. POOH. Lay down bit and pick a new 200mm, Varel, MKS 55 bit. Set a new pre-mix tank with the mud system. Mix and prepare mud to drill ahead. Drill down to 1147.0m. Mix and prepare new mud with LCM pill.
Feb 11, 07	1,332.00	185.00	7.20	25.7	Mix and prepare new mud with LCM pill to drill ahead. Drilling of 200mm hole from 1147.0m to 1332.0m with partial returns. New mud was prepared with LCM pill every after 5 joints of drilling i.e. mud 20m3 in every five joints of drilling. Conduct periodical surveys. Continue drilling.
Feb 12, 07	1,406.00	74.00	6.00	12.3	Continue drilling from 1332.0m to 1389.0m. Clean up flow line, pumps and Kelly. Mix and prepare new mud with LCM pill to drill ahead. Resume drilling from 1389.0m to 1406.0m. Lost circulation encountered at 1395.0m. POOH for coring continued.
Feb 13, 07	1,413.40	7.40	4.20	1.8	POOH. Pre-job safety meeting. Lay down bit and pick up core bit and BHA. Flow check at 430.0m. Break circulation. RIH to 1406.0m with intermittent break circulation to condition mud. TG at 1406.0m is 668/84 units. Mud conditioning at 1406.0m. Coring from 1406.0m to 1413.40m. Core barrel jammed. Circulation and mud conditioning. POOH. Lay down core bit. Recover cores.
Feb 14, 07	1,425.00	11.60	6.50	1.8	Retrieve core and reset coring tools. Safety meeting with core hands. Slip and cut drill line. RIH with a new core bit, BHC, ARC 327 and coring BHA. Flow check at 430.0m, 703.0m, 1406.0m - static. Wash down to bottom. Resume coring from 1413.4m to 1425.0m. POOH to retrieve core. Flow check at 1425.0m, 1354.0m, 712.0m, 430.0m and 0m - static. Lay down core barrel and recover core. RIH with bit No. 4RR1 on drilling BHA.

Date	Depth	Progress	Rotating Hours	Avg. P.R.	Daily Operational Summary
Feb 15, 07	1,449.00	24.00	9.20	2.6	RIH with bit No. 4RR1 on drilling BHA. Flow check at 430m, 703m and 830m - static. Break circulation at 1425.0m. Trip gas recorded 382/34 units. Reaming the cored section from 1406.0m to 1425.0m. Resume drilling 200mm hole from 1425.0m to 1449.0m. Survey at 1449.0m. Circulate and condition mud to MW: 1060kg/m3 and FV to 95sec. POOH for logging. Flow check at 1425m, 703m, 430m and 0m - static. Safety meeting. Rig up Weatherford logging tools and equipments. Logging.
Feb 16, 07	1,449.00	0.00	0.00	0.0	Logging. One Run with - MAI/MSS/MPD/MDN/MGS/MML/MTC/MCG tools. RIH with rock bit. Flow check at 430m and 724m - partial loss. TG at 1449.8m is 289/34 units. POOH and lay down drilling strings. Safety meeting with Tong hand crews. Rig up casing equipments and tools. RIH of 139.7mm production casings. Set the ECP (external casing packer) at 568.64m RKB. Set the casing shoe at 1449.5m. Circulate and condition mud through the casings string.
Feb 17, 07	1,449.00	0.00	0.00	0.0	RIH production casings. RIH 109 joints of 139.7mm; 23.07kg/m; IPSCO; J-55 casings. The ECL is set at 566.0m RKB. Circulation through production string - partial returns. TG gas 194/34 units. Safety meeting with the Sanjel cementing hands. Cement job was completed in two stages. Cement slurry from 2 tones THXLITE + 1% SMS was pumped as the lead slurry followed by cement slurry from 13 tones Expandomix LWL + 1% CFL + 2% LTR + 2% SPC-II as tail slurry. Plugged down at 11:14hrs. 2m3 scavenger cement slurry was received on surface. WOC. Nipple down BOP stacks. Rig down - tear down rig. Rig move.

Casing Data Summary

Storage Units: Metric

Casing Type: Surface

Casing Size:	219.1	**Hole Size:**	311.0
Casing Landed @:	430.00	**Total Joints:**	32
Casing Date:	Jan 30, 2007 @ 13:30	**Plug Down Date:**	Jan 30, 2007 @ 20:15

# of Joints / Length / O.D. / Weight: 32 joints; 431.11m; 219.1mm; 35.72kg/m; IPSCO; J-55 types.

Cementing Details: Cement job was completed in two stages. Cement slurry from 2 tones THXLITE + 1% SMS was pumped as the lead slurry followed by cement slurry from 13 tones Expandomix LWL + 1% CFL + 2% LTR + 2% SPC-II as tail slurry. Plugged down at 11:14hrs. 2m3 scavenge

Remarks: The casings were pulled out from 65.0m and 81.0m respectively as could not pass through. Tight spots were cleanned of with reaming.

Casing Type: Production

Casing Size:	139.7	**Hole Size:**	200.0
Casing Landed @:	1,449.00	**Total Joints:**	109
Casing Date:	Feb 16, 2007 @ 06:45	**Plug Down Date:**	Feb 16, 2007 @ 11:14

# of Joints / Length / O.D. / Weight: 109 joints; 1450.48m; 139.7mm; 23.07kg/m; IPSCO; J-55.

Cementing Details: Two stages cement jobs with packer set at 566.0m RKB. Lead Slurry: cement slurry from 2 tonnes laed THXLITE + 1% SMS followed by tail slurry of 13 tonnes Expandomix LWL + 1% CFL + 2% LTR + 2% SPC-II. Plug down at 11:14hrs with 2m3scavanger cement.

Remarks: Considerable amount of mud loss was recorded during circulation through the casing string.

Bit Record Table (IADC Grading System)

Storage Units: Metric

*** For more detailed Bit Information refer to Bit Record ****

Bit #	Make	Type	Size	Depth In	Depth Out	Made	Hours	Avg. P.R.	I.A.D.C. Bit Condition								
									I	O	MDC	Loc	B	G	ODC	RP1	RP2
1A	Varel	CH04JM	311.0	0.0	430.0	430.0	34.75	12.4	2	2	CT	A	E	I	BT	TD	TD
3	Varel	MKS 65	200.0	430.0	1,122.0	692.0	52.50	13.2	0	0	WT	A	X	I	CT	HP	HP
4	Varel	MKS55	200.0	1,122.0	1,406.0	284.0	19.75	14.4									
C Bit -	BHC	BHC 40	171.0	1,406.0	1,413.0	7.0	4.00	1.8	0	0	BC	N	X	I	WT	PR	PR
C Bit -	BHC	ARC 32	171.0	1,413.4	1,425.0	11.6	6.50	1.8	0	0	NO	A	X	I	NO	FM	FM
4RR1	Varel	MKS55	200.0	1,425.0	1,449.0	24.0	9.25	2.6									

Total Rotating Hours: 126.75

Core Report

Storage Units: Metric

Date: February 12, 2007
Core #: 1
Formations Cored: **Sulphur Point Dol.**

Cored Interval
From: 1,406.00 **To:** 1,413.40
Cut: 7.40 **Recovered:** 7.63 103.11 %
Core Diameter: 102.0

Coring Company: Baker Hughes.
Service Representative: K.S. Ciurysek

Core Bit Information
Bit Make: BHC **Bit Type:** BHC 406
Bit Size (OD): 171.0 **Serial #:** 7302765
Original Hole Size: 200.0

Remarks: The core barrel got jammed after coring to 1413.46m. Core interval: 1406.0m to 1413.46m. Recovery: 102.2%

Detailed Core Descriptions

Sulphur Pt Dol: 1,407.20 MD, 1,407.20 TVD, -638.00 SSL

1,406.00 to 1,407.30 (1.30)
Limestone
tan to brownish gray, compact, very dense argillaceous limestone with patchy white to off white anhydrite and calcite strips intercalated with medium brownish limy shale laminae. Dip angle ±25-±15. Wash out by mud on surface insuring hardness of the interval. None to very tight intercrystalline porosity on the upper section which increases to vuggy at the lower part. Traces to 5% of bright yellow orange oil staining at the lower section, brownish yellow direct fluorescence, faint intensity slow milky white streaming cut, thin pale white residual ring fluorescence, poor show.

1,407.30 to 1,410.60 (3.30)
Dolomite
dolomitic limestone is isolated with dark gray, grey black, firm, compact, dense, subfissile, subplaty, limy shale, micromicaceous common microlaminated with biotitic mica plates. They predominantly of chalky mudstone texture with traces dark brown carbonaceous fossil debris and in part silty. Medium brown, tan, mottled, compact and dense dolomite underlying the limy shale sequence are porous (5% to 14% at places) masked by even brownish yellow to golden yellow oil staining, 20% to 100% white, brownish yellow and yellow gold direct fluorescence, moderate intensity, fast to instantaneous white streaming and blooming cut fluorescence, thin pale brown oil residue, thick white residual ring fluorescence, poor to excellent show.

1,410.60 to 1,411.75 (1.15)
Dolomite
spotted with dirty white to tan dolomitic limestone with some patchy shale stringers intercalated with laminae of calcite and anhydrite which has limited the permeability. Porosity in this interval varies from 5% to maximum 10%. This section is masked by 80% patchy oil staining, bright yellow to creamy white, beige direct natural fluorescence, slow to flash white streaming cut fluorescence on 30% of sample, white thin residual ring, thin pale brown oil residue, good show.

1,411.75 to 1,413.40 (1.65)	**Dolomite** The lower section is fractured with maximum ∢30 to ∢40 dip which could lead to jam the continuous coring. The dense tan, mottled, brownish dolomite section intercalated with brownish gray limy shale appears as patchy lenses rare with anhydrite inclusion. Calcite stringers are common. This section grading to dolomitic limestone with some stains of white chalky limestone. Porosity varies from 6% to 10%. This section is masked with 60% to 100% natural oil staining, weak to strong brownish yellow fluorescence, immediate to slow streaming yellow-white fluorescent cut, good pale yellow fluorescent cut residue, light tan visible cut residue, poor to excellent show show.

Core Report

Storage Units: Metric

Date: February 13, 2007
Core #: 2
Formations Cored: **Sulphur Point & Muskeg**

Cored Interval
From: 1,413.40 **To:** 1,425.00
Cut: 11.60 **Recovered:** 11.60 100.00 %
Core Diameter: 102.0

Coring Company: Baker Hughes Inteq.
Service Representative: K.S.Ciurysek

Core Bit Information
Bit Make: BHC **Bit Type:** ARC 327
Bit Size (OD): 171.0 **Serial #:** 61414
Original Hole Size: 200.0

Remarks: Cored Inteval: 1413.4m to 1425.0m. Coring was suspended due to slow ROP - 0.3m/hr.

Detailed Core Descriptions

1,413.40 to 1,413.80 (0.40)
Shale
dark gray, grey black, firm, compact, dense, subfissile, subplaty, noncalcareous, micromicaceous with traces dark brown carbonaceous debris, in part silty limy shale. Partly washed out grading to lumpy limy mudstone, slightly to highly calcareous, off white to white stains of limestone inclusion.

1,413.80 to 1,414.80 (1.00)
Dolomite
tan to brownish gray, compact, very dense dolomite mottled and light to medium brown and occasionally dark brown, firm crumbly to moderately hard, speckled with patchy white to off white anhydrite and anhedral to subhedral calcite strips, rare dark black bituminous (?) oil staining, occasionally spotty and grainy, intercalated with medium brownish patchy limy shale strips and black to brownish black minerals stains. Dip angle ∢10-∢7. Porosity 6-12%. Even oil show, masked tan oil stain, 100% golden yellow fluorescence, immediate to slow streaming pale yellow fluorescent cut, good yellow fluorescent cut residue, dark tan visible cut residue. Excellent show

1,414.80 to 1,415.80 (1.00)
Shale
tan to brownish gray compact, dense dolomite intercalated often, fractured and overlain of clayey micromicaceous limy shale. Spotty anhydrites with calcite bands are common. Spotty light tan to tan oil stain, 10%-40% scattered golden yellow fluorescence, moderate to slow streaming pale yellow fluorescent cut, very good yellow fluorescent cut residue, dark tan visible cut residue, poor to fair show.

1,415.80 to 1,416.50 (0.70)
Dolomite
mottled, tan, brownish gray crumbly to moderately hard dolomite, partly grainy, wackestone to packstone texture, 5% to 9% scattered porosity varying between ∢10-12 dip angle are masked with even oil stain, fair to good oil show, 80% golden yellow fluorescence, fast to slow streaming pale yellow fluorescent cut, good yellow fluorescent cut residue, tan visible cut residue.

1,416.50 to 1,418.40 (1.90)	**Dolomite** dolomite of brownish gray, tan and mottle with limestone grains are alternately intercalated with limy shale leading to vuggy porosity. 10 to 25% of bright yellow orange oil staining increasing to the lower section, brownish yellow direct natural sample fluorescence, faint intensity slow milky white streaming cut, thin pale white residual ring fluorescence, poor show.
1,418.40 to 1,422.90 (4.50)	**Dolomite** medium brown, off white to light grey, mottled and commonly tan aphanites to rare finely crystalline, relict wackestone with packstone texture visible when partially dolomitize, calcite and anhydrite inclusion. Black dead oil (?) stain with brownish black to black or bituminous partings. Possessing scattered porosity between 4% to 8% changing its depositional facies with variation of dip angle between ∢12-∢7. Masked with traces to maximum 60% patchy oil show to brownish yellow to golden yellow oil staining, golden white, brownish yellow and yellow gold direct fluorescence, moderate intensity, fast to slow white streaming and blooming cut fluorescence, thin pale brown oil residue, thick white residual ring fluorescence, poor to good show.
1,422.90 to 1,423.80 (0.90)	**Shale** dark gray, grayish, firm, compact, dense, subfissile, subplaty, noncalcareous, micromicaceous common traces dark brown carbonaceous debris, in part silty, shale underlying the Muskeg formation separated the Sulphur Point with unconformably fractured with micropyritic shale sequence. Speckled with white dolomitic limestone and stained of anhydrite, calcite and black to brownish black minerals. Presence of anhydride and dolomitic inclusion increases to lower part. Microlaminations are noticed with the change of facies.

Muskeg: 1,423.80 MD, 1,423.80 TVD, -654.60 SSL

1,423.80 to 1,425.00 (1.20)	**Anhydrite** white, off white, light brown, light gray, white, interbeded with dolomite, inetrbeded with limestone with patchy faint oil stain and black bituminous(?) and black minerals, moderately hard, very hard in parts, blocky, cryptocrystalline to micro crystalline, grading to thomb stone debris.

Wireline Logging Summary

Storage Units: Metric

Logging Suite Number:	1		
Wireline Logging Company:	Weatherford Logging Services.	**Engineer:**	G. Singer
District:	GPR	**Unit Number:**	13124
Witness:	Azim Ahmed		

Was Pressure Control Equipment Utilized:	No	**Maximum Deviation:**	2.700 °
Was the Logging Job Mechanically Assisted:	No	**Hole Size:**	200.0

Total Lost Time:	0.00
Loggers' Total Down Time:	0.00
Total Job Time (From Rig up to Rig down):	6.50

	Measured Depth	True Vertical Depth
Casing Depth Driller	430.00	430.00
Casing Depth Logger	430.80	430.80
Total Depth Driller (Tally)	1,449.00	1,449.00
Total Depth Driller (Strap or SLM)		

General Remarks: Logging was completed in one run.

Logging Run #: 1
Date: Feb 14, 2007

Drilling Fluid Data

Drilling Fluid Type: Gel Chem.
Fluid Density: 1060.0 **Viscosity:** 93 **pH:** 11.0 **Fluid Loss:** 11.0

Mud Resistivity (Rm):	1.18	@	25.0 °		
Mud Resistivity (Rm) @ BHT:	0.78	@	48.0 °	**Maximum Temperature:**	48.0 °
Mud Filtrate Resistivity (Rmf):	1.04	@	25.0 °	**Source (Rmf):**	Press
Mud Cake Resistivity (Rmc):	1.32	@	25.0 °	**Source (Rmc):**	Filter

Logging Run Information

Date on Bottom: Feb 15, 2007
Total Depth Logger: 1,449.50 (MD) 1,449.50 (TVD)

Logging Tools: MAI/MSS/MPD/MDN/MML/ISC/MGS/MTC/MFE/MCG tools; 430.0m to 1449.5m RKB.

Remarks:
The well is drilled as a vertical one. and all depth are measured from RKB.
The well is drilled by Precision Drilling Rig# 129.
Paramount AFE# 07N710028.
Logging was completed by Weatherford.
139.7mm production casings were run in.

Hole Conditions: Encountered total mudloss at 676.0m RKB. Drilling was completed with partial returns adding LCM pills and Gel in mud continuously. Mudloss was limited during coring.

Deviation Survey Points

Storage Units: Metric

Survey Type: magnetic / single shot

Measured Depth	Drift Angle (°)	TVD	Measured Depth	Drift Angle (°)	TVD
31.95	0.500	31.95			
59.08	0.250	59.08			
92.08	0.750	92.08			
119.80	0.750	119.80			
147.79	0.400	147.79			
175.57	0.750	175.57			
204.03	1.250	204.03			
232.62	0.750	232.62			
261.17	0.500	261.17			
290.73	0.250	290.73			
319.85	0.750	319.85			
349.04	0.750	349.04			
378.17	1.250	378.17			
407.07	1.000	407.07			
430.00	0.750	430.00			
505.00	1.000	505.00			
641.83	1.250	641.83			
785.55	1.000	785.55			
952.00	2.000	952.00			
991.00	1.500	991.00			
1,040.00	2.750	1,040.00			
1,085.00	2.500	1,085.00			
1,137.00	2.000	1,137.00			
1,449.00	1.000	1,449.00			

Drilling Fluid Summary

Storage Units: Metric

Drilling Fluid Type:	Gel Chem	**From:**	0	**To:**	430
Drilling Fluid Type:	Flock Water	**From:**	430	**To:**	850
Drilling Fluid Type:	Gel Chem	**From:**	850	**To:**	1,449

Work Schedule

Storage Units: Metric

Company:	Khan Petroleum Ltd.			
Geologist:	**Azim Ahmed**			
Work Performed	**From:**	Jan 24, 2007	**To:**	Feb 16, 2007
Depths Logged	**From:**	1,280.0	**To:**	1,449.0

Remarks: Rig moved from Bitscho 2-11 to J-04 on Jan 24-25, 2007.

Formation Top Summary

Storage Units: Metric

Kelly Bushing Elevation: 769.20 **Casing Flange Elevation:** 4.00
Ground Elevation: 765.20

***** All Depths measured from Kelly Bushing Elevation *****

Group *Formation* Member	Prognosis (TVD)	Sample Top (MD)	Sample Top (TVD)	Log Top (MD)	Log Top (TVD)	Subsea	Thickness
Wabamun	549.20	550.00	550.00	551.00	551.00	218.20	170.00
Fort Simpson	721.20	717.00	717.00	717.50	717.50	51.70	563.00
Sample Point	1,280.00	1,280.00	1,280.00			-510.80	
BhL	1,314.10	1,319.50	1,319.50	1,319.70	1,319.70	-550.50	22.50
Slave Point	1,339.00	1,342.00	1,342.00	1,342.80	1,342.80	-573.60	41.50
F4	1,381.10	1,383.50	1,383.50	1,383.70	1,383.70	-614.50	6.00
Watt Mountain	1,388.50	1,389.50	1,389.50	1,389.00	1,389.00	-619.80	8.00
Sulphur Pt Ls	1,398.10	1,396.50	1,396.50	1,394.00	1,394.00	-624.80	10.70
Sulphur Pt Dol	1,405.80	1,407.20	1,407.20	1,406.70	1,406.70	-637.50	16.60
Muskeg	1,426.00	1,423.80	1,423.80	1,424.00	1,424.00	-654.80	25.20
Total Depth	1,449.20	1,449.00	1,449.00	1,449.80	1,449.80	-680.60	

Sample Point: 1,280.00 MD, 1,280.00 TVD, -510.80 SSL

1,280.00 to 1,285.00 (5.00)	80%	**Shale** medium gray, gray, greenish gray, firm, friable, partly moderately hard to hard, splintery to blocky, micromicaceous, dull earthy texture, mud stone inclusion, smooth to waxy texture in parts, fissile to subfissile, partly platy, carbonaceous, traces of granular pyrite, abundant of gray to tan limestone inclusion, abundant of dark brown to black minerals, rare silty, very calcareous to shally limestone.
	20%	**Limestone** off white, light brown, brownish gray, mottled, in part chalky, firm to crumpled, rare moderately hard, blocky to subblocky, smooth to gritty, partly grainy, cryptocrystalline to microcrystalline debris, predominately mudstone, rare wackestone, calcarenite, commonly dolomitic & locally grading to dolomitic limestone, traces of calcite inclusions, abundant of shale fragments, local disseminated pyrite, poor intercrystalline visible porosity, no shows.
1,285.00 to 1,290.00 (5.00)	70%	**Shale** medium gray, gray, greenish gray, firm, friable, partly moderately hard to hard, splintery to blocky, micromicaceous, dull earthy texture, mud stone inclusion, smooth to waxy texture in parts, fissile to subfissile, partly platy, carbonaceous, traces of granular pyrite, abundant of gray to tan limestone inclusion, abundant of dark brown to black minerals, traces of loose coarse quartz grains, rare silty, very calcareous to shally limestone.
	30%	**Limestone** off white, light brown, brownish gray, mottled, in part chalky, firm to crumpled, rare moderately hard, blocky to subblocky, smooth to gritty, partly grainy, cryptocrystalline to microcrystalline debris, predominately mudstone, rare wackestone, calcarenite, commonly dolomitic & locally grading to dolomitic limestone, traces of calcite inclusions, abundant of shale fragments, local disseminated pyrite, poor intercrystalline visible porosity, no shows.
1,290.00 to 1,295.00 (5.00)	60%	**Limestone** off white, light brown, brownish gray, mottled, tan, in part chalky, firm to crumpled, rare moderately hard, blocky to subblocky, smooth to gritty, partly grainy, cryptocrystalline to microcrystalline debris, predominately mudstone, rare wackestone, calcarenite, commonly dolomitic & locally grading to dolomitic limestone, traces of calcite inclusions, abundant of shale fragments, local disseminated pyrite, traces of loose coarse quartz grains, poor intercrystalline visible porosity, no shows.
	40%	**Shale** medium gray, gray, greenish gray, firm, friable, partly moderately hard to hard, splintery to blocky, micromicaceous, dull earthy texture, mud stone inclusion, smooth to waxy texture in parts, fissile to subfissile, partly platy, carbonaceous, traces of granular pyrite, abundant of gray to tan limestone inclusion, abundant of dark brown to black minerals, traces of loose coarse quartz grains, rare silty, very calcareous to shally limestone.

1,295.00 to 1,300.00 (5.00)	70%	**Shale** medium gray, gray, greenish gray, firm, friable, partly moderately hard to hard, splintery to blocky, micromicaceous, dull earthy texture, mud stone inclusion, smooth to waxy texture in parts, fissile to subfissile, partly platy, carbonaceous, traces of granular pyrite, abundant of gray to tan limestone inclusion, abundant of dark brown to black minerals, traces of loose coarse quartz grains, rare silty, very calcareous to shally limestone.
	30%	**Limestone** off white, light brown, brownish gray, mottled, tan, in part chalky, firm to crumpled, rare moderately hard, blocky to subblocky, smooth to gritty, partly grainy, cryptocrystalline to microcrystalline debris, predominately mudstone, rare wackestone, calcarenite, commonly dolomitic & locally grading to dolomitic limestone, traces of calcite inclusions, abundant of shale fragments, local disseminated pyrite, traces of loose coarse quartz grains, poor intercrystalline visible porosity, no shows.
1,300.00 to 1,305.00 (5.00)	70%	**Shale** medium gray, gray, partly greenish gray, firm, friable, partly moderately hard to hard, splintery to blocky, micromicaceous, dull earthy texture, mud stone inclusion, smooth to waxy texture in parts, fissile to subfissile, partly platy, carbonaceous, traces of granular pyrite, abundant of gray to tan lumpy to blocky limestone, abundant of dark brown to black minerals, traces of loose coarse quartz grains, rare silty, very calcareous to shally limestone, rare dolomitic.
	30%	**Limestone** off white, light brown, brownish gray, mottled, tan, in part chalky, firm to crumpled, rare moderately hard, blocky to subblocky, smooth to gritty, partly grainy, cryptocrystalline to microcrystalline debris, predominately mudstone, rare wackestone, calcarenite, commonly dolomitic & locally grading to dolomitic limestone, traces of calcite inclusions, abundant of shale fragments, local disseminated pyrite, traces of loose coarse quartz grains, poor intercrystalline visible porosity, no shows.
1,305.00 to 1,310.00 (5.00)	80%	**Shale** medium gray, gray, partly greenish gray, firm, friable, partly moderately hard to hard, splintery to blocky, micromicaceous, dull earthy texture, mud stone inclusion, smooth to waxy texture in parts, fissile to subfissile, partly platy, carbonaceous, traces of granular pyrite, abundant of gray to tan lumpy to blocky limestone, abundant of dark brown to black minerals, traces of loose coarse quartz grains, rare silty, very calcareous to shally limestone, rare dolomitic.
	20%	**Limestone** off white, light brown, brownish gray, mottled, tan, in part chalky, firm to crumpled, rare moderately hard, blocky to subblocky, smooth to gritty, partly grainy, cryptocrystalline to microcrystalline debris, predominately mudstone, rare wackestone, calcarenite, commonly dolomitic & locally grading to dolomitic limestone, traces of calcite inclusions, abundant of shale fragments, local disseminated pyrite, traces of loose coarse quartz grains, poor intercrystalline visible porosity, no shows.

1,310.00 to 1,315.00 (5.00)

70% **Shale**
blackish gray, gray, dark gray, firm, friable, moderately hard to hard, predominately blocky, smooth to gritty, commonly micromicaceous & limy, partly dull earthy texture, subfissile, partly platy, rare thinly laminated, occasionally silty, partly carbonaceous, traces of argillaceous dolomitic limestone, rare siltstone & sandstone stringers, slightly calcareous.

30% **Limestone**
off white, light brown, brownish gray, mottled, tan, in part chalky, firm to crumpled, rare moderately hard, blocky to subblocky, smooth to gritty, partly grainy, cryptocrystalline to microcrystalline debris, predominately mudstone, rare wackestone, calcarenite, commonly dolomitic & locally grading to dolomitic limestone, traces of calcite inclusions, abundant of shale fragments, local disseminated pyrite, traces of loose coarse quartz grains, poor intercrystalline visible porosity, no shows.

BhL: 1,319.50 MD, 1,319.50 TVD, -550.30 SSL

1,315.00 to 1,320.00 (5.00)

80% **Shale**
blackish gray, gray, dark gray, traces greenish gray, firm, friable, moderately hard to hard, predominately blocky, commonly micromicaceous & limy, partly dull earthy texture, partly smooth to gritty, partly subfissile, partly platy, rare thinly laminated, occasionally silty, partly carbonaceous, traces of argillaceous limestone, rare siltstone & sandstone stringers, calcareous.

20% **Limestone**
off white, light brown, brownish gray, mottled, tan, in part chalky, firm to crumpled, rare moderately hard, blocky to subblocky, smooth to gritty, partly grainy, cryptocrystalline to microcrystalline debris, predominately mudstone, rare wackestone, calcarenite, commonly dolomitic & locally grading to dolomitic limestone, traces of calcite inclusions, abundant of shale fragments, local disseminated pyrite, traces of loose coarse quartz grains, poor intercrystalline visible porosity, no shows.

1,320.00 to 1,325.00 (5.00)

50% **Limestone**
off white, light brown, brownish gray, mottled, tan, in part chalky, firm to crumpled, rare moderately hard, blocky to subblocky, smooth to gritty, partly grainy, cryptocrystalline to microcrystalline debris, predominately mudstone, rare wackestone, calcarenite, commonly dolomitic & locally grading to dolomitic limestone, traces of calcite inclusions, traces bituminous in part (?), abundant of shale fragments, local disseminated pyrite, traces of loose coarse quartz grains, poor intercrystalline visible porosity, no shows.

50% **Shale**
blackish gray, gray, dark gray, traces greenish gray, soft to firm, friable, moderately hard to hard, sub blocky to blocky, commonly micromicaceous & limy, partly dull earthy texture, partly smooth to waxy, partly subfissile, partly platy, rare thinly laminated, partly clayey, occasionally silty, partly carbonaceous, traces of argillaceous limestone, traces bituminous in part (?), abundant of shale fragments, local disseminated pyrite, traces of loose coarse quartz grains with rare siltsone & sandstone stringers, calcareous.

1,325.00 to 1,330.00 (5.00)	70%	**Shale** blackish gray, gray, dark gray, traces greenish gray, moderately hard to hard, partly friable, sub blocky to blocky, commonly micromicaceous & limy, partly dull earthy texture, partly smooth to waxy, partly subfissile, partly platy, rare thinly laminated, partly clayey, occasionally silty, partly carbonaceous, clayey in parts, traces of argillaceous limestone, traces bituminous in part (?), abundant of shale fragments, local disseminated pyrite, traces of loose coarse quartz grains with rare siltsone & sandstone stringers, calcareous. traces of siltstone and sandstone stringers, abundant of argillaceous limestone, calcareous.
	30%	**Limestone** off white, light brown, brownish gray, mottled, tan, in part chalky, firm to crumpled, rare moderately hard, blocky to subblocky, smooth to gritty, partly grainy, cryptocrystalline to microcrystalline debris, predominately mudstone, rare wackestone, calcarenite, commonly dolomitic & locally grading to dolomitic limestone, traces of calcite inclusions, traces bituminous in part (?), abundant of shale fragments, local disseminated pyrite, traces of loose coarse quartz grains, poor intercrystalline visible porosity, no shows.
1,330.00 to 1,335.00 (5.00)	70%	**Shale** gray, dark gray, brownish gray, occasionally greenish gray, moderately hard to hard, partly friable, sub blocky to blocky, smooth to gritty, commonly micromicaceous, partly limy, partly dull earthy texture, rare subfissile, partly platy & rare thinly laminated, occasionally silty, partly carbonaceous, traces of argillaceous limestone, traces of coarse quartz graing with some siltstone stringers, calcareous.
	30%	**Limestone** off white, light brown, brownish gray, mottled, tan, in part chalky, firm to crumpled, rare moderately hard, blocky to subblocky, smooth to gritty, partly grainy, cryptocrystalline to microcrystalline debris, predominately mudstone, rare wackestone, calcarenite, commonly dolomitic & locally grading to dolomitic limestone, traces of calcite inclusions, traces bituminous in part (?), abundant of shale fragments, local disseminated pyrite, traces of loose coarse quartz grains, poor intercrystalline visible porosity, no shows.
1,335.00 to 1,340.00 (5.00)	80%	**Limestone** white, off white, light brown, mottled, tan, creamy, dark brown, firm to crumpled to moderately hard, lumpy to blocky, partly subblocky, smooth to gritty, predominately microcrystalline to crystalline debris, predominately wackestone to mudstone, locally dolomitic, intraclasts & occasionally bioclastic debris, commonly loose grains to predominately peloids, calcarenite, traces of fine crystalline dolomite, traces of coarse quartz grain, fair visible intracrystalline porosity, no show.
	20%	**Shale** gray, dark gray, brownish gray, occasionally greenish gray, moderately hard to hard, partly friable, sub blocky to blocky, smooth to gritty, commonly micromicaceous, partly limy, partly dull earthy texture, rare subfissile, partly platy, rare thinly laminated, occasionally silty, partly carbonaceous, traces of argillaceous limestone, traces of granular pyrite, calcareous.

Slave Point: 1,342.00 MD, 1,342.00 TVD, -572.80 SSL

1,340.00 to 1,345.00 (5.00) 100% **Limestone**
white, off white, light brown, mottled, tan, creamy, dark brown, firm to crumpled to moderately hard, lumpy to blocky, partly subblocky, smooth to gritty, predominately microcrystalline to crystalline debris, predominately wackestone to mudstone, locally dolomitic, intraclasts & occasionally bioclastic debris, commonly loose grains to predominately peloids, calcarenite, traces of fine crystalline dolomite, traces of coarse quartz grain, dense with trace poor intracrystalline porosity, rare traces of light brown oil show to very weak odour, no visible staining, light pale yellow sample fluorescence, faint cut, no residual ring fluorescence, poor show.

1,345.00 to 1,350.00 (5.00) 100% **Limestone**
brown, greenish brown, tan, dark brown, partly light yellow with dark brown stain, friable to crumpled to moderately hard, blocky to subblocky, smooth to gritty, predominately microcrystalline to very fine crystalline debris, partly cryptocrystalline, predominately wackestone, partly mudstone, intraclasts & occasionally bioclastic debris, calcarenite, partly argillaceous, traces of fine crystalline dolomite, rare siltstone stringer, traces of greenish brown shale fragments, traces of nodular pyrite, poor to fair visible intracrystalline porosity, rare traces of light brown oil show to very weak odour, no visible staining, light pale yellow sample fluorescence, no cut, no residual ring fluorescence, poor show.

1,350.00 to 1,355.00 (5.00) 100% **Limestone**
brown, greenish brown, tan, dark brown, partly light yellow with dark brown stain, rare creamy, friable to crumpled to moderately hard, blocky to subblocky, smooth to gritty, predominately microcrystalline to very fine crystalline debris, partly cryptocrystalline, predominately wackestone, partly mudstone, partly grainy, intraclasts & occasionally bioclastic debris, calcarenite, partly argillaceous, traces of fine crystalline dolomite, rare siltstone stringer inclusion, traces of greenish brown shale fragments, traces of disseminated granular pyrite, fair to good visible intracrystalline porosity, weak odor, traces of light brown oil show, no visible staining, light pale yellow sample fluorescence, very faint cut, no residual ring fluorescence, poor show.

1,355.00 to 1,360.00 (5.00) 100% **Limestone**
predominately tan, brown, greenish brown, dark brown, partly light yellow with dark brown stain, rare creamy, friable to crumpled to moderately hard, blocky to subblocky, smooth to gritty, predominately microcrystalline to very fine crystalline debris, partly cryptocrystalline, predominately wackestone, partly mudstone, partly grainy, intraclasts & occasionally bioclastic debris, calcarenite, partly argillaceous, traces of fine crystalline dolomite, rare siltstone stringer inclusion, traces of greenish brown shale fragments, traces of disseminated granular pyrite, fair to good visible intracrystalline porosity, weak odor, traces of light brown oil show, no visible staining, light pale yellow sample fluorescence, very faint cut, no residual ring fluorescence, poor show.

1,360.00 to 1,365.00 (5.00) 100% **Limestone**
predominately brown, off white, greenish brown, light yellow with dark brown stain, occasionally tan, dark brown, firm, friable to crumpled to moderately hard, lumpy to blocky, predominately microcrystalline to very fine crystalline debris, partly cryptocrystalline, predominately wackestone, partly mudstone, intraclasts & occasionally bioclastic debris, calcarenite, partly argillaceous, traces of fine crystalline dolomite, rare siltstone stringer & greenish brown shale fragments inclusion, traces of loose coarse quartz grains, good visible intracrystalline porosity, weak odour, no visible staining, patchy golden white natural sample fluorescence, slow faint cut, pale yellowish brown residual ring fluorescence, good show.

1,365.00 to 1,370.00 (5.00) 100% **Limestone**
predominately brown, off white, greenish brown, light yellow with dark brown stain, occasionally tan, dark brown, firm, friable to crumpled to moderately hard, lumpy to blocky, predominately microcrystalline to very fine crystalline debris, partly cryptocrystalline, predominately wackestone, partly mudstone, intraclasts & occasionally bioclastic debris, calcarenite, partly argillaceous, traces of fine crystalline dolomite, rare siltstone stringer & greenish brown shale fragments inclusion, traces of loose coarse quartz grains, good visible intracrystalline porosity, weak odour, no visible staining, patchy golden white natural sample fluorescence, slow faint cut, pale brownish yellow residual ring fluorescence, good show.

1,370.00 to 1,375.00 (5.00) 100% **Limestone**
brown, off white, greenish brown, dark brown, light yellow with dark brown stain, tan, firm, friable to crumpled to moderately hard, lumpy to blocky, predominately microcrystalline to very fine crystalline debris, partly cryptocrystalline, predominately wackestone, partly mudstone, partly grainy, intraclasts & occasionally bioclastic debris, calcarenite, argillaceous in parts, traces of fine crystalline dolomite, rare siltstone stringer & greenish brown shale fragments inclusion, traces of loose coarse quartz grains, traces of bituminous (?) fragments, good visible intracrystalline porosity, weak odor, no visible staining, patchy golden white natural sample fluorescence, slow faint cut, pale brownish yellow residual ring fluorescence, good show.

1,375.00 to 1,380.00 (5.00) 100% **Limestone**
brown, off white, greenish brown, dark brown, light yellow with dark brown stain, tan, firm, friable to crumpled to moderately hard, lumpy to blocky, predominately microcrystalline to very fine crystalline debris, partly cryptocrystalline, predominately wackestone, partly mudstone, partly grainy, intraclasts & occasionally bioclastic debris, calcarenite, argillaceous in parts, traces of fine crystalline dolomite, rare siltstone stringer & greenish brown shale fragments inclusion, traces of loose coarse quartz grains, good visible intracrystalline porosity, weak odour, no visible staining, traces of golden white natural sample fluorescence, slow faint cut, pale brownish yellow residual ring fluorescence, fair show.

Shale
gray, greenish gray, moderately hard to hard, partly friable, sub blocky to blocky, commonly micromicaceous, rare dull earthy texture, partly clayey & soft to firm, rare subfissile, partly platy, occasionally silty, partly carbonaceous, abundant crystalline limestone, traces of fine crystalline dolomite, traces of bituminous (?) fragments, non to slightly calcareous.

F4: 1,383.50 MD, 1,383.50 TVD, -614.30 SSL

1,380.00 to 1,385.00 (5.00) 100% **Limestone**
off white, mottled, light yellow with dark brown stain, light brown, dark brown, firm to crumpled to moderately hard, blocky to subblocky, smooth to gritty, predominately microcrystalline to crystalline debris, predominately wackestone to packstone, locally grading to dolomitic limestone, intraclasts & occasionally bioclastic debris, commonly loose grains to predominately peloids, calcarenite, traces of fine crystalline dolomite, traces of coarse quartz grain, traces of anhydrite inclusion, abundant of gray to greenish gray shale fragments, vuggy to fair visible intracrystalline porosity, very faint odour, no visible staining, traces of light brown oil show, light brownish yellow sample fluorescence, faint cut, no residual ring fluorescence, poor show.

Shale
gray, greenish gray, moderately hard to hard, partly friable, sub blocky to blocky, commonly micromicaceous, rare dull earthy texture, partly clayey & soft to firm, rare subfissile, partly platy, occasionally silty, partly carbonaceous, abundant crystalline limestone, traces of fine crystalline dolomite, traces of bituminous (?) fragments, traces of coarse quartz grain, traces of anhydrite inclusion, non to slightly calcareous.

Watt Mountain: 1,389.50 MD, 1,389.50 TVD, -620.30 SSL

1,385.00 to 1,390.00 (5.00) 80% **Limestone**
brown, light yellow with dark brown stain, occasionally tan, dark brown, firm, friable to crumpled to moderately hard, blocky to subblocky, smooth to gritty, predominately microcrystalline to very fine crystalline debris, partly cryptocrystalline, predominately wackestone, partly mudstone, partly argillaceous, traces of fine crystalline dolomite, traces of greenish brown shale fragments, abundant of anhydrite inclusion, loose coarse quartz grains, tight visible intracrystalline porosity, no shows.

20% **Shale**
gray, greenish gray, moderately hard to hard, partly friable, sub blocky to blocky, commonly micromicaceous, rare dull earthy texture, partly clayey & soft to firm, rare subfissile, partly platy, occasionally silty, partly carbonaceous, abundant crystalline limestone, traces of fine crystalline dolomite, non to slightly calcareous.

1,390.00 to 1,395.00 (5.00) 80% **Limestone**
brown, light yellow with dark brown stain, occasionally tan, dark brown, firm, friable to crumpled to moderately hard, blocky to subblocky, smooth to gritty, predominately microcrystalline to very fine crystalline debris, partly cryptocrystalline, predominately wackestone, partly mudstone, partly argillaceous, traces of fine crystalline dolomite, traces of greenish brown shale fragments, abundant of anhydrite inclusion, loose coarse quartz grains, tight visible intracrystalline porosity, no shows.

1,390.00 to 1,395.00 (5.00)	20%	**Shale** gray, greenish gray, green, moderately hard to hard, partly friable, sub blocky to blocky, smooth to gritty, commonly micromicaceous, rare dull earthy texture, rare subfissile, occasionally thinly laminated, occasionally silty, partly carbonaceous, abundant crystalline limestone, traces of fine crystalline dolomite, abundant of bituminous (?) fragments with dark brown to black minerals, traces of coarse quartz grain with granular pyrite, traces of anhydrite inclusion, calcareous.
1,425.00 to 1,430.00 (5.00)	80%	**Dolomite** light brown, mottled, tan, off white, firm to crumpled to moderately hard, blocky to subblocky, smooth to gritty, partly earthy & chalky, ratty, predominately cryptocrystalline debris, predominately mudstone, partly wackestone, slightly argillaceous, abundant limestone & anhydrite inclusion, calcarenite, no visible intracrystalline porosity, no shows.
	20%	**Anhydrite** white, off white, light brown, light gray, white, interbeded with dolomite, inetrbeded with limestone with patchy faint oil stain and black bituminous(?) and black minerals, moderately hard, very hard in parts, blocky, cryptocrystalline to micro crystalline, grading to thomb stone debris.
1,430.00 to 1,435.00 (5.00)	70%	**Dolomite** light brown, mottled, tan, off white, firm to crumpled to moderately hard, blocky to subblocky, smooth to gritty, partly earthy & chalky, ratty, predominately cryptocrystalline debris, predominately mudstone, partly wackestone, slightly argillaceous, abundant anhydrite inclusion with some limestone, calcarenite, no visible intracrystalline porosity, no shows.
	30%	**Anhydrite** white, off white, hyaline, tan, irregularly shaped, sharp, angular, abundant of calcite inclusion, traces of fine crystalline limestone with abundant of of brownish gray to tan dolomite inclusion, traces of greenish brown shale fragments, traces of carbonaceous material.
1,435.00 to 1,440.00 (5.00)	80%	**Dolomite** light gray, light brown, mottled, tan, stainy, creamy, reddish brown, firm to crumpled to moderately hard, blocky to subblocky, smooth to gritty, partly earthy & chalky, ratty, predominately cryptocrystalline debris, mudstone, partly packstone, slightly argillaceous, abundant limestone inclusion, locally grading to dolomitic limestone, calcarenite, fossiliferous, abundant of calcite and anhydrite inclusions, traces of bituminous partings with some black minerals, traces of shale grain, tight intracrystalline porosity, no shows.
	20%	**Anhydrite** white, off white, hyaline, tan, irregularly shaped, sharp, angular, abundant of calcite inclusion, atraces of fine crystalline limestone with abundant of of brownish gray to tan dolomite inclusion.
1,440.00 to 1,445.00 (5.00)	80%	**Dolomite** light brown, mottled, tan, off white, firm to crumpled to moderately hard, blocky to subblocky, smooth to gritty, partly earthy & chalky, ratty, predominately cryptocrystalline debris, predominately mudstone, partly wackestone, slightly argillaceous, abundant limestone & anhydrite inclusion, calcarenite, no visible intracrystalline porosity, no shows.

1,440.00 to 1,445.00 (5.00)	20%	**Anhydrite** white, off white, hyaline, tan, irregularly shaped, sharp, angular, abundant of calcite inclusion, atraces of fine crystalline limestone with abundant of of brownish gray to tan dolomite inclusion.
1,445.00 to 1,449.00 (4.00)	60%	**Dolomite** light brown, mottled, tan, off white, firm to crumpled to moderately hard, blocky to subblocky, smooth to gritty, partly earthy & chalky, ratty, predominately cryptocrystalline debris, predominately mudstone, partly wackestone, slightly argillaceous, abundant anhydrite inclusion with some limestone, calcarenite, no visible intracrystalline porosity, no shows.
	40%	**Anhydrite** white, off white, hyaline, tan, irregularly shaped, sharp, angular, abundant of calcite inclusion, traces of fine crystalline limestone with abundant of of brownish gray to tan dolomite inclusion, traces of greenish brown shale fragments, traces of carbonaceous material.

Well Information

Operator:	**Paramount Resources Ltd.**
Well Name:	**Para Et Al Cameron J-04**
Location:	**300/J-04-60-10-117-30**
UWI:	300J04601011730
Pool:	Sulphur Point & Slave Point.
Field:	Cameron Hills
Province / State:	Northwest Territory
Country:	Canada

Paramount resources ltd.

Elevations

Reference:	MSL	**Ground:**	765.2 m
Cut(-) / Fill(+):	-0 m	**Kelly Bushing:**	769.2 m
K.B. to Ground:	4 m	**Casing Flange:**	4 m

Total Depth

Measurement Type	Measured Depth	True Vertical Depth
Drillers TD (Tally)	1449 m	1449 m
Drillers TD (Strap or SLM)	1449 m	1449 m
Loggers TD	1449.5 m	1449.5 m

Surface Co - Ordinates

Well Type:	Straight	**Longitude:**	117º30'47.8"	**Latitude:**	60º3'31.3"
N / S Co - Ordinates:					
E / W Co - Ordinates:					

Bottom Hole Co - Ordinates

Longitude:	117º30'47.8"	**Latitude:**	60º3'31.3"
N / S Co - Ordinates:			
E / W Co - Ordinates:			

Drilling Fluid Summary

Fluid Type	From	To
Gel Chem	0 m	430 m
Flock Water	430 m	850 m
Gel Chem	850 m	1449 m

Casing Summary

Type	Hole Size	Casing Size	Landed At
Surface	311 mm	219.1 mm	430 m
Production	200 mm	139.7 mm	1449 m

Well Summary

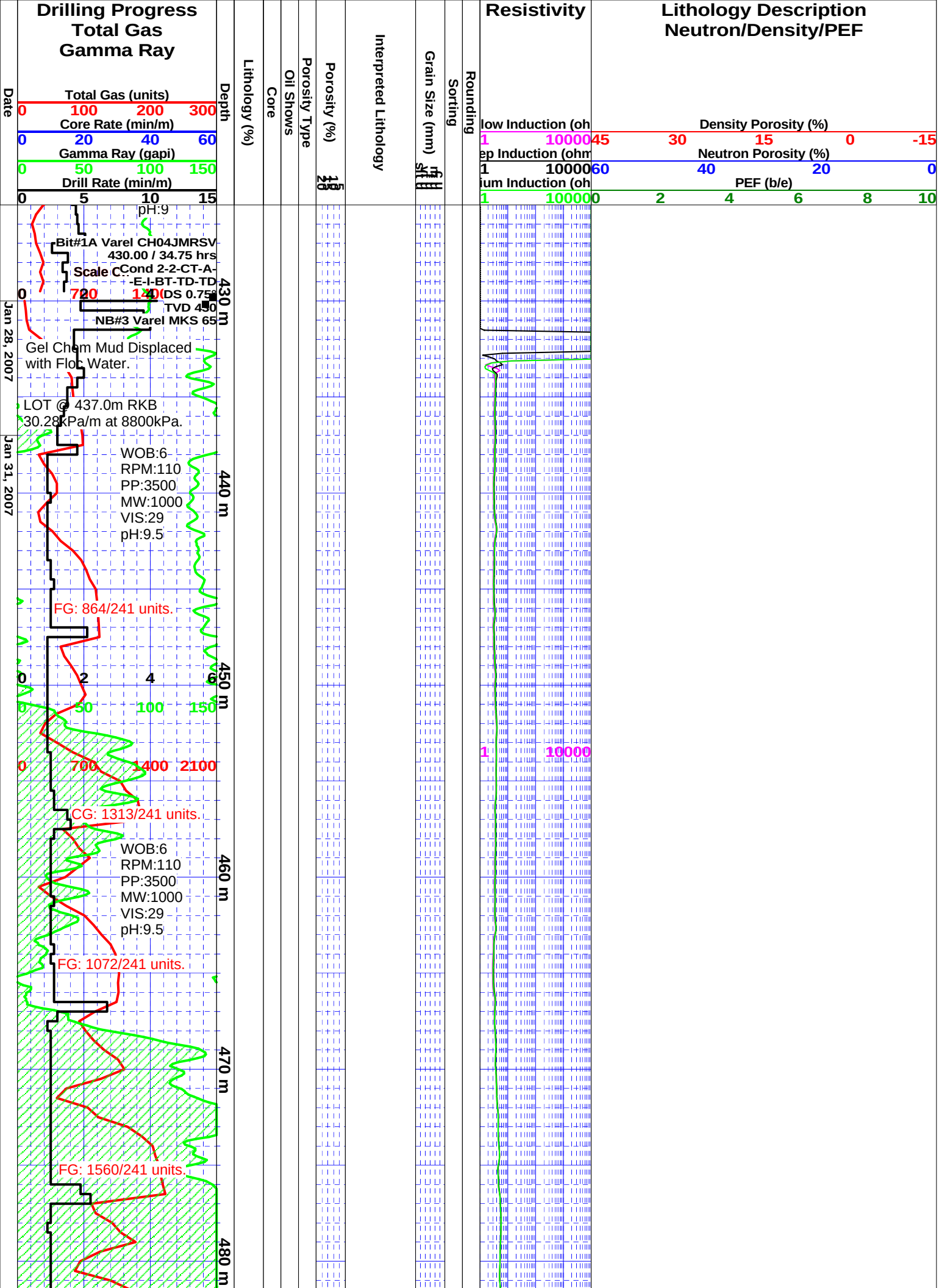
Spud Date:	Jan 26, 2007 @ 16:00hrs	**Contractor:**	Precision Rig# 129.
TD Date:	Feb 15, 2007	**Rig Release Date:**	Feb 16, 2007 @ 23:59hrs

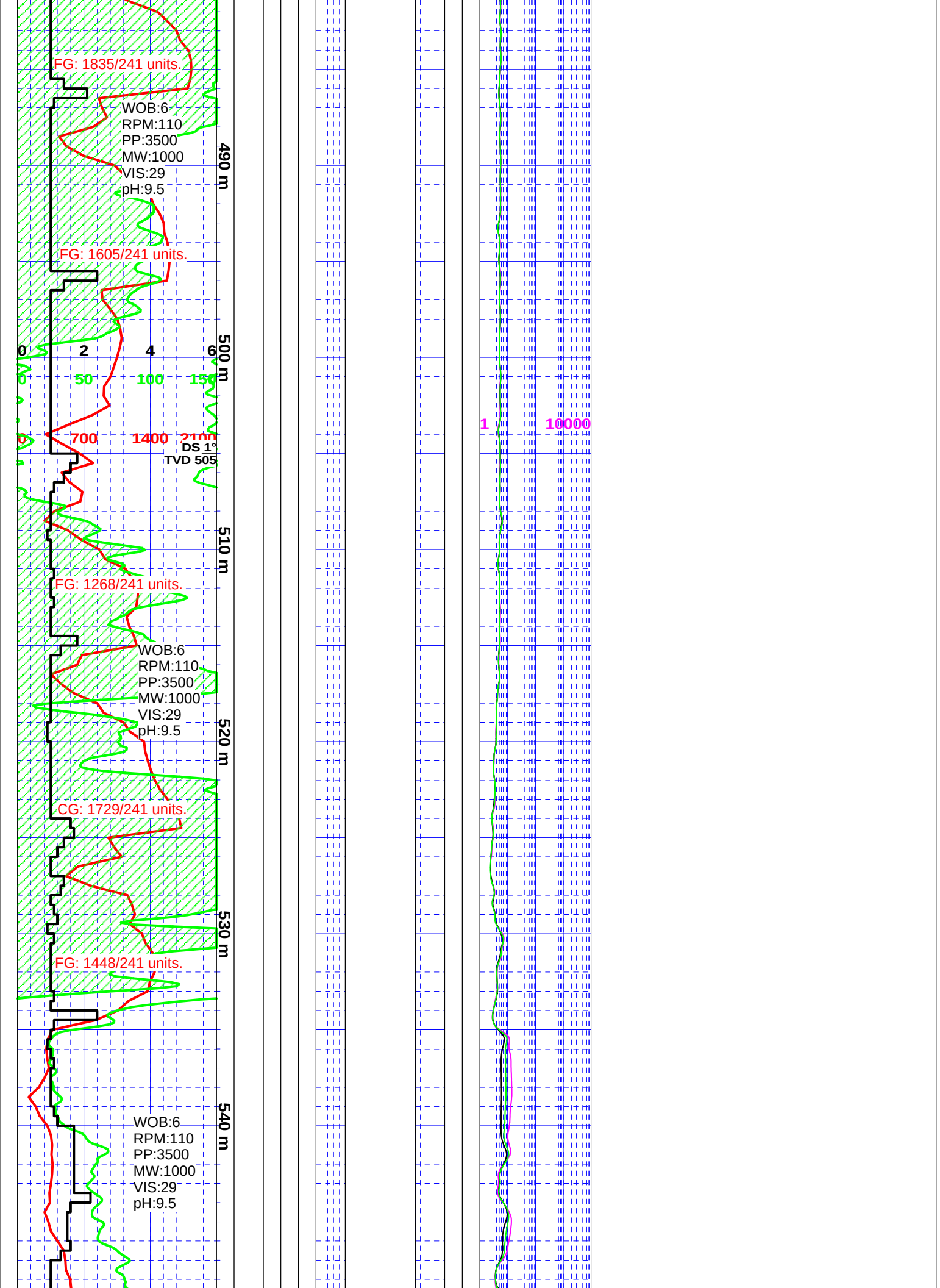
Work Schedule

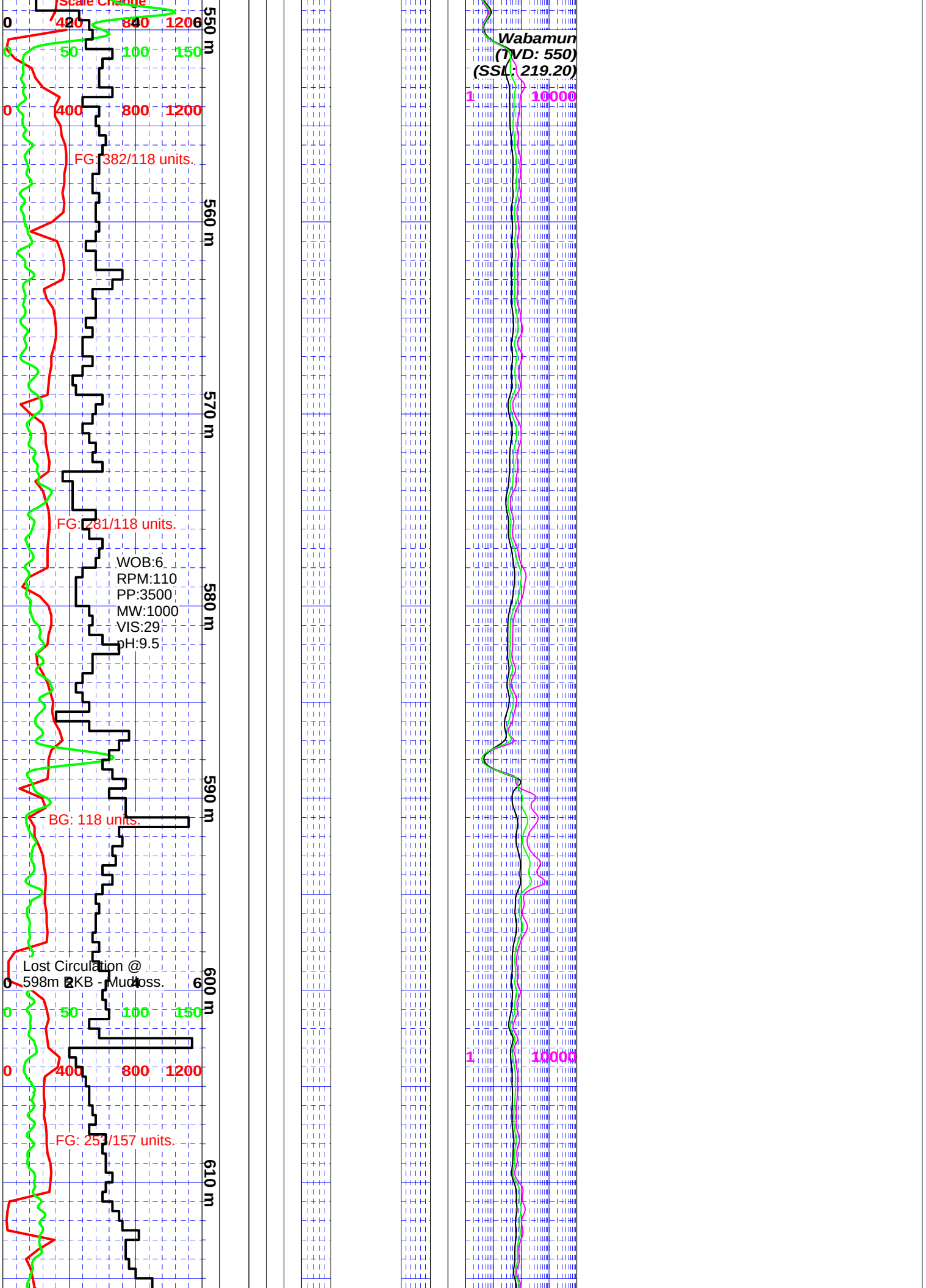
Contractor	Geologist	Log Interval	Dates Logged
Khan Petroleum Ltd.	Azim Ahmed	1280 m - 1449 m	Jan 24, 2007 - Feb 16, 2007

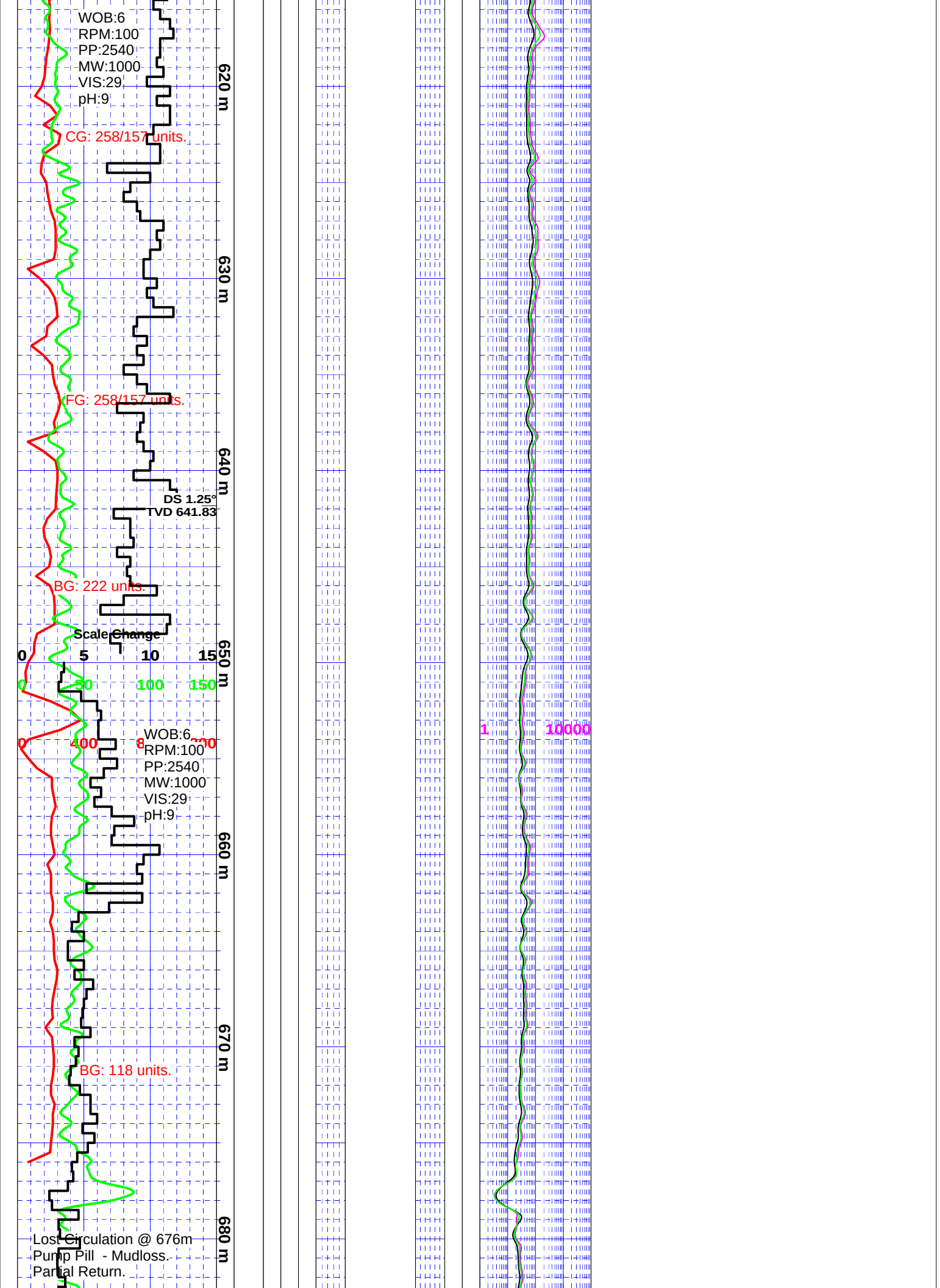
Remarks

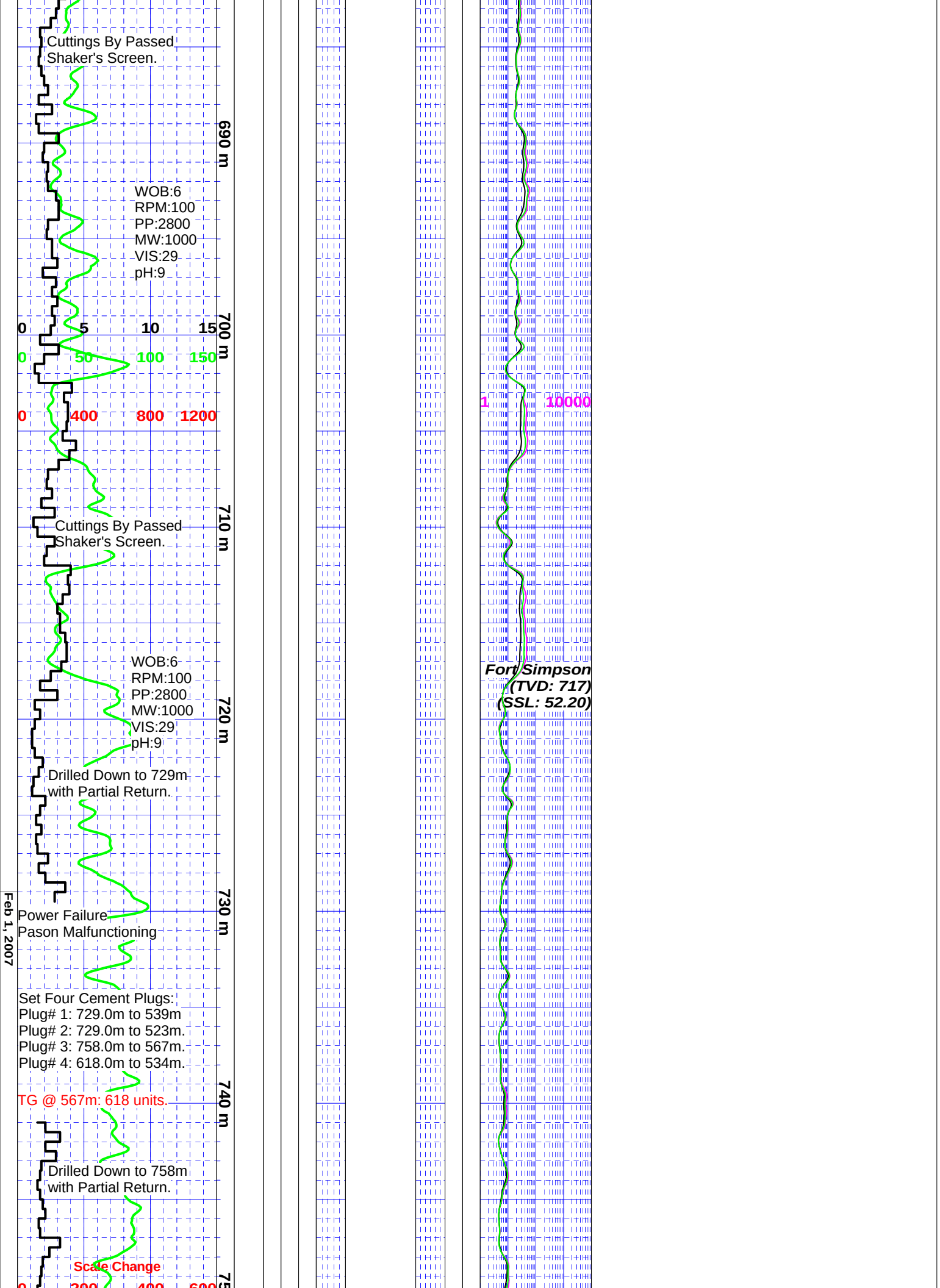
Composite Striplog Presentation - Scales 1:240

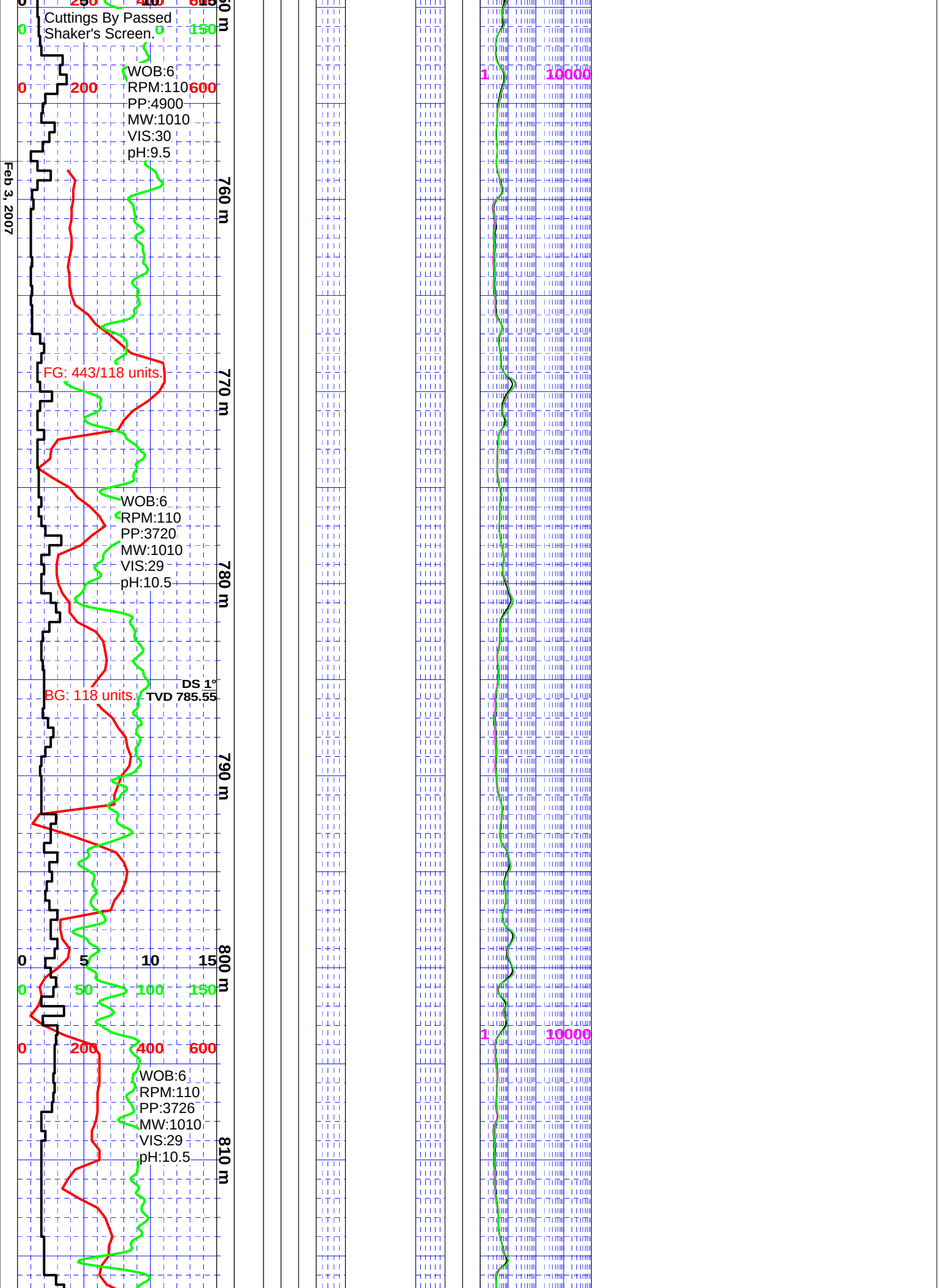

Drilling Progress
Total Gas
Gamma Ray
Total Gas (units)
0 100 200 300
Core Rate (min/m)
0 20 40 60
Gamma Ray (gapi)
0 50 100 150
Drill Rate (min/m)
0 5 10 15
Date
Depth
Lithology (%)
Core
Oil Shows
Porosity Type
Porosity (%)
Interpreted Lithology
Grain Size (mm)
Sorting
Rounding
Resistivity
low Induction (oh
1 10000
ep Induction (ohm
1 10000
ium Induction (oh
1 10000
Lithology Description
Neutron/Density/PEF
Density Porosity (%)
45 30 15 0 -15
Neutron Porosity (%)
60 40 20 0
PEF (b/e)
0 2 4 6 8 10
pH:9
Bit#1A Varel CH04JMRSV
430.00 / 34.75 hrs
Cond 2-2-CT-A-
-E-I-BT-TD-TD
Scale C...
0 720 1440
DS 0.75
TVD 450
NB#3 Varel MKS 65
Gel Chem Mud Displaced
with Floc Water.
LOT @ 437.0m RKB
30.28kPa/m at 8800kPa.
Jan 28, 2007
Jan 31, 2007
WOB:6
RPM:110
PP:3500
MW:1000
VIS:29
pH:9.5
FG: 864/241 units.
0 2 4 6
0 50 100 150
0 700 1400 2100
CG: 1313/241 units.
WOB:6
RPM:110
PP:3500
MW:1000
VIS:29
pH:9.5
FG: 1072/241 units.
FG: 1560/241 units.
430 m
440 m
450 m
460 m
470 m
480 m

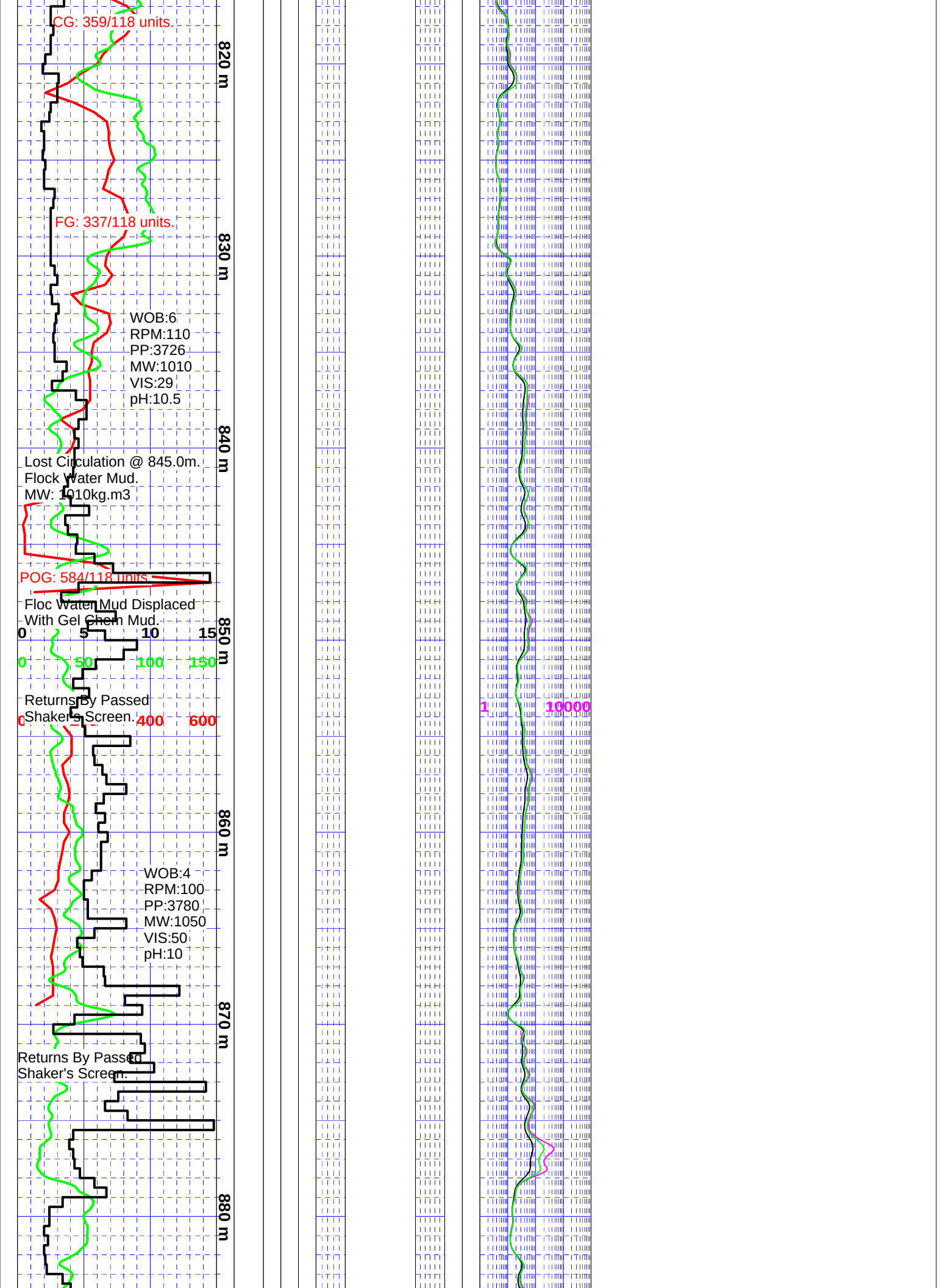

FG: 1835/241 units.
WOB:6
RPM:110
PP:3500
MW:1000
VIS:29
pH:9.5
FG: 1605/241 units.
490 m
0
2
4
6
50
100
150
700
1400
2100
DS 1°
TVD 505
500 m
1
10000
FG: 1268/241 units.
WOB:6
RPM:110
PP:3500
MW:1000
VIS:29
pH:9.5
510 m
CG: 1729/241 units.
520 m
FG: 1448/241 units.
530 m
WOB:6
RPM:110
PP:3500
MW:1000
VIS:29
pH:9.5
540 m

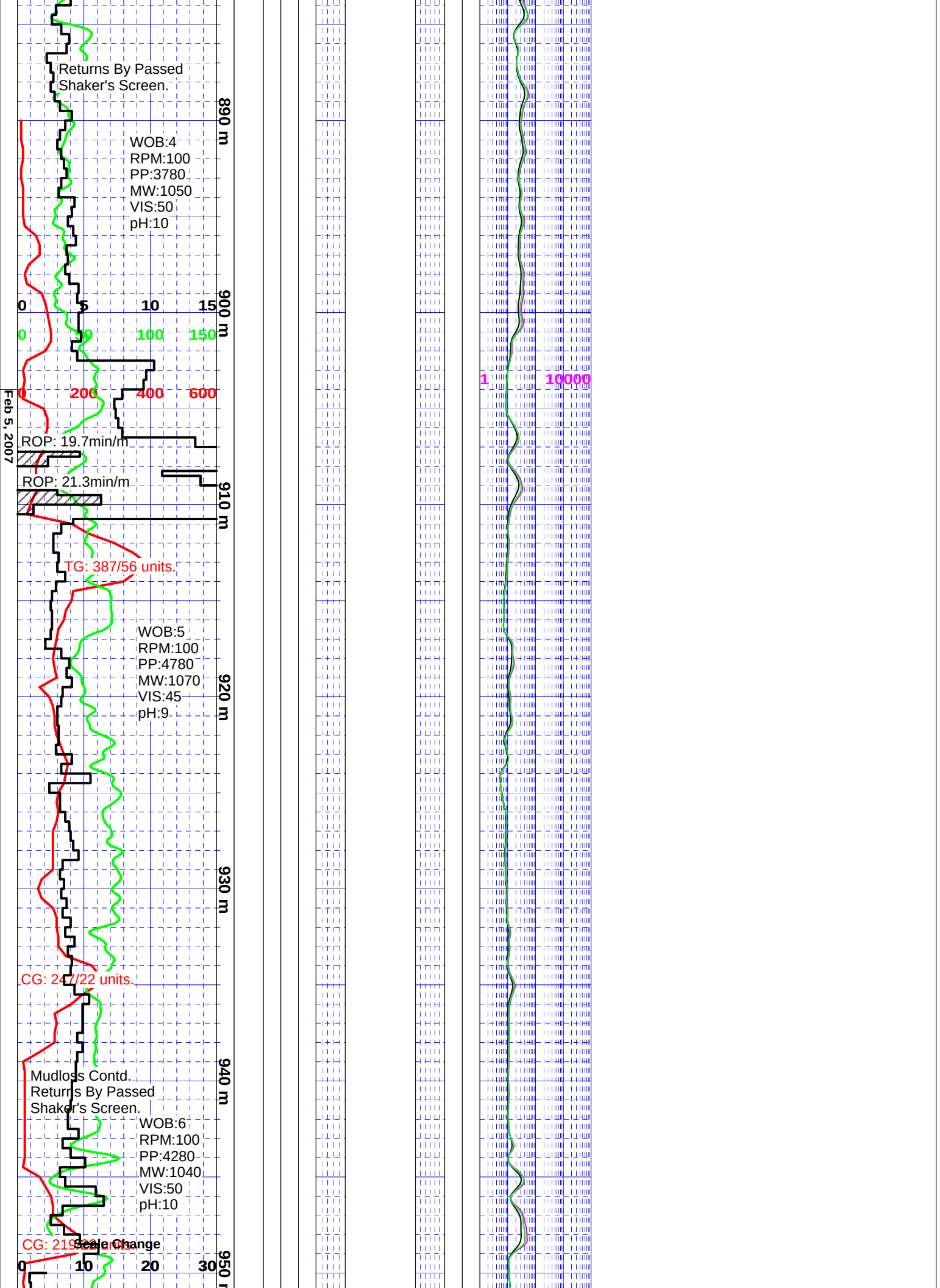

Scale Change
0
420
840
1206
0
50
100
150
0
400
800
1200
550 m
560 m
570 m
580 m
590 m
600 m
610 m
FG: 382/118 units.
FG: 281/118 units.
WOB:6
RPM:110
PP:3500
MW:1000
VIS:29
pH:9.5
BG: 118 units.
Lost Circulation @
598m RKB - Mudloss.
0
2
4
6
0
50
100
150
0
400
800
1200
FG: 251/157 units.
Wabamun
(TVD: 550)
(SSL: 219.20)
1
10000
1
10000

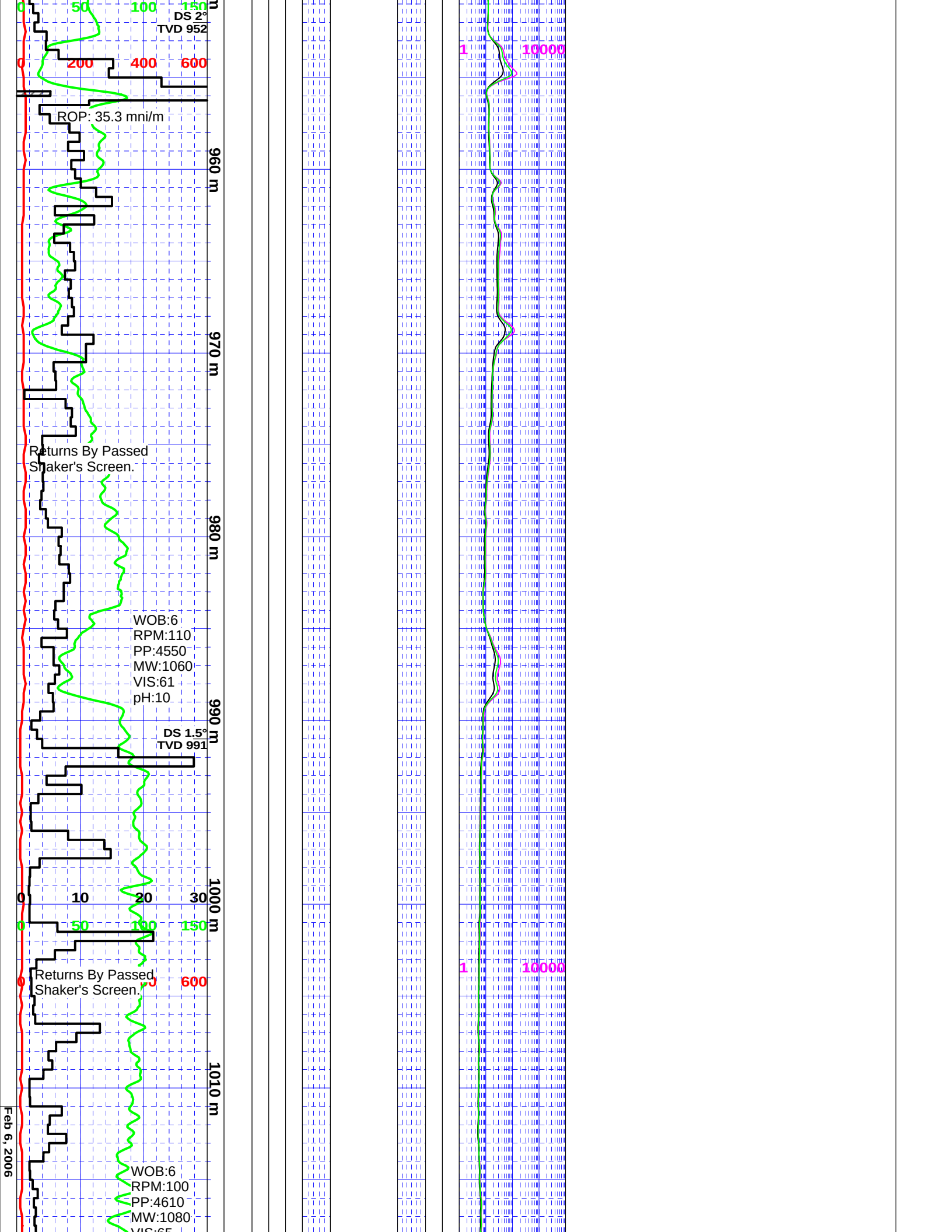

WOB:6
RPM:100
PP:2540
MW:1000
VIS:29
pH:9
CG: 258/157 units.
FG: 258/157 units.
DS 1.25°
TVD 641.83
BG: 222 units.
Scale Change
0
5
10
15
620 m
630 m
640 m
650 m
660 m
670 m
680 m
0
50
100
150
0
400
800
1200
1
10000
WOB:6
RPM:100
PP:2540
MW:1000
VIS:29
pH:9
BG: 118 units.
Lost Circulation @ 676m
Pump Pill - Mudloss.
Partial Return.

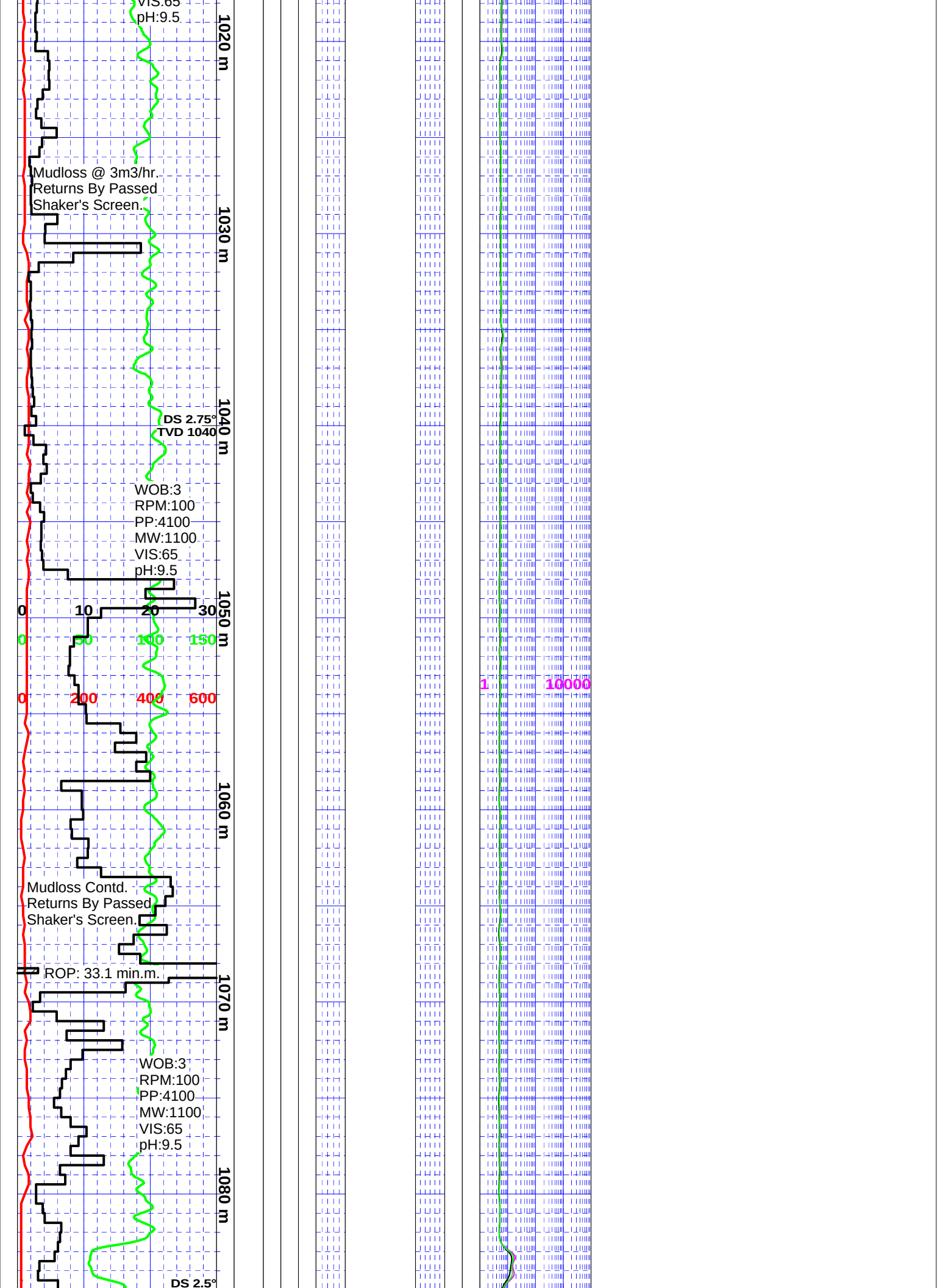

Cuttings By Passed Shaker's Screen.
690 m
WOB:6
RPM:100
PP:2800
MW:1000
VIS:29
pH:9
0 5 10 15
0 50 100 150
0 400 800 1200
1 10000
700 m
Cuttings By Passed Shaker's Screen.
710 m
WOB:6
RPM:100
PP:2800
MW:1000
VIS:29
pH:9
Fort Simpson
(TVD: 717)
(SSL: 52.20)
720 m
Drilled Down to 729m with Partial Return.
730 m
Feb 1, 2007
Power Failure
Pason Malfunctioning
Set Four Cement Plugs:
Plug# 1: 729.0m to 539m
Plug# 2: 729.0m to 523m.
Plug# 3: 758.0m to 567m.
Plug# 4: 618.0m to 534m.
740 m
TG @ 567m: 618 units.
Drilled Down to 758m with Partial Return.
Scale Change

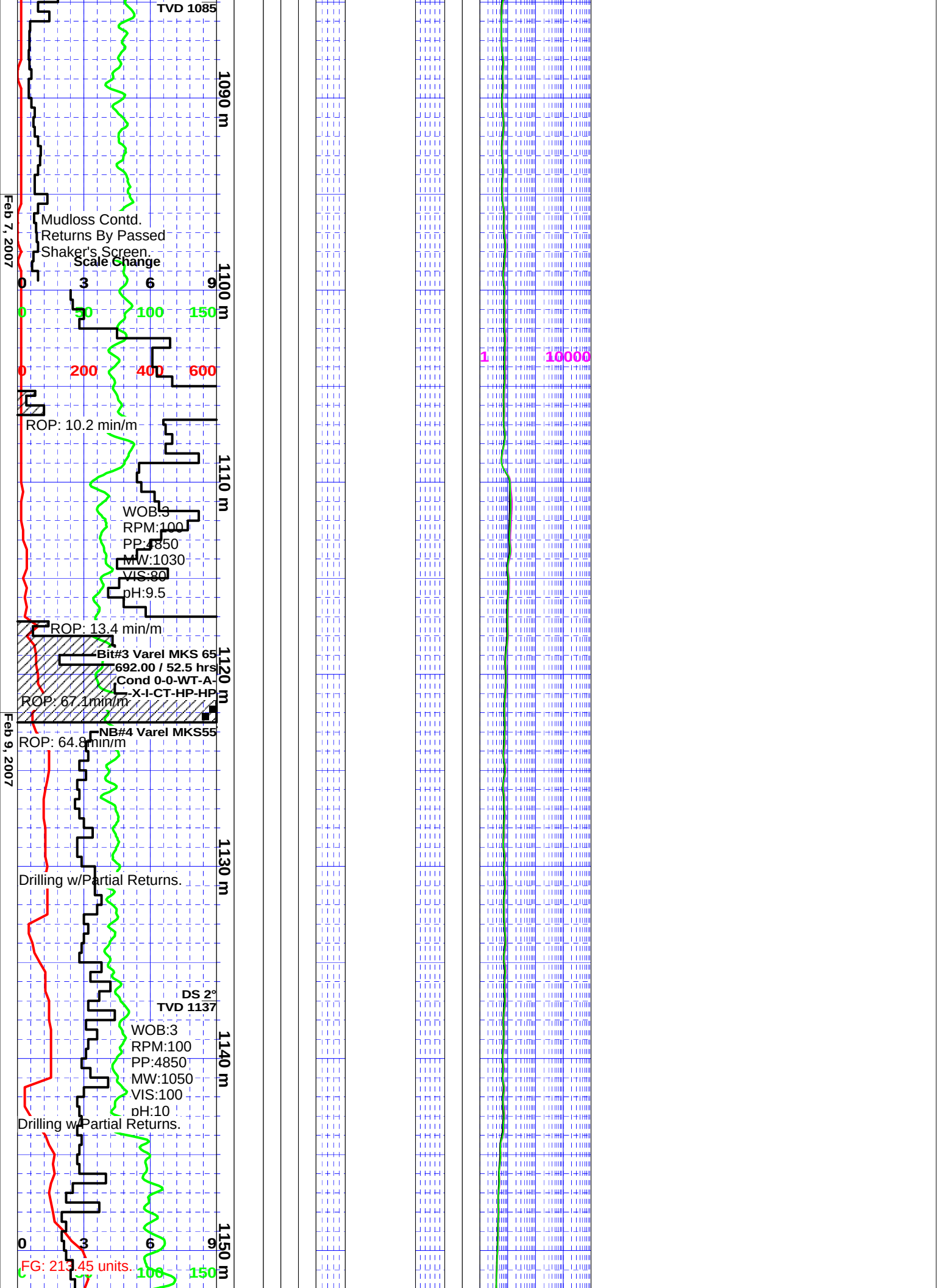

Feb 3, 2007
Cuttings By Passed Shaker's Screen.
WOB:6
RPM:110
PP:4900
MW:1010
VIS:30
pH:9.5
FG: 443/118 units.
WOB:6
RPM:110
PP:3720
MW:1010
VIS:29
pH:10.5
BG: 118 units.
DS 1°
TVD 785.55
WOB:6
RPM:110
PP:3726
MW:1010
VIS:29
pH:10.5
760 m
770 m
780 m
790 m
800 m
810 m
0
5
10
15
50
100
150
200
400
600
1
10000

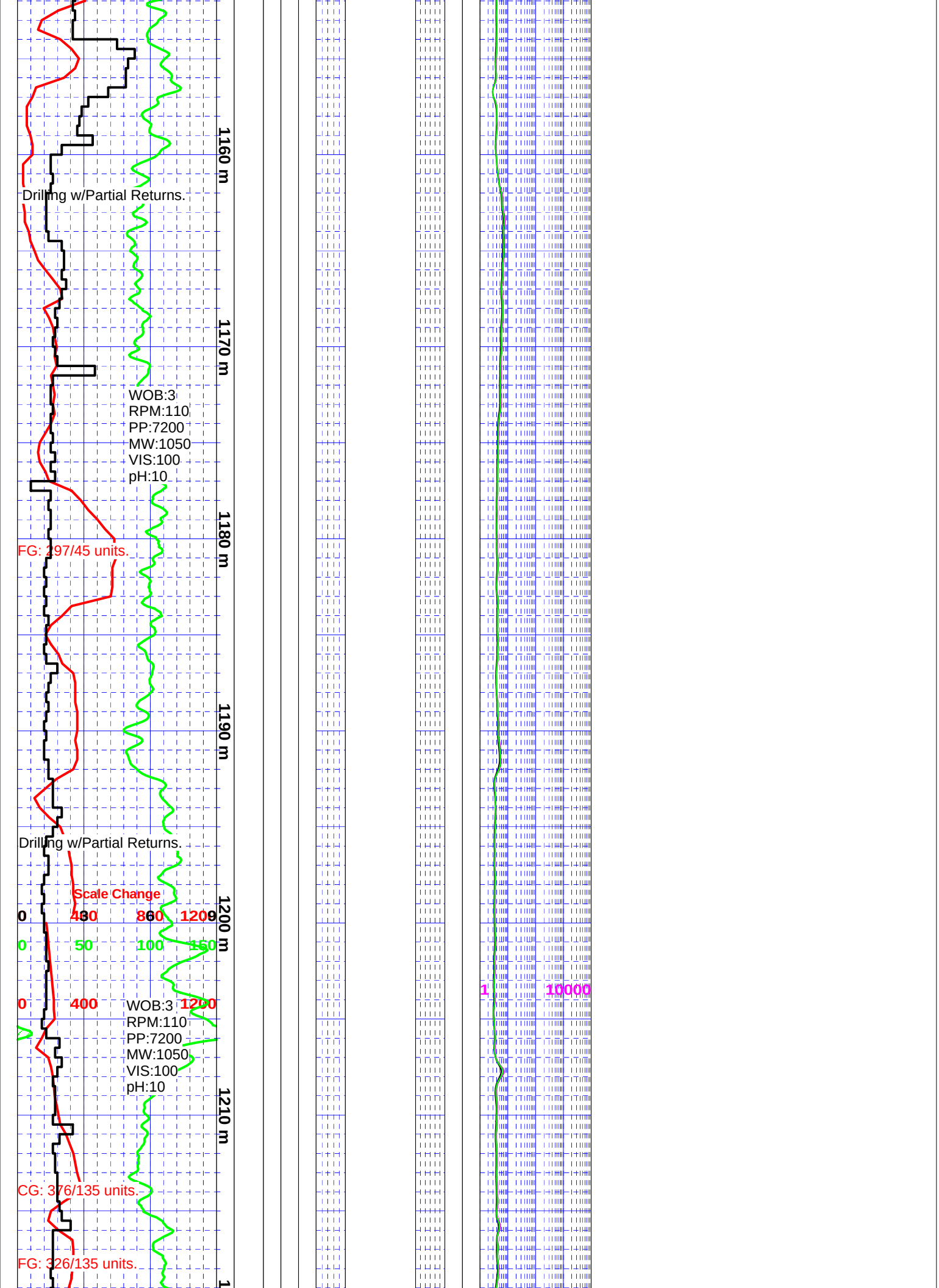

CG: 359/118 units.
820 m
FG: 337/118 units.
830 m
WOB:6
RPM:110
PP:3726
MW:1010
VIS:29
pH:10.5
840 m
Lost Circulation @ 845.0m.
Flock Water Mud.
MW: 1010kg.m3
POG: 584/118 units.
Floc Water Mud Displaced
With Gel Chem Mud.
0
5
10
15
850 m
0
50
100
150
Returns By Passed
Shaker's Screen.
0
400
600
1
10000
860 m
WOB:4
RPM:100
PP:3780
MW:1050
VIS:50
pH:10
870 m
Returns By Passed
Shaker's Screen.
880 m

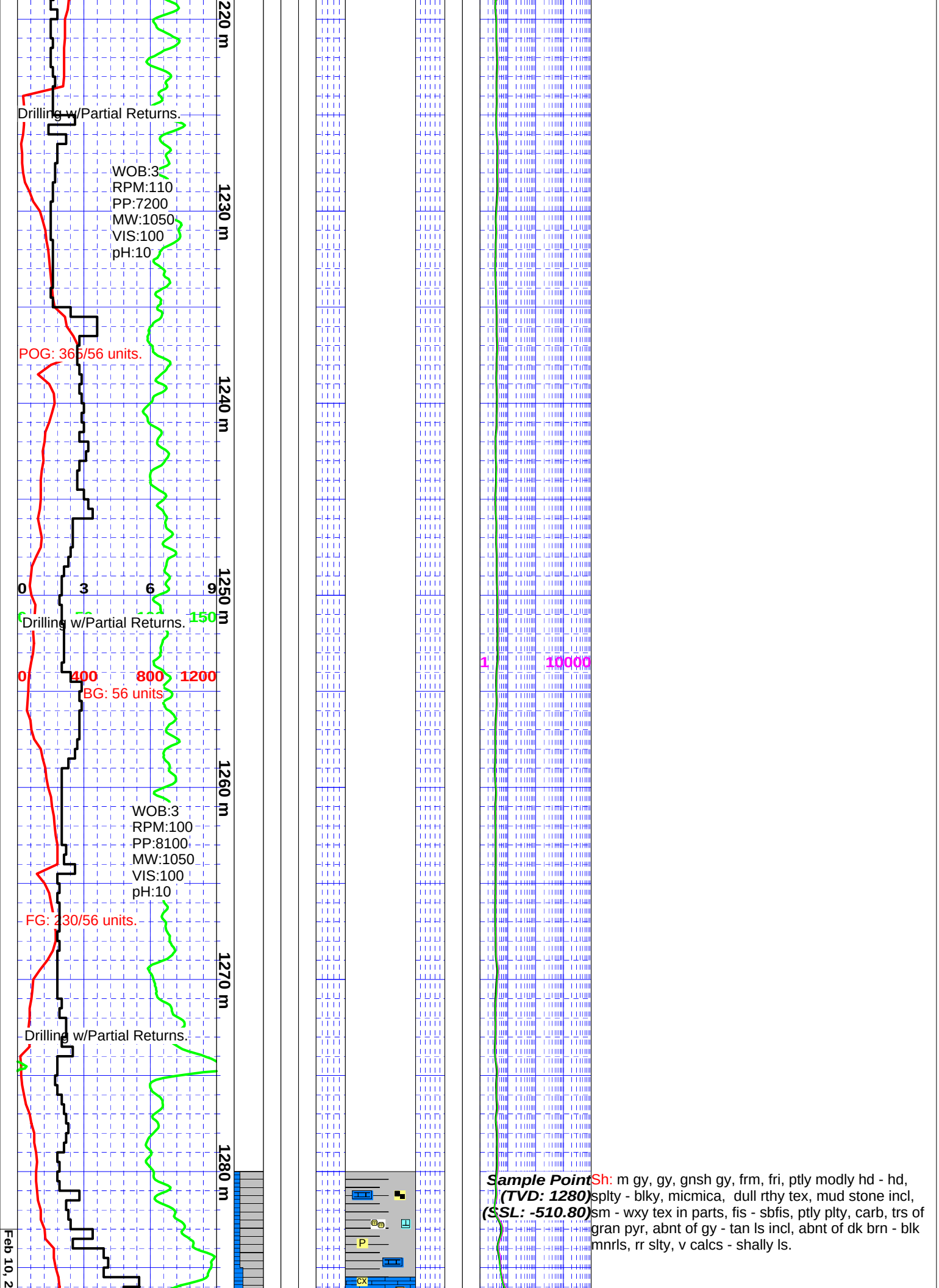

Returns By Passed
Shaker's Screen.
WOB:4
RPM:100
PP:3780
MW:1050
VIS:50
pH:10
890 m
900 m
0
5
10
15
0
50
100
150
0
200
400
600
1
10000
Feb 5, 2007
ROP: 19.7min/m
ROP: 21.3min/m
910 m
TG: 387/56 units.
WOB:5
RPM:100
PP:4780
MW:1070
VIS:45
pH:9
920 m
930 m
CG: 247/22 units.
Mudloss Contd.
Returns By Passed
Shaker's Screen.
940 m
WOB:6
RPM:100
PP:4280
MW:1040
VIS:50
pH:10
CG: 219
Scale Change
0
10
20
30
950 m


0
50
100
150
DS 2°
TVD 952
0
200
400
600
ROP: 35.3 mni/m
960 m
970 m
Returns By Passed
Shaker's Screen.
980 m
WOB:6
RPM:110
PP:4550
MW:1060
VIS:61
pH:10
990 m
DS 1.5°
TVD 991
0
10
20
30
1000 m
0
50
100
150
Returns By Passed
Shaker's Screen.
0
600
1010 m
WOB:6
RPM:100
PP:4610
MW:1080
1
10000
1
10000
Feb 6, 2006


VIS:65
pH:9.5
1020 m
Mudloss @ 3m3/hr.
Returns By Passed
Shaker's Screen.
1030 m
DS 2.75°
TVD 1040
1040 m
WOB:3
RPM:100
PP:4100
MW:1100
VIS:65
pH:9.5
0
10
20
30
1050 m
0
50
100
150
0
200
400
600
1
10000
1060 m
Mudloss Contd.
Returns By Passed
Shaker's Screen.
ROP: 33.1 min.m.
1070 m
WOB:3
RPM:100
PP:4100
MW:1100
VIS:65
pH:9.5
1080 m
DS 2.5°

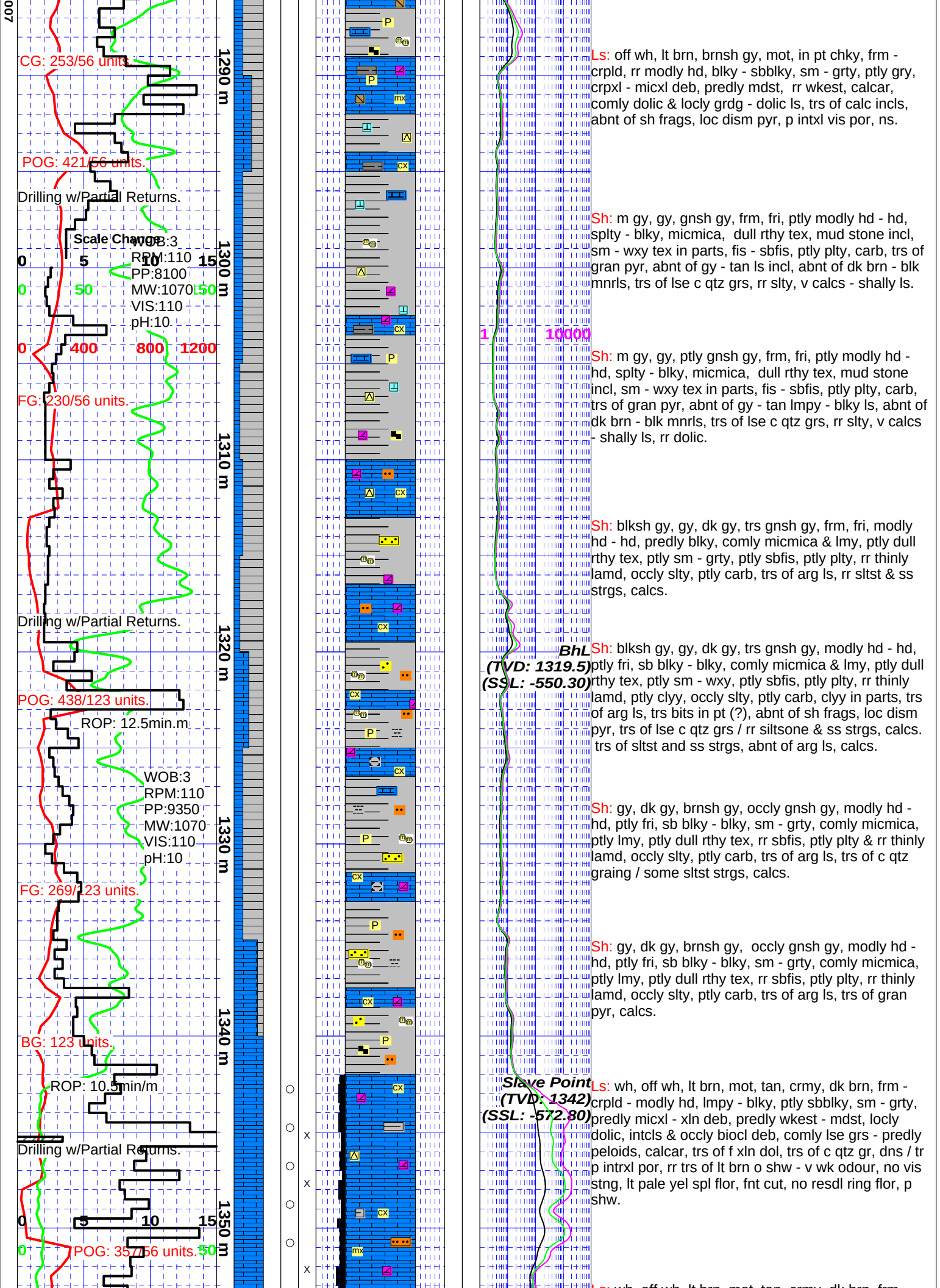

TVD 1085
1090 m
Feb 7, 2007
Mudloss Contd.
Returns By Passed
Shaker's Screen.
Scale Change
0
3
6
9
1100 m
0
50
100
150
1
10000
0
200
400
600
ROP: 10.2 min/m
1110 m
WOB:3
RPM:100
PP:4850
MW:1030
VIS:80
pH:9.5
ROP: 13.4 min/m
Bit#3 Varel MKS 65
692.00 / 52.5 hrs
Cond 0-0-WT-A-
-X-I-CT-HP-HP
1120 m
ROP: 67.1min/m
Feb 9, 2007
NB#4 Varel MKS55
ROP: 64.8min/m
1130 m
Drilling w/Partial Returns.
DS 2°
TVD 1137
WOB:3
RPM:100
PP:4850
MW:1050
VIS:100
pH:10
1140 m
Drilling w/Partial Returns.
0
3
6
9
1150 m
FG: 213.45 units.
100
150


1160 m
Drilling w/Partial Returns.
1170 m
WOB:3
RPM:110
PP:7200
MW:1050
VIS:100
pH:10
1180 m
FG: 297/45 units.
1190 m
Drilling w/Partial Returns.
Scale Change
0
400
800
1200
0
50
100
150
1
10000
1200 m
0
400
1200
WOB:3
RPM:110
PP:7200
MW:1050
VIS:100
pH:10
1210 m
CG: 376/135 units.
FG: 326/135 units.



Sample Point (TVD: 1280) (SSL: -510.80)

Sh: m gy, gy, gnsh gy, frm, fri, ptly modly hd - hd, splty - blky, micmica, dull rthy tex, mud stone incl, sm - wxy tex in parts, fis - sbfis, ptly plty, carb, trs of gran pyr, abnt of gy - tan ls incl, abnt of dk brn - blk mnrls, rr slty, v calcs - shally ls.



Ls: off wh, lt brn, brnsh gy, mot, in pt chky, frm - crpld, rr modly hd, blky - sbblky, sm - grty, ptly gry, crpxl - micxl deb, predly mdst, rr wkest, calcar, comly dolic & locly grdg - dolic ls, trs of calc incls, abnt of sh frags, loc dism pyr, p intxl vis por, ns.

Sh: m gy, gy, gnsh gy, frm, fri, ptly modly hd - hd, splty - blky, micmica, dull rthy tex, mud stone incl, sm - wxy tex in parts, fis - sbfis, ptly plty, carb, trs of gran pyr, abnt of gy - tan ls incl, abnt of dk brn - blk mnrls, trs of lse c qtz grs, rr slty, v calcs - shally ls.

Sh: m gy, gy, ptly gnsh gy, frm, fri, ptly modly hd - hd, splty - blky, micmica, dull rthy tex, mud stone incl, sm - wxy tex in parts, fis - sbfis, ptly plty, carb, trs of gran pyr, abnt of gy - tan lmpy - blky ls, abnt of dk brn - blk mnrls, trs of lse c qtz grs, rr slty, v calcs - shally ls, rr dolic.

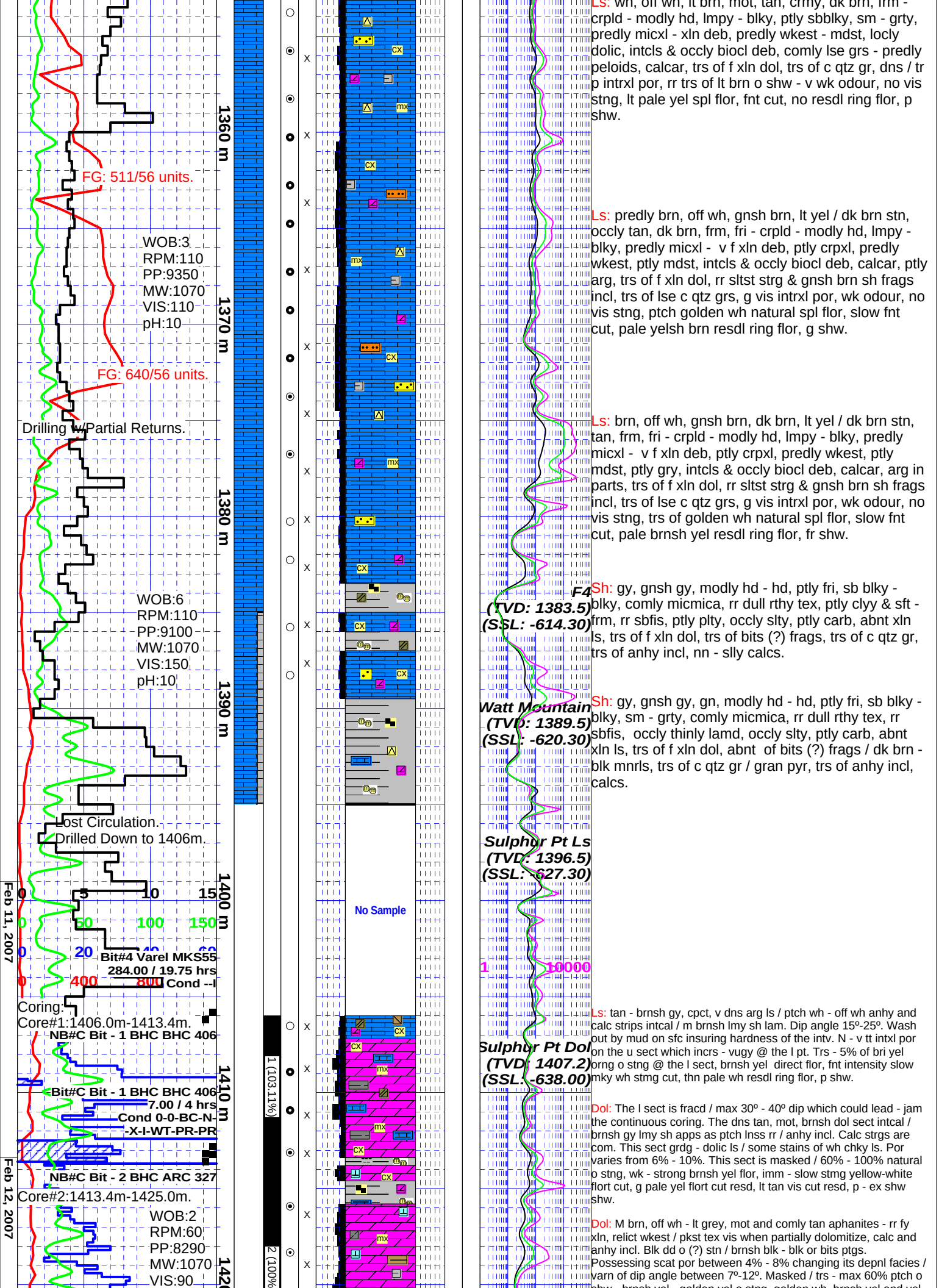
Sh: blksh gy, gy, dk gy, trs gnsh gy, frm, fri, modly hd - hd, predly blky, comly micmica & lmy, ptly dull rthy tex, ptly sm - grty, ptly sbfis, ptly plty, rr thinly lamd, occly slty, ptly carb, trs of arg ls, rr sltst & ss strgs, calcs.

Sh: blksh gy, gy, dk gy, trs gnsh gy, modly hd - hd, ptly fri, sb blky - blky, comly micmica & lmy, ptly dull rthy tex, ptly sm - wxy, ptly sbfis, ptly plty, rr thinly lamd, ptly clyy, occly slty, ptly carb, clyy in parts, trs of arg ls, trs bits in pt (?), abnt of sh frags, loc dism pyr, trs of lse c qtz grs / rr siltsone & ss strgs, calcs. trs of sltst and ss strgs, abnt of arg ls, calcs.

Sh: gy, dk gy, brnsh gy, occly gnsh gy, modly hd - hd, ptly fri, sb blky - blky, sm - grty, comly micmica, ptly lmy, ptly dull rthy tex, rr sbfis, ptly plty & rr thinly lamd, occly slty, ptly carb, trs of arg ls, trs of c qtz graing / some sltst strgs, calcs.

Sh: gy, dk gy, brnsh gy, occly gnsh gy, modly hd - hd, ptly fri, sb blky - blky, sm - grty, comly micmica, ptly lmy, ptly dull rthy tex, rr sbfis, ptly plty, rr thinly lamd, occly slty, ptly carb, trs of arg ls, trs of gran pyr, calcs.

Ls: wh, off wh, lt brn, mot, tan, crmy, dk brn, frm - crpld - modly hd, lmpy - blky, ptly sbblky, sm - grty, predly micxl - xln deb, predly wkest - mdst, locly dolic, intcls & occly biocl deb, comly lse grs - predly peloids, calcar, trs of f xln dol, trs of c qtz gr, dns / tr p intrxl por, rr trs of lt brn o shw - v wk odour, no vis stng, lt pale yel spl flor, fnt cut, no resdl ring flor, p shw.



Ls: wh, off wh, lt brn, mot, tan, crmy, dk brn, frm - crpld - modly hd, lmpy - blky, ptly sbblky, sm - grty, predly micxl - xln deb, predly wkest - mdst, locly dolic, intcls & occly biocl deb, comly lse grs - predly peloids, calcar, trs of f xln dol, trs of c qtz gr, dns / tr p intrxl por, rr trs of lt brn o shw - v wk odour, no vis stng, lt pale yel spl flor, fnt cut, no resdl ring flor, p shw.

Ls: predly brn, off wh, gnsh brn, lt yel / dk brn stn, occly tan, dk brn, frm, fri - crpld - modly hd, lmpy - blky, predly micxl - v f xln deb, ptly crpxl, predly wkest, ptly mdst, intcls & occly biocl deb, calcar, ptly arg, trs of f xln dol, rr sltst strg & gnsh brn sh frags incl, trs of lse c qtz grs, g vis intrxl por, wk odour, no vis stng, ptch golden wh natural spl flor, slow fnt cut, pale yelsh brn resdl ring flor, g shw.

Ls: brn, off wh, gnsh brn, dk brn, lt yel / dk brn stn, tan, frm, fri - crpld - modly hd, lmpy - blky, predly micxl - v f xln deb, ptly crpxl, predly wkest, ptly mdst, ptly gry, intcls & occly biocl deb, calcar, arg in parts, trs of f xln dol, rr sltst strg & gnsh brn sh frags incl, trs of lse c qtz grs, g vis intrxl por, wk odour, no vis stng, trs of golden wh natural spl flor, slow fnt cut, pale brnsh yel resdl ring flor, fr shw.

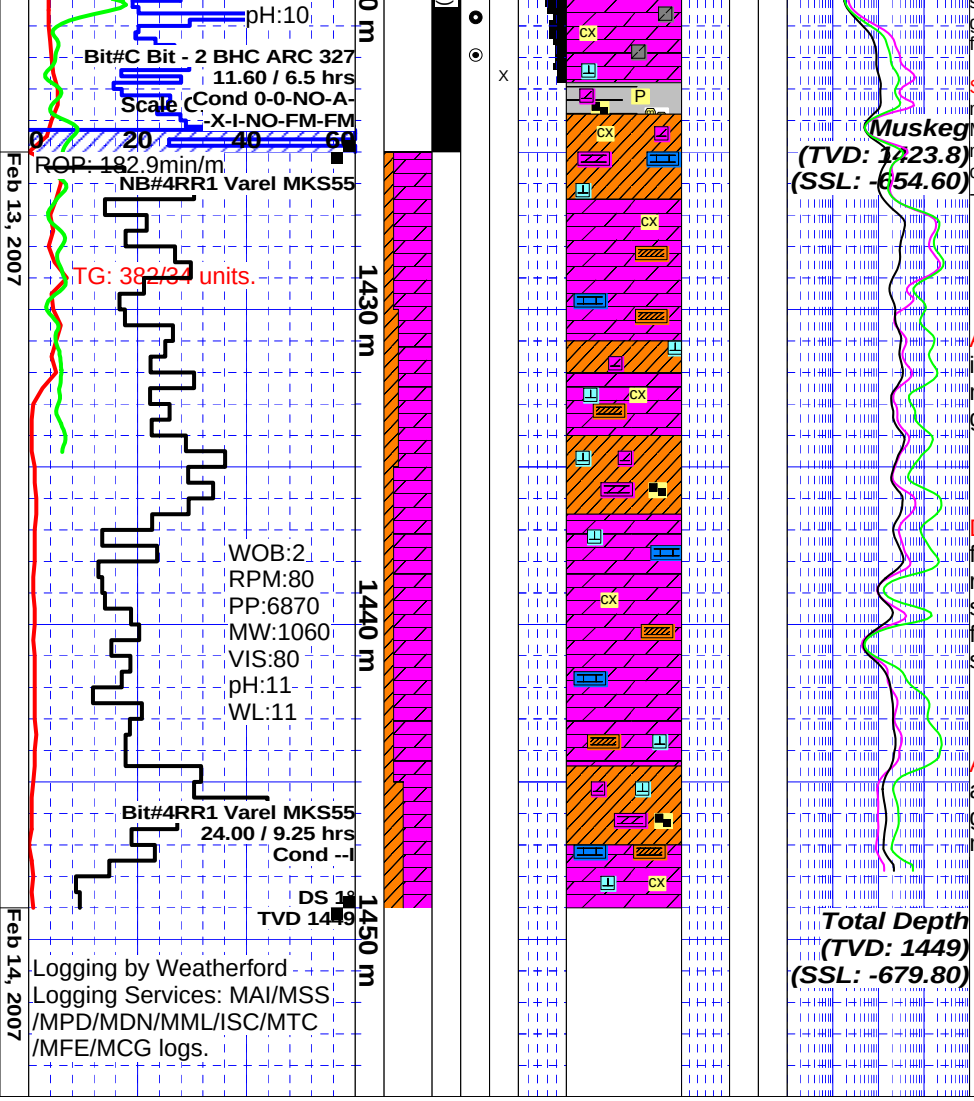
Sh: gy, gnsh gy, modly hd - hd, ptly fri, sb blky - blky, comly micmica, rr dull rthy tex, ptly clyy & sft - frm, rr sbfis, ptly plty, occly slty, ptly carb, abnt xln ls, trs of f xln dol, trs of bits (?) frags, trs of c qtz gr, trs of anhy incl, nn - slly calcs.

Sh: gy, gnsh gy, gn, modly hd - hd, ptly fri, sb blky - blky, sm - grty, comly micmica, rr dull rthy tex, rr sbfis, occly thinly lamd, occly slty, ptly carb, abnt xln ls, trs of f xln dol, abnt of bits (?) frags / dk brn - blk mnrls, trs of c qtz gr / gran pyr, trs of anhy incl, calcs.

Ls: tan - brnsh gy, cpct, v dns arg ls / ptch wh - off wh anhy and calc strips intcal / m brnsh lmy sh lam. Dip angle 15º-25º. Wash out by mud on sfc insuring hardness of the intv. N - v tt intxl por on the u sect which incrs - vugy @ the l pt. Trs - 5% of bri yel orng o stng @ the l sect, brnsh yel direct flor, fnt intensity slow mky wh stmg cut, thn pale wh resdl ring flor, p shw.

Dol: The l sect is fracd / max 30º - 40º dip which could lead - jam the continuous coring. The dns tan, mot, brnsh dol sect intcal / brnsh gy lmy sh apps as ptch lnss rr / anhy incl. Calc strgs are com. This sect grdg - dolic ls / some stains of wh chky ls. Por varies from 6% - 10%. This sect is masked / 60% - 100% natural o stng, wk - strong brnsh yel flor, imm - slow stmg yellow-white flort cut, g pale yel flort cut resd, lt tan vis cut resd, p - ex shw shw.

Dol: M brn, off wh - lt grey, mot and comly tan aphanites - rr fy xln, relict wkest / pkst tex vis when partially dolomitize, calc and anhy incl. Blk dd o (?) stn / brnsh blk - blk or bits ptgs. Possessing scat por between 4% - 8% changing its depnl facies / varn of dip angle between 7º-12º. Masked / trs - max 60% ptch o



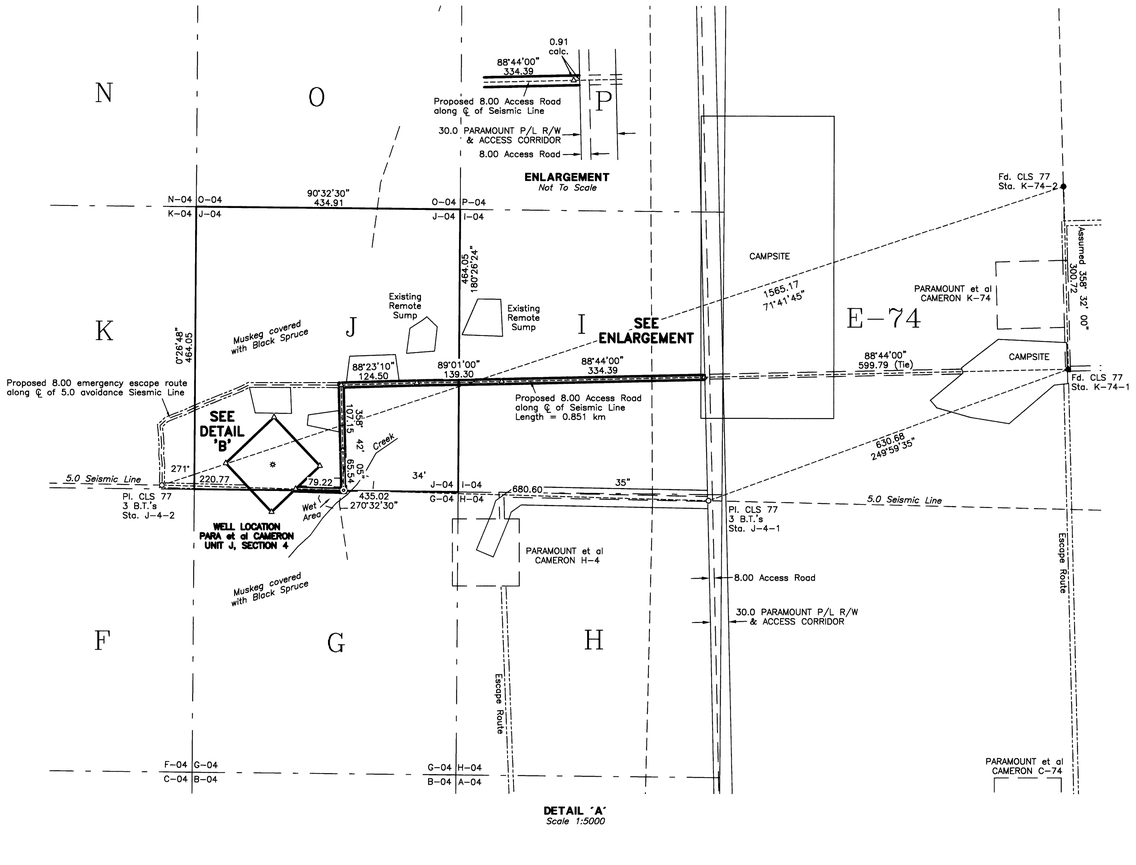
shw - brnsh yel - golden yel o stng, golden wh, brnsh yel and yel gold direct flor, mod intensity, fast - slow wh stmg and blomg cut flor, thn pale brn o resd, thk wh resdl ring flor, p - g shw.

Sh: dk gy, gysh, frm, cpct, dns, sbfis, subplaty, noncalcareous, micmica com trs dk brn carb deb, in pt slty, sh undlng the Muskeg fm separated the Su Point / unconformably fracd / micropyritic sh sequence. Specd / wh dolic ls and stnd of anhy, calc and blk - brnsh blk mnrls. Presence of anhy & dolic incl incrs _ l pt. Mic lami noticed / the change of facies.

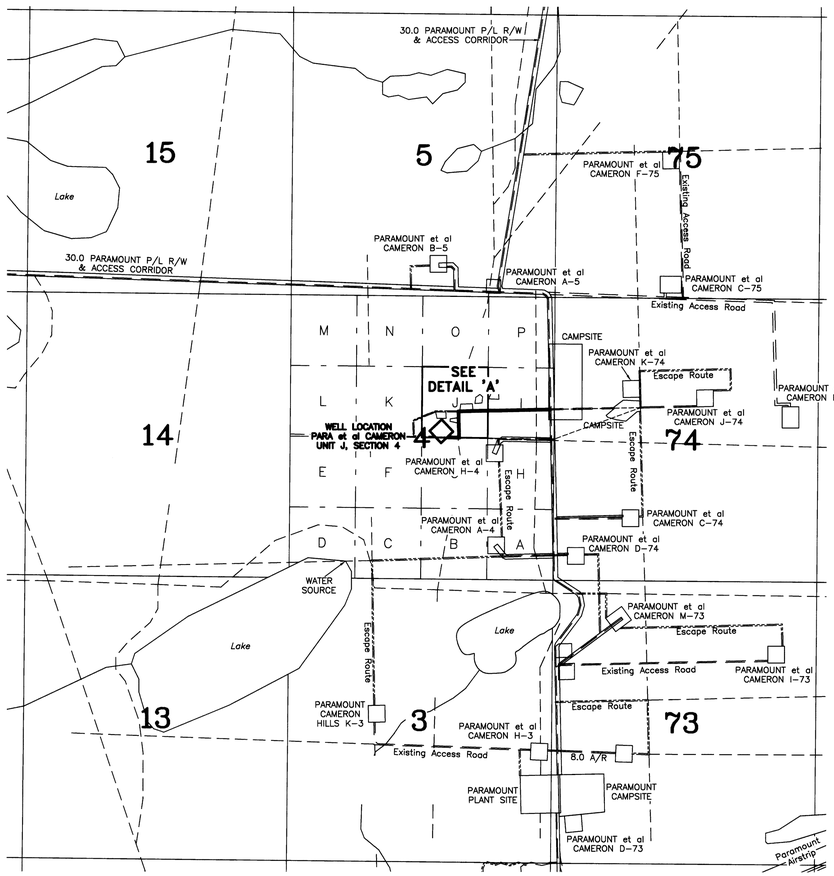
Anhy: wh, off wh, lt brn, lt gy, wh, interbeded / dol, inetrbeded / ls / ptch fnt o stn and blk bits(?) and blk mnrls, modly hd, v hd in parts, blky, crpxl - mic xln, grdg - thomb stone deb.

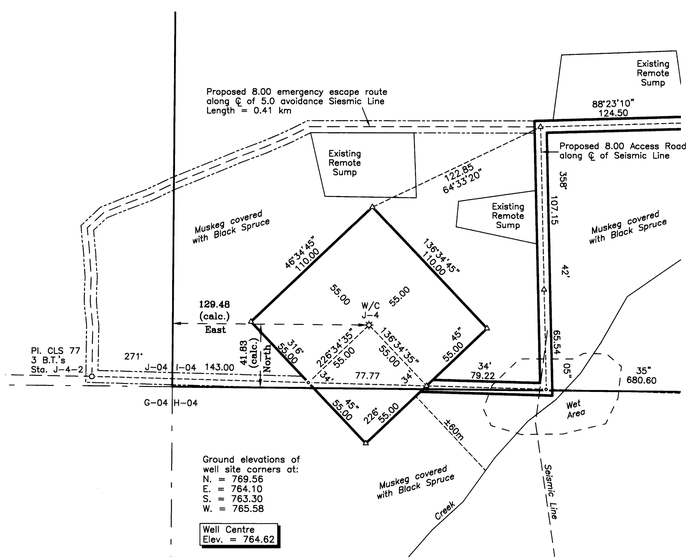
Dol: lt gy, lt brn, mot, tan, stainy, crmy, redsh brn, frm - crpld - modly hd, blky - sbblky, sm - grty, ptly rthy & chky, ratty, predly crpxl deb, mdst, ptly pkst, slly arg, abnt ls incl, locly grdg - dolic ls, calcar, foss, abnt of calc and anhy incls, trs of bits ptgs / some blk mnrls, trs of sh gr, tt intrxl por, ns.

Anhy: wh, off wh, hyaline, tan, iregly shaped, shp, ang, abnt of calc incl, trs of f xln ls / abnt of of brnsh gy - tan dol incl, trs of gnsh brn sh frags, trs of carb matl.

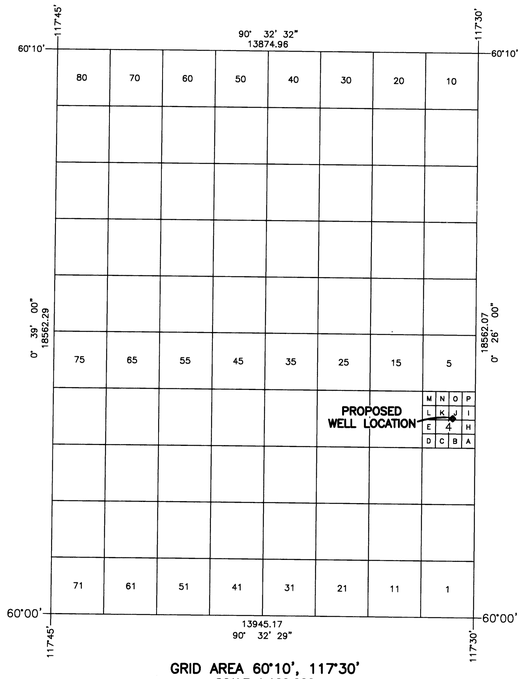


DETAIL 'A'
Scale 1:5000





DETAIL 'B'
Scale 1:2000



GRID AREA 60°10', 117°30'
SCALE 1:100,000

AREA REQUIRED:

	Hectares	Acres
WELL SITE =	1.210	2.99
ACCESS ROAD =	0.681	1.68
TOTAL =	1.891	4.67

BEARING TREES

STATION	BEARING	DISTANCE	TREE
J-74-1	325°54'45"	14.0	0.10 POPLAR
	66°14'45"	22.2	0.10 SPRUCE
	104°51'45"	23.5	0.10 SPRUCE
J-74-2	321°19'45"	9.6	0.10 SPRUCE
	156°06'45"	12.2	0.08 SPRUCE
	220°15'45"	11.5	0.10 SPRUCE

GEOGRAPHIC AND UTM COORDINATES, (1983 NAD)

Station	Latitude(N)	Longitude(W)	Northings	Eastings	Elev.
CONTROL MONUMENTS					
J-74-1	60°03'30.048"	117°30'06.523"	6658015.167	472059.573	769.04
J-74-2	60°03'30.626"	117°31'04.760"	6658039.998	471159.003	764.76
K-74-1 (Fixed)	60°03'46.872"	117°29'28.971"	6658230.818	472651.894	774.24
K-74-2	60°03'37.162"	117°29'28.331"	6658531.282	472644.233	779.95
PROPOSED WELL					
J-04, WELL CENTRE	60°03'31.766"	117°30'52.959"	6658073.854	471341.800	764.62

GRID AREA 60°10', 117° 30' – GEOGRAPHIC AND UTM COORDINATES, (1927 NAD)				
N.E.	60°10'00"	117°30'00"	6669871.559	472250.652
N.W.	60°10'00"	117°45'00"	6670002.853	458376.311
S.W.	60°00'00"	117°45'00"	6651441.753	458165.709
S.E.	60°00'00"	117°30'00"	6651310.016	472110.252
J-04, N.E.	60°03'45.028"	117°30'28.123"	6658274.710	471727.957
J-04, N.W.	60°03'45.052"	117°30'56.248"	6658278.822	471293.012
J-04, S.W.	60°03'30.052"	117°30'56.248"	6657810.786	471289.393
J-04, S.E.	60°03'30.028"	117°30'28.123"	6657810.674	471724.392
PROPOSED WELL GEOGRAPHIC AND UTM COORDINATES, (1927 NAD)				
J-04 W/C	60°03'31.397"	117°30'47.877"	6657855.390	471419.197
LEASE CORNERS				
N.	60°03'34.106"	117°29'56.423"	6657933.12	471421.34
E.	60°03'31.347"	117°30'42.849"	6657853.24	471496.95
S.	60°03'28.883"	117°30'47.977"	6657777.64	471417.05
W.	60°03'31.447"	117°30'52.905"	6657857.53	471341.44

PLAN AND FIELD NOTES

OF SURVEY OF

PROPOSED EXPLORATORY WELL

PARA ET AL CAMERON J-4

IN UNIT J, SECTION 4

GRID AREA 60° 10', 117° 30'

NORTHWEST TERRITORIES

CANADA OIL AND GAS REGULATIONS
EXPLORATORY WELL, NORTHWEST TERRITORIES

SCALE 1:20,000

400m 200 0m 400 800 1200 1600m

SURVEYED FOR

PARAMOUNT RESOURCES LTD.

AFFIDAVIT

THIS SURVEY WAS EXECUTED ON THE DATE OF JULY 9th, 2005
BY JOHN E. LANDRY, C.L.S.

CERTIFIED CORRECT ON THE 26th DAY OF JULY, 2005

JOHN E. LANDRY
CANADA LANDS SURVEYOR

John E. Landry Comm. No. 1267

Paramount resources

DATE

LEGEND

UTM coordinates are computed for Zone 11, Central Meridian 117° W. Bearings were derived from differentially corrected GPS Observations, and are referred to meridian 117° W.

Distances are expressed in metres and decimals thereof.

Distances shown in traverse are measured distances reduced to the horizontal at general ground level.

For the computation of coordinates measured distances have been reduced to the UTM plane by multiplying them by an average combined scale factor of 0.999492.

Distances shown on grid area subdivisions are UTM plane, NAD 27 Datum. All other dimensions are based on NAD83 Datum.

(CLS '77) Statutory iron posts placed are shown thus:
(CLS '77) Statutory iron posts found are shown thus:
Calculated points are shown thus:
Traverse stations placed are shown thus (Spikes):
Areas dealt with shown thus:
Buried pipe lines are shown thus:
Seismic lines are shown thus:
Emergency escape routes are shown thus:

Survey was completed prior to drilling; therefore well as drilled may not necessarily agree with proposed location.

REV.	DESCRIPTION	BY	DATE
0	PLAN ISSUED	NB	JULY 26/05

JOHN E. LANDRY
CANADA LANDS SURVEYOR

McELHANNEY LAND SURVEYS LTD.
PROFESSIONAL LAND SURVEYORS
138, 14315–118 Avenue
Edmonton, Alberta
PH: (780) 451–3420 FAX: (780) 452–7033

Date: July 26, 2005
Plan No.: 1 of 1
Job No.: 321116981

SCALE AS SHOWN
File No.: 16981 JDS

Plan ID E16981WS1

ARRAY INDUCTION

COMPANY	PARAMOUNT RESOURCES LTD.
WELL	PARAMOUNT ET AL CAMERON J-04
FIELD	CAMERON HILLS
PROVINCE/COUNTY	NORTH WEST TERRITORIES
COUNTRY/STATE	CANADA
LOCATION	300/J-04-60-10-117-30

FIELD PRINT

LSD	SEC	TWP	RGE

Other Services

PHOTO DENSITY
DUAL SPACED NEUTRON
MICROLOG
COMPENSTATED SONIC

API Number
Permit Number 1159

Permanent Datum GROUND LEVEL, Elevation 765.20 metres
Log Measured From 4.00 M above Permanent Datum
Drilling Measured From KB

Elevations:	metres
KB	769.20
DF	
GL	765.20

Date	15-FEB-2007			
Run Number	1			
Depth Driller	1449.00	metres		
Depth Logger	1449.50	metres		
First Reading	1448.70	metre		
Last Reading	420.00	metre		
Casing Driller	430.00	metres		
Casing Logger	429.80	metres		
Bit Size	200.00	mm		
Hole Fluid Type	GELCHEM			
Density / Viscosity	1060.0 kg/M3	93.00 CP		
PH / Fluid Loss	11.00	11.00 ml/30Min		
Sample Source	FLOWLINE			
Rm @ Measured Temp	1.18 @ 25.0	ohm-m		
Rmf @ Measured Temp	1.04 @ 25.0	ohm-m		
Rmc @ Measured Temp	1.32 @ 25.0	ohm-m		
Source Rmf / Rmc	PRESS	FILTER		
Rm @ BHT	0.78 @ 48.0	ohm-m		
Time Since Circulation	6 HRS			
Max Recorded Temp	48.00	deg C		
Equipment Name	COMPACT			
Equipment / Base	13124	GPR		
Recorded By	G. SINGER			
Witnessed By	A. AHMED			
CIRC. STOP TIME	01:30-FEB-15		Last Line	

BOREHOLE RECORD

Last Edited: 15-FEB-2007 05:01

Bit Size millimetres	Depth From metres	Depth To metres
311.000	0.00	430.00
200.000	430.00	1449.00

CASING RECORD

Type	Size millimetres	Depth From metres	Shoe Depth metres	Weight Kg/metre
SURFACE	219.100	0.00	430.00	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 INTERSONIC CRANK
   MTC: SIX LEAF CENTRALIZER
5) SERVICE ORDER #: 30073028 SAP #: 4147101 # FIELD PRINTS = 3
6) RIG: PD 129

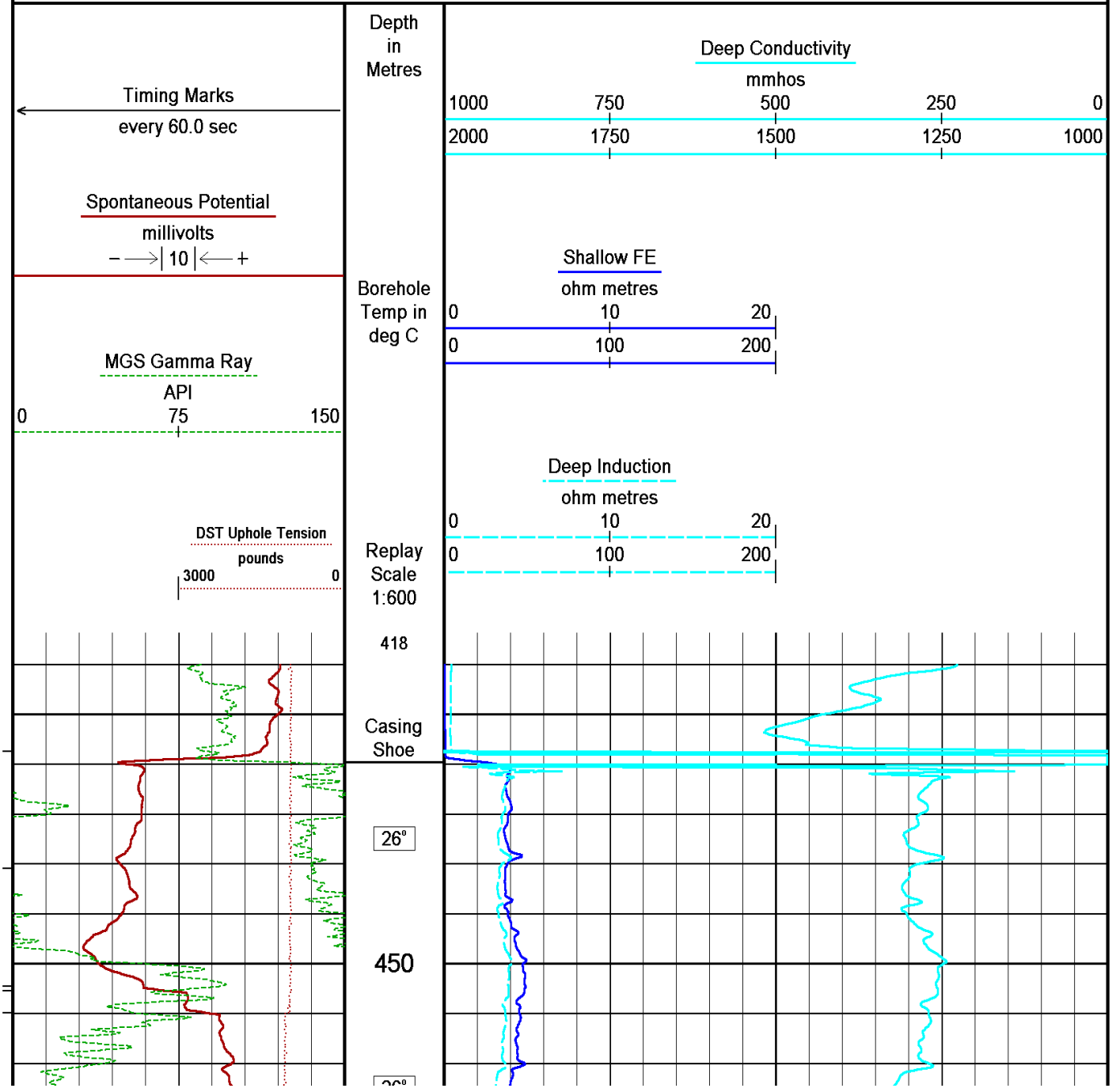
7) HOLE AND CEMENT VOLUMES CALCULATED USING DENSITY AND 2-ARM CALIPERS :
HOLE VOLUME = 37.4 CU.M.
ANNULAR VOLUME USING 139.7 MM PRODUCTION CASING = 21.8 CU.M

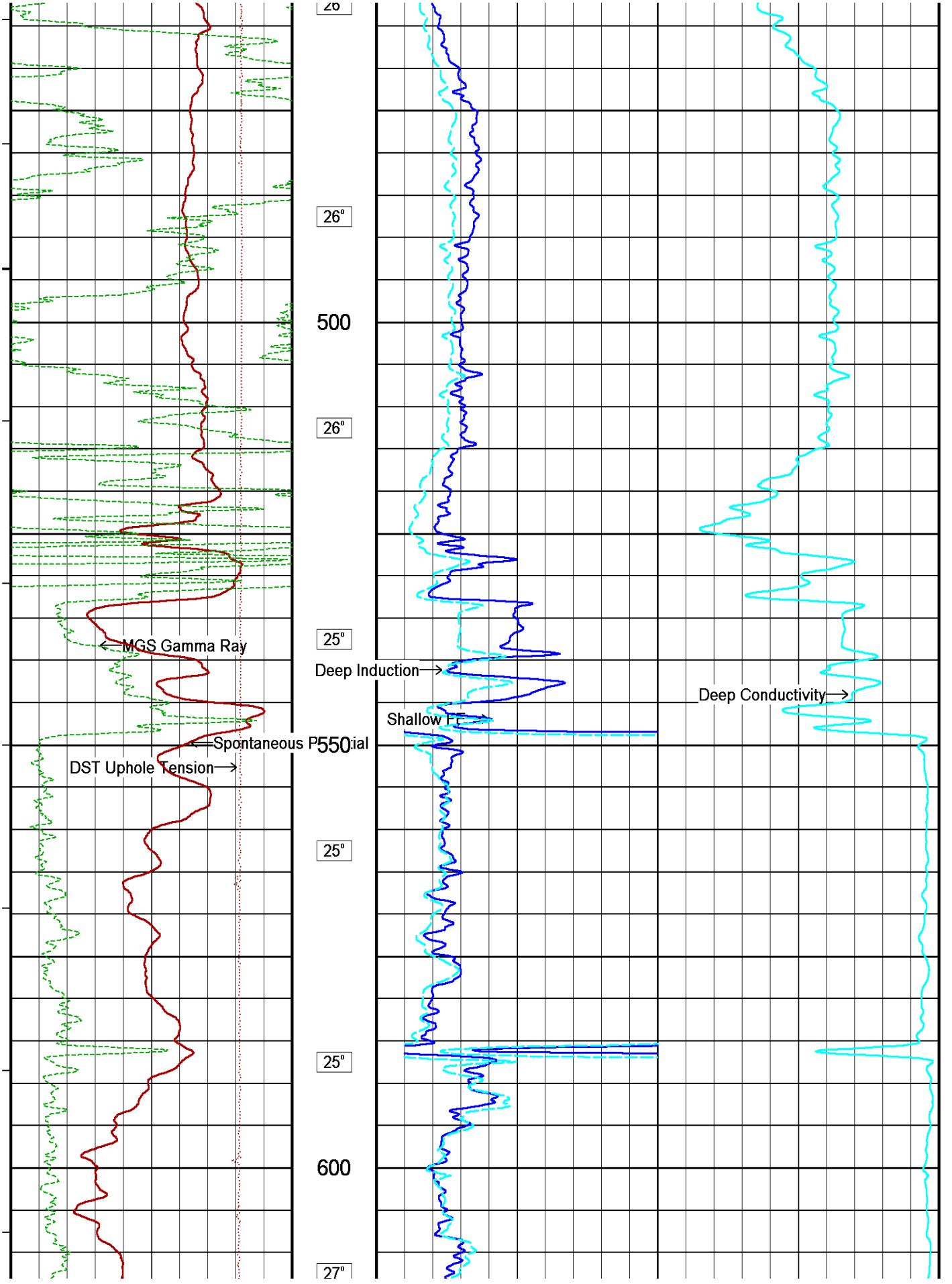
8) SONIC FREE PIPE FOUND FROM 352M - 357M

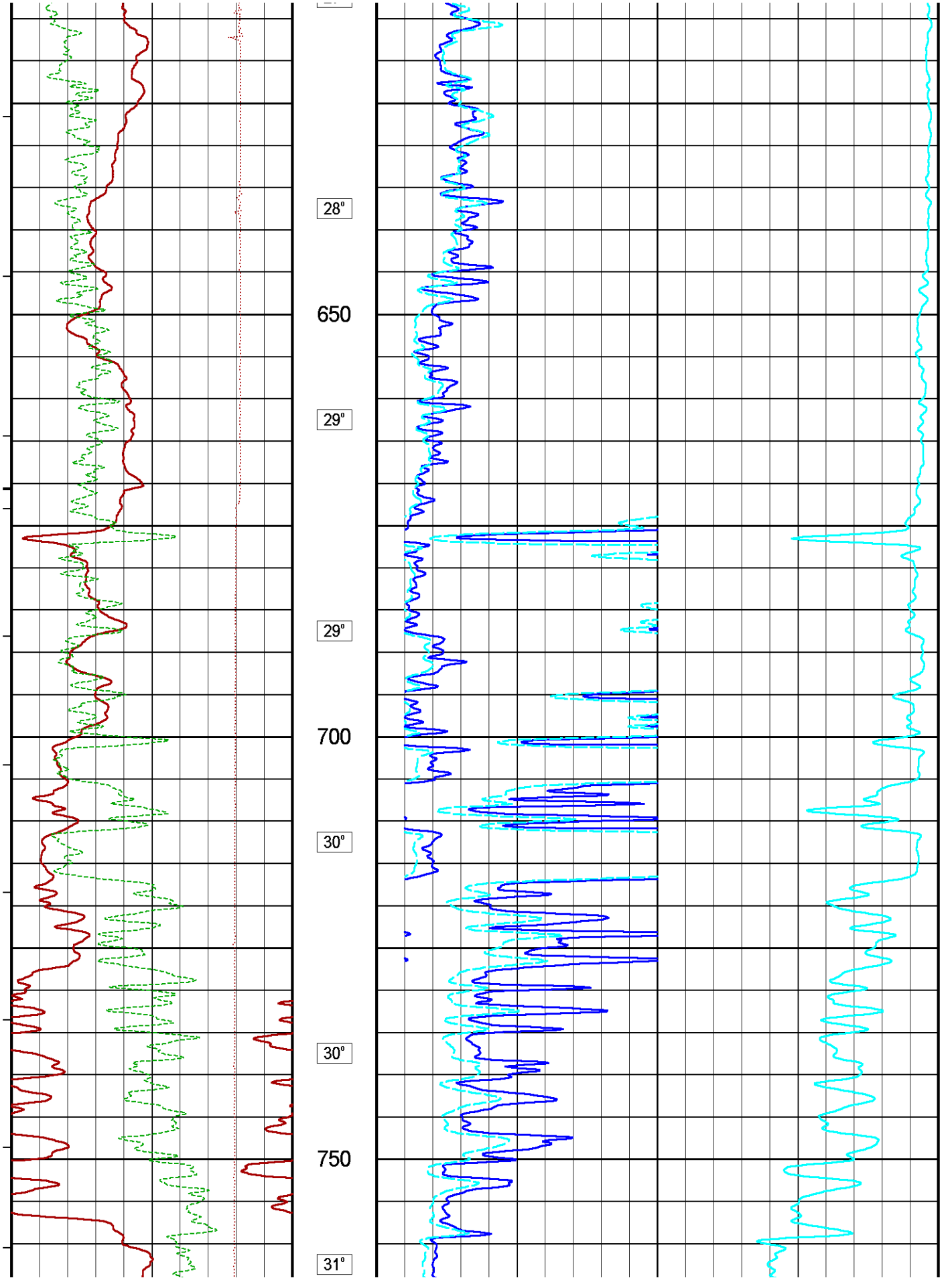
MAIN LOG 1:600

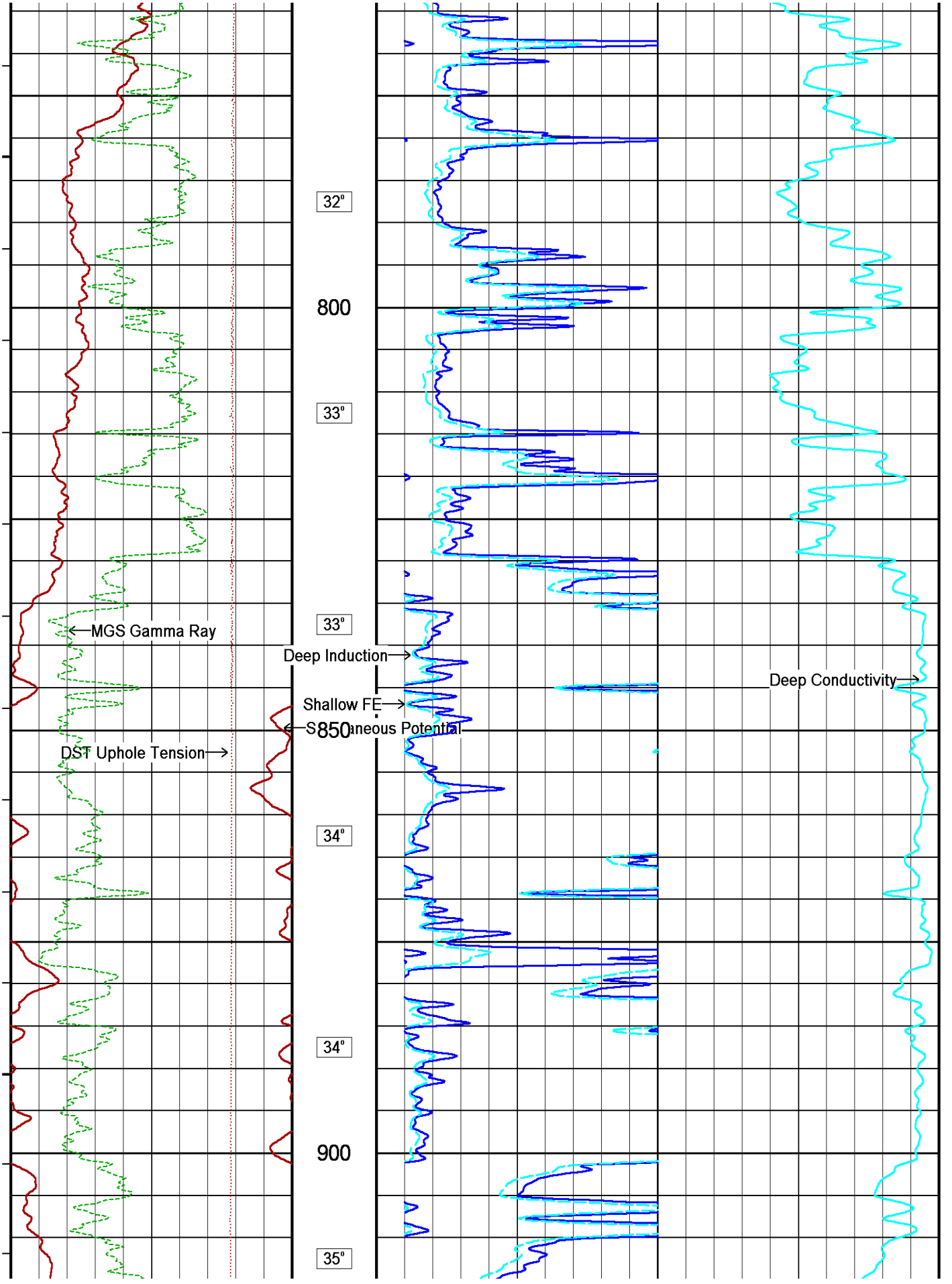
Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

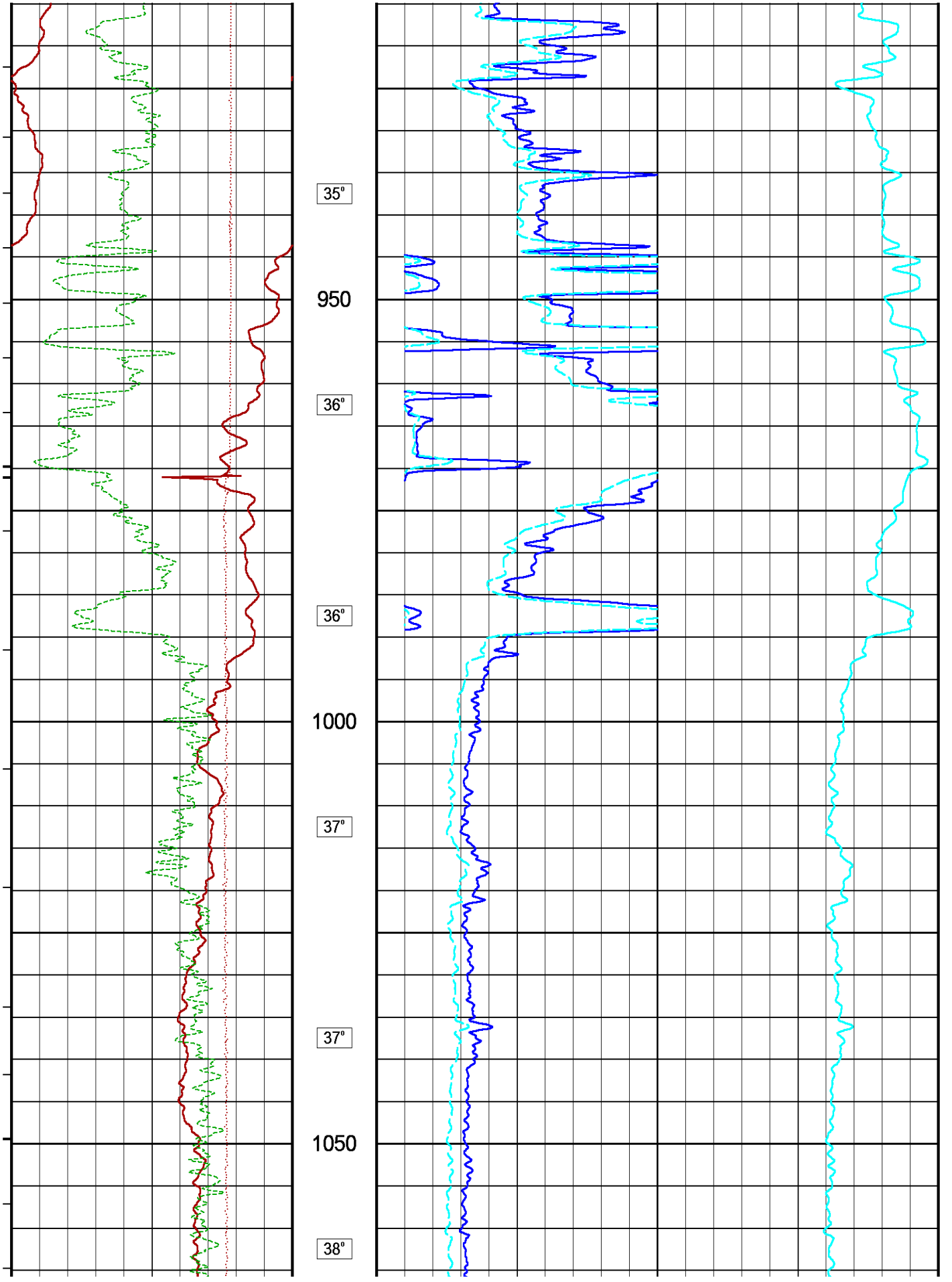
Plotted on 12-NOV-2007 09:27
Recorded on 15-FEB-2007 08:46

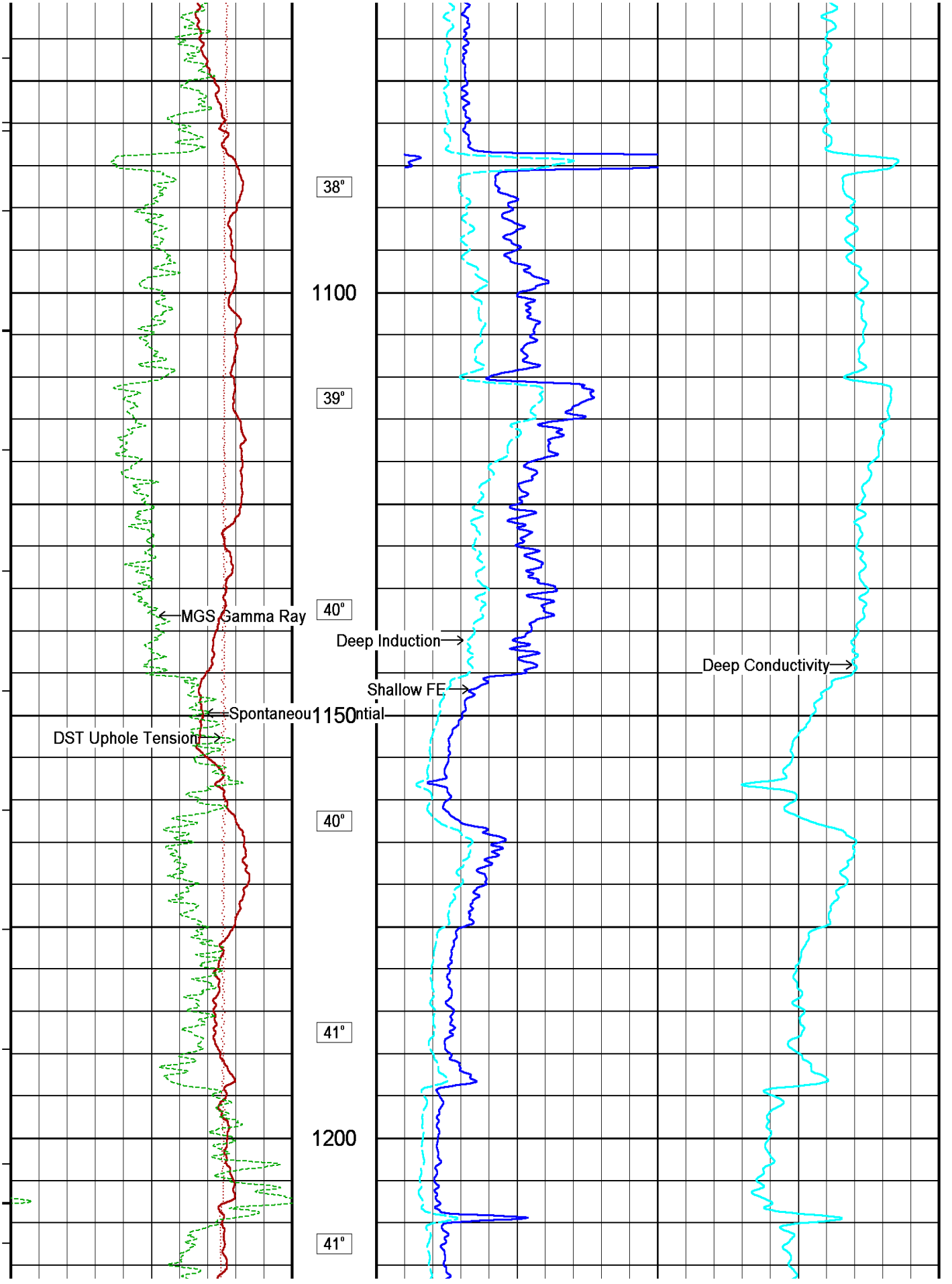


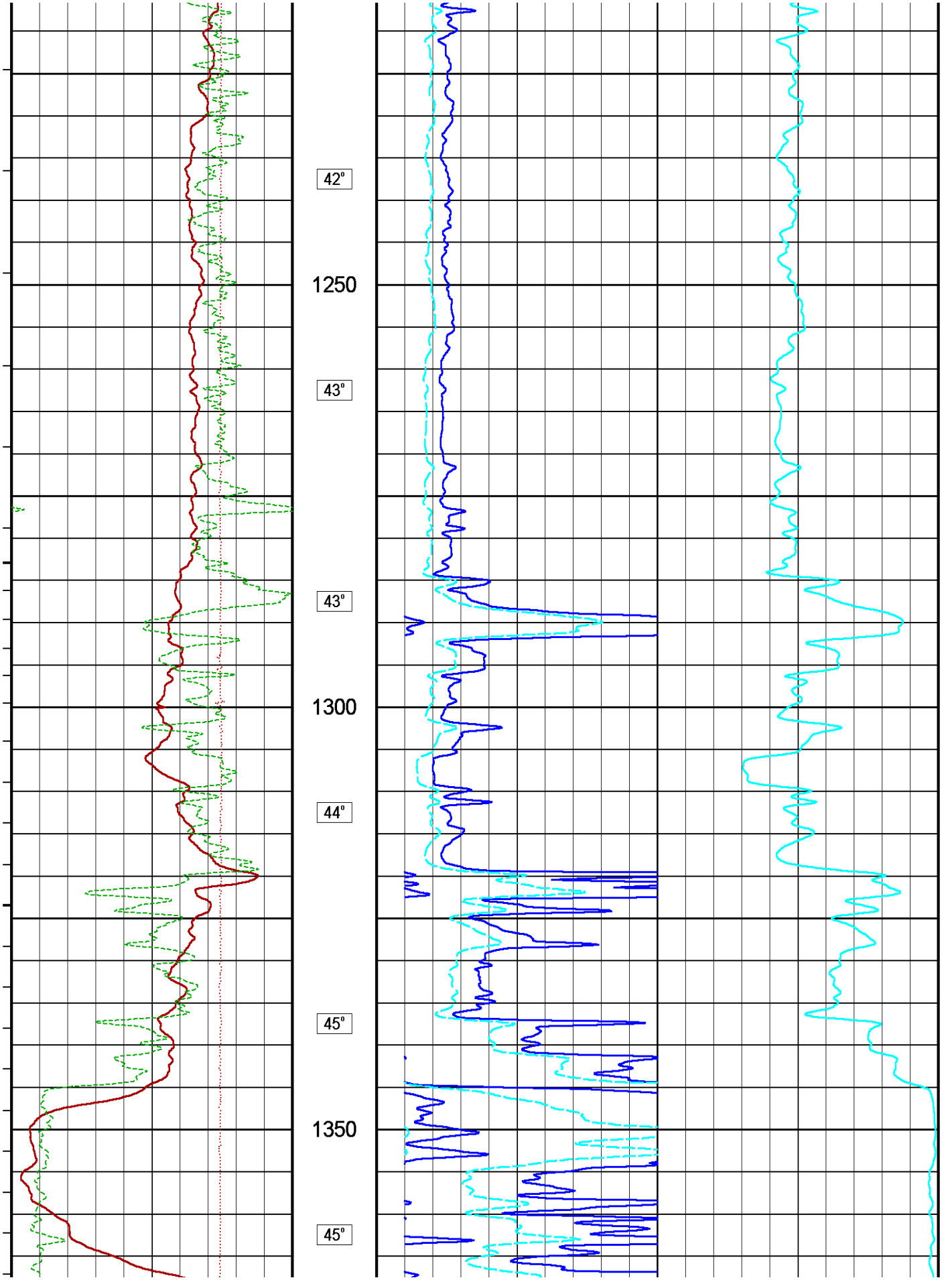

26°
26°
500
26°
25°
MGS Gamma Ray
Deep Induction
Deep Conductivity
Shallow Ft
Spontaneous P
550
ial
DST Uphole Tension
25°
25°
600
27°

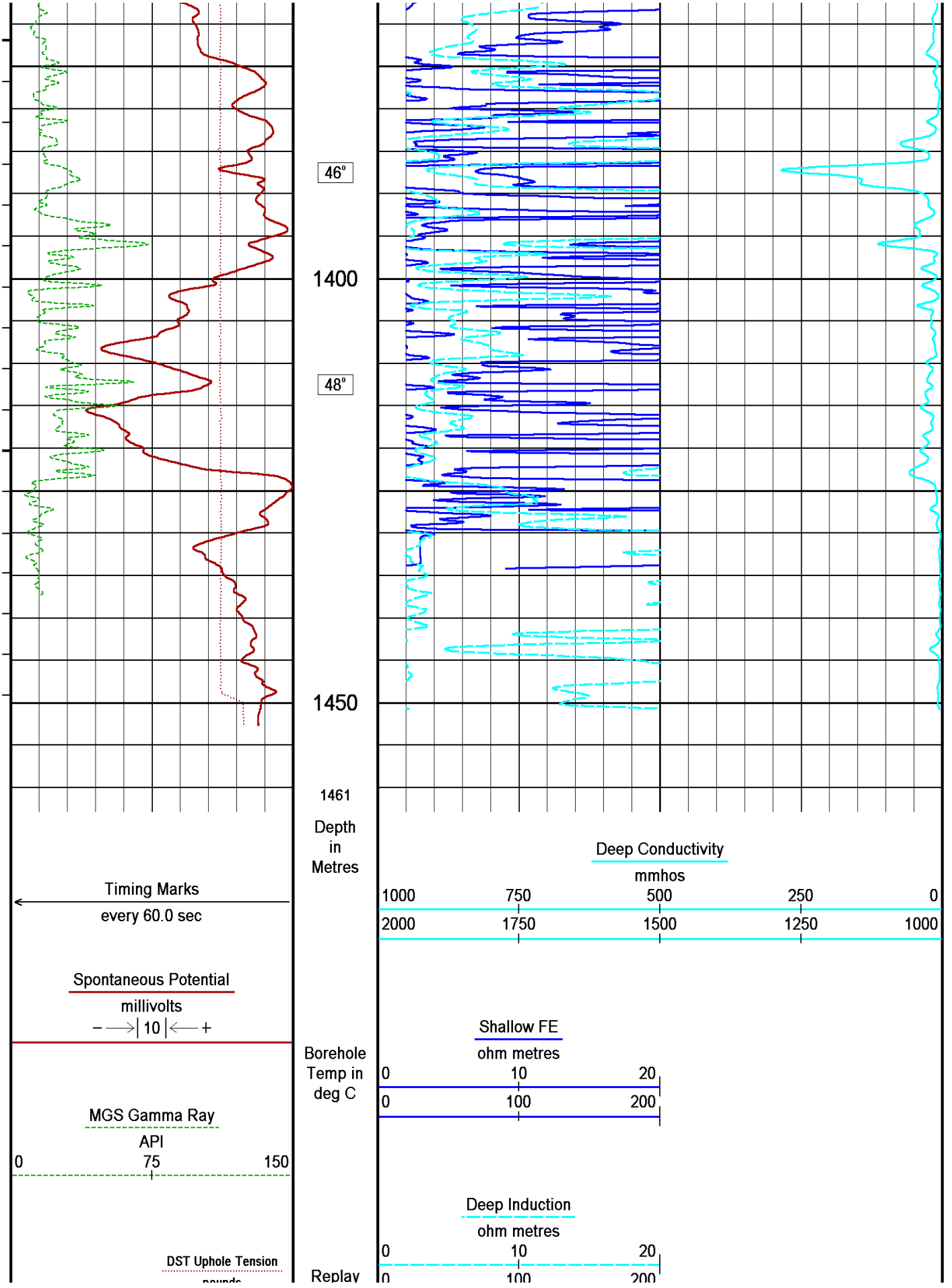

28°
650
29°
29°
700
30°
30°
750
31°

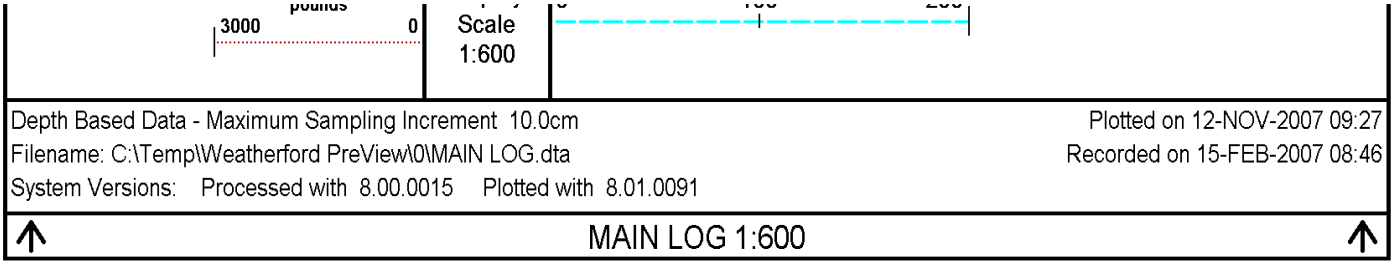

32°
800
33°
33°
MGS Gamma Ray
Deep Induction
Deep Conductivity
Shallow FE
S
850
aneous Potential
DST Uphole Tension
34°
34°
900
35°


35°
950
36°
36°
1000
37°
37°
1050
38°


38°
1100
39°
40°
MGS Gamma Ray
Deep Induction
Deep Conductivity
Shallow FE
Spontaneou
1150
ntial
DST Uphole Tension
40°
41°
1200
41°


42°
1250
43°
43°
1300
44°
45°
1350
45°


46°
1400
48°
1450
1461
Depth
in
Metres
Timing Marks
every 60.0 sec
Spontaneous Potential
millivolts
– 10 +
MGS Gamma Ray
API
0
75
150
DST Uphole Tension
Borehole
Temp in
deg C
Replay
Deep Conductivity
mmhos
1000
750
500
250
0
2000
1750
1500
1250
1000
Shallow FE
ohm metres
0
10
20
0
100
200
Deep Induction
ohm metres
0
10
20
0
100
200

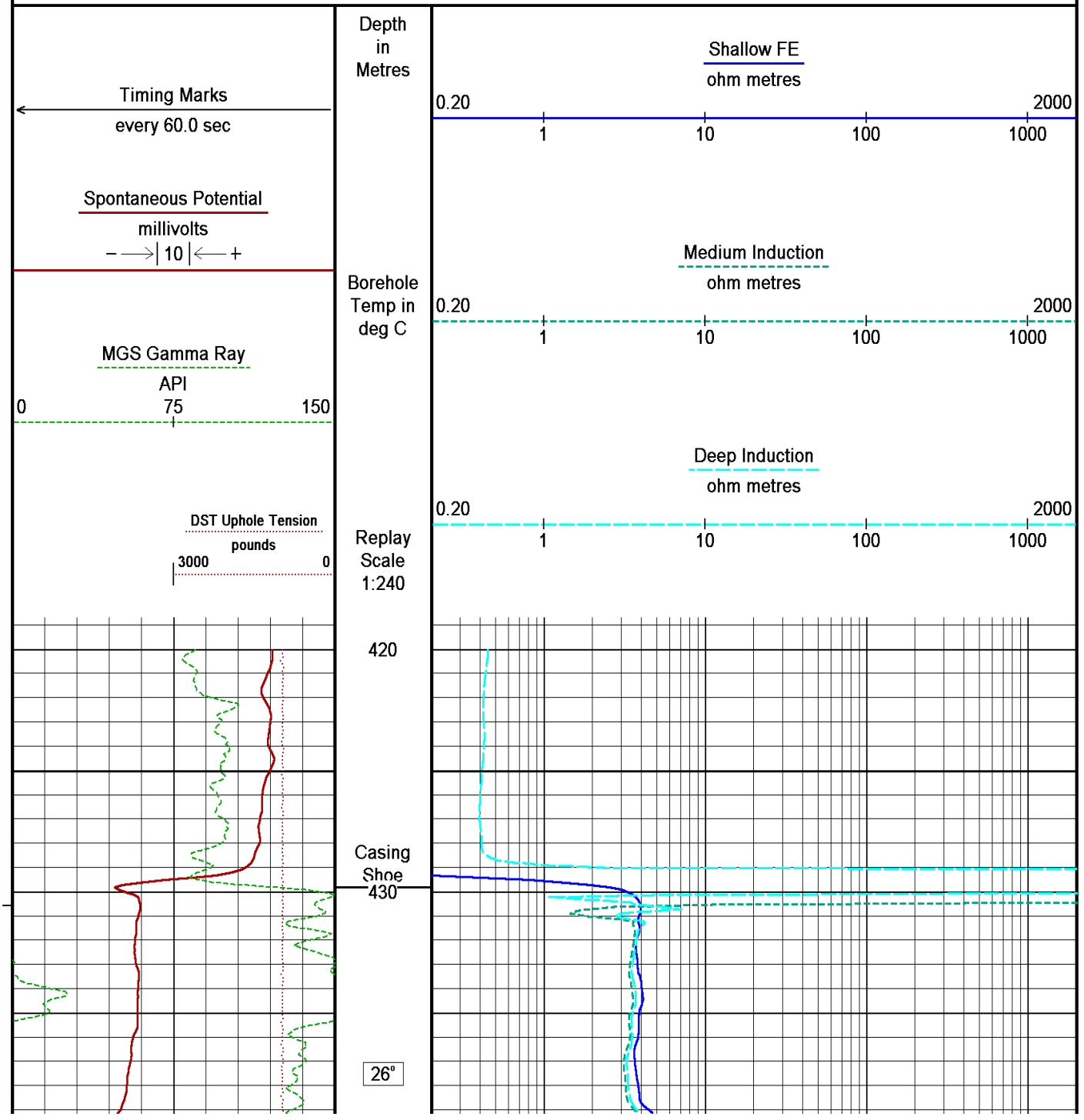


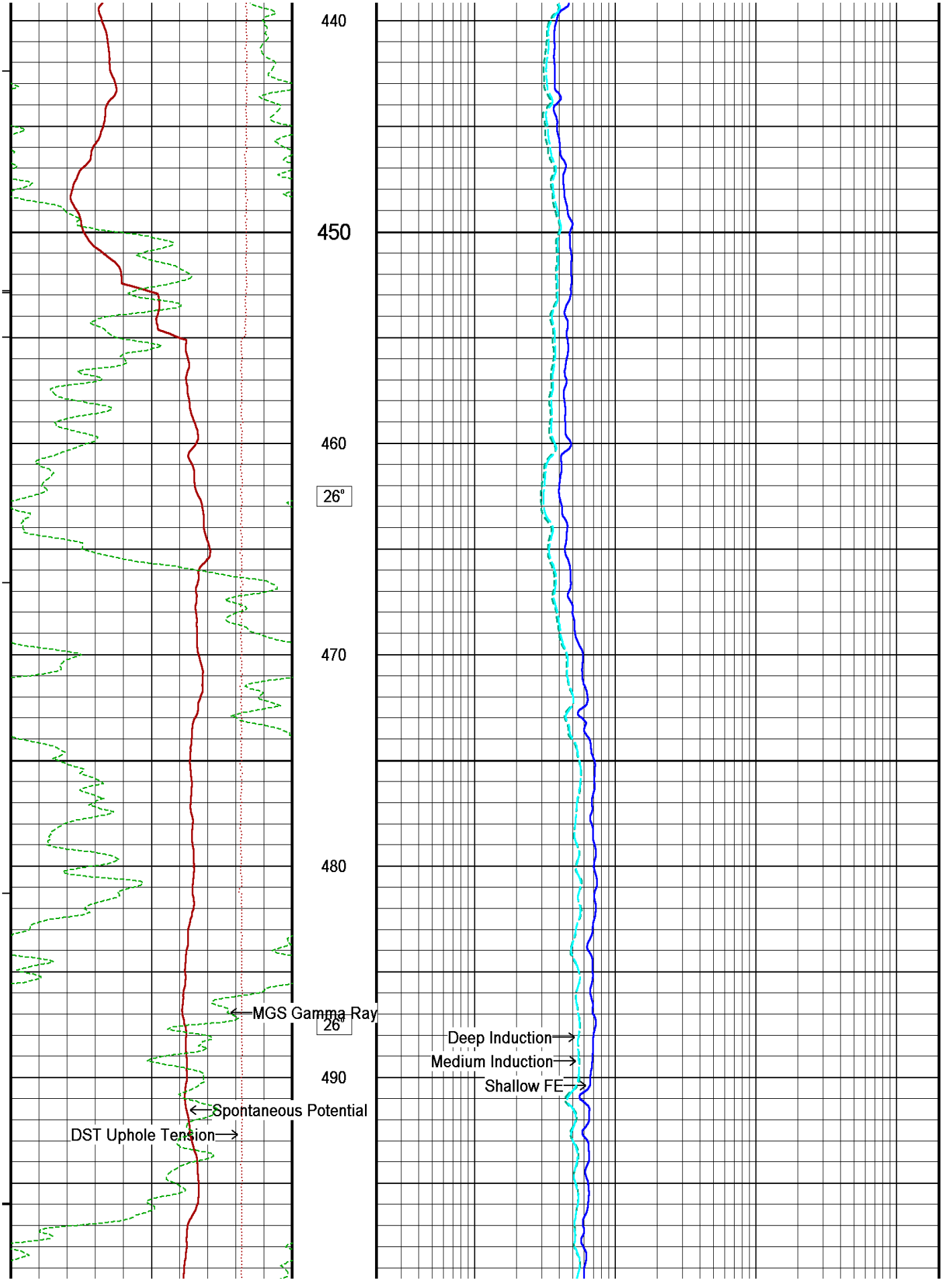
Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 12-NOV-2007 09:27
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

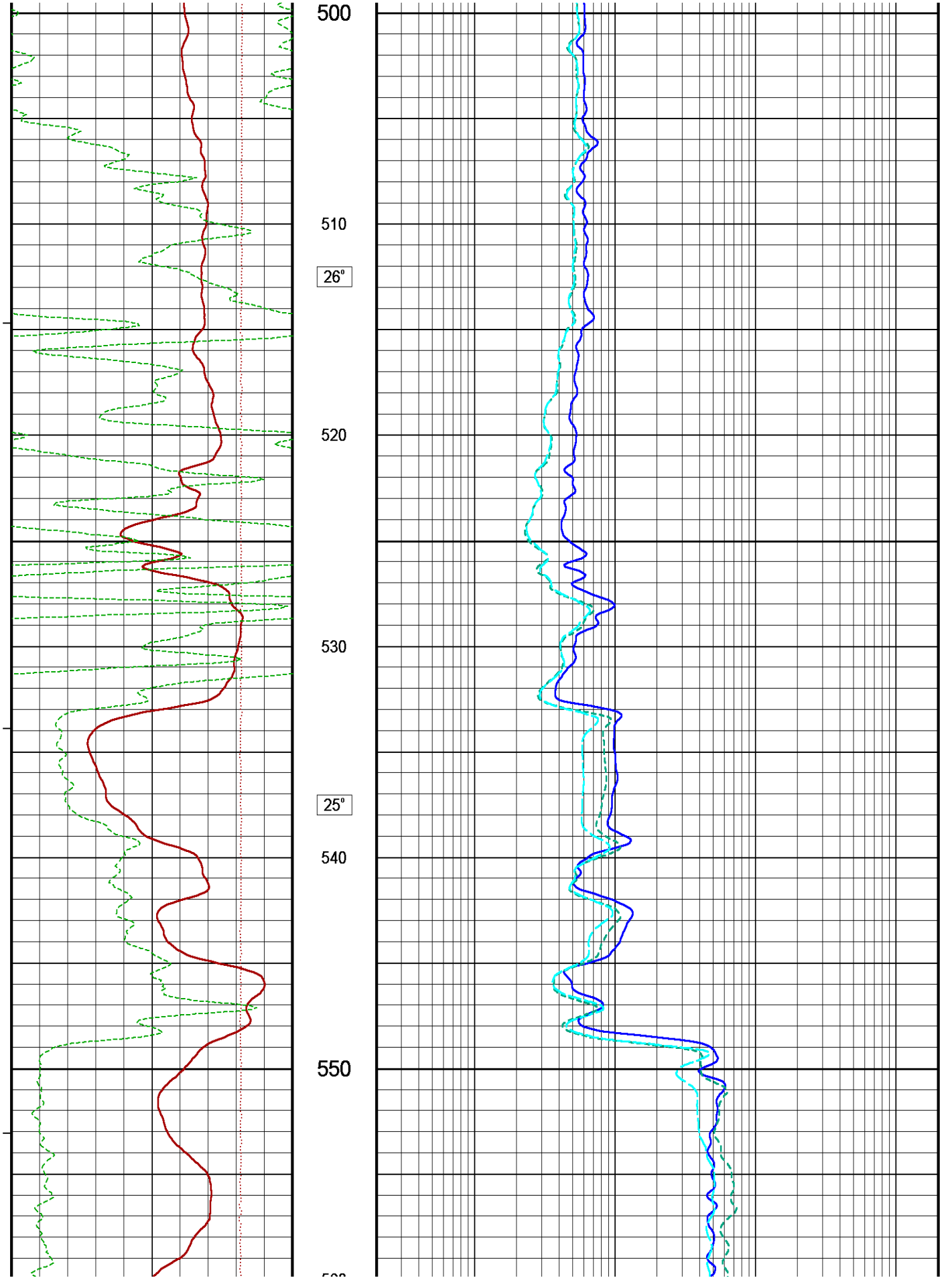
MAIN LOG 1:600

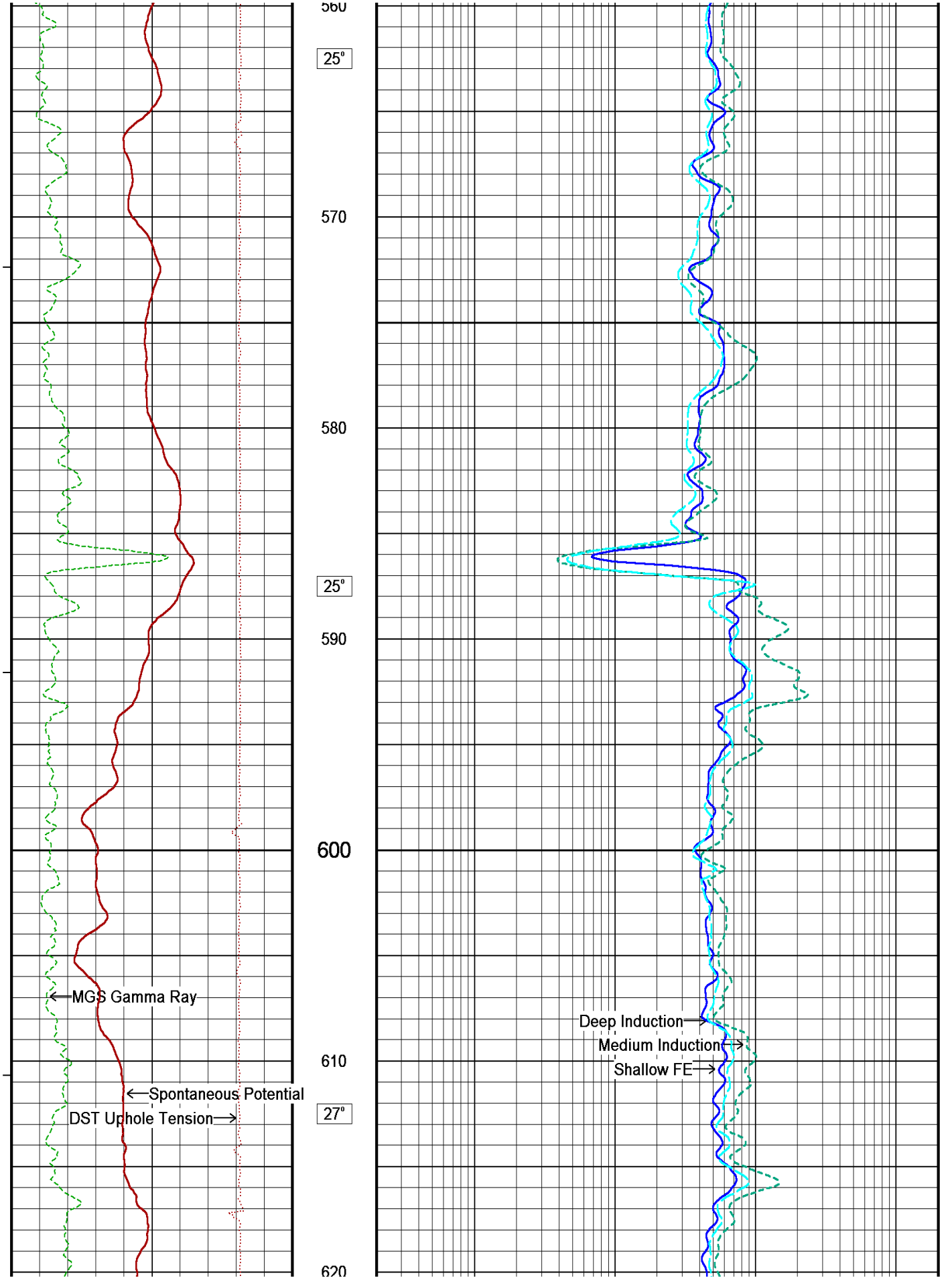
MAIN LOG 1:240

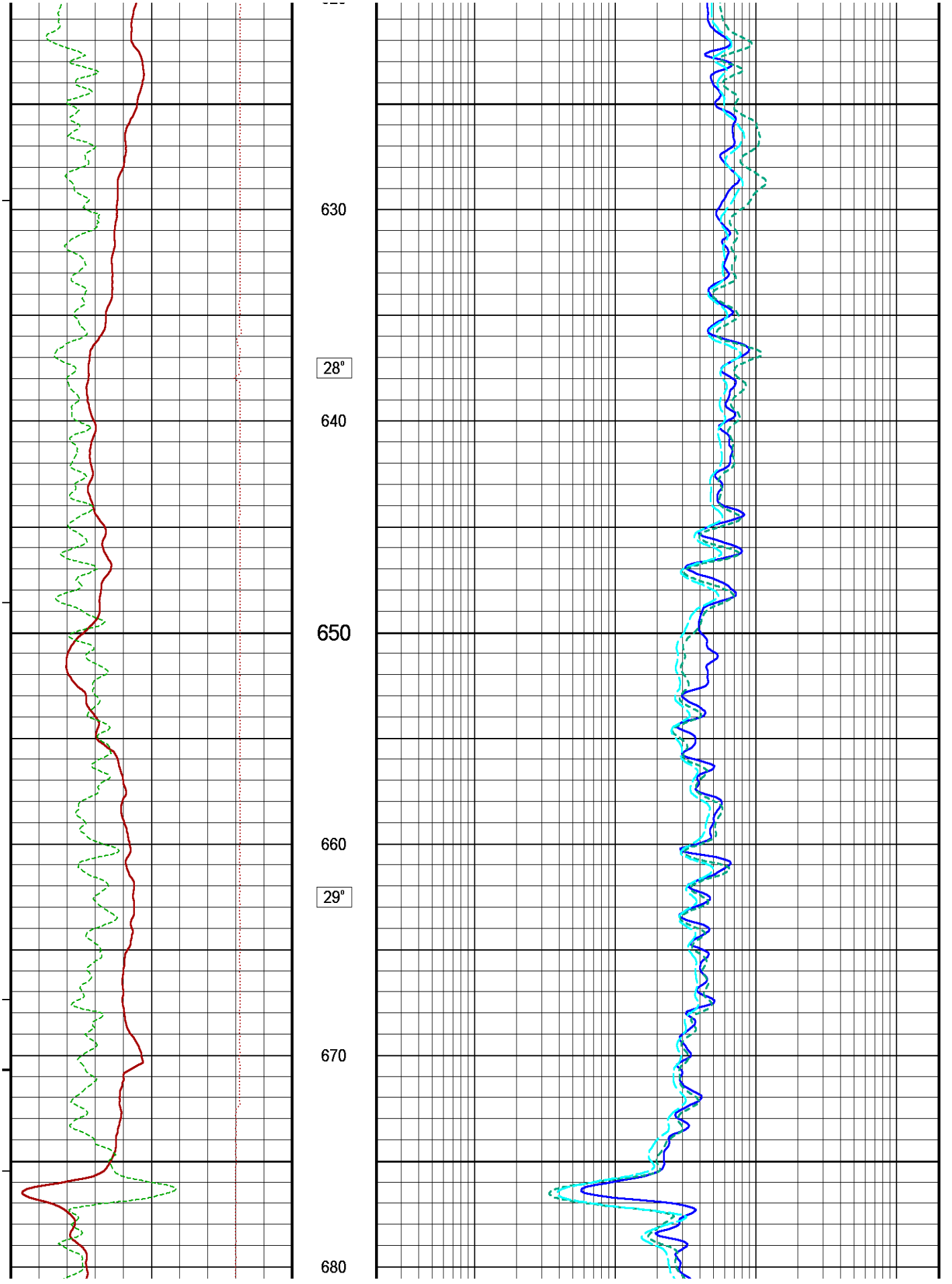
Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 12-NOV-2007 09:27
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

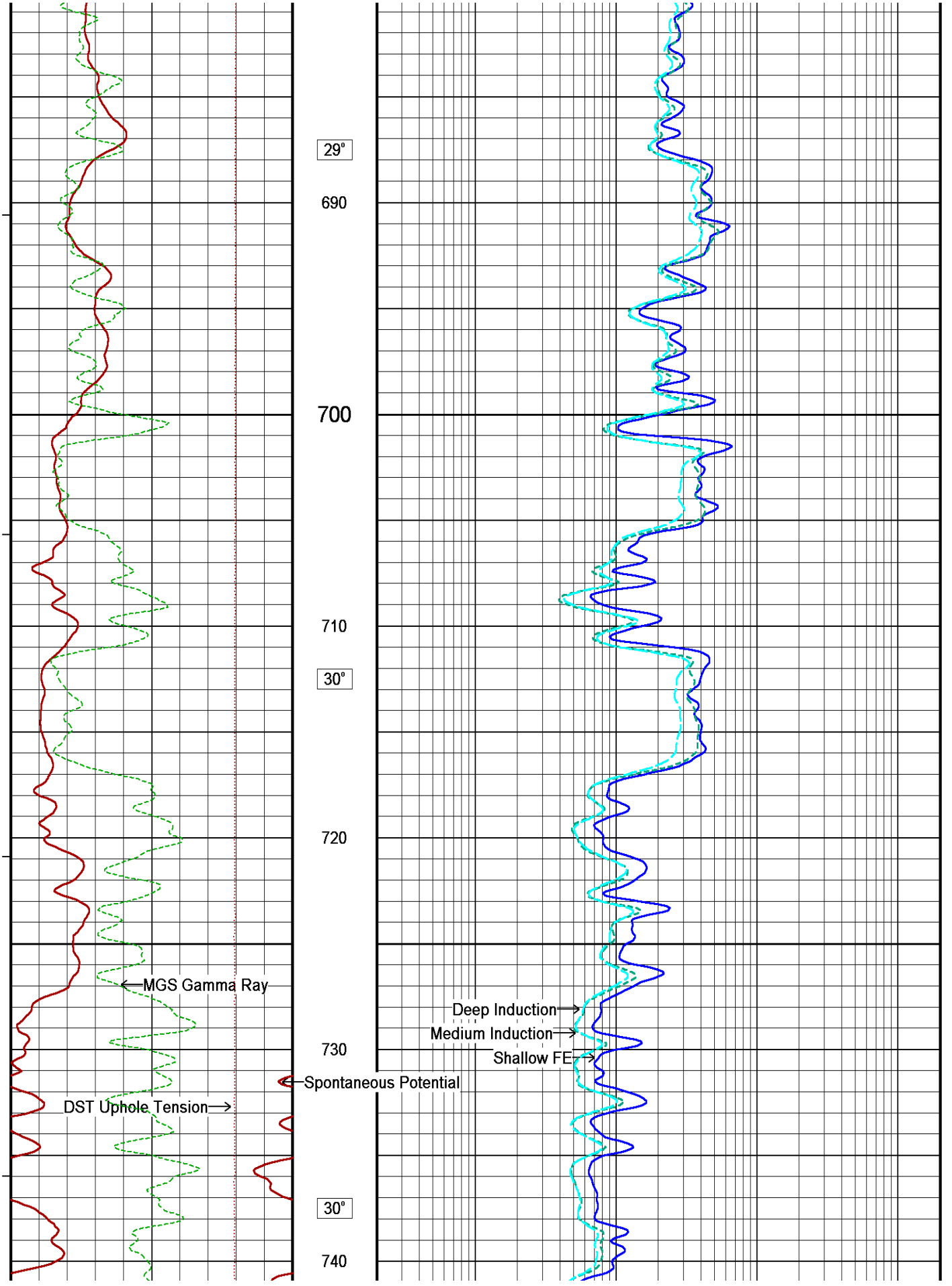


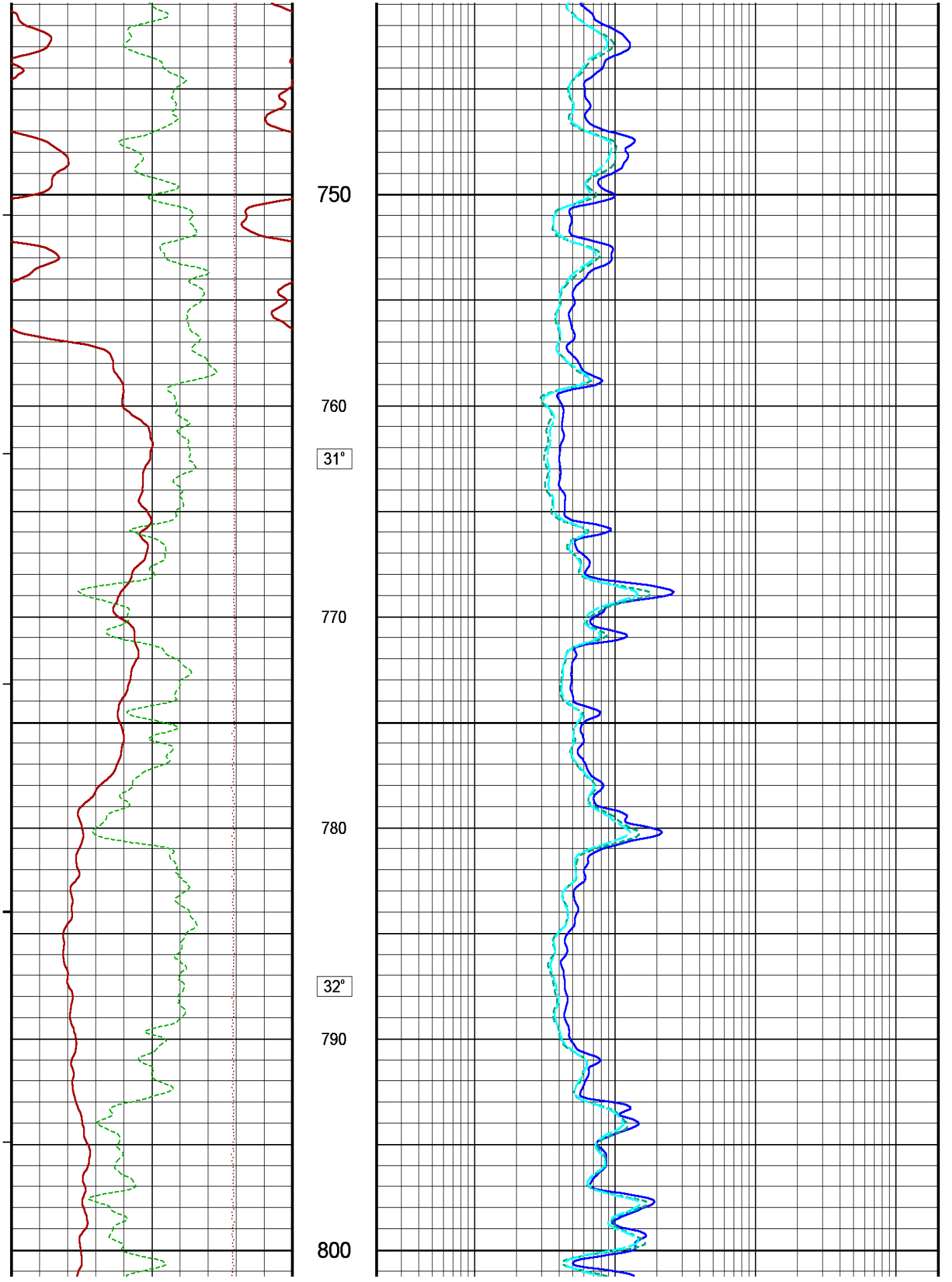

440
450
460
26°
470
480
MGS Gamma Ray
26°
490
Spontaneous Potential
DST Uphole Tension
Deep Induction
Medium Induction
Shallow FE

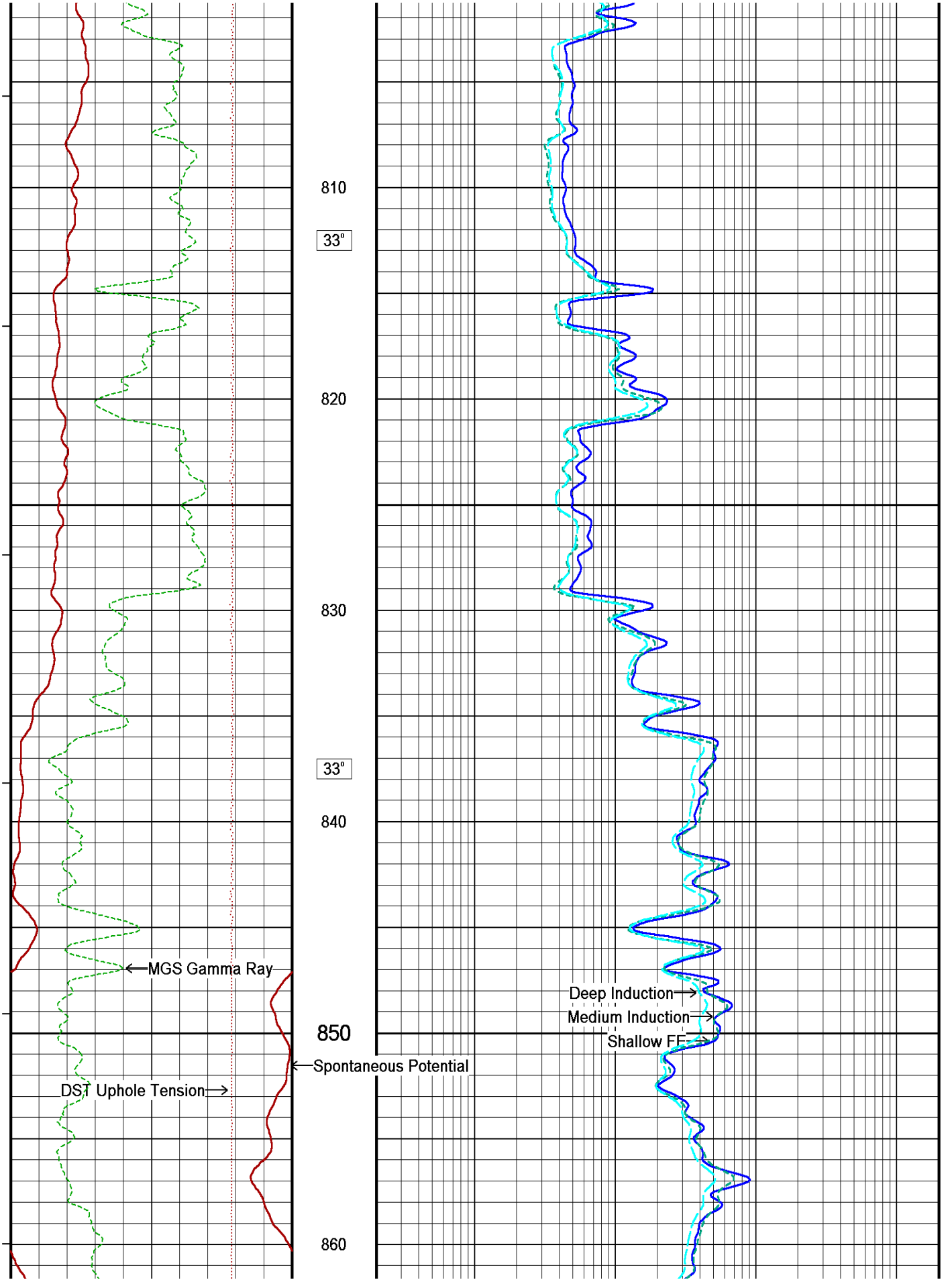

500
510
26°
520
530
25°
540
550

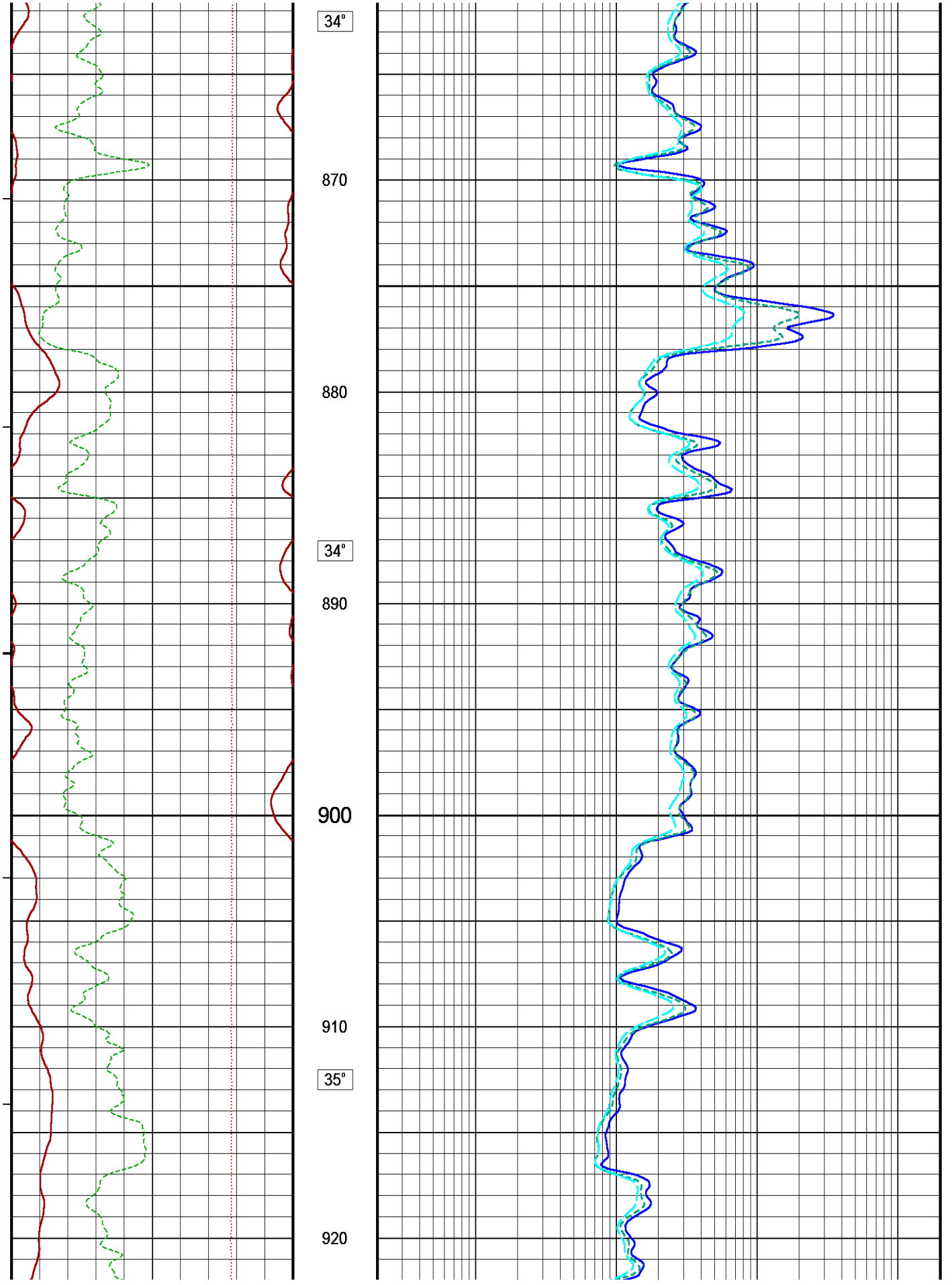

560
25°
570
580
25°
590
600
610
27°
620
←MGS Gamma Ray
←Spontaneous Potential
DST Uphole Tension→
Deep Induction→
Medium Induction→
Shallow FE→

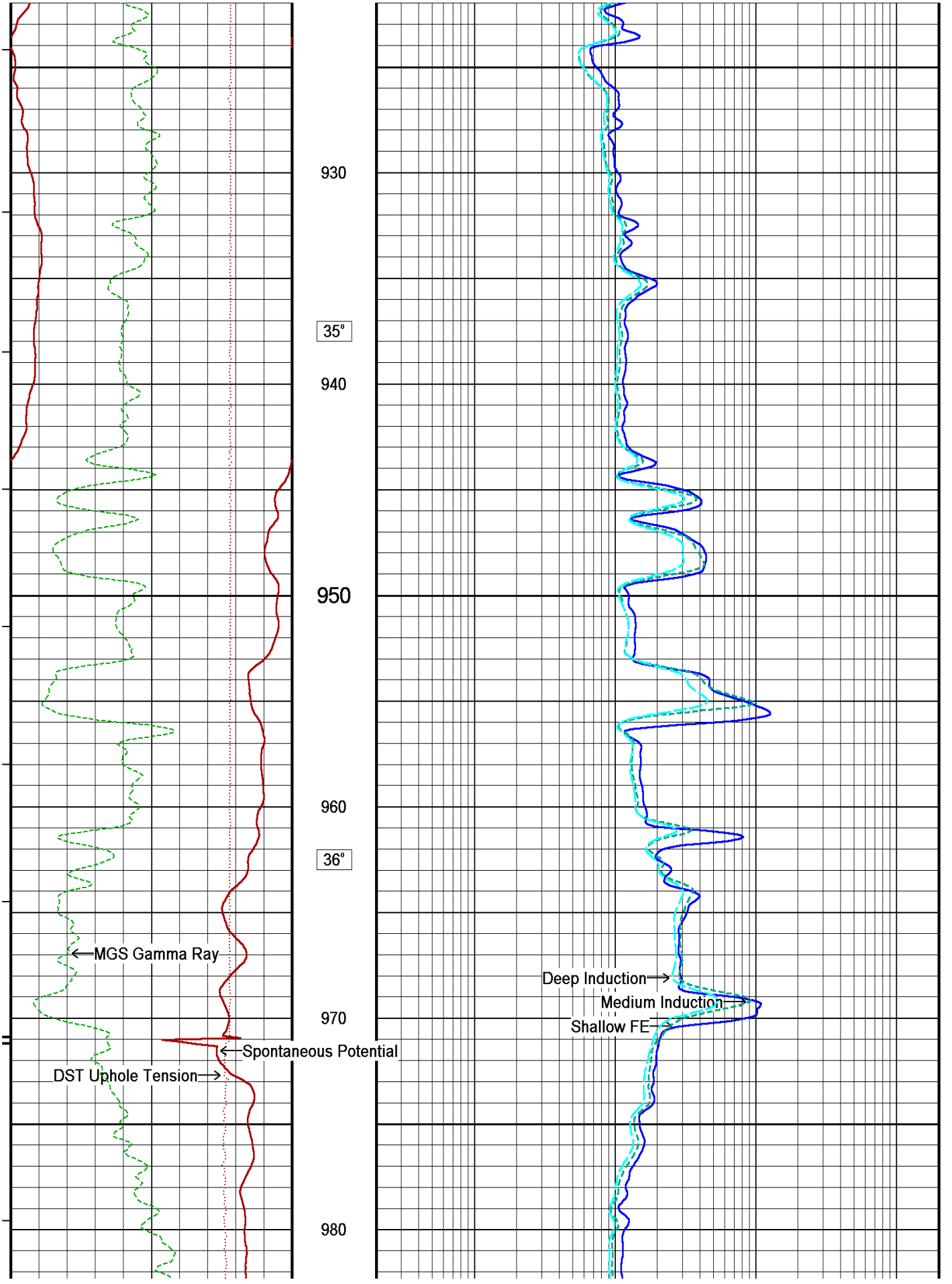

630
28°
640
650
660
29°
670
680

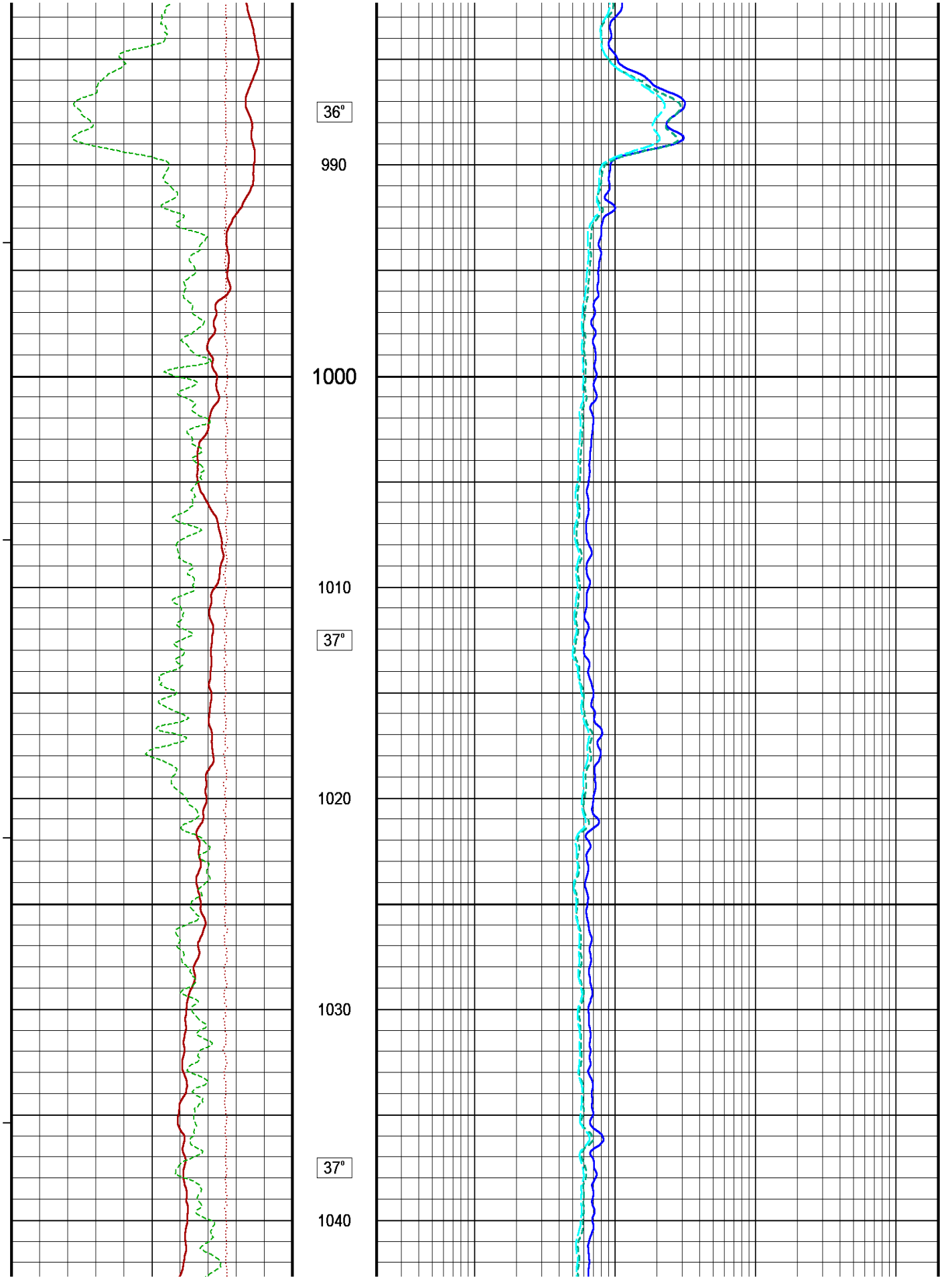

29°
690
700
710
30°
720
MGS Gamma Ray
730
Spontaneous Potential
DST Uphole Tension
30°
740
Deep Induction
Medium Induction
Shallow FE

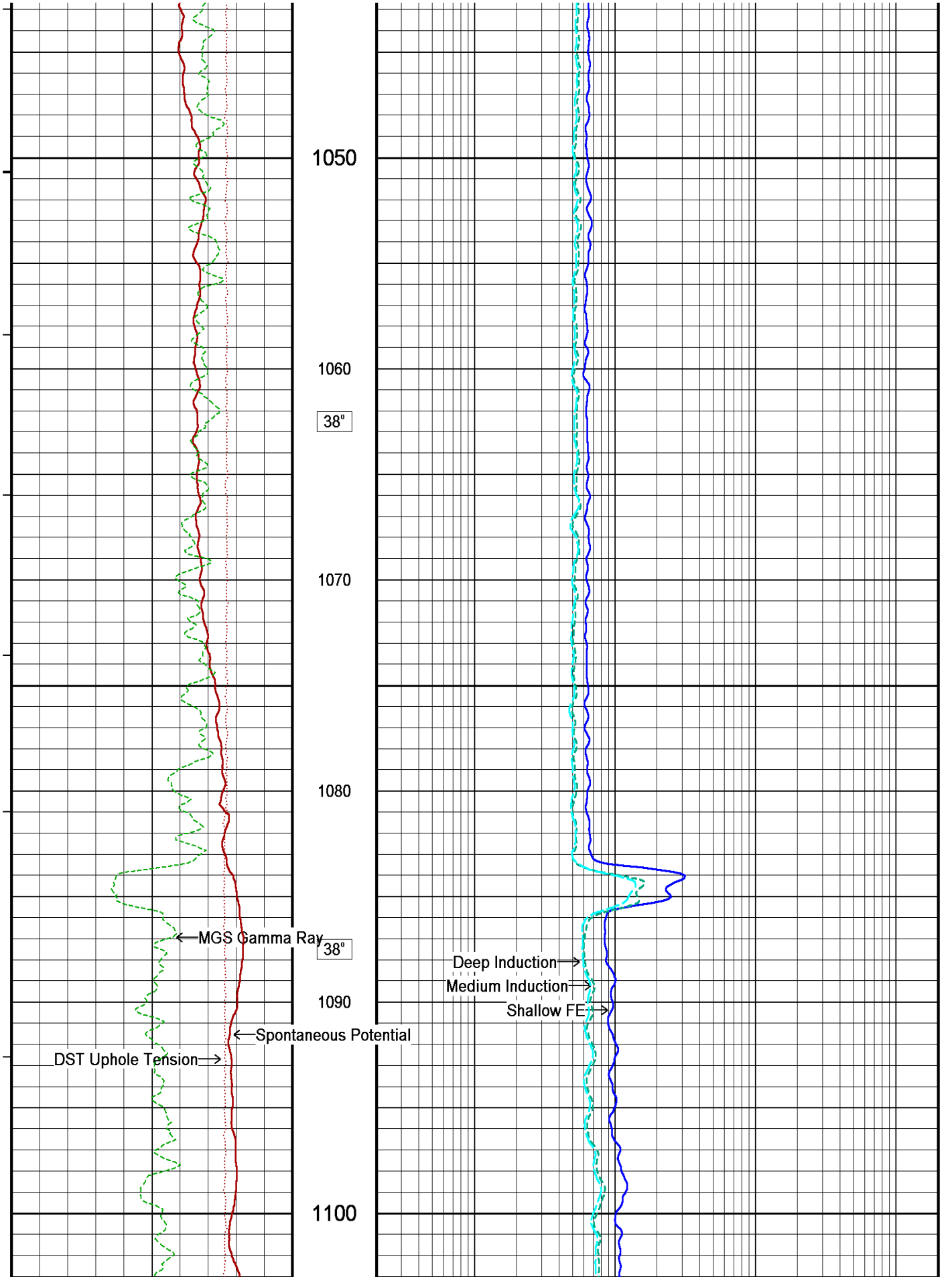

750
760
31°
770
780
32°
790
800

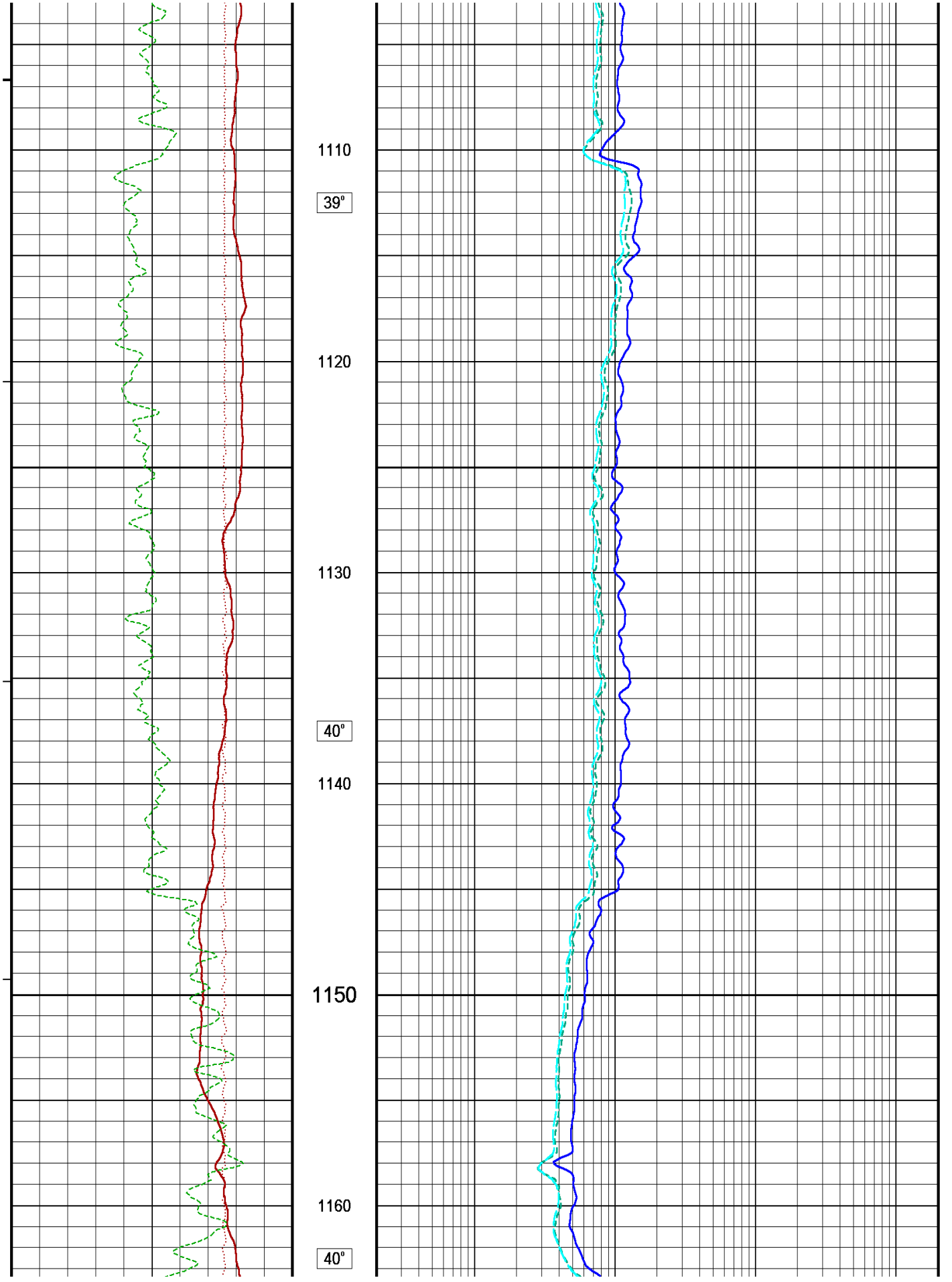

810
33°
820
830
33°
840
MGS Gamma Ray
850
Spontaneous Potential
DST Uphole Tension
860
Deep Induction
Medium Induction
Shallow FE

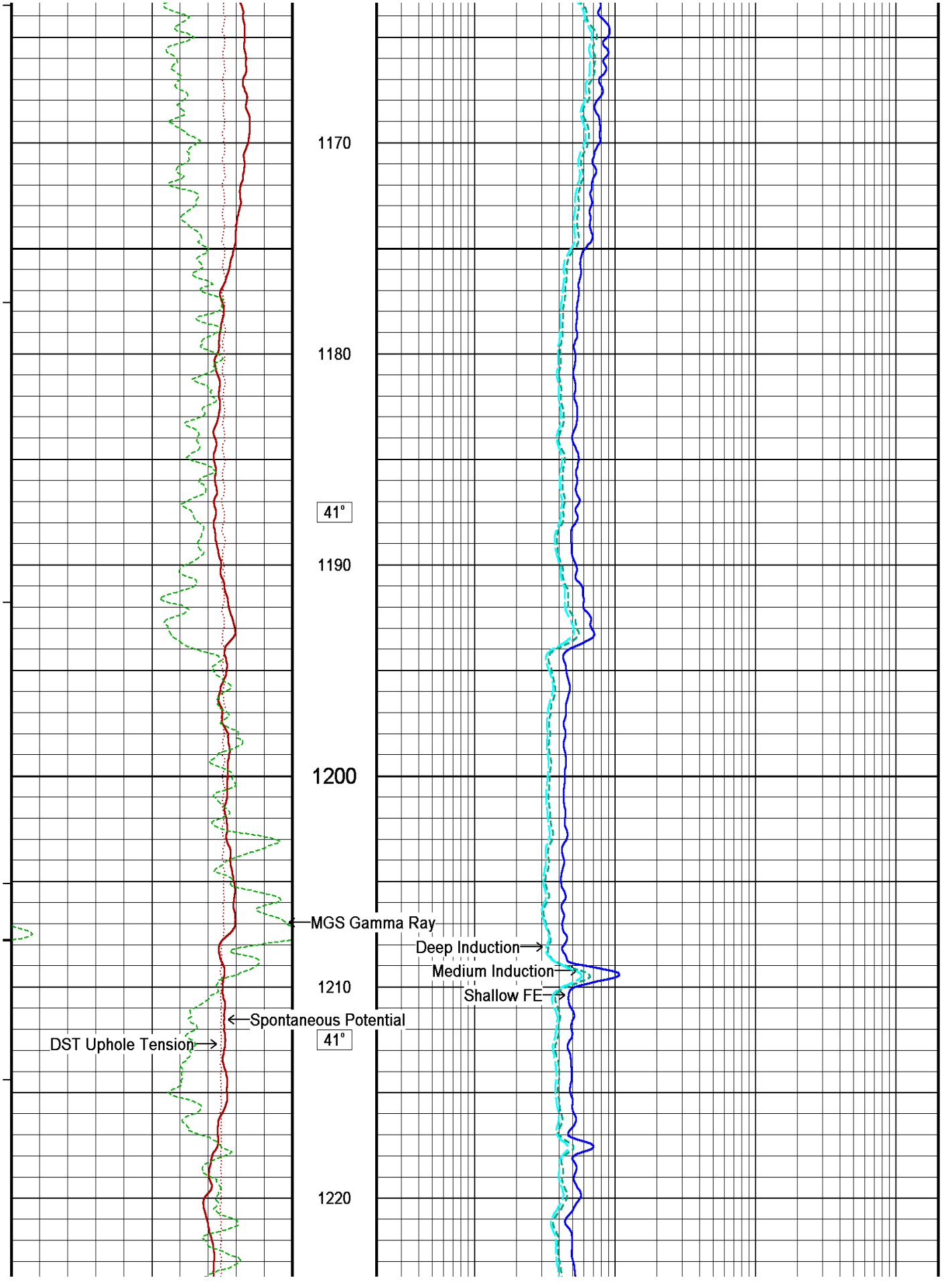

34°
870
880
34°
890
900
910
35°
920

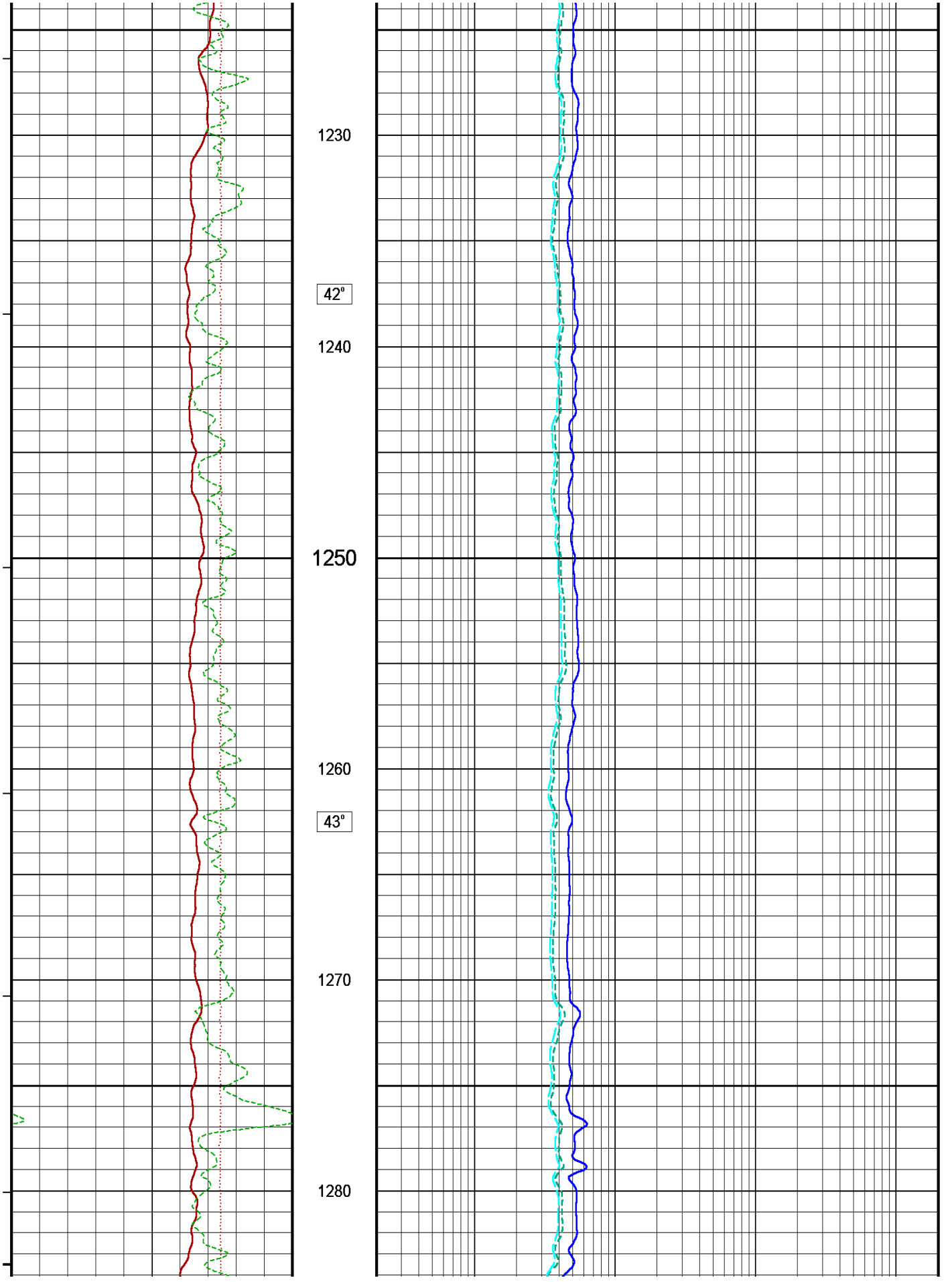

930
35°
940
950
960
36°
970
980
MGS Gamma Ray
Spontaneous Potential
DST Uphole Tension
Deep Induction
Medium Induction
Shallow FE

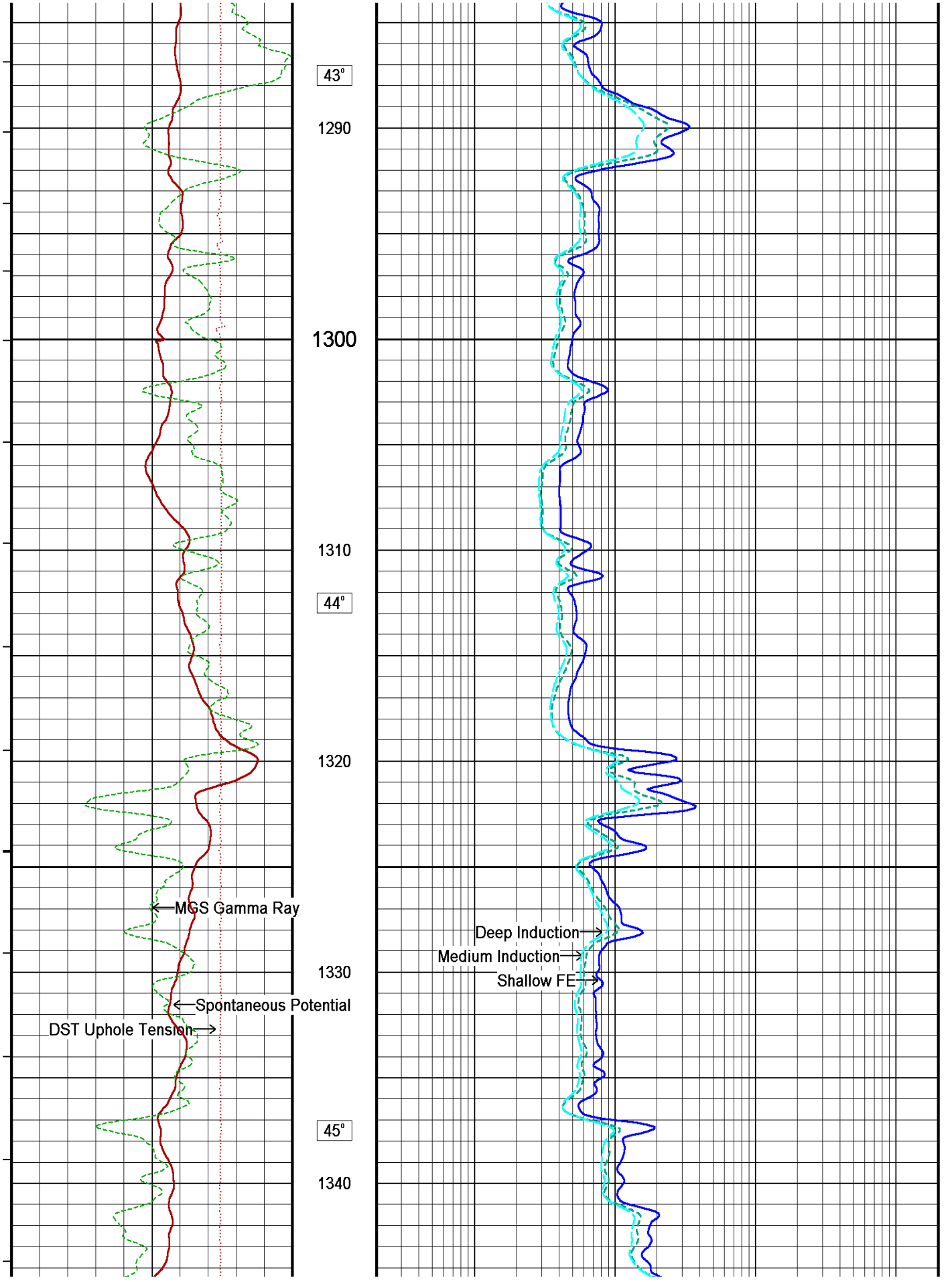

36°
990
1000
1010
37°
1020
1030
37°
1040

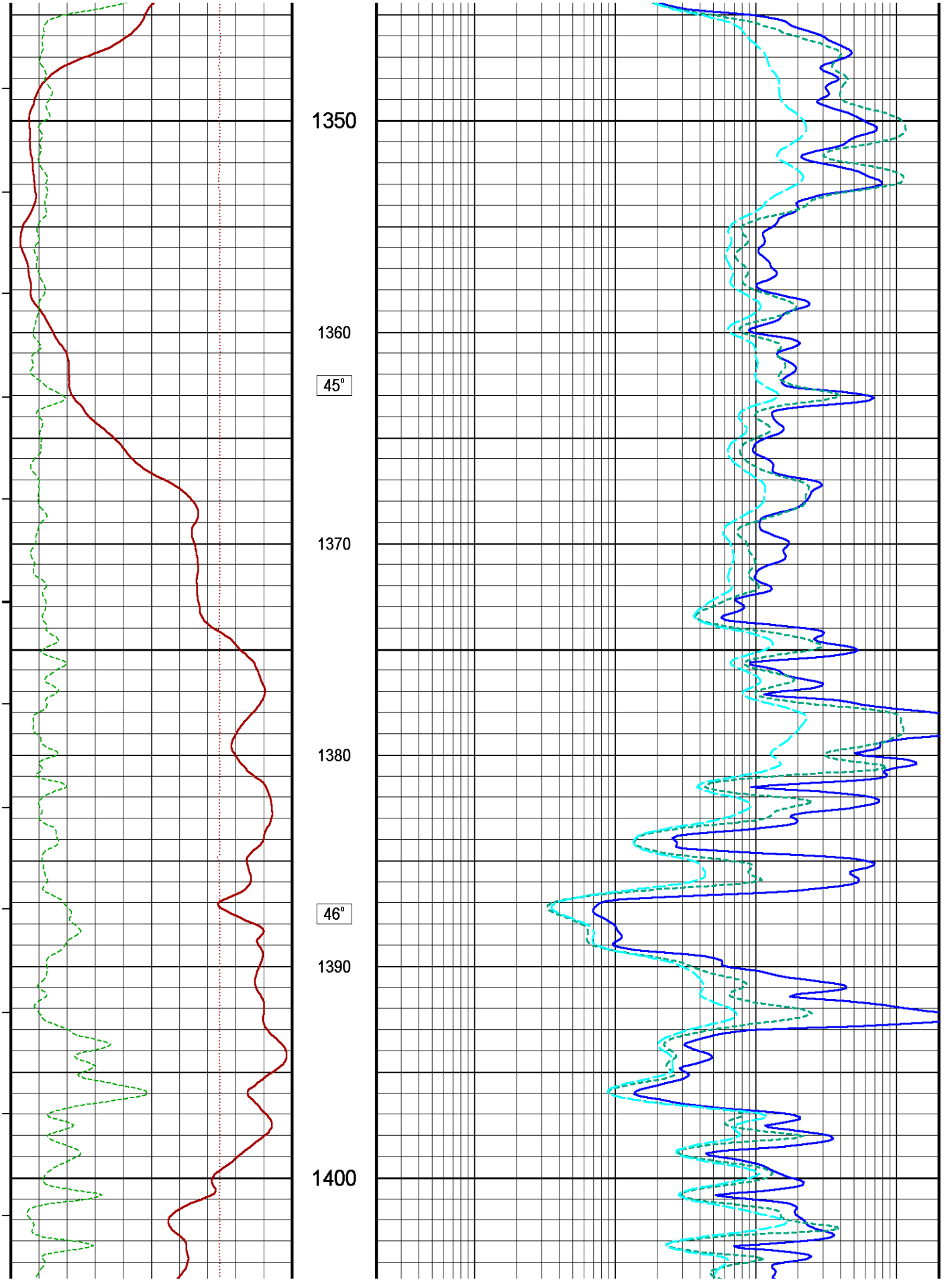

1050
1060
38°
1070
1080
MGS Gamma Ray
38°
1090
Spontaneous Potential
DST Uphole Tension
1100
Deep Induction
Medium Induction
Shallow FE

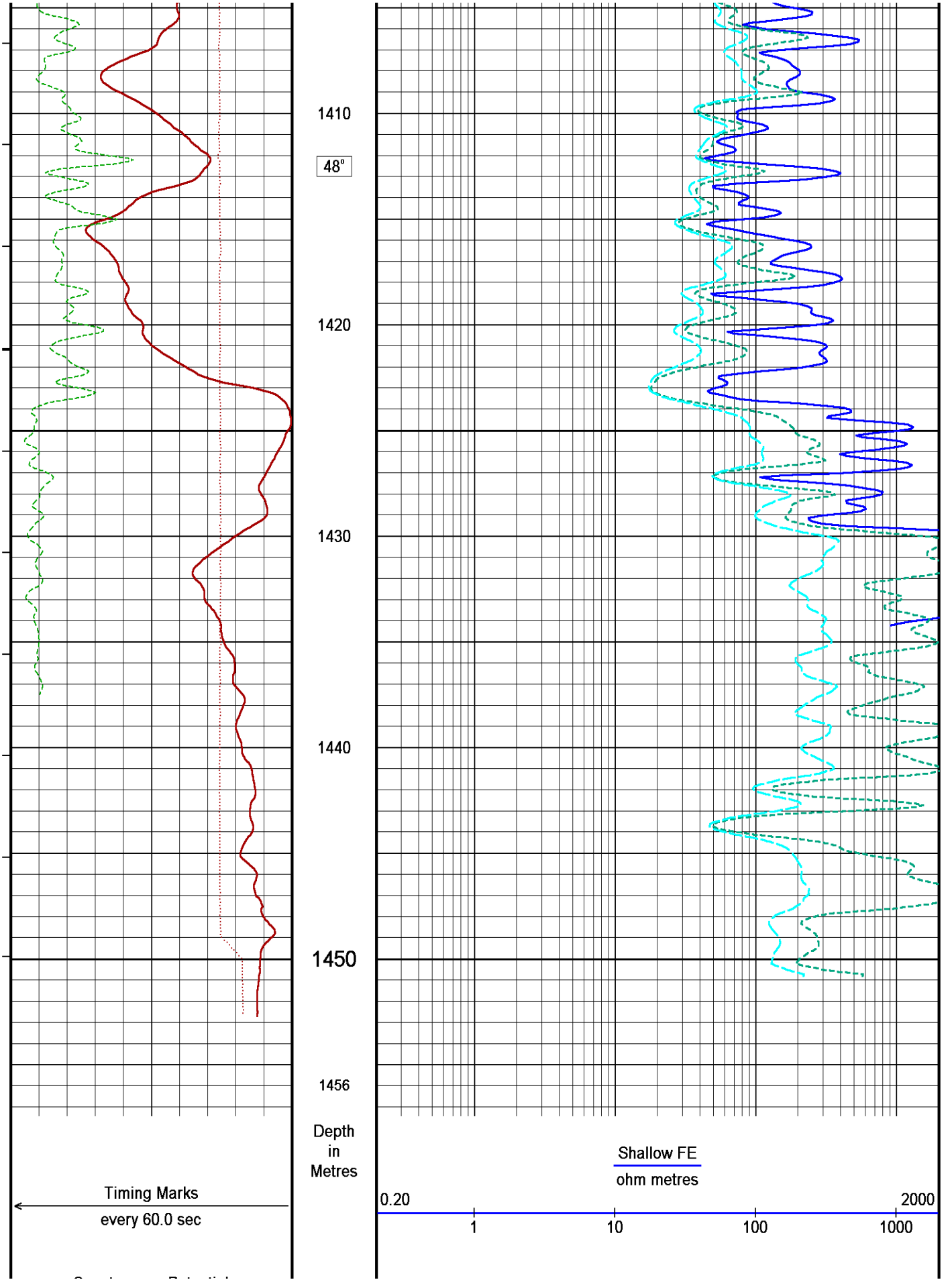

1110
39°
1120
1130
40°
1140
1150
1160
40°

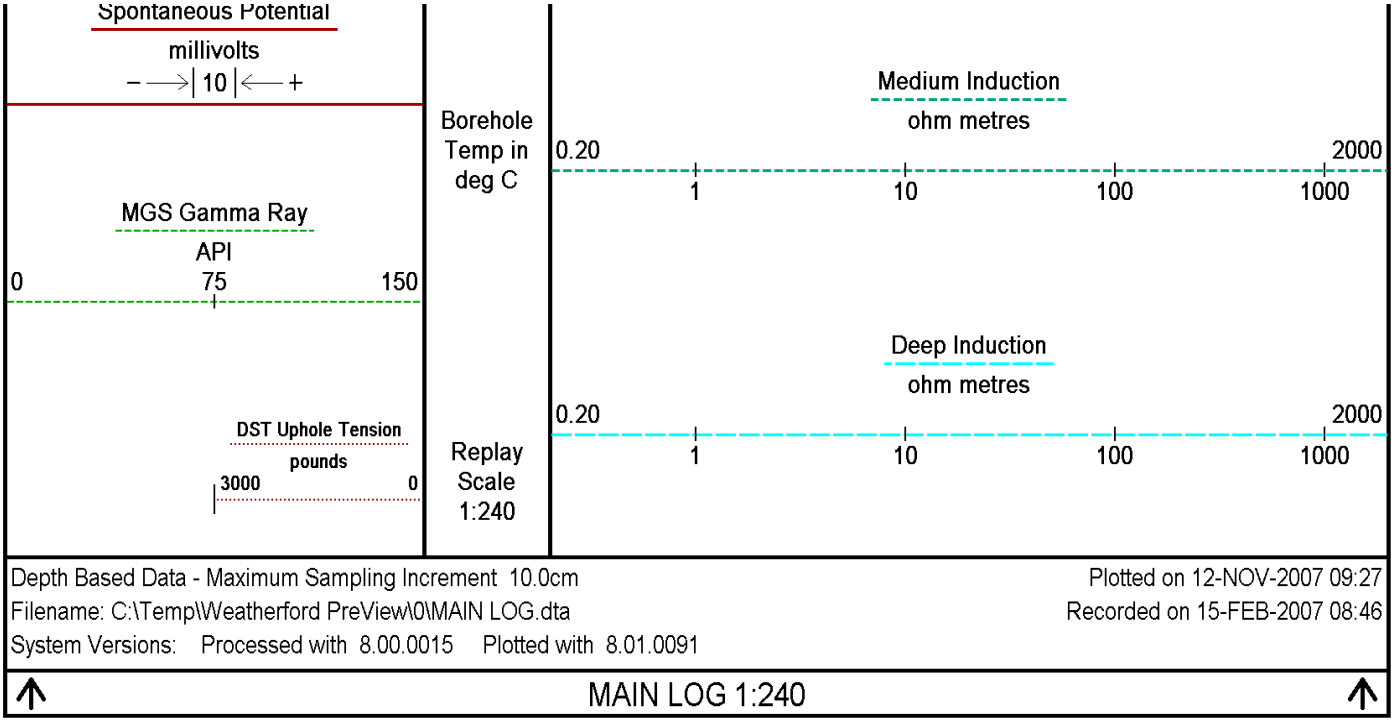

1170
1180
41°
1190
1200
MGS Gamma Ray
Deep Induction
Medium Induction
1210
Shallow FE
Spontaneous Potential
41°
DST Uphole Tension
1220


1230
42°
1240
1250
1260
43°
1270
1280


43°
1290
1300
1310
44°
1320
MGS Gamma Ray
Deep Induction
Medium Induction
1330
Shallow FE
Spontaneous Potential
DST Uphole Tension
45°
1340


1350
1360
45°
1370
1380
46°
1390
1400


1410
48°
1420
1430
1440
1450
1456
Depth
in
Metres
Timing Marks
every 60.0 sec
Shallow FE
ohm metres
0.20
2000
1
10
100
1000

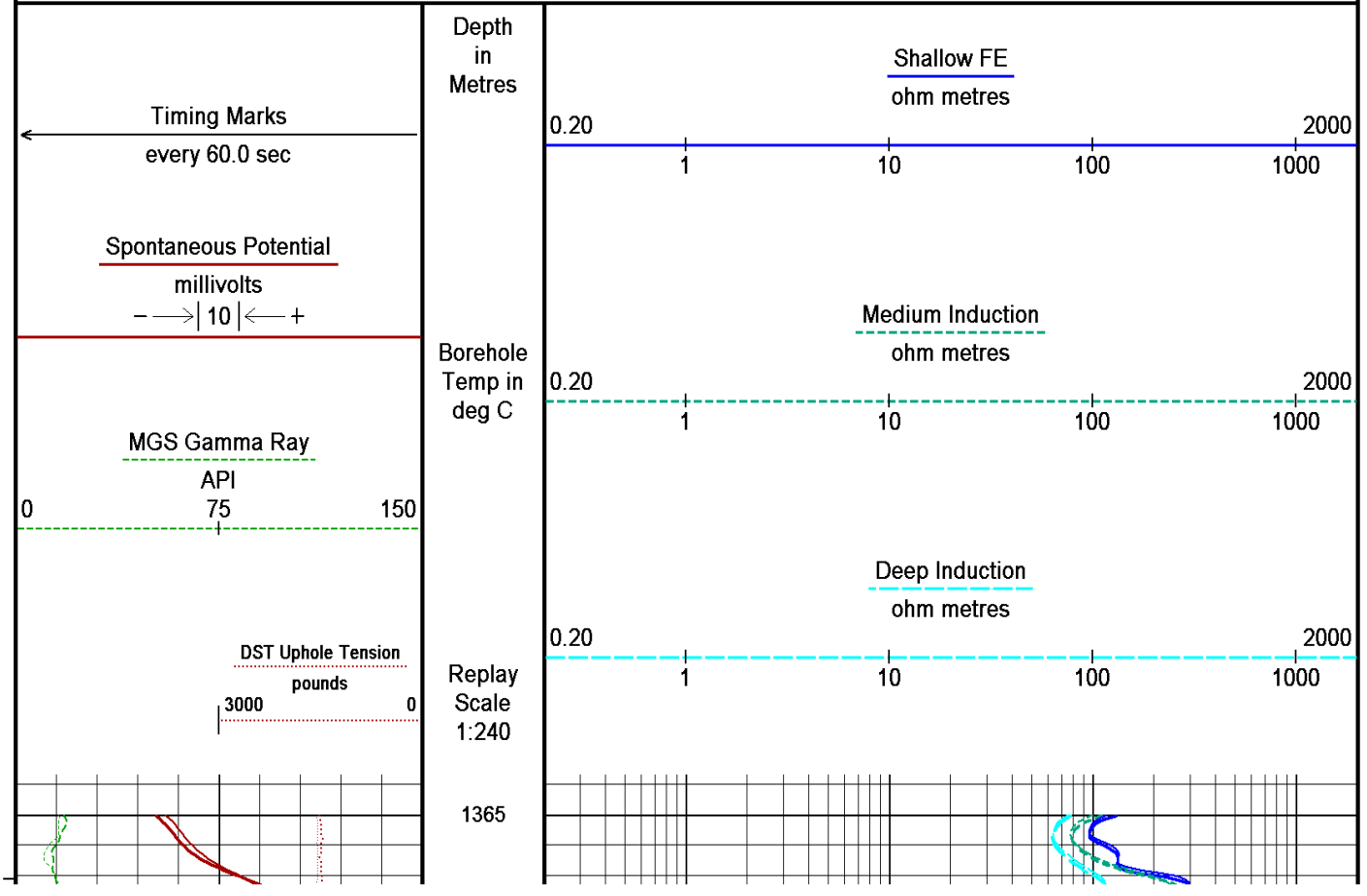


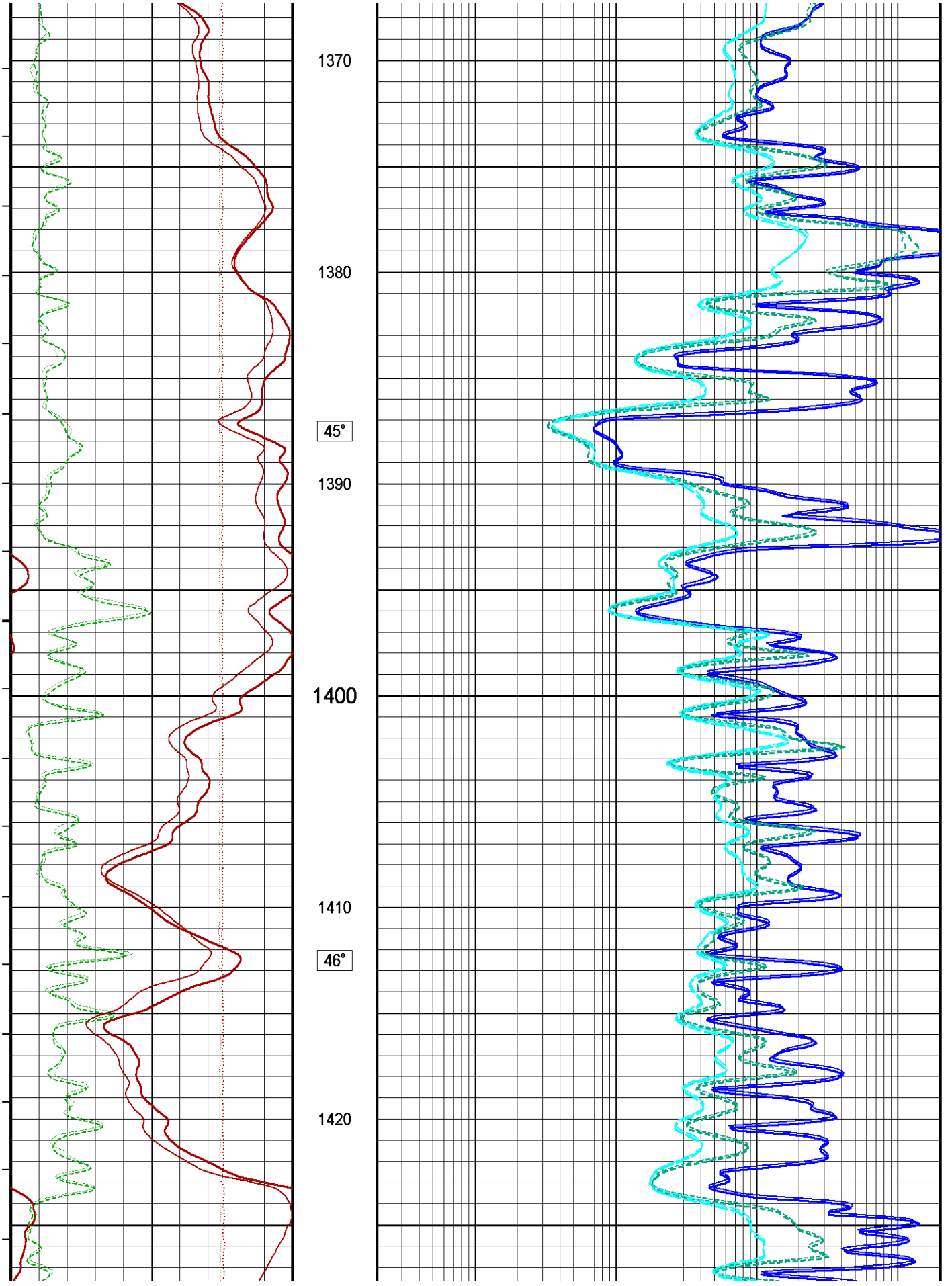
Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 12-NOV-2007 09:27
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta — Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

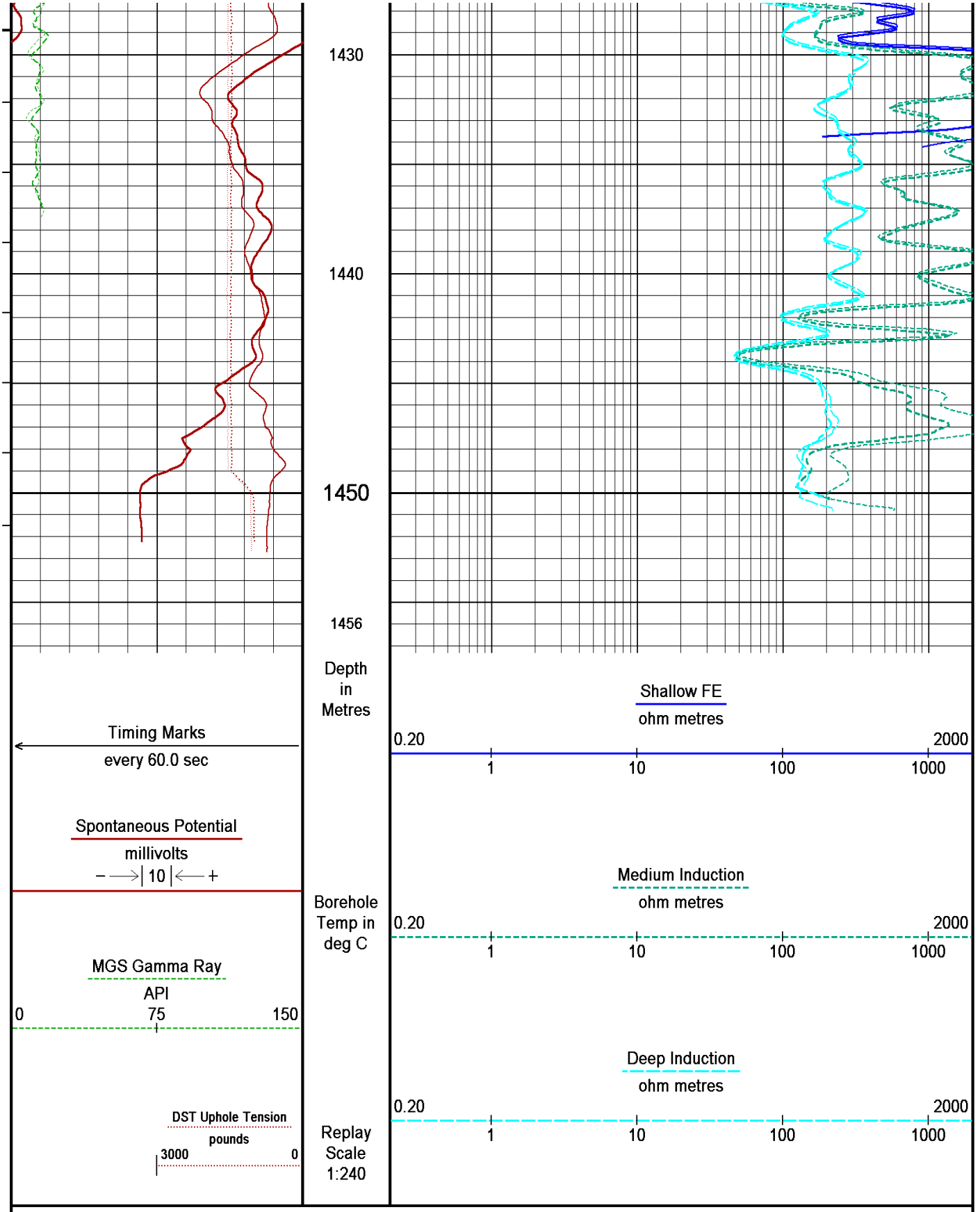
MAIN LOG 1:240

REPEAT SECTION
MAIN LOG 1:240

Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 12-NOV-2007 09:27
Filename: C:\Temp\Weatherford PreView\0\REPEAT.dta — Recorded on 15-FEB-2007 07:26
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta — Recorded on 15-FEB-2007 08:46
System Versions: Logged with 7.01.0195 Processed with 8.00.0015 Plotted with 8.01.0091




1370
1380
45°
1390
1400
1410
46°
1420



Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\Temp\Weatherford PreView\0\REPEAT.dta
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
System Versions: Logged with 7.01.0195 Processed with 8.00.0015 Plotted with 8.01.0091

Plotted on 12-NOV-2007 09:27
Recorded on 15-FEB-2007 07:26
Recorded on 15-FEB-2007 08:46

REPEAT SECTION

BEFORE SURVEY CALIBRATION

C:\Temp\Weatherford PreView\0\REPEAT.dta

General Constants All 000

Last Edited on 15-FEB-2007,06:48

General Parameters		
Mud Resistivity	1.180	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	

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 14-FEB-2007 07:09
Field Check on

Base Calibration

	Measured	Calibrated (ohm-m)
Reference 1	0.0	0.0
Reference 2	971.4	126.8
Base Check		279.4
Field Check		0.0

FE Constants MFE 017

Last Edited on 15-FEB-2007,04:52

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

Gamma Calibration MGS 010

Field Calibration on 7-FEB-2007,09:09

	Measured	Calibrated (API)
Background	48	31
Calibrator (Gross)	1256	825
Calibrator (Net)	1208	794

Gamma Constants MGS 010

Last Edited on 15-FEB-2007,06:48

Gamma Calibrator Number	grcc075

Mud Density	1060.00	kg/m3
Caliper Source for Processing	Density Caliper	
Tool Position	Centred	
Concentration of KCl	0.00	kppm

Induction Calibration MAI 072

Base Calibration on 25-JAN-2007,18:16
Field Check on 12-FEB-2007 04:15

Base Calibration

Test Loop Calibration

Channel	Measured Low	Measured High	Calibrated (mmho/m) Low	Calibrated (mmho/m) 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

Channel	Base Check (mmho/m) Low	Base Check (mmho/m) High	Field Check (mmho/m) Low	Field Check (mmho/m) High
1	18.0	3925.2	20.2	3926.2
2	31.0	3598.6	32.7	3599.2
3	29.0	3101.3	30.3	3102.2
4	20.3	2105.9	21.3	2106.6
Deep	18.4	2019.9	19.4	2021.1
Medium	40.9	4089.6	42.6	4090.6
Shallow	45.6	5324.4	48.1	5324.5
Array Temperature	18.5		22.2	Deg C

Induction Constants MAI 072

Last Edited on 7-FEB-2007,09:11

Induction Model	VECTAR	
Caliper for Borehole Corr.	Y Two Arm Caliper	
Hole Size for Borehole Correction	N/A	millimetres
Stand-off	25.40	millimetres
Number of Fins on Stand-off	5.0000	
Stand-off Fin Width	25.4000	millimetres
Borehole Corr. Rm Source	Temperature Corr	
Temp. for Rm Corr.	MCG External Temperature	
Squasher Start	0.0020	mhos/metre

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

DOWNHOLE EQUIPMENT

C:\Temp\Weatherford PreView\0\REPEAT.dta

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

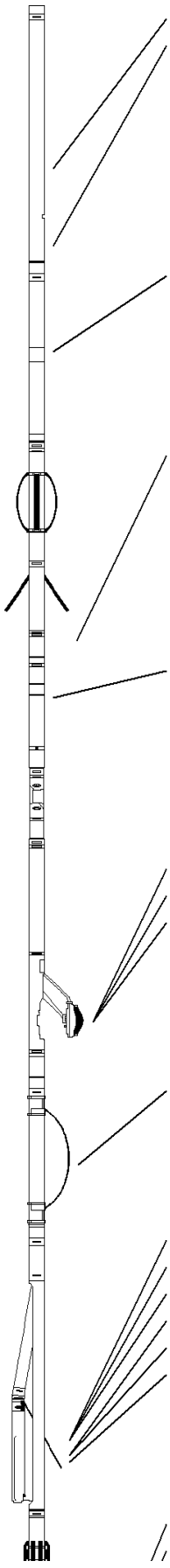
10.64 m NPRL - Limestone Neutron Por.

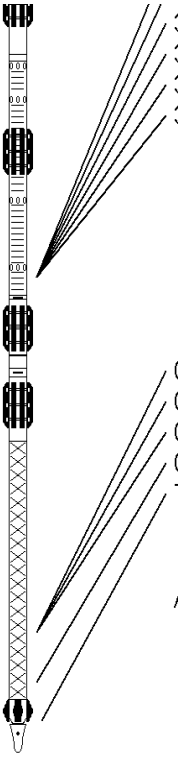
Compact Density/Caliper
MPD 36 Length: 2.92 m Weight: 90.4 lb

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

Compact Sonic
MSS 60 Length: 3.82 m Weight: 72.8 lb

3.95 m TR21 - 3' Transit Time
3.95 m TR11 - 4' Transit Time





3.95 m	TR22 - 5' Transit Time	
3.95 m	DT34 - 3-4' Compensated Sonic	
3.95 m	DT35 - 3-5' Compensated Sonic	
3.95 m	TR12 - 6' Transit Time	
0.79 m	VEC0 - Shallow Induction	
0.79 m	RILM - Medium Induction	
0.79 m	RILD - Deep Induction	
0.07 m	SPCG - Spontaneous Potential	
Tool Zero	(0.28m from bottom)	

Compact Induction
MAI 72 Length: 3.29 m Weight: 48.5 lb

Compact Hole Finder
HFS 1 Length: 0.24 m Weight: 2.2 lb

Total Length: 22.63 m Weight: 568.8 lb

All measurements relative to tool zero.

COMPANY	PARAMOUNT RESOURCES LTD.
WELL	PARAMOUNT ET AL CAMERON J-04
FIELD	CAMERON HILLS
PROVINCE/COUNTY	NORTH WEST TERRITORIES
COUNTRY/STATE	CANADA

Elevation Kelly Bushing	769.20	metres	First Reading	1448.70	metre
Elevation Drill Floor		metres	Depth Driller	1449.00	metres
Elevation Ground Level	765.20	metres	Depth Logger	1449.50	metres

Weatherford®

ARRAY INDUCTION

ARRAY INDUCTION

COMPANY	PARAMOUNT RESOURCES LTD.
WELL	PARAMOUNT ET AL CAMERON J-04
FIELD	CAMERON HILLS
PROVINCE/COUNTY	NORTH WEST TERRITORIES
COUNTRY/STATE	CANADA
LOCATION	300/J-04-60-10-117-30

FIELD PRINT

LSD	SEC	TWP	RGE

Other Services

PHOTO DENSITY
DUAL SPACED NEUTRON
MICROLOG
COMPENSTATED SONIC

API Number
Permit Number 1159

Permanent Datum GROUND LEVEL, Elevation 765.20 metres
Log Measured From 4.00 M above Permanent Datum
Drilling Measured From KB

Elevations:	metres
KB	769.20
DF	
GL	765.20

Date	15-FEB-2007			
Run Number	1			
Depth Driller	1449.00	metres		
Depth Logger	1449.50	metres		
First Reading	1448.70	metre		
Last Reading	420.00	metre		
Casing Driller	430.00	metres		
Casing Logger	429.80	metres		
Bit Size	200.00	mm		
Hole Fluid Type	GELCHEM			
Density / Viscosity	1060.0 kg/M3	93.00 CP		
PH / Fluid Loss	11.00	11.00 ml/30Min		
Sample Source	FLOWLINE			
Rm @ Measured Temp	1.18 @ 25.0	ohm-m		
Rmf @ Measured Temp	1.04 @ 25.0	ohm-m		
Rmc @ Measured Temp	1.32 @ 25.0	ohm-m		
Source Rmf / Rmc	PRESS	FILTER		
Rm @ BHT	0.78 @ 48.0	ohm-m		
Time Since Circulation	6 HRS			
Max Recorded Temp	48.00	deg C		
Equipment Name	COMPACT			
Equipment / Base	13124	GPR		
Recorded By	G. SINGER			
Witnessed By	A. AHMED			
CIRC. STOP TIME	01:30-FEB-15		Last Line	

BOREHOLE RECORD

Last Edited: 15-FEB-2007 05:01

Bit Size millimetres	Depth From metres	Depth To metres
311.000	0.00	430.00
200.000	430.00	1449.00

CASING RECORD

Type	Size millimetres	Depth From metres	Shoe Depth metres	Weight Kg/metre
SURFACE	219.100	0.00	430.00	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 INTERSONIC CRANK
   MTC: SIX LEAF CENTRALIZER
5) SERVICE ORDER #: 30073028 SAP #: 4147101 # FIELD PRINTS = 3
6) RIG: PD 129

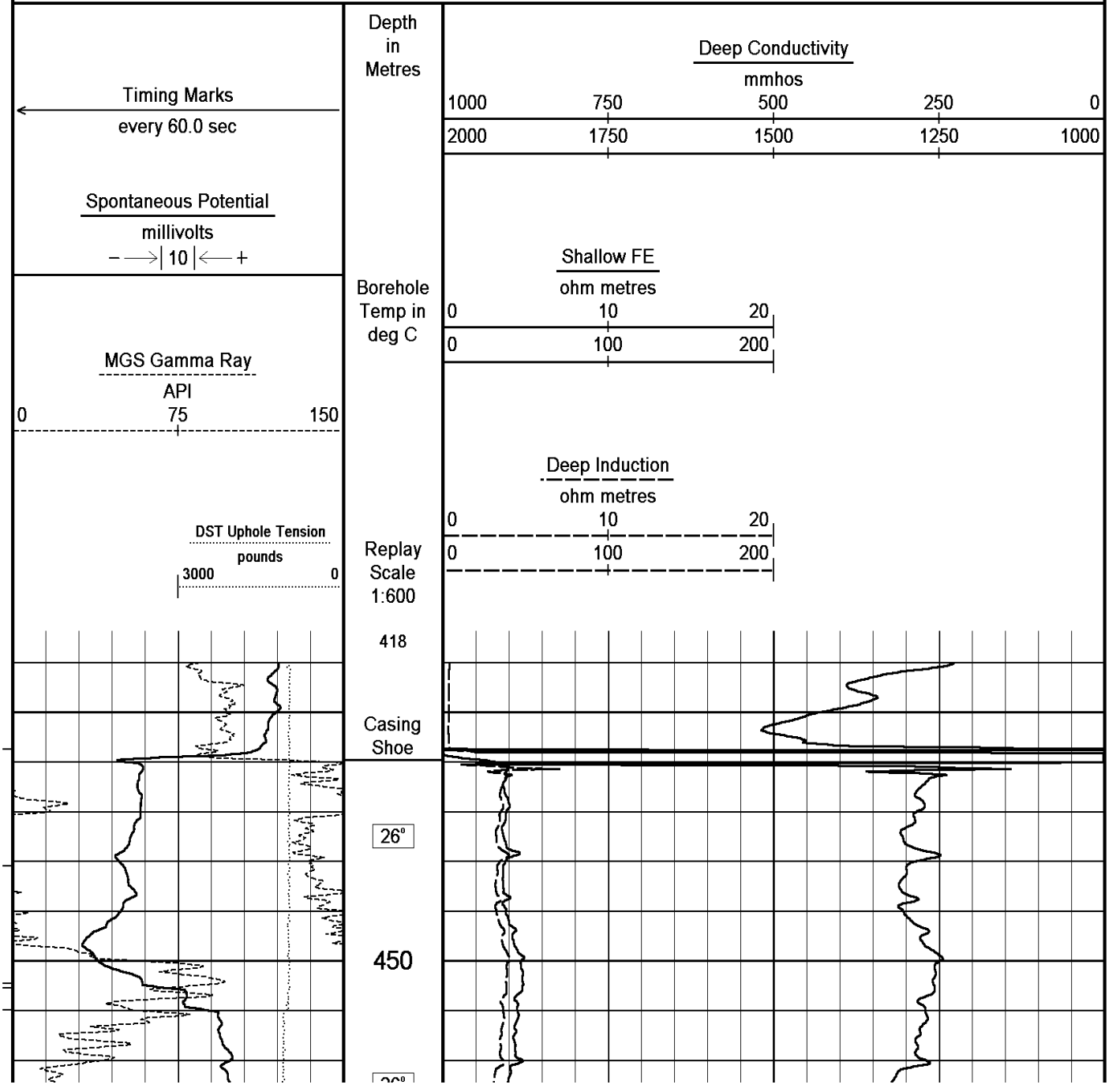
7) HOLE AND CEMENT VOLUMES CALCULATED USING DENSITY AND 2-ARM CALIPERS :
HOLE VOLUME = 37.4 CU.M.
ANNULAR VOLUME USING 139.7 MM PRODUCTION CASING = 21.8 CU.M

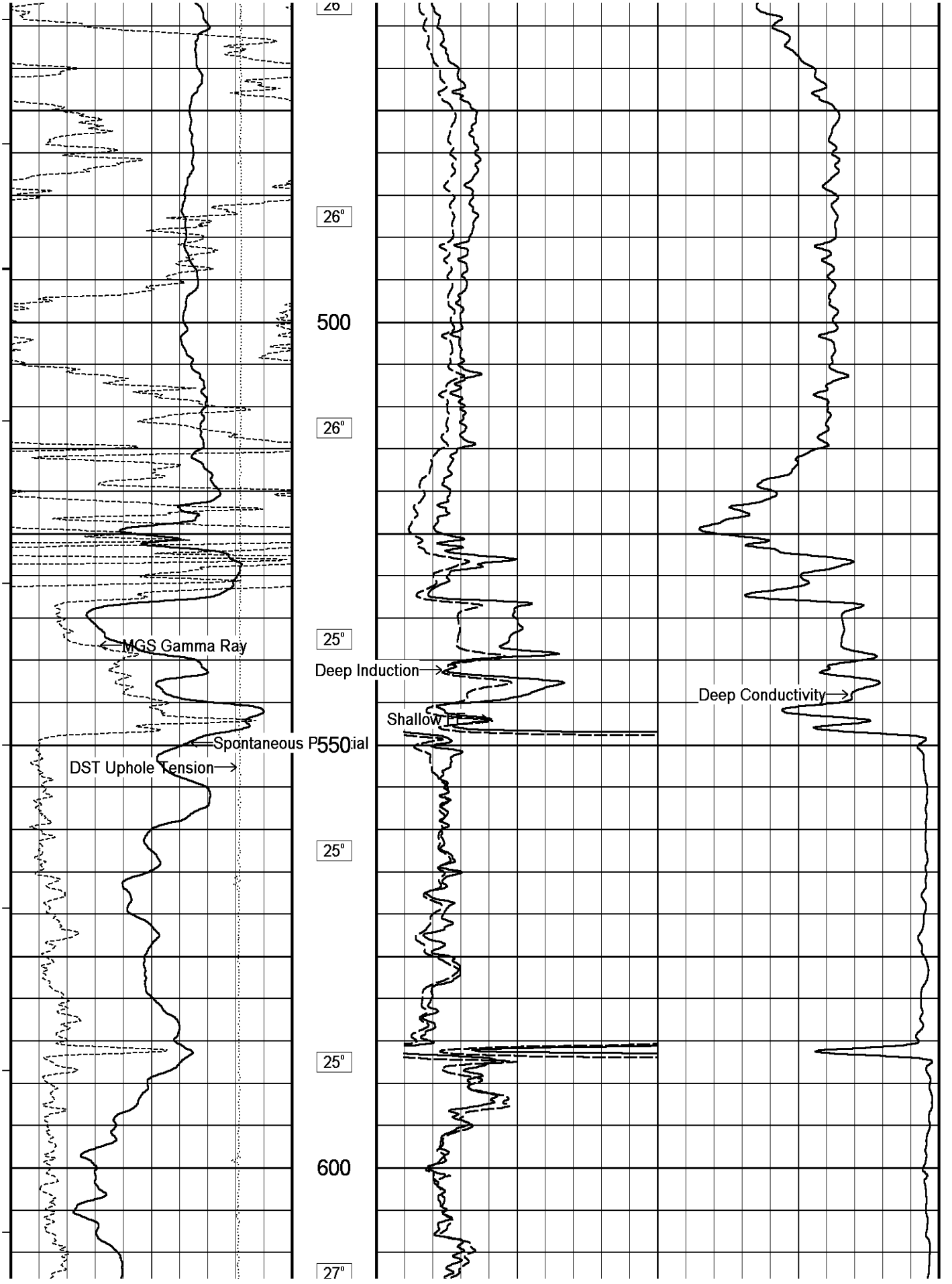
8) SONIC FREE PIPE FOUND FROM 352M - 357M

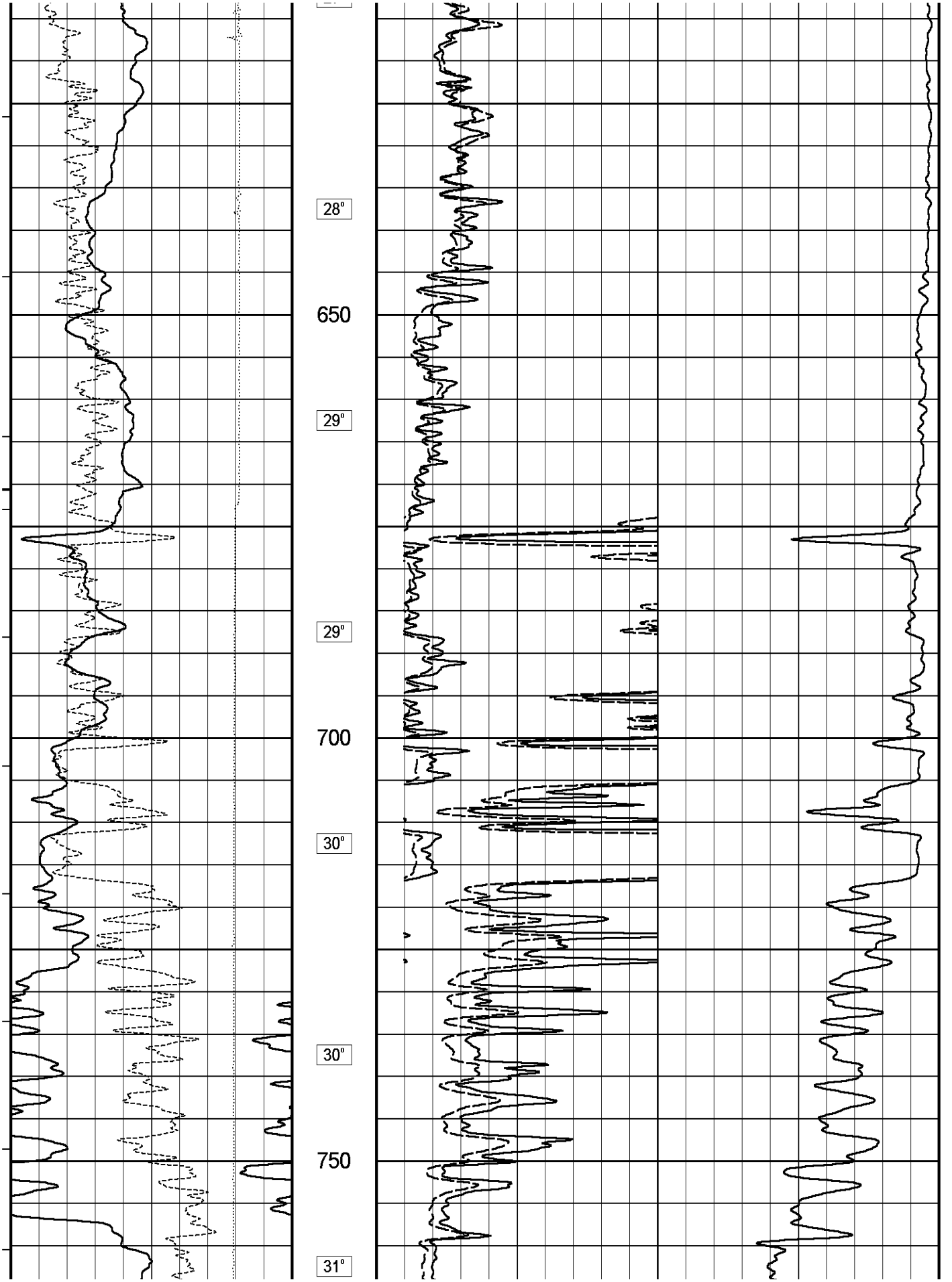
MAIN LOG 1:600

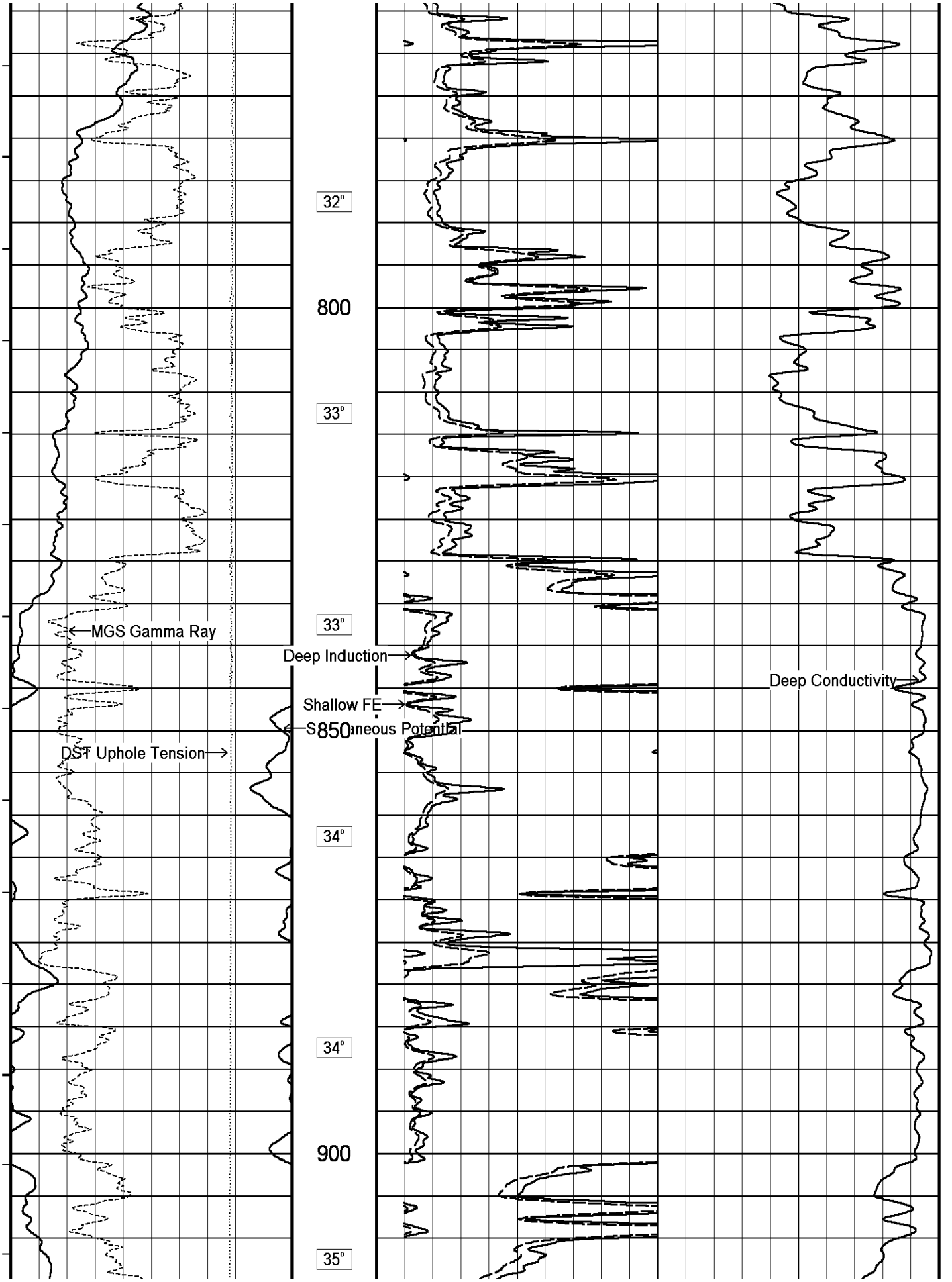
Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

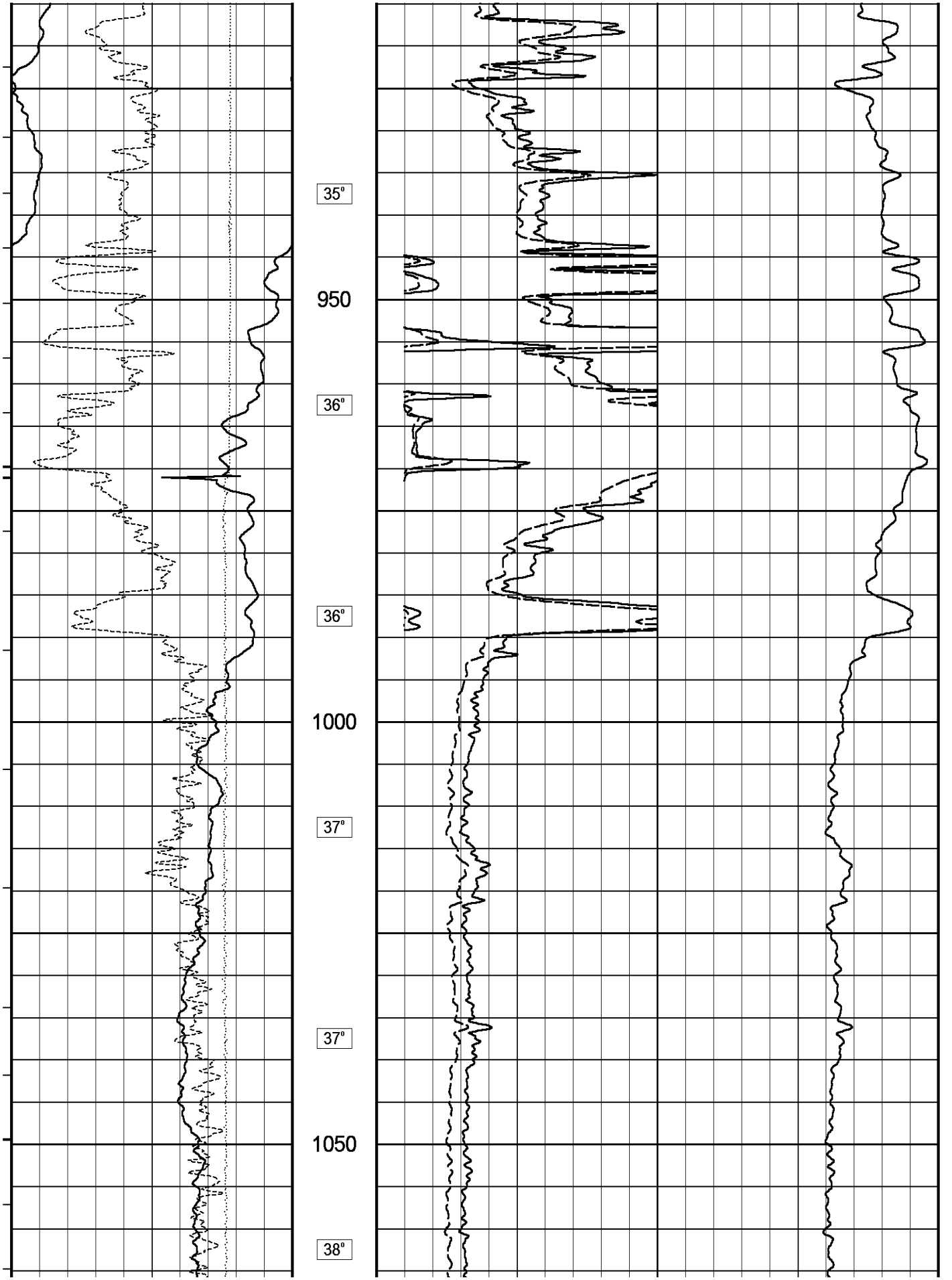
Plotted on 12-NOV-2007 09:24
Recorded on 15-FEB-2007 08:46

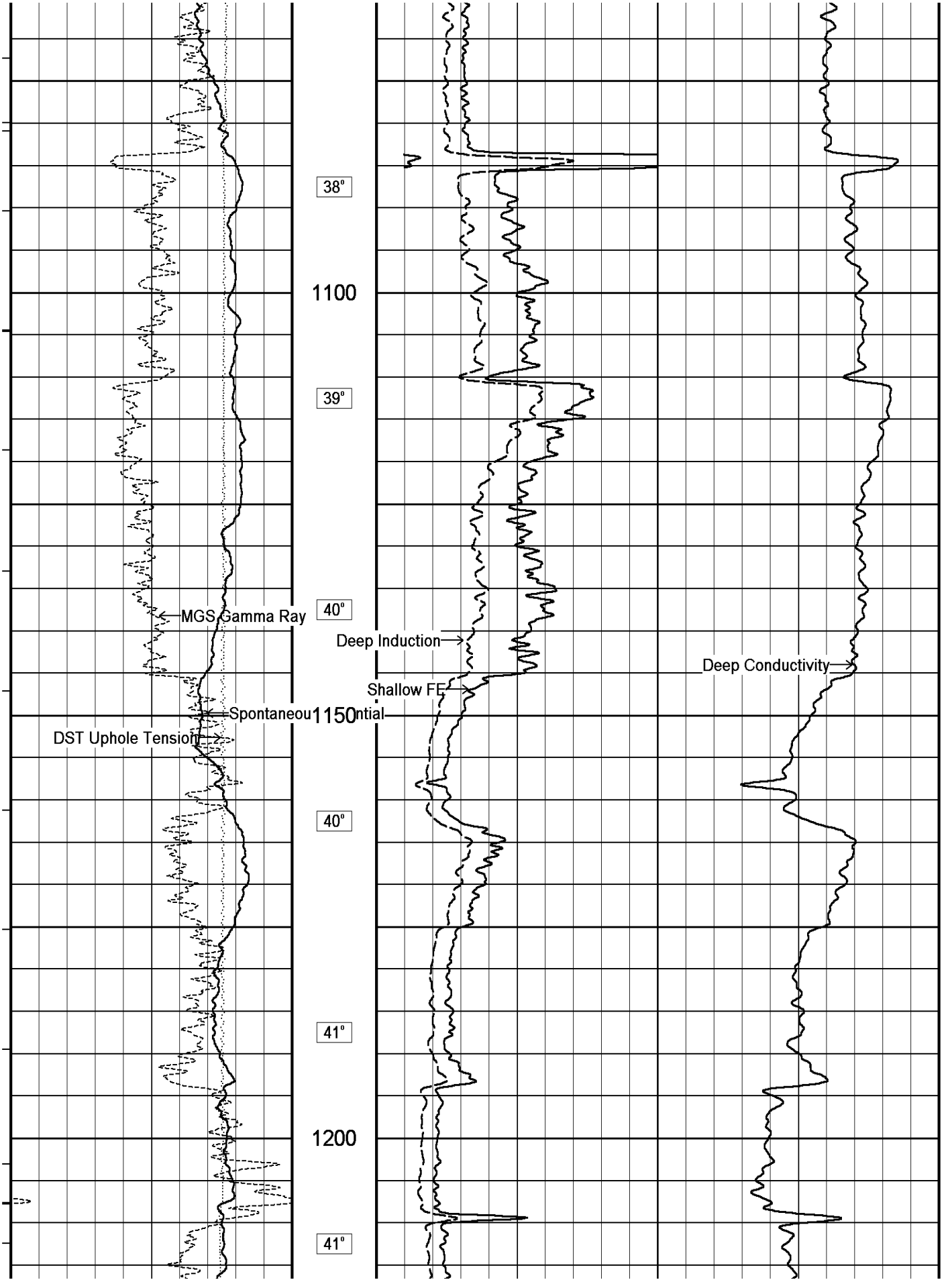


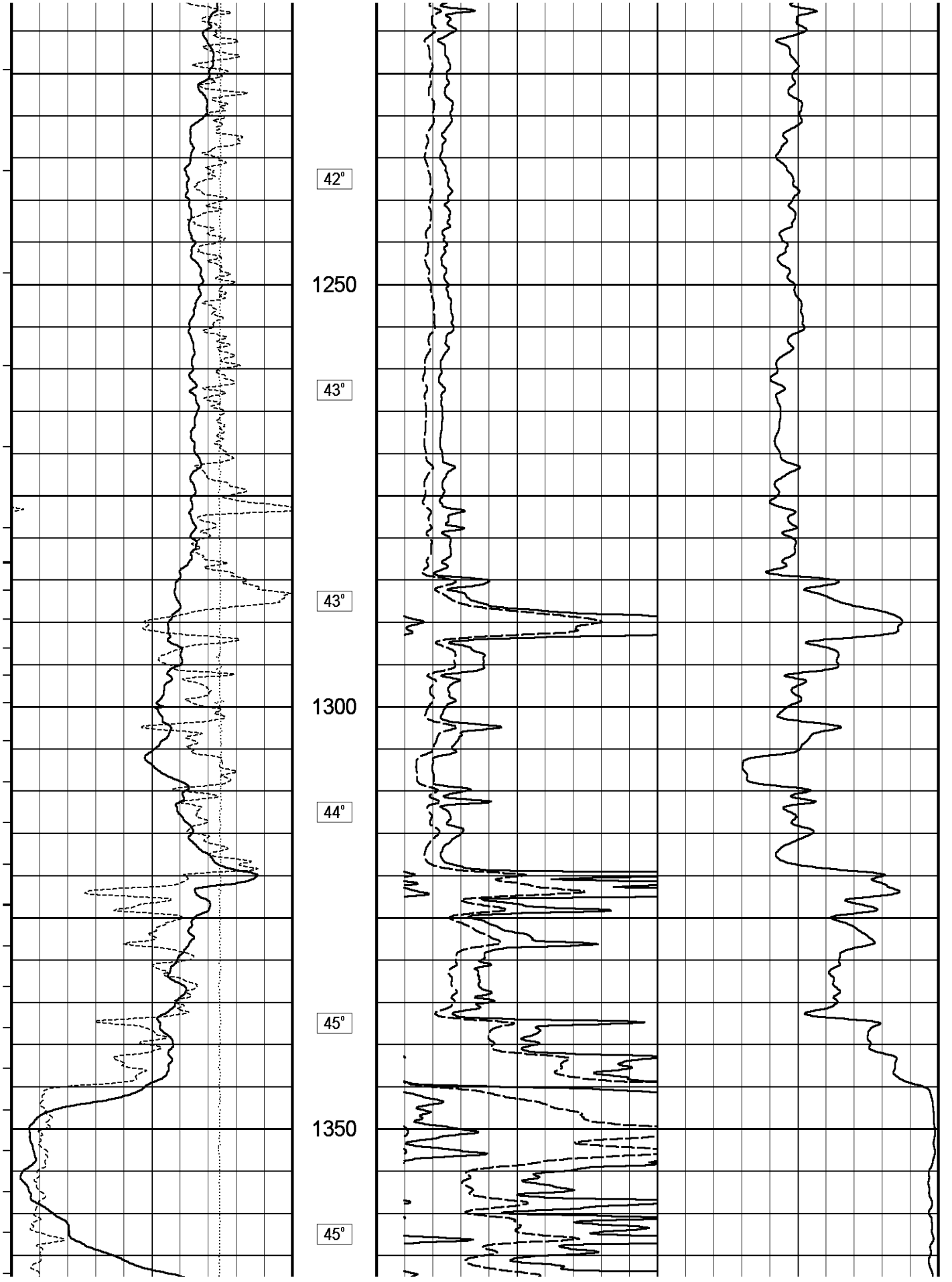

26°
26°
500
26°
25°
MGS Gamma Ray
Deep Induction
Deep Conductivity
Shallow
Spontaneous P
550
ial
DST Uphole Tension
25°
25°
600
27°

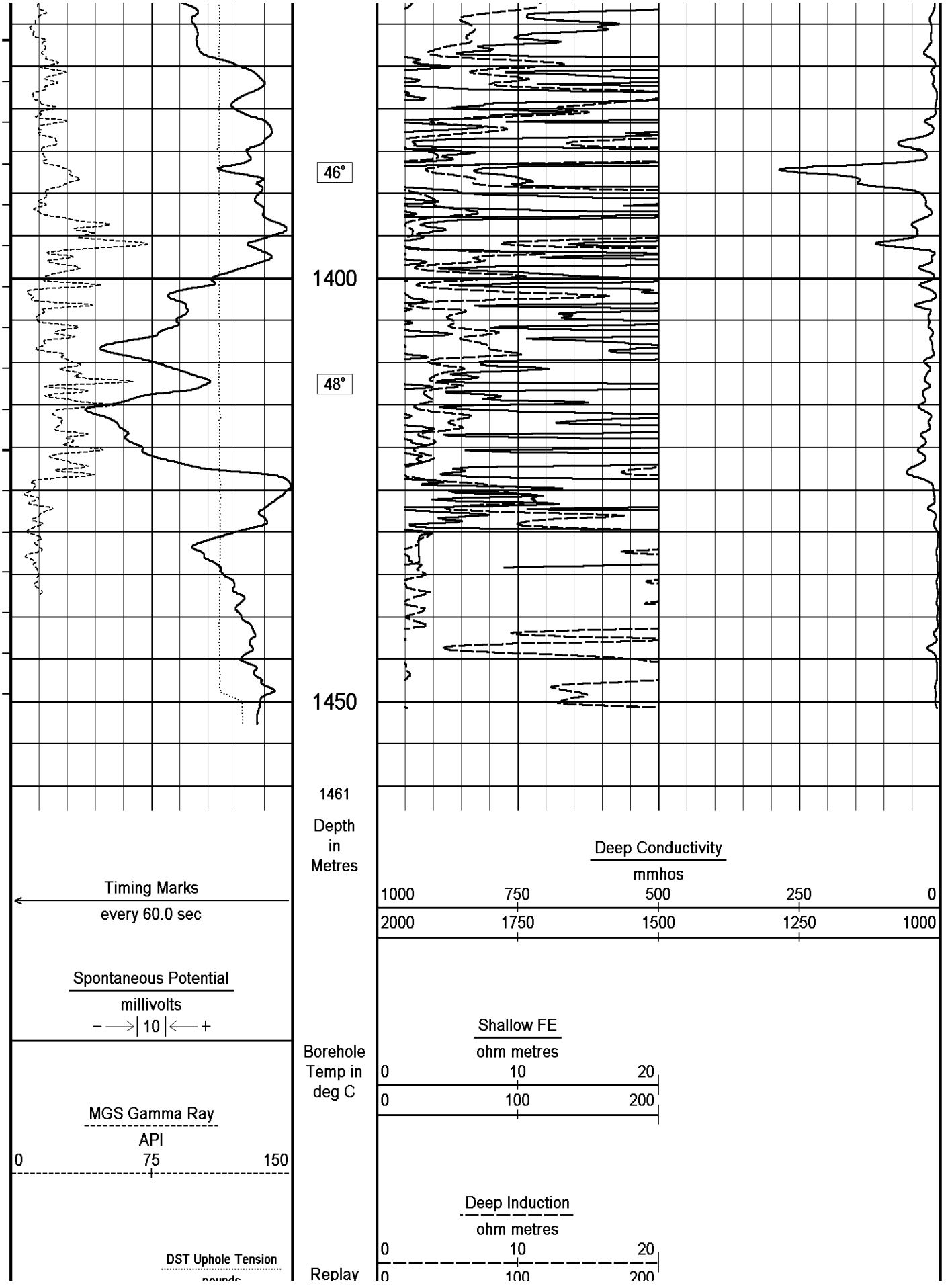

28°
650
29°
29°
700
30°
30°
750
31°


32°
800
33°
33°
MGS Gamma Ray
Deep Induction
Deep Conductivity
Shallow FE
SP
850
DST Uphole Tension
34°
34°
900
35°


35°
950
36°
36°
1000
37°
37°
1050
38°


38°
1100
39°
40°
MGS Gamma Ray
Deep Induction
Deep Conductivity
Shallow FE
Spontaneou
1150
ntial
DST Uphole Tension
40°
41°
1200
41°


42°
1250
43°
43°
1300
44°
45°
1350
45°


46°
1400
48°
1450
1461
Depth in Metres
Timing Marks
every 60.0 sec
Spontaneous Potential
millivolts
– 10 +
MGS Gamma Ray
API
0 75 150
DST Uphole Tension
pounds
Deep Conductivity
mmhos
1000 750 500 250 0
2000 1750 1500 1250 1000
Shallow FE
ohm metres
0 10 20
0 100 200
Borehole Temp in deg C
Deep Induction
ohm metres
0 10 20
0 100 200
Replay

pounds
3000 0

Scale
1:600

Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 12-NOV-2007 09:24
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

MAIN LOG 1:600

MAIN LOG 1:240

Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 12-NOV-2007 09:24
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

Timing Marks
every 60.0 sec

Spontaneous Potential
millivolts
– ⟶ | 10 | ⟵ +

MGS Gamma Ray
API
0 75 150

DST Uphole Tension
pounds
3000 0

Depth
in
Metres

Borehole
Temp in
deg C

Replay
Scale
1:240

420

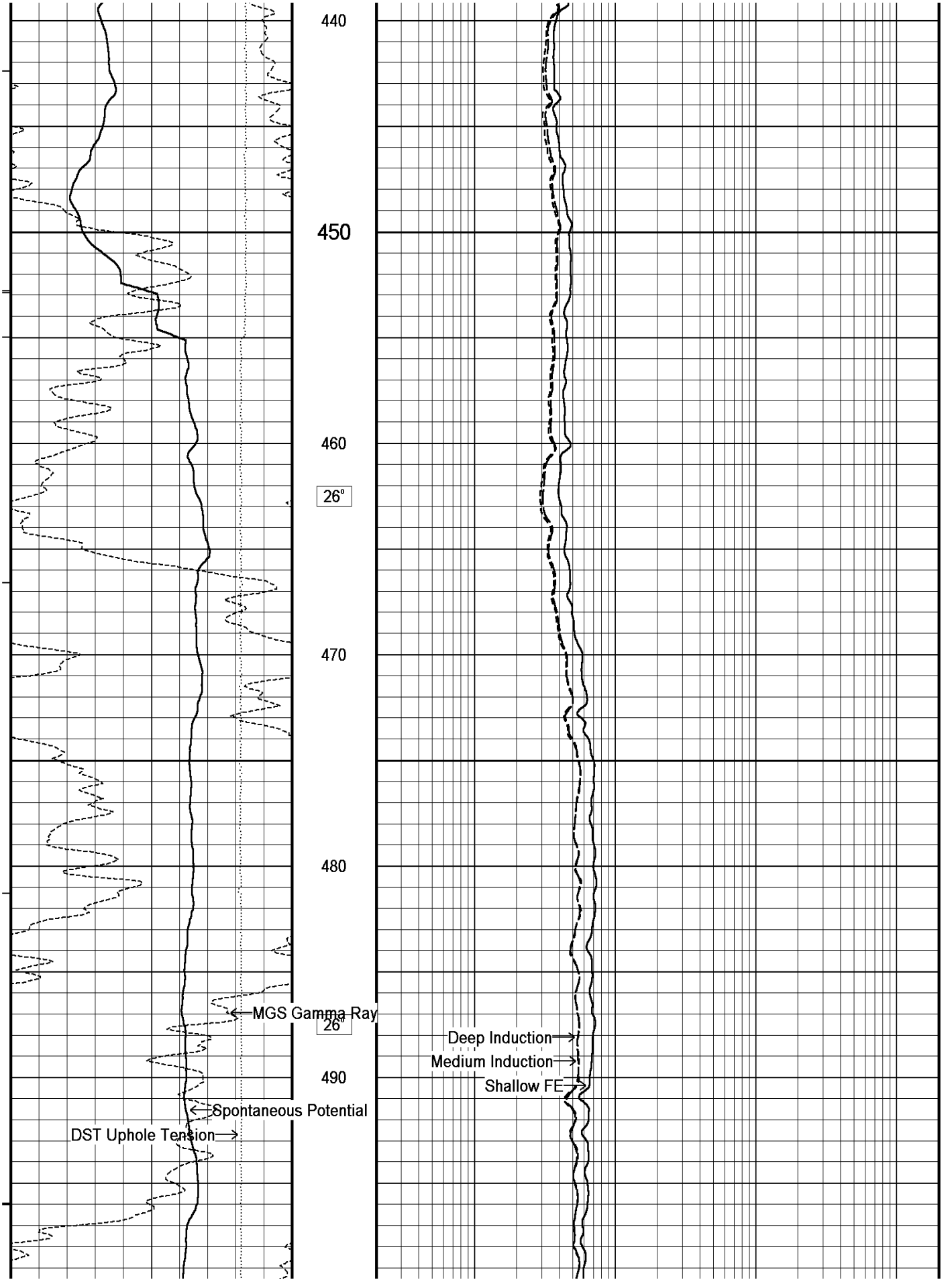
Casing
Shoe
430

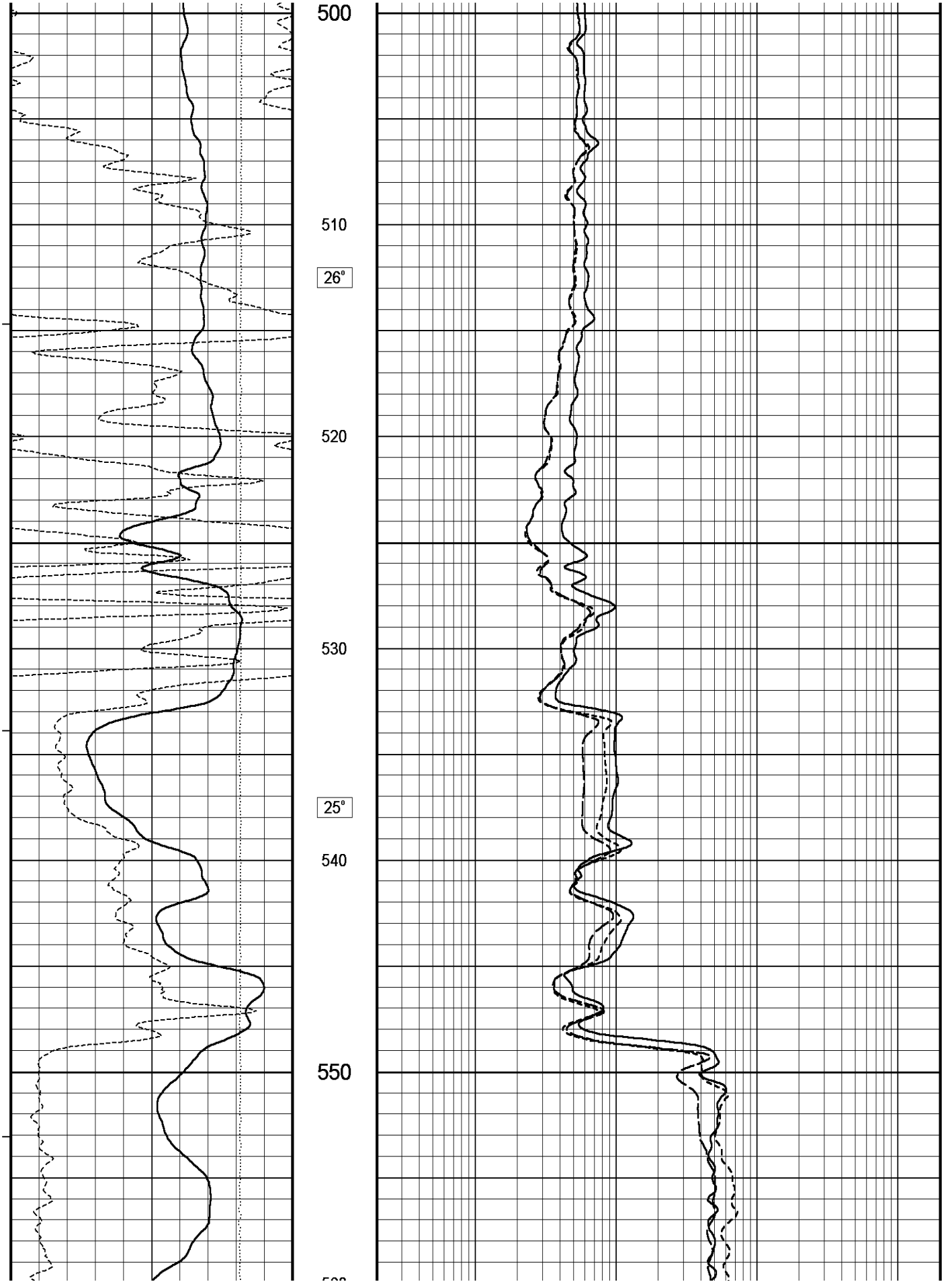
26°

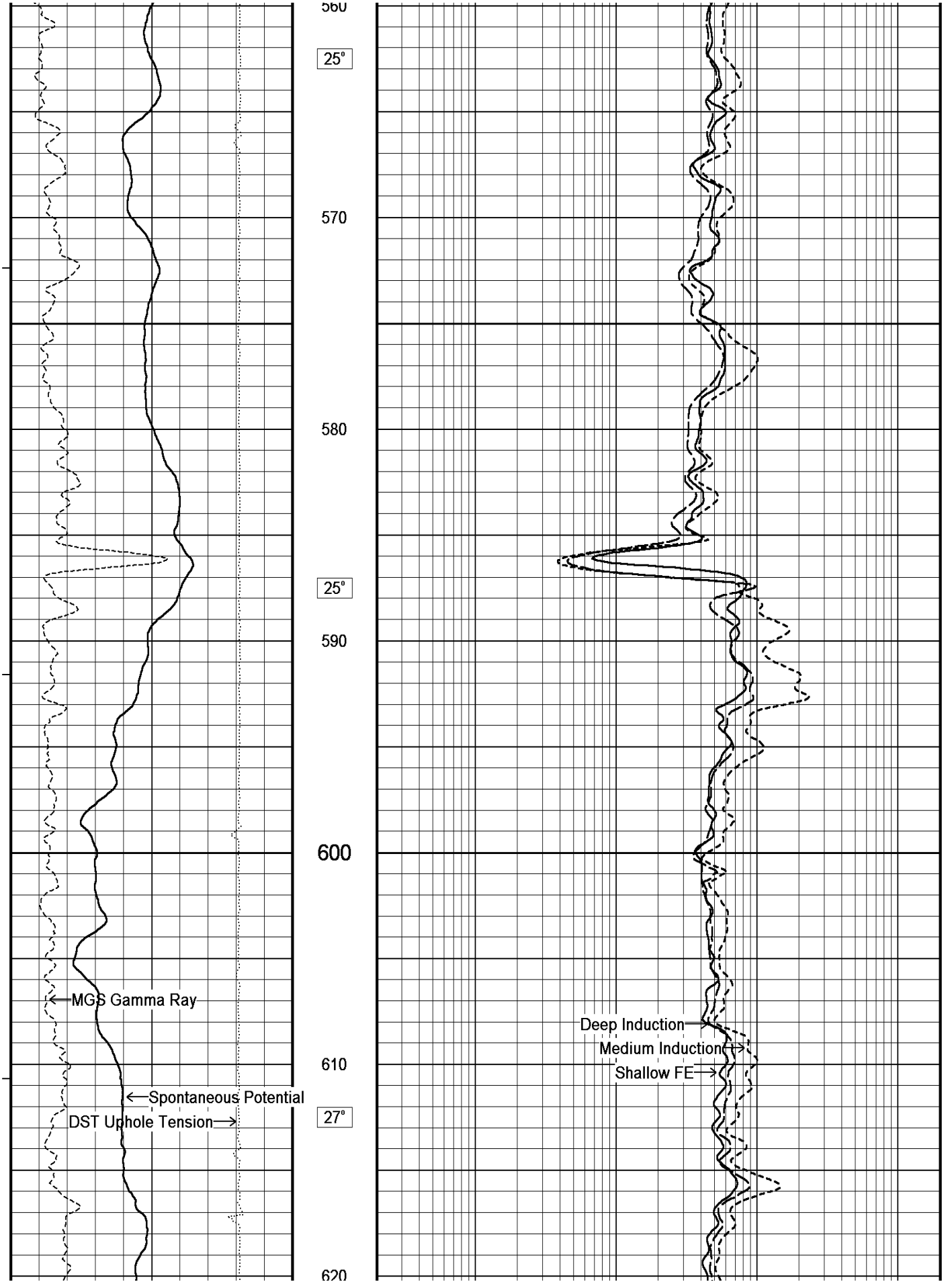
Shallow FE
ohm metres
0.20 2000
1 10 100 1000

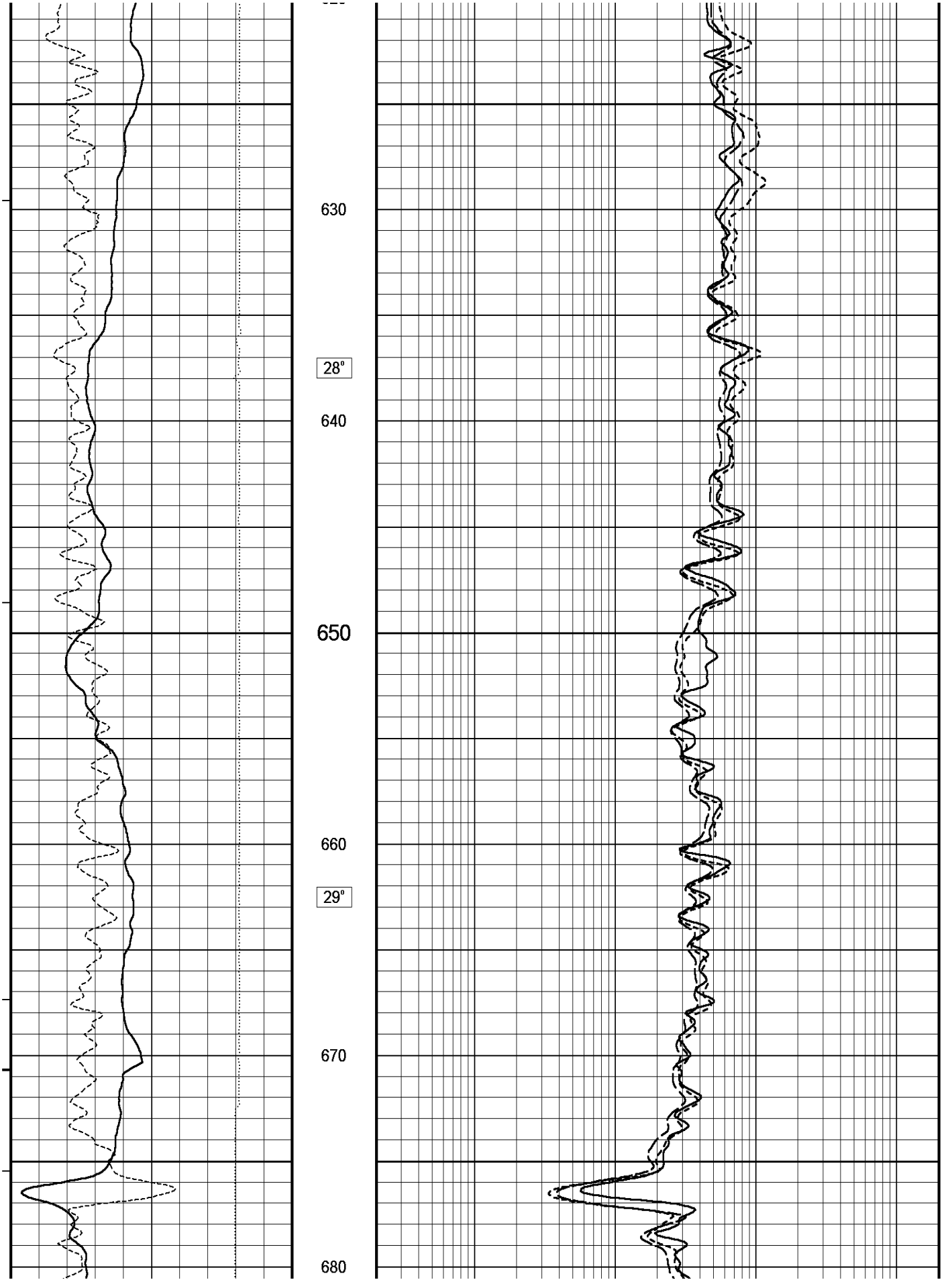
Medium Induction
ohm metres
0.20 2000
1 10 100 1000

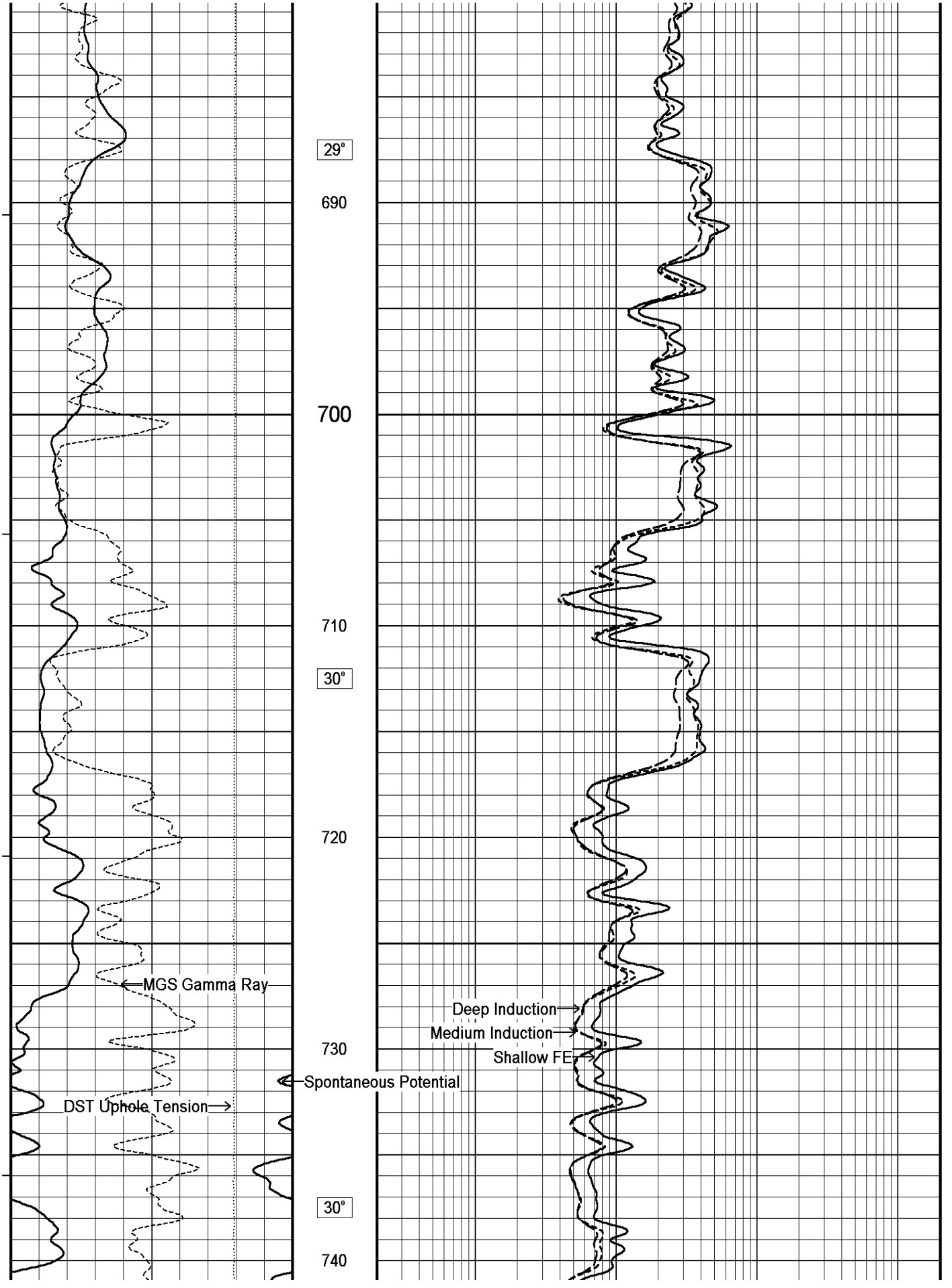
Deep Induction
ohm metres
0.20 2000
1 10 100 1000

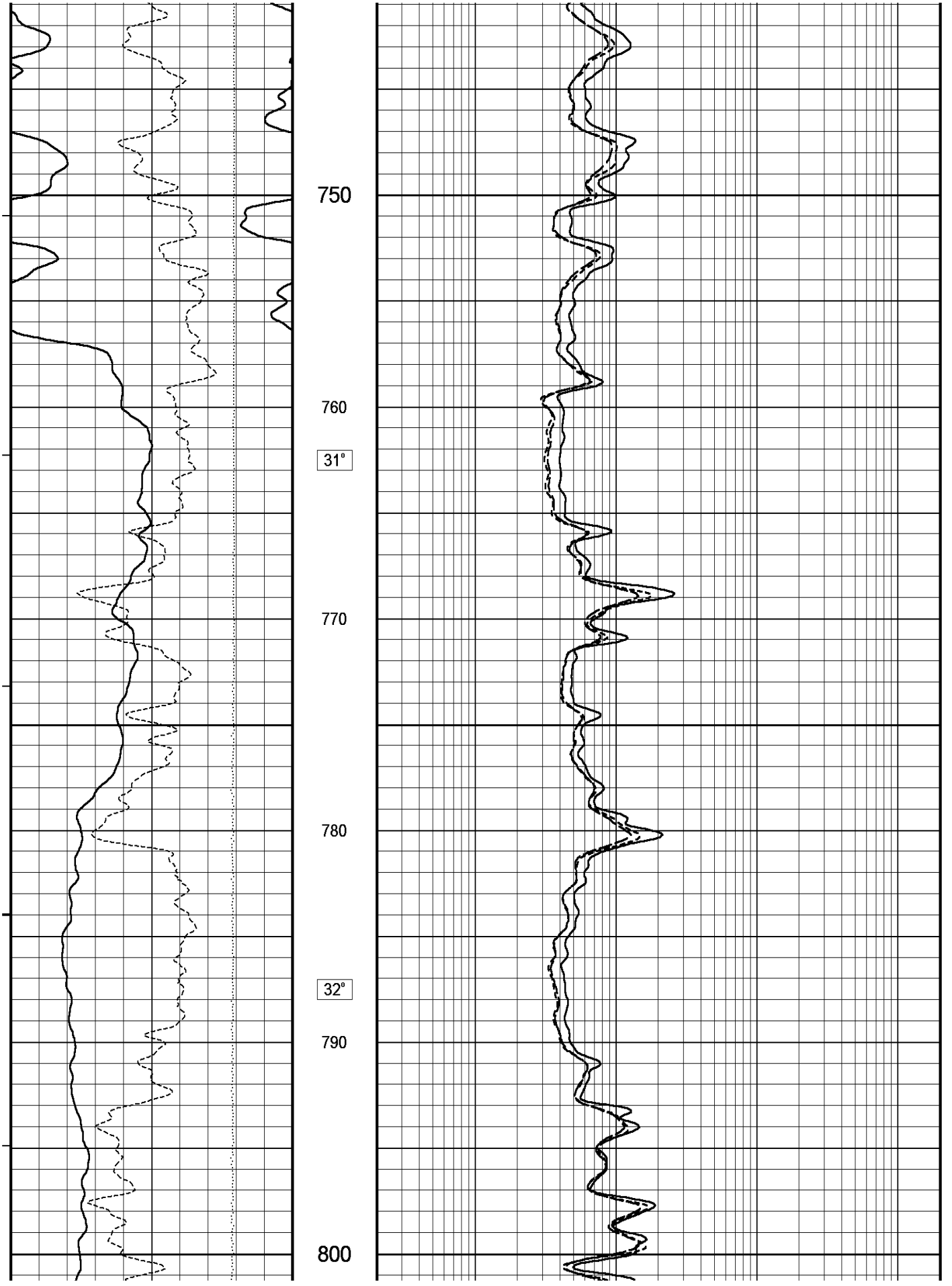

440
450
460
26°
470
480
MGS Gamma Ray
26°
490
Spontaneous Potential
DST Uphole Tension
Deep Induction
Medium Induction
Shallow FE

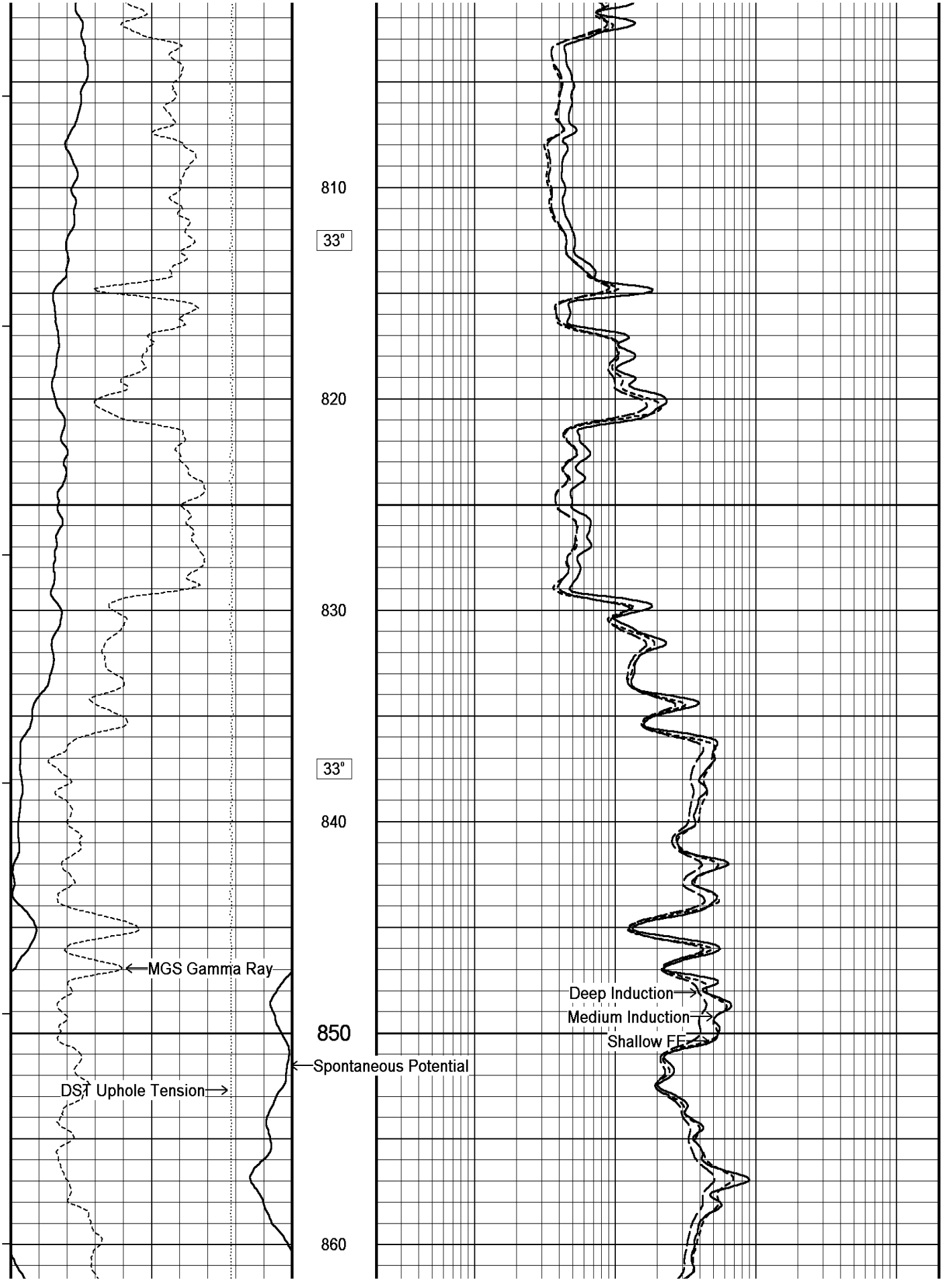

500
510
26°
520
530
25°
540
550

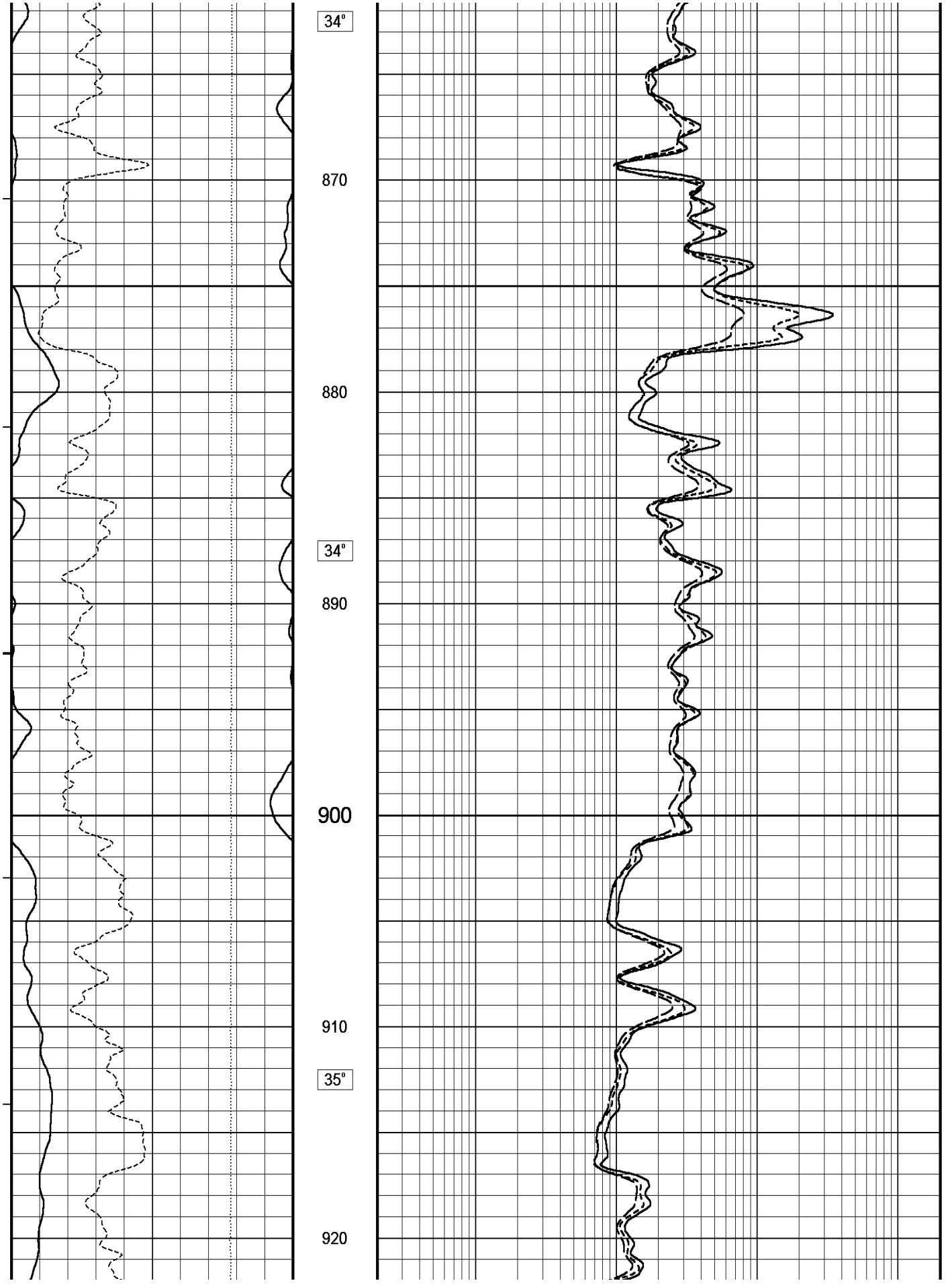

560
25°
570
580
25°
590
600
610
27°
620
MGS Gamma Ray
Spontaneous Potential
DST Uphole Tension
Deep Induction
Medium Induction
Shallow FE

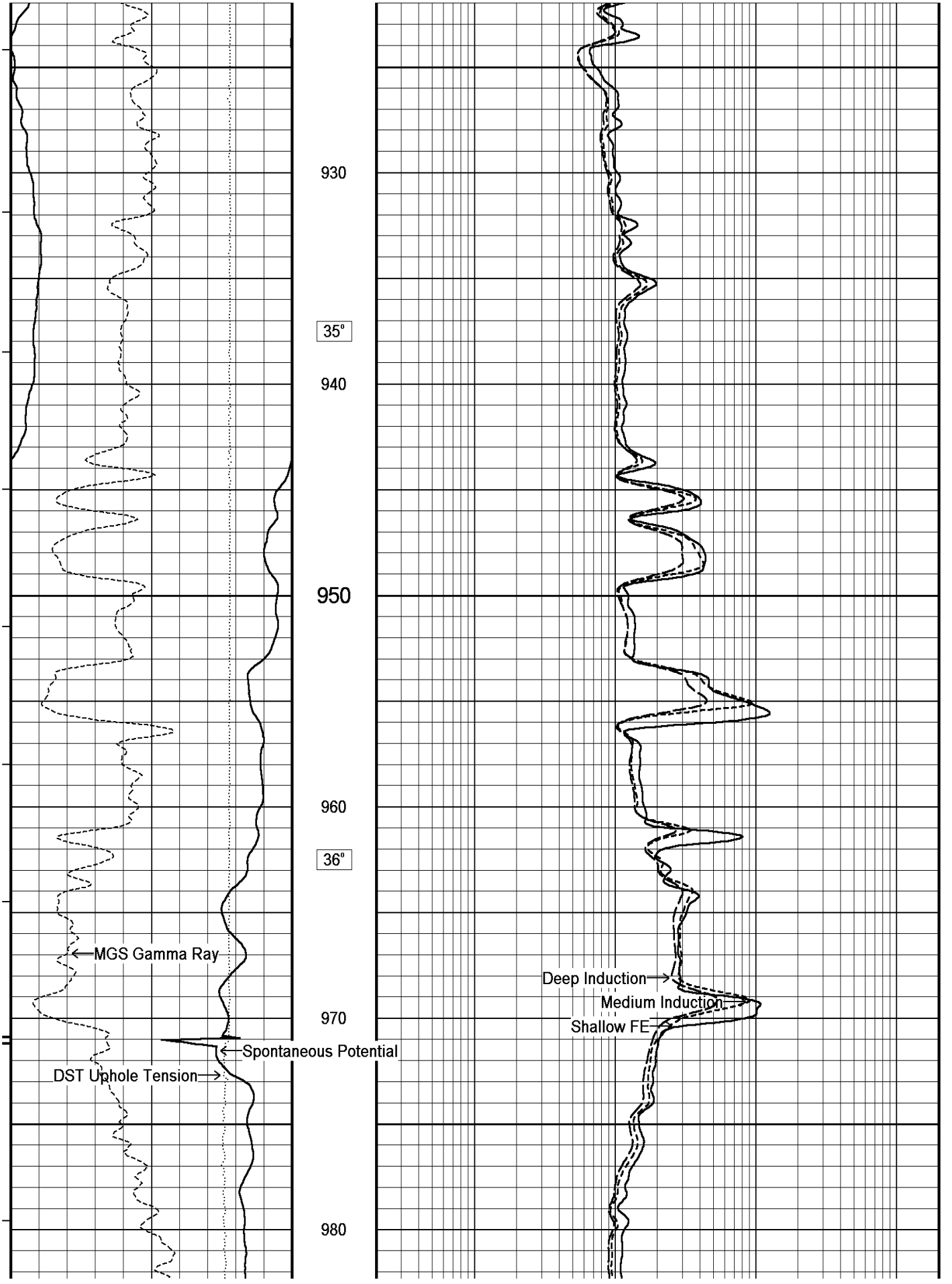

630
28°
640
650
660
29°
670
680

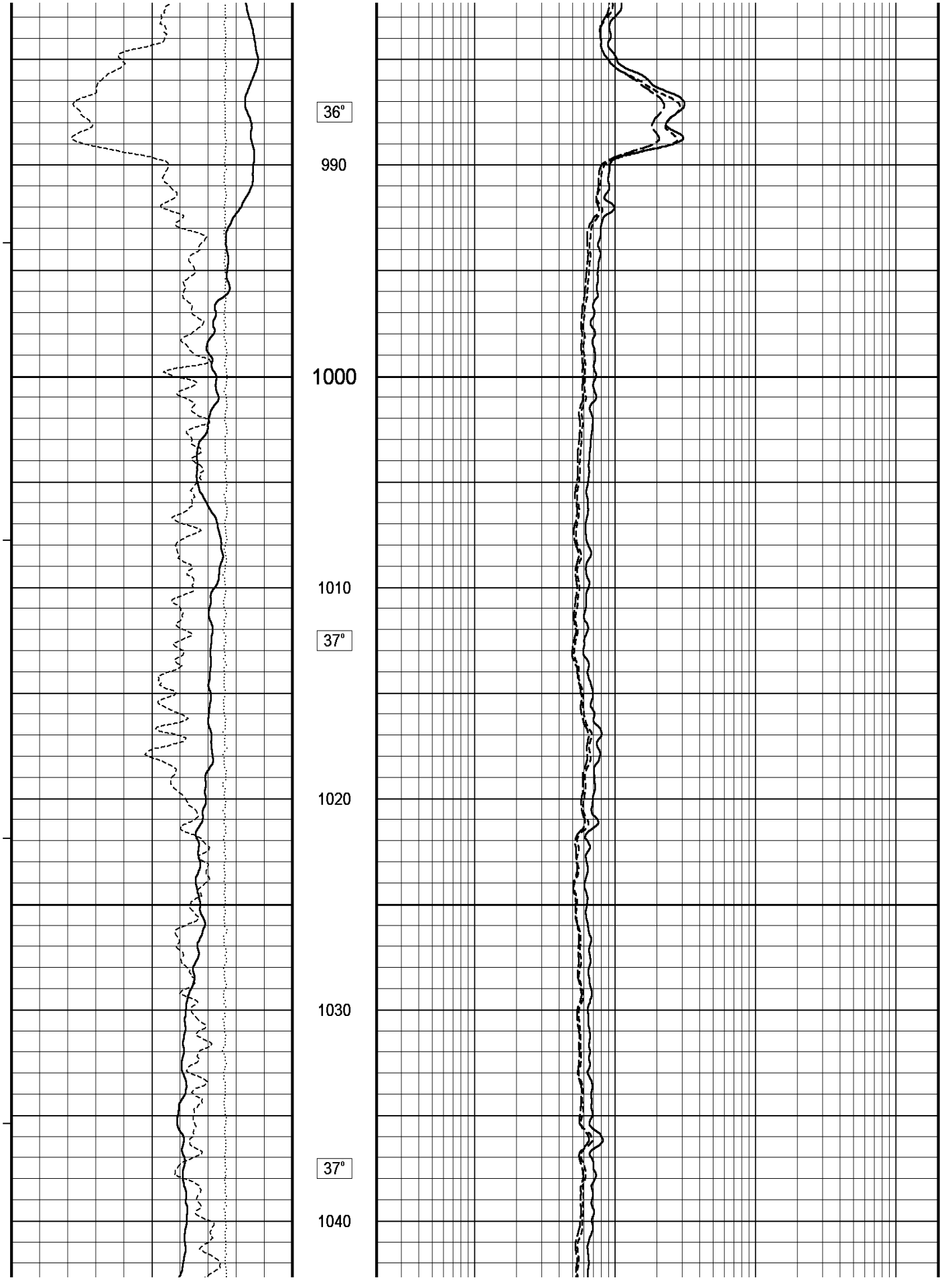

29°
690
700
710
30°
720
MGS Gamma Ray
730
Spontaneous Potential
DST Uphole Tension
30°
740
Deep Induction
Medium Induction
Shallow FE

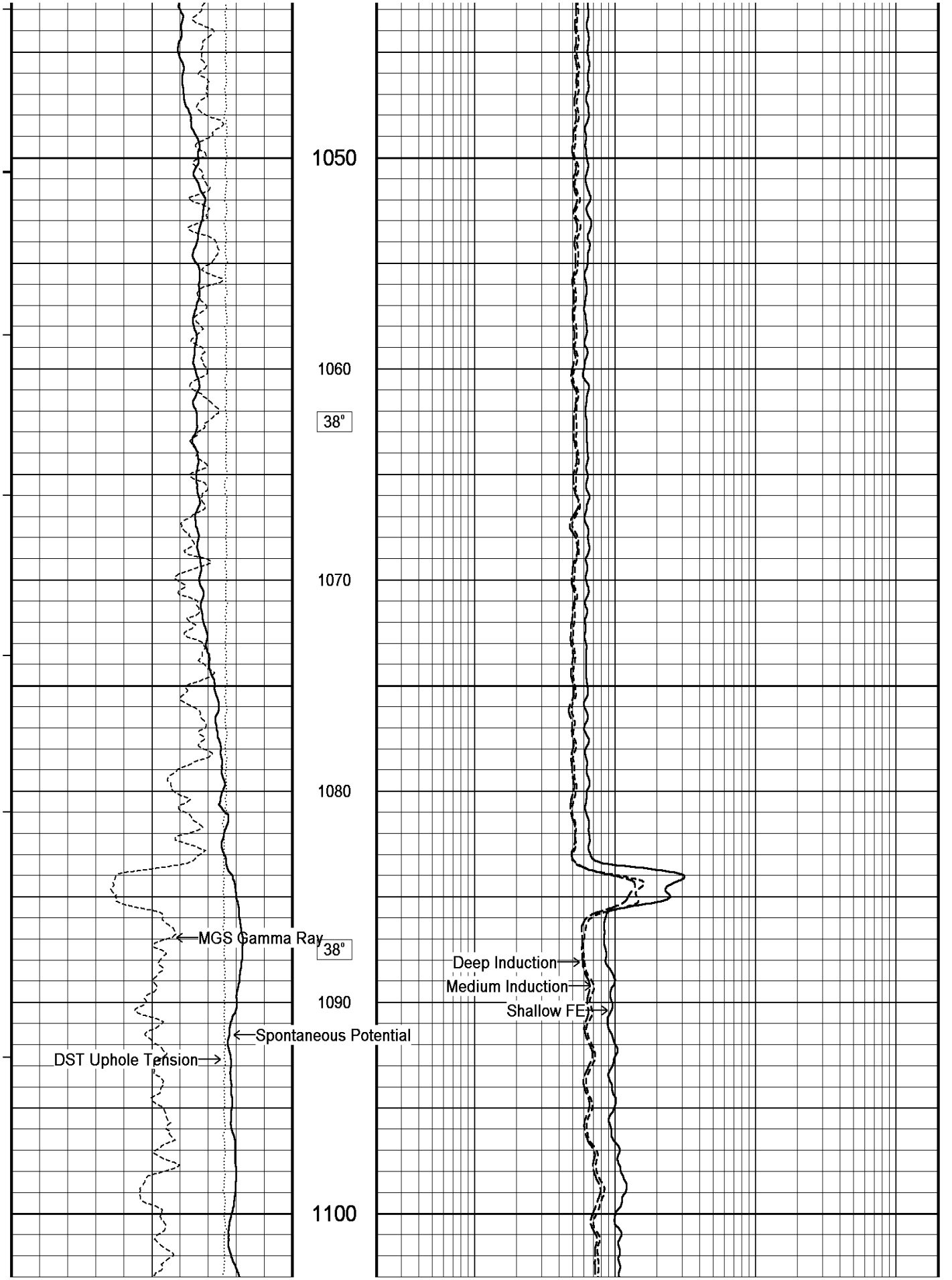

750
760
31°
770
780
32°
790
800

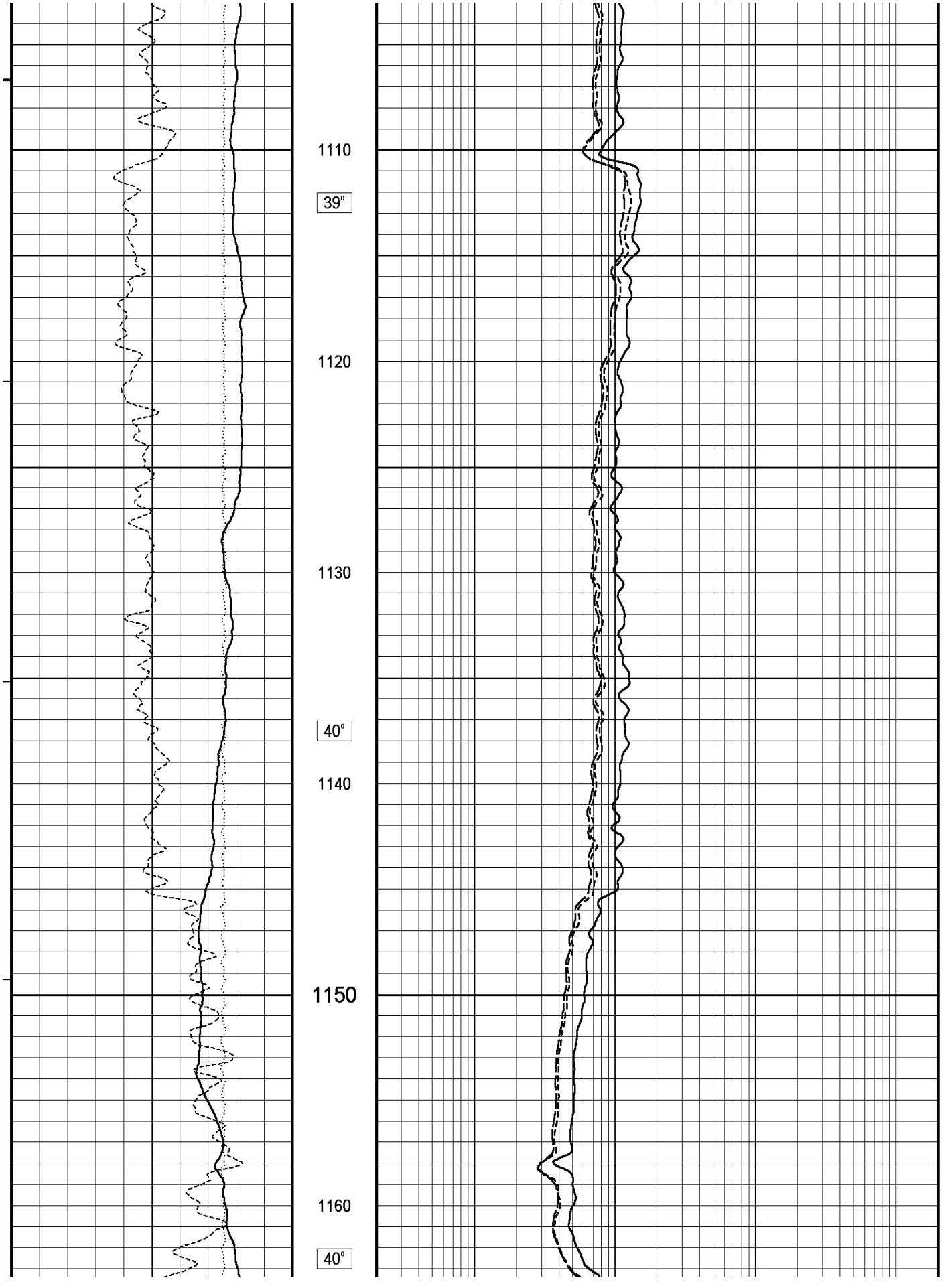

810
33°
820
830
33°
840
MGS Gamma Ray
850
Spontaneous Potential
DST Uphole Tension
860
Deep Induction
Medium Induction
Shallow FE

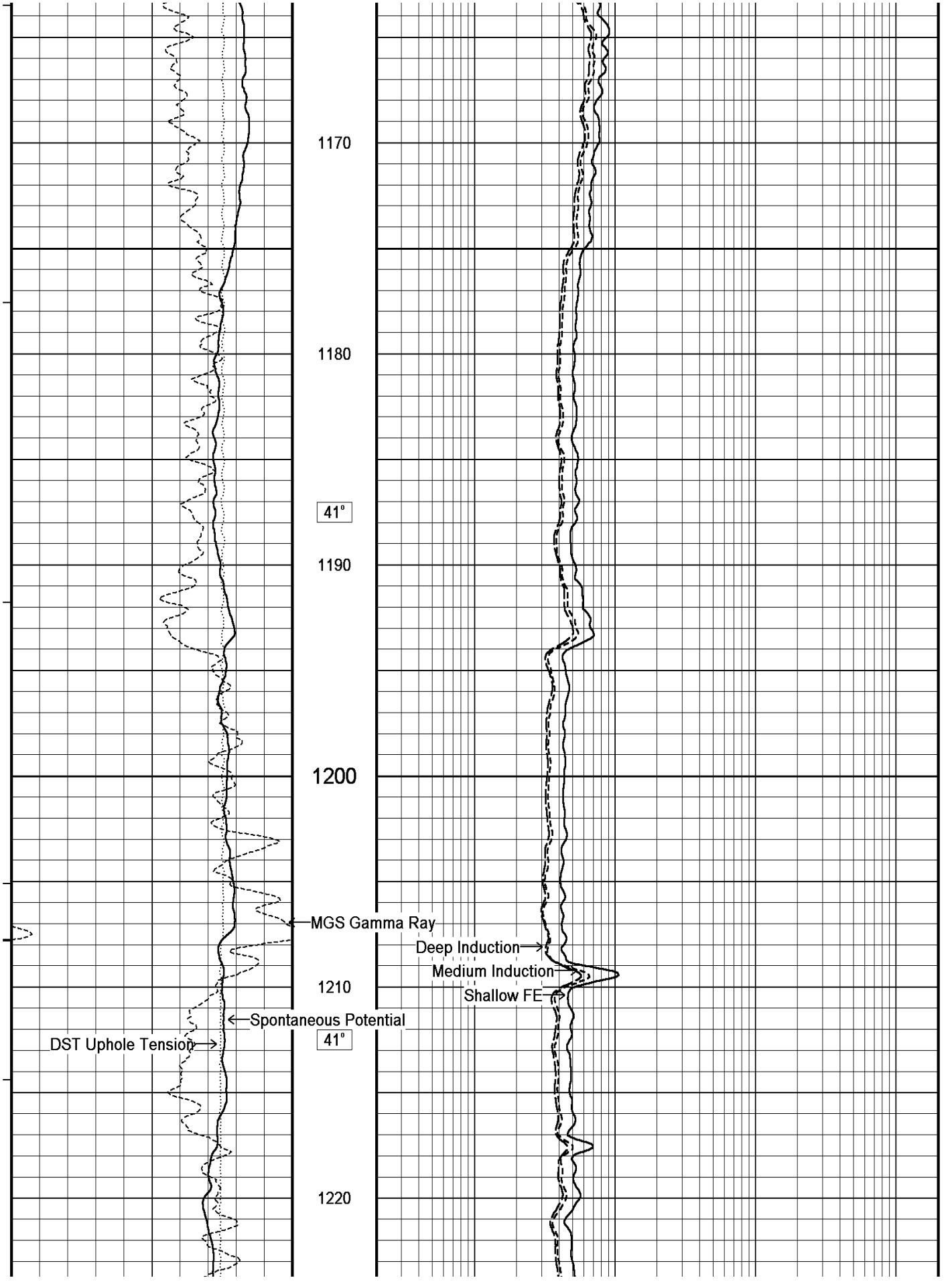

34°
870
880
34°
890
900
910
35°
920

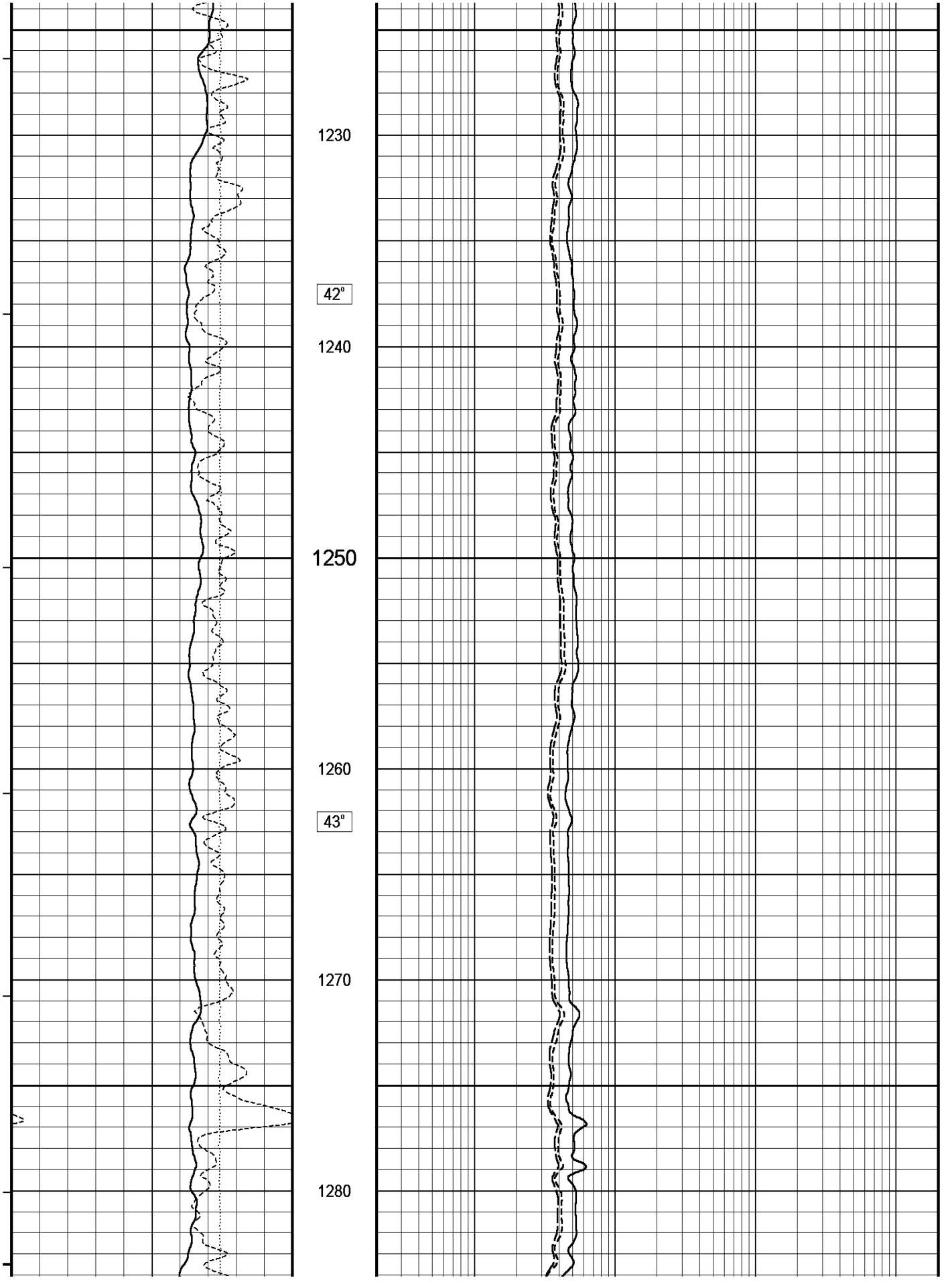

930
35°
940
950
960
36°
970
980
MGS Gamma Ray
Spontaneous Potential
DST Uphole Tension
Deep Induction
Medium Induction
Shallow FE

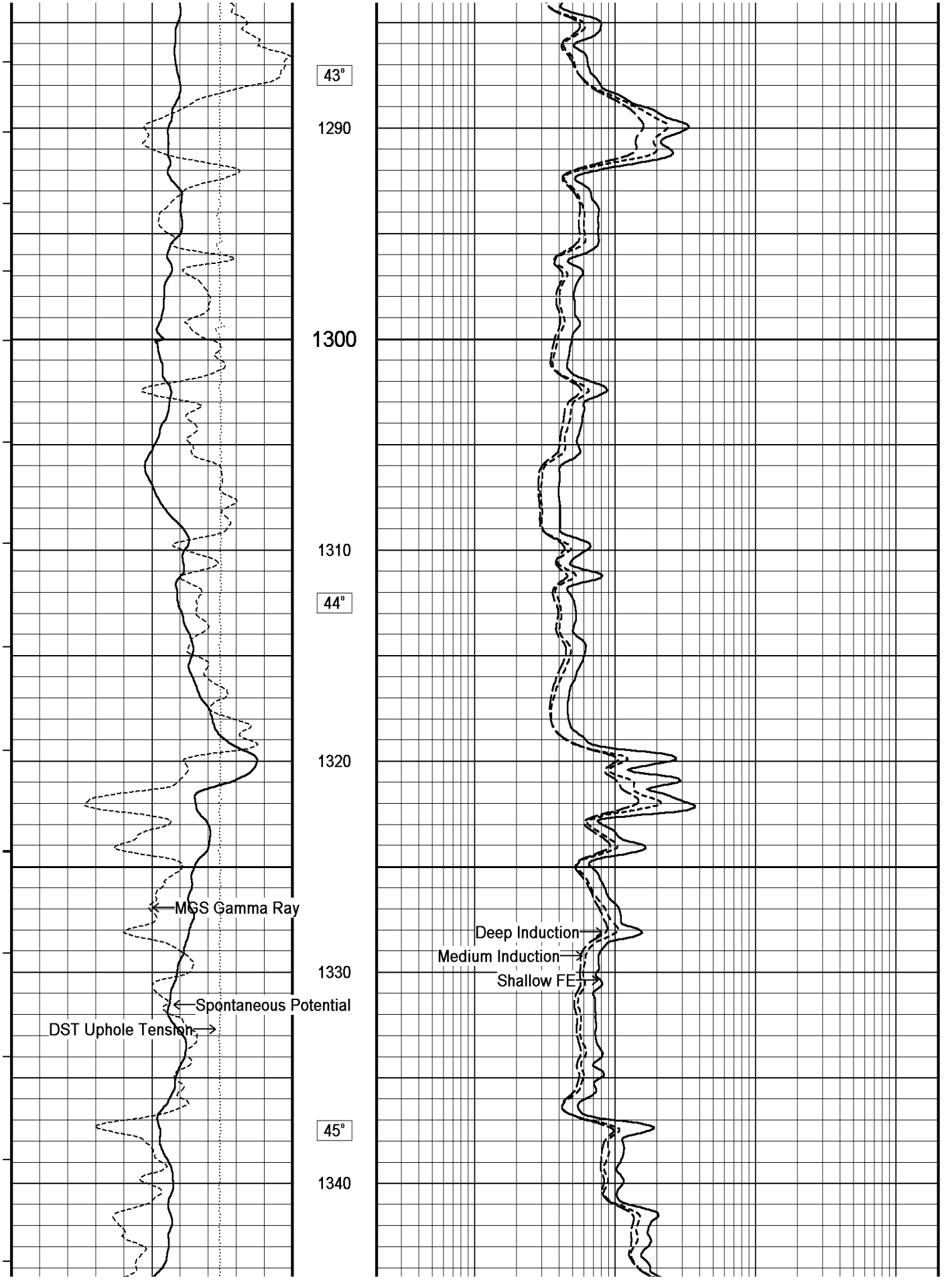

36°
990
1000
1010
37°
1020
1030
37°
1040

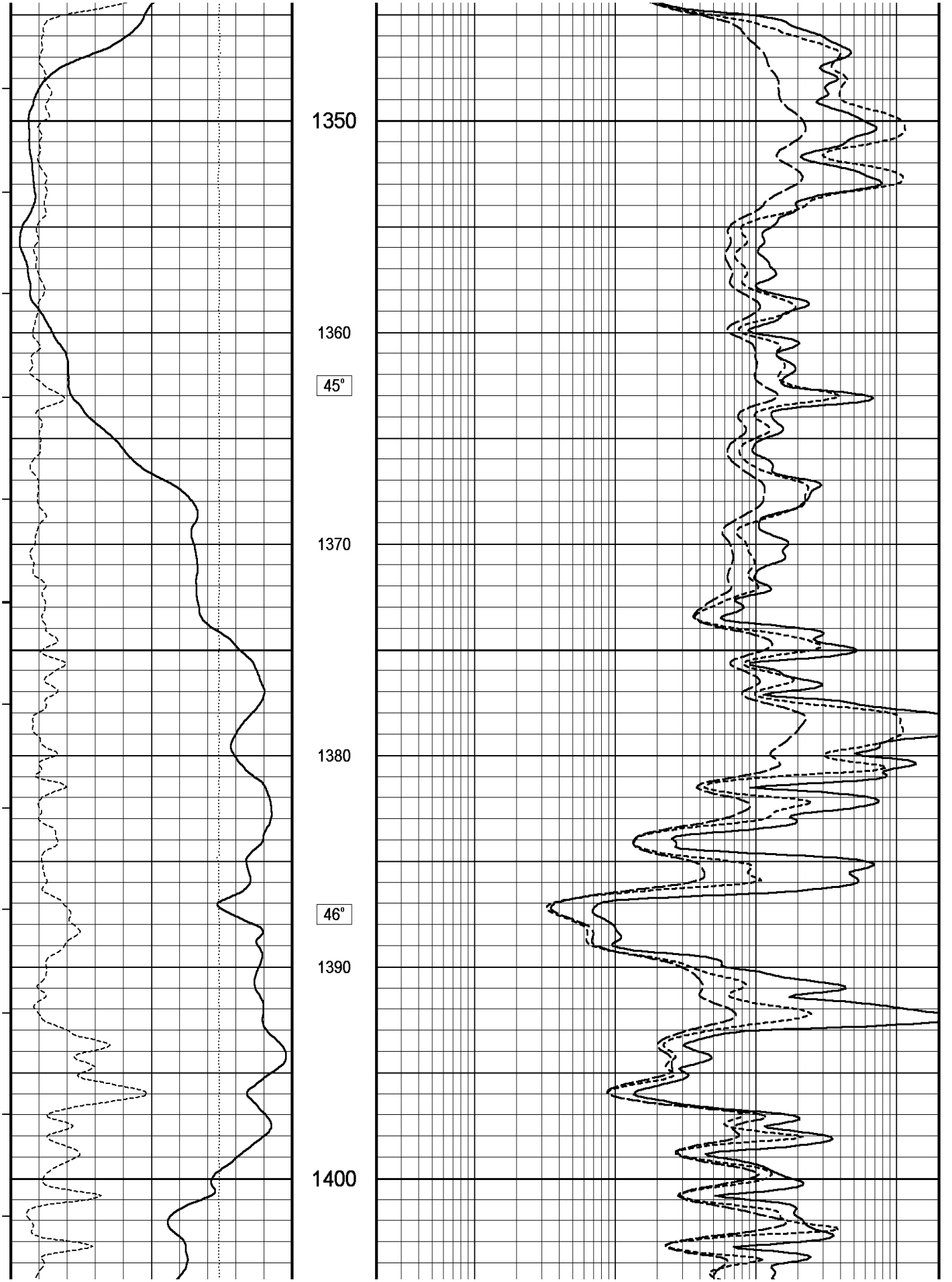

1050
1060
38°
1070
1080
MGS Gamma Ray
38°
1090
Spontaneous Potential
DST Uphole Tension
Deep Induction
Medium Induction
Shallow FE
1100

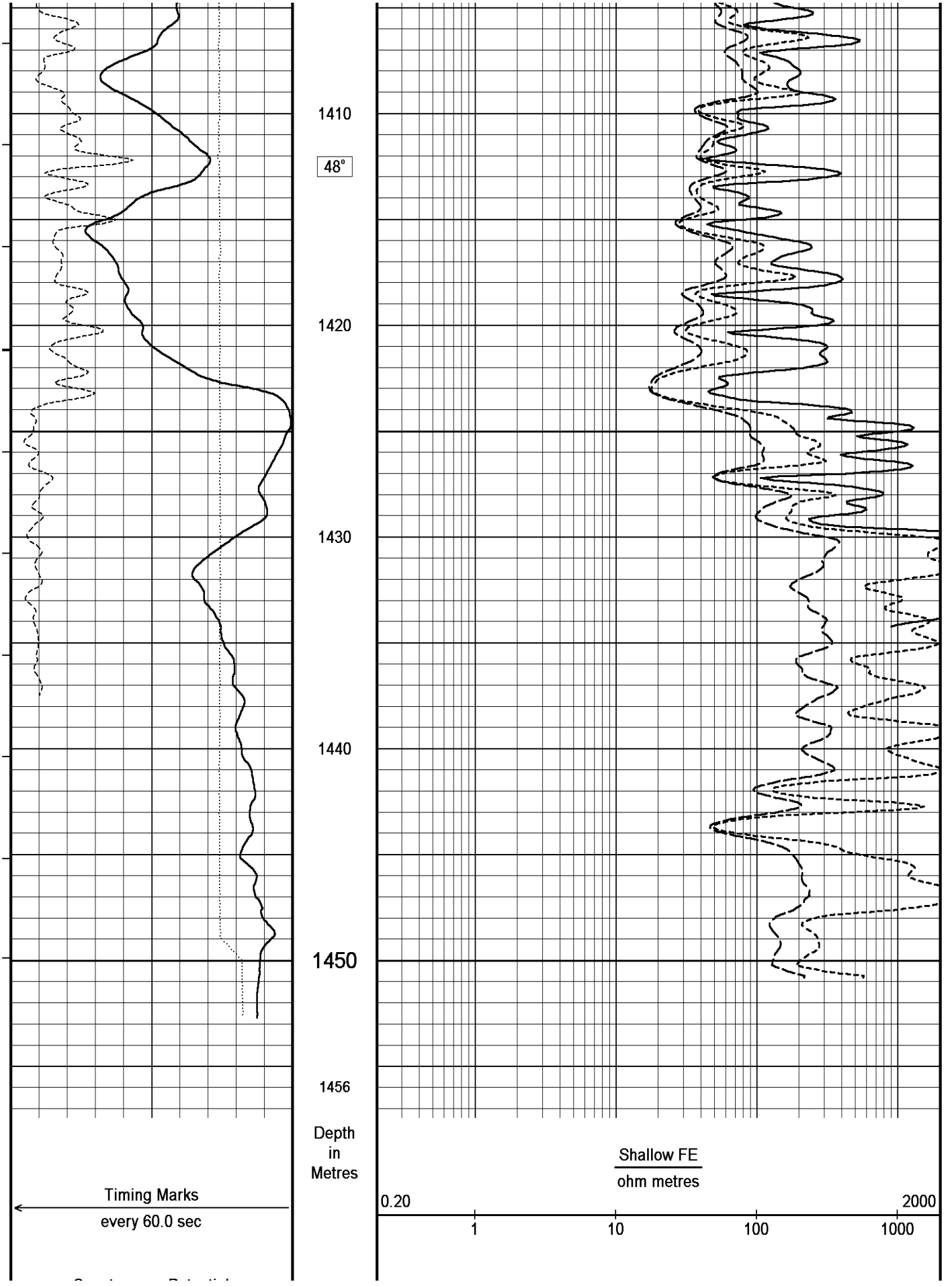

1110
39°
1120
1130
40°
1140
1150
1160
40°

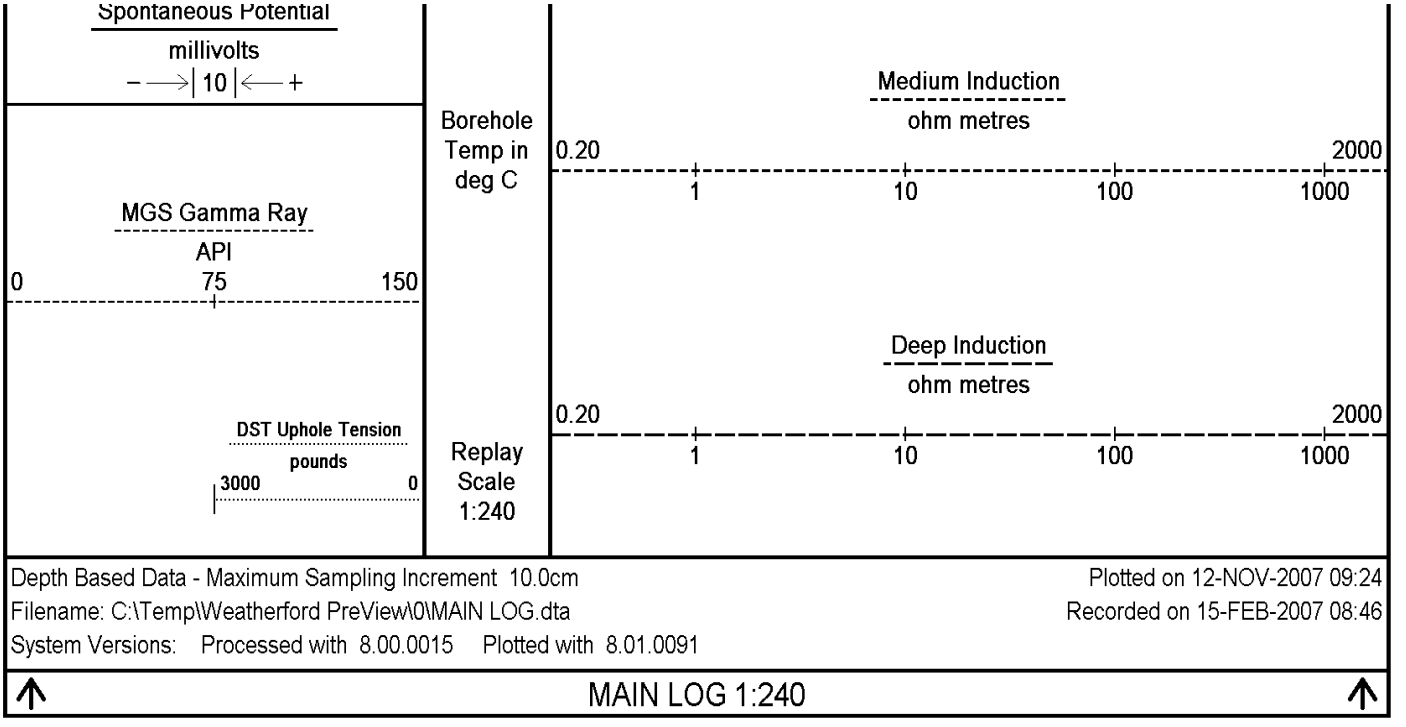

1170
1180
41°
1190
1200
MGS Gamma Ray
Deep Induction
Medium Induction
1210
Shallow FE
Spontaneous Potential
DST Uphole Tension
41°
1220


1230
42°
1240
1250
1260
43°
1270
1280


43°
1290
1300
1310
44°
1320
MGS Gamma Ray
1330
Spontaneous Potential
DST Uphole Tension
45°
1340
Deep Induction
Medium Induction
Shallow FE


1350
1360
45°
1370
1380
46°
1390
1400


1410
48°
1420
1430
1440
1450
1456
Depth
in
Metres
Timing Marks
every 60.0 sec
Shallow FE
ohm metres
0.20
2000
1
10
100
1000

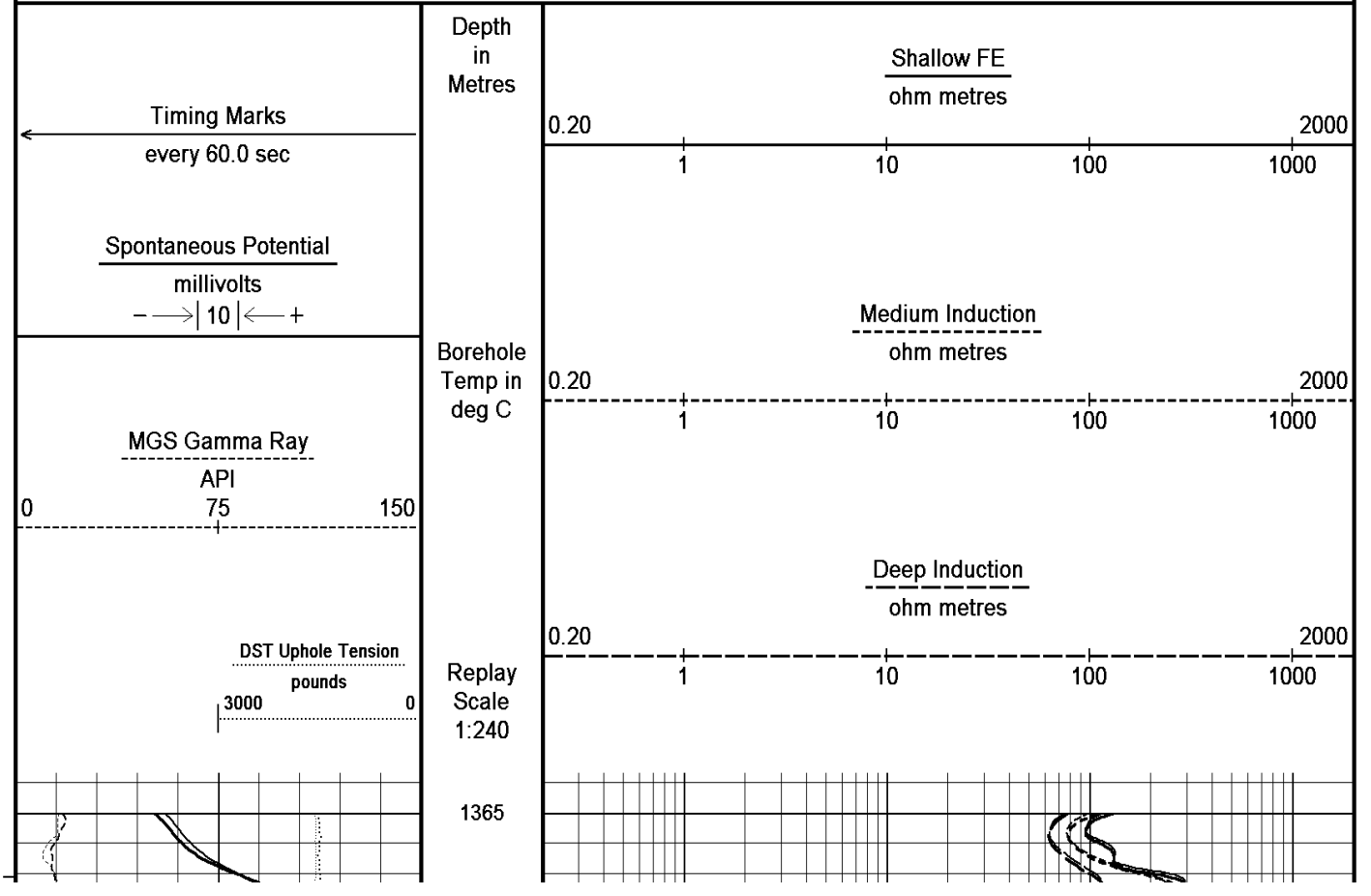


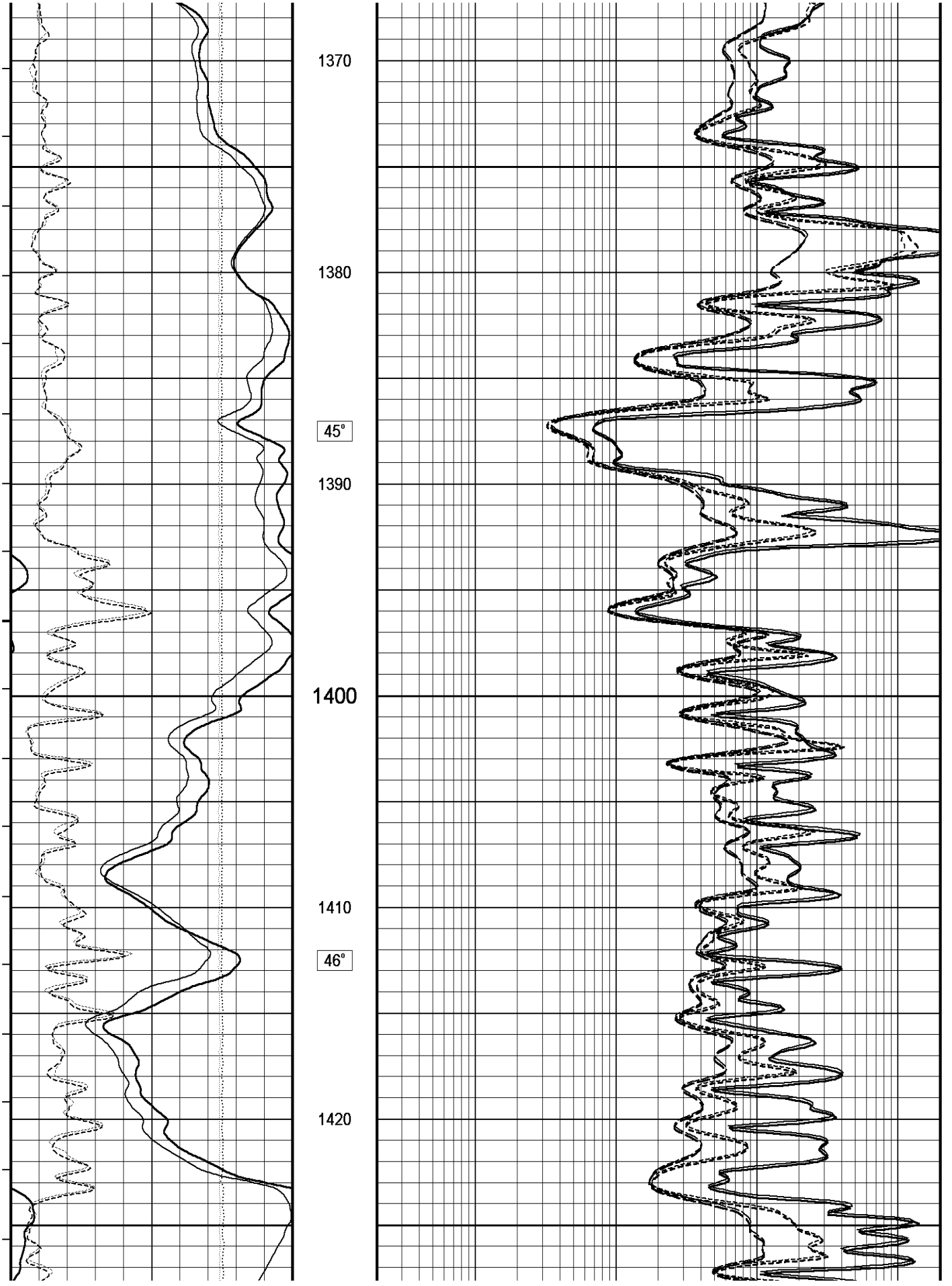
Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 12-NOV-2007 09:24
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta — Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

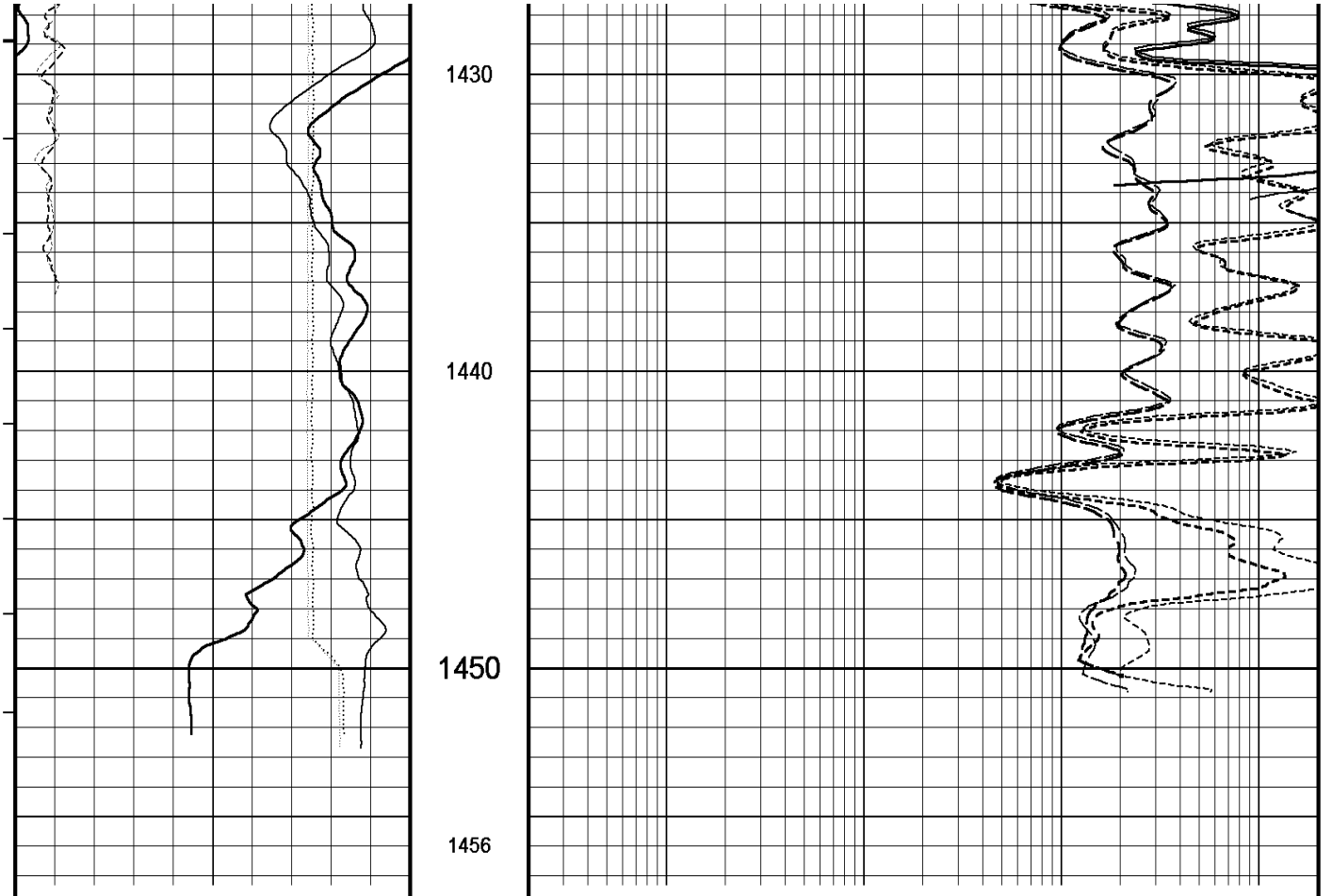
MAIN LOG 1:240

REPEAT SECTION
MAIN LOG 1:240

Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 12-NOV-2007 09:24
Filename: C:\Temp\Weatherford PreView\0\REPEAT.dta — Recorded on 15-FEB-2007 07:26
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta — Recorded on 15-FEB-2007 08:46
System Versions: Logged with 7.01.0195 Processed with 8.00.0015 Plotted with 8.01.0091




1370
1380
45°
1390
1400
1410
46°
1420



Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 12-NOV-2007 09:24
Filename: C:\Temp\Weatherford PreView\0\REPEAT.dta
Recorded on 15-FEB-2007 07:26
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
Recorded on 15-FEB-2007 08:46
System Versions: Logged with 7.01.0195 Processed with 8.00.0015 Plotted with 8.01.0091

REPEAT SECTION

BEFORE SURVEY CALIBRATION

C:\Temp\Weatherford PreView\0\REPEAT.dta

General Constants All 000

Last Edited on 15-FEB-2007,06:48

General Parameters		
Mud Resistivity	1.180	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	

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 14-FEB-2007 07:09
Field Check on

Base Calibration

	Measured	Calibrated (ohm-m)
Reference 1	0.0	0.0
Reference 2	971.4	126.8
Base Check		279.4
Field Check		0.0

FE Constants MFE 017

Last Edited on 15-FEB-2007,04:52

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

Gamma Calibration MGS 010

Field Calibration on 7-FEB-2007,09:09

	Measured	Calibrated (API)
Background	48	31
Calibrator (Gross)	1256	825
Calibrator (Net)	1208	794

Gamma Constants MGS 010

Last Edited on 15-FEB-2007,06:48

Gamma Calibrator Number	grcc075

Mud Density	1060.00	kg/m3
Caliper Source for Processing	Density Caliper	
Tool Position	Centred	
Concentration of KCl	0.00	kppm

Induction Calibration MAI 072

Base Calibration on 25-JAN-2007,18:16
Field Check on 12-FEB-2007 04:15

Base Calibration

Test Loop Calibration

Channel	Measured Low	Measured High	Calibrated (mmho/m) Low	Calibrated (mmho/m) 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

Channel	Base Check (mmho/m) Low	Base Check (mmho/m) High	Field Check (mmho/m) Low	Field Check (mmho/m) High
1	18.0	3925.2	20.2	3926.2
2	31.0	3598.6	32.7	3599.2
3	29.0	3101.3	30.3	3102.2
4	20.3	2105.9	21.3	2106.6
Deep	18.4	2019.9	19.4	2021.1
Medium	40.9	4089.6	42.6	4090.6
Shallow	45.6	5324.4	48.1	5324.5
Array Temperature	18.5		22.2	Deg C

Induction Constants MAI 072

Last Edited on 7-FEB-2007,09:11

Induction Model	VECTAR	
Caliper for Borehole Corr.	Y Two Arm Caliper	
Hole Size for Borehole Correction	N/A	millimetres
Stand-off	25.40	millimetres
Number of Fins on Stand-off	5.0000	
Stand-off Fin Width	25.4000	millimetres
Borehole Corr. Rm Source	Temperature Corr	
Temp. for Rm Corr.	MCG External Temperature	
Squasher Start	0.0020	mhos/metre

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

DOWNHOLE EQUIPMENT

C:\Temp\Weatherford PreView\0\REPEAT.dta

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

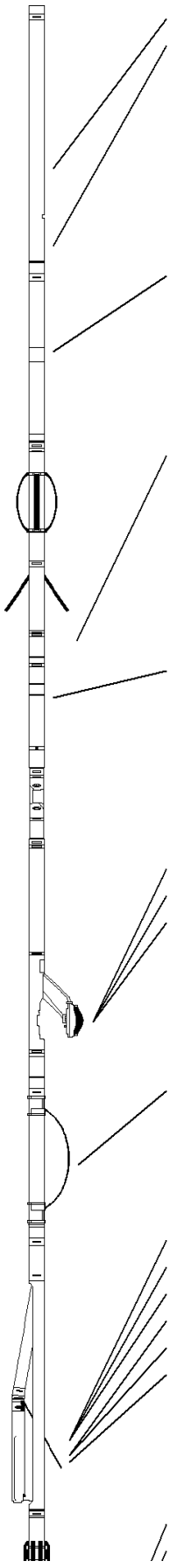
10.64 m NPRL - Limestone Neutron Por.

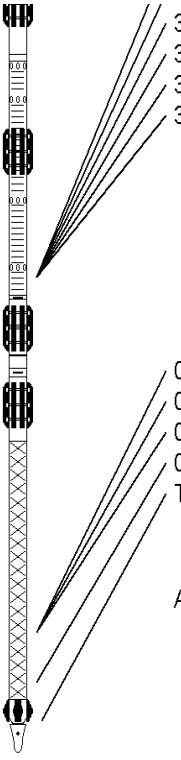
Compact Density/Caliper
MPD 36 Length: 2.92 m Weight: 90.4 lb

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

Compact Sonic
MSS 60 Length: 3.82 m Weight: 72.8 lb

3.95 m TR21 - 3' Transit Time
3.95 m TR11 - 4' Transit Time





3.95 m	TR22 - 5' Transit Time	
3.95 m	DT34 - 3-4' Compensated Sonic	
3.95 m	DT35 - 3-5' Compensated Sonic	
3.95 m	TR12 - 6' Transit Time	

Compact Induction
MAI 72 Length: 3.29 m Weight: 48.5 lb

0.79 m	VEC0 - Shallow Induction	
0.79 m	RILM - Medium Induction	
0.79 m	RILD - Deep Induction	
0.07 m	SPCG - Spontaneous Potential	
Tool Zero		(0.28m from bottom)

Compact Hole Finder
HFS 1 Length: 0.24 m Weight: 2.2 lb

All measurements relative to tool zero.

Total Length: 22.63 m Weight: 568.8 lb

COMPANY	PARAMOUNT RESOURCES LTD.
WELL	PARAMOUNT ET AL CAMERON J-04
FIELD	CAMERON HILLS
PROVINCE/COUNTY	NORTH WEST TERRITORIES
COUNTRY/STATE	CANADA

Elevation Kelly Bushing	769.20	metres	First Reading	1448.70	metre
Elevation Drill Floor		metres	Depth Driller	1449.00	metres
Elevation Ground Level	765.20	metres	Depth Logger	1449.50	metres

Weatherford®

ARRAY INDUCTION

COMPENSATED SONIC

COMPANY	PARAMOUNT RESOURCES LTD.
WELL	PARAMOUNT ET AL CAMERON J-04
FIELD	CAMERON HILLS
PROVINCE/COUNTY	NORTH WEST TERRITORIES
COUNTRY/STATE	CANADA
LOCATION	300/J-04-60-10-117-30

FIELD PRINT

LSD	SEC	TWP	RGE	Other Services
				PHOTO DENSITY
				MICROLOG
				ARRAY INDUCTION
				DUAL SPACED NEUTRON

API Number
Permit Number 1159

Permanent Datum GROUND LEVEL, Elevation 765.20 metres
Log Measured From 4.00 M above Permanent Datum
Drilling Measured From KB

Elevations:	metres
KB	769.20
DF	
GL	765.20

Date	15-FEB-2007		
Run Number	1		
Depth Driller	1449.00	metres	
Depth Logger	1449.50	metres	
First Reading	1445.50	metre	
Last Reading	352.00	metre	
Casing Driller	430.00	metres	
Casing Logger	429.80	metres	
Bit Size	200.00	mm	
Hole Fluid Type	GELCHEM		
Density / Viscosity	1060.0 kg/M3	93.00 CP	
PH / Fluid Loss	11.00	11.00 ml/30Min	
Sample Source	FLOWLINE		
Rm @ Measured Temp	1.18 @ 25.0	ohm-m	
Rmf @ Measured Temp	1.04 @ 25.0	ohm-m	
Rmc @ Measured Temp	1.32 @ 25.0	ohm-m	
Source Rmf / Rmc	PRESS	FILTER	
Rm @ BHT	0.78 @ 48.0	ohm-m	
Time Since Circulation	6 HRS		
Max Recorded Temp	48.00	deg C	
Equipment Name	COMPACT		
Equipment / Base	13124	GPR	
Recorded By	G. SINGER		
Witnessed By	A. AHMED		
CIRC. STOP TIME	01:30-FEB-15		Last Line

BOREHOLE RECORD

Last Edited: 15-FEB-2007 05:01

Bit Size millimetres	Depth From metres	Depth To metres
311.000	0.00	430.00
200.000	430.00	1449.00

CASING RECORD

Type	Size millimetres	Depth From metres	Shoe Depth metres	Weight Kg/metre
SURFACE	219.100	0.00	430.00	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 INTERSONIC CRANK
   MTC: SIX LEAF CENTRALIZER
5) SERVICE ORDER #: 30073028 SAP #: 4147101 # FIELD PRINTS = 3
6) RIG: PD 129

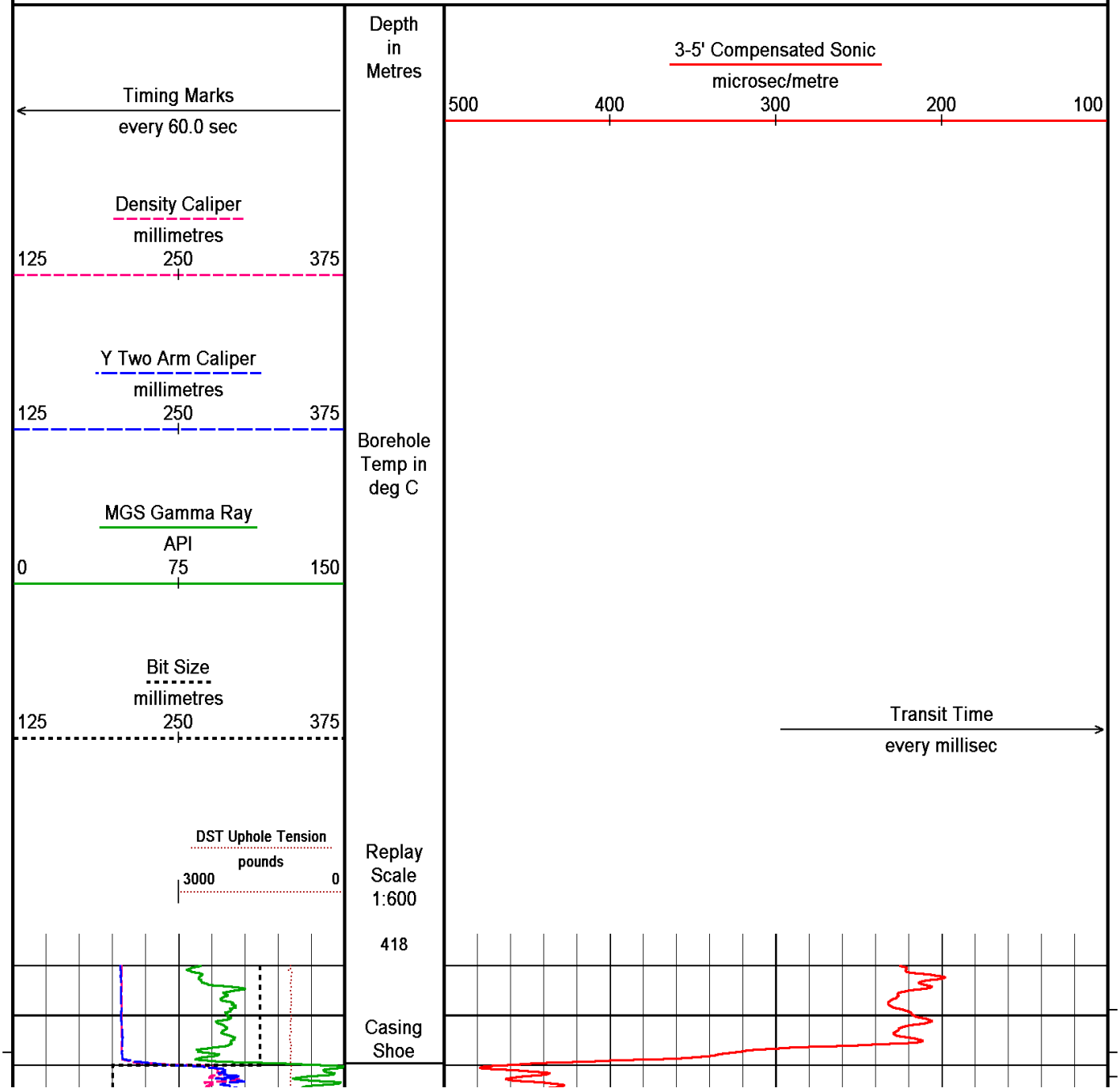
7) HOLE AND CEMENT VOLUMES CALCULATED USING DENSITY AND 2-ARM CALIPERS :
HOLE VOLUME = 37.4 CU.M.
ANNULAR VOLUME USING 139.7 MM PRODUCTION CASING = 21.8 CU.M

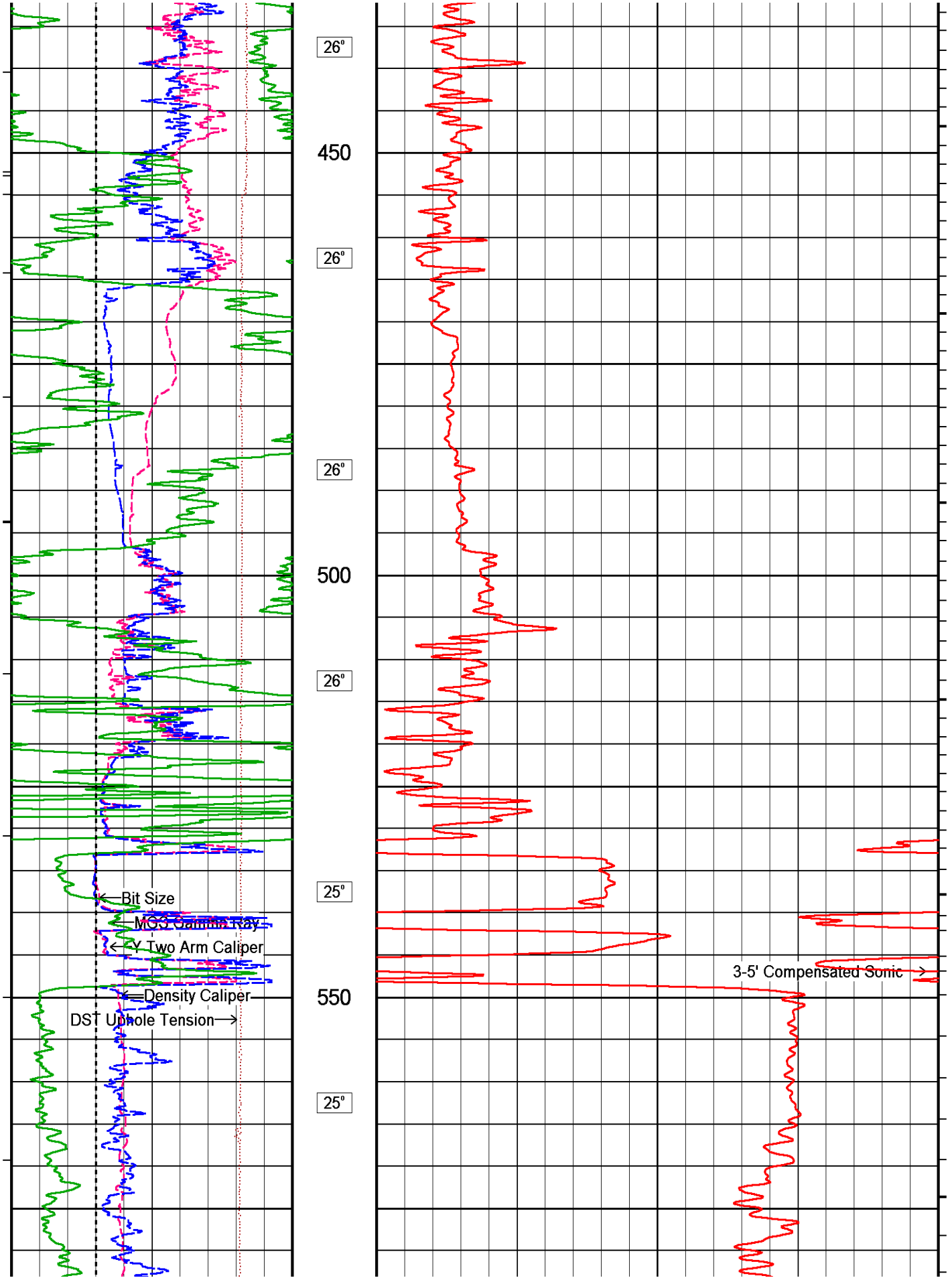
8) SONIC FREE PIPE FOUND FROM 352M - 357M

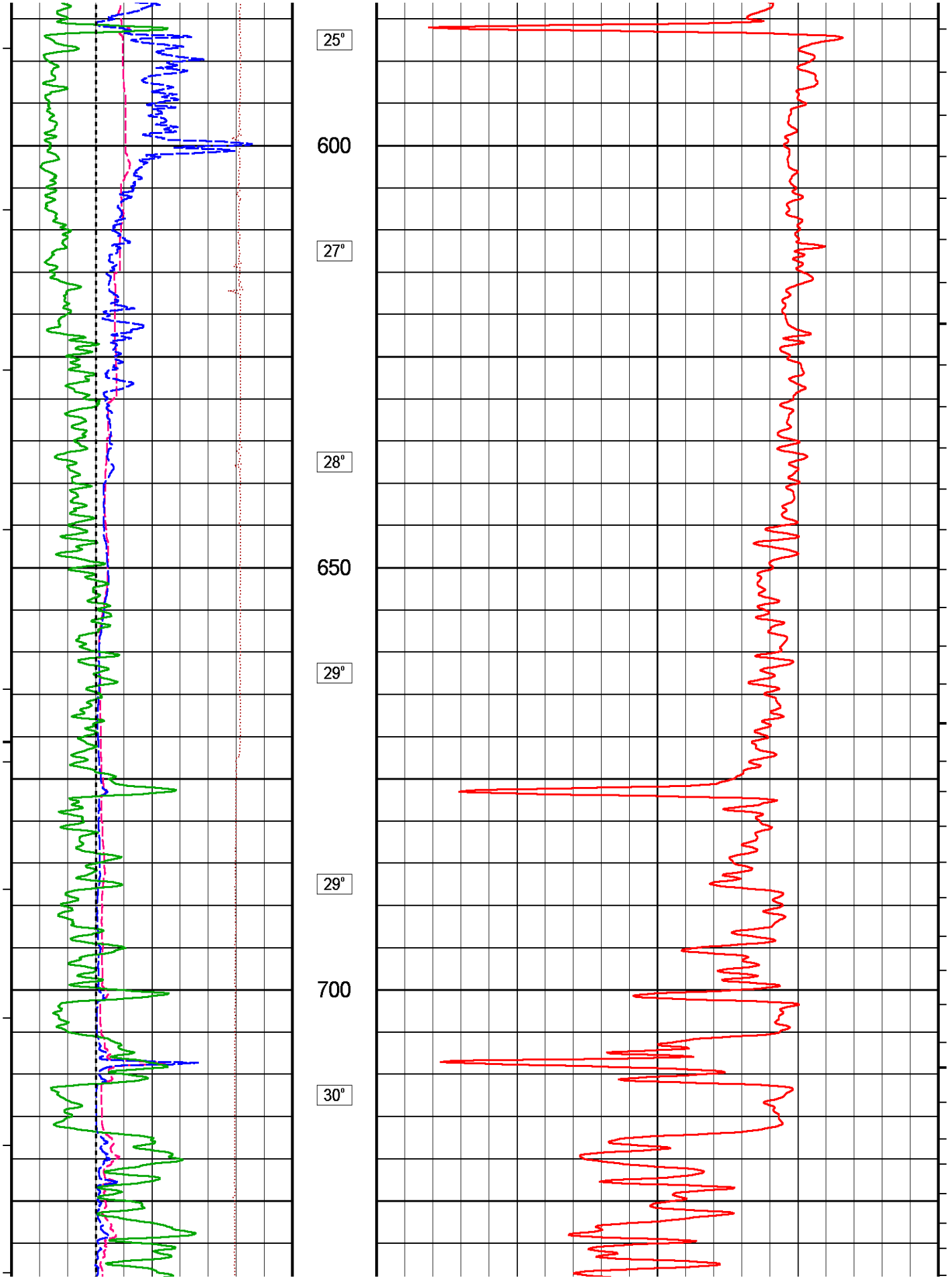
MAIN LOG 1:600

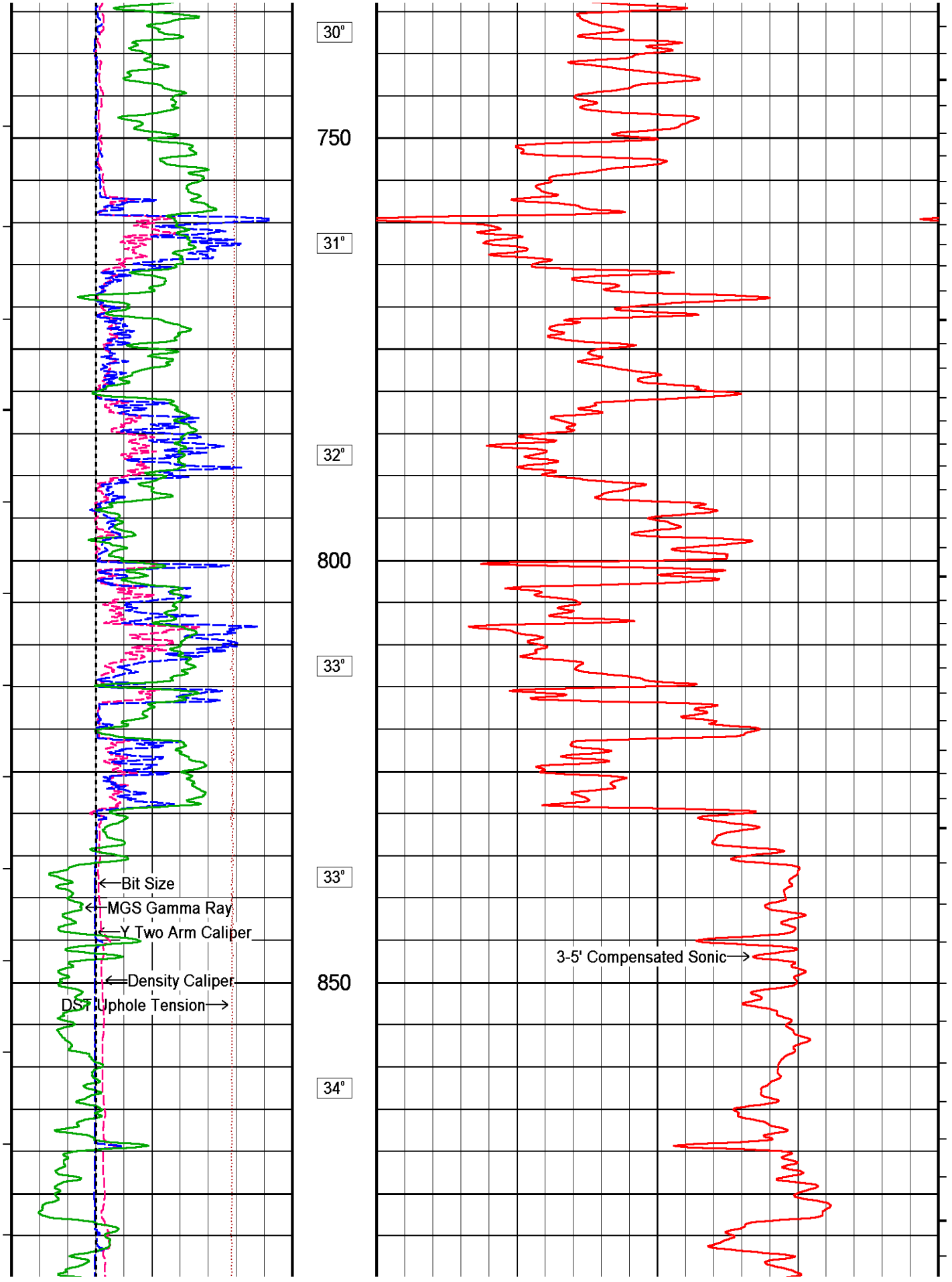
Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

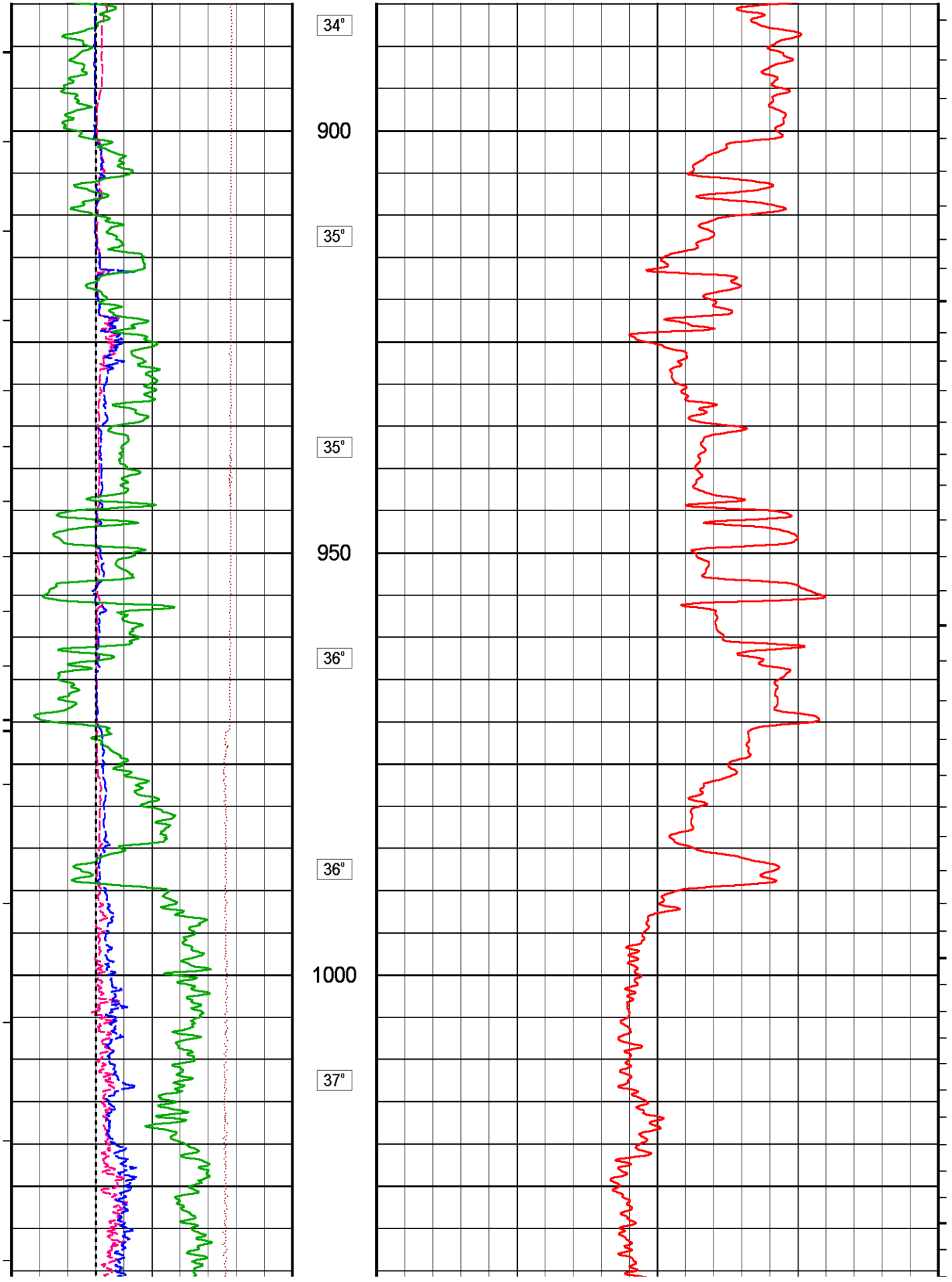
Plotted on 12-NOV-2007 09:28
Recorded on 15-FEB-2007 08:46

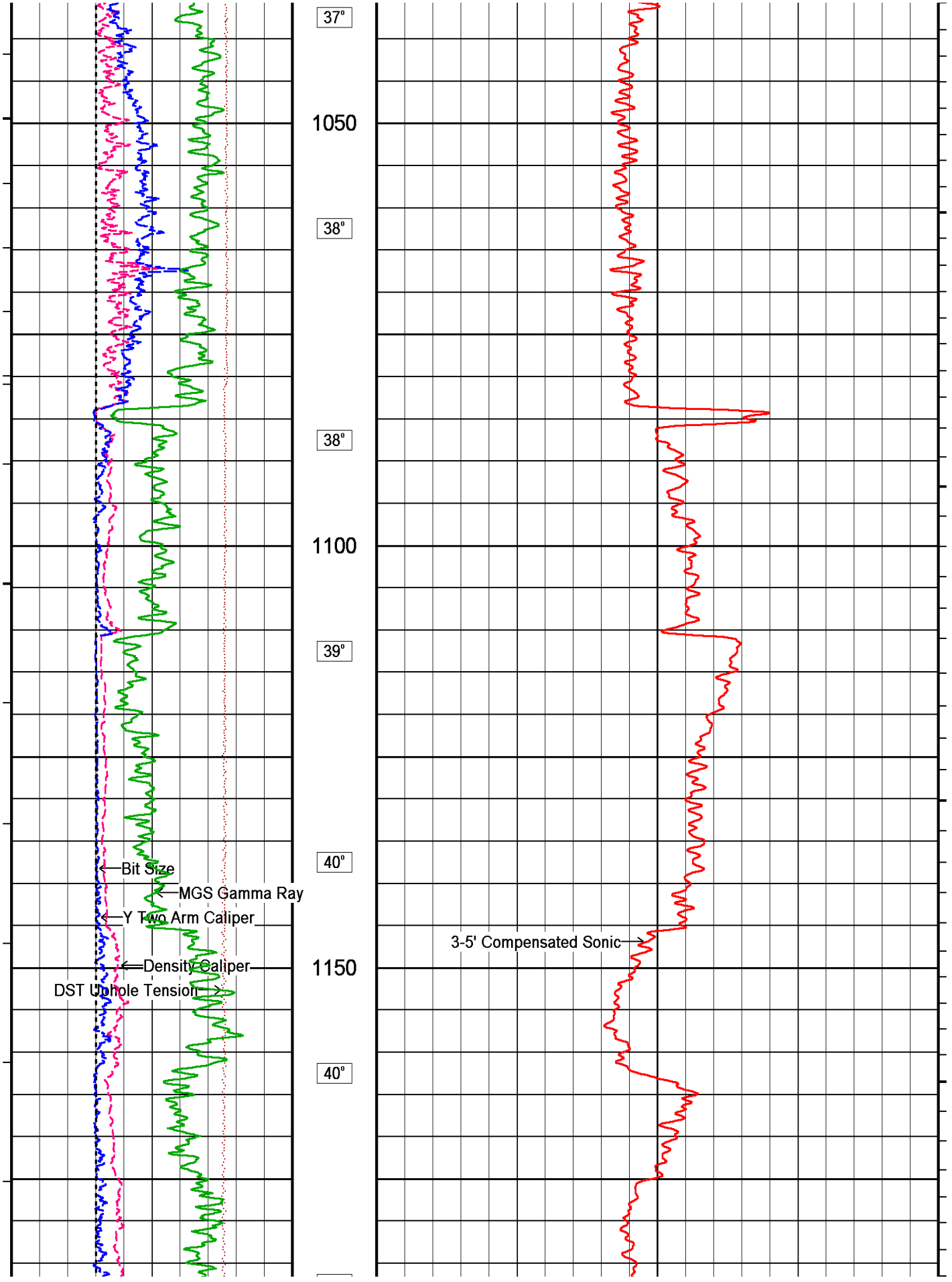


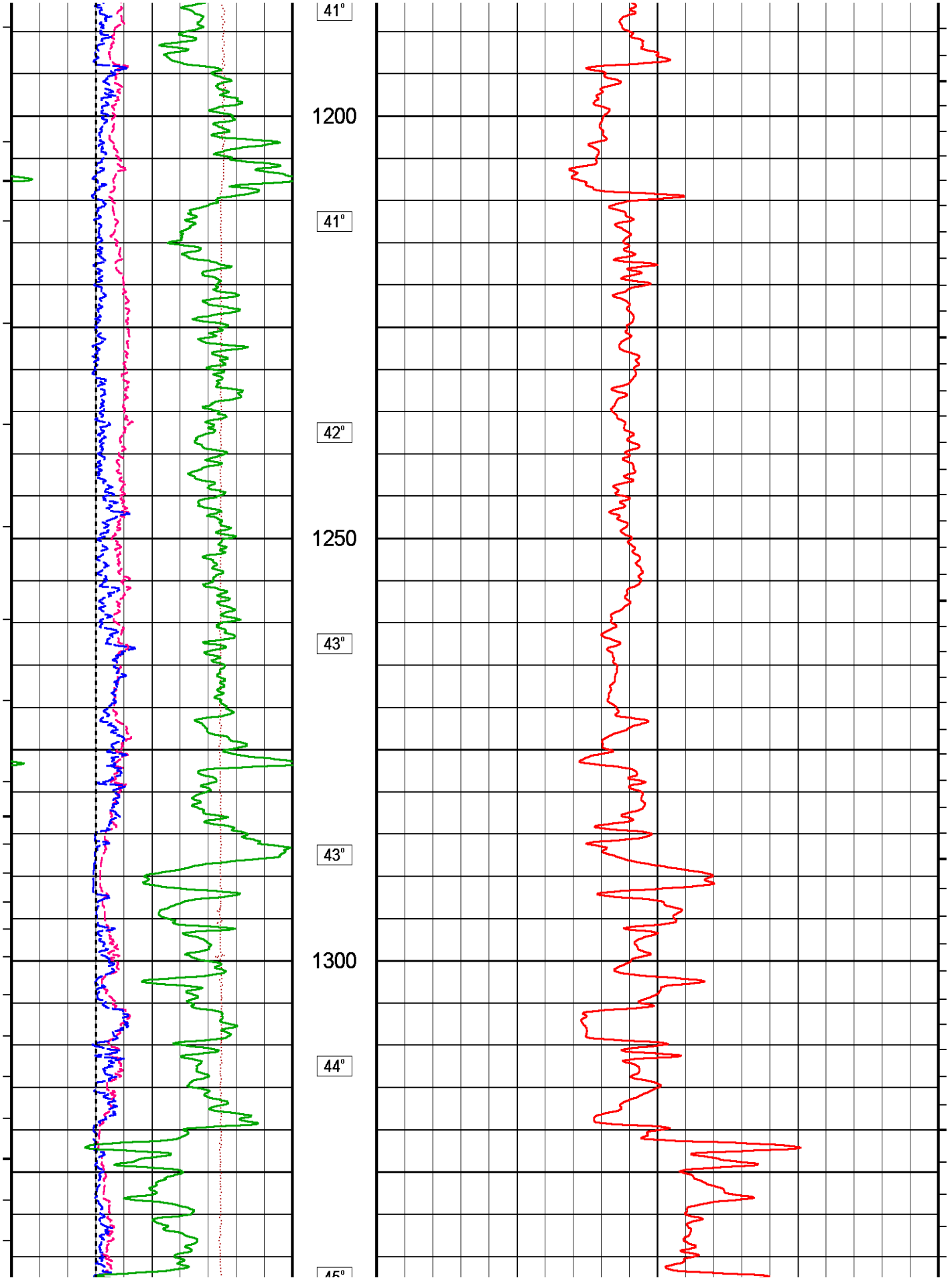

26°
450
26°
26°
500
26°
25°
550
25°
←Bit Size
MS3 Gamma Ray
←Y Two Arm Caliper
←Density Caliper
DST Uphole Tension→
3-5' Compensated Sonic →

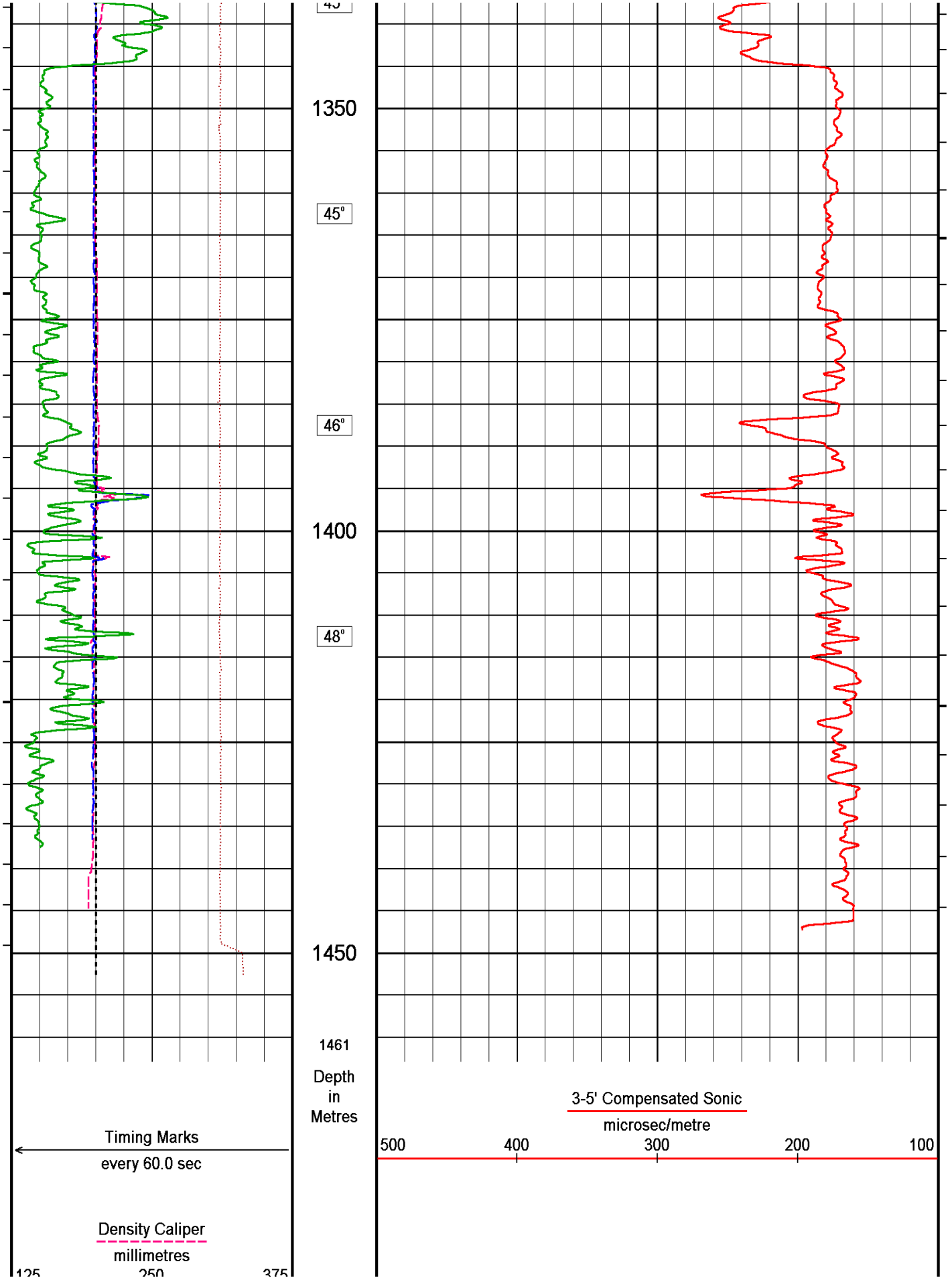

25°
600
27°
28°
650
29°
29°
700
30°

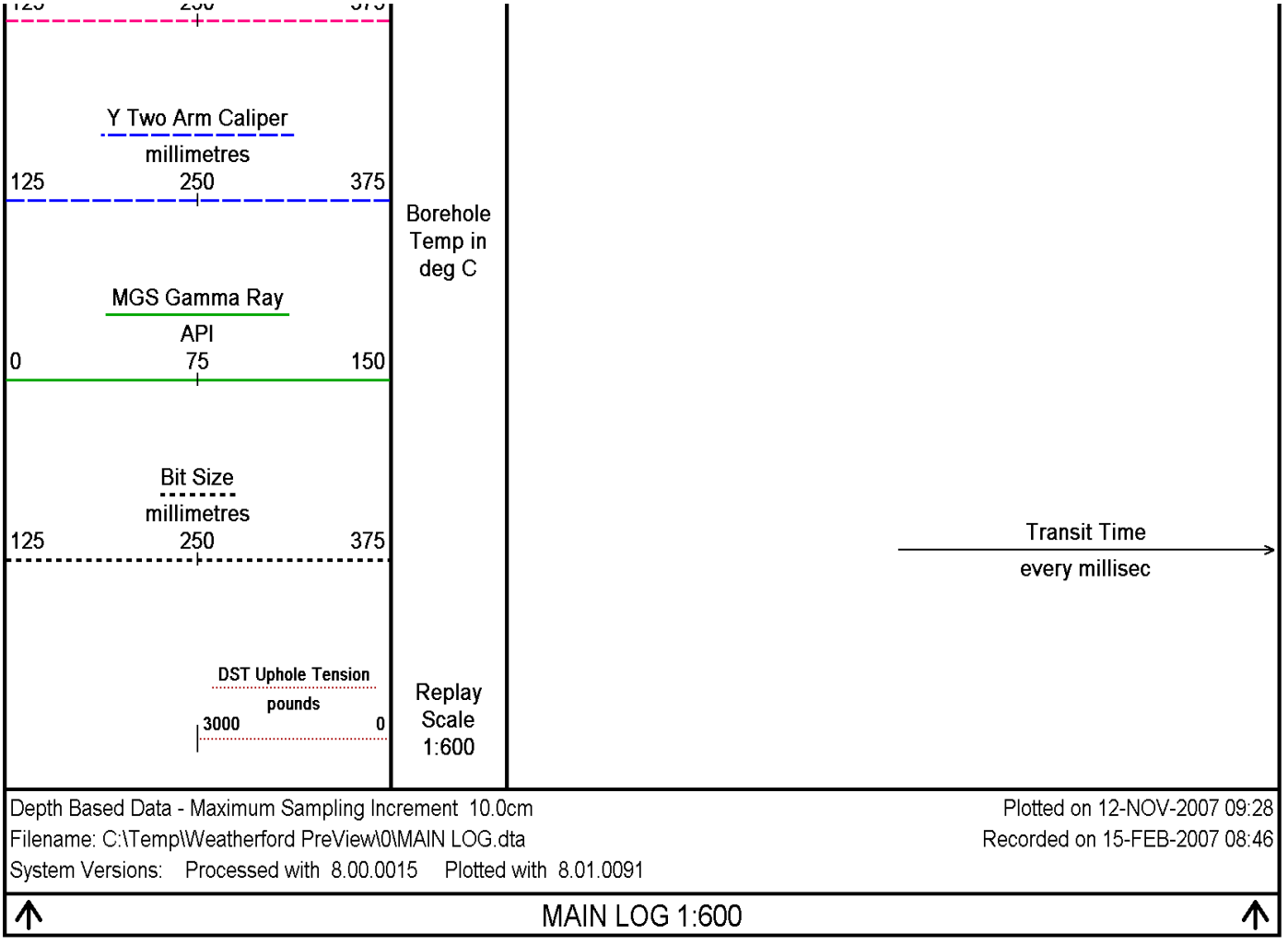

30°
750
31°
32°
800
33°
33°
850
34°
←Bit Size
←MGS Gamma Ray
←Y Two Arm Caliper
←Density Caliper
DST Uphole Tension→
3-5' Compensated Sonic→

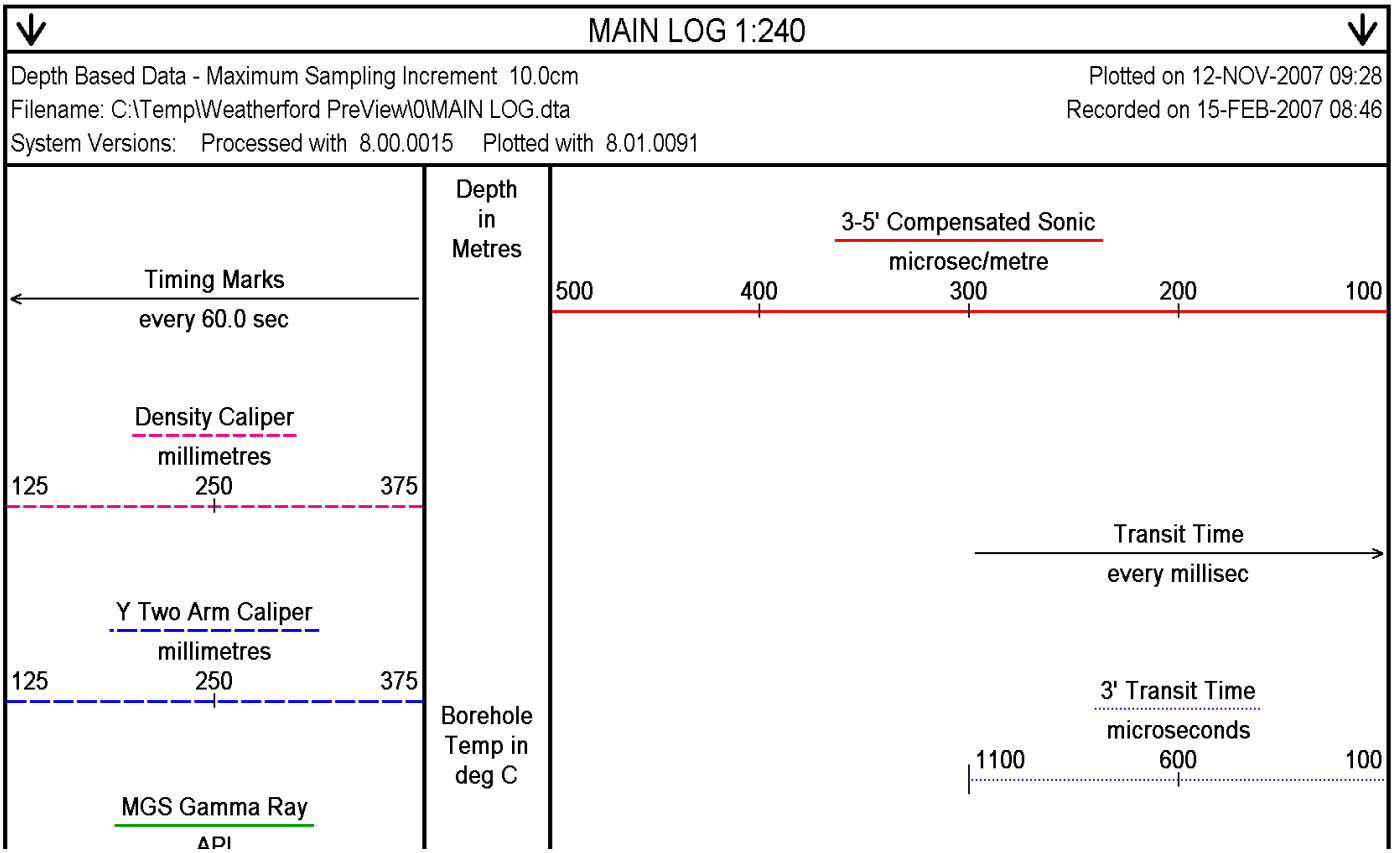

34°
900
35°
35°
950
36°
36°
1000
37°

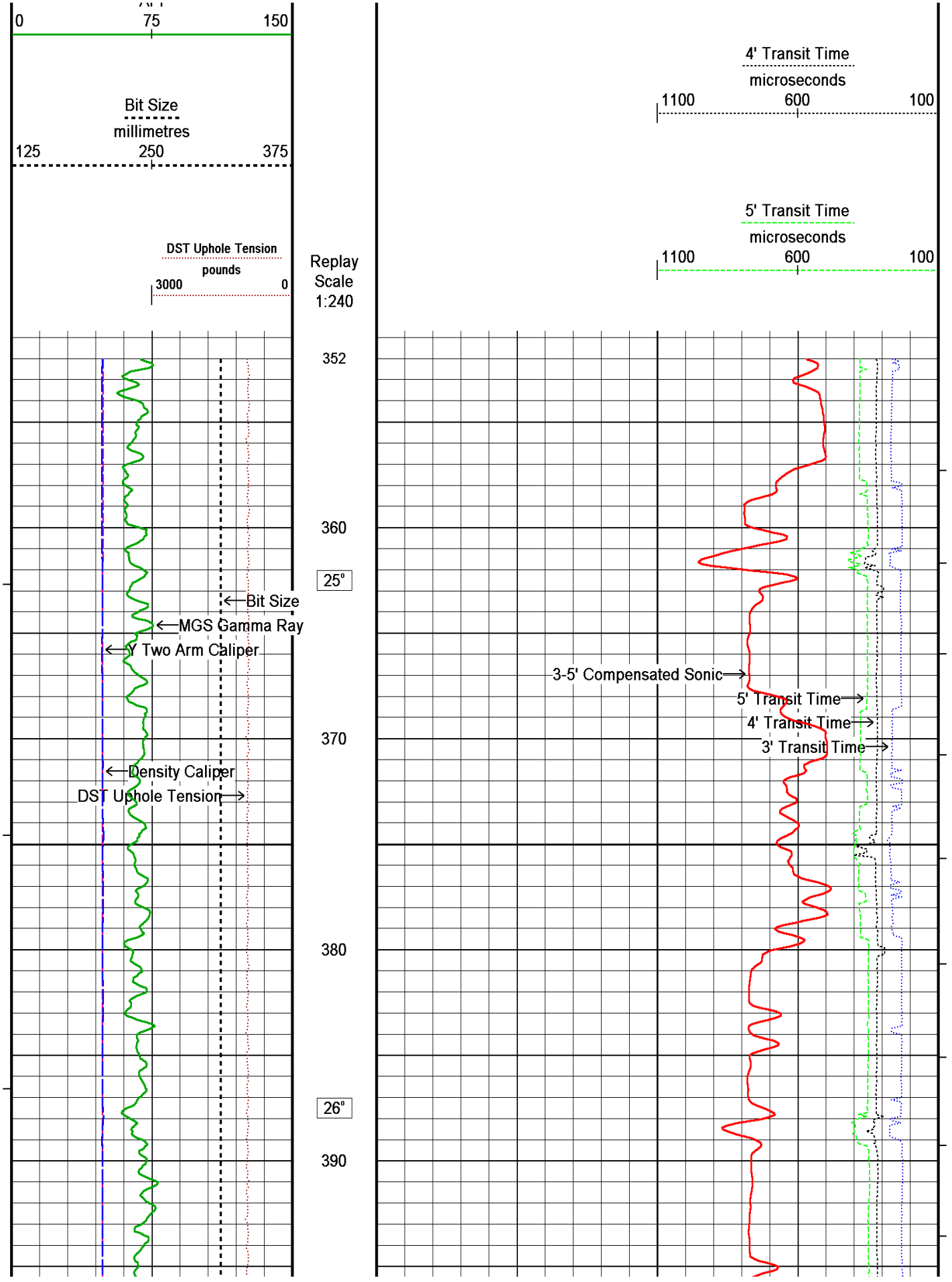

37°
1050
38°
38°
1100
39°
40°
1150
40°
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
3-5' Compensated Sonic

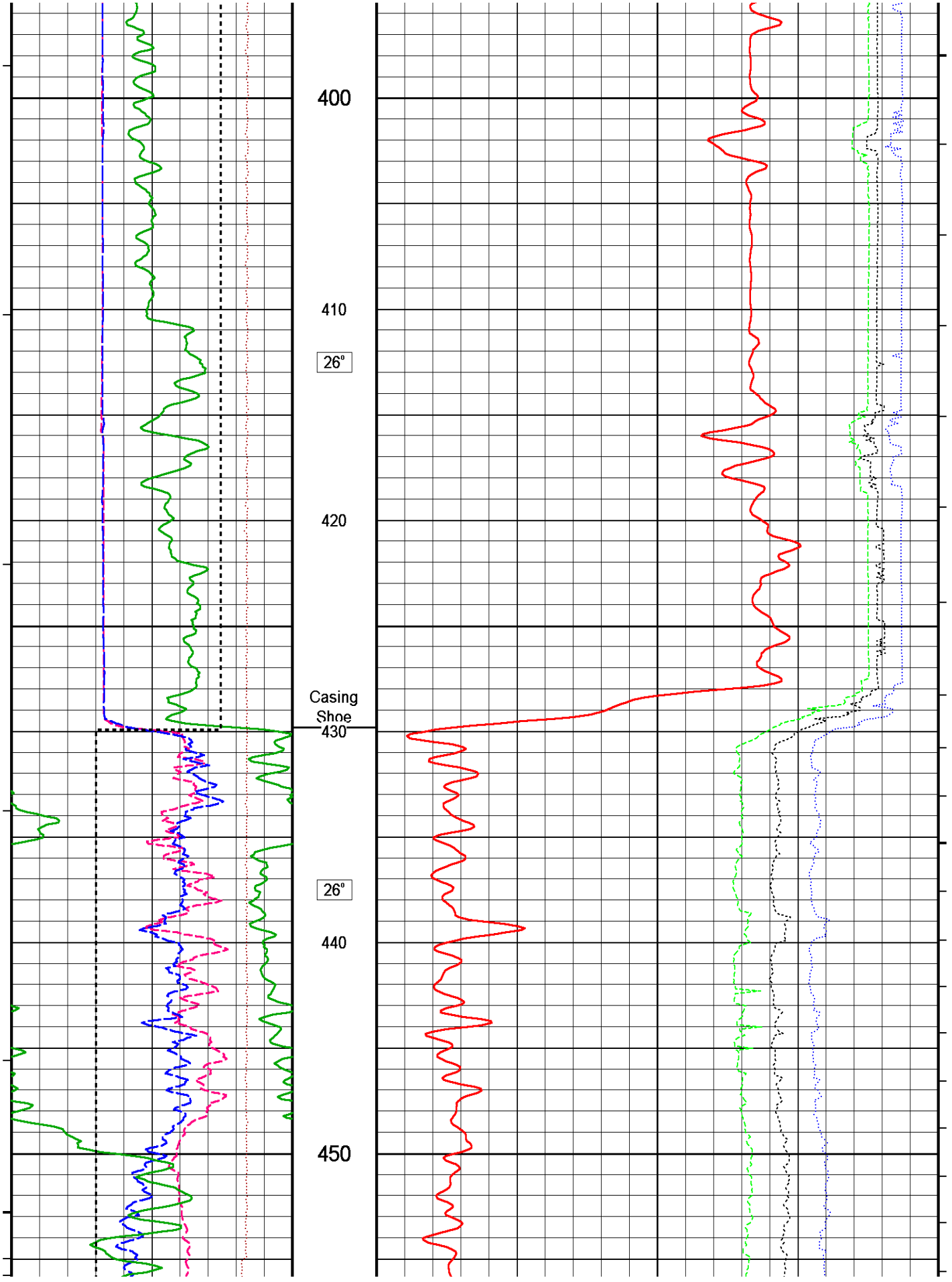

41°
1200
41°
42°
1250
43°
43°
1300
44°

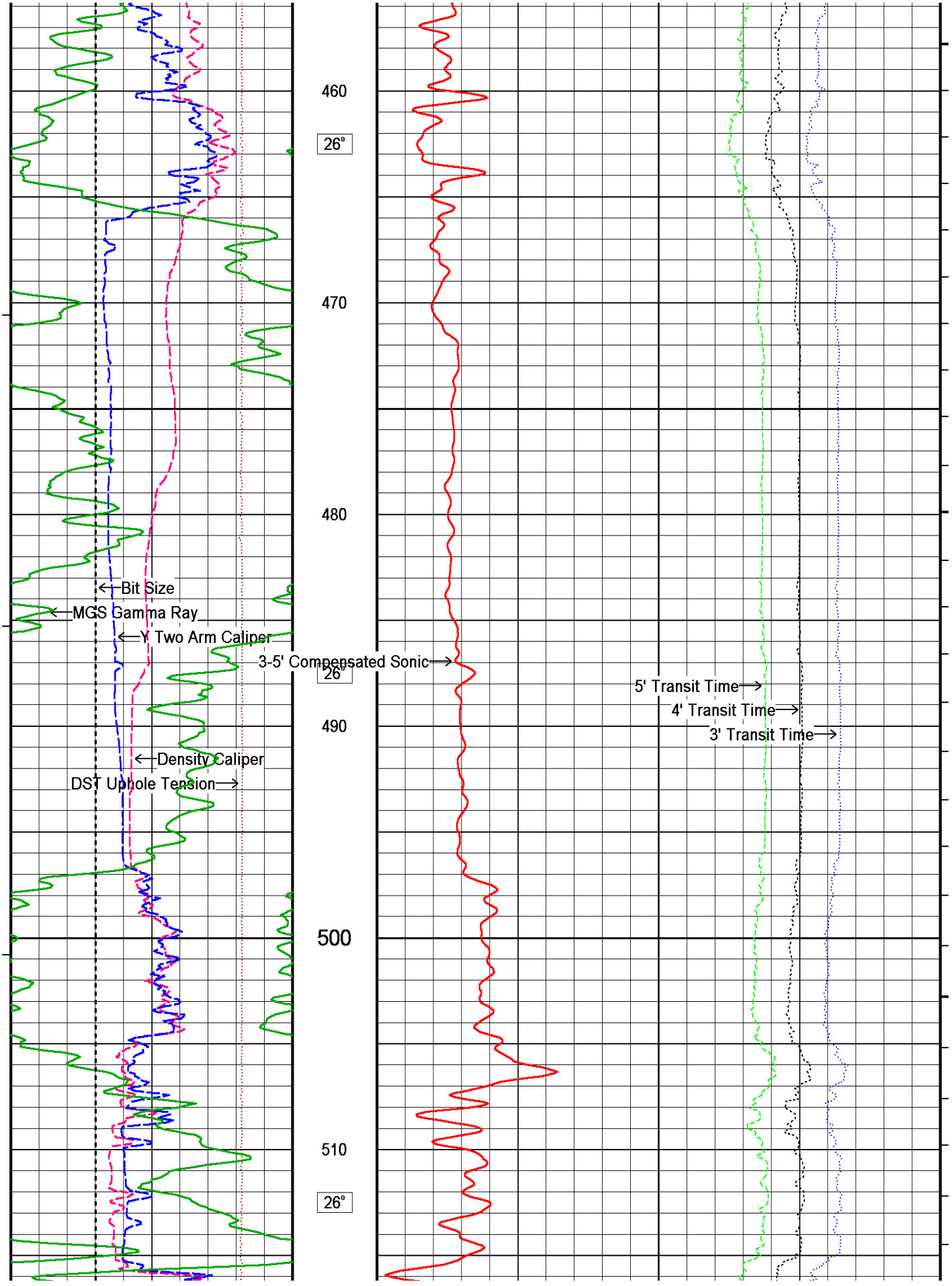

1350
45°
46°
1400
48°
1450
1461
Depth
in
Metres
Timing Marks
every 60.0 sec
Density Caliper
millimetres
125
250
375
3-5' Compensated Sonic
microsec/metre
500
400
300
200
100

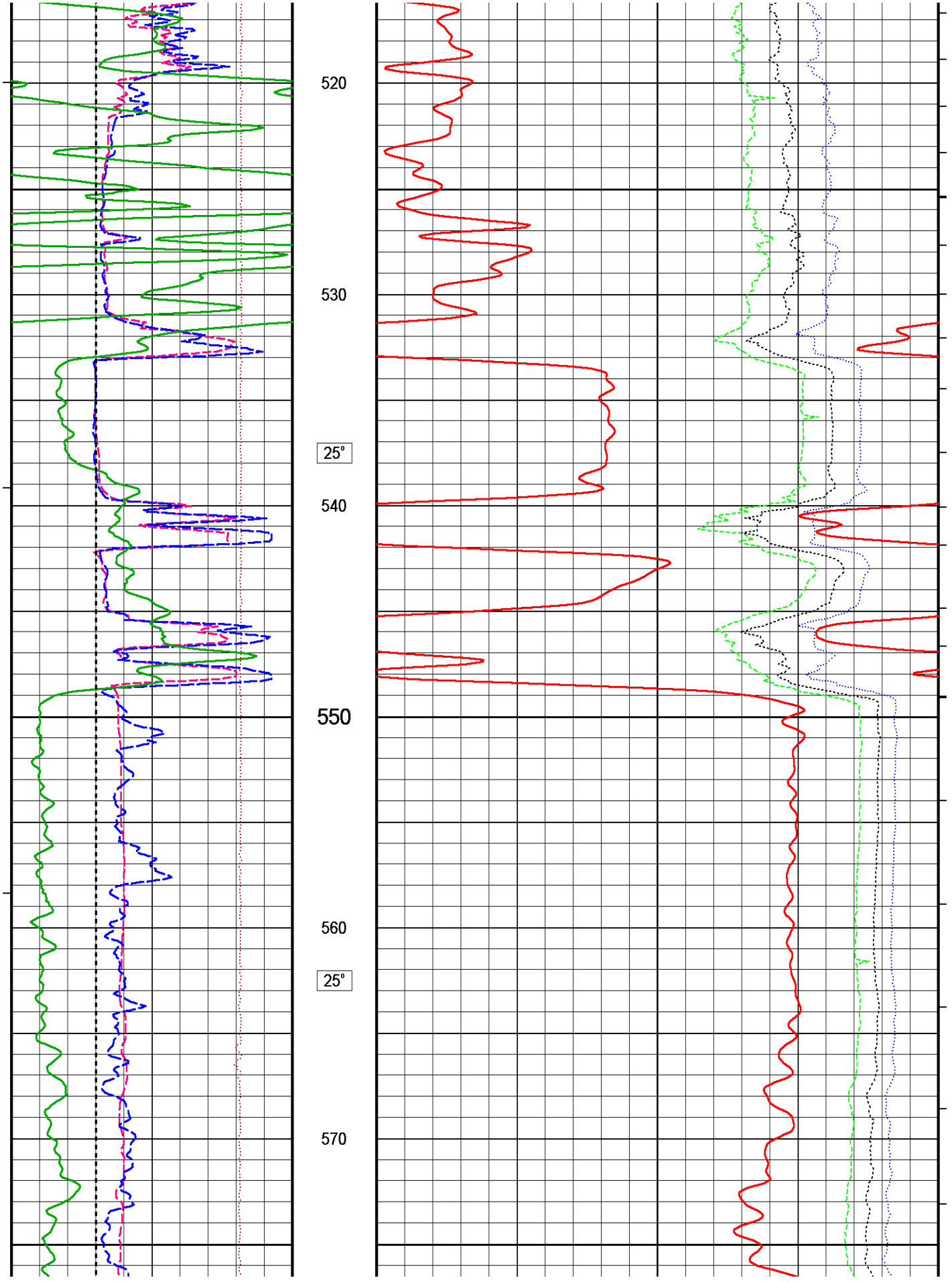

Y Two Arm Caliper
millimetres
125
250
375
MGS Gamma Ray
API
0
75
150
Bit Size
millimetres
125
250
375
DST Uphole Tension
pounds
3000
0
Borehole Temp in deg C
Replay Scale 1:600
Transit Time
every millisec
Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091
Plotted on 12-NOV-2007 09:28
Recorded on 15-FEB-2007 08:46
MAIN LOG 1:600

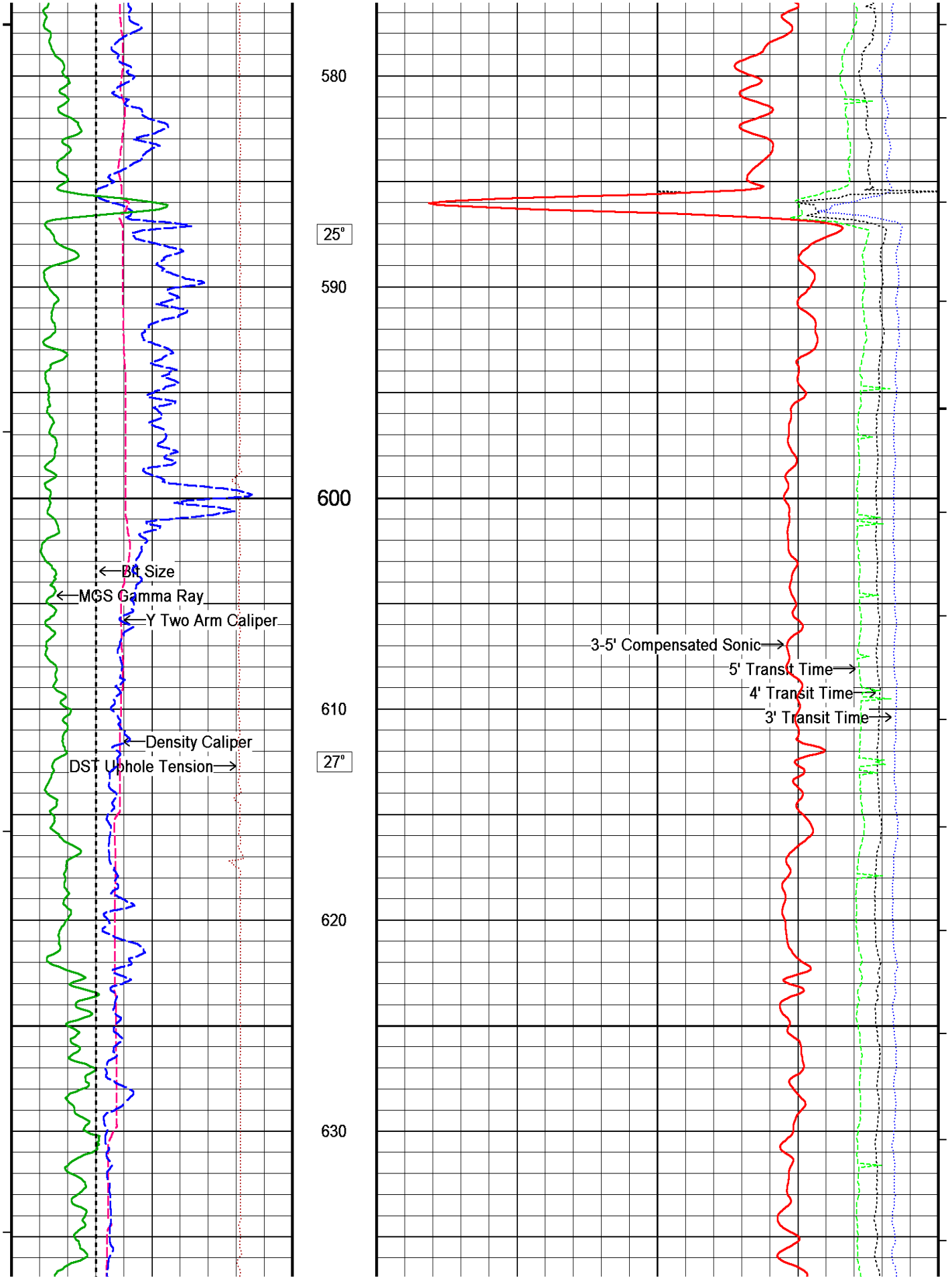

MAIN LOG 1:240
Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091
Plotted on 12-NOV-2007 09:28
Recorded on 15-FEB-2007 08:46
Depth in Metres
Timing Marks
every 60.0 sec
3-5' Compensated Sonic
microsec/metre
500
400
300
200
100
Density Caliper
millimetres
125
250
375
Transit Time
every millisec
Y Two Arm Caliper
millimetres
125
250
375
3' Transit Time
microseconds
1100
600
100
Borehole Temp in deg C
MGS Gamma Ray
API

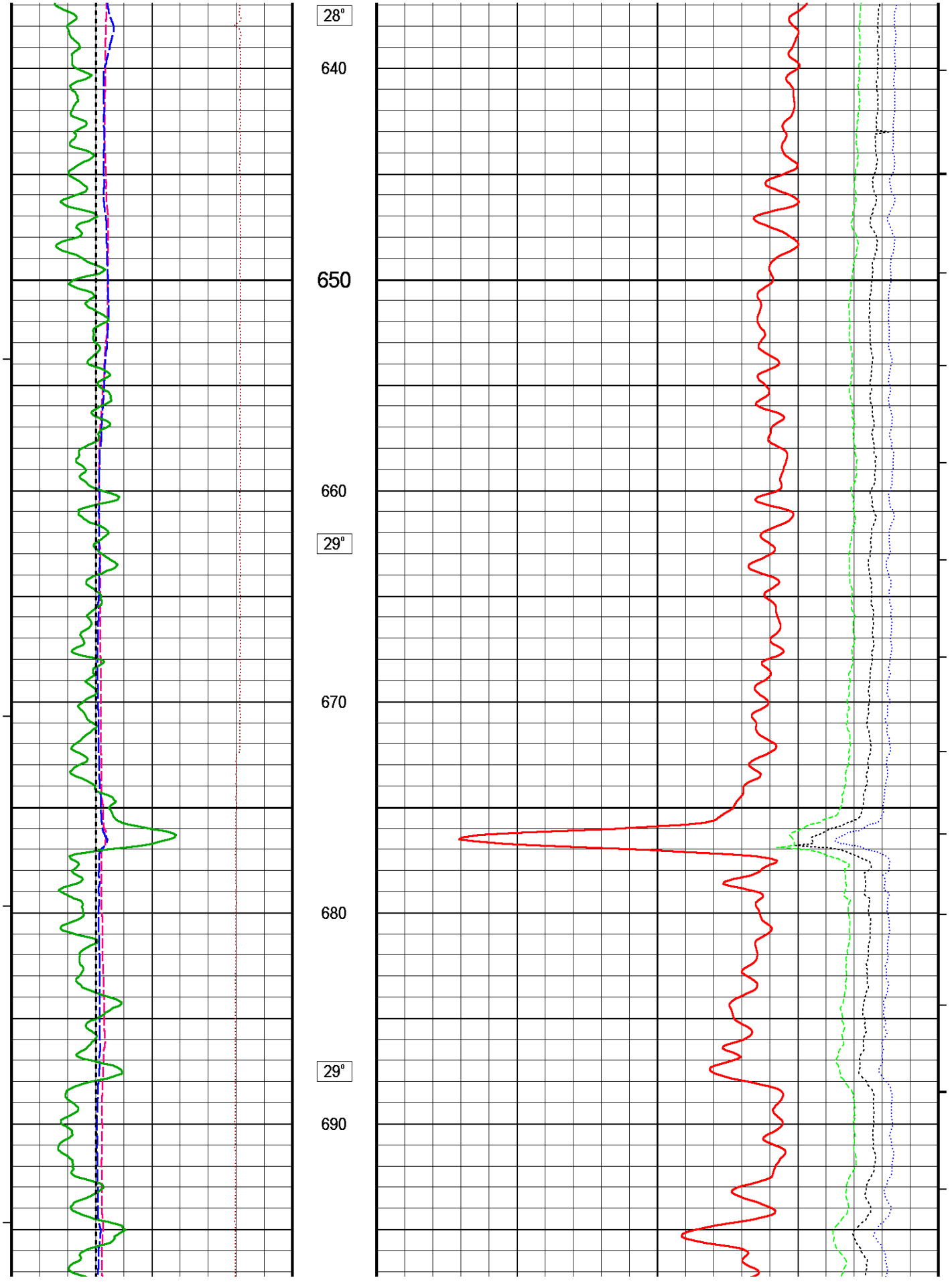

0
75
150
Bit Size
millimetres
125
250
375
DST Uphole Tension
pounds
3000
0
Replay
Scale
1:240
4' Transit Time
microseconds
1100
600
100
5' Transit Time
microseconds
1100
600
100
352
360
25°
370
380
26°
390
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
3-5' Compensated Sonic
5' Transit Time
4' Transit Time
3' Transit Time

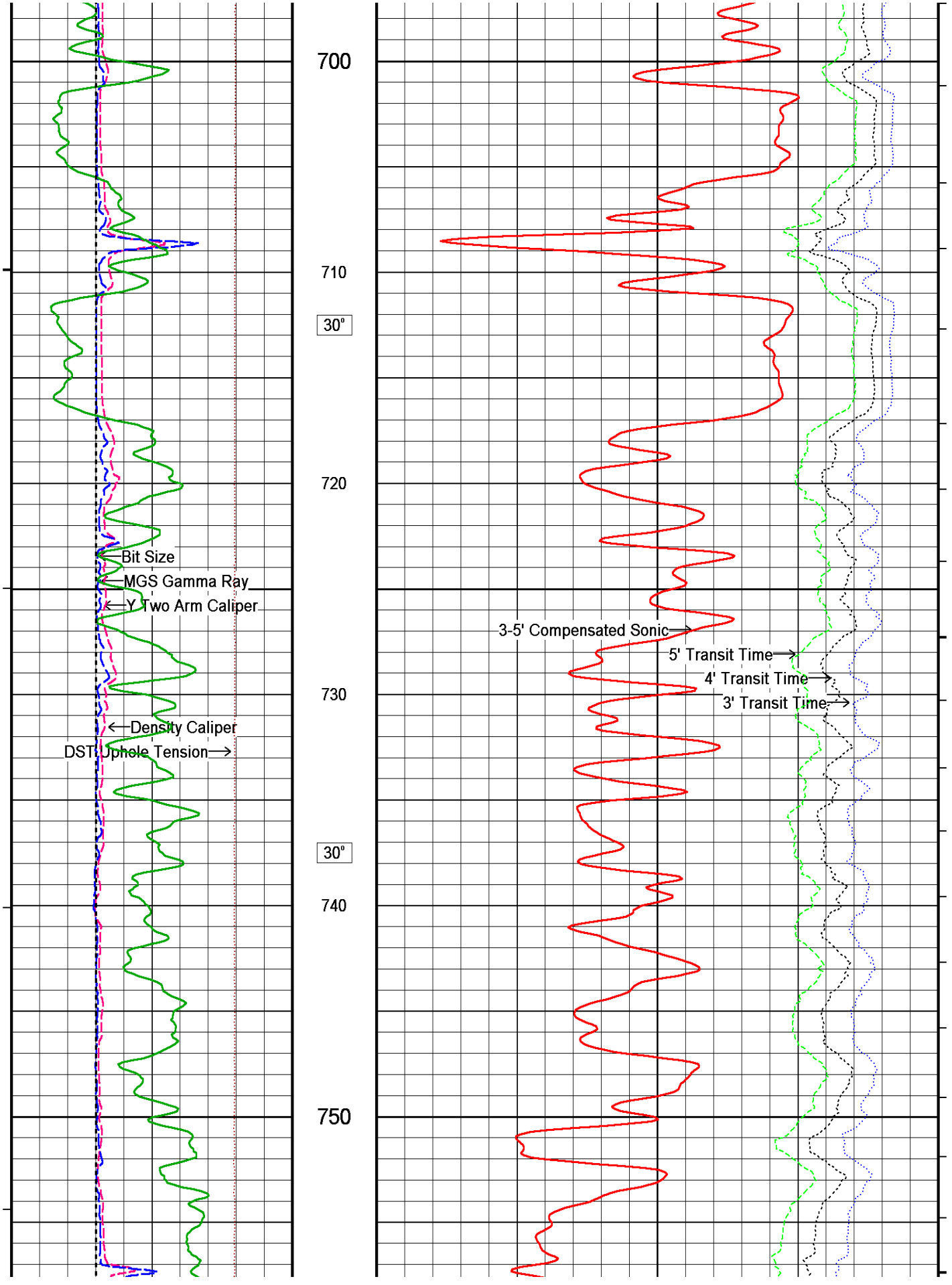

400
410
26°
420
Casing
Shoe
430
26°
440
450

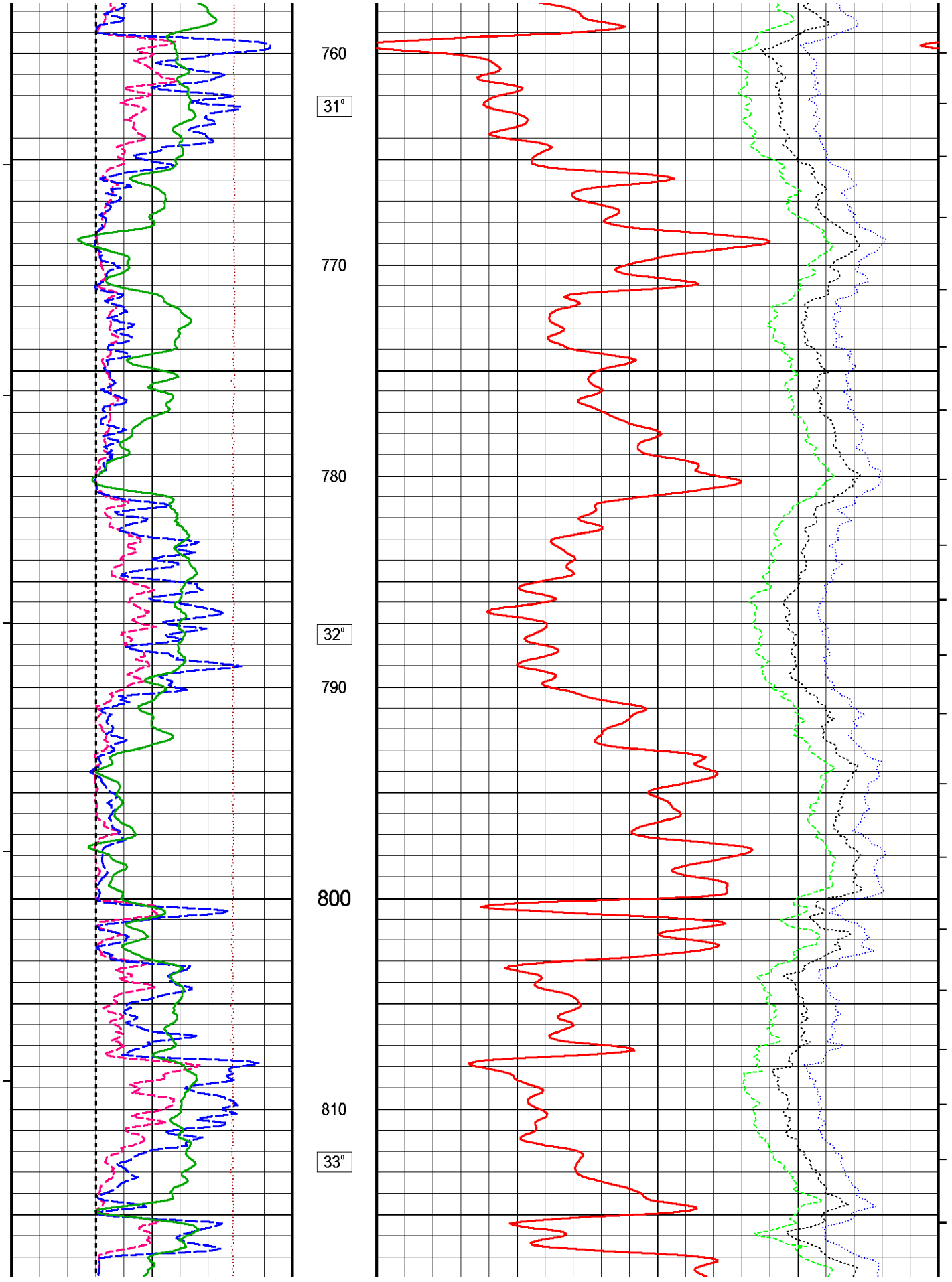

460
26°
470
480
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
3-5' Compensated Sonic
26°
490
Density Caliper
DST Uphole Tension
5' Transit Time
4' Transit Time
3' Transit Time
500
510
26°

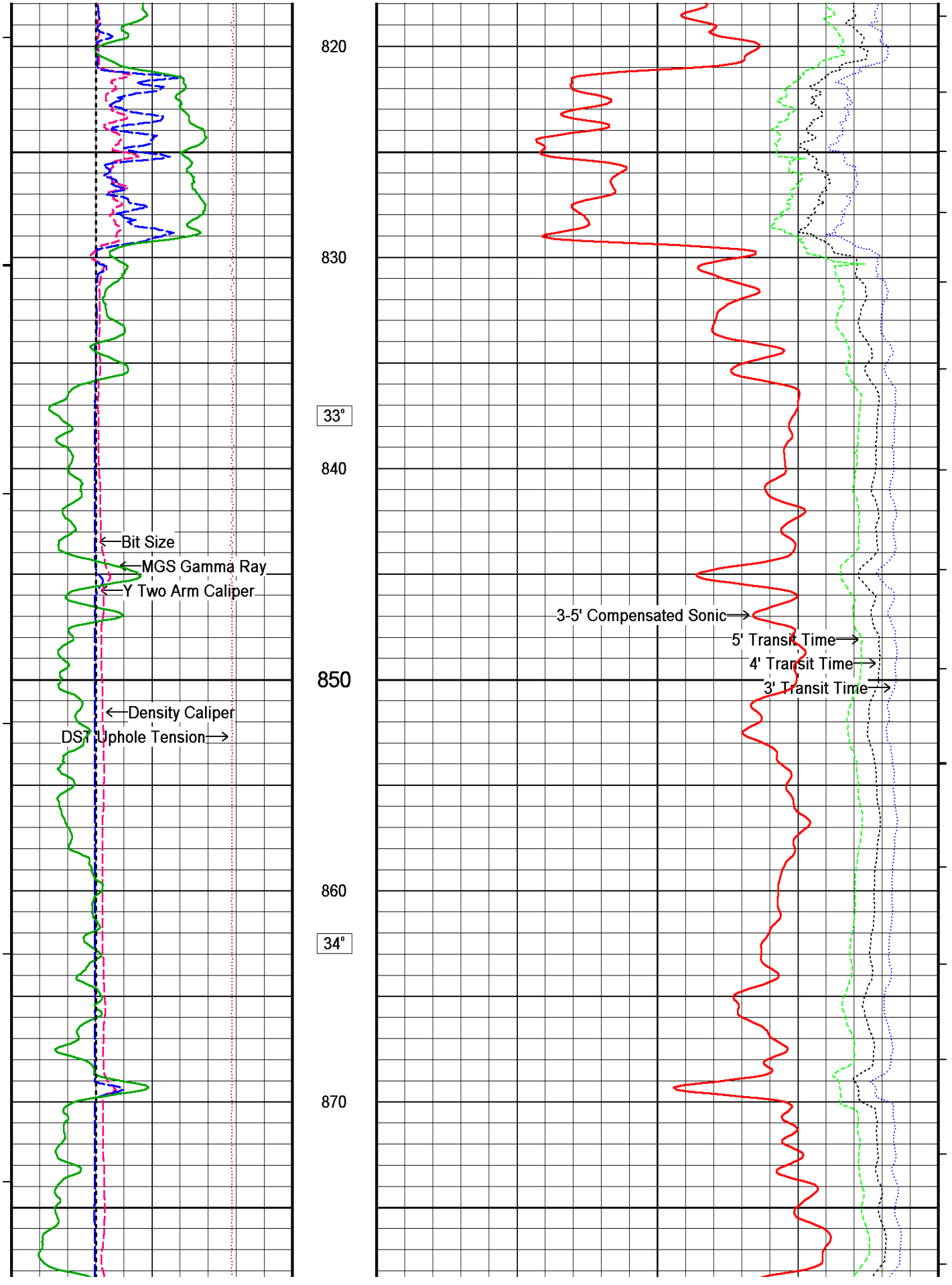

520
530
25°
540
550
560
25°
570

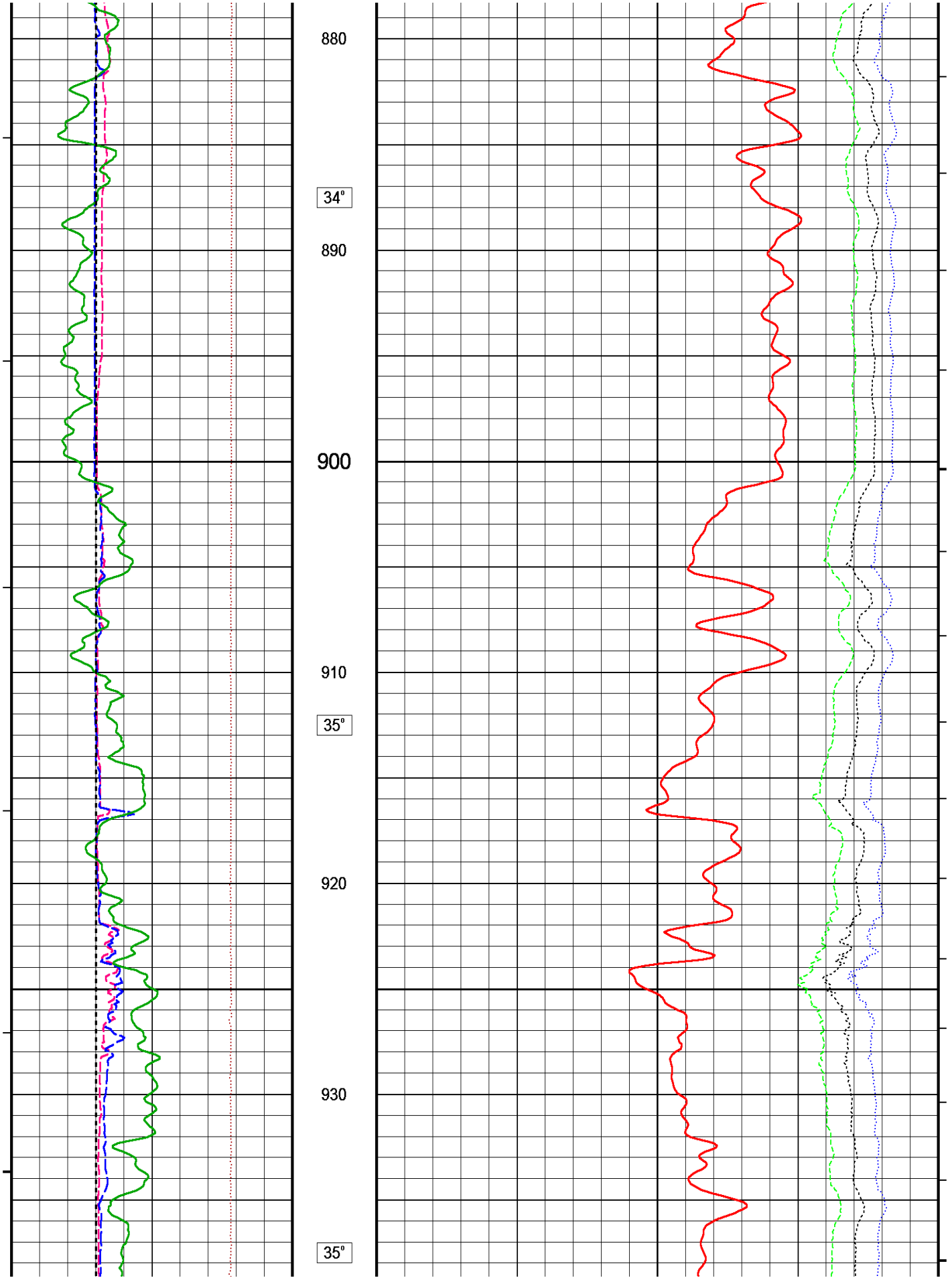

580
25°
590
600
610
27°
620
630
←Bit Size
←MGS Gamma Ray
←Y Two Arm Caliper
←Density Caliper
DST Uphole Tension→
3-5' Compensated Sonic→
5' Transit Time→
4' Transit Time→
3' Transit Time→

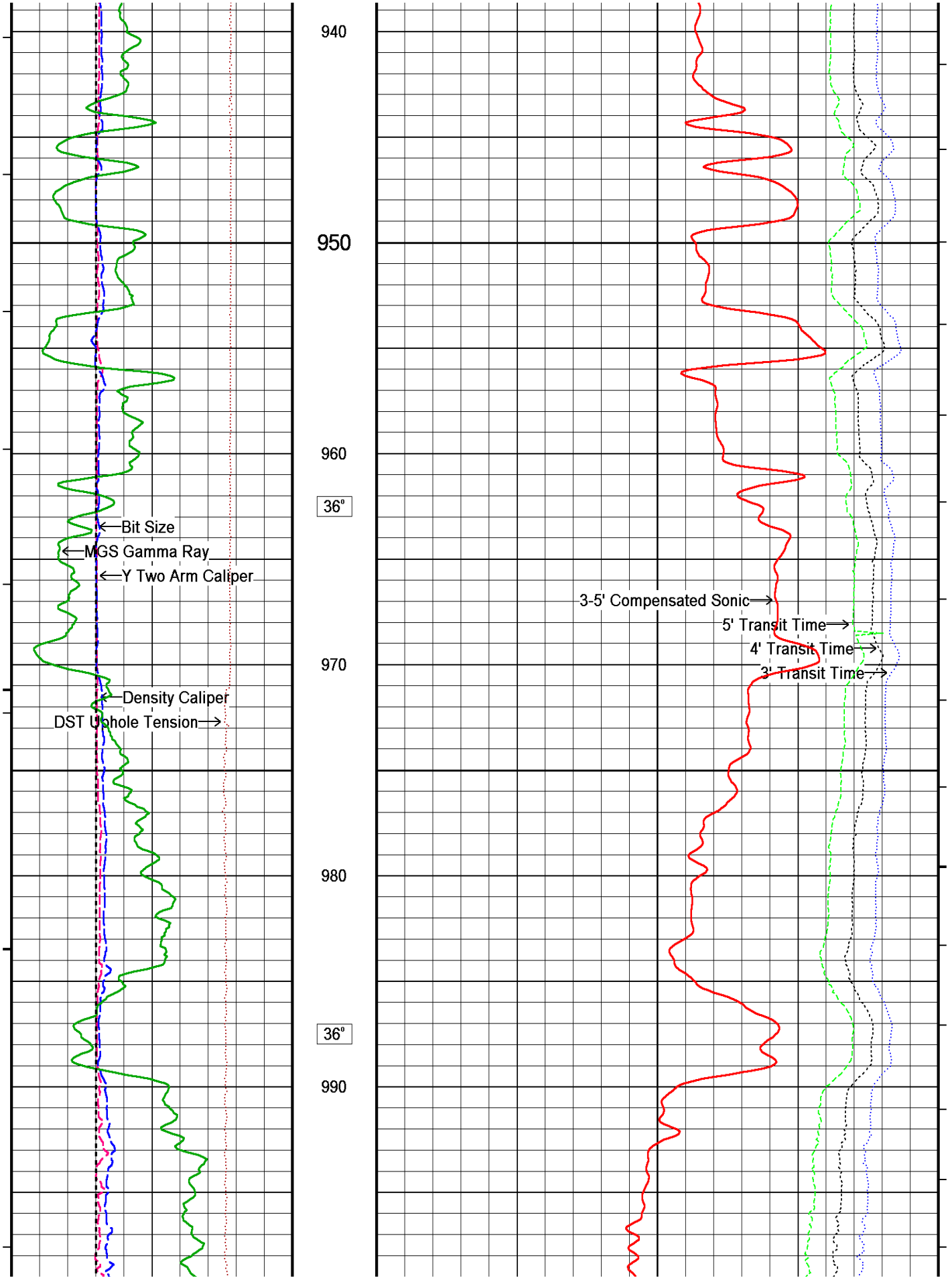

28°
640
650
660
29°
670
680
29°
690

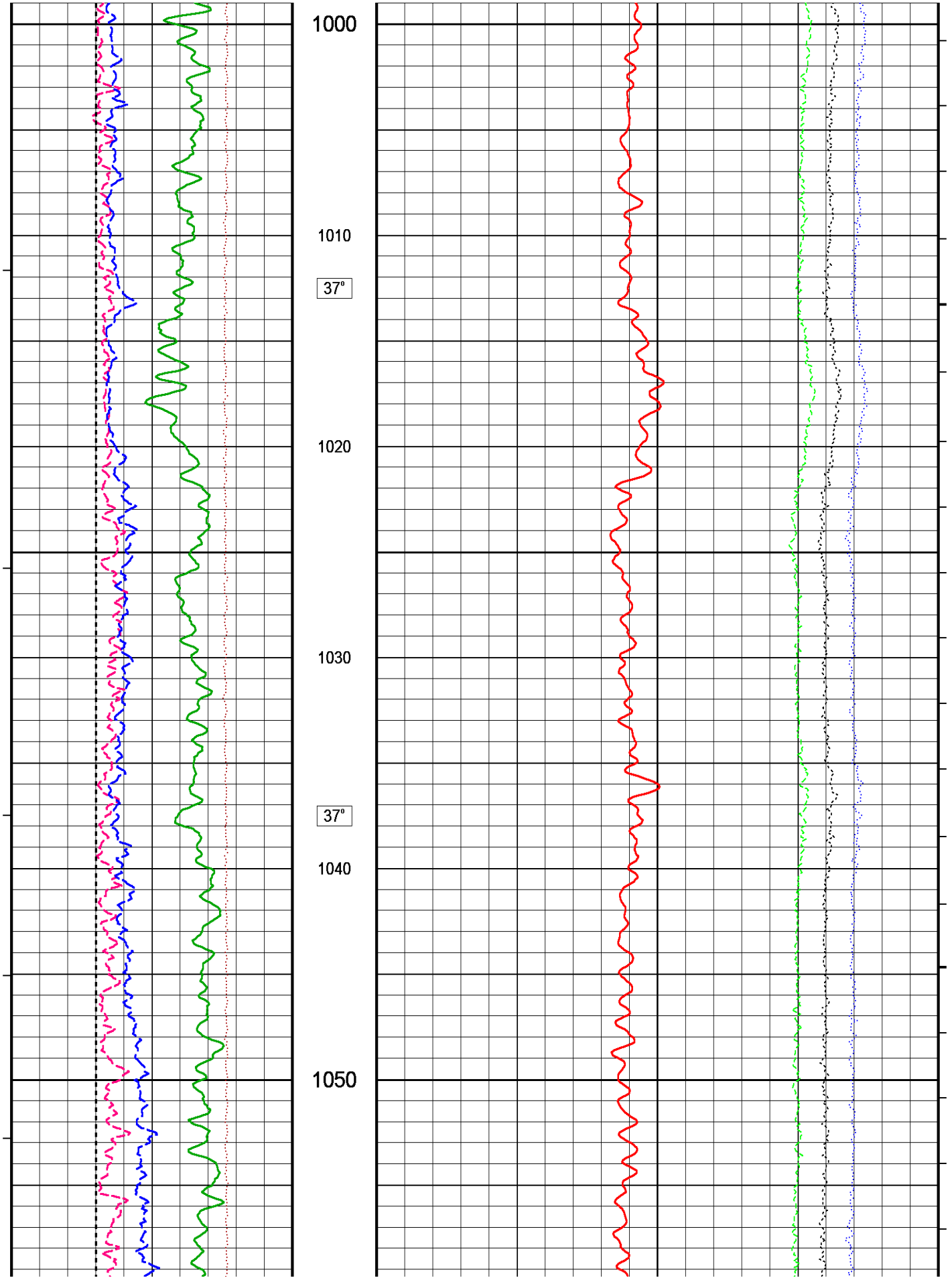

700
710
30°
720
730
30°
740
750
←Bit Size
←MGS Gamma Ray
←Y Two Arm Caliper
←Density Caliper
DST Uphole Tension→
3-5' Compensated Sonic→
5' Transit Time→
4' Transit Time→
3' Transit Time→

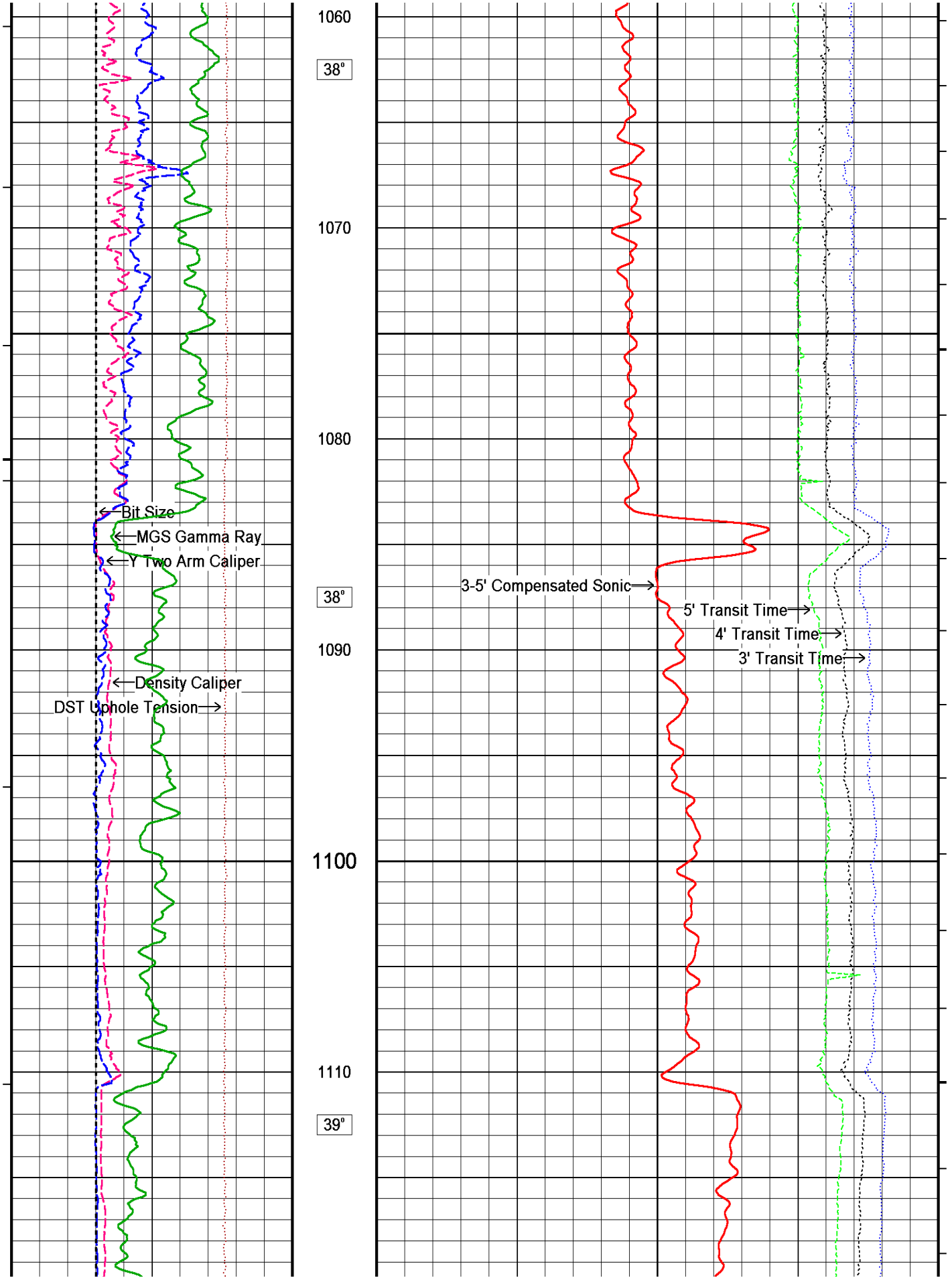

760
31°
770
780
32°
790
800
810
33°

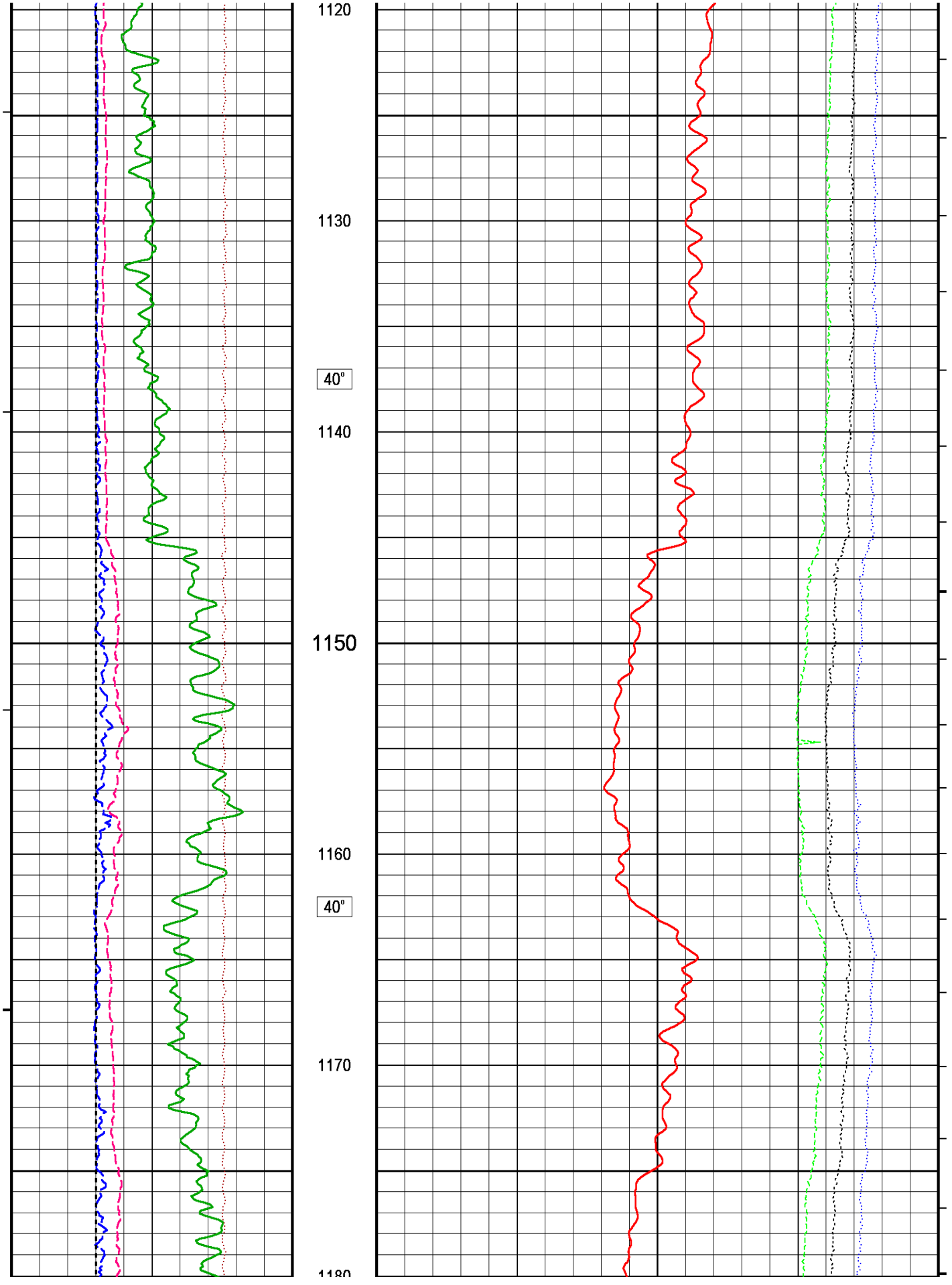

820
830
33°
840
850
860
34°
870
←Bit Size
←MGS Gamma Ray
←Y Two Arm Caliper
←Density Caliper
DS7 Uphole Tension→
3-5' Compensated Sonic→
5' Transit Time→
4' Transit Time→
3' Transit Time→

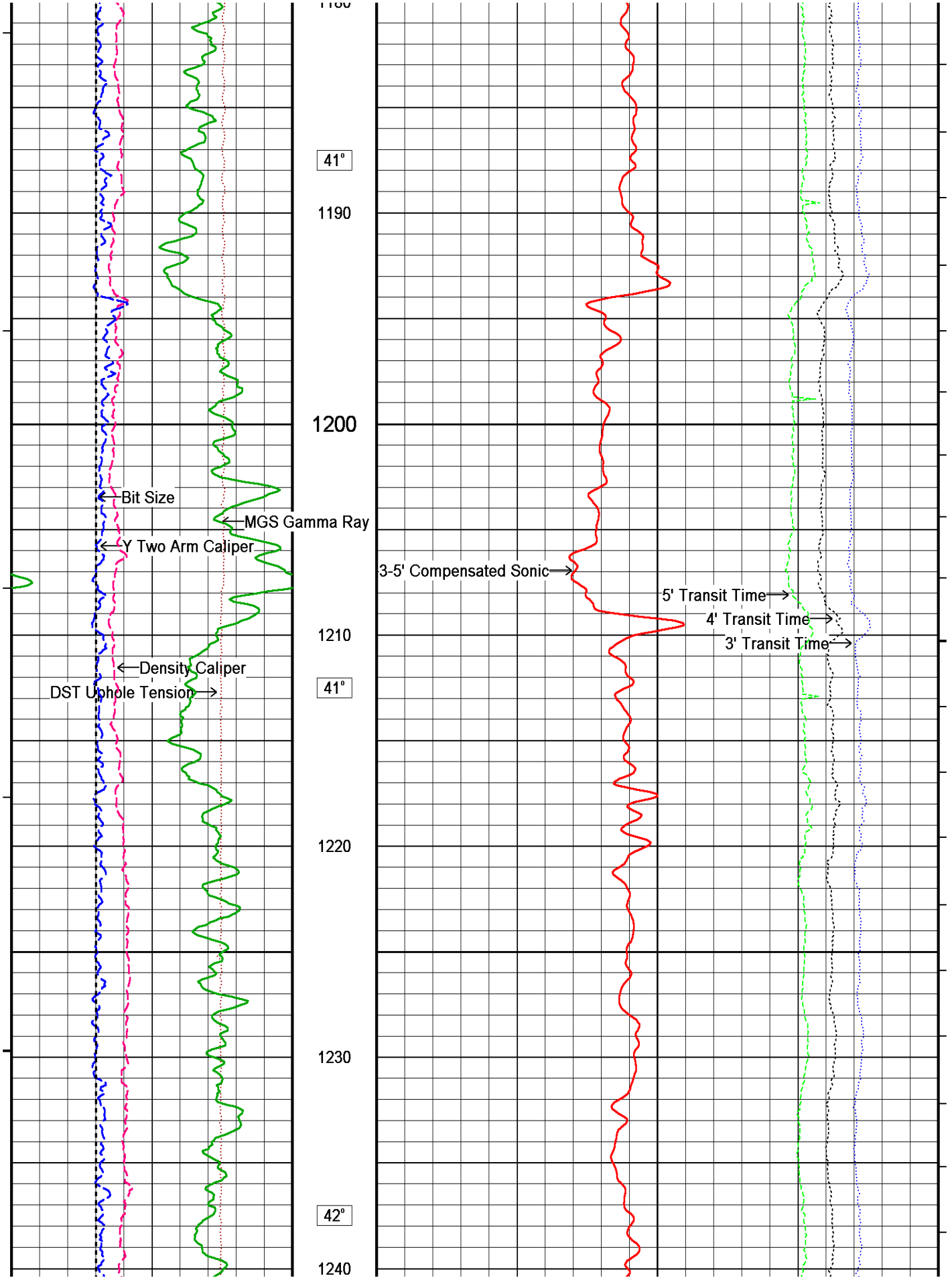

880
34°
890
900
910
35°
920
930
35°

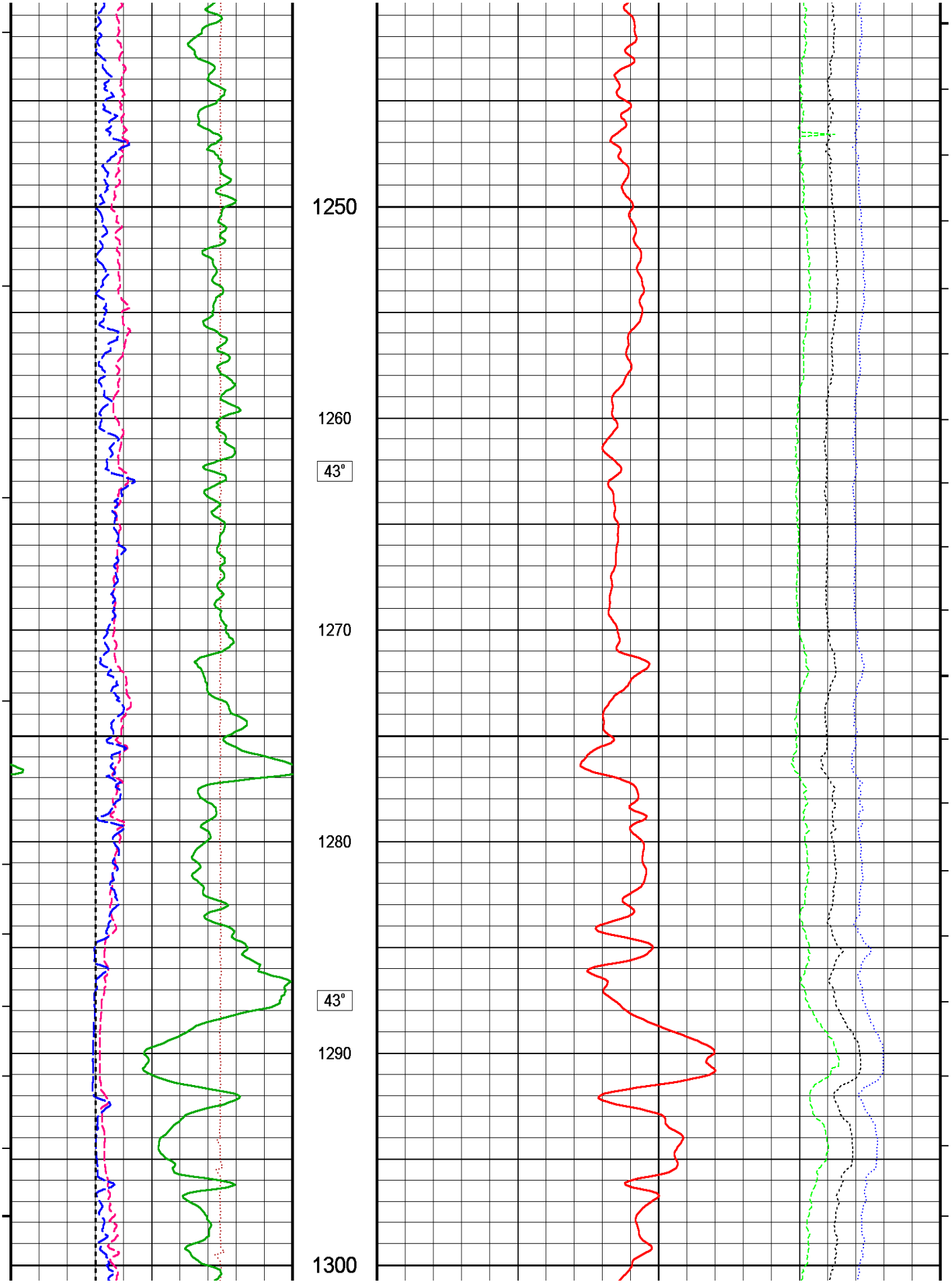

940
950
960
36°
970
980
36°
990
←Bit Size
←MGS Gamma Ray
←Y Two Arm Caliper
←Density Caliper
DST Uphole Tension→
3-5' Compensated Sonic→
5' Transit Time→
4' Transit Time→
3' Transit Time→

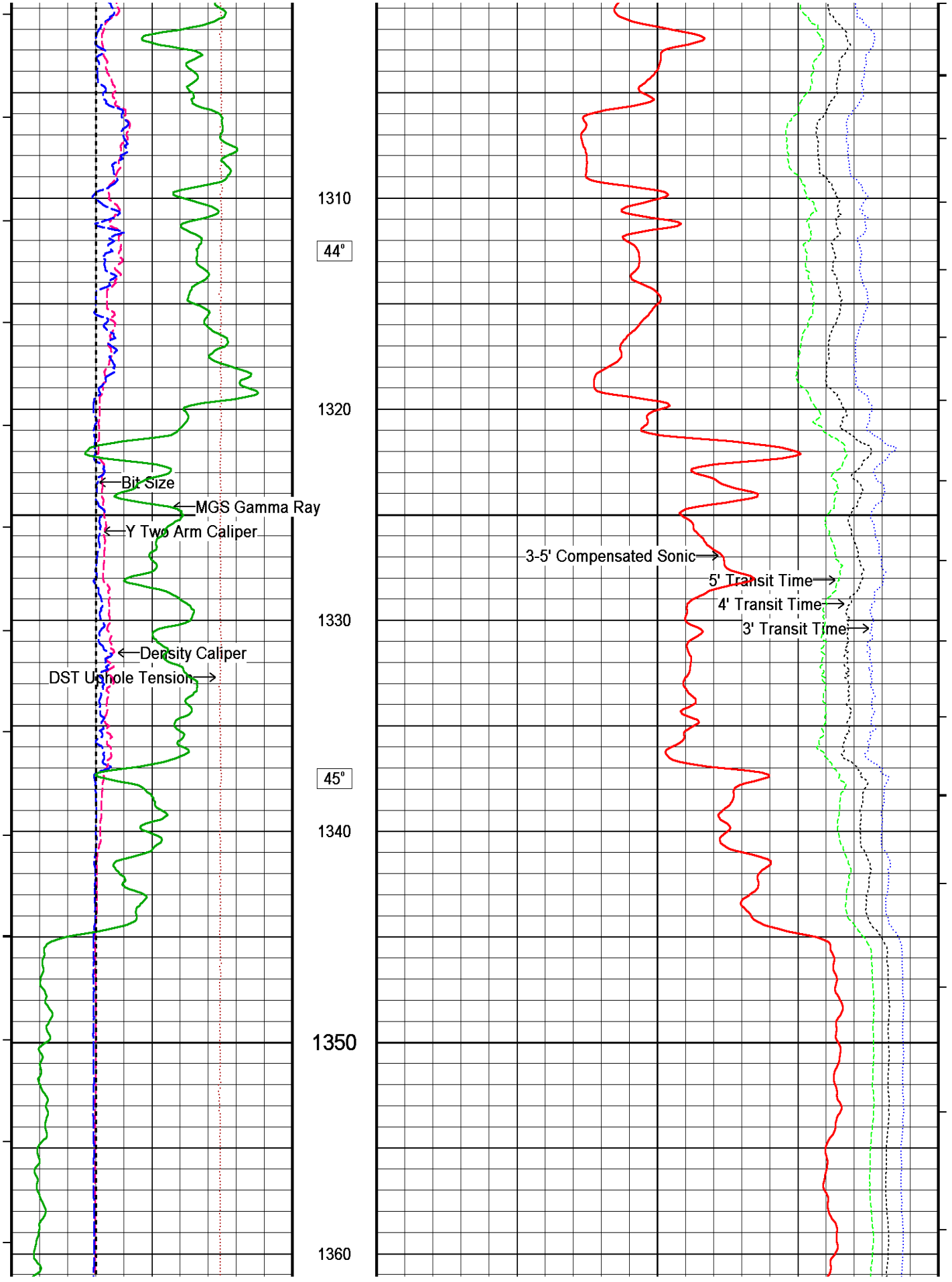

1000
1010
37°
1020
1030
37°
1040
1050

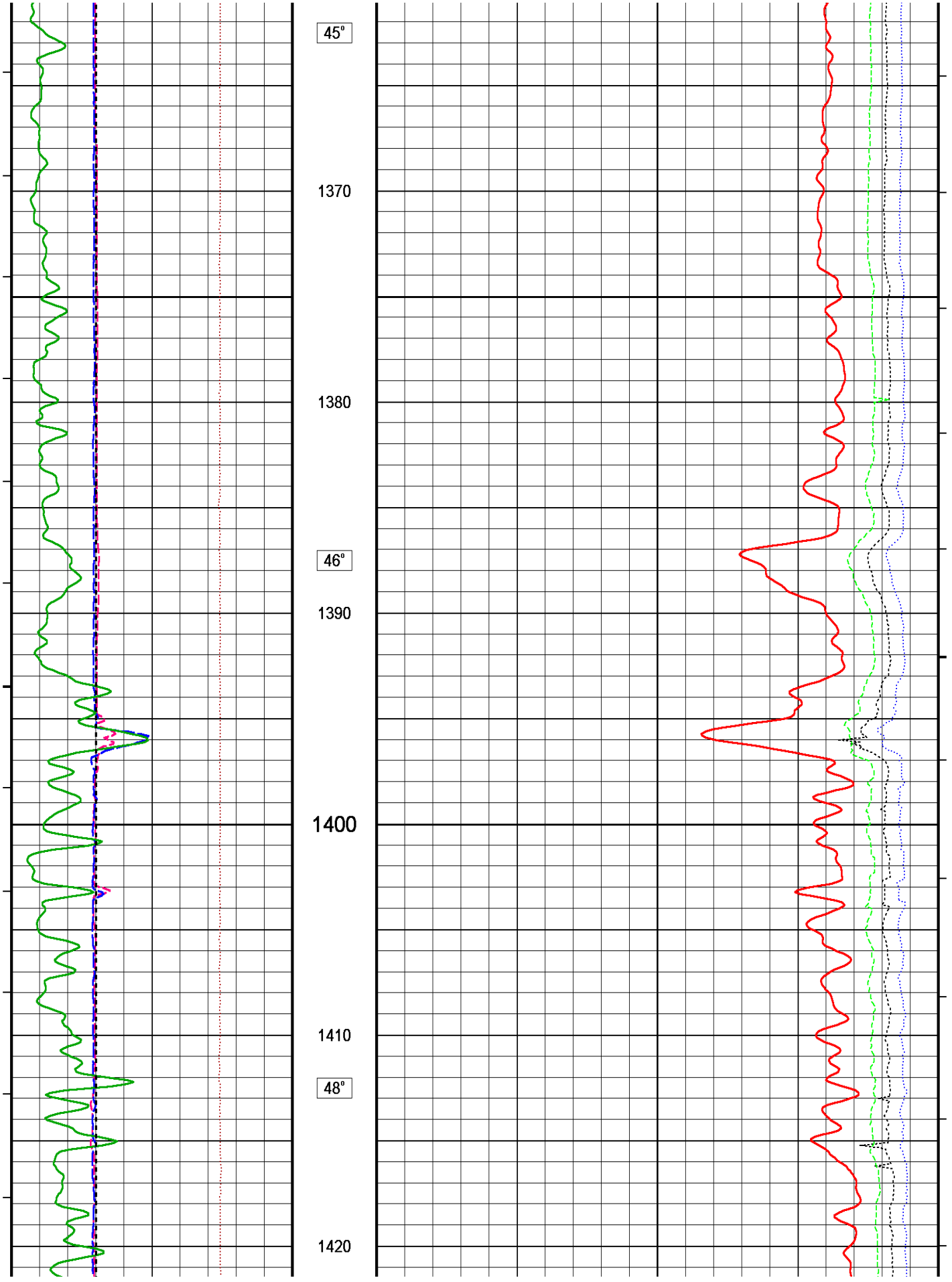

1060
38°
1070
1080
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
38°
1090
Density Caliper
DST Uphole Tension
1100
1110
39°
3-5' Compensated Sonic
5' Transit Time
4' Transit Time
3' Transit Time

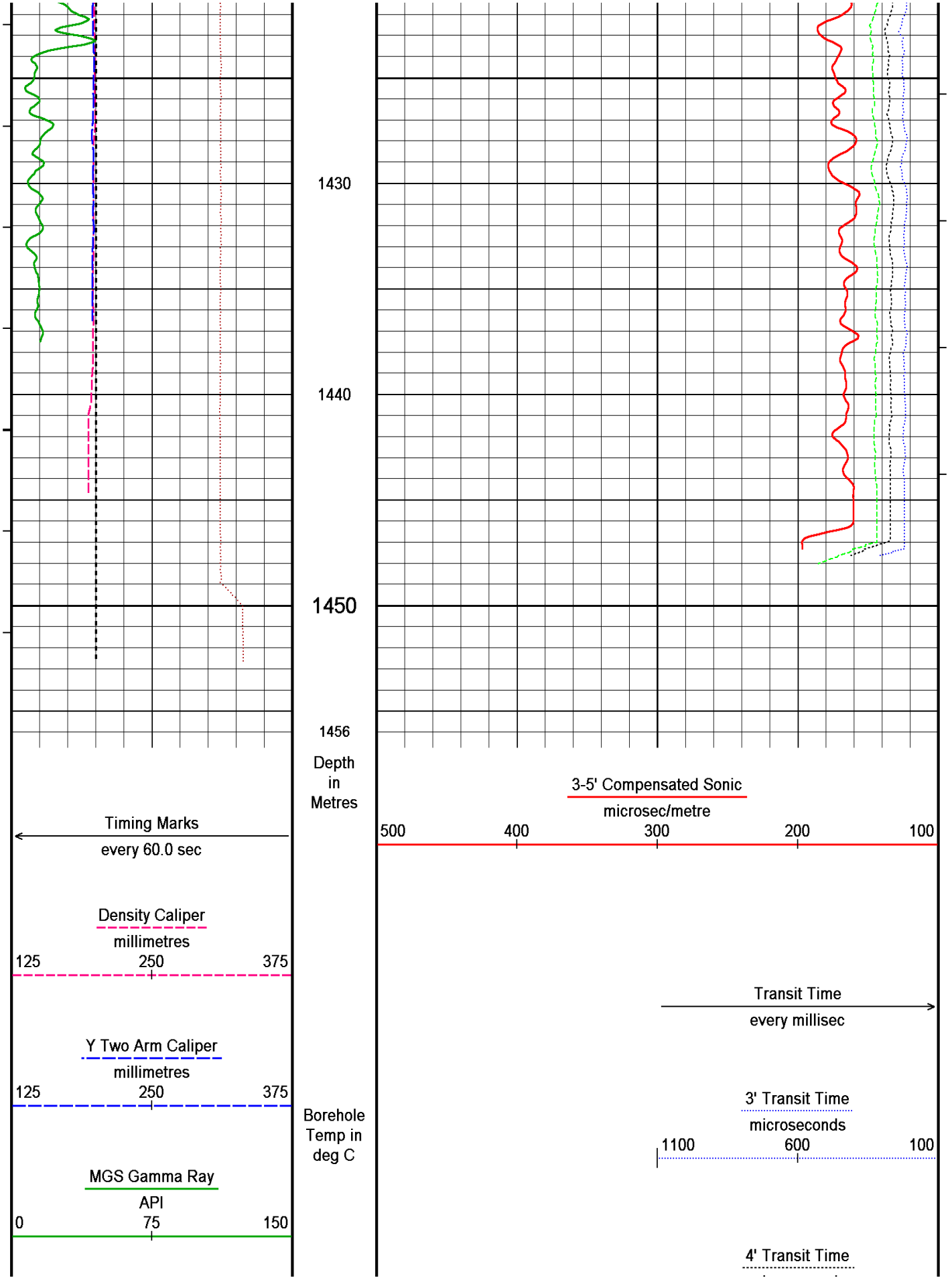

1120
1130
40°
1140
1150
1160
40°
1170
1180

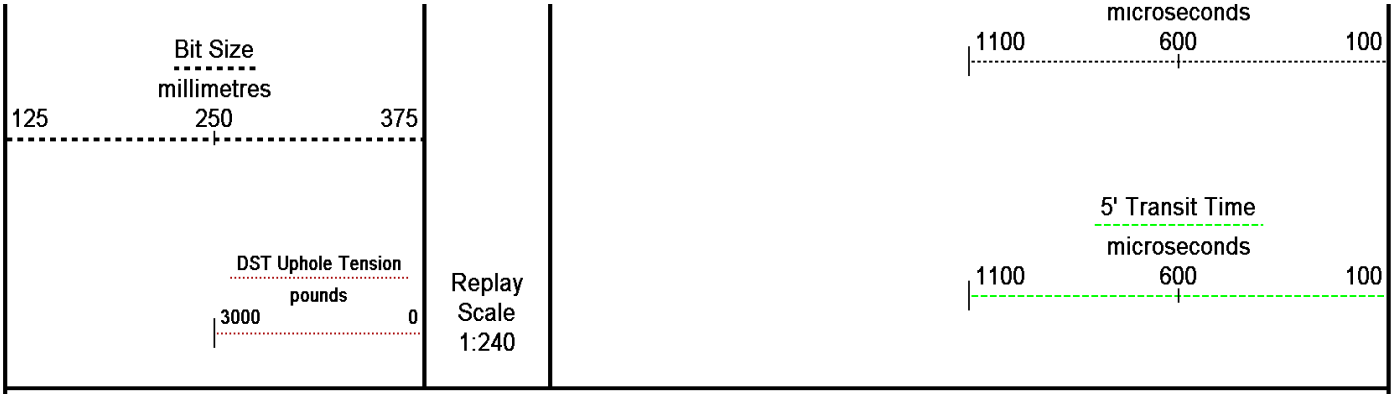

41°
1190
1200
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
3-5' Compensated Sonic
5' Transit Time
4' Transit Time
3' Transit Time
1210
Density Caliper
DST Uphole Tension
41°
1220
1230
42°
1240


1250
1260
43°
1270
1280
43°
1290
1300


1310
44°
1320
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
3-5' Compensated Sonic
5' Transit Time
4' Transit Time
3' Transit Time
1330
Density Caliper
DST Uphole Tension
45°
1340
1350
1360


45°
1370
1380
46°
1390
1400
1410
48°
1420


1430
1440
1450
1456
Depth in Metres
Timing Marks
every 60.0 sec
Density Caliper
millimetres
125
250
375
Y Two Arm Caliper
millimetres
125
250
375
Borehole Temp in deg C
MGS Gamma Ray
API
0
75
150
3-5' Compensated Sonic
microsec/metre
500
400
300
200
100
Transit Time
every millisec
3' Transit Time
microseconds
1100
600
100
4' Transit Time



Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

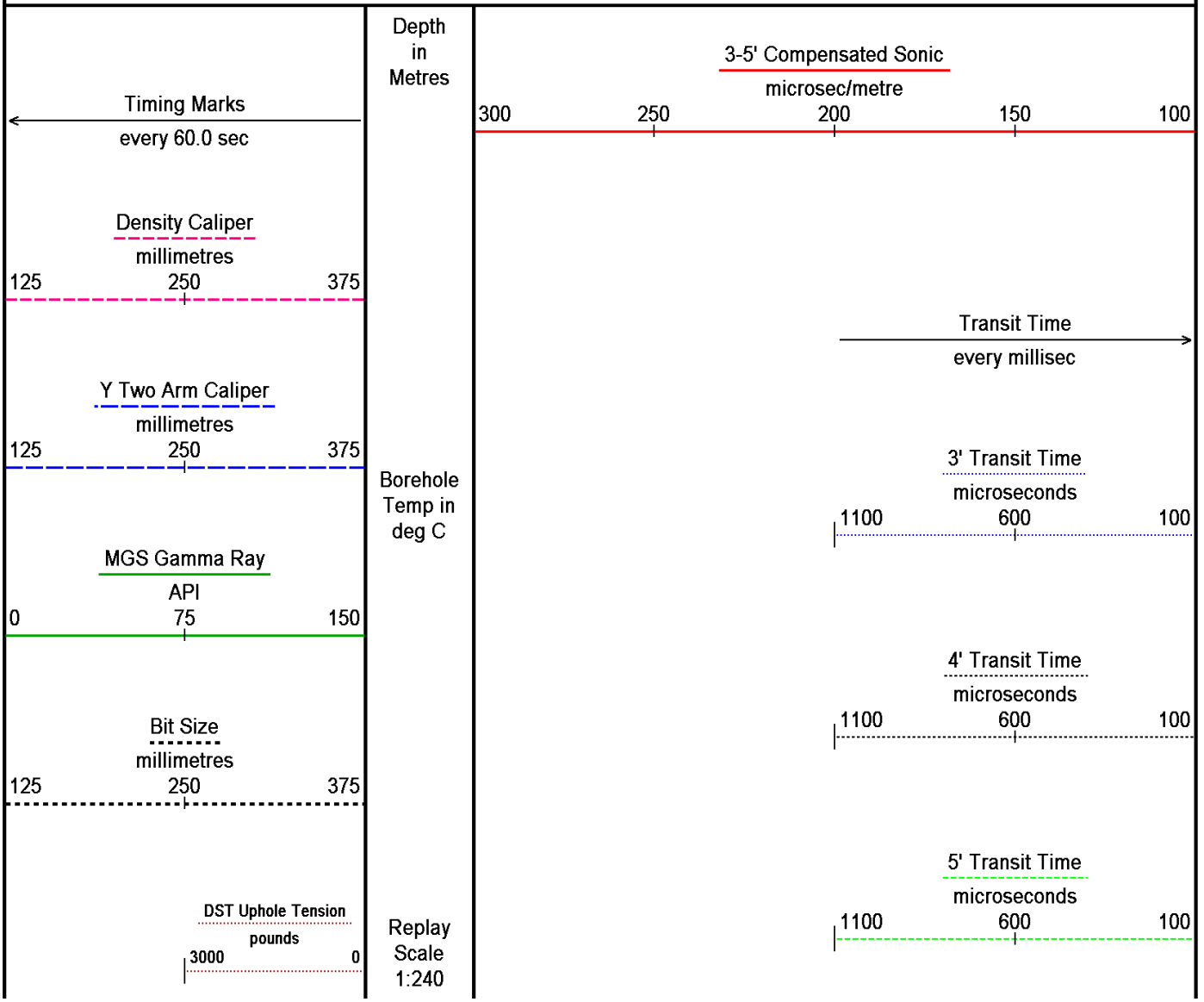
Plotted on 12-NOV-2007 09:28
Recorded on 15-FEB-2007 08:46

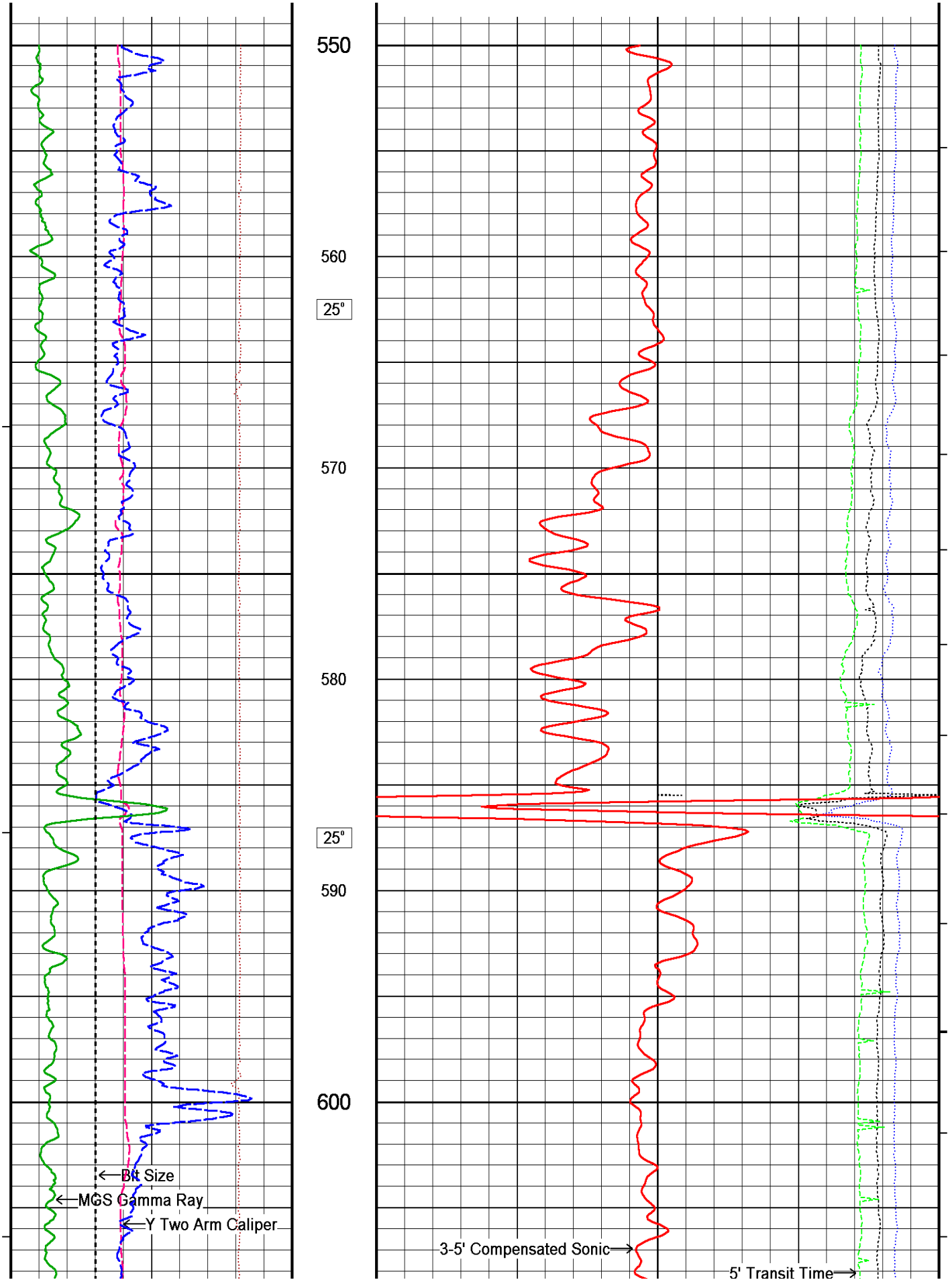
MAIN LOG 1:240

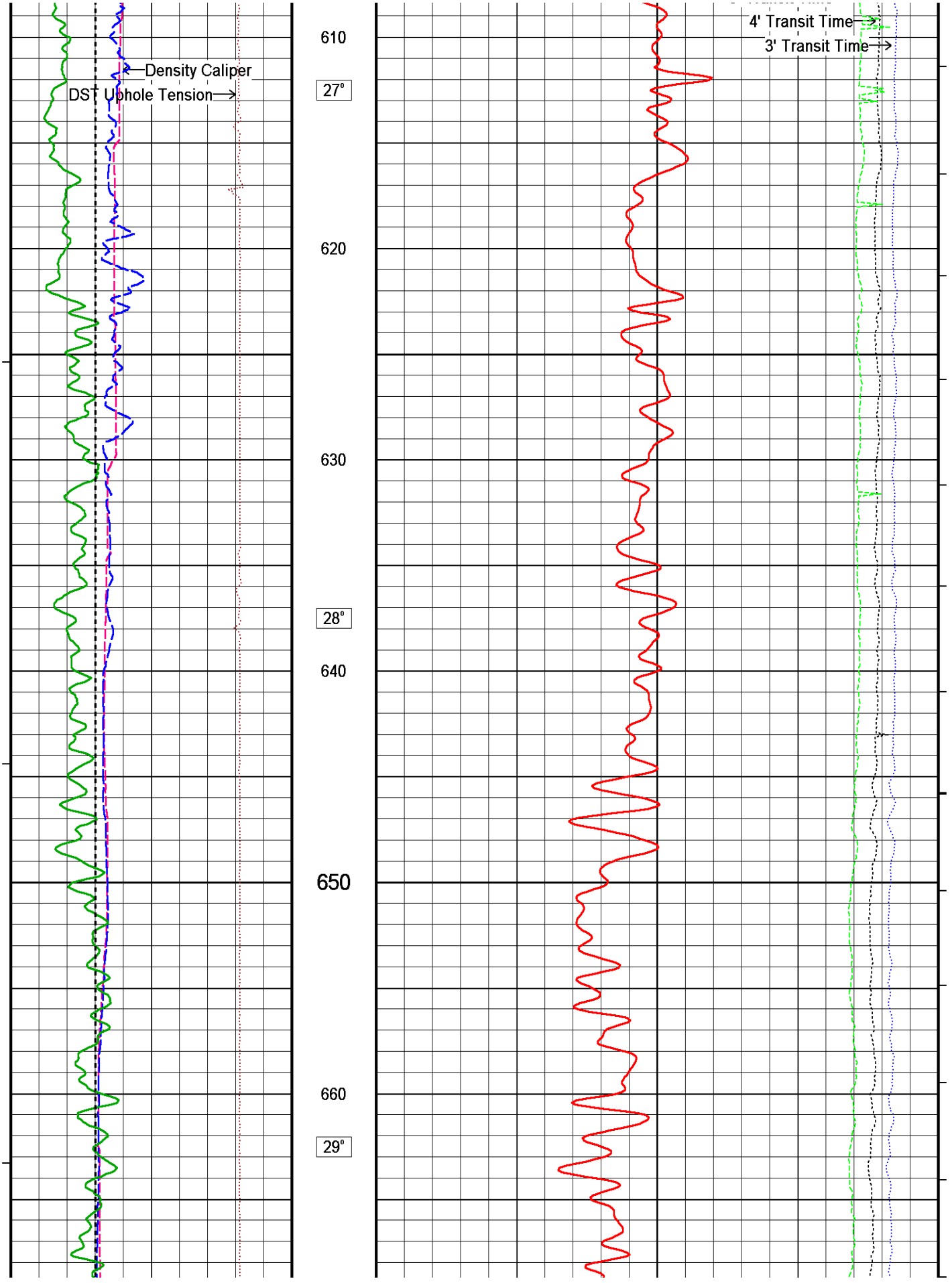
MAIN LOG 1:240

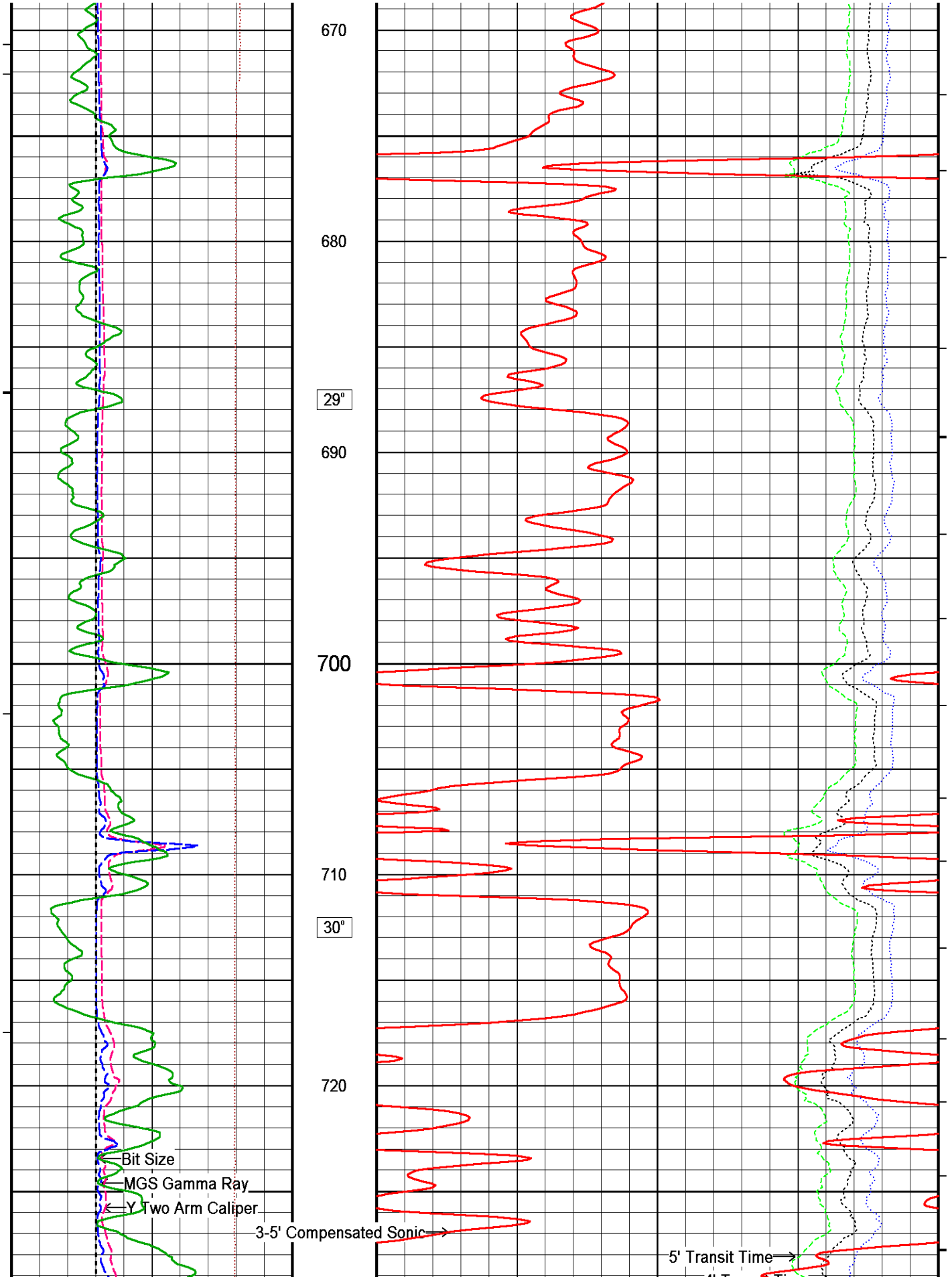
Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

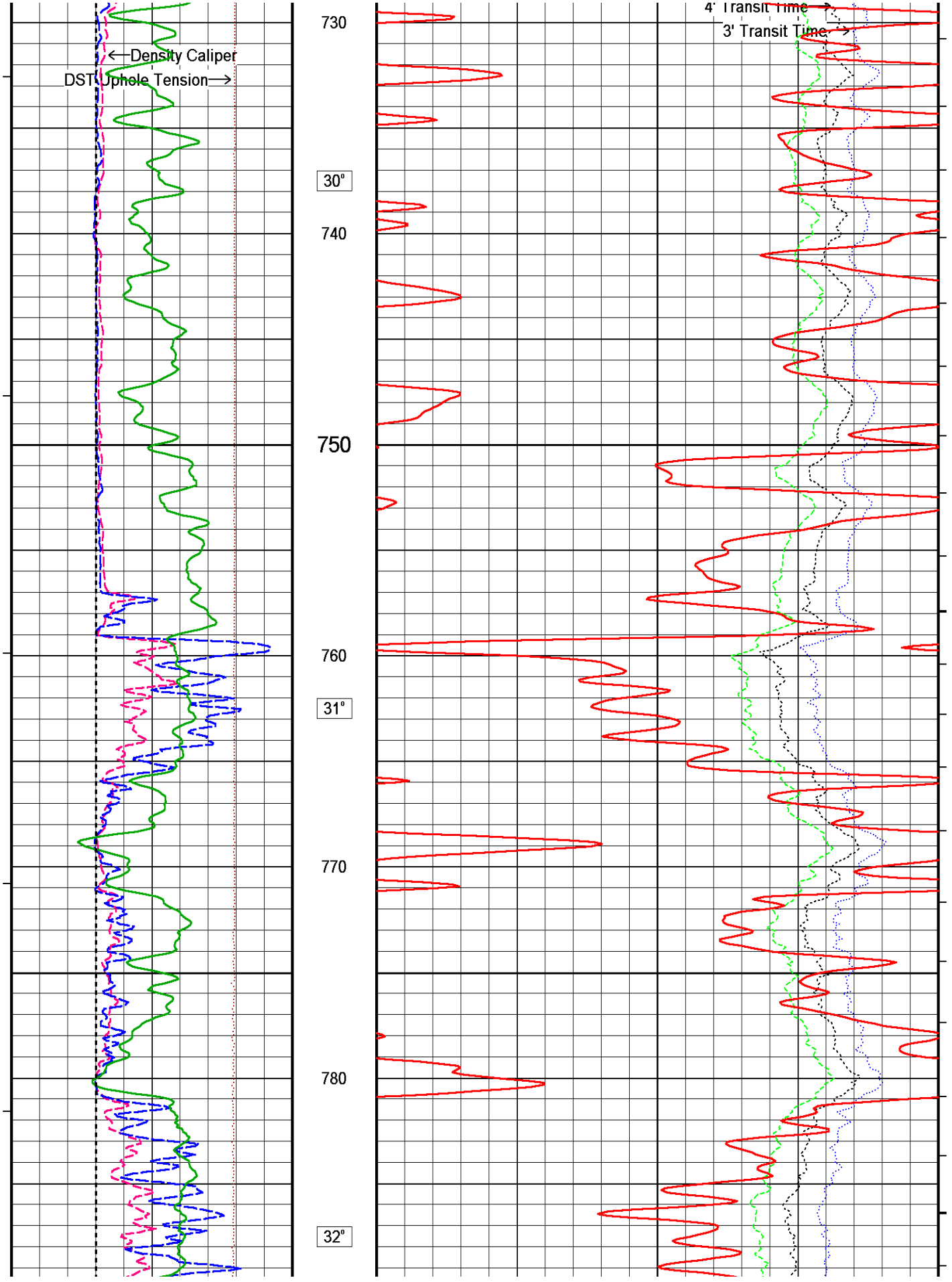
Plotted on 12-NOV-2007 09:28
Recorded on 15-FEB-2007 08:46

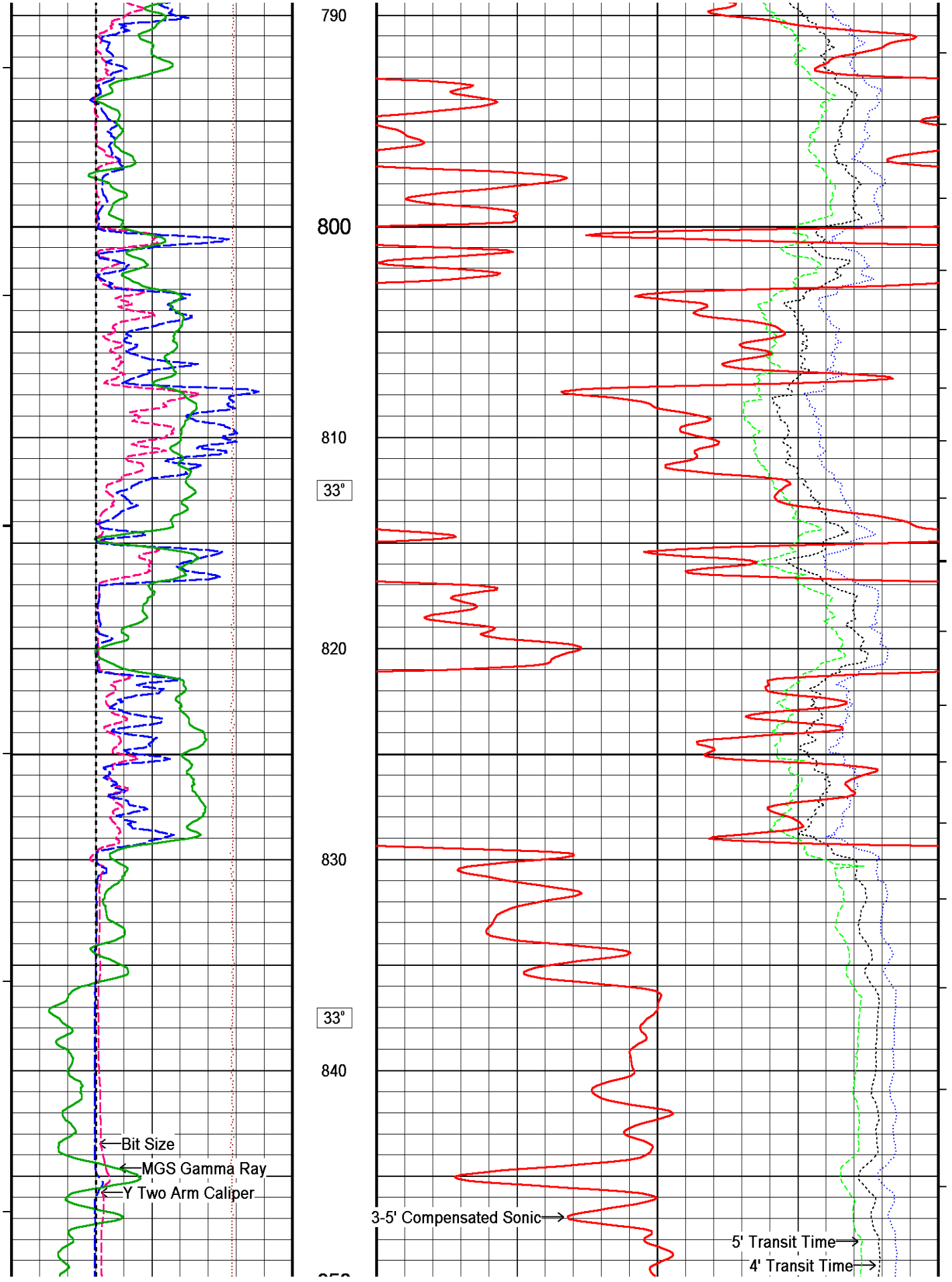


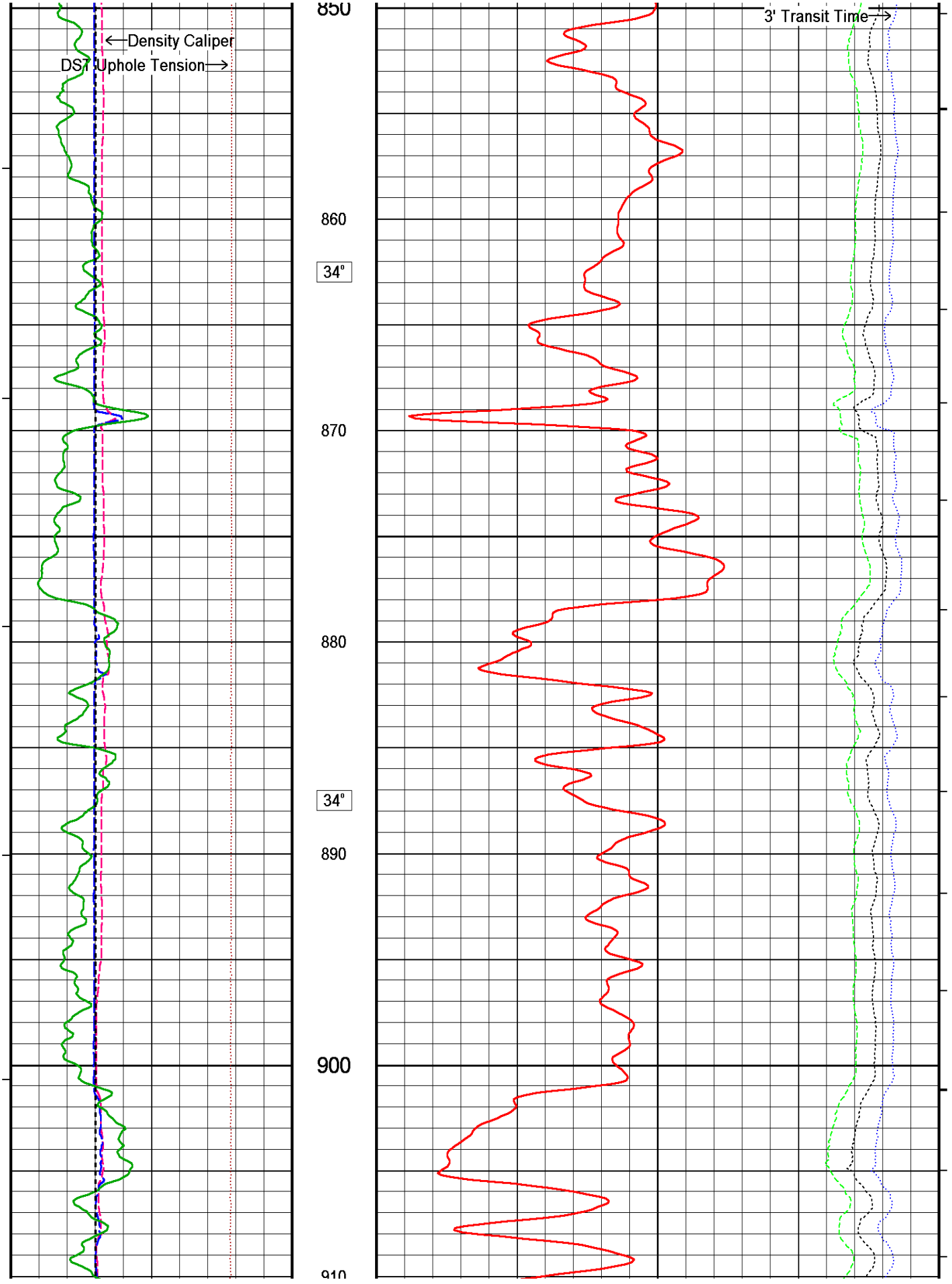

550
560
25°
570
580
25°
590
600
←Bit Size
←MGS Gamma Ray
←Y Two Arm Caliper
3-5' Compensated Sonic→
5' Transit Time→

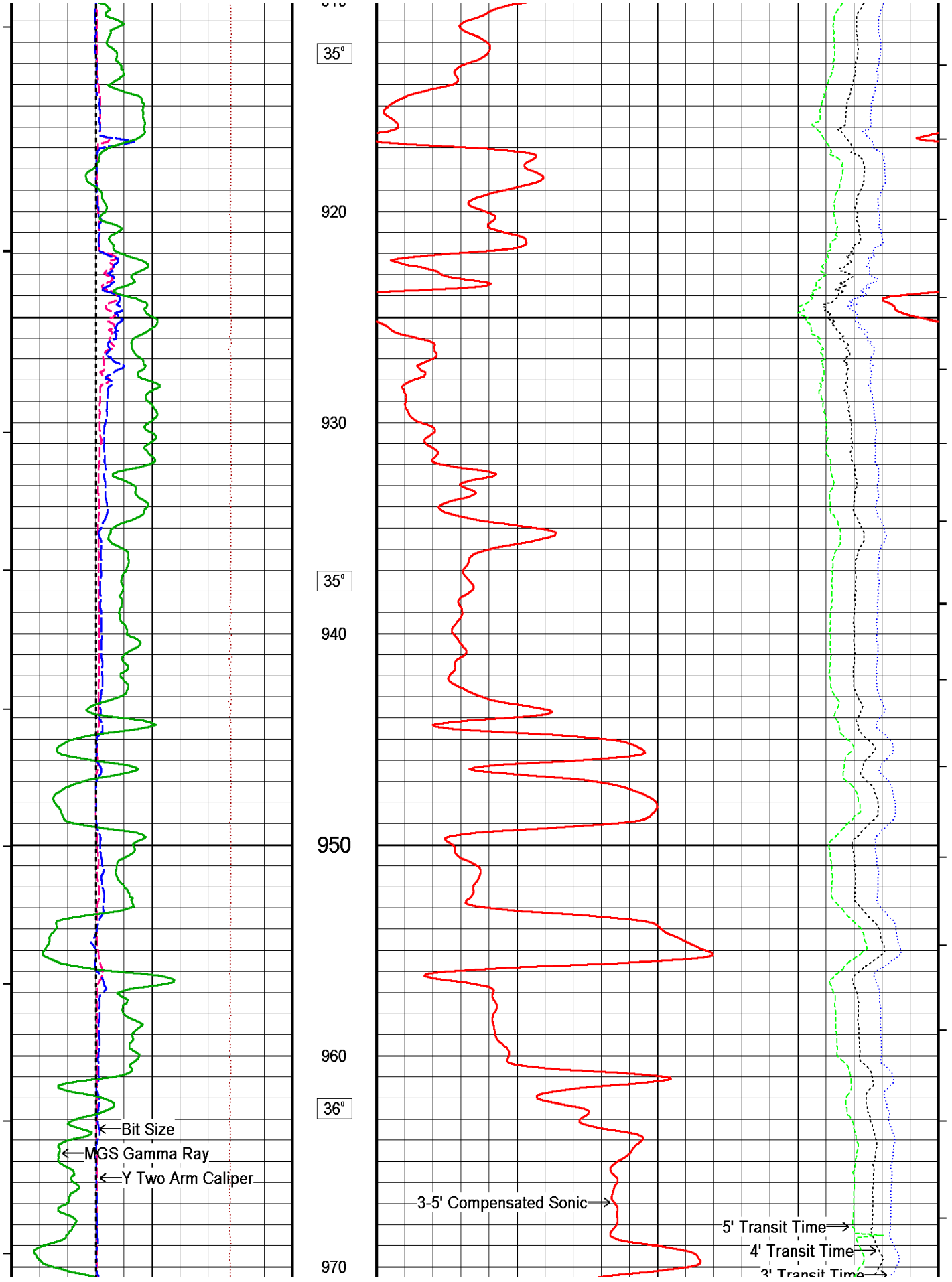

Density Caliper
DST Uphole Tension
610
27°
620
630
28°
640
650
660
29°
4' Transit Time
3' Transit Time

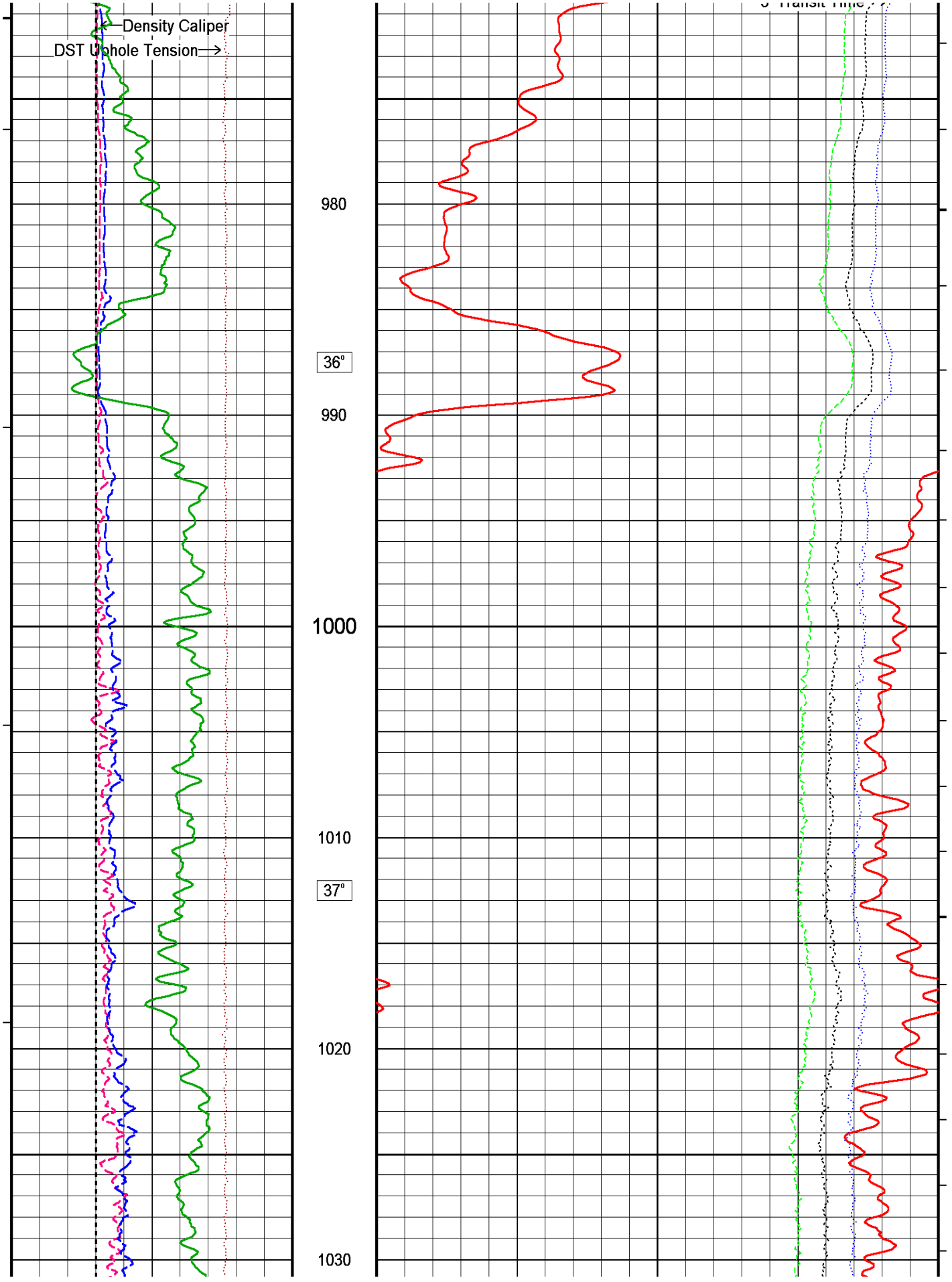

670
680
29°
690
700
710
30°
720
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
3-5' Compensated Sonic
5' Transit Time

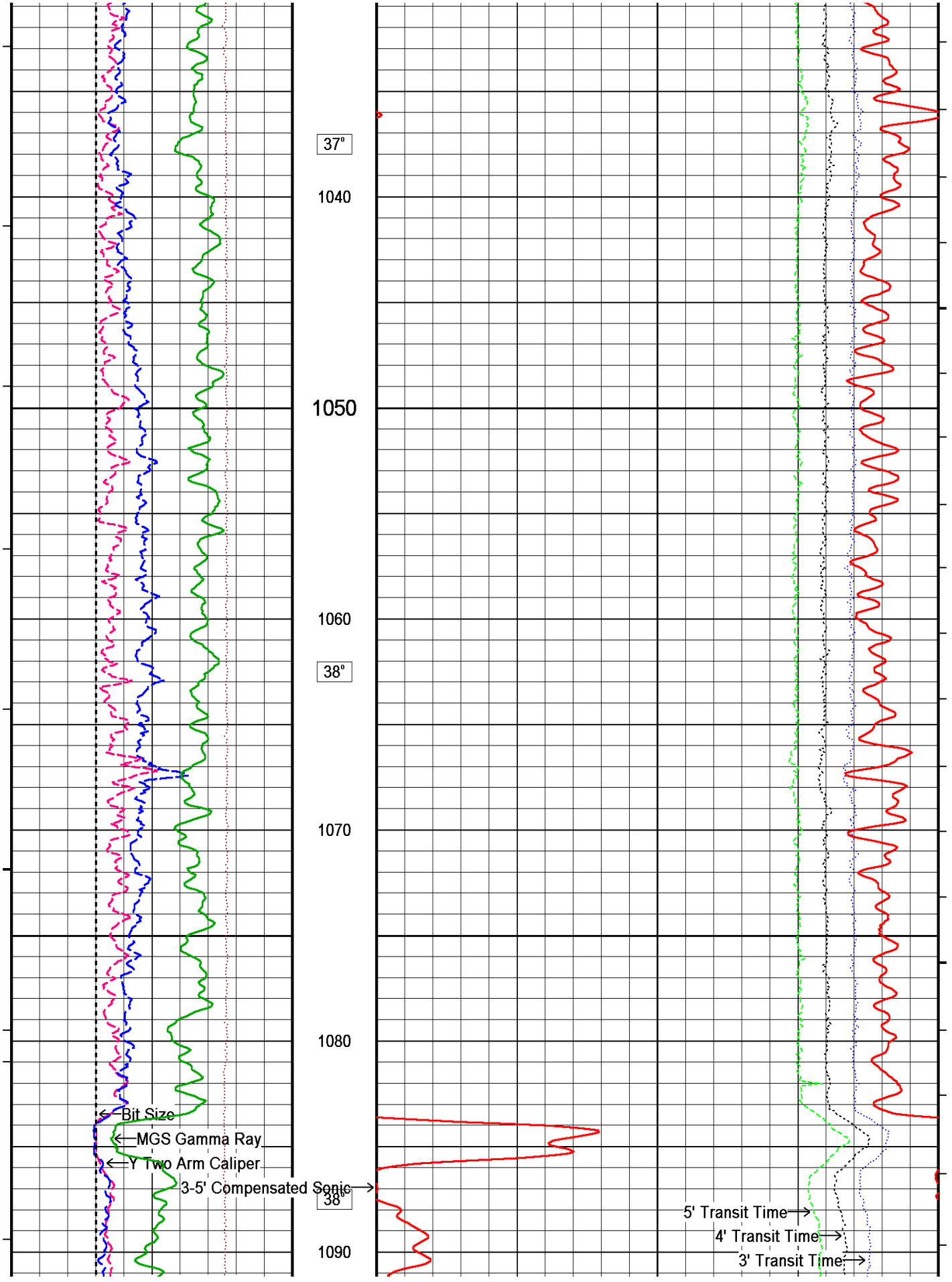

←Density Caliper
DST Uphole Tension→
730
30°
740
750
760
31°
770
780
32°
4' Transit Time →
3' Transit Time →

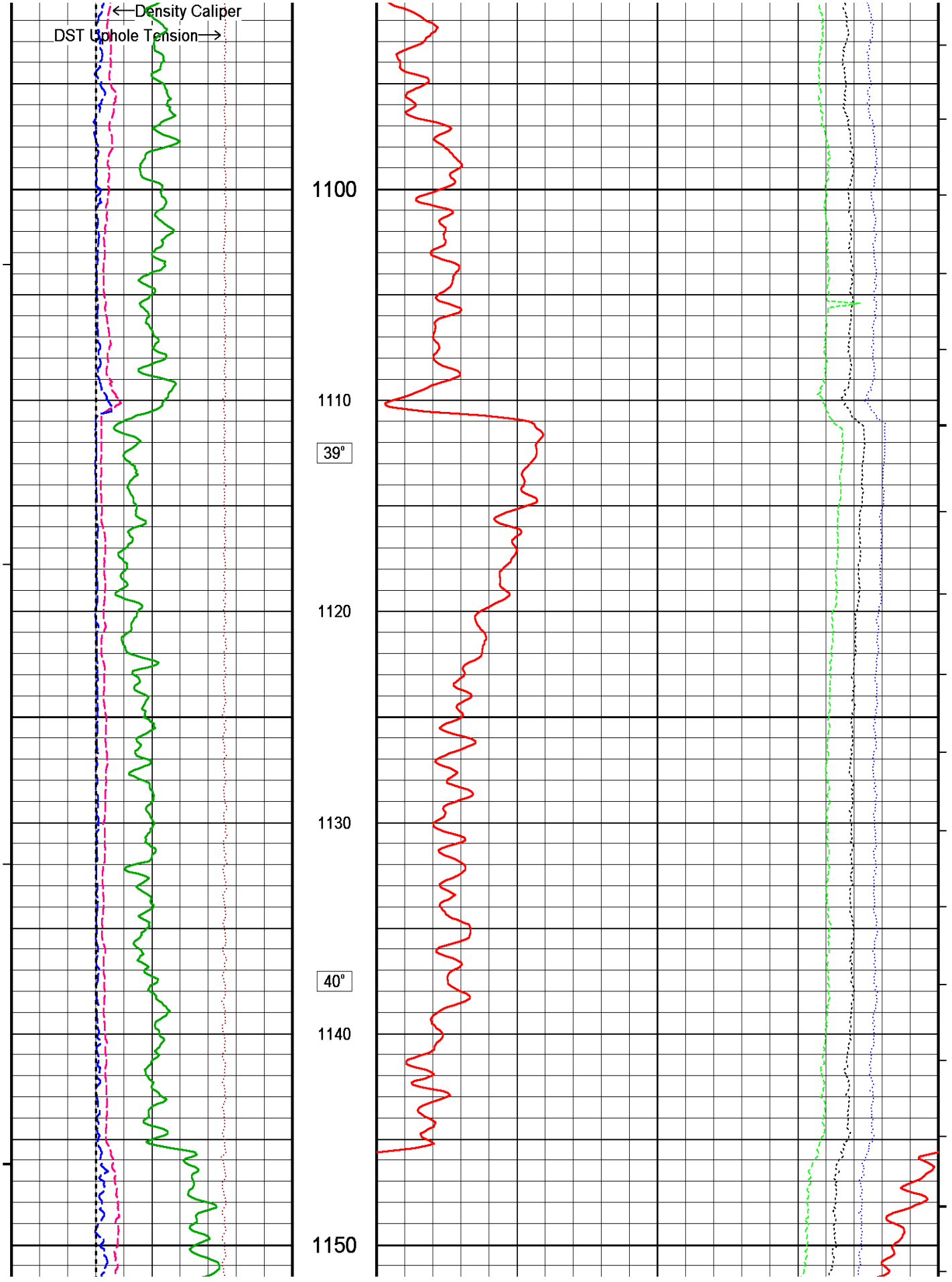

790
800
810
33°
820
830
33°
840
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
3-5' Compensated Sonic
5' Transit Time
4' Transit Time

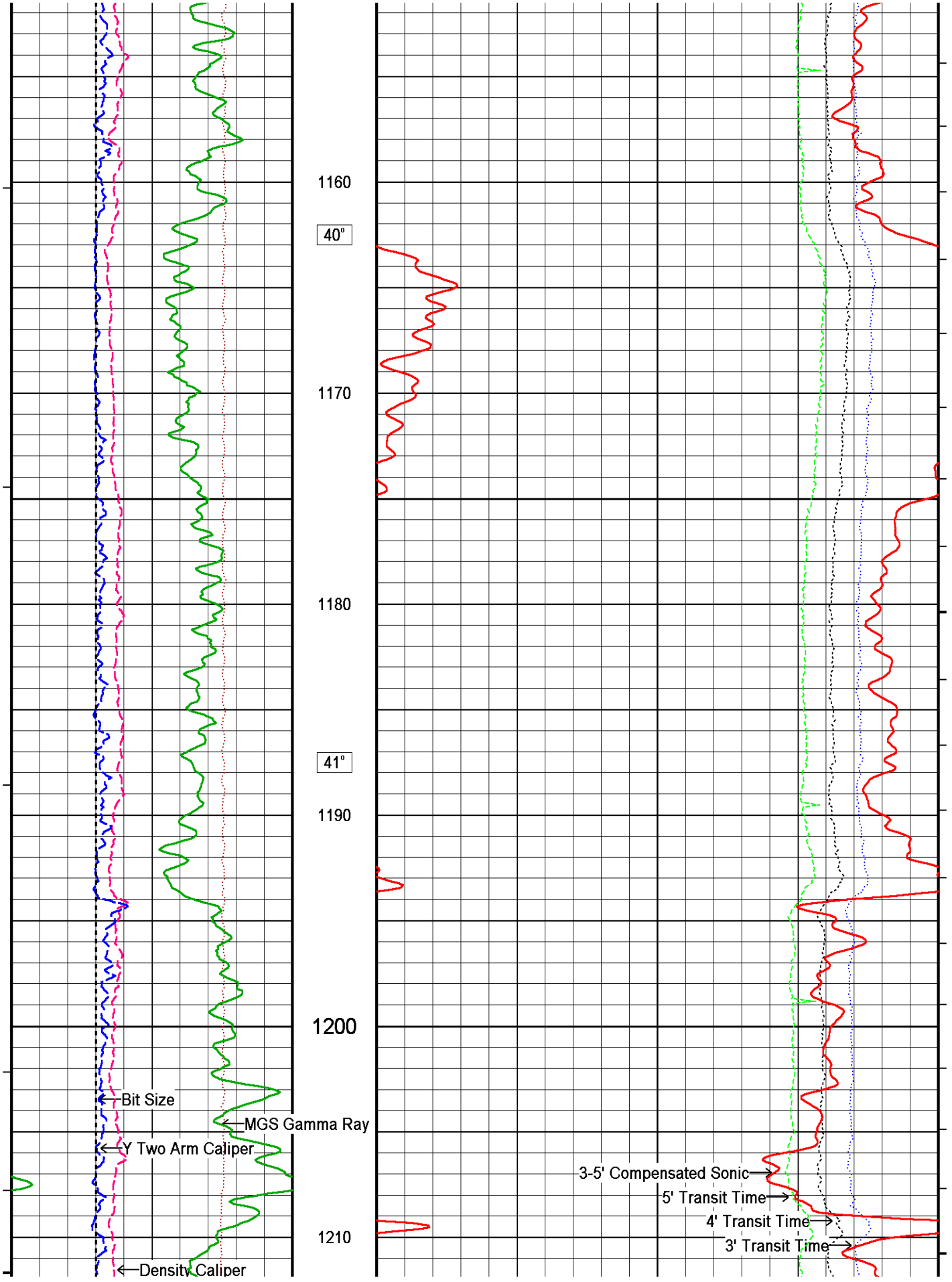

←Density Caliper
DS7 Uphole Tension→
850
860
34°
870
880
34°
890
900
910
3' Transit Time→

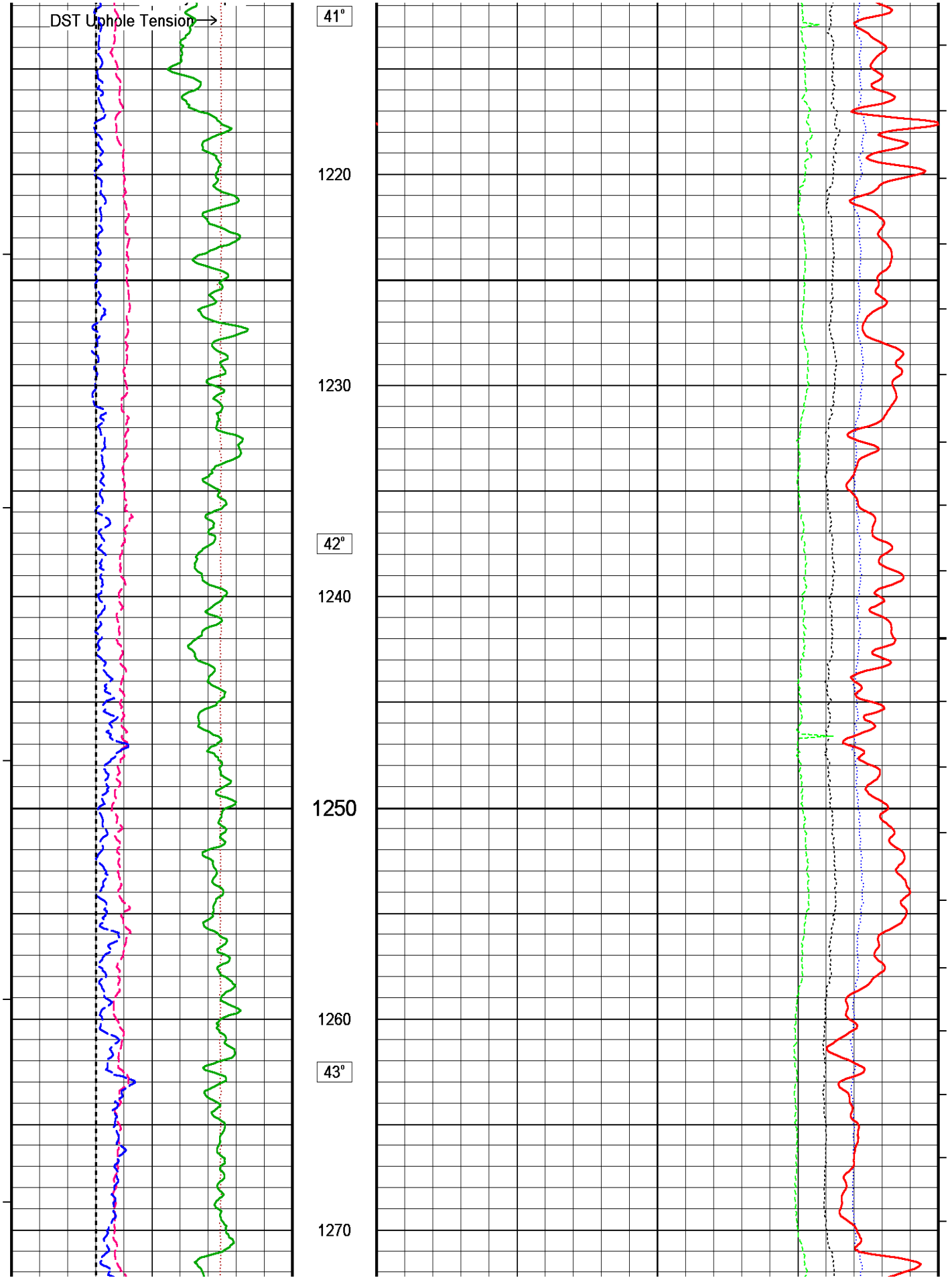

35°
920
930
35°
940
950
960
36°
970
←Bit Size
←MGS Gamma Ray
←Y Two Arm Caliper
3-5' Compensated Sonic→
5' Transit Time→
4' Transit Time→

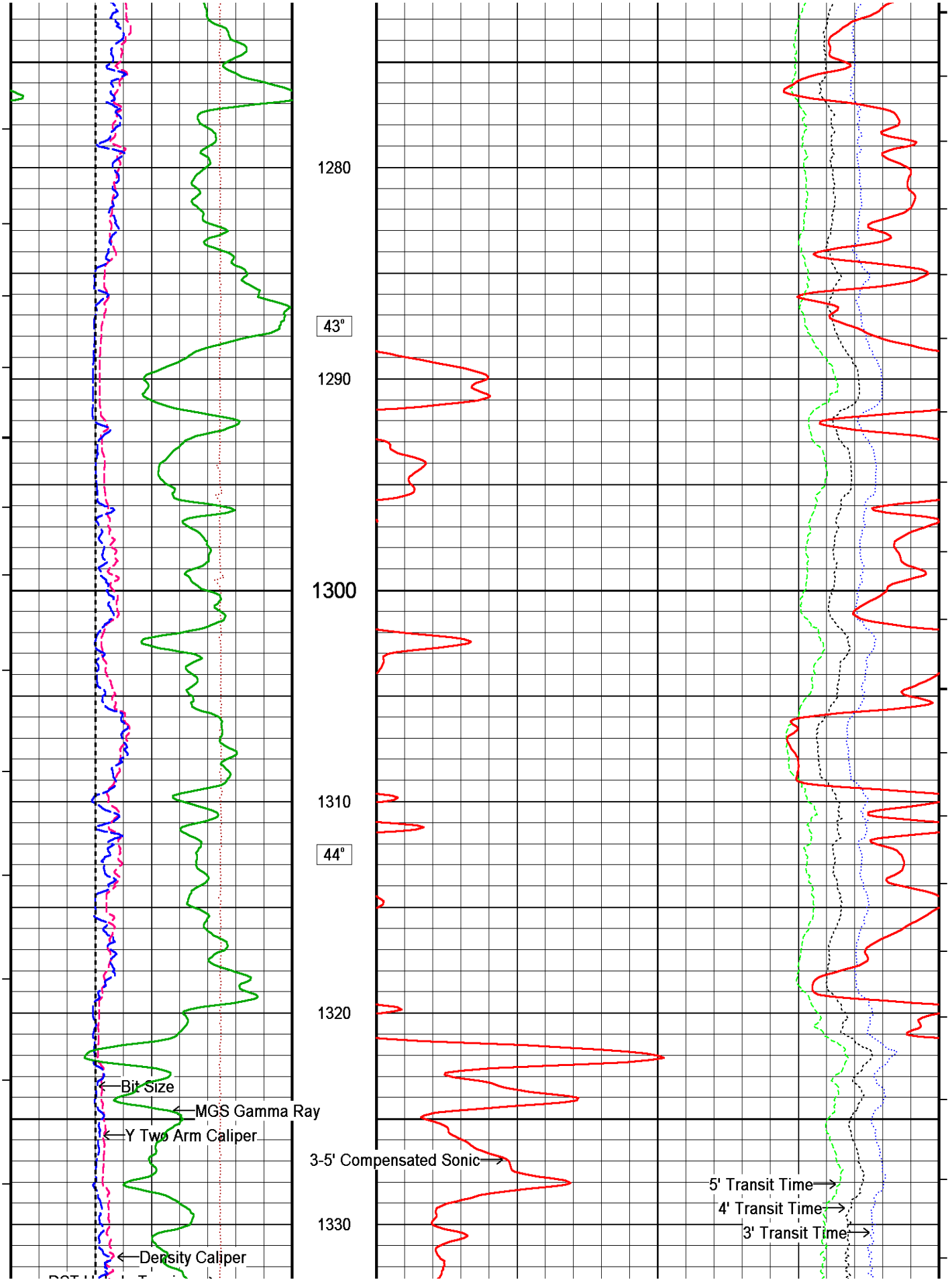

Density Caliper
DST Upshole Tension
980
36°
990
1000
1010
37°
1020
1030

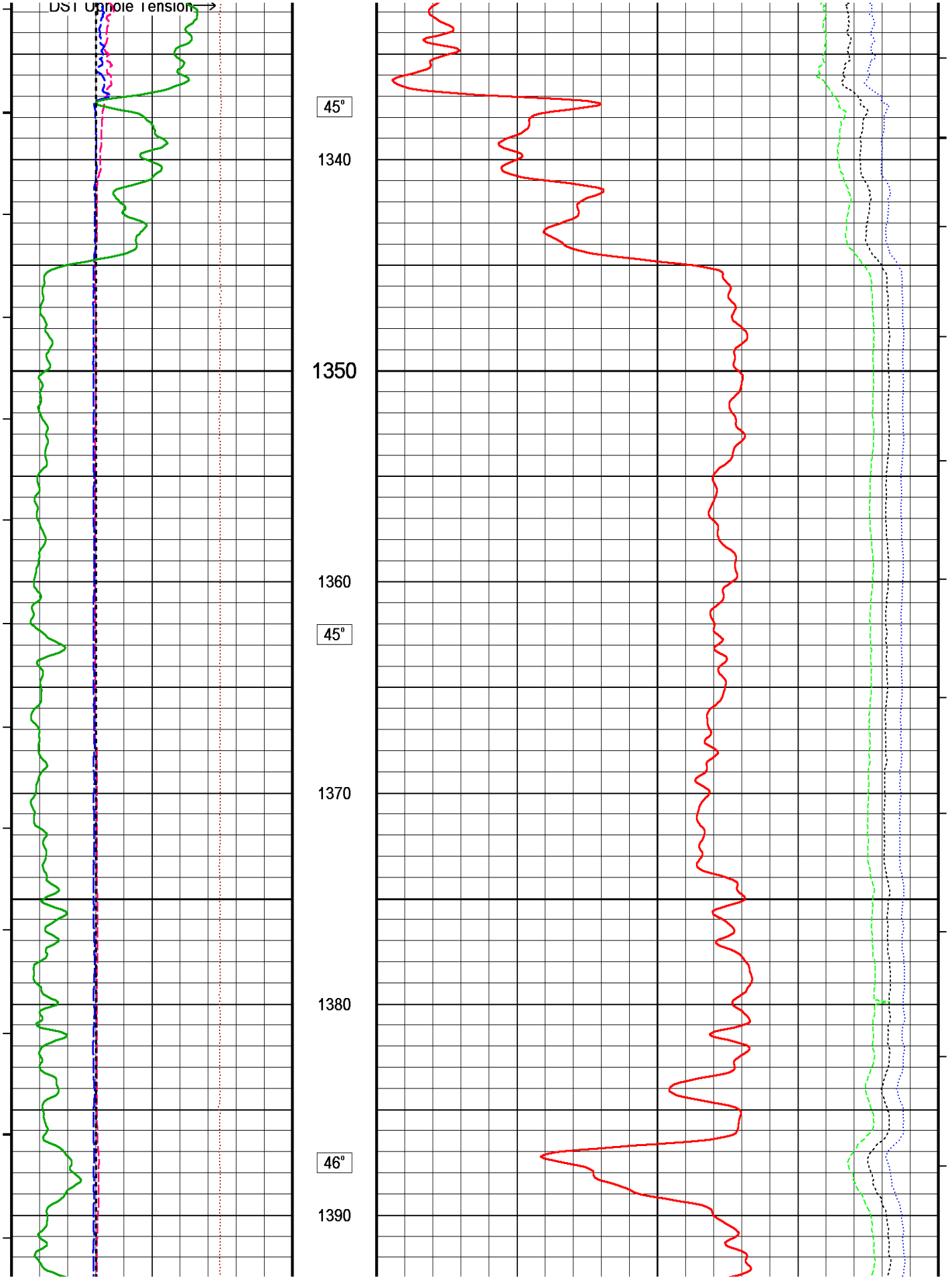

37°
1040
1050
1060
38°
1070
1080
38°
1090
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
3-5' Compensated Sonic
5' Transit Time
4' Transit Time
3' Transit Time

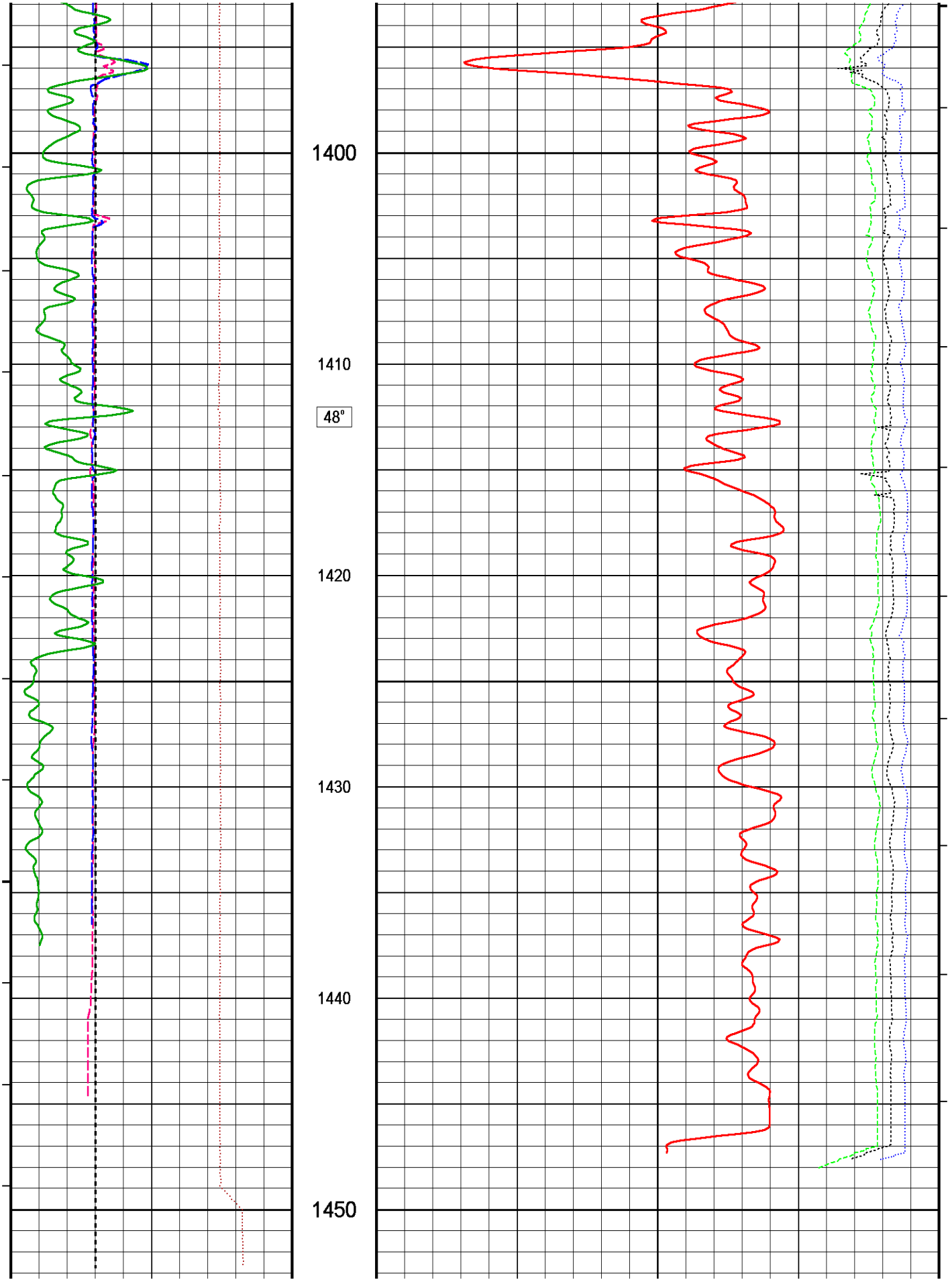

←Density Caliper
DST Uphole Tension→
1100
1110
39°
1120
1130
40°
1140
1150

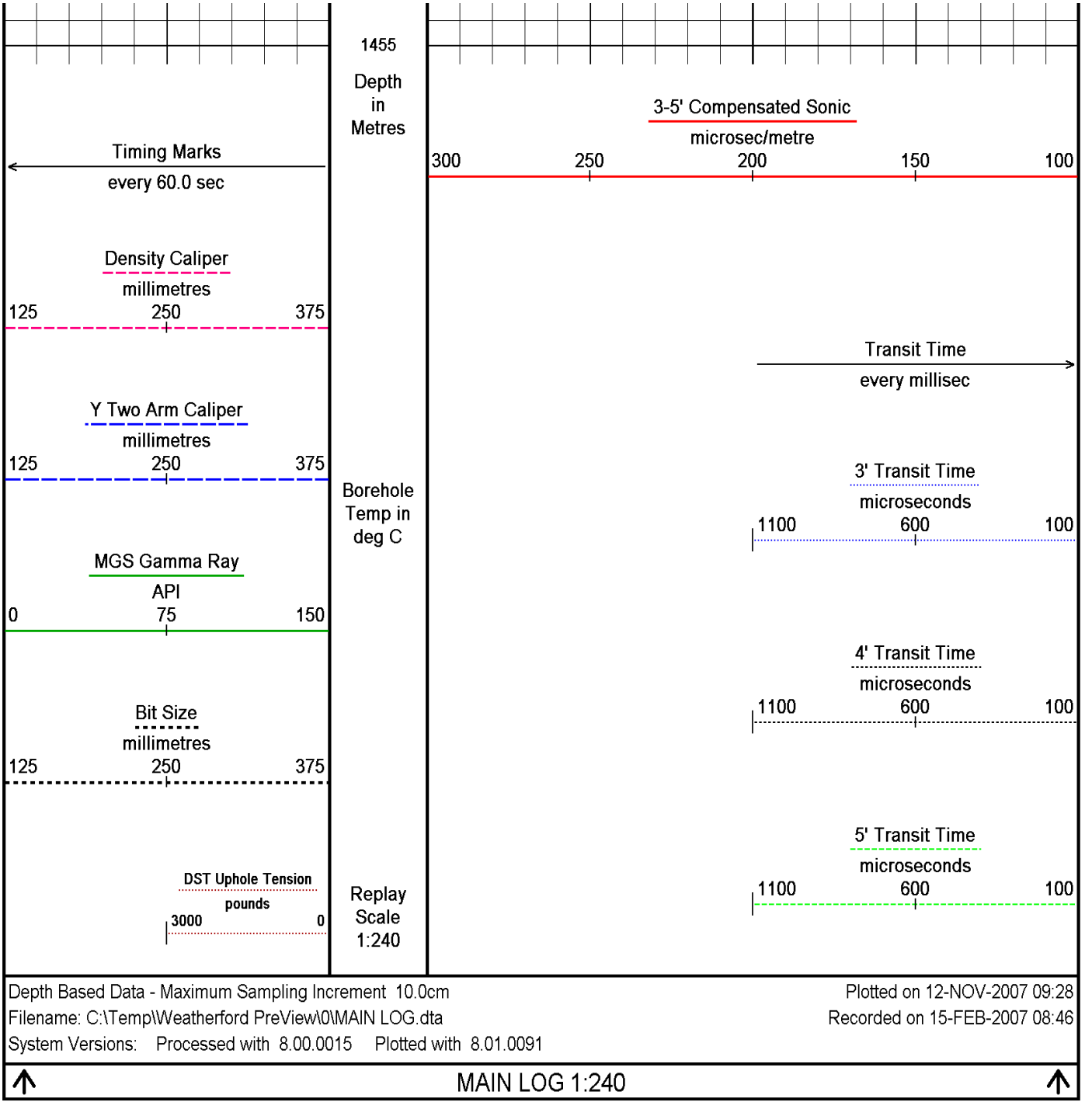

1160
40°
1170
1180
41°
1190
1200
1210
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
3-5' Compensated Sonic
5' Transit Time
4' Transit Time
3' Transit Time


DST Uphole Tension
41°
1220
1230
42°
1240
1250
1260
43°
1270


1280
43°
1290
1300
1310
44°
1320
1330
←Bit Size
←MGS Gamma Ray
←Y Two Arm Caliper
3-5' Compensated Sonic→
←Density Caliper
5' Transit Time→
4' Transit Time→
3' Transit Time→


DST Cable Tension
45°
1340
1350
1360
45°
1370
1380
46°
1390


1400
1410
48°
1420
1430
1440
1450

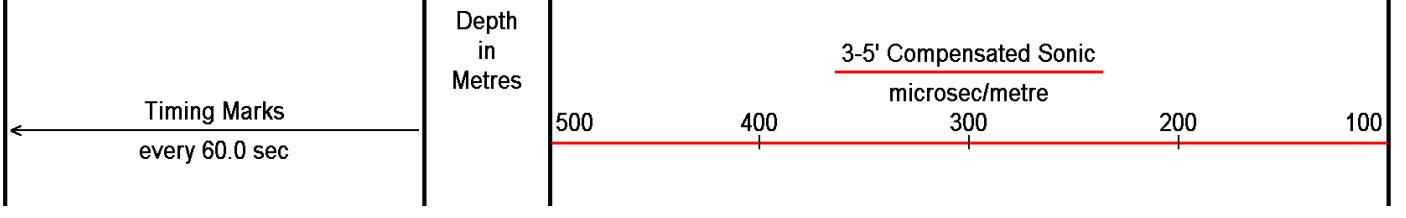


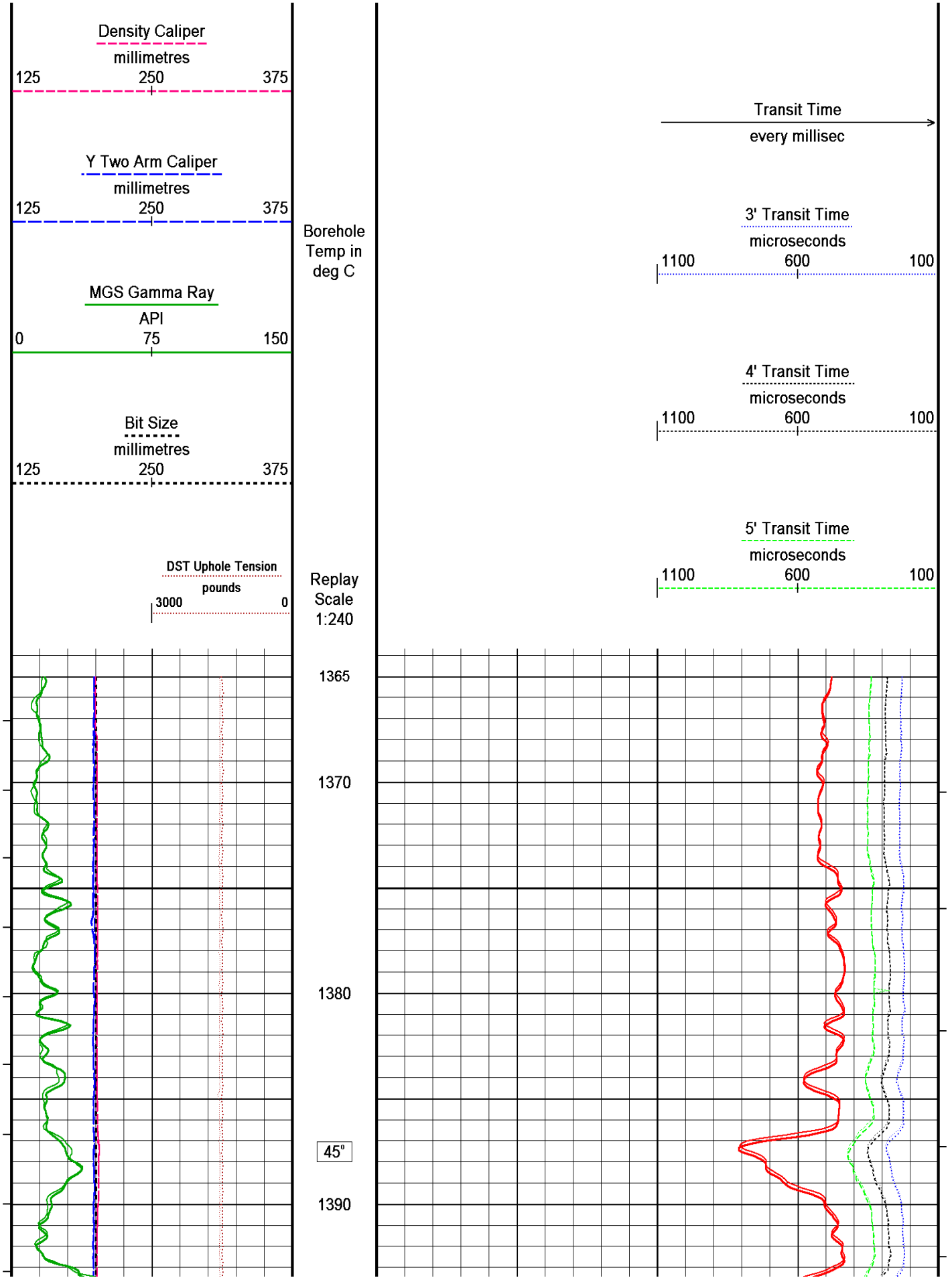
Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 12-NOV-2007 09:28
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta — Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

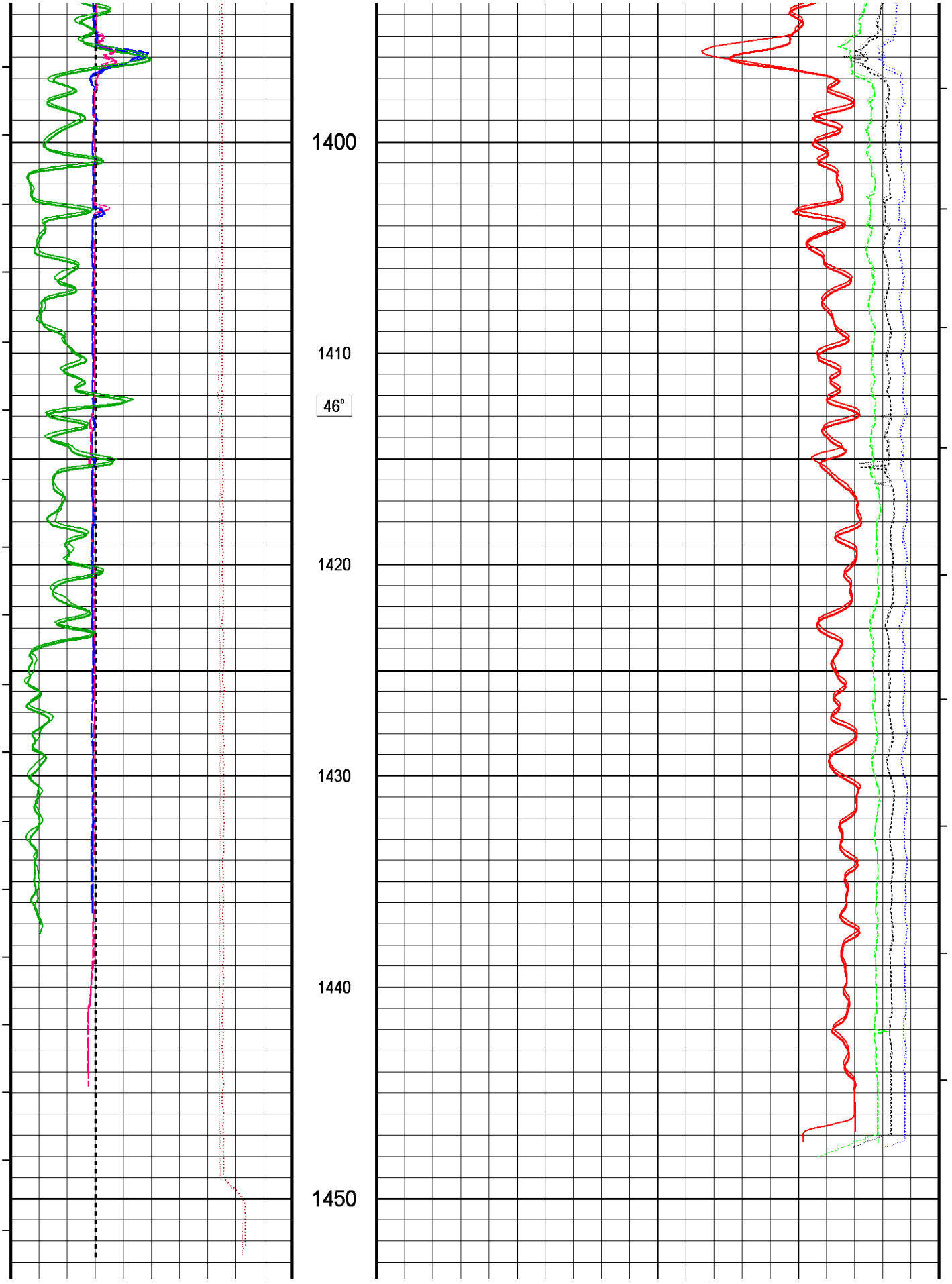
MAIN LOG 1:240

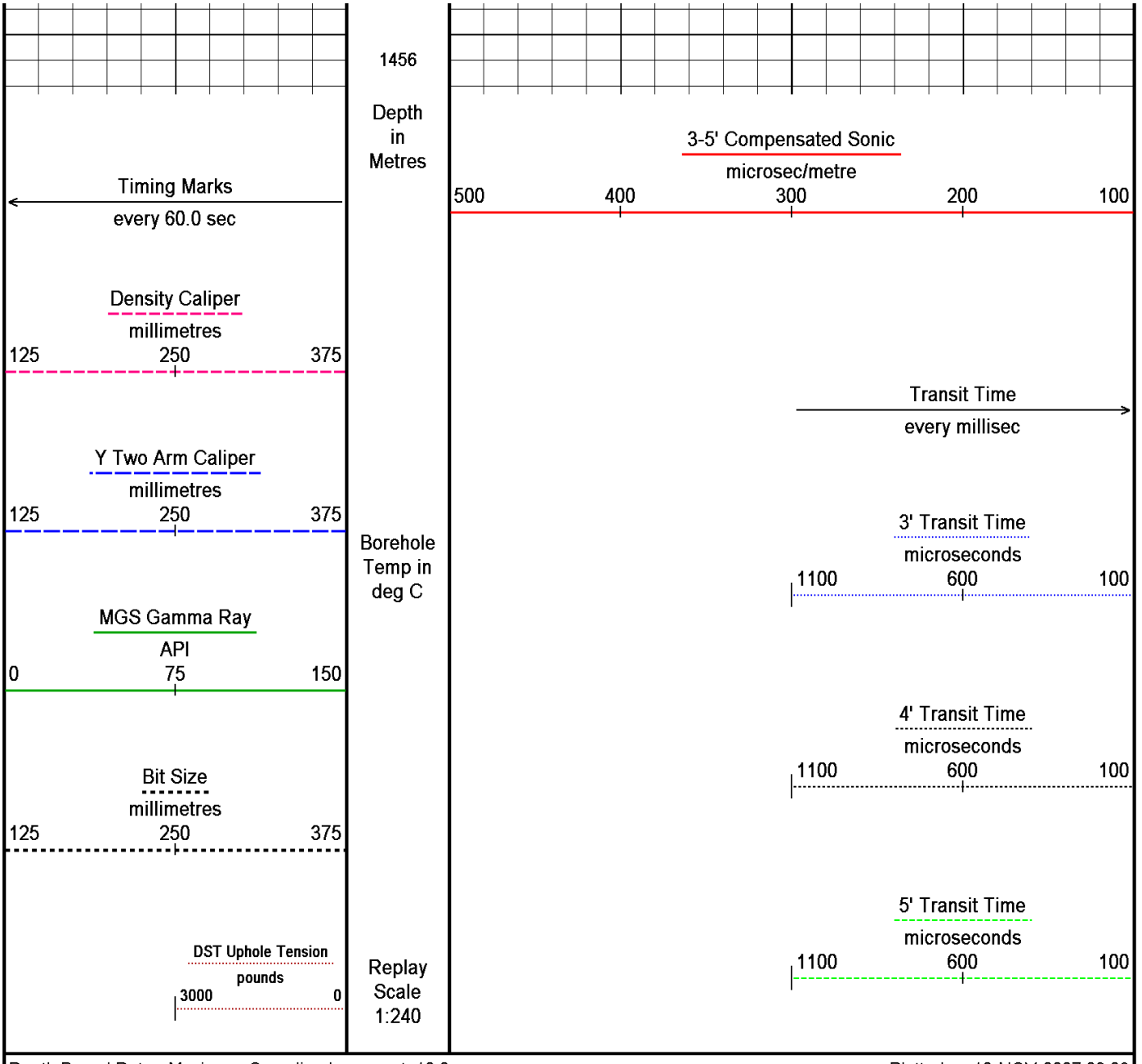
REPEAT SECTION
MAIN LOG 1:240

Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 12-NOV-2007 09:28
Filename: C:\Temp\Weatherford PreView\0\REPEAT.dta — Recorded on 15-FEB-2007 07:26
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta — Recorded on 15-FEB-2007 08:46
System Versions: Logged with 7.01.0195 Processed with 8.00.0015 Plotted with 8.01.0091




Density Caliper
millimetres
125
250
375
Y Two Arm Caliper
millimetres
125
250
375
MGS Gamma Ray
API
0
75
150
Bit Size
millimetres
125
250
375
DST Uphole Tension
pounds
3000
0
Borehole Temp in deg C
Replay Scale 1:240
Transit Time
every millisec
3' Transit Time
microseconds
1100
600
100
4' Transit Time
microseconds
1100
600
100
5' Transit Time
microseconds
1100
600
100
1365
1370
1380
45°
1390


1400
1410
46°
1420
1430
1440
1450



Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 12-NOV-2007 09:28
Filename: C:\Temp\Weatherford PreView\0\REPEAT.dta — Recorded on 15-FEB-2007 07:26
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta — Recorded on 15-FEB-2007 08:46
System Versions: Logged with 7.01.0195 Processed with 8.00.0015 Plotted with 8.01.0091

REPEAT SECTION
MAIN LOG 1:240

BEFORE SURVEY CALIBRATION

C:\Temp\Weatherford PreView\0\REPEAT.dta

General Constants All 000 — Last Edited on 15-FEB-2007,06:48

General Parameters		
Mud Resistivity	1.180	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	

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

Caliper Calibration MTC 006

Base Calibration on 25-JAN-2007,18:14
Field Calibration on 10-FEB-2007,20:21

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)
208.70	205.70

Gamma Calibration MGS 010

Field Calibration on 7-FEB-2007,09:09

	Measured	Calibrated (API)
Background	48	31
Calibrator (Gross)	1256	825
Calibrator (Net)	1208	794

Gamma Constants MGS 010

Last Edited on 15-FEB-2007,06:48

Gamma Calibrator Number	grcc075	
Mud Density	1060.00	kg/m3
Caliper Source for Processing	Density Caliper	
Tool Position	Centred	
Concentration of KCl	0.00	kppm

Caliper Calibration MPD 036

Base Calibration on 23-JAN-2007 04:20
Field Calibration on 7-FEB-2007,11:28

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)

Measured Caliper (mm)	166.10
Actual Caliper (mm)	166.10

Sonic Constants MSS 060

Last Edited on 7-FEB-2007,10:50

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	83.13	micro-sec/ft

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	

Down Hole Fixed Gate Parameters

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

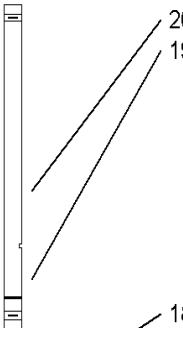
Full Waveform Parameters

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

DOWNHOLE EQUIPMENT

C:\Temp\Weatherford PreView\0\REPEAT.dta

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

18.79 m FEFE - Shallow FE

MFE 17 Length: 1.84 m Weight: 48.5 lb

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 NPRL - Limestone 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 DPRL - Limestone Density Por.
7.85 m DCOR - Density Correction
7.83 m PDPE - PE

Compact Sonic
MSS 60 Length: 3.82 m Weight: 72.8 lb

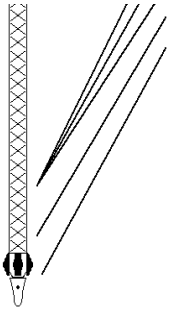
3.95 m TR21 - 3' Transit Time
3.95 m TR11 - 4' Transit Time
3.95 m TR22 - 5' Transit Time
3.95 m DT34 - 3-4' Compensated Sonic
3.95 m DT35 - 3-5' Compensated Sonic
3.95 m TR12 - 6' Transit Time

Compact Induction
MAI 72 Length: 3.29 m Weight: 48.5 lb

0.79 m VEC0 - Shallow Induction
0.79 m RILM - Medium Induction
0.79 m RILD - Deep Induction

Compact Hole Finder

HFS 1	Length: 0.24 m	Weight: 2.2 lb
Total	Length: 22.63 m	Weight: 568.8 lb



0.07 m Tool Zero

SPCG - Spontaneous Potential (0.28m from bottom)

All measurements relative to tool zero.

COMPANY	PARAMOUNT RESOURCES LTD.
WELL	PARAMOUNT ET AL CAMERON J-04
FIELD	CAMERON HILLS
PROVINCE/COUNTY	NORTH WEST TERRITORIES
COUNTRY/STATE	CANADA

Elevation Kelly Bushing	769.20	metres	First Reading	1445.50	metre
Elevation Drill Floor		metres	Depth Driller	1449.00	metres
Elevation Ground Level	765.20	metres	Depth Logger	1449.50	metres

Weatherford®

COMPENSATED SONIC

SECTOR BOND TOOL

PROVINCE N.W.T
FIELD CAMERON
WELL PARA et al CAMERON J-04 300/L-04-60-10-117-30
COMPANY PARAMOUNT RESOURCES LTD

COMPANY PARAMOUNT RESOURCES LTD

WELL PARA et al CAMERON J-04
300/J-04-60-10-117-30

FIELD CAMERON

PROVINCE N.W.T

LSD Sec. Twp. Rge.
Perm. Datum Ground Level Elev.764.62
Log measured from K.B. , 8.38 m above Permanent Datum.

Other Services:
PERFORATE

UWI 300/J-04-60-10-117-30
Licence 2034

ELEV.K.B.773.00
G.L.764.62

Date	MARCH 16 2007
Service Order	4313640
Run No.	ONE
BHT	0°C
Depth-Driller	1449.5
Depth-Logger	1435.5
Btm.Log Inter.	1435.5
Top Log Inter.	164.0
Fluid in Hole	WATER
Fluid Level	164.0
Bit Size (mm)	0.0
Unit #	14215
Location	HIGH LEVEL
Recorded By	D.BOIRE
Witnessed By	K.McLEOD

Shot Density	No. of Shots	Perf. Interval From	Perf. Interval To

Gun Type
Gun Size

Tubing/Casing Record

Size mm	Wt. Kg/m	From	To
219.10	35.70	SURFACE	436.0
139.70	23.07	SURFACE	1450.0

Other Services

Service	Type	Size	Depth
Bridge Plug			
Produc. Packer			
Cement Retainer			
Cement			

Tubing Bottom	Junk Basket Type
Seating Nipple	Gauge Ring Size

REMARKS Rig: CONCORD #19 Service Order # 4313640

CORRELATED TO WEATHERFORD PHOTO DENSITY DUAL SPACED NEUTRON LOG

DATED FEBRUARY 15 2007

TICKET # 10155023

EQUIPMENT DATA

Run No.	Tool Type	Tool No.	Other
ONE	SBTAA	166	SECTOR
	CTBAA	183	CCL - TELEMETRY
	GRBAA	183	GAMMA RAY

DEPTH SCALE: **1:600** VERSION: **7021587 R**

MERGED PASS

4313640 HSDA600

FINISH DEPTH: **1438.5** Meters DIRECTION: **UP** DATE: **03/16/2007** TIME: **14:38** MODE: **TRACE PLAYBACK**

3' TRAVEL TIME
600 Microseconds 200

3' AMPLITUDE
0 Millivolts 100

FREE PIPE TT
200 Microseconds 1200

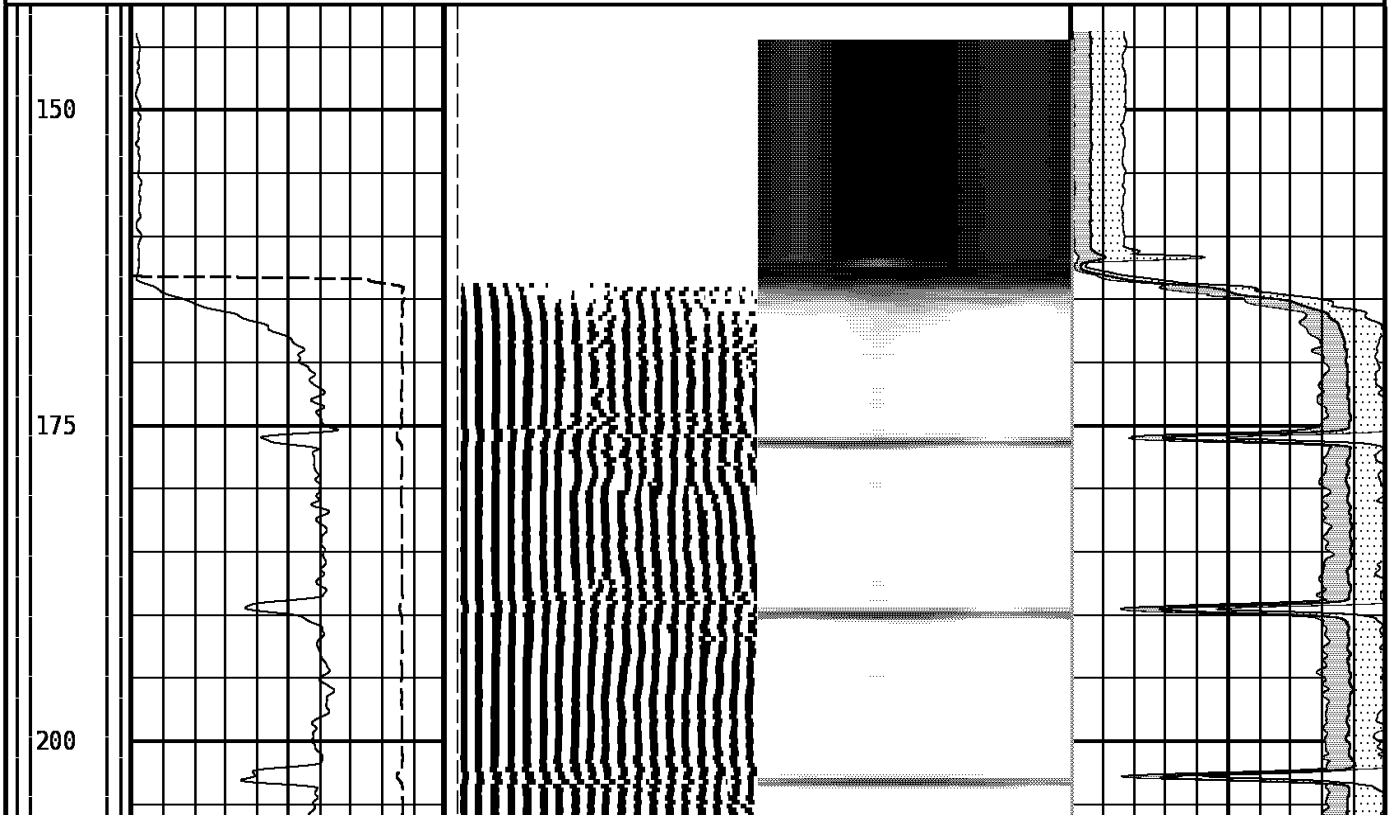
VARIABLE DENSITY
200 Microseconds 1200

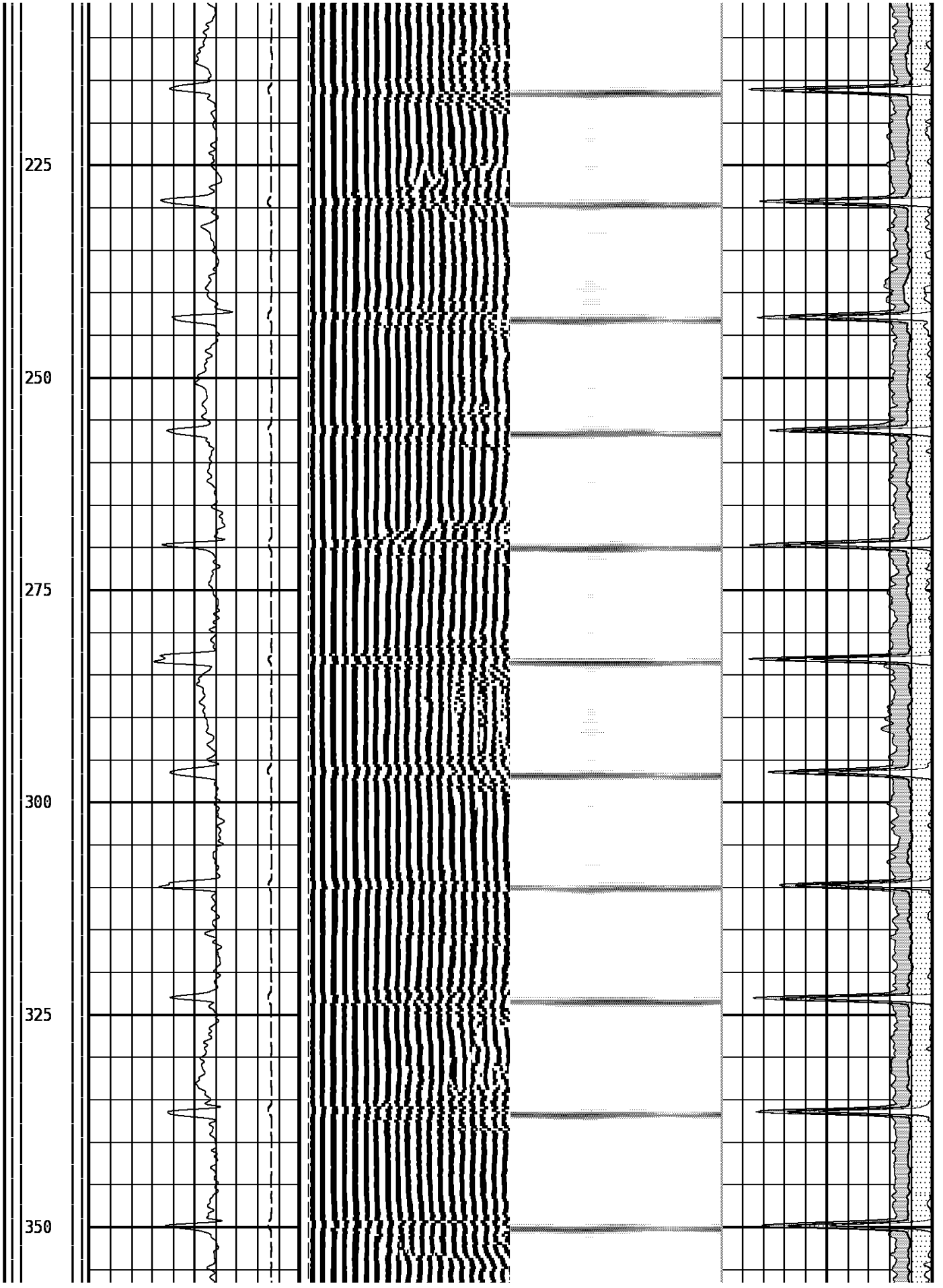
VARIABLE ENERGY
0 Millivolts 80

MAX ENERGY
0 Millivolts 100

AVG ENERGY
0 Millivolts 100

MIN ENERGY
0 Millivolts 100

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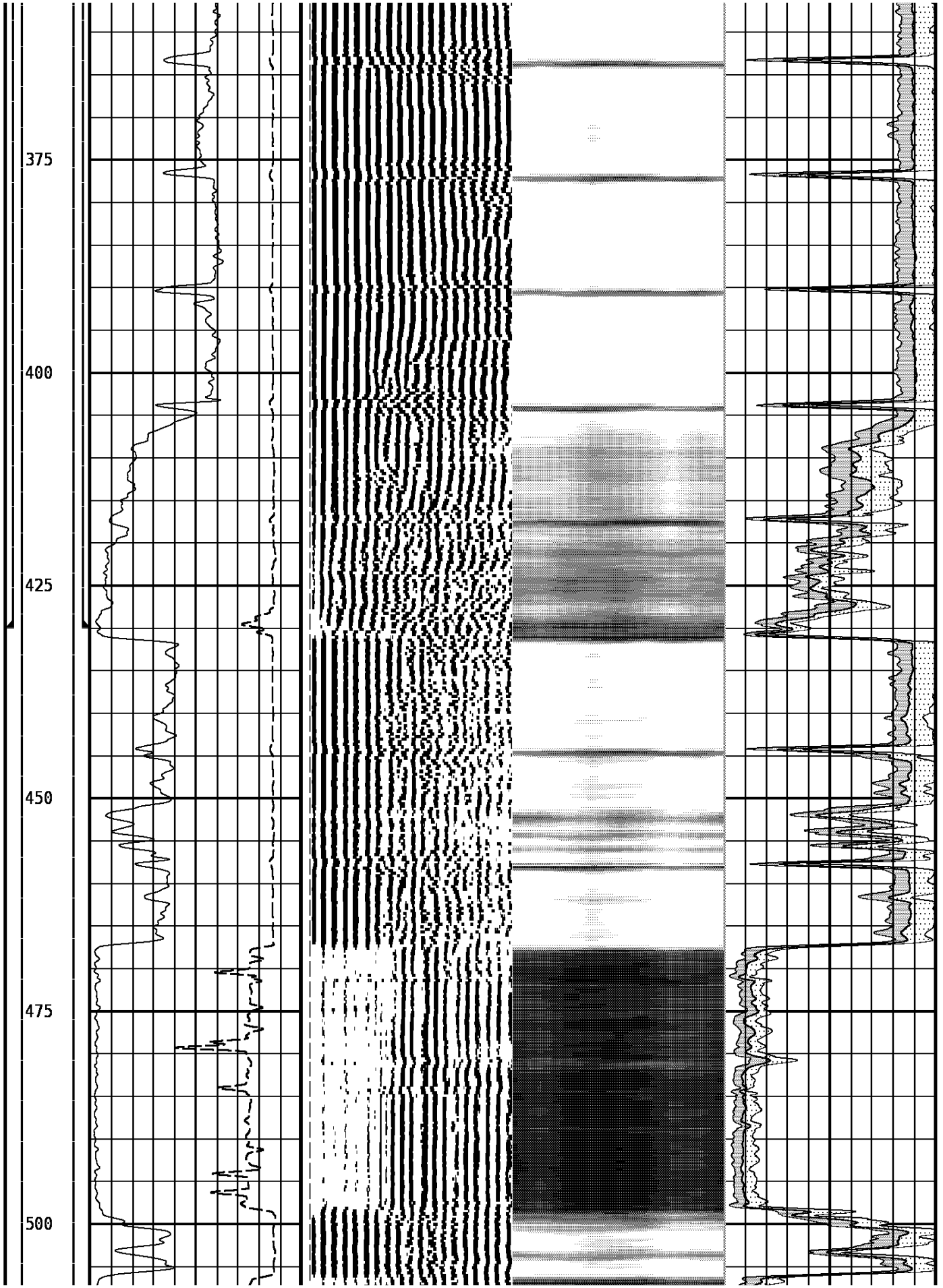
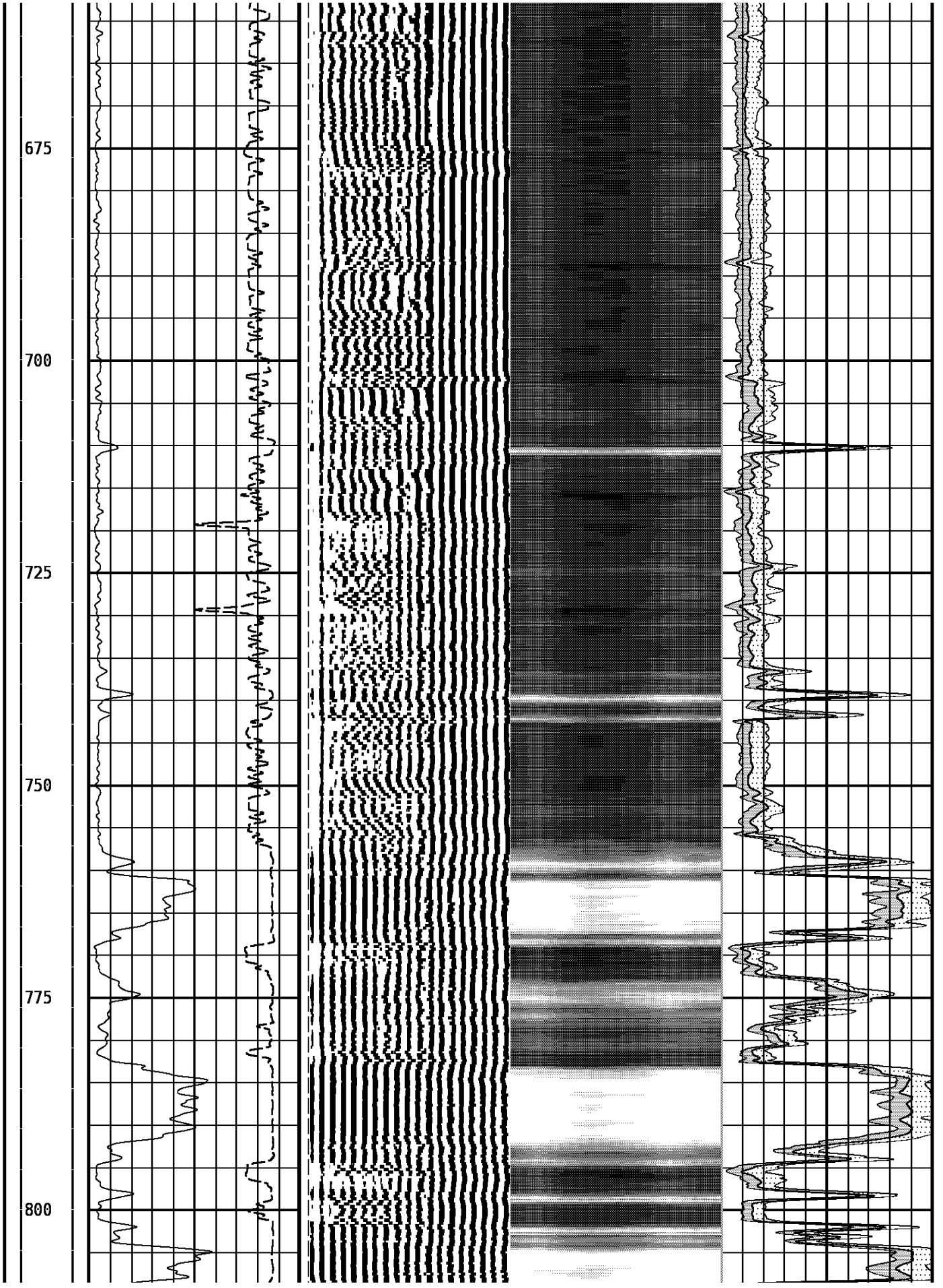
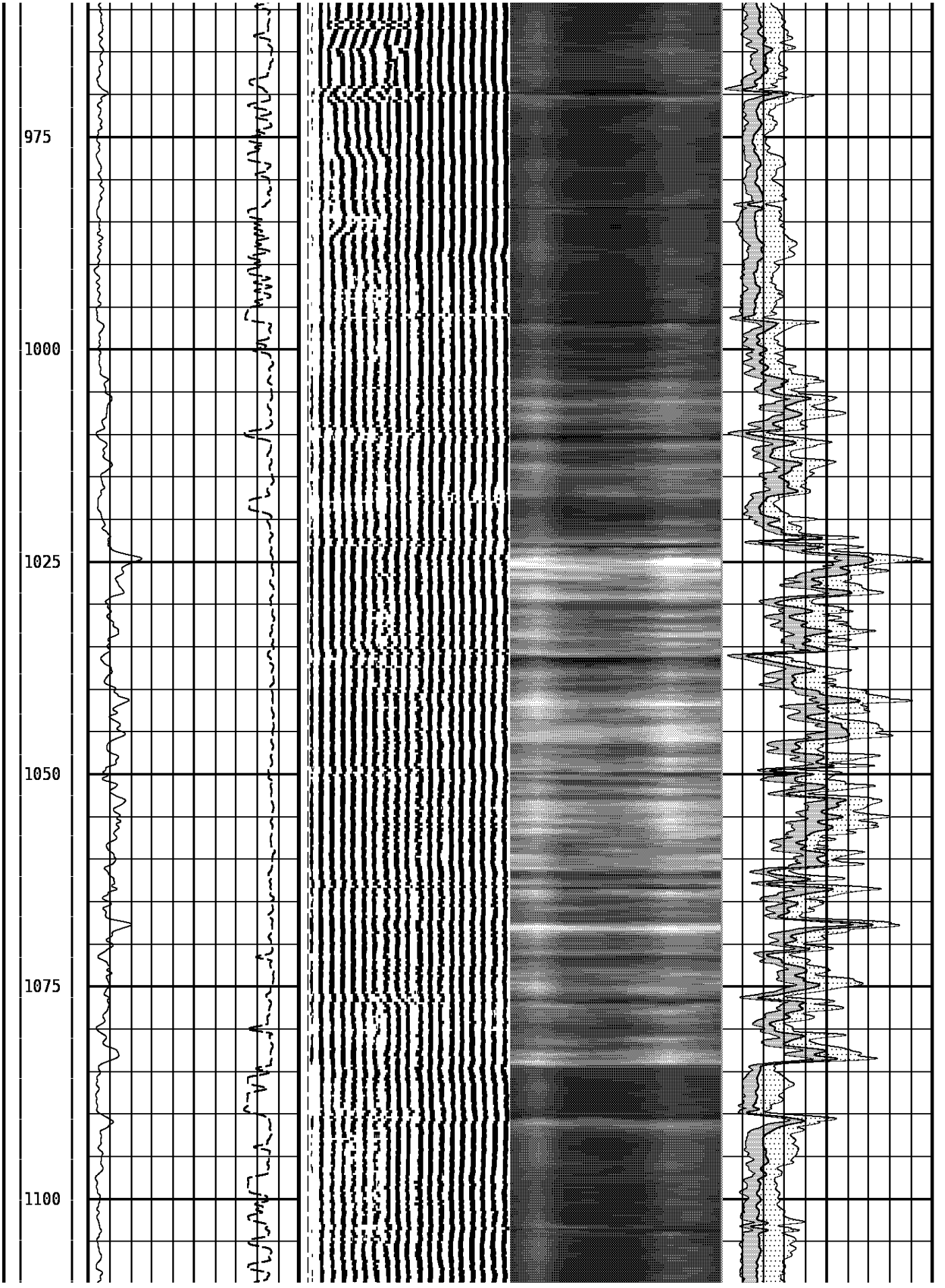
250
275
300
325
350

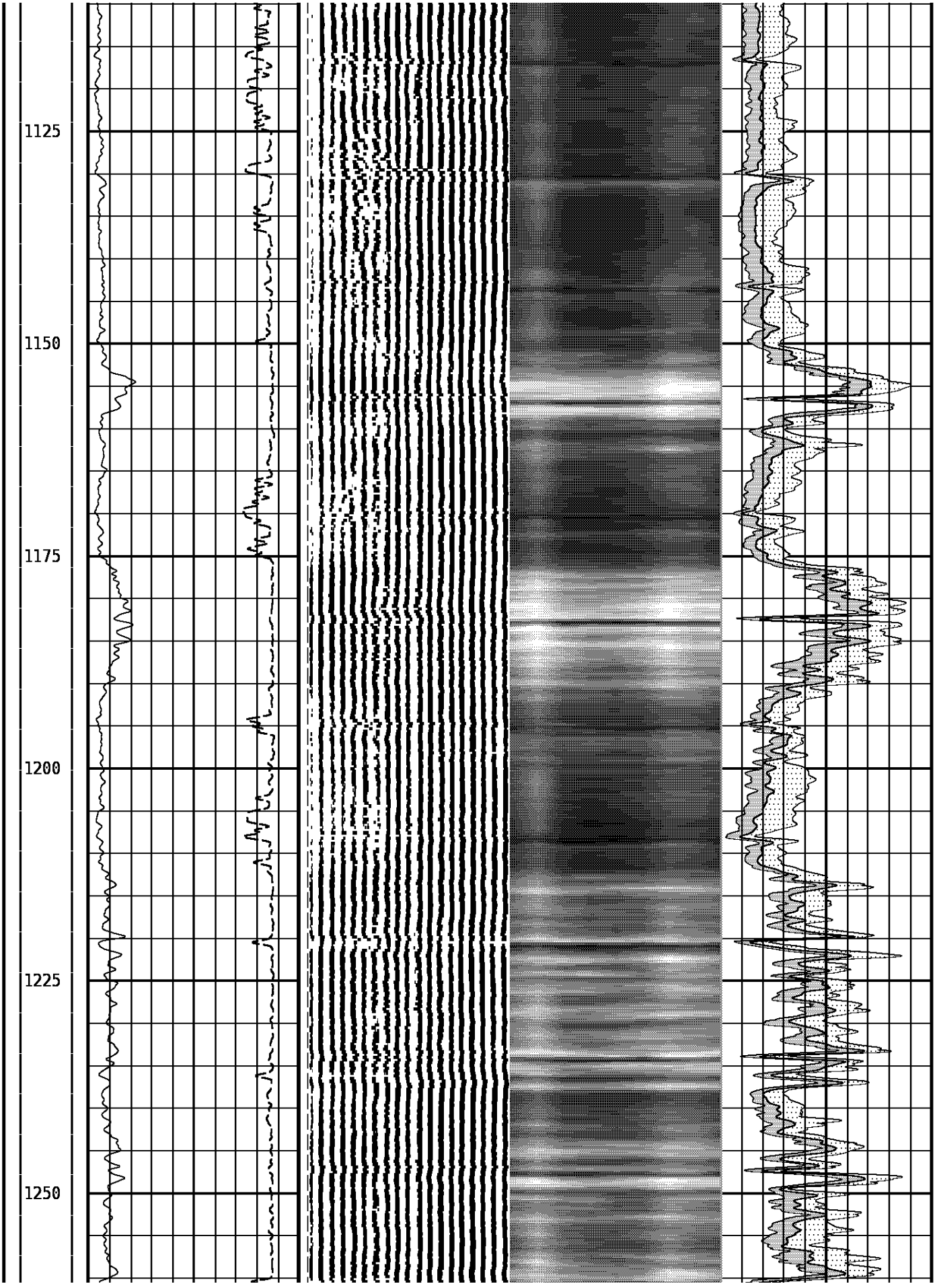

375
400
425
450
475
500

525
550
575
600
625
650


675
700
725
750
775
800

825
850
875
900
925
950


975
1000
1025
1050
1075
1100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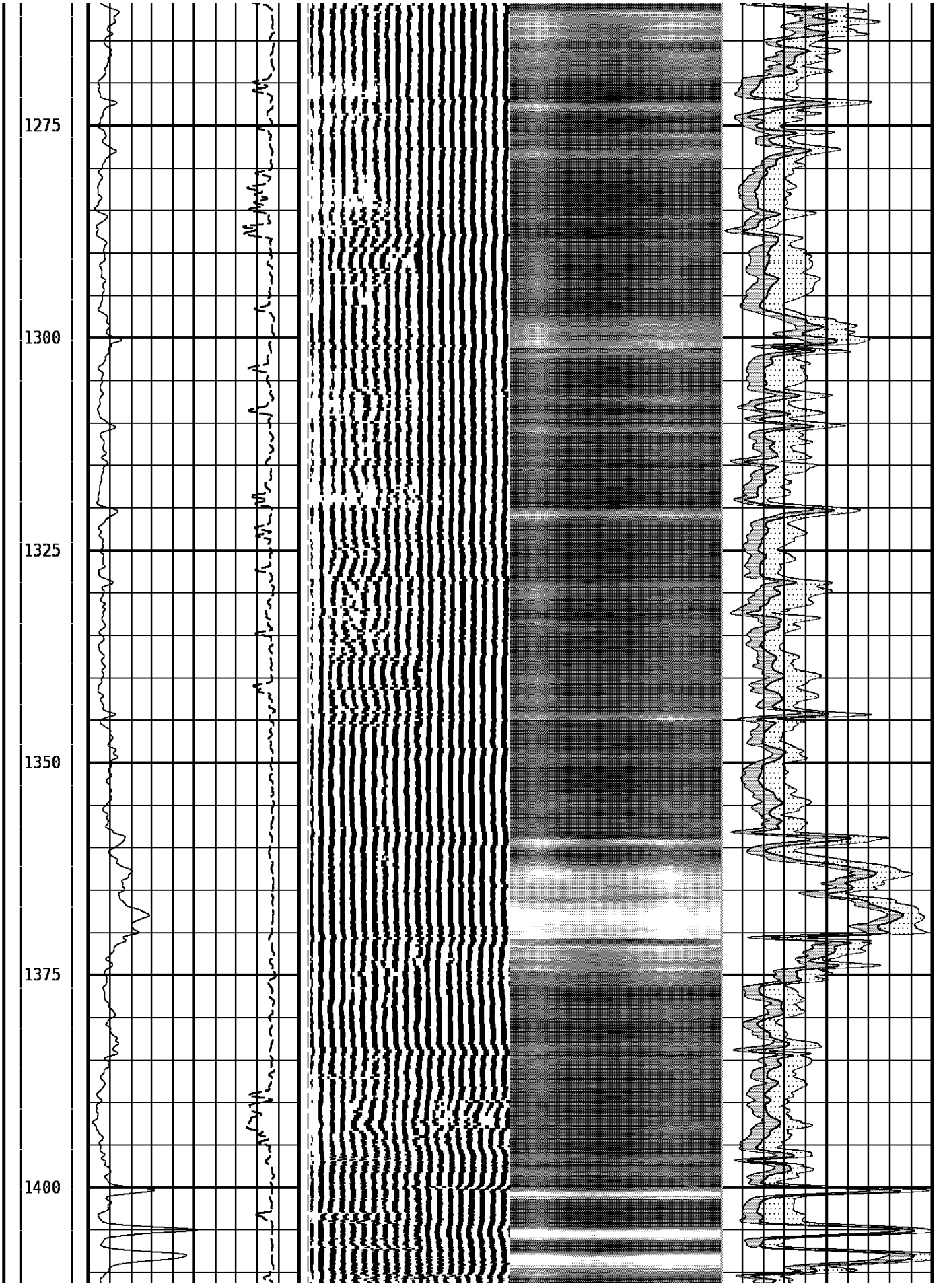
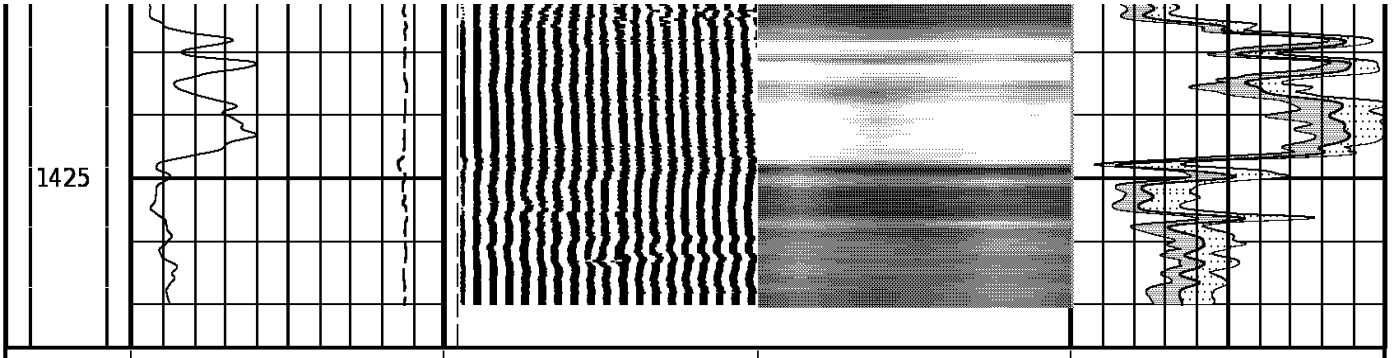
1150
1175
1200
1225
1250


1275
1300
1325
1350
1375
1400



3' AMPLITUDE			VARIABLE DENSITY			VARIABLE ENERGY			MIN ENERGY		
0	Millivolts	100	200	Microseconds	1200	0	Millivolts	80	0	Millivolts	100
3' TRAVEL TIME			**FREE PIPE TT**						**AVG ENERGY**		
600	Microseconds	200	200	Microseconds	1200				0	Millivolts	100
									MAX ENERGY		
									0	Millivolts	100

START DEPTH: **1438.5** DIRECTION: **UP** DATE: **03/16/2007** TIME: **14:36** MODE: **TRACE PLAYBACK**

4313640 HSDA600

MERGED PASS

DEPTH SCALE: **1:600** VERSION: **7021587 R**

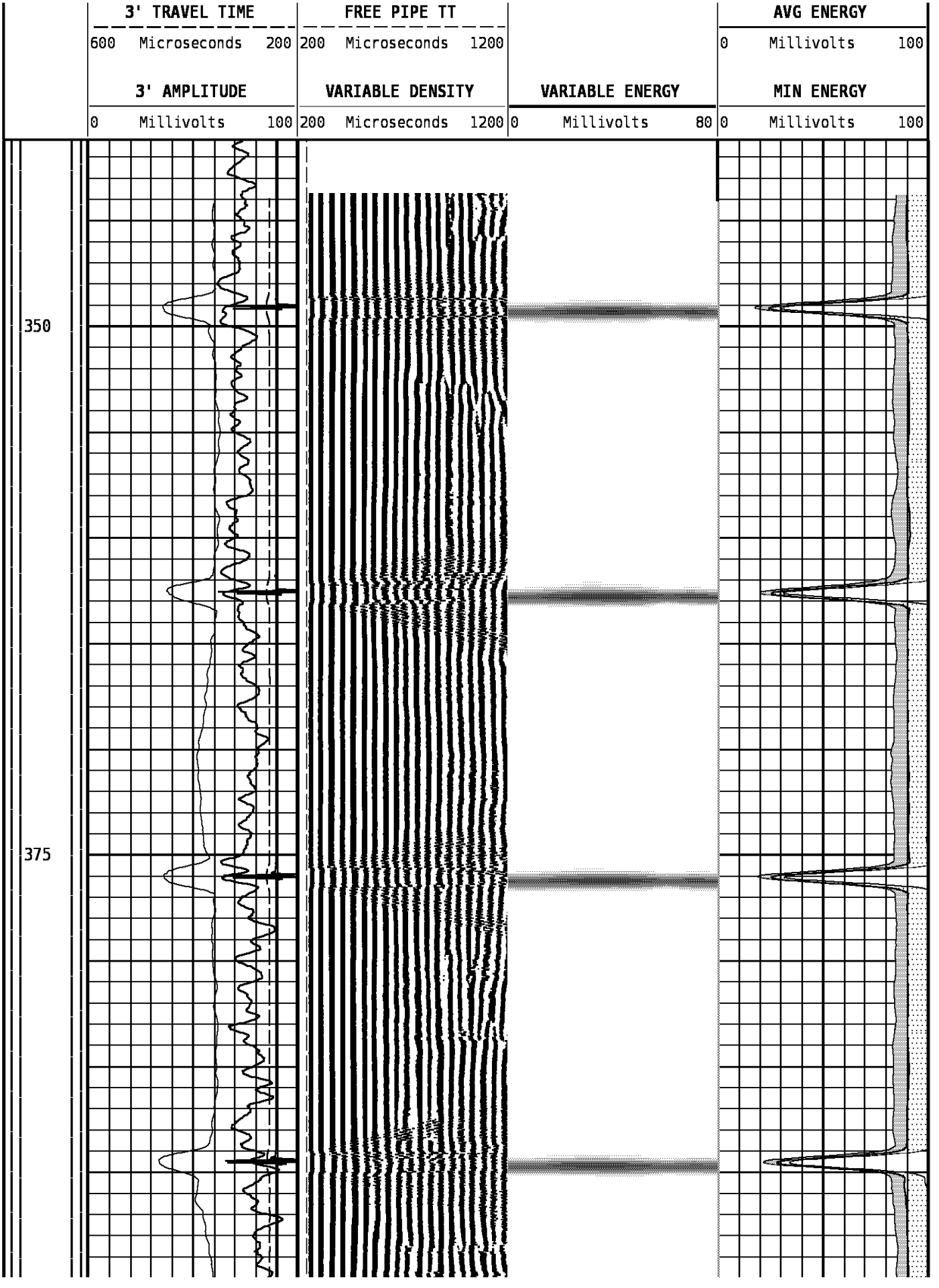
DEPTH SCALE: **1:240** VERSION: **7021587 R**

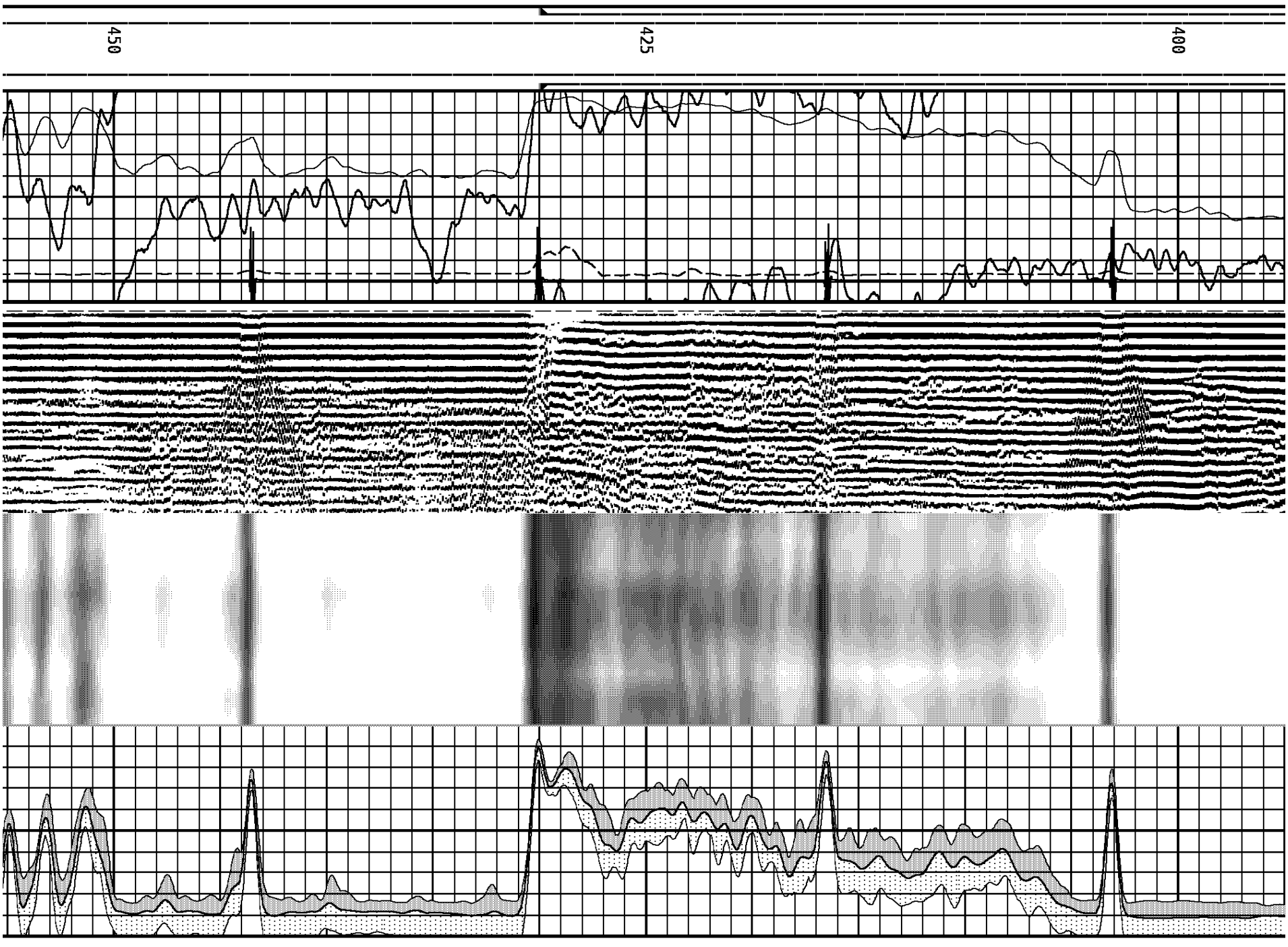
MAIN PASS

4313640 SEC4

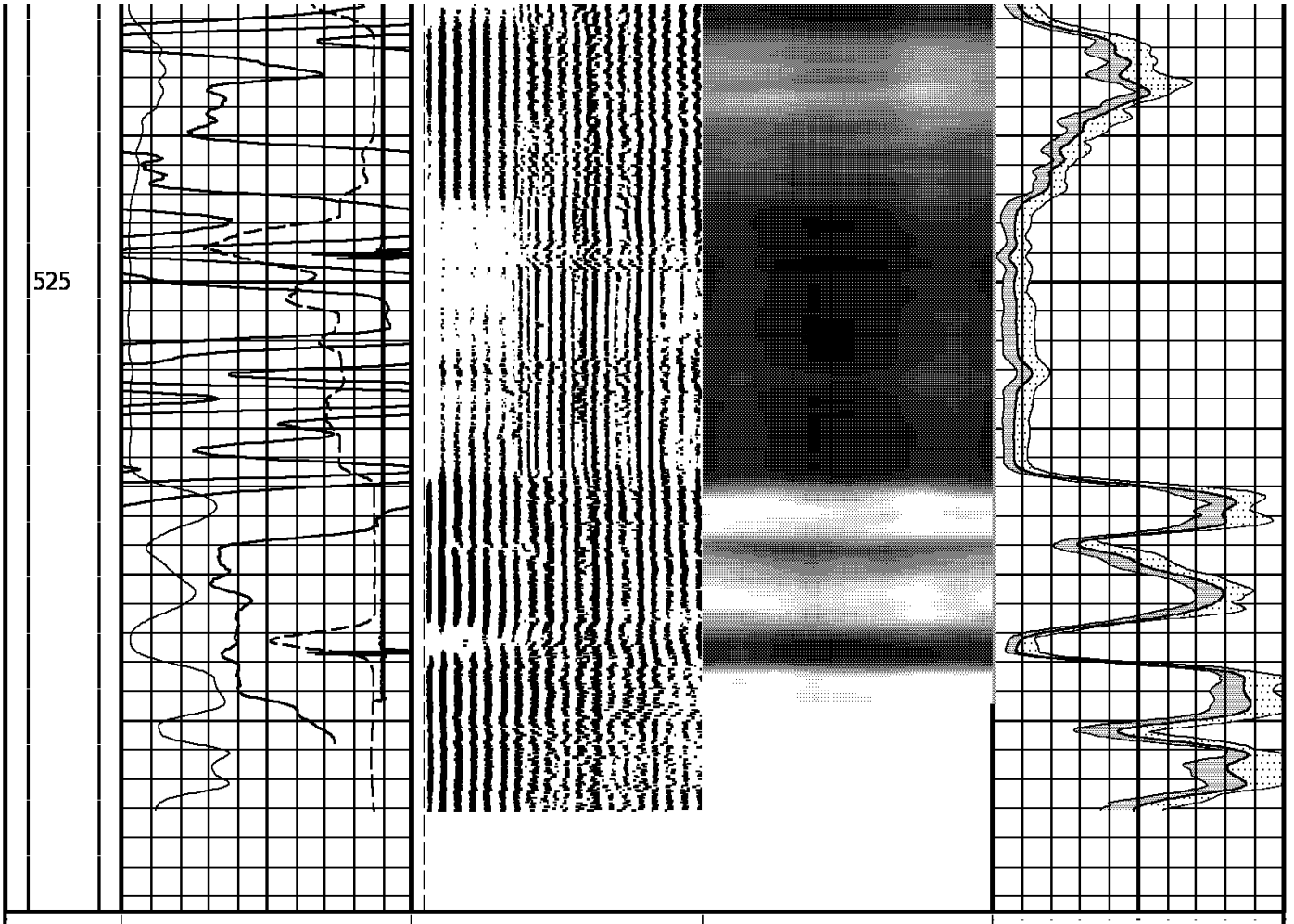
FINISH DEPTH: **349.4** Meters DIRECTION: **UP** DATE: **03/16/2007** TIME: **14:44** MODE: **TRACE PLAYBACK**

COLLAR LOCATOR			MAX ENERGY		
-5000	Millivolts	550	0	Millivolts	100
GAMMA RAY					
0	API	120			


3' TRAVEL TIME
600 Microseconds 200
FREE PIPE TT
200 Microseconds 1200
AVG ENERGY
0 Millivolts 100
3' AMPLITUDE
0 Millivolts 100
VARIABLE DENSITY
200 Microseconds 1200
VARIABLE ENERGY
0 Millivolts 80
MIN ENERGY
0 Millivolts 100
350
375


450
425
400

475
500



3' AMPLITUDE			VARIABLE DENSITY			VARIABLE ENERGY			MIN ENERGY		
0	Millivolts	100	200	Microseconds	1200	0	Millivolts	80	0	Millivolts	100
3' TRAVEL TIME			**FREE PIPE TT**						**AVG ENERGY**		
600	Microseconds	200	200	Microseconds	1200				0	Millivolts	100
GAMMA RAY									**MAX ENERGY**		
0	API	120							0	Millivolts	100
COLLAR LOCATOR											
-5000	Millivolts	550									

START DEPTH: **550.0** DIRECTION: **UP** DATE: **03/16/2007** TIME: **14:24** MODE: **TRACE PLAYBACK**

4313640 SEC4

MAIN PASS

DEPTH SCALE: **1:240** VERSION: **7021587 R**

DEPTH SCALE: **1:240**

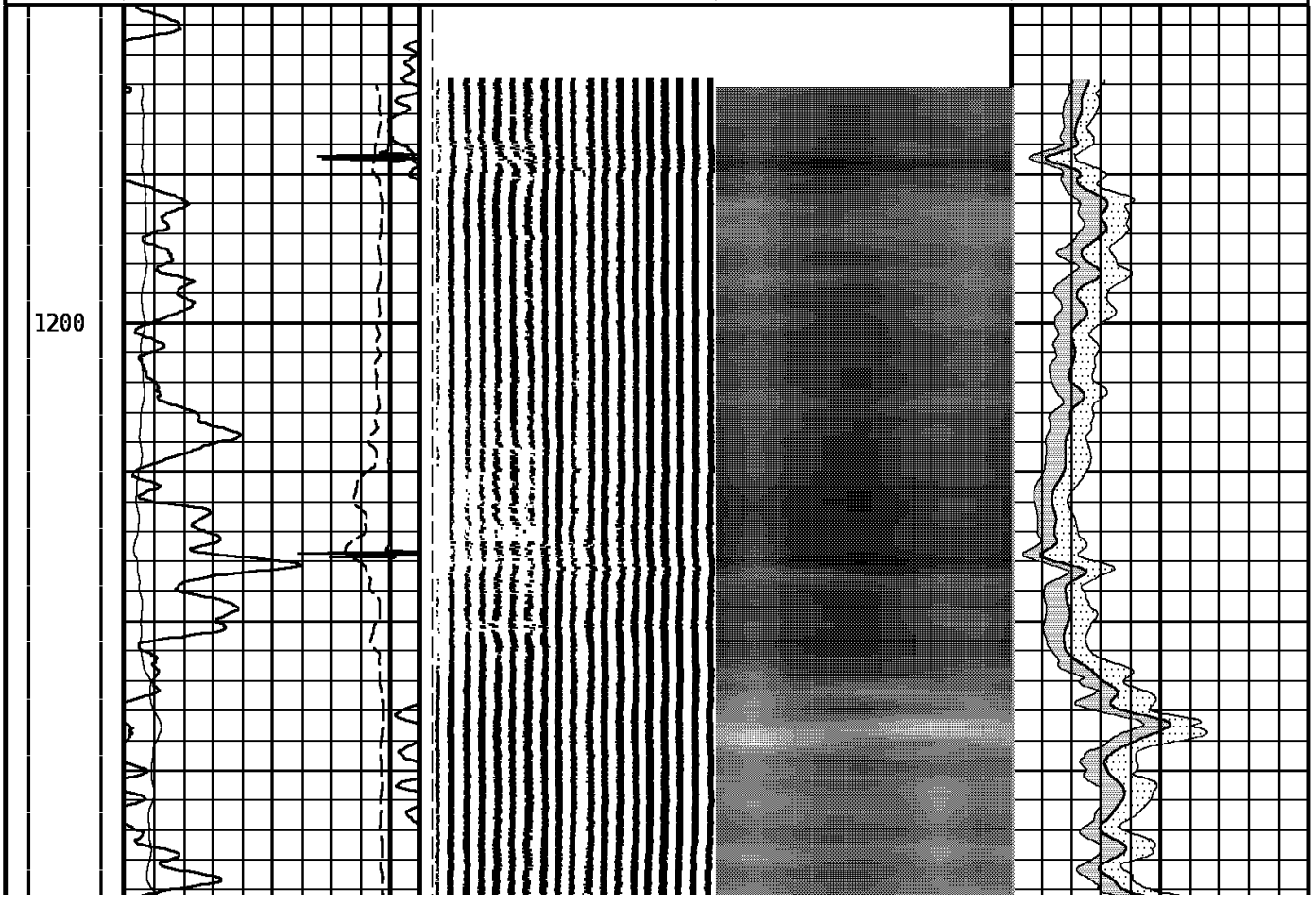
VERSION: **7021587 R**

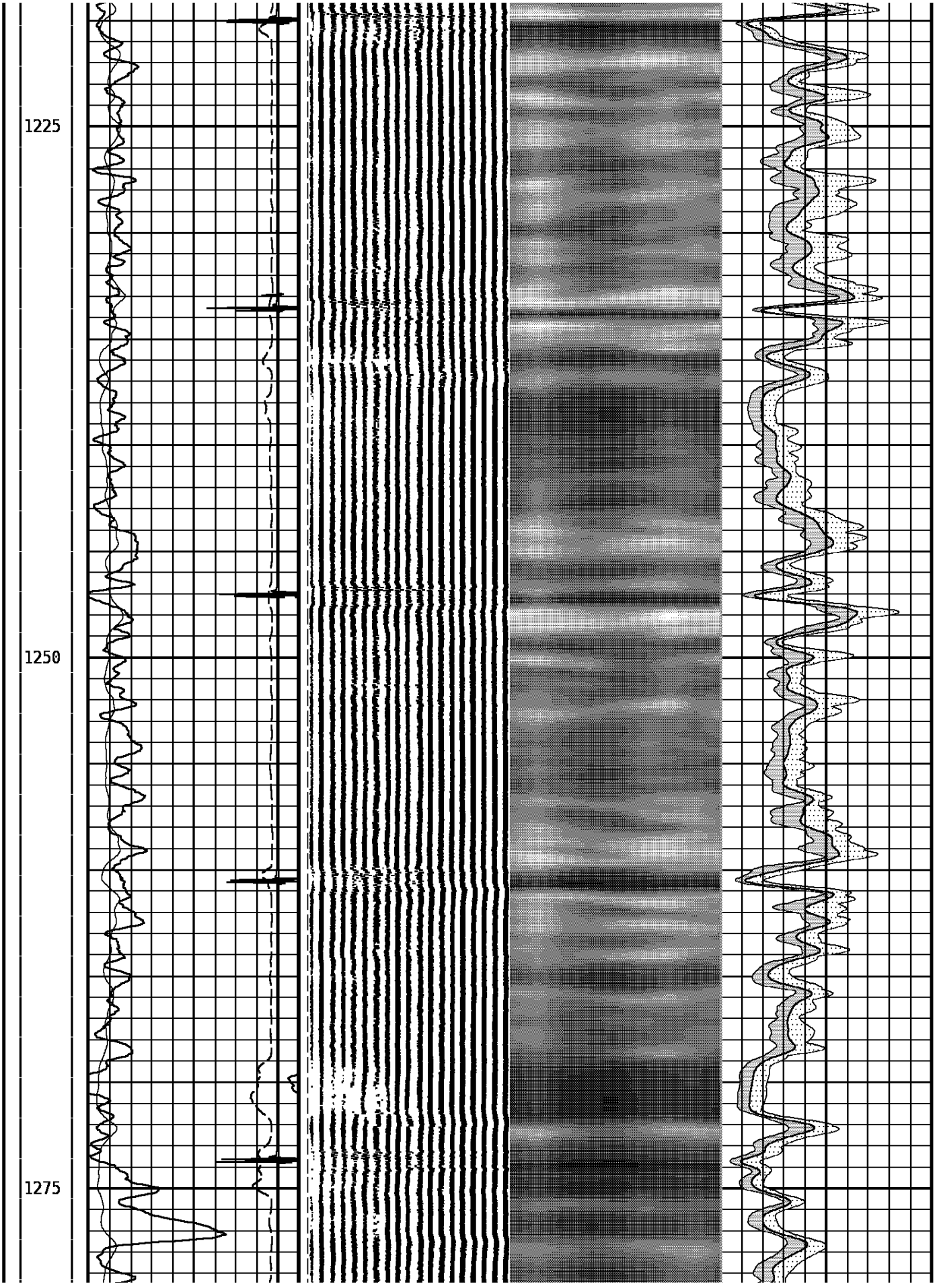
MAIN PASS

4313640 SEC2

FINISH DEPTH: **1197.5** Meters DIRECTION: **UP** DATE: **03/16/2007** TIME: **14:18** MODE: **TRACE PLAYBACK**

COLLAR LOCATOR				**MAX ENERGY**
-5000 Millivolts 550				0 Millivolts 100
GAMMA RAY				
0 API 120				
3' TRAVEL TIME	**FREE PIPE TT**			**AVG ENERGY**
600 Microseconds 200	200 Microseconds 1200			0 Millivolts 100
3' AMPLITUDE	**VARIABLE DENSITY**		**VARIABLE ENERGY**	**MIN ENERGY**
0 Millivolts 100	200 Microseconds 1200		0 Millivolts 80	0 Millivolts 100

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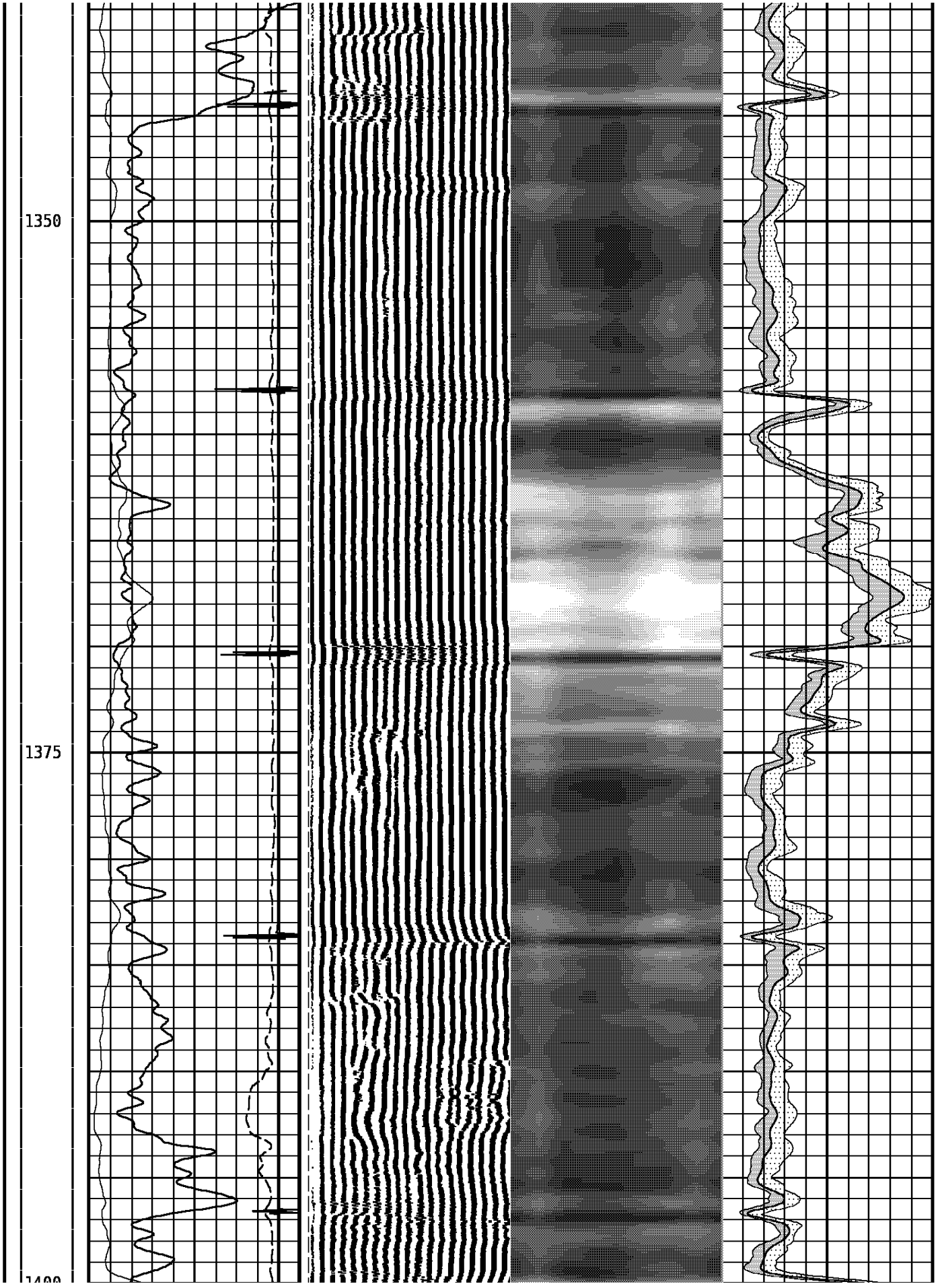
1250
1275

1300
1325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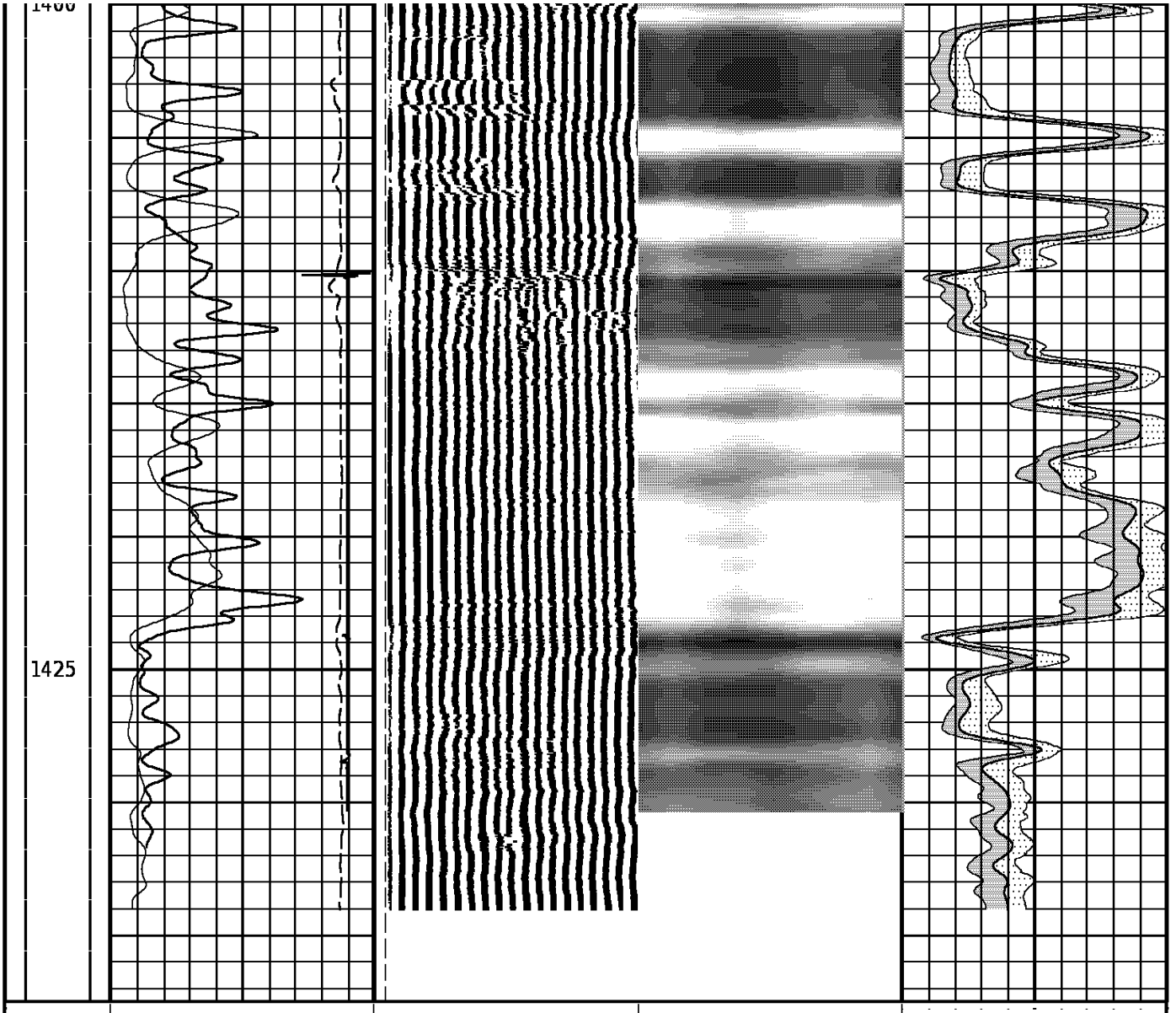


3' AMPLITUDE			VARIABLE DENSITY			VARIABLE ENERGY			MIN ENERGY		
0	Millivolts	100	200	Microseconds	1200	0	Millivolts	80	0	Millivolts	100
3' TRAVEL TIME			**FREE PIPE TT**						**AVG ENERGY**		
600	Microseconds	200	200	Microseconds	1200				0	Millivolts	100
GAMMA RAY									**MAX ENERGY**		
0	API	120							0	Millivolts	100
COLLAR LOCATOR											
-5000	Millivolts	550									

START DEPTH: **1441.0** DIRECTION: **UP** DATE: **03/16/2007** TIME: **13:54** MODE: **TRACE PLAYBACK**

4313640 SEC2

MAIN PASS

DEPTH SCALE: **1:240** VERSION: **7021587 R**

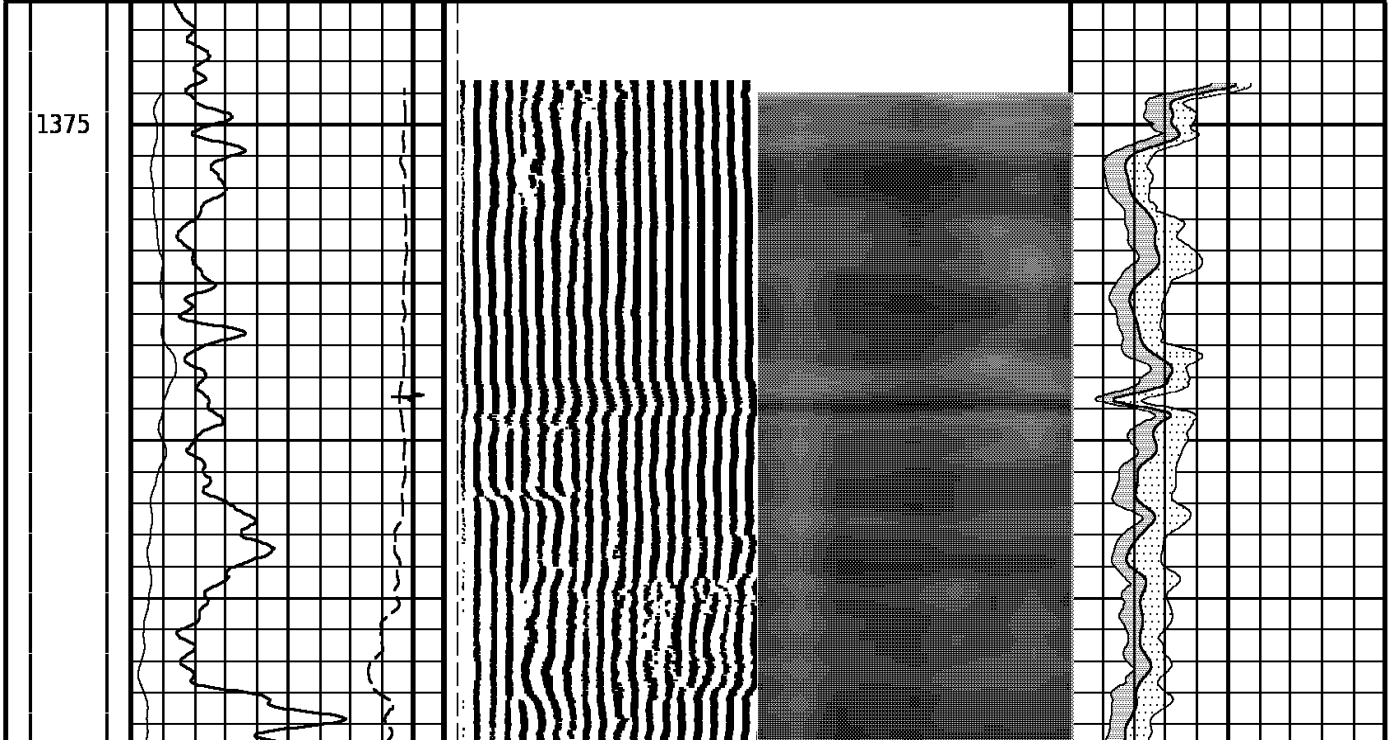
DEPTH SCALE: **1:240** VERSION: **7021587 R**

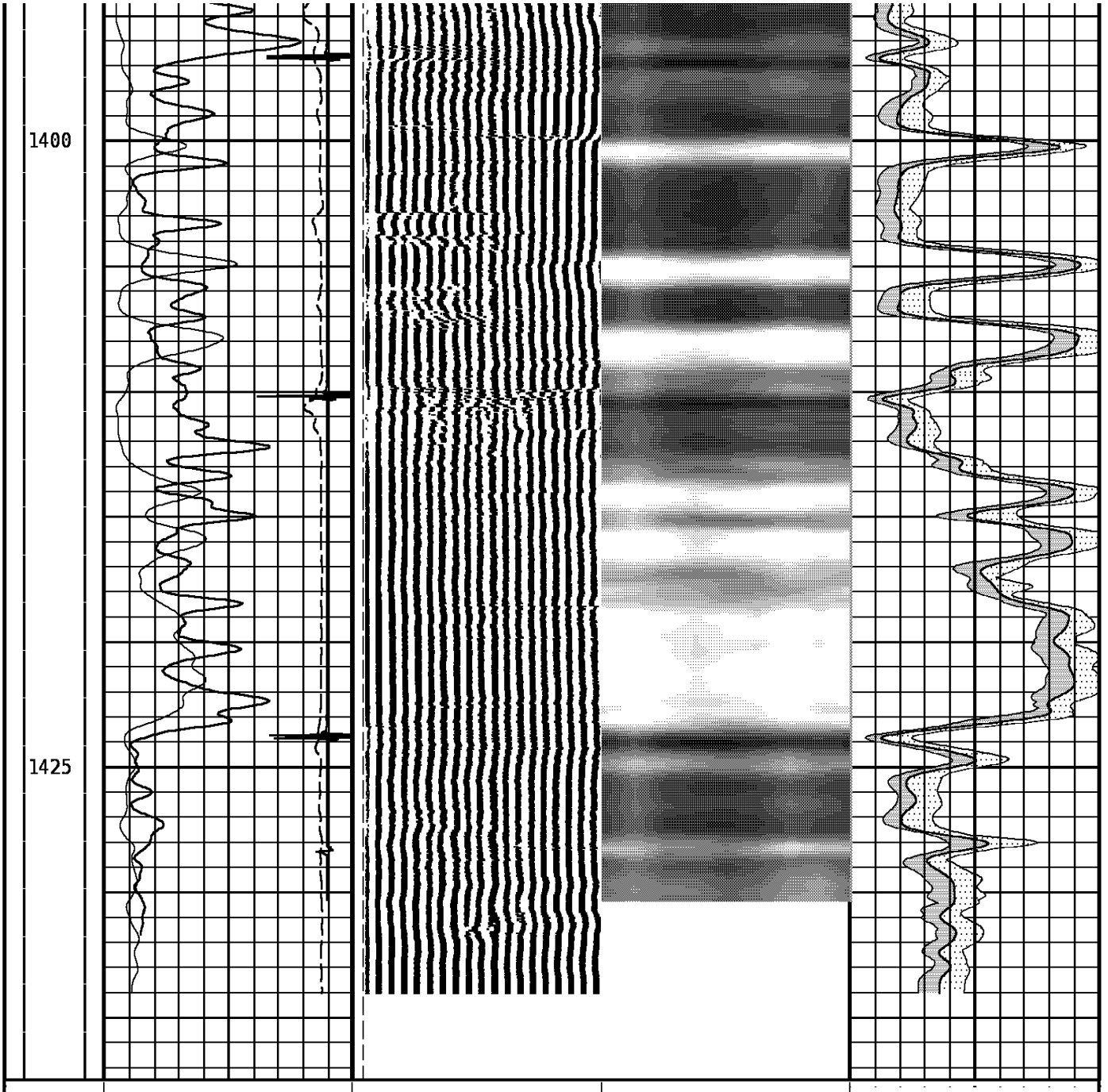
MAIN PASS

4313640 SEC1A

FINISH DEPTH: **1437.5** Meters DIRECTION: **UP** DATE: **03/16/2007** TIME: **14:30** MODE: **TRACE PLAYBACK**

COLLAR LOCATOR					**MAX ENERGY**
-5000 Millivolts 550					0 Millivolts 100
GAMMA RAY					
0 API 120					**AVG ENERGY**
3' TRAVEL TIME	**FREE PIPE TT**				0 Millivolts 100
600 Microseconds 200	200 Microseconds 1200				**MIN ENERGY**
3' AMPLITUDE	**VARIABLE DENSITY**		**VARIABLE ENERGY**		0 Millivolts 100
0 Millivolts 100	200 Microseconds 1200		0 Millivolts 80		





3' AMPLITUDE			VARIABLE DENSITY			VARIABLE ENERGY			MIN ENERGY		
0	Millivolts	100	200	Microseconds	1200	0	Millivolts	80	0	Millivolts	100
3' TRAVEL TIME			**FREE PIPE TT**						**AVG ENERGY**		
600	Microseconds	200	200	Microseconds	1200				0	Millivolts	100
GAMMA RAY									**MAX ENERGY**		
0	API	120							0	Millivolts	100
COLLAR LOCATOR											
-5000	Millivolts	550									

START DEPTH: **1437.5** DIRECTION: **UP** DATE: **03/16/2007** TIME: **14:30** MODE: **TRACE PLAYBACK**

4313640 SEC1A

MAIN PASS

DEPTH SCALE: **1:240** VERSION: **7021587 R**

01/01/88 12:00 0.0 M Ver Job

Gamma Ray Before Survey Calibration

Tool Type: GRB-AA Serial No: 183
Calibrator No:

Background	Calibrator	Standard	Units
24.5	195.0	120.0	API

Delta Counts Per Sec: 170.5 CPS/API = 1.421

08/03/05 02:01 18.0 M Ver 50223795 Job 4246042

Sector Bond Before Calibration

Tool Type SBT-AA Serial No sbt131

Sensor	Description	Standard	Measured
AMP 3FT	ZERO	0.00	2.50
	PLUS	72.00	1255.60
AMP 5FT	ZERO	0.00	11.23
	PLUS	60.00	1350.90
1 SECTOR AMP	ZERO	0.00	15.40
	PLUS	90.00	1404.40
2 SECTOR AMP	ZERO	0.00	13.20
	PLUS	90.00	1508.60

3 SECTOR AMP	ZERO	0.00	10.30
	PLUS	90.00	1475.80
4 SECTOR AMP	ZERO	0.00	11.22
	PLUS	90.00	1469.20
5 SECTOR AMP	ZERO	0.00	11.60
	PLUS	90.00	1455.60
6 SECTOR AMP	ZERO	0.00	11.20
	PLUS	90.00	1494.50
7 SECTOR AMP	ZERO	0.00	13.80
	PLUS	90.00	1323.60
8 SECTOR AMP	ZERO	0.00	10.10
	PLUS	90.00	1465.40

1-11/16" Adaptor

Weight	1 kg
Length	0.31 m
Max. Diameter	4.28 cm

Total Stack Weight	63.4 kg	in air
Total Stack Length	8.51 m	

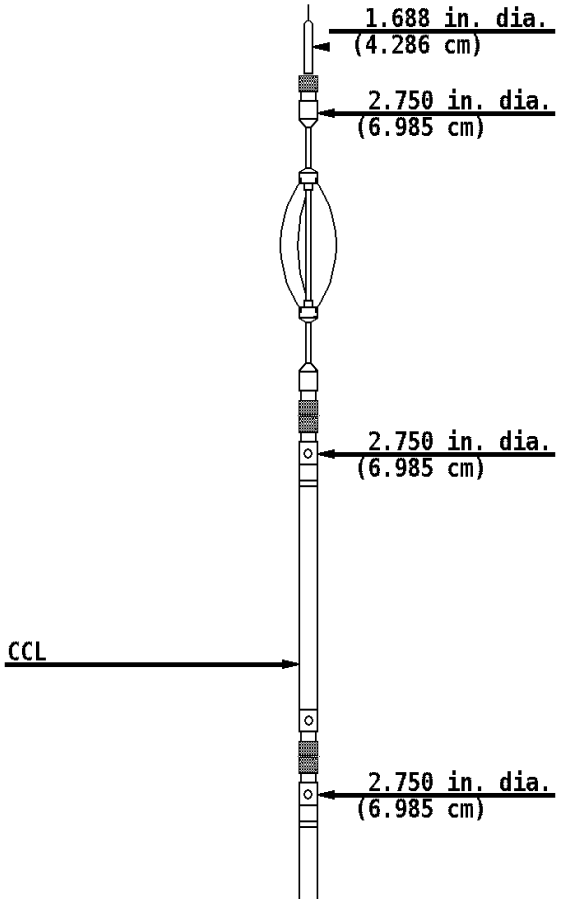
Slim Hole Centralizer

Weight	5.4 kg
Length	0.76 m
Max. Diameter	6.9 cm

Collar Locator

Weight	
Length	1.04 m
Max. Diameter	

Slim Hole Gamma Ray



Weight	
Length	1.45 m
Max. Diameter	

GR

2.750 in. dia.
(6.985 cm)

Slim Hole Centralizer

Weight	10.8 kg
Length	0.94 m
Max. Diameter	6.9 cm

2.750 in. dia.
(6.985 cm)

Sector Bond

Weight	40.8 kg
Length	3.15 m
Max. Diameter	6.9 cm

SBT/CBL Tx

SBT Rx 2.37 m

3' Rx 2.22 m

5' Rx 1.91 m

2.750 in. dia.
(6.985 cm)

Slim Hole Centralizer

Weight	5.4 kg
Length	0.76 m
Max. Diameter	6.9 cm

Tool Zero

COMPANY PARAMOUNT RESOURCES LTD

300/J-04-60-10-117-30

WELL PARA et al CAMERON J-04

FIELD CAMERON PROVINCE N.W.T

COMPENSATED SONIC

COMPANY	PARAMOUNT RESOURCES LTD.
WELL	PARAMOUNT ET AL CAMERON J-04
FIELD	CAMERON HILLS
PROVINCE/COUNTY	NORTH WEST TERRITORIES
COUNTRY/STATE	CANADA
LOCATION	300/J-04-60-10-117-30

FIELD PRINT

LSD	SEC	TWP	RGE	Other Services
				PHOTO DENSITY
				MICROLOG
				ARRAY INDUCTION
				DUAL SPACED NEUTRON

API Number
Permit Number 1159

Permanent Datum GROUND LEVEL, Elevation 765.20 metres
Log Measured From 4.00 M above Permanent Datum
Drilling Measured From KB

Elevations:	metres
KB	769.20
DF	
GL	765.20

Date	15-FEB-2007		
Run Number	1		
Depth Driller	1449.00	metres	
Depth Logger	1449.50	metres	
First Reading	1445.50	metre	
Last Reading	352.00	metre	
Casing Driller	430.00	metres	
Casing Logger	429.80	metres	
Bit Size	200.00	mm	
Hole Fluid Type	GELCHEM		
Density / Viscosity	1060.0 kg/M3	93.00 CP	
PH / Fluid Loss	11.00	11.00 ml/30Min	
Sample Source	FLOWLINE		
Rm @ Measured Temp	1.18 @ 25.0	ohm-m	
Rmf @ Measured Temp	1.04 @ 25.0	ohm-m	
Rmc @ Measured Temp	1.32 @ 25.0	ohm-m	
Source Rmf / Rmc	PRESS	FILTER	
Rm @ BHT	0.78 @ 48.0	ohm-m	
Time Since Circulation	6 HRS		
Max Recorded Temp	48.00	deg C	
Equipment Name	COMPACT		
Equipment / Base	13124	GPR	
Recorded By	G. SINGER		
Witnessed By	A. AHMED		
CIRC. STOP TIME	01:30-FEB-15		Last Line

BOREHOLE RECORD

Last Edited: 15-FEB-2007 05:01

Bit Size millimetres	Depth From metres	Depth To metres
311.000	0.00	430.00
200.000	430.00	1449.00

CASING RECORD

Type	Size millimetres	Depth From metres	Shoe Depth metres	Weight Kg/metre
SURFACE	219.100	0.00	430.00	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 INTERSONIC CRANK
   MTC: SIX LEAF CENTRALIZER
5) SERVICE ORDER #: 30073028 SAP #: 4147101 # FIELD PRINTS = 3
6) RIG: PD 129

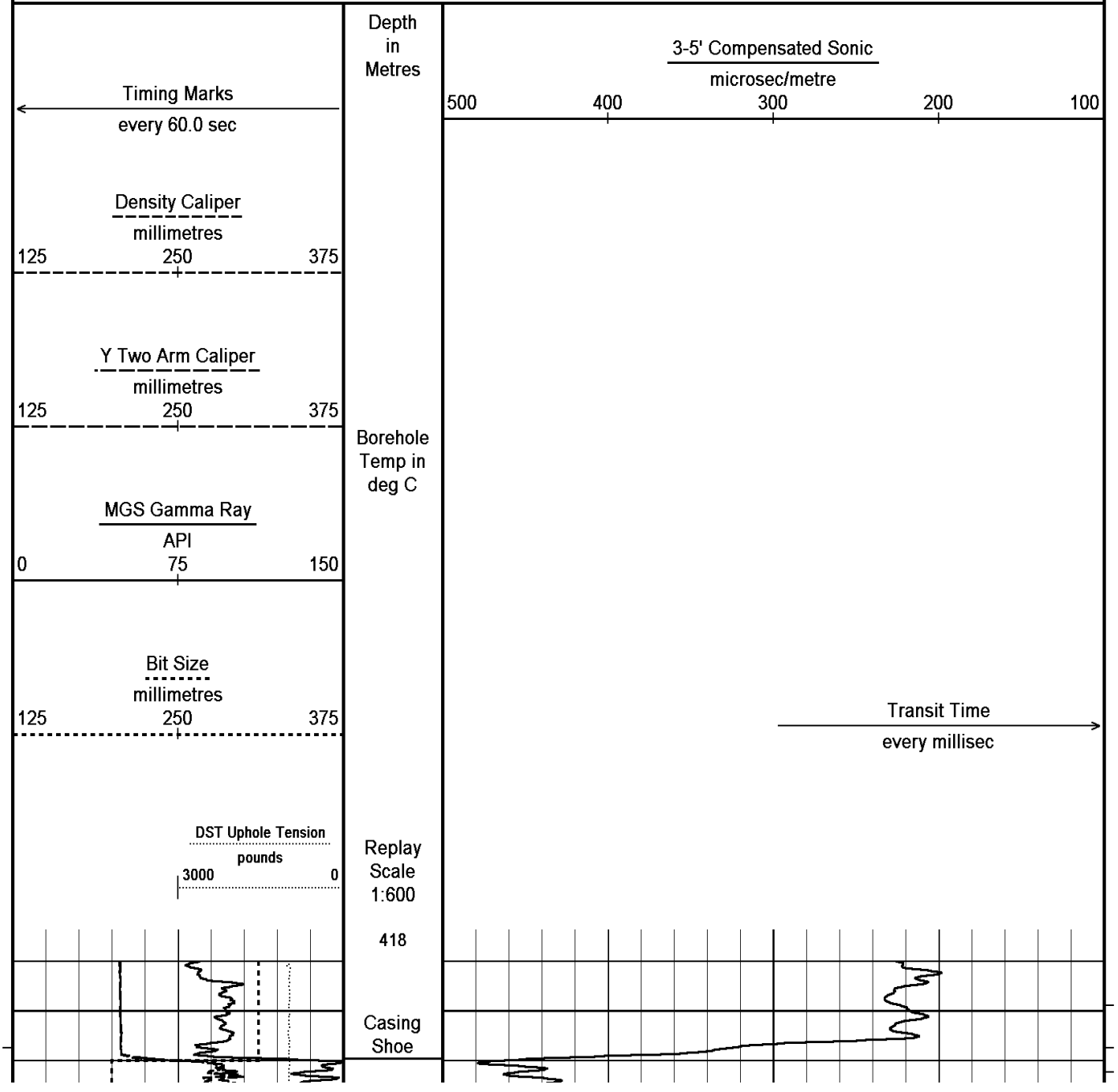
7) HOLE AND CEMENT VOLUMES CALCULATED USING DENSITY AND 2-ARM CALIPERS :
HOLE VOLUME = 37.4 CU.M.
ANNULAR VOLUME USING 139.7 MM PRODUCTION CASING = 21.8 CU.M

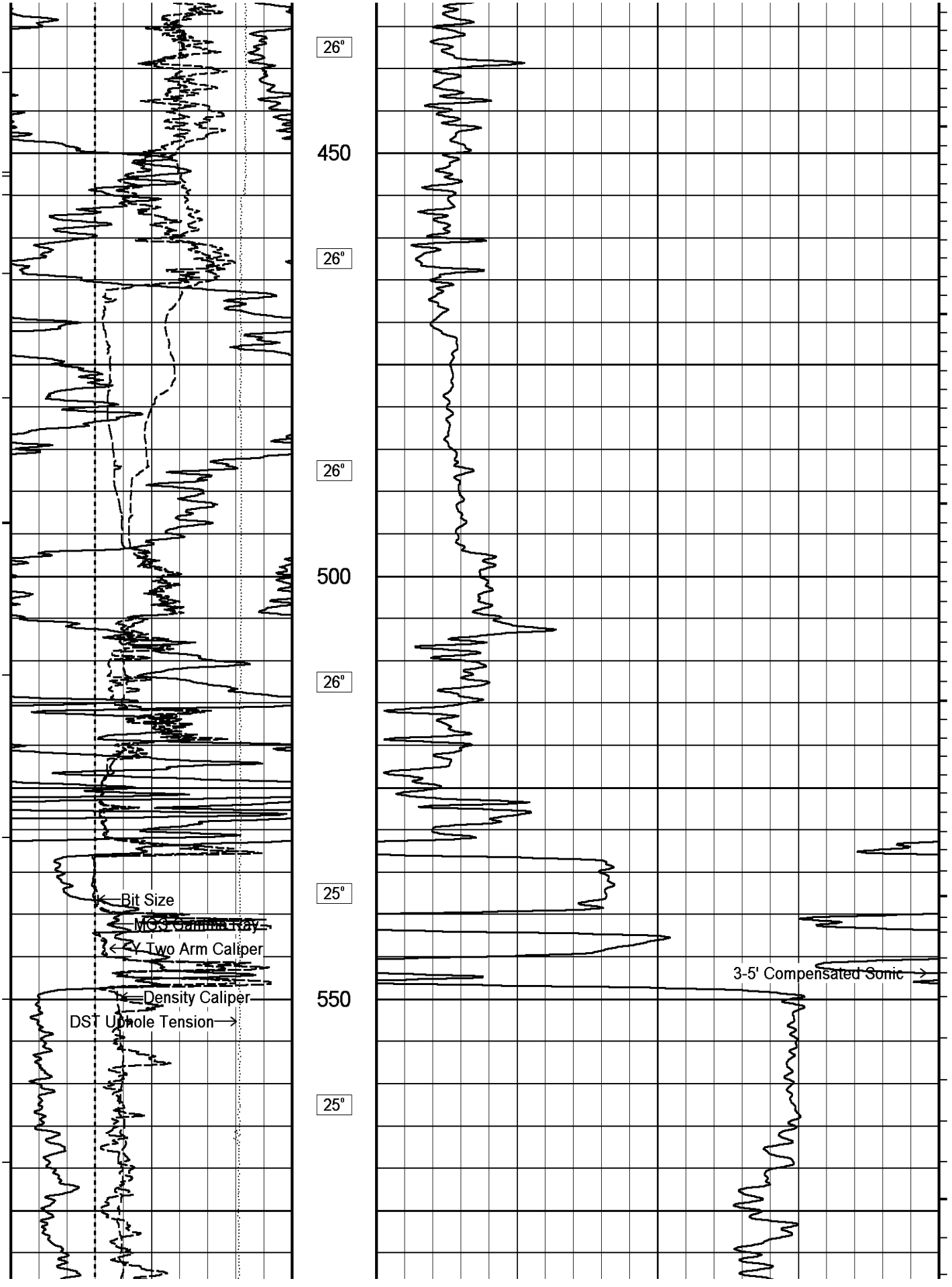
8) SONIC FREE PIPE FOUND FROM 352M - 357M

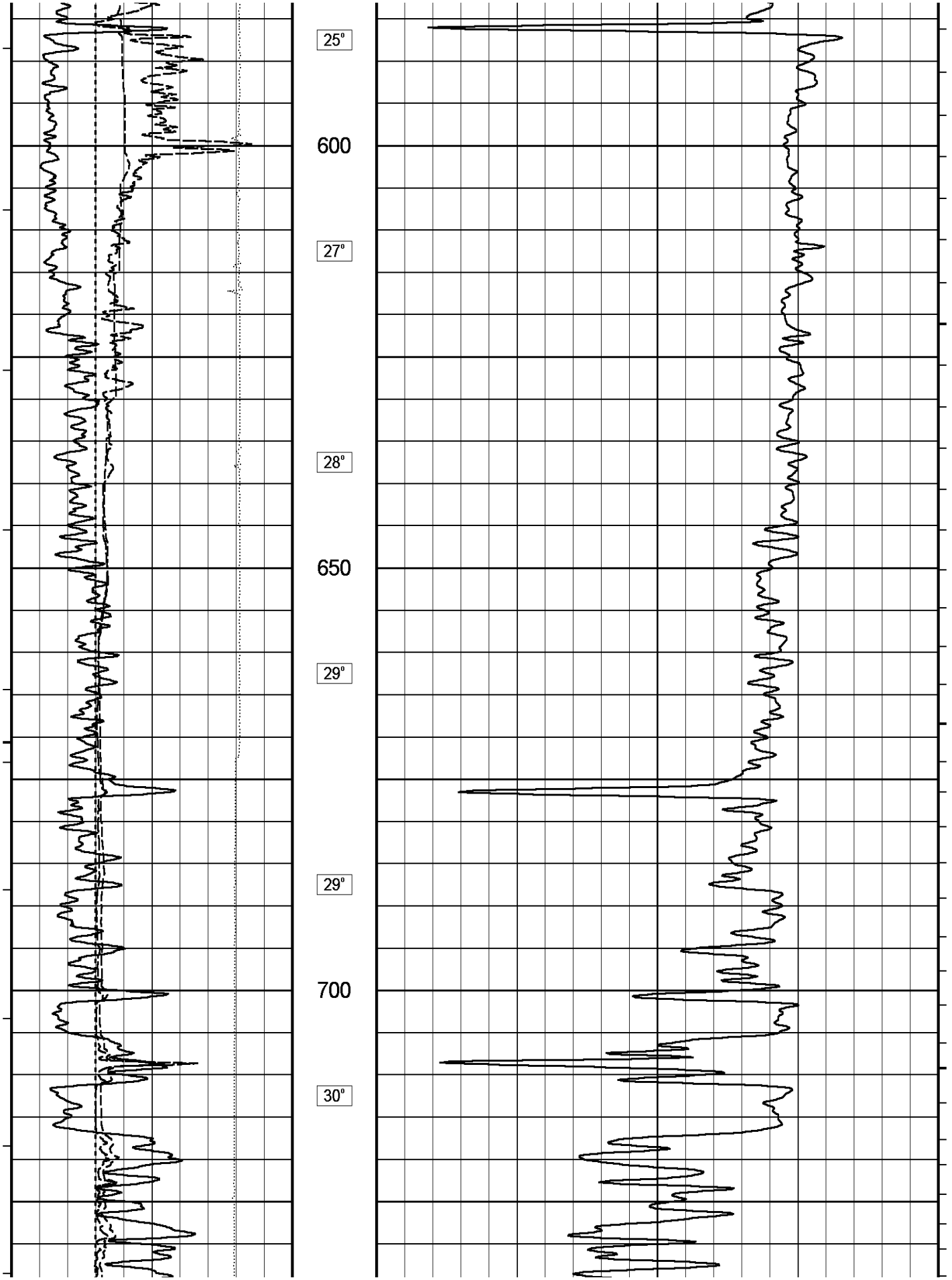
MAIN LOG 1:600

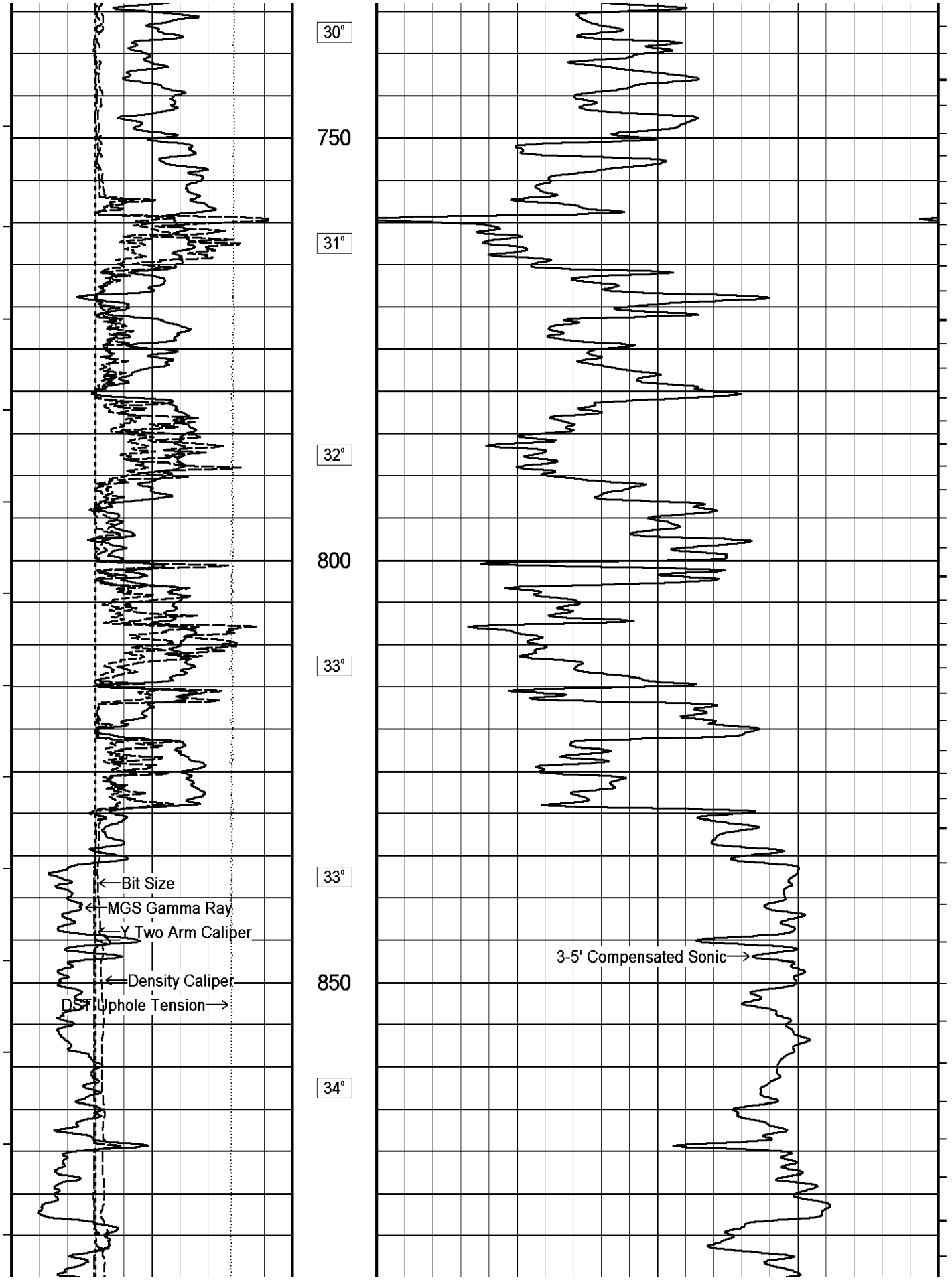
Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

Plotted on 12-NOV-2007 09:24
Recorded on 15-FEB-2007 08:46

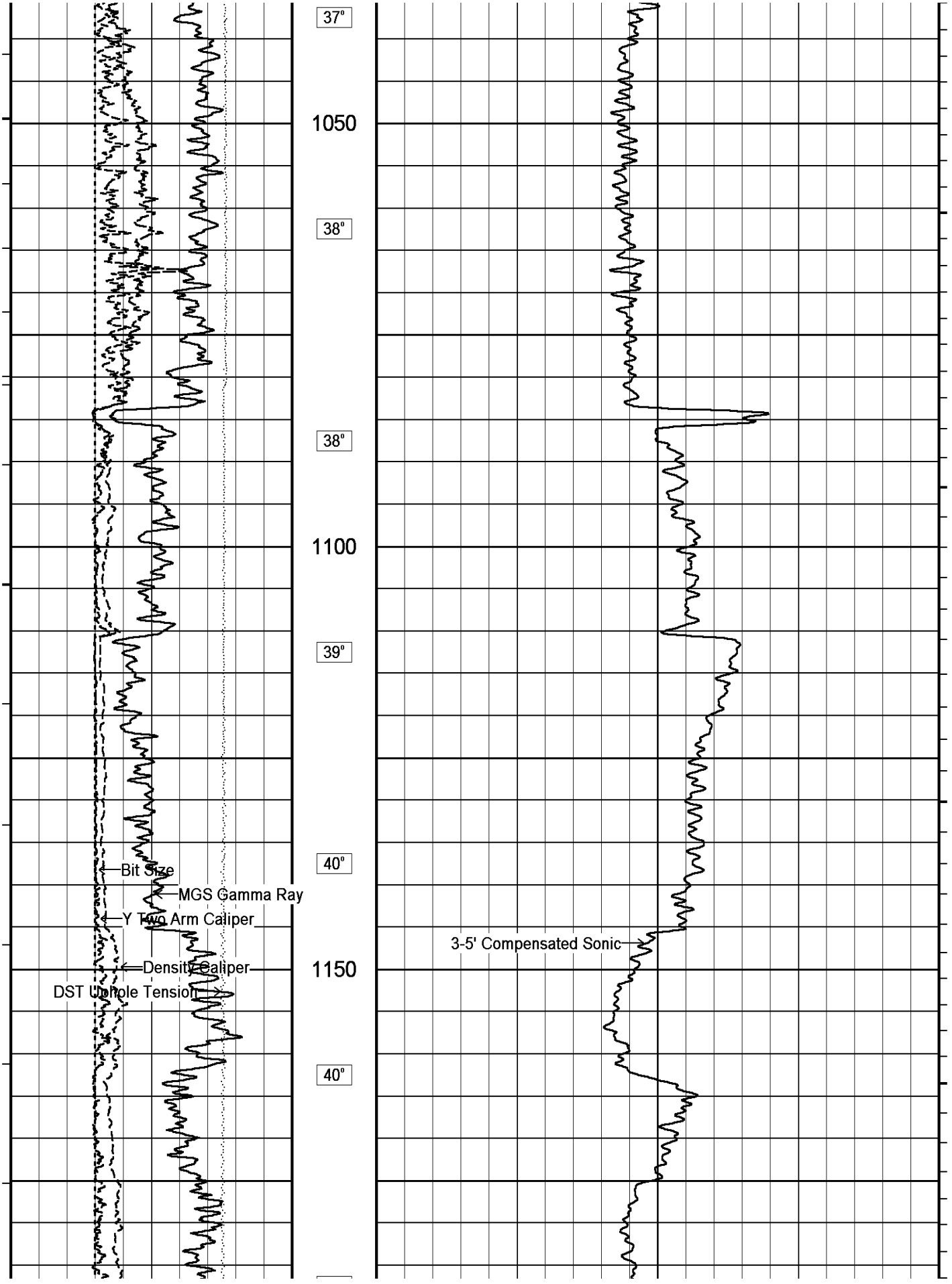


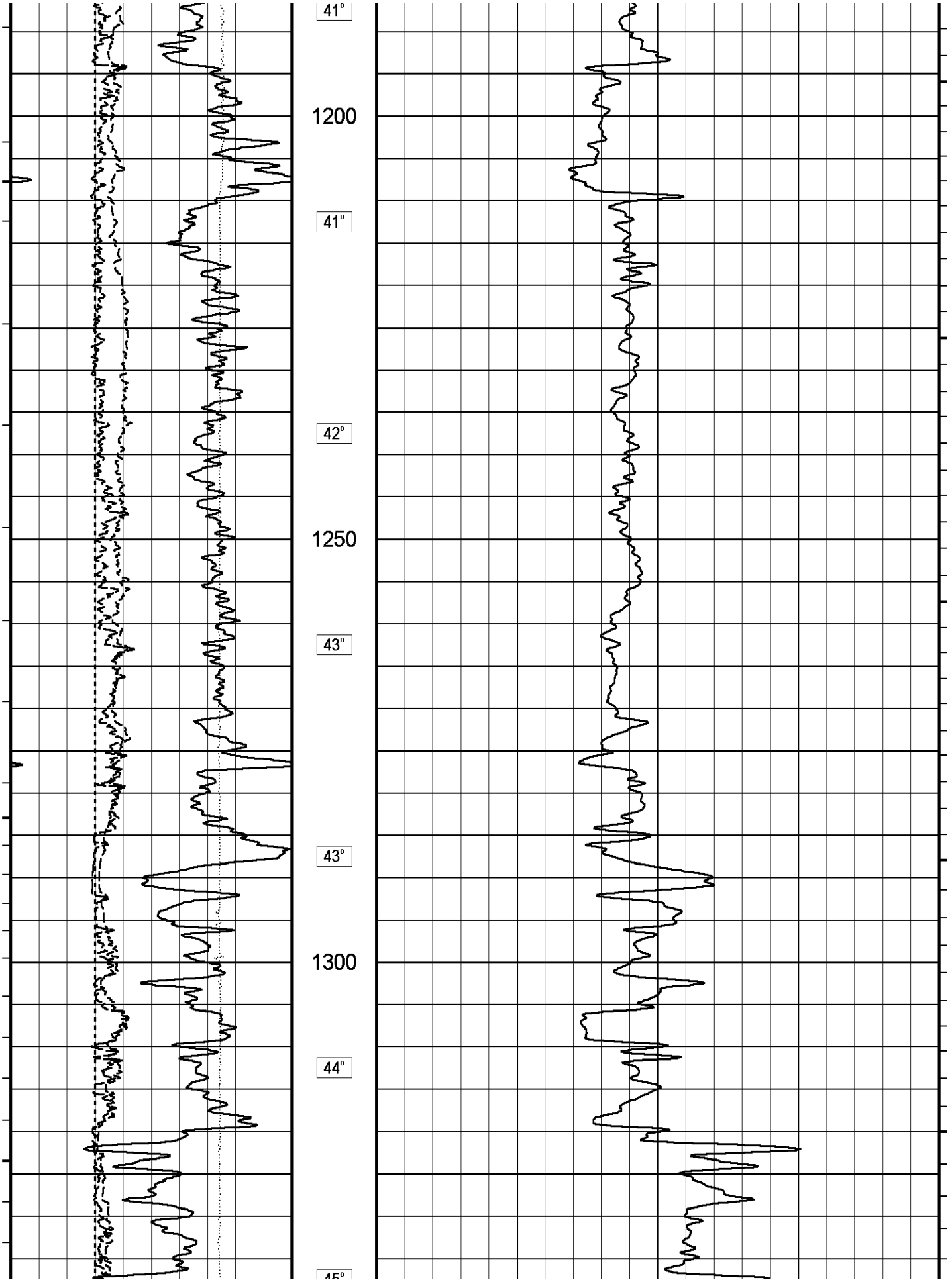

26°
450
26°
26°
500
26°
25°
Bit Size
MCS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
550
25°
3-5' Compensated Sonic

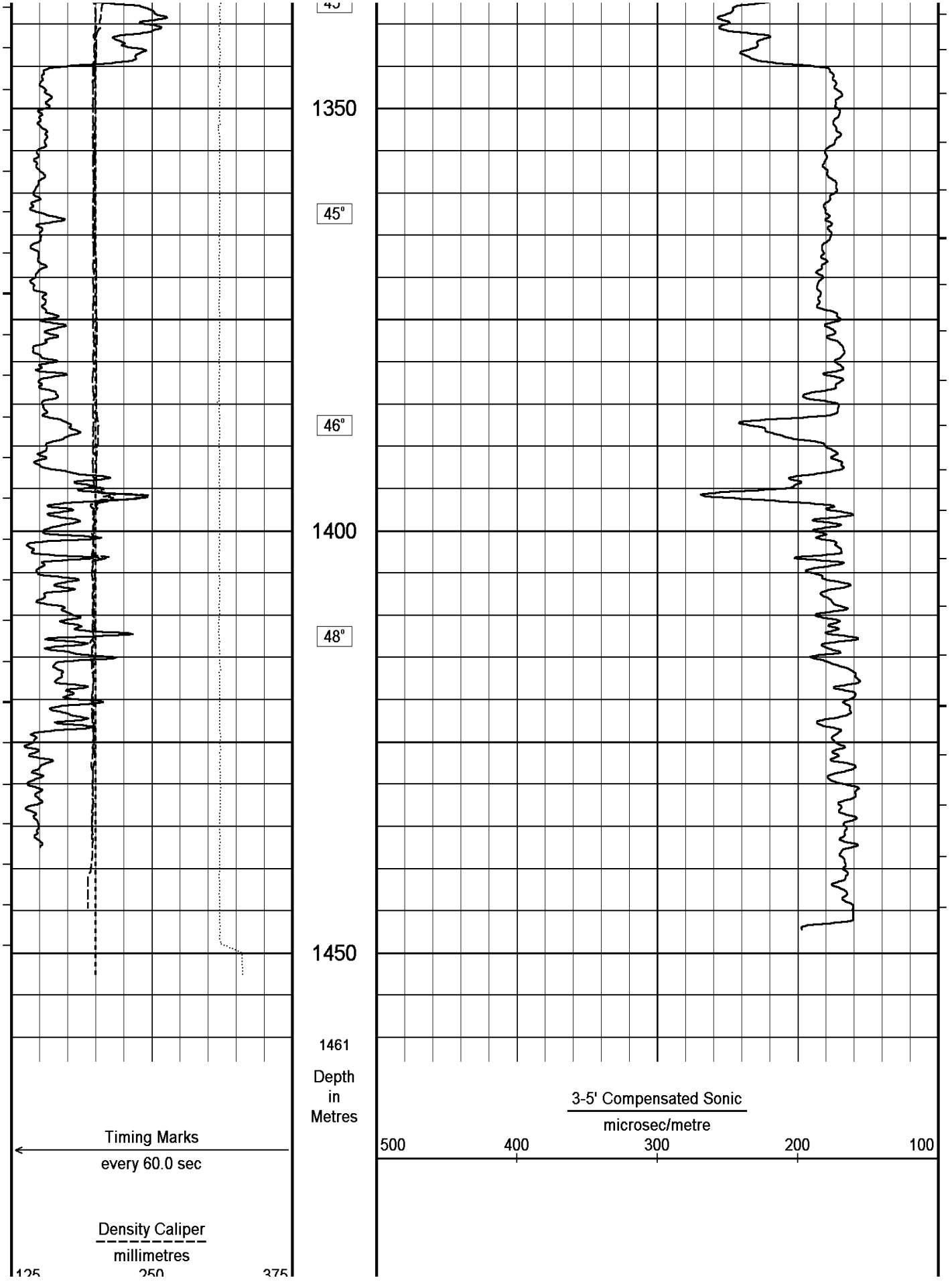

25°
600
27°
28°
650
29°
29°
700
30°

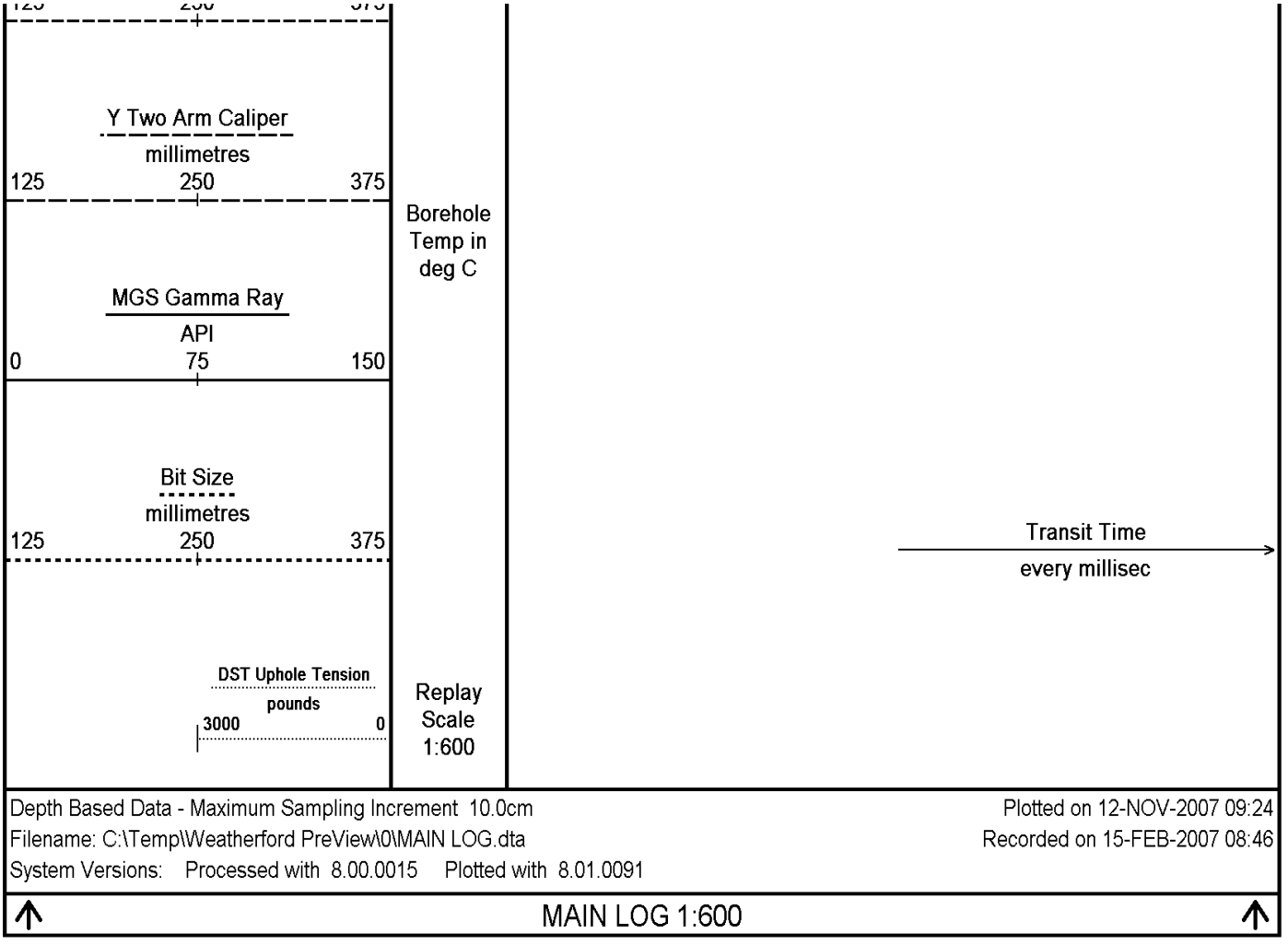

30°
750
31°
32°
800
33°
33°
850
34°
←Bit Size
←MGS Gamma Ray
←Y Two Arm Caliper
←Density Caliper
DS Tuphole Tension→
3-5' Compensated Sonic→

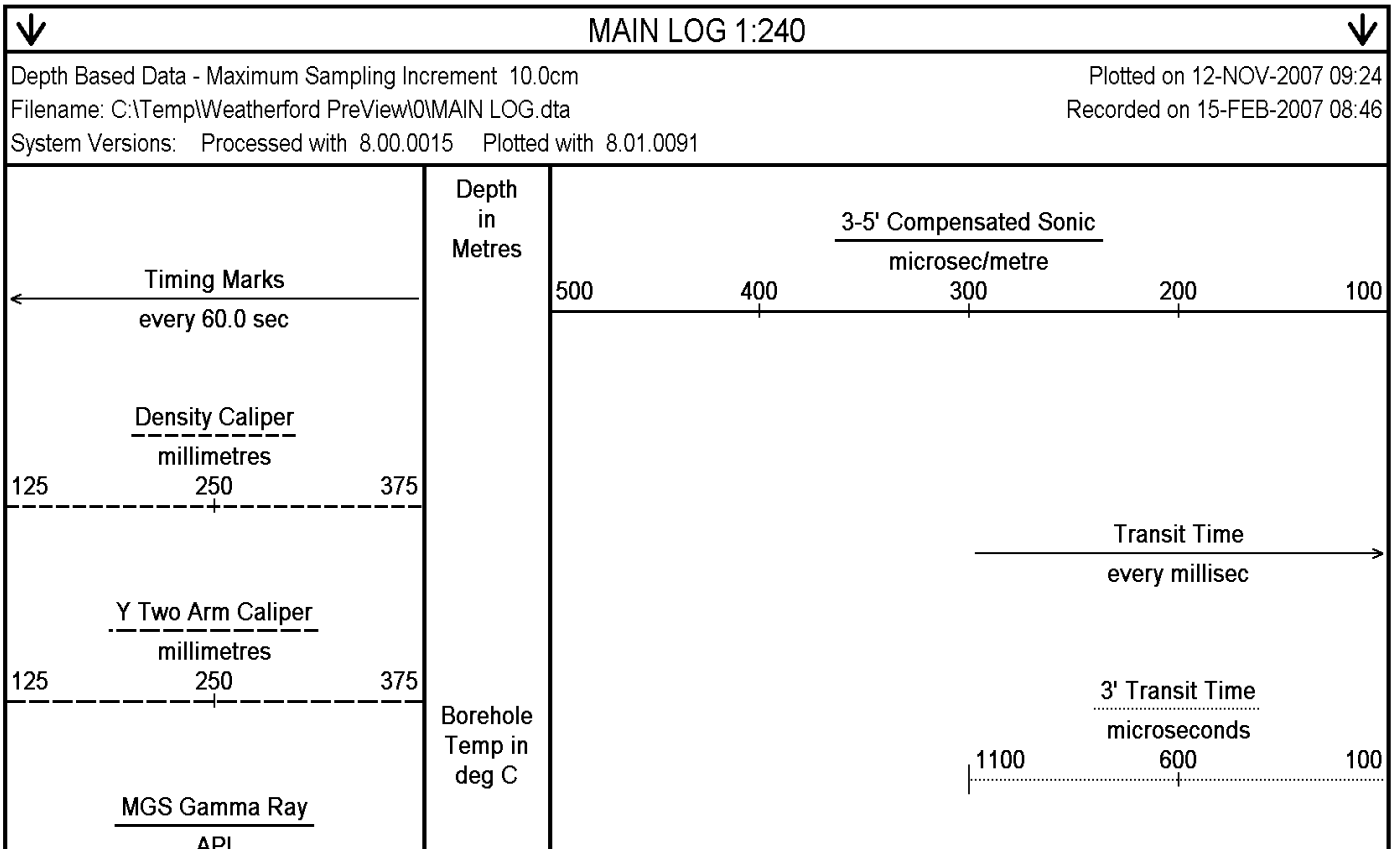
34°
900
35°
35°
950
36°
36°
1000
37°

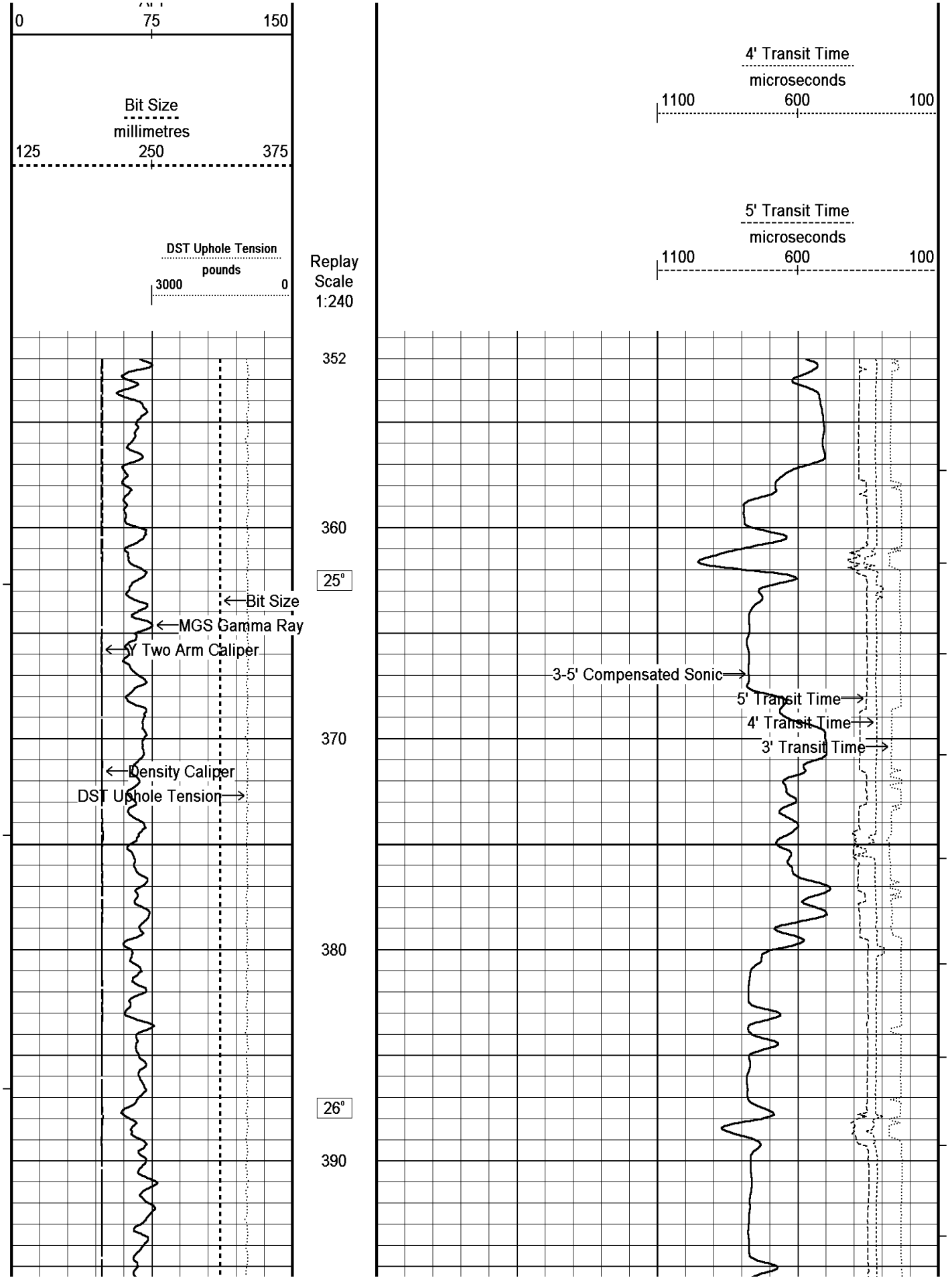

37°
1050
38°
38°
1100
39°
40°
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
1150
40°
3-5' Compensated Sonic

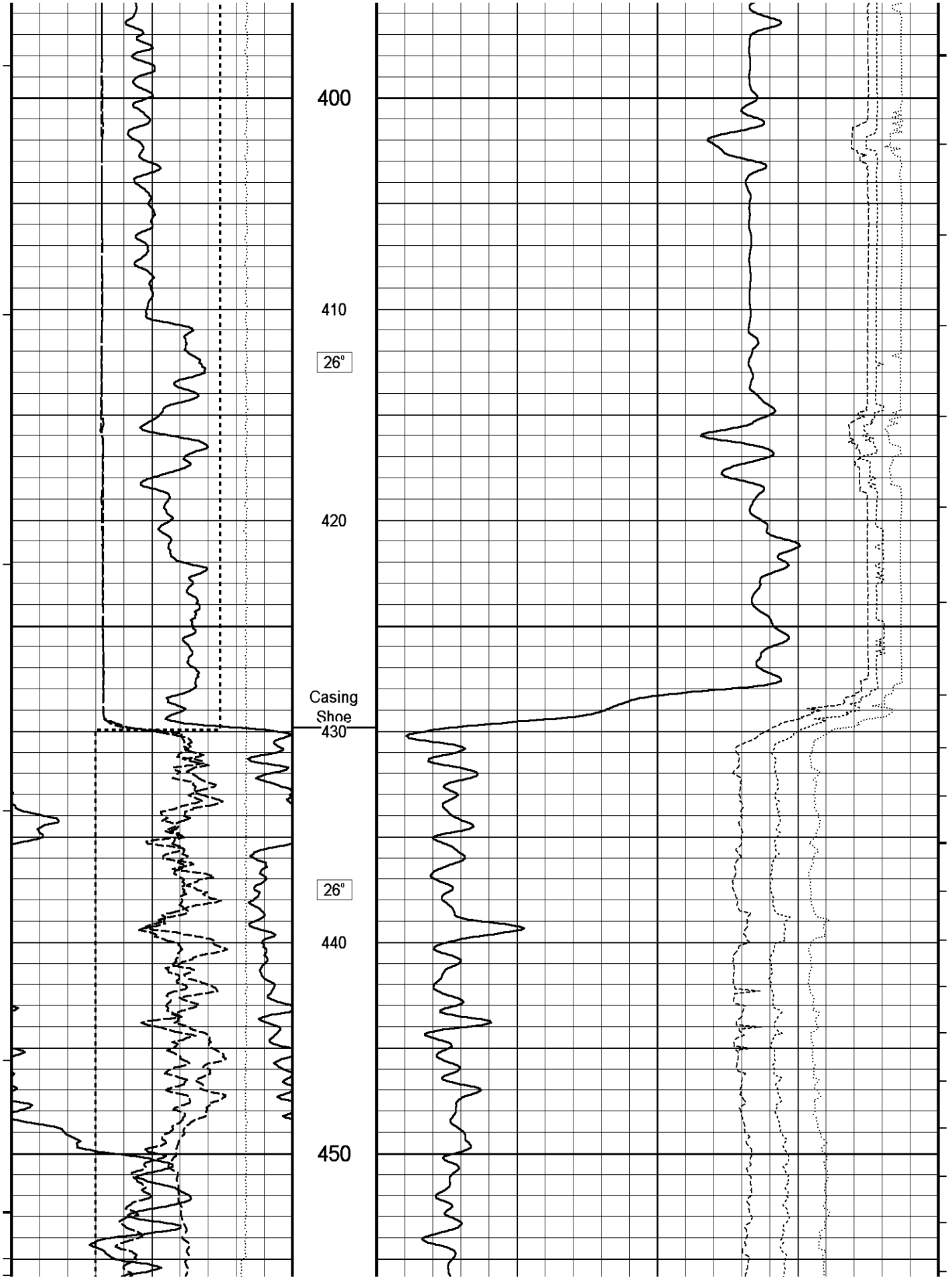

41°
1200
41°
42°
1250
43°
43°
1300
44°

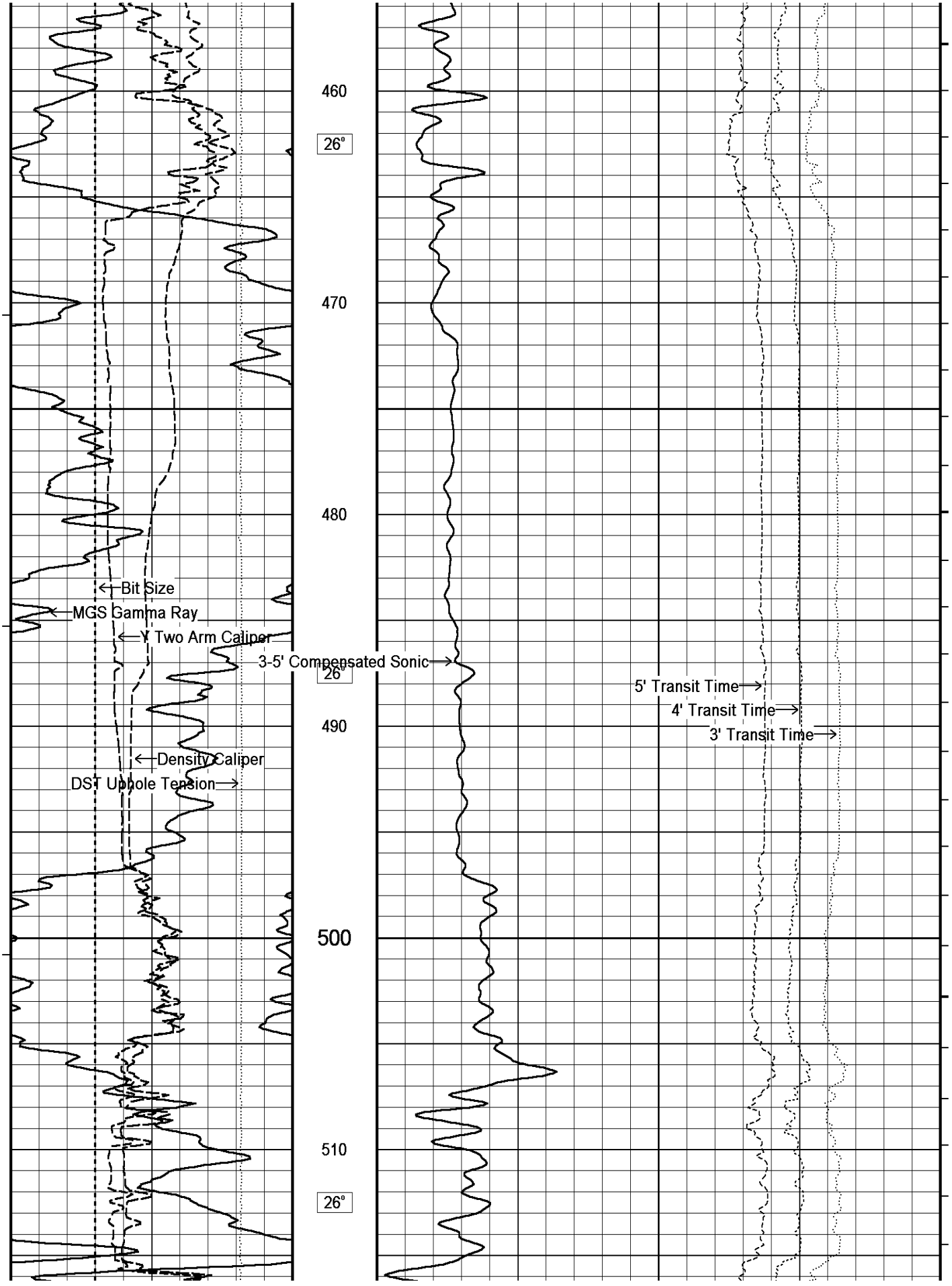

1350
45°
46°
1400
48°
1450
1461
Depth
in
Metres
Timing Marks
every 60.0 sec
Density Caliper
millimetres
125
250
375
3-5' Compensated Sonic
microsec/metre
500
400
300
200
100

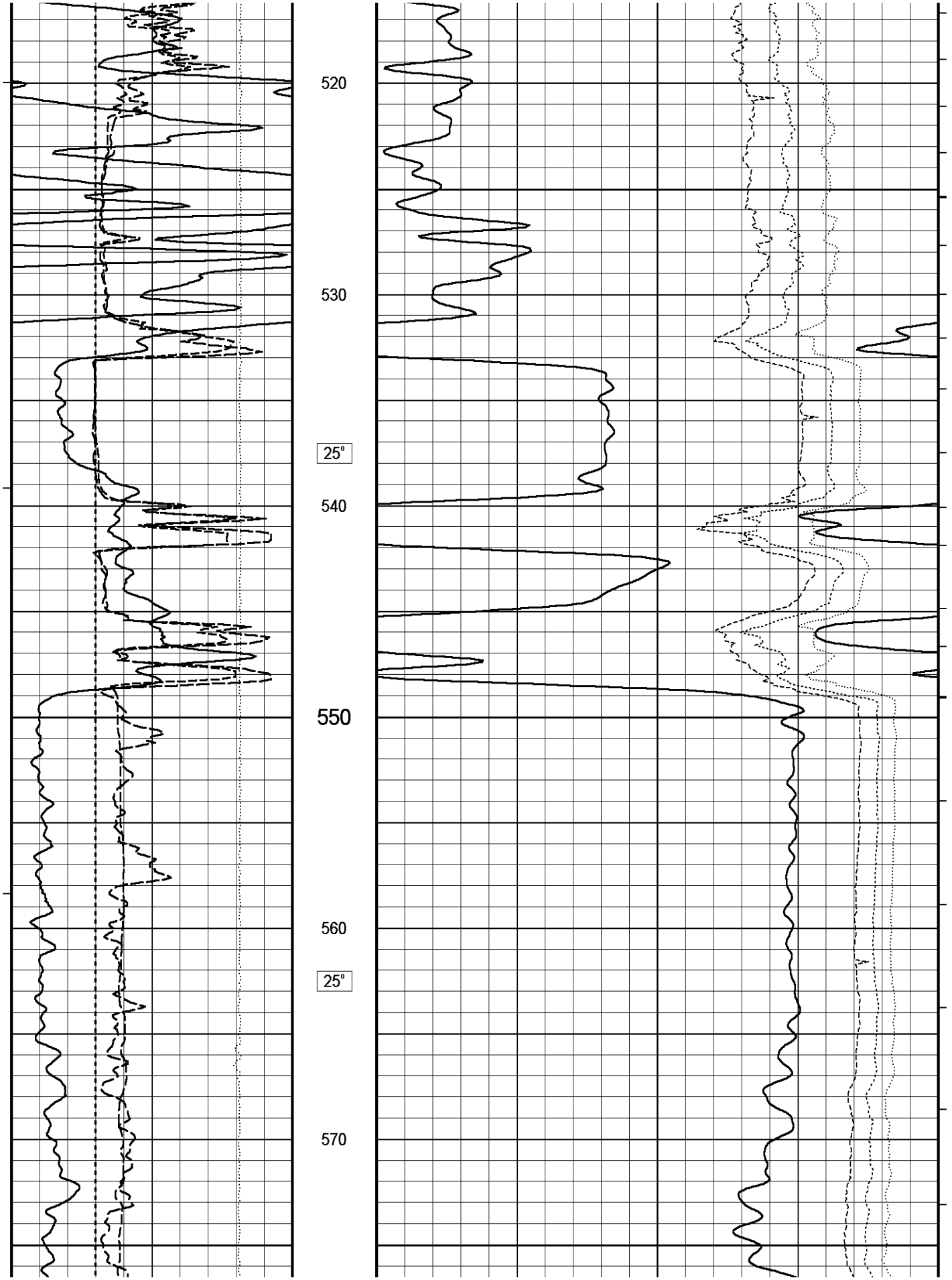

Y Two Arm Caliper
millimetres
125
250
375
Borehole Temp in deg C
MGS Gamma Ray
API
0
75
150
Bit Size
millimetres
125
250
375
Transit Time
every millisec
DST Uphole Tension
pounds
3000
0
Replay Scale 1:600
Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 12-NOV-2007 09:24
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091
MAIN LOG 1:600

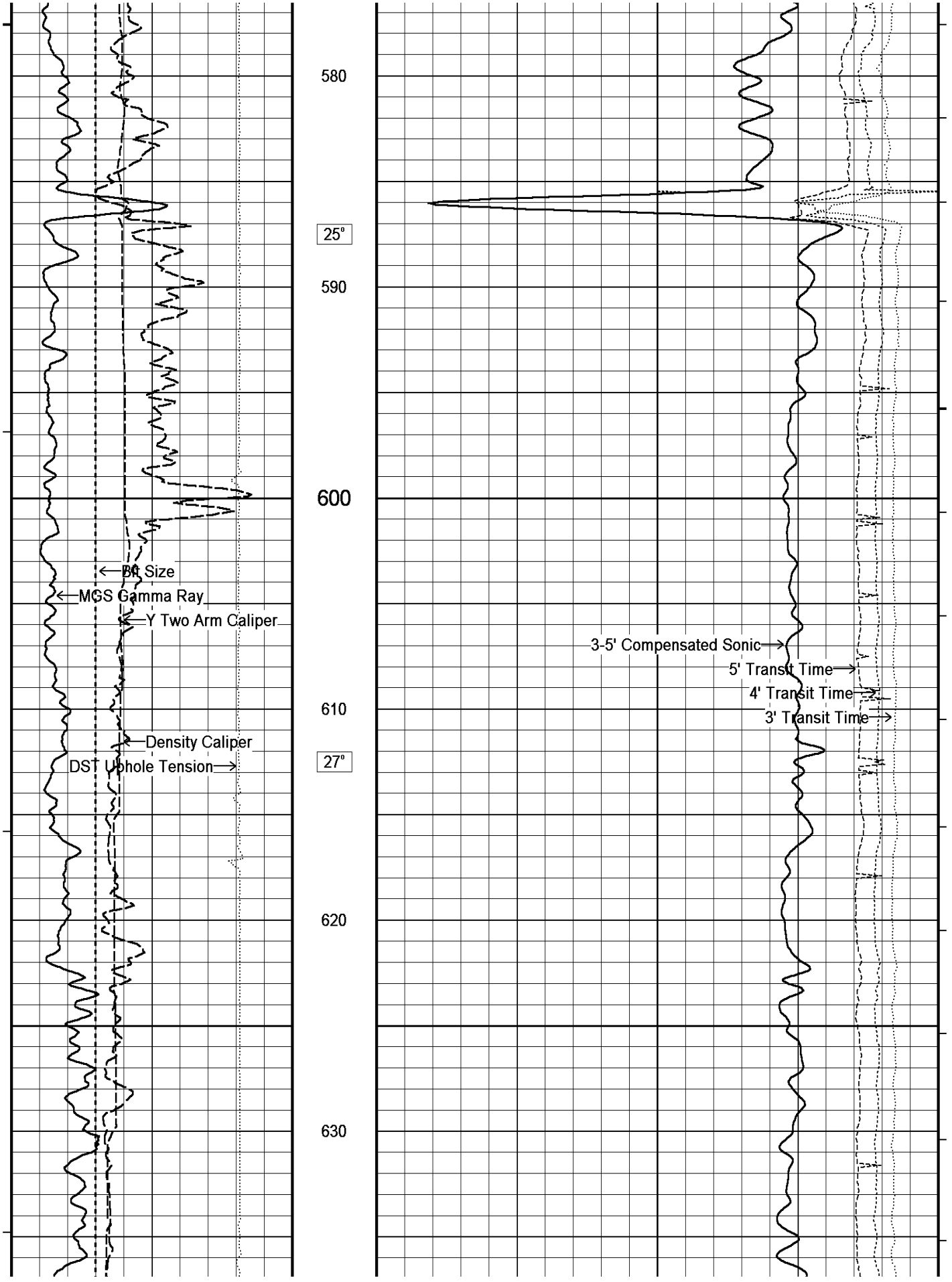

MAIN LOG 1:240
Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 12-NOV-2007 09:24
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091
Depth in Metres
Timing Marks
every 60.0 sec
3-5' Compensated Sonic
microsec/metre
500
400
300
200
100
Density Caliper
millimetres
125
250
375
Transit Time
every millisec
Y Two Arm Caliper
millimetres
125
250
375
3' Transit Time
microseconds
1100
600
100
Borehole Temp in deg C
MGS Gamma Ray
API

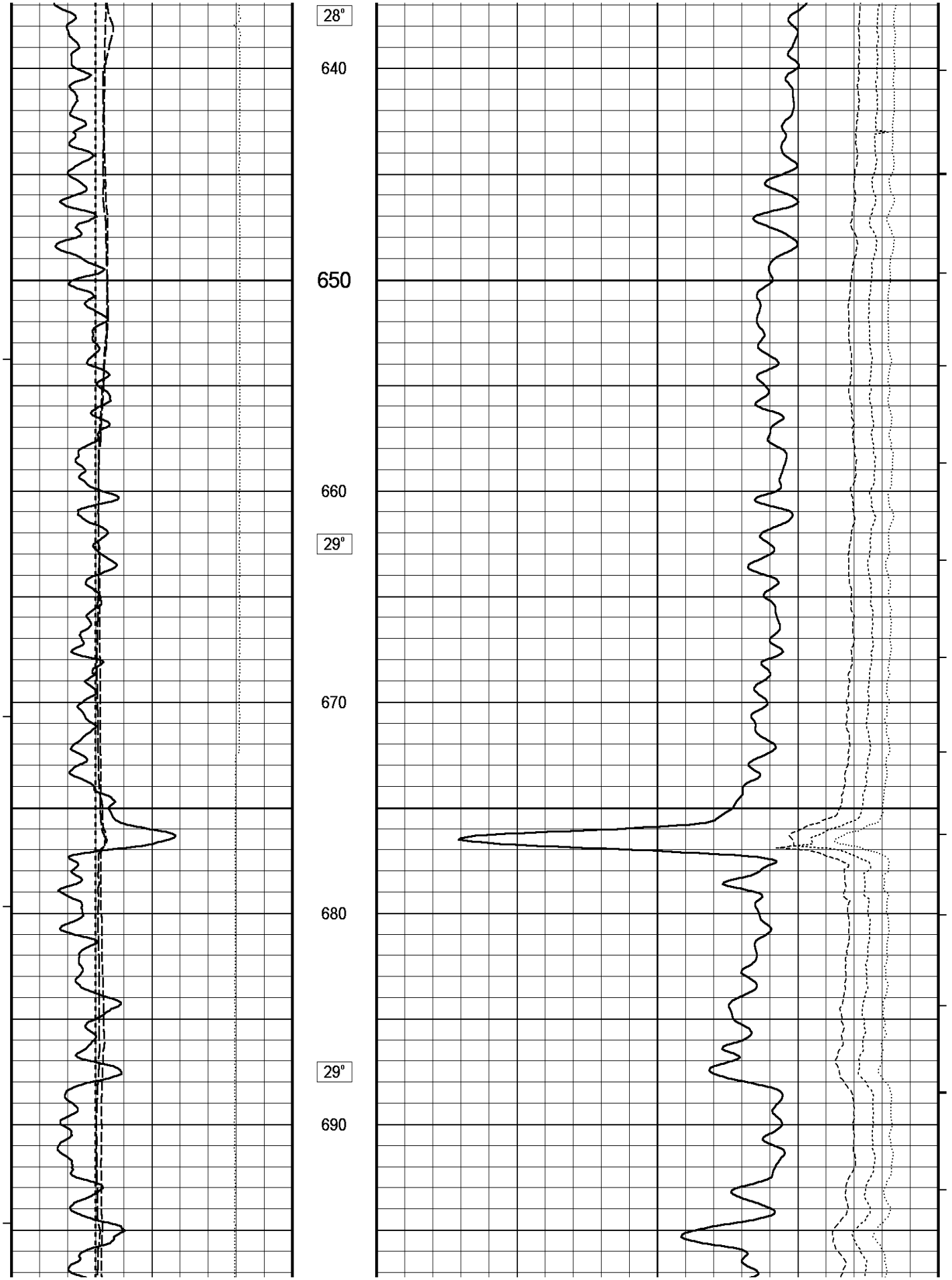

0
75
150
Bit Size
millimetres
125
250
375
DST Uphole Tension
pounds
3000
0
Replay
Scale
1:240
352
360
25°
370
380
26°
390
←Bit Size
←MGS Gamma Ray
←Y Two Arm Caliper
←Density Caliper
DST Uphole Tension→
4' Transit Time
microseconds
1100
600
100
5' Transit Time
microseconds
1100
600
100
3-5' Compensated Sonic→
5' Transit Time→
4' Transit Time→
3' Transit Time→

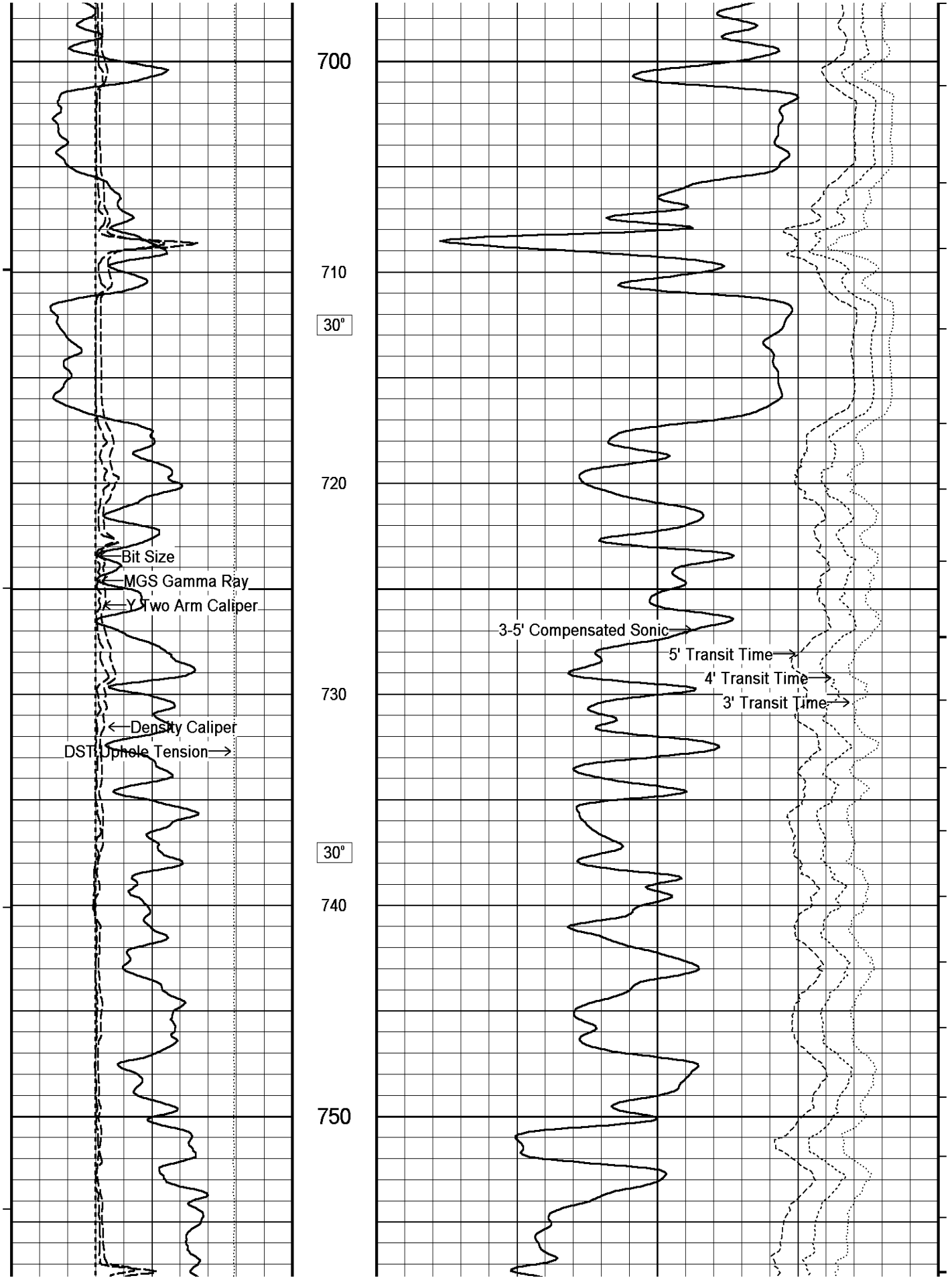

400
410
26°
420
Casing
Shoe
430
26°
440
450

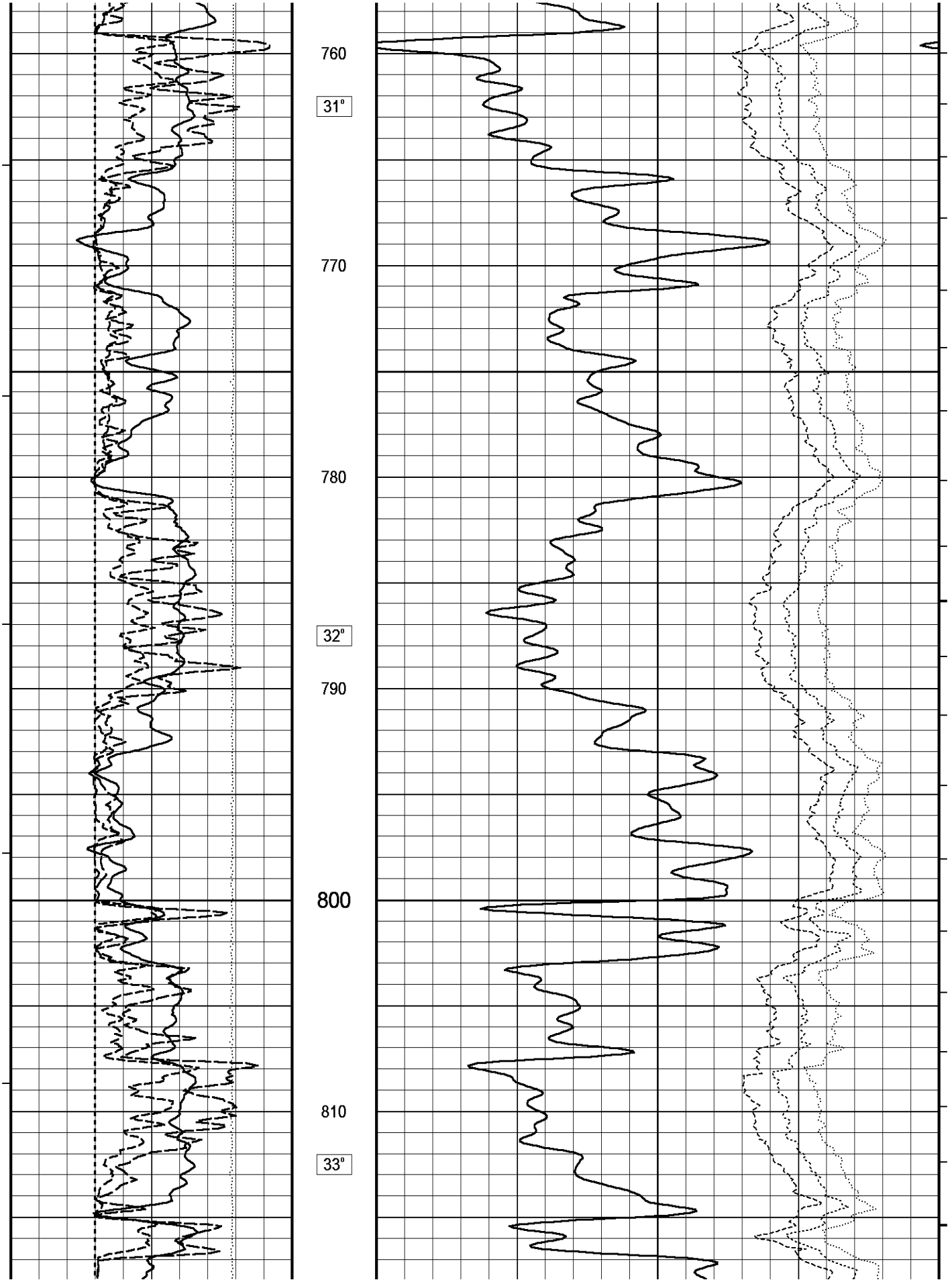

460
26"
470
480
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
3-5' Compensated Sonic
26"
490
Density Caliper
DST Uphole Tension
5' Transit Time
4' Transit Time
3' Transit Time
500
510
26"

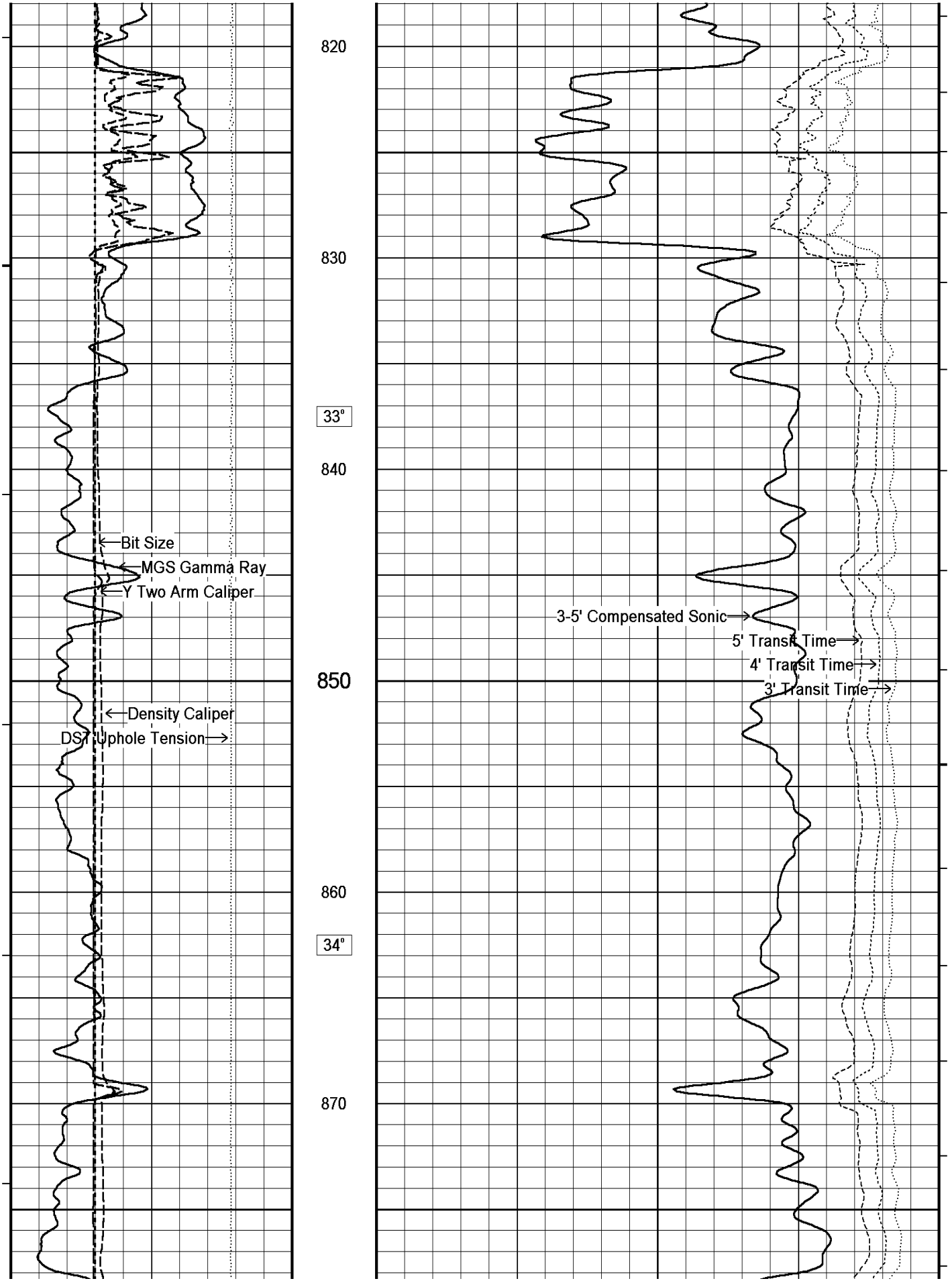

520
530
25°
540
550
560
25°
570

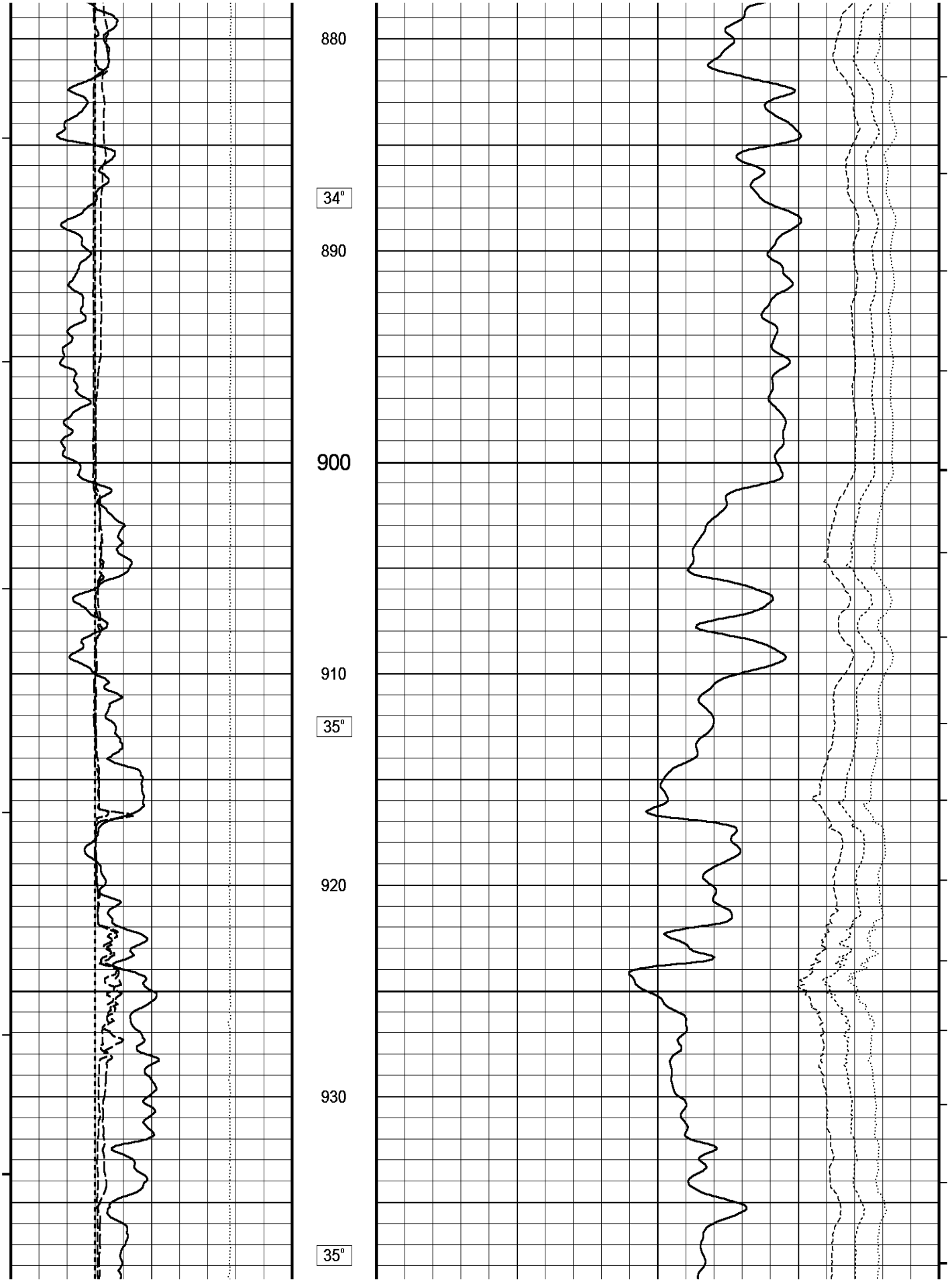

580
25°
590
600
610
27°
620
630
Bit Size
MCS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
3-5' Compensated Sonic
5' Transit Time
4' Transit Time
3' Transit Time

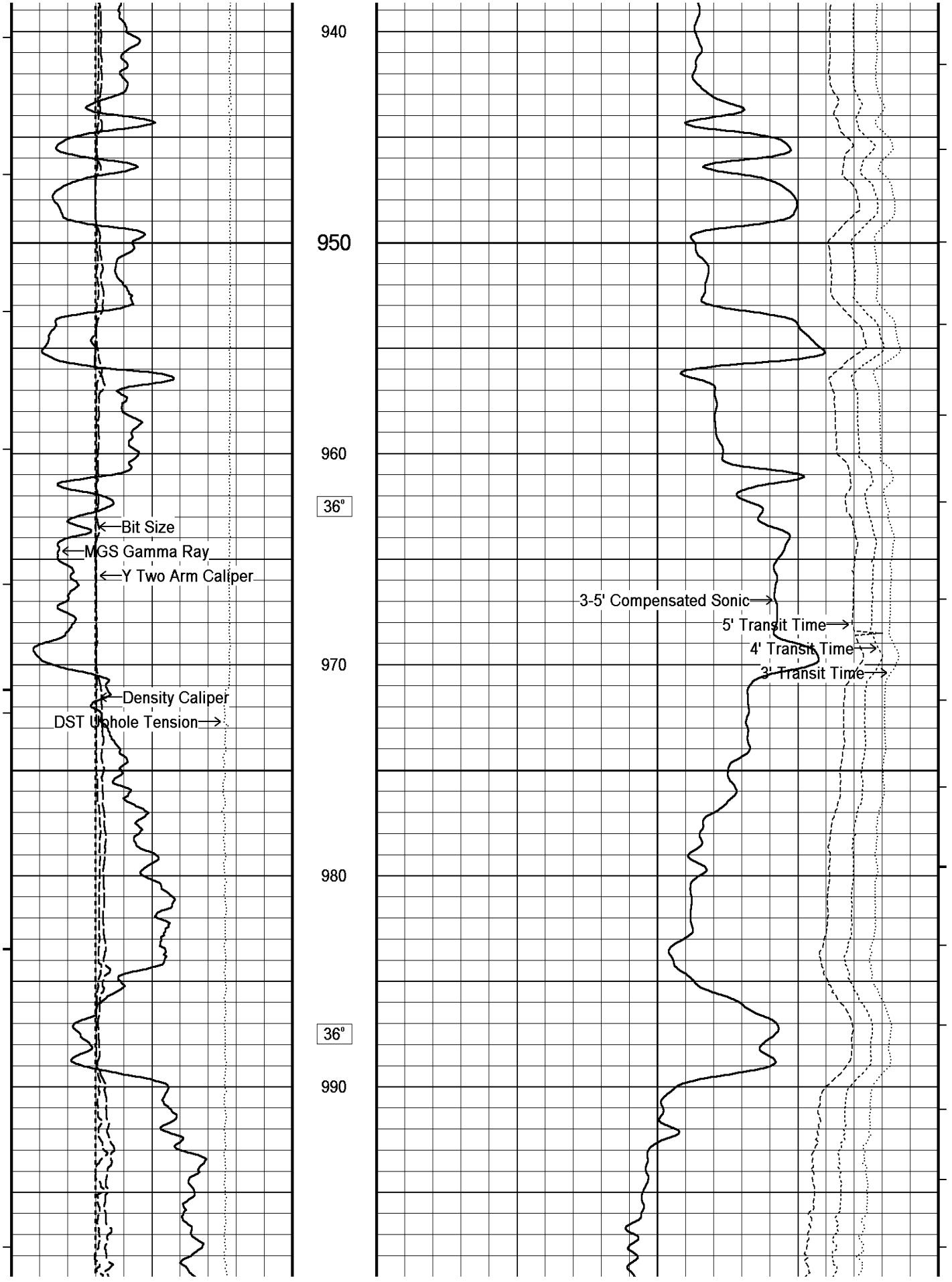

28°
640
650
660
29°
670
680
29°
690

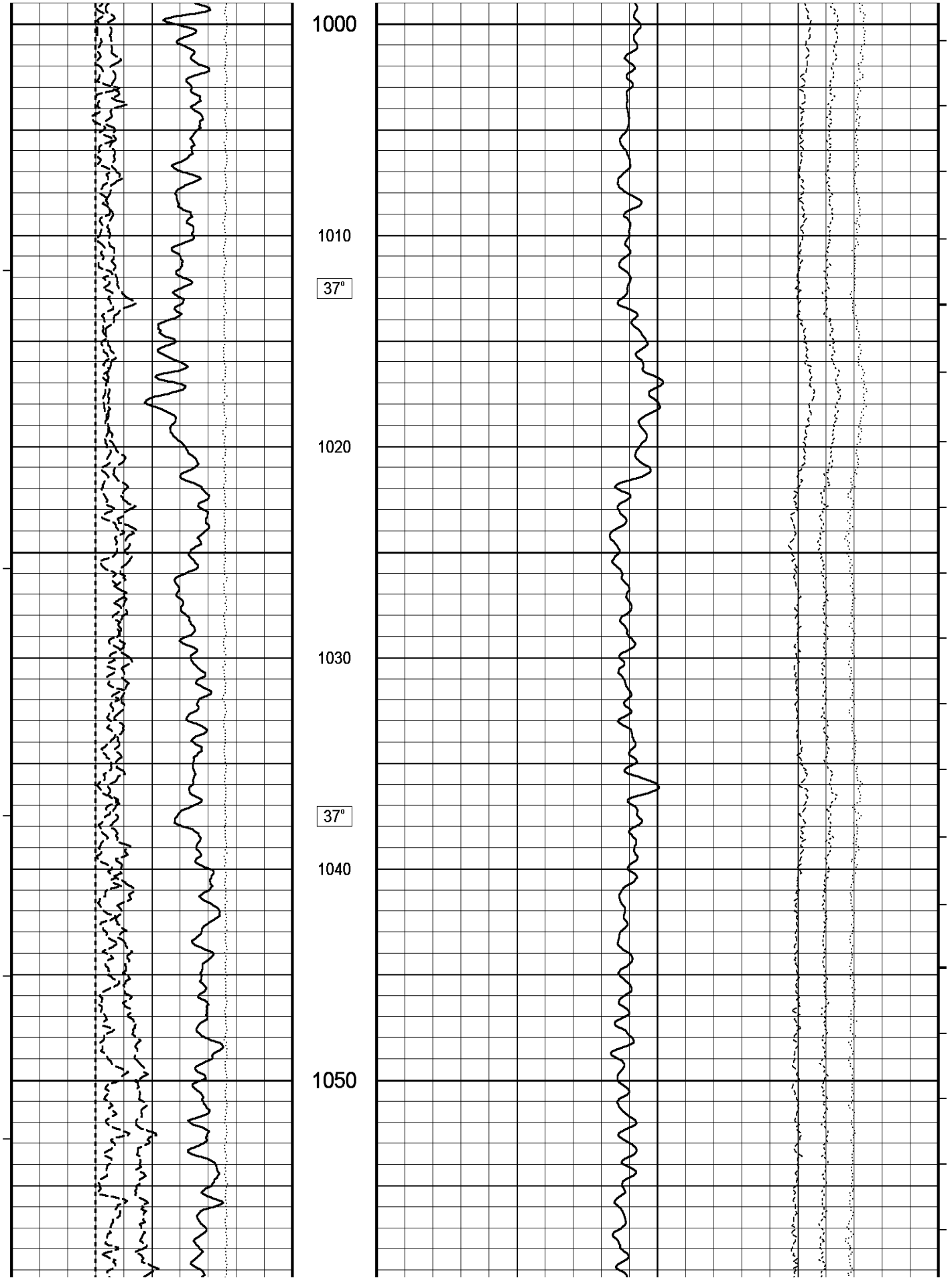

700
710
30°
720
730
30°
740
750
Bit Size
MGS Gamma Ray
Two Arm Caliper
Density Caliper
DST Uphole Tension
3-5' Compensated Sonic
5' Transit Time
4' Transit Time
3' Transit Time

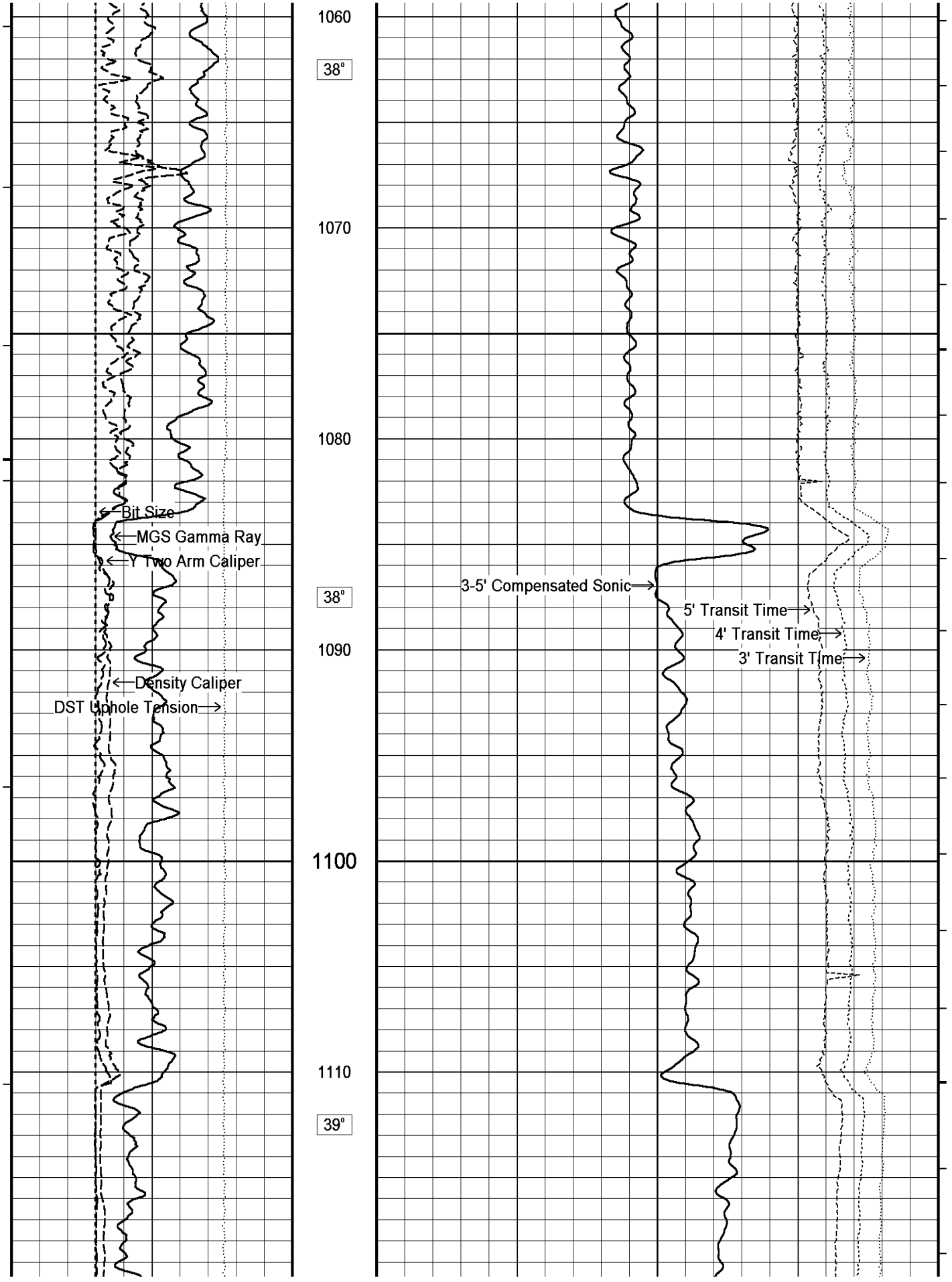

760
31°
770
780
32°
790
800
810
33°

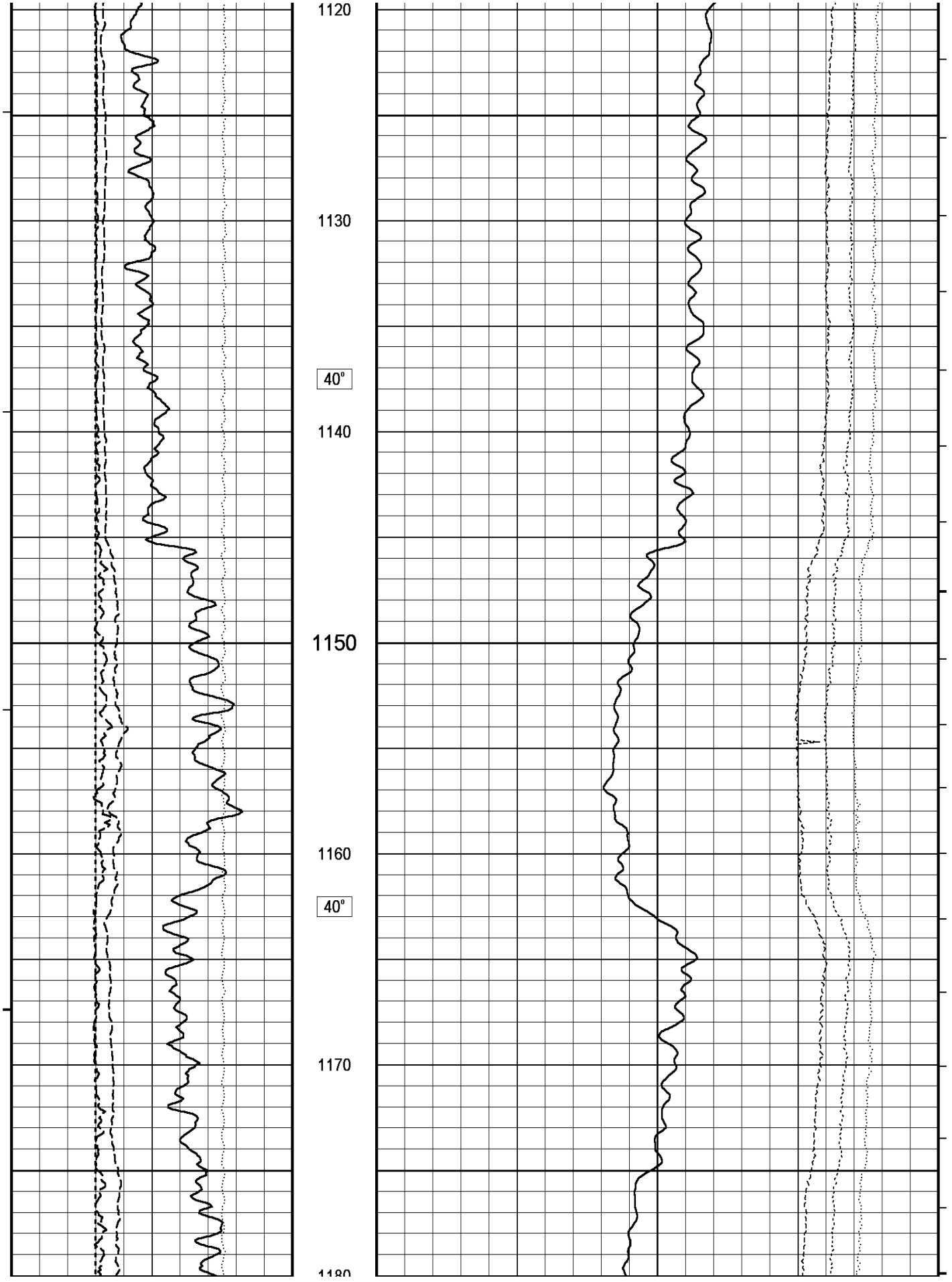

820
830
33°
840
850
860
34°
870
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DSI Uphole Tension
3-5' Compensated Sonic
5' Transit Time
4' Transit Time
3' Transit Time

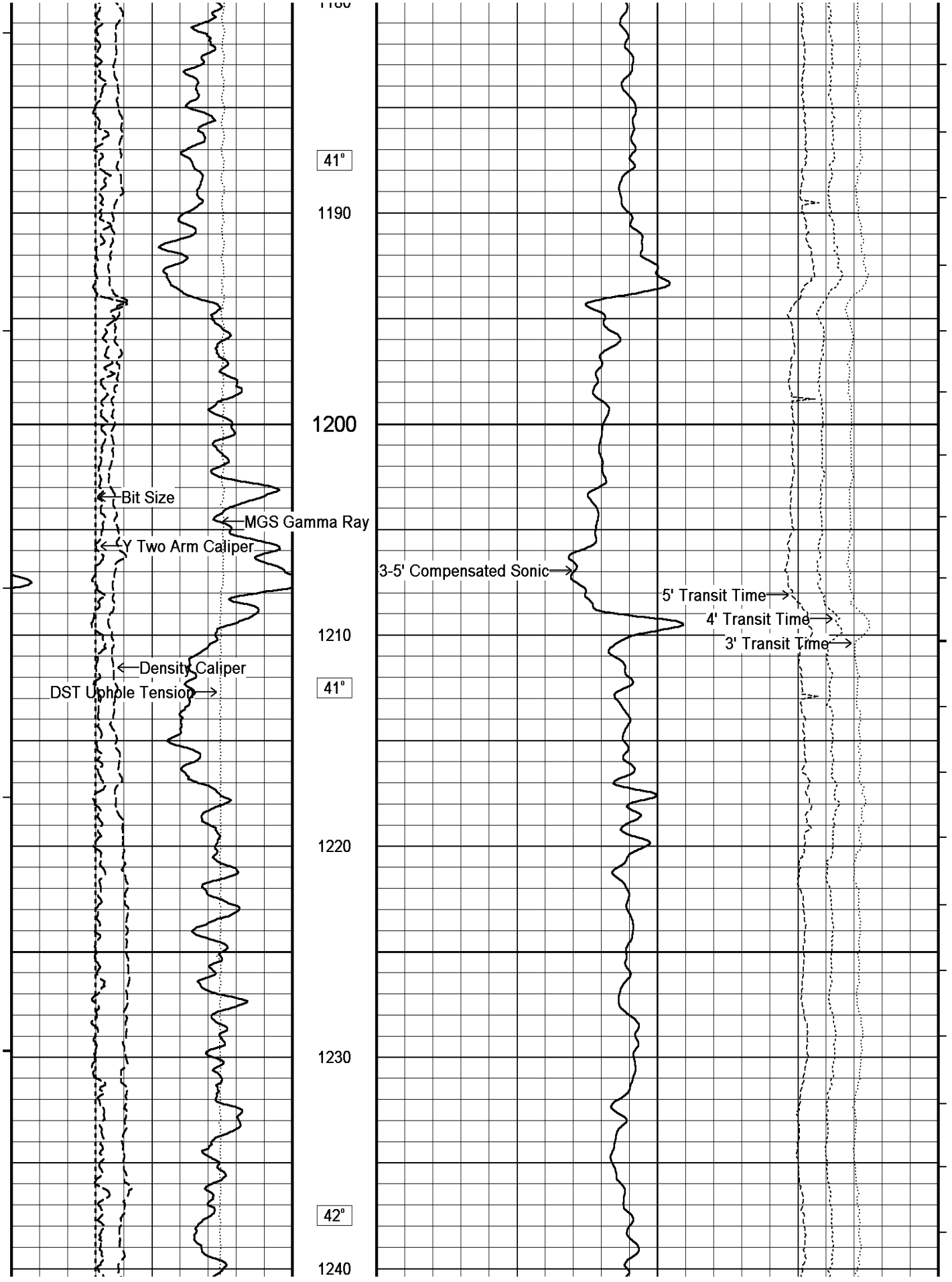

880
34°
890
900
910
35°
920
930
35°

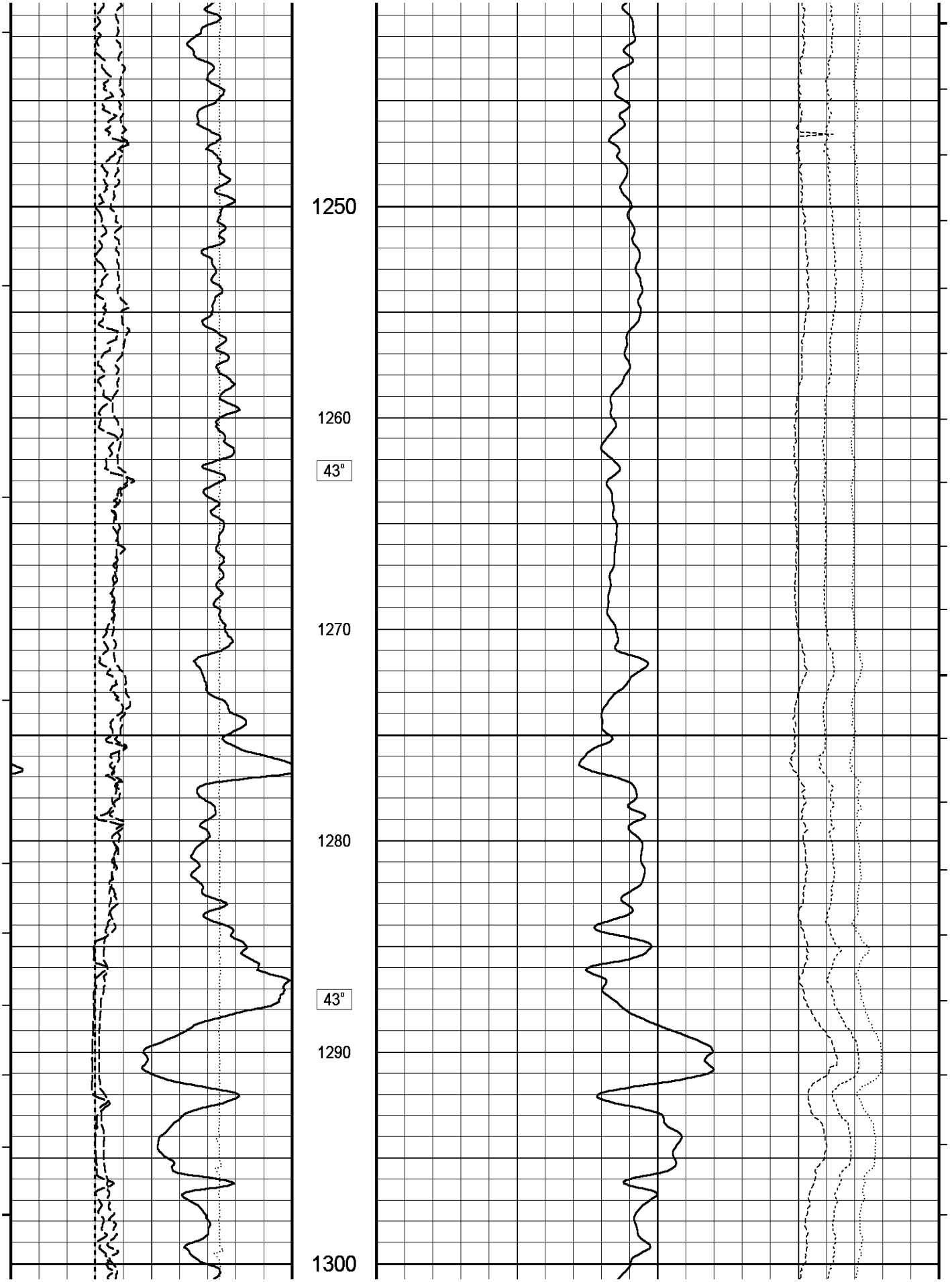

940
950
960
36°
970
980
36°
990
←Bit Size
←MGS Gamma Ray
←Y Two Arm Caliper
←Density Caliper
DST Uphole Tension→
3-5' Compensated Sonic→
5' Transit Time→
4' Transit Time→
3' Transit Time→

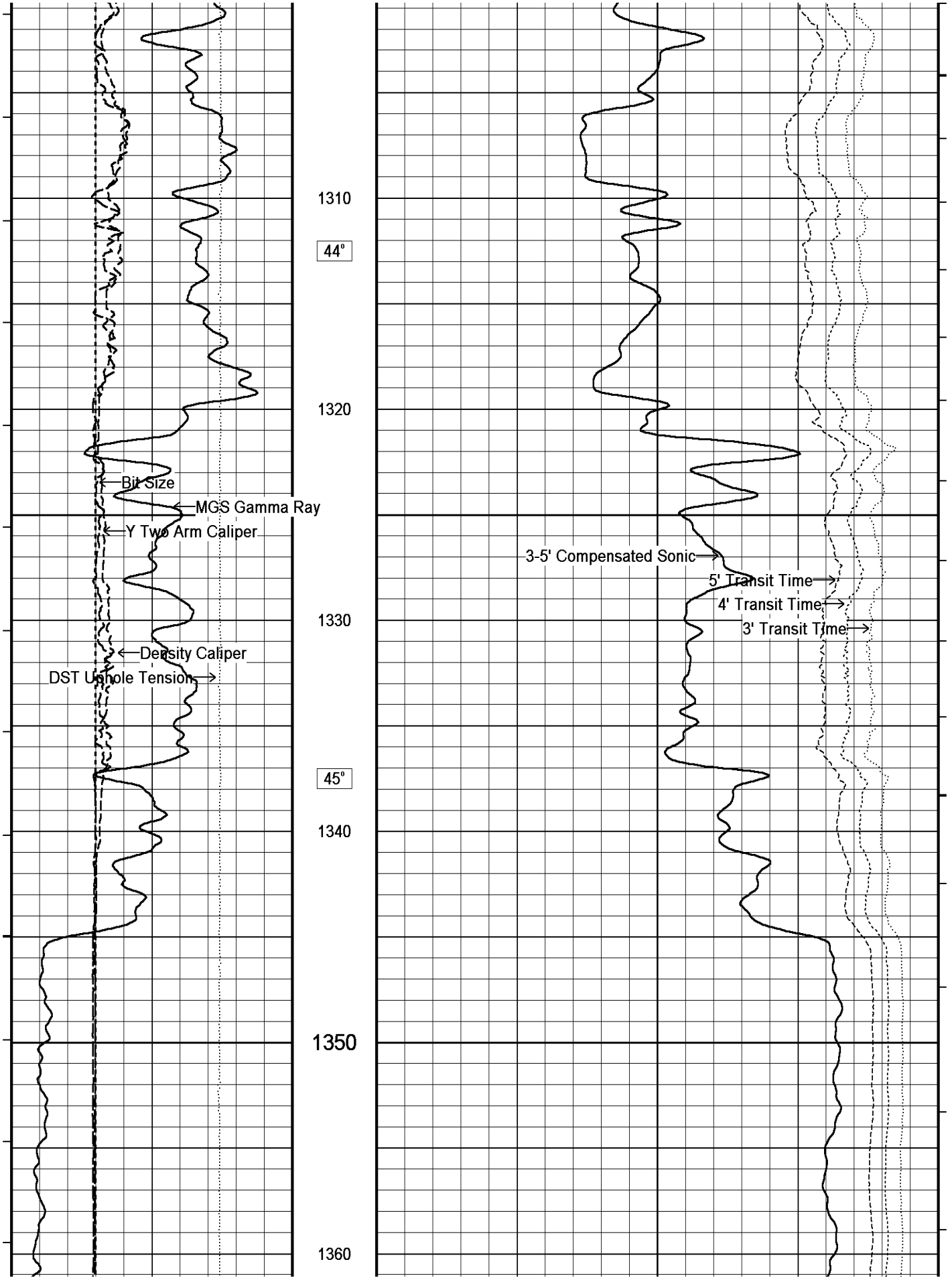

1000
1010
37°
1020
1030
37°
1040
1050

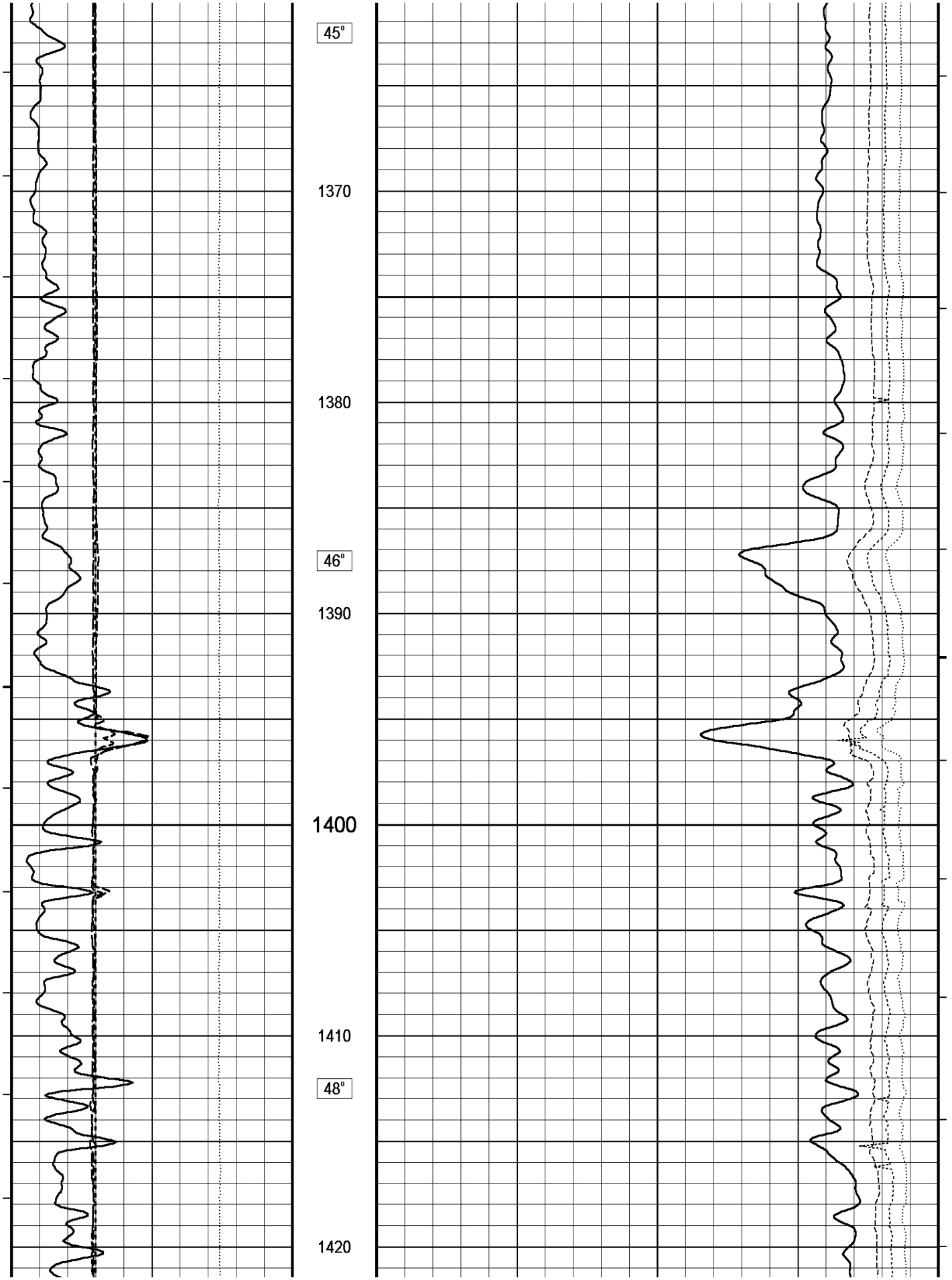

1060
38°
1070
1080
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
38°
1090
Density Caliper
DST Uphole Tension
1100
1110
39°
3-5' Compensated Sonic
5' Transit Time
4' Transit Time
3' Transit Time

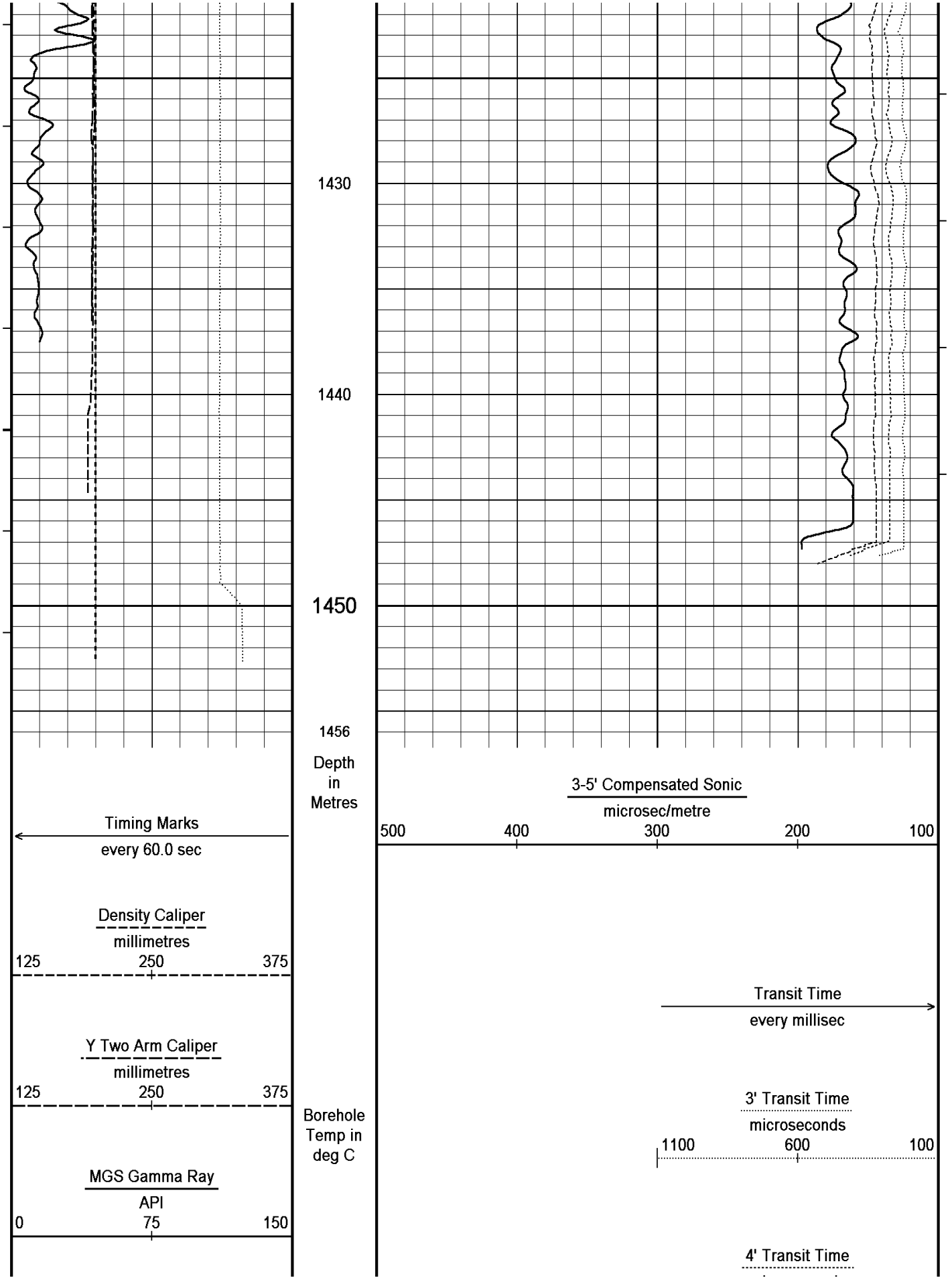

1120
1130
40°
1140
1150
1160
40°
1170
1180

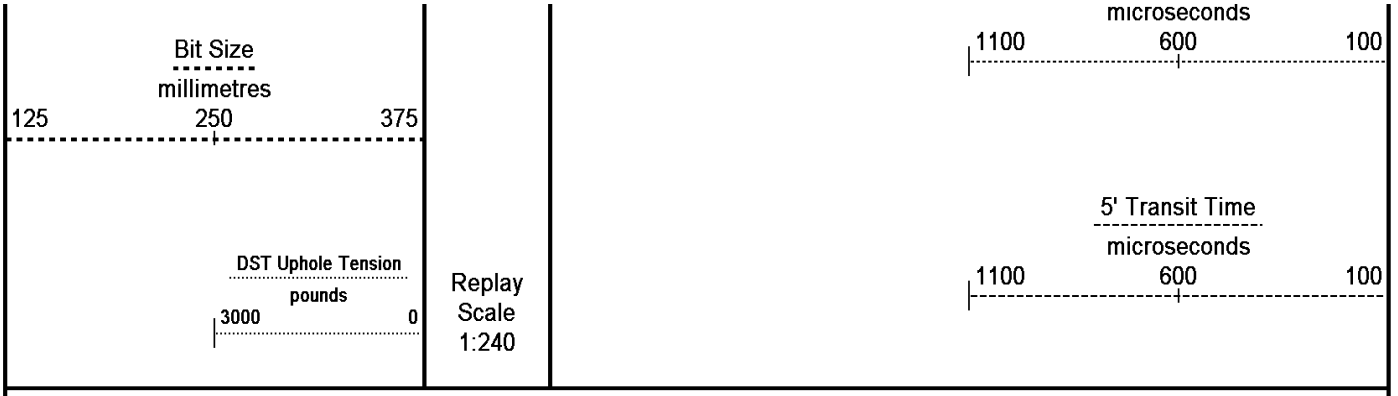

41°
1190
1200
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
3-5' Compensated Sonic
5' Transit Time
4' Transit Time
3' Transit Time
1210
Density Caliper
DST Uphole Tension
41°
1220
1230
42°
1240


1250
1260
43°
1270
1280
43°
1290
1300


1310
44°
1320
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
3-5' Compensated Sonic
5' Transit Time
4' Transit Time
3' Transit Time
1330
Density Caliper
DST Uphole Tension
45°
1340
1350
1360


45°
1370
1380
46°
1390
1400
1410
48°
1420


1430
1440
1450
1456
Depth in Metres
Timing Marks
every 60.0 sec
Density Caliper
millimetres
125
250
375
Y Two Arm Caliper
millimetres
125
250
375
MGS Gamma Ray
API
0
75
150
Borehole Temp in deg C
3-5' Compensated Sonic
microsec/metre
500
400
300
200
100
Transit Time
every millisec
3' Transit Time
microseconds
1100
600
100
4' Transit Time

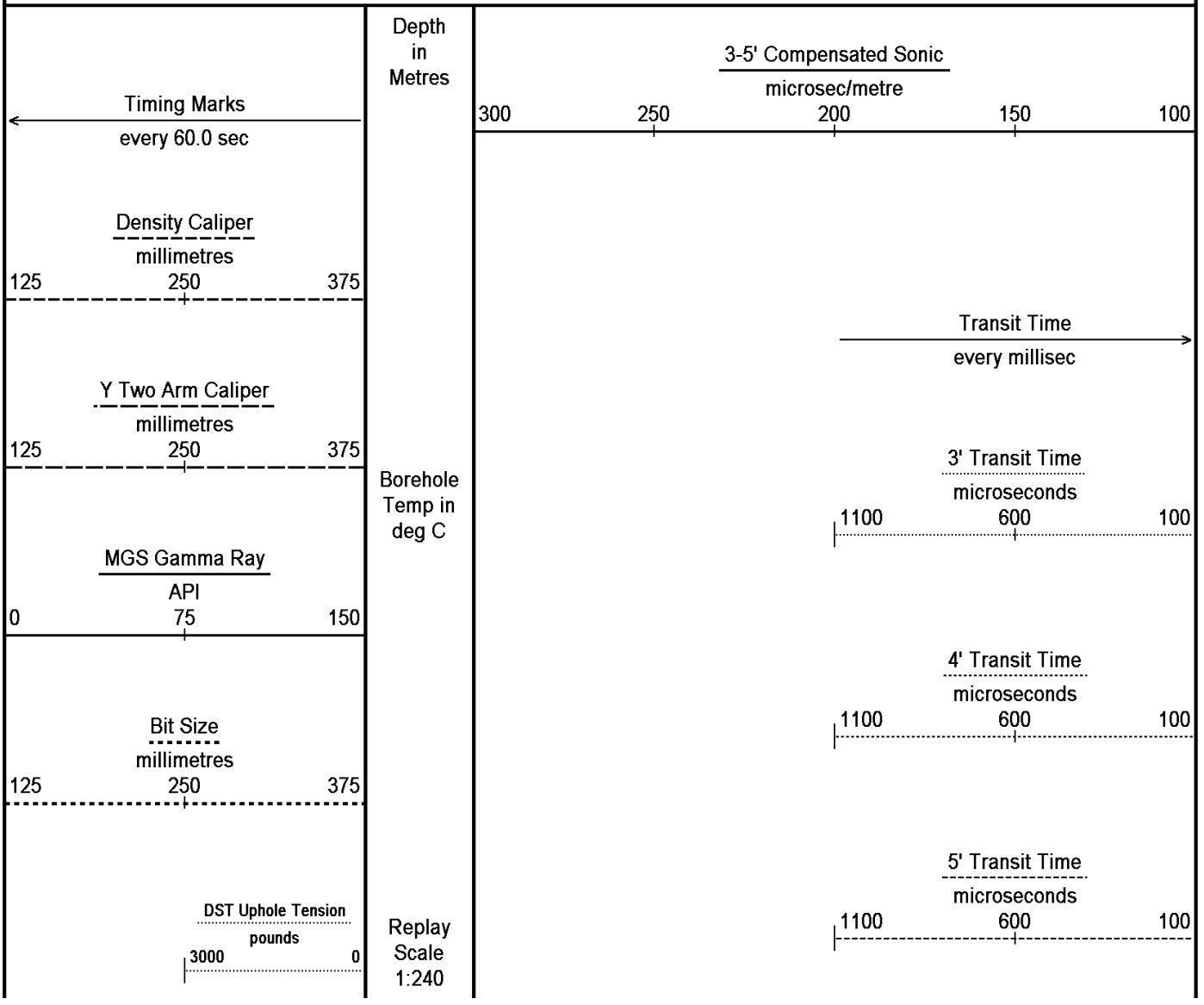


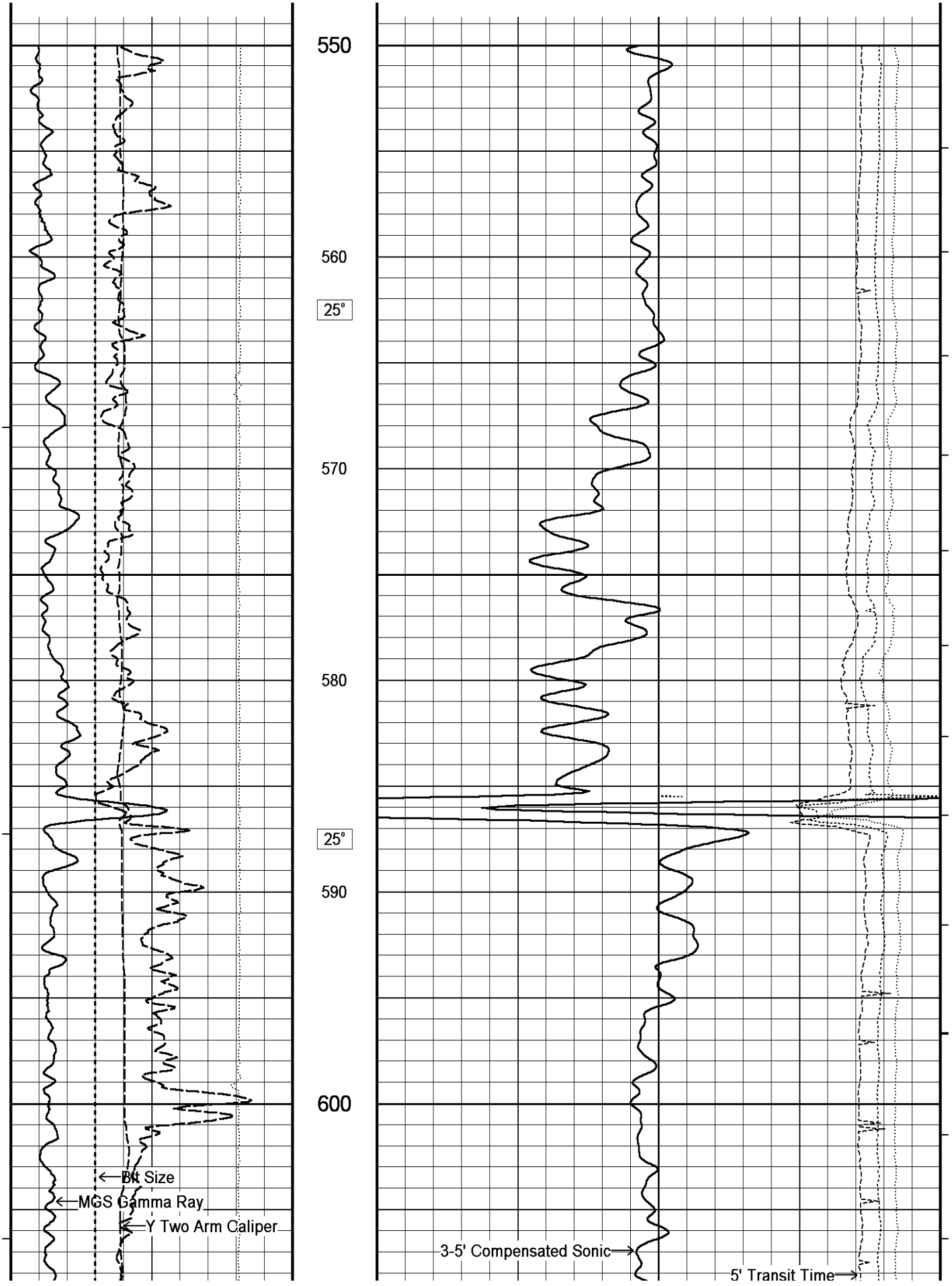
Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 12-NOV-2007 09:24
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta — Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

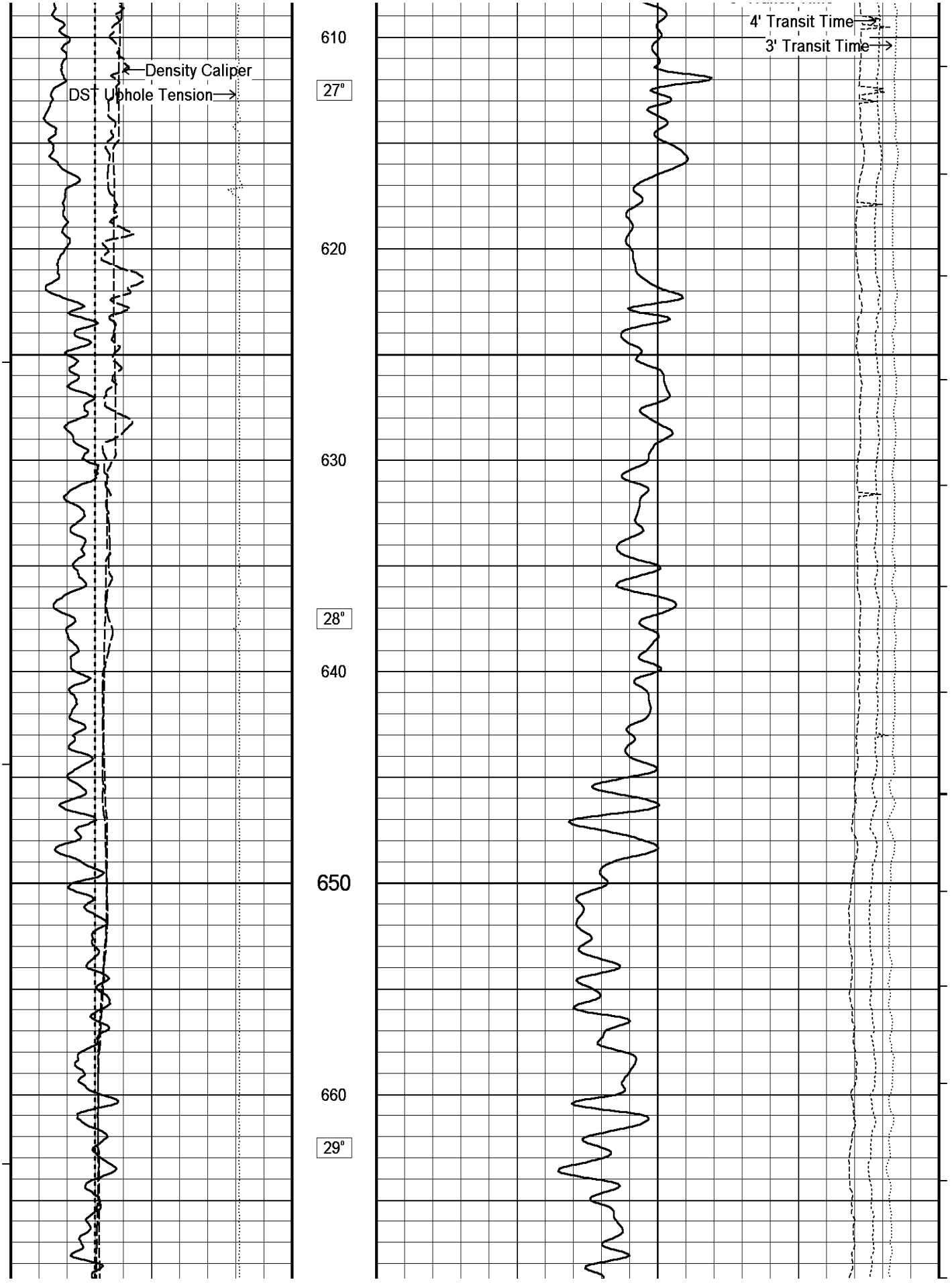
MAIN LOG 1:240

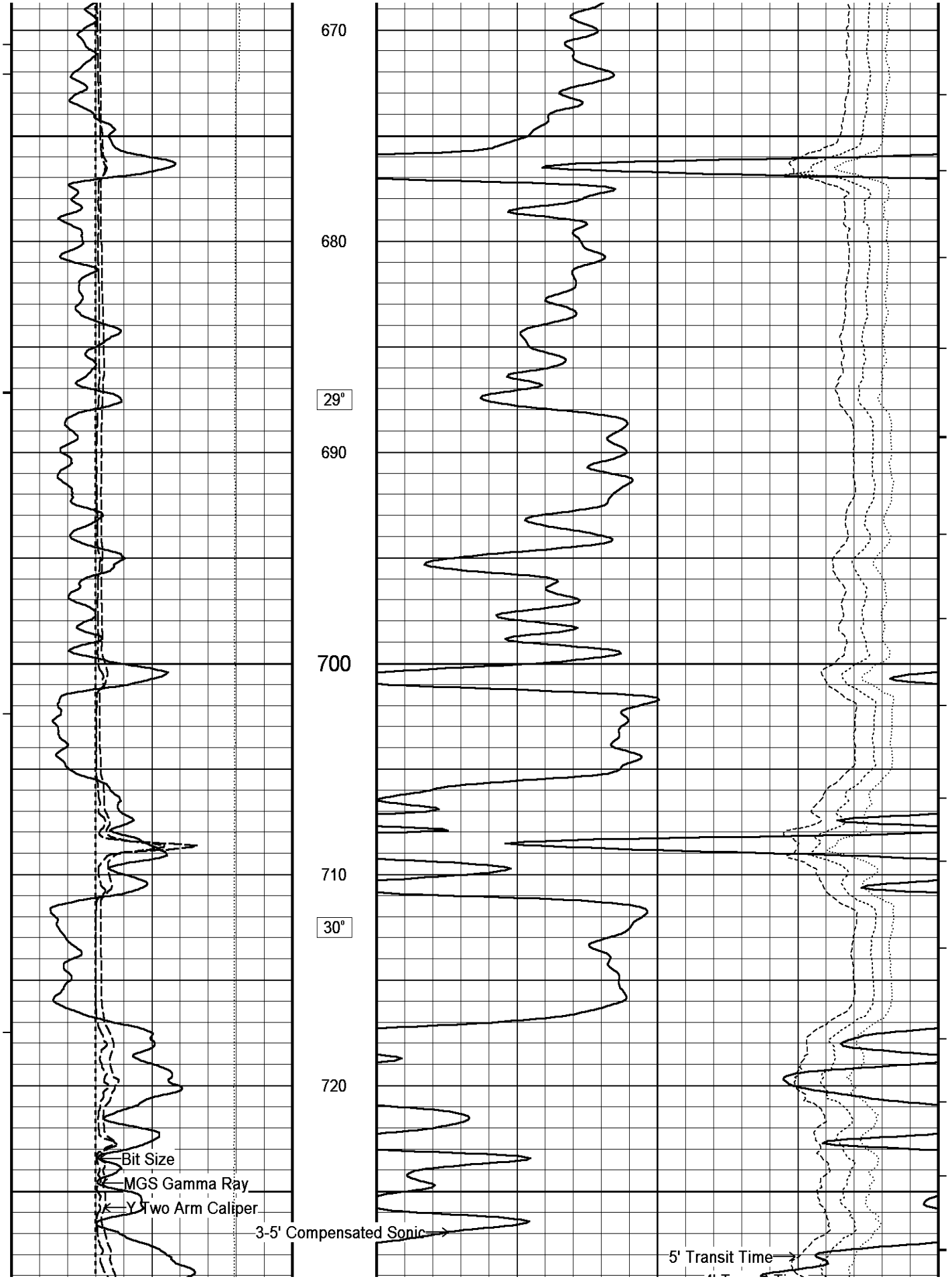
MAIN LOG 1:240

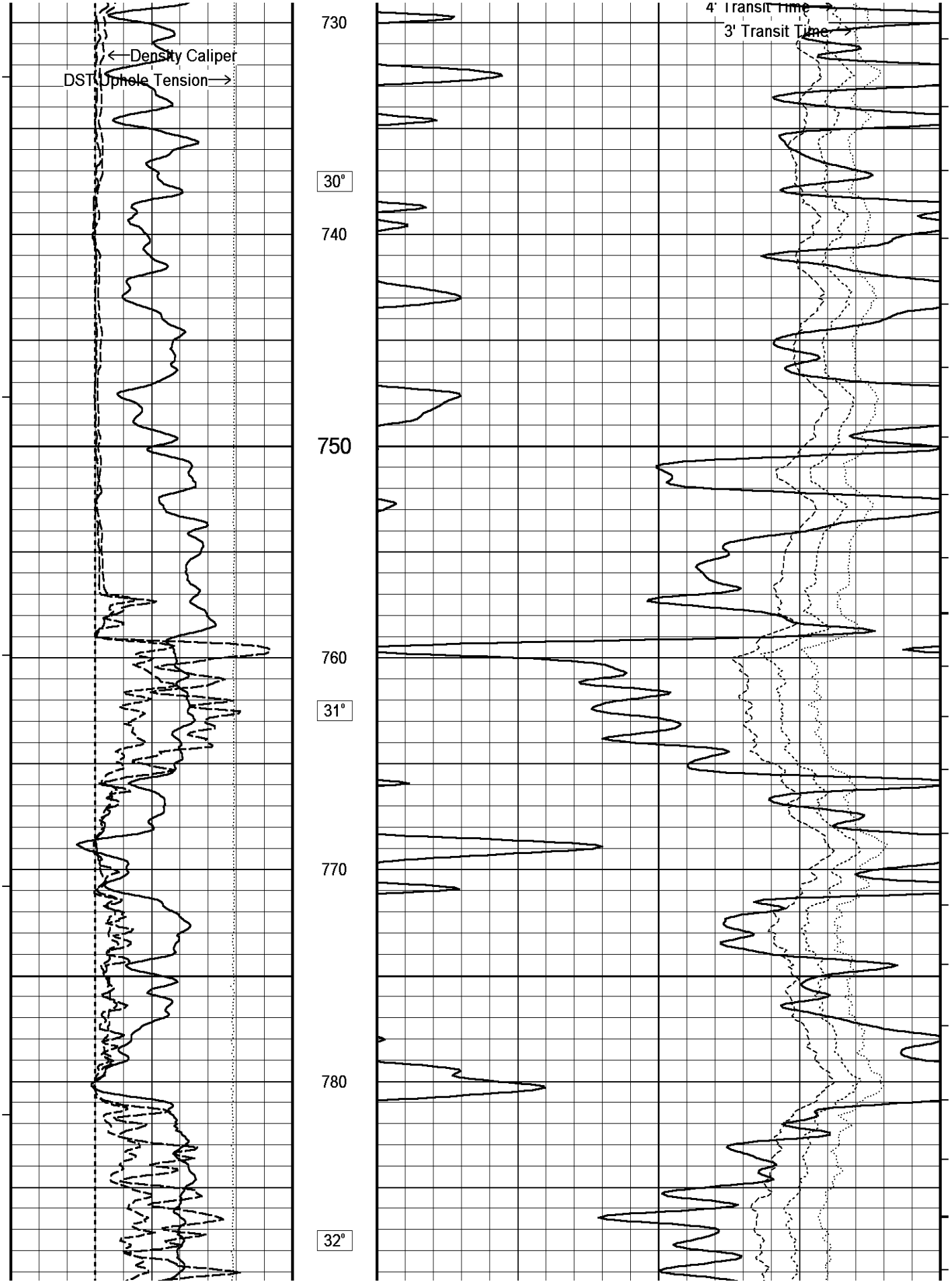
Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 12-NOV-2007 09:24
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta — Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

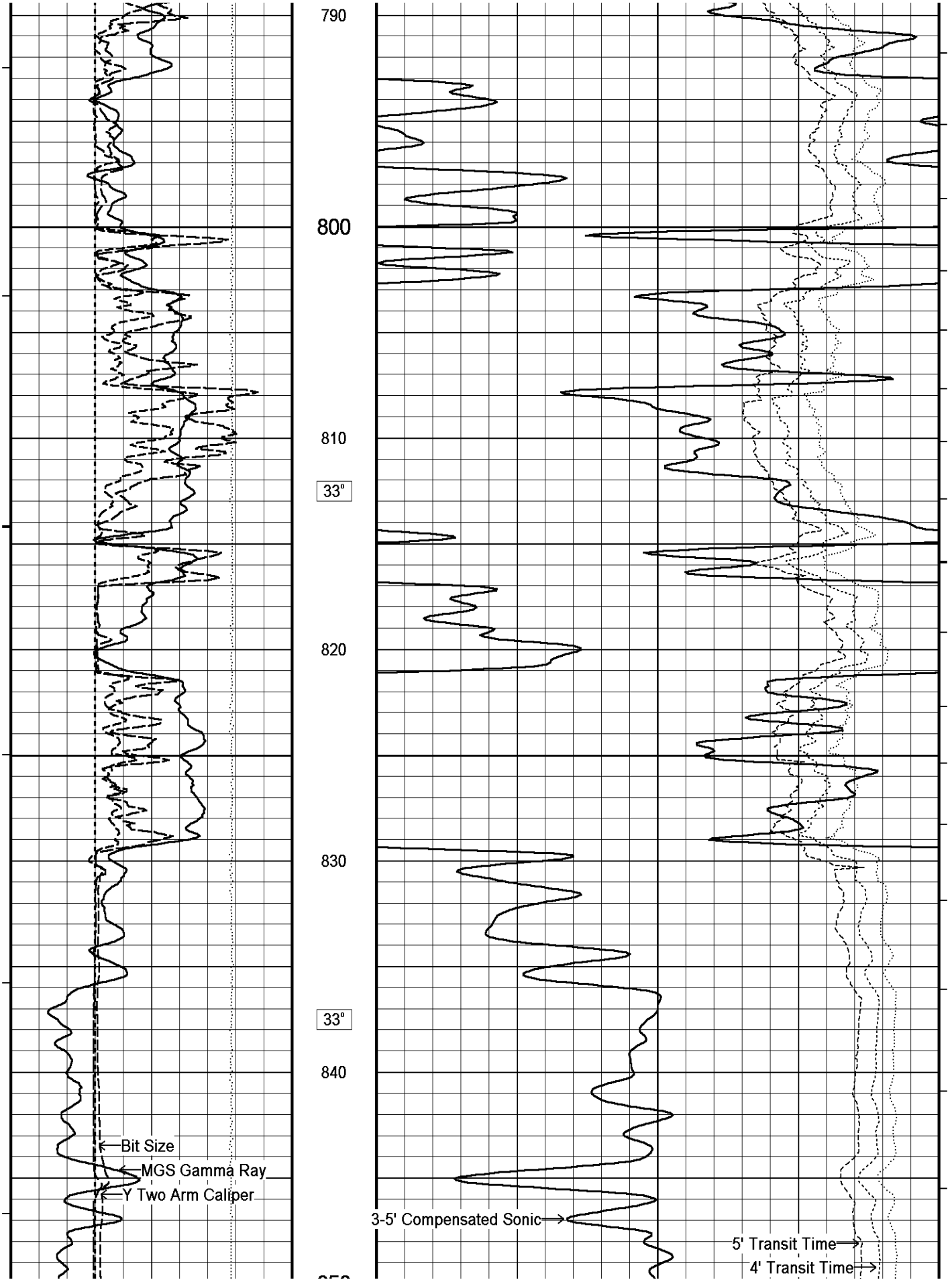


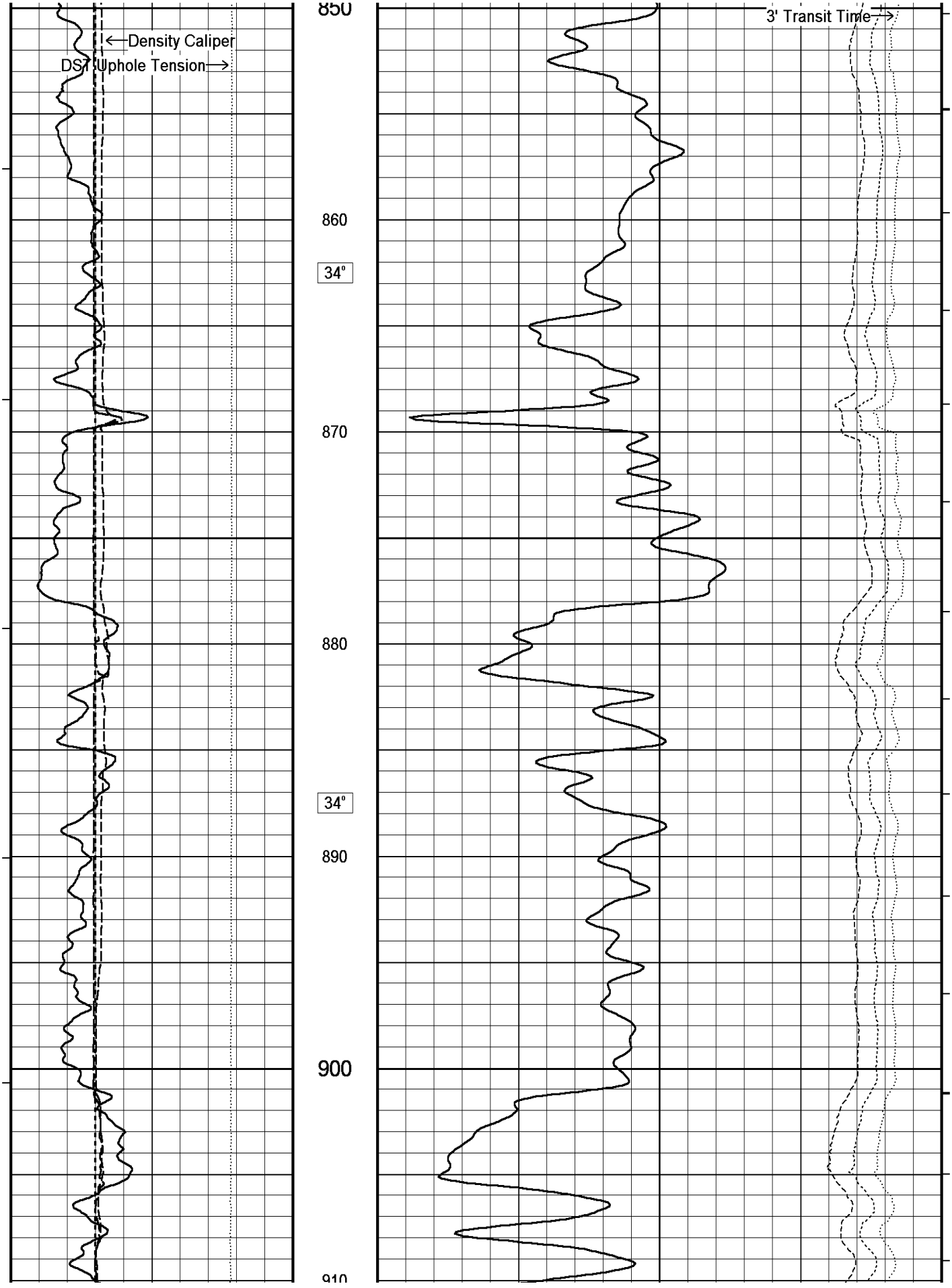

550
560
25°
570
580
25°
590
600
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
3-5' Compensated Sonic
5' Transit Time

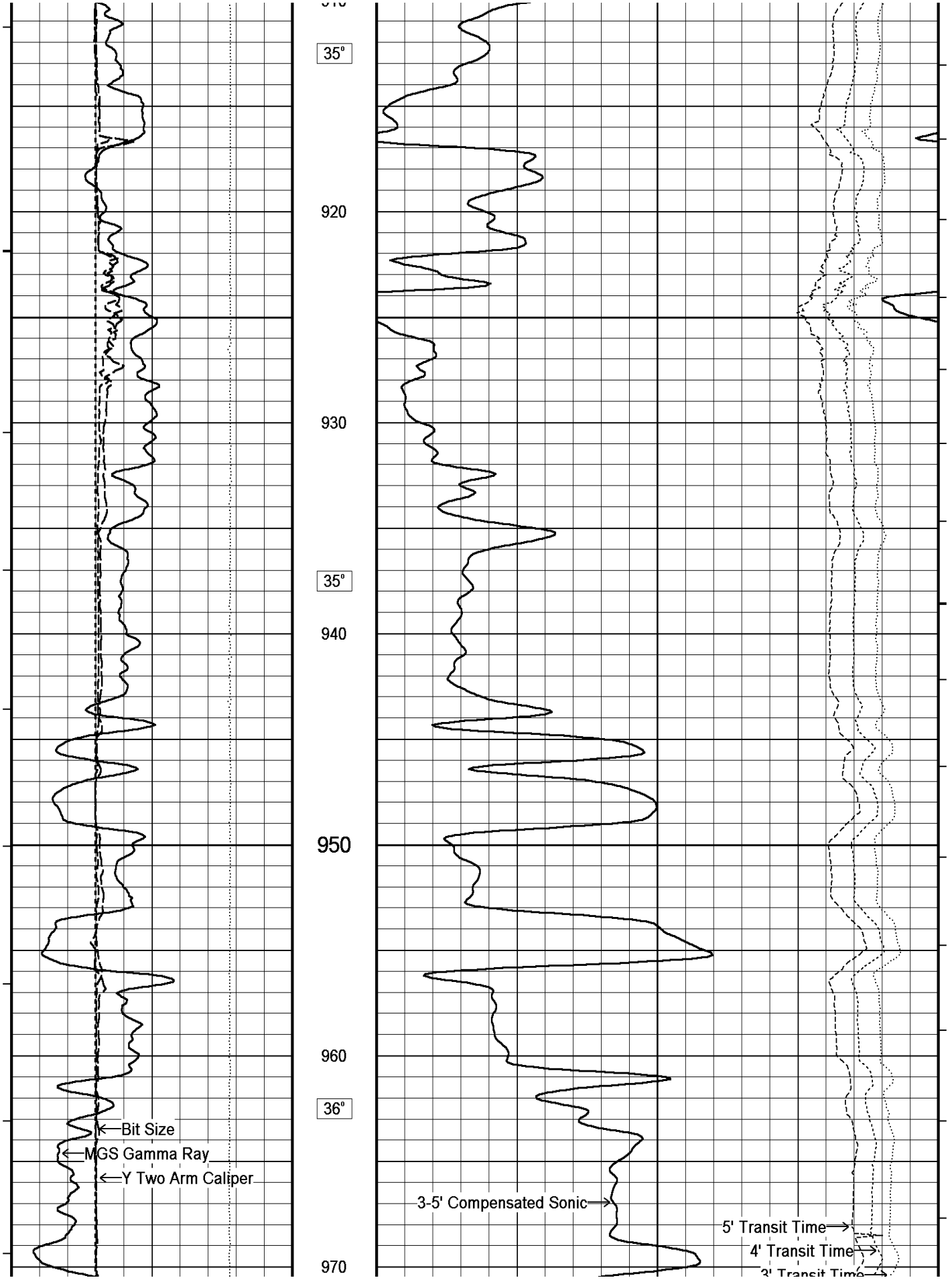

Density Caliper
DST Uphole Tension
4' Transit Time
3' Transit Time
610
27°
620
630
28°
640
650
660
29°

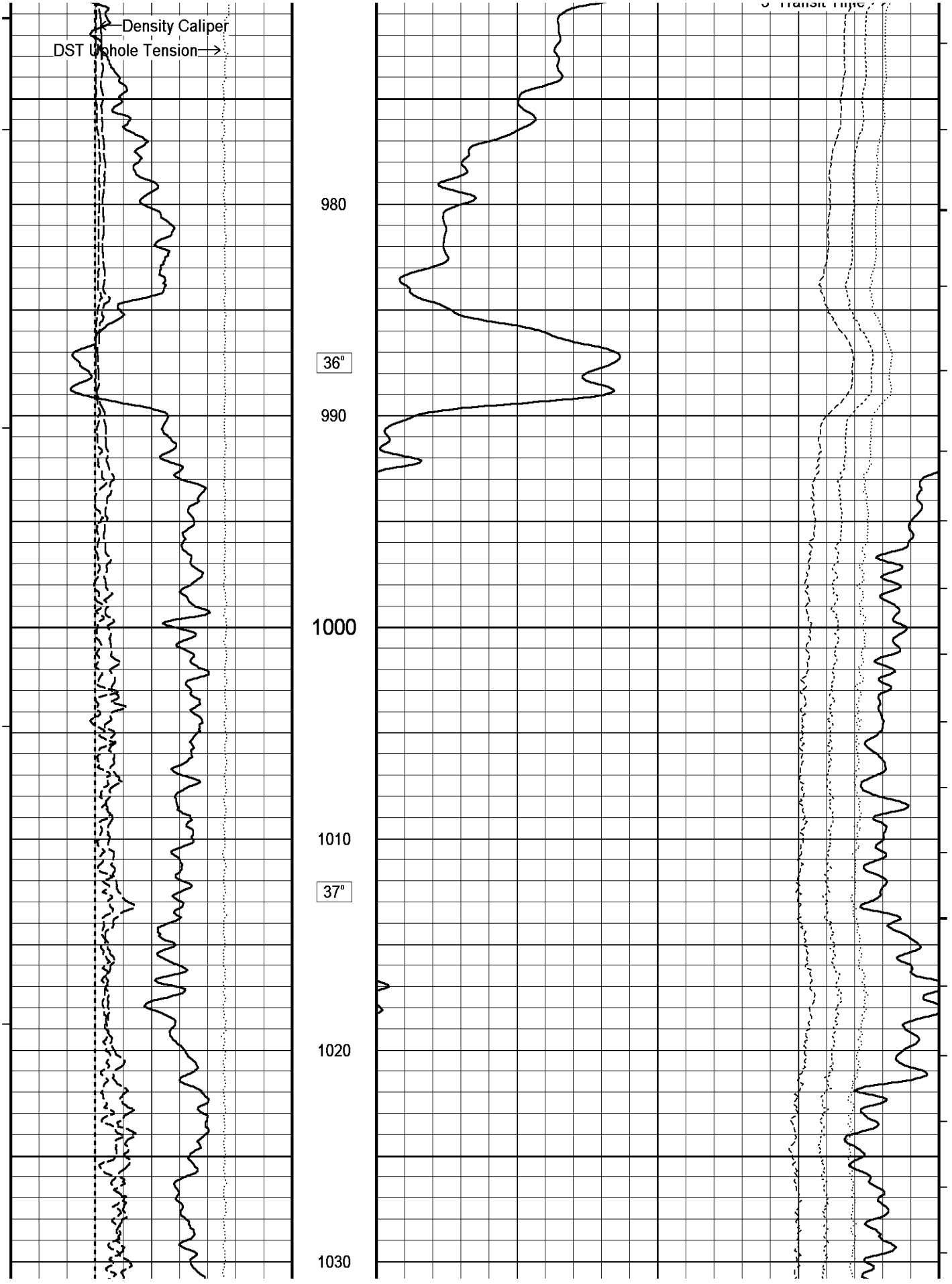

670
680
29°
690
700
710
30°
720
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
3-5' Compensated Sonic
5' Transit Time

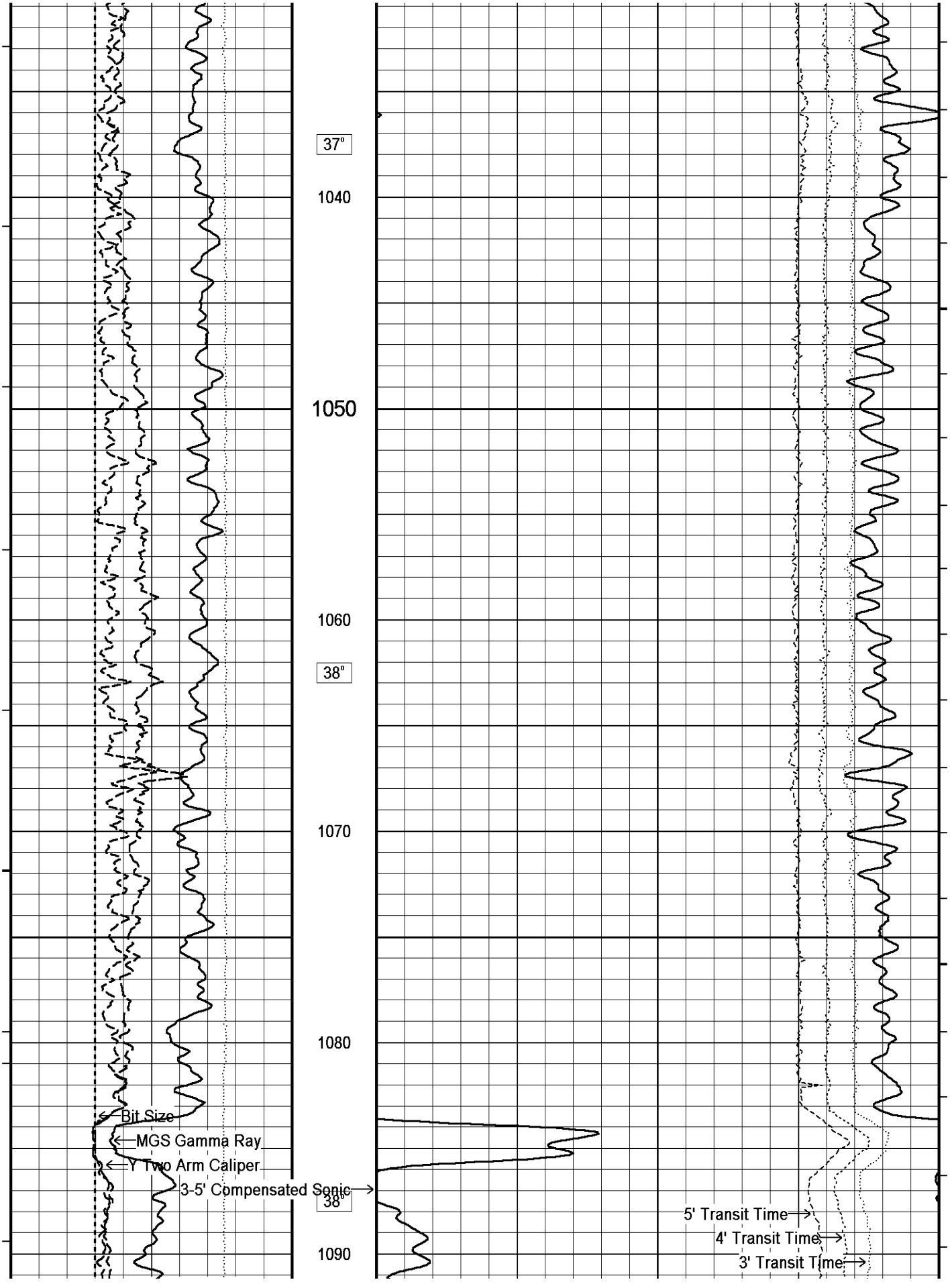

←Density Caliper
DST Uphole Tension→
730
30°
740
750
760
31°
770
780
32°
4' Transit Time →
3' Transit Time →

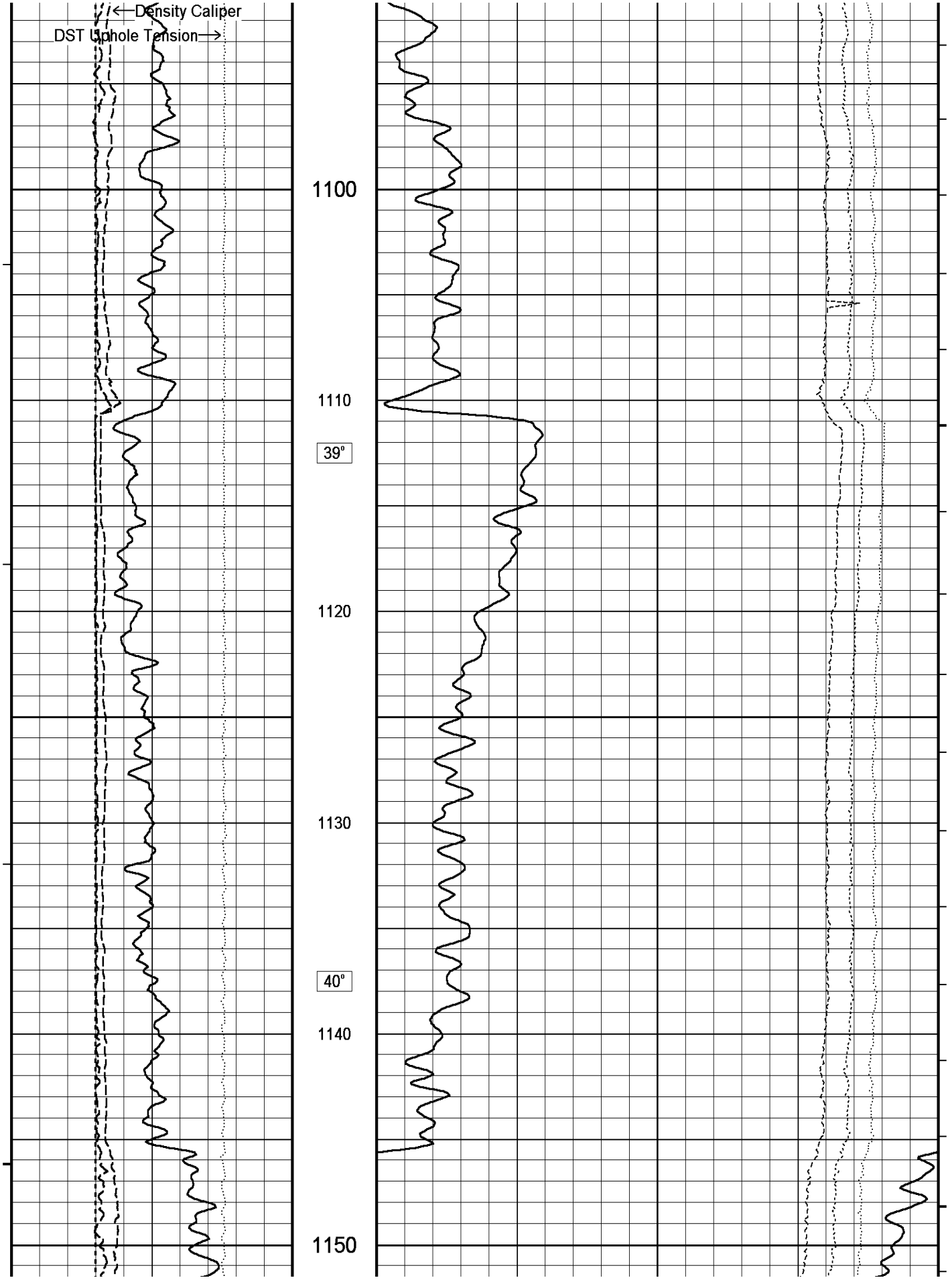

790
800
810
33°
820
830
33°
840
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
3-5' Compensated Sonic
5' Transit Time
4' Transit Time

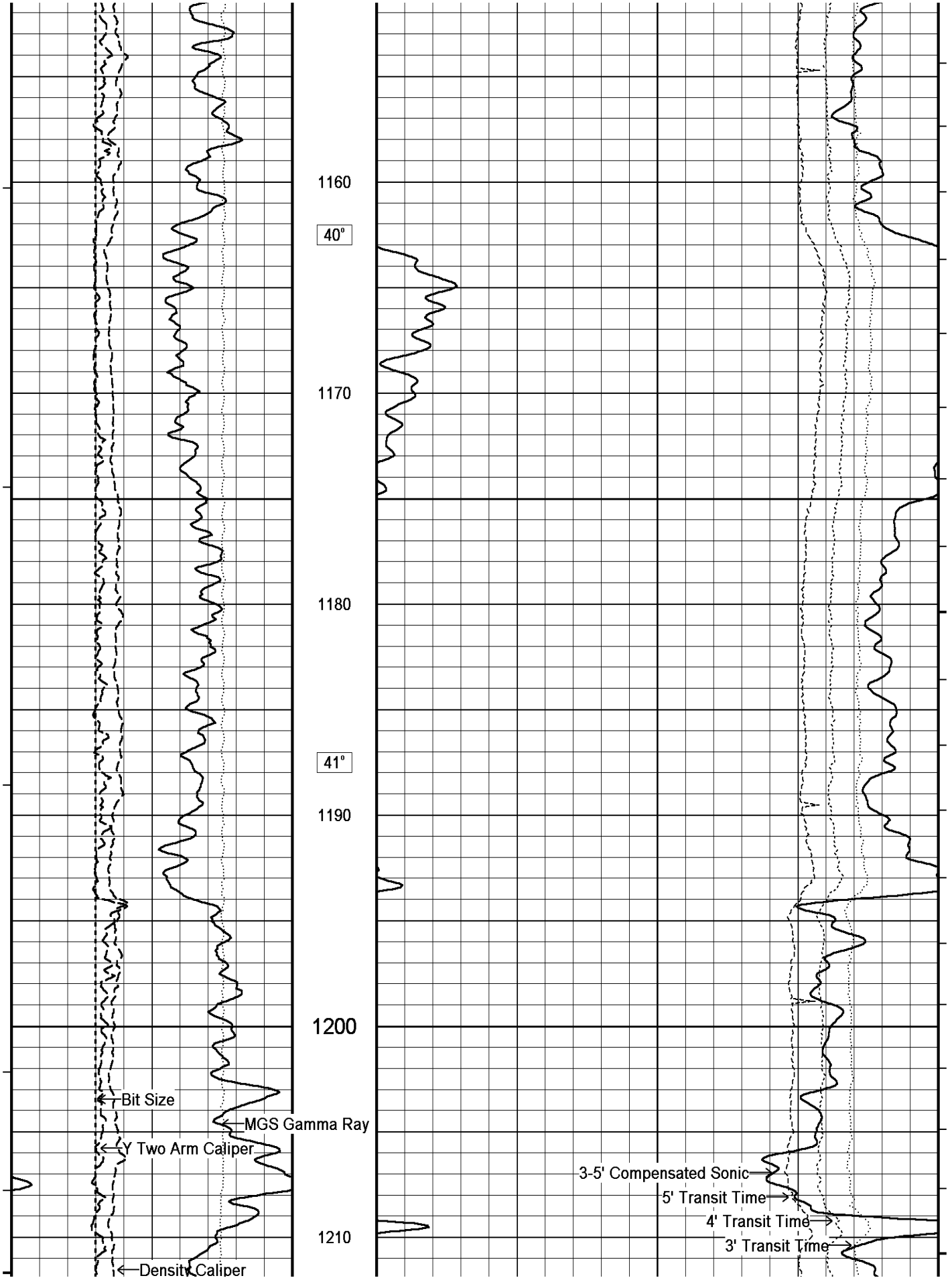

←Density Caliper
DS7 Uphole Tension→
850
860
34°
870
880
34°
890
900
910
3' Transit Time→

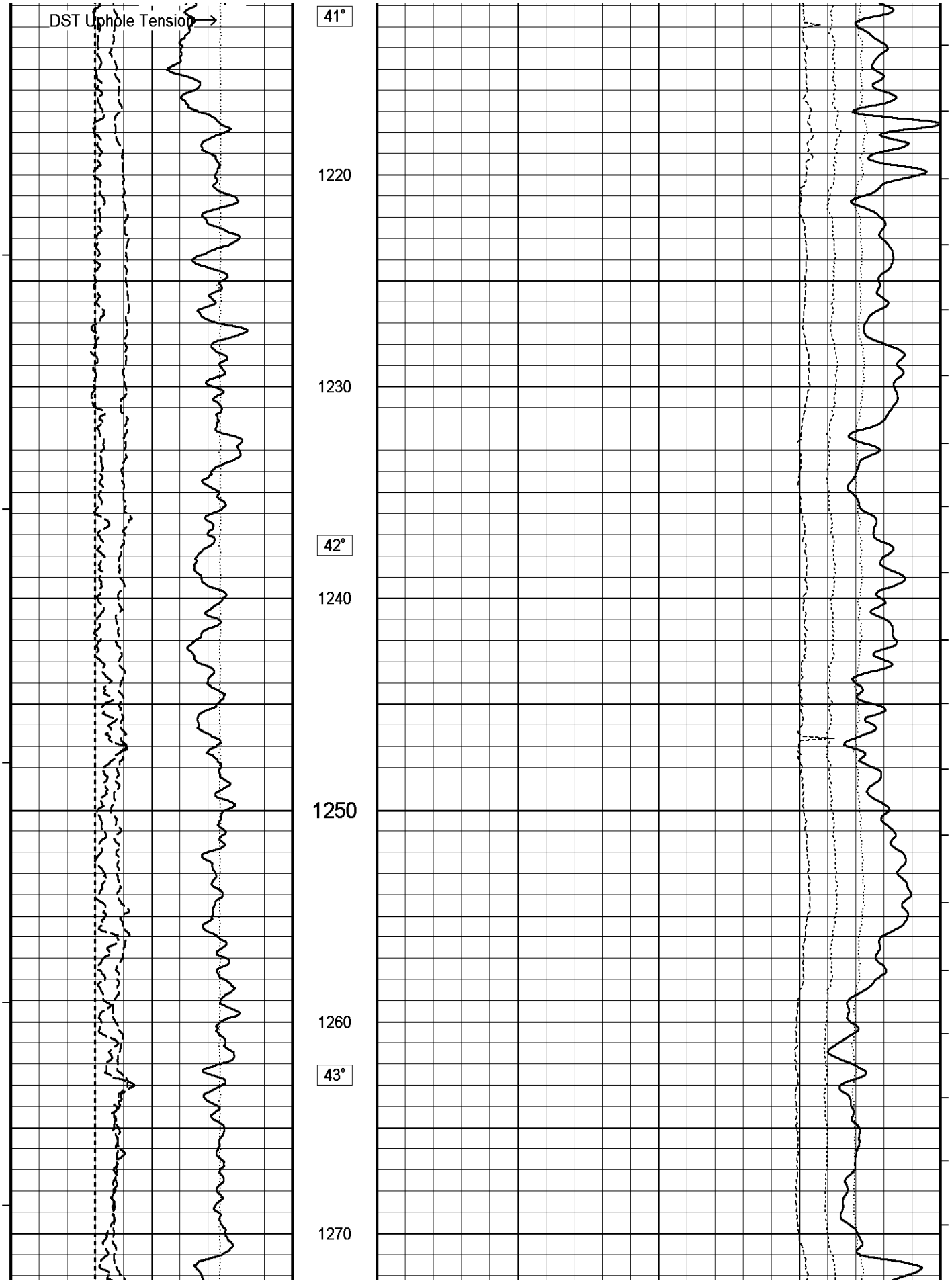

35°
920
930
35°
940
950
960
36°
970
←Bit Size
←MGS Gamma Ray
←Y Two Arm Caliper
3-5' Compensated Sonic→
5' Transit Time→
4' Transit Time→
3' Transit Time→

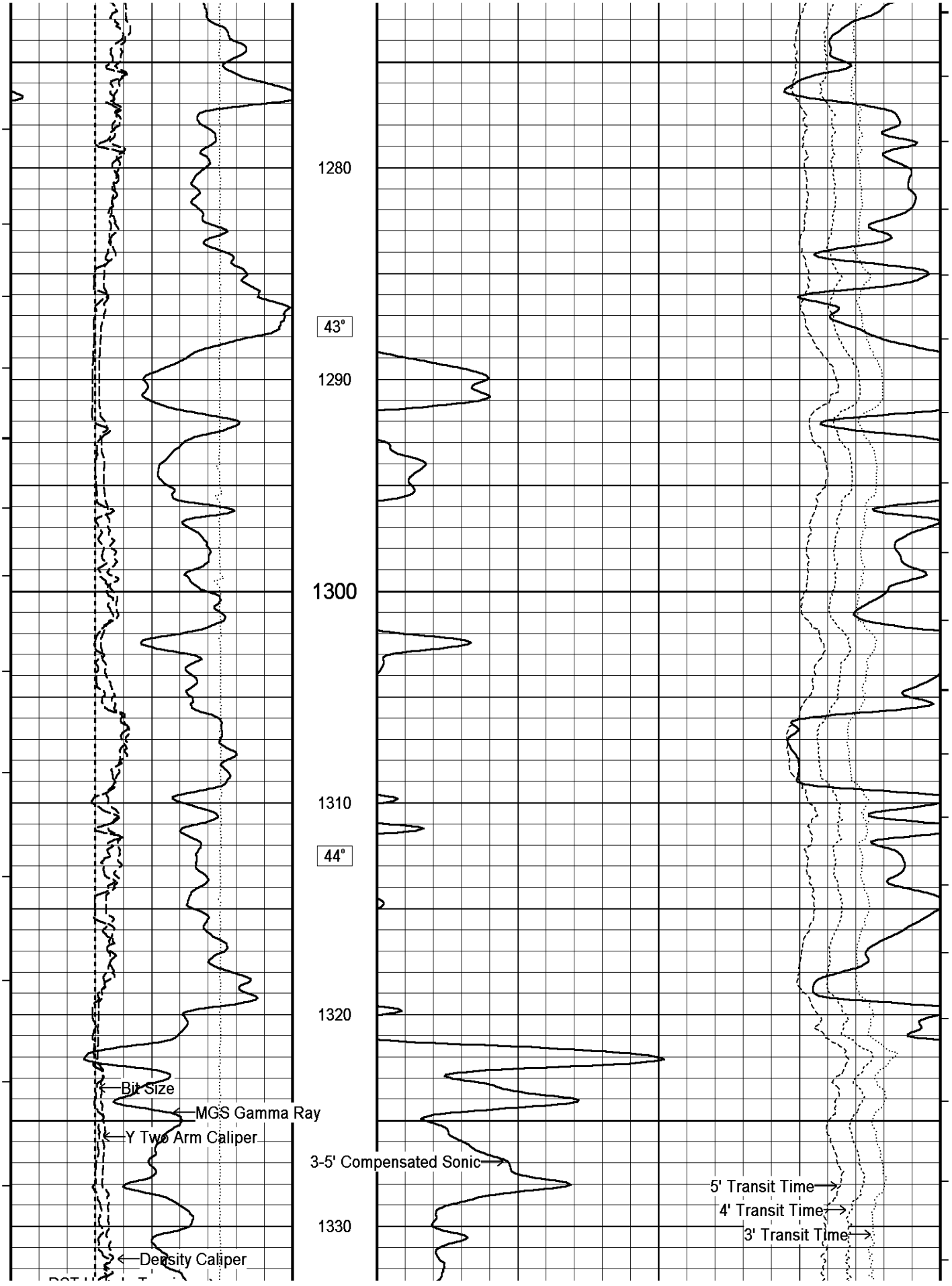

Density Caliper
DST Uphole Tension
980
36°
990
1000
1010
37°
1020
1030

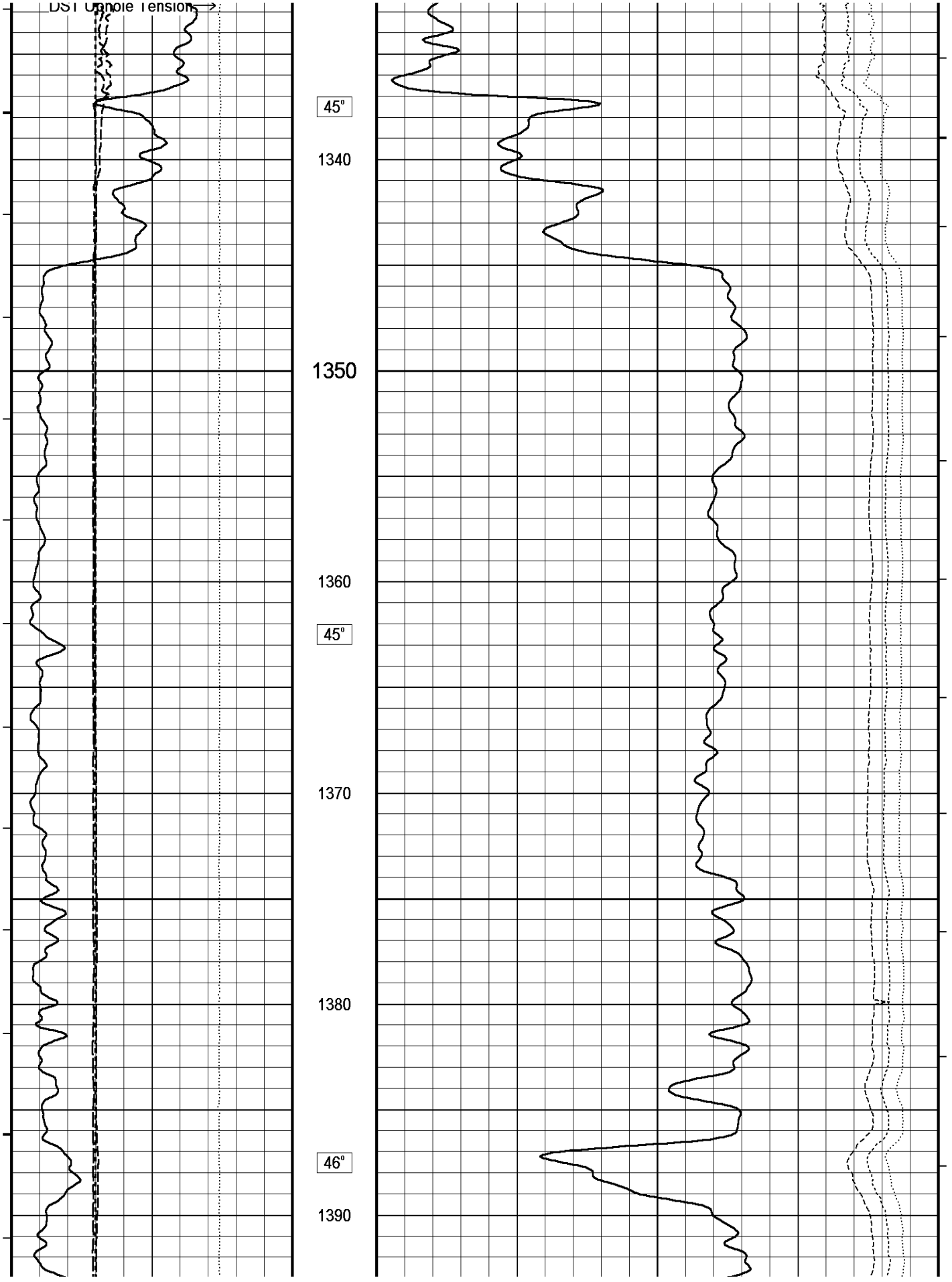

37°
1040
1050
1060
38°
1070
1080
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
3-5' Compensated Sonic
38°
1090
5' Transit Time
4' Transit Time
3' Transit Time

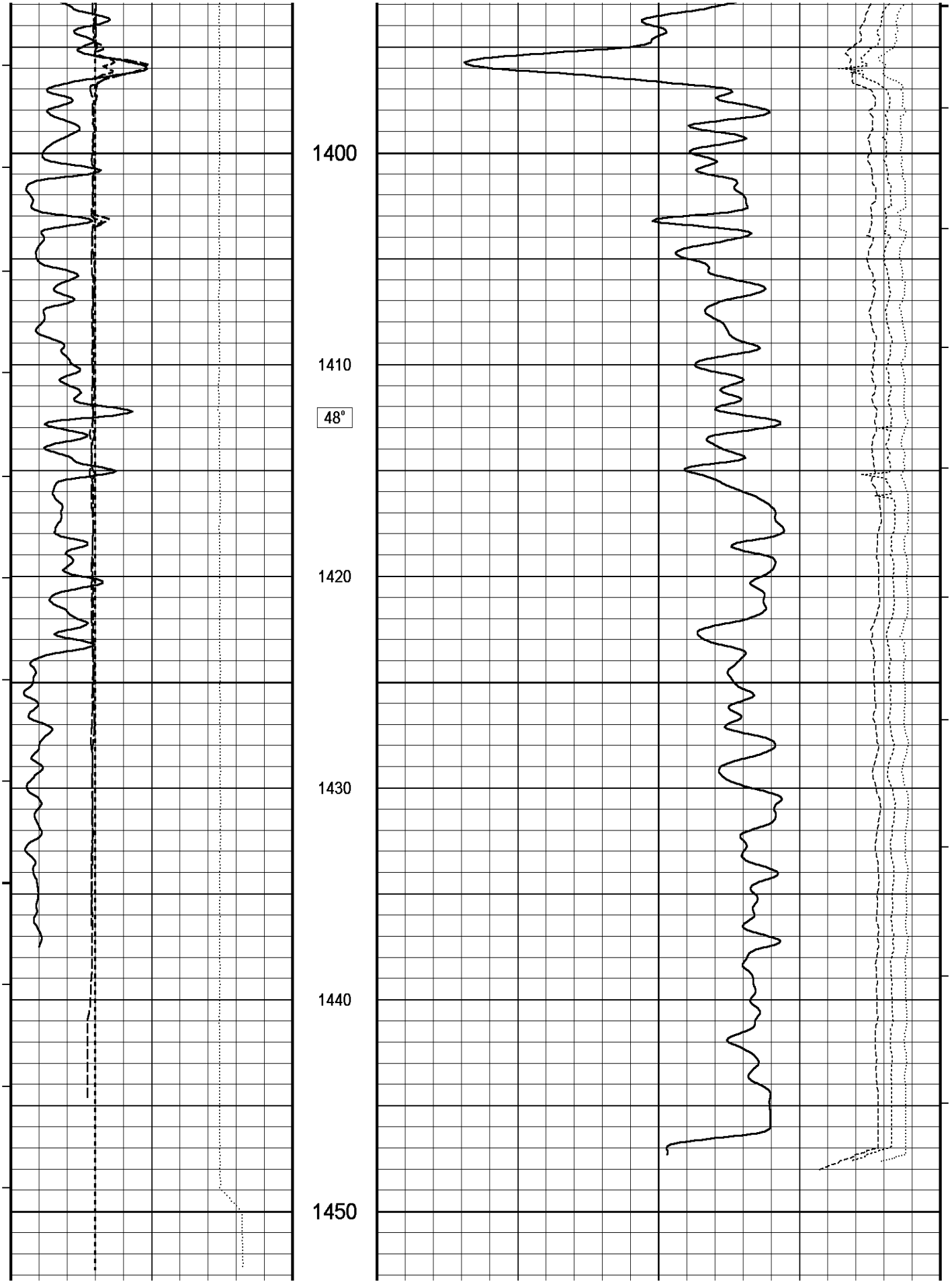

←Density Caliper
DST Uphole Tension→
1100
1110
39°
1120
1130
40°
1140
1150

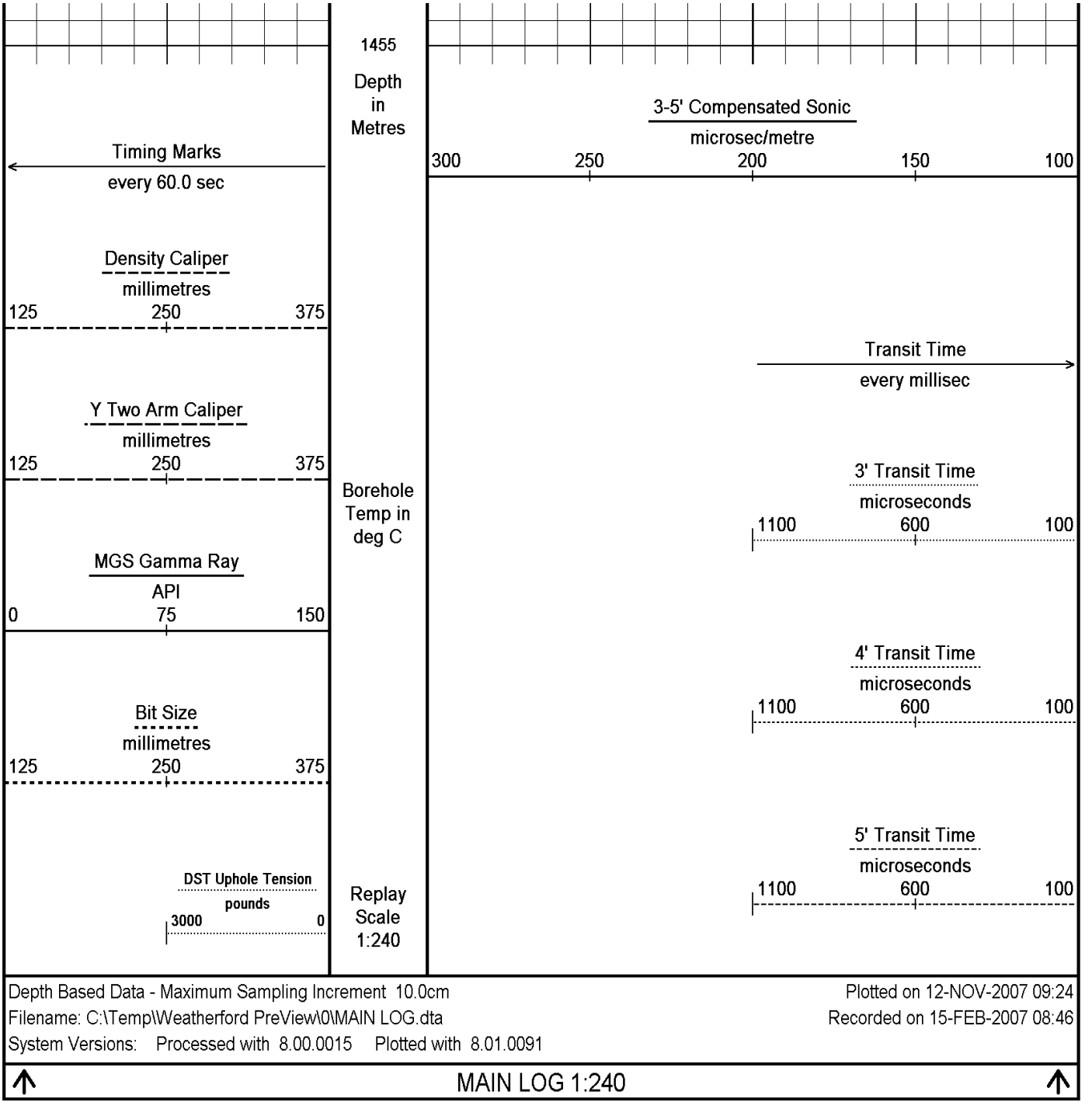

1160
40°
1170
1180
41°
1190
1200
1210
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
3-5' Compensated Sonic
5' Transit Time
4' Transit Time
3' Transit Time


DST Uphole Tension
41°
1220
1230
42°
1240
1250
1260
43°
1270


1280
43°
1290
1300
1310
44°
1320
1330
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
3-5' Compensated Sonic
Density Caliper
5' Transit Time
4' Transit Time
3' Transit Time


DST Cable Tension
45°
1340
1350
1360
45°
1370
1380
46°
1390


1400
1410
48°
1420
1430
1440
1450

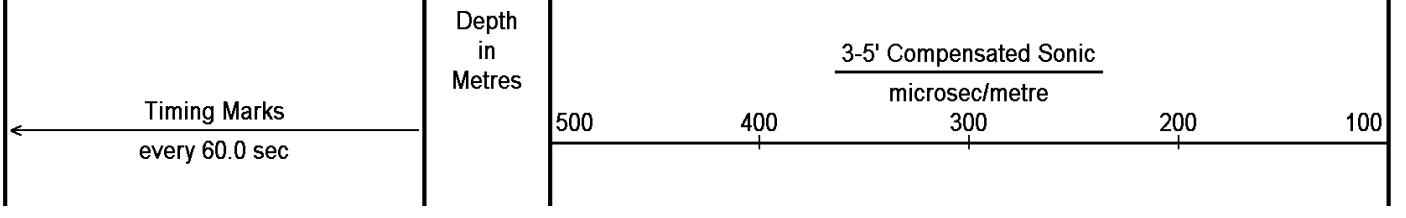


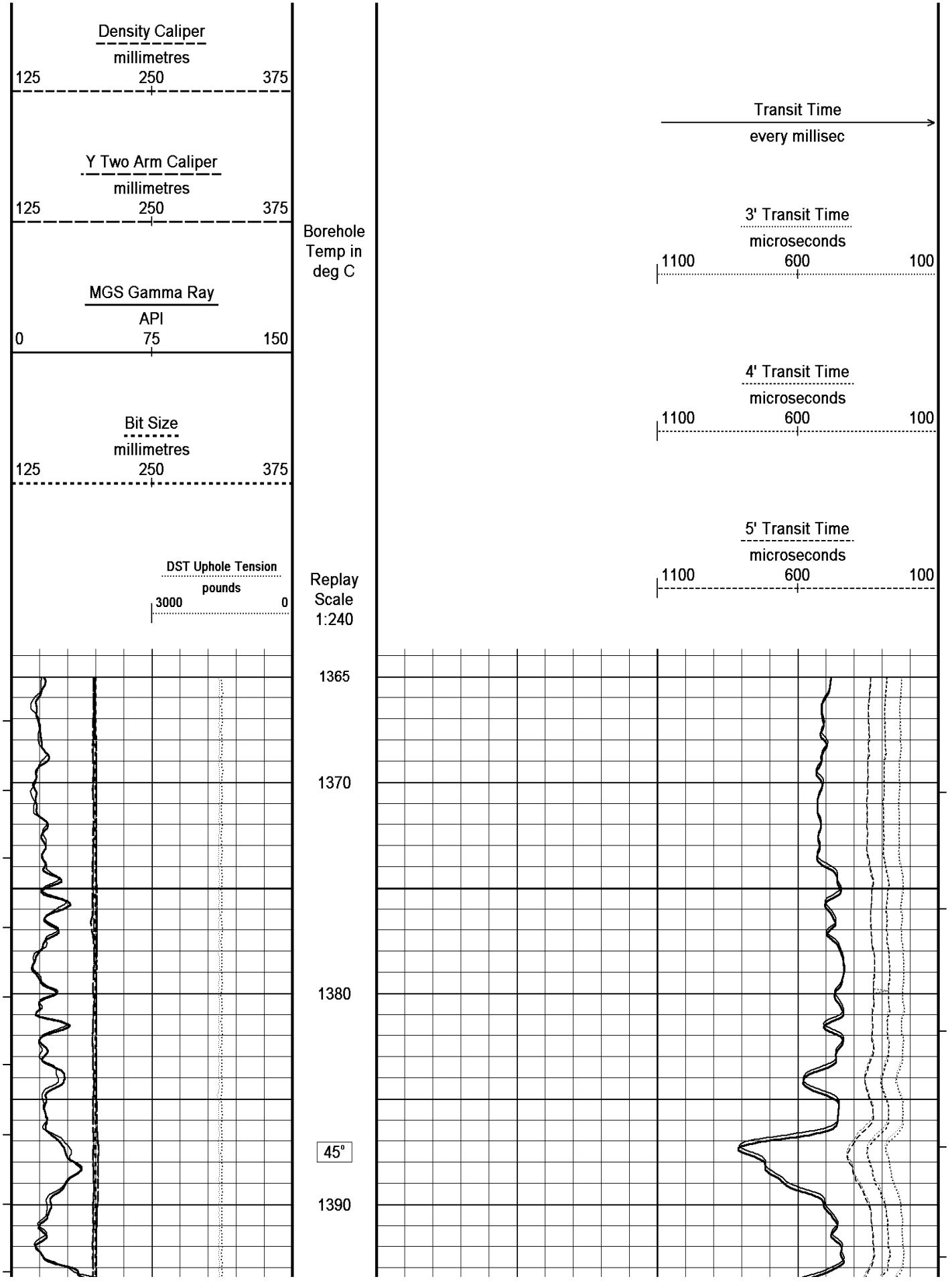
Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 12-NOV-2007 09:24
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta — Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

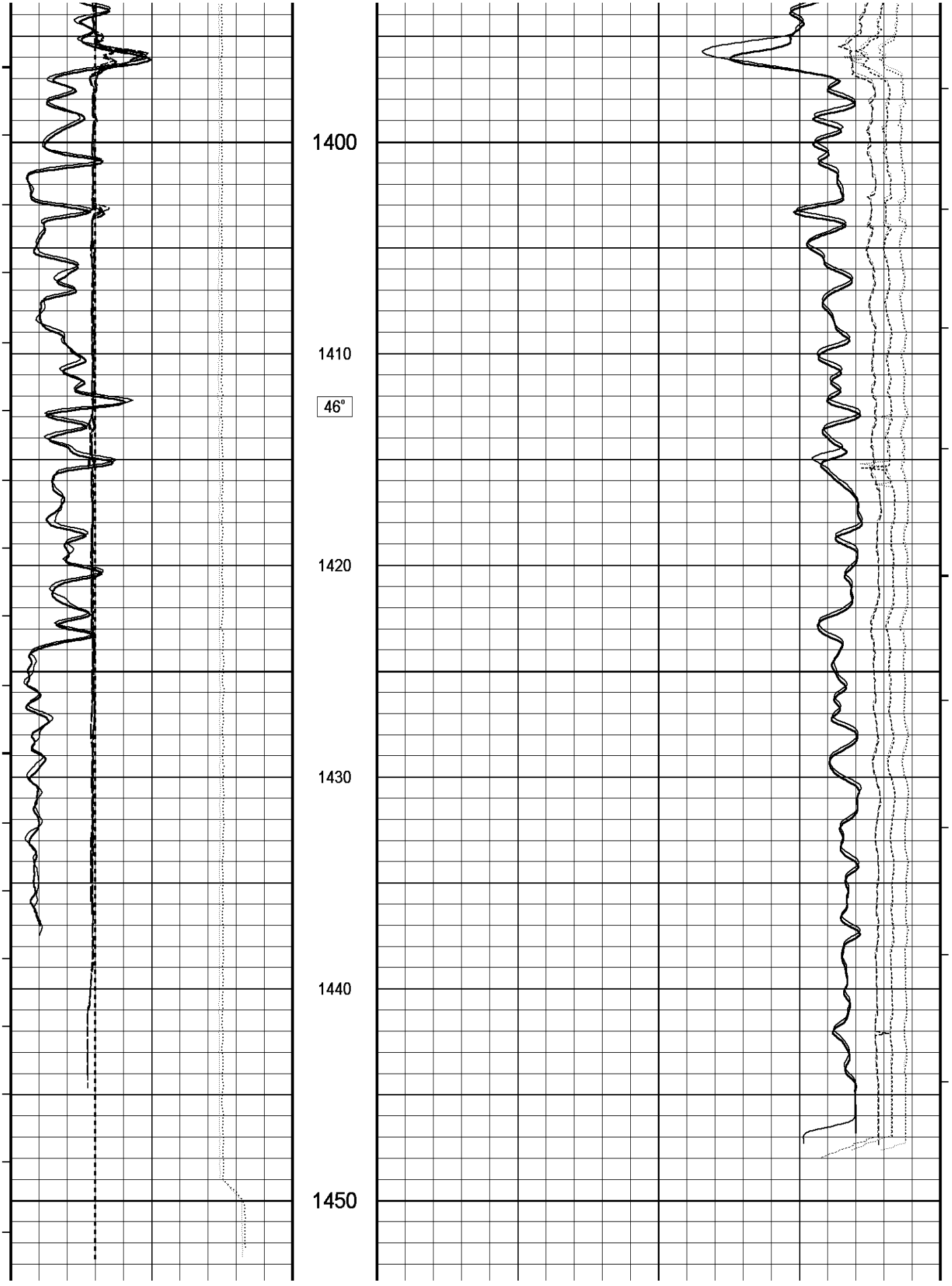
MAIN LOG 1:240

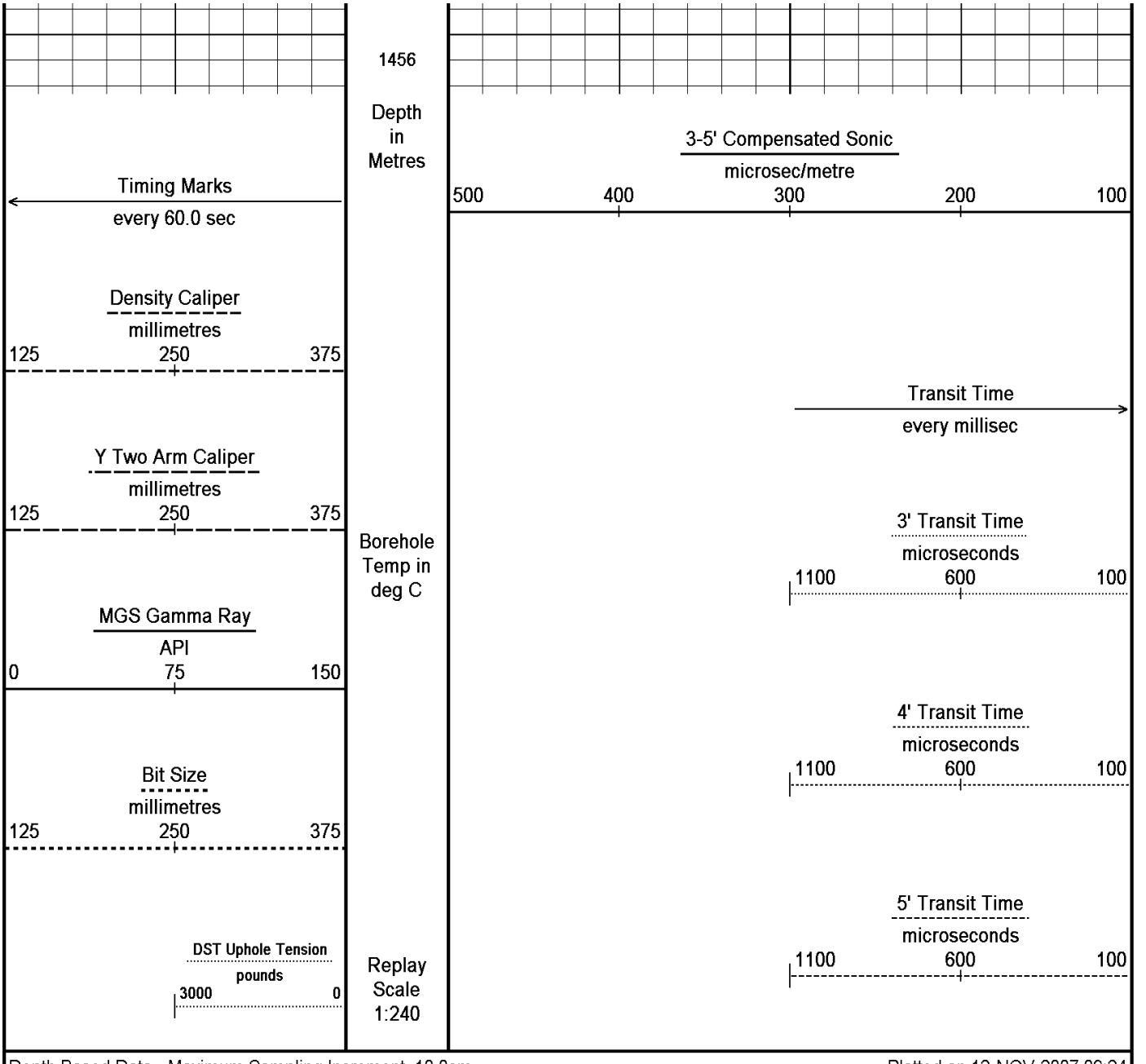
REPEAT SECTION
MAIN LOG 1:240

Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 12-NOV-2007 09:24
Filename: C:\Temp\Weatherford PreView\0\REPEAT.dta — Recorded on 15-FEB-2007 07:26
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta — Recorded on 15-FEB-2007 08:46
System Versions: Logged with 7.01.0195 Processed with 8.00.0015 Plotted with 8.01.0091




Density Caliper
millimetres
125
250
375
Y Two Arm Caliper
millimetres
125
250
375
MGS Gamma Ray
API
0
75
150
Bit Size
millimetres
125
250
375
DST Uphole Tension
pounds
3000
0
Borehole Temp in deg C
Replay Scale 1:240
Transit Time
every millisec
3' Transit Time
microseconds
1100
600
100
4' Transit Time
microseconds
1100
600
100
5' Transit Time
microseconds
1100
600
100
1365
1370
1380
45°
1390


1400
1410
46°
1420
1430
1440
1450



Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 12-NOV-2007 09:24
Filename: C:\Temp\Weatherford PreView\0\REPEAT.dta — Recorded on 15-FEB-2007 07:26
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta — Recorded on 15-FEB-2007 08:46
System Versions: Logged with 7.01.0195 Processed with 8.00.0015 Plotted with 8.01.0091

REPEAT SECTION
MAIN LOG 1:240

BEFORE SURVEY CALIBRATION

C:\Temp\Weatherford PreView\0\REPEAT.dta

General Constants All 000 — Last Edited on 15-FEB-2007,06:48

General Parameters		
Mud Resistivity	1.180	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	

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

Caliper Calibration MTC 006

Base Calibration on 25-JAN-2007,18:14
Field Calibration on 10-FEB-2007,20:21

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)
208.70	205.70

Gamma Calibration MGS 010

Field Calibration on 7-FEB-2007,09:09

	Measured	Calibrated (API)
Background	48	31
Calibrator (Gross)	1256	825
Calibrator (Net)	1208	794

Gamma Constants MGS 010

Last Edited on 15-FEB-2007,06:48

Gamma Calibrator Number	grcc075	
Mud Density	1060.00	kg/m3
Caliper Source for Processing	Density Caliper	
Tool Position	Centred	
Concentration of KCl	0.00	kppm

Caliper Calibration MPD 036

Base Calibration on 23-JAN-2007 04:20
Field Calibration on 7-FEB-2007,11:28

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)

Measured Caliper (mm)	166.10
Actual Caliper (mm)	166.10

Sonic Constants MSS 060

Last Edited on 7-FEB-2007,10:50

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	83.13	micro-sec/ft

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	

Down Hole Fixed Gate Parameters

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

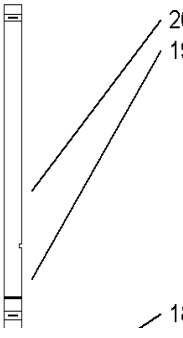
Full Waveform Parameters

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

DOWNHOLE EQUIPMENT

C:\Temp\Weatherford PreView\0\REPEAT.dta

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

18.79 m FEFE - Shallow FE

MFE 17 Length: 1.84 m Weight: 48.5 lb

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 NPRL - Limestone 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 DPRL - Limestone Density Por.
7.85 m DCOR - Density Correction
7.83 m PDPE - PE

Compact Sonic
MSS 60 Length: 3.82 m Weight: 72.8 lb

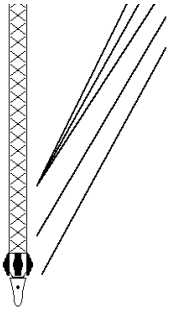
3.95 m TR21 - 3' Transit Time
3.95 m TR11 - 4' Transit Time
3.95 m TR22 - 5' Transit Time
3.95 m DT34 - 3-4' Compensated Sonic
3.95 m DT35 - 3-5' Compensated Sonic
3.95 m TR12 - 6' Transit Time

Compact Induction
MAI 72 Length: 3.29 m Weight: 48.5 lb

0.79 m VEC0 - Shallow Induction
0.79 m RILM - Medium Induction
0.79 m RILD - Deep Induction

Compact Hole Finder

HFS 1	Length: 0.24 m	Weight: 2.2 lb
Total	Length: 22.63 m	Weight: 568.8 lb



0.07 m Tool Zero

SPCG - Spontaneous Potential (0.28m from bottom)

All measurements relative to tool zero.

COMPANY	PARAMOUNT RESOURCES LTD.
WELL	PARAMOUNT ET AL CAMERON J-04
FIELD	CAMERON HILLS
PROVINCE/COUNTY	NORTH WEST TERRITORIES
COUNTRY/STATE	CANADA

Elevation Kelly Bushing	769.20	metres	First Reading	1445.50	metre
Elevation Drill Floor		metres	Depth Driller	1449.00	metres
Elevation Ground Level	765.20	metres	Depth Logger	1449.50	metres

Weatherford®

COMPENSATED SONIC

CEMENT VOLUME
PROD. CSG. 139.7 MM

COMPANY	PARAMOUNT RESOURCES LTD.
WELL	PARAMOUNT ET AL CAMERON J-04
FIELD	CAMERON HILLS
PROVINCE/COUNTY	NORTH WEST TERRITORIES
COUNTRY/STATE	CANADA
LOCATION	300/J-04-60-10-117-30

FIELD PRINT

LSD	SEC	TWP	RGE

API Number
Permit Number 1159

Other Services
ARRAY INDUCTION
MICROLOG
COMPENSTATED SONIC
PHOTO DENSITY
DUAL SPACED NEUTRON

Permanent Datum GROUND LEVEL, Elevation 765.20 metres
Log Measured From 4.00 M above Permanent Datum
Drilling Measured From KB

Elevations:	metres
KB	769.20
DF	
GL	765.20

Date	15-FEB-2007		
Run Number	1		
Depth Driller	1449.00	metres	
Depth Logger	1449.50	metres	
First Reading	1441.60	metre	
Last Reading	420.00	metre	
Casing Driller	430.00	metres	
Casing Logger	429.80	metres	
Bit Size	200.00	mm	
Hole Fluid Type	GELCHEM		
Density / Viscosity	1060.0 kg/M3	93.00 CP	
PH / Fluid Loss	11.00	11.00 ml/30Min	
Sample Source	FLOWLINE		
Rm @ Measured Temp	1.18 @ 25.0	ohm-m	
Rmf @ Measured Temp	1.04 @ 25.0	ohm-m	
Rmc @ Measured Temp	1.32 @ 25.0	ohm-m	
Source Rmf / Rmc	PRESS	FILTER	
Rm @ BHT	0.78 @ 48.0	ohm-m	
Time Since Circulation	6 HRS		
Max Recorded Temp	48.00	deg C	
Equipment Name	COMPACT		
Equipment / Base	13124	GPR	
Recorded By	G. SINGER		
Witnessed By	A. AHMED		
CIRC. STOP TIME	01:30-FEB-15		Last Line

BOREHOLE RECORD

Last Edited: 15-FEB-2007 05:01

Bit Size millimetres	Depth From metres	Depth To metres
311.000	0.00	430.00
200.000	430.00	1449.00

CASING RECORD

Type	Size millimetres	Depth From metres	Shoe Depth metres	Weight Kg/metre
SURFACE	219.100	0.00	430.00	35.72

REMARKS

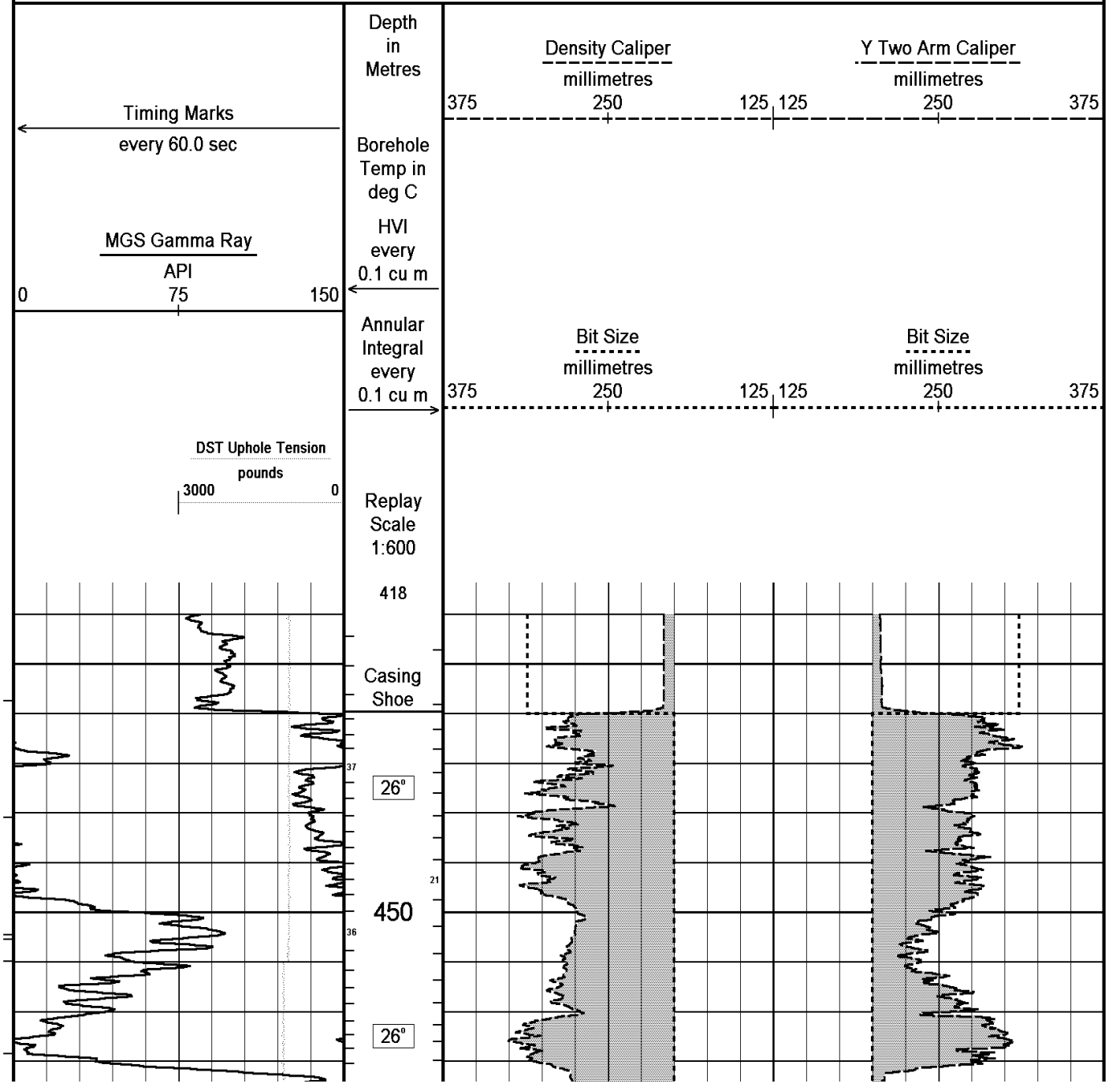
1) SOFTWARE ISSUE: WLS 7.01.0195.
2) CUSTOMER SCALES AND LOGGED INTERVALS USED
3) TOOLS RUN: MAI, MSS, MPD, MDN, MML, ISC, MGS, MTC, MFE, MCG RUN IN COMBINATION
4) HARDWARE: MAI: TWO 25.4 MM STANDOFFS
   MSS: THREE 25.4 MM STANDOFFS
   MDN: DUAL BOWSPRING AND INTERSONIC CRANK
   MTC: SIX LEAF CENTRALIZER
5) SERVICE ORDER #: 30073028 SAP #: 4147101 # FIELD PRINTS = 3
6) RIG: PD 129

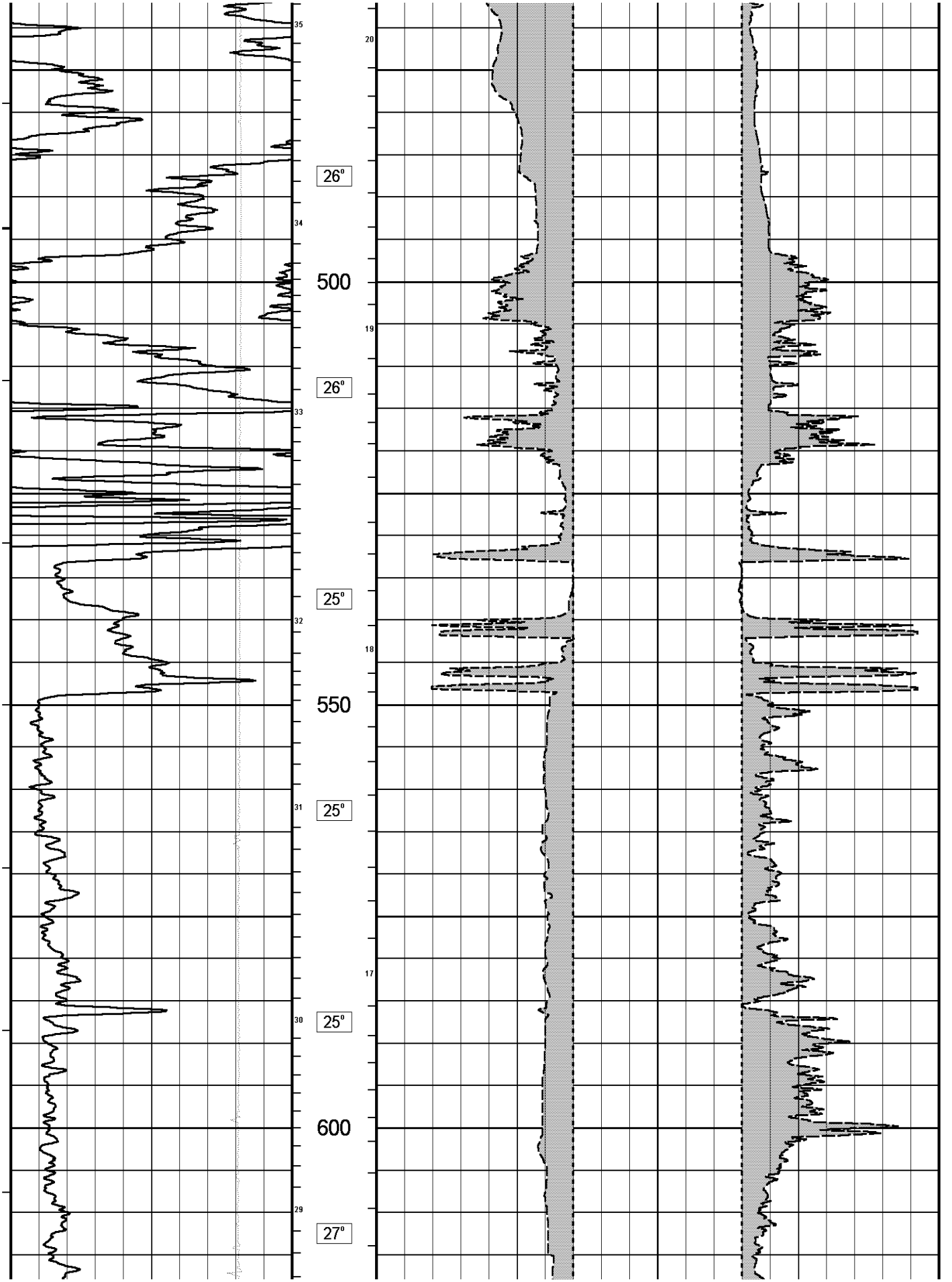
7) HOLE AND CEMENT VOLUMES CALCULATED USING DENSITY AND 2-ARM CALIPERS :
HOLE VOLUME = 37.4 CU.M.
ANNULAR VOLUME USING 139.7 MM PRODUCTION CASING = 21.8 CU.M

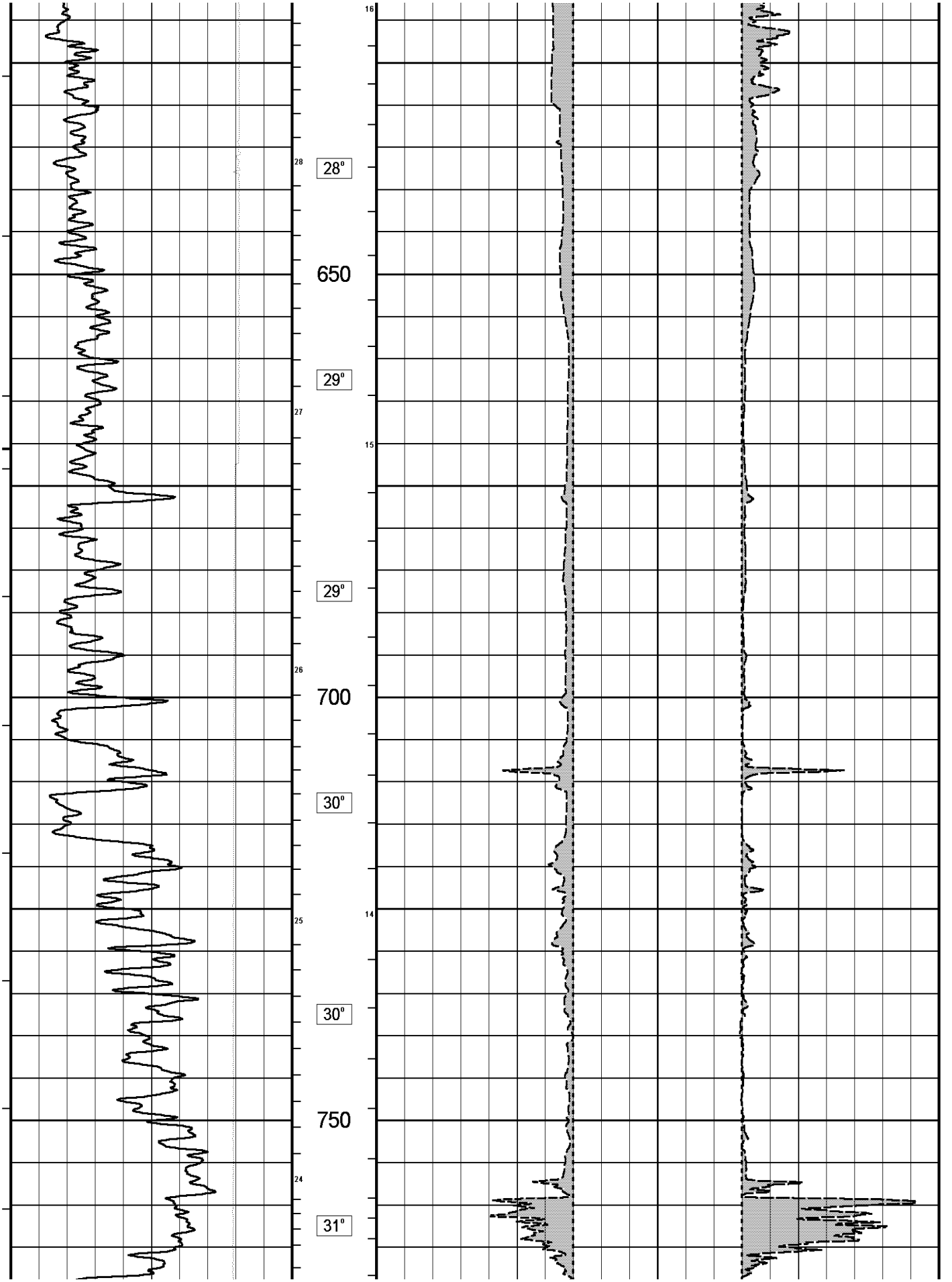
8) SONIC FREE PIPE FOUND FROM 352M - 357M

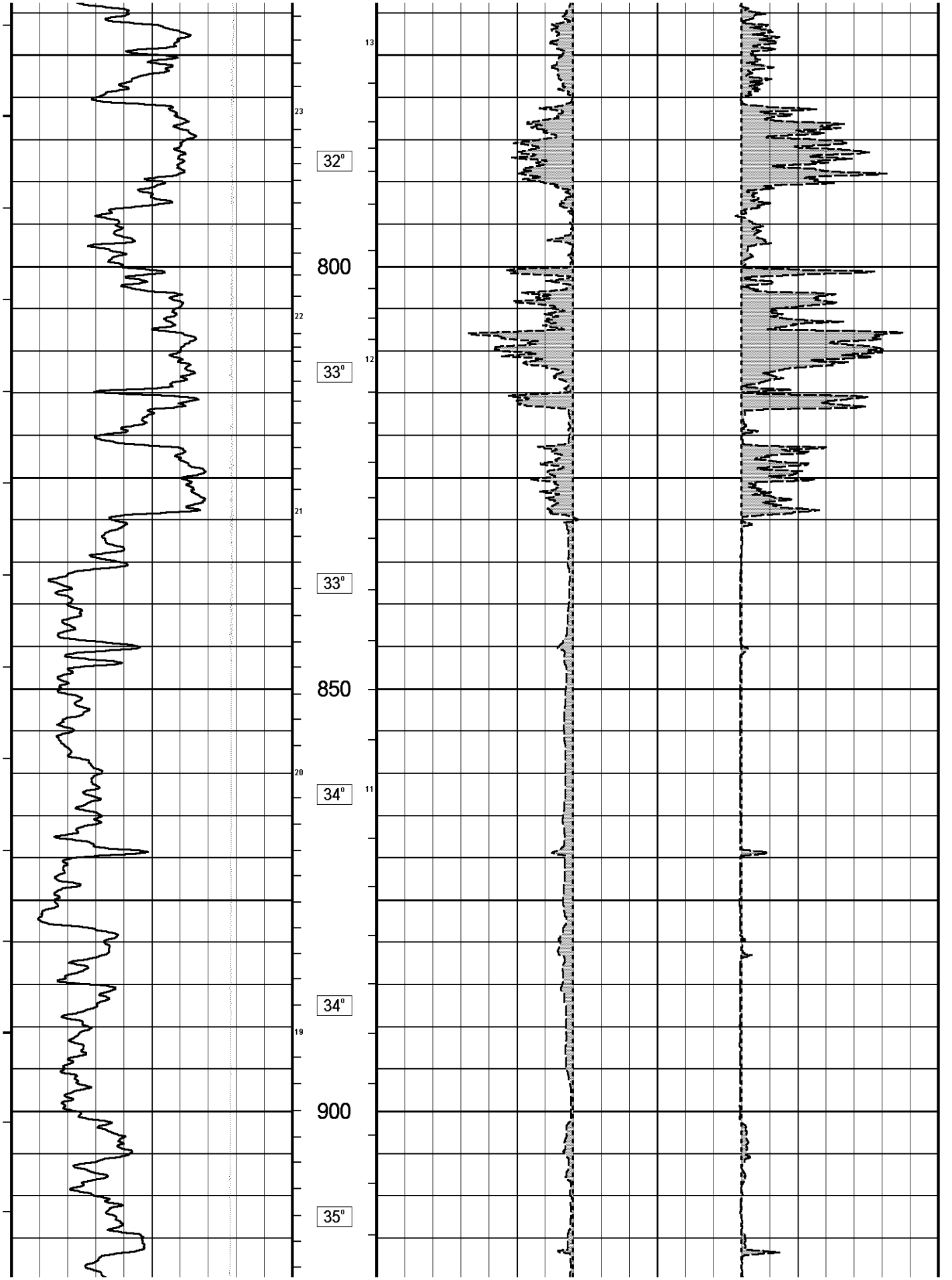
HOLE VOLUMES USING 139.7mm PRODUCTION CASING

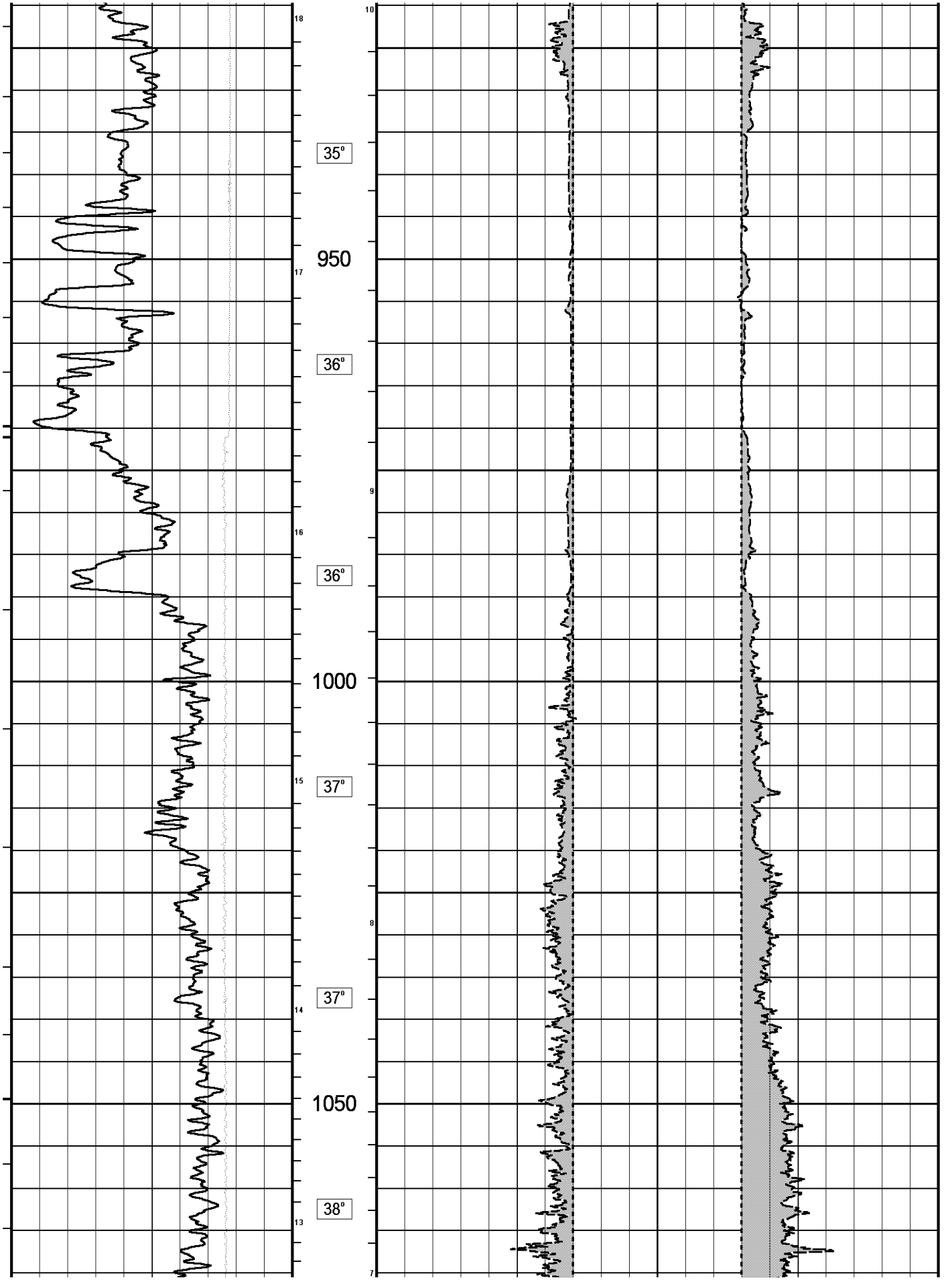
Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 12-NOV-2007 09:26
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

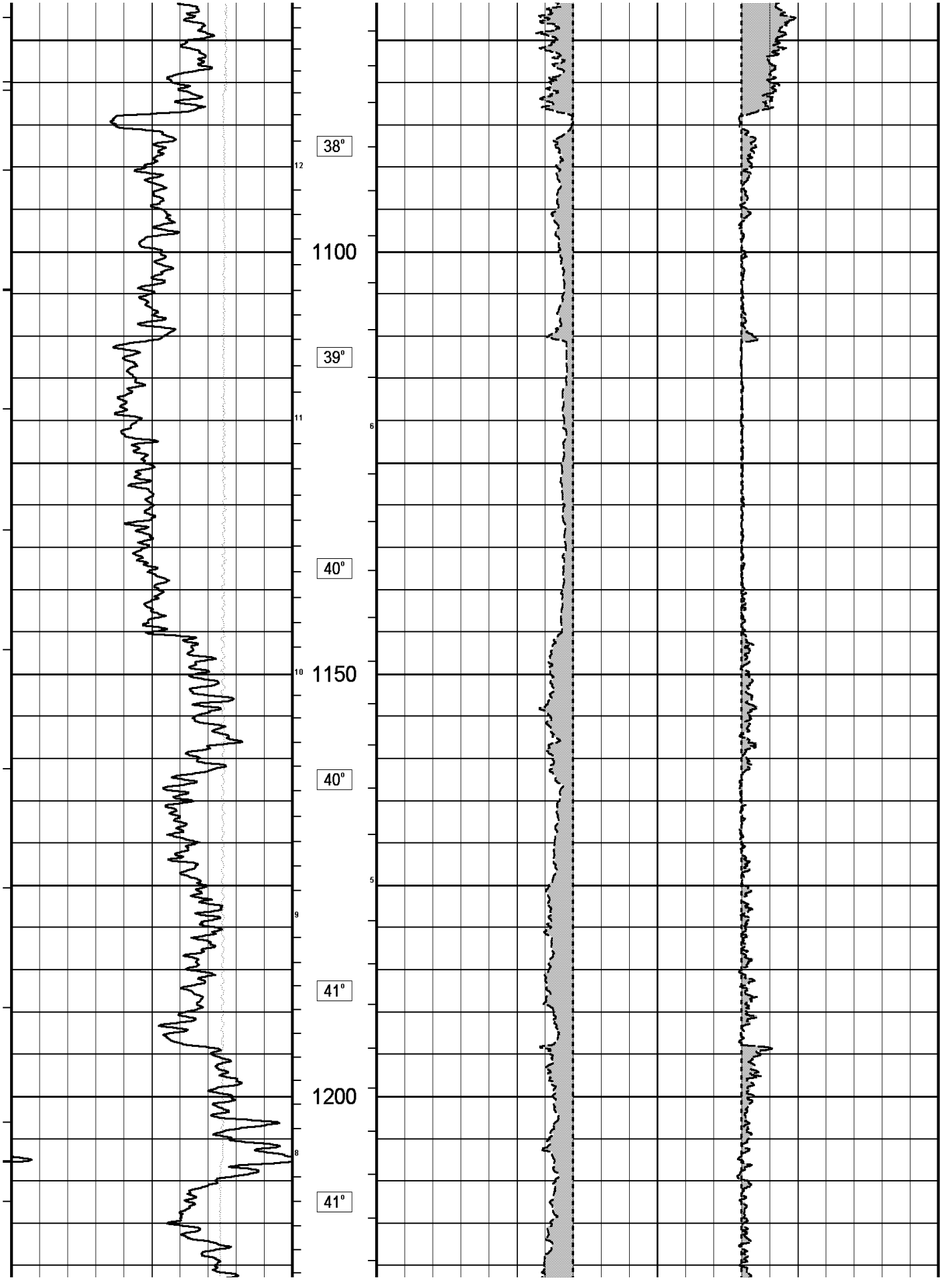


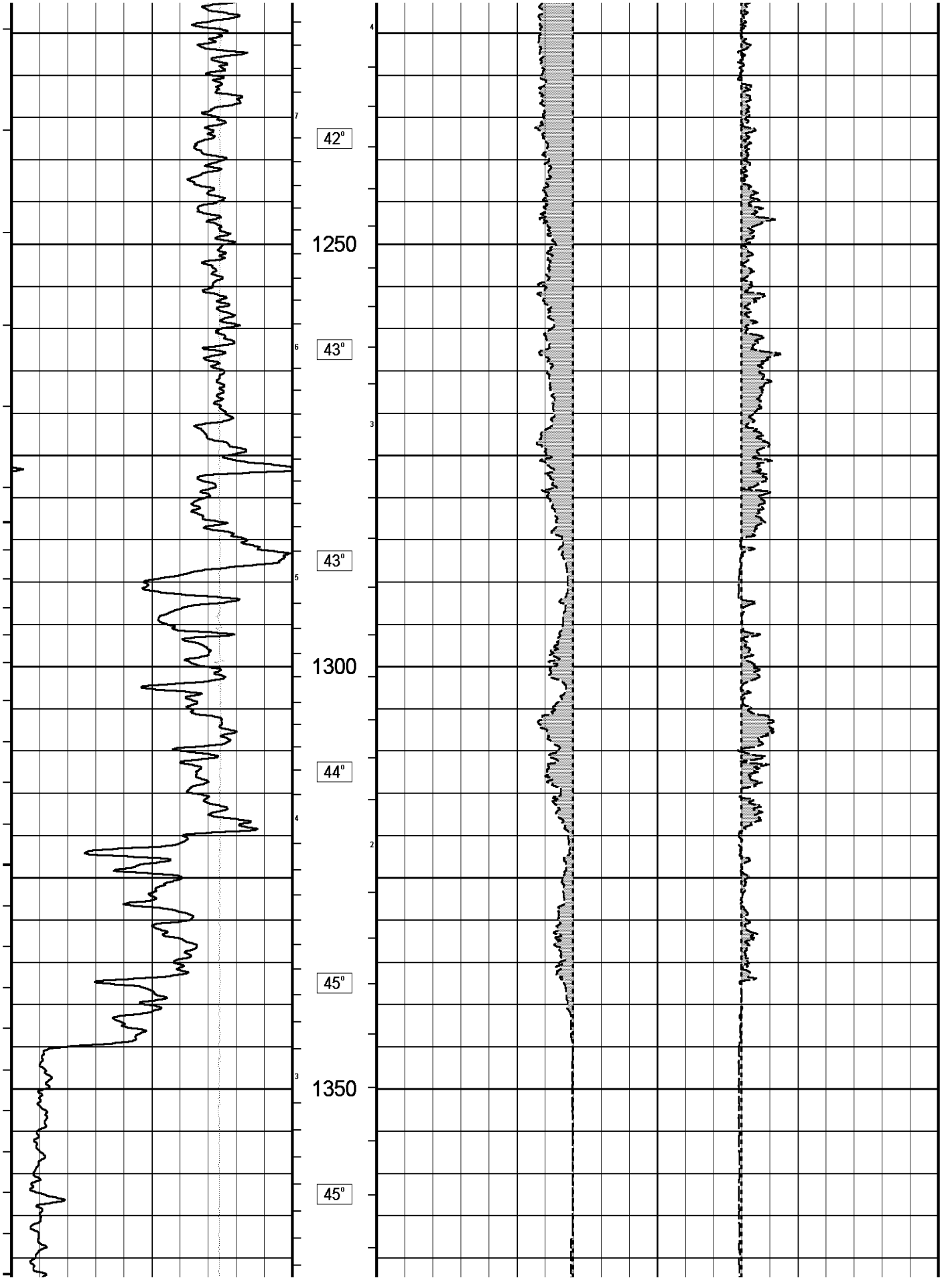

35
34
33
32
31
30
29
20
19
18
17
26°
26°
25°
25°
25°
27°
500
550
600

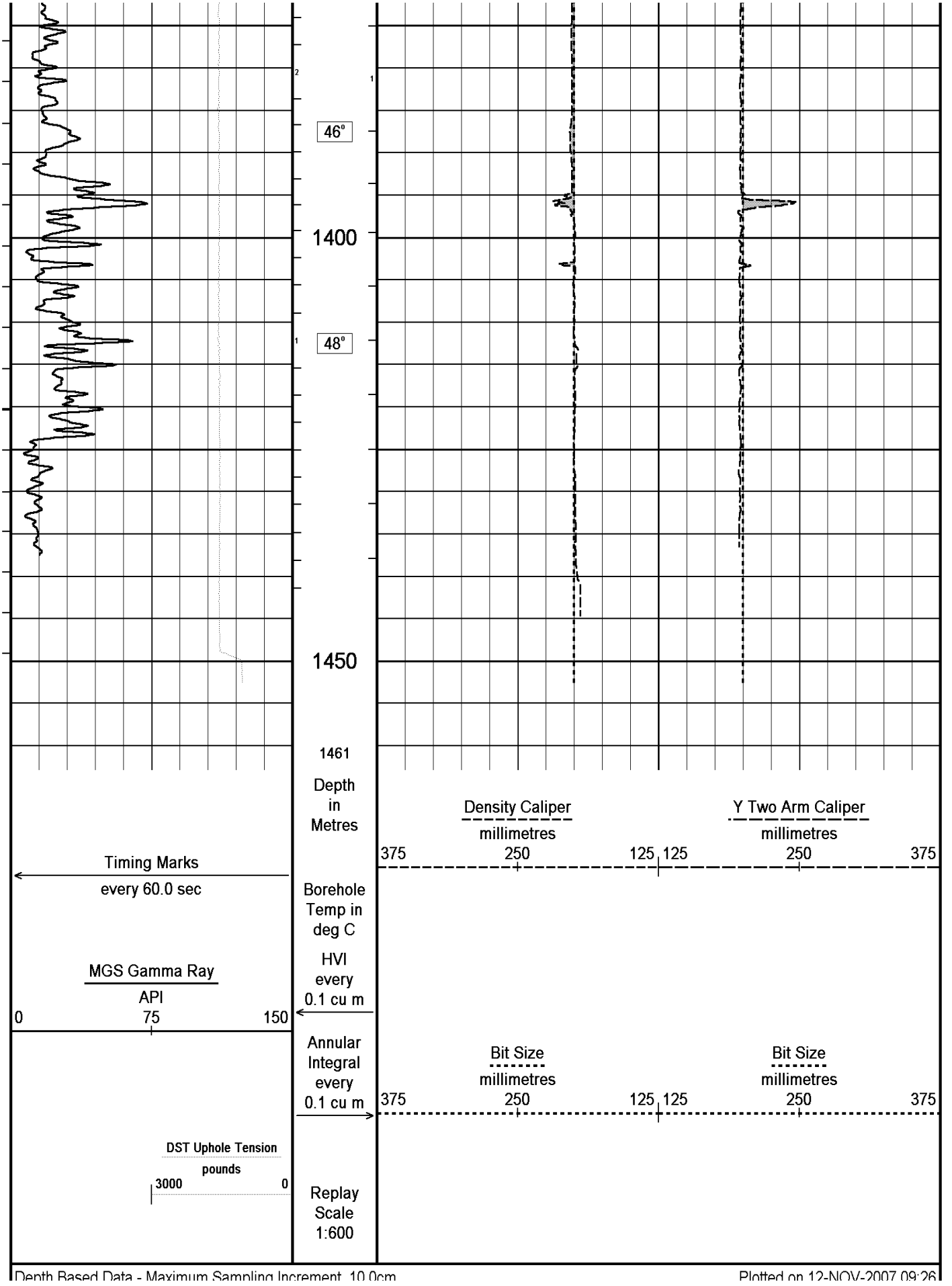

28
27
26
25
24
16
15
14
28°
650
29°
29°
700
30°
30°
750
31°


23
22
21
20
19
32°
33°
33°
34°
34°
35°
800
850
900
13
12
11


35°
950
36°
36°
1000
37°
37°
1050
38°


38°
1100
39°
40°
1150
40°
41°
1200
41°


42°
1250
43°
43°
1300
44°
45°
1350
45°



Depth Based Data - Maximum Sampling Increment 10.0cm

Plotted on 12-NOV-2007 09:26

Depth Based Data - Maximum Sampling Increment 10.00m — Plotted on 12-NOV-2007 09:20

Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta — Recorded on 15-FEB-2007 08:46

System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

HOLE VOLUMES USING 139.7mm PRODUCTION CASING

COMPANY	PARAMOUNT RESOURCES LTD.
WELL	PARAMOUNT ET AL CAMERON J-04
FIELD	CAMERON HILLS
PROVINCE/COUNTY	NORTH WEST TERRITORIES
COUNTRY/STATE	CANADA

Elevation Kelly Bushing	769.20	metres	First Reading	1441.60	metre
Elevation Drill Floor		metres	Depth Driller	1449.00	metres
Elevation Ground Level	765.20	metres	Depth Logger	1449.50	metres

Weatherford®

CEMENT VOLUME

PROD. CSG. 139.7 MM

CEMENT VOLUME
PROD. CSG. 139.7 MM

COMPANY	PARAMOUNT RESOURCES LTD.
WELL	PARAMOUNT ET AL CAMERON J-04
FIELD	CAMERON HILLS
PROVINCE/COUNTY	NORTH WEST TERRITORIES
COUNTRY/STATE	CANADA
LOCATION	300/J-04-60-10-117-30

FIELD PRINT

LSD	SEC	TWP	RGE

API Number
Permit Number 1159

Other Services
ARRAY INDUCTION
MICROLOG
COMPENSTATED SONIC
PHOTO DENSITY
DUAL SPACED NEUTRON

Permanent Datum GROUND LEVEL, Elevation 765.20 metres
Log Measured From 4.00 M above Permanent Datum
Drilling Measured From KB

Elevations:	metres
KB	769.20
DF	
GL	765.20

Date	15-FEB-2007		
Run Number	1		
Depth Driller	1449.00	metres	
Depth Logger	1449.50	metres	
First Reading	1441.60	metre	
Last Reading	420.00	metre	
Casing Driller	430.00	metres	
Casing Logger	429.80	metres	
Bit Size	200.00	mm	
Hole Fluid Type	GELCHEM		
Density / Viscosity	1060.0 kg/M3	93.00 CP	
PH / Fluid Loss	11.00	11.00 ml/30Min	
Sample Source	FLOWLINE		
Rm @ Measured Temp	1.18 @ 25.0	ohm-m	
Rmf @ Measured Temp	1.04 @ 25.0	ohm-m	
Rmc @ Measured Temp	1.32 @ 25.0	ohm-m	
Source Rmf / Rmc	PRESS	FILTER	
Rm @ BHT	0.78 @ 48.0	ohm-m	
Time Since Circulation	6 HRS		
Max Recorded Temp	48.00	deg C	
Equipment Name	COMPACT		
Equipment / Base	13124	GPR	
Recorded By	G. SINGER		
Witnessed By	A. AHMED		
CIRC. STOP TIME	01:30-FEB-15		Last Line

BOREHOLE RECORD

Last Edited: 15-FEB-2007 05:01

Bit Size millimetres	Depth From metres	Depth To metres
311.000	0.00	430.00
200.000	430.00	1449.00

CASING RECORD

Type	Size millimetres	Depth From metres	Shoe Depth metres	Weight Kg/metre
SURFACE	219.100	0.00	430.00	35.72

REMARKS

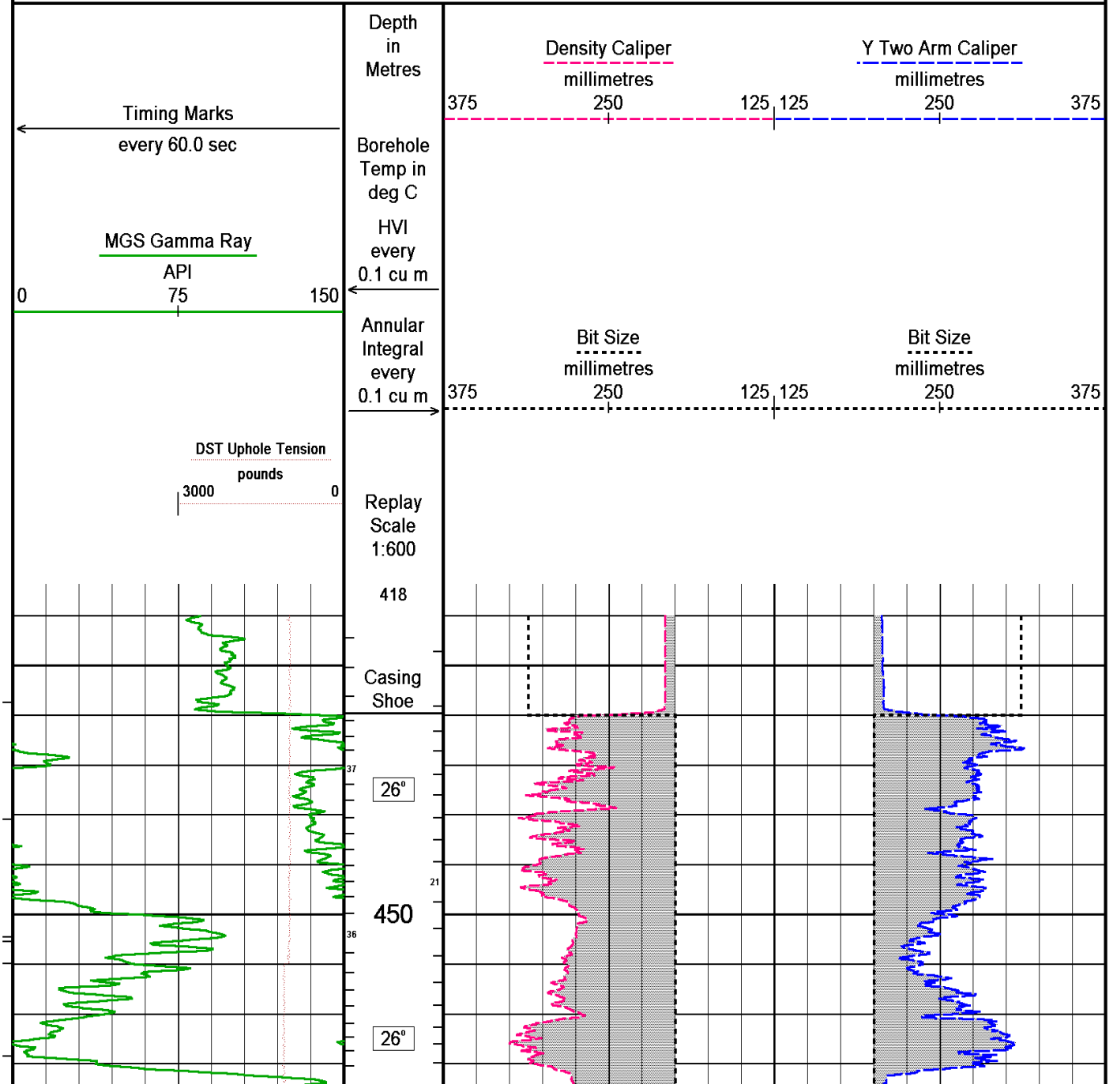
1) SOFTWARE ISSUE: WLS 7.01.0195.
2) CUSTOMER SCALES AND LOGGED INTERVALS USED
3) TOOLS RUN: MAI, MSS, MPD, MDN, MML, ISC, MGS, MTC, MFE, MCG RUN IN COMBINATION
4) HARDWARE: MAI: TWO 25.4 MM STANDOFFS
   MSS: THREE 25.4 MM STANDOFFS
   MDN: DUAL BOWSPRING AND INTERSONIC CRANK
   MTC: SIX LEAF CENTRALIZER
5) SERVICE ORDER #: 30073028 SAP #: 4147101 # FIELD PRINTS = 3
6) RIG: PD 129

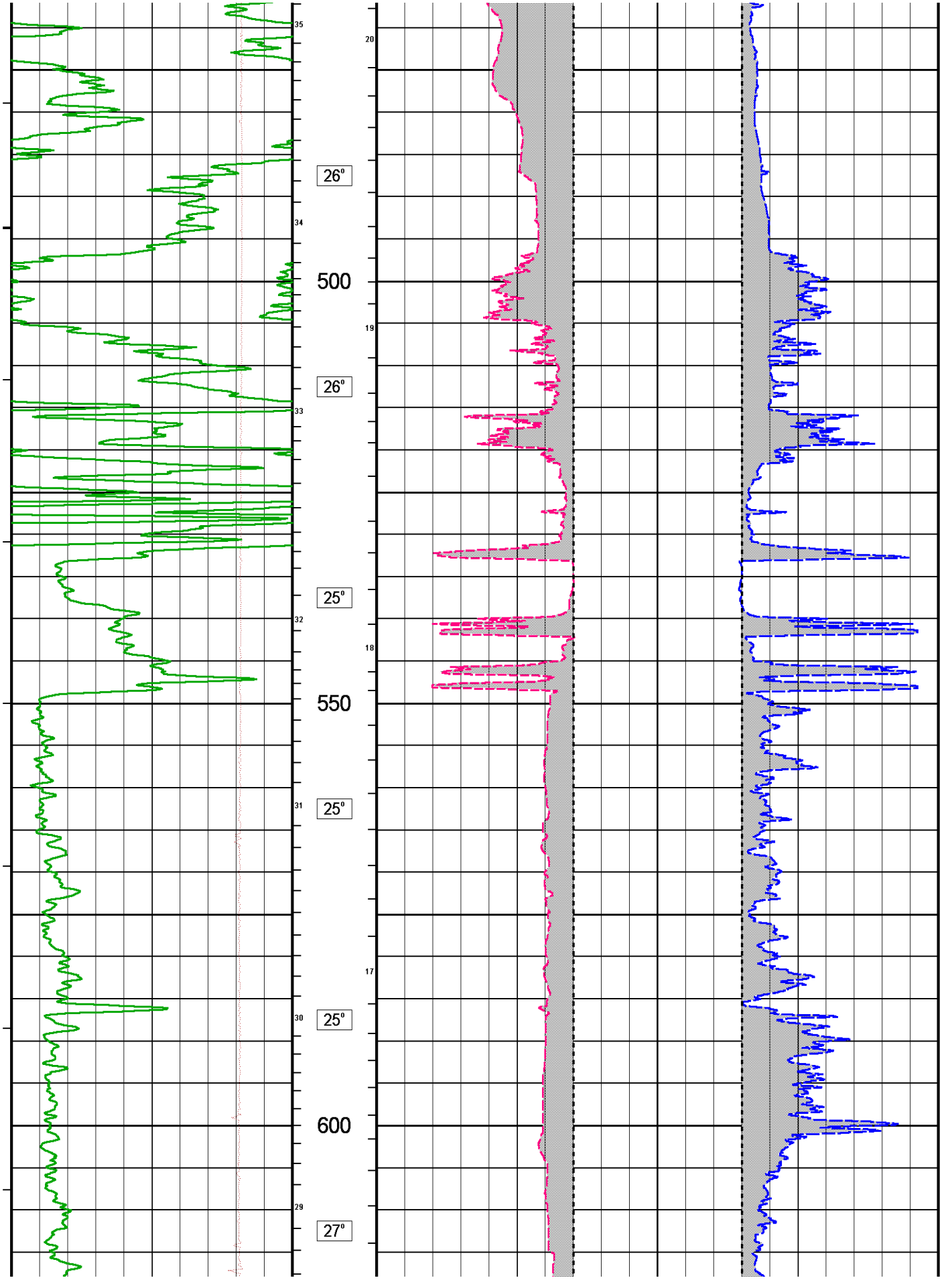
7) HOLE AND CEMENT VOLUMES CALCULATED USING DENSITY AND 2-ARM CALIPERS :
HOLE VOLUME = 37.4 CU.M.
ANNULAR VOLUME USING 139.7 MM PRODUCTION CASING = 21.8 CU.M

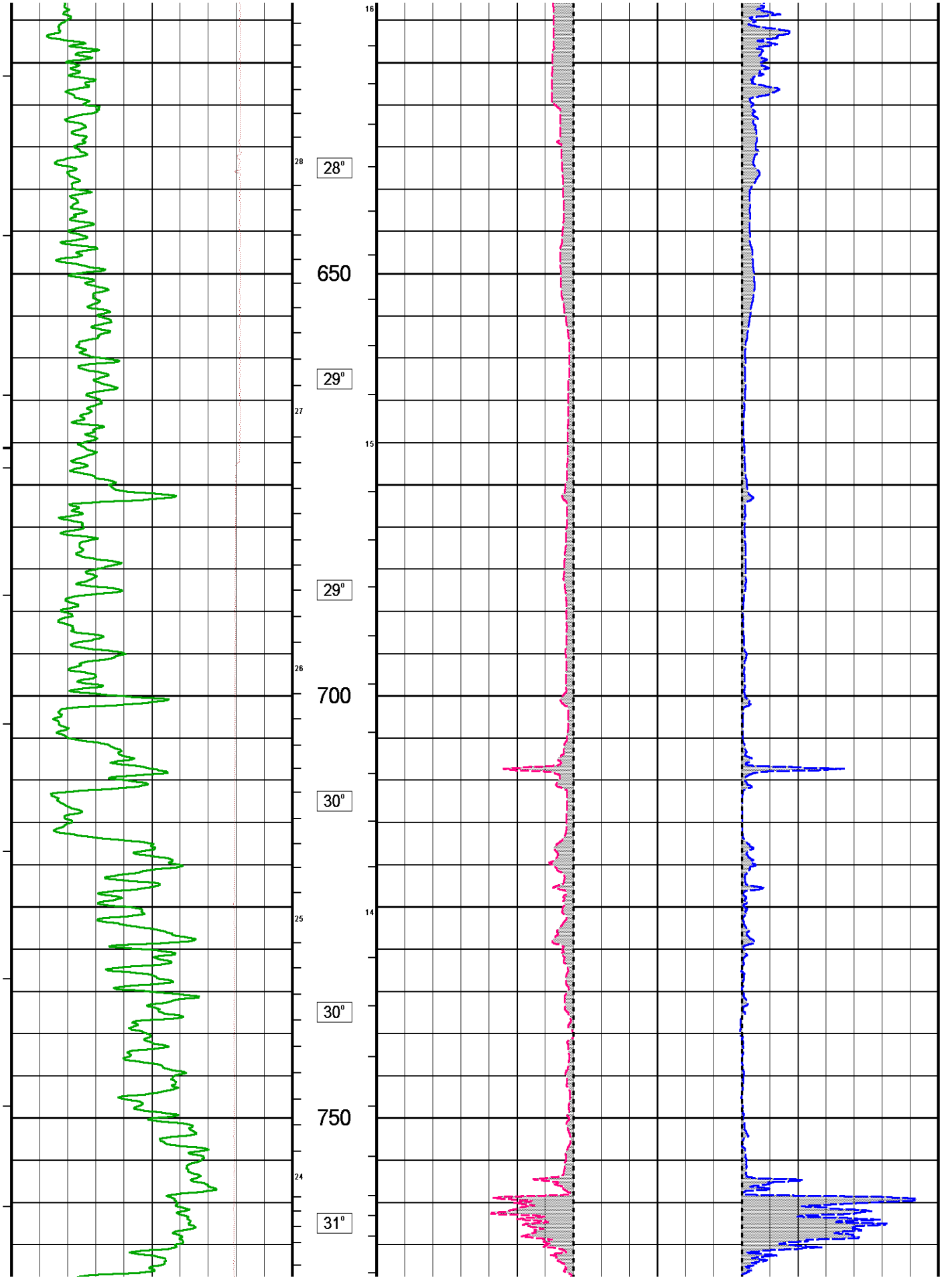
8) SONIC FREE PIPE FOUND FROM 352M - 357M

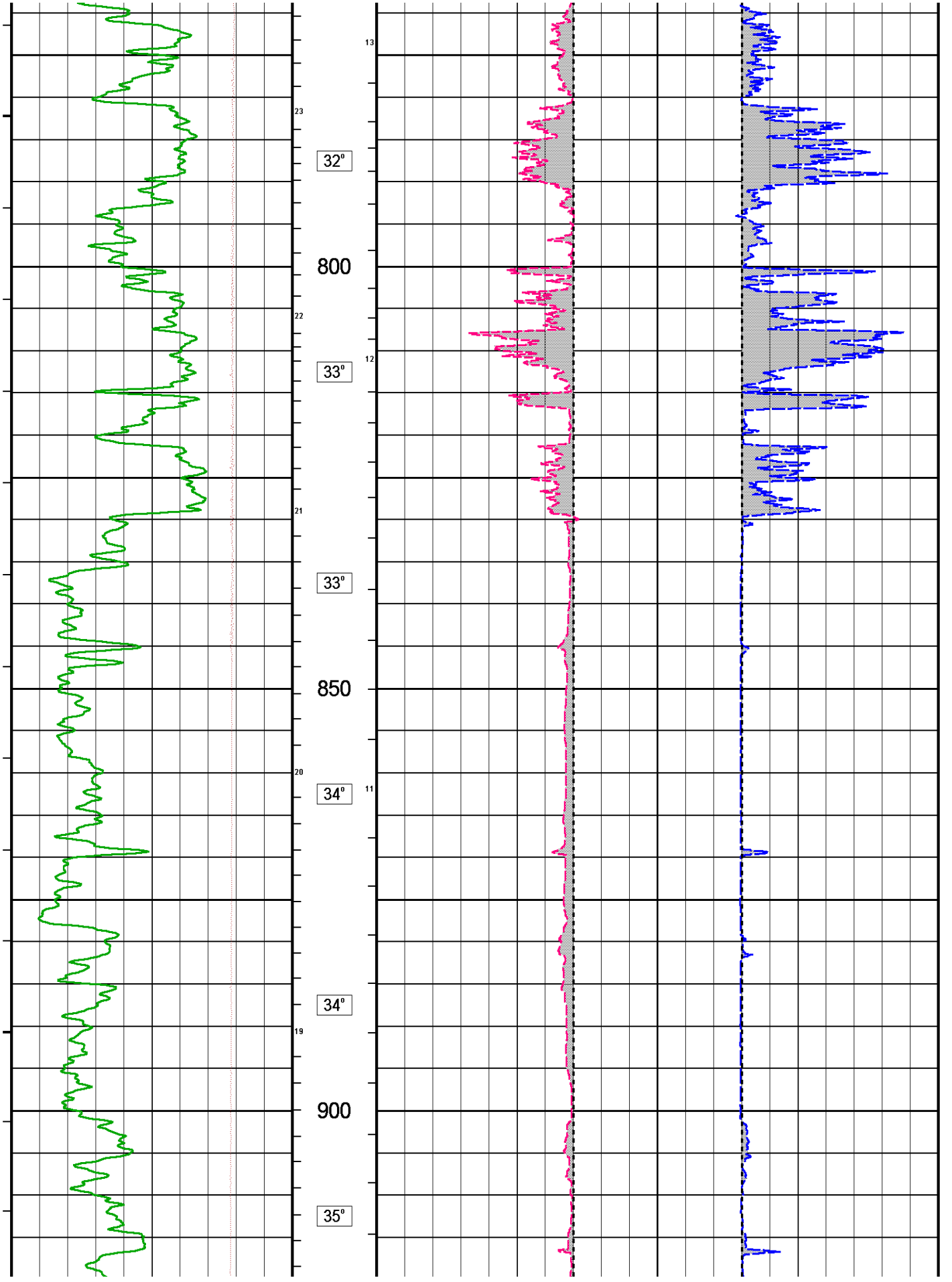
HOLE VOLUMES USING 139.7mm PRODUCTION CASING

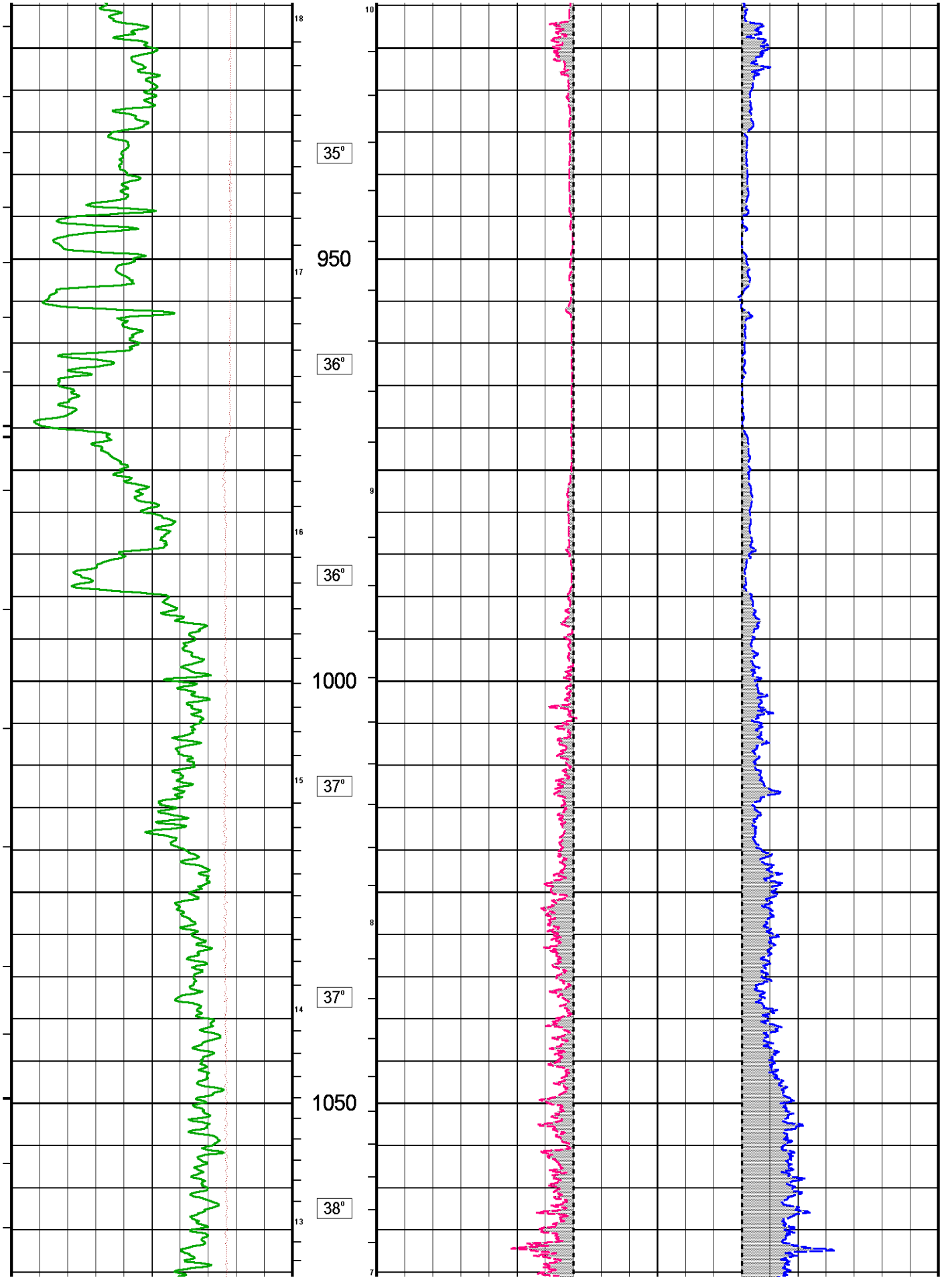
Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 12-NOV-2007 09:31
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

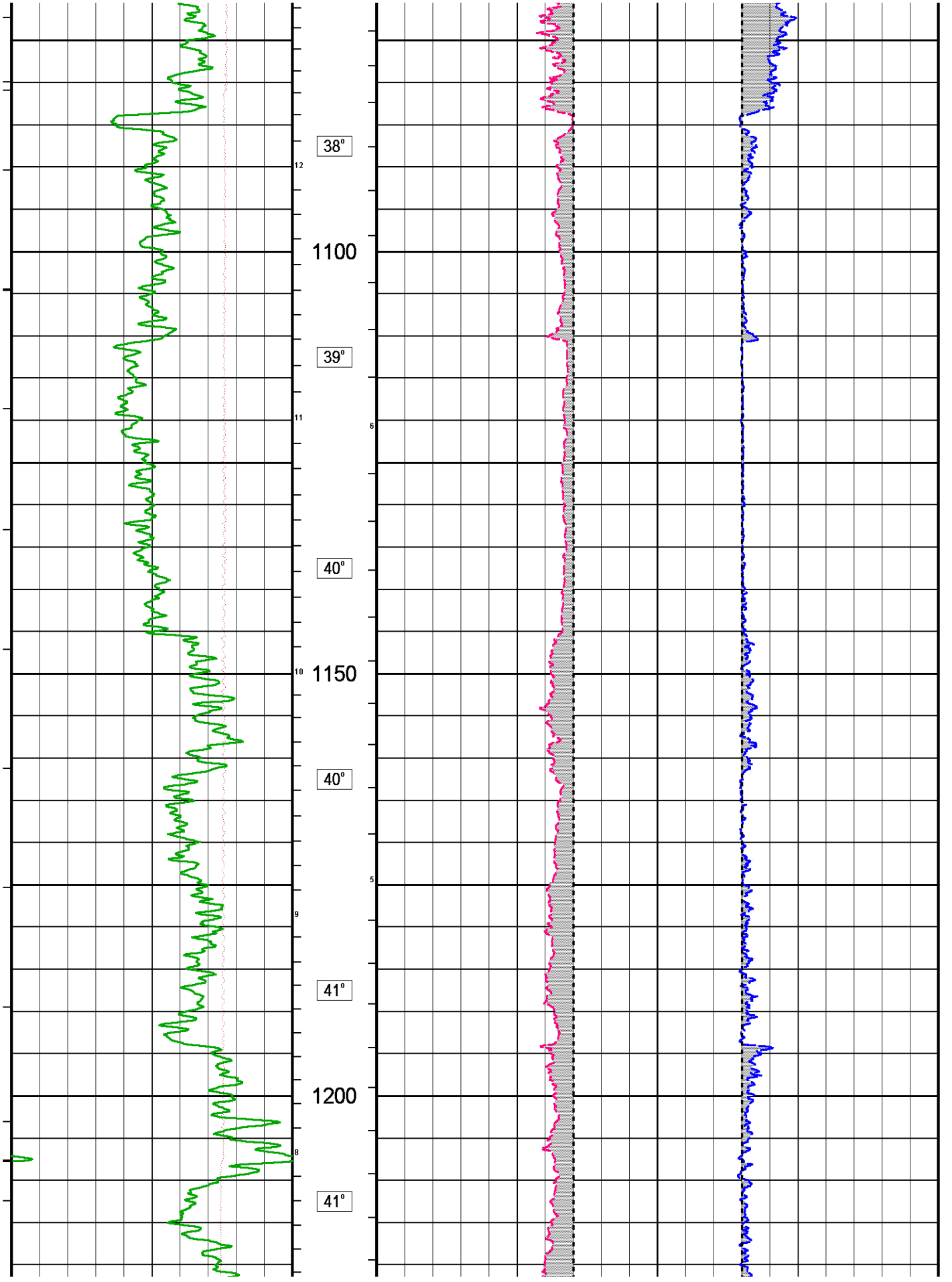



35
34
33
32
31
30
29
20
19
18
17
26°
26°
25°
25°
25°
27°
500
550
600


28°
650
29°
29°
700
30°
30°
750
31°
28
27
26
25
24
16
15
14


23
22
21
20
19
32°
33°
33°
34°
34°
35°
800
850
900
13
12
11


18
17
16
15
14
13
35°
950
36°
36°
1000
37°
37°
1050
38°
10
9
8
7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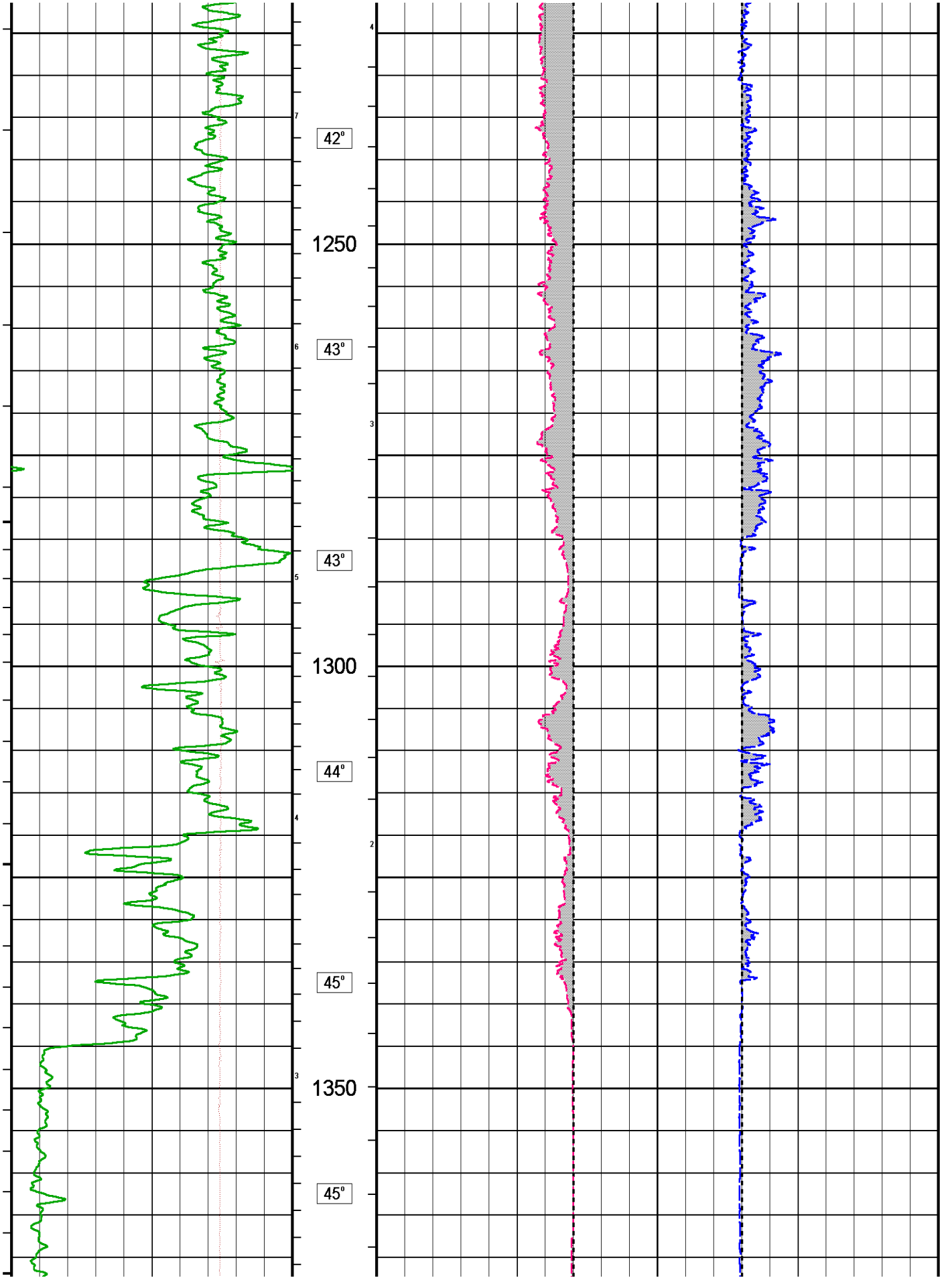
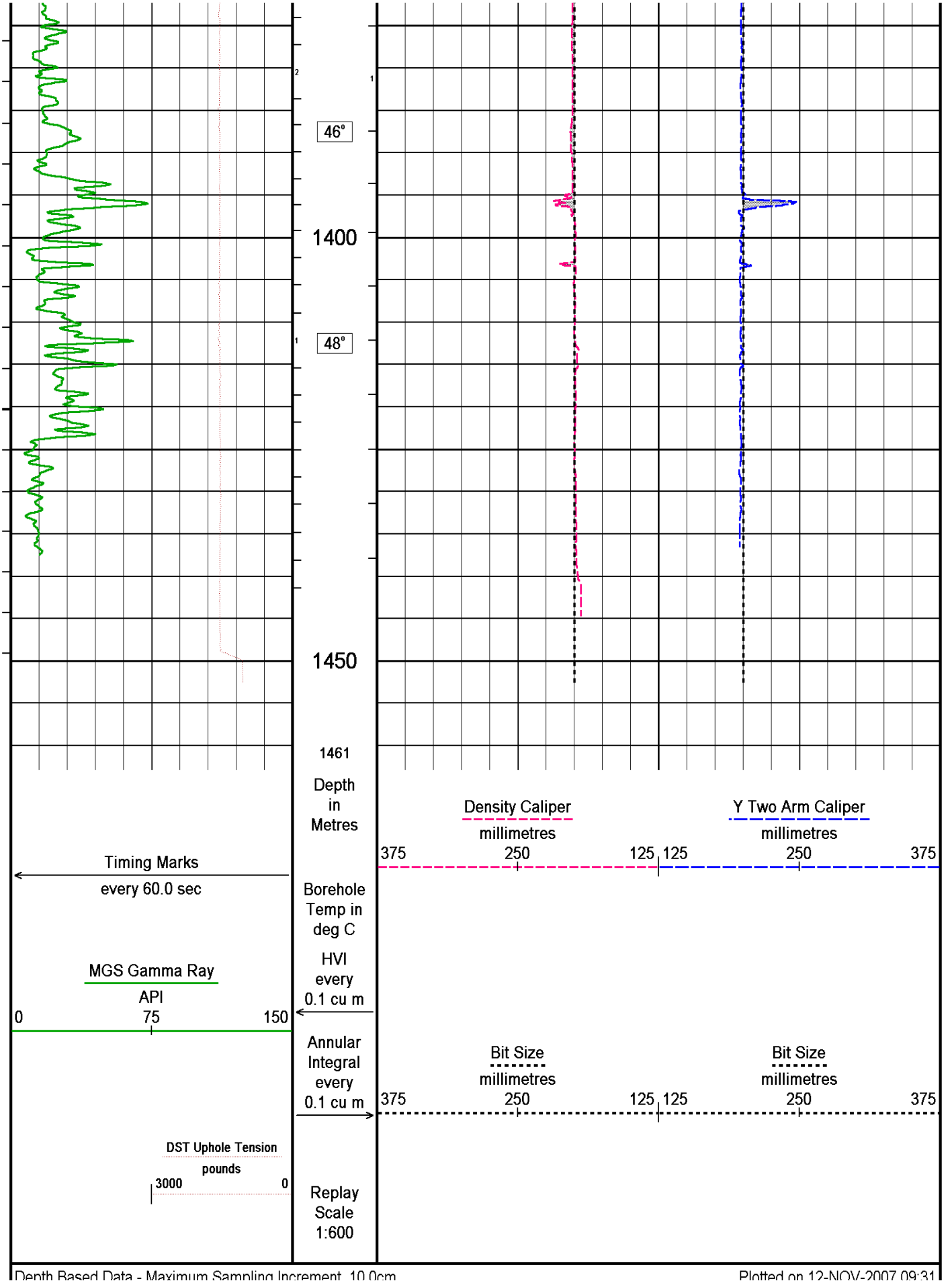
1100
39°
40°
1150
40°
41°
1200
41°
12
11
10
9
8
6
5


42°
1250
43°
43°
1300
44°
45°
1350
45°


46°
1400
48°
1450
1461
Depth
in
Metres
Density Caliper
millimetres
375
250
125
125
250
375
Y Two Arm Caliper
millimetres
Timing Marks
every 60.0 sec
Borehole
Temp in
deg C
MGS Gamma Ray
API
0
75
150
HVI
every
0.1 cu m
Annular
Integral
every
0.1 cu m
Bit Size
millimetres
375
250
125
125
250
375
Bit Size
millimetres
DST Uphole Tension
pounds
3000
0
Replay
Scale
1:600
Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 12-NOV-2007 09:31

Depth Based Data - Maximum Sampling Increment 10.00m — Plotted on 12-NOV-2007 08:01

Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta — Recorded on 15-FEB-2007 08:46

System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

HOLE VOLUMES USING 139.7mm PRODUCTION CASING

COMPANY	PARAMOUNT RESOURCES LTD.
WELL	PARAMOUNT ET AL CAMERON J-04
FIELD	CAMERON HILLS
PROVINCE/COUNTY	NORTH WEST TERRITORIES
COUNTRY/STATE	CANADA

Elevation Kelly Bushing	769.20	metres	First Reading	1441.60	metre
Elevation Drill Floor		metres	Depth Driller	1449.00	metres
Elevation Ground Level	765.20	metres	Depth Logger	1449.50	metres

Weatherford®

CEMENT VOLUME

PROD. CSG. 139.7 MM

PHOTO DENSITY
DUAL SPACED NEUTRON

COMPANY	PARAMOUNT RESOURCES LTD.
WELL	PARAMOUNT ET AL CAMERON J-04
FIELD	CAMERON HILLS
PROVINCE/COUNTY	NORTH WEST TERRITORIES
COUNTRY/STATE	CANADA
LOCATION	300/J-04-60-10-117-30

FIELD PRINT

LSD	SEC	TWP	RGE

API Number
Permit Number 1159

Other Services
ARRAY INDUCTION
MICROLOG
COMPENSTATED SONIC

Permanent Datum GROUND LEVEL, Elevation 765.20 metres
Log Measured From 4.00 M above Permanent Datum
Drilling Measured From KB

Elevations:	metres
KB	769.20
DF	
GL	765.20

Date	15-FEB-2007			
Run Number	1			
Depth Driller	1449.00	metres		
Depth Logger	1449.50	metres		
First Reading	1441.60	metre		
Last Reading	0.00	metre		
Casing Driller	430.00	metres		
Casing Logger	429.80	metres		
Bit Size	200.00	mm		
Hole Fluid Type	GELCHEM			
Density / Viscosity	1060.0 kg/M3	93.00 CP		
PH / Fluid Loss	11.00	11.00 ml/30Min		
Sample Source	FLOWLINE			
Rm @ Measured Temp	1.18 @ 25.0	ohm-m		
Rmf @ Measured Temp	1.04 @ 25.0	ohm-m		
Rmc @ Measured Temp	1.32 @ 25.0	ohm-m		
Source Rmf / Rmc	PRESS	FILTER		
Rm @ BHT	0.78 @ 48.0	ohm-m		
Time Since Circulation	6 HRS			
Max Recorded Temp	48.00	deg C		
Equipment Name	COMPACT			
Equipment / Base	13124	GPR		
Recorded By	G. SINGER			
Witnessed By	A. AHMED			
CIRC. STOP TIME	01:30-FEB-15		Last Line	

BOREHOLE RECORD

Last Edited: 15-FEB-2007 05:01

Bit Size millimetres	Depth From metres	Depth To metres
311.000	0.00	430.00
200.000	430.00	1449.00

CASING RECORD

Type	Size millimetres	Depth From metres	Shoe Depth metres	Weight Kg/metre
SURFACE	219.100	0.00	430.00	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 INTERSONIC CRANK
   MTC: SIX LEAF CENTRALIZER
5) SERVICE ORDER #: 30073028 SAP #: 4147101 # FIELD PRINTS = 3
6) RIG: PD 129

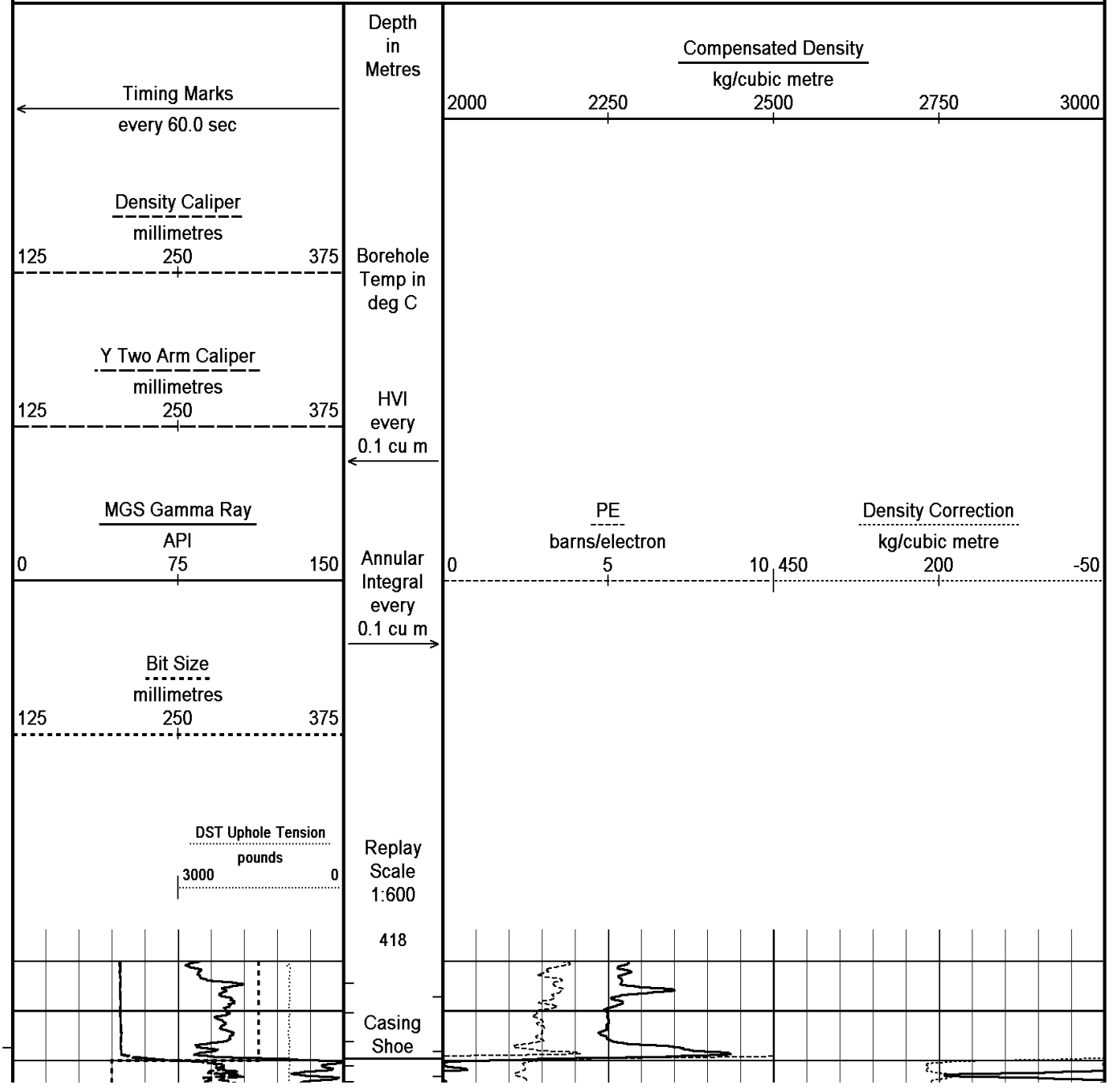
7) HOLE AND CEMENT VOLUMES CALCULATED USING DENSITY AND 2-ARM CALIPERS :
HOLE VOLUME = 37.4 CU.M.
ANNULAR VOLUME USING 139.7 MM PRODUCTION CASING = 21.8 CU.M

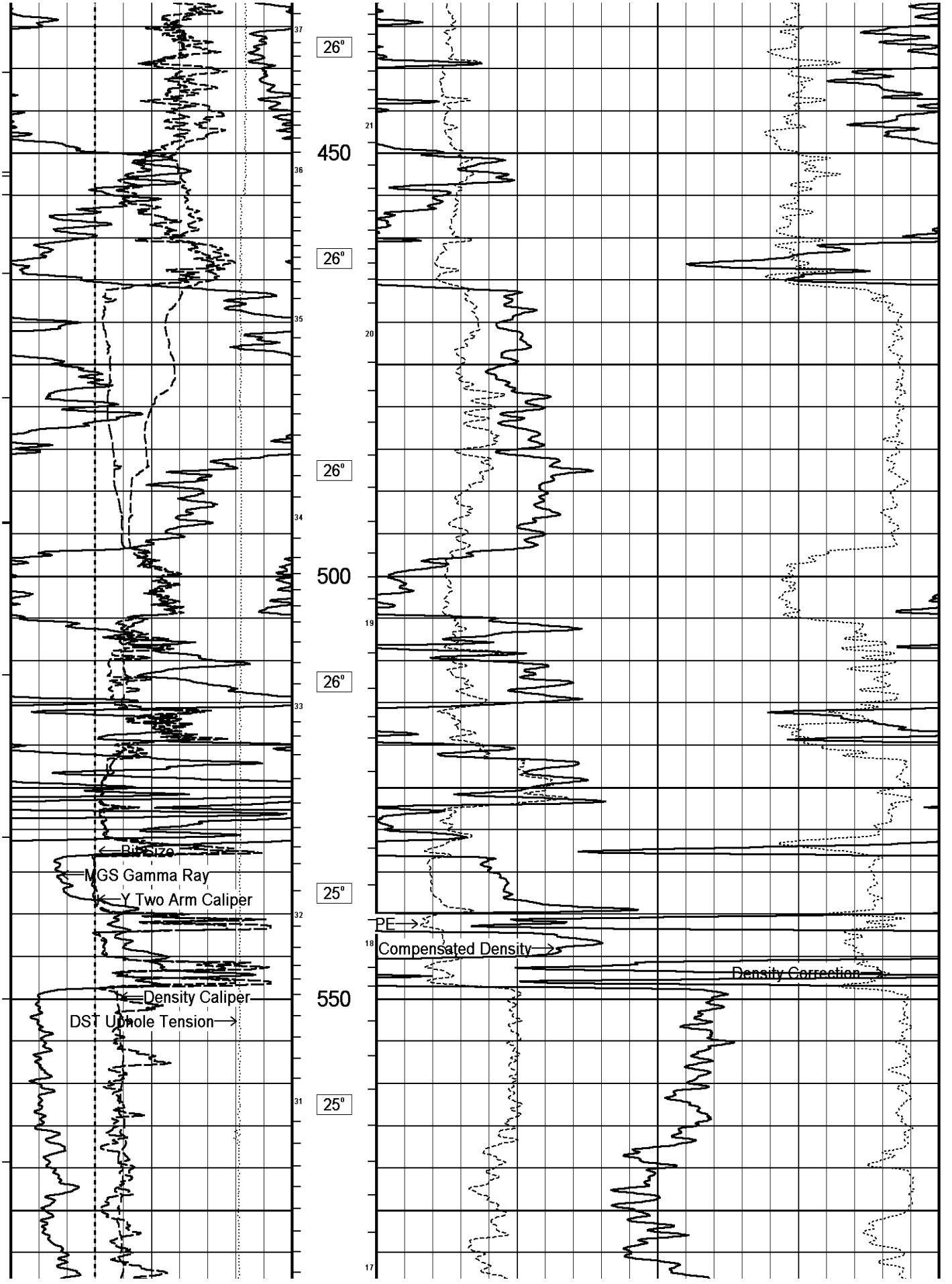
8) SONIC FREE PIPE FOUND FROM 352M - 357M

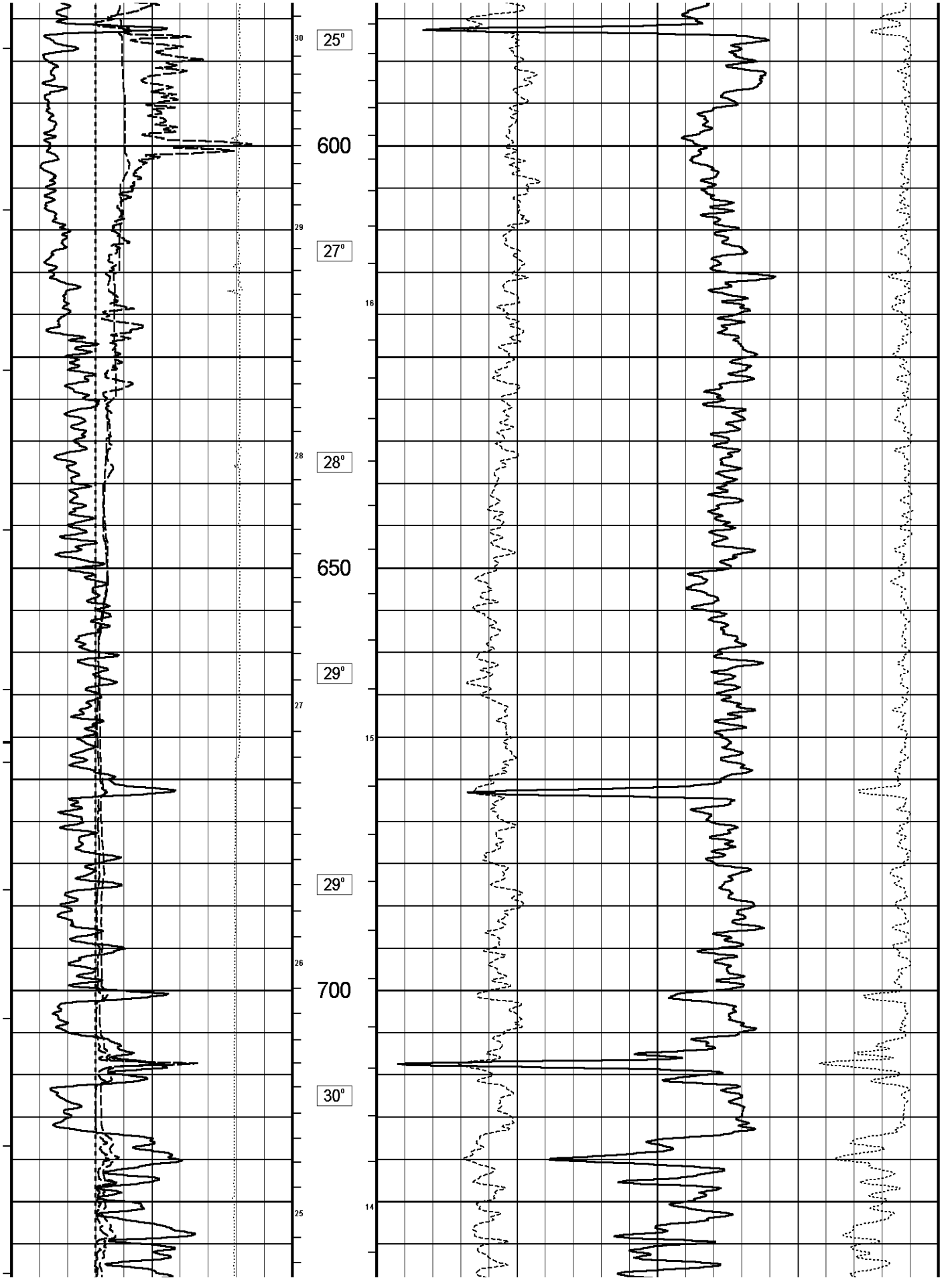
BULK DENSITY 1:600

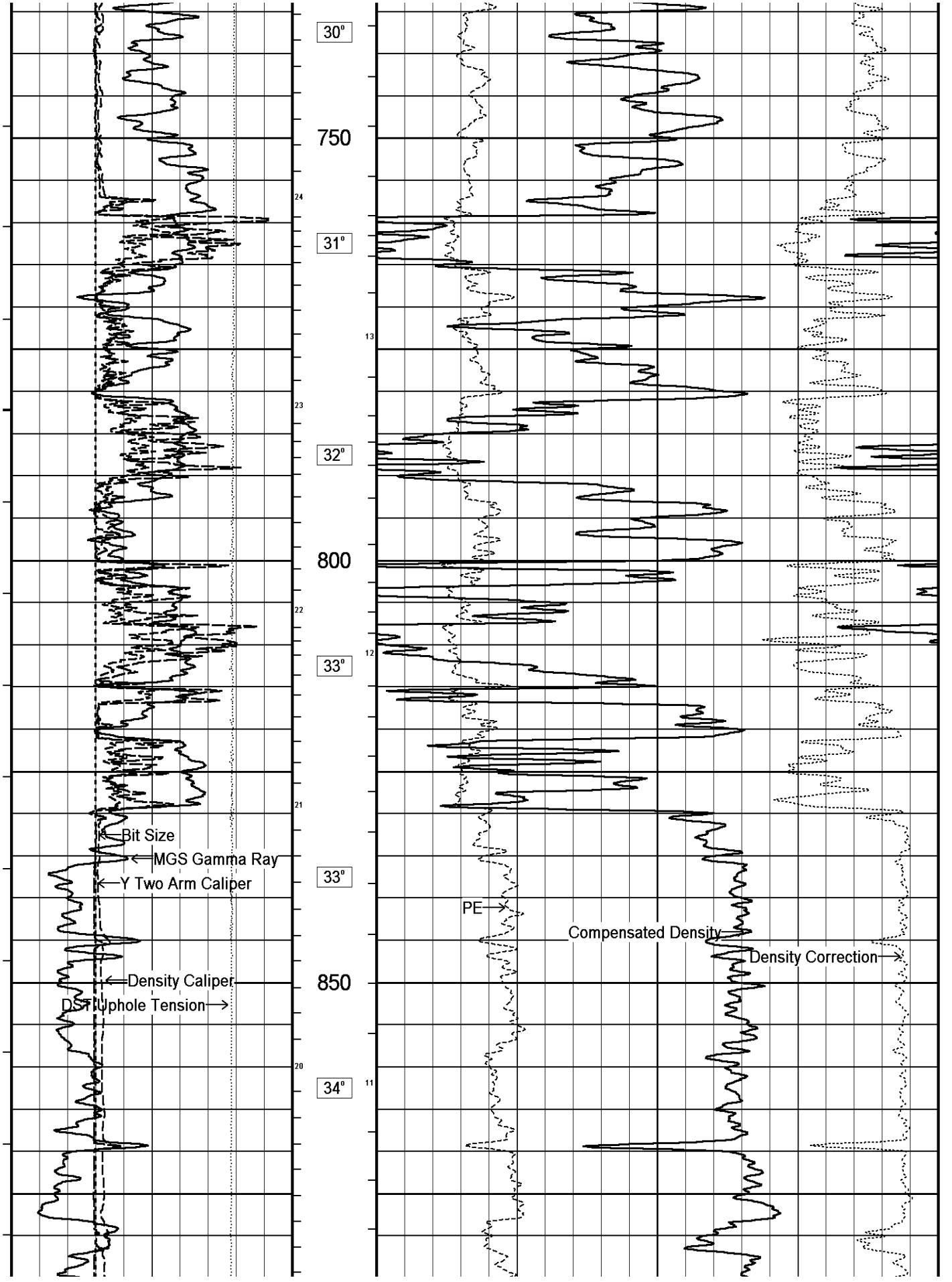
Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

Plotted on 12-NOV-2007 09:26
Recorded on 15-FEB-2007 08:46

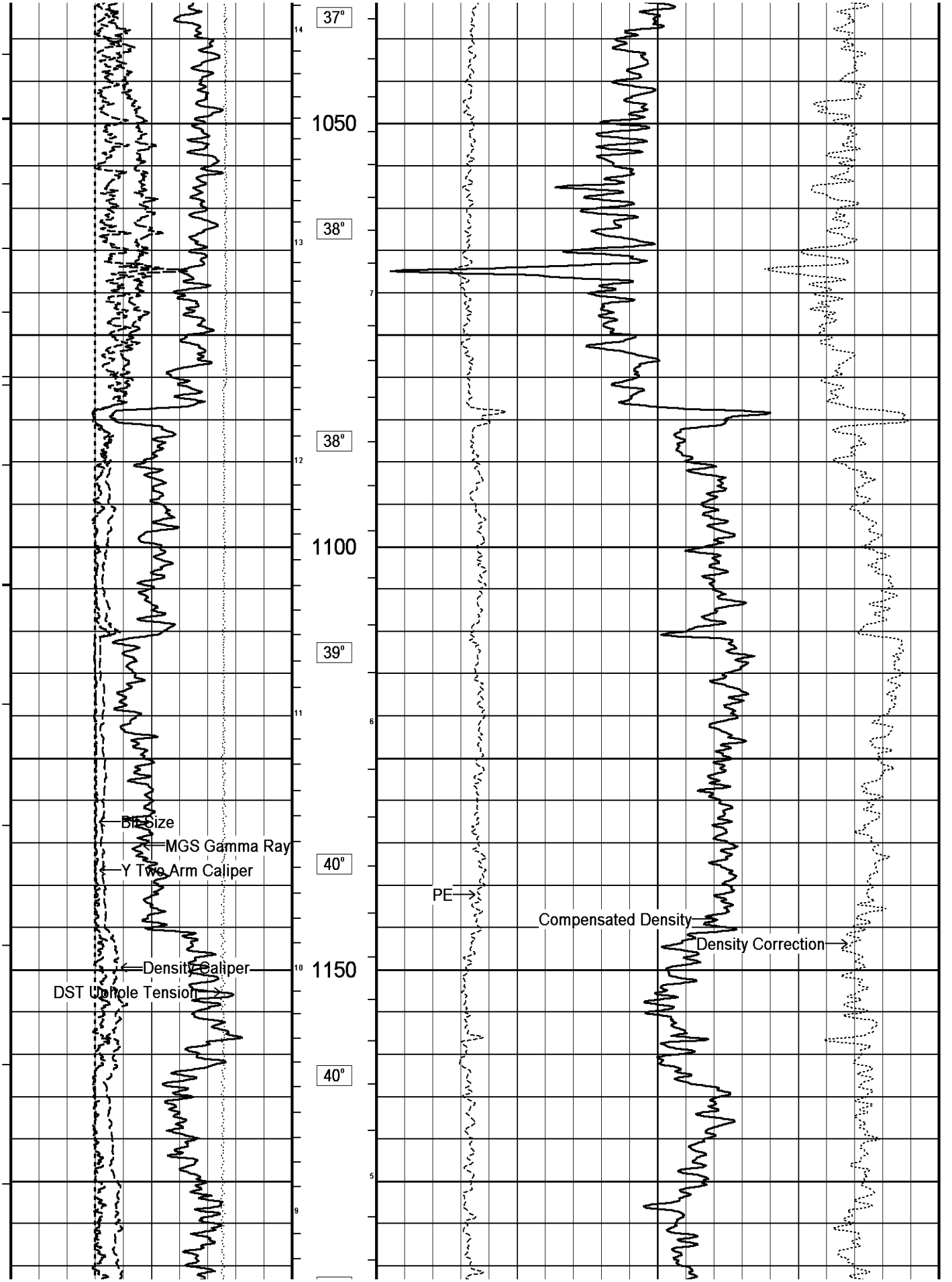


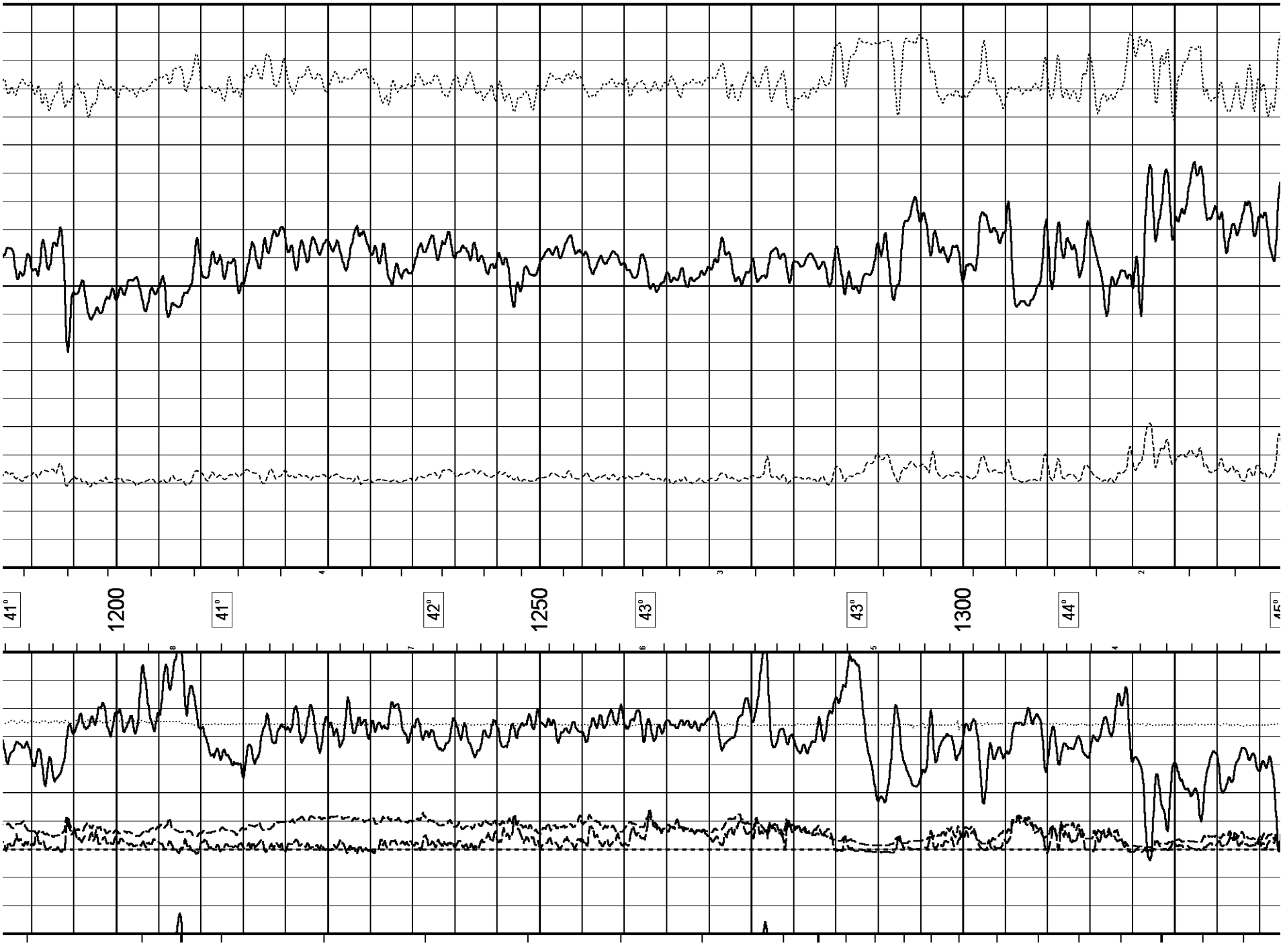

26°
450
26°
26°
500
26°
25°
PE
Compensated Density
Density Correction
550
25°
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension

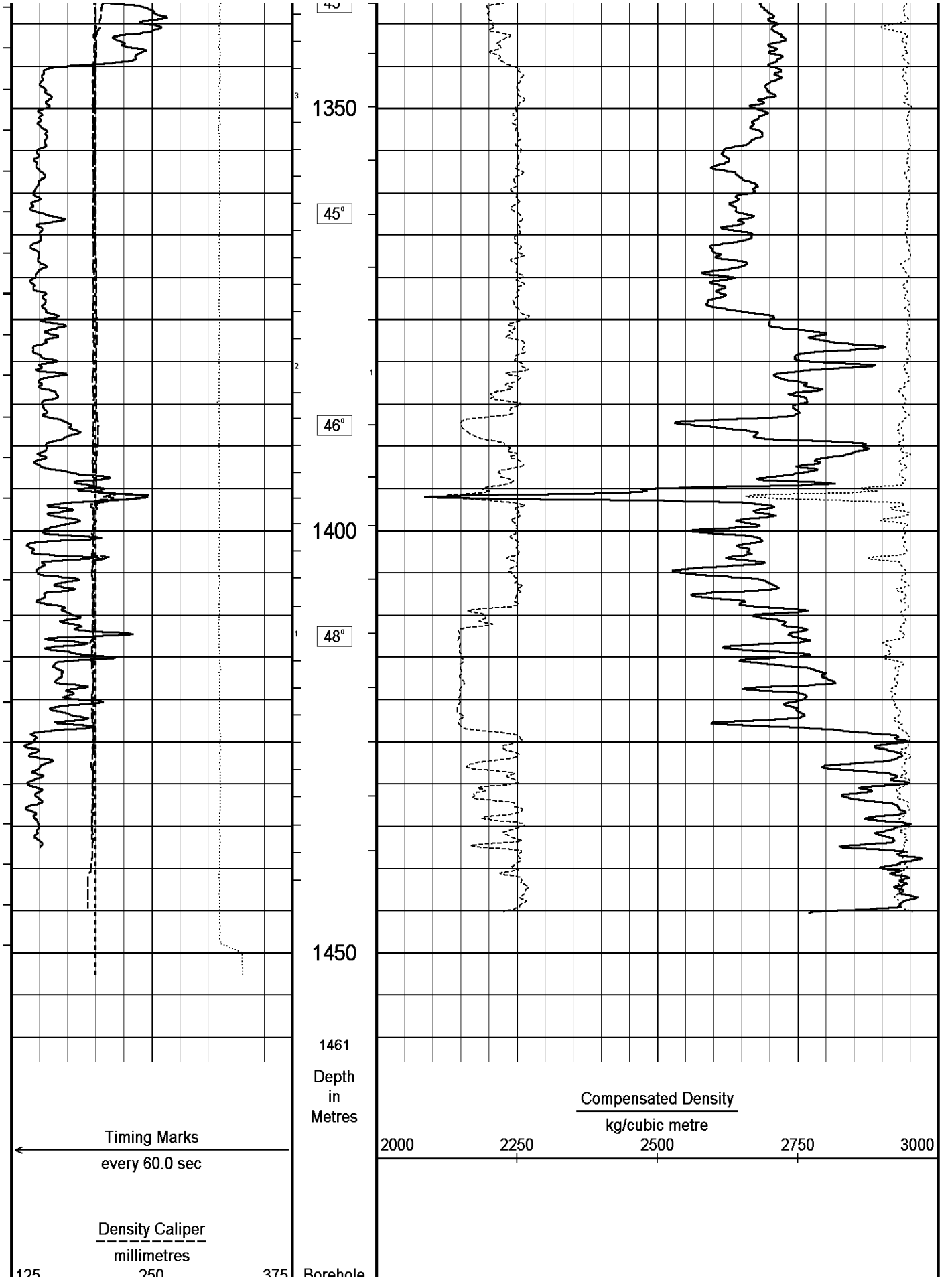

25°
600
27°
28°
650
29°
29°
700
30°

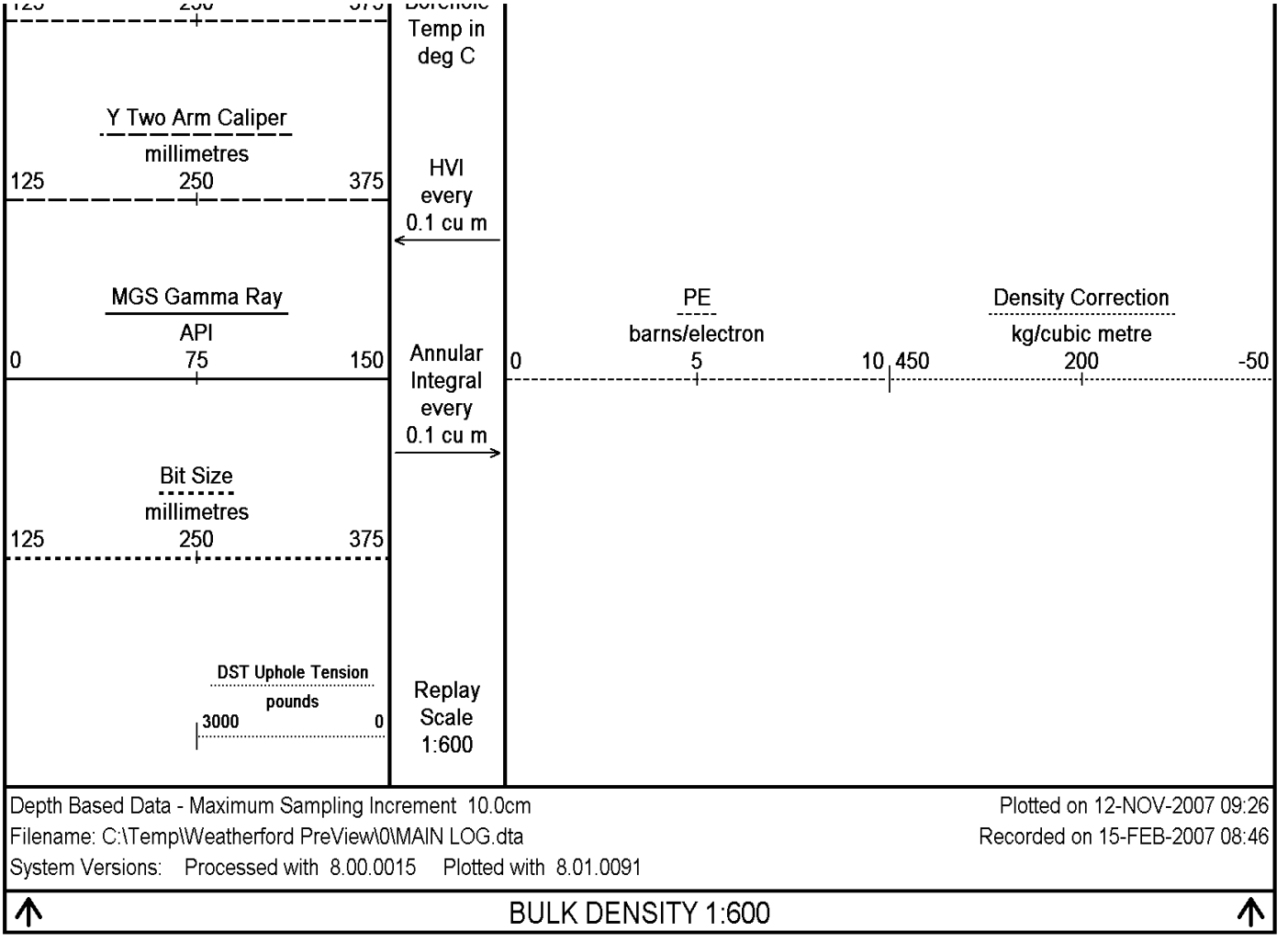

30°
750
31°
32°
800
33°
33°
850
34°
24
23
22
21
20
13
12
11
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DS Tuphole Tension
PE
Compensated Density
Density Correction

34°
900
35°
35°
950
36°
36°
1000
37°
19
18
17
16
15
10
9
8


37°
1050
38°
38°
1100
39°
40°
1150
40°
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
PE
Compensated Density
Density Correction


41°
1200
41°
42°
1250
43°
43°
1300
44°


1350
45°
46°
1400
48°
1450
1461
Depth
in
Metres
Timing Marks
every 60.0 sec
Density Caliper
millimetres
125
250
375
Borehole
Compensated Density
kg/cubic metre
2000
2250
2500
2750
3000

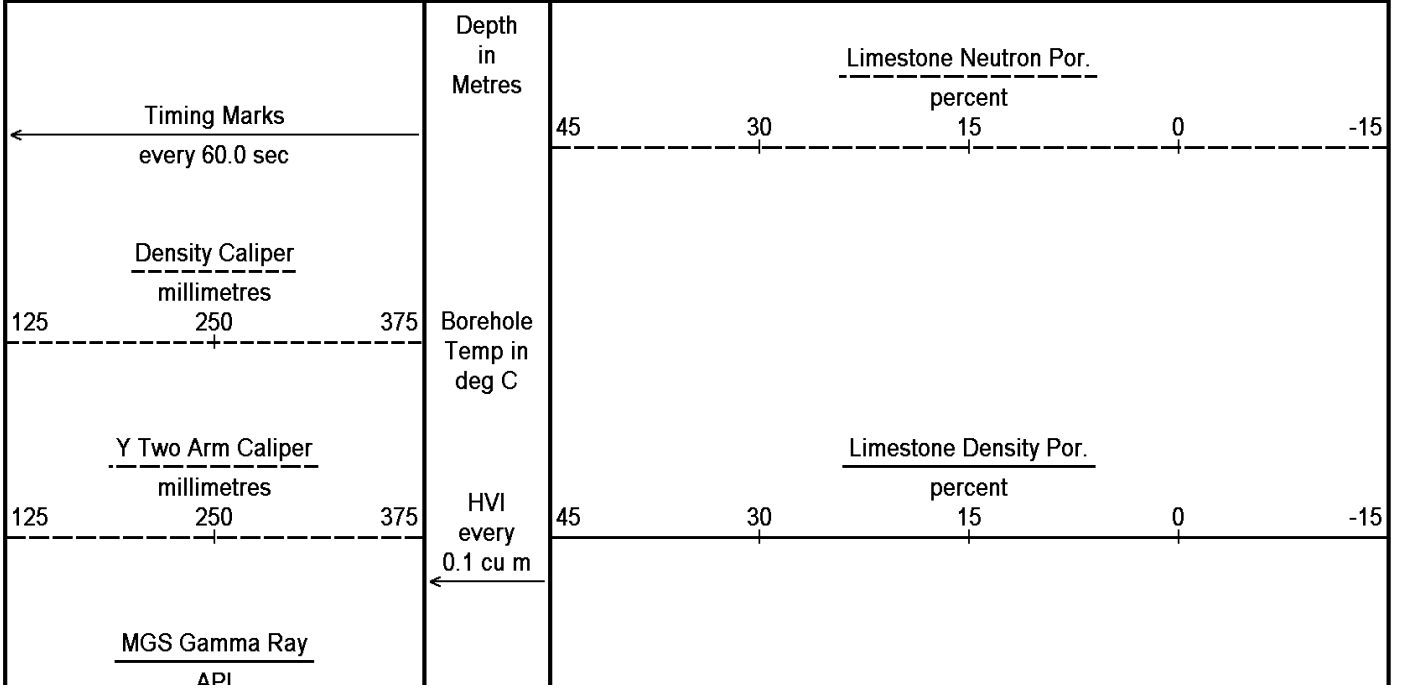


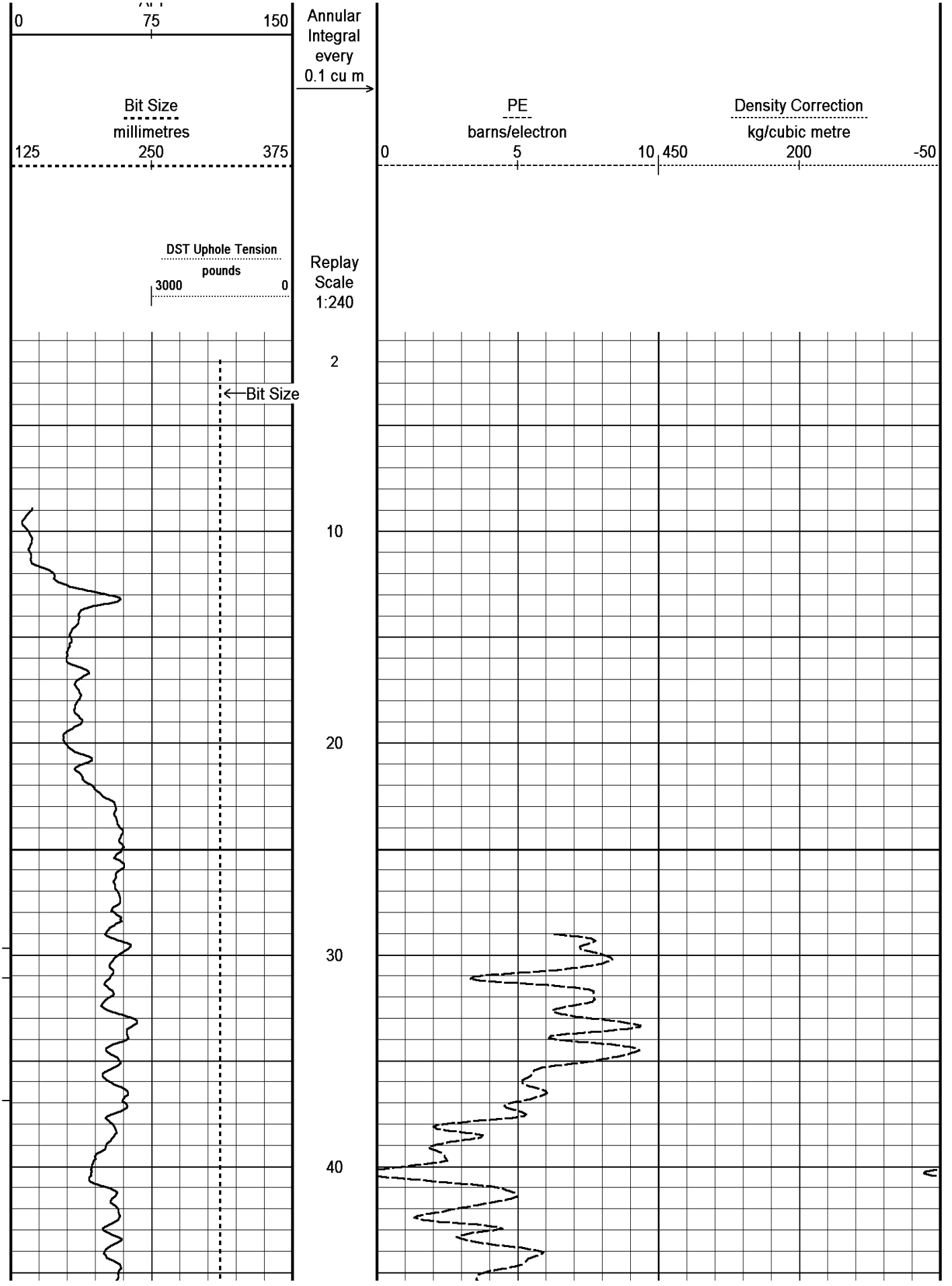
Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 12-NOV-2007 09:26
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta — Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

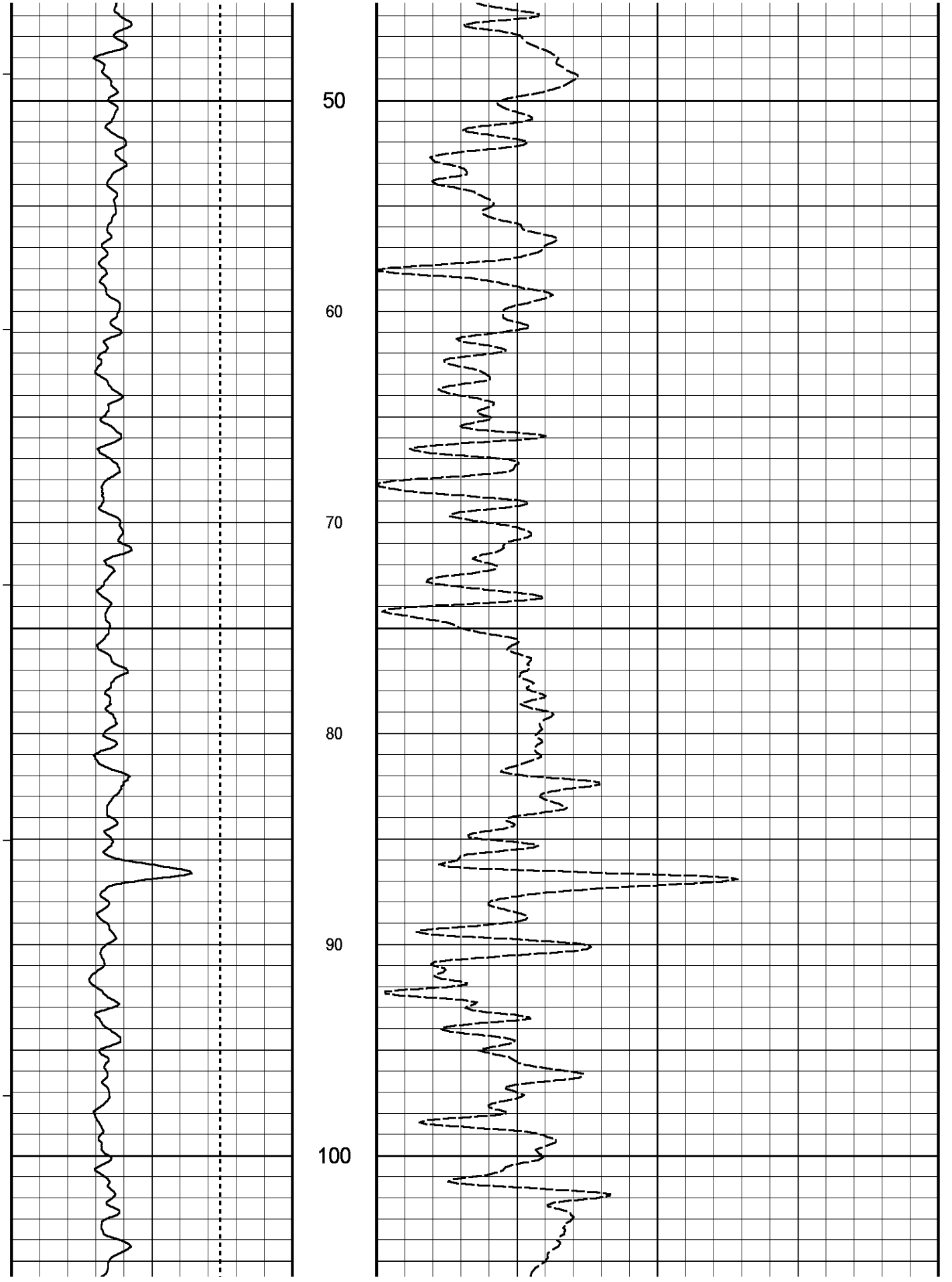
BULK DENSITY 1:600

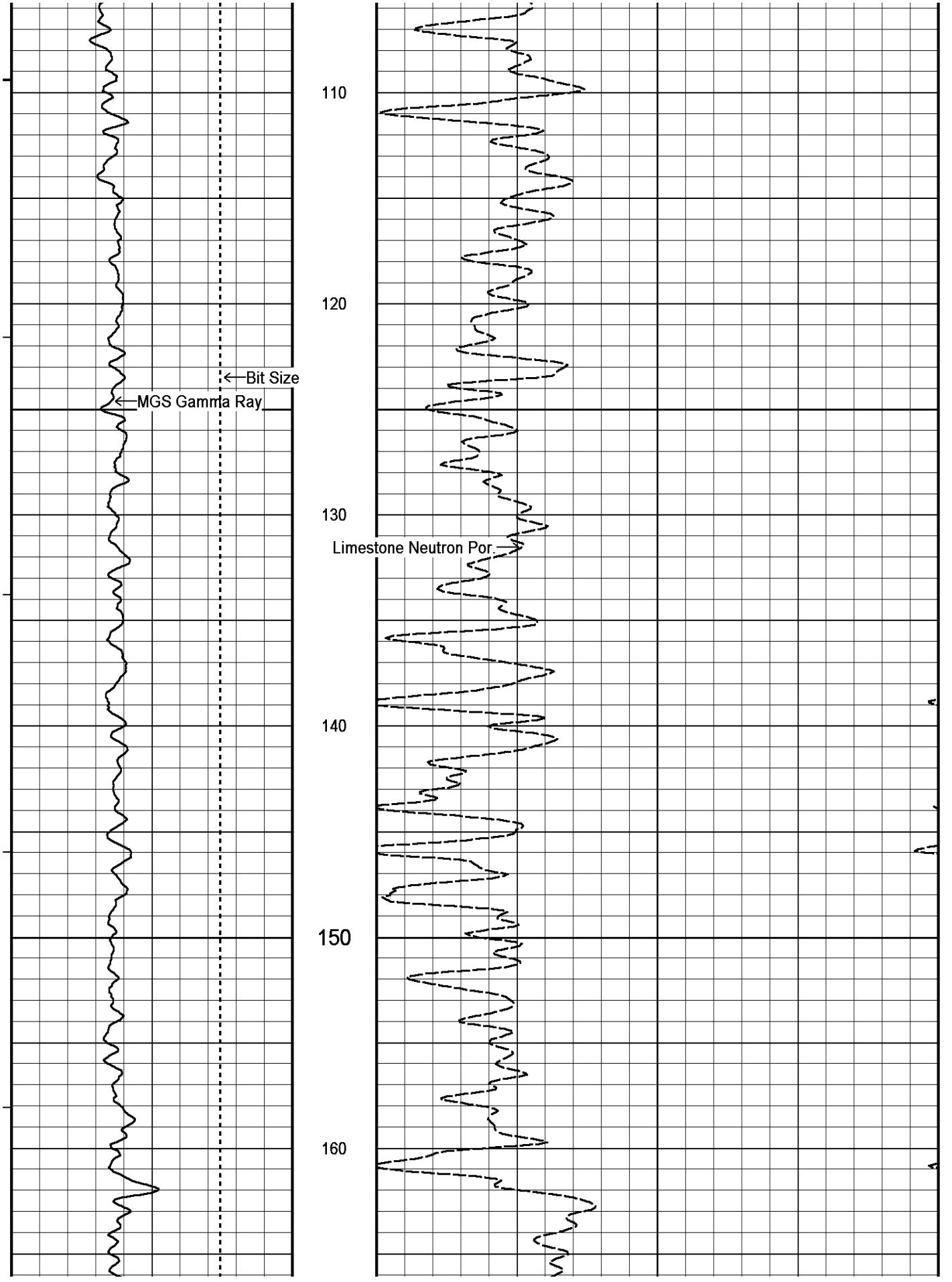
LIMESTONE MAINLOG

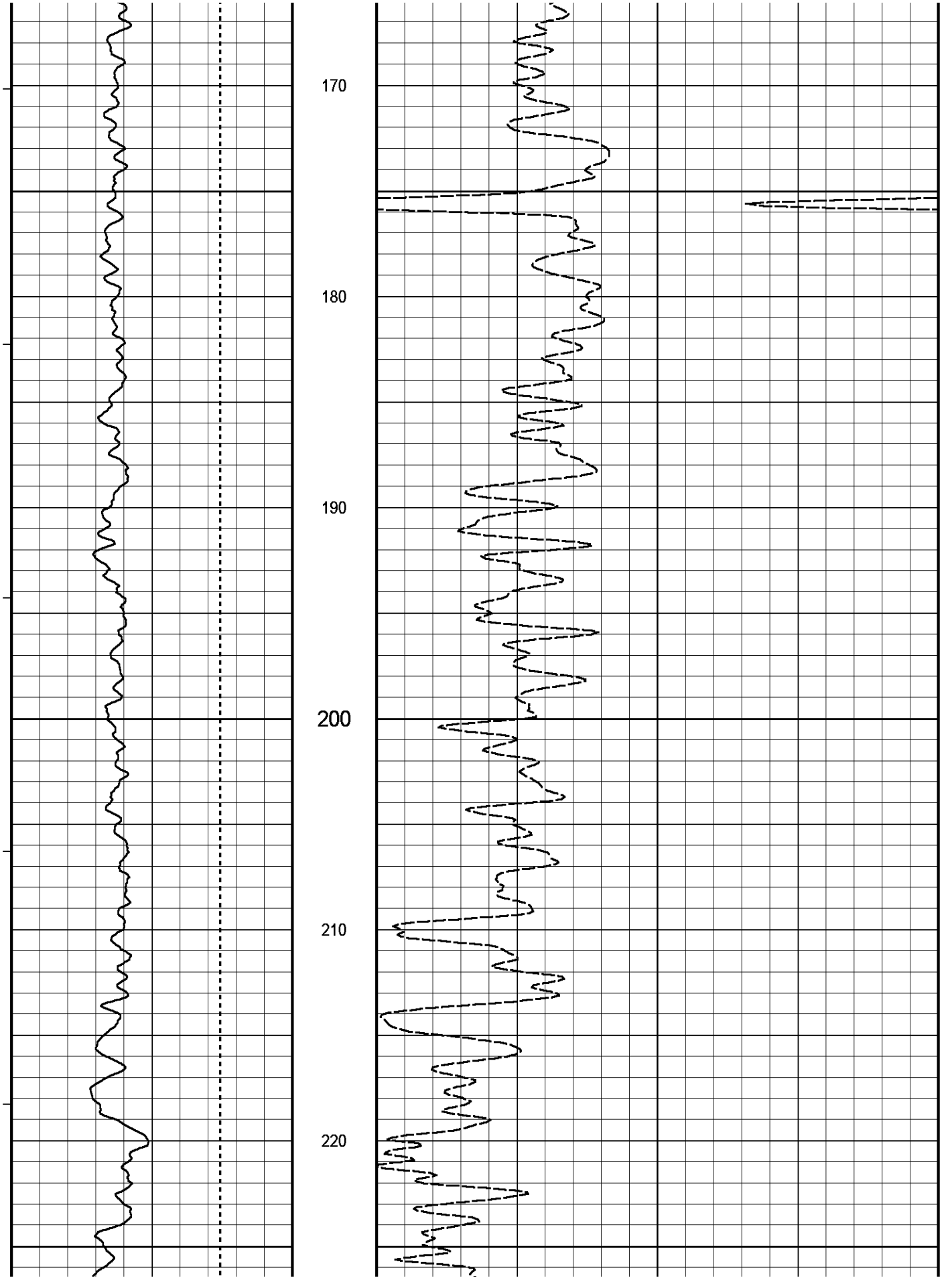
Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 12-NOV-2007 09:26
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta — Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

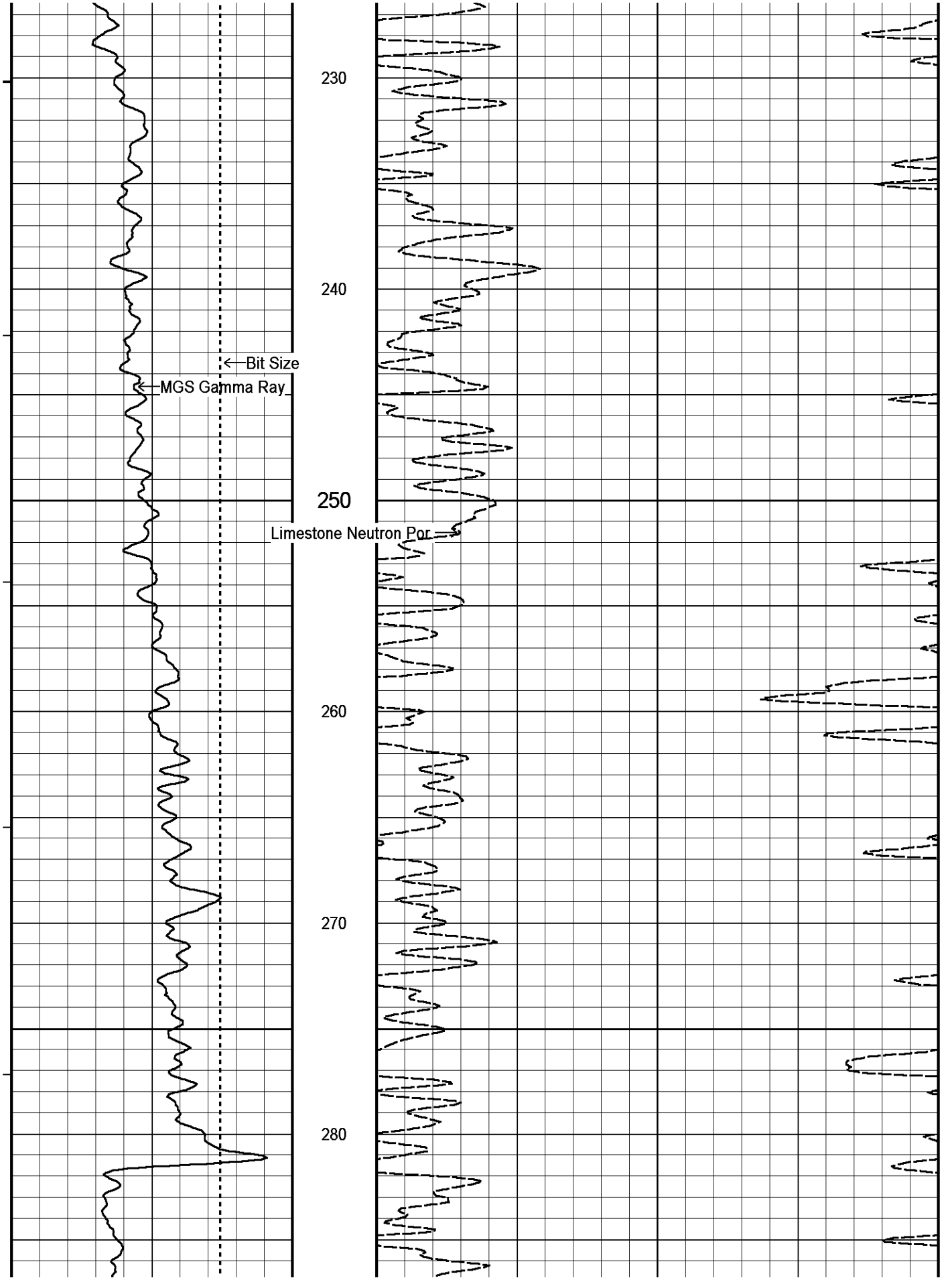


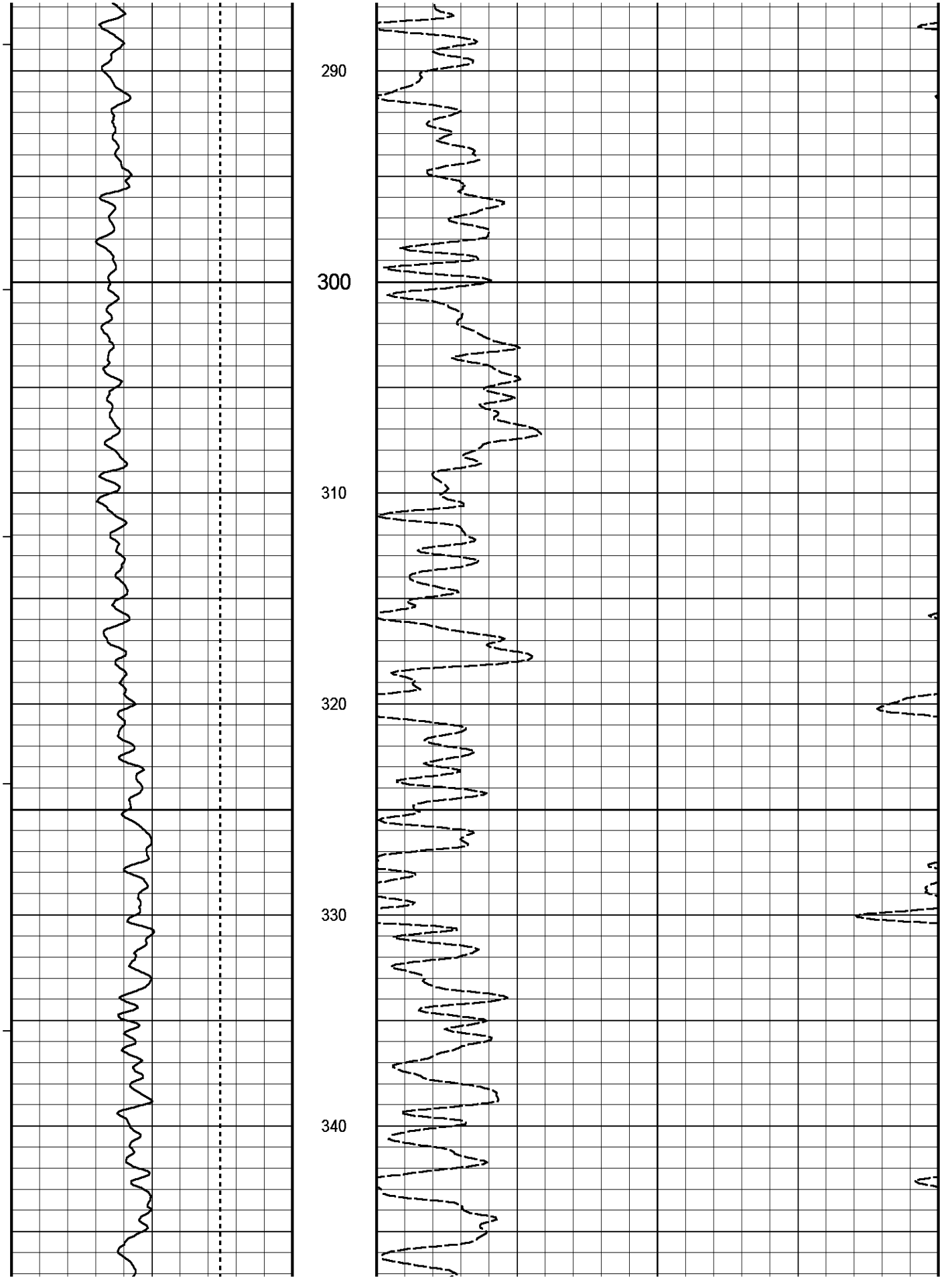

0
75
150
Annular Integral every 0.1 cu m
Bit Size
millimetres
125
250
375
PE
barns/electron
0
5
10
Density Correction
kg/cubic metre
450
200
-50
DST Uphole Tension
pounds
3000
0
Replay Scale 1:240
2
10
20
30
40
Bit Size

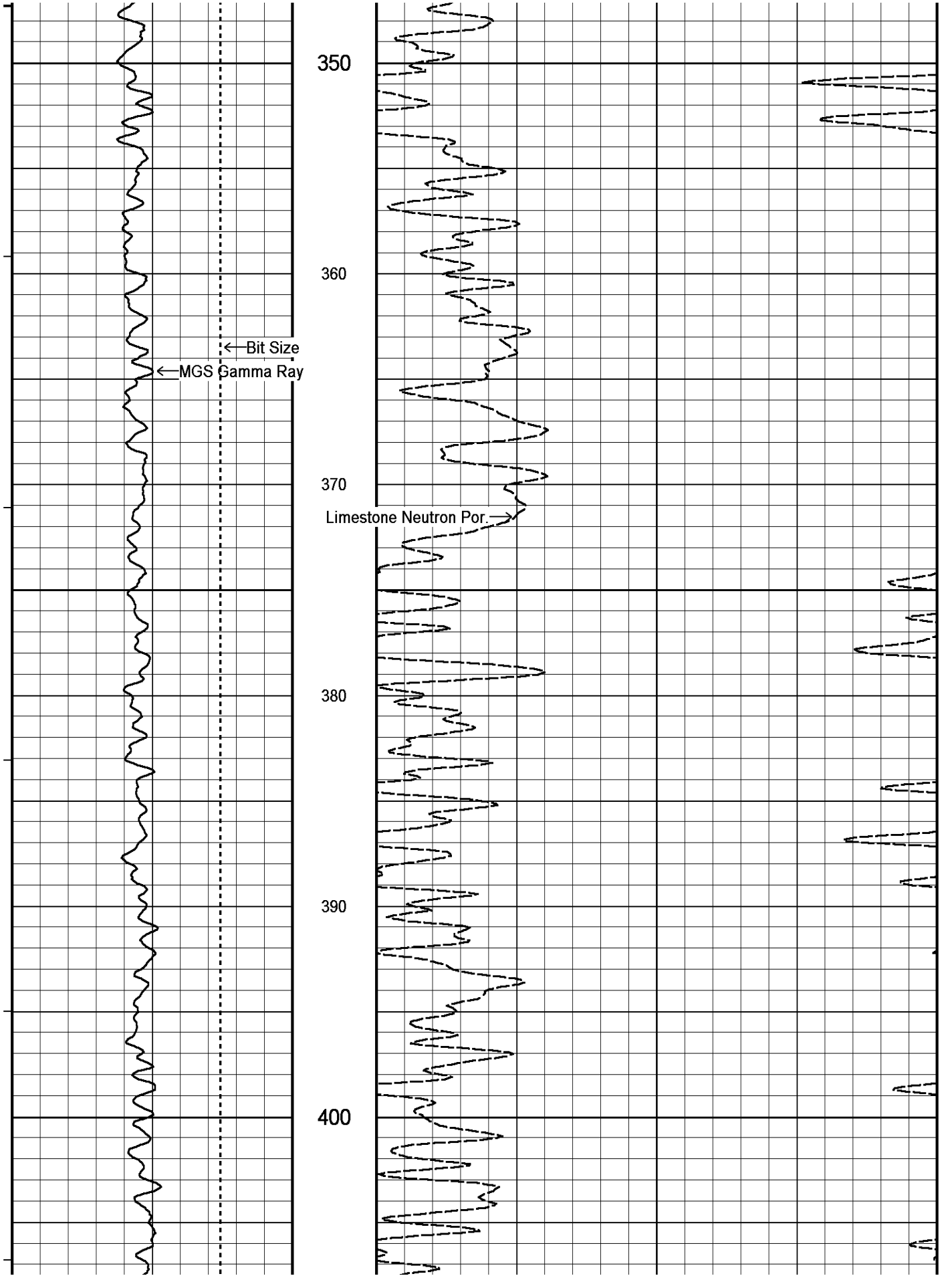

50
60
70
80
90
100

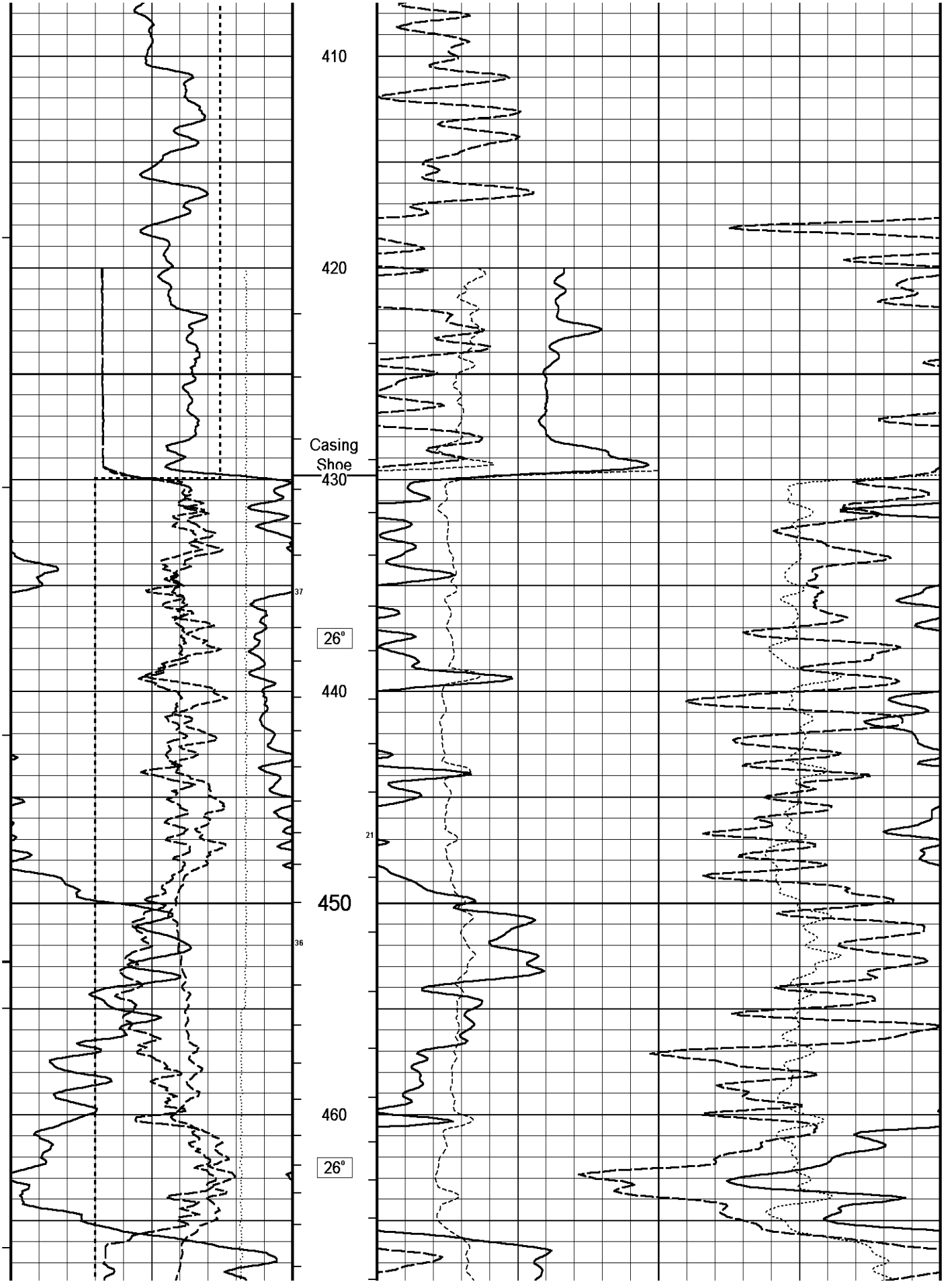

110
120
130
140
150
160
←Bit Size
←MGS Gamma Ray
Limestone Neutron Por.

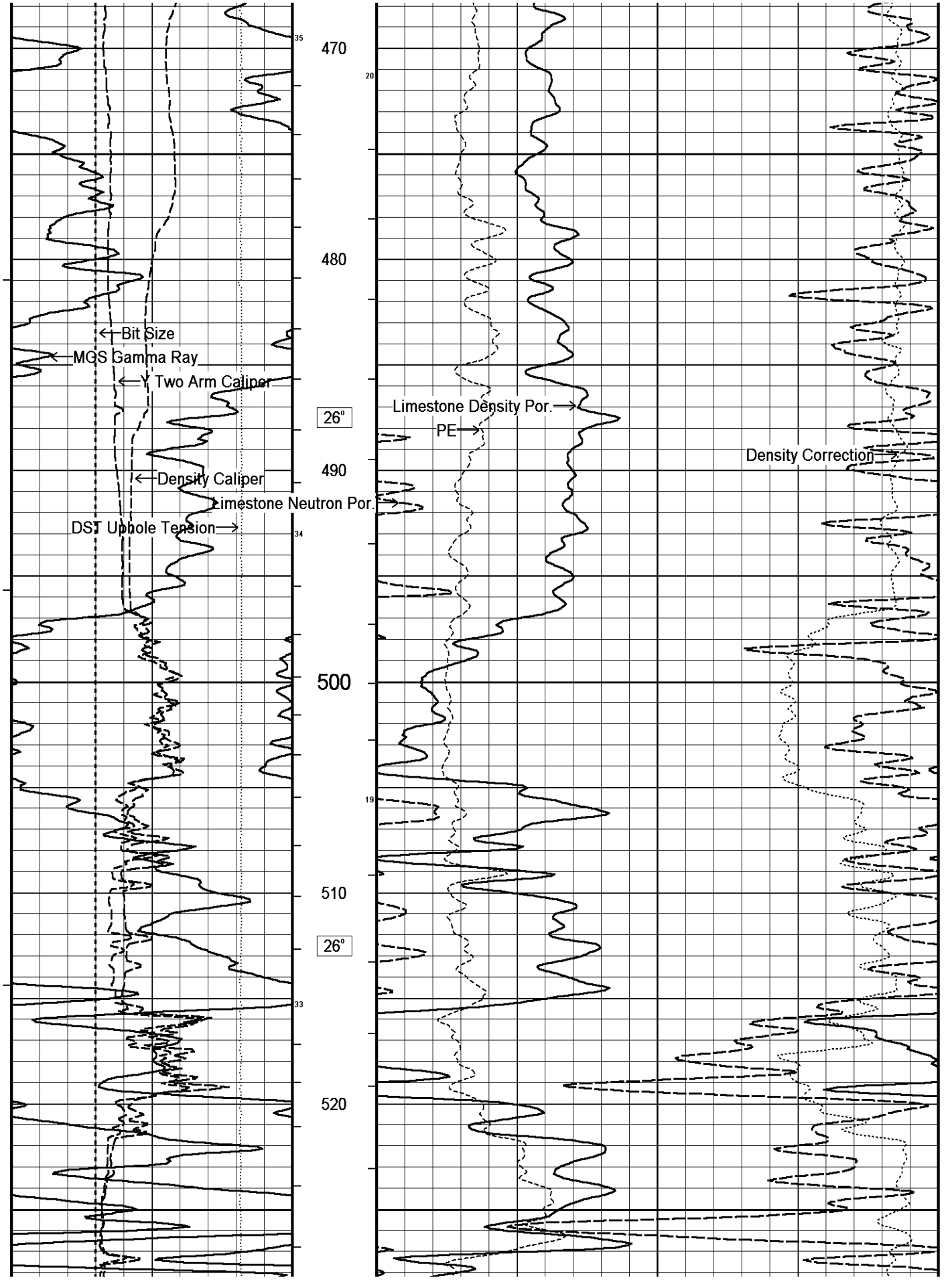

170
180
190
200
210
220

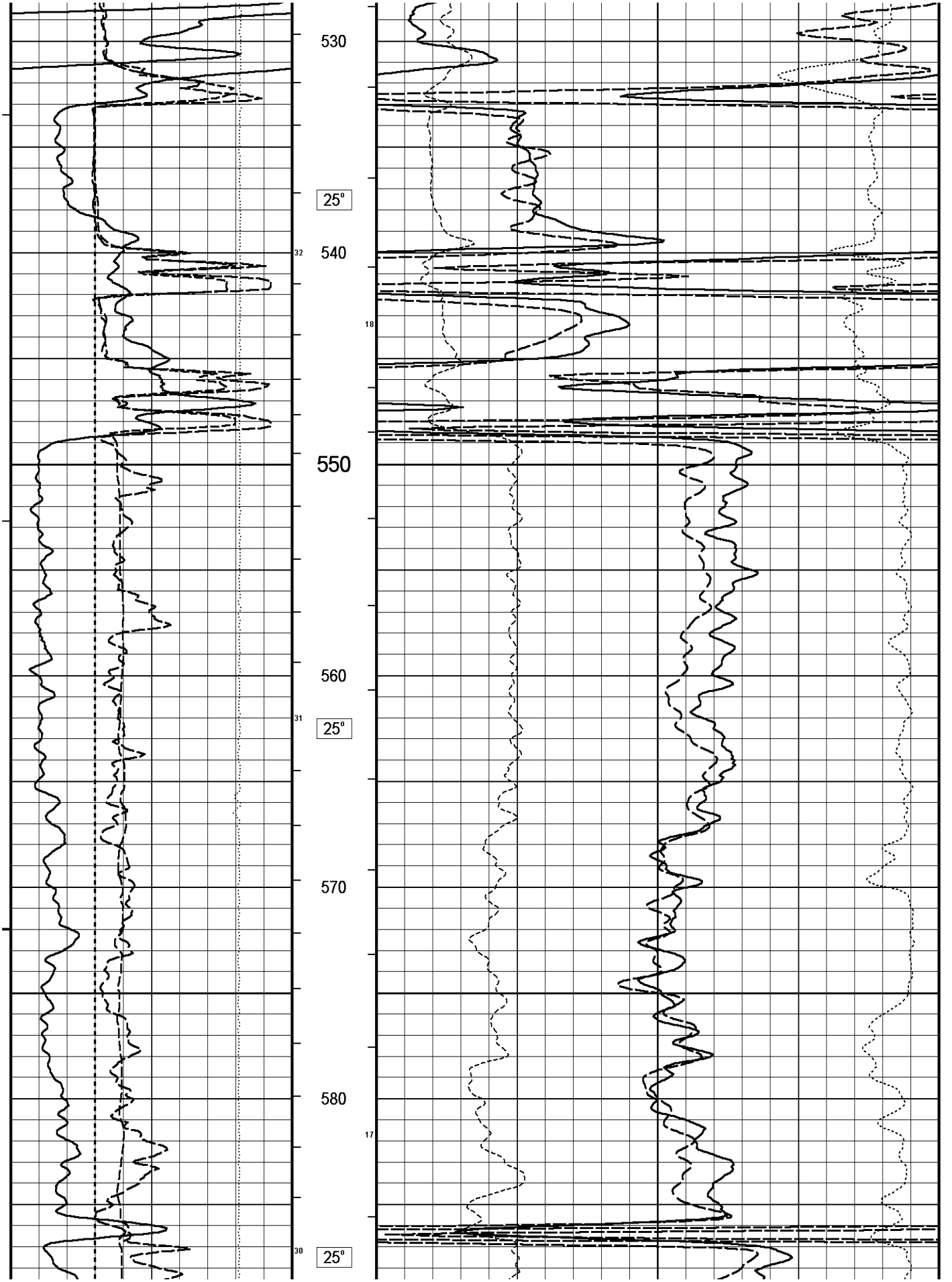

230
240
250
260
270
280
Bit Size
MGS Gamma Ray
Limestone Neutron Por

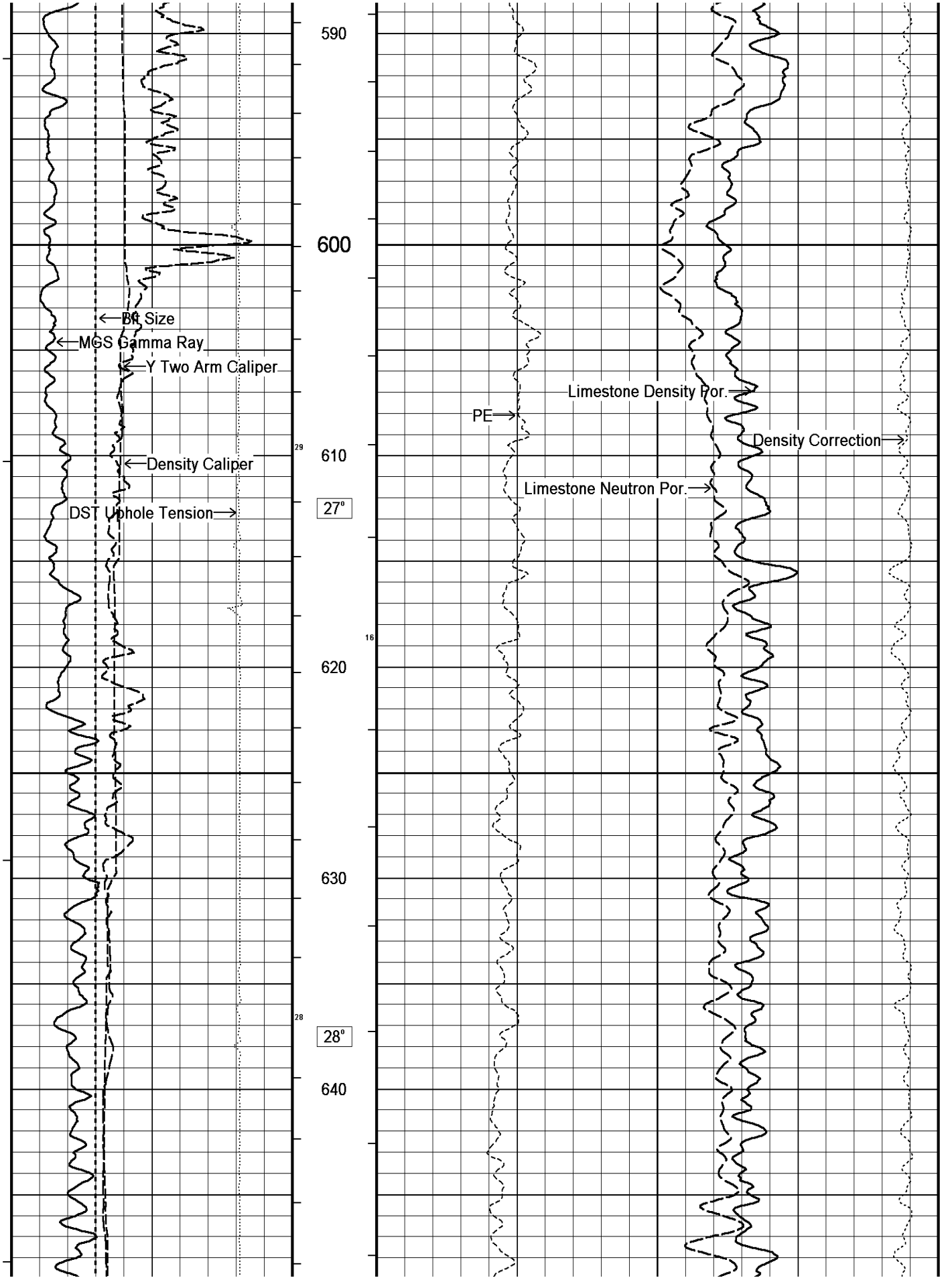

290
300
310
320
330
340

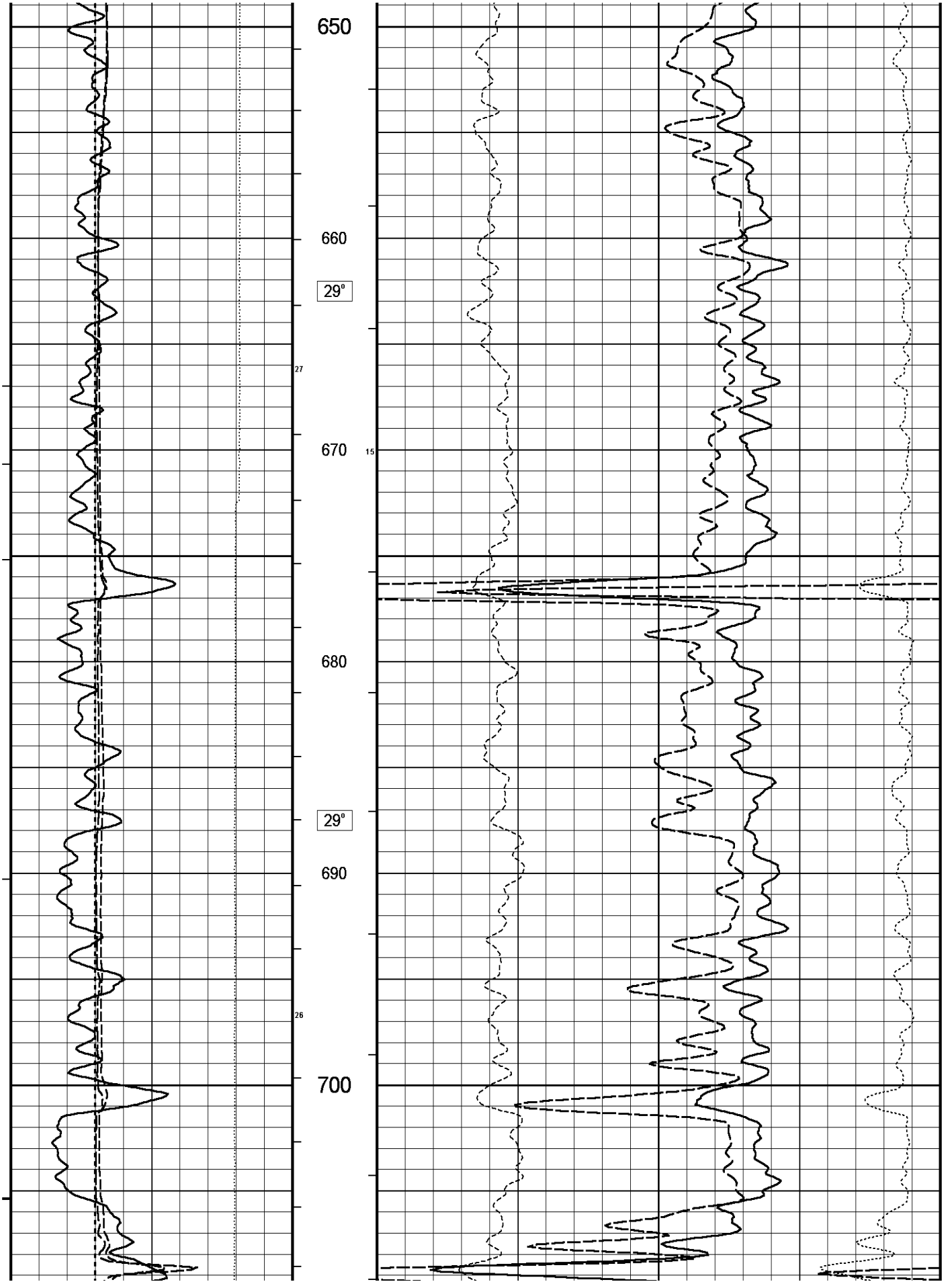

350
360
370
380
390
400
←Bit Size
←MGS Gamma Ray
Limestone Neutron Por.→

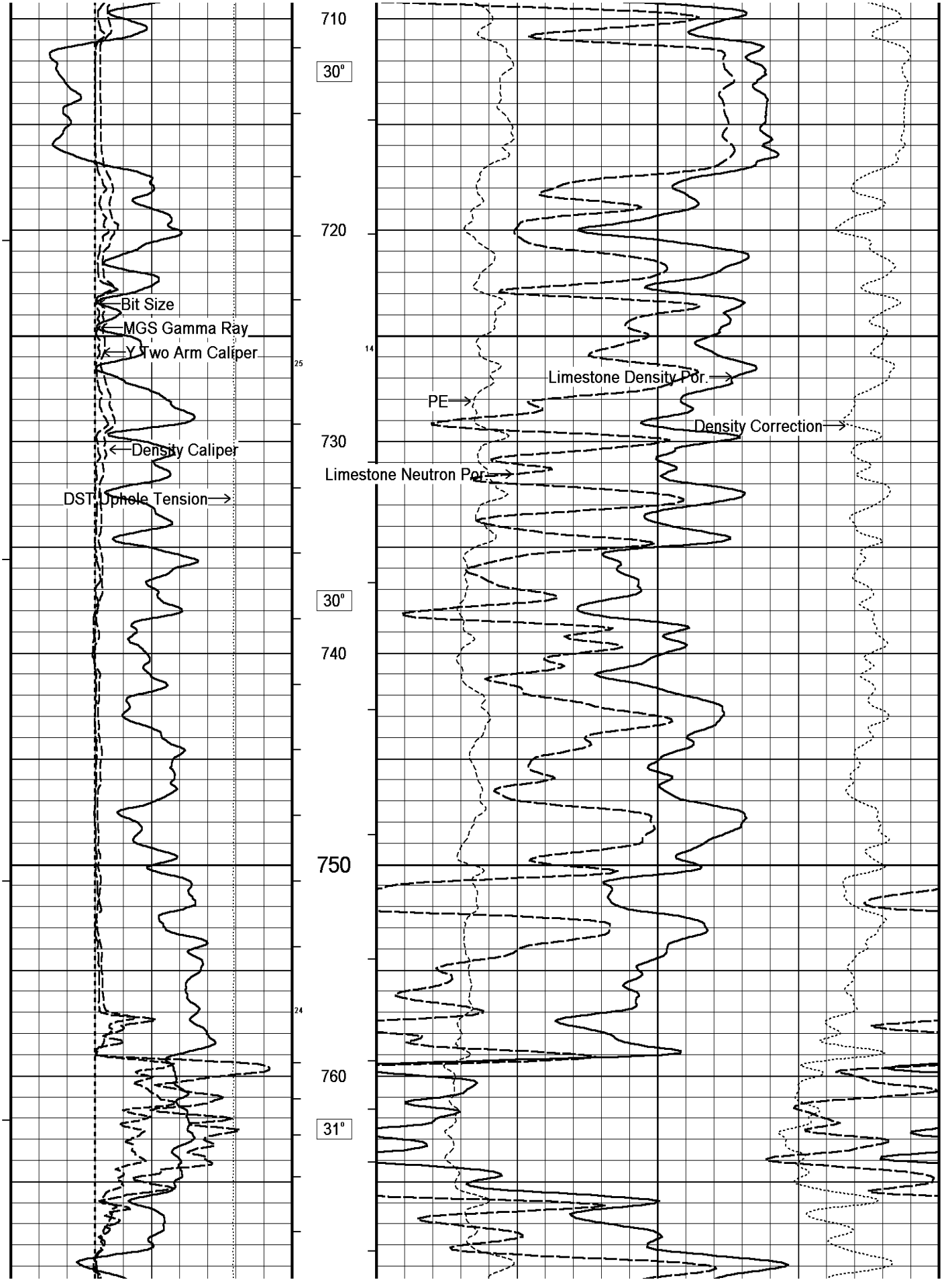

410
420
Casing
Shoe
430
37
26°
440
21
450
36
460
26°

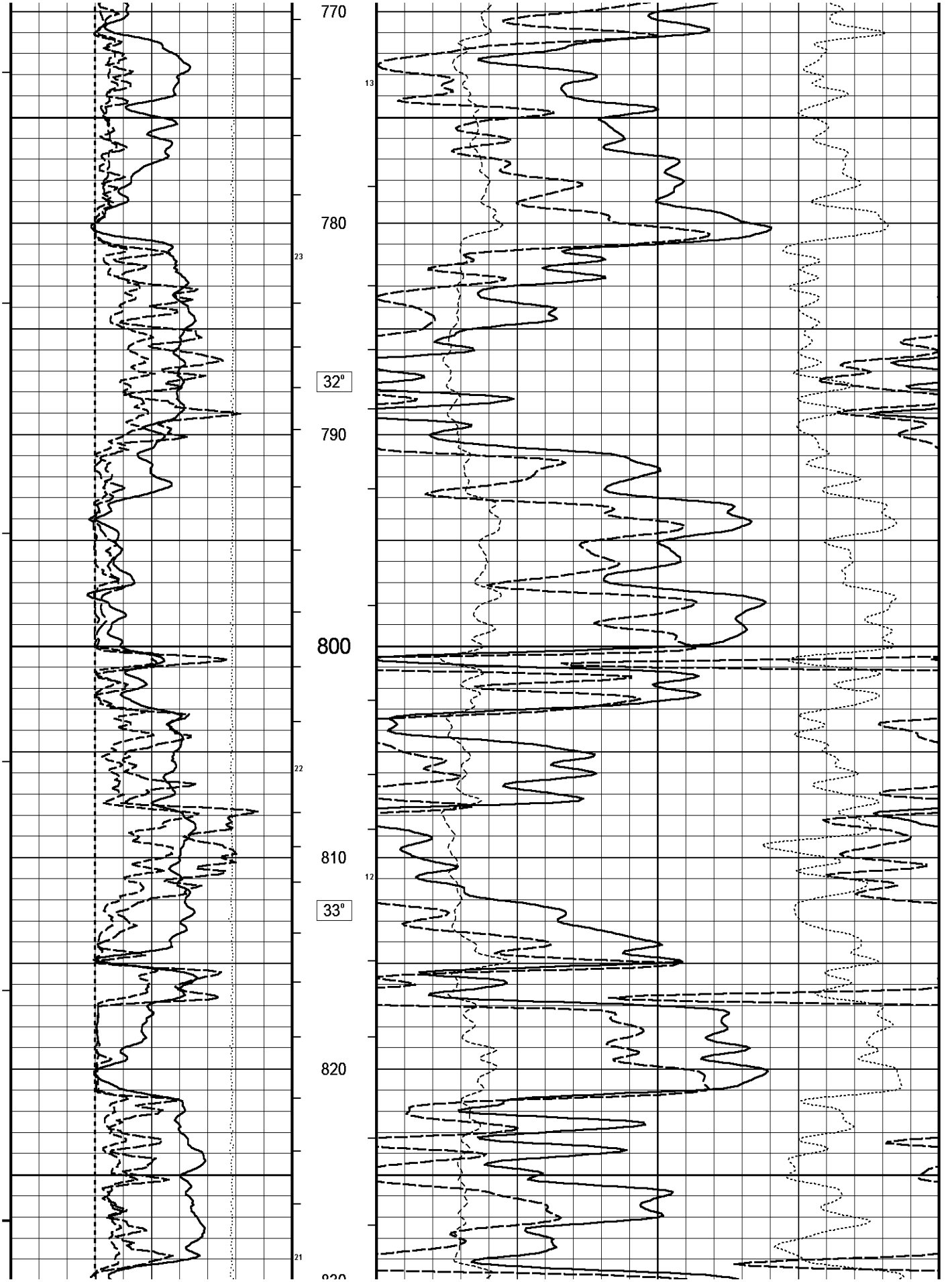

35
470
20
480
Bit Size
MGS Gamma Ray
Two Arm Caliper
Limestone Density Por.
26°
PE
490
Density Caliper
Density Correction
Limestone Neutron Por.
DST Uphole Tension
34
500
19
510
26°
33
520

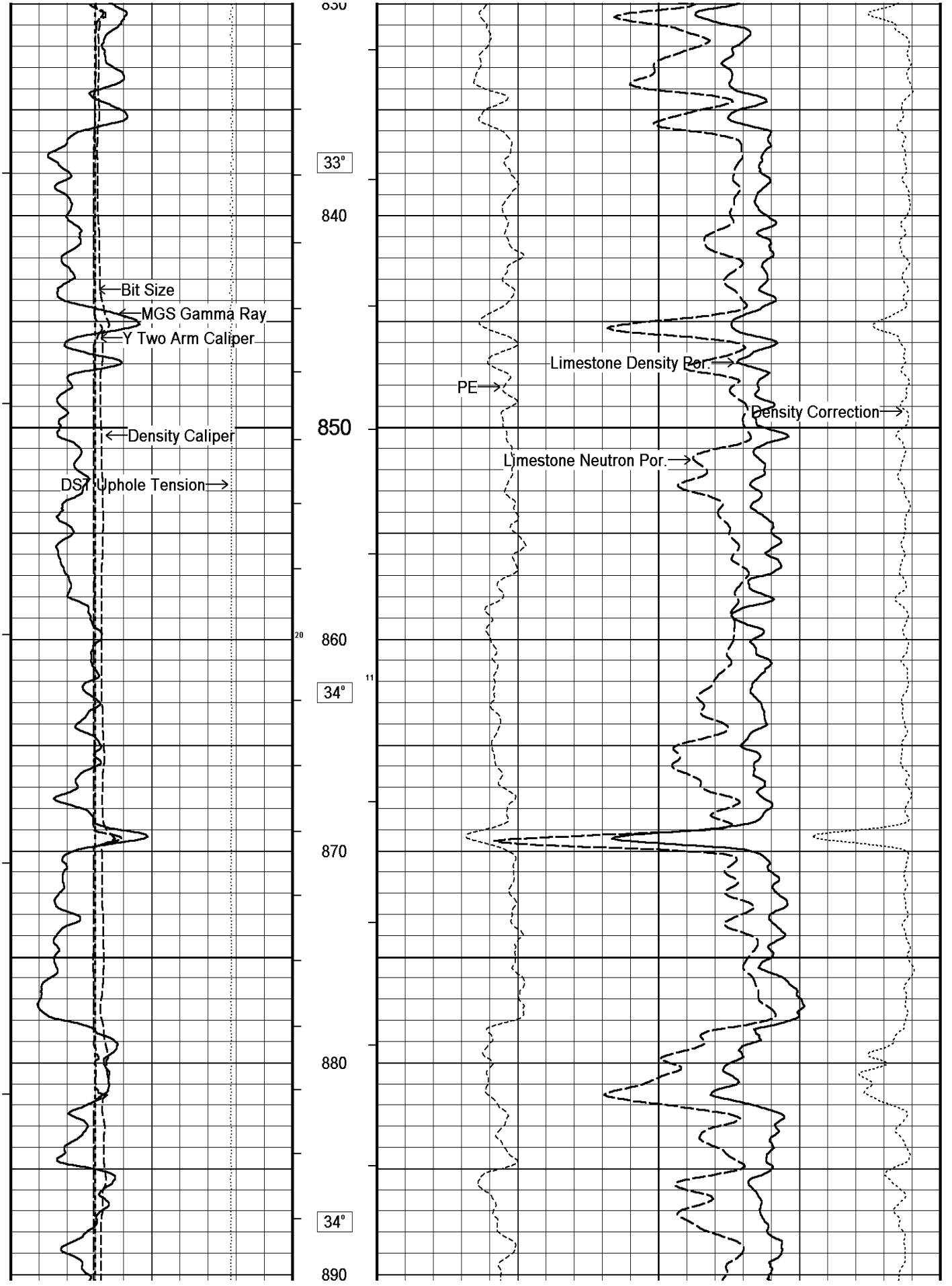

530
25°
32
540
18
550
560
31
25°
570
580
17
30
25°

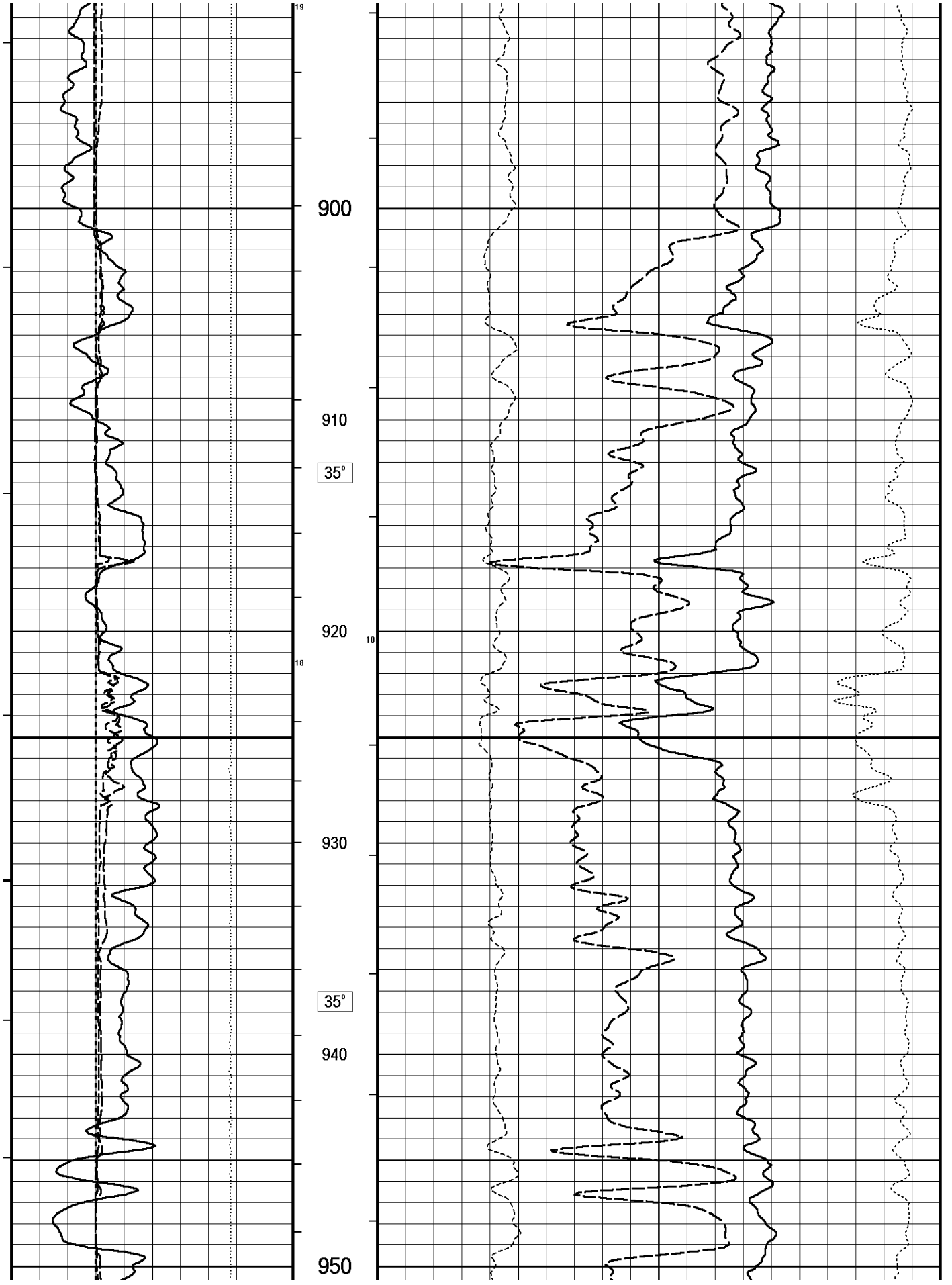

590
600
610
620
630
640
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
29
27°
28
28°
16
PE
Limestone Density Por.
Density Correction
Limestone Neutron Por.

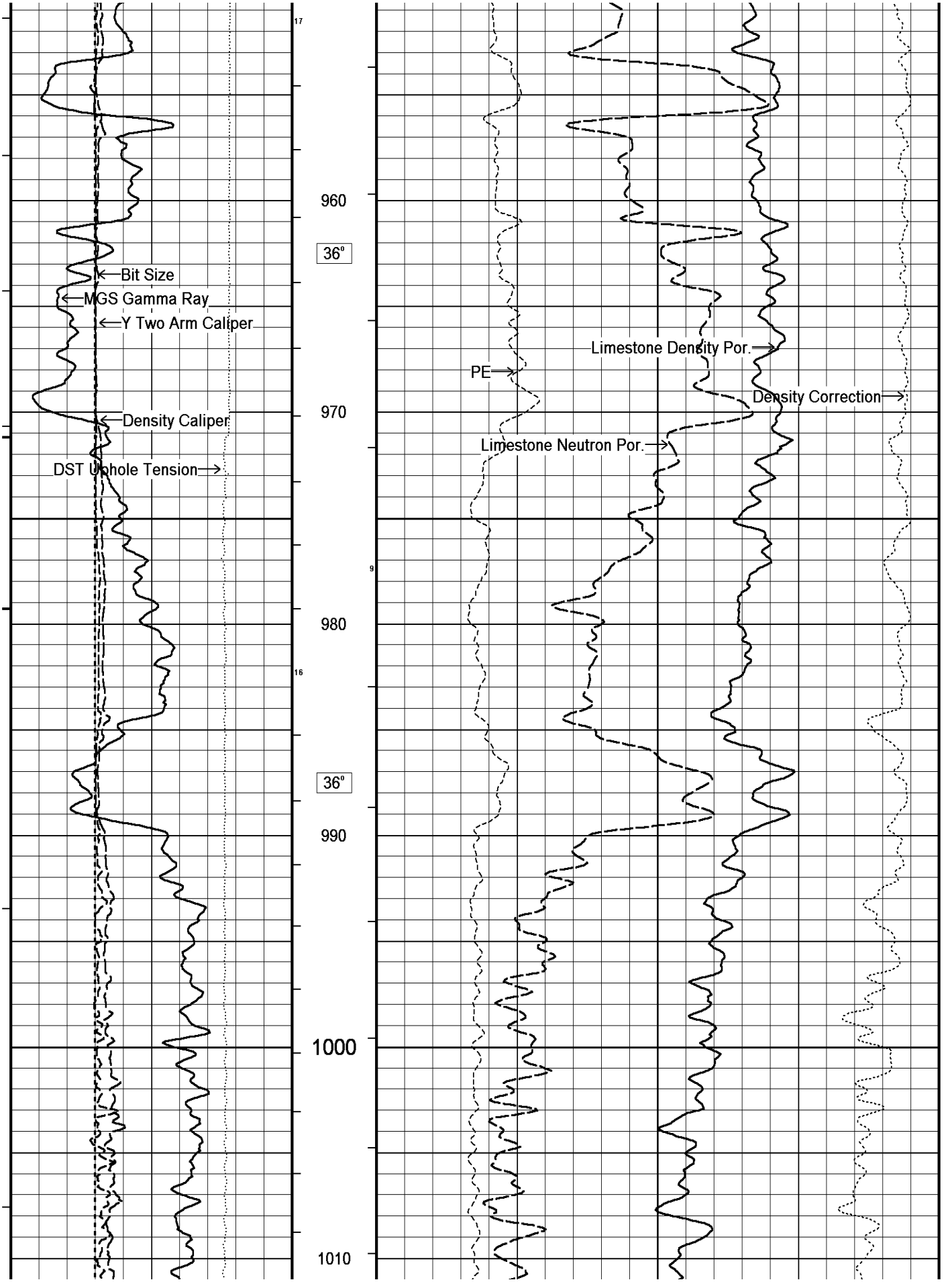

650
660
29°
27
670
15
680
29°
690
26
700

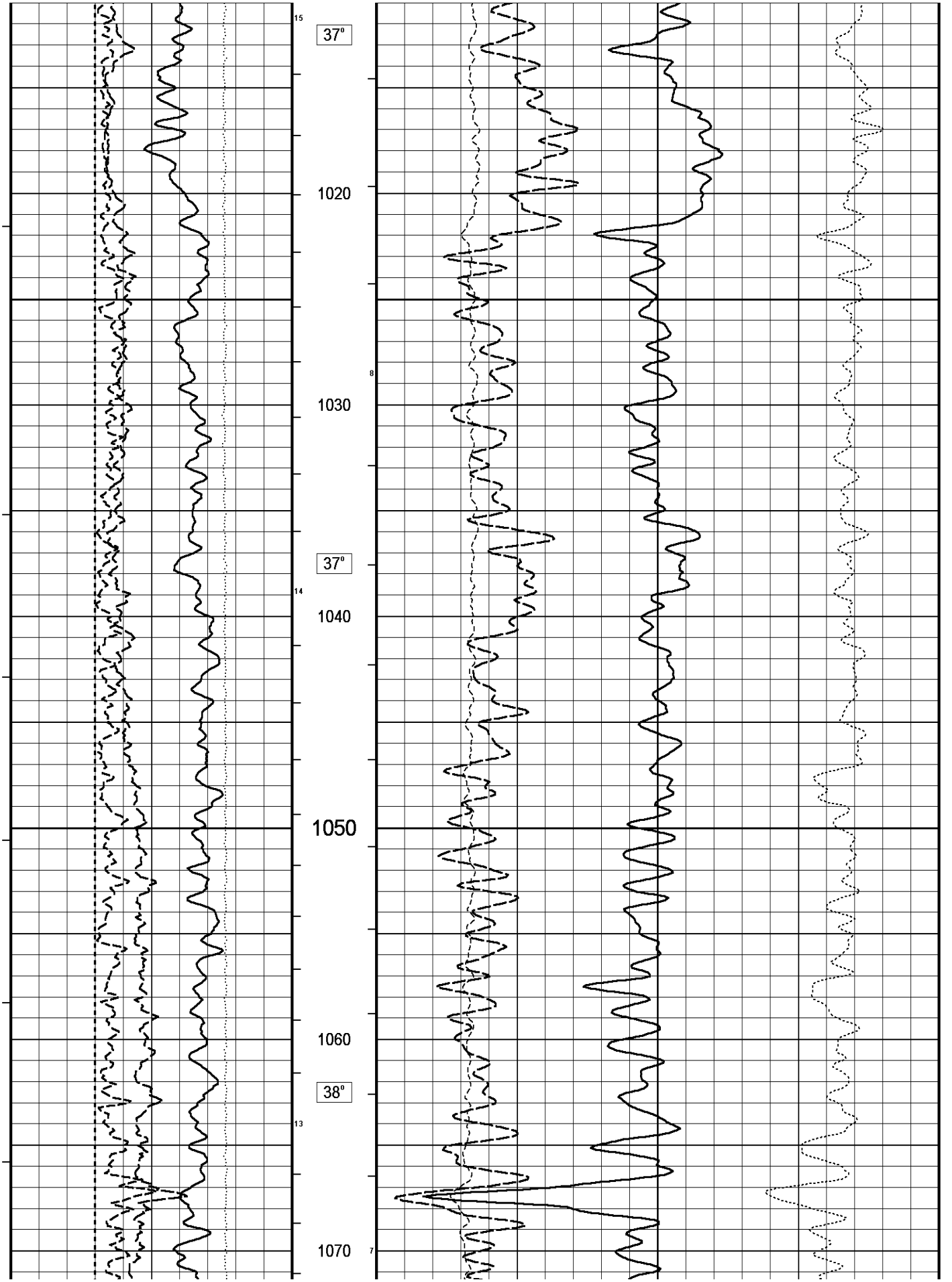

710
30°
720
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
25
Density Caliper
730
DST Uphole Tension
30°
740
750
24
760
31°
14
Limestone Density Por.
PE
Density Correction
Limestone Neutron Por.

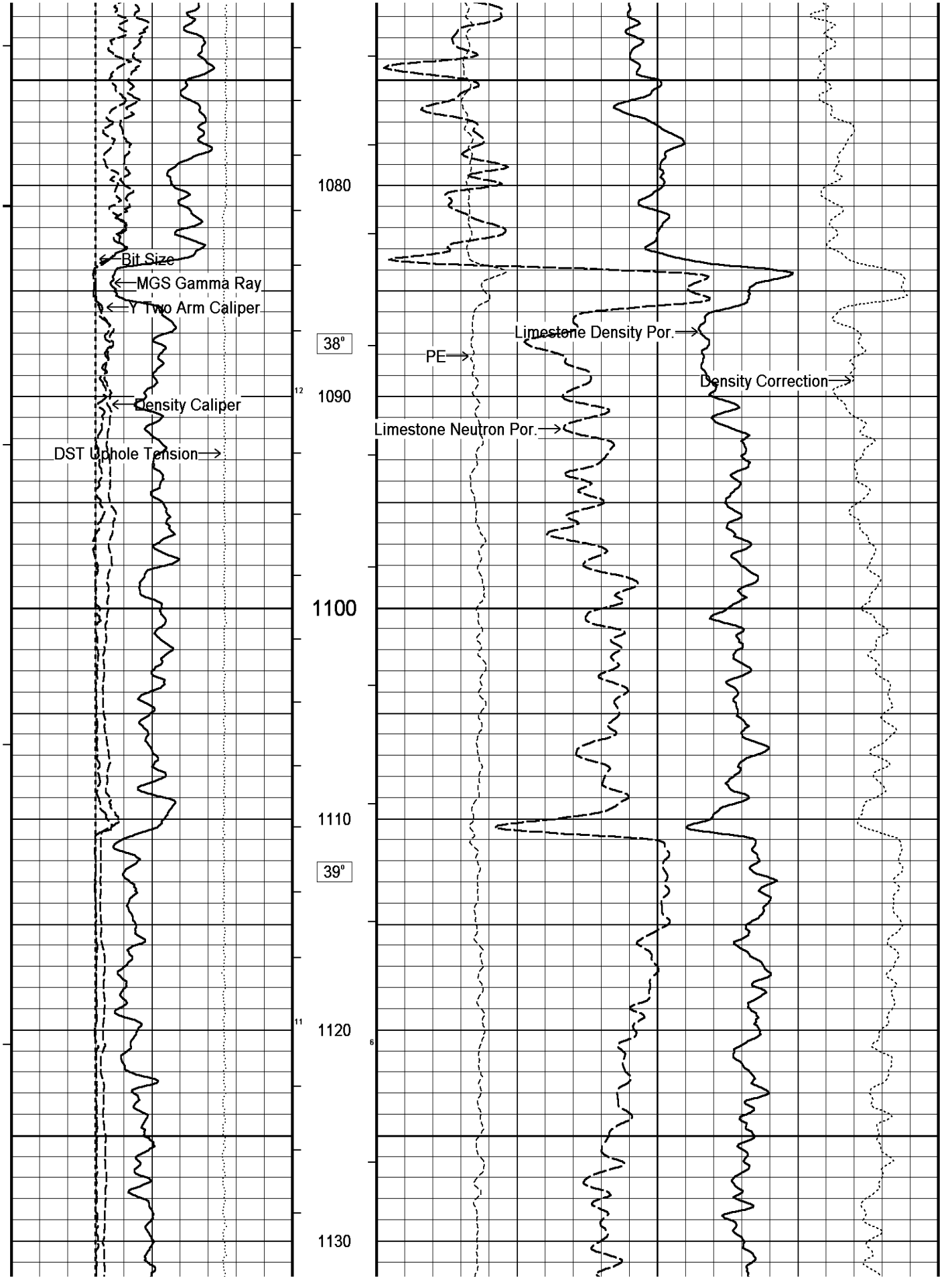

770
780
790
800
810
820
32°
33°
23
22
21
13
12

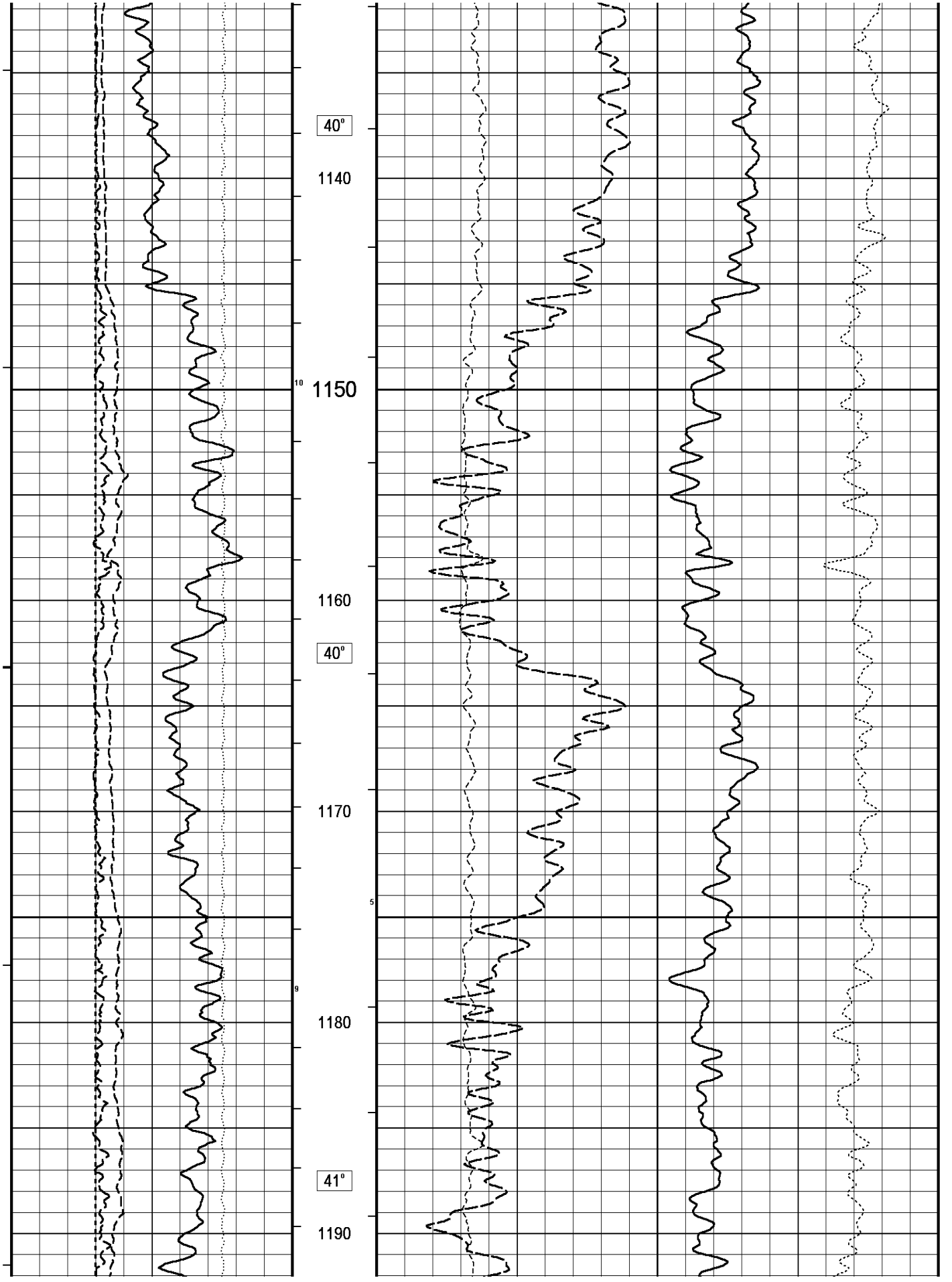

Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DSI Uphole Tension
PE
Limestone Density Por.
Density Correction
Limestone Neutron Por.
33°
34°
34°
840
850
860
870
880
890
20
11

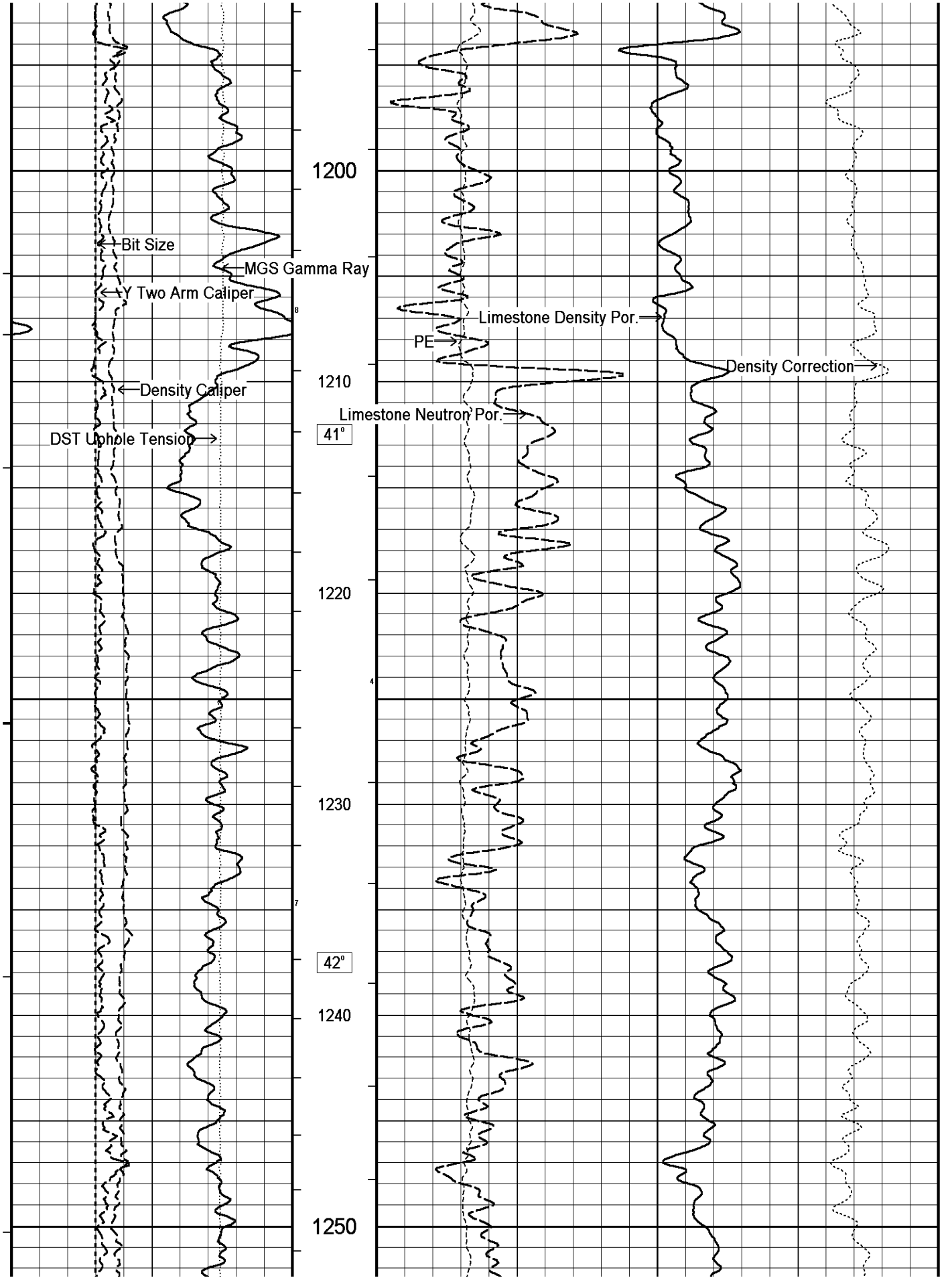

19
900
910
35°
920
18
10
930
35°
940
950

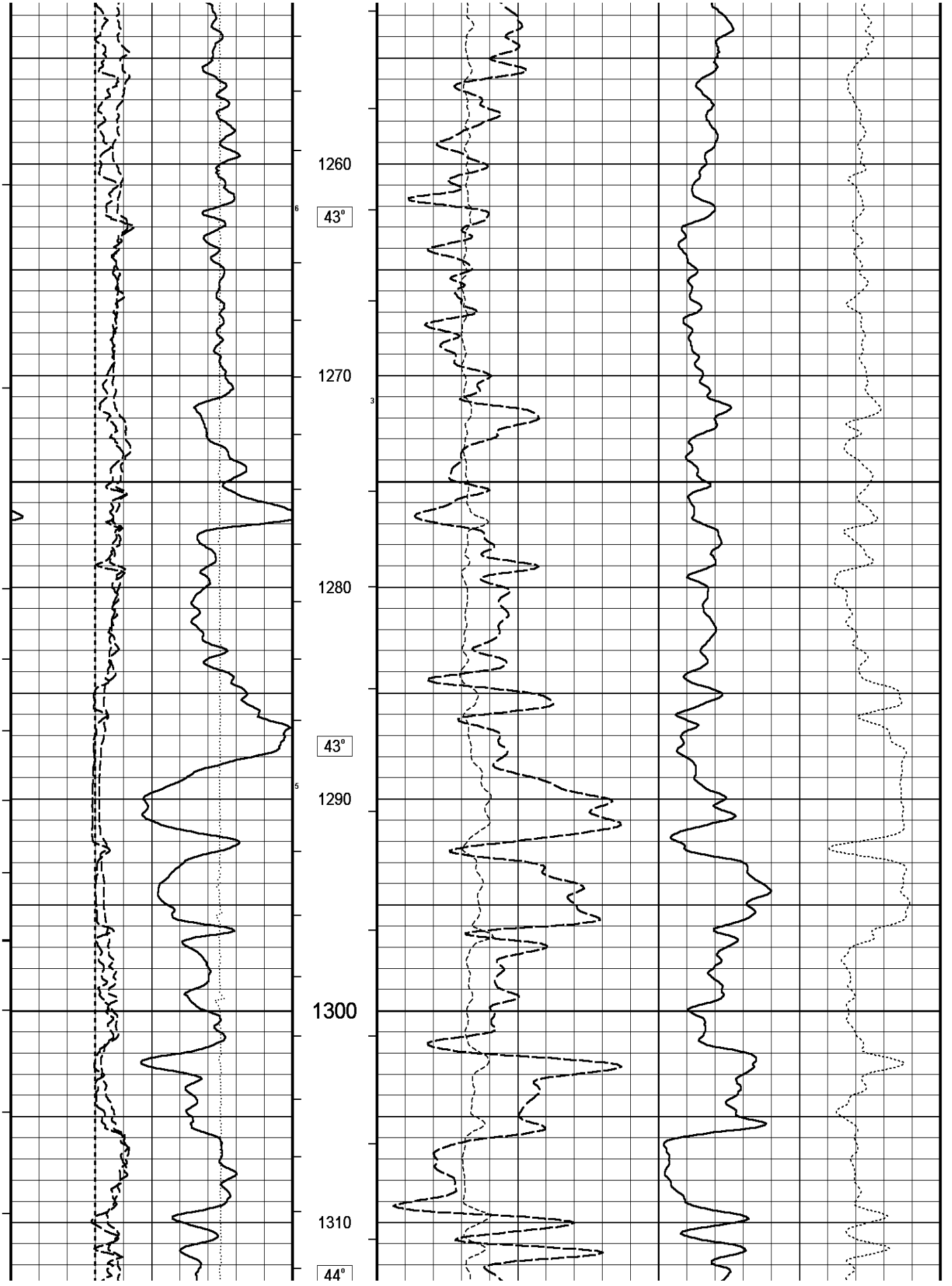

Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
PE
Limestone Density Por.
Density Correction
Limestone Neutron Por.
960
970
980
990
1000
1010
36°
36°

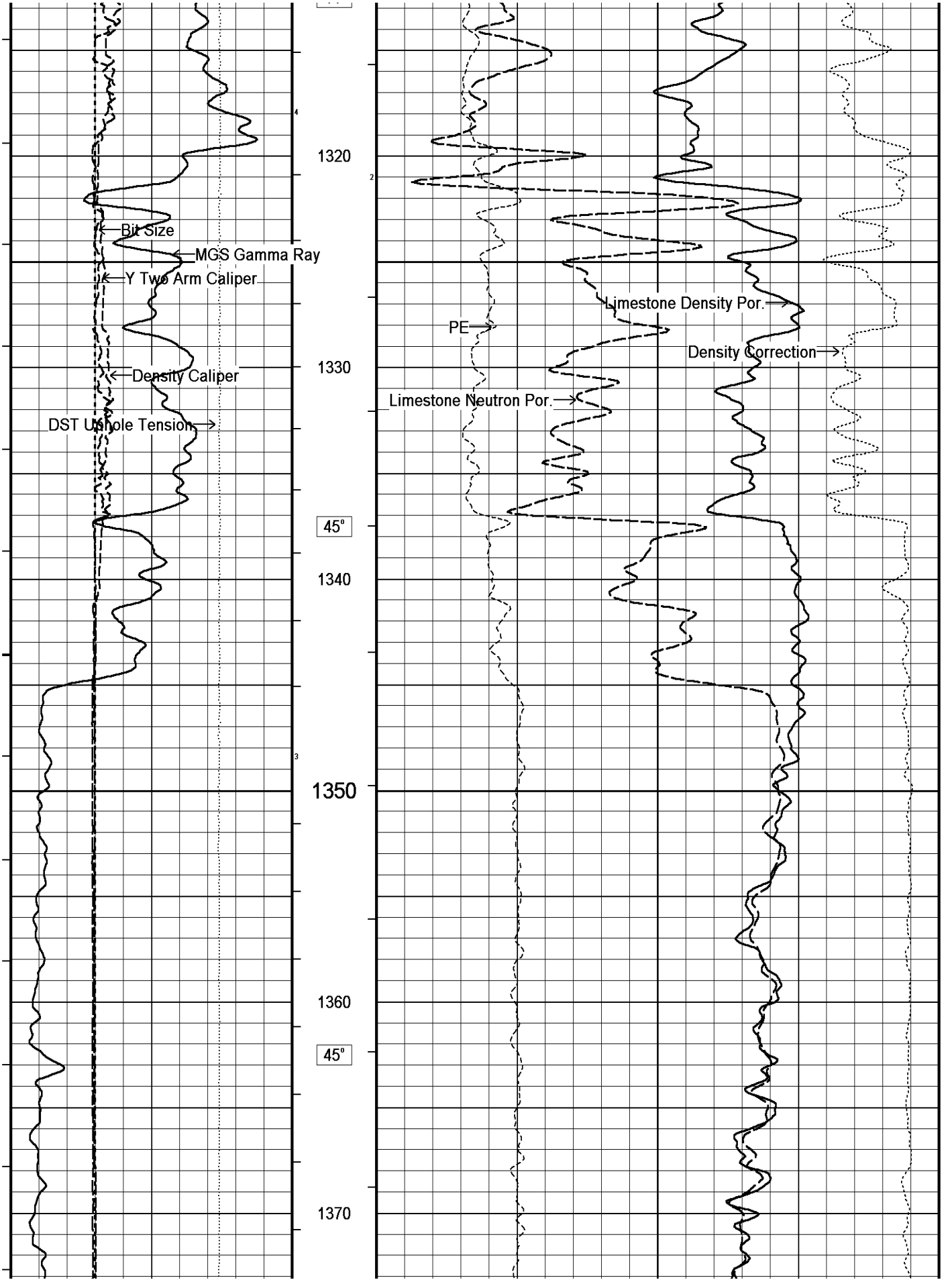

15
37°
1020
8
1030
37°
14
1040
1050
1060
38°
13
1070
7

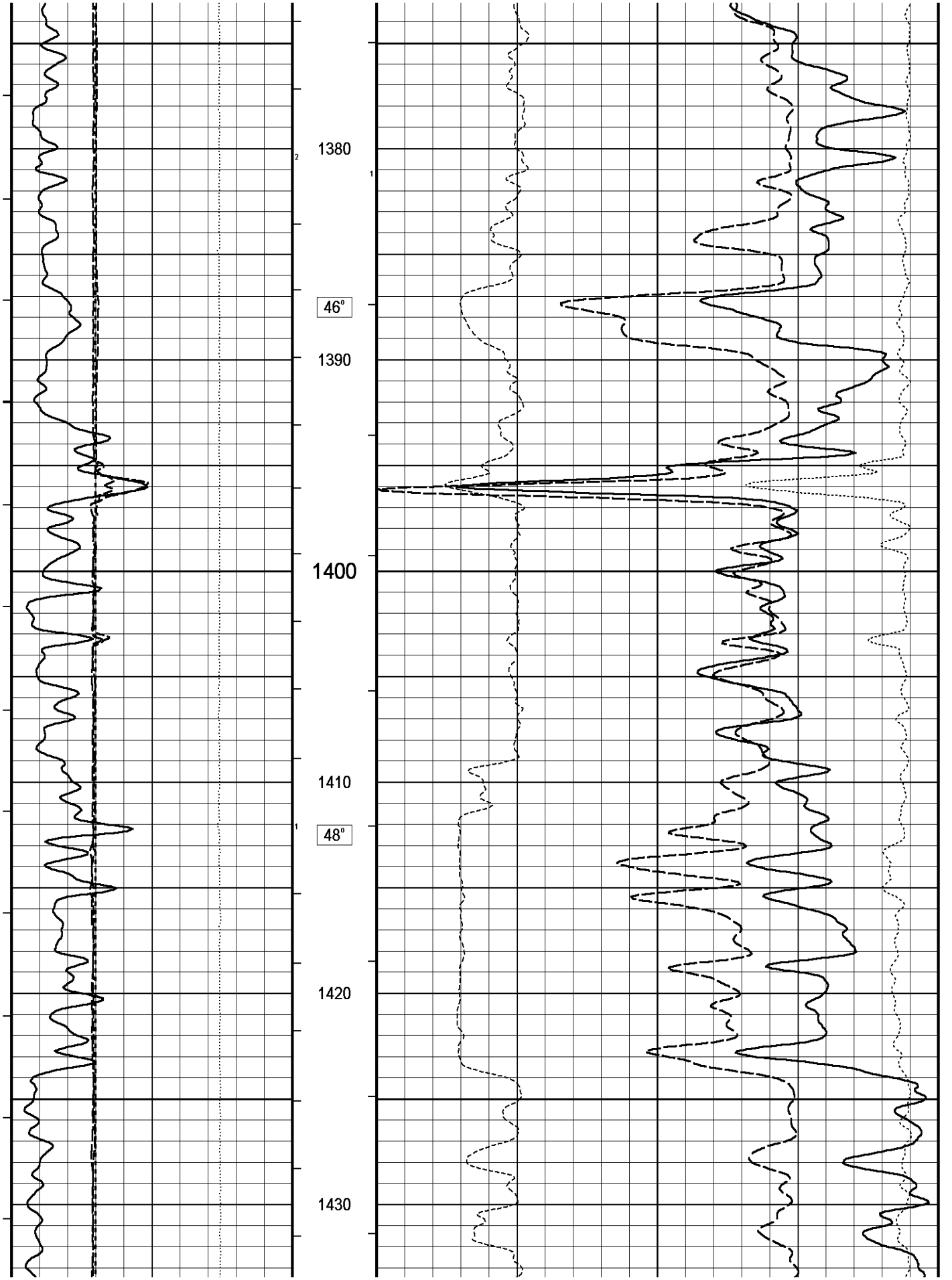

Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
1080
38°
1090
1100
1110
39°
1120
1130
Limestone Density Por.
PE
Density Correction
Limestone Neutron Por.

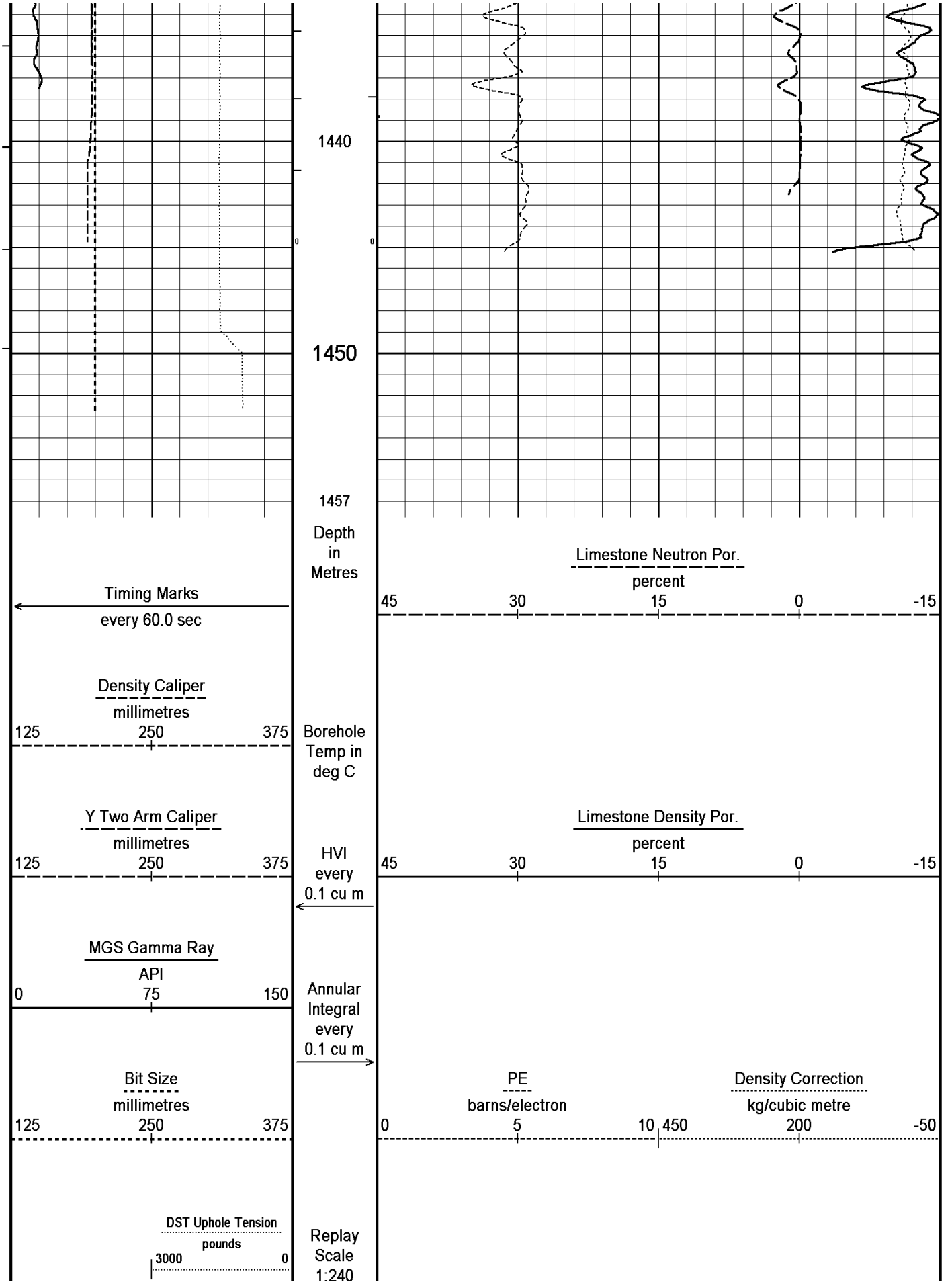

40°
1140
1150
1160
40°
1170
1180
41°
1190


Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
Limestone Density Por.
PE
Density Correction
Limestone Neutron Por.
41°
42°
1200
1210
1220
1230
1240
1250


1260
43°
1270
1280
43°
1290
1300
1310
44°


Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
PE
Limestone Density Por.
Density Correction
Limestone Neutron Por.
1320
1330
45°
1340
1350
1360
45°
1370


1380
46°
1390
1400
1410
48°
1420
1430


1440
1450
1457
Depth in Metres
Timing Marks
every 60.0 sec
Density Caliper
millimetres
125 250 375
Y Two Arm Caliper
millimetres
125 250 375
MGS Gamma Ray
API
0 75 150
Bit Size
millimetres
125 250 375
DST Uphole Tension
pounds
3000 0
Borehole Temp in deg C
HVI every 0.1 cu m
Annular Integral every 0.1 cu m
Replay Scale 1:240
Limestone Neutron Por.
percent
45 30 15 0 -15
Limestone Density Por.
percent
45 30 15 0 -15
PE
barns/electron
0 5 10
Density Correction
kg/cubic metre
450 200 -50

Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 12-NOV-2007 09:26
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta — Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

LIMESTONE MAINLOG

LIMESTONE REPEAT
SANDSTONE MAINLOG

Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 12-NOV-2007 09:26
Filename: C:\Temp\Weatherford PreView\0\REPEAT.dta — Recorded on 15-FEB-2007 07:26
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta — Recorded on 15-FEB-2007 08:46
System Versions: Logged with 7.01.0195 Processed with 8.00.0015 Plotted with 8.01.0091

Timing Marks
every 60.0 sec

Depth in Metres

Limestone Neutron Por.
percent
45 30 15 0 -15

Density Caliper
millimetres
125 250 375

Borehole Temp in deg C

Y Two Arm Caliper
millimetres
125 250 375

Limestone Density Por.
percent
45 30 15 0 -15

HVI every 0.1 cu m

MGS Gamma Ray
API
0 75 150

Annular Integral every 0.1 cu m

Bit Size
millimetres
125 250 375

PE
barns/electron
0 5 10

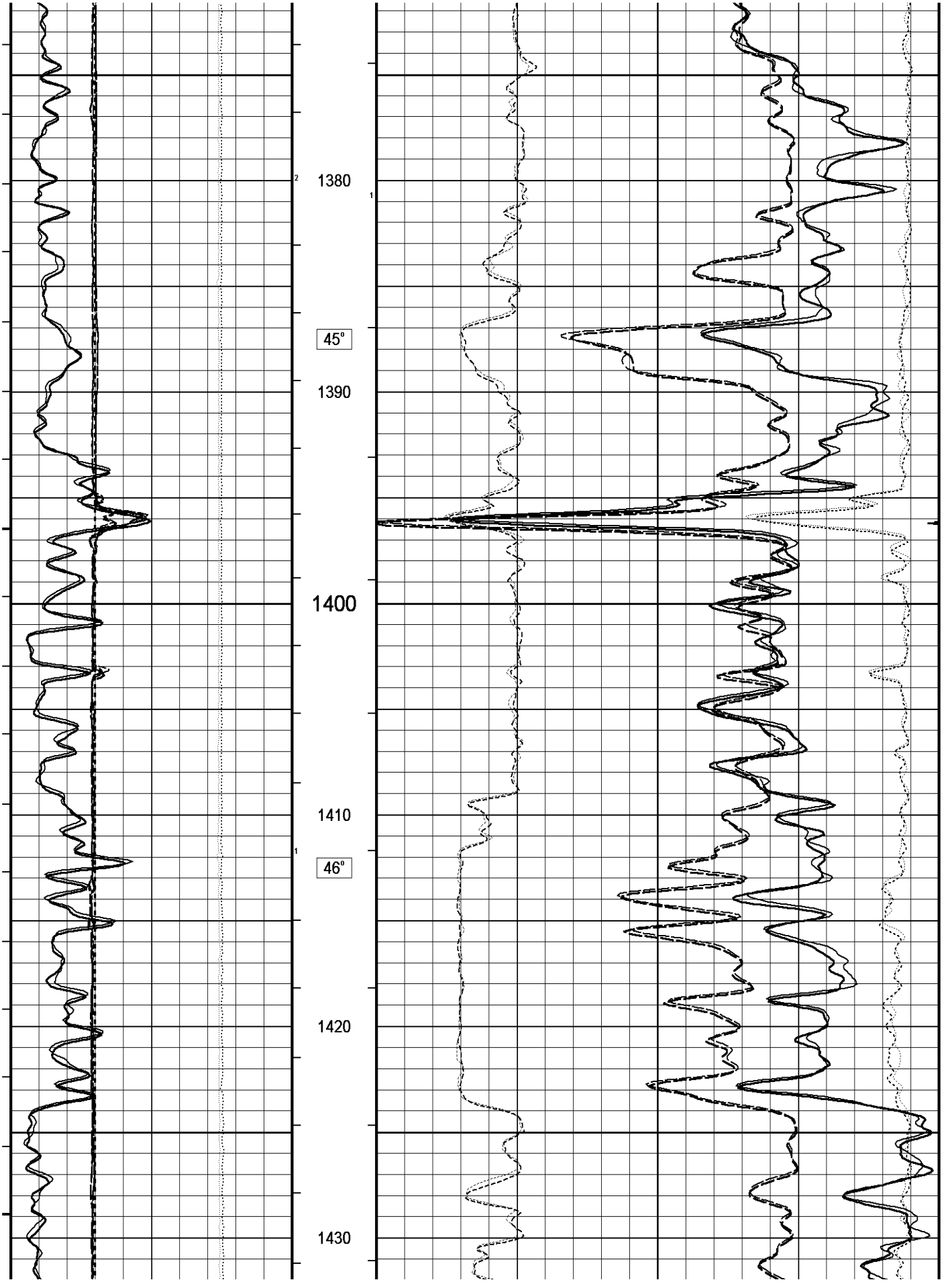
Density Correction
kg/cubic metre
450 200 -50

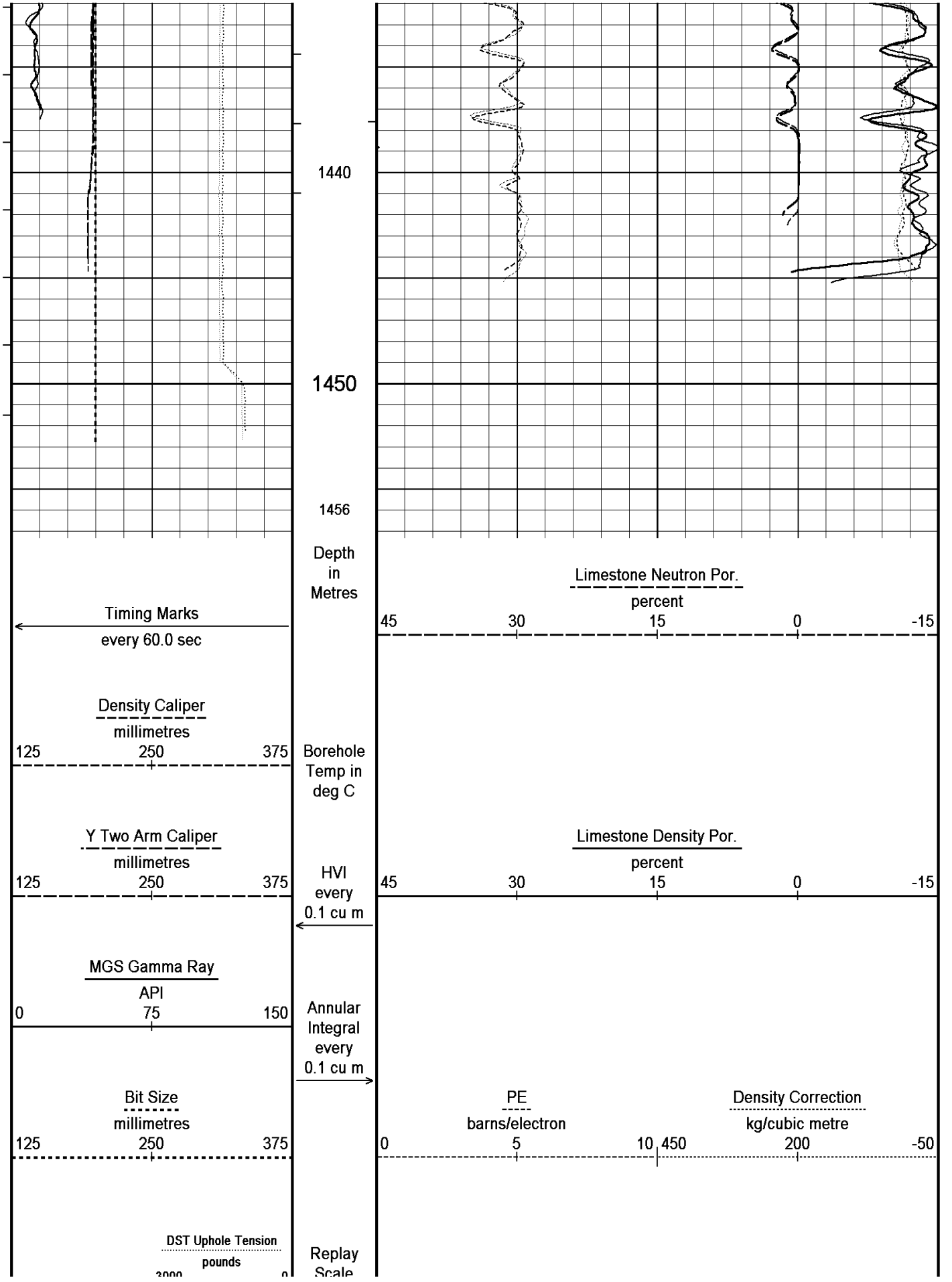
DST Uphole Tension
pounds
3000 0

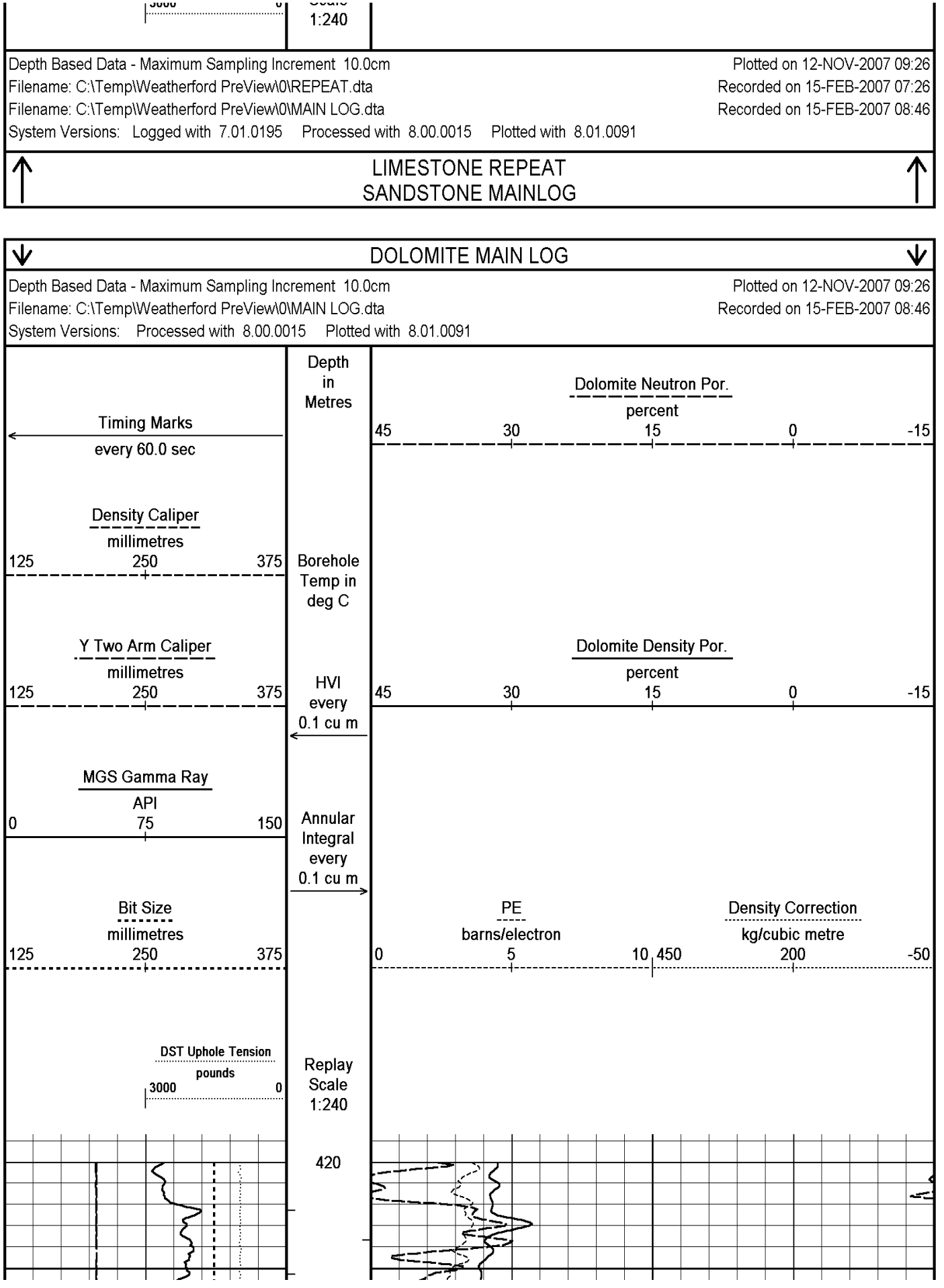
Replay Scale 1:240

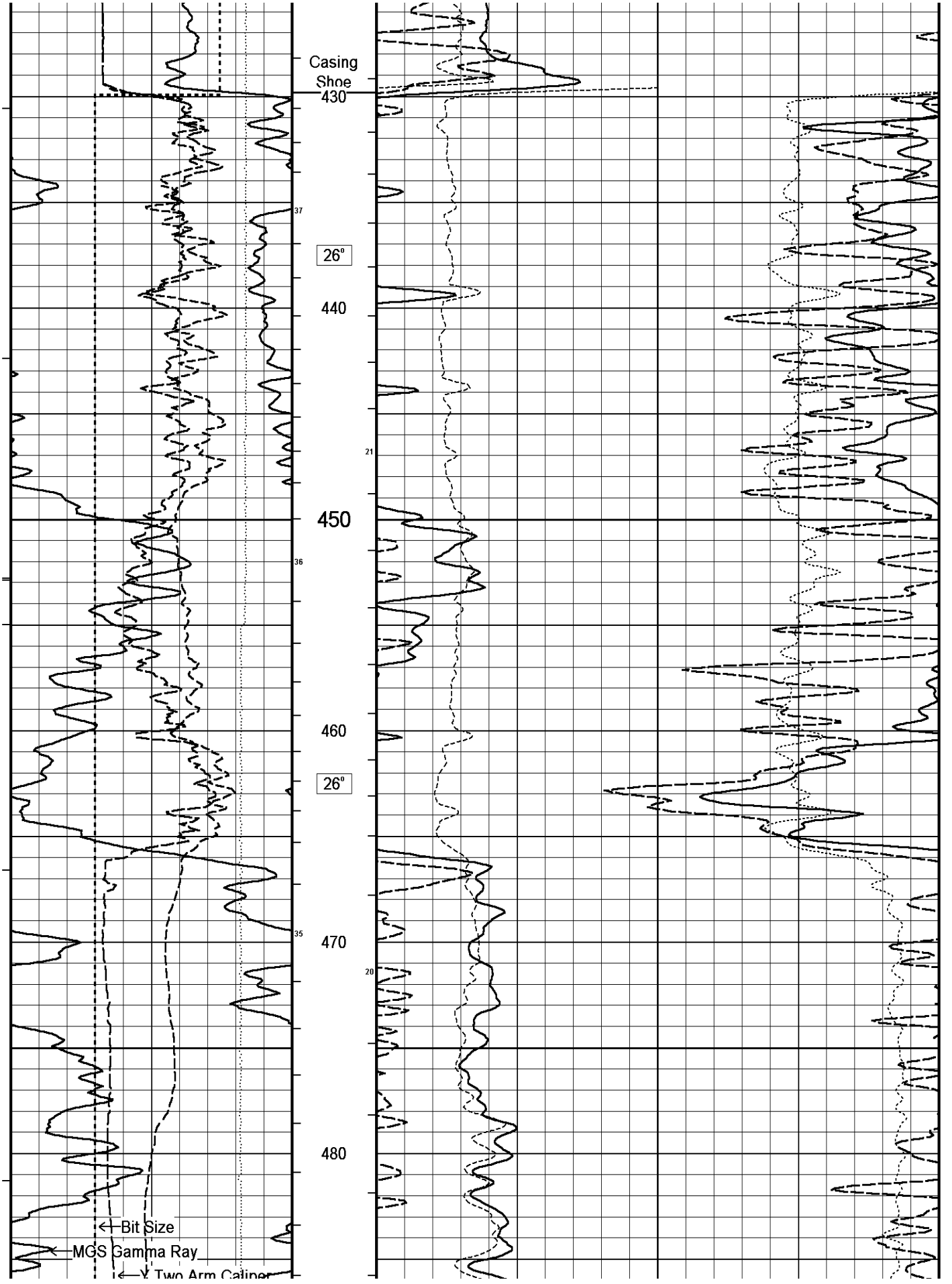
1365

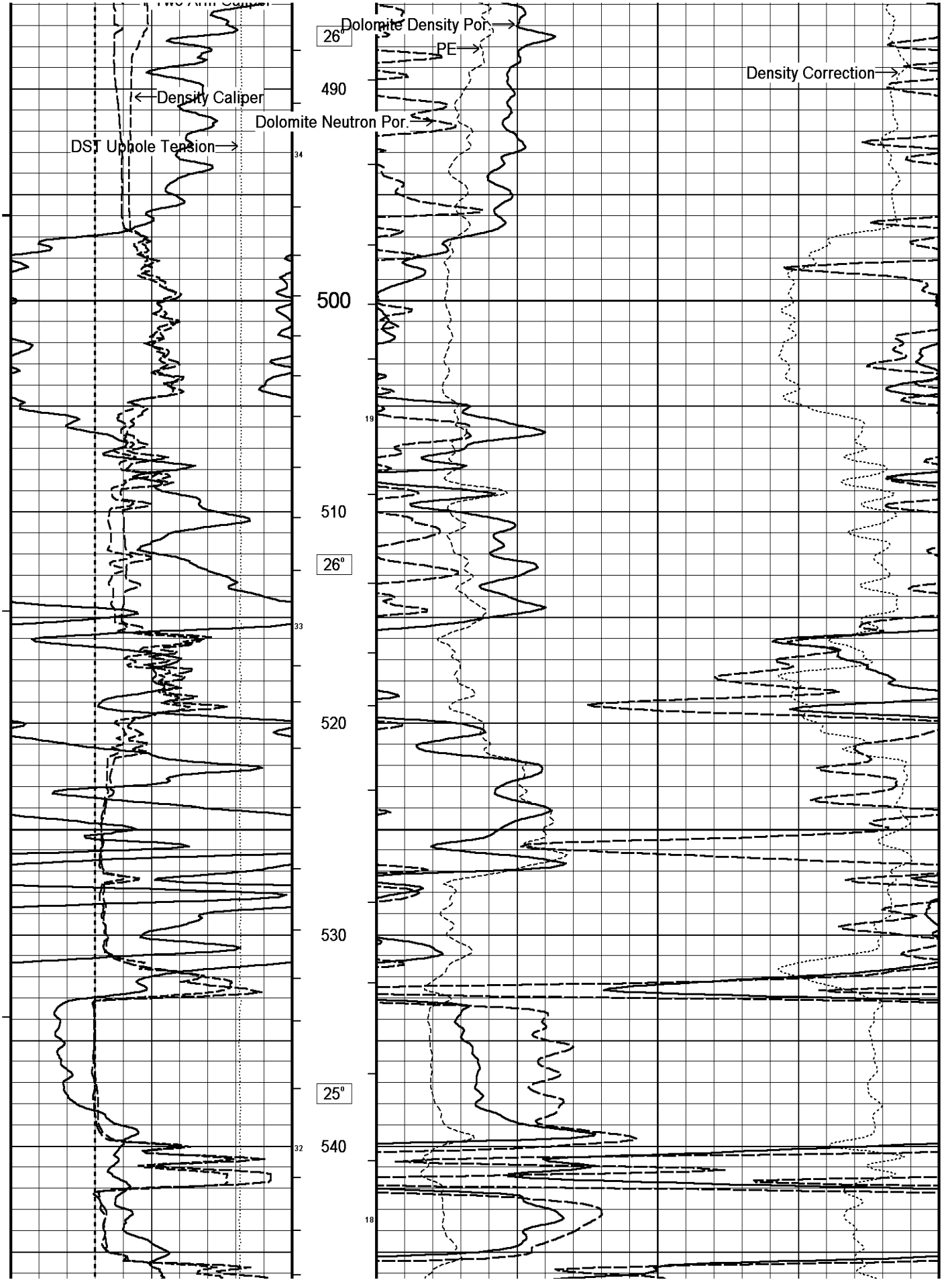
1370

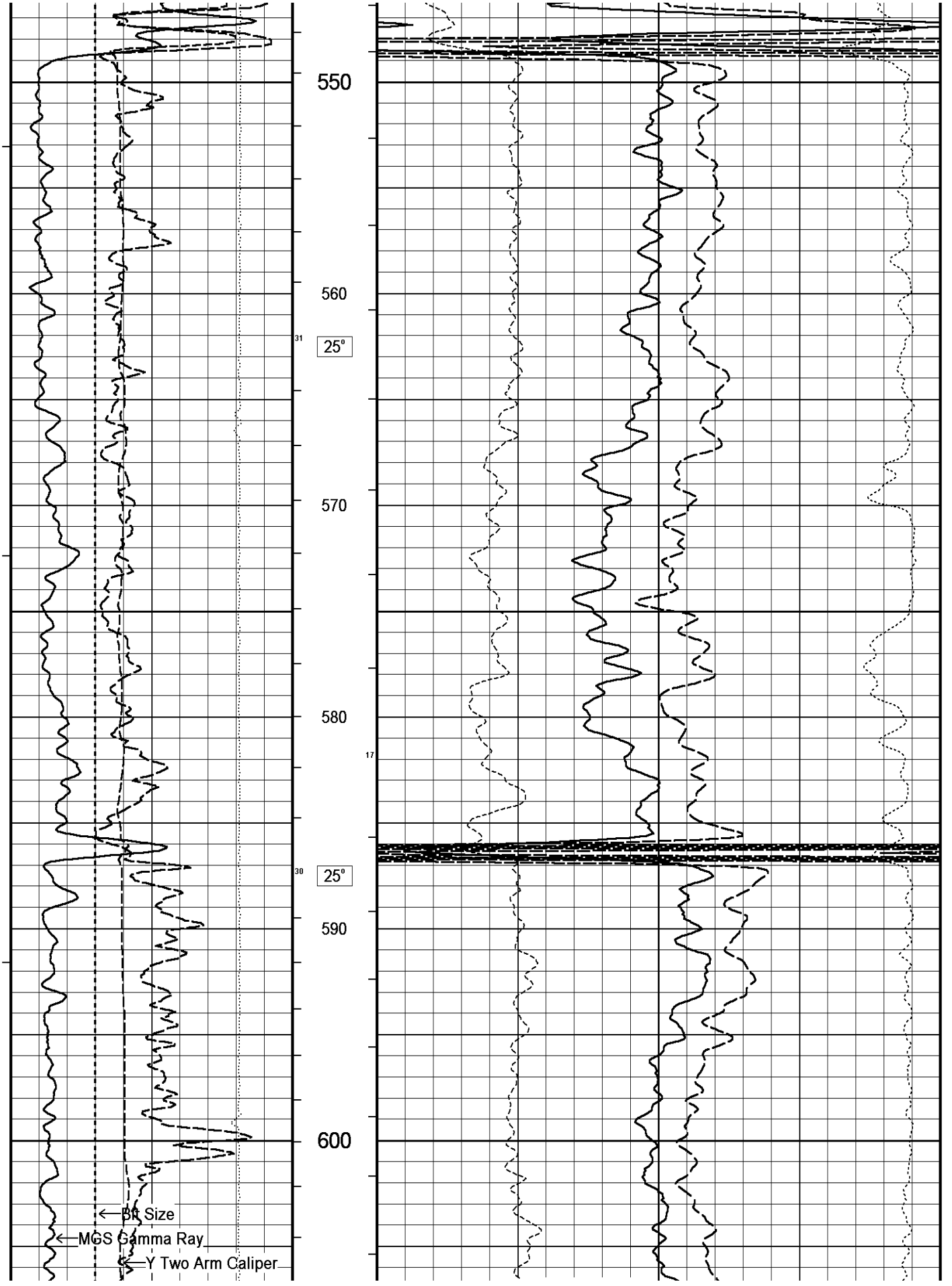

1380
45°
1390
1400
1410
46°
1420
1430

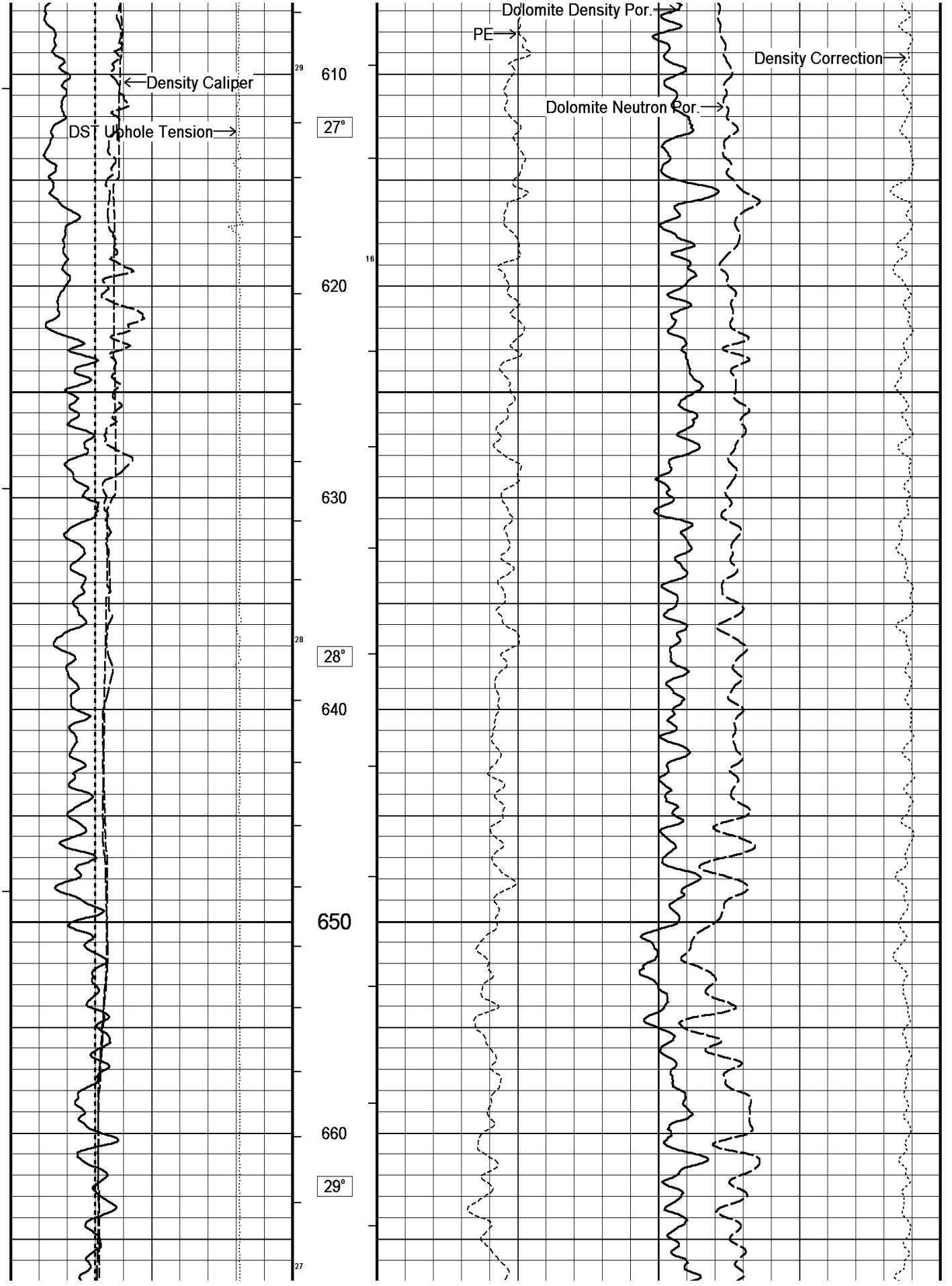

1440
1450
1456
Depth in Metres
Timing Marks
every 60.0 sec
Limestone Neutron Por.
percent
45 30 15 0 -15
Density Caliper
millimetres
125 250 375
Borehole Temp in deg C
Y Two Arm Caliper
millimetres
125 250 375
HVI every 0.1 cu m
Limestone Density Por.
percent
45 30 15 0 -15
MGS Gamma Ray
API
0 75 150
Annular Integral every 0.1 cu m
Bit Size
millimetres
125 250 375
PE
barns/electron
0 5 10
Density Correction
kg/cubic metre
450 200 -50
DST Uphole Tension
pounds
3000 0
Replay Scale

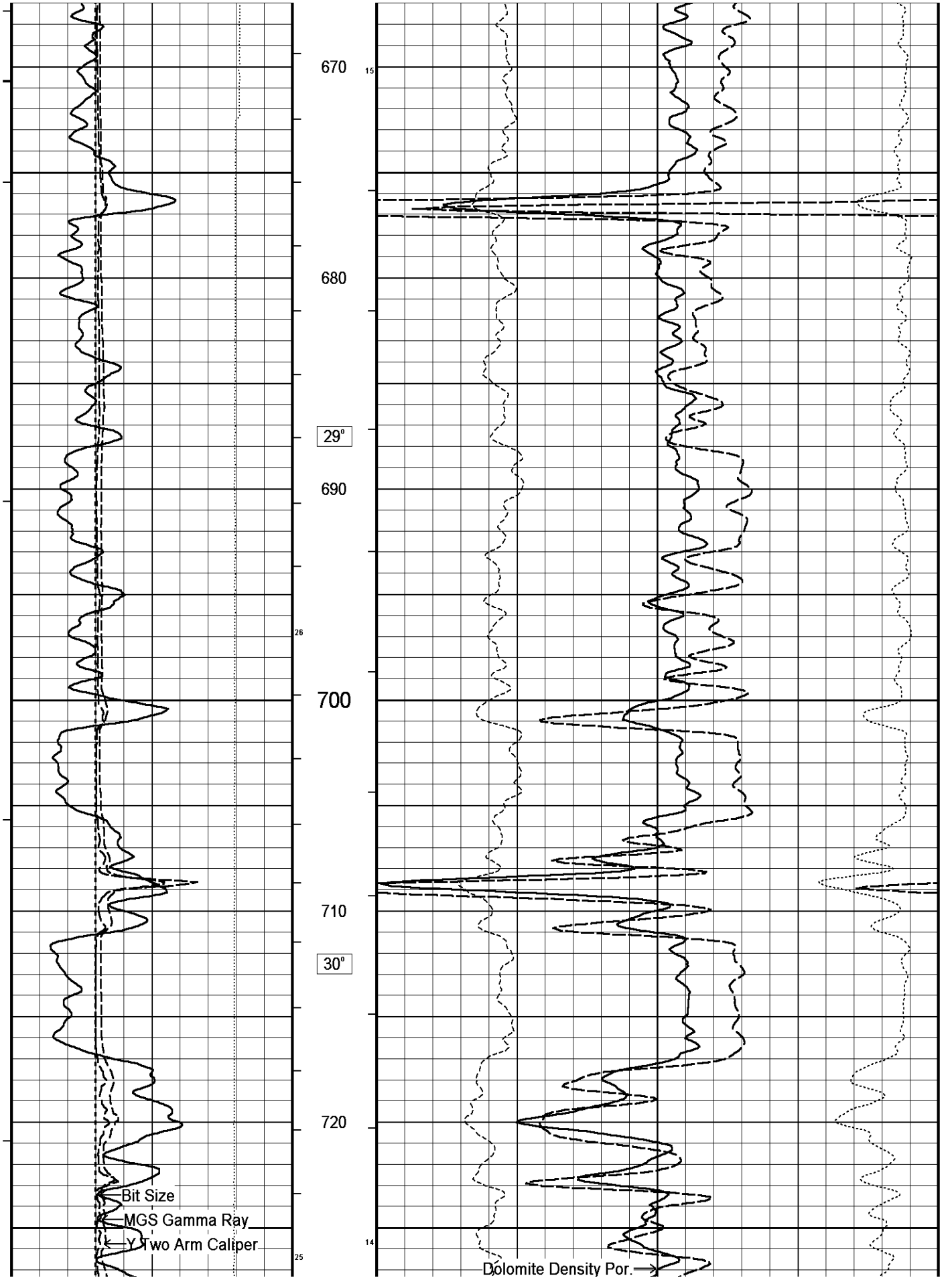

1:240
Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 12-NOV-2007 09:26
Filename: C:\Temp\Weatherford PreView\0\REPEAT.dta
Recorded on 15-FEB-2007 07:26
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
Recorded on 15-FEB-2007 08:46
System Versions: Logged with 7.01.0195 Processed with 8.00.0015 Plotted with 8.01.0091
LIMESTONE REPEAT
SANDSTONE MAINLOG
DOLOMITE MAIN LOG
Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 12-NOV-2007 09:26
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091
Depth in Metres
Timing Marks
every 60.0 sec
Dolomite Neutron Por.
percent
45 30 15 0 -15
Density Caliper
millimetres
125 250 375
Borehole Temp in deg C
Y Two Arm Caliper
millimetres
125 250 375
HVI every 0.1 cu m
Dolomite Density Por.
percent
45 30 15 0 -15
MGS Gamma Ray
API
0 75 150
Annular Integral every 0.1 cu m
Bit Size
millimetres
125 250 375
PE
barns/electron
0 5 10
Density Correction
kg/cubic metre
450 200 -50
DST Uphole Tension
pounds
3000 0
Replay Scale 1:240
420

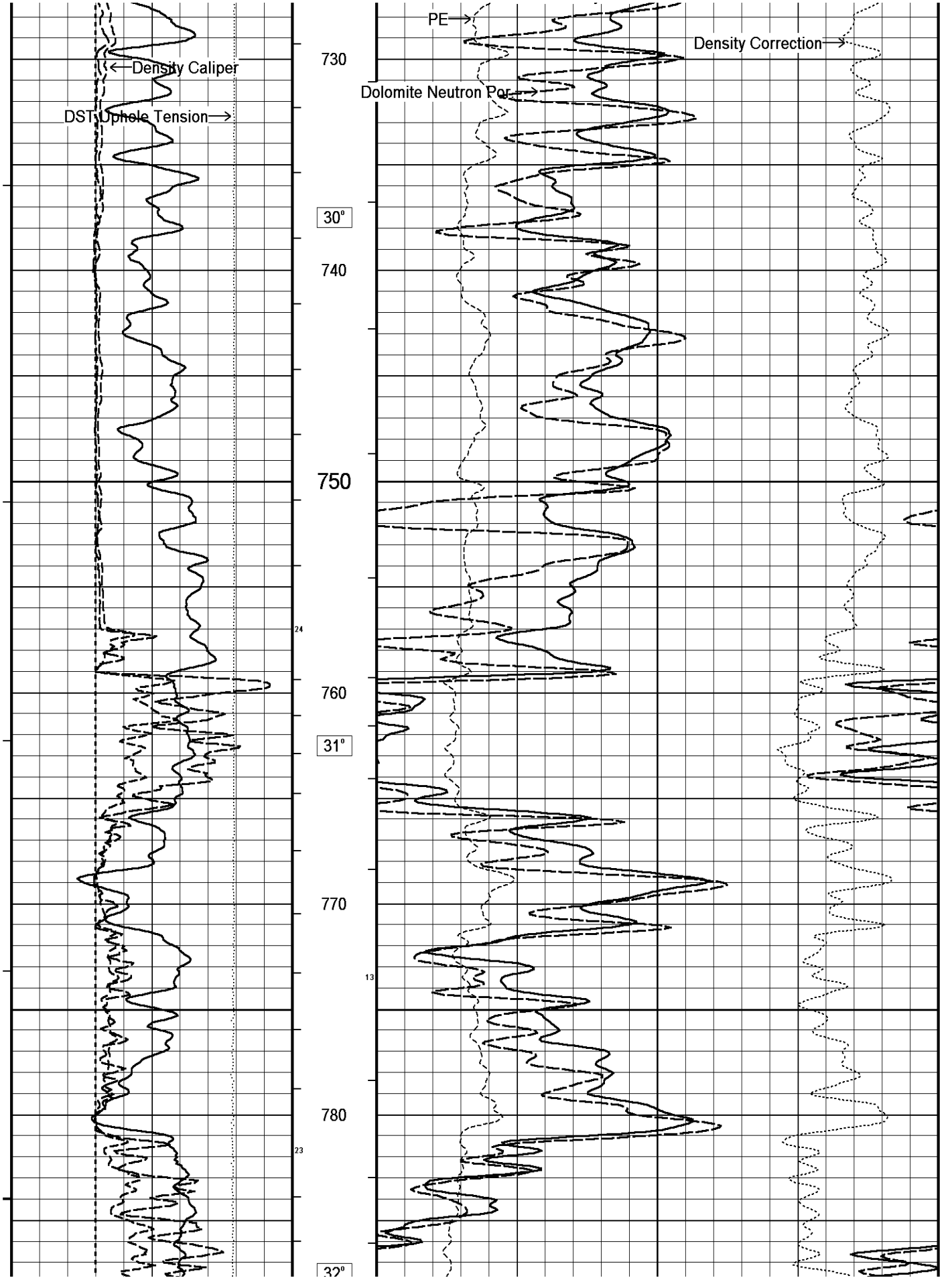

Casing
Shoe
430
37
26°
440
21
450
36
460
26°
35
470
20
480
Bit Size
MGS Gamma Ray
Two Arm Caliper

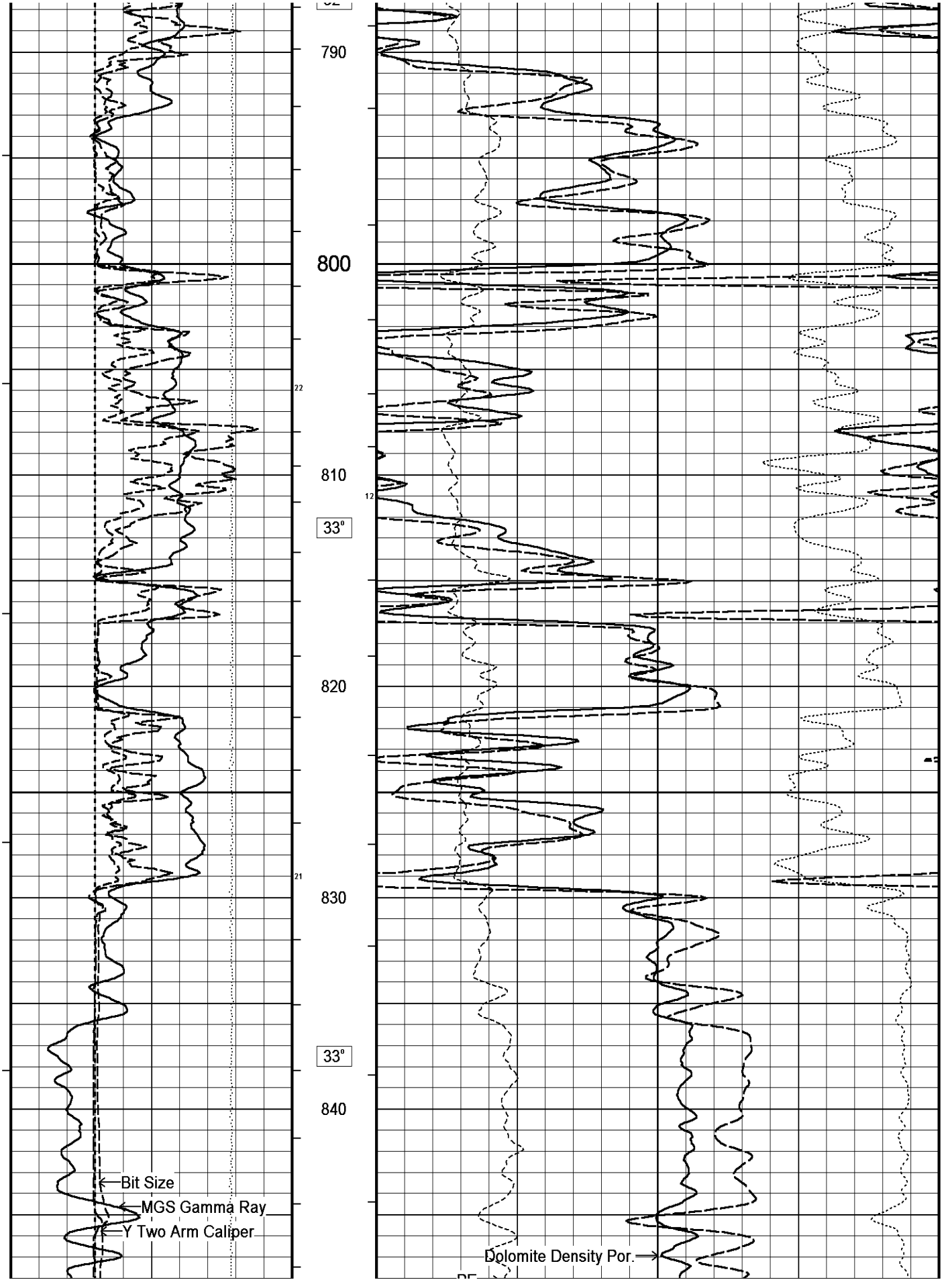

Dolomite Density Por
PE
Density Correction
Density Caliper
Dolomite Neutron Por
DST Uphole Tension
26°
490
500
510
26°
520
530
25°
540

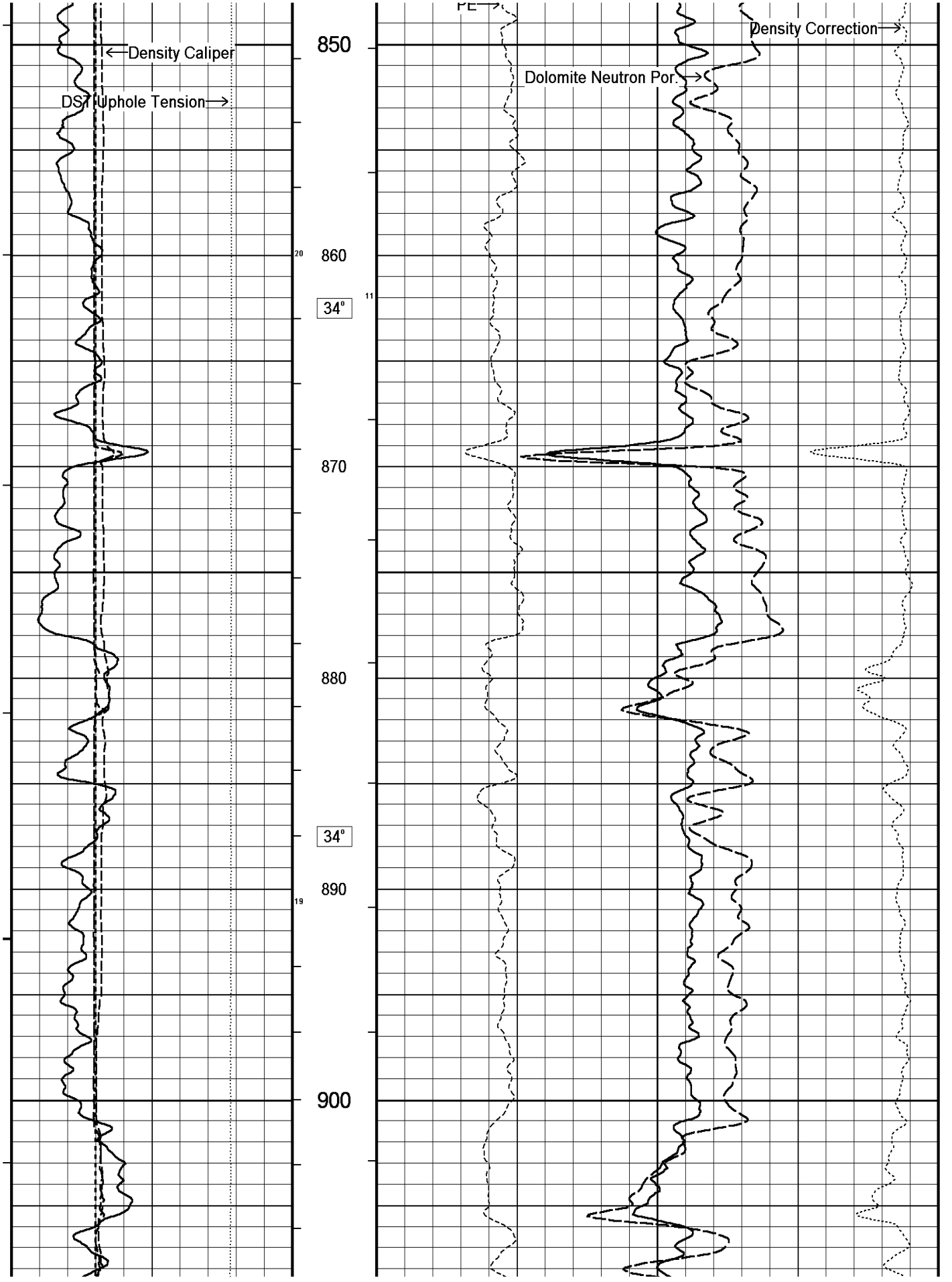

550
560
570
580
590
600
31
25°
30
25°
17
← Bit Size
← MGS Gamma Ray
← Y Two Arm Caliper

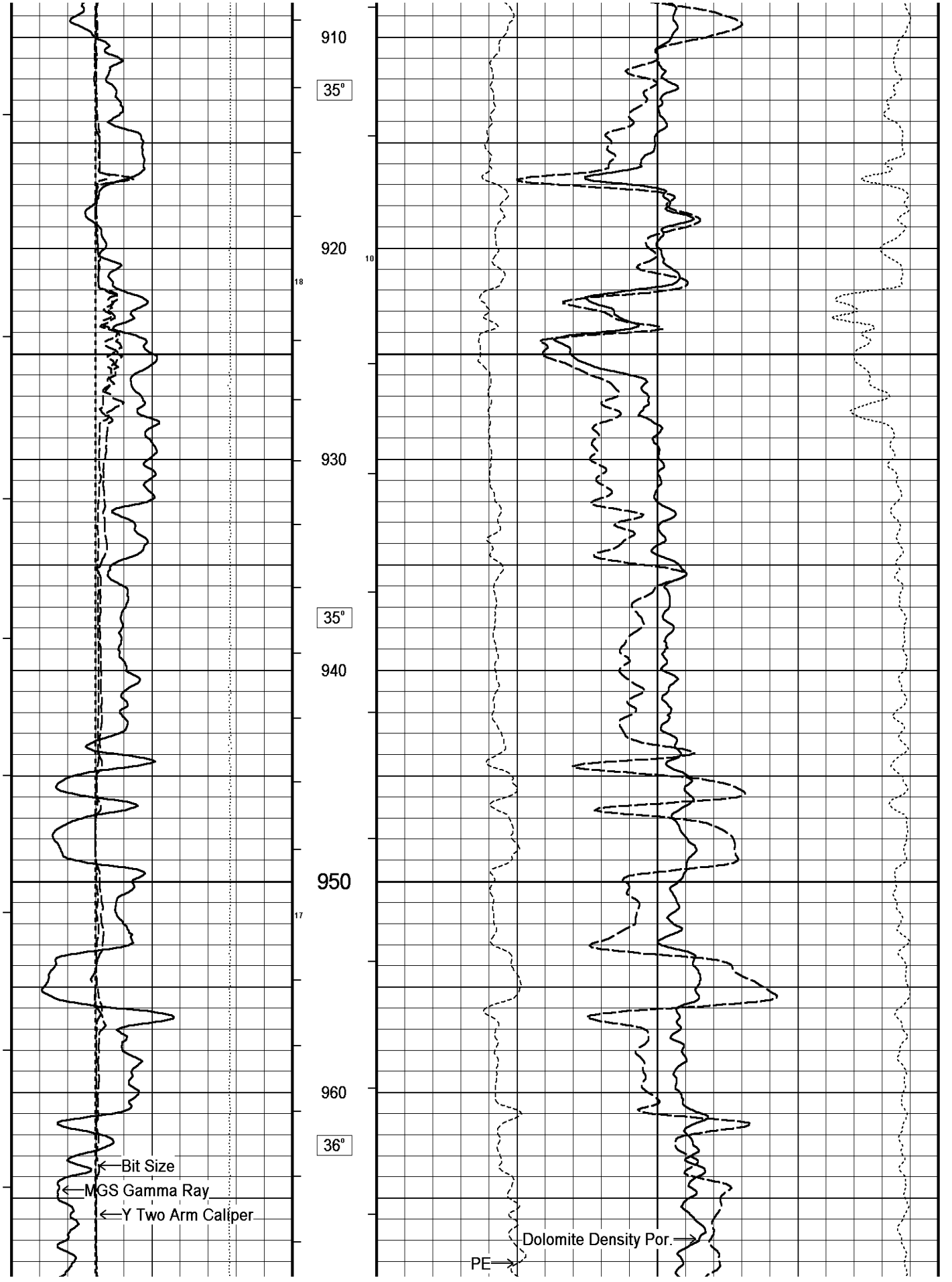

Density Caliper
DST Uphole Tension
29
27
610
620
630
28
640
650
660
29
27
Dolomite Density Por.
PE
Density Correction
Dolomite Neutron Por.
16

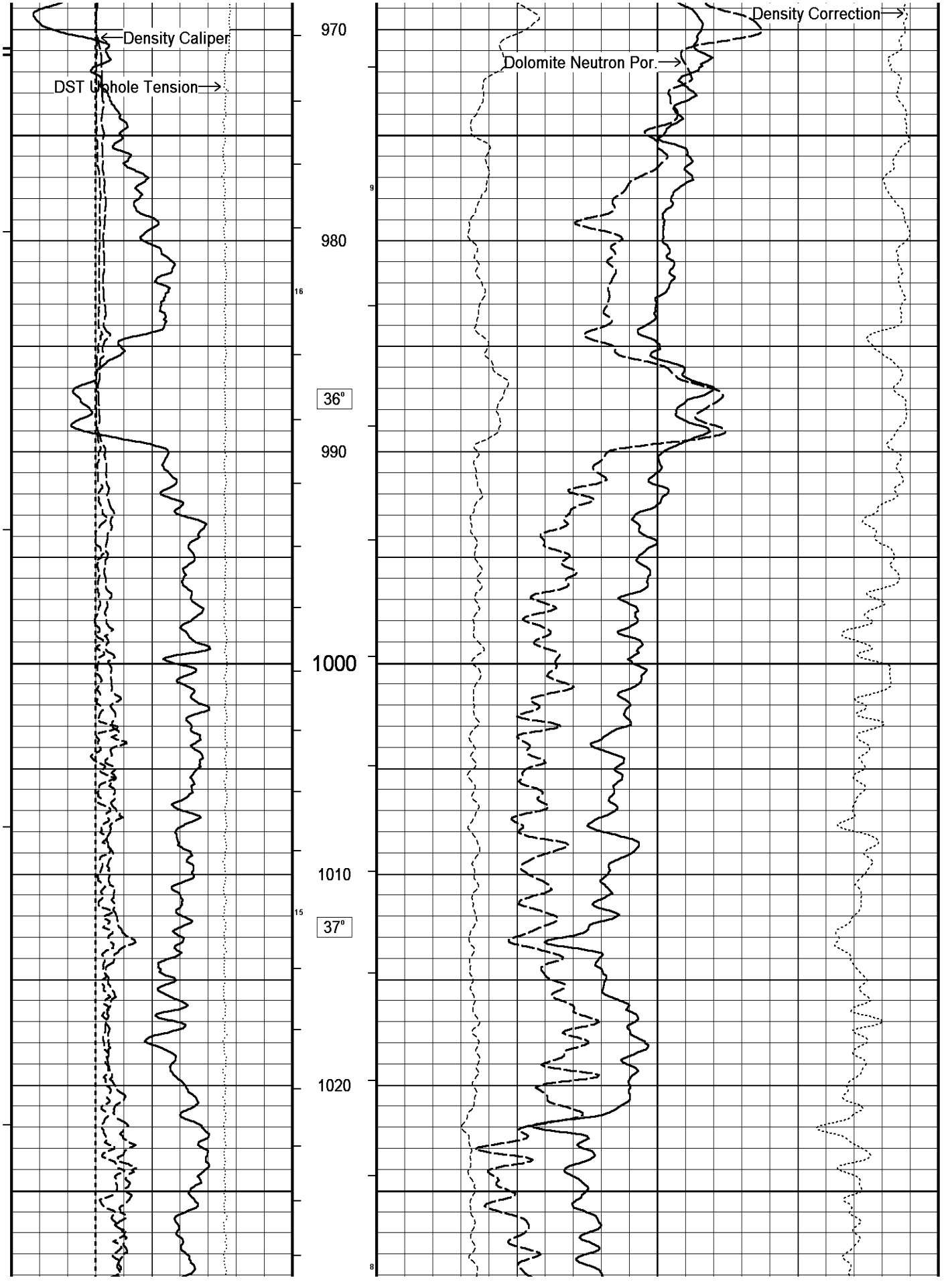

670
680
29°
690
700
710
30°
720
26
25
15
14
Bit Size
MGS Gamma Ray
Two Arm Caliper
Dolomite Density Por.

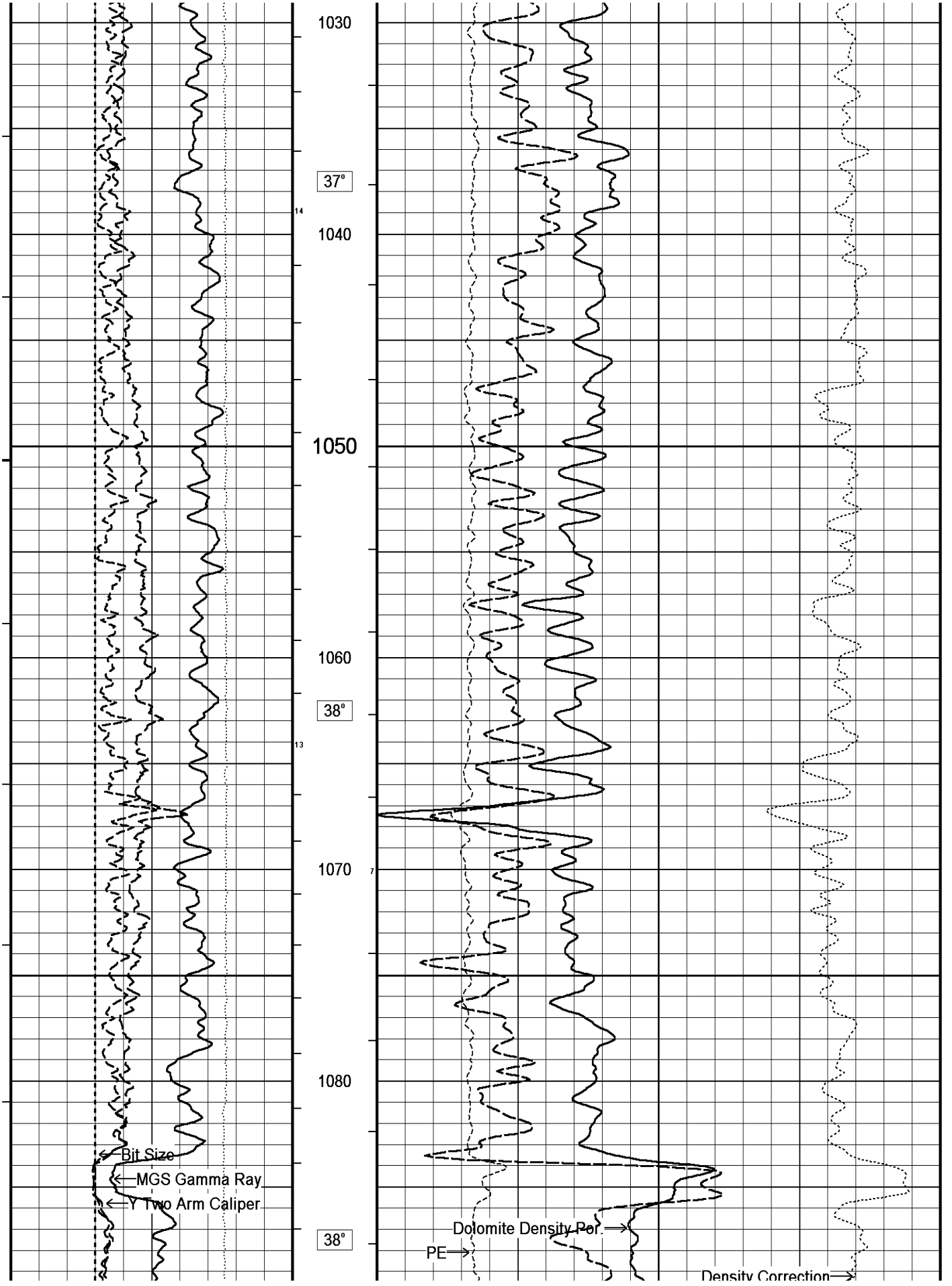

Density Caliper
DST Uphole Tension
PE
Density Correction
Dolomite Neutron Por
730
30°
740
750
760
31°
770
780
32°

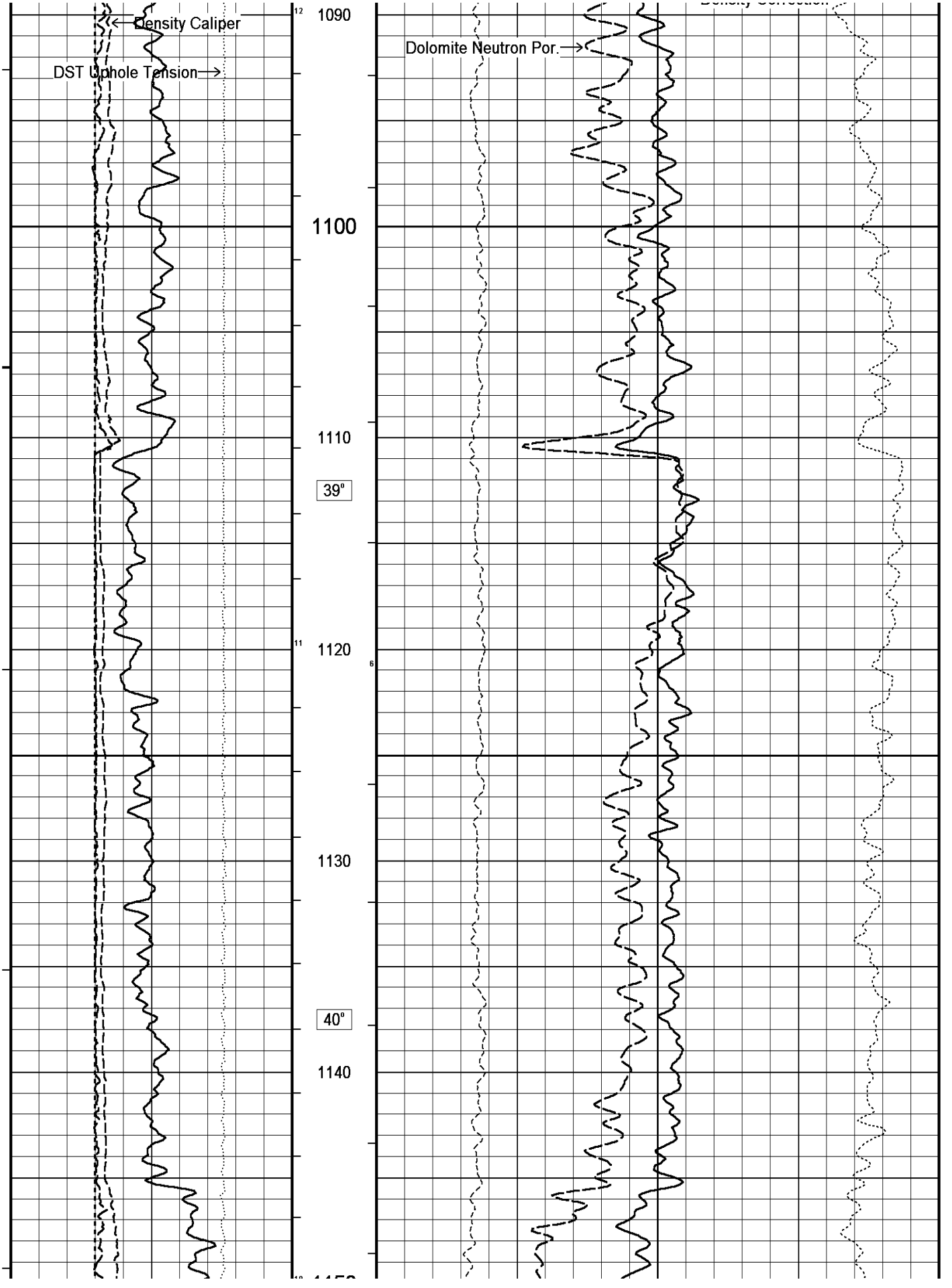

790
800
810
820
830
840
33°
33°
22
21
12
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Dolomite Density Por.

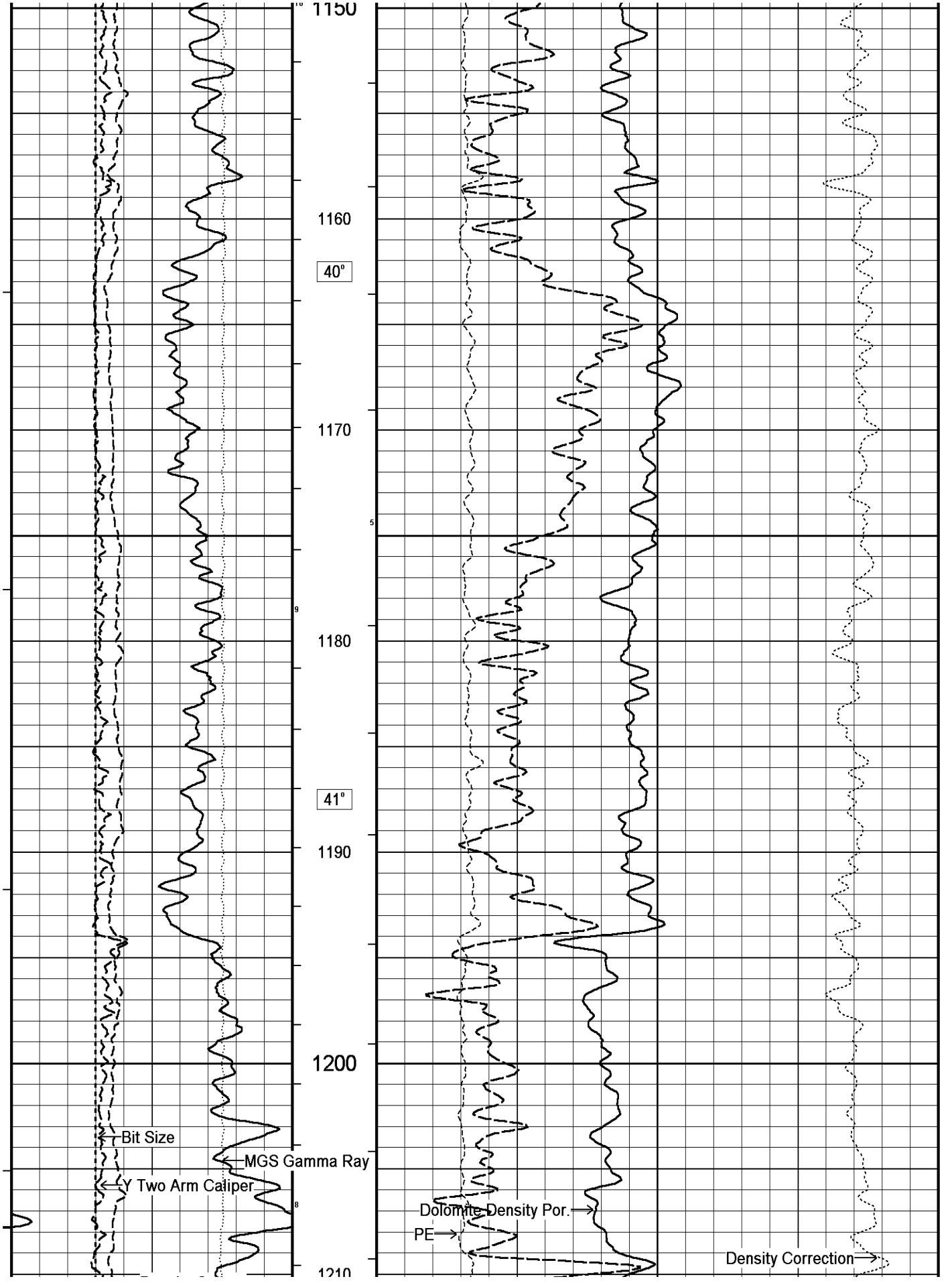

Density Caliper
DS7 Uphole Tension
PE
Dolomite Neutron Por.
Density Correction
850
860
870
880
890
900
20
19
11
34°
34°

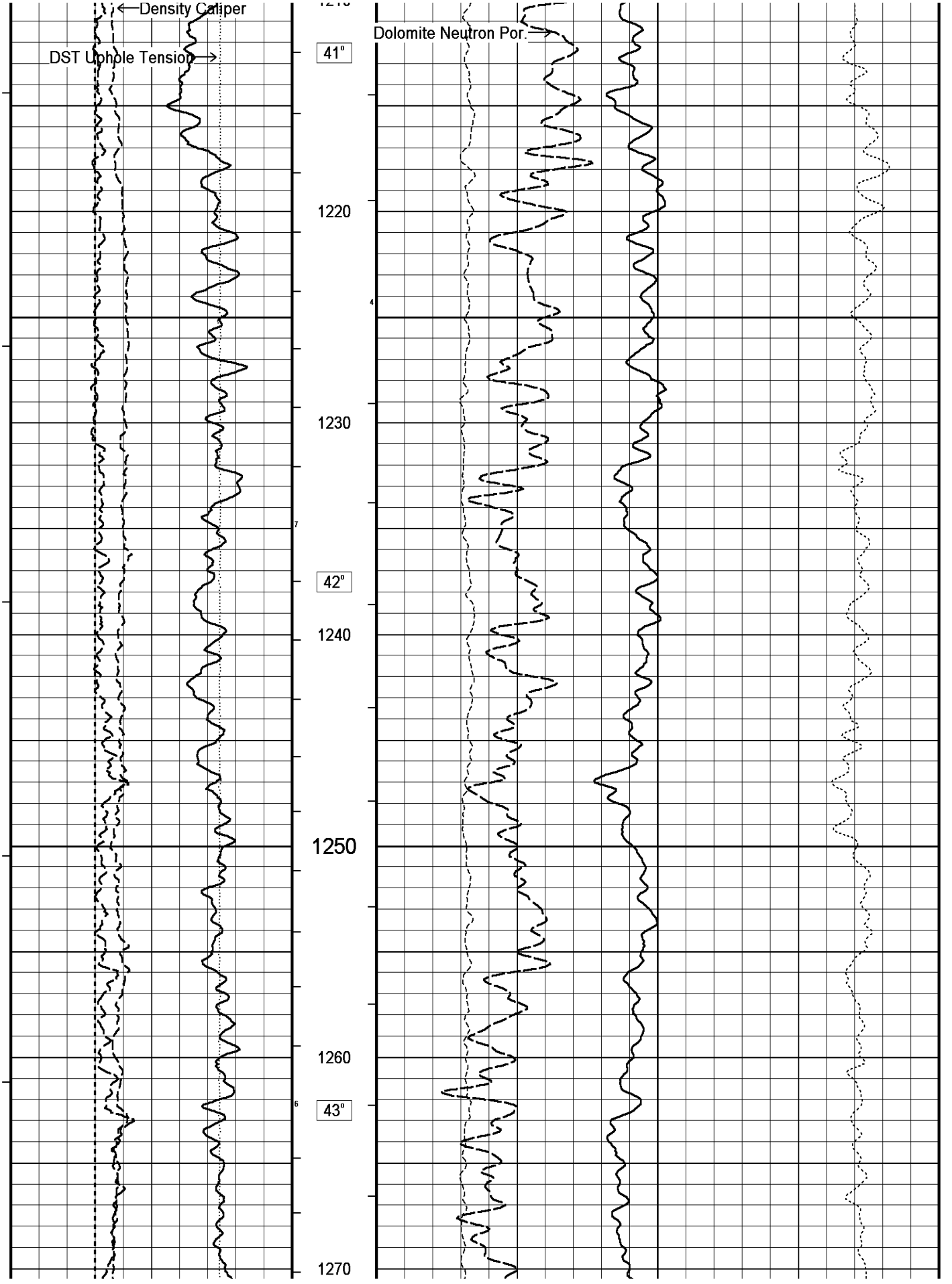

910
35°
920
930
35°
940
950
960
36°
18
17
10
←Bit Size
←MGS Gamma Ray
←Y Two Arm Caliper
PE→
Dolomite Density Por.→

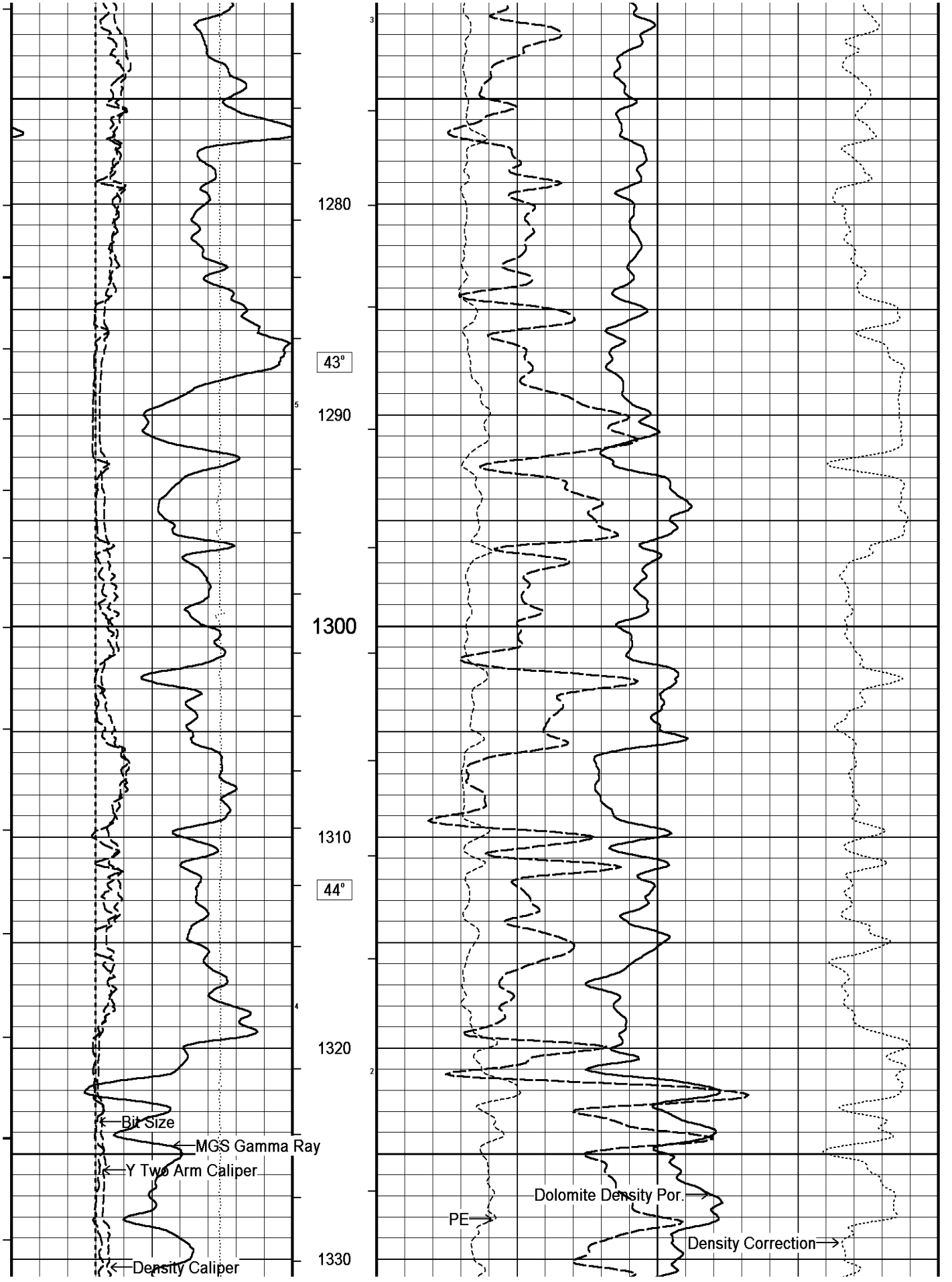

Density Caliper
DST Uphole Tension
970
980
16
36°
990
1000
1010
15
37°
1020
Dolomite Neutron Por.
Density Correction
9
8

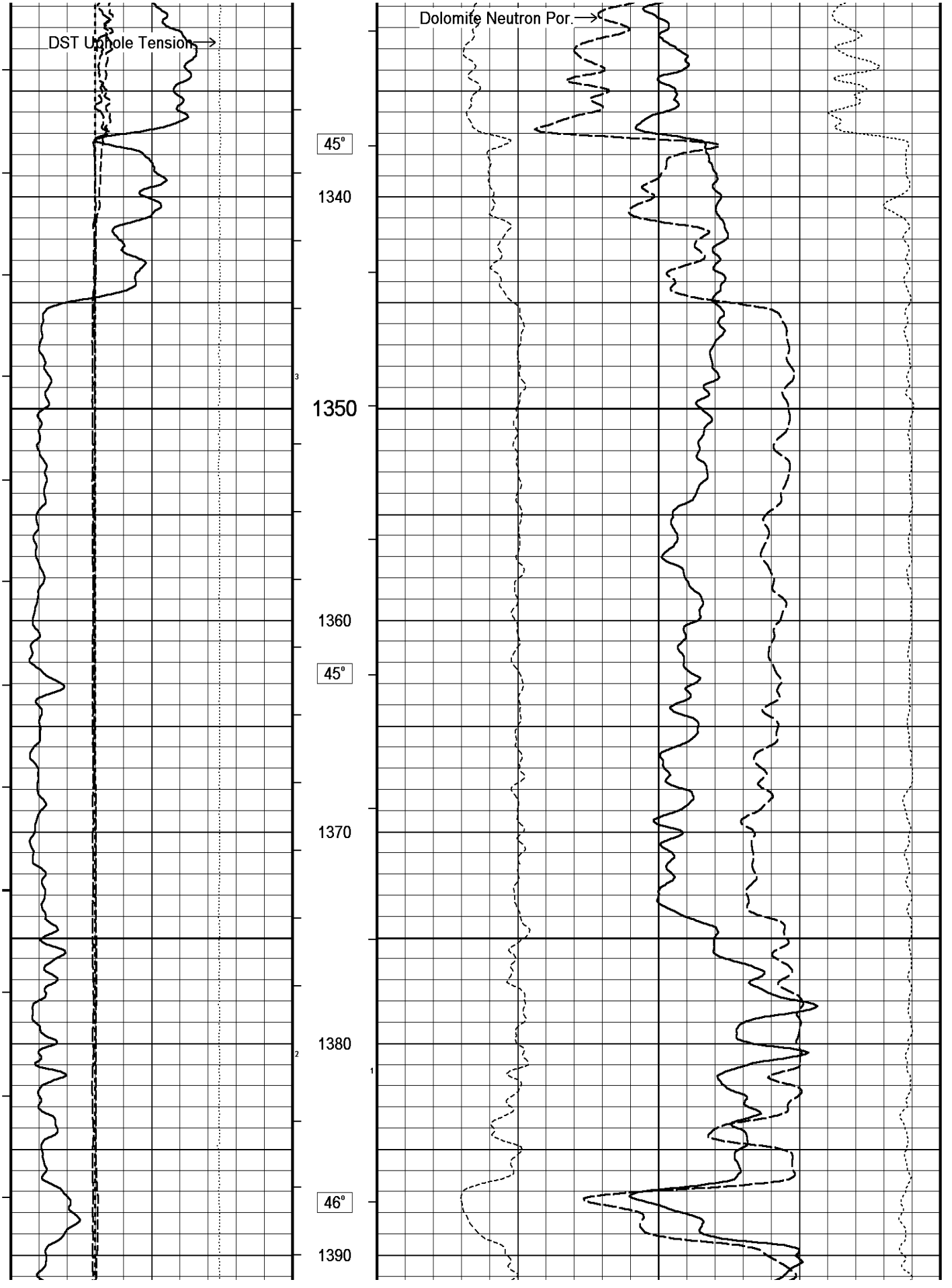

1030
37°
1040
1050
1060
38°
1070
1080
38°
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Dolomite Density Por.
PE
Density Correction

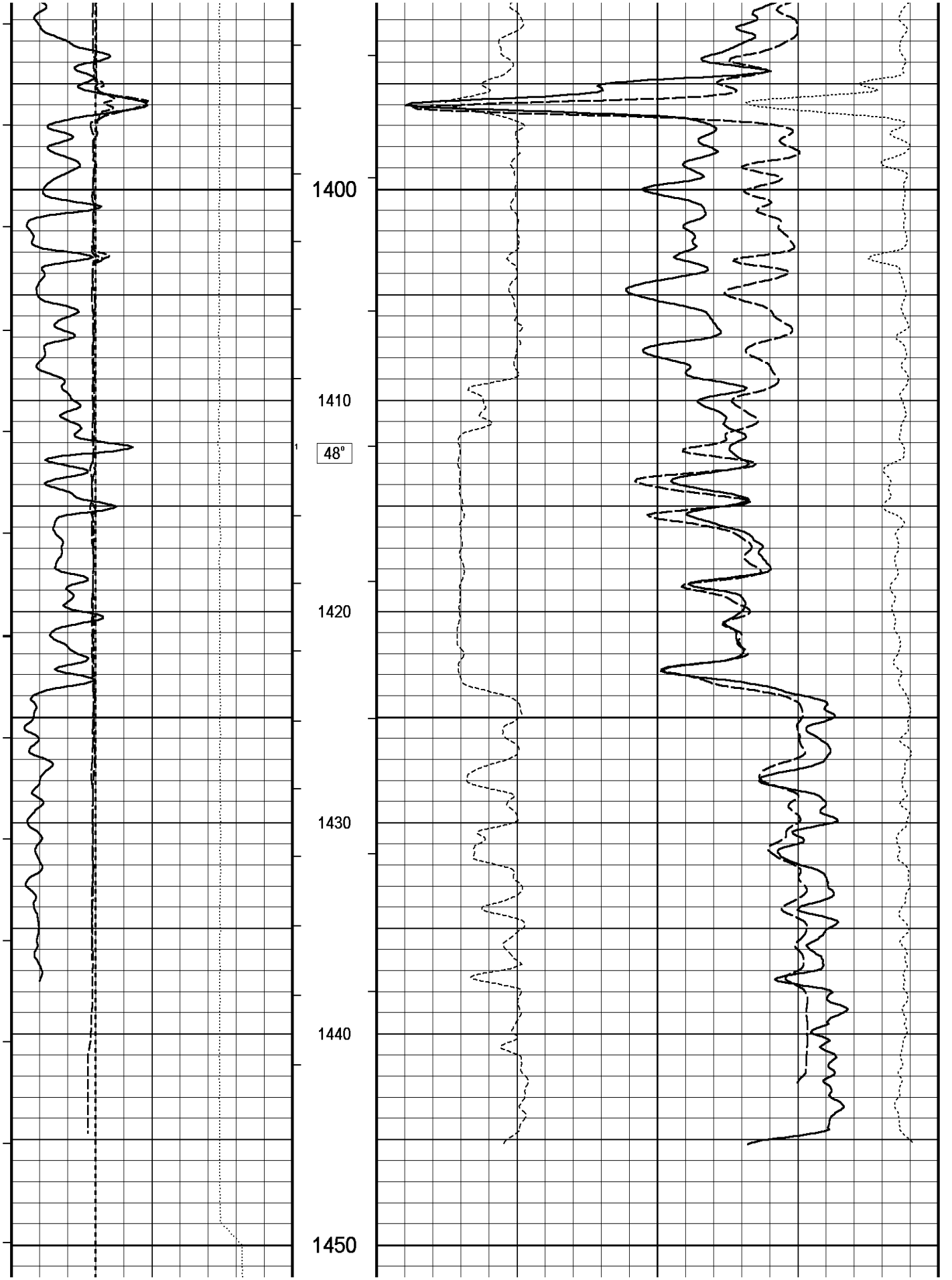

Density Caliper
DST Uphole Tension
Dolomite Neutron Por.
12
11
6
1090
1100
1110
39°
1120
1130
40°
1140

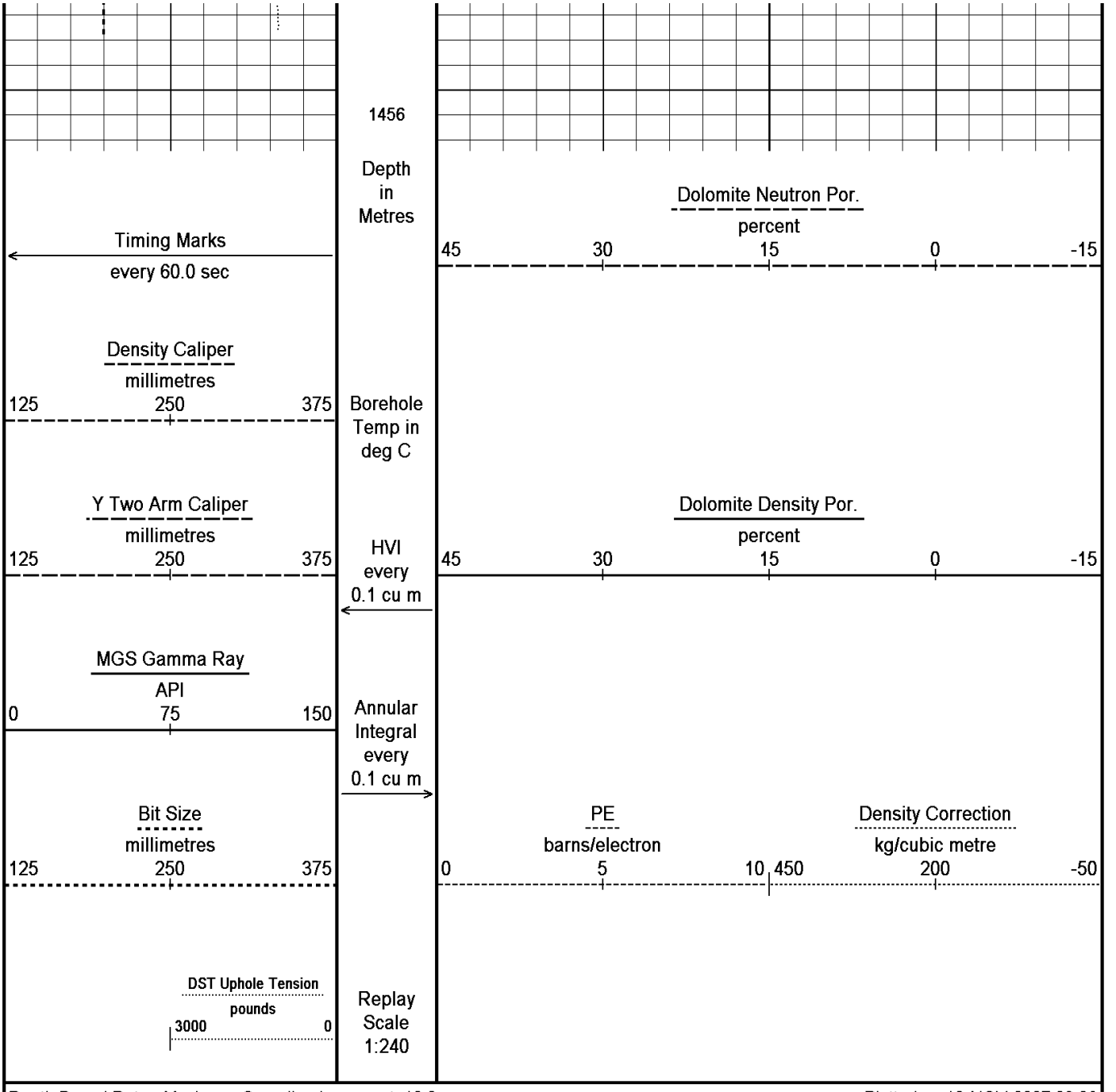

1150
1160
40°
1170
1180
41°
1190
1200
1210
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Dolomite Density Por.
PE
Density Correction


Density Caliper
DST Uphole Tension
Dolomite Neutron Por.
41°
1220
1230
42°
1240
1250
1260
43°
1270


1280
43°
1290
1300
1310
44°
1320
1330
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
PE
Dolomite Density Por.
Density Correction


DST Uphole Tension
Dolomite Neutron Por.
45°
1340
1350
1360
45°
1370
1380
46°
1390


1400
1410
48°
1420
1430
1440
1450

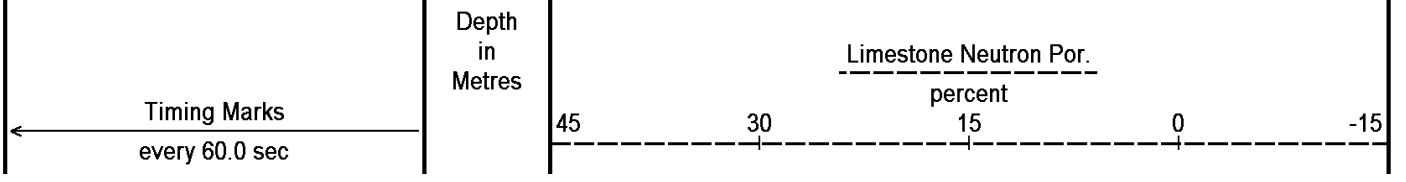


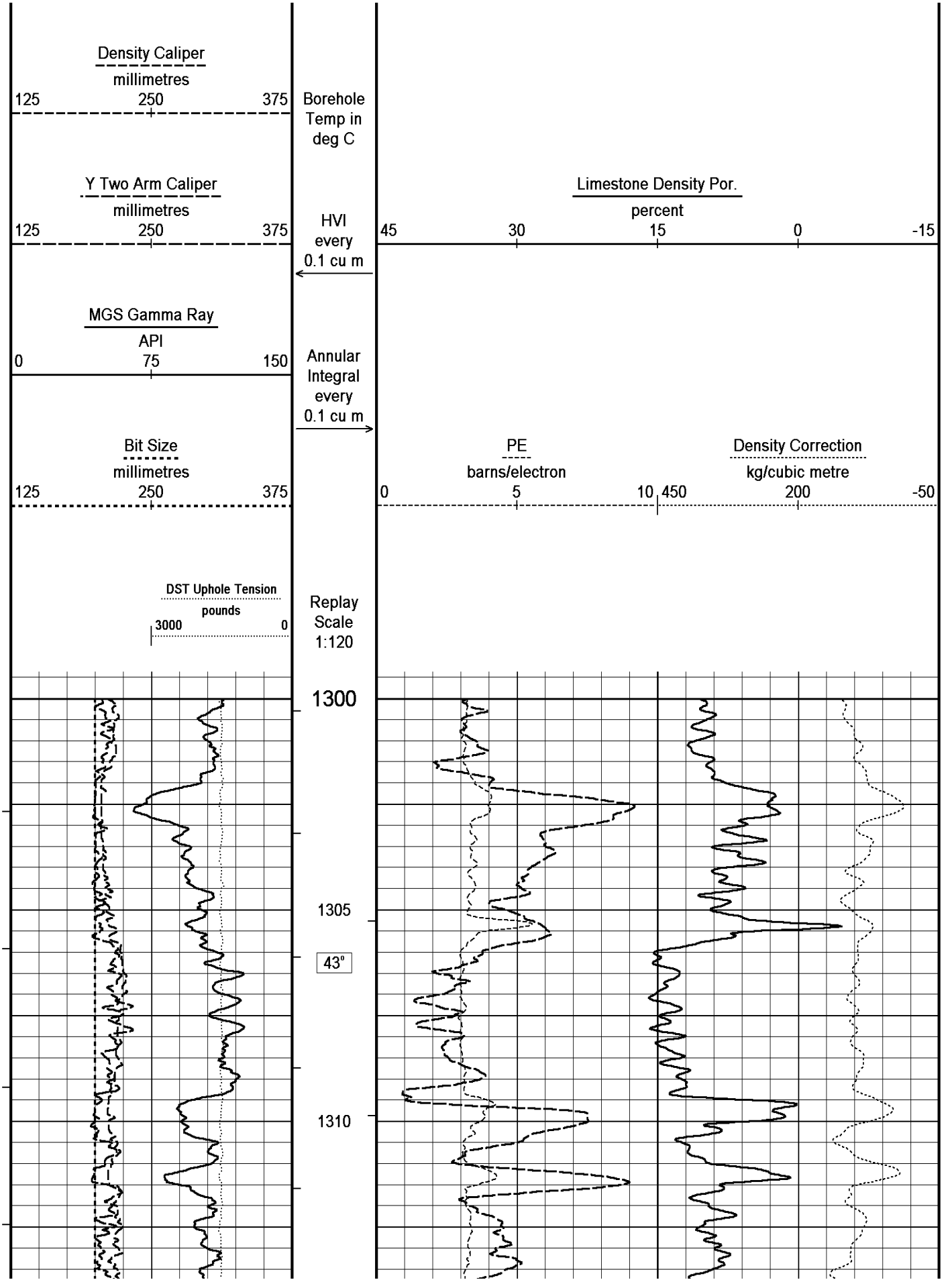
Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 12-NOV-2007 09:26
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta — Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

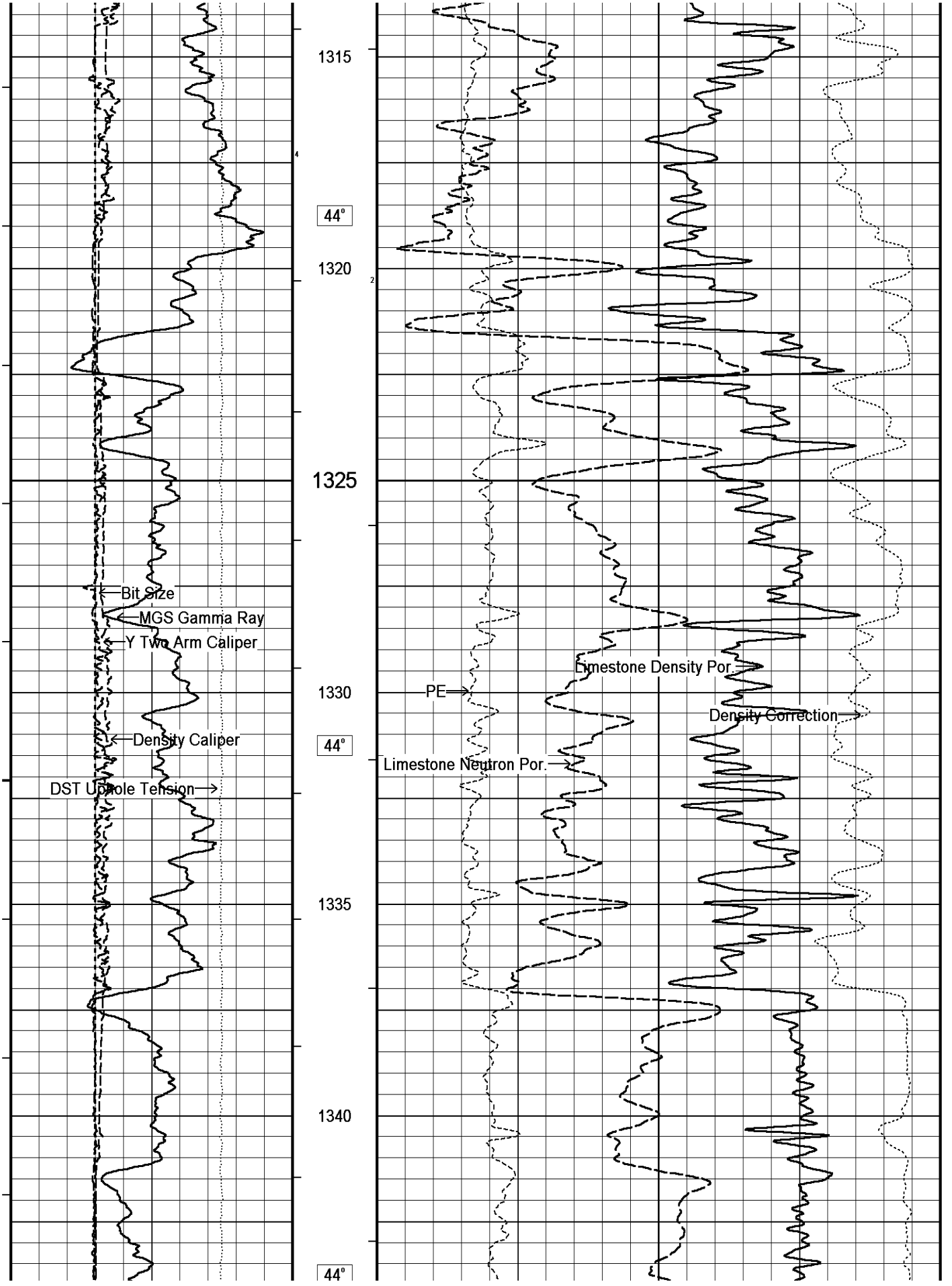
DOLOMITE MAIN LOG

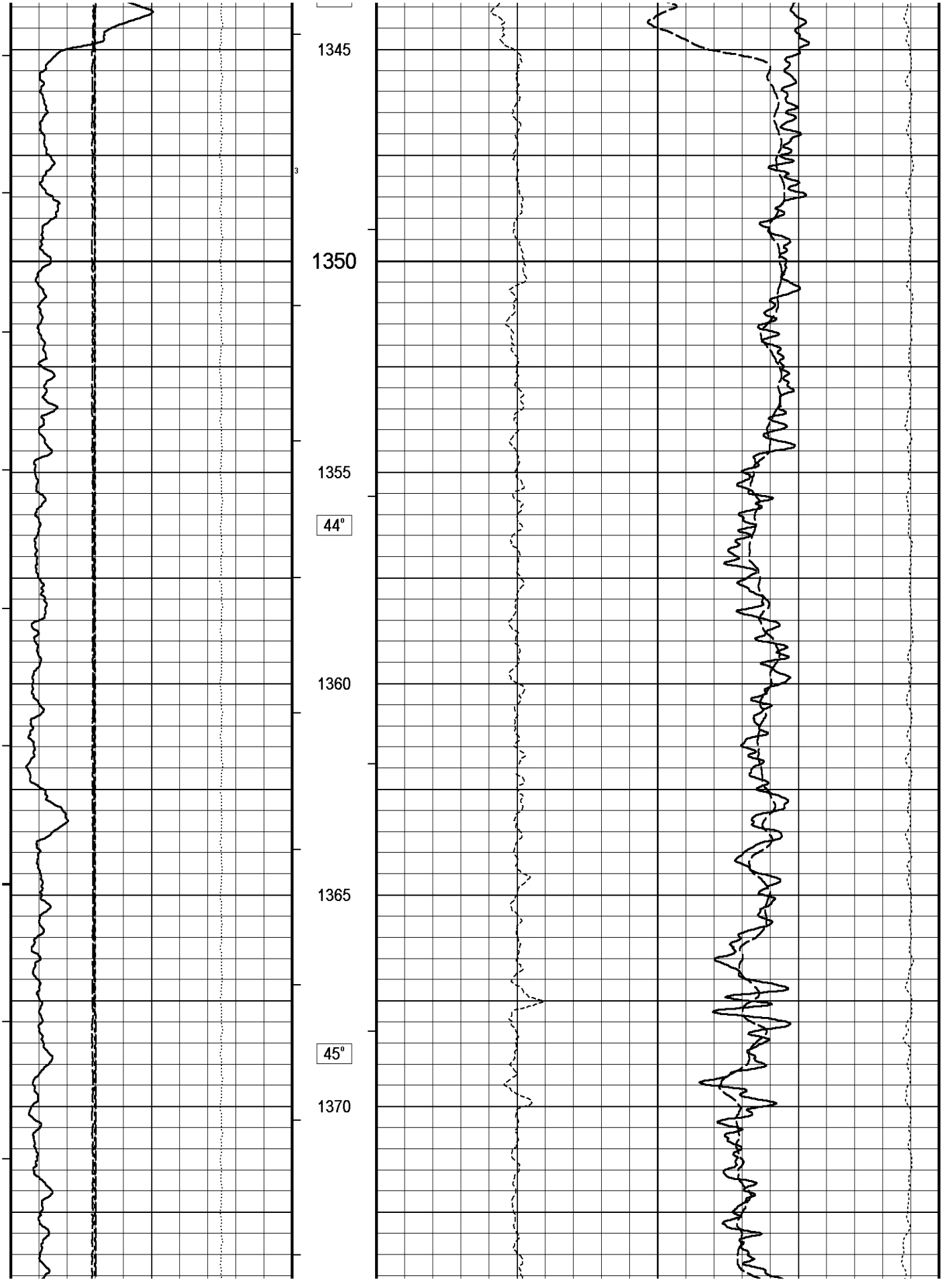
LIMESTONE HIGH RESOLUTION 1:120

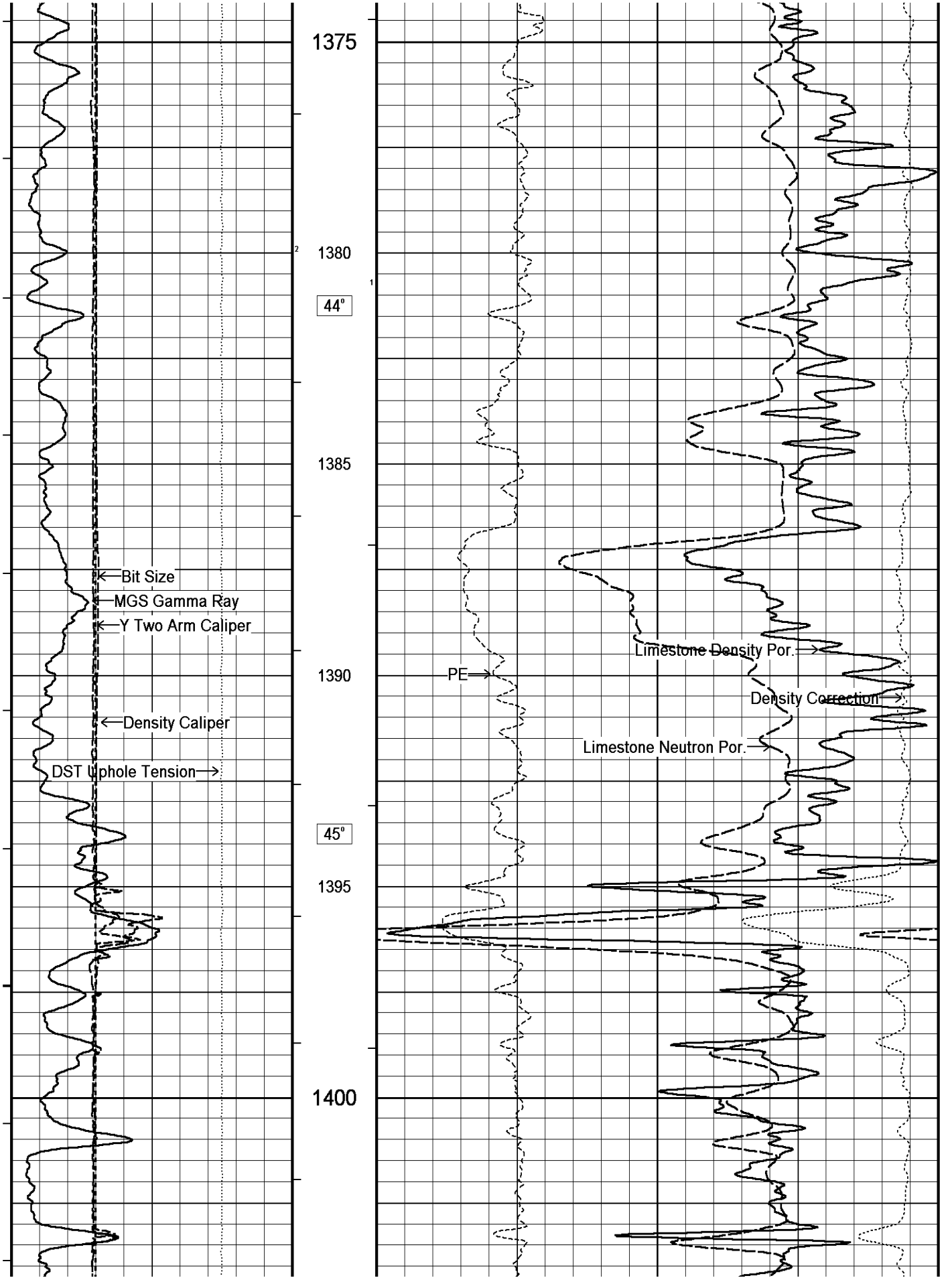
Depth Based Data - Maximum Sampling Increment 2.5cm — Plotted on 12-NOV-2007 09:26
Filename: C:\Temp\Weatherford PreView\0\HIGH RES.dta — Recorded on 15-FEB-2007 07:26
System Versions: Logged with 7.01.0195 Processed with 8.00.0015 Plotted with 8.01.0091

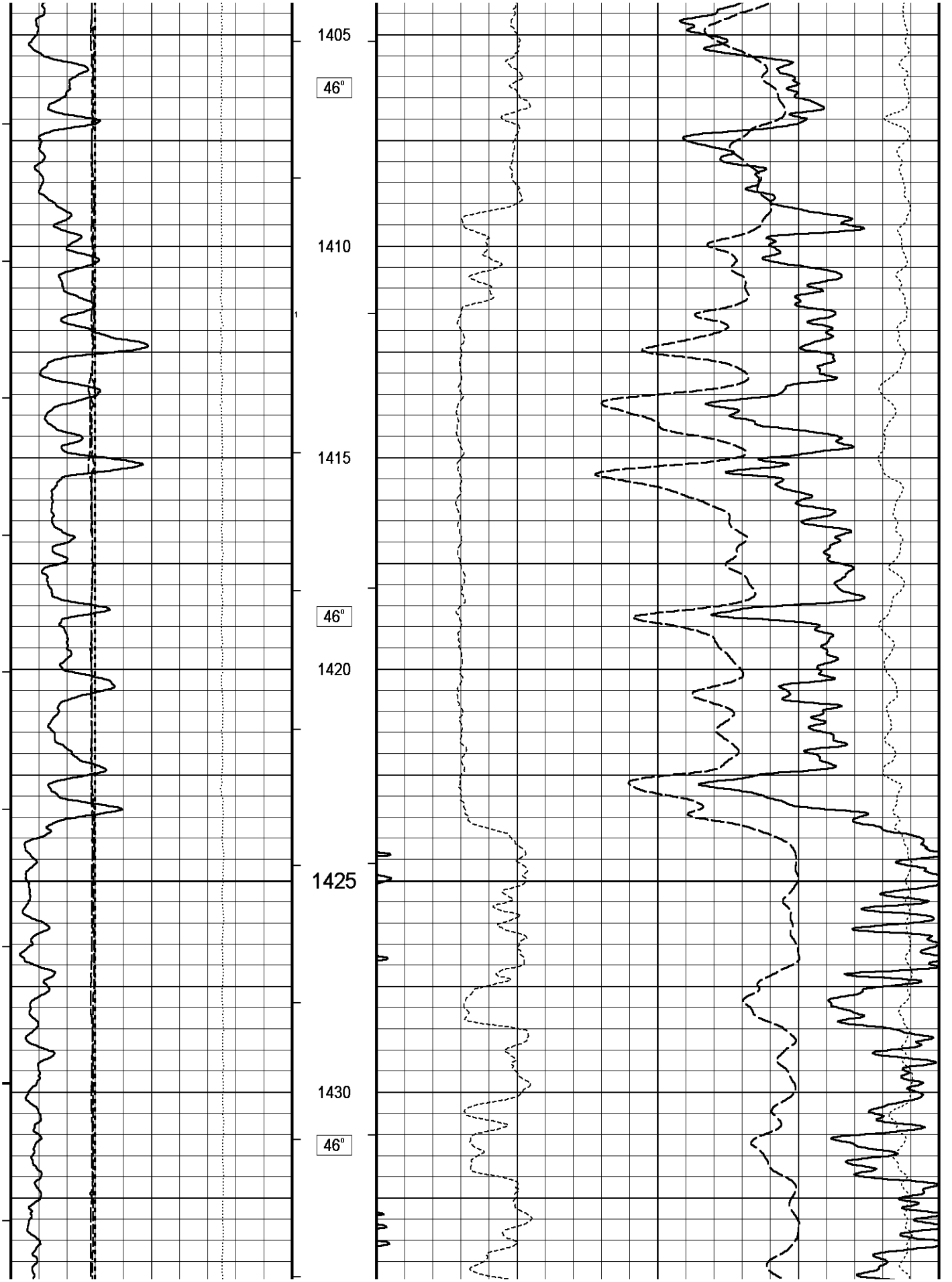


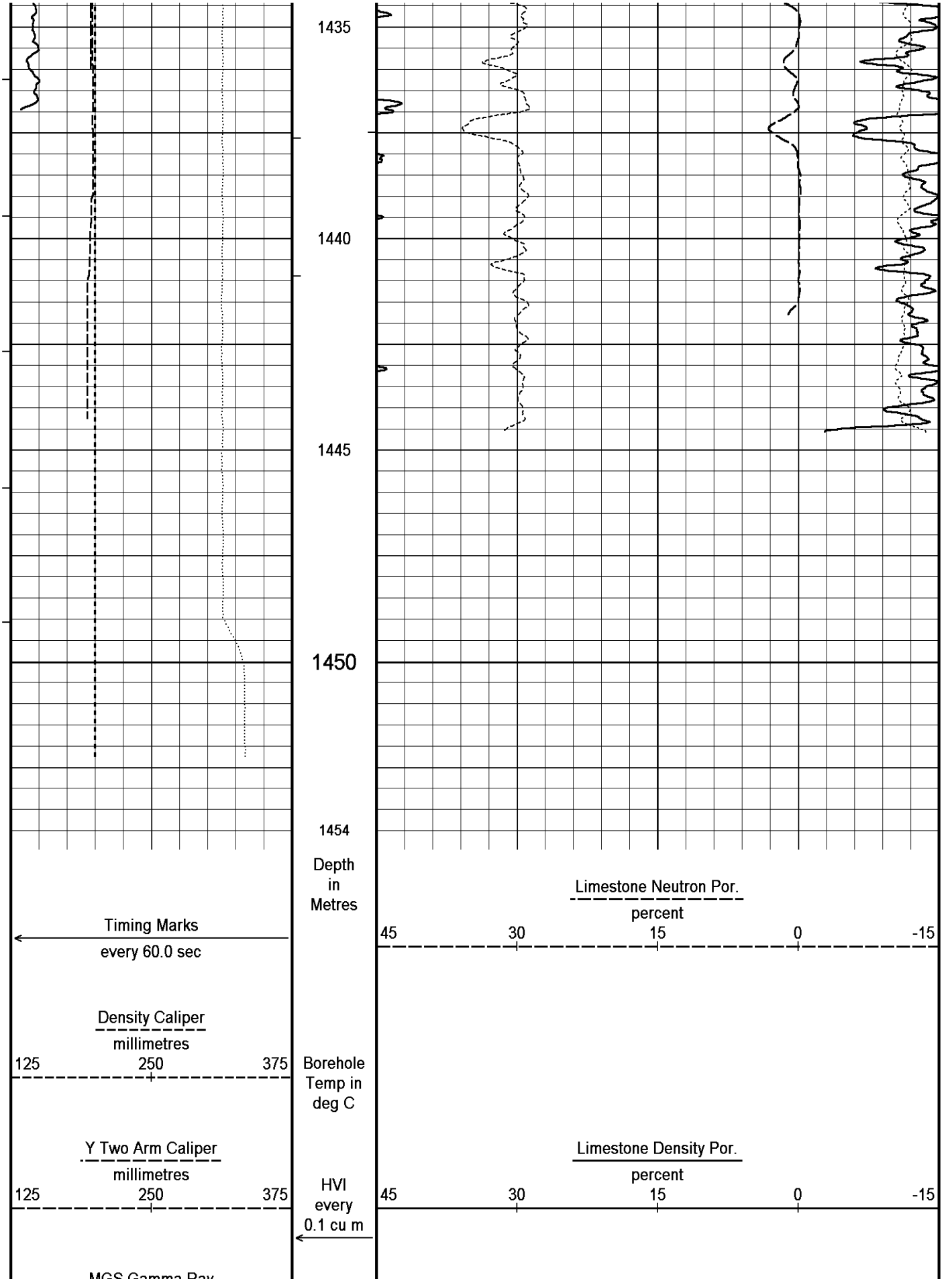

Density Caliper
millimetres
125
250
375
Borehole Temp in deg C
Y Two Arm Caliper
millimetres
125
250
375
HVI every 0.1 cu m
Limestone Density Por.
percent
45
30
15
0
-15
MGS Gamma Ray
API
0
75
150
Annular Integral every 0.1 cu m
Bit Size
millimetres
125
250
375
PE
barns/electron
0
5
10
Density Correction
kg/cubic metre
450
200
-50
DST Uphole Tension
pounds
3000
0
Replay Scale 1:120
1300
1305
43°
1310

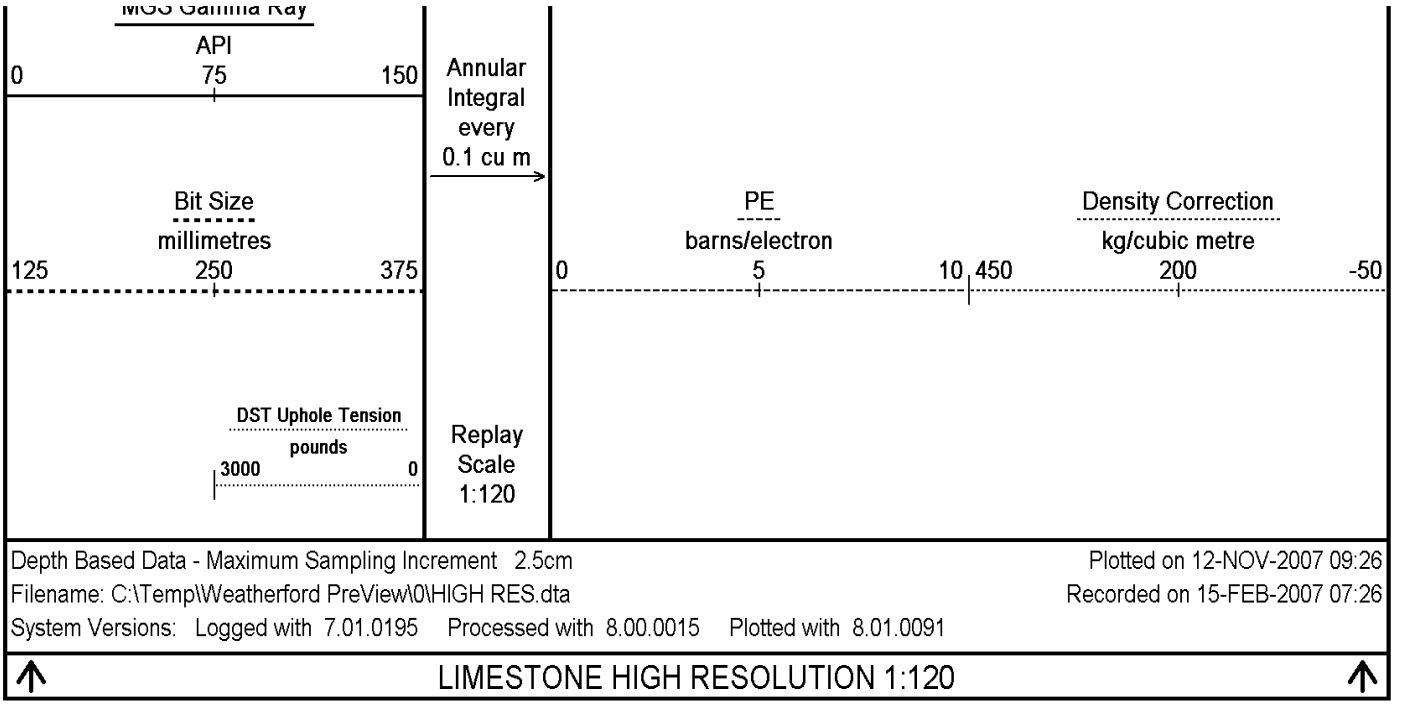

1315
44°
1320
1325
1330
44°
1335
1340
44°
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
PE
Limestone Density Por.
Density Correction
Limestone Neutron Por.


1345
1350
1355
44°
1360
1365
45°
1370


1375
1380
44°
1385
1390
45°
1395
1400
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
PE
Limestone Density Por.
Density Correction
Limestone Neutron Por.


1405
46°
1410
1415
46°
1420
1425
1430
46°


1435
1440
1445
1450
1454
Depth in Metres
Limestone Neutron Por.
percent
45
30
15
0
-15
Timing Marks
every 60.0 sec
Density Caliper
millimetres
125
250
375
Borehole Temp in deg C
Y Two Arm Caliper
millimetres
125
250
375
HVI every 0.1 cu m
Limestone Density Por.
percent
45
30
15
0
-15
MGS Gamma Ray

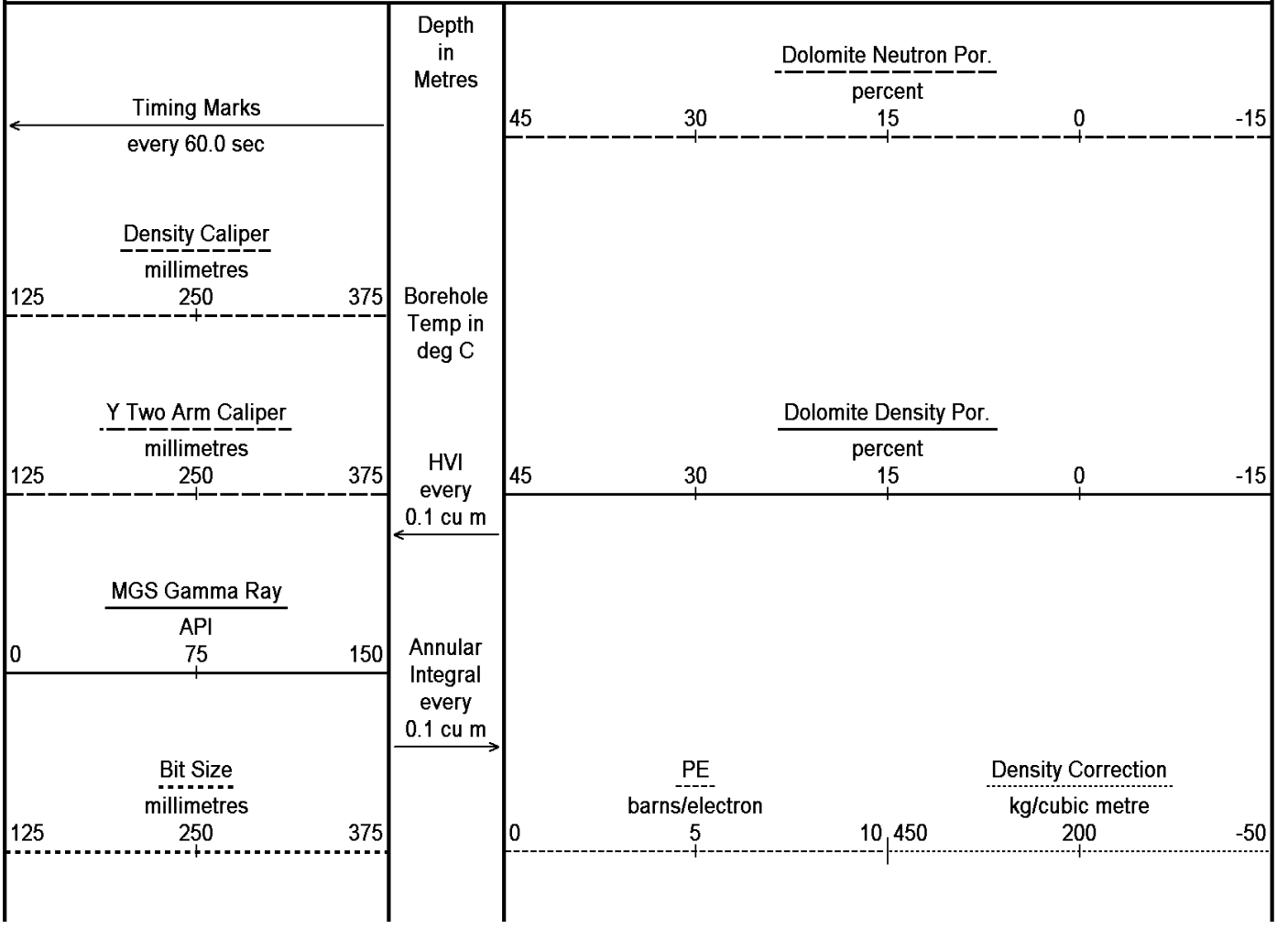


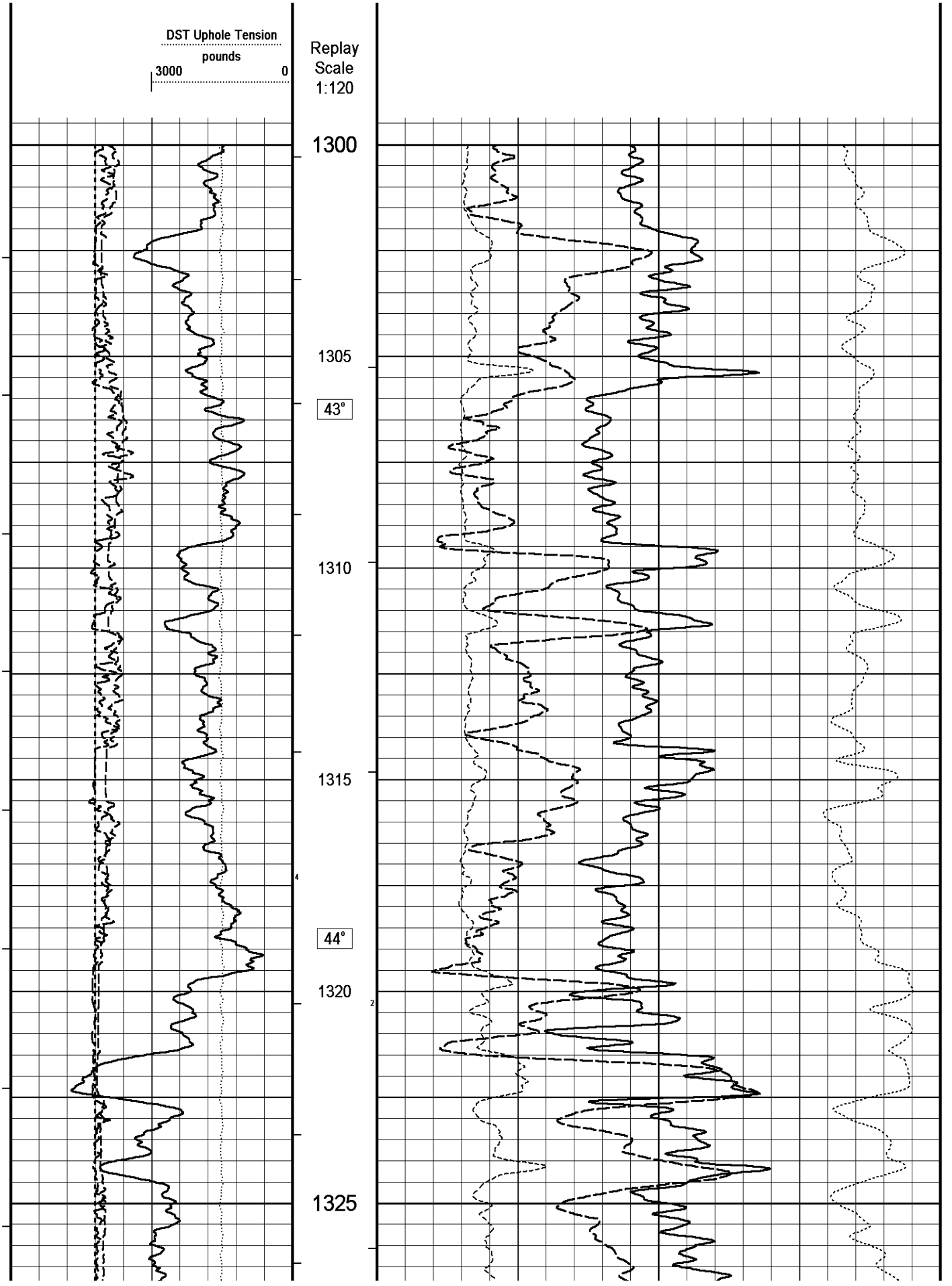
Depth Based Data - Maximum Sampling Increment 2.5cm — Plotted on 12-NOV-2007 09:26
Filename: C:\Temp\Weatherford PreView\0\HIGH RES.dta — Recorded on 15-FEB-2007 07:26
System Versions: Logged with 7.01.0195 Processed with 8.00.0015 Plotted with 8.01.0091

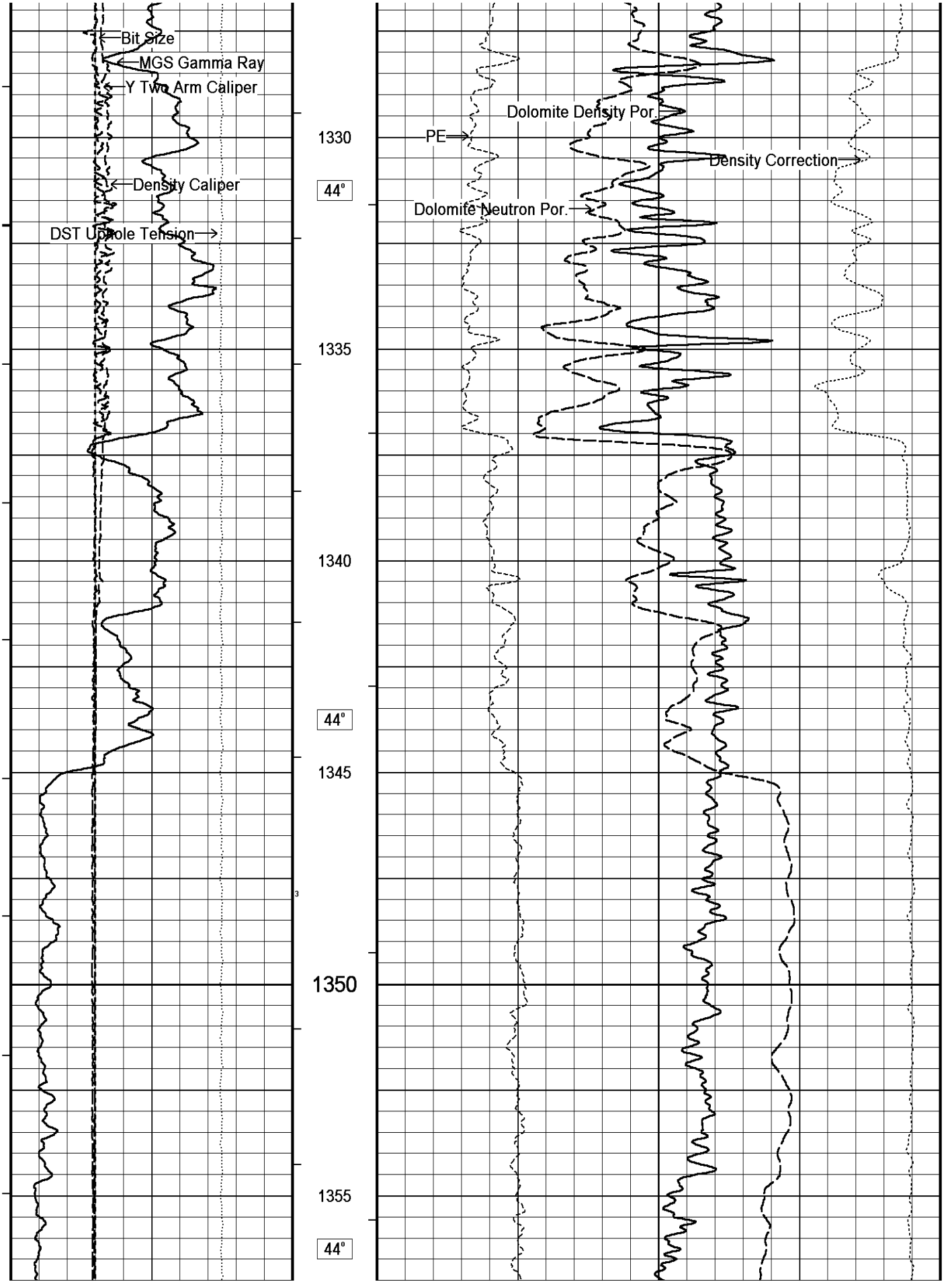
LIMESTONE HIGH RESOLUTION 1:120

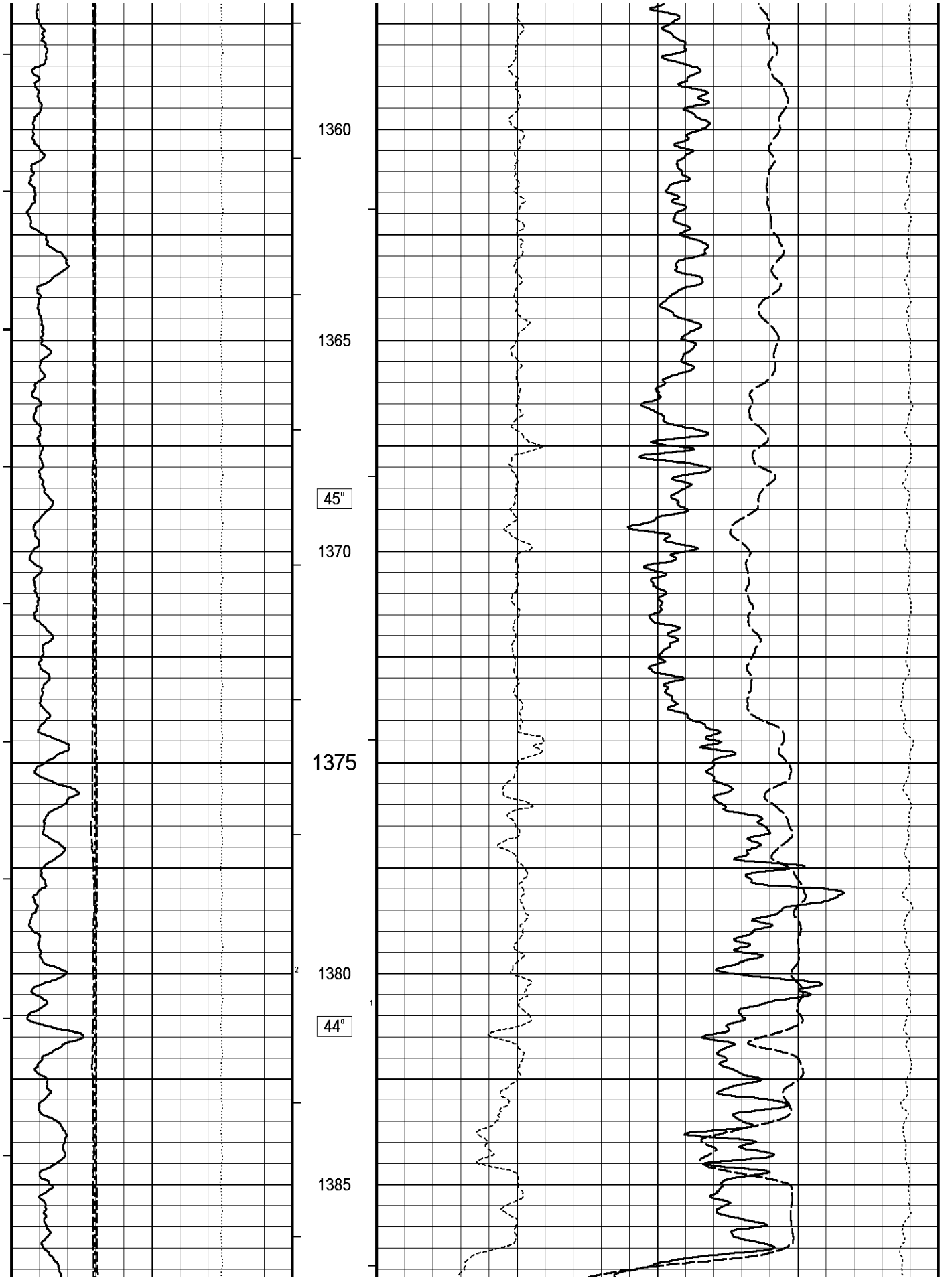
DOLOMITE HIGH RESOLUTION 1:120

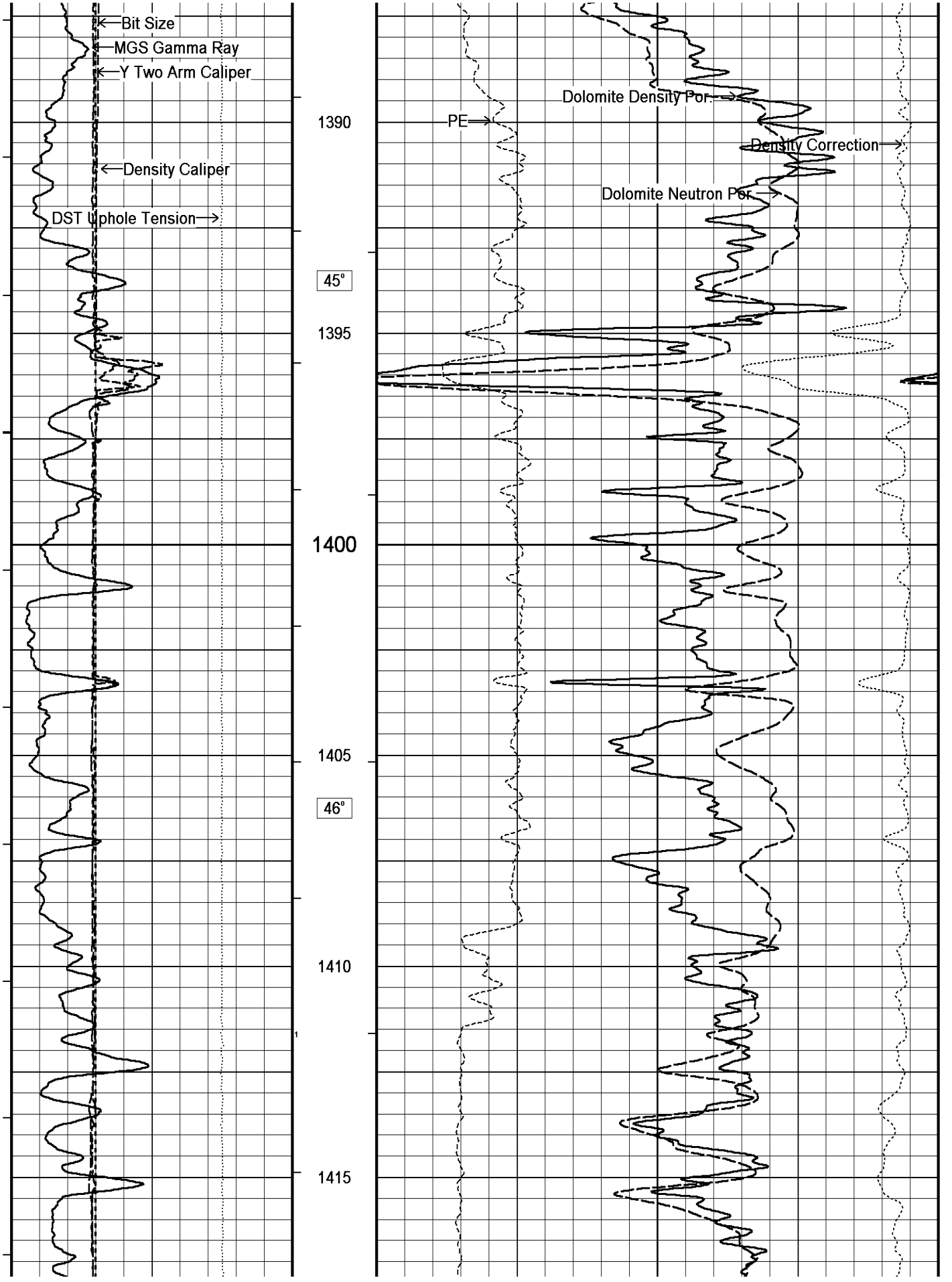
Depth based Data - Maximum Sampling Increment 2.5cm — Plotted on 12-NOV-2007 09:26
Filename: C:\Temp\Weatherford PreView\0\HIGH RES.dta — Recorded on 15-FEB-2007 07:26
System Versions: Logged with 7.01.0195 Processed with 8.00.0015 Plotted with 8.01.0091

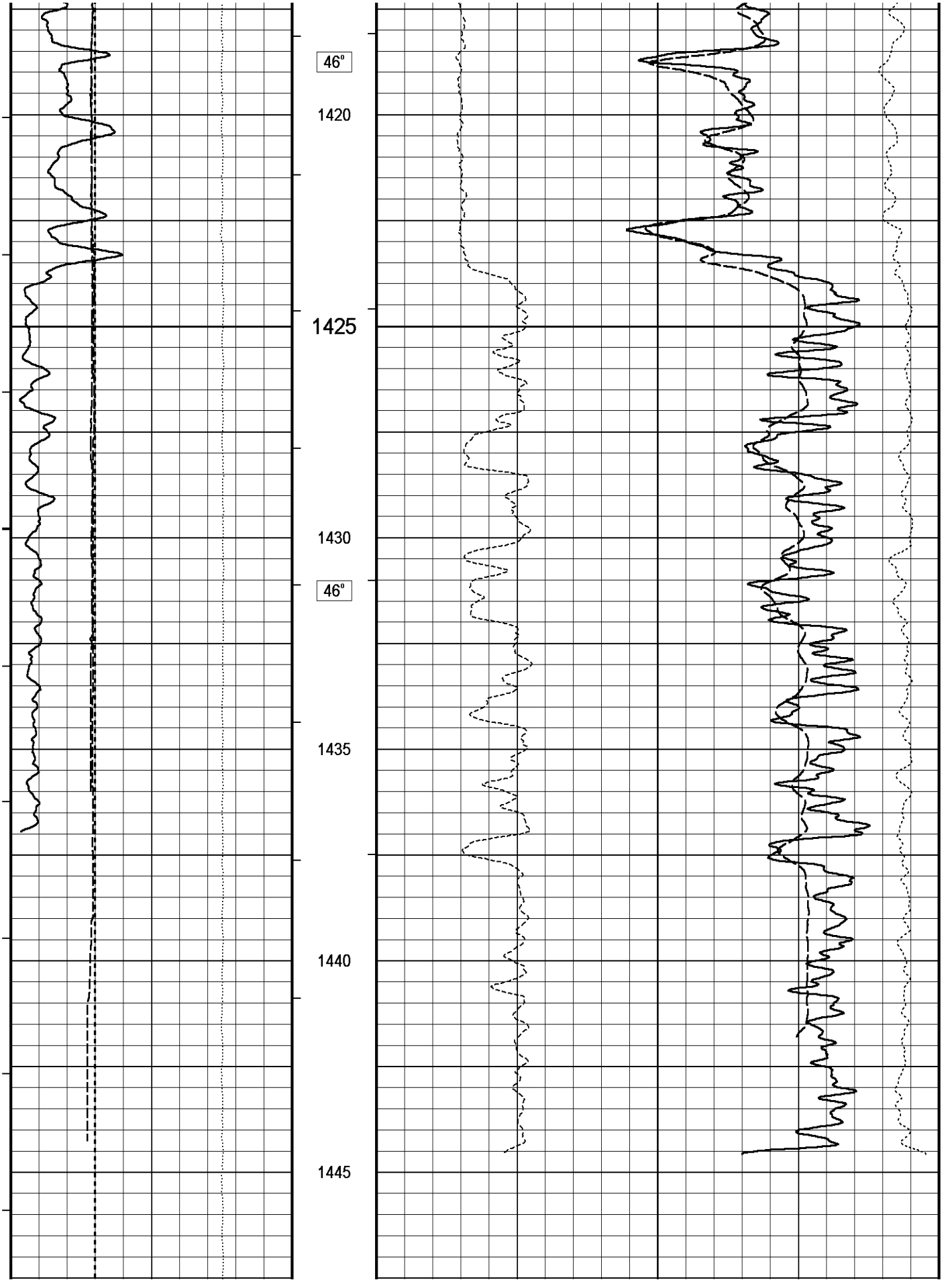


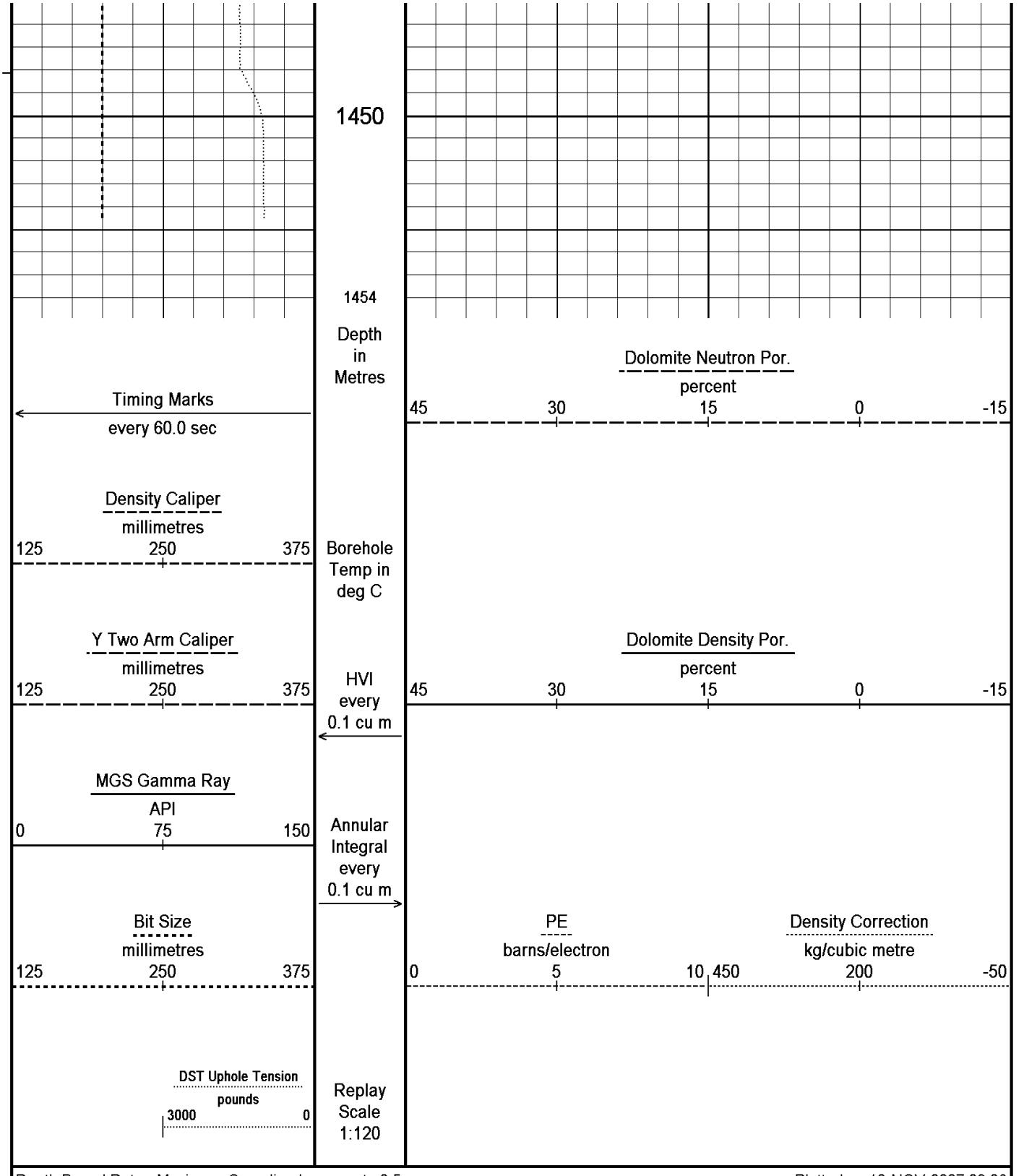

DST Uphole Tension
pounds
3000
0
Replay
Scale
1:120
1300
1305
43°
1310
1315
44°
1320
1325


Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
1330
44°
1335
1340
44°
1345
1350
1355
44°
Dolomite Density Por.
PE
Density Correction
Dolomite Neutron Por.


1360
1365
45°
1370
1375
1380
44°
1385


Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
1390
45°
1395
1400
1405
46°
1410
1415
PE
Dolomite Density Por.
Density Correction
Dolomite Neutron Por.


46°
1420
1425
1430
46°
1435
1440
1445



Depth Based Data - Maximum Sampling Increment 2.5cm
Plotted on 12-NOV-2007 09:26

Filename: C:\Temp\Weatherford PreView\0\HIGH RES.dta
Recorded on 15-FEB-2007 07:26

System Versions: Logged with 7.01.0195 Processed with 8.00.0015 Plotted with 8.01.0091

DOLOMITE HIGH RESOLUTION 1:120

BEFORE SURVEY CALIBRATION

General Constants All 000

Last Edited on 15-FEB-2007,06:48

General Parameters

Mud Resistivity	1.180	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	

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

Caliper Calibration MTC 006

Base Calibration on 25-JAN-2007,18:14
Field Calibration on 10-FEB-2007,20:21

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)
208.70	205.70

Gamma Calibration MGS 010

Field Calibration on 7-FEB-2007,09:09

	Measured	Calibrated (API)
Background	48	31
Calibrator (Gross)	1256	825
Calibrator (Net)	1208	794

Gamma Constants MGS 010

Last Edited on 15-FEB-2007,06:48

Gamma Calibrator Number	grcc075	
Mud Density	1060.00	kg/m3
Caliper Source for Processing	Density Caliper	
Tool Position	Centred	
Concentration of KCl	0.00	kppm

Neutron Calibration MDN 144

Base Calibration on 25-JAN-2007 18:05
Field Check on 15-FEB-2007 05:21

Base Calibration

	Measured		Calibrated (cps)	
	Near	Far	Near	Far

	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)	
			2094	3091
Ratio			0.677	

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 8-MAR-2007,10:54
Field Check on

Density Calibration

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

Field Check at Base		
	1184.8	1494.9

Field Check		
	0.0	0.0

PE Calibration

Base Calibration	Measured			Calibrated
	WS	WH	Ratio	Ratio
Background	213	1052		
Reference 1	22151	53000	0.422	0.400
Reference 2	5909	20800	0.288	0.272

Field Check at Base		
	213.1	1051.7

Field Check		
	0.0	0.0

Density Constants MPD 036

Last Edited on 15-FEB-2007,04:55

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	1000.00	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	Advanced	

Matrix Density (kg/m3)	Depth (m)
2710.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00

Caliper Calibration MPD 036

Base Calibration on 23-JAN-2007 04:20
Field Calibration on 7-FEB-2007,11:28

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)
166.10	166.10

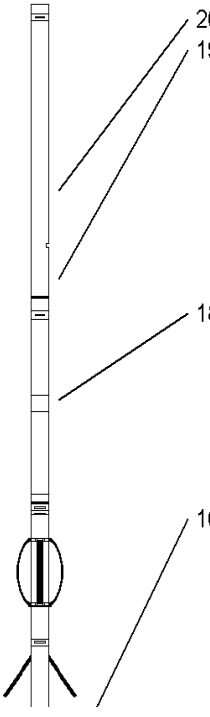
DOWNHOLE EQUIPMENT

C:\Temp\Weatherford PreView\0\REPEAT.dta

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

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

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



20.78 m GRGC - Gamma Ray
19.90 m CGXT - MCG External Temperature
18.79 m FEFE - Shallow FE
16.33 m CLYC - Y Two Arm Caliper

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

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

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

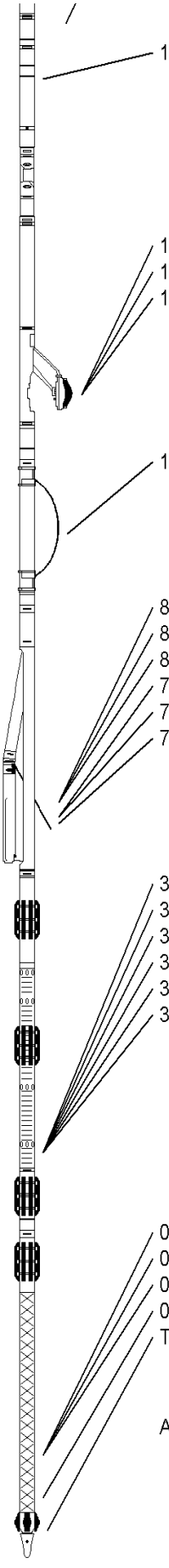
Compact Density/Caliper
MPD 36 Length: 2.92 m Weight: 90.4 lb

Compact Sonic
MSS 60 Length: 3.82 m Weight: 72.8 lb

Compact Induction
MAI 72 Length: 3.29 m Weight: 48.5 lb

Compact Hole Finder
HFS 1 Length: 0.24 m Weight: 2.2 lb

Total Length: 22.63 m Weight: 568.8 lb



15.46 m	GRGM - MGS Gamma Ray
12.10 m	MINV - Micro-inverse
12.10 m	MNRL - Micro-normal
12.10 m	MLTC - MML Caliper
10.64 m	NPRL - Limestone Neutron Por.
8.06 m	AVOL - Annular Volume
8.06 m	HVOL - Hole Volume
8.06 m	CLDC - Density Caliper
7.85 m	DPRL - Limestone Density Por.
7.85 m	DCOR - Density Correction
7.83 m	PDPE - PE
3.95 m	TR21 - 3' Transit Time
3.95 m	TR11 - 4' Transit Time
3.95 m	TR22 - 5' Transit Time
3.95 m	DT34 - 3-4' Compensated Sonic
3.95 m	DT35 - 3-5' Compensated Sonic
3.95 m	TR12 - 6' Transit Time
0.79 m	VEC0 - Shallow Induction
0.79 m	RILM - Medium Induction
0.79 m	RILD - Deep Induction
0.07 m	SPCG - Spontaneous Potential
Tool Zero	(0.28m from bottom)

All measurements relative to tool zero.

COMPANY	PARAMOUNT RESOURCES LTD.
WELL	PARAMOUNT ET AL CAMERON J-04
FIELD	CAMERON HILLS
PROVINCE/COUNTY	NORTH WEST TERRITORIES
COUNTRY/STATE	CANADA

Elevation Kelly Bushing	769.20	metres	First Reading	1441.60	metre
Elevation Drill Floor		metres	Depth Driller	1449.00	metres
Elevation Ground Level	765.20	metres	Depth Logger	1449.50	metres

Weatherford®

PHOTO DENSITY

DUAL SPACED NEUTRON

PHOTO DENSITY
DUAL SPACED NEUTRON

COMPANY	PARAMOUNT RESOURCES LTD.
WELL	PARAMOUNT ET AL CAMERON J-04
FIELD	CAMERON HILLS
PROVINCE/COUNTY	NORTH WEST TERRITORIES
COUNTRY/STATE	CANADA
LOCATION	300/J-04-60-10-117-30

FIELD PRINT

LSD	SEC	TWP	RGE

API Number
Permit Number 1159

Other Services
ARRAY INDUCTION
MICROLOG
COMPENSTATED SONIC

Permanent Datum GROUND LEVEL, Elevation 765.20 metres
Log Measured From 4.00 M above Permanent Datum
Drilling Measured From KB

Elevations:	metres
KB	769.20
DF	
GL	765.20

Date	15-FEB-2007			
Run Number	1			
Depth Driller	1449.00	metres		
Depth Logger	1449.50	metres		
First Reading	1441.60	metre		
Last Reading	0.00	metre		
Casing Driller	430.00	metres		
Casing Logger	429.80	metres		
Bit Size	200.00	mm		
Hole Fluid Type	GELCHEM			
Density / Viscosity	1060.0 kg/M3	93.00 CP		
PH / Fluid Loss	11.00	11.00 ml/30Min		
Sample Source	FLOWLINE			
Rm @ Measured Temp	1.18 @ 25.0	ohm-m		
Rmf @ Measured Temp	1.04 @ 25.0	ohm-m		
Rmc @ Measured Temp	1.32 @ 25.0	ohm-m		
Source Rmf / Rmc	PRESS	FILTER		
Rm @ BHT	0.78 @ 48.0	ohm-m		
Time Since Circulation	6 HRS			
Max Recorded Temp	48.00	deg C		
Equipment Name	COMPACT			
Equipment / Base	13124	GPR		
Recorded By	G. SINGER			
Witnessed By	A. AHMED			
CIRC. STOP TIME	01:30-FEB-15		Last Line	

BOREHOLE RECORD

Last Edited: 15-FEB-2007 05:01

Bit Size millimetres	Depth From metres	Depth To metres
311.000	0.00	430.00
200.000	430.00	1449.00

CASING RECORD

Type	Size millimetres	Depth From metres	Shoe Depth metres	Weight Kg/metre
SURFACE	219.100	0.00	430.00	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 INTERSONIC CRANK
   MTC: SIX LEAF CENTRALIZER
5) SERVICE ORDER #: 30073028 SAP #: 4147101 # FIELD PRINTS = 3
6) RIG: PD 129

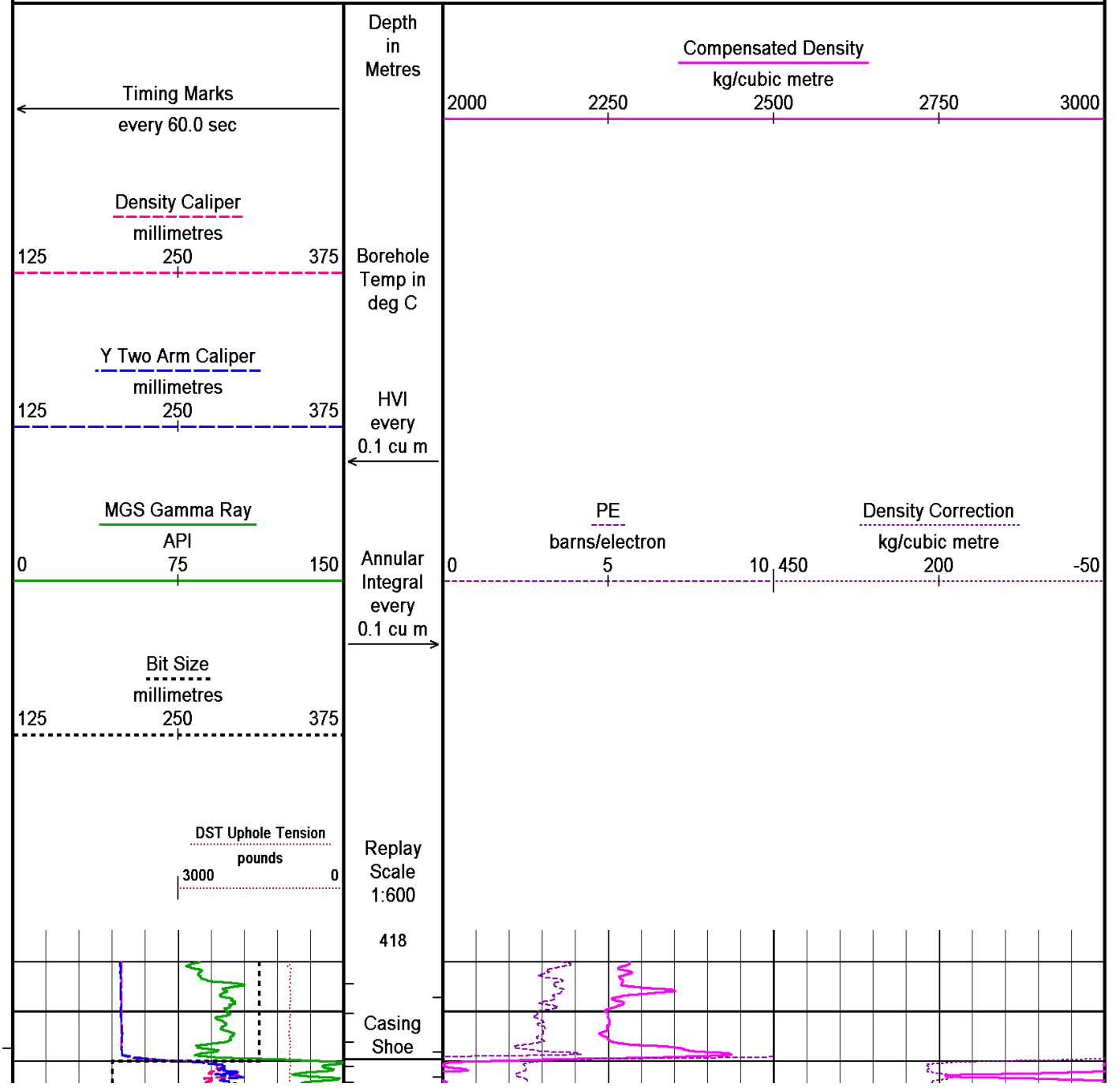
7) HOLE AND CEMENT VOLUMES CALCULATED USING DENSITY AND 2-ARM CALIPERS :
HOLE VOLUME = 37.4 CU.M.
ANNULAR VOLUME USING 139.7 MM PRODUCTION CASING = 21.8 CU.M

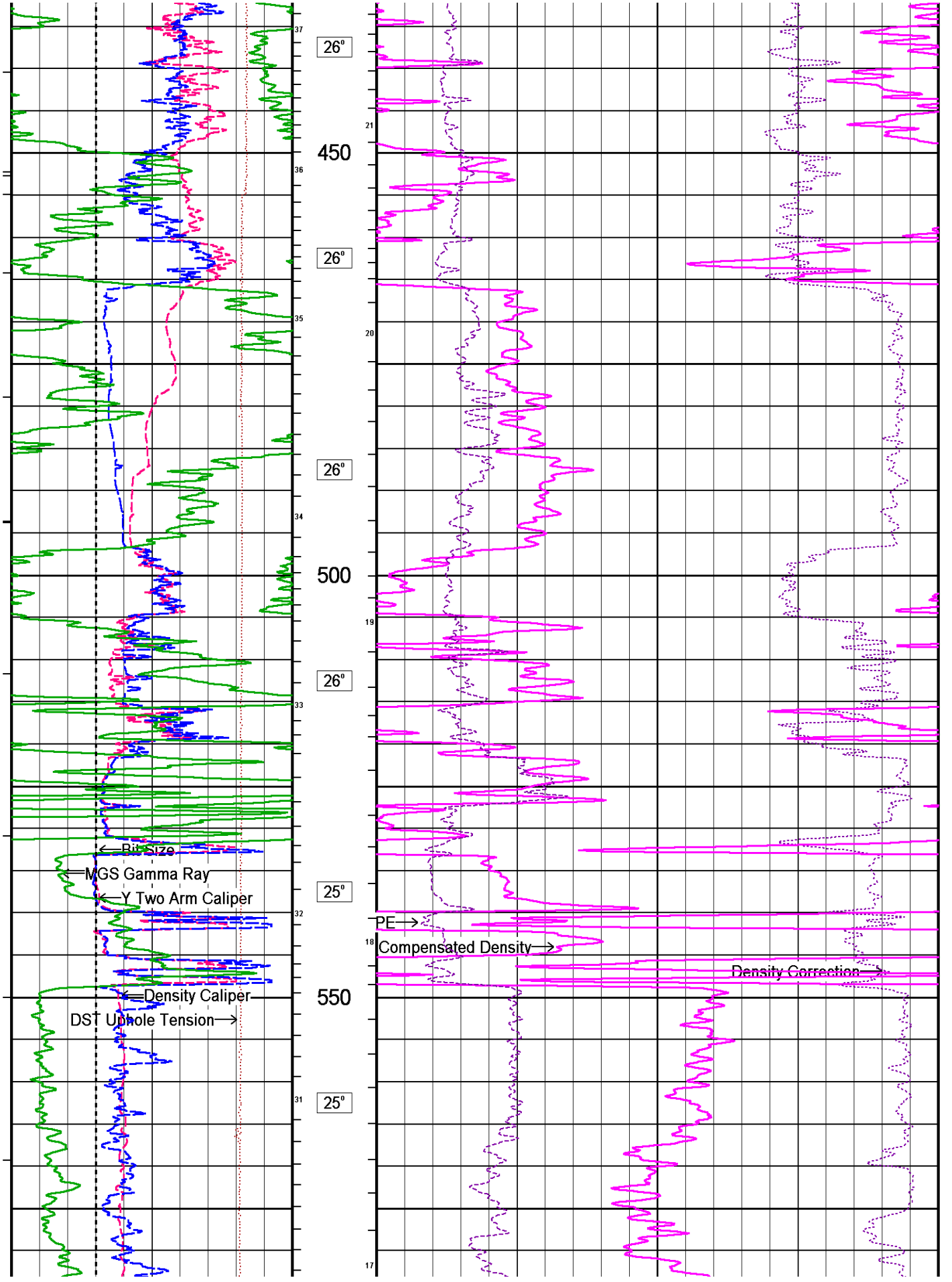
8) SONIC FREE PIPE FOUND FROM 352M - 357M

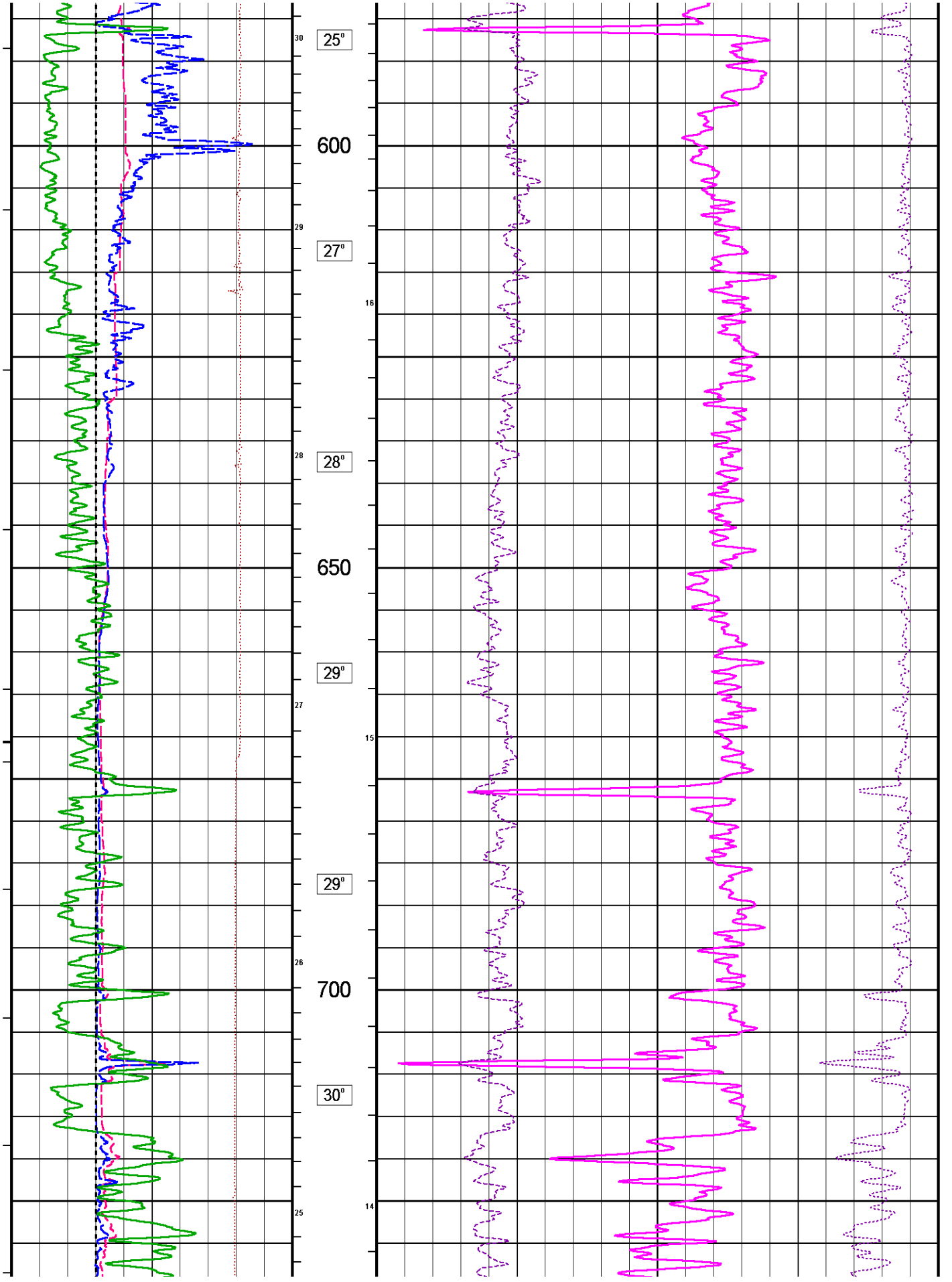
BULK DENSITY 1:600

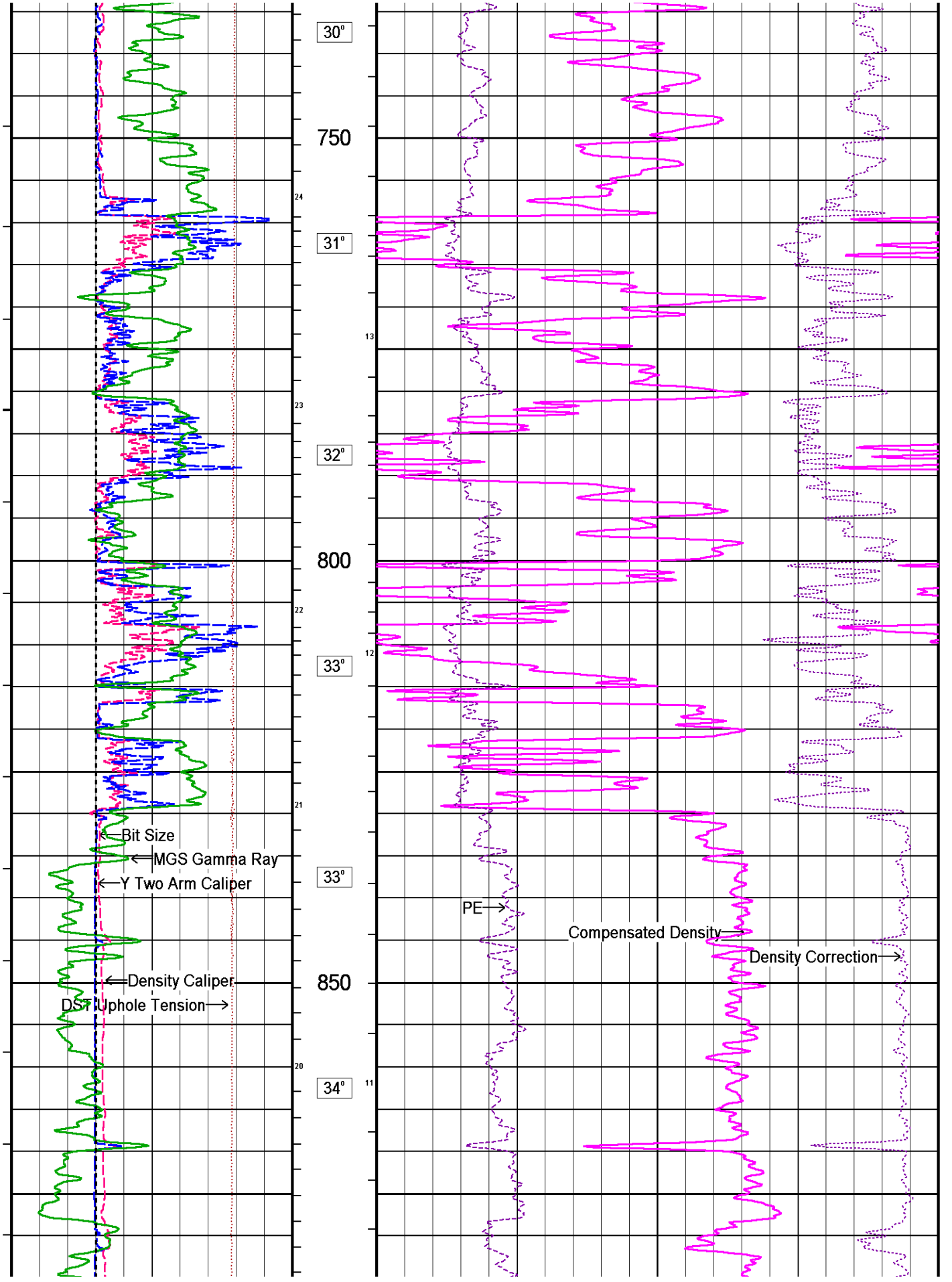
Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

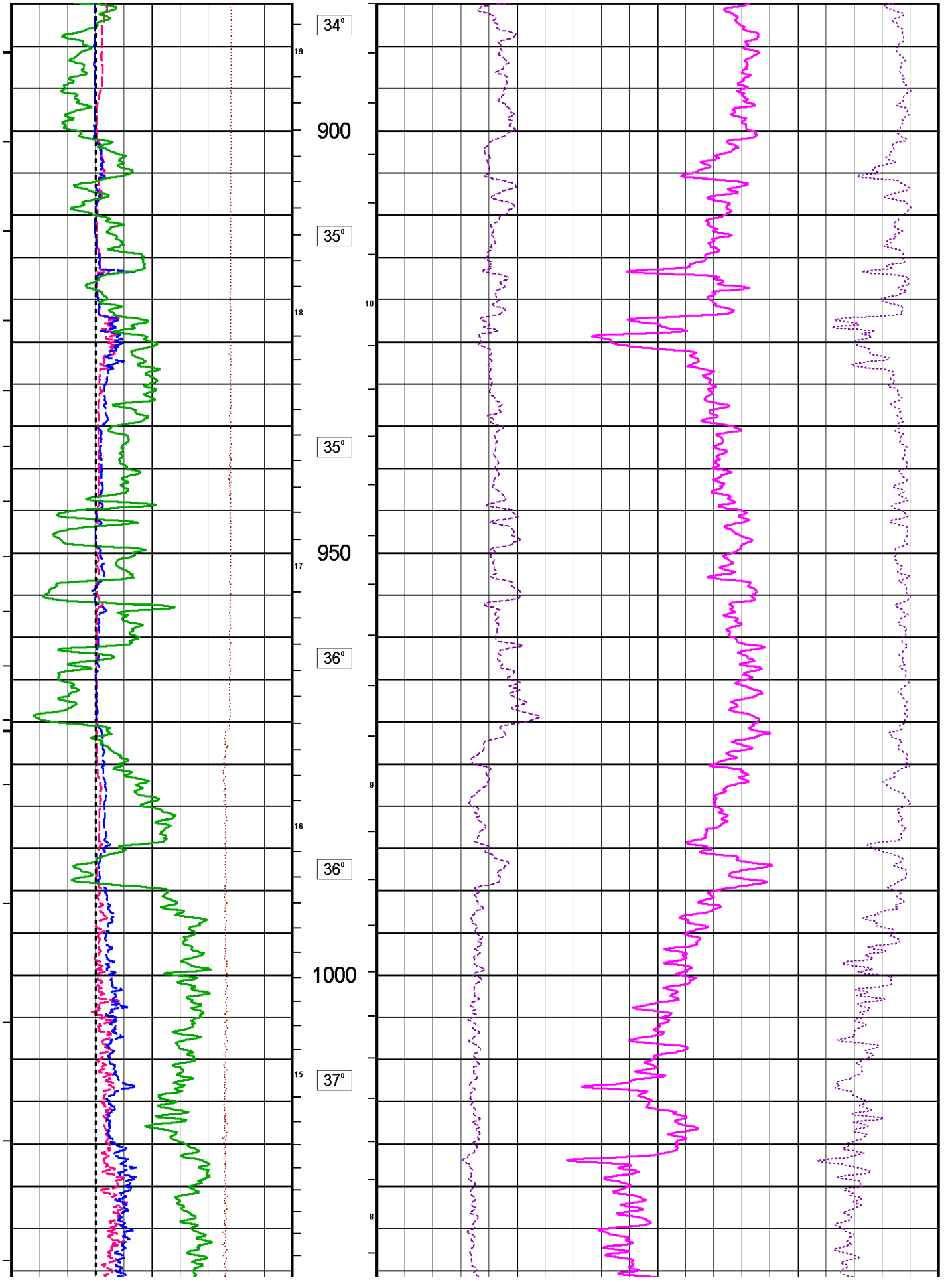
Plotted on 12-NOV-2007 09:30
Recorded on 15-FEB-2007 08:46

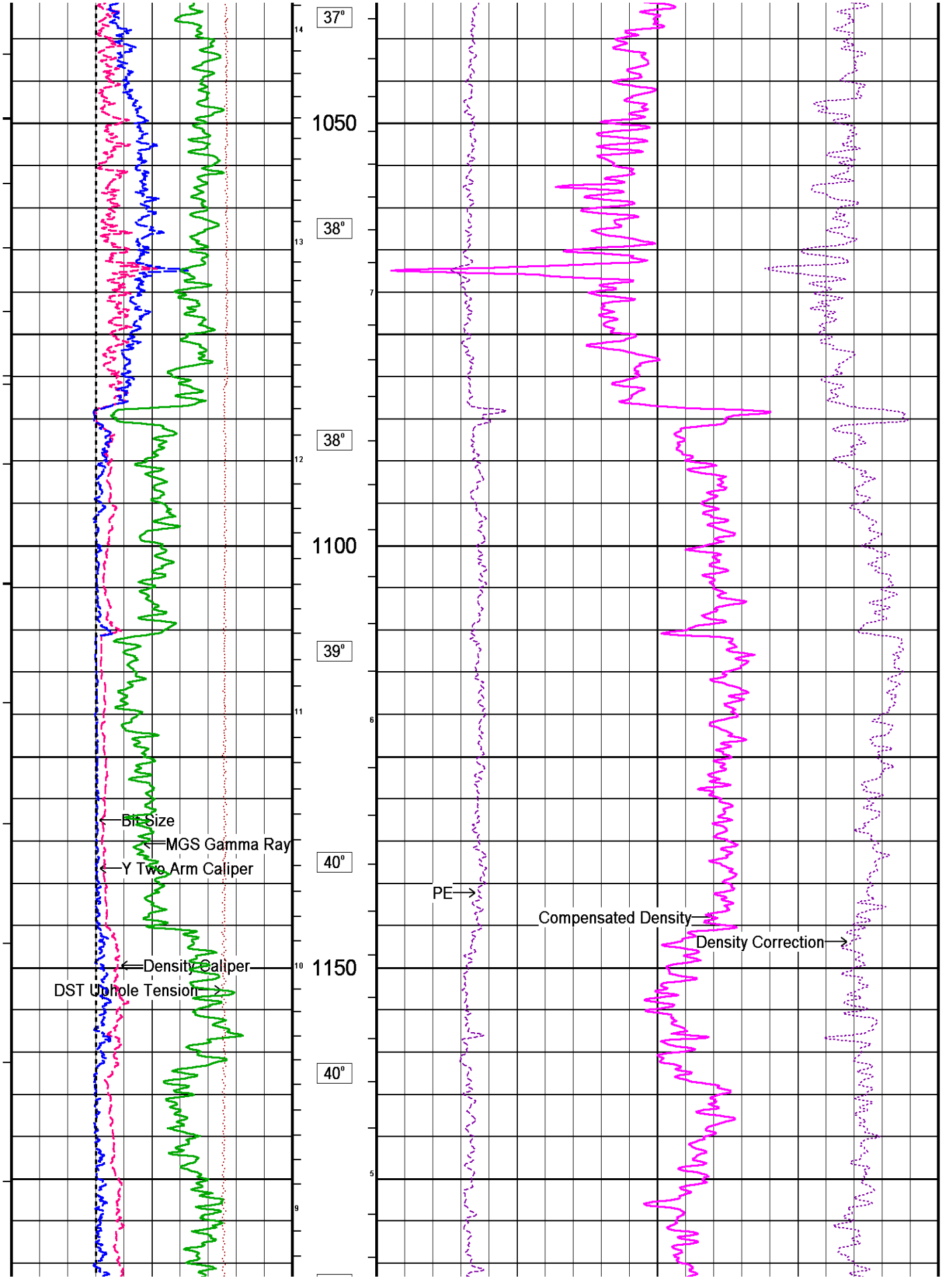


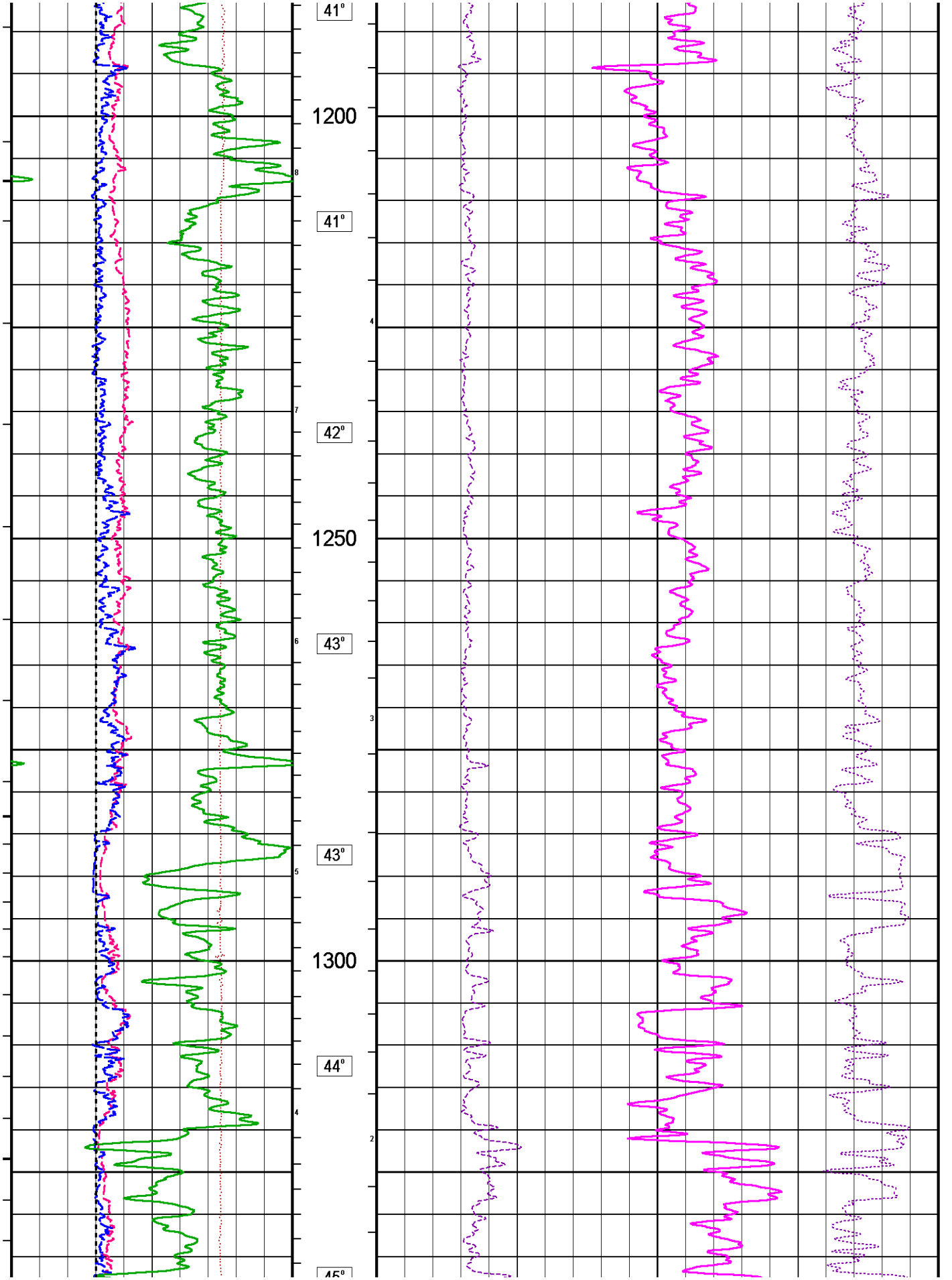

26°
450
26°
26°
500
26°
25°
550
25°
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
PE
Compensated Density
Density Correction

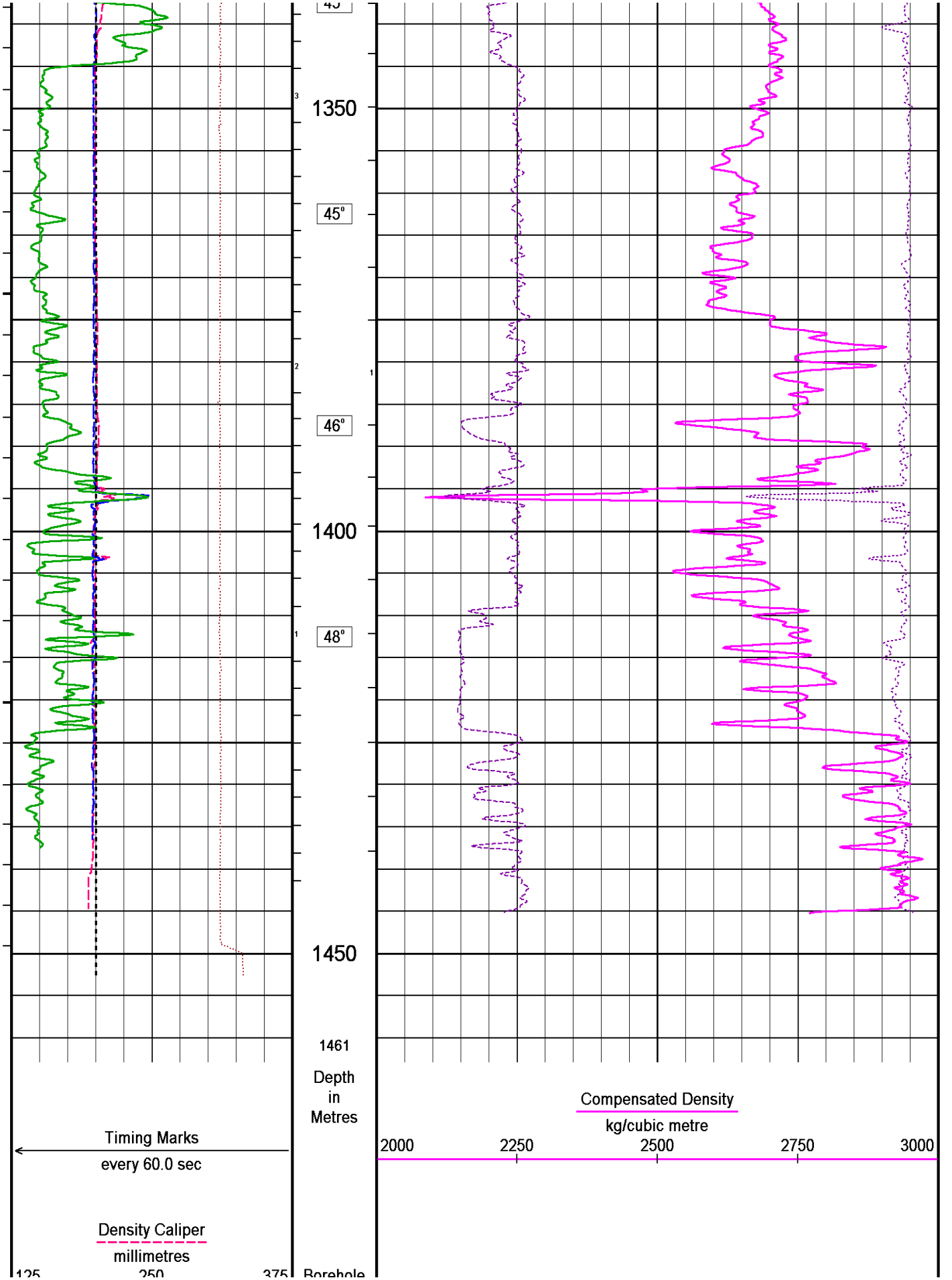

30
29
28
27
26
25
25°
600
27°
28°
650
29°
29°
700
30°
16
15
14

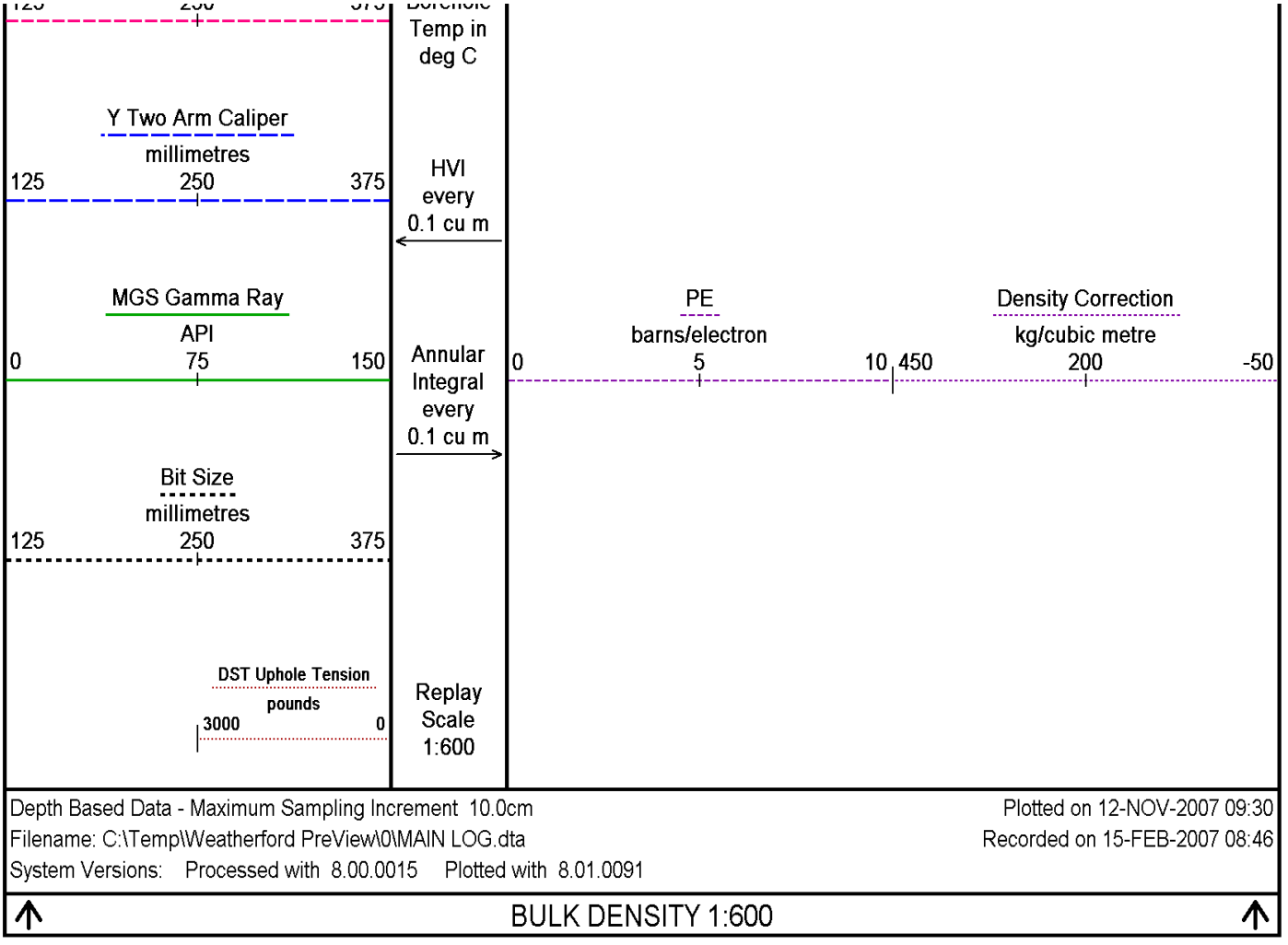

30°
750
31°
32°
800
33°
33°
850
34°
24
23
22
21
20
13
12
11
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
PE
Compensated Density
Density Correction

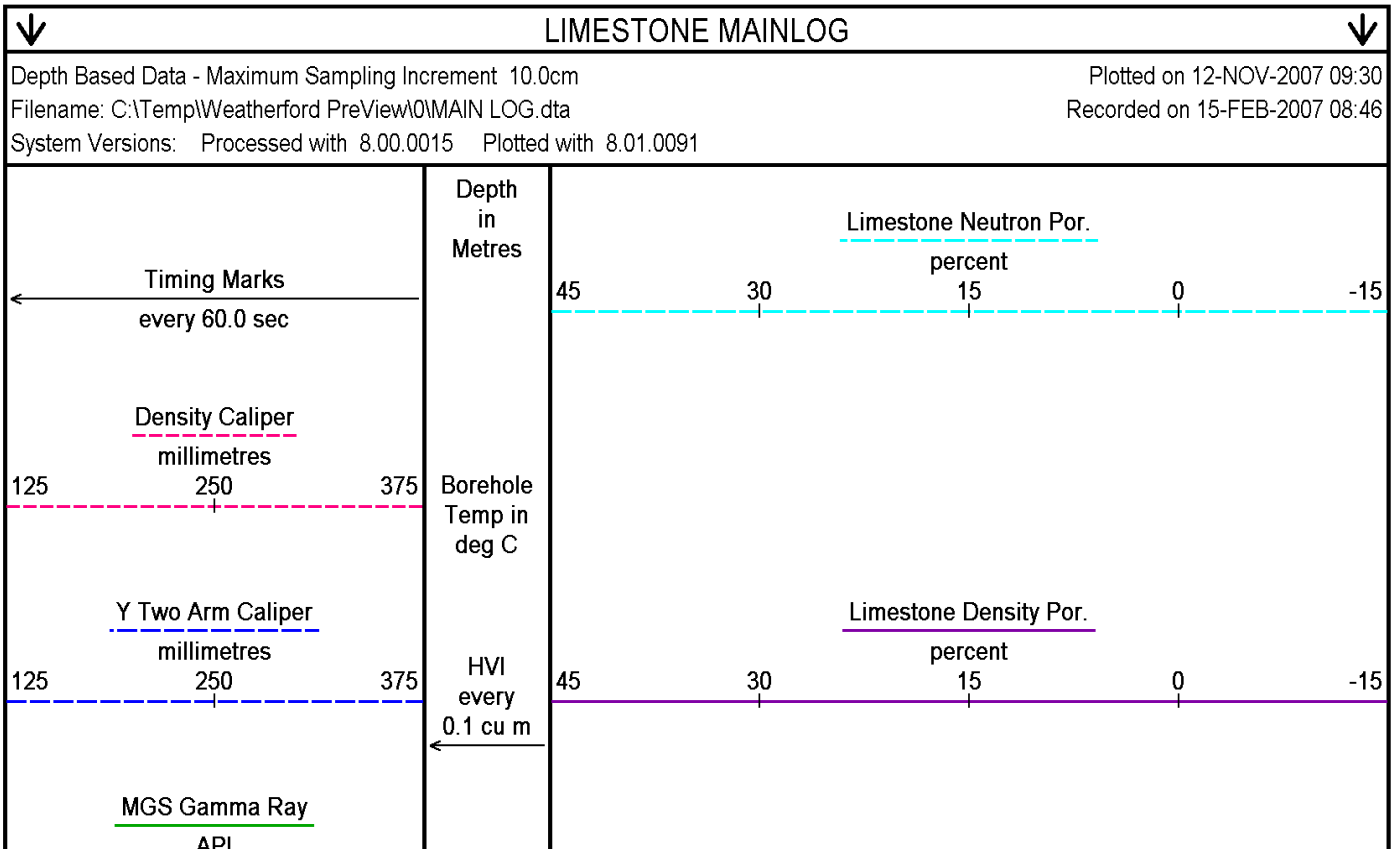

34°
900
35°
35°
950
36°
36°
1000
37°
19
18
17
16
15
10
9
8

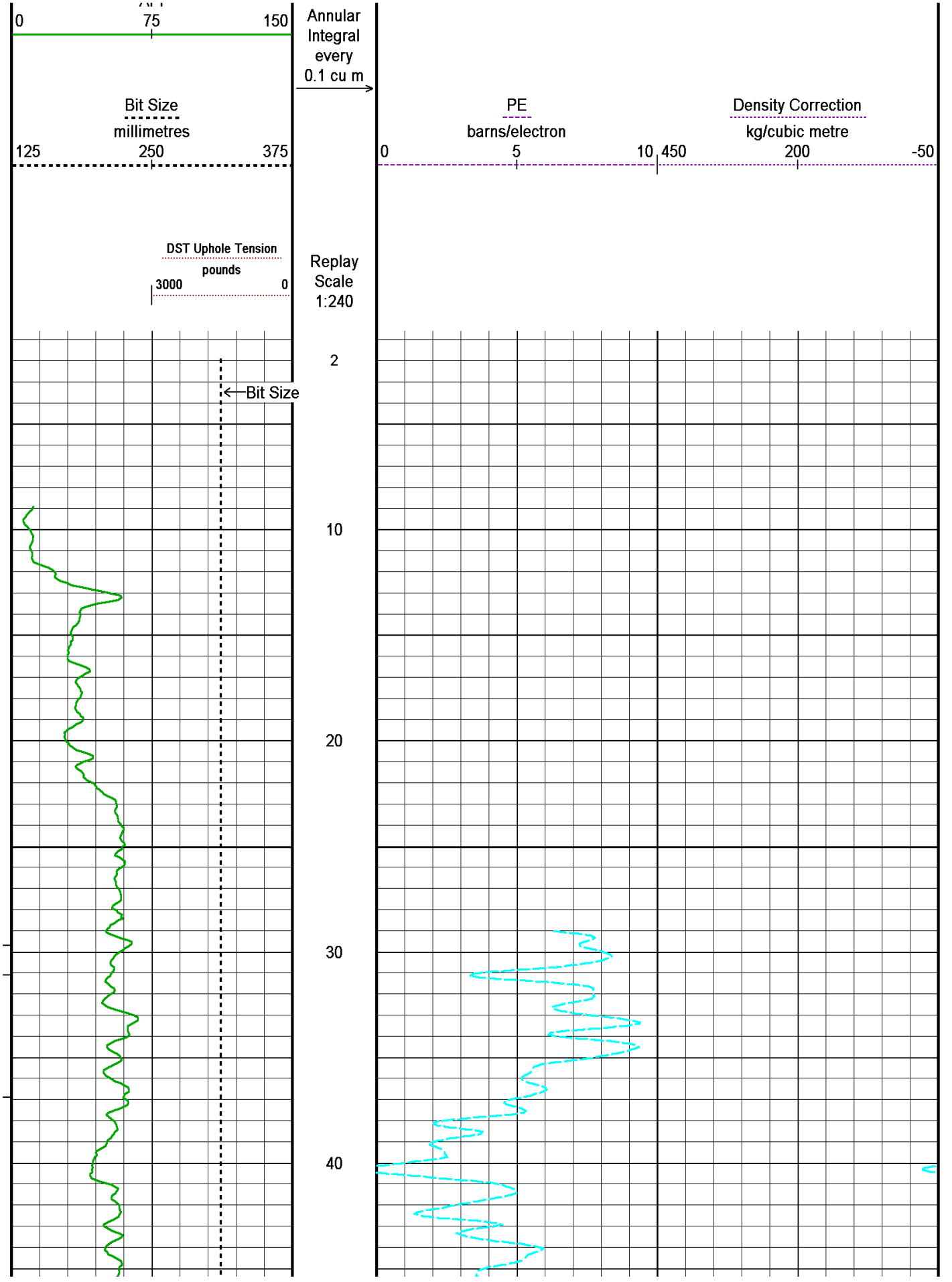

37°
1050
38°
38°
1100
39°
40°
1150
40°
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
PE
Compensated Density
Density Correction

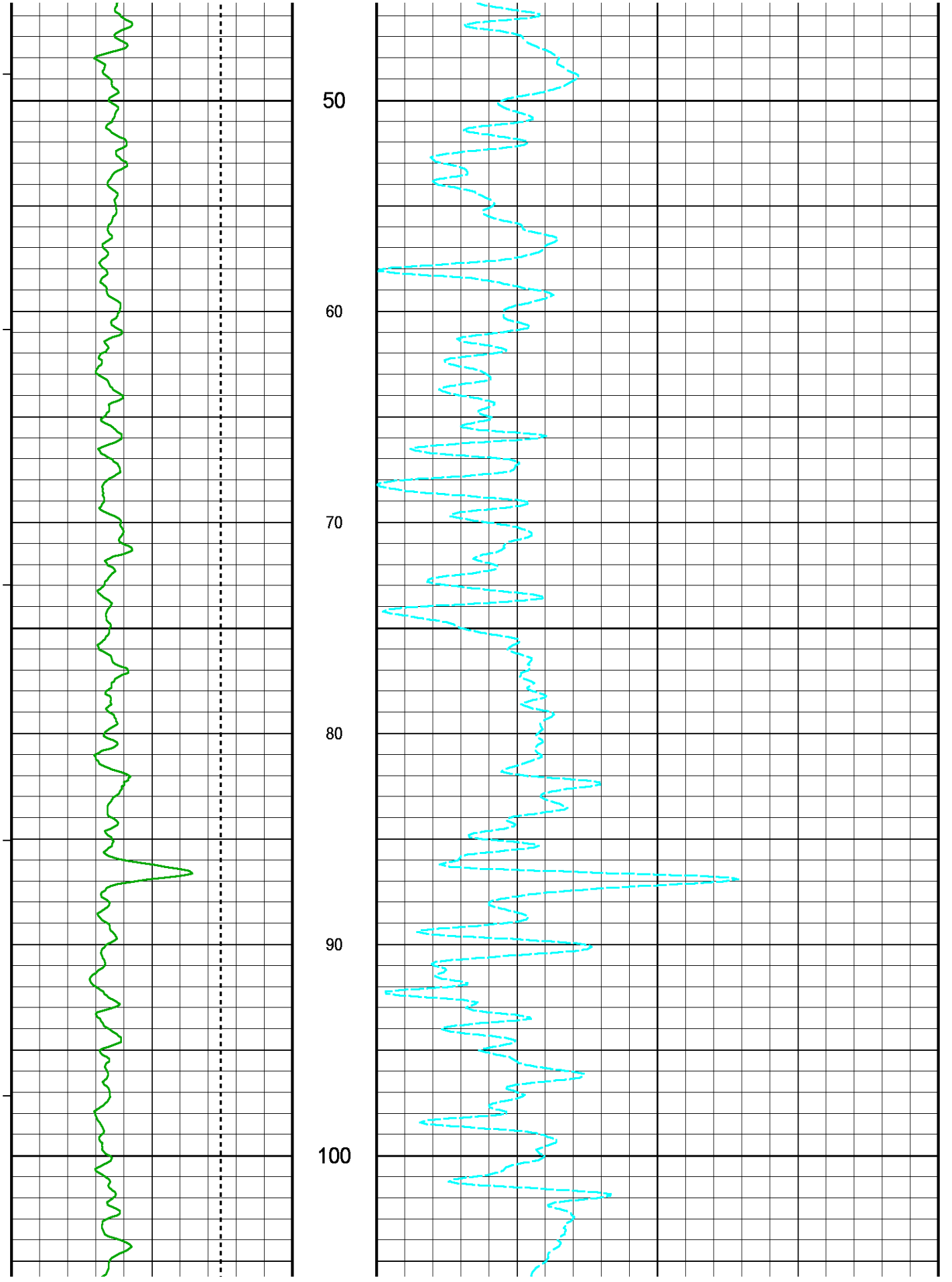

41°
1200
41°
42°
1250
43°
43°
1300
44°

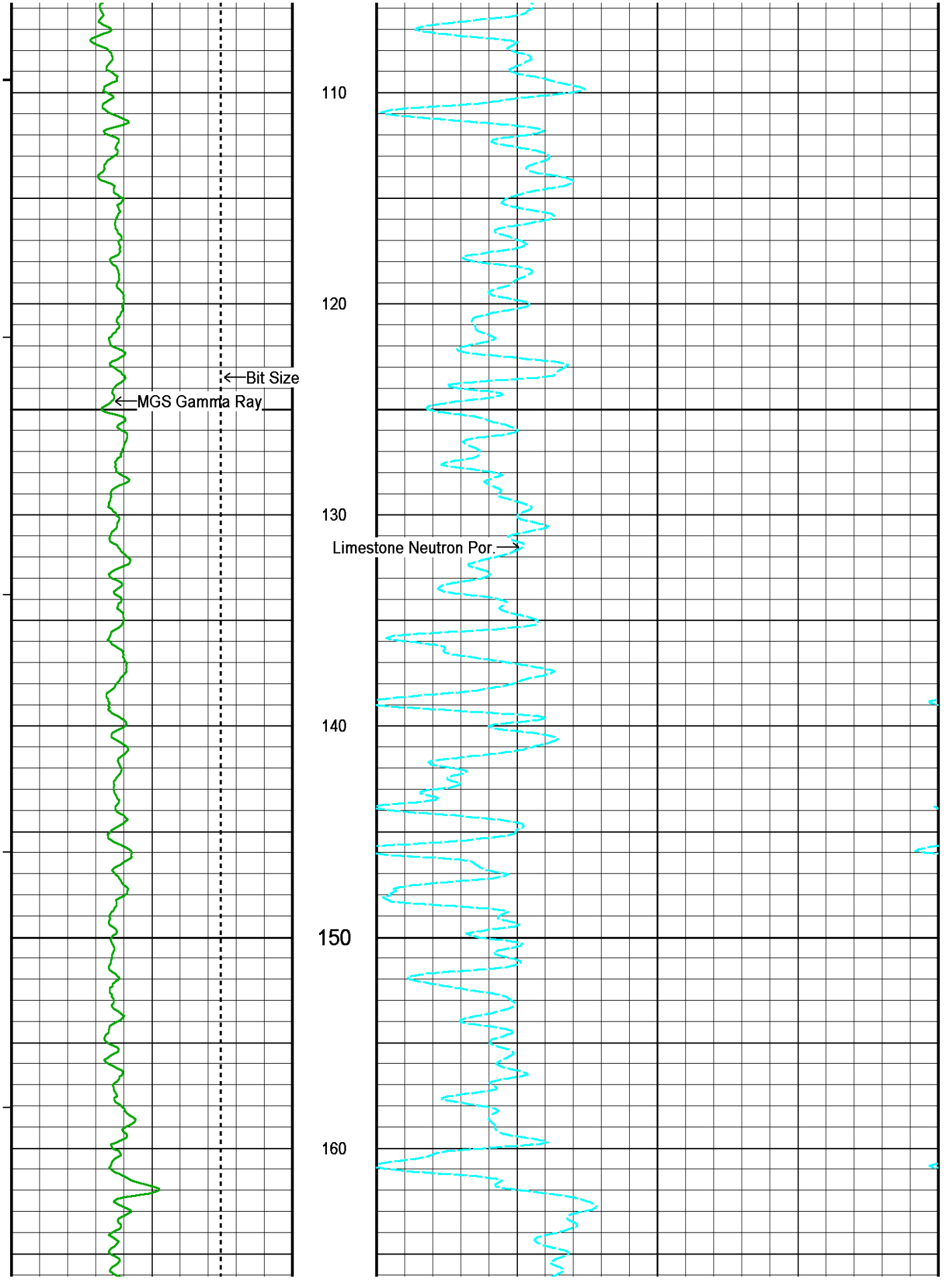

1350
45°
46°
1400
48°
1450
1461
Depth
in
Metres
Timing Marks
every 60.0 sec
Density Caliper
millimetres
125
250
375
Borehole
Compensated Density
kg/cubic metre
2000
2250
2500
2750
3000

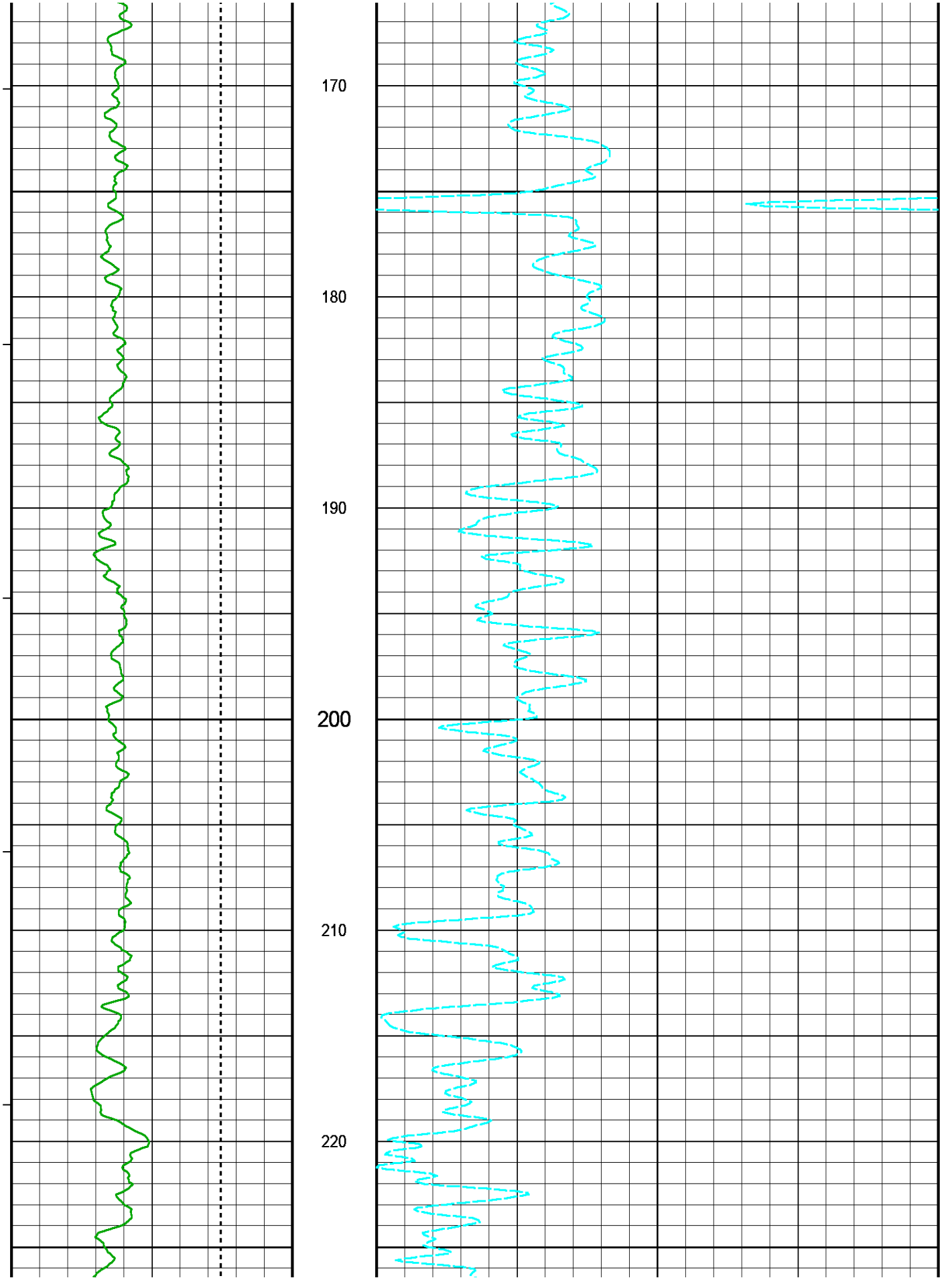

Temp in deg C
Y Two Arm Caliper
millimetres
125
250
375
HVI every 0.1 cu m
MGS Gamma Ray
API
0
75
150
Annular Integral every 0.1 cu m
PE
barns/electron
0
5
10
Density Correction
kg/cubic metre
450
200
-50
Bit Size
millimetres
125
250
375
DST Uphole Tension
pounds
3000
0
Replay Scale 1:600
Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 12-NOV-2007 09:30
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091
BULK DENSITY 1:600

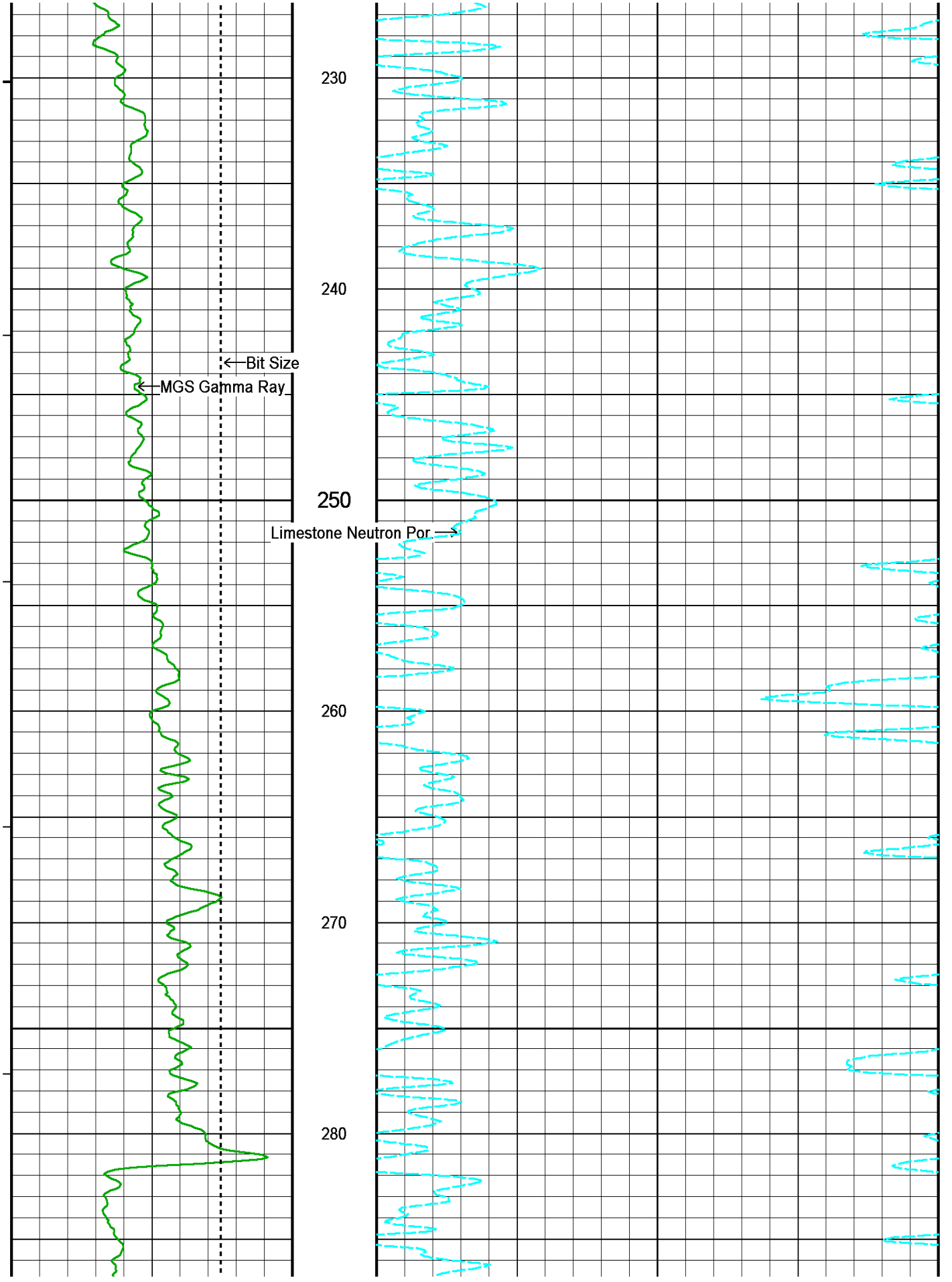

LIMESTONE MAINLOG
Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 12-NOV-2007 09:30
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091
Depth in Metres
Timing Marks
every 60.0 sec
Limestone Neutron Por.
percent
45
30
15
0
-15
Density Caliper
millimetres
125
250
375
Borehole Temp in deg C
Y Two Arm Caliper
millimetres
Limestone Density Por.
percent
HVI every 0.1 cu m
MGS Gamma Ray
API

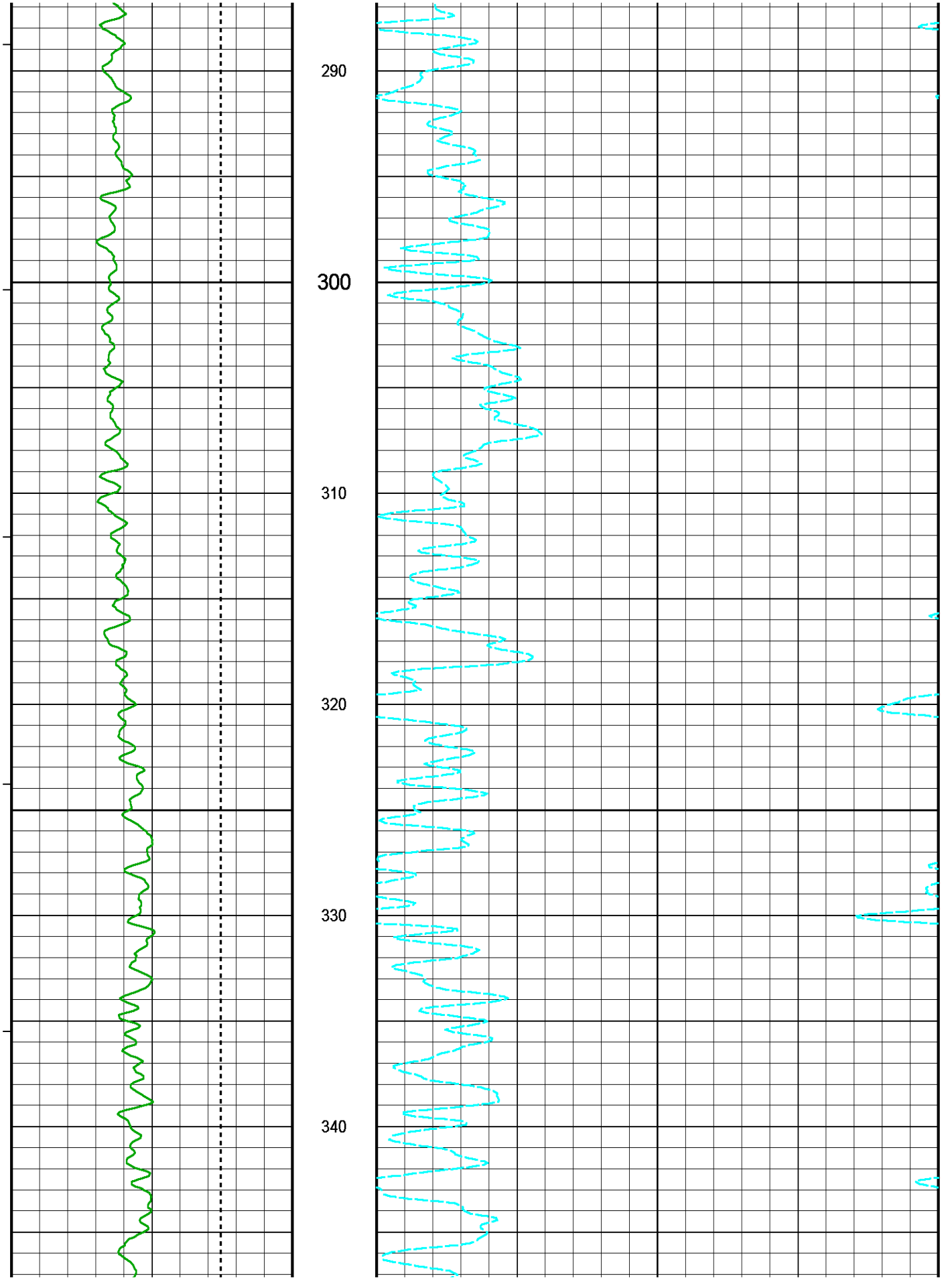

0
75
150
Annular Integral every 0.1 cu m
Bit Size
millimetres
125
250
375
PE
barns/electron
0
5
10
Density Correction
kg/cubic metre
450
200
-50
DST Uphole Tension
pounds
3000
0
Replay Scale 1:240
Bit Size
2
10
20
30
40

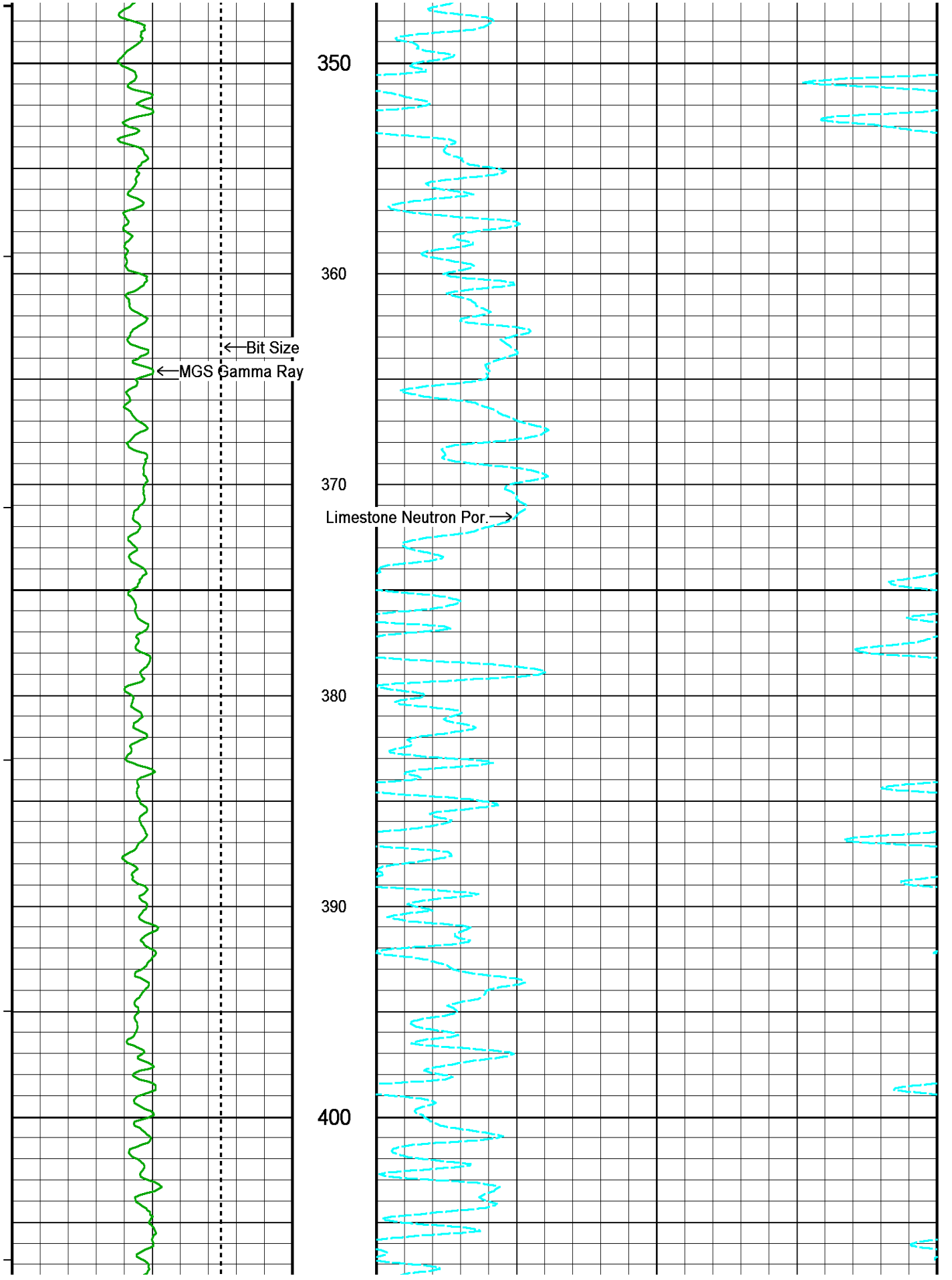

50
60
70
80
90
100

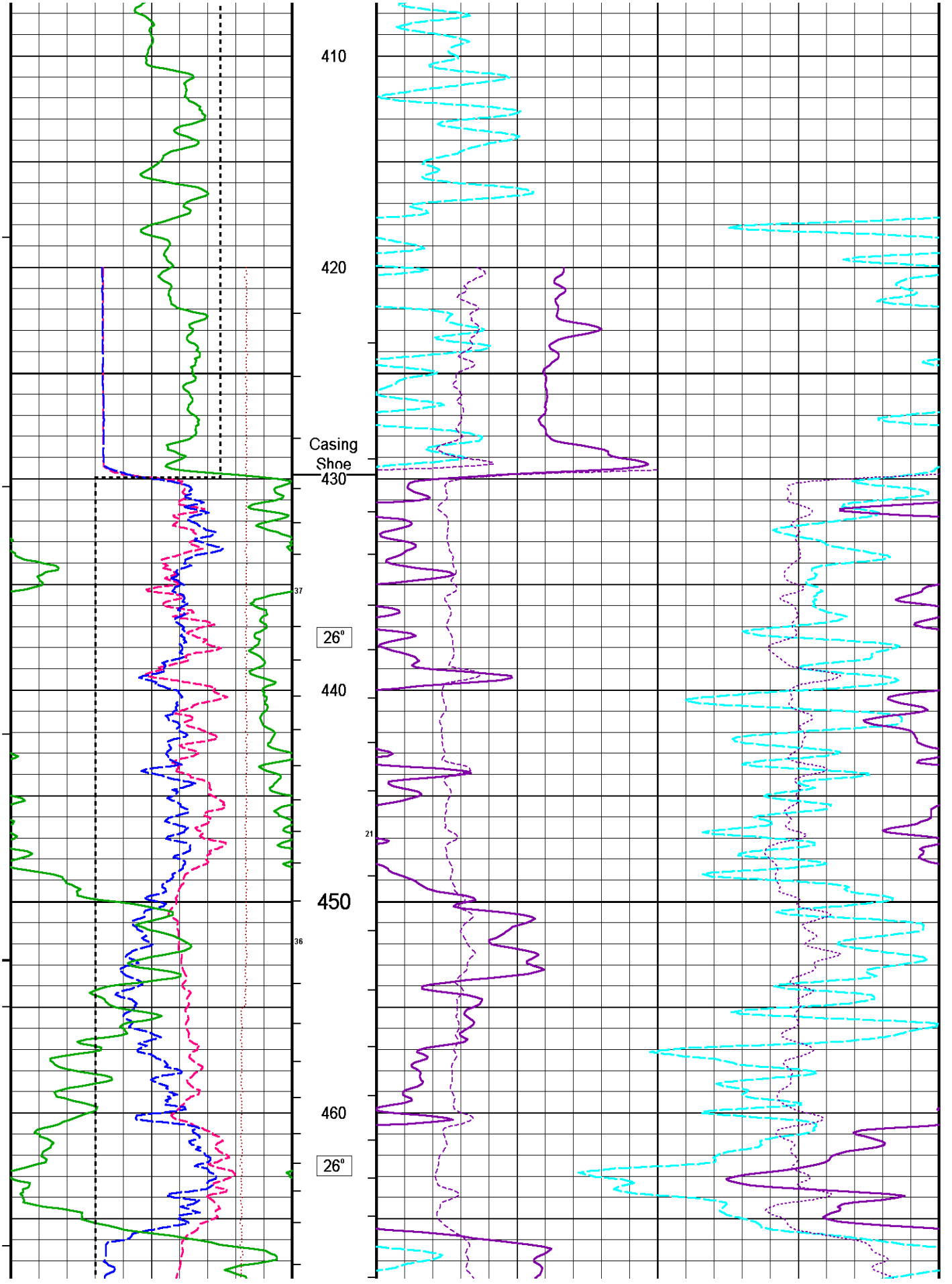

110
120
130
140
150
160
←Bit Size
←MGS Gamma Ray
Limestone Neutron Por.→

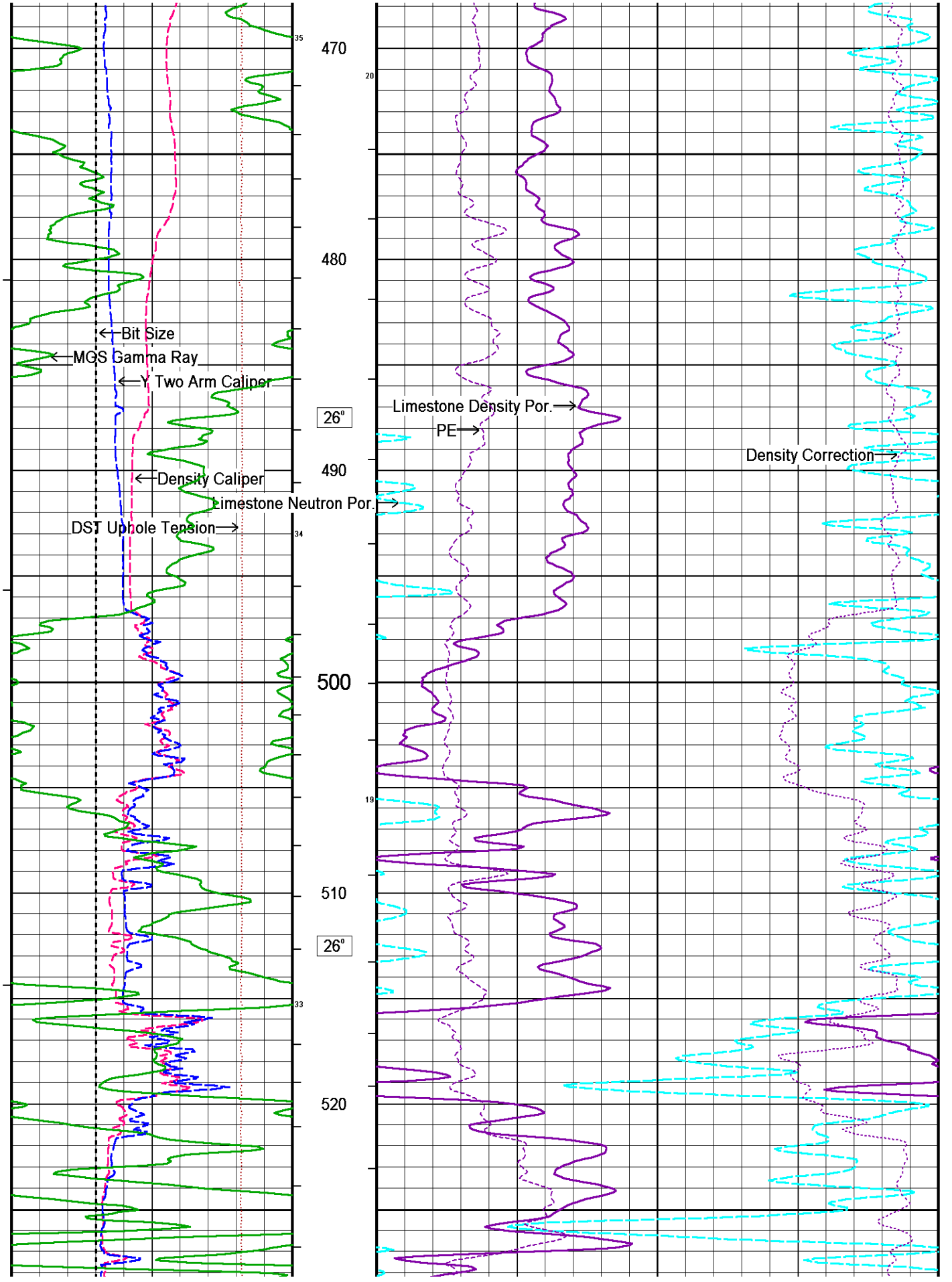

170
180
190
200
210
220

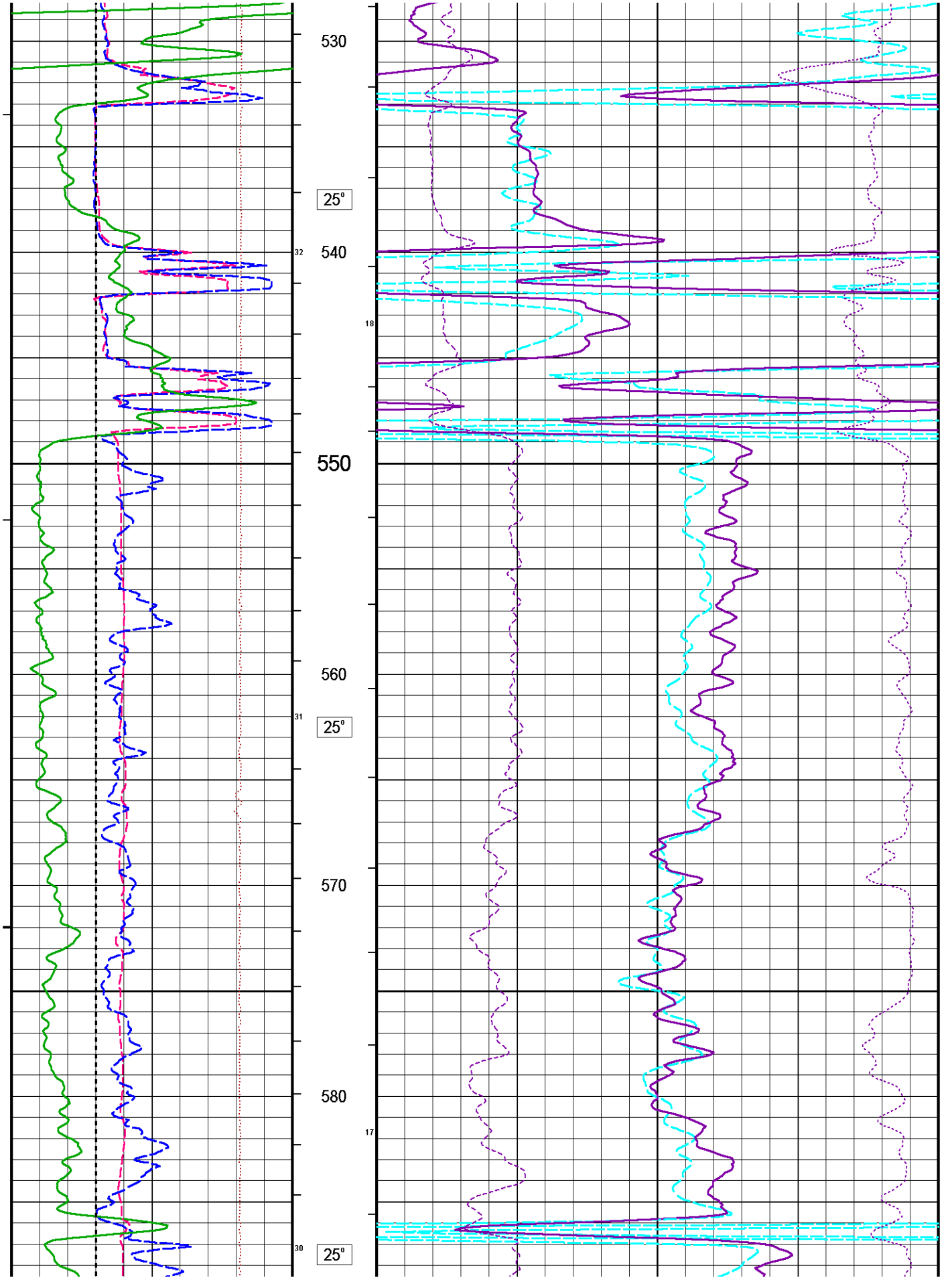

230
240
250
260
270
280
←Bit Size
←MGS Gamma Ray
Limestone Neutron Por →

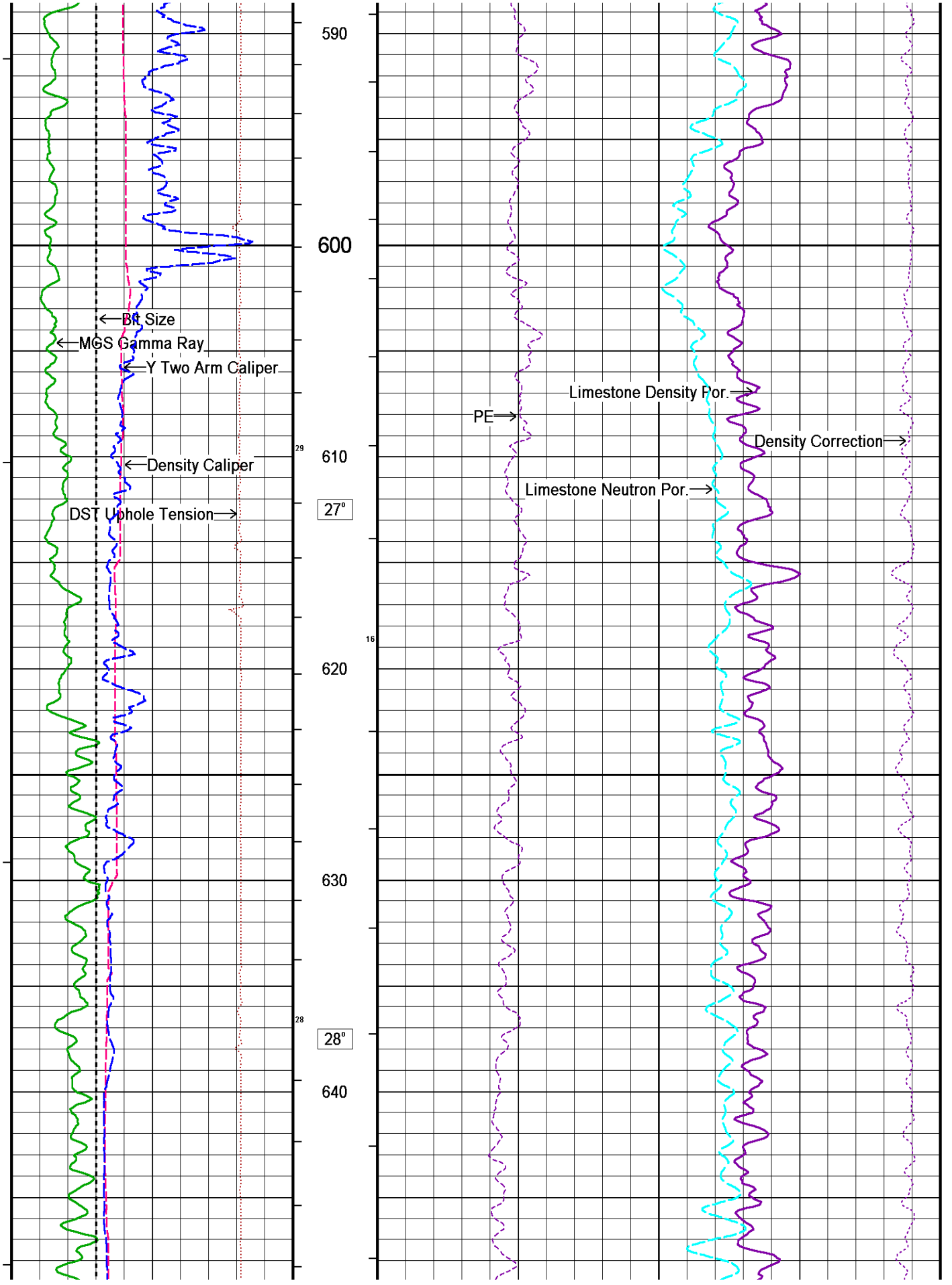

290
300
310
320
330
340

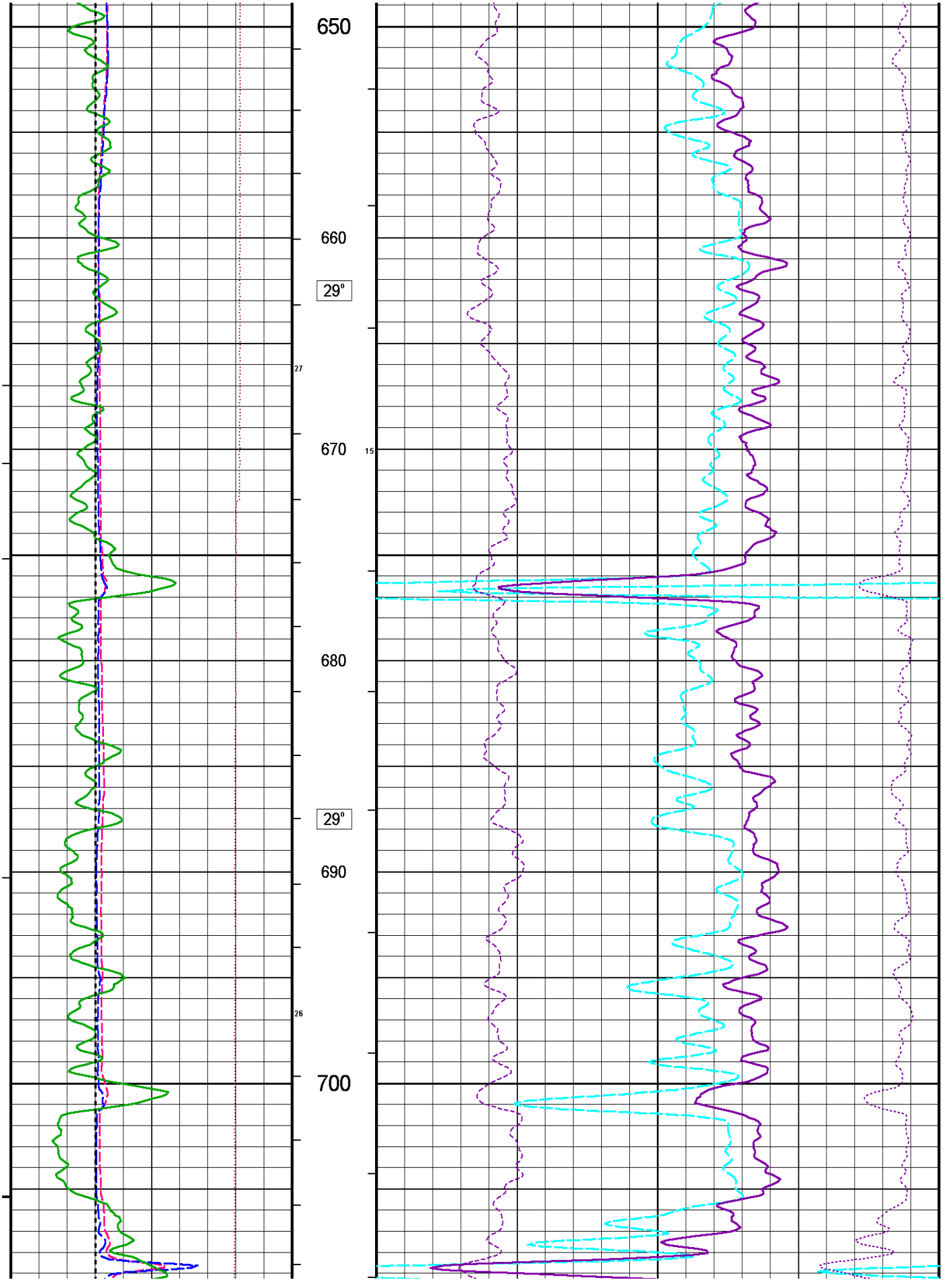

350
360
370
380
390
400
←Bit Size
←MGS Gamma Ray
Limestone Neutron Por.→

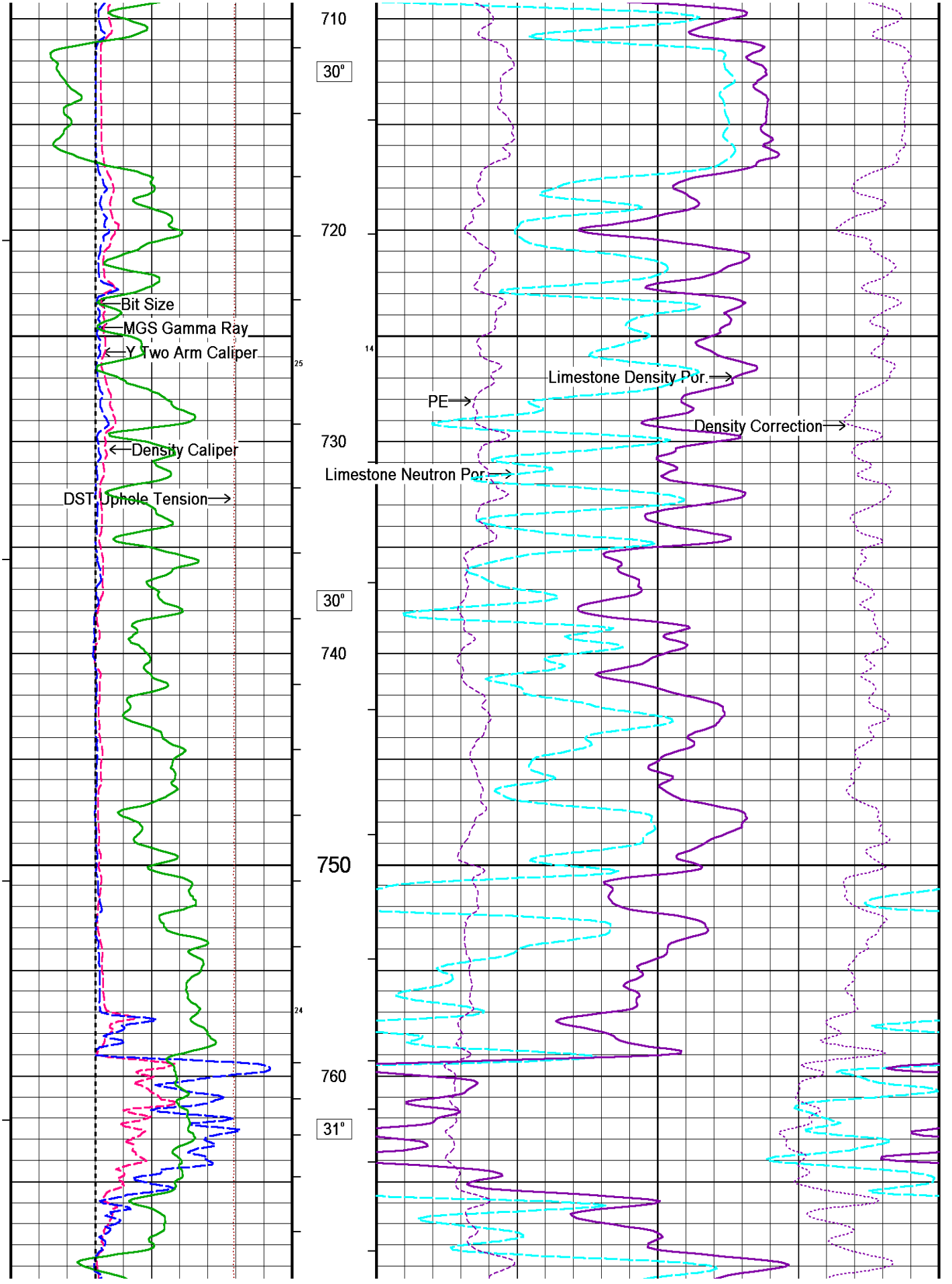

410
420
Casing
Shoe
430
37
26°
440
21
450
36
460
26°

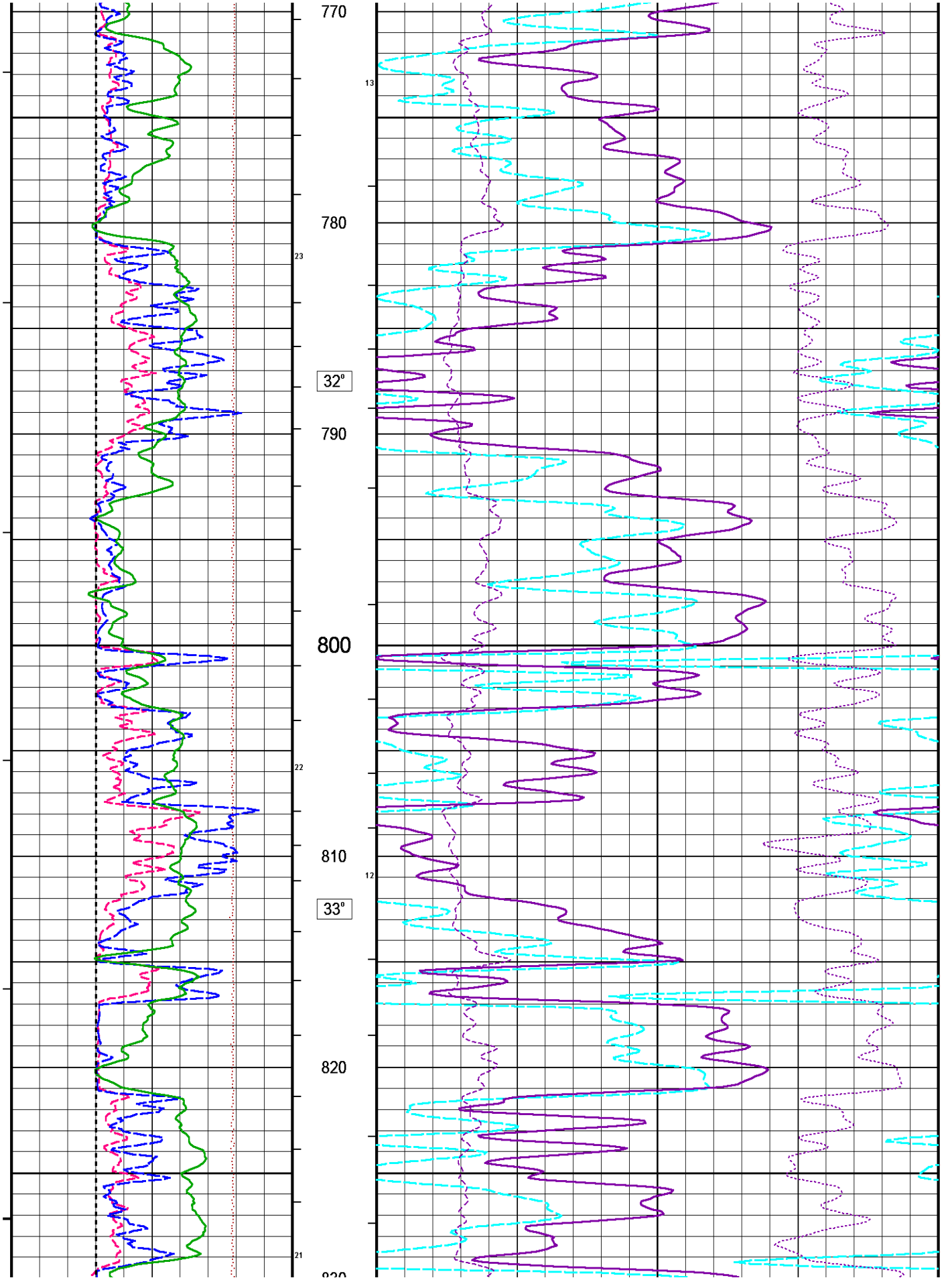

35
470
20
480
←Bit Size
←MGS Gamma Ray
←Y Two Arm Caliper
26°
Limestone Density Por.→
PE→
490
←Density Caliper
Limestone Neutron Por.→
Density Correction→
DST Uphole Tension→
34
500
19
510
26°
33
520

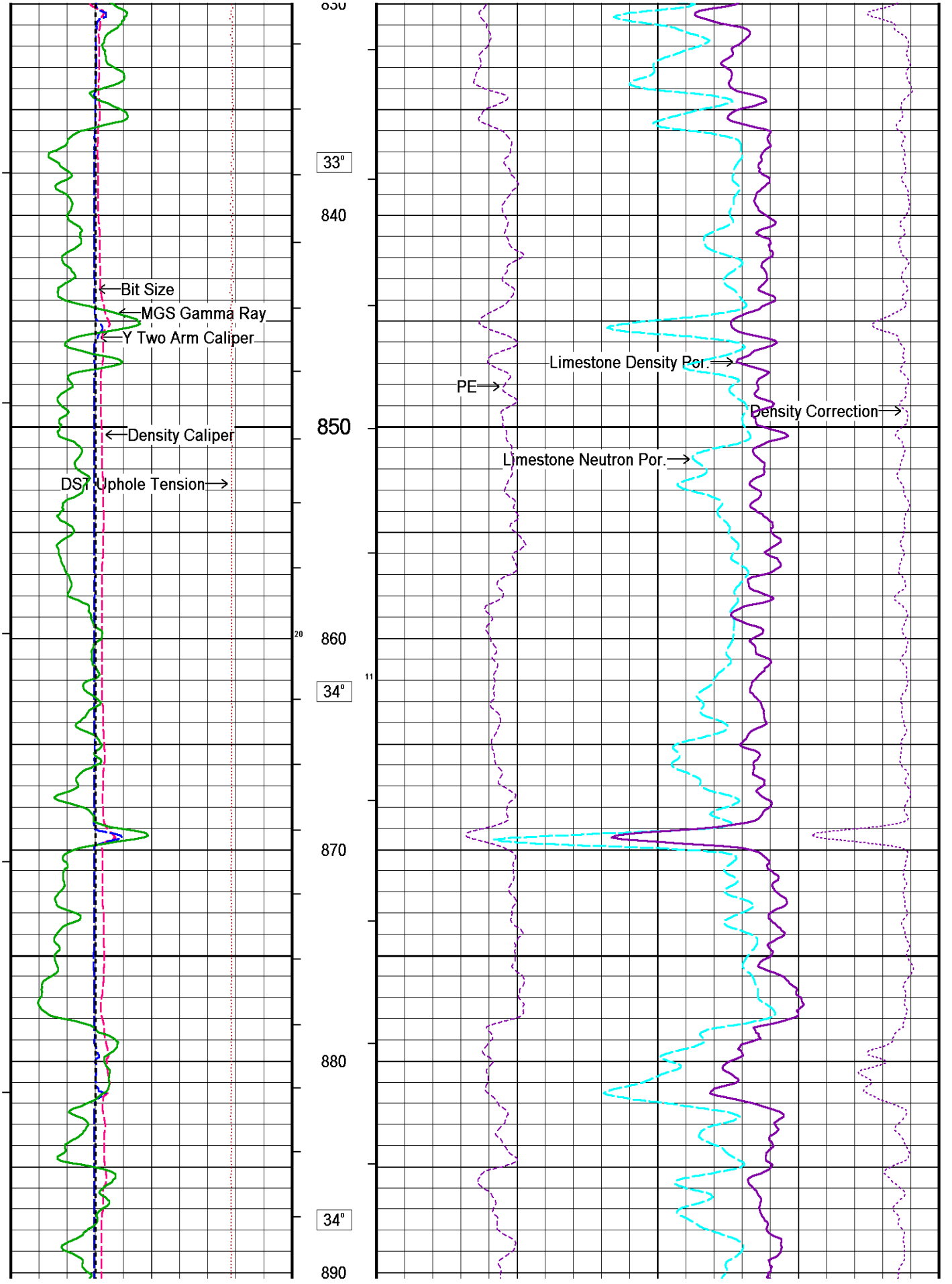

530
25°
32
540
18
550
560
31
25°
570
580
17
30
25°

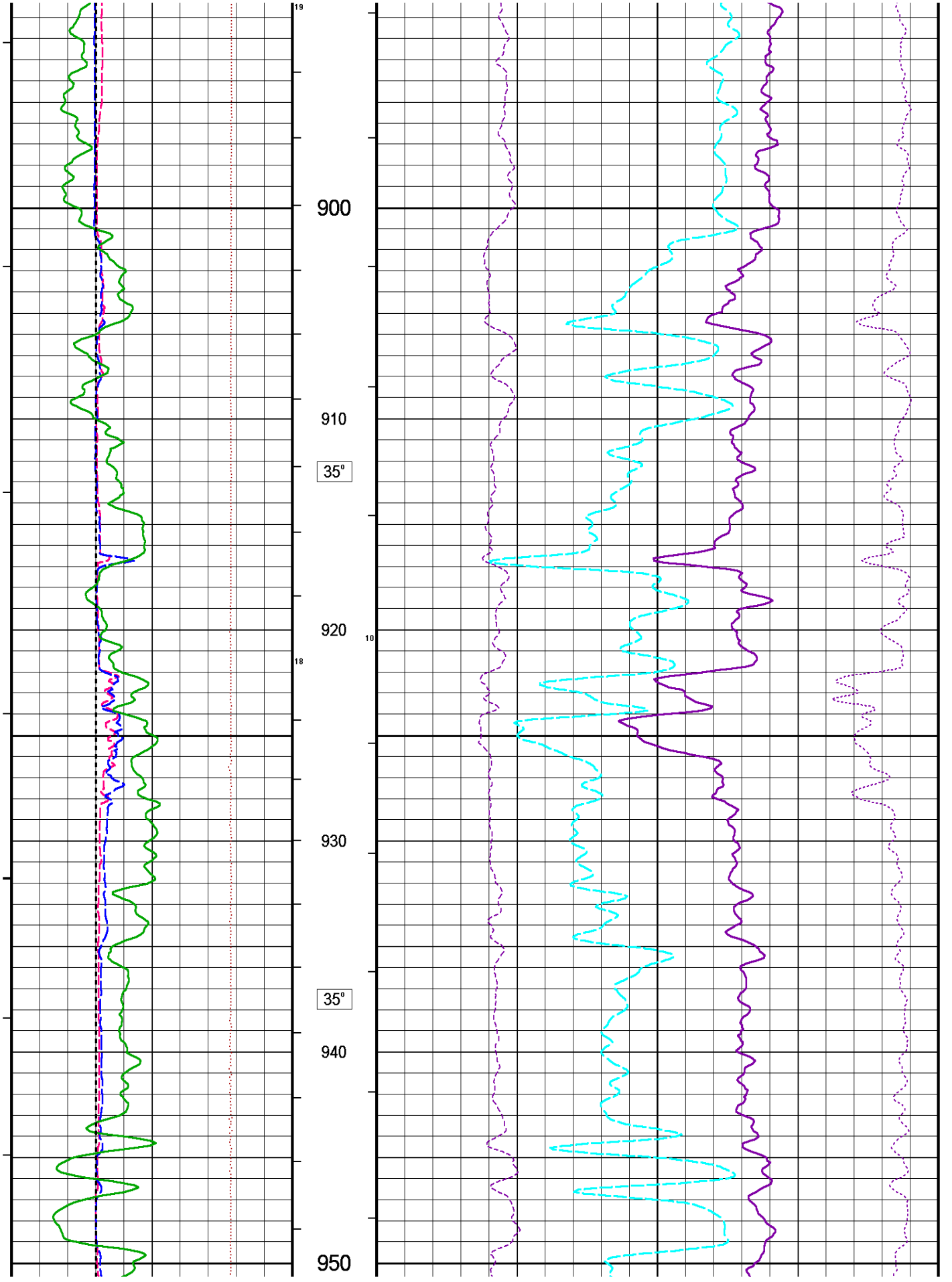

590
600
610
620
630
640
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
29
27°
28
28°
16
PE
Limestone Density Por.
Density Correction
Limestone Neutron Por.

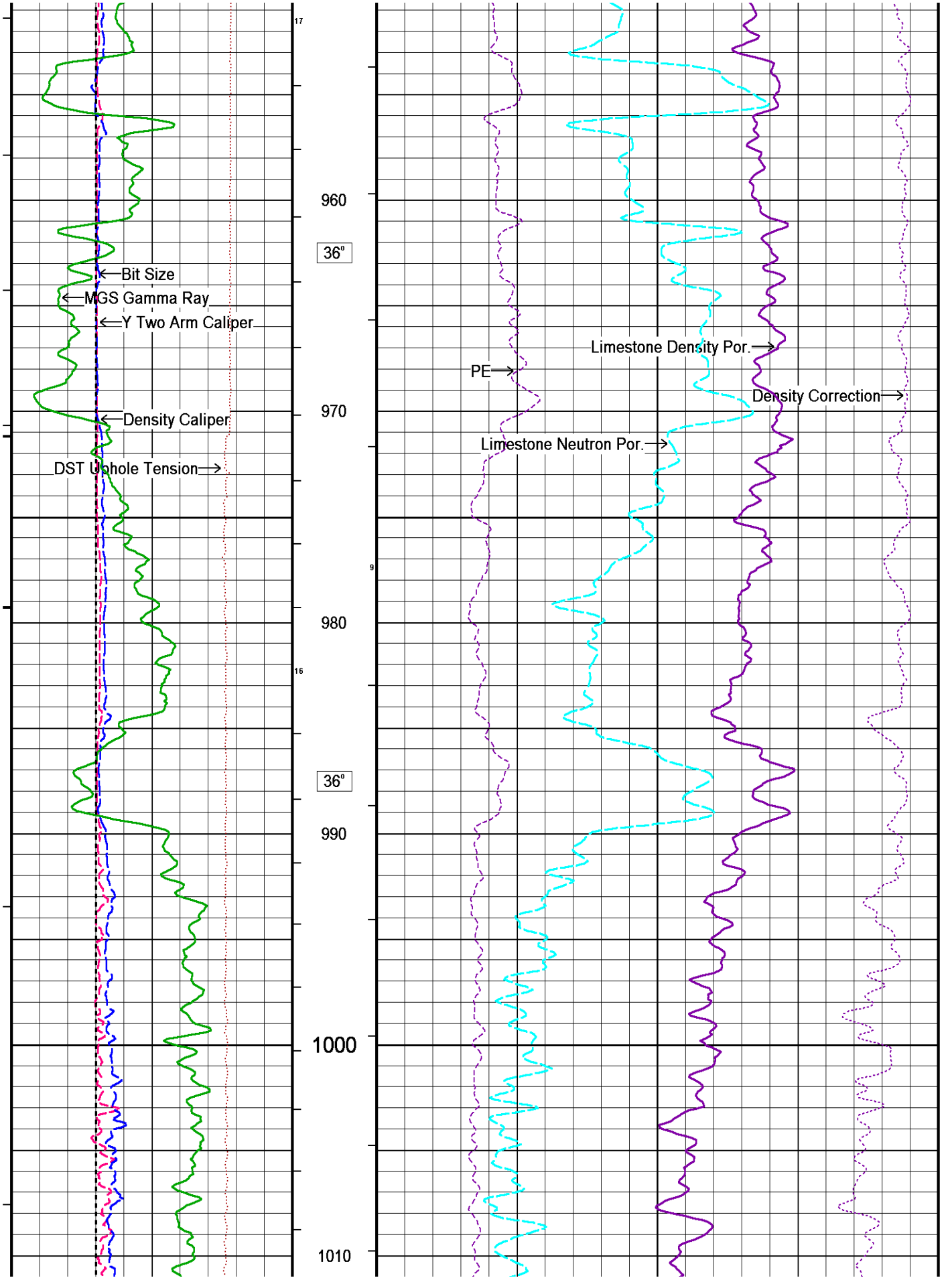

650
660
29°
27
670
15
680
29°
690
26
700

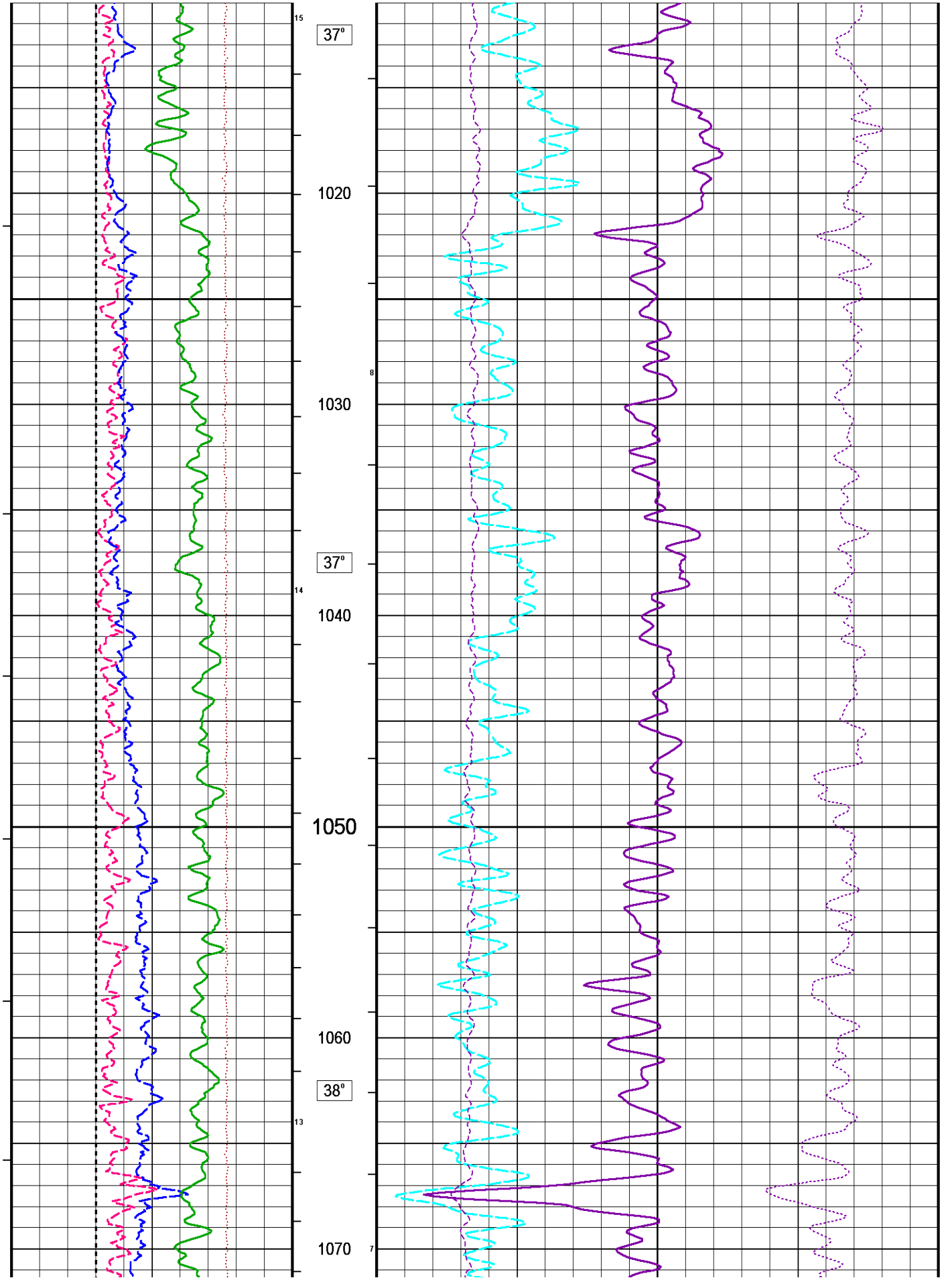

710
30°
720
730
30°
740
750
760
31°
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
Limestone Density Por.
PE
Density Correction
Limestone Neutron Por.

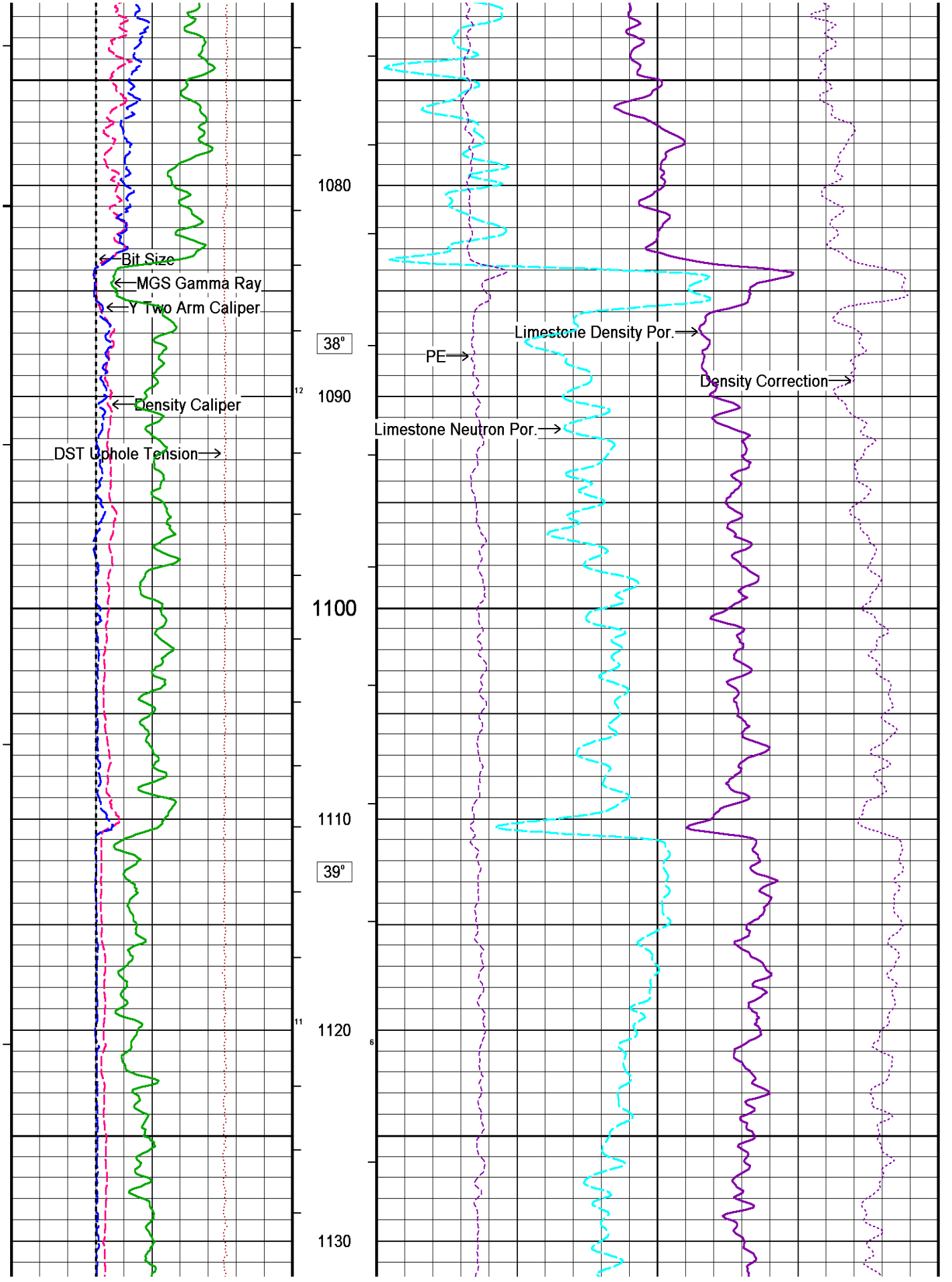

770
780
32°
790
800
810
33°
820
23
22
21
13
12

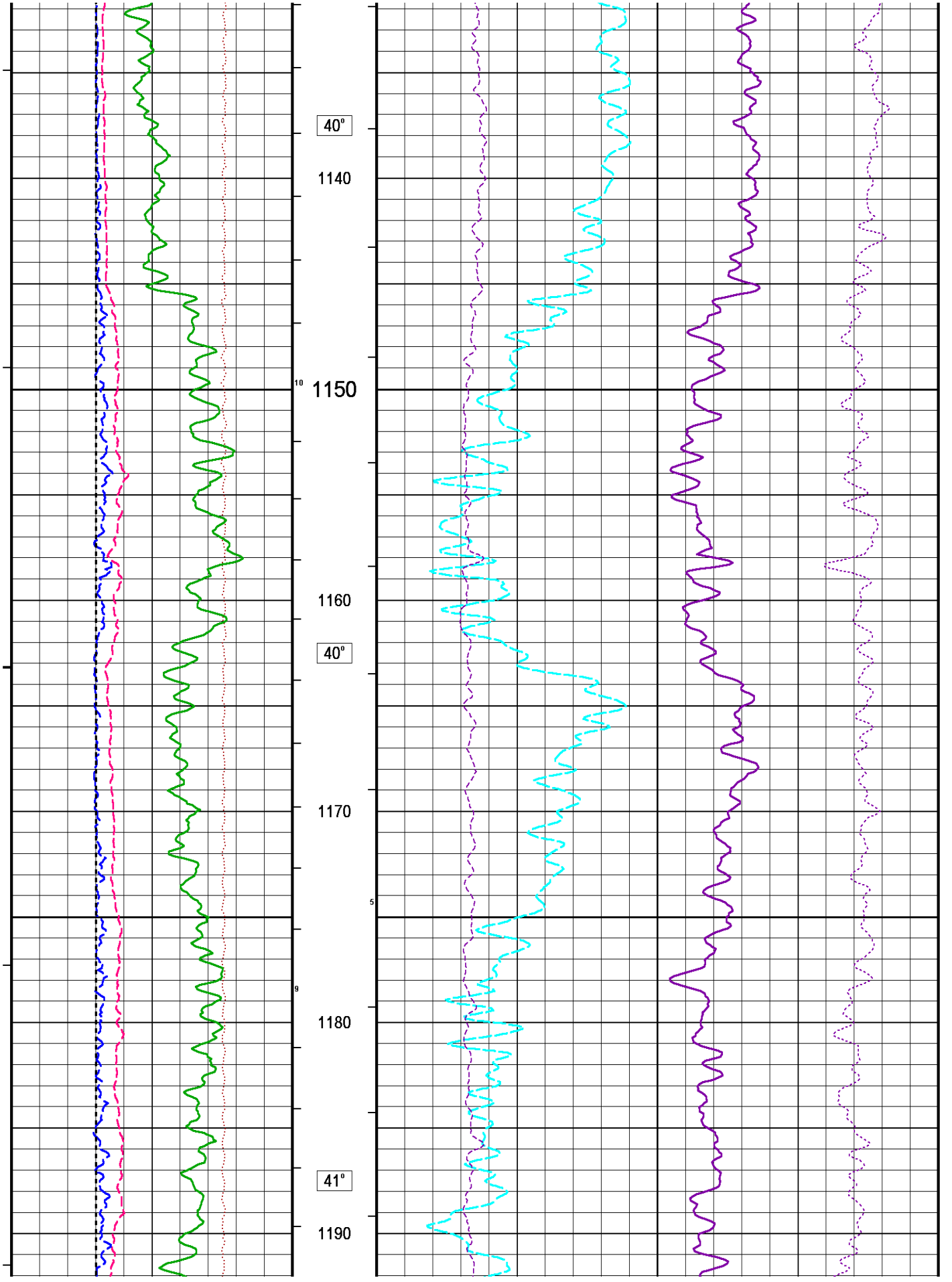

Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DS7 Uphole Tension
PE
Limestone Density Por.
Density Correction
Limestone Neutron Por.
33°
840
850
860
34°
870
880
34°
890

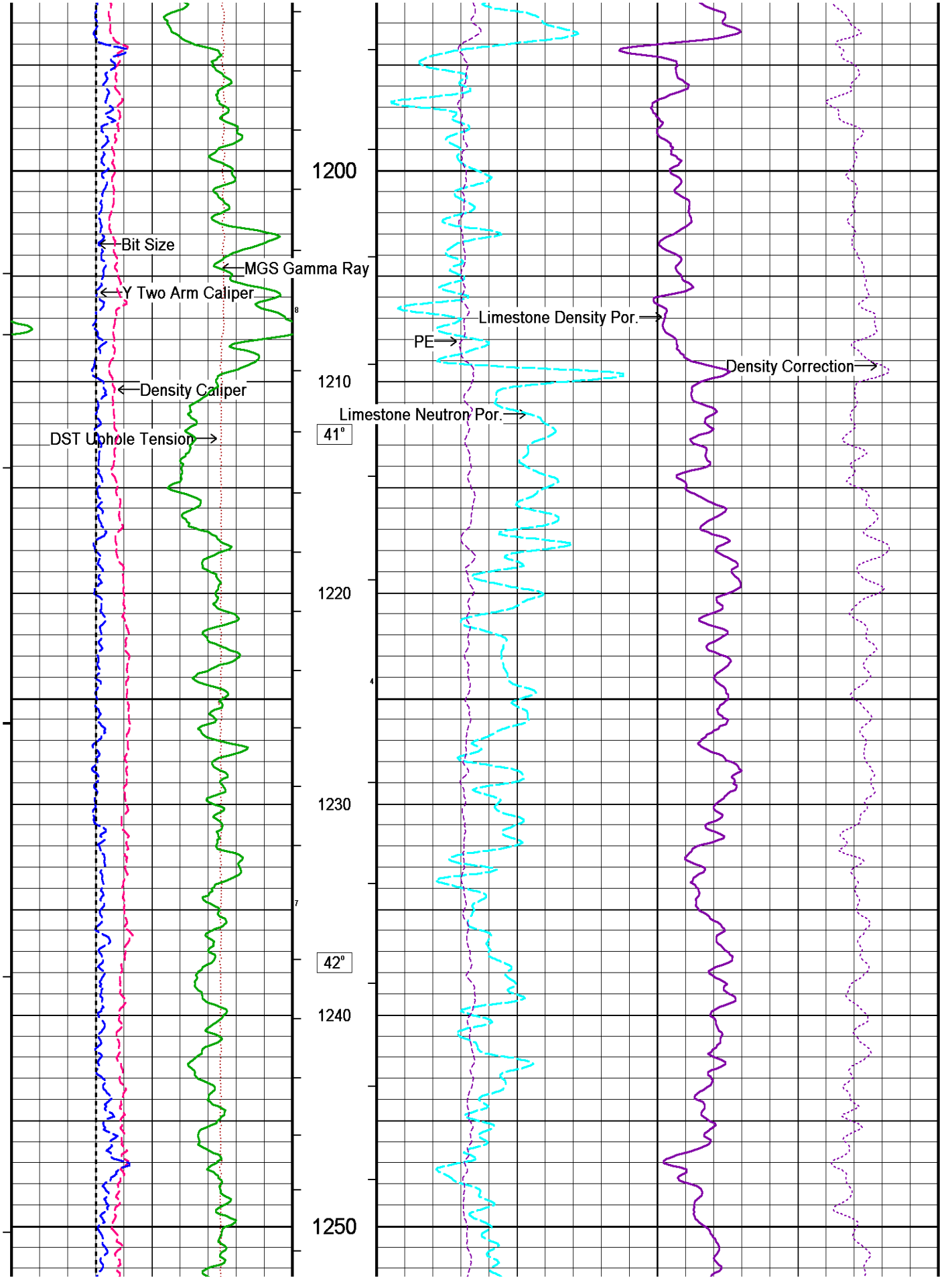

19
900
910
35°
920
18
10
930
35°
940
950

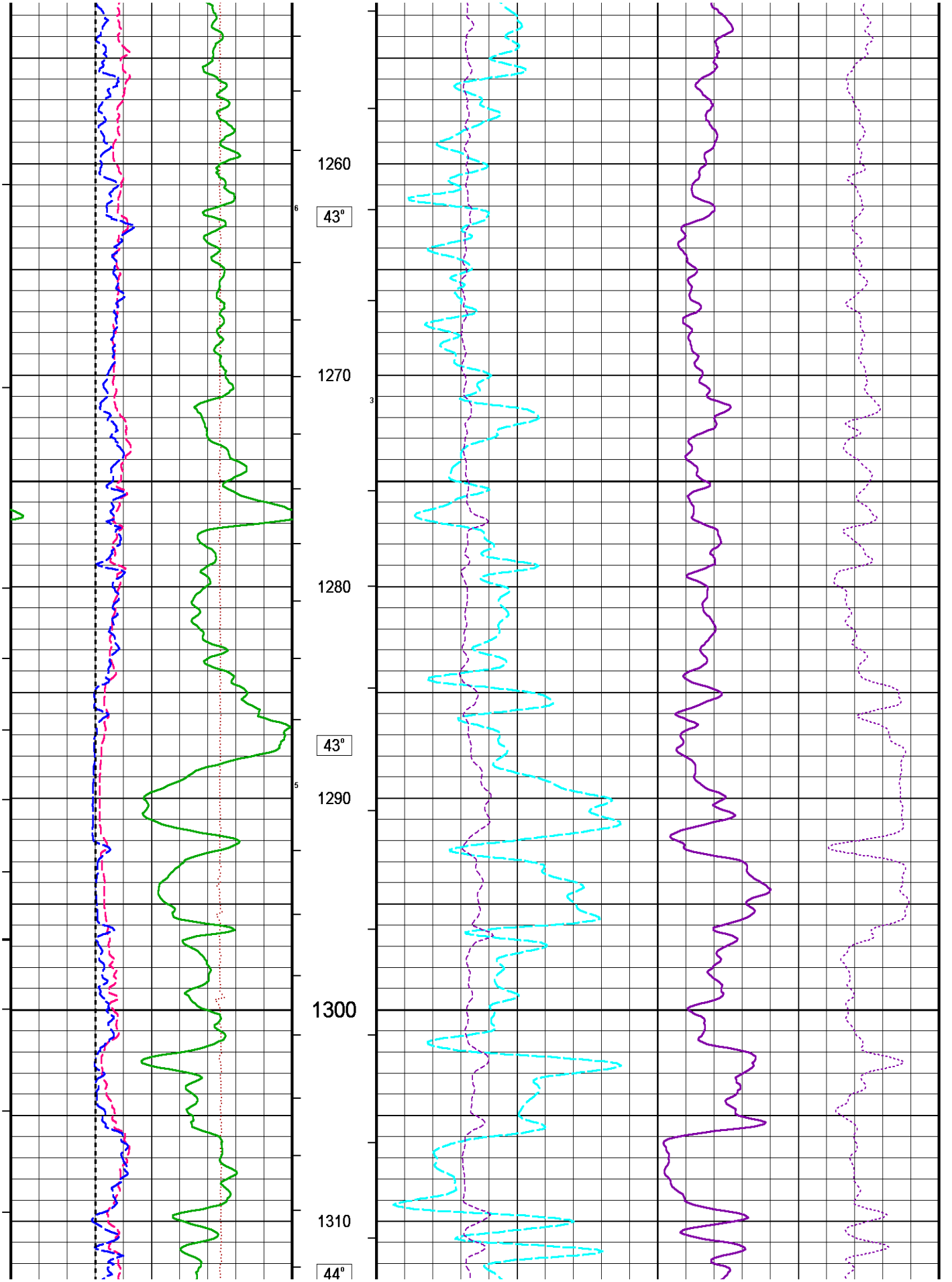

17
960
36°
←Bit Size
←MGS Gamma Ray
←Y Two Arm Caliper
970
←Density Caliper
DST Uphole Tension→
980
16
36°
990
1000
1010
Limestone Density Por.→
PE→
Density Correction→
Limestone Neutron Por.→

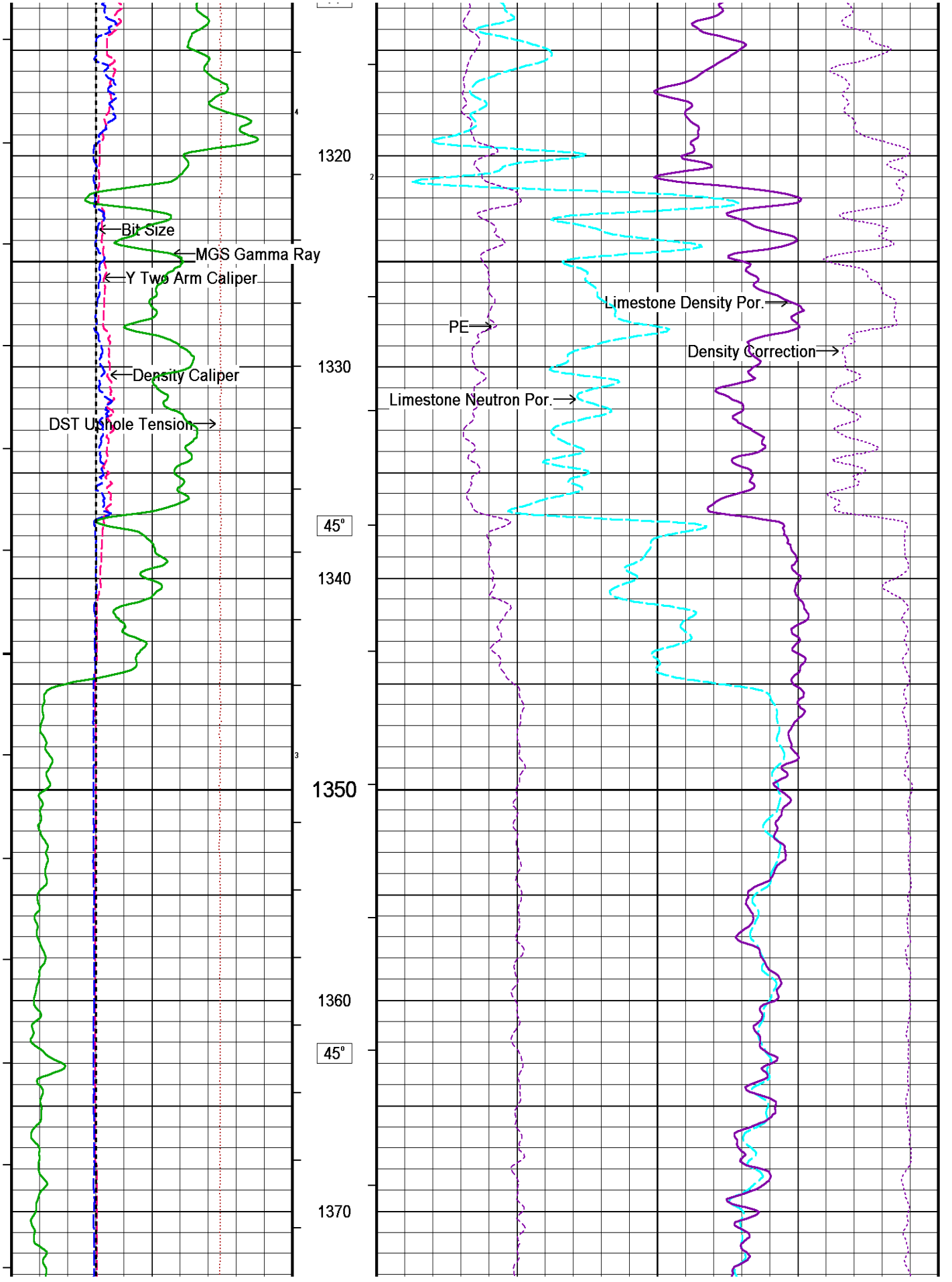

37°
1020
1030
37°
1040
1050
1060
38°
1070
15
14
13
8
7

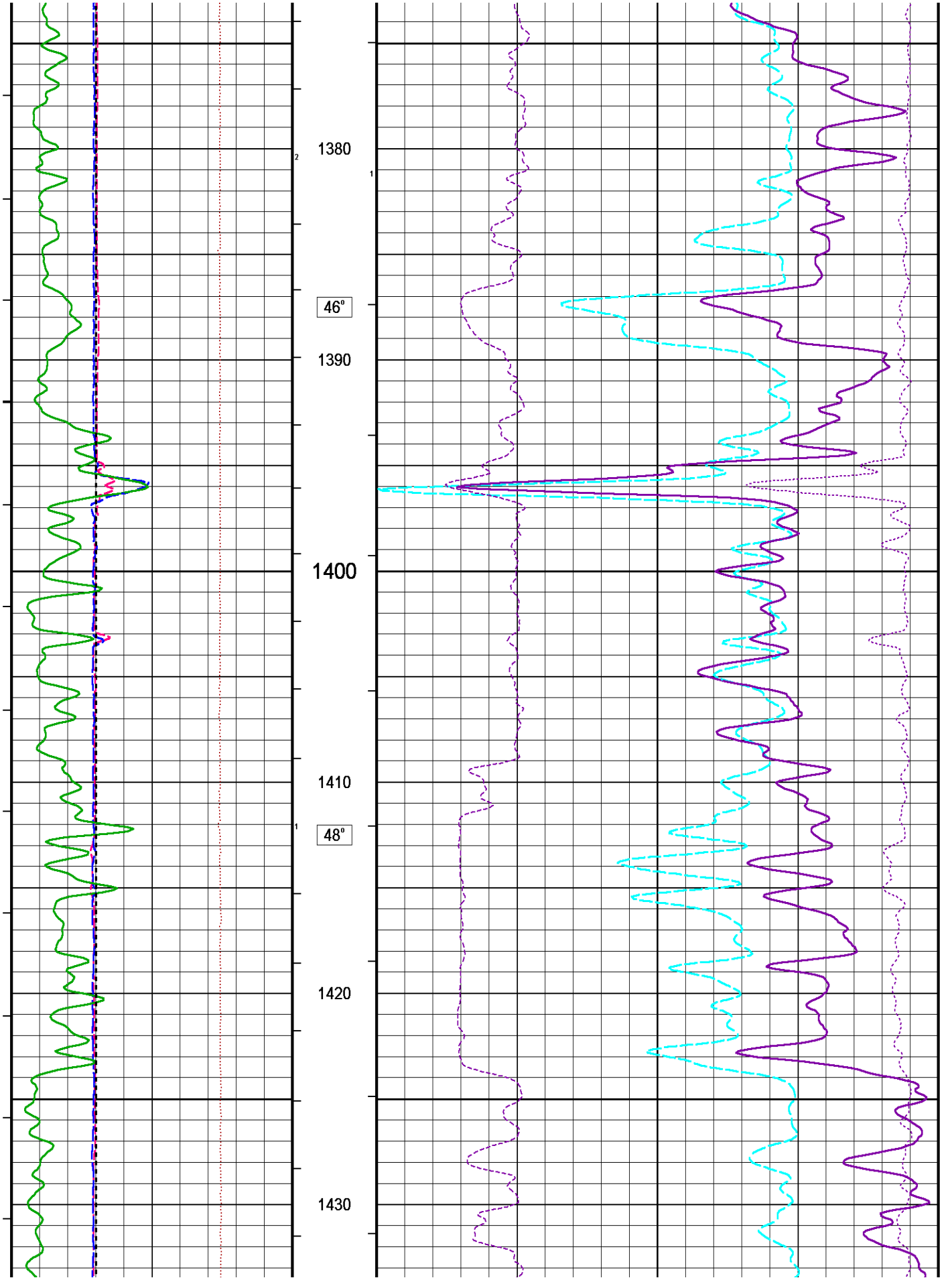

Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
1080
38°
1090
1100
1110
39°
1120
1130
Limestone Density Por.
PE
Density Correction
Limestone Neutron Por.

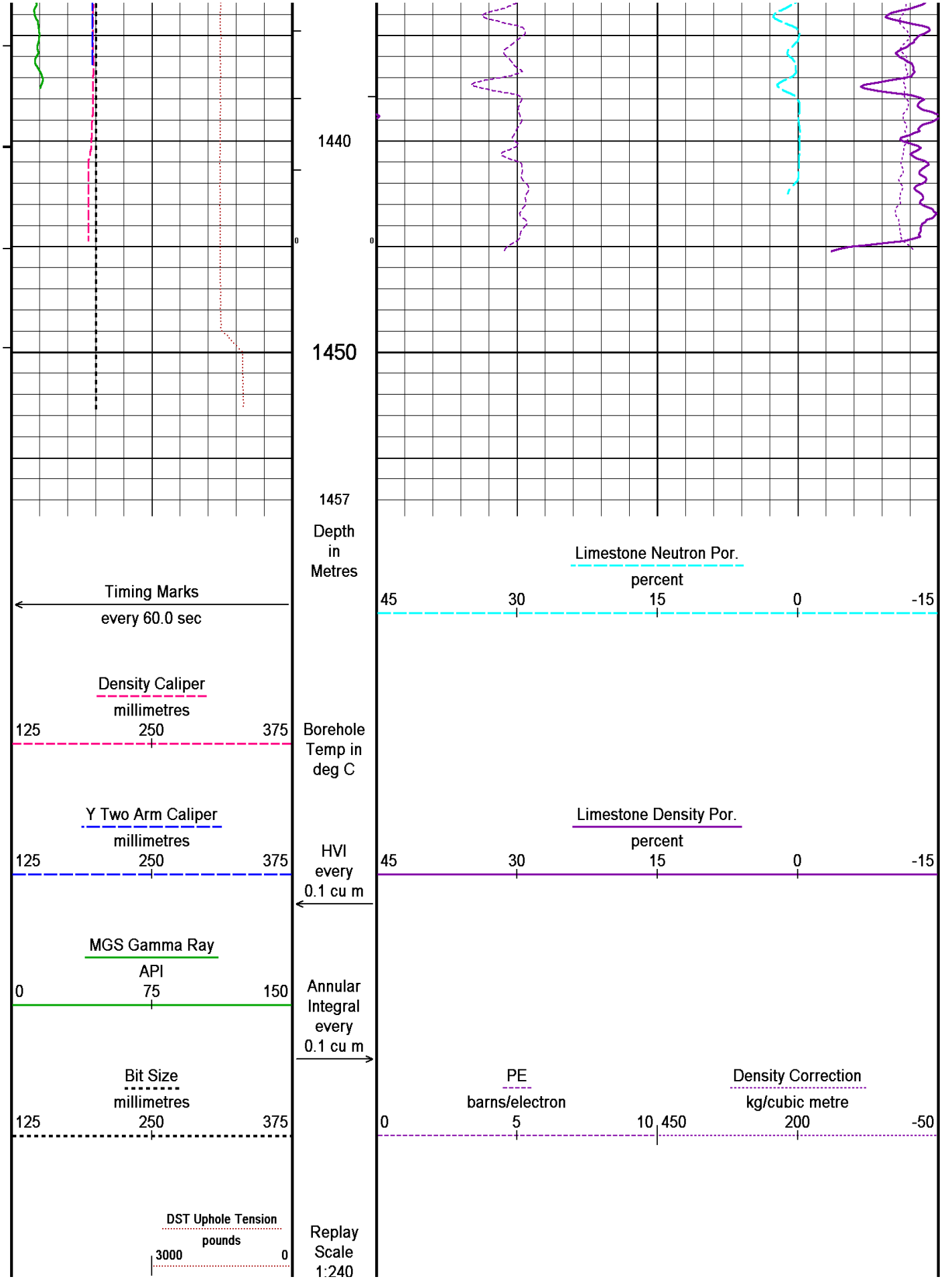

40°
1140
1150
1160
40°
1170
1180
41°
1190


Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
Limestone Density Por.
PE
Density Correction
Limestone Neutron Por.
1200
1210
1220
1230
1240
1250
41°
42°


1260
43°
1270
1280
43°
1290
1300
1310
44°


Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
PE
Limestone Density Por.
Density Correction
Limestone Neutron Por.
1320
1330
45°
1340
1350
1360
45°
1370


1380
46°
1390
1400
1410
48°
1420
1430


1440
1450
1457
Depth in Metres
Timing Marks
every 60.0 sec
Density Caliper
millimetres
125
250
375
Borehole Temp in deg C
Y Two Arm Caliper
millimetres
125
250
375
HVI every 0.1 cu m
MGS Gamma Ray
API
0
75
150
Annular Integral every 0.1 cu m
Bit Size
millimetres
125
250
375
DST Uphole Tension
pounds
3000
0
Replay Scale 1:240
Limestone Neutron Por.
percent
45
30
15
0
-15
Limestone Density Por.
percent
45
30
15
0
-15
PE
barns/electron
0
5
10
Density Correction
kg/cubic metre
450
200
-50

Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 12-NOV-2007 09:30
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta — Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

LIMESTONE MAINLOG

LIMESTONE REPEAT
SANDSTONE MAINLOG

Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 12-NOV-2007 09:30
Filename: C:\Temp\Weatherford PreView\0\REPEAT.dta — Recorded on 15-FEB-2007 07:26
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta — Recorded on 15-FEB-2007 08:46
System Versions: Logged with 7.01.0195 Processed with 8.00.0015 Plotted with 8.01.0091

Timing Marks
every 60.0 sec

Density Caliper
millimetres
125 250 375

Y Two Arm Caliper
millimetres
125 250 375

MGS Gamma Ray
API
0 75 150

Bit Size
millimetres
125 250 375

DST Uphole Tension
pounds
3000 0

Depth in Metres

Borehole Temp in deg C

HVI every 0.1 cu m

Annular Integral every 0.1 cu m

Replay Scale 1:240

Limestone Neutron Por.
percent
45 30 15 0 -15

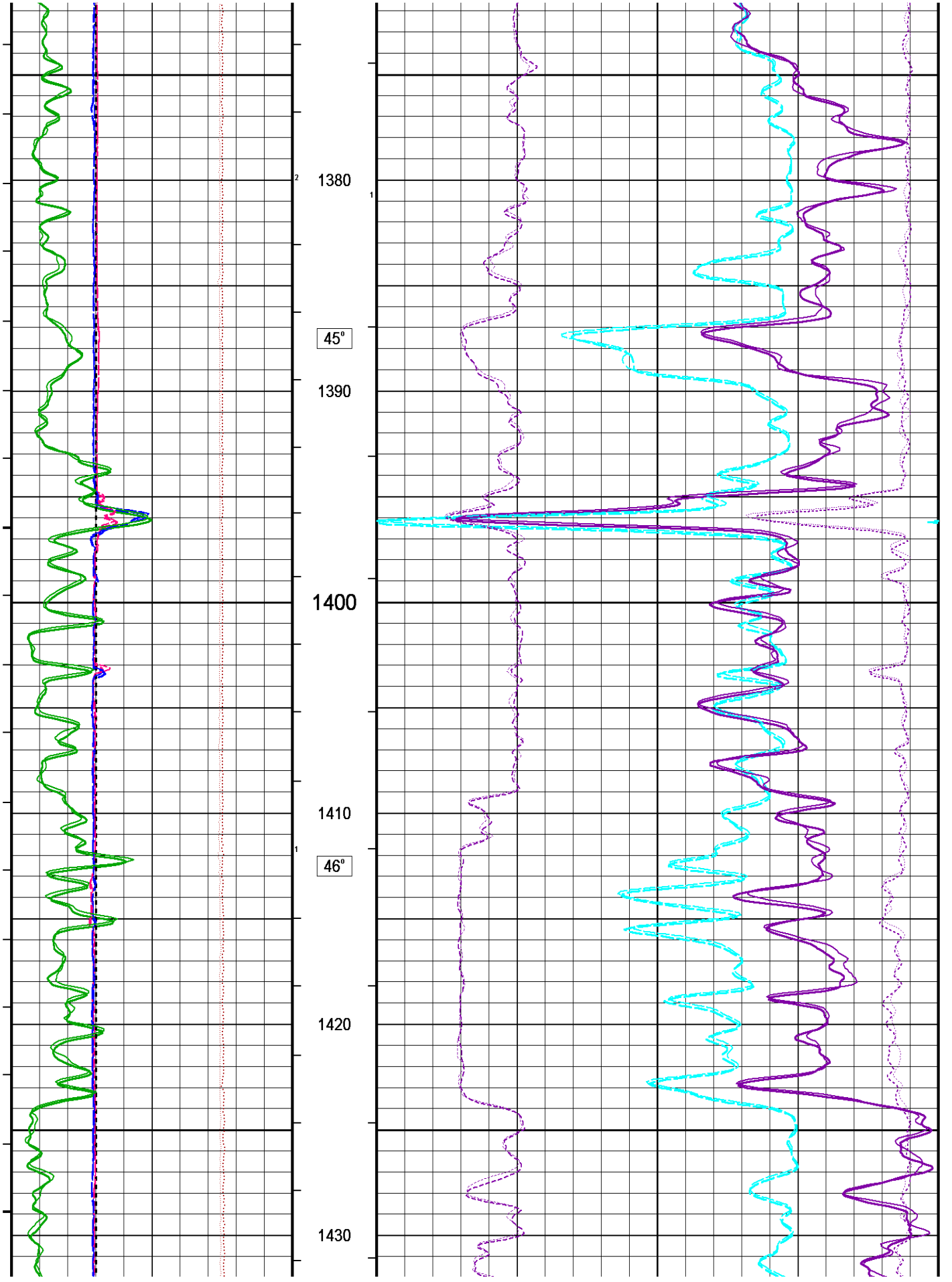
Limestone Density Por.
percent
45 30 15 0 -15

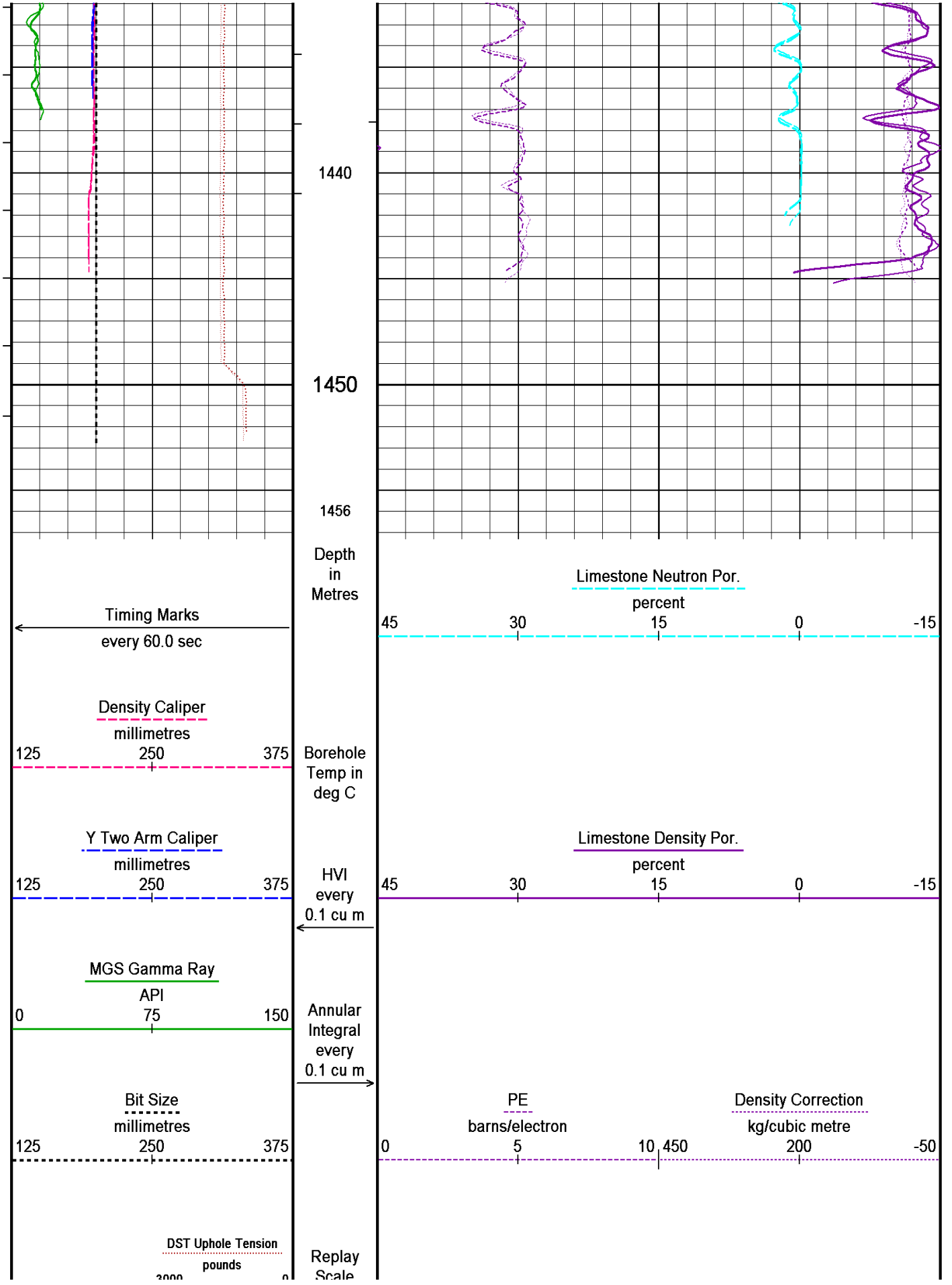
PE
barns/electron
0 5 10

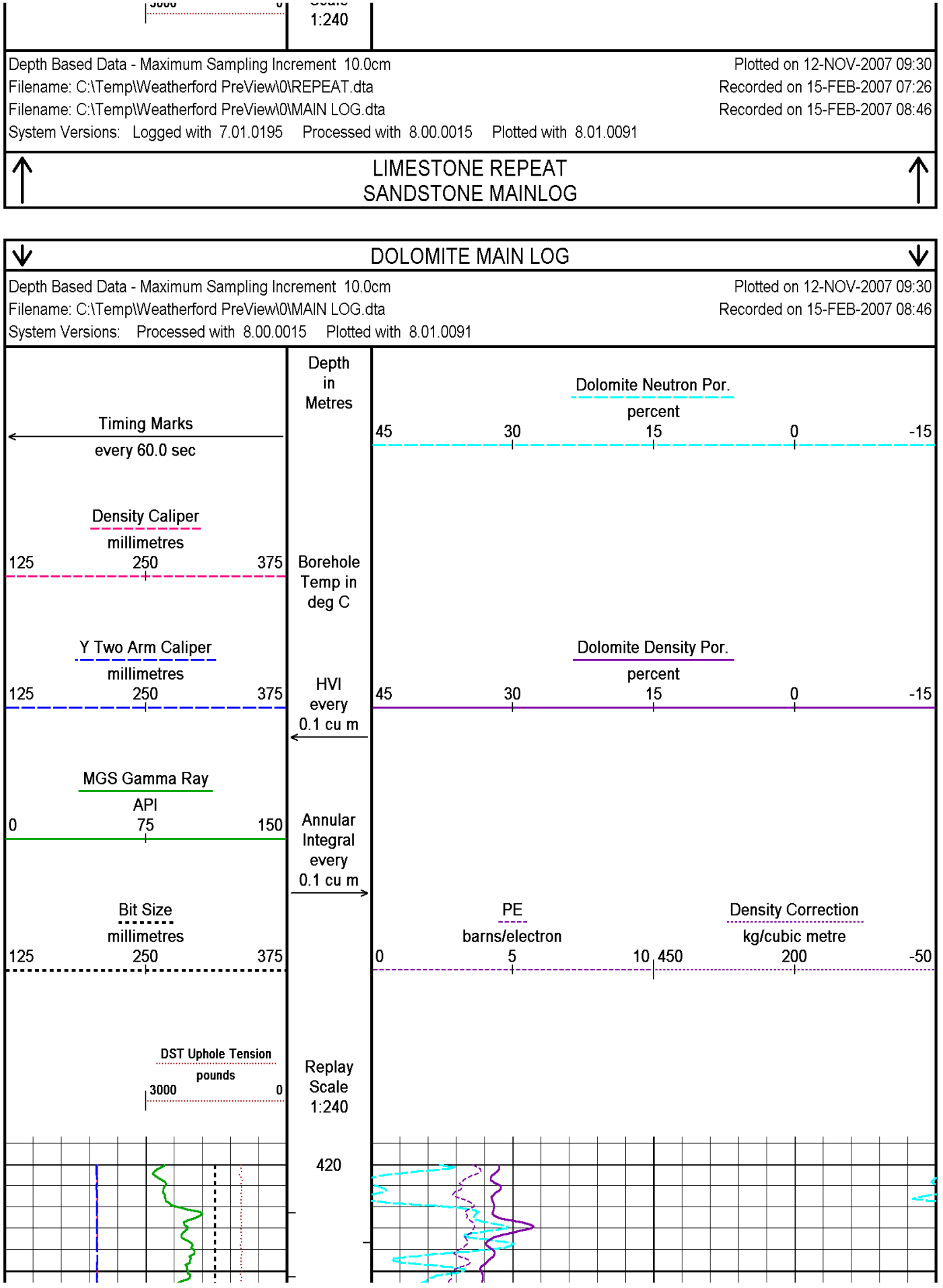
Density Correction
kg/cubic metre
450 200 -50

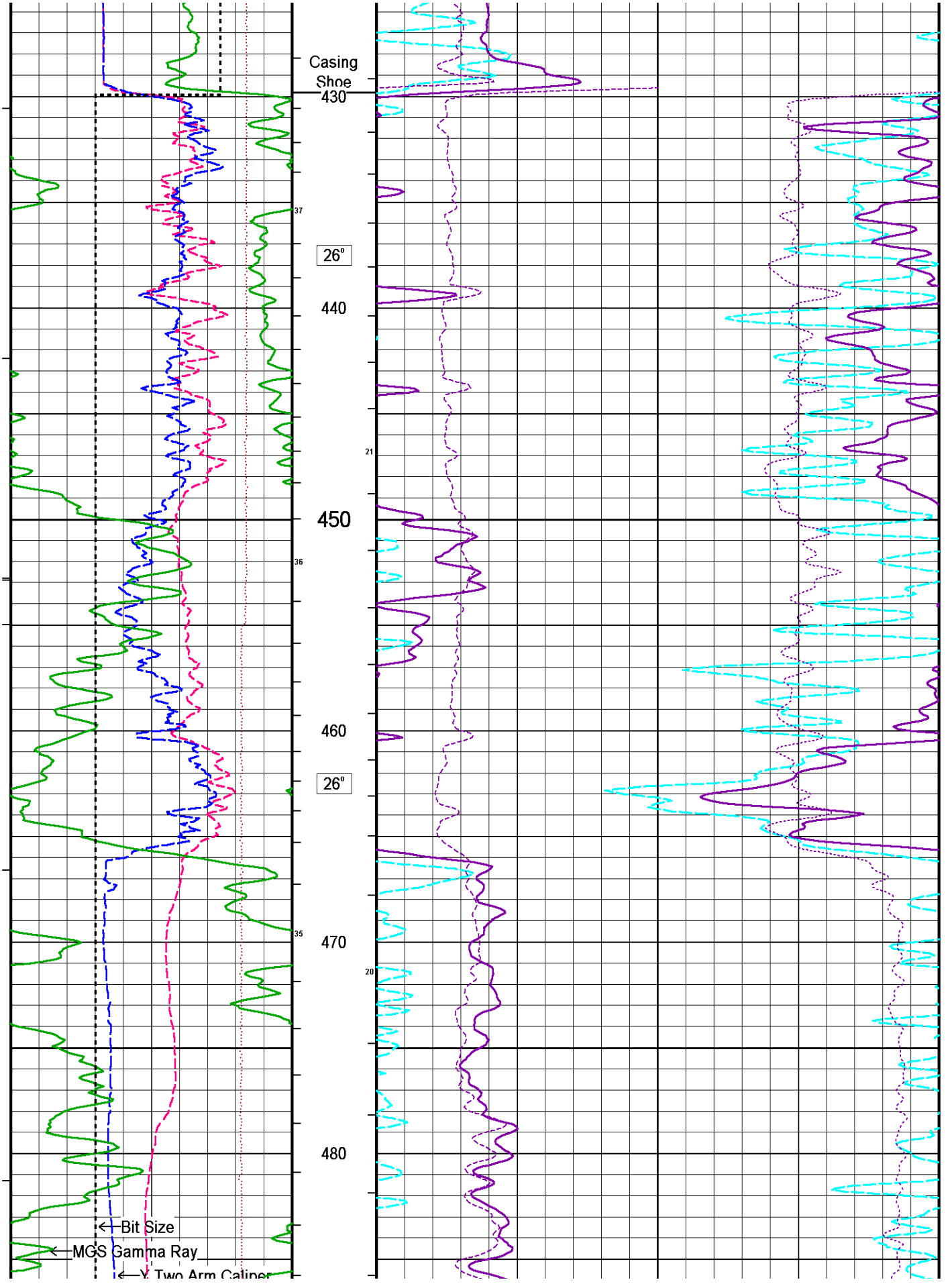
1365

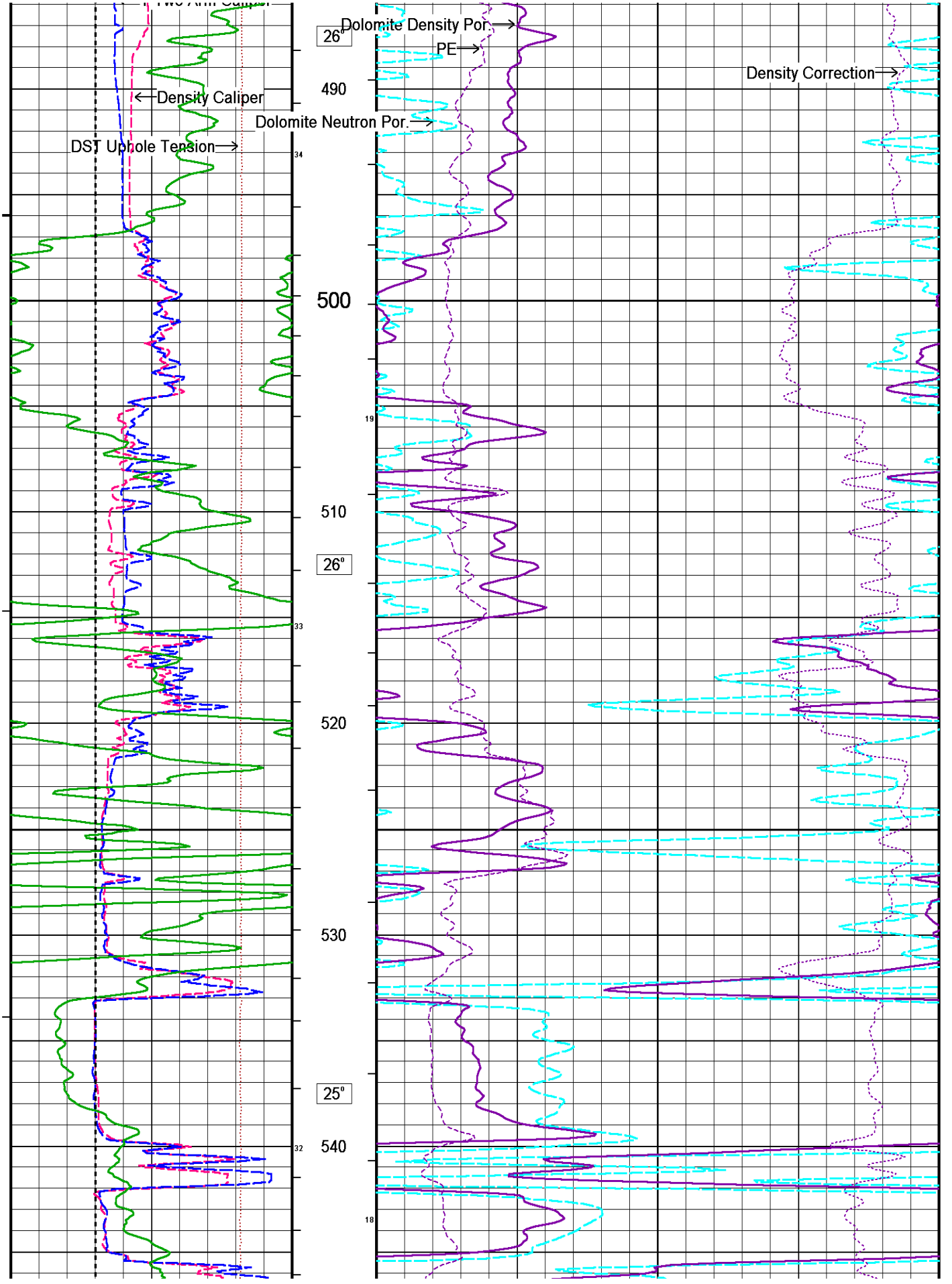
1370

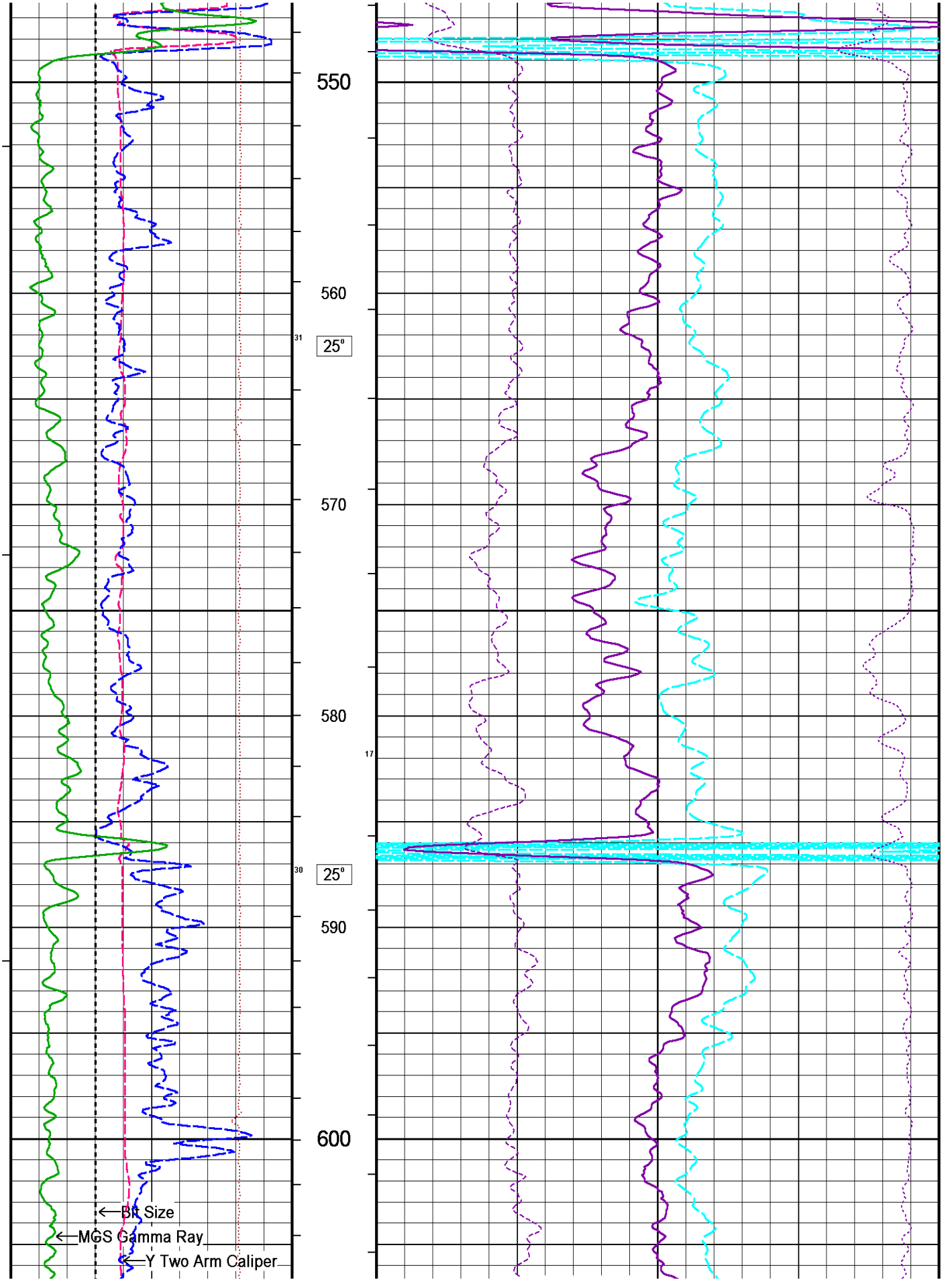

1380
45°
1390
1400
1410
46°
1420
1430

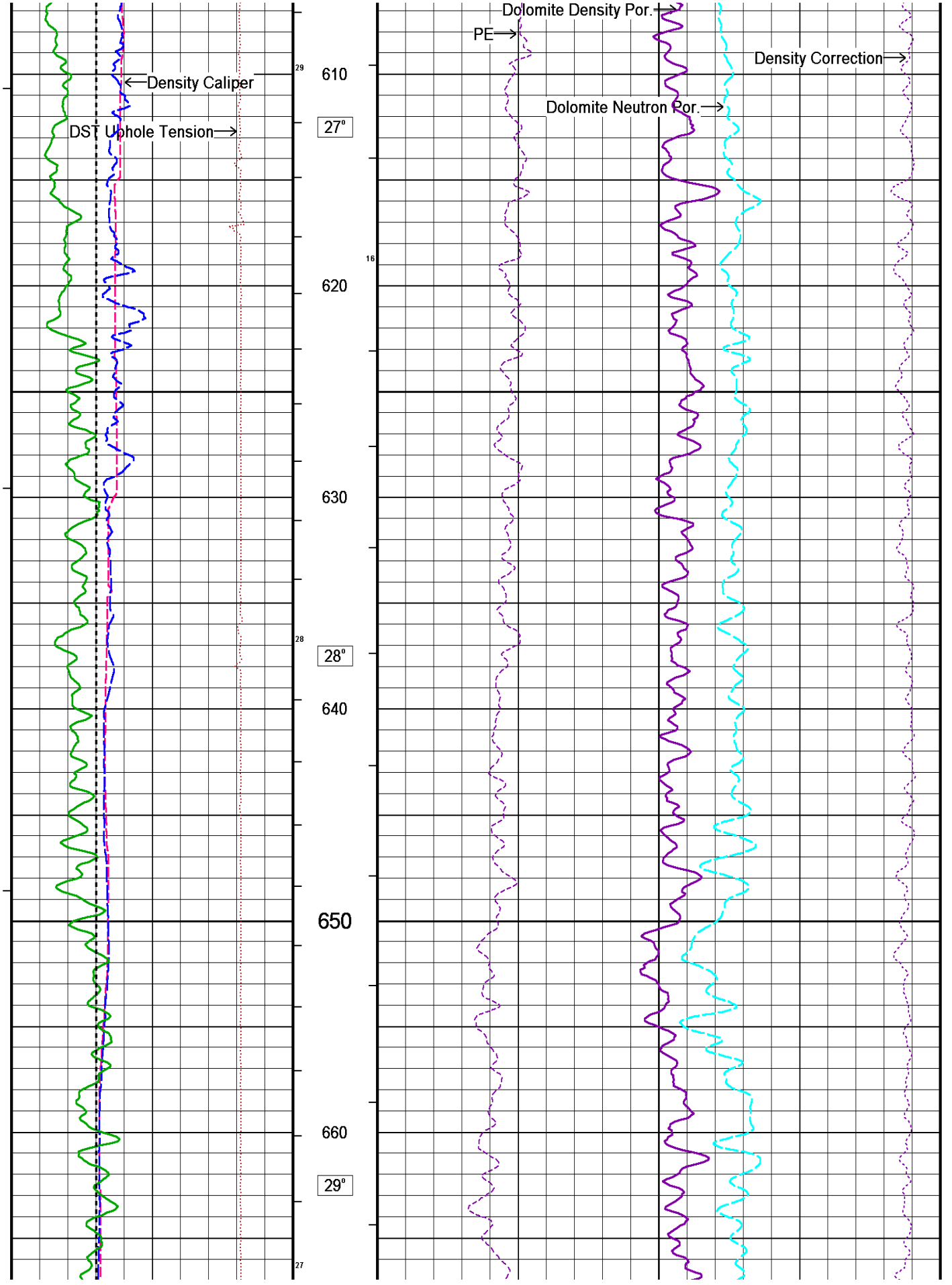

1440
1450
1456
Depth in Metres
Timing Marks
every 60.0 sec
Density Caliper
millimetres
125
250
375
Borehole Temp in deg C
Y Two Arm Caliper
millimetres
125
250
375
HVI every 0.1 cu m
MGS Gamma Ray
API
0
75
150
Annular Integral every 0.1 cu m
Bit Size
millimetres
125
250
375
DST Uphole Tension
pounds
3000
0
Replay Scale
Limestone Neutron Por.
percent
45
30
15
0
-15
Limestone Density Por.
percent
45
30
15
0
-15
PE
barns/electron
0
5
10
Density Correction
kg/cubic metre
450
200
-50

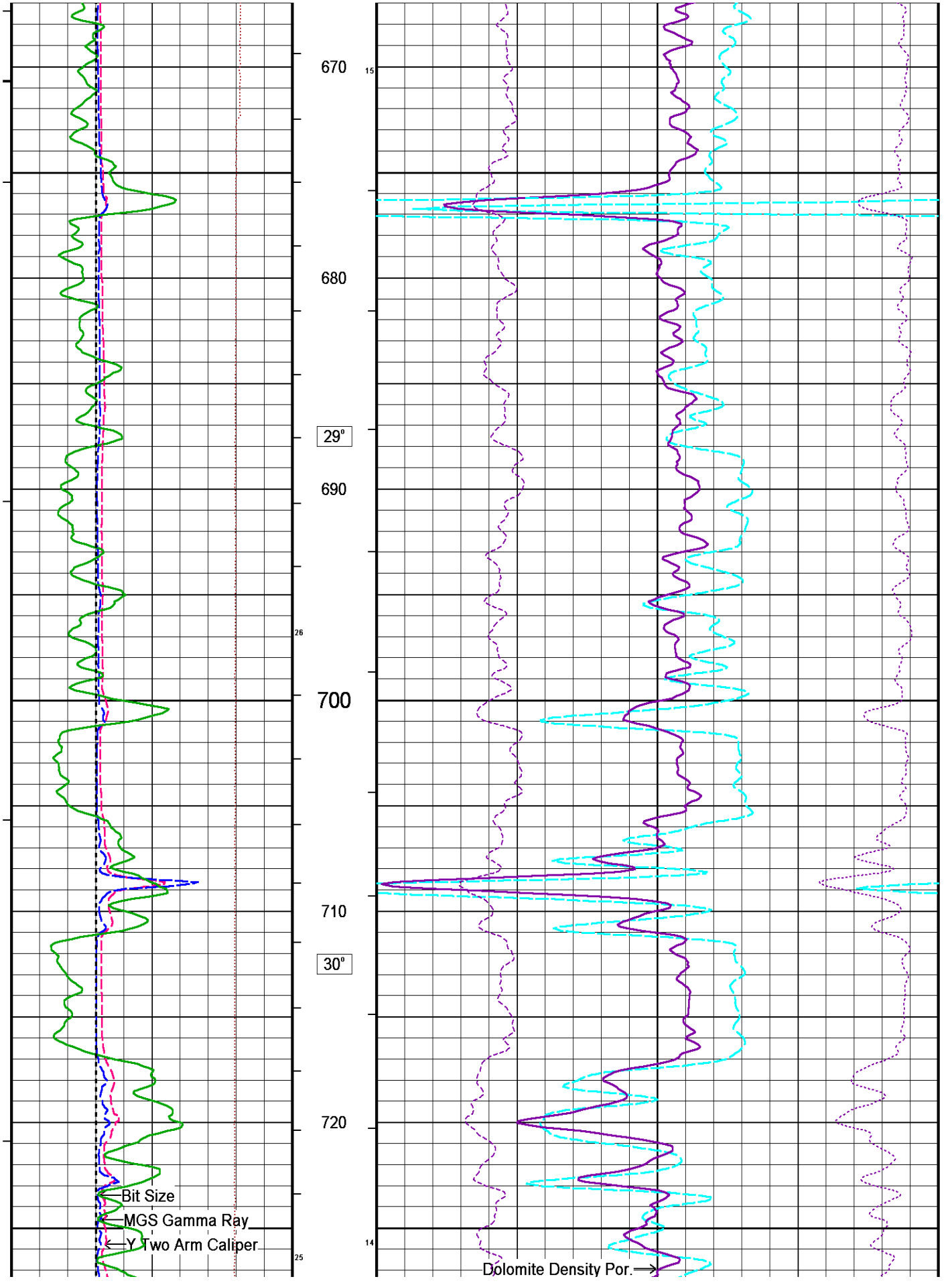

1:240
Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 12-NOV-2007 09:30
Filename: C:\Temp\Weatherford PreView\0\REPEAT.dta
Recorded on 15-FEB-2007 07:26
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
Recorded on 15-FEB-2007 08:46
System Versions: Logged with 7.01.0195 Processed with 8.00.0015 Plotted with 8.01.0091
LIMESTONE REPEAT
SANDSTONE MAINLOG
DOLOMITE MAIN LOG
Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 12-NOV-2007 09:30
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091
Depth in Metres
Timing Marks
every 60.0 sec
Dolomite Neutron Por.
percent
45 30 15 0 -15
Density Caliper
millimetres
125 250 375
Borehole Temp in deg C
Y Two Arm Caliper
millimetres
125 250 375
HVI every 0.1 cu m
Dolomite Density Por.
percent
45 30 15 0 -15
MGS Gamma Ray
API
0 75 150
Annular Integral every 0.1 cu m
Bit Size
millimetres
125 250 375
PE
barns/electron
0 5 10
Density Correction
kg/cubic metre
450 200 -50
DST Uphole Tension
pounds
3000 0
Replay Scale 1:240
420

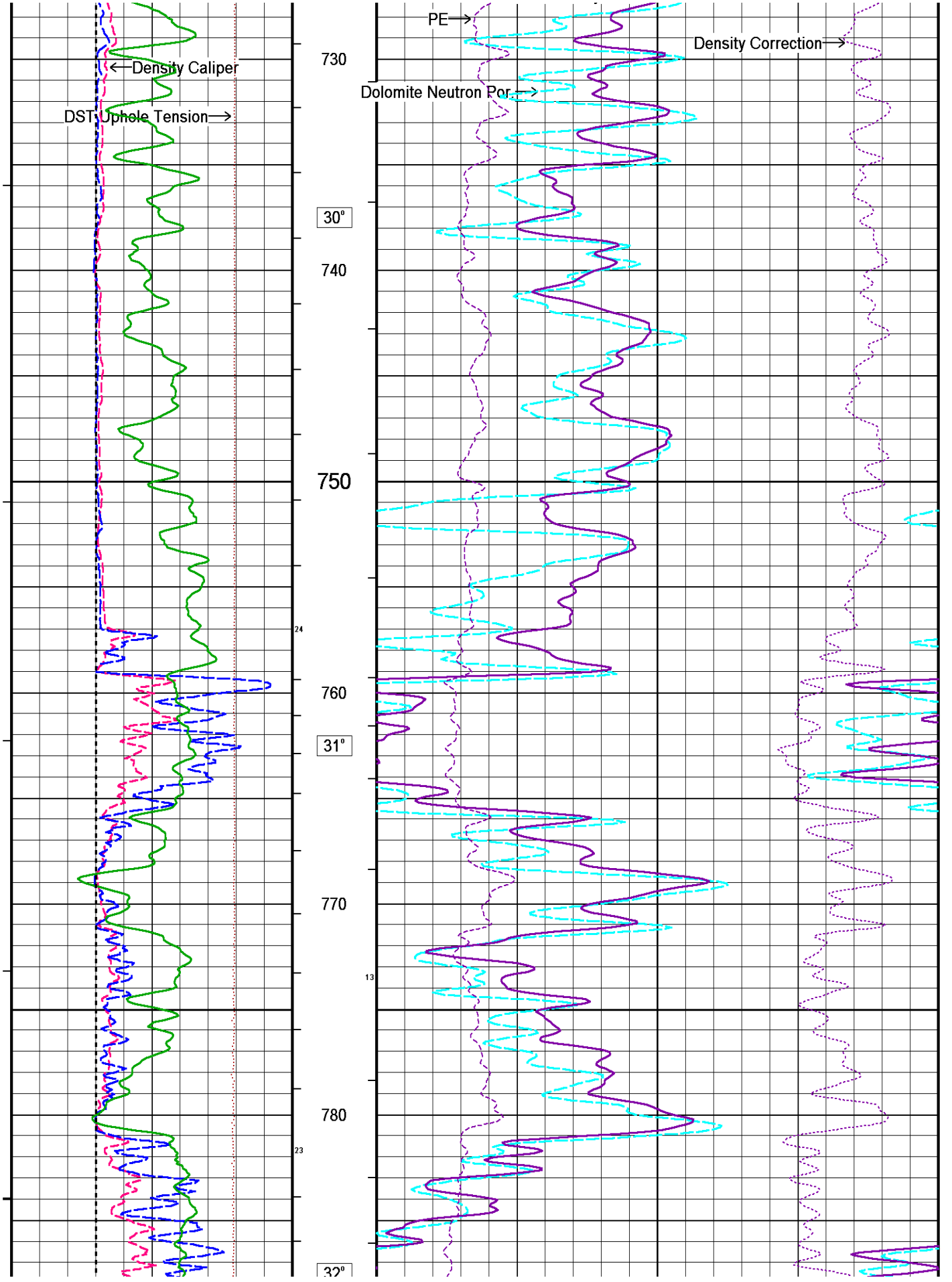

Casing
Shoe
430
37
26°
440
21
450
36
460
26°
35
470
20
480
Bit Size
MGS Gamma Ray
Y Two Arm Caliper

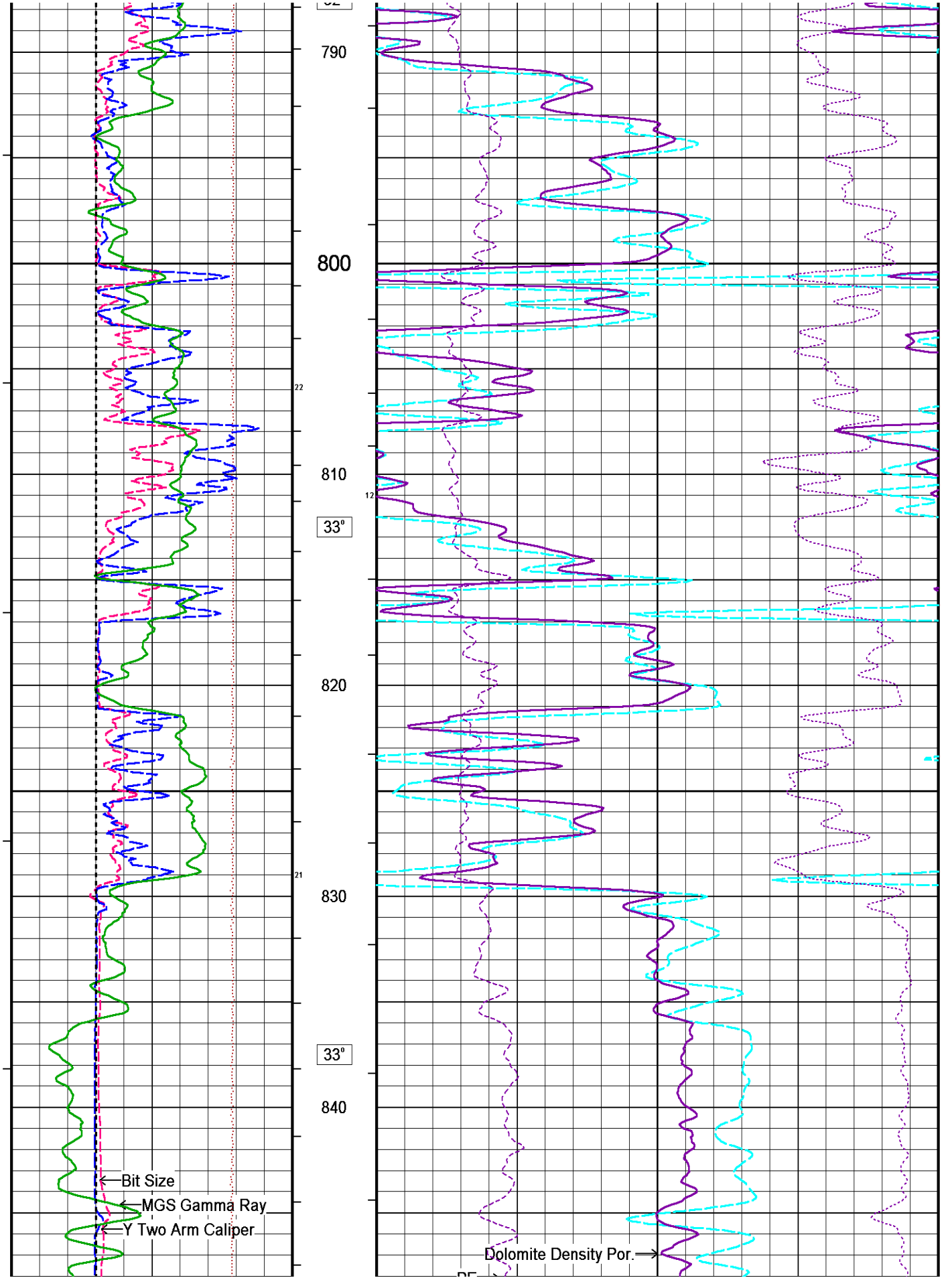

Dolomite Density Por.
PE
Density Correction
Density Caliper
Dolomite Neutron Por.
DST Uphole Tension
26°
490
500
510
26°
520
530
25°
540

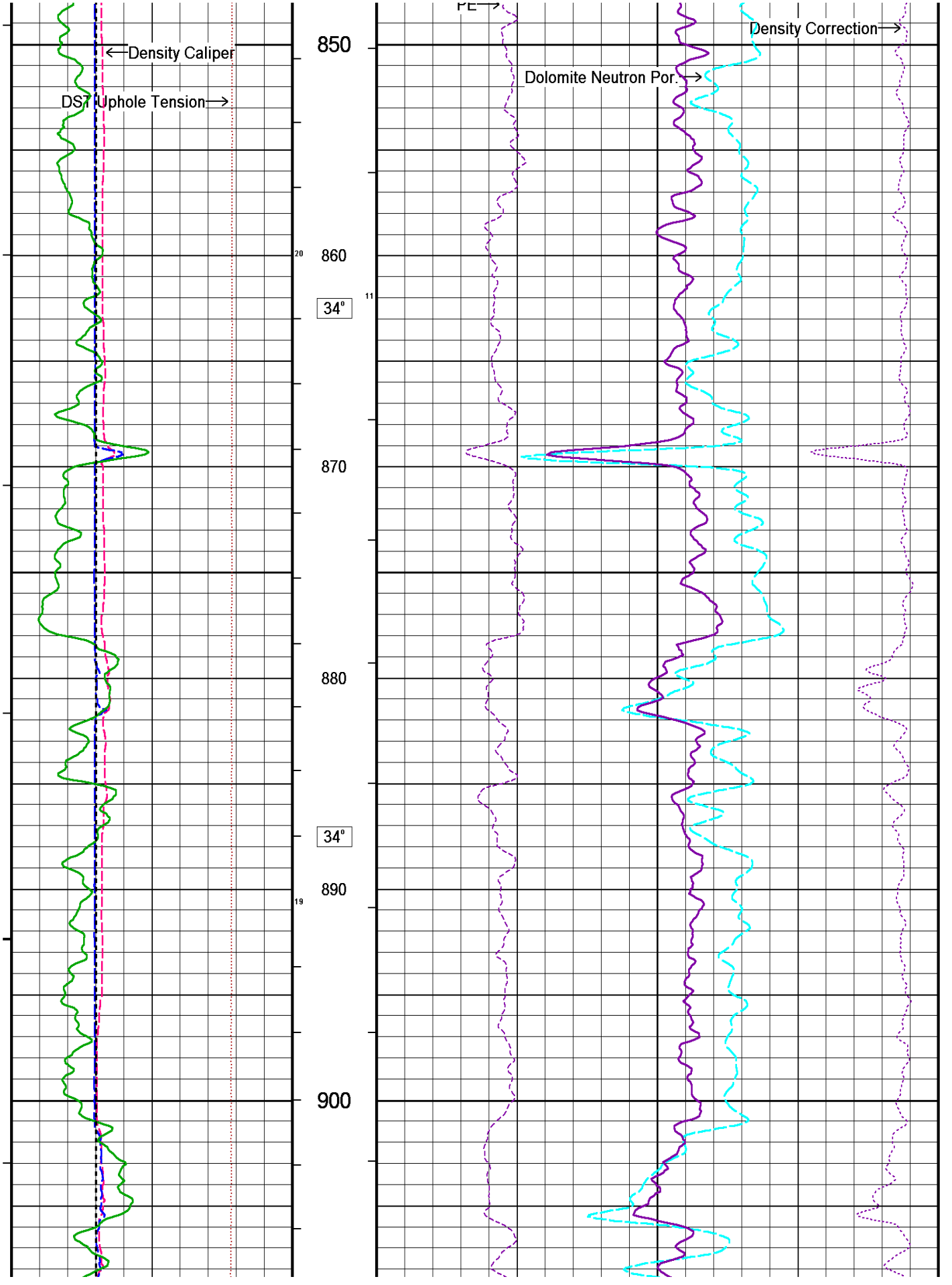

550
560
570
580
590
600
31
25°
30
25°
17
← Bit Size
← MGS Gamma Ray
← Y Two Arm Caliper

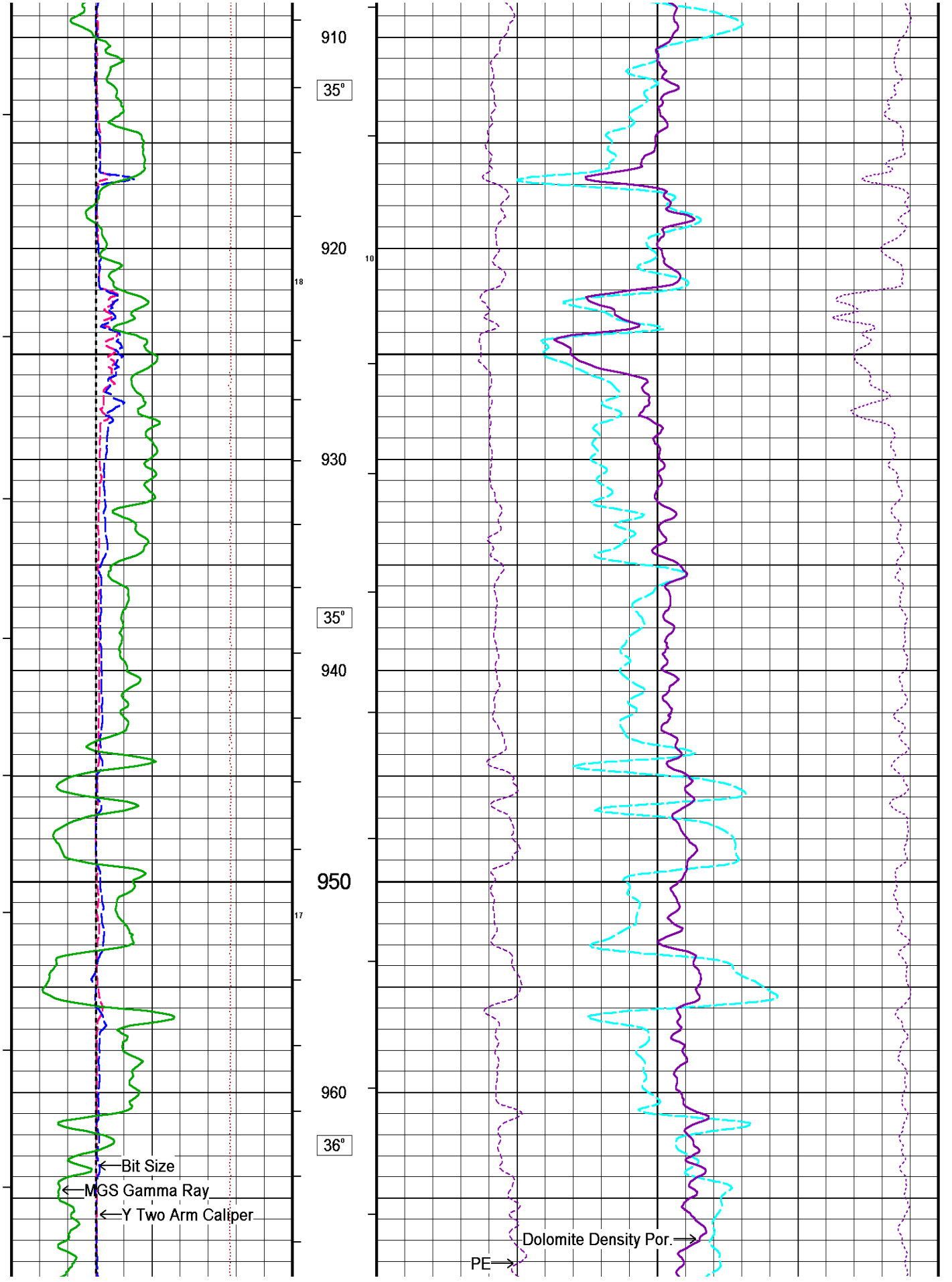

Density Caliper
DST Uphole Tension
Dolomite Density Por.
PE
Density Correction
Dolomite Neutron Por.
29
610
27°
620
16
630
28
28°
640
650
660
29°
27

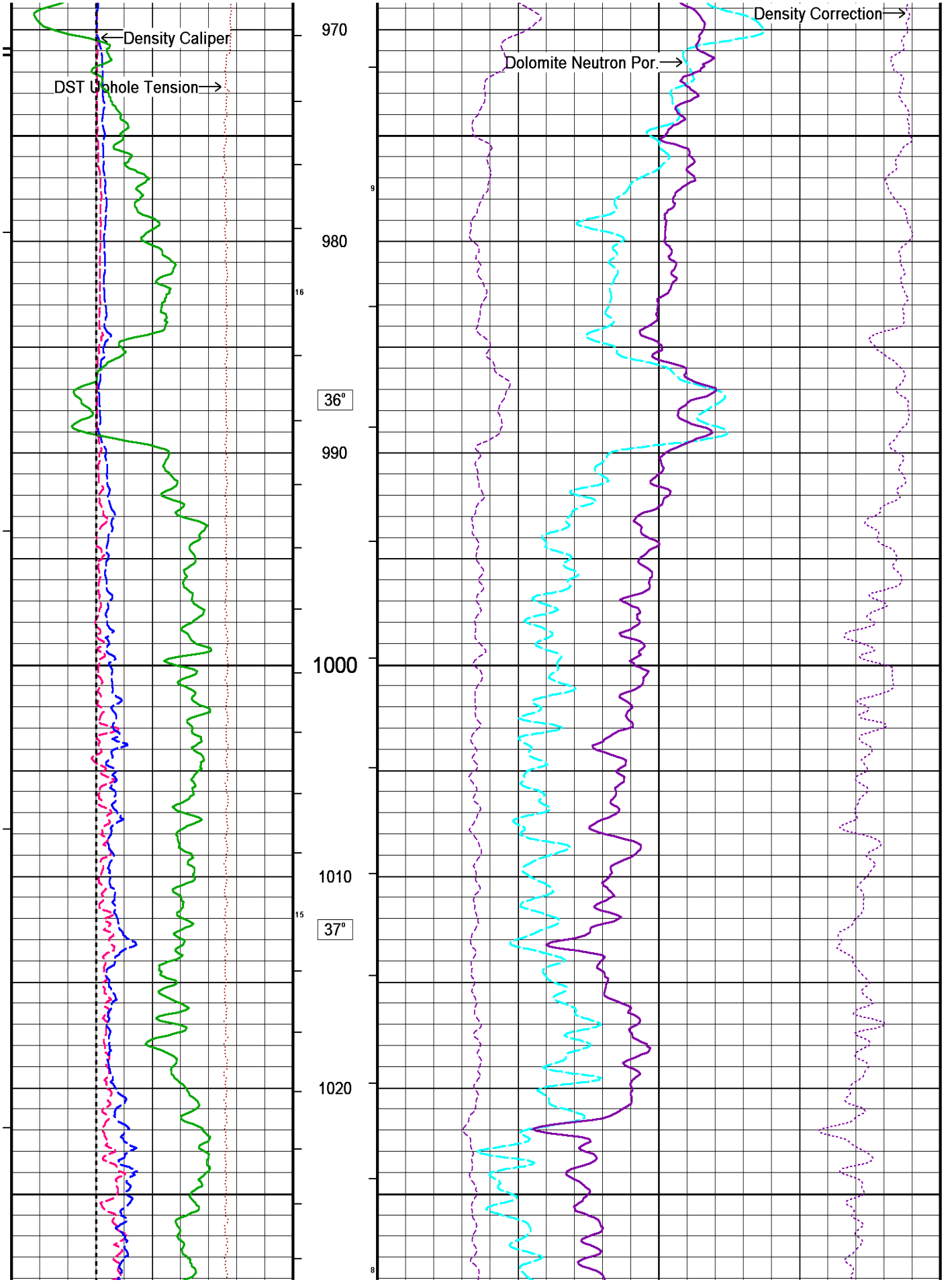

670
680
29°
690
700
710
30°
720
26
25
15
14
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Dolomite Density Por.

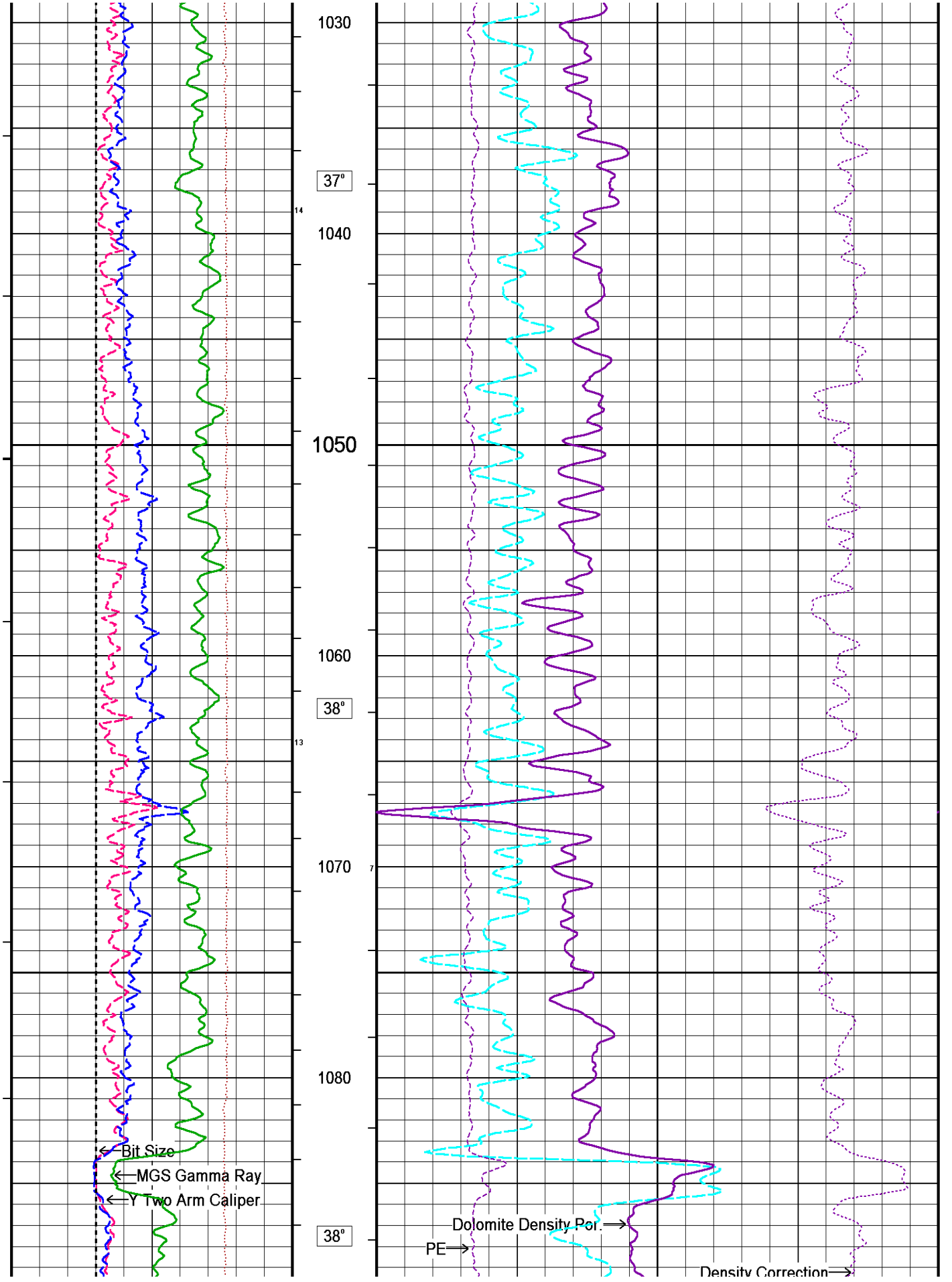

←Density Caliper
DST Uphole Tension→
730
30°
740
750
760
31°
770
780
32°
PE→
Dolomite Neutron Por→
Density Correction→

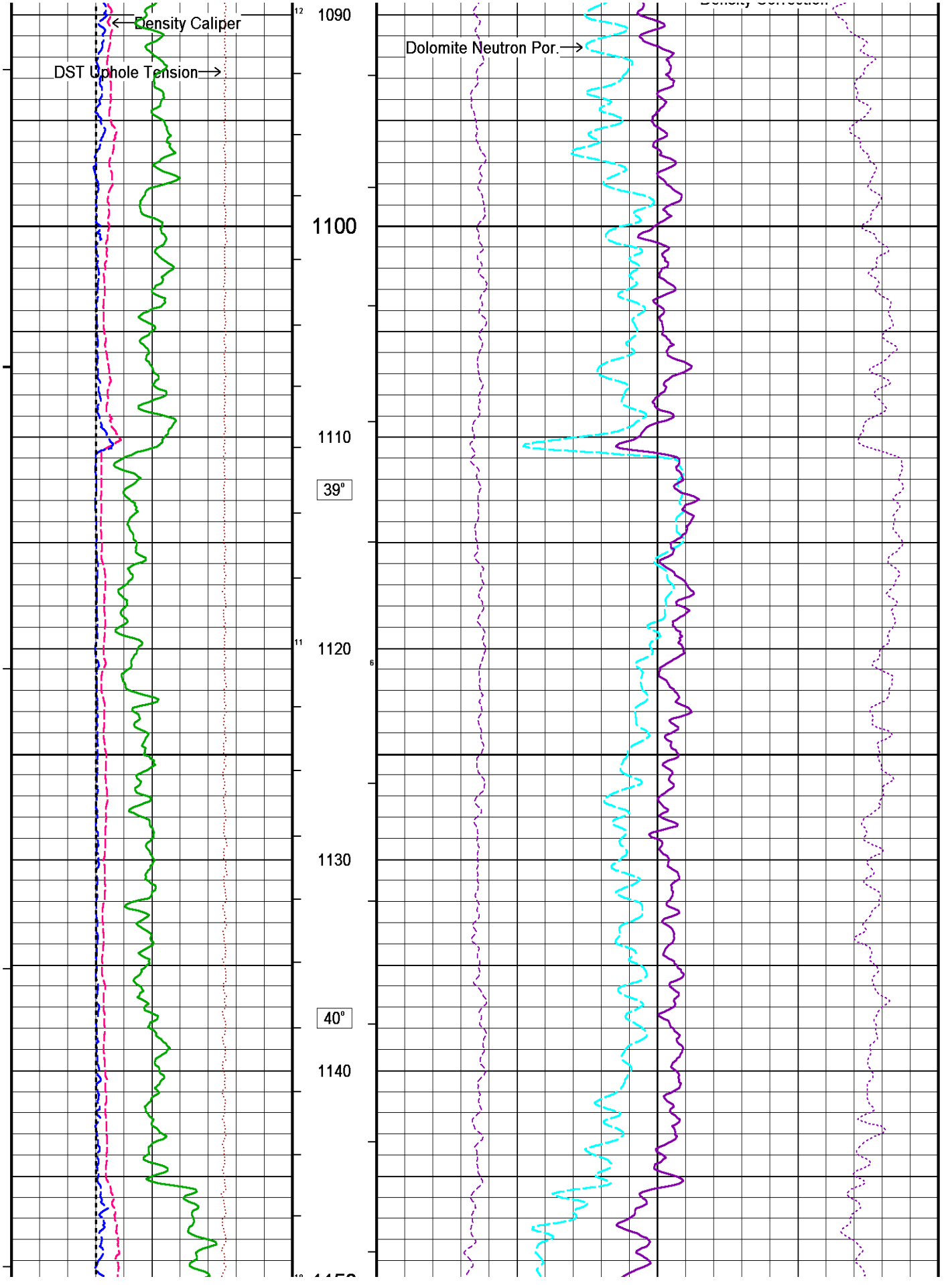

790
800
810
820
830
840
33°
33°
22
21
12
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Dolomite Density Por.

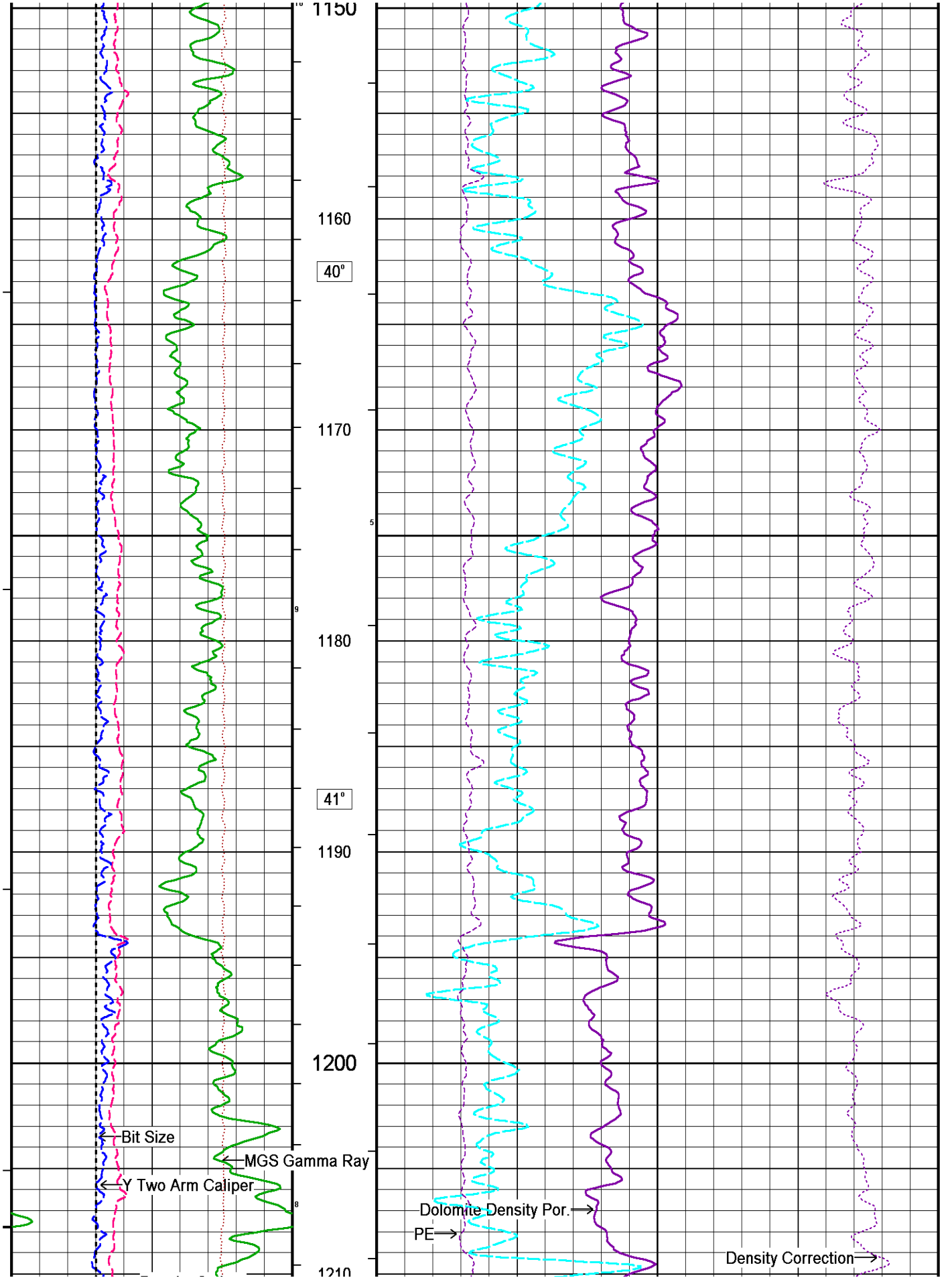

Density Caliper
DS1 Uphole Tension
850
860
34°
870
880
34°
890
900
PE
Dolomite Neutron Por.
Density Correction

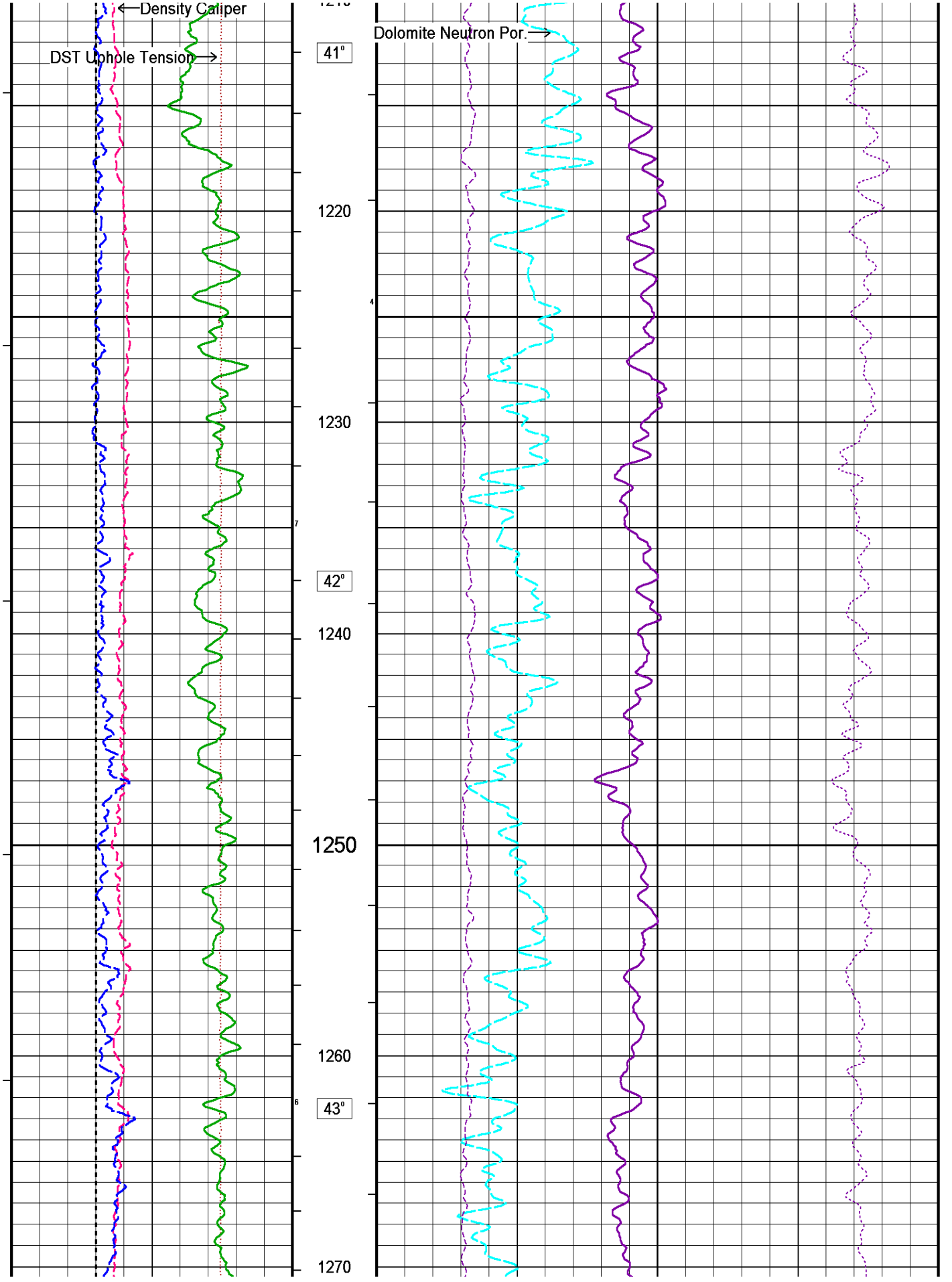

910
35°
920
930
35°
940
950
960
36°
18
17
10
←Bit Size
←MGS Gamma Ray
←Y Two Arm Caliper
PE→
Dolomite Density Por.→

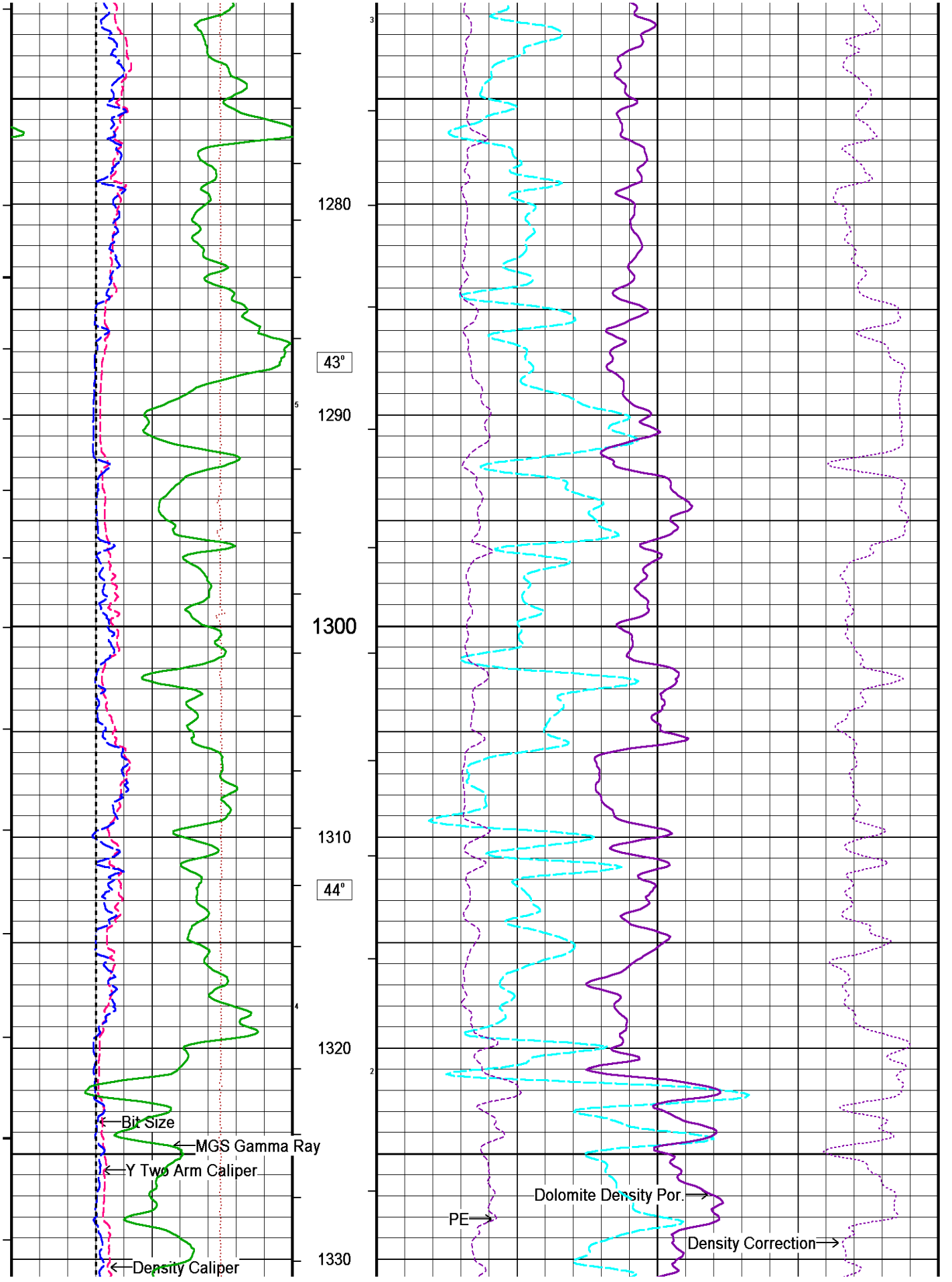

Density Caliper
DST Uphole Tension
Dolomite Neutron Por.
Density Correction
970
980
990
1000
1010
1020
36°
37°
16
15
9
8

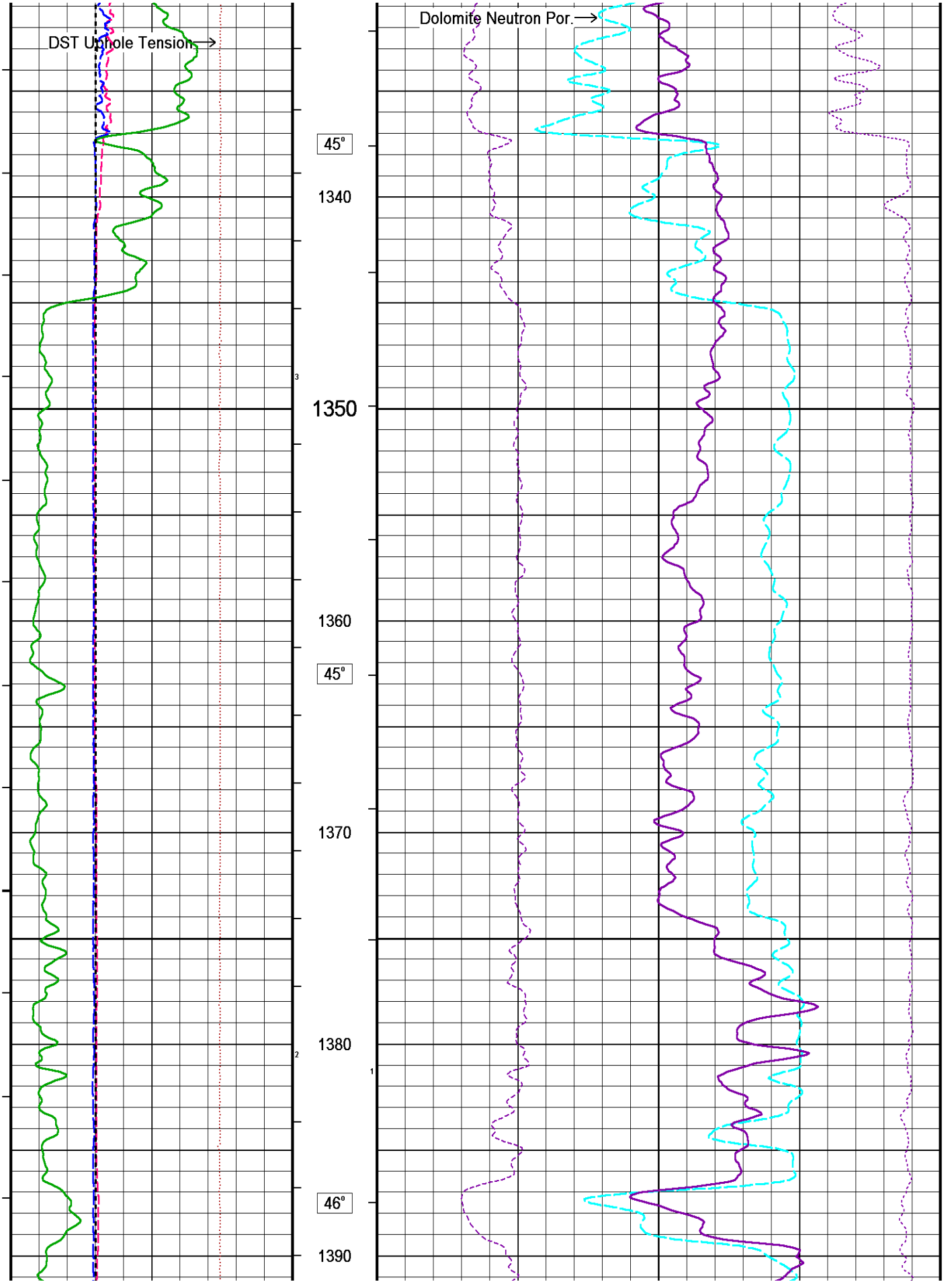

1030
37°
1040
1050
1060
38°
1070
1080
38°
14
13
7
←Bit Size
←MGS Gamma Ray
←Y Two Arm Caliper
Dolomite Density Por.→
PE→
Density Correction→

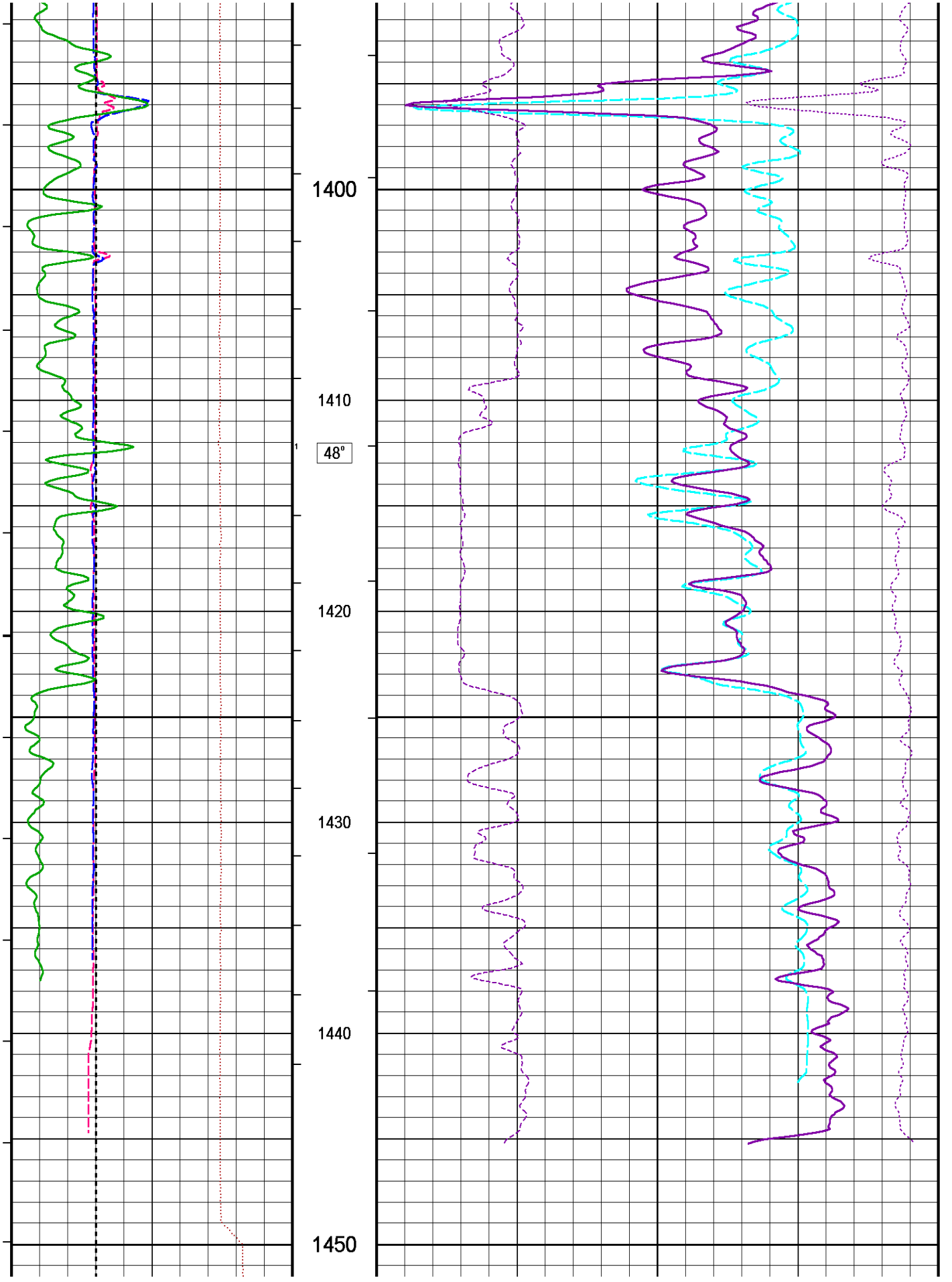

Density Caliper
DST Uphole Tension
Dolomite Neutron Por.
12
11
6
1090
1100
1110
39°
1120
1130
40°
1140

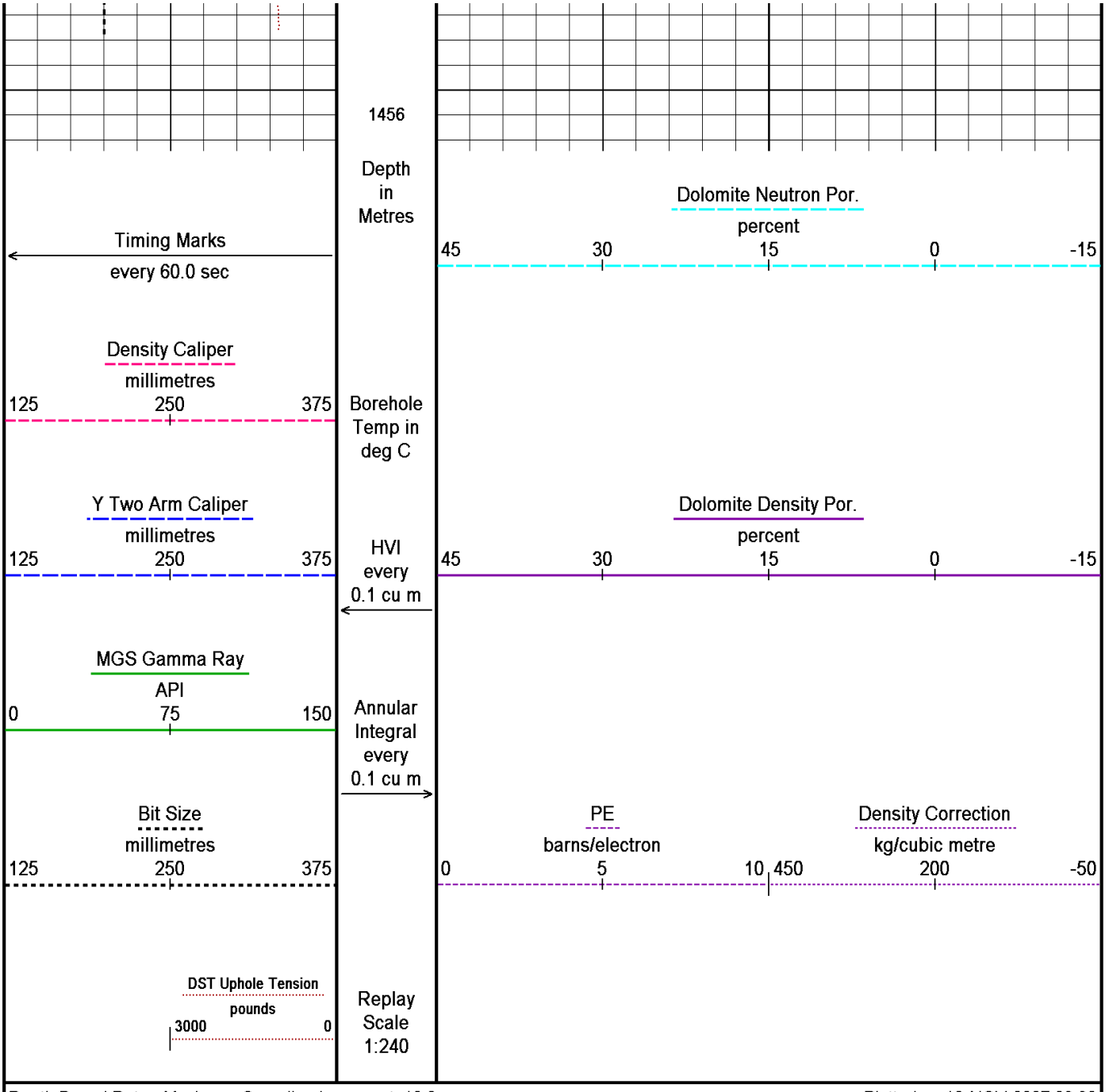

1150
1160
40°
1170
1180
41°
1190
1200
1210
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Dolomite Density Por.
PE
Density Correction


←Density Caliper
DST Uphole Tension→
Dolomite Neutron Por.→
41°
1220
1230
42°
1240
1250
1260
43°
1270


1280
43°
1290
1300
1310
44°
1320
1330
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
PE
Dolomite Density Por.
Density Correction


DST Uphole Tension
Dolomite Neutron Por.
45°
1340
1350
1360
45°
1370
1380
46°
1390


1400
1410
48°
1420
1430
1440
1450

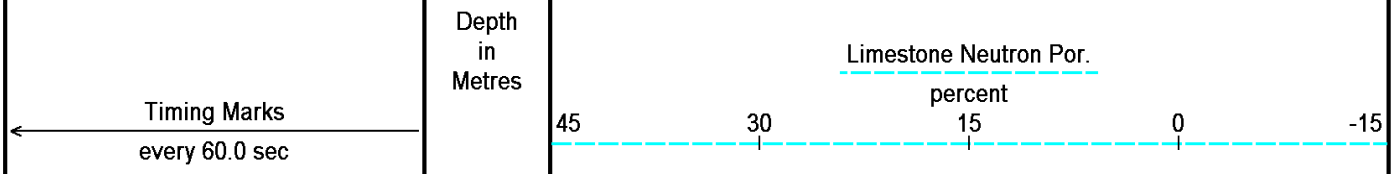


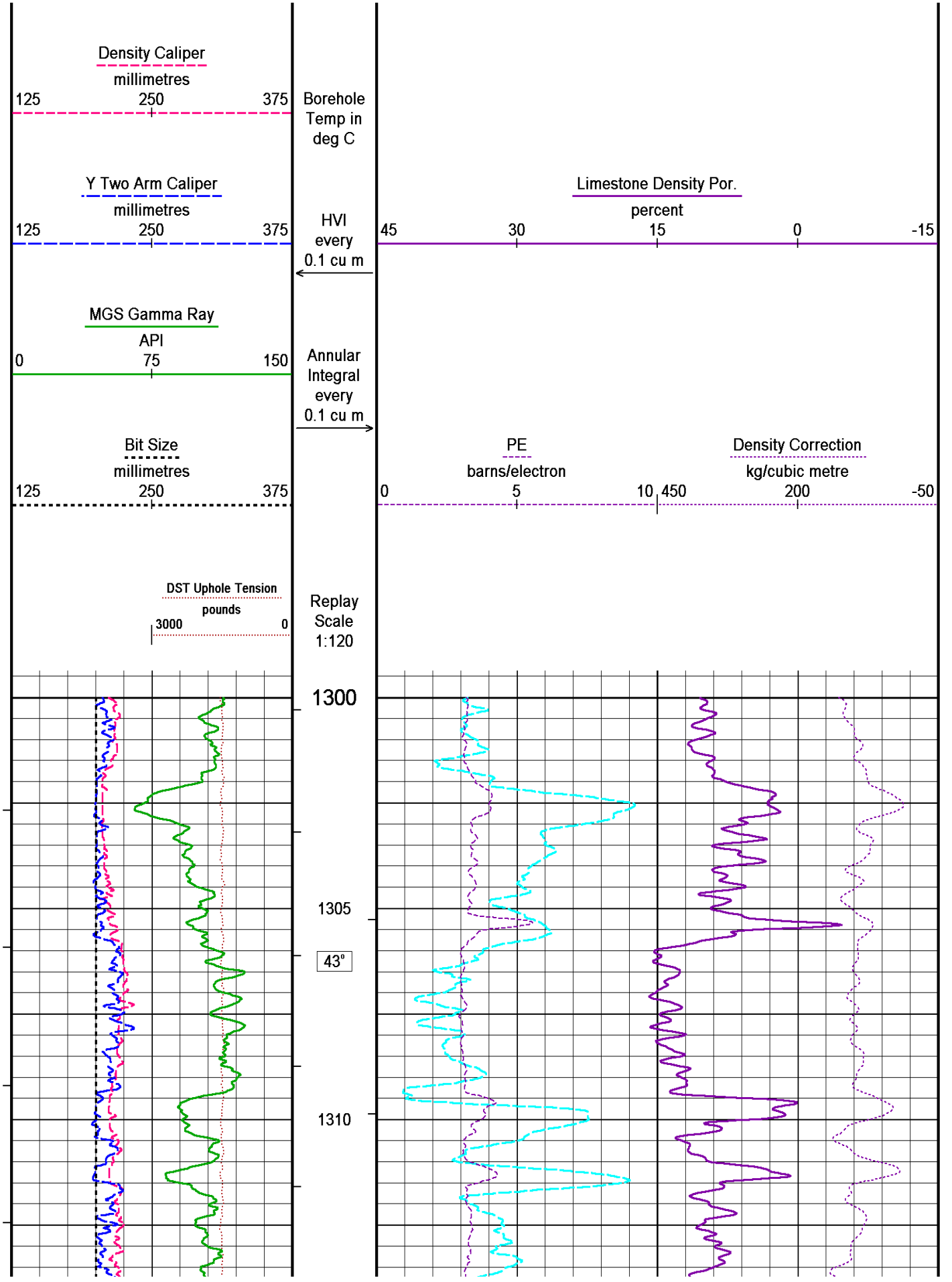
Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 12-NOV-2007 09:30
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta — Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

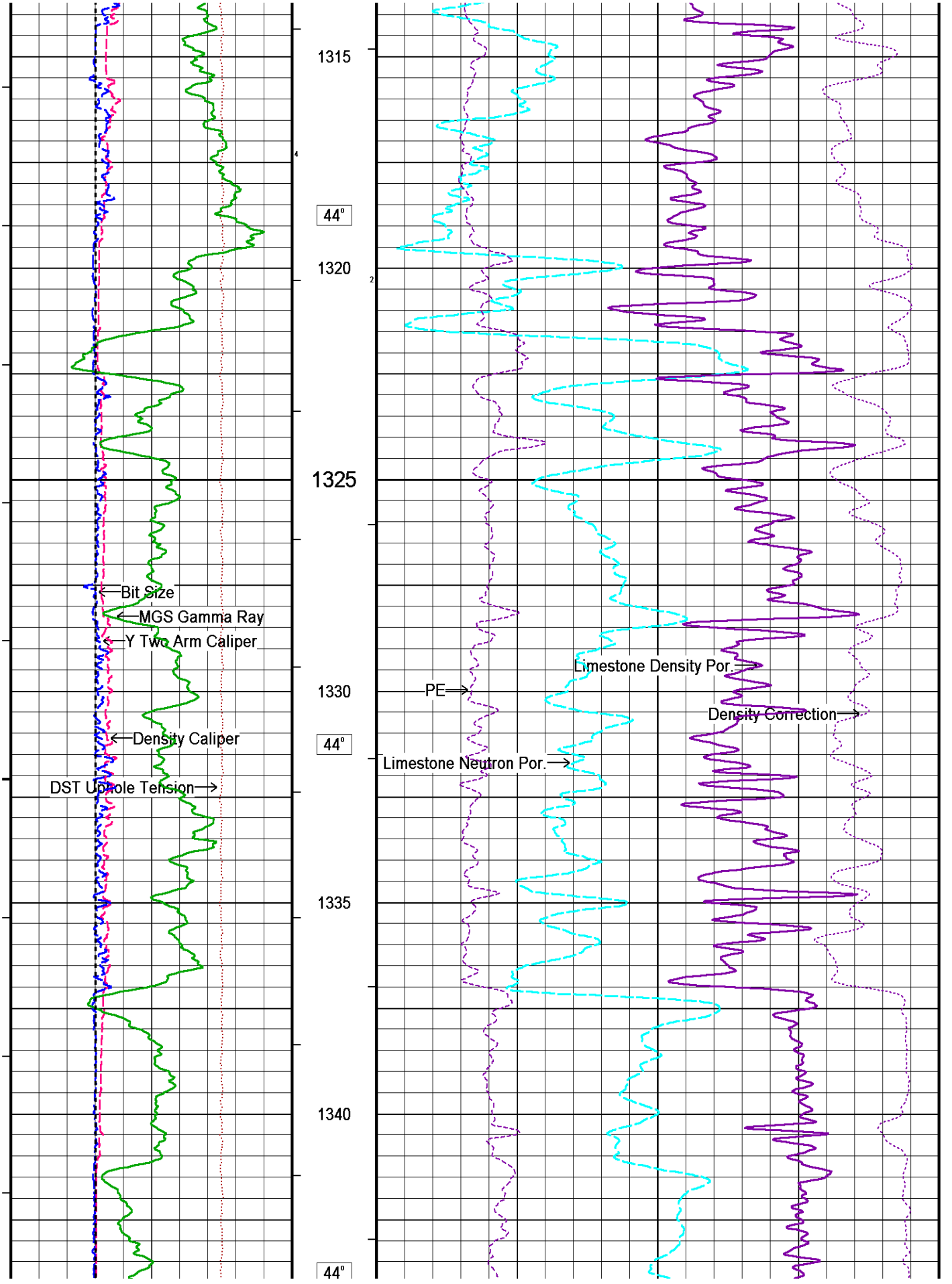
DOLOMITE MAIN LOG

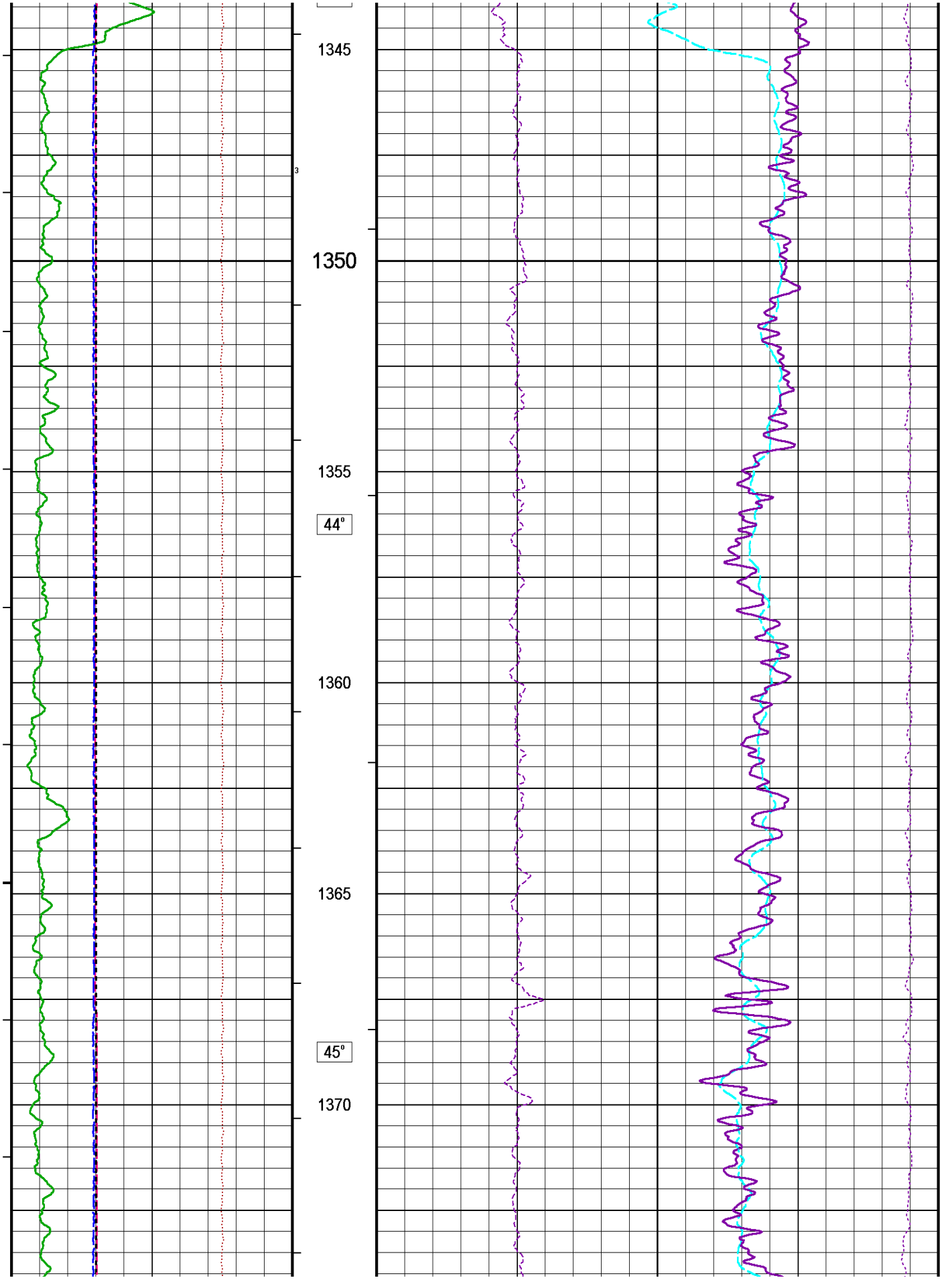
LIMESTONE HIGH RESOLUTION 1:120

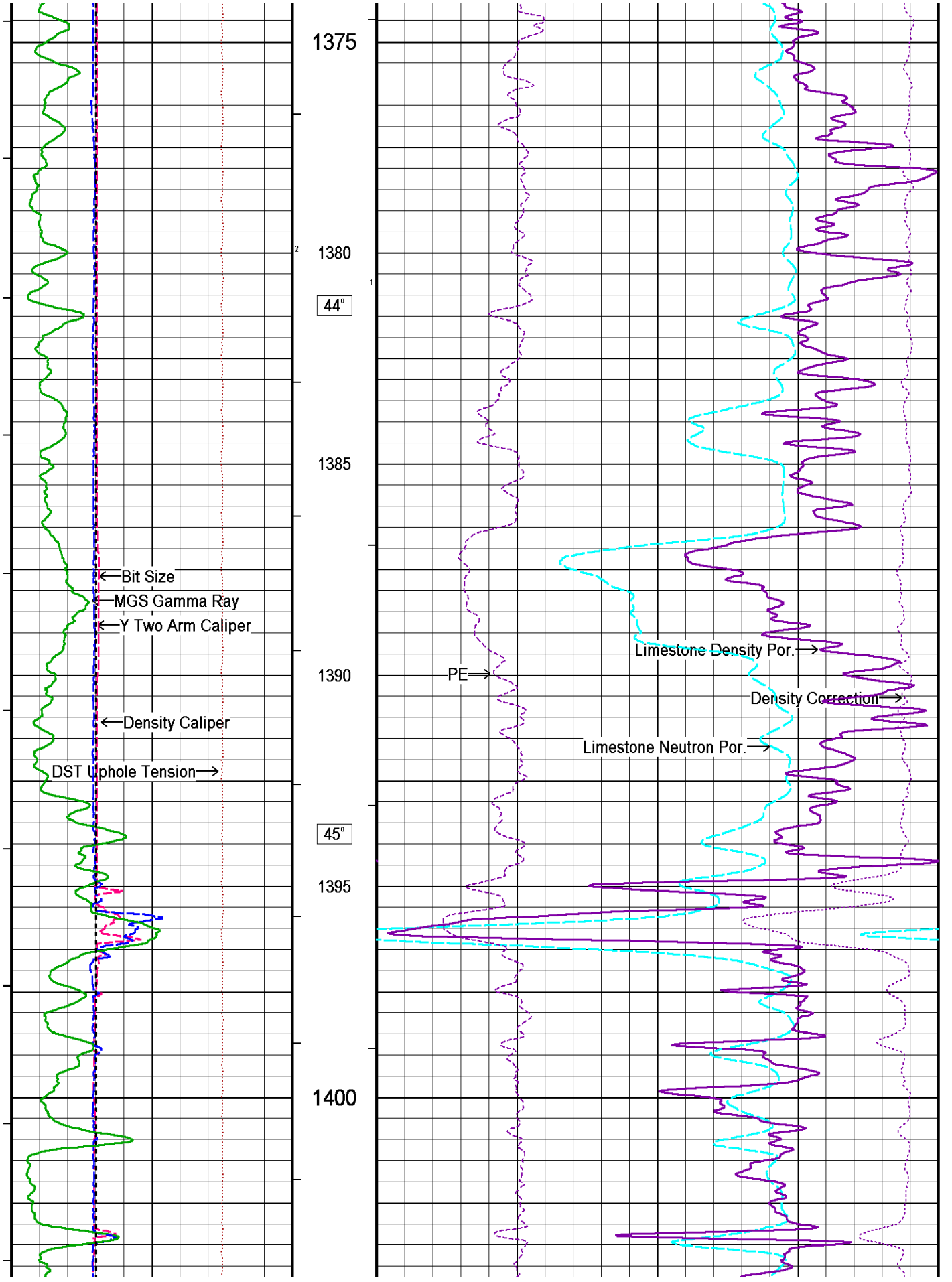
Depth Based Data - Maximum Sampling Increment 2.5cm — Plotted on 12-NOV-2007 09:30
Filename: C:\Temp\Weatherford PreView\0\HIGH RES.dta — Recorded on 15-FEB-2007 07:26
System Versions: Logged with 7.01.0195 Processed with 8.00.0015 Plotted with 8.01.0091

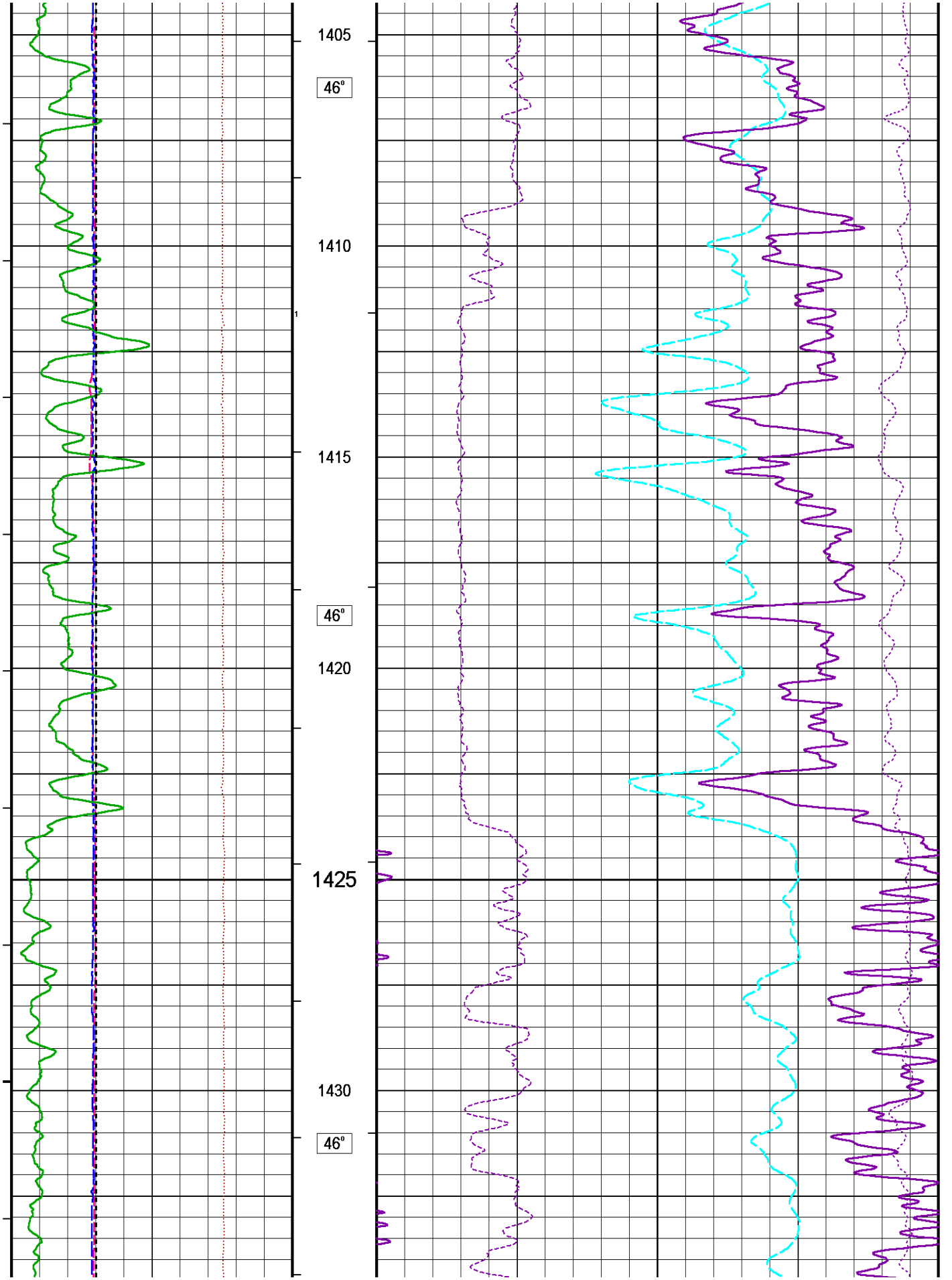


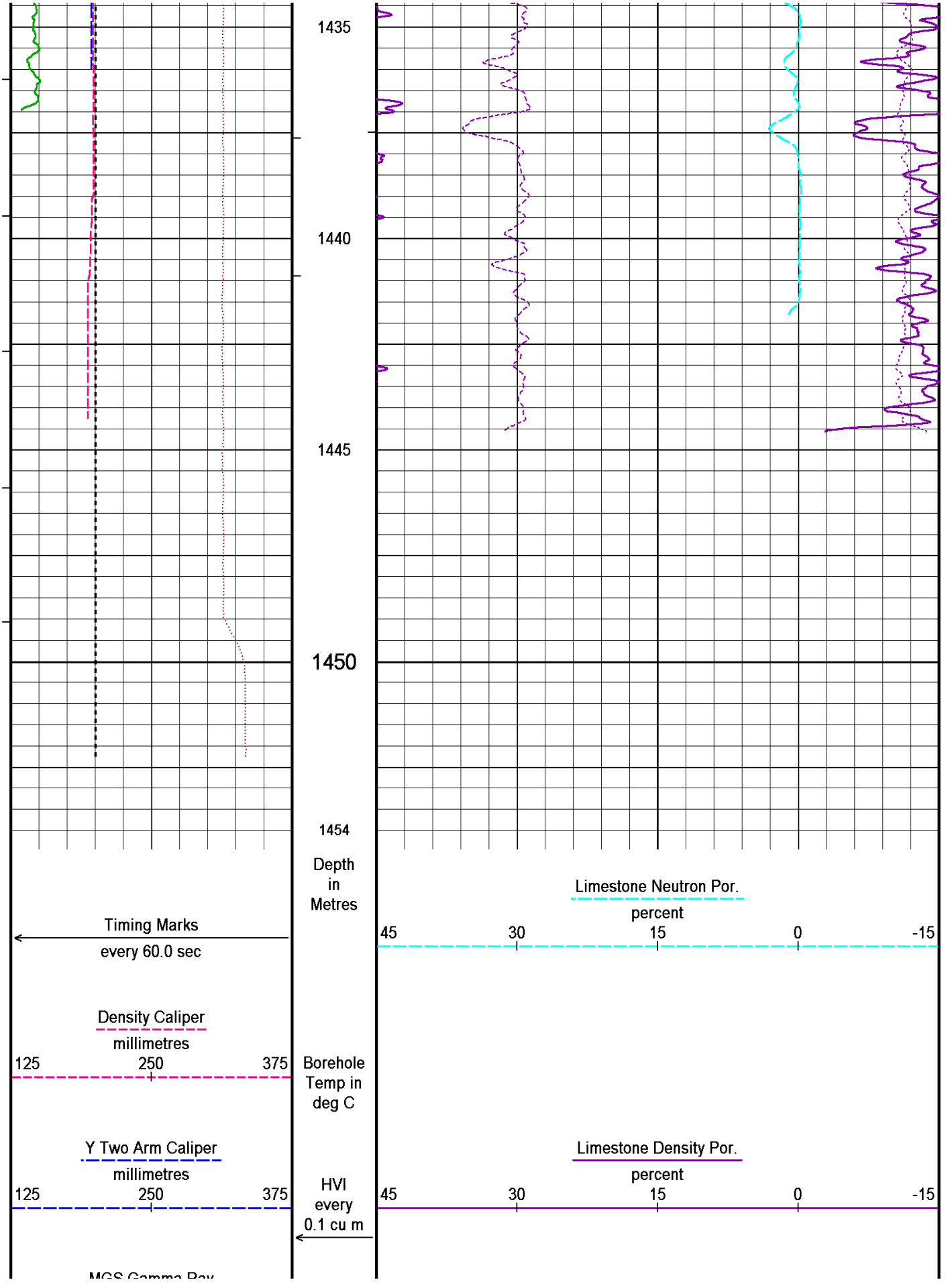

Density Caliper
millimetres
125
250
375
Borehole Temp in deg C
Y Two Arm Caliper
millimetres
125
250
375
HVI every 0.1 cu m
Limestone Density Por.
percent
45
30
15
0
-15
MGS Gamma Ray
API
0
75
150
Annular Integral every 0.1 cu m
Bit Size
millimetres
125
250
375
PE
barns/electron
0
5
10
Density Correction
kg/cubic metre
450
200
-50
DST Uphole Tension
pounds
3000
0
Replay Scale 1:120
1300
1305
43°
1310

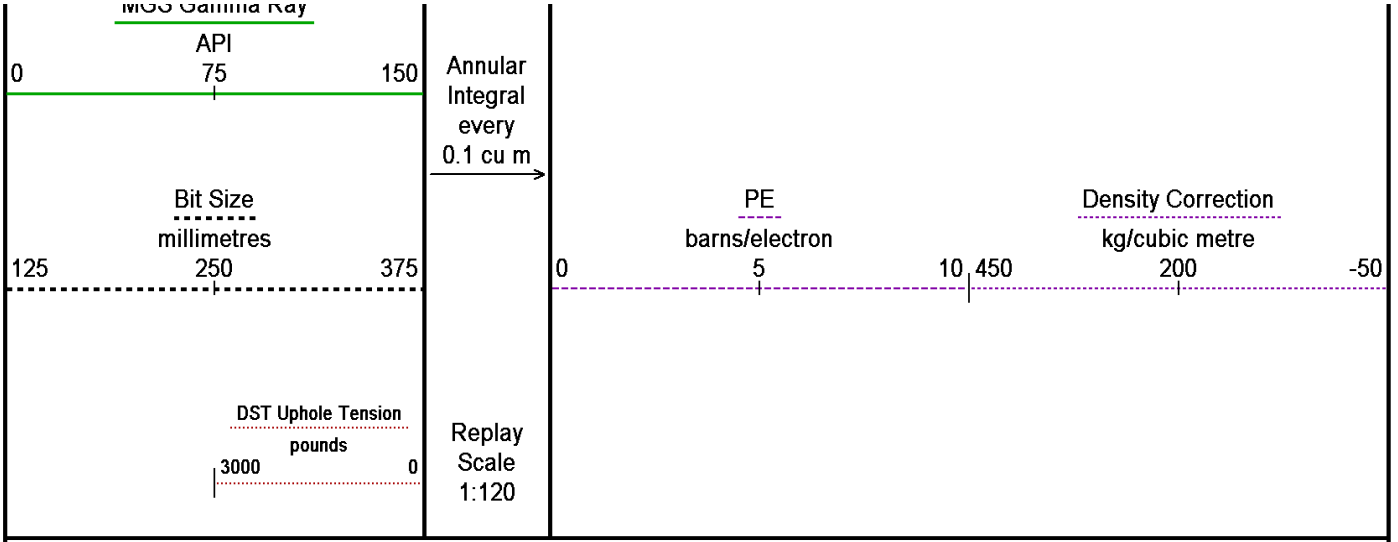

1315
44°
1320
1325
1330
44°
1335
1340
44°
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
PE
Limestone Density Por.
Density Correction
Limestone Neutron Por.


1345
1350
1355
44°
1360
1365
45°
1370


1375
1380
44°
1385
1390
45°
1395
1400
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
PE
Limestone Density Por.
Density Correction
Limestone Neutron Por.


1405
46°
1410
1415
46°
1420
1425
1430
46°


1435
1440
1445
1450
1454
Depth in Metres
Timing Marks
every 60.0 sec
Density Caliper
millimetres
125
250
375
Y Two Arm Caliper
millimetres
125
250
375
Borehole Temp in deg C
HVI every 0.1 cu m
MGS Gamma Ray
Limestone Neutron Por.
percent
45
30
15
0
-15
Limestone Density Por.
percent
45
30
15
0
-15

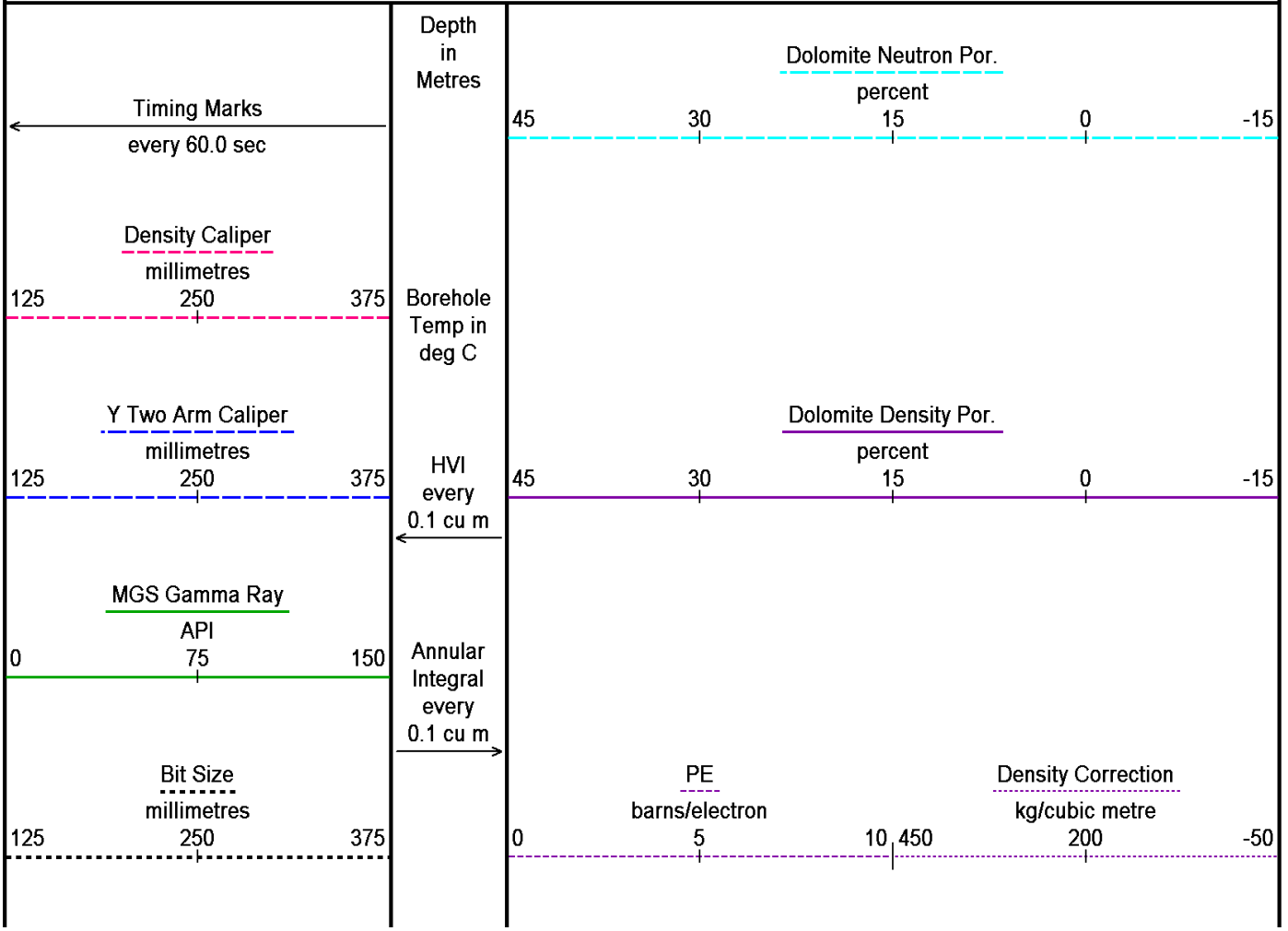


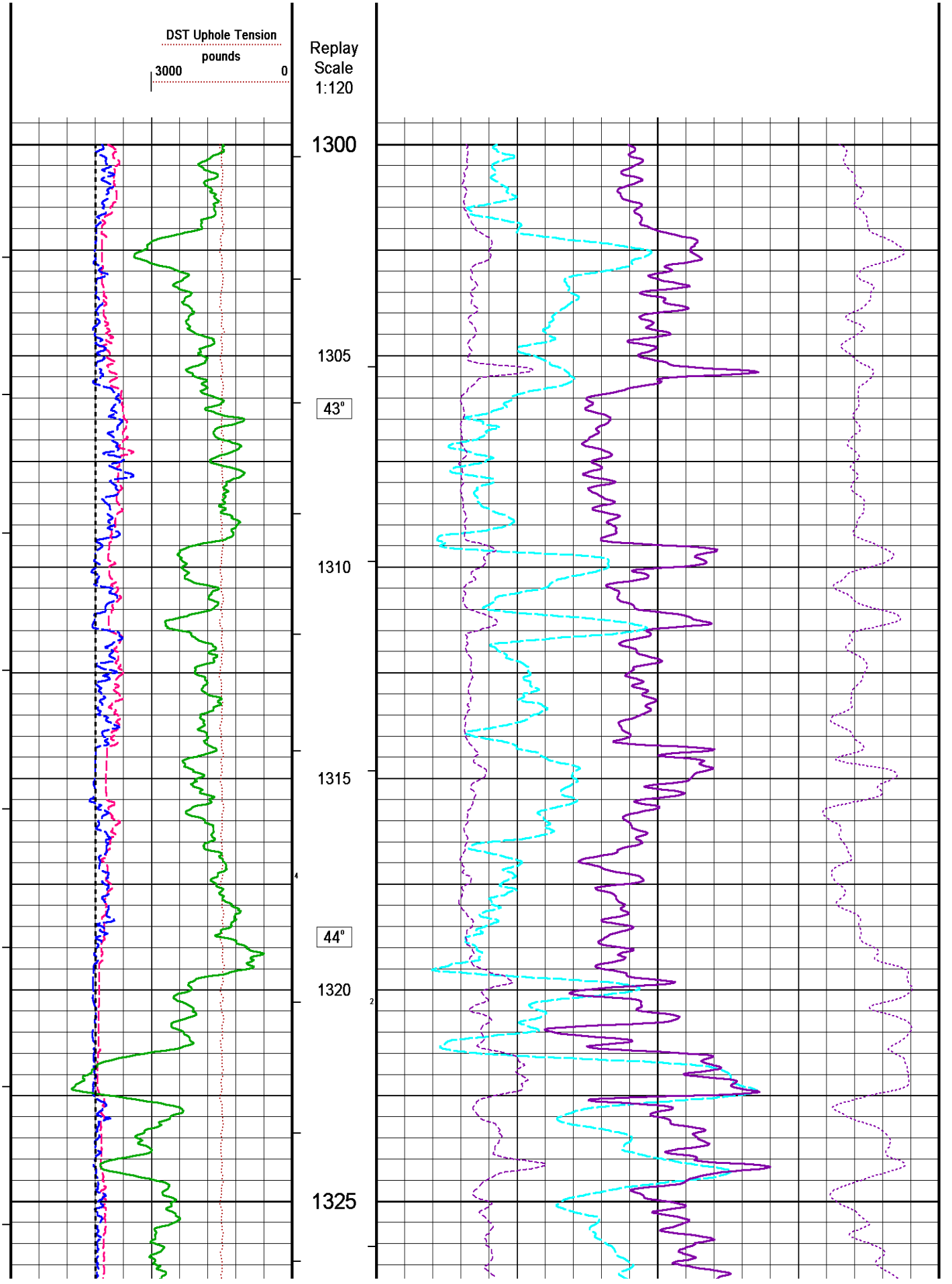
Depth Based Data - Maximum Sampling Increment 2.5cm — Plotted on 12-NOV-2007 09:30
Filename: C:\Temp\Weatherford PreView\0\HIGH RES.dta — Recorded on 15-FEB-2007 07:26
System Versions: Logged with 7.01.0195 Processed with 8.00.0015 Plotted with 8.01.0091

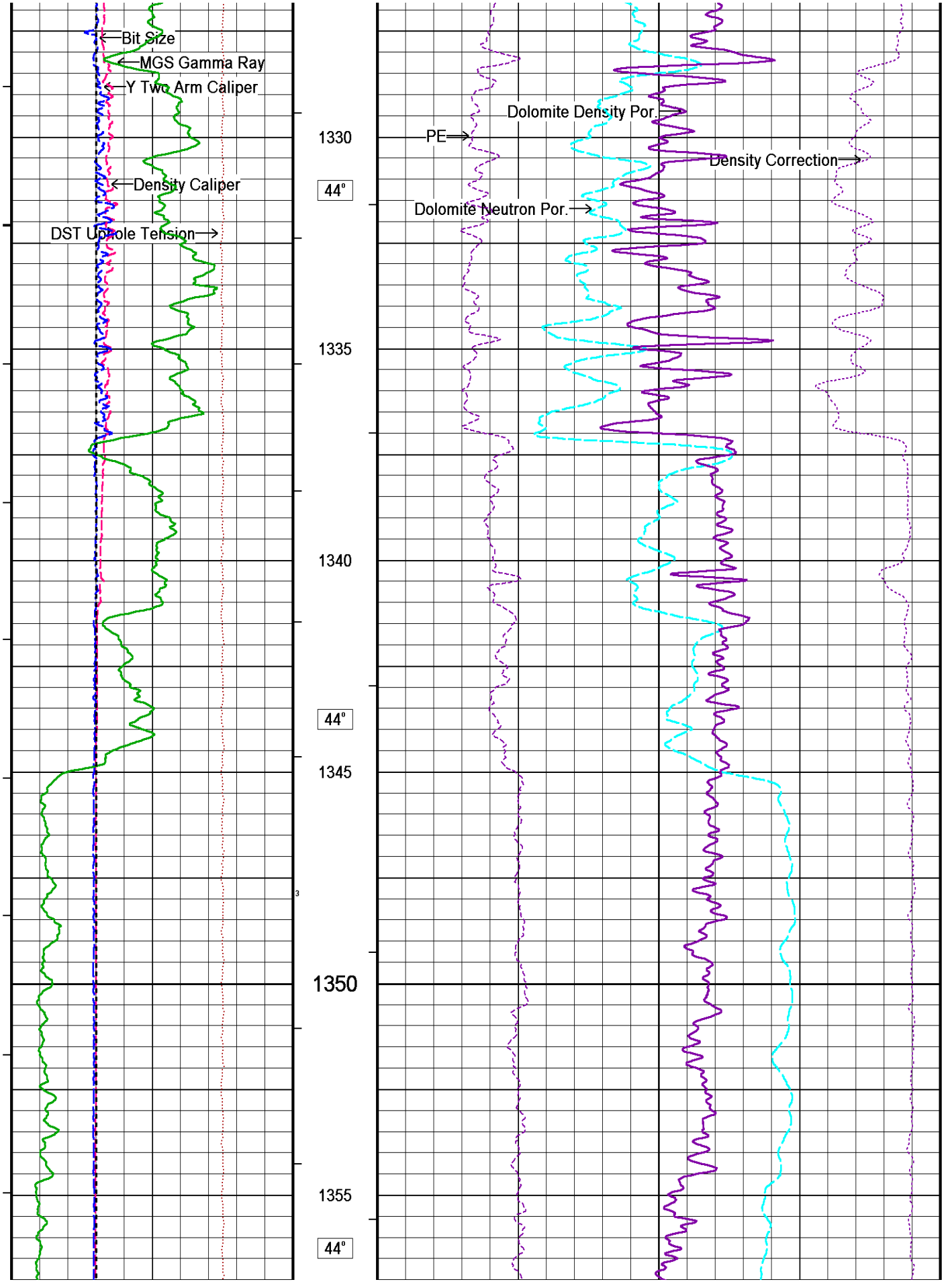
LIMESTONE HIGH RESOLUTION 1:120

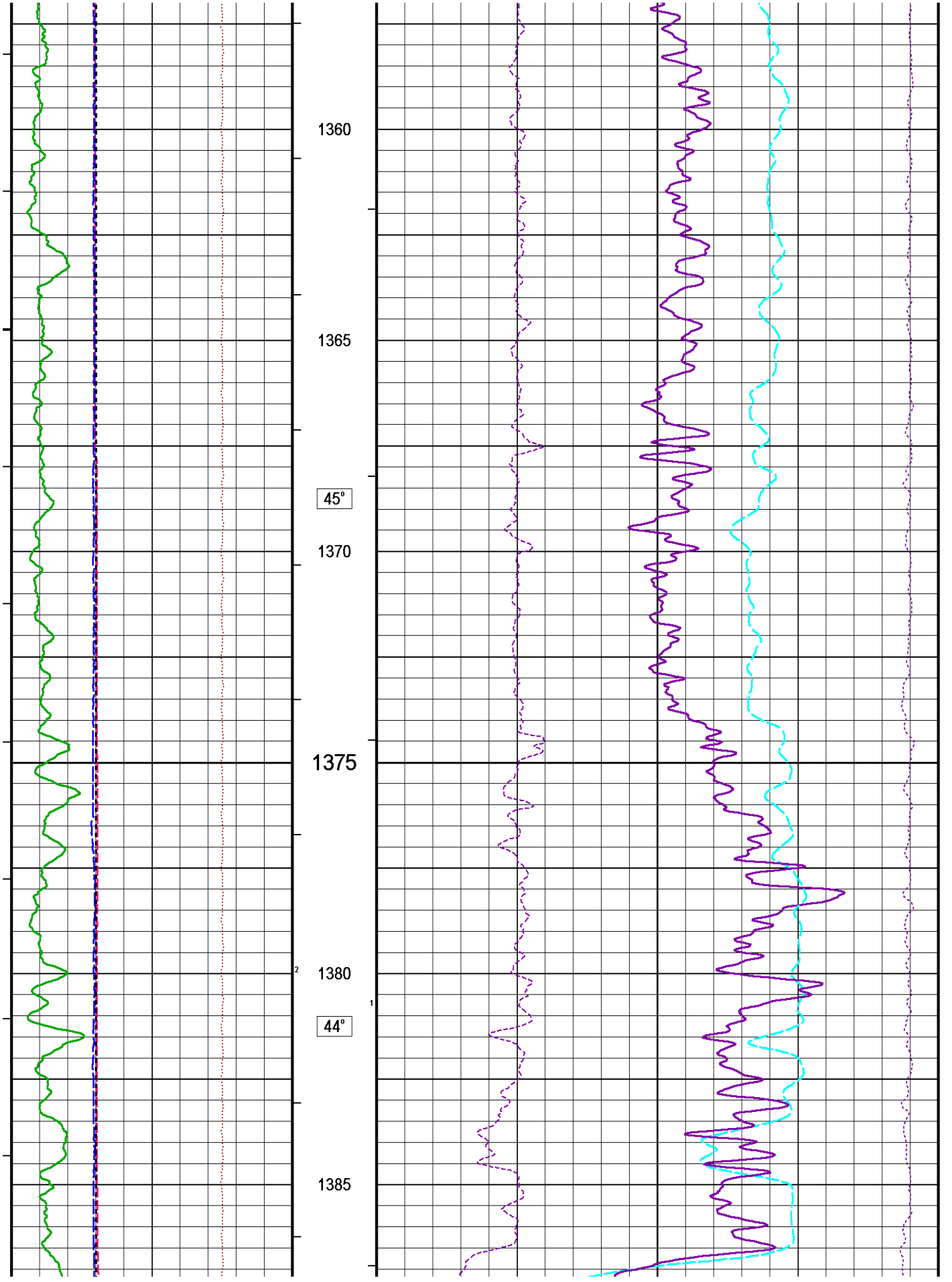
DOLOMITE HIGH RESOLUTION 1:120

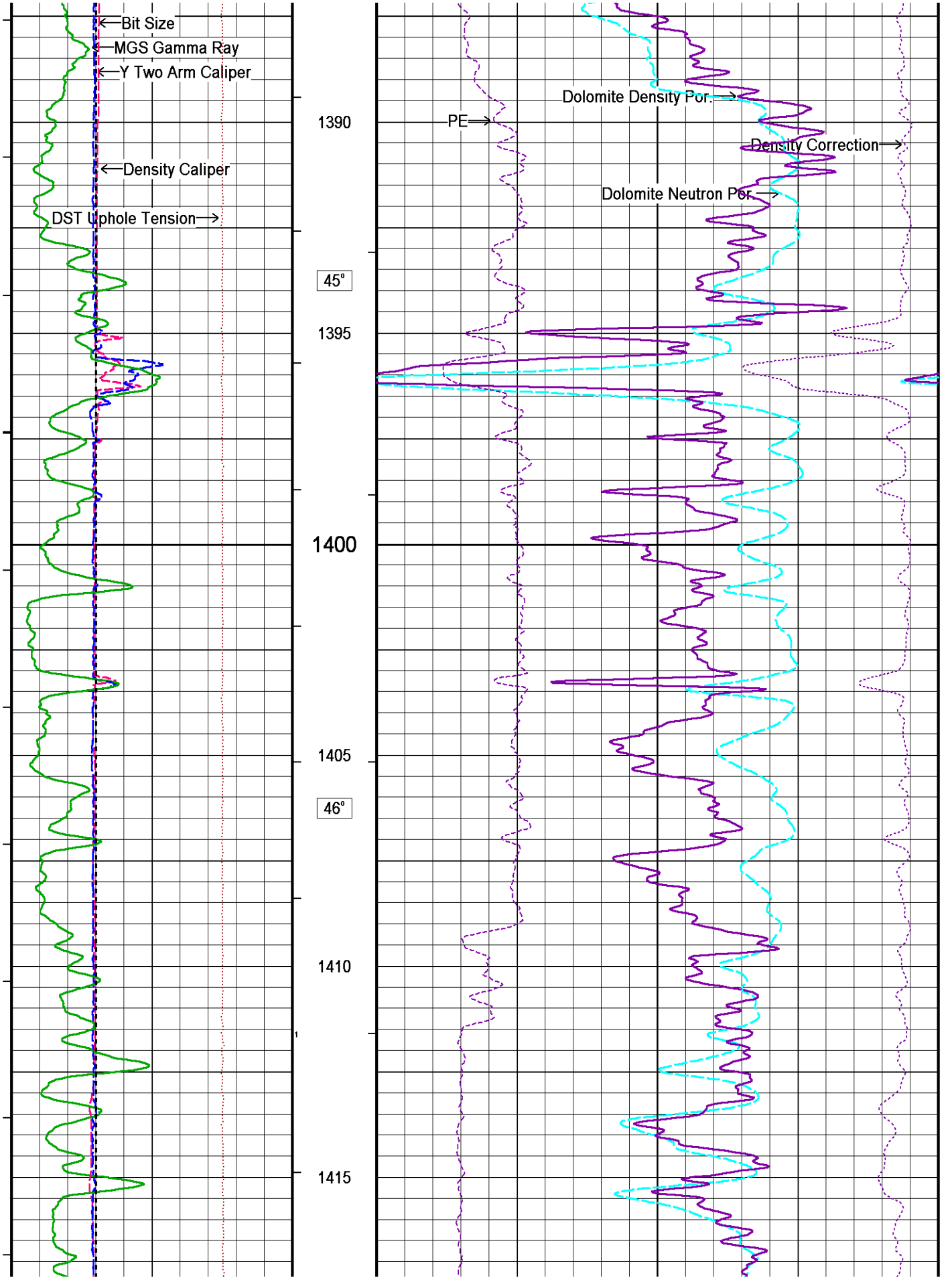
Depth Based Data - Maximum Sampling Increment 2.5cm — Plotted on 12-NOV-2007 09:30
Filename: C:\Temp\Weatherford PreView\0\HIGH RES.dta — Recorded on 15-FEB-2007 07:26
System Versions: Logged with 7.01.0195 Processed with 8.00.0015 Plotted with 8.01.0091

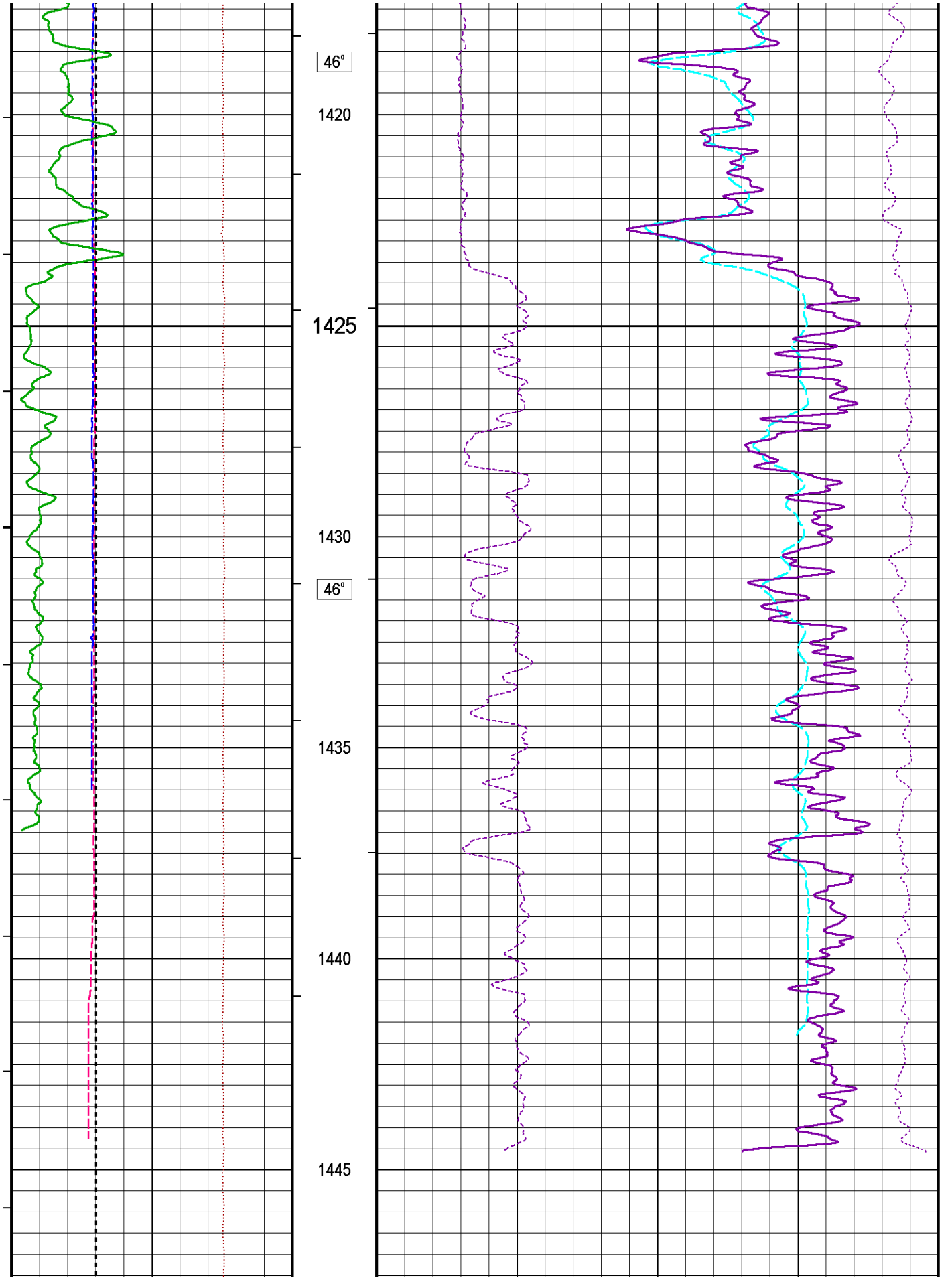


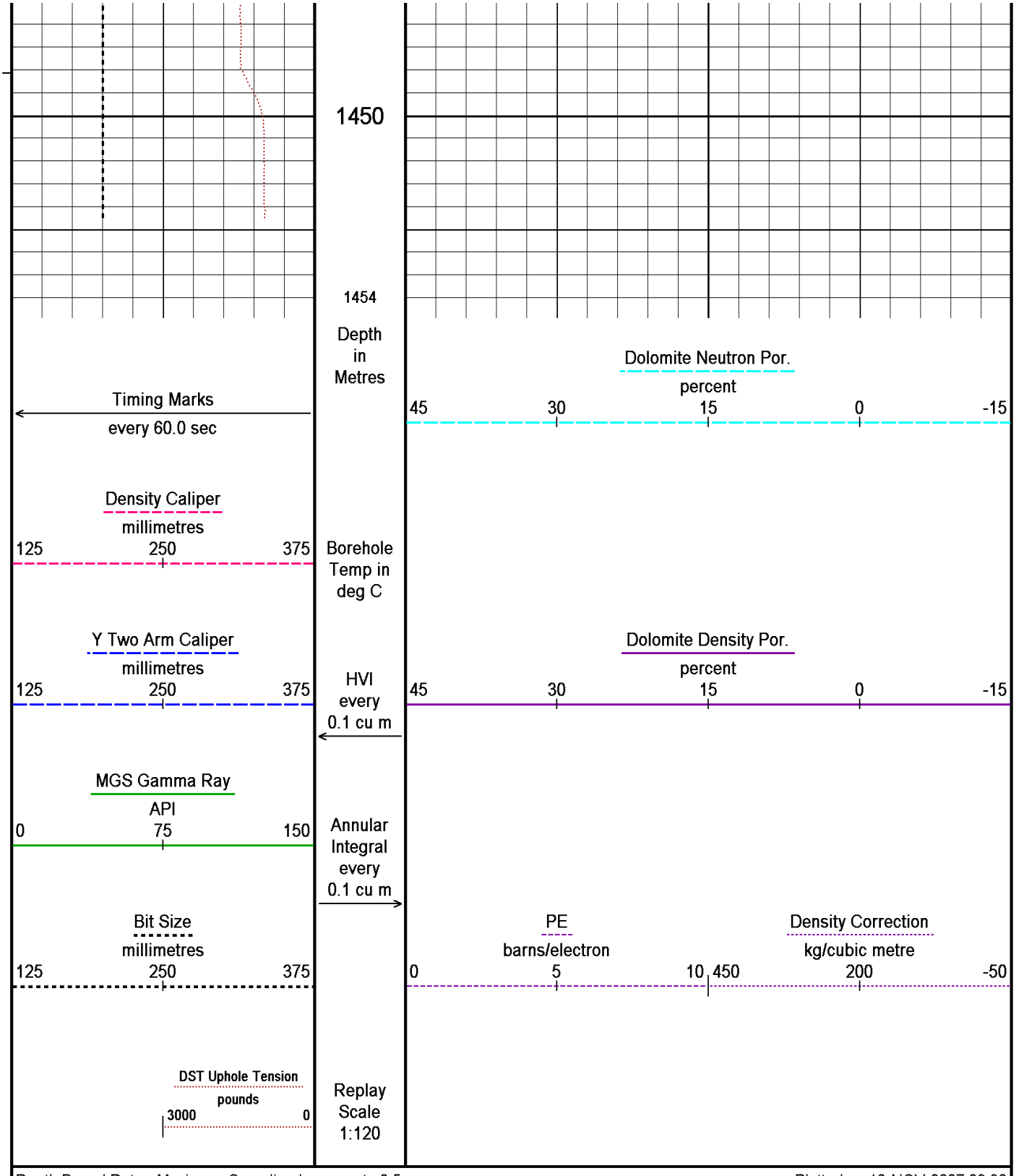

DST Uphole Tension
pounds
3000
0
Replay
Scale
1:120
1300
1305
43°
1310
1315
44°
1320
1325


Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
1330
44°
1335
1340
44°
1345
1350
1355
44°
Dolomite Density Por.
PE
Density Correction
Dolomite Neutron Por.


1360
1365
45°
1370
1375
1380
44°
1385


Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
1390
45°
1395
1400
1405
46°
1410
1415
Dolomite Density Por.
PE
Density Correction
Dolomite Neutron Por.


46°
1420
1425
1430
46°
1435
1440
1445



Depth Based Data - Maximum Sampling Increment 2.5cm
Plotted on 12-NOV-2007 09:30
Filename: C:\Temp\Weatherford PreView\0\HIGH RES.dta
Recorded on 15-FEB-2007 07:26
System Versions: Logged with 7.01.0195 Processed with 8.00.0015 Plotted with 8.01.0091

DOLOMITE HIGH RESOLUTION 1:120

BEFORE SURVEY CALIBRATION

General Constants All 000

Last Edited on 15-FEB-2007,06:48

General Parameters

Mud Resistivity	1.180	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	

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

Caliper Calibration MTC 006

Base Calibration on 25-JAN-2007,18:14
Field Calibration on 10-FEB-2007,20:21

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)
208.70	205.70

Gamma Calibration MGS 010

Field Calibration on 7-FEB-2007,09:09

	Measured	Calibrated (API)
Background	48	31
Calibrator (Gross)	1256	825
Calibrator (Net)	1208	794

Gamma Constants MGS 010

Last Edited on 15-FEB-2007,06:48

Gamma Calibrator Number	grcc075	
Mud Density	1060.00	kg/m3
Caliper Source for Processing	Density Caliper	
Tool Position	Centred	
Concentration of KCl	0.00	kppm

Neutron Calibration MDN 144

Base Calibration on 25-JAN-2007 18:05
Field Check on 15-FEB-2007 05:21

Base Calibration

	Measured		Calibrated (cps)	
	Near	Far	Near	Far

	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)	
			2094	3091
Ratio			0.677	

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 8-MAR-2007,10:54
Field Check on

Density Calibration

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

Field Check at Base		
	1184.8	1494.9

Field Check		
	0.0	0.0

PE Calibration

Base Calibration	Measured			Calibrated
	WS	WH	Ratio	Ratio
Background	213	1052		
Reference 1	22151	53000	0.422	0.400
Reference 2	5909	20800	0.288	0.272

Field Check at Base		
	213.1	1051.7

Field Check		
	0.0	0.0

Density Constants MPD 036

Last Edited on 15-FEB-2007,04:55

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	1000.00	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	Advanced	

Matrix Density (kg/m3)	Depth (m)
2710.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00

Caliper Calibration MPD 036

Base Calibration on 23-JAN-2007 04:20
Field Calibration on 7-FEB-2007,11:28

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)
166.10	166.10

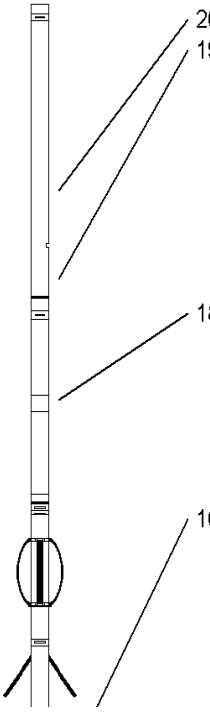
DOWNHOLE EQUIPMENT

C:\Temp\Weatherford PreView\0\REPEAT.dta

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

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

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



20.78 m GRGC - Gamma Ray
19.90 m CGXT - MCG External Temperature
18.79 m FEFE - Shallow FE
16.33 m CLYC - Y Two Arm Caliper

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

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

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

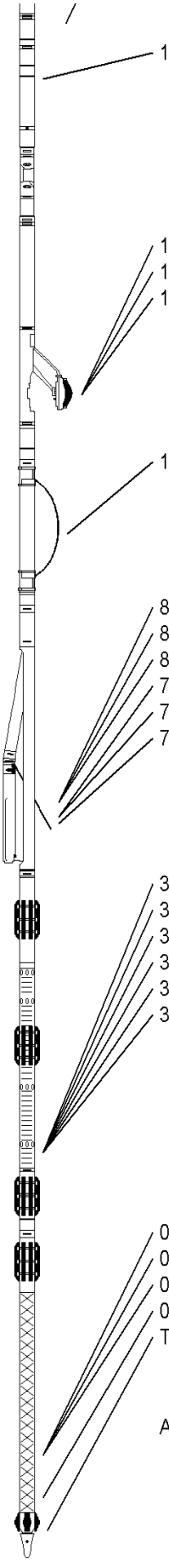
Compact Density/Caliper
MPD 36 Length: 2.92 m Weight: 90.4 lb

Compact Sonic
MSS 60 Length: 3.82 m Weight: 72.8 lb

Compact Induction
MAI 72 Length: 3.29 m Weight: 48.5 lb

Compact Hole Finder
HFS 1 Length: 0.24 m Weight: 2.2 lb

Total Length: 22.63 m Weight: 568.8 lb



15.46 m	GRGM - MGS Gamma Ray
12.10 m	MINV - Micro-inverse
12.10 m	MNRL - Micro-normal
12.10 m	MLTC - MML Caliper
10.64 m	NPRL - Limestone Neutron Por.
8.06 m	AVOL - Annular Volume
8.06 m	HVOL - Hole Volume
8.06 m	CLDC - Density Caliper
7.85 m	DPRL - Limestone Density Por.
7.85 m	DCOR - Density Correction
7.83 m	PDPE - PE
3.95 m	TR21 - 3' Transit Time
3.95 m	TR11 - 4' Transit Time
3.95 m	TR22 - 5' Transit Time
3.95 m	DT34 - 3-4' Compensated Sonic
3.95 m	DT35 - 3-5' Compensated Sonic
3.95 m	TR12 - 6' Transit Time
0.79 m	VEC0 - Shallow Induction
0.79 m	RILM - Medium Induction
0.79 m	RILD - Deep Induction
0.07 m	SPCG - Spontaneous Potential
Tool Zero	(0.28m from bottom)

All measurements relative to tool zero.

COMPANY	PARAMOUNT RESOURCES LTD.
WELL	PARAMOUNT ET AL CAMERON J-04
FIELD	CAMERON HILLS
PROVINCE/COUNTY	NORTH WEST TERRITORIES
COUNTRY/STATE	CANADA

Elevation Kelly Bushing	769.20	metres	First Reading	1441.60	metre
Elevation Drill Floor		metres	Depth Driller	1449.00	metres
Elevation Ground Level	765.20	metres	Depth Logger	1449.50	metres

Weatherford®

PHOTO DENSITY

DUAL SPACED NEUTRON

MINIPLOT

COMPANY	PARAMOUNT RESOURCES LTD.
WELL	PARAMOUNT ET AL CAMERON J-04
FIELD	CAMERON HILLS
PROVINCE/COUNTY	NORTH WEST TERRITORIES
COUNTRY/STATE	CANADA
LOCATION	300/J-04-60-10-117-30

FIELD PRINT

LSD	SEC	TWP	RGE	Other Services

API Number
Permit Number 1159

MICROLOG
COMPENSTATED SONIC

Permanent Datum GROUND LEVEL, Elevation 765.20 metres
Log Measured From 4.00 M above Permanent Datum
Drilling Measured From KB

Elevations:	metres
KB	769.20
DF	
GL	765.20

Date	15-FEB-2007			
Run Number	1			
Depth Driller	1449.00	metres		
Depth Logger	1449.50	metres		
First Reading	1448.70	metre		
Last Reading	420.00	metre		
Casing Driller	430.00	metres		
Casing Logger	429.80	metres		
Bit Size	200.00	mm		
Hole Fluid Type	GELCHEM			
Density / Viscosity	1060.0 kg/M3	93.00 CP		
PH / Fluid Loss	11.00	11.00 ml/30Min		
Sample Source	FLOWLINE			
Rm @ Measured Temp	1.18 @ 25.0	ohm-m		
Rmf @ Measured Temp	1.04 @ 25.0	ohm-m		
Rmc @ Measured Temp	1.32 @ 25.0	ohm-m		
Source Rmf / Rmc	PRESS	FILTER		
Rm @ BHT	0.78 @ 48.0	ohm-m		
Time Since Circulation	6 HRS			
Max Recorded Temp	48.00	deg C		
Equipment Name	COMPACT			
Equipment / Base	13124	GPR		
Recorded By	G. SINGER			
Witnessed By	A. AHMED			
CIRC. STOP TIME	01:30-FEB-15		Last Line	

BOREHOLE RECORD

Last Edited: 15-FEB-2007 05:01

Bit Size millimetres	Depth From metres	Depth To metres
311.000	0.00	430.00
200.000	430.00	1449.00

CASING RECORD

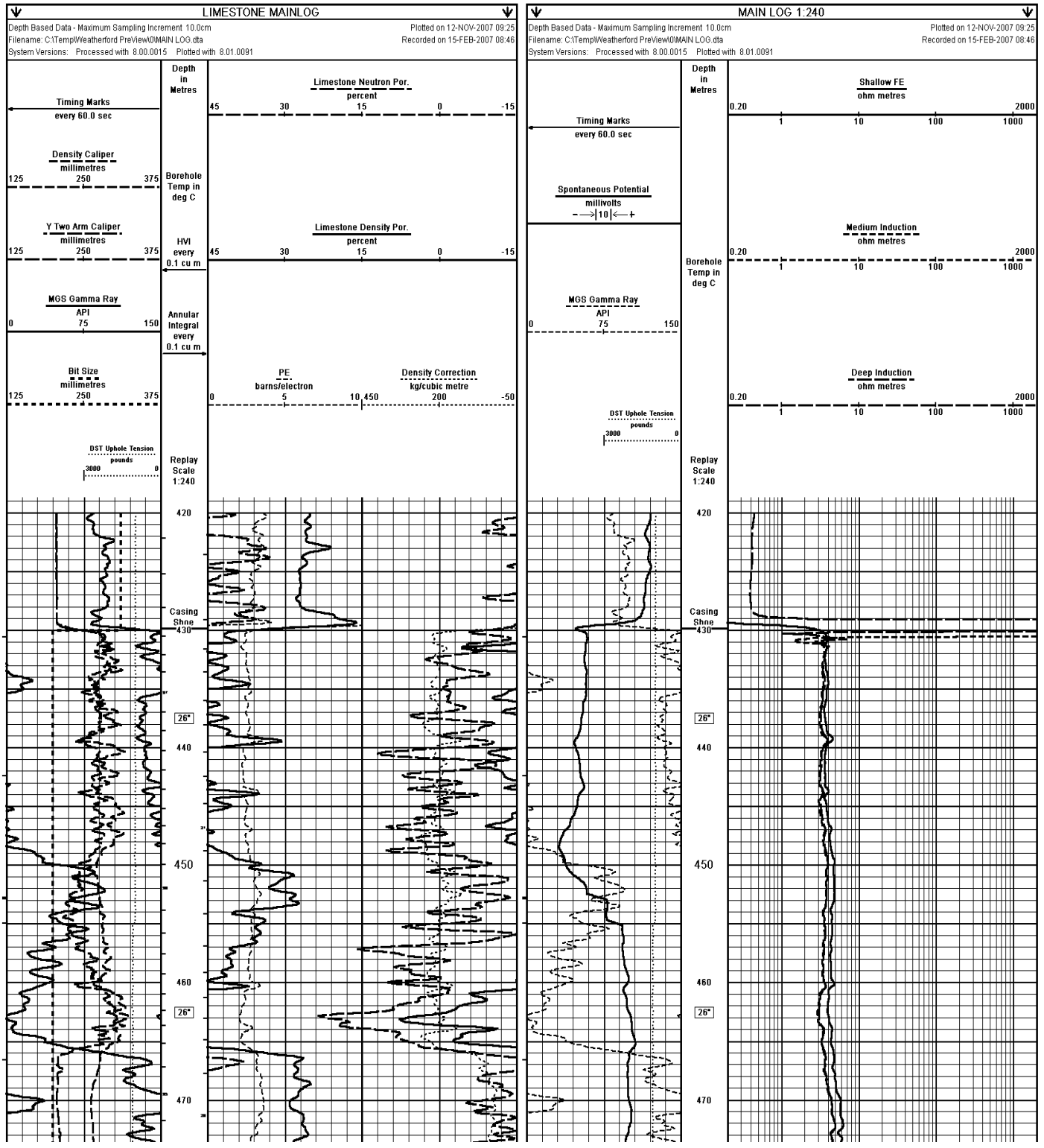
Type	Size millimetres	Depth From metres	Shoe Depth metres	Weight Kg/metre
SURFACE	219.100	0.00	430.00	35.72

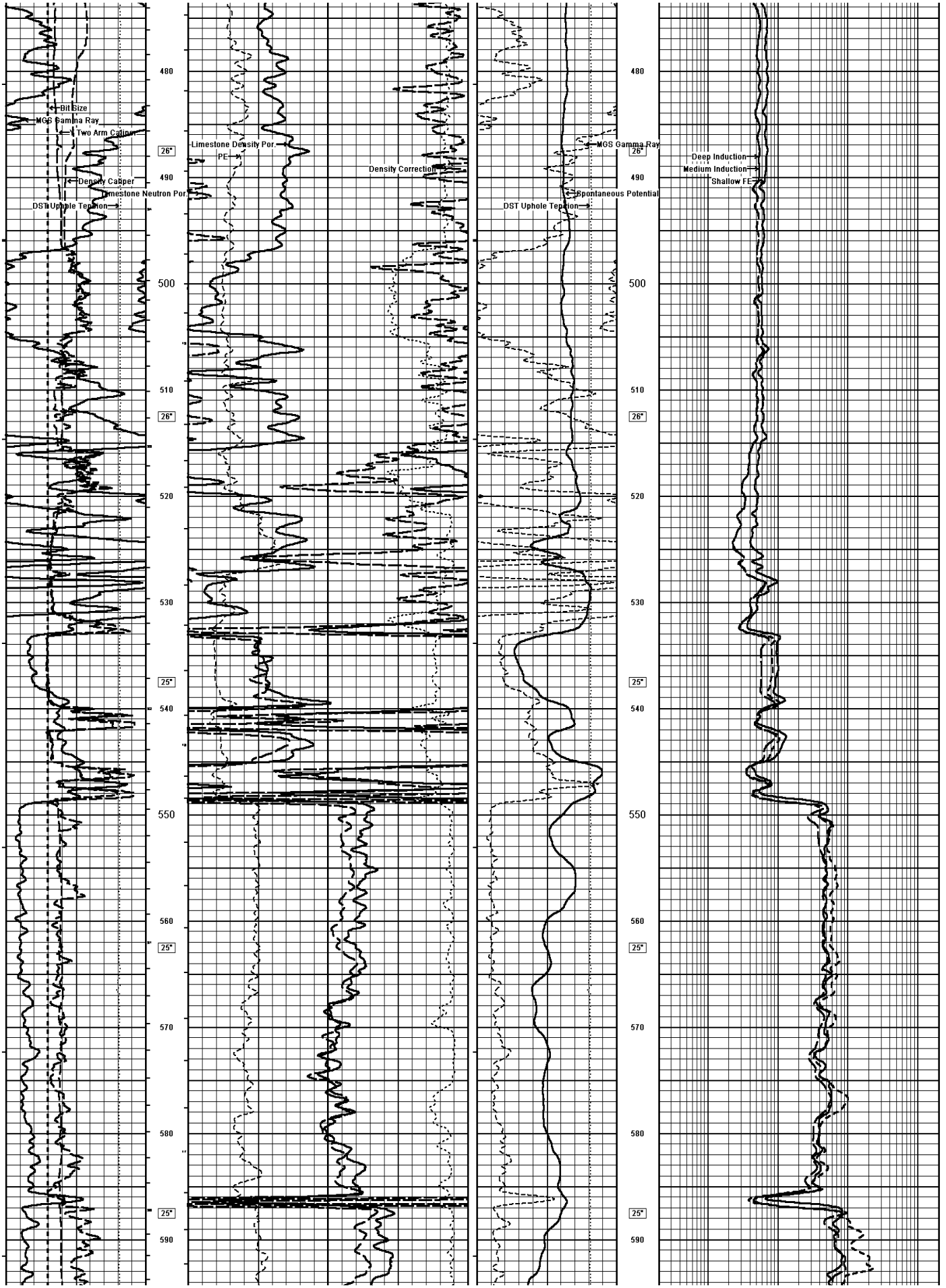
REMARKS

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 INTERSONIC CRANK
   MTC: SIX LEAF CENTRALIZER
5) SERVICE ORDER #: 30073028 SAP #: 4147101 # FIELD PRINTS = 3
6) RIG: PD 129

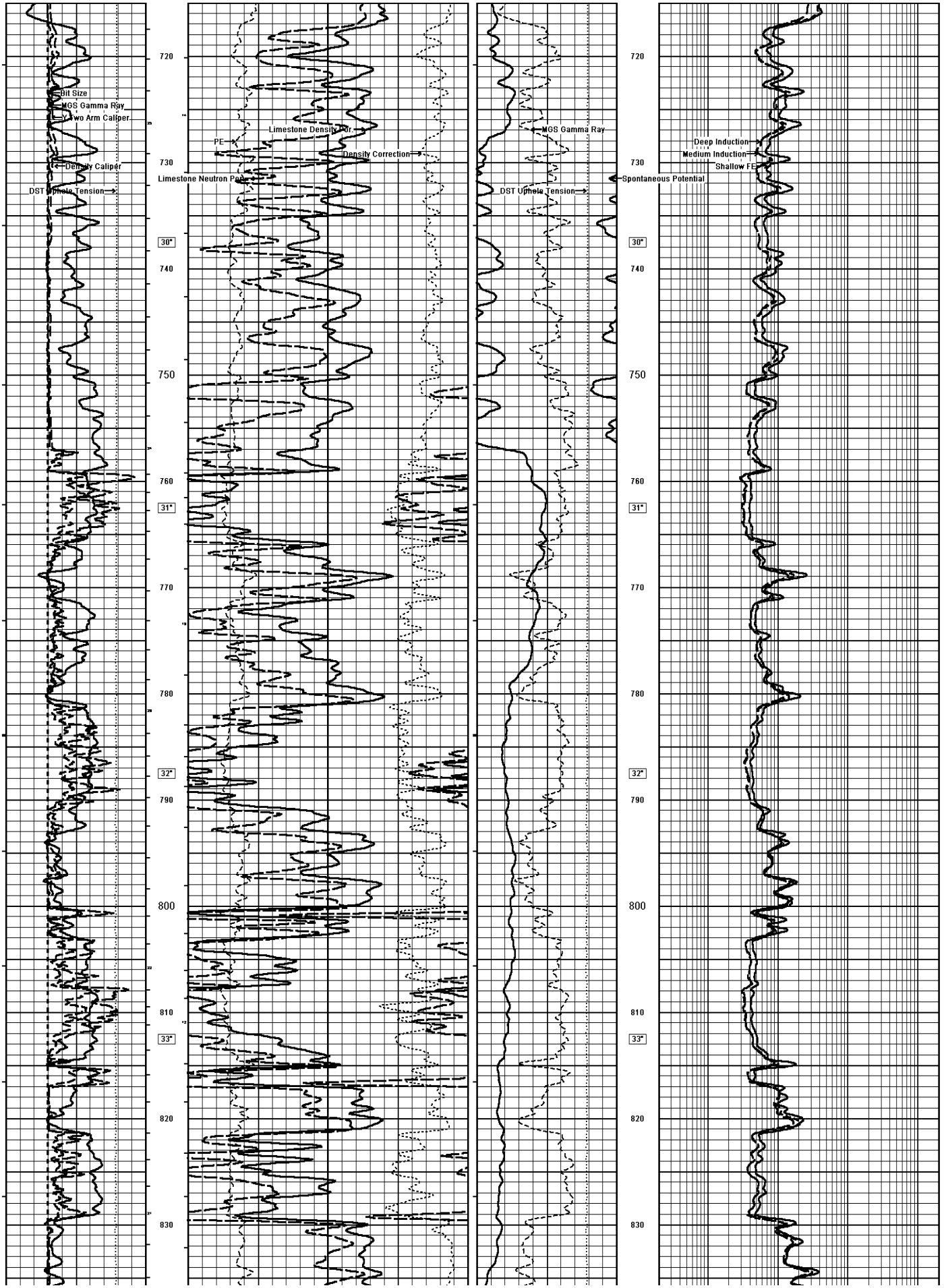
7) HOLE AND CEMENT VOLUMES CALCULATED USING DENSITY AND 2-ARM CALIPERS :
HOLE VOLUME = 37.4 CU.M.
ANNULAR VOLUME USING 139.7 MM PRODUCTION CASING = 21.8 CU.M

8) SONIC FREE PIPE FOUND FROM 352M - 357M

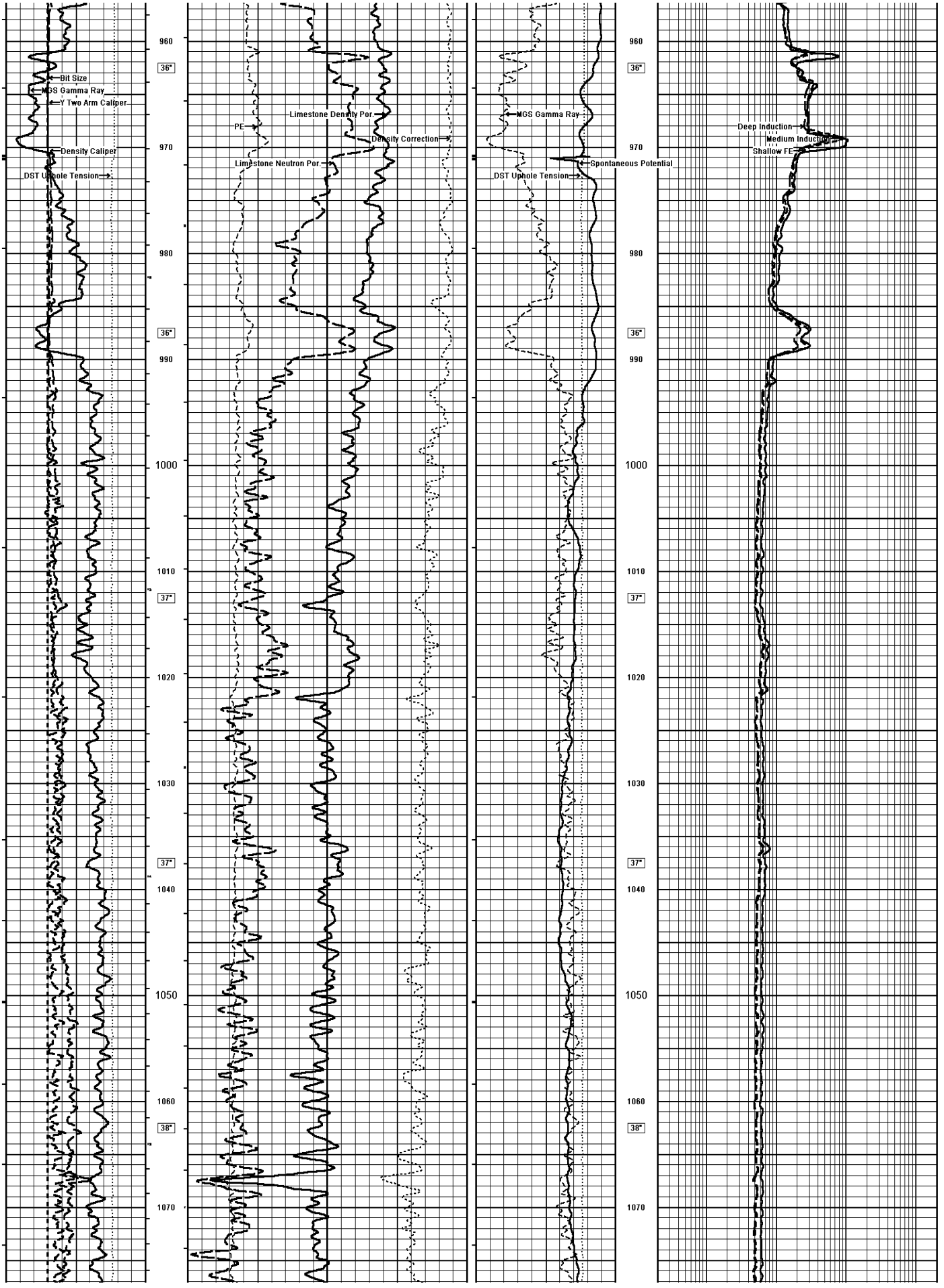



Bit Size
MGS Gamma Ray
Two Arm Caliper
Density Caliper
Limestone Neutron Por
DST Uphole Tepmon
Limestone Density Por
PE
Density Correction
MGS Gamma Ray
Spontaneous Potential
DST Uphole Tepmon
Deep Induction
Medium Induction
Shallow FE
480
490
500
510
520
530
540
550
560
570
580
590
26"
25"

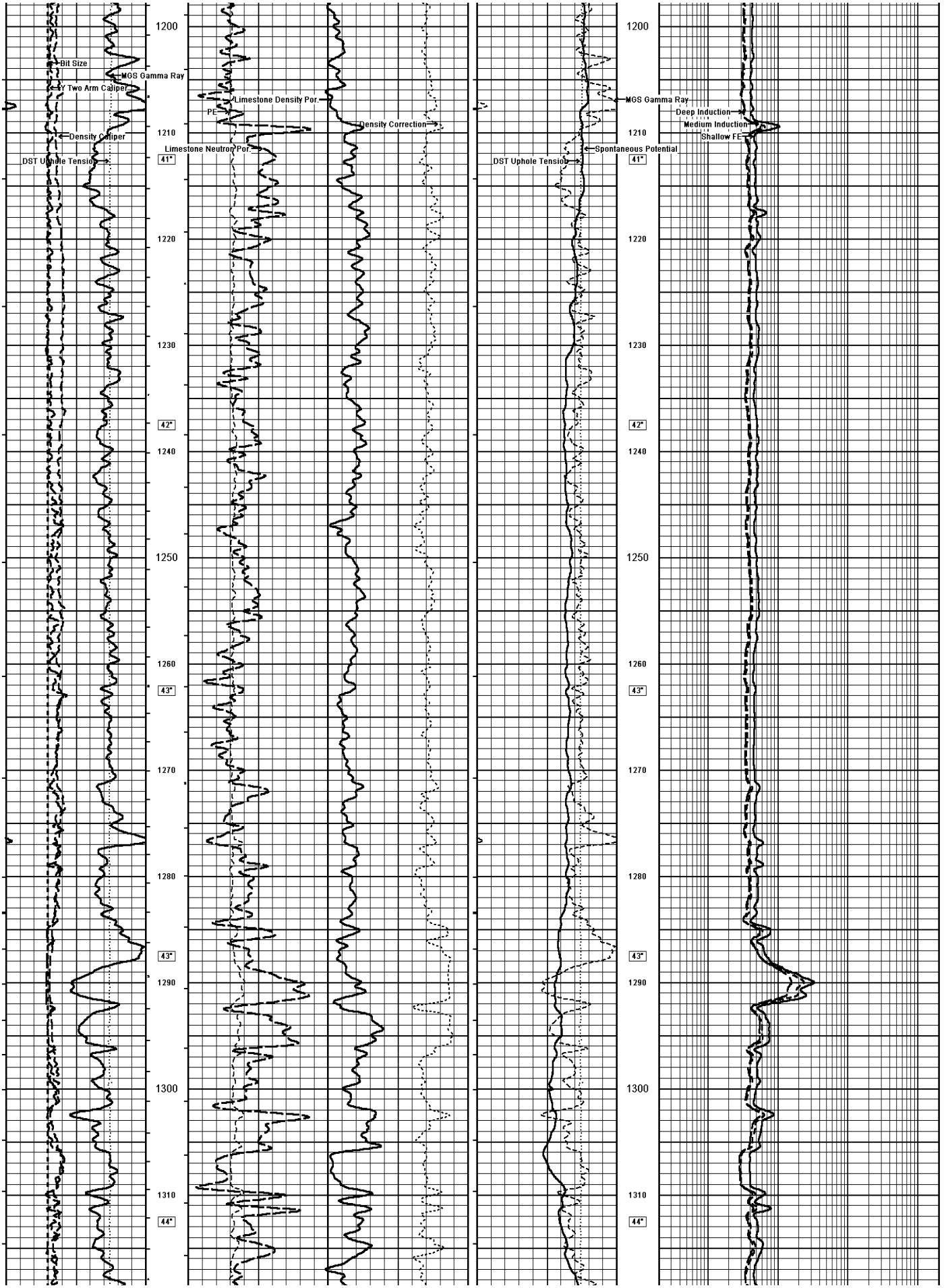

BS Size
MCS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
Limestone Density Por.
PE
Density Correction
Limestone Neutron Por.
MCS Gamma Ray
Spontaneous Potential
DST Upsole Tension
Deep Induction
Medium Induction
Shallow FE
600
610
620
630
640
650
660
670
680
690
700
710
27"
28"
29"
30"

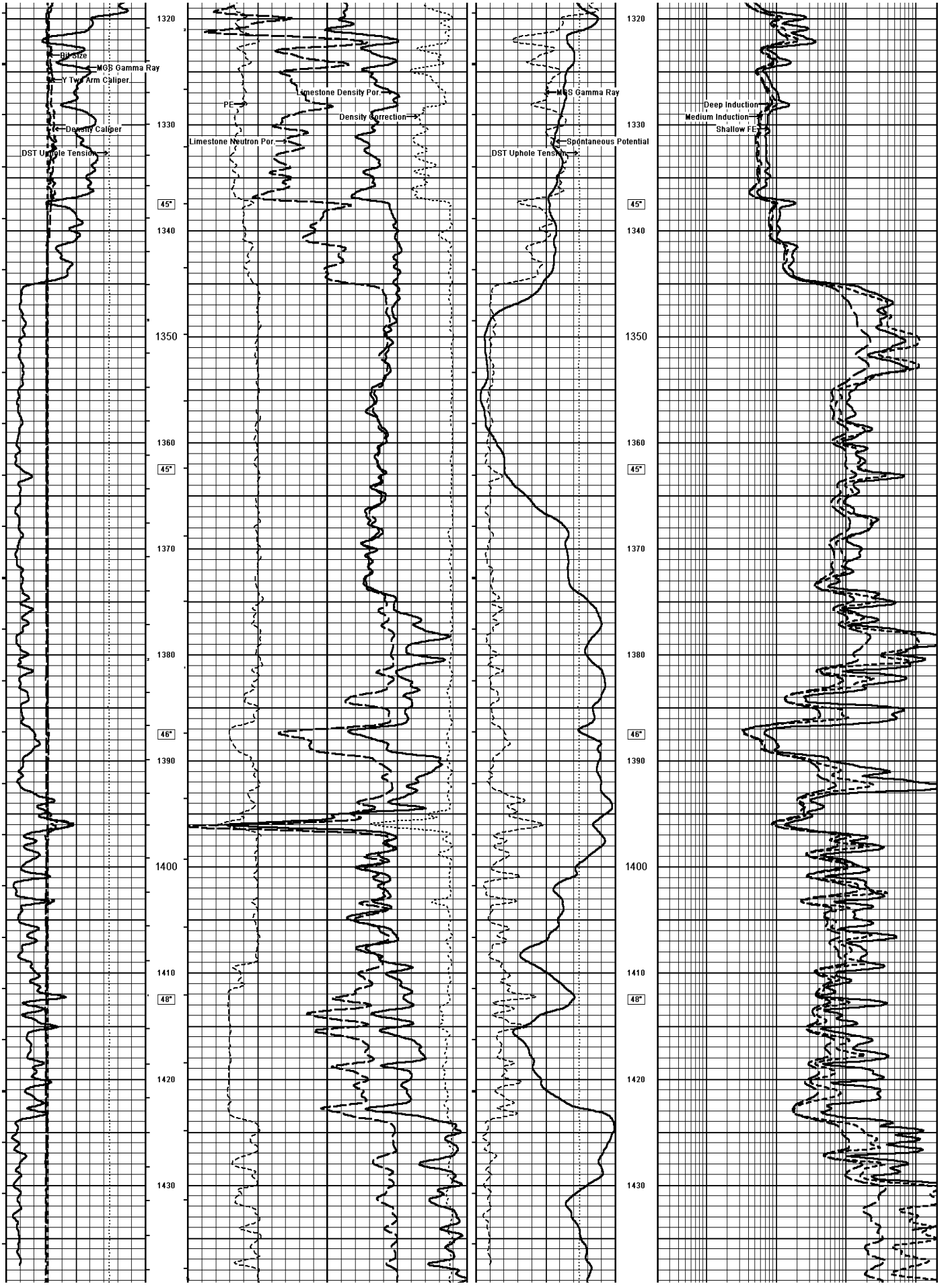

Bit Size
MGS Gamma Ray
Two Arm Caliper
Density Caliper
DST Uphole Tension
Limestone Density Por.
PE
Density Correction
Limestone Neutron Por.
MGS Gamma Ray
DST Uphole Tension
Deep Induction
Medium Induction
Shallow FE
Spontaneous Potential
720
730
30"
740
750
760
31"
770
780
32"
790
800
810
33"
820
830

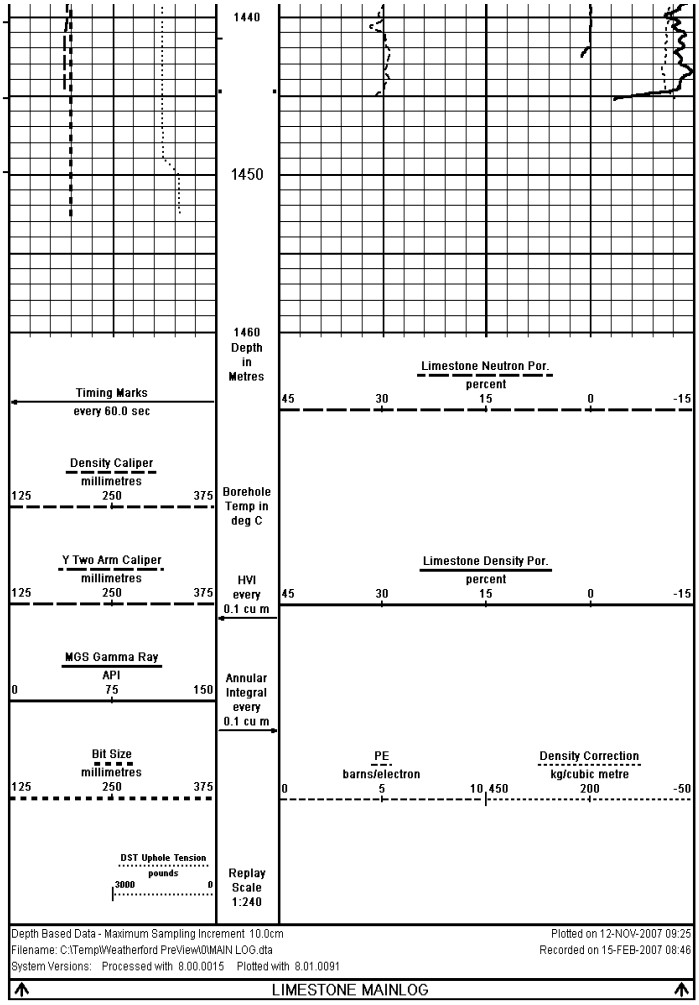

Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DSTU Uphole Tension
PE
Limestone Density Por.
Density Correction
Limestone Neutron Por.
MGS Gamma Ray
DSTU Uphole Tension
Spontaneous Potential
Deep Induction
Medium Induction
Shallow Ind.
33"
840
850
860
34"
870
880
34"
890
900
910
35"
920
930
35"
940
950

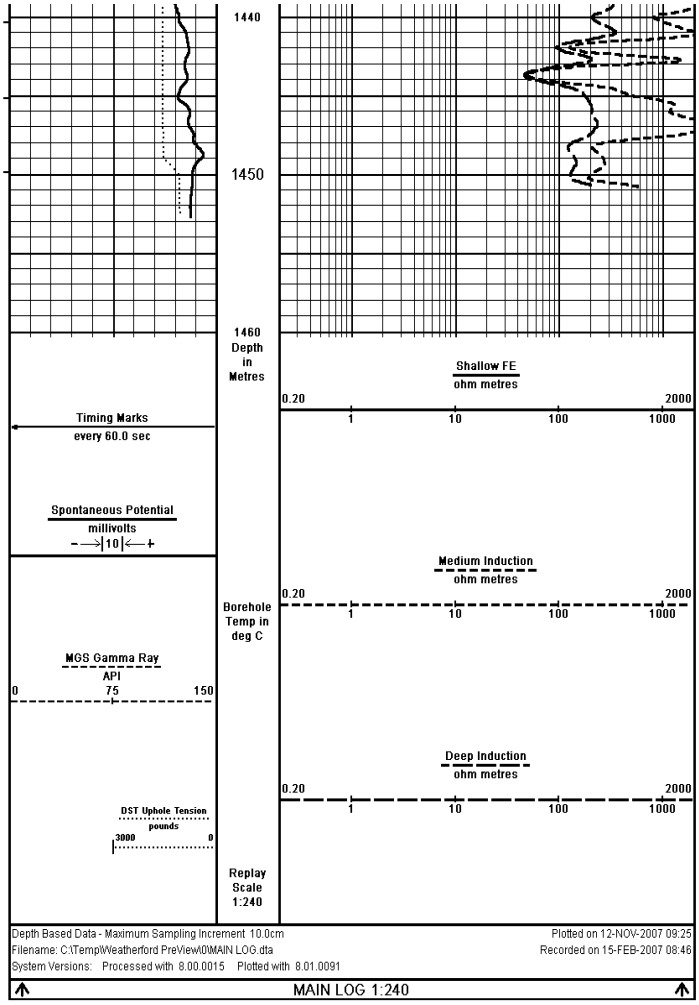

Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
PE
Limestone Density Por.
Density Correction
Limestone Neutron Por.
MGS Gamma Ray
Spontaneous Potential
DST Uphole Tension
Deep Induction
Medium Induction
Shallow FE
960
36"
970
980
36"
990
1000
1010
37"
1020
1030
37"
1040
1050
1060
38"
1070

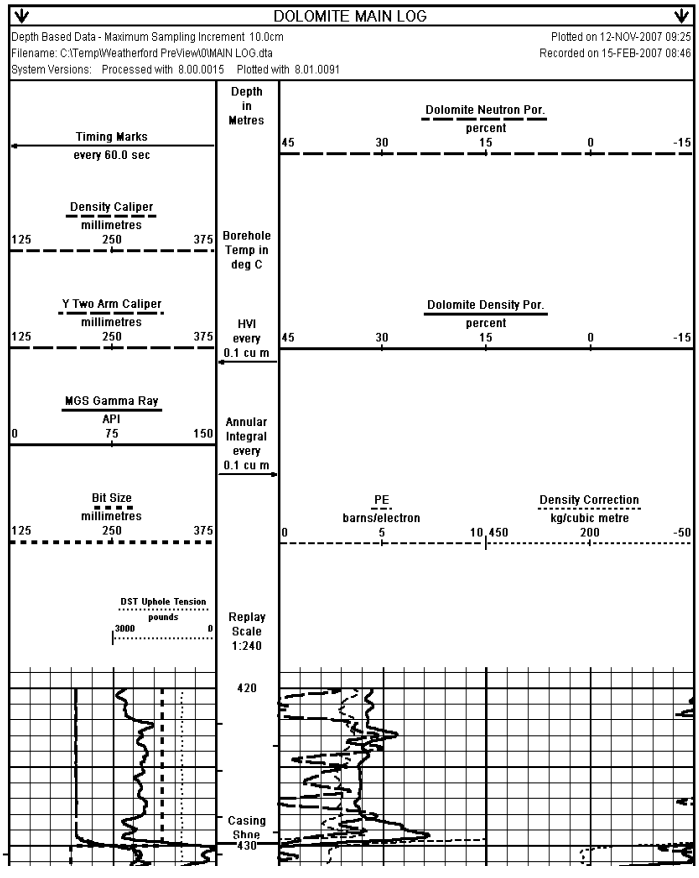

Bit Size
MGS Gamma Ray
3 Two Arm Caliper
Density Caliper
DST Uphole Tension
PE
Limestone Density Por
Density Correction
Limestone Neutron Por
MGS Gamma Ray
Spontaneous Potential
DST Uphole Tension
Deep Induction
Medium Induction
Shallow FE
1080
1090
1100
1110
1120
1130
1140
1150
1160
1170
1180
1190
38"
39"
40"
41"

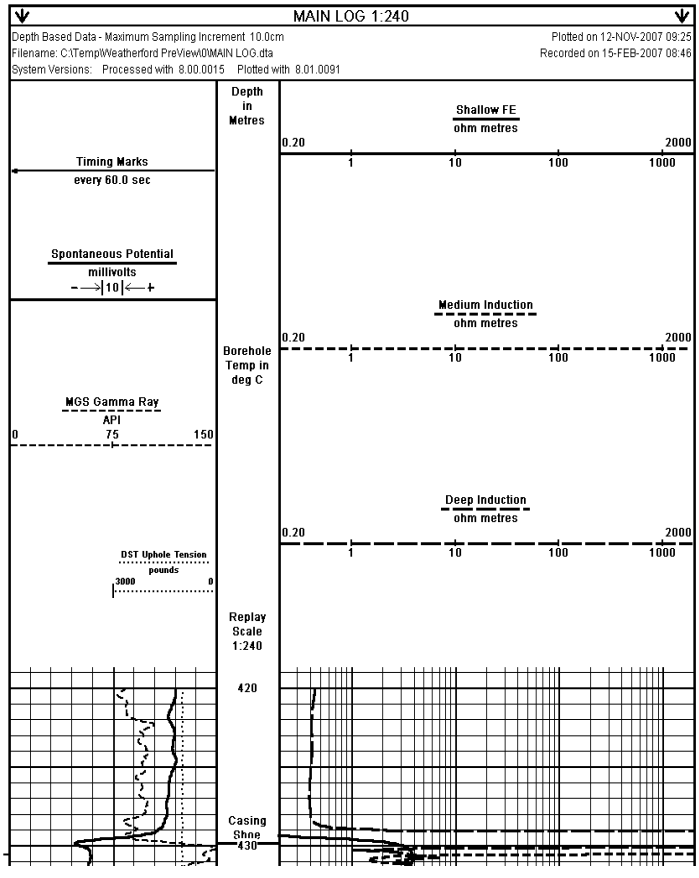

Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
Limestone Density Por.
PE
Density Correction
Limestone Neutron Por.
MGS Gamma Ray
Deep Induction
Medium Induction
Shallow FE
Spontaneous Potential
DST Uphole Tension
1200
1210
1220
1230
1240
1250
1260
1270
1280
1290
1300
1310
41"
42"
43"
44"

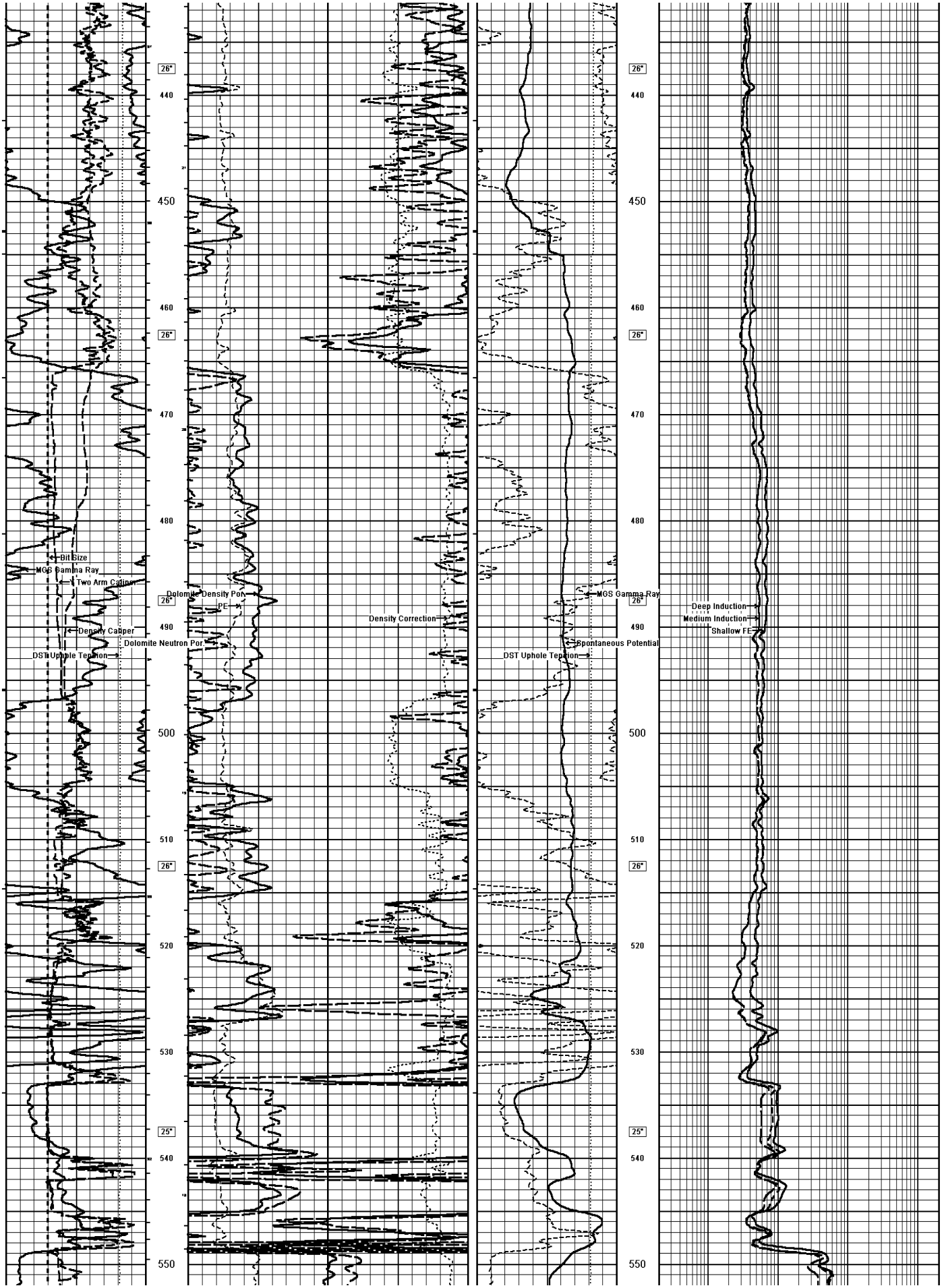

Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
Limestone Density Por.
PE
Density Correction
Limestone Neutron Por.
MGS Gamma Ray
Spontaneous Potential
DST Uphole Tension
Deep Induction
Medium Induction
Shallow FE
1320
1330
45"
1340
1350
1360
45"
1370
1380
46"
1390
1400
1410
48"
1420
1430

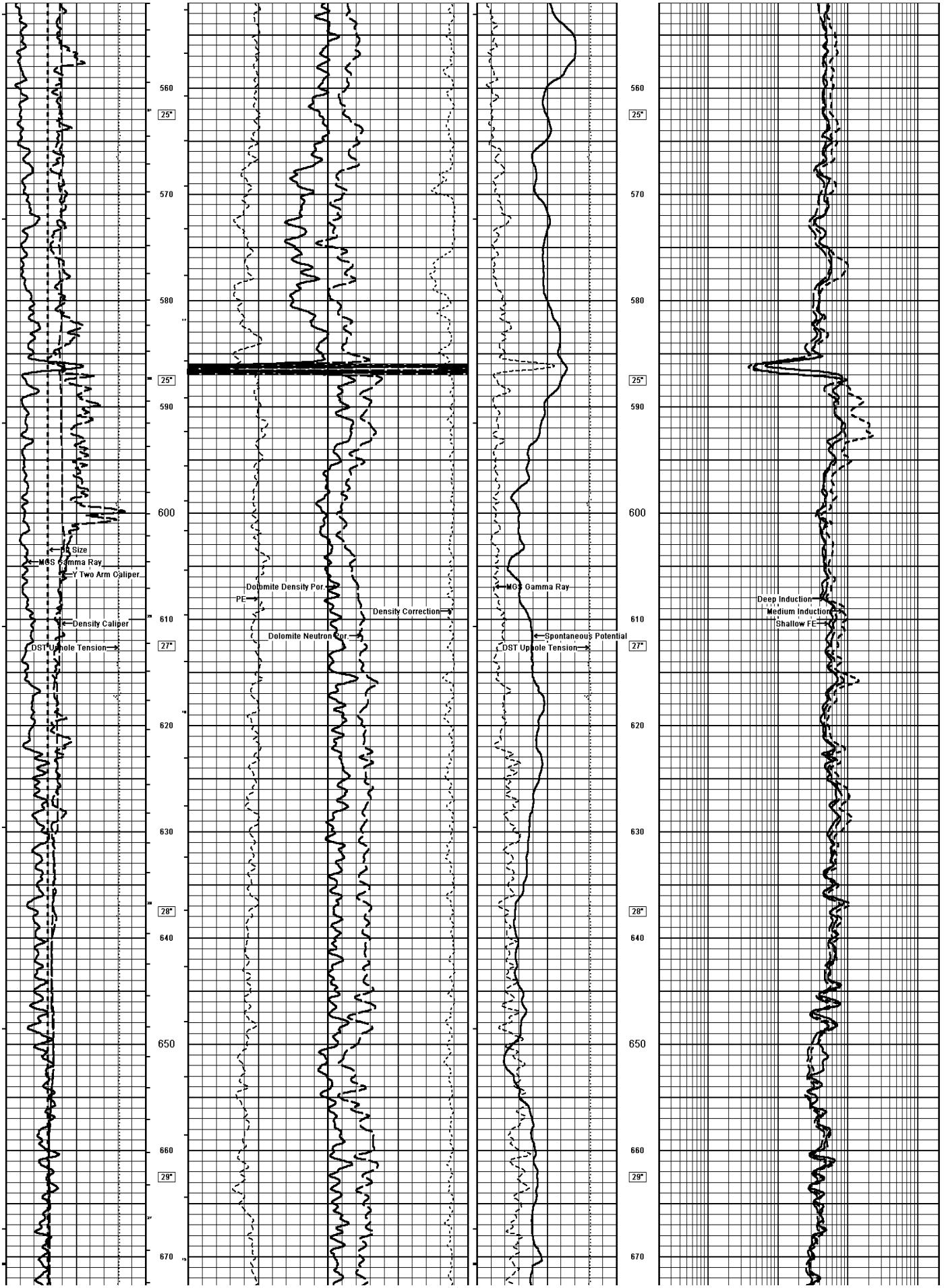

1440
1450
1460
Depth in Metres
Timing Marks
every 60.0 sec
Density Caliper
millimetres
125 250 375
Borehole Temp in deg C
Y Two Arm Caliper
millimetres
125 250 375
HVI every 0.1 cu m
MGS Gamma Ray
API
0 75 150
Annular Integral every 0.1 cu m
Bit Size
millimetres
125 250 375
DST Uphole Tension
pounds
3000 0
Replay Scale 1:240
Limestone Neutron Por.
percent
45 30 15 0 -15
Limestone Density Por.
percent
45 30 15 0 -15
PE
barns/electron
0 5 10
Density Correction
kg/cubic metre
450 200 -50
Depth based Data - Maximum Sampling Increment 10.0cm
Plotted on 12-NOV-2007 09:25
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091
LIMESTONE MAINLOG


1440
1450
1460
Depth in Metres
Timing Marks
every 60.0 sec
Spontaneous Potential
millivolts
10
Borehole Temp in deg C
MGS Gamma Ray
API
0 75 150
DST Uphole Tension
pounds
3000 0
Replay Scale 1:240
Shallow FE
ohm metres
0.20 1 10 100 2000
Medium Induction
ohm metres
0.20 1 10 100 2000
Deep Induction
ohm metres
0.20 1 10 100 2000
Depth based Data - Maximum Sampling Increment 10.0cm
Plotted on 12-NOV-2007 09:25
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091
MAIN LOG 1:240


DOLOMITE MAIN LOG
Depth based Data - Maximum Sampling Increment 10.0cm
Plotted on 12-NOV-2007 09:25
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091
Depth in Metres
Timing Marks
every 60.0 sec
Density Caliper
millimetres
125 250 375
Borehole Temp in deg C
Y Two Arm Caliper
millimetres
125 250 375
HVI every 0.1 cu m
MGS Gamma Ray
API
0 75 150
Annular Integral every 0.1 cu m
Bit Size
millimetres
125 250 375
DST Uphole Tension
pounds
3000 0
Replay Scale 1:240
Dolomite Neutron Por.
percent
45 30 15 0 -15
Dolomite Density Por.
percent
45 30 15 0 -15
PE
barns/electron
0 5 10
Density Correction
kg/cubic metre
450 200 -50
420
Casing Shoe
430


MAIN LOG 1:240
Depth based Data - Maximum Sampling Increment 10.0cm
Plotted on 12-NOV-2007 09:25
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091
Depth in Metres
Timing Marks
every 60.0 sec
Spontaneous Potential
millivolts
10
Borehole Temp in deg C
MGS Gamma Ray
API
0 75 150
DST Uphole Tension
pounds
3000 0
Replay Scale 1:240
Shallow FE
ohm metres
0.20 1 10 100 2000
Medium Induction
ohm metres
0.20 1 10 100 2000
Deep Induction
ohm metres
0.20 1 10 100 2000
420
Casing Shoe
430

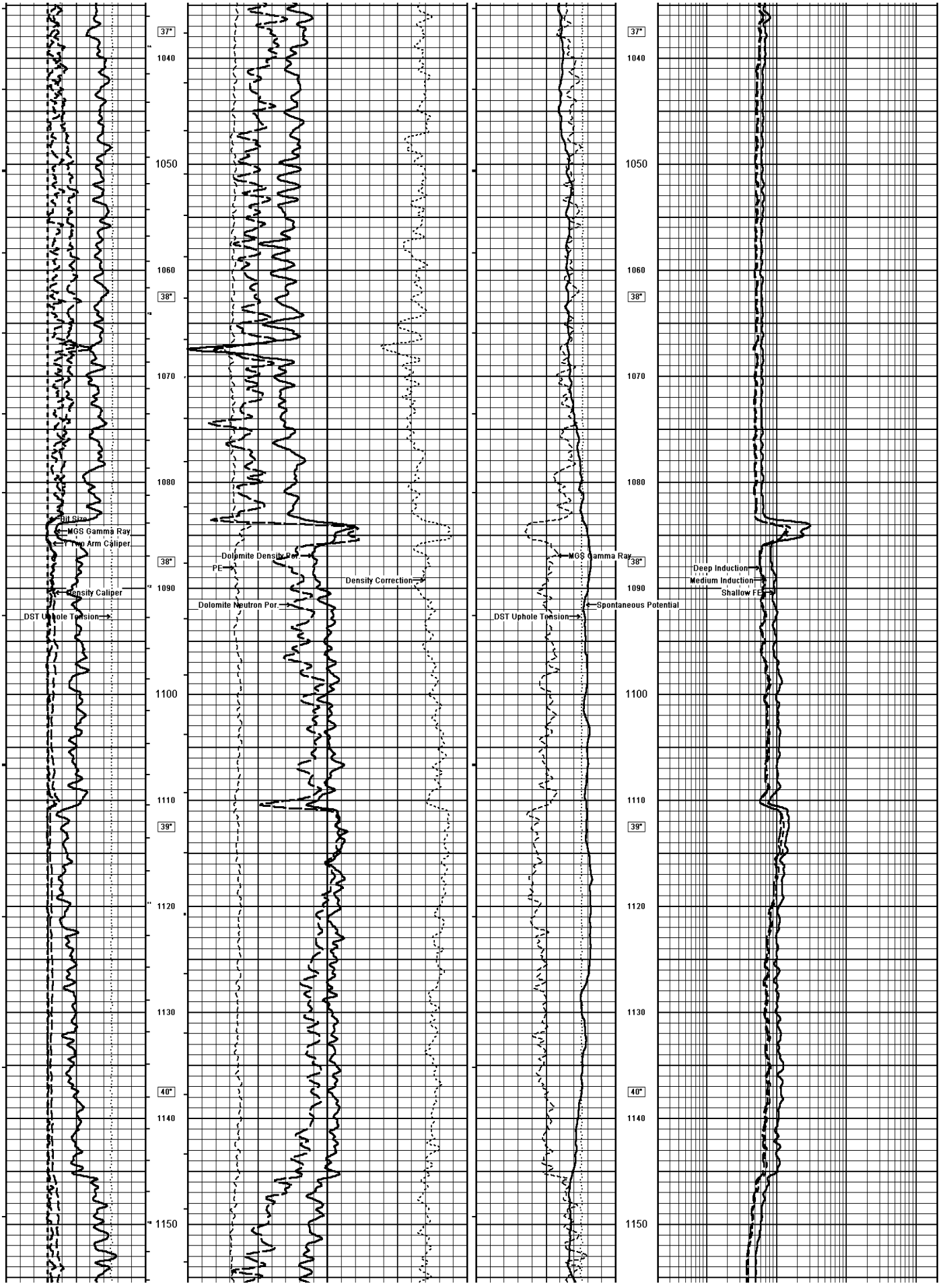

26"
440
450
460
26"
470
480
Bit Size
MGS Gamma Ray
Two Arm Caliper
Density Caliper
DST Uphole Tension
Dolomite Density Por
PE
Dolomite Neutron Por
26"
490
Density Correction
500
510
26"
520
530
25"
540
550
26"
440
450
460
26"
470
480
MGS Gamma Ray
26"
490
DST Uphole Tension
Spontaneous Potential
500
510
26"
520
530
25"
540
550
Deep Induction
Medium Induction
Shallow FE

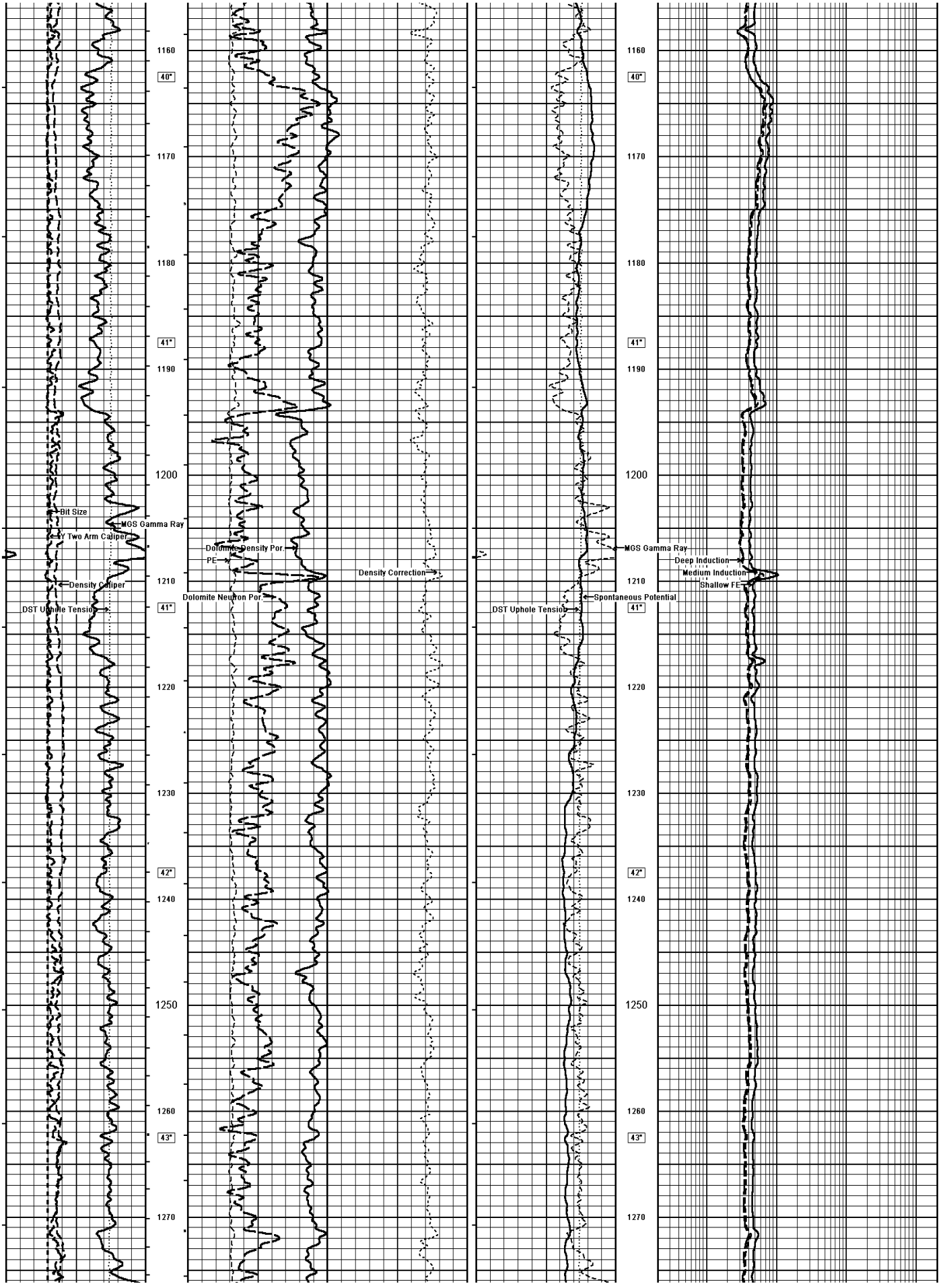

560
25"
570
580
25"
590
600
610
27"
620
630
28"
640
650
660
29"
670
BS Size
MCS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
Dolomite Density Por.
PE
Density Correction
Dolomite Neutron Cor.
MCS Gamma Ray
Spontaneous Potential
DST Uphole Tension
Deep Induction
Medium Induction
Shallow FE

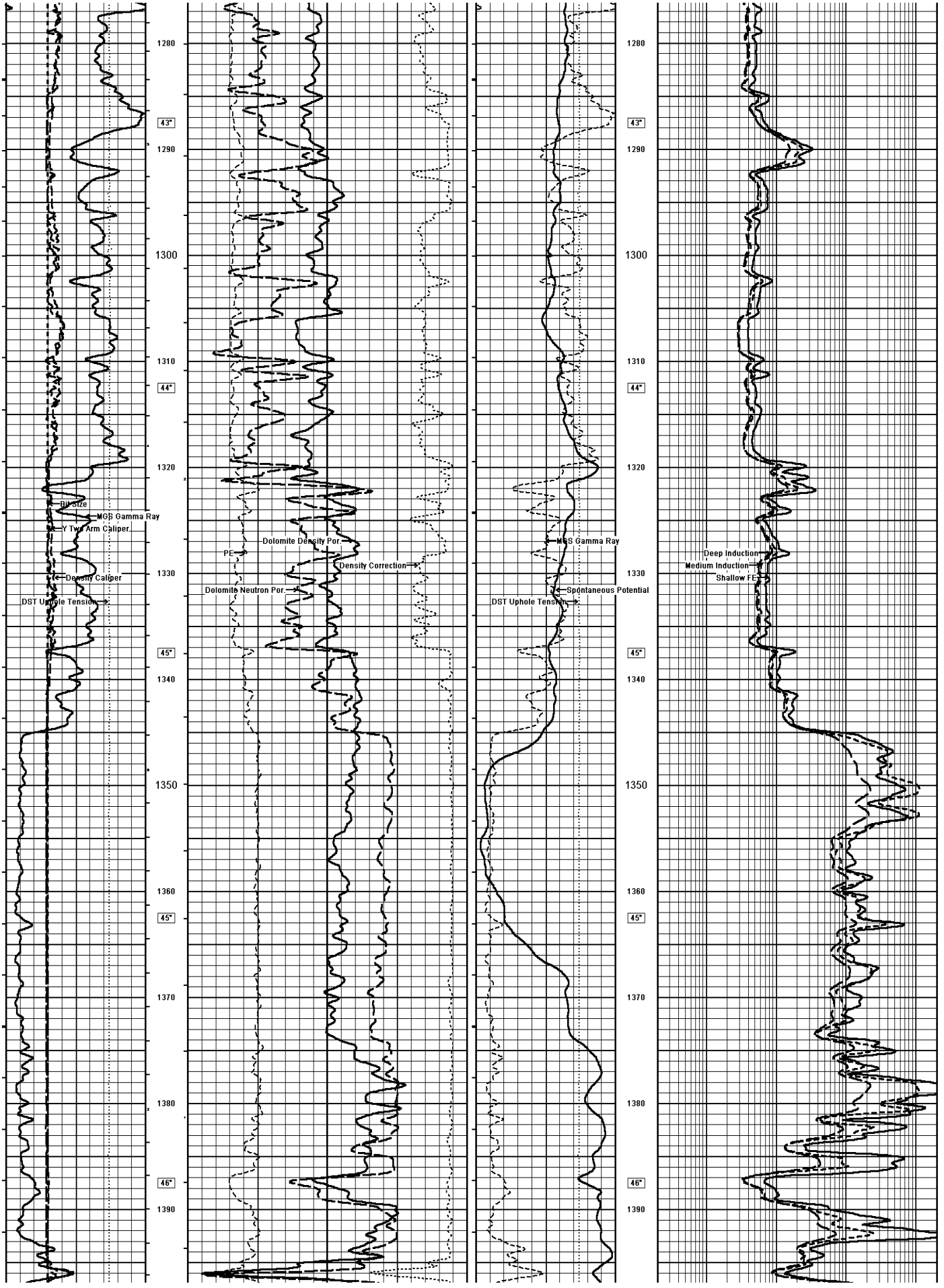

680
29"
690
700
710
30"
720
730
30"
740
750
760
31"
770
780
32"
790
Bit Size
MGS Gamma Ray
Two Arm Caliper
Density Caliper
DST Uphole Tension
Dolomite Density Por.
PE
Density Correction
Dolomite Neutron Por.
MGS Gamma Ray
DST Uphole Tension
Spontaneous Potential
Deep Induction
Medium Induction
Shallow FE

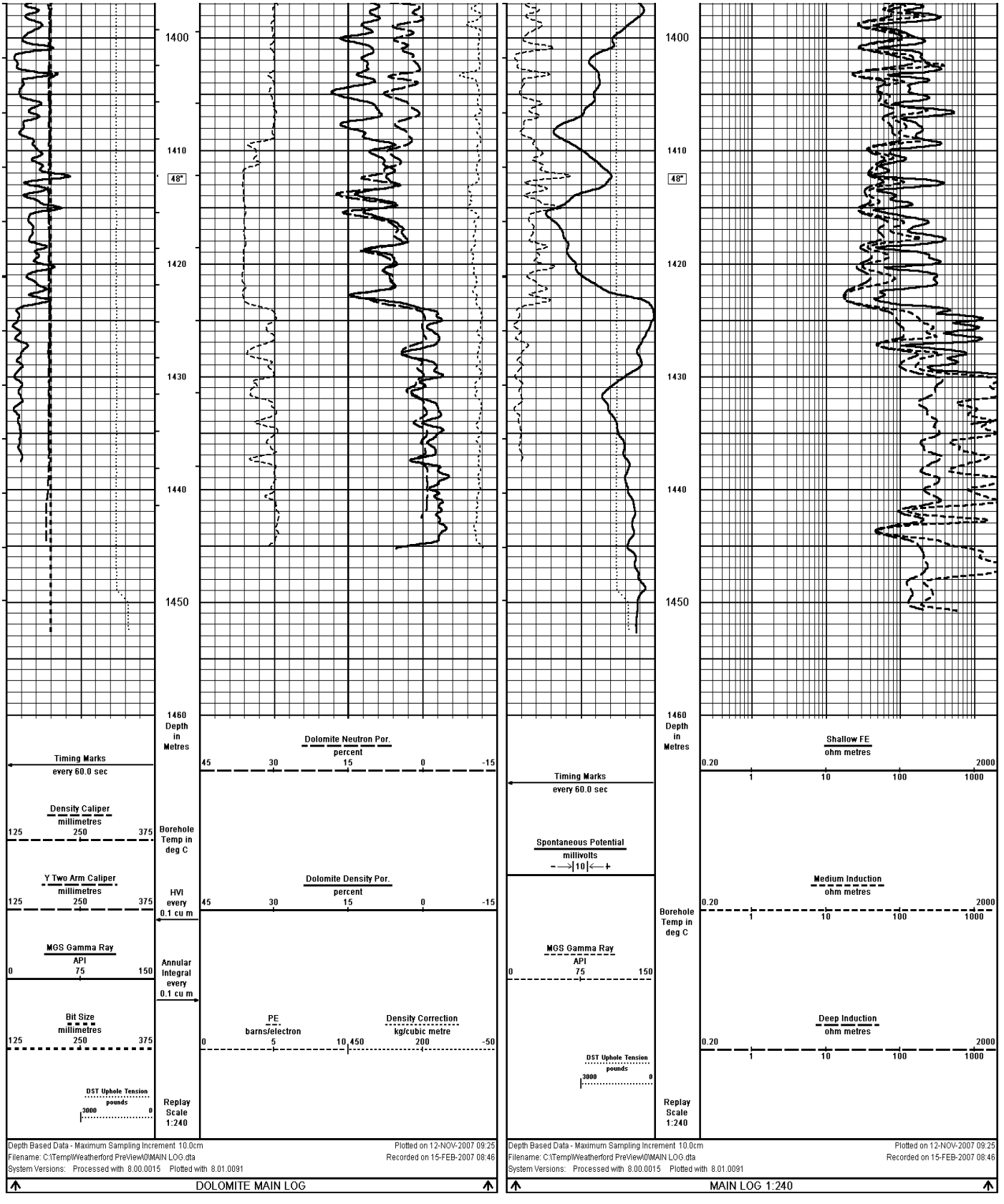

800
810
33"
820
830
33"
840
850
860
34"
870
880
34"
890
900
910
35"
Bit Size
MGS Gamma Ray
Two Arm Caliper
Density Caliper
DSV Uphole Tension
Dolomite Density Por.
PE
Density Correction
Dolomite Neutron Por.
MGS Gamma Ray
DSV Uphole Tension
Spontaneous Potential
Deep Induction
Medium Induction
Shallow Fi


920
930
35"
940
950
960
36"
970
980
36"
990
1000
1010
37"
1020
1030
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
Dolomite Density Por
PE
Density Correction
Dolomite Neutron Por
MGS Gamma Ray
Spontaneous Potential
DST Uphole Tension
Deep Induction
Medium Induction
Shallow FE


37"
1040
1050
1060
38"
1070
1080
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
38"
Density Caliper
1090
DST Uphole Tension
1100
1110
39"
1120
1130
40"
1140
1150
Dolomite Density Por
PE
Density Correction
Dolomite Neutron Por
MGS Gamma Ray
Spontaneous Potential
DST Uphole Tension
Deep Induction
Medium Induction
Shallow FE


1160
40"
1170
1180
41"
1190
1200
1210
41"
1220
1230
42"
1240
1250
1260
43"
1270
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Dolomite Density Por.
PE
Density Caliper
Density Correction
Dolomite Neutron Por.
DST Uphole Tension
MGS Gamma Ray
Deep Induction
Medium Induction
Shallow FE
Spontaneous Potential
DST Uphole Tension


1280
43"
1290
1300
1310
44"
1320
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
1330
45"
1340
1350
1360
45"
1370
1380
46"
1390
Dolomite Density Por.
PE
Density Correction
Dolomite Neutron Por.
MGS Gamma Ray
Spontaneous Potential
DST Uphole Tension
Deep Induction
Medium Induction
Shallow FE



BEFORE SURVEY CALIBRATION

C:\Temp\Weatherford PreView\0\REPEAT.dta

General Constants All 000

Last Edited on 15-FEB-2007,06:48

General Parameters

Mud Resistivity	1.180	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	

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

Caliper Calibration MTC 006

Base Calibration on 25-JAN-2007,18:14
Field Calibration on 10-FEB-2007,20:21

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)
208.70	205.70

Gamma Calibration MGS 010

Field Calibration on 7-FEB-2007,09:09

	Measured	Calibrated (API)
Background	48	31
Calibrator (Gross)	1256	825
Calibrator (Net)	1208	794

Gamma Constants MGS 010

Last Edited on 15-FEB-2007,06:48

Gamma Calibrator Number	grcc075	
Mud Density	1060.00	kg/m3
Caliper Source for Processing	Density Caliper	
Tool Position	Centred	
Concentration of KCl	0.00	kppm

Neutron Calibration MDN 144

Base Calibration on 25-JAN-2007 18:05
Field Check on 15-FEB-2007 05:21

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)	
	2094	3091
Ratio	0.677	

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 8-MAR-2007,10:54
Field Check on

Density Calibration

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

Field Check at Base		
	1184.8	1494.9

Field Check		
	0.0	0.0

PE Calibration

Base Calibration	Measured			Calibrated
	WS	WH	Ratio	Ratio
Background	213	1052		
Reference 1	22151	53000	0.422	0.400
Reference 2	5909	20800	0.288	0.272

Field Check at Base		
	213.1	1051.7

Field Check		
	0.0	0.0

Density Constants MPD 036

Last Edited on 15-FEB-2007,04:55

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	1000.00	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	Advanced	

Matrix Density (kg/m3)	Depth (m)
2710.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00

Caliper Calibration MPD 036

Base Calibration on 23-JAN-2007 04:20
Field Calibration on 7-FEB-2007,11:28

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)
166.10	166.10

DOWNHOLE EQUIPMENT

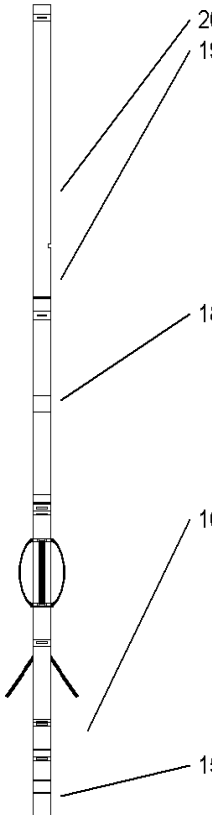
C:\Temp\Weatherford PreView\0\REPEAT.dta

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

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

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

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



20.78 m GRGC - Gamma Ray
19.90 m CGXT - MCG External Temperature
18.79 m FEFE - Shallow FE
16.33 m CLYC - Y Two Arm Caliper
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	NPRL - Limestone 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	DPRL - Limestone Density Por.
7.85 m	DCOR - Density Correction
7.83 m	PDPE - PE

Compact Sonic
MSS 60 Length: 3.82 m Weight: 72.8 lb

3.95 m	TR21 - 3' Transit Time
3.95 m	TR11 - 4' Transit Time
3.95 m	TR22 - 5' Transit Time
3.95 m	DT34 - 3-4' Compensated Sonic
3.95 m	DT35 - 3-5' Compensated Sonic
3.95 m	TR12 - 6' Transit Time

Compact Induction
MAI 72 Length: 3.29 m Weight: 48.5 lb

0.79 m	VEC0 - Shallow Induction
0.79 m	RILM - Medium Induction
0.79 m	RILD - Deep Induction
0.07 m	SPCG - Spontaneous Potential
Tool Zero	(0.28m from bottom)

Compact Hole Finder
HFS 1 Length: 0.24 m Weight: 2.2 lb

All measurements relative to tool zero.

Total Length: 22.63 m Weight: 568.8 lb

COMPANY	PARAMOUNT RESOURCES LTD.
WELL	PARAMOUNT ET AL CAMERON J-04

FIELD	CAMERON HILLS
PROVINCE/COUNTY	NORTH WEST TERRITORIES
COUNTRY/STATE	CANADA

Elevation Kelly Bushing	769.20	metres	First Reading	1448.70	metre
Elevation Drill Floor		metres	Depth Driller	1449.00	metres
Elevation Ground Level	765.20	metres	Depth Logger	1449.50	metres

Weatherford®

MINIPLOT

MINIPLOT

COMPANY	PARAMOUNT RESOURCES LTD.
WELL	PARAMOUNT ET AL CAMERON J-04
FIELD	CAMERON HILLS
PROVINCE/COUNTY	NORTH WEST TERRITORIES
COUNTRY/STATE	CANADA
LOCATION	300/J-04-60-10-117-30

FIELD PRINT

LSD	SEC	TWP	RGE	Other Services

API Number
Permit Number 1159

MICROLOG
COMPENSTATED SONIC

Permanent Datum GROUND LEVEL, Elevation 765.20 metres
Log Measured From 4.00 M above Permanent Datum
Drilling Measured From KB

Elevations:	metres
KB	769.20
DF	
GL	765.20

Date	15-FEB-2007		
Run Number	1		
Depth Driller	1449.00	metres	
Depth Logger	1449.50	metres	
First Reading	1448.70	metre	
Last Reading	420.00	metre	
Casing Driller	430.00	metres	
Casing Logger	429.80	metres	
Bit Size	200.00	mm	
Hole Fluid Type	GELCHEM		
Density / Viscosity	1060.0 kg/M3	93.00 CP	
PH / Fluid Loss	11.00	11.00 ml/30Min	
Sample Source	FLOWLINE		
Rm @ Measured Temp	1.18 @ 25.0	ohm-m	
Rmf @ Measured Temp	1.04 @ 25.0	ohm-m	
Rmc @ Measured Temp	1.32 @ 25.0	ohm-m	
Source Rmf / Rmc	PRESS	FILTER	
Rm @ BHT	0.78 @ 48.0	ohm-m	
Time Since Circulation	6 HRS		
Max Recorded Temp	48.00	deg C	
Equipment Name	COMPACT		
Equipment / Base	13124	GPR	
Recorded By	G. SINGER		
Witnessed By	A. AHMED		
CIRC. STOP TIME	01:30-FEB-15		Last Line

BOREHOLE RECORD

Last Edited: 15-FEB-2007 05:01

Bit Size millimetres	Depth From metres	Depth To metres
311.000	0.00	430.00
200.000	430.00	1449.00

CASING RECORD

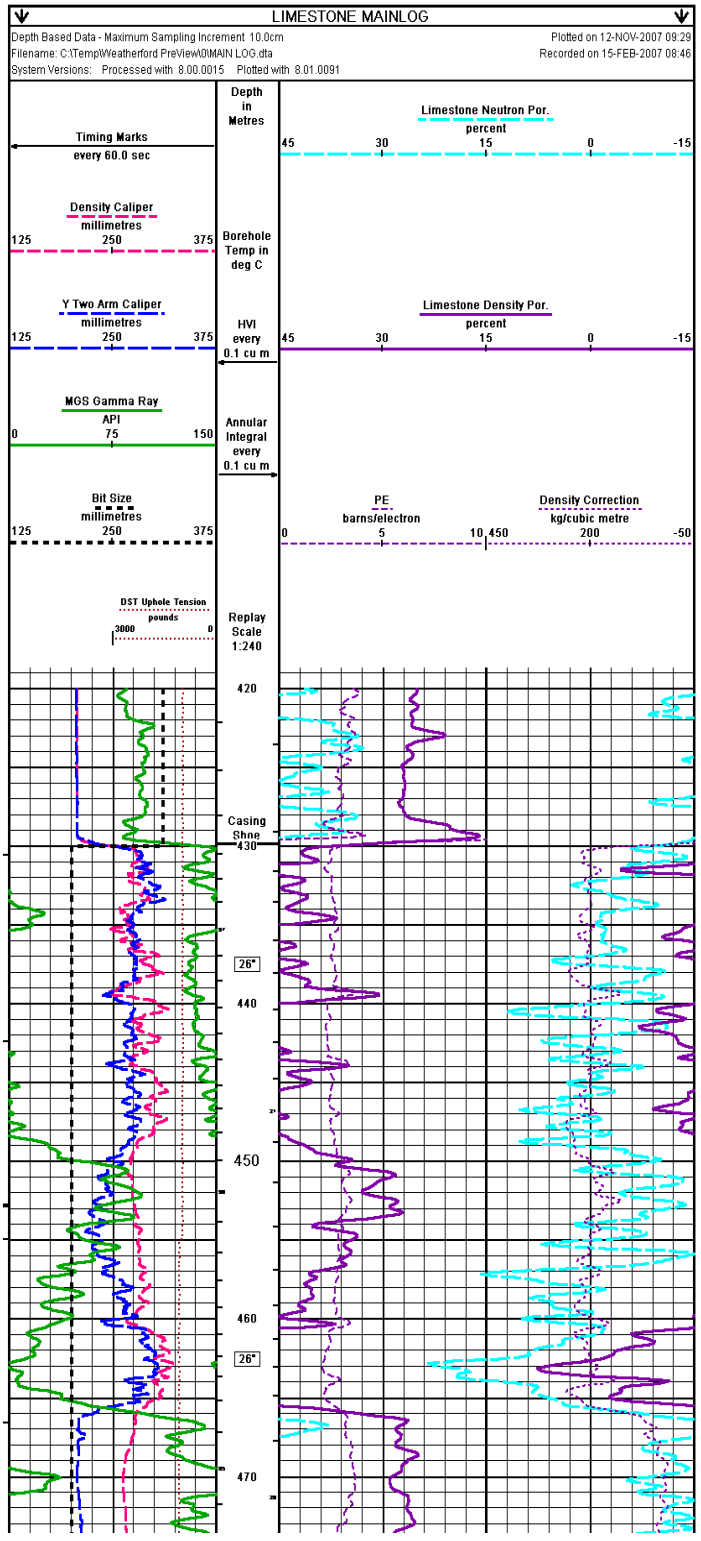
Type	Size millimetres	Depth From metres	Shoe Depth metres	Weight Kg/metre
SURFACE	219.100	0.00	430.00	35.72

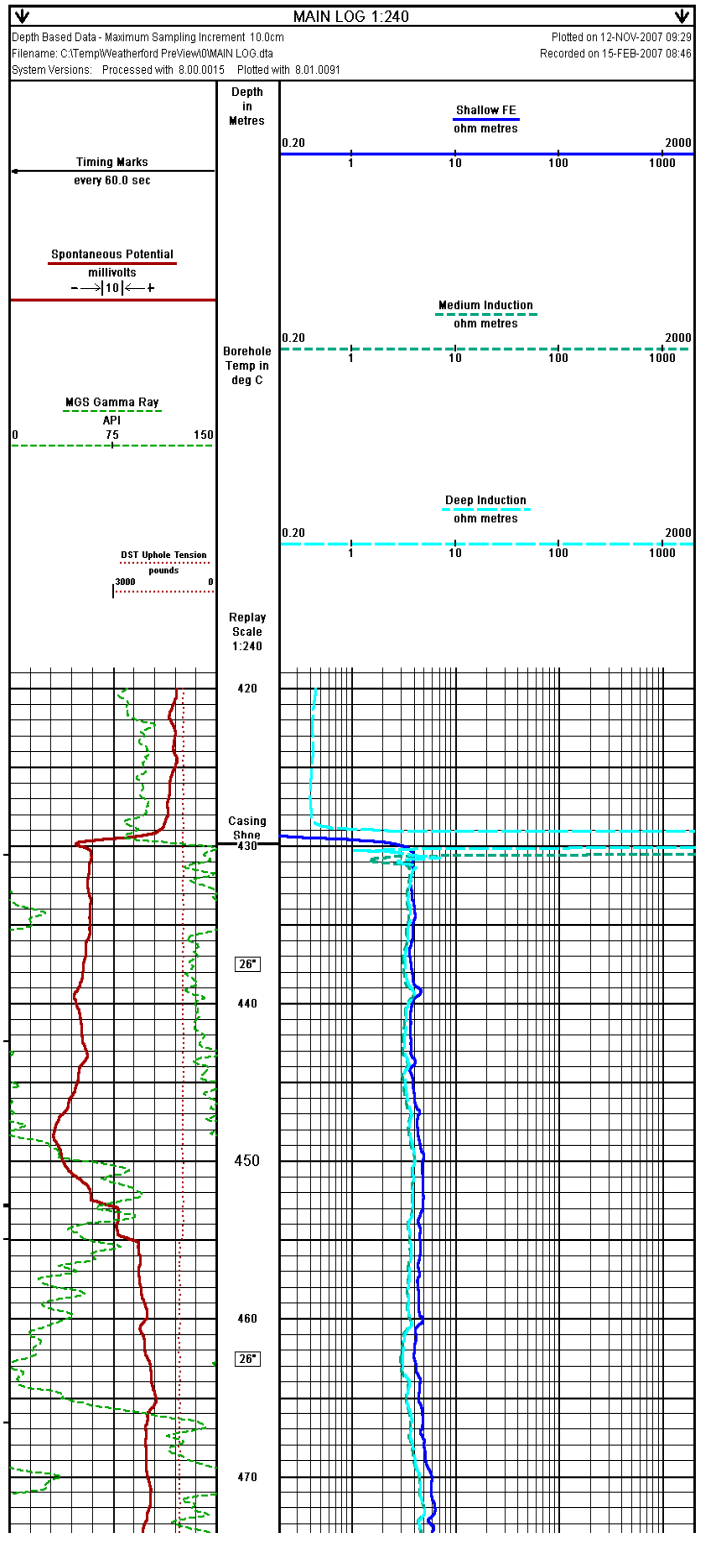
REMARKS

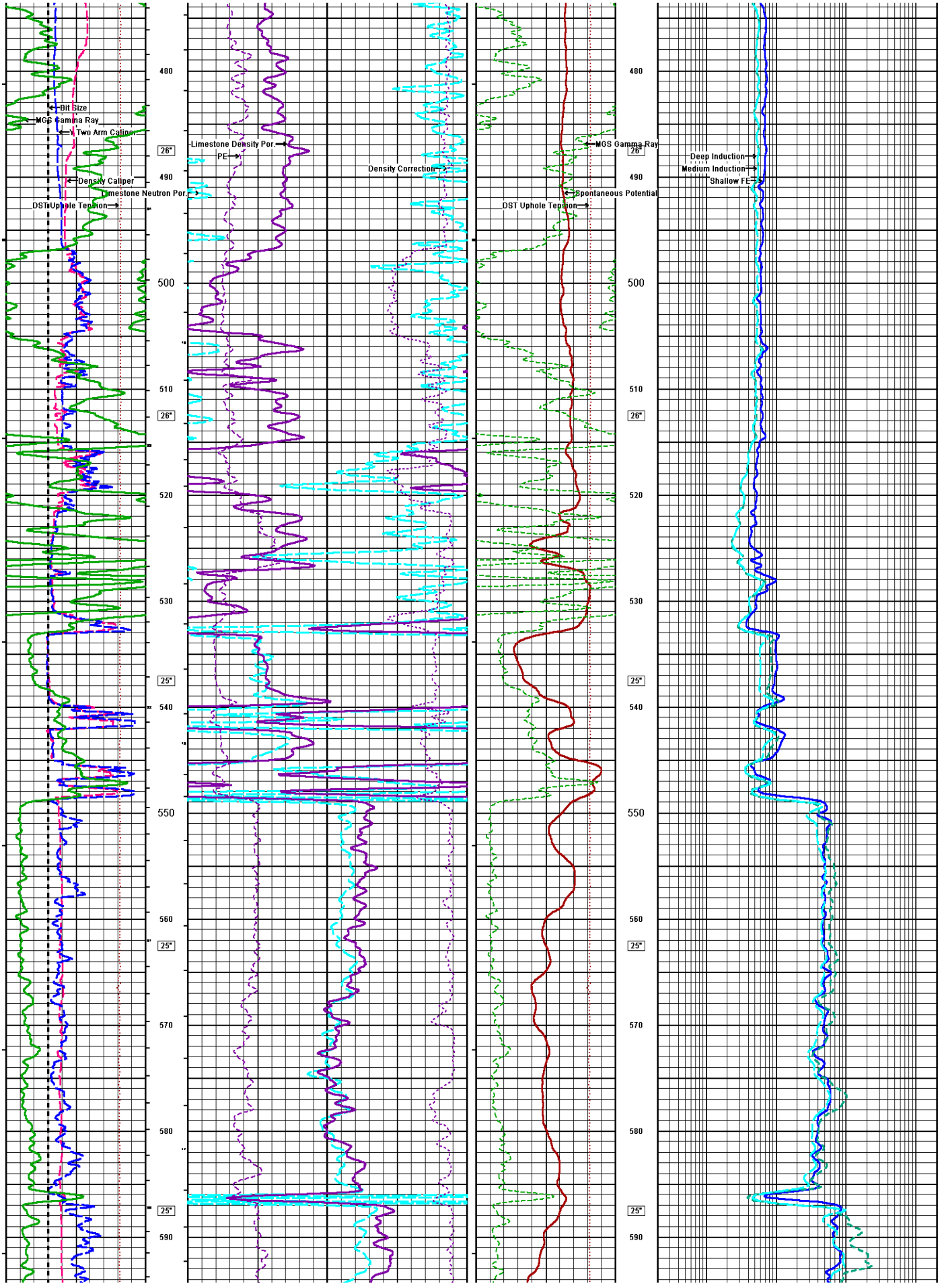
1) SOFTWARE ISSUE: WLS 7.01.0195.
2) CUSTOMER SCALES AND LOGGED INTERVALS USED
3) TOOLS RUN: MAI, MSS, MPD, MDN, MML, ISC, MGS, MTC, MFE, MCG RUN IN COMBINATION
4) HARDWARE: MAI: TWO 25.4 MM STANDOFFS
   MSS: THREE 25.4 MM STANDOFFS
   MDN: DUAL BOWSPRING AND INTERSONIC CRANK
   MTC: SIX LEAF CENTRALIZER
5) SERVICE ORDER #: 30073028 SAP #: 4147101 # FIELD PRINTS = 3
6) RIG: PD 129

7) HOLE AND CEMENT VOLUMES CALCULATED USING DENSITY AND 2-ARM CALIPERS :
HOLE VOLUME = 37.4 CU.M.
ANNULAR VOLUME USING 139.7 MM PRODUCTION CASING = 21.8 CU.M

8) SONIC FREE PIPE FOUND FROM 352M - 357M



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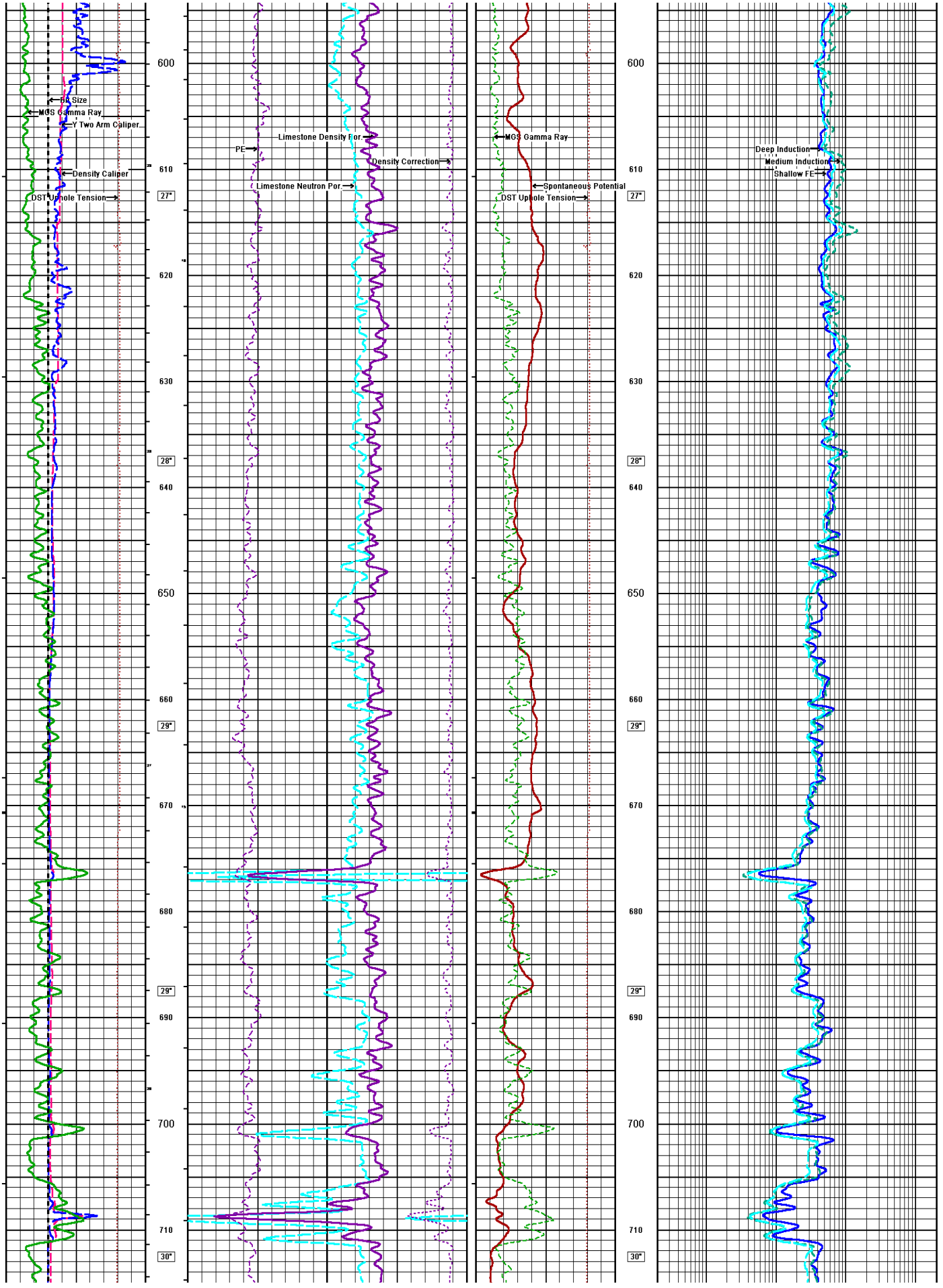
Two Arm Caliper
Density Caliper
Limestone Neutron Por.
DST Uphole Tension
Limestone Density Por.
PE
Density Correction
MGS Gamma Ray
Spontaneous Potential
DST Uphole Tension
Deep Induction
Medium Induction
Shallow FE
480
490
500
510
520
530
540
550
560
570
580
590
26"
25"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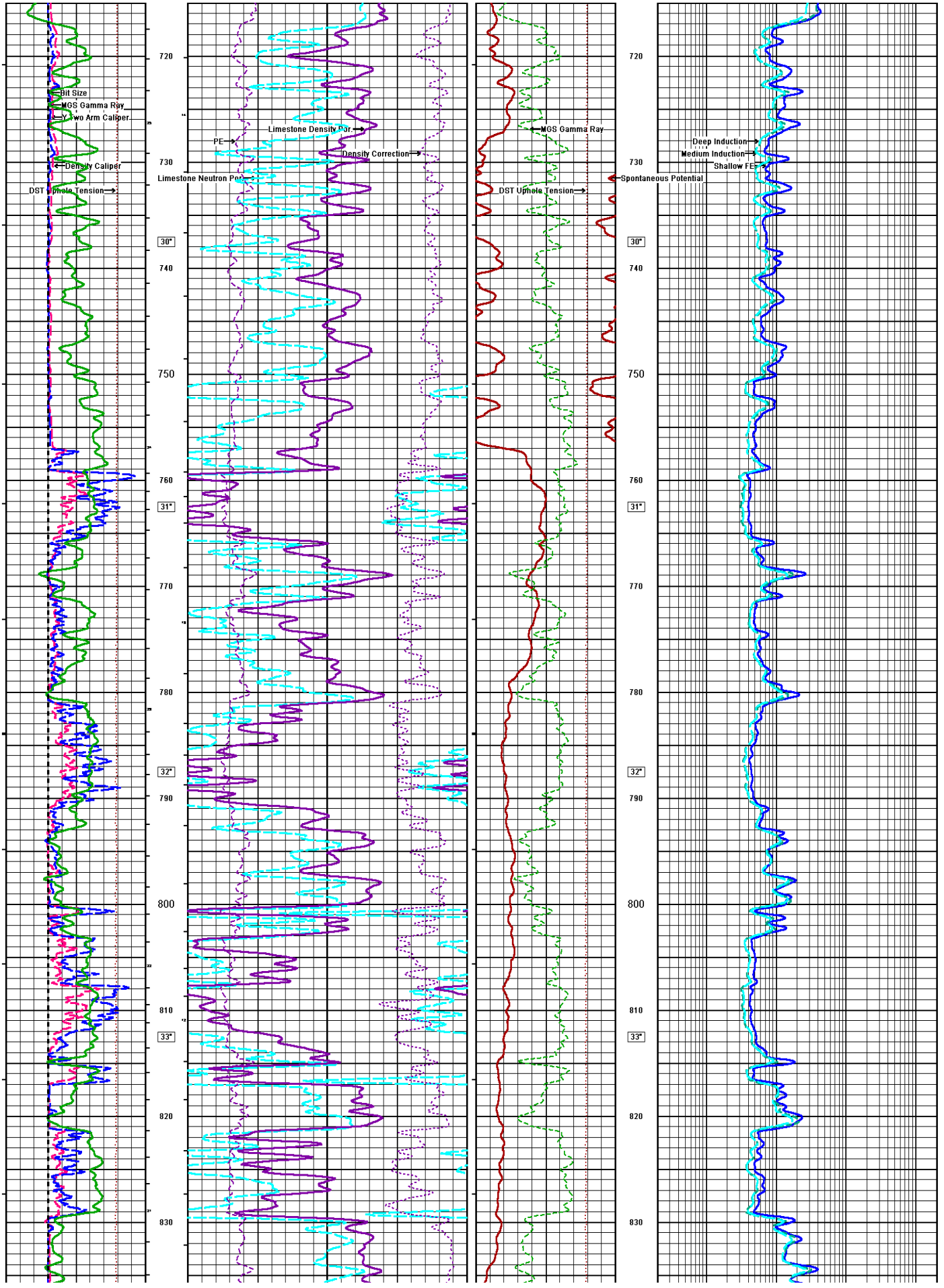
Density Caliper
DST Upole Tension
Limestone Density Por.
PE
Density Correction
Limestone Neutron Por.
MGS Gamma Ray
Spontaneous Potential
DST Upole Tension
Deep Induction
Medium Induction
Shallow FE
600
610
620
630
640
650
660
670
680
690
700
710
27"
28"
29"
30"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Limestone Density Por.
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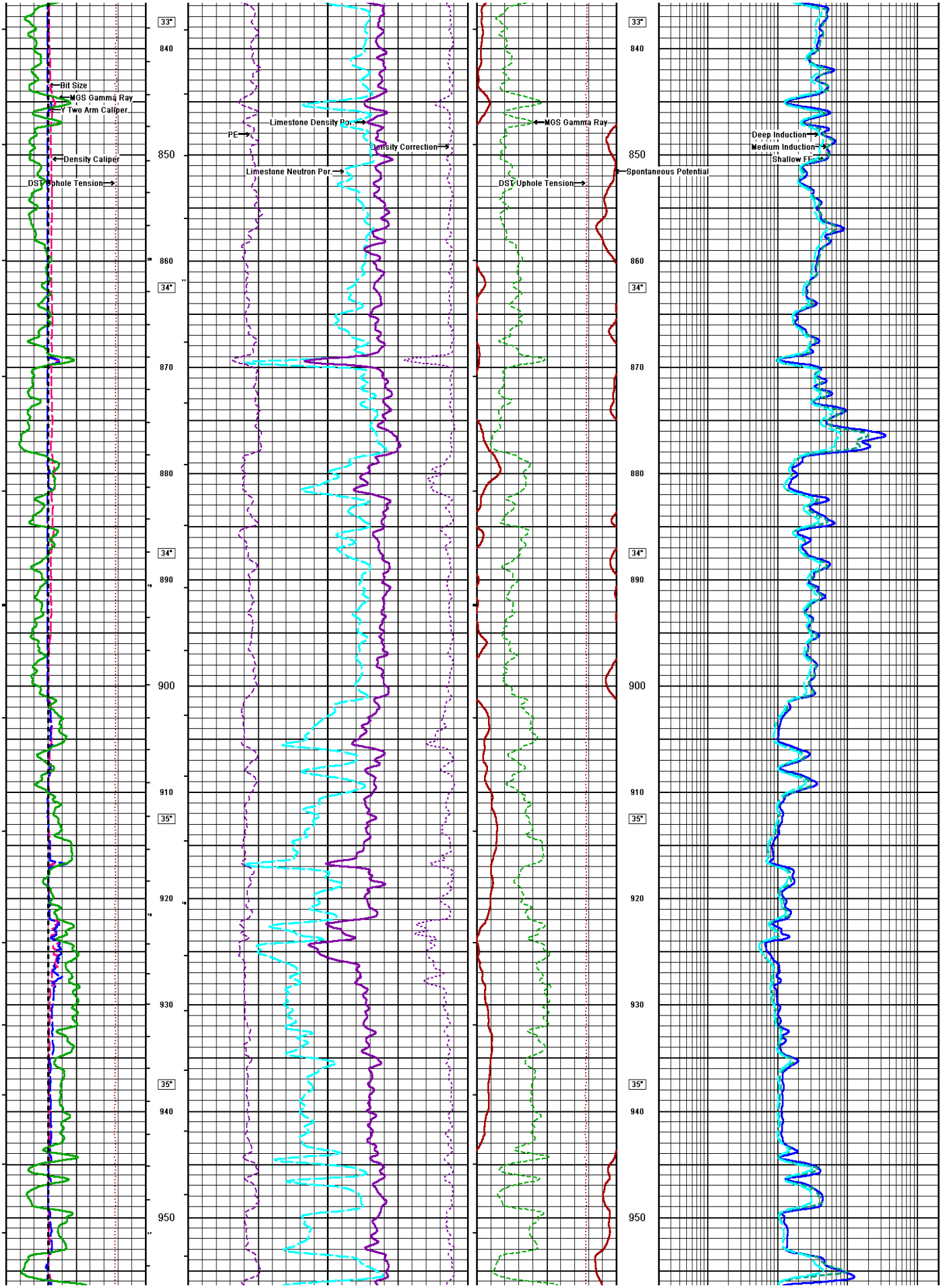
Density Correction
Limestone Neutron Por.
MGS Gamma Ray
DST Uphole Tension
Spontaneous Potential
Deep Induction
Medium Induction
Shallow FE
720
730
30"
740
750
760
31"
770
780
32"
790
800
810
33"
820
830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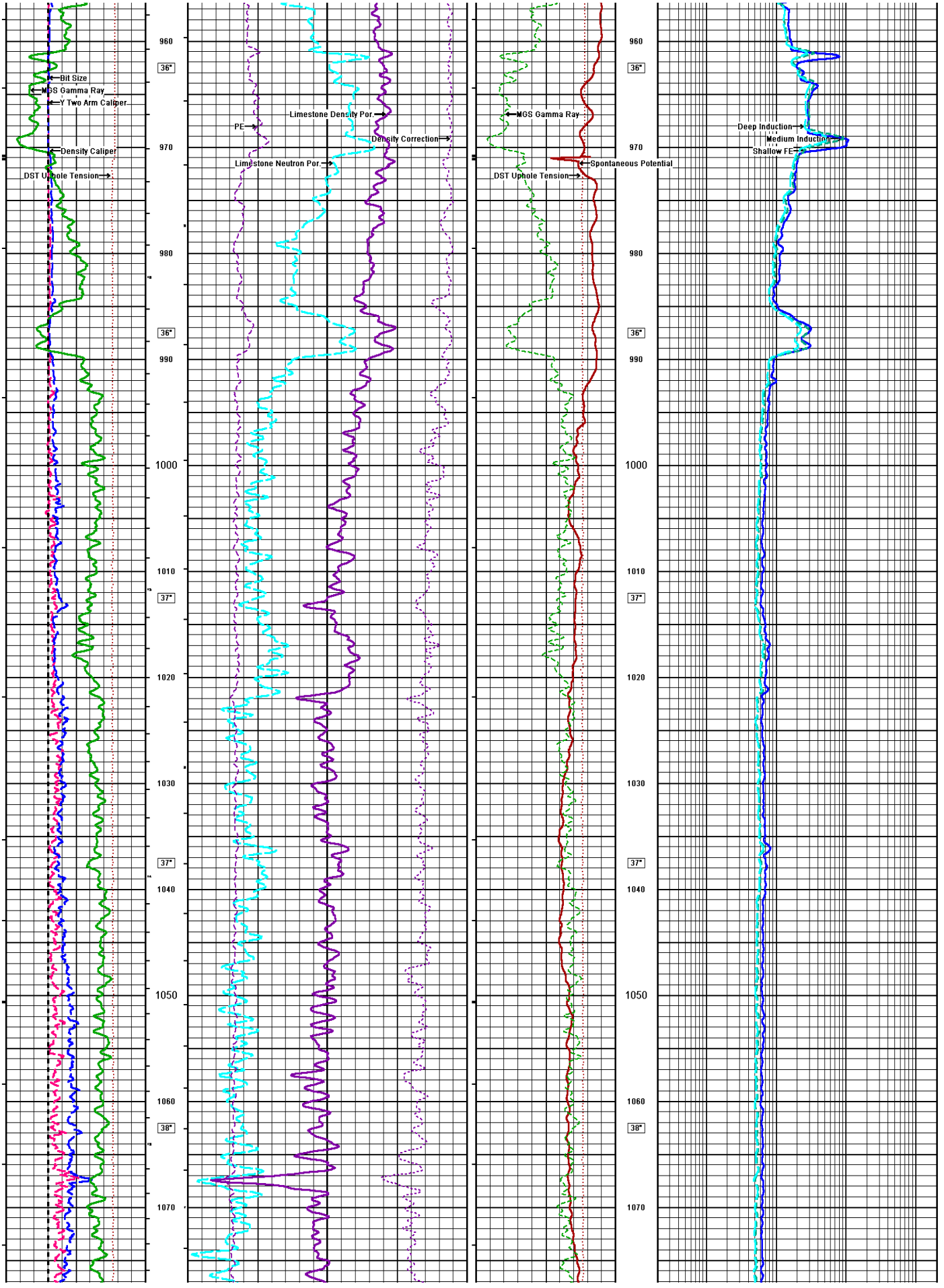
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
PE
Limestone Density Por.
Density Correction
Limestone Neutron Por.
MGS Gamma Ray
DST Uphole Tension
Spontaneous Potential
Deep Induction
Medium Induction
Shallow FE
33"
840
850
860
34"
870
880
34"
890
900
910
35"
920
930
35"
940
950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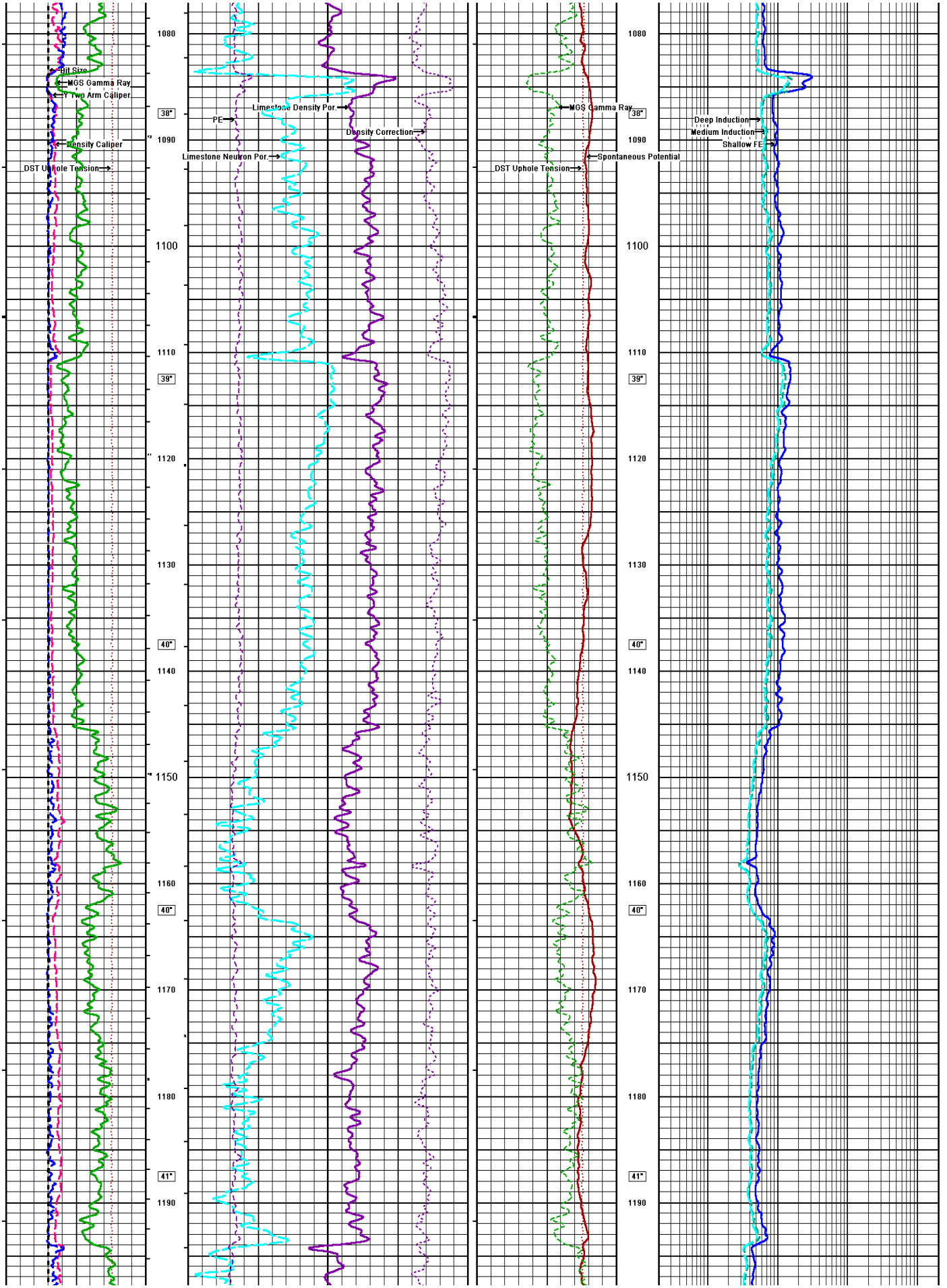
Density Caliper
DST Uphole Tension
PE
Limestone Density Por
Density Correction
Limestone Neutron Por
MGS Gamma Ray
Spontaneous Potential
DST Uphole Tension
Deep Induction
Medium Induction
Shallow FE
960
970
980
990
1000
1010
1020
1030
1040
1050
1060
1070
36"
37"
38"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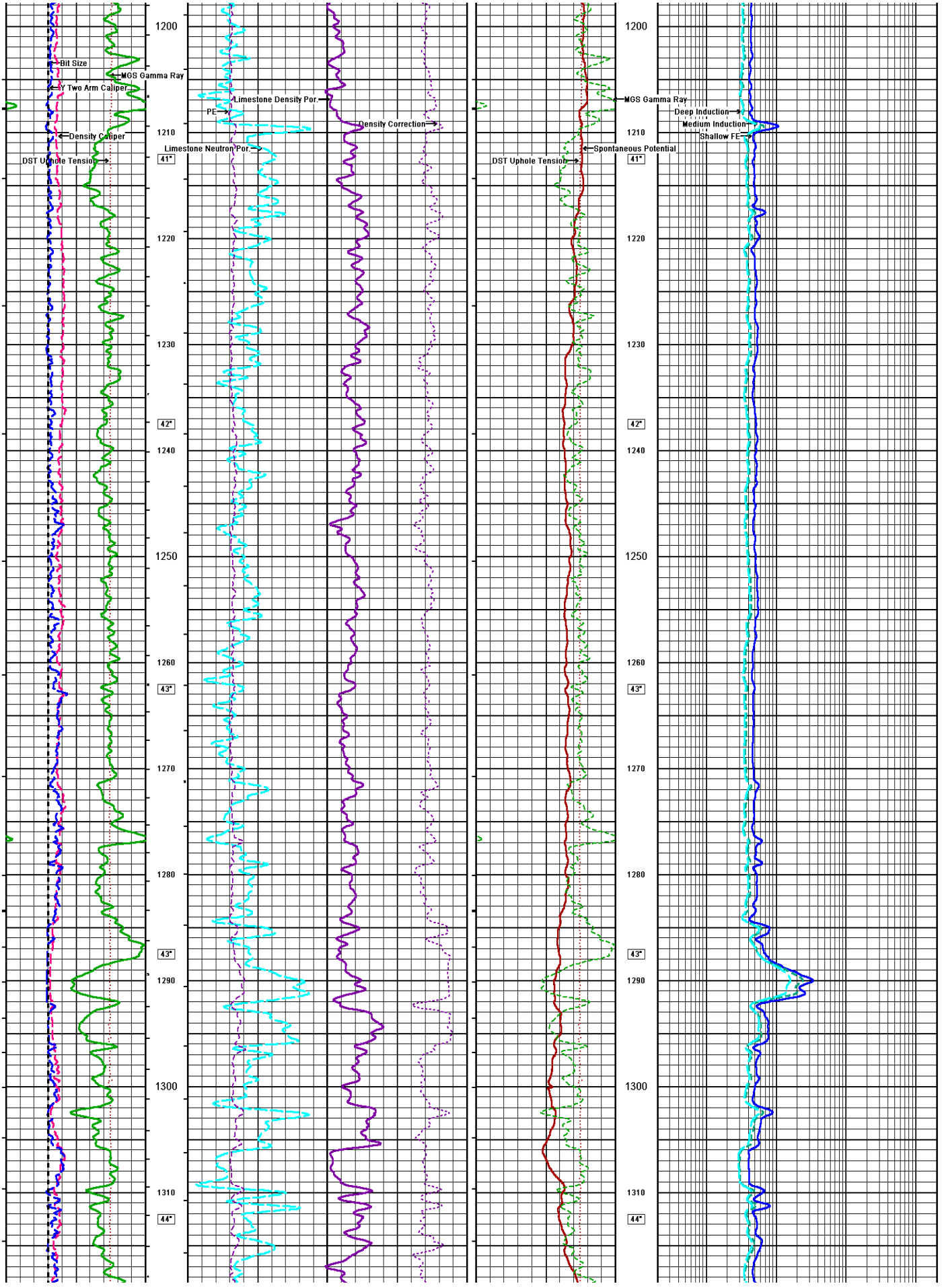
Density Caliper
DST Uphole Tension
Limestone Density Por
PE
Density Correction
Limestone Neutron Por
MGS Gamma Ray
DST Uphole Tension
Spontaneous Potential
Deep Induction
Medium Induction
Shallow FE
1080
1090
1100
1110
1120
1130
1140
1150
1160
1170
1180
1190
38"
39"
40"
41"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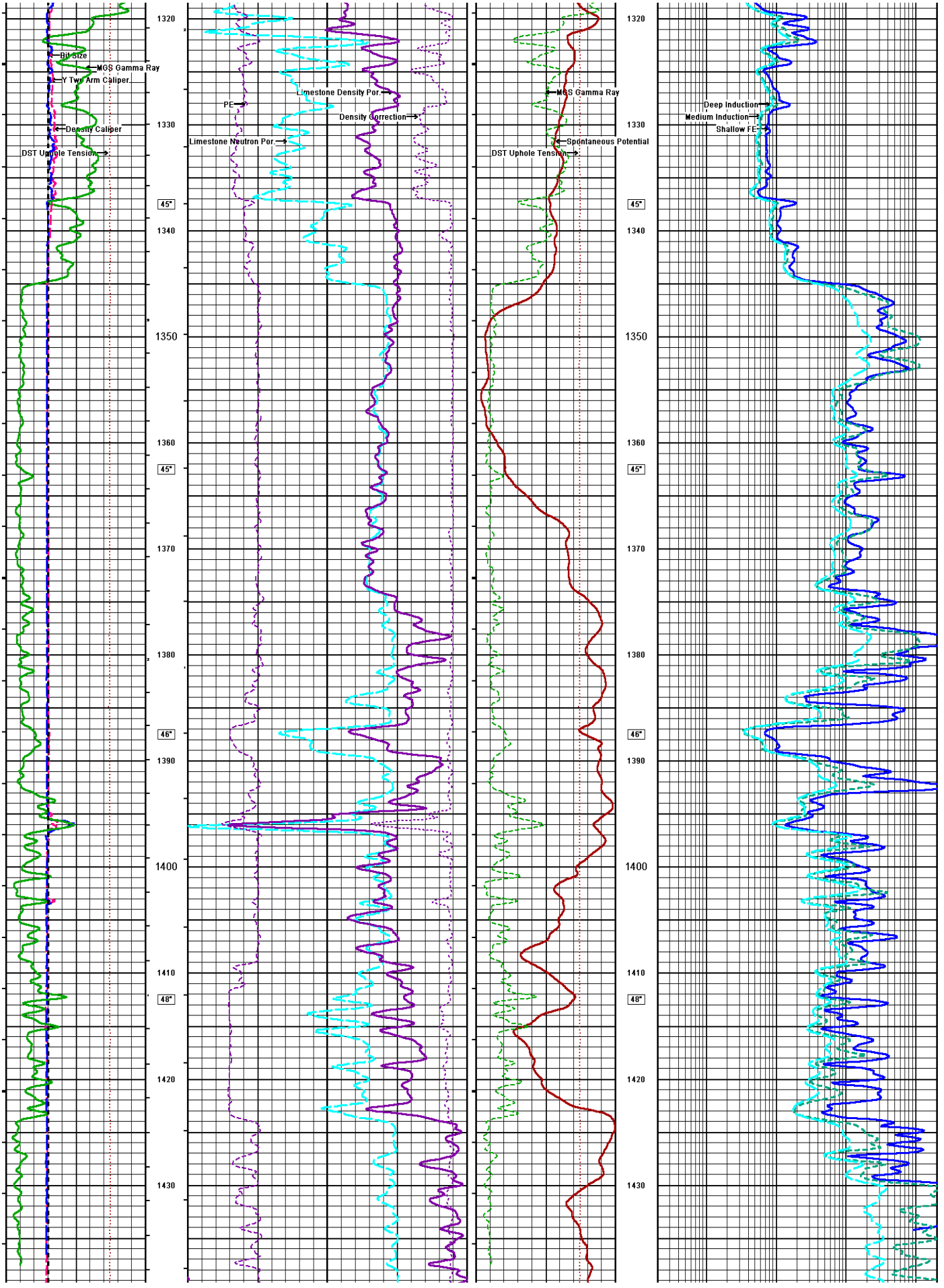
Density Caliper
DST Uphole Tension
Limestone Density Por.
PE
Density Correction
Limestone Neutron Por.
MGS Gamma Ray
Deep Induction
Medium Induction
Shallow FE
Spontaneous Potential
DST Uphole Tension
1200
1210
1220
1230
1240
1250
1260
1270
1280
1290
1300
1310
41"
42"
43"
44"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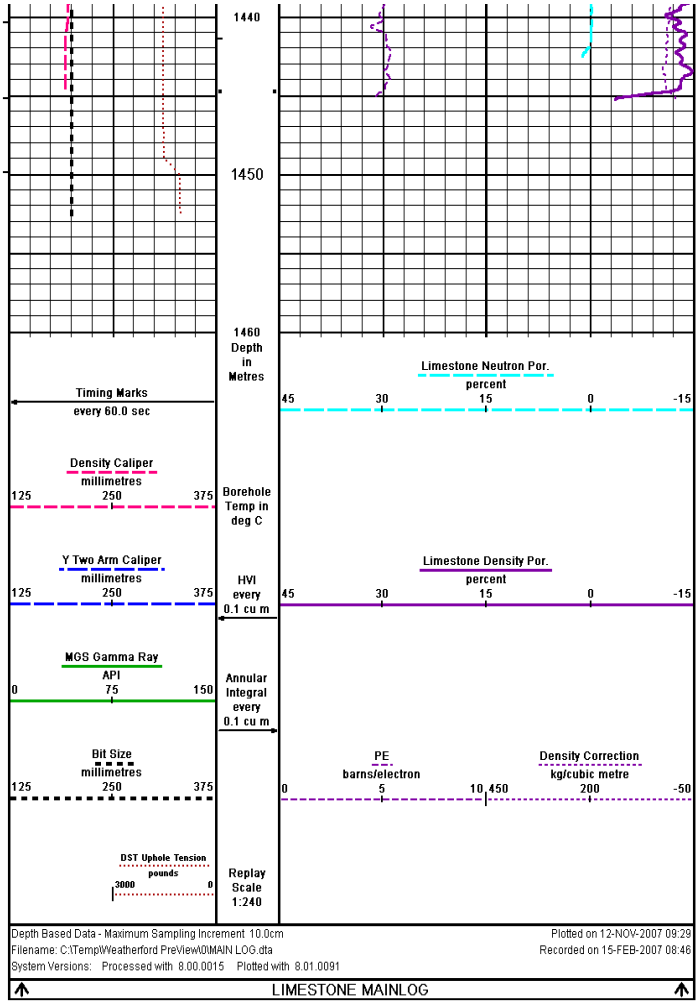
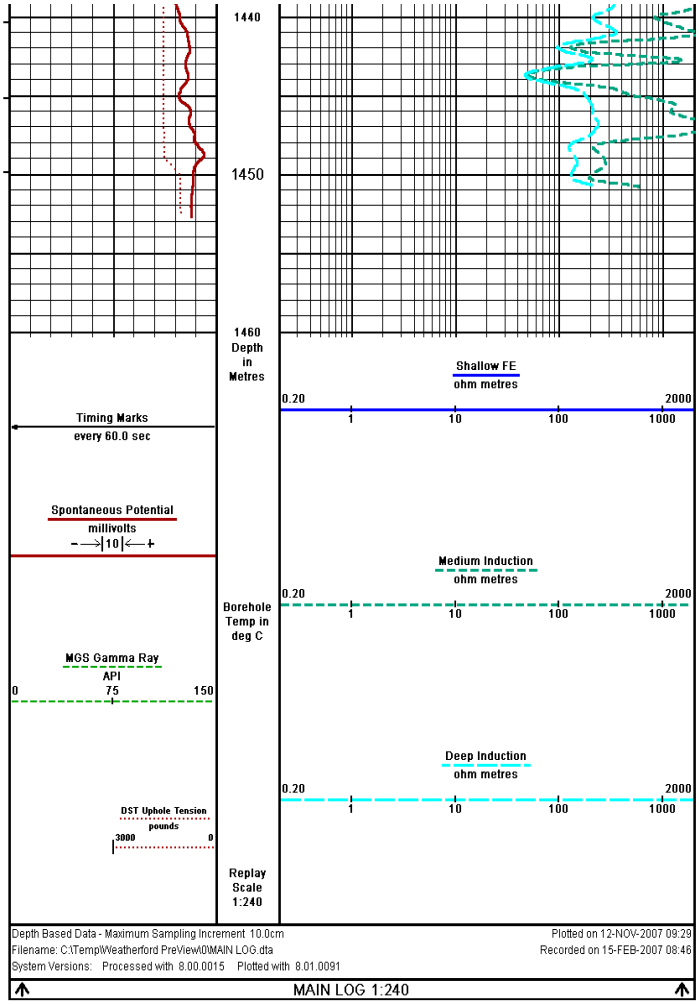
PE
Limestone Density Por.
Density Correction
Limestone Neutron Por.
MGS Gamma Ray
Spontaneous Potential
DST Uphole Tension
Deep Induction
Medium Induction
Shallow FE
1320
1330
45"
1340
1350
1360
45"
1370
1380
46"
1390
1400
1410
48"
1420
1430


1440
1450
1460
Depth in Metres
Timing Marks
every 60.0 sec
Density Caliper
millimetres
125 250 375
Borehole Temp in deg C
Y Two Arm Caliper
millimetres
125 250 375
HVI every 0.1 cu m
MGS Gamma Ray
API
0 75 150
Annular Integral every 0.1 cu m
Bit Size
millimetres
125 250 375
DST Uphole Tension
pounds
3000 0
Replay Scale 1:240
Limestone Neutron Por.
percent
45 30 15 0 -15
Limestone Density Por.
percent
45 30 15 0 -15
PE
barns/electron
0 5 10
Density Correction
kg/cubic metre
450 200 -50
Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091
Plotted on 12-NOV-2007 09:29
Recorded on 15-FEB-2007 08:46
LIMESTONE MAINLOG


1440
1450
1460
Depth in Metres
Timing Marks
every 60.0 sec
Spontaneous Potential
millivolts
10
MGS Gamma Ray
API
0 75 150
DST Uphole Tension
pounds
3000 0
Borehole Temp in deg C
Replay Scale 1:240
Shallow FE
ohm metres
0.20 1 10 100 2000
Medium Induction
ohm metres
0.20 1 10 100 2000
Deep Induction
ohm metres
0.20 1 10 100 2000
Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
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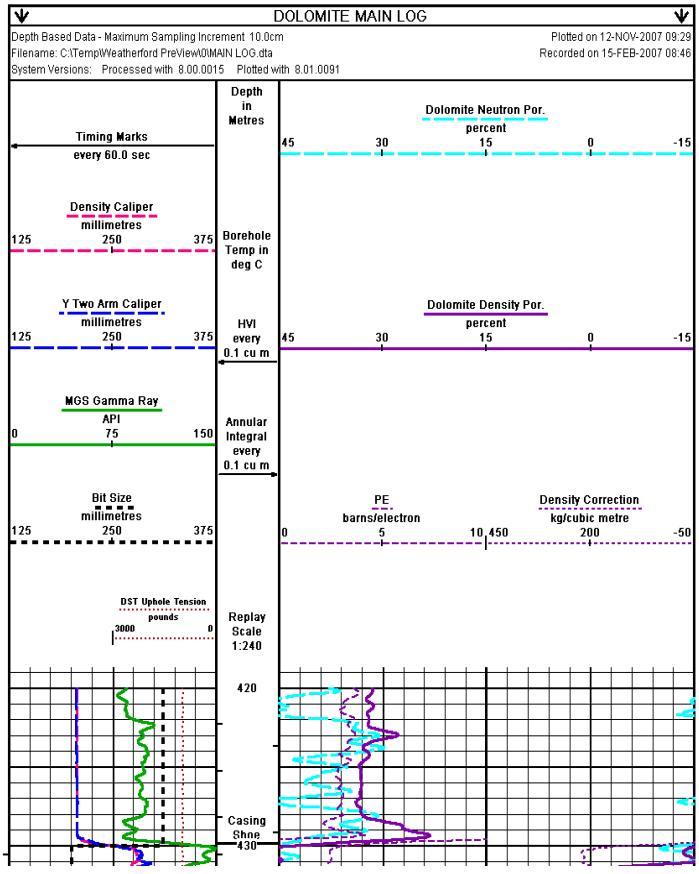
Recorded on 15-FEB-2007 08:46
MAIN LOG 1:240


DOLOMITE MAIN LOG
Depth Based Data - Maximum Sampling Increment 10.0cm
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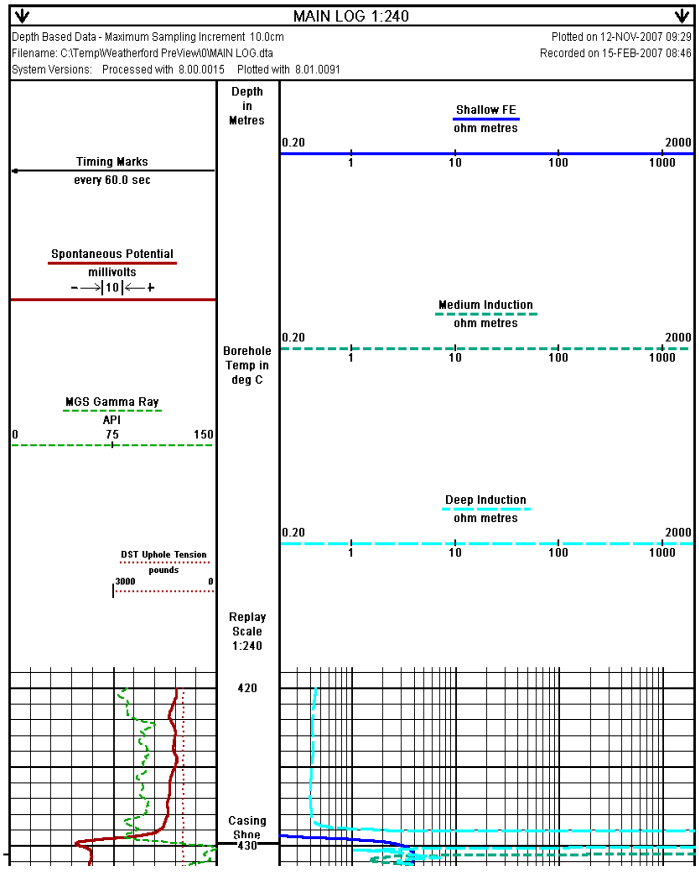
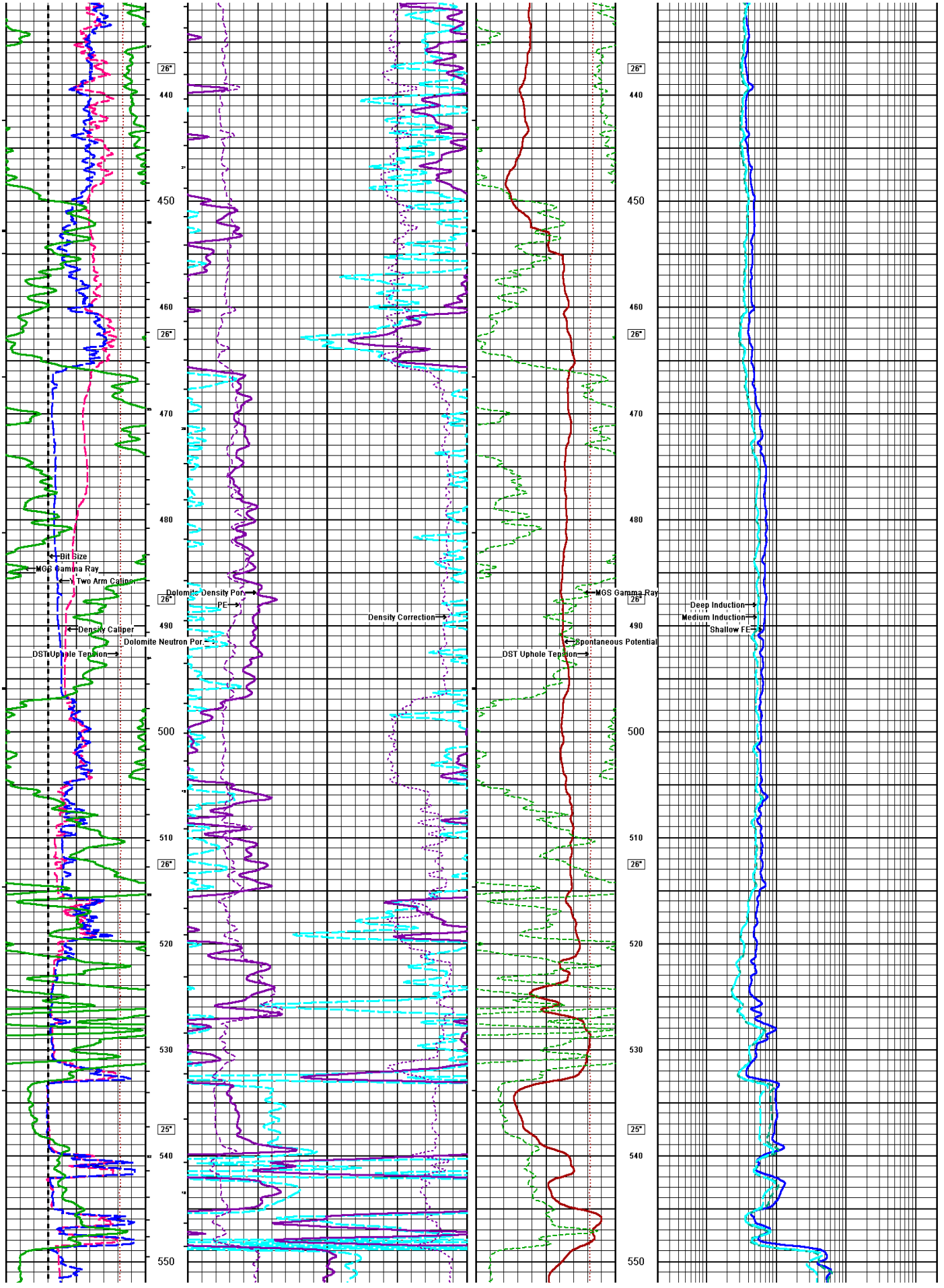
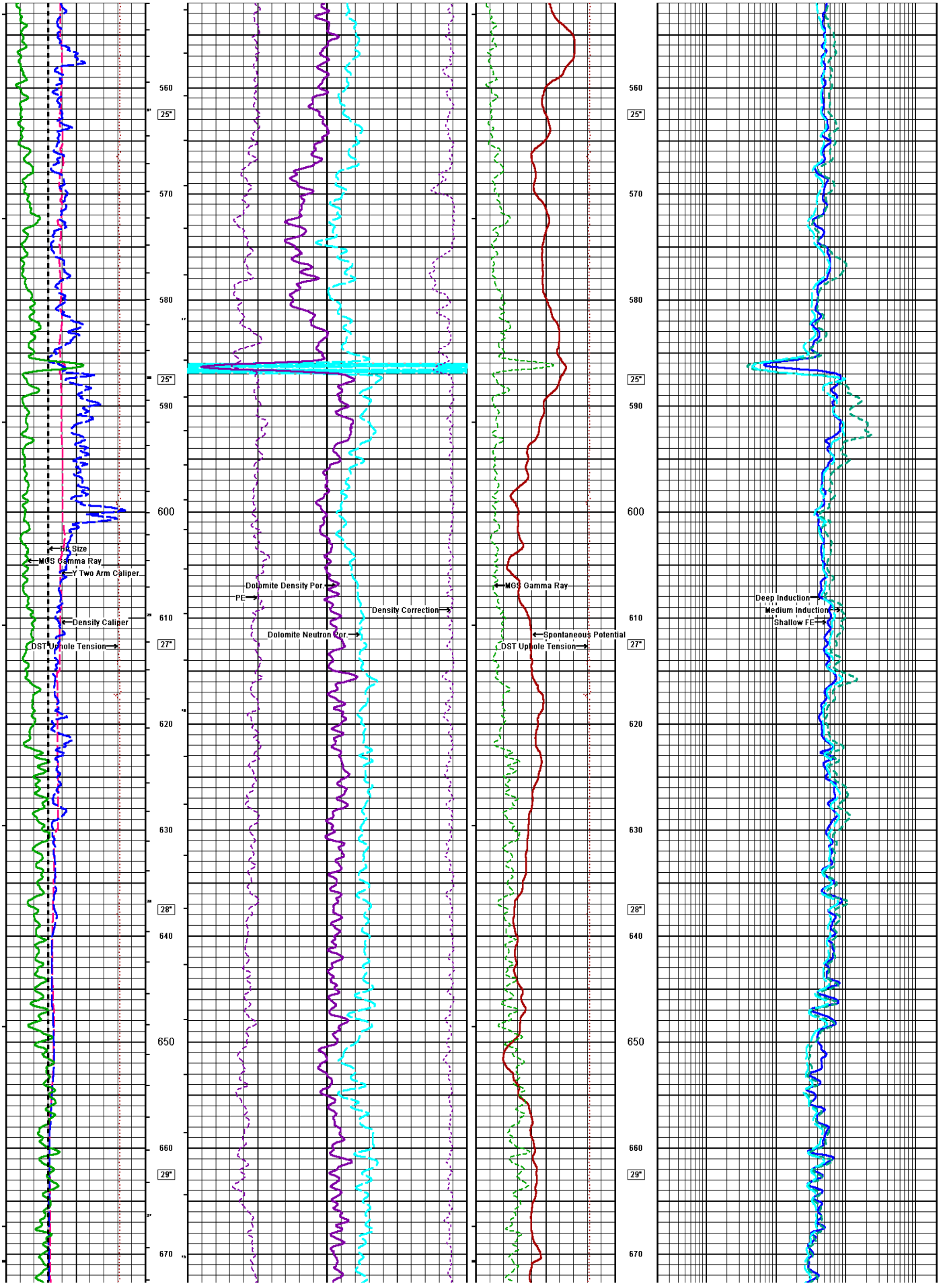
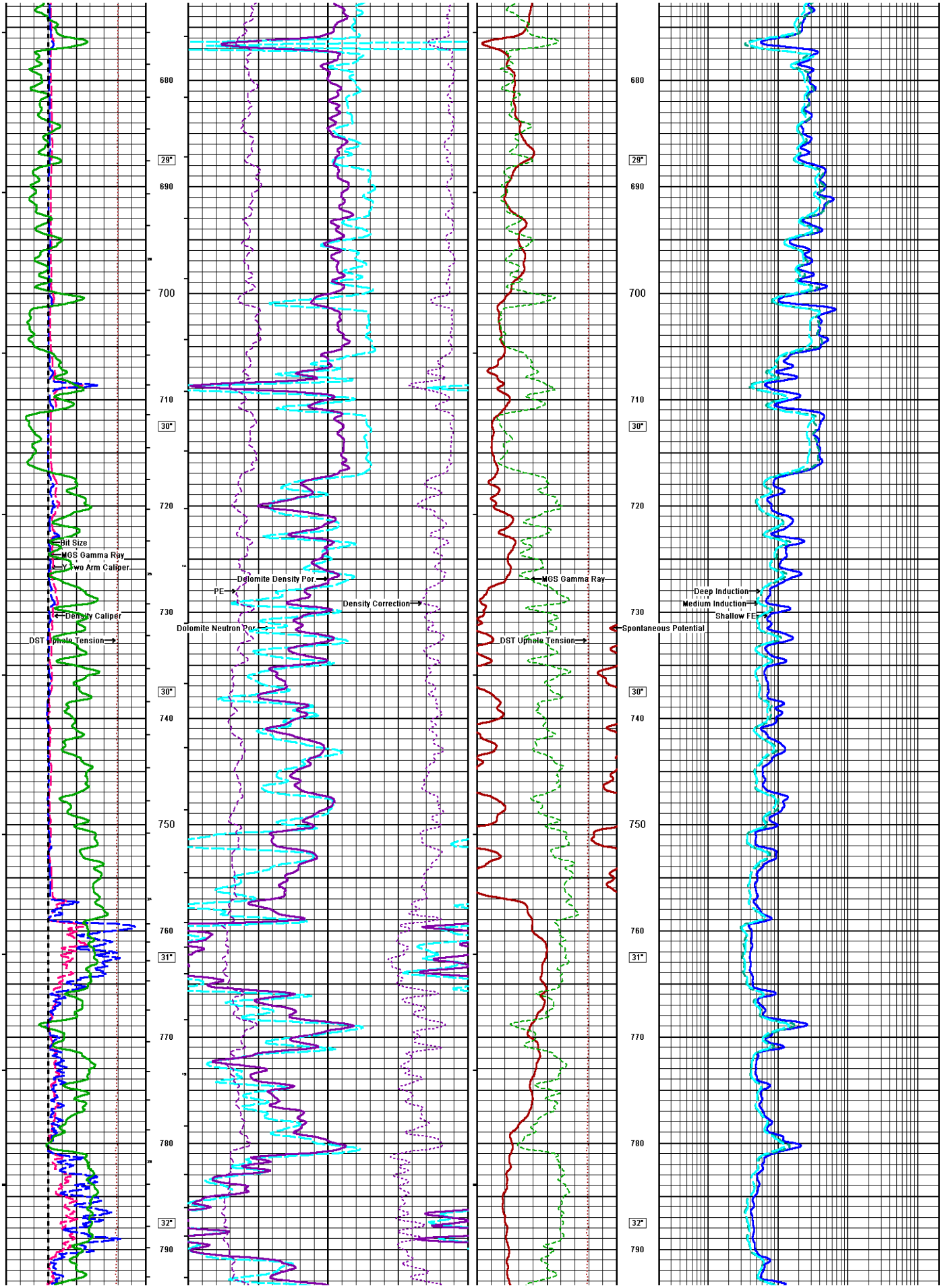
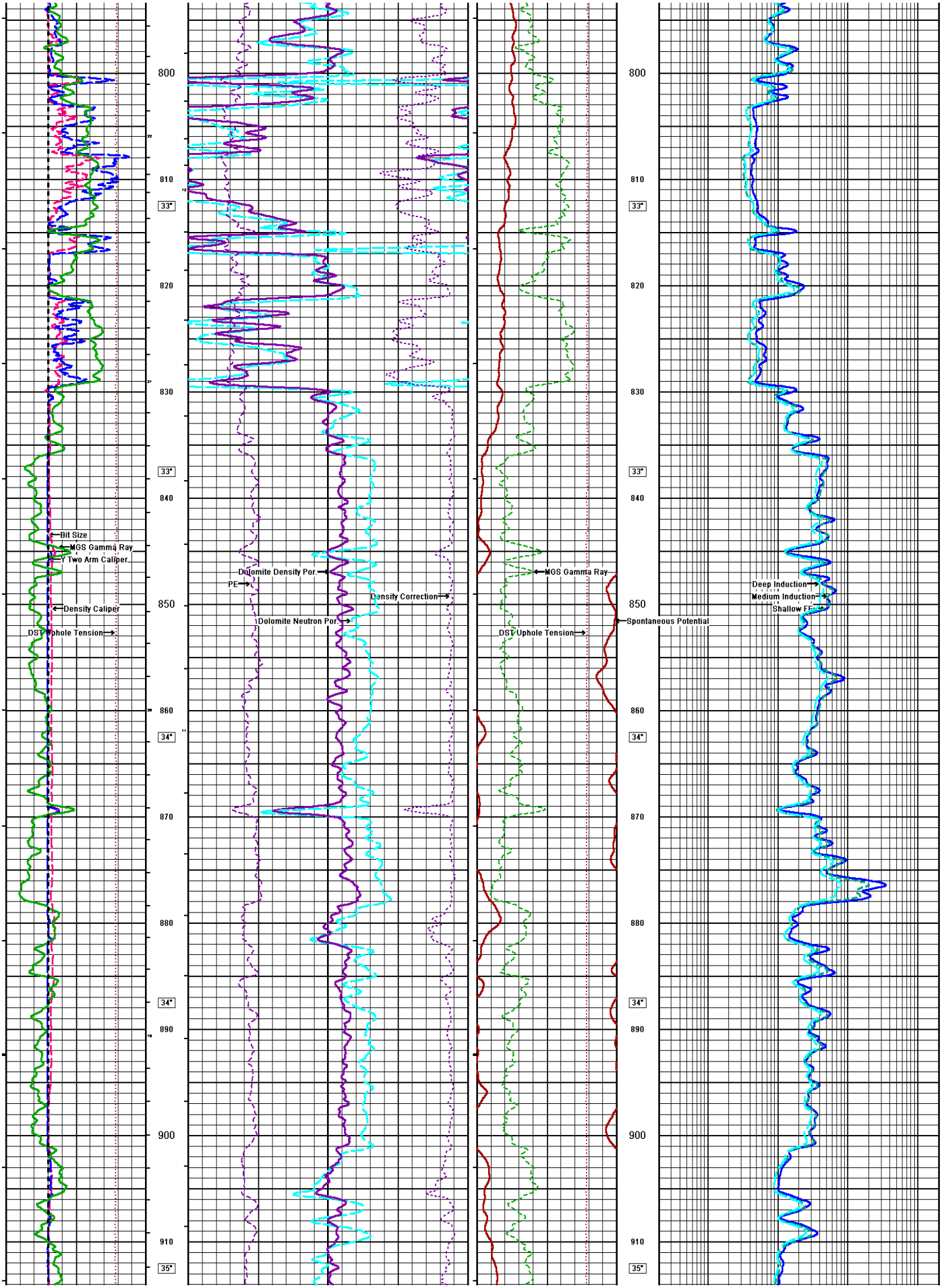
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091
Plotted on 12-NOV-2007 09:29
Recorded on 15-FEB-2007 08:46
Depth in Metres
Timing Marks
every 60.0 sec
Density Caliper
millimetres
125 250 375
Borehole Temp in deg C
Y Two Arm Caliper
millimetres
125 250 375
HVI every 0.1 cu m
MGS Gamma Ray
API
0 75 150
Annular Integral every 0.1 cu m
Bit Size
millimetres
125 250 375
DST Uphole Tension
pounds
3000 0
Replay Scale 1:240
Dolomite Neutron Por.
percent
45 30 15 0 -15
Dolomite Density Por.
percent
45 30 15 0 -15
PE
barns/electron
0 5 10
Density Correction
kg/cubic metre
450 200 -50
420
Casing Shoe
430

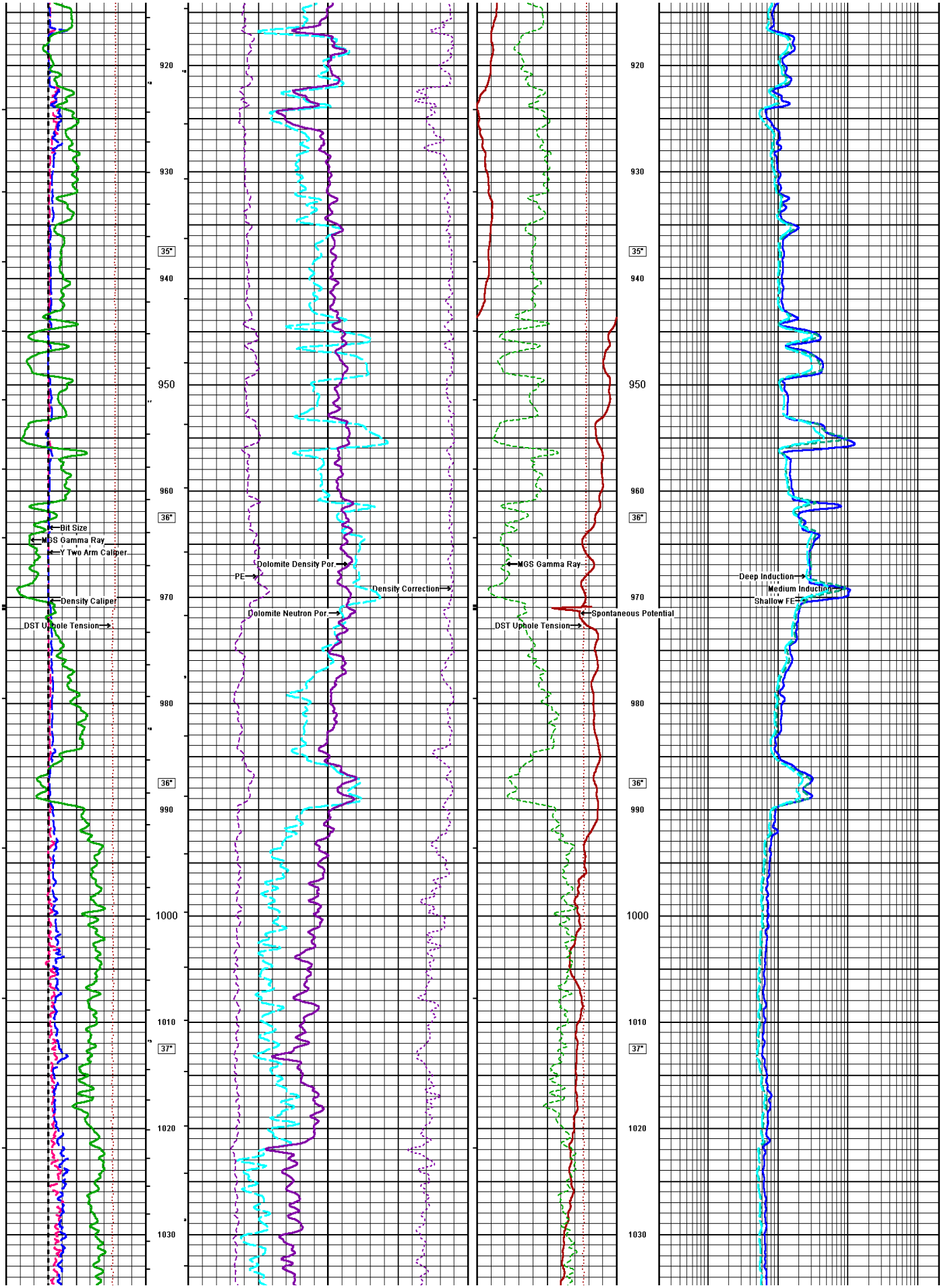

MAIN LOG 1:240
Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091
Plotted on 12-NOV-2007 09:29
Recorded on 15-FEB-2007 08:46
Depth in Metres
Timing Marks
every 60.0 sec
Spontaneous Potential
millivolts
10
MGS Gamma Ray
API
0 75 150
DST Uphole Tension
pounds
3000 0
Borehole Temp in deg C
Replay Scale 1:240
Shallow FE
ohm metres
0.20 1 10 100 2000
Medium Induction
ohm metres
0.20 1 10 100 2000
Deep Induction
ohm metres
0.20 1 10 100 2000
420
Casing Shoe
430

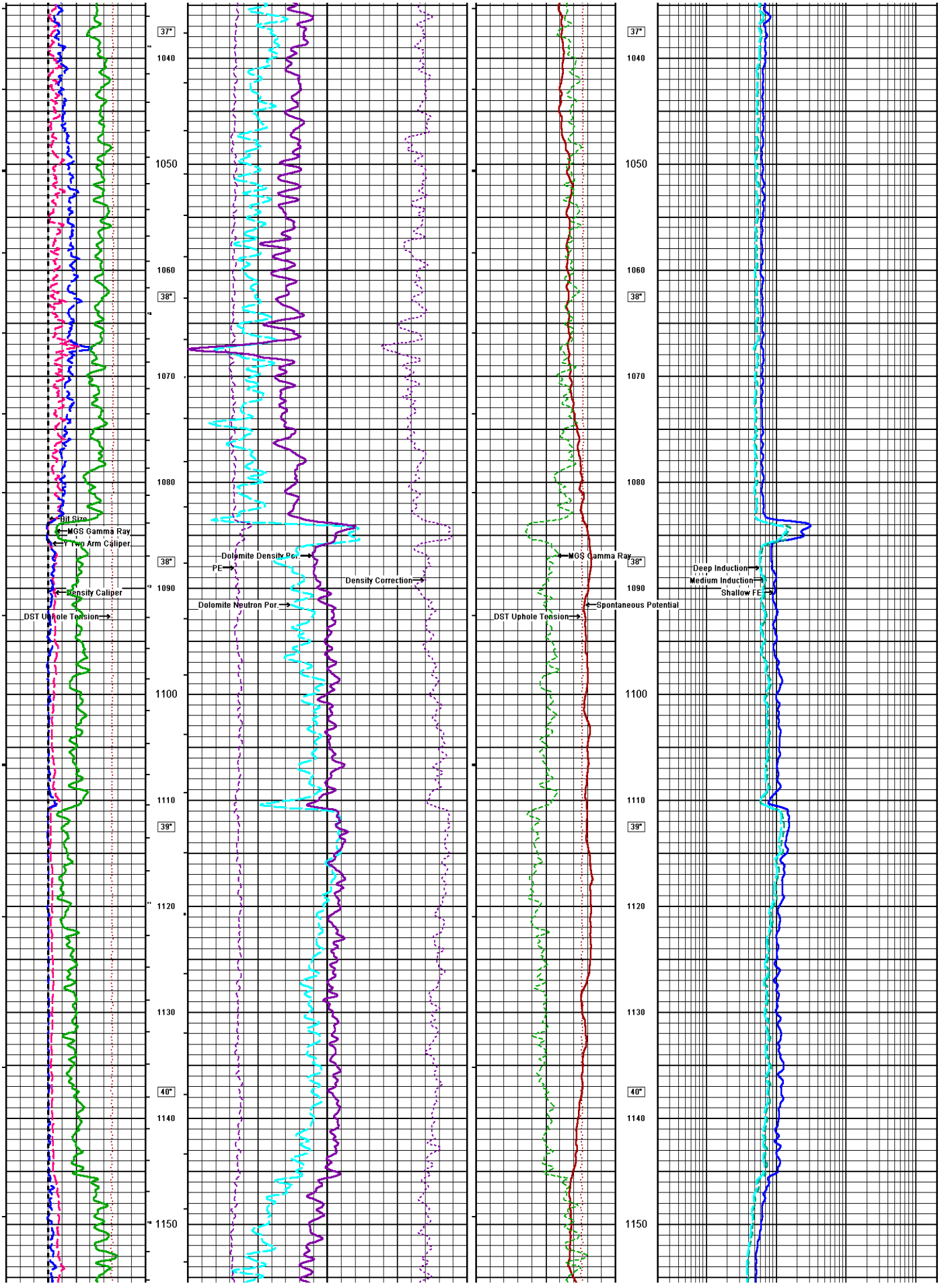

Bit Size
MGS Gamma Ray
Two Arm Caliper
Density Caliper
Dolomite Neutron Por
DST Uphole Tension
Dolomite Density Por
PE
Density Correction
MGS Gamma Ray
Spontaneous Potential
DST Uphole Tension
Deep Induction
Medium Induction
Shallow FE
26"
25"
440
450
460
470
480
490
500
510
520
530
540
550

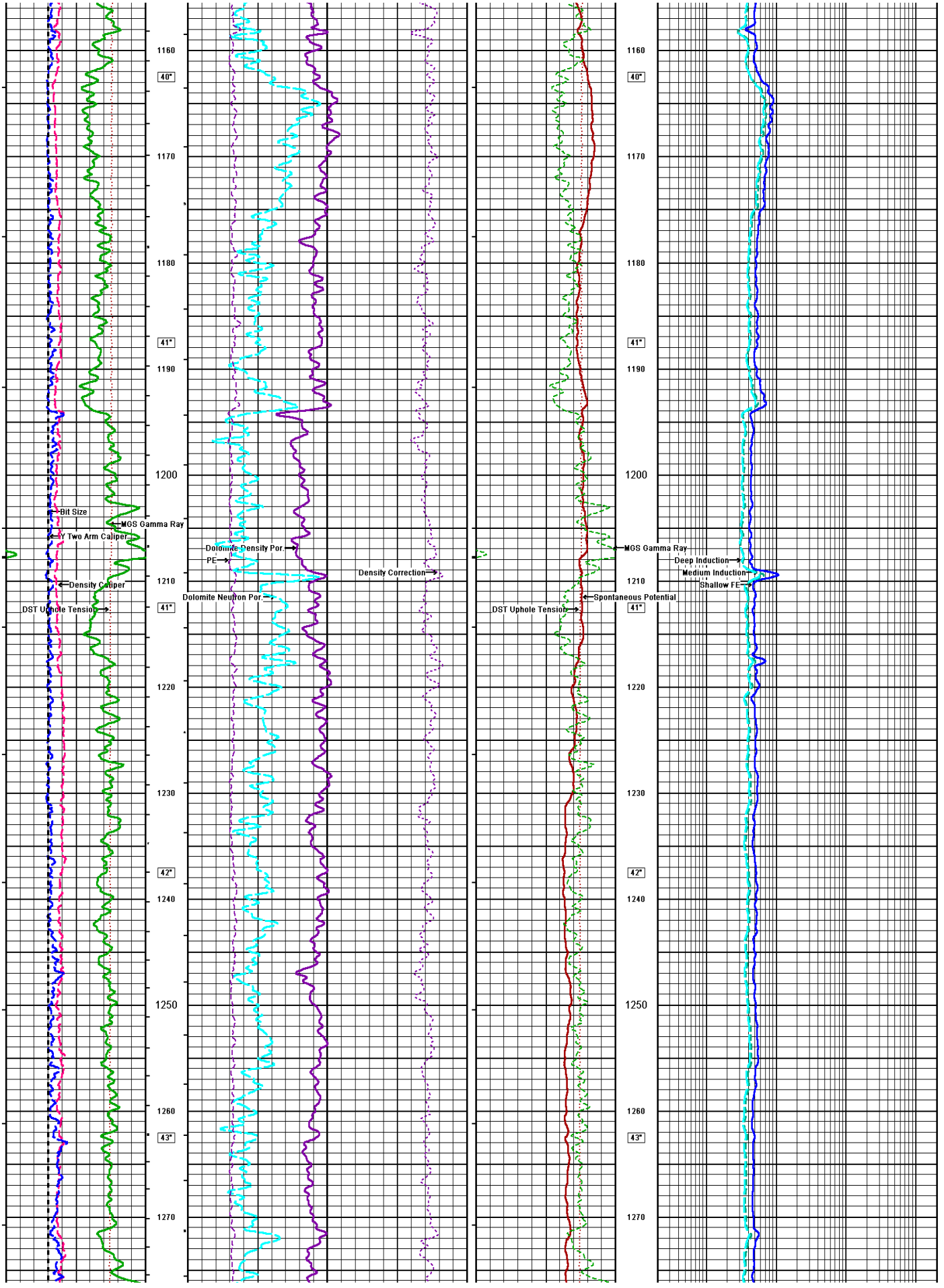

560
25"
570
580
25"
590
600
610
27"
620
630
28"
640
650
660
29"
670
BS Size
MCS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
Dolomite Density Por.
PE
Density Correction
Dolomite Neutron Por.
MCS Gamma Ray
Spontaneous Potential
DST Uphole Tension
Deep Induction
Medium Induction
Shallow FE

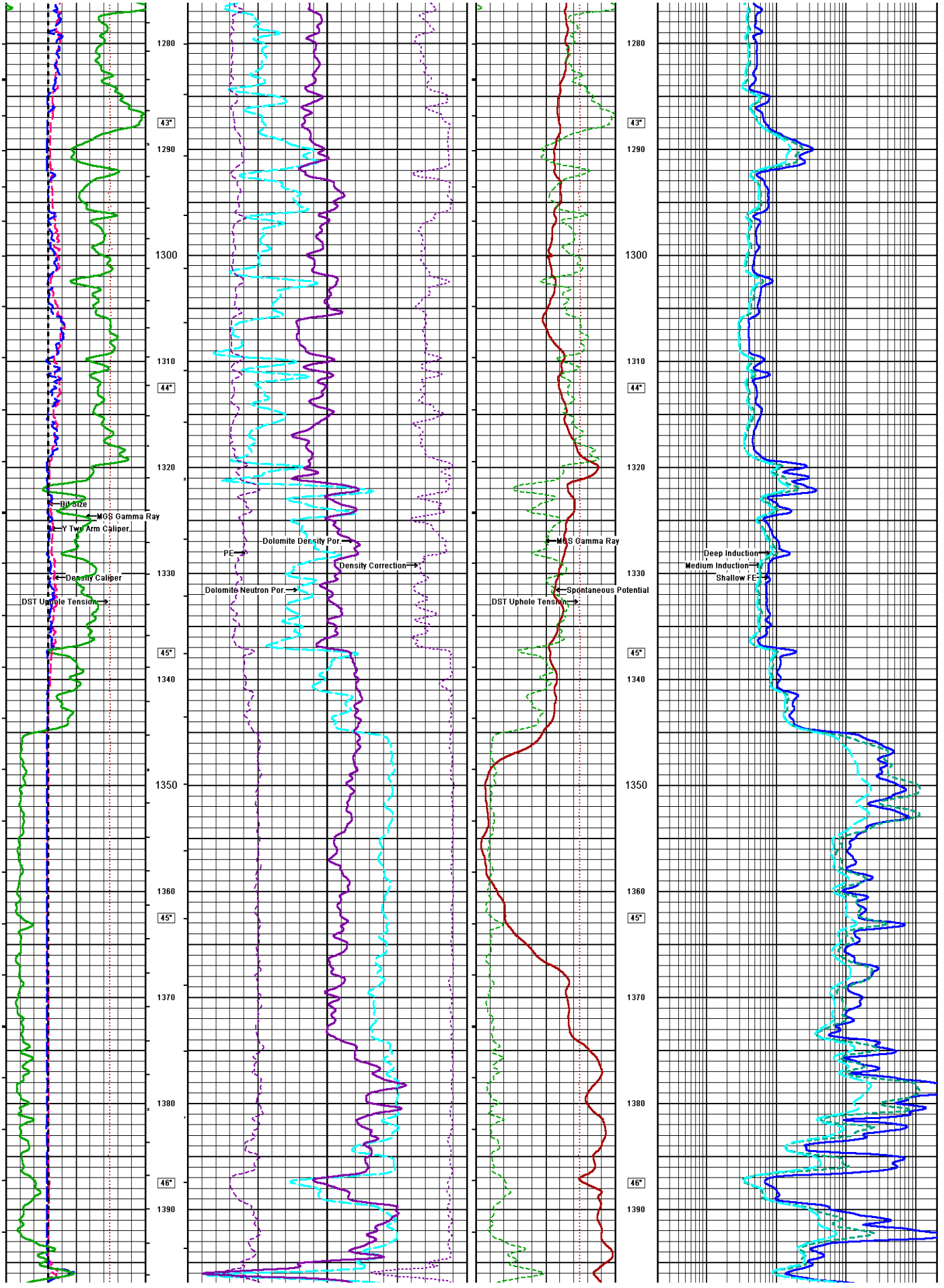

680
29"
690
700
710
30"
720
730
30"
740
750
760
31"
770
780
32"
790
Bit Size
MGS Gamma Ray
Two Arm Caliper
Density Caliper
DST Uphole Tension
Dolomite Density Por
PE
Density Correction
Dolomite Neutron Por
MGS Gamma Ray
DST Uphole Tension
Spontaneous Potential
Deep Induction
Medium Induction
Shallow FE

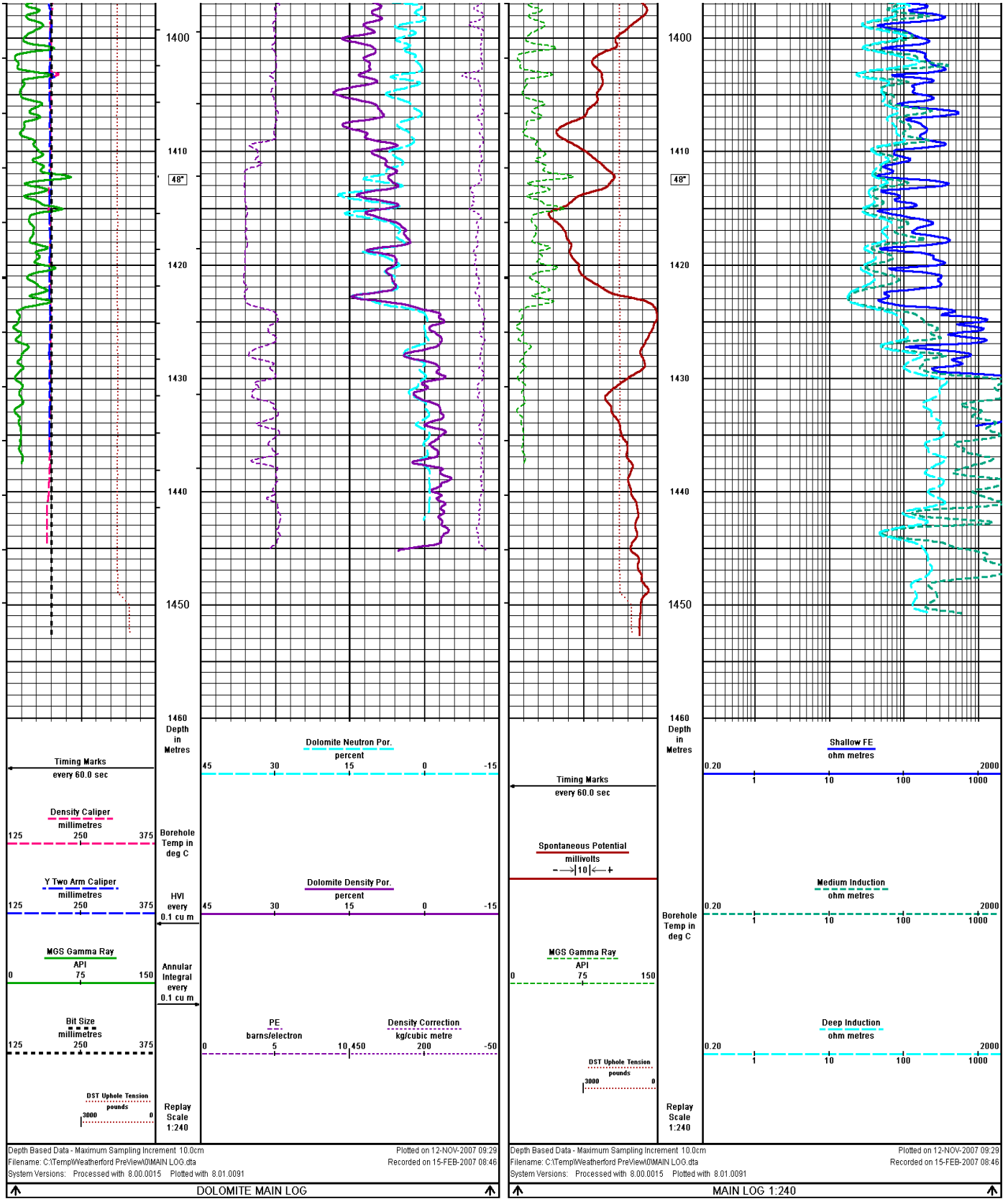

Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DSTU Uphole Tension
Dolomite Density Por.
PE
Density Correction
Dolomite Neutron Por.
MGS Gamma Ray
DSTU Uphole Tension
Spontaneous Potential
Deep Induction
Medium Induction
Shallow FE
800
810
33"
820
830
33"
840
850
860
34"
870
880
34"
890
900
910
35"


920
930
35"
940
950
960
36"
970
980
36"
990
1000
1010
37"
1020
1030
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
Dolomite Density Por.
PE
Density Correction
Dolomite Neutron Por.
MGS Gamma Ray
Spontaneous Potential
DST Uphole Tension
Deep Induction
Medium Induction
Shallow FE


37"
1040
1050
1060
38"
1070
1080
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
38"
Density Caliper
1090
DST Uphole Tension
Dolomite Density Por.
PE
Density Correction
Dolomite Neutron Por.
1100
1110
39"
1120
1130
40"
1140
1150
37"
1040
1050
1060
38"
1070
1080
MGS Gamma Ray
38"
1090
Spontaneous Potential
DST Uphole Tension
1100
1110
39"
1120
1130
40"
1140
1150
Deep Induction
Medium Induction
Shallow FE


1160
40"
1170
1180
41"
1190
1200
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Dolomite Density Por.
PE
Density Correction
Density Caliper
Dolomite Neutron Por.
DST Uphole Tension
1210
41"
1220
1230
42"
1240
1250
1260
43"
1270
MGS Gamma Ray
Deep Induction
Medium Induction
Shallow FE
Spontaneous Potential
DST Uphole Tension


1280
43"
1290
1300
1310
44"
1320
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
1330
45"
1340
1350
1360
45"
1370
1380
46"
1390
Dolomite Density Por.
PE
Density Correction
Dolomite Neutron Por.
MGS Gamma Ray
Spontaneous Potential
DST Uphole Tension
Deep Induction
Medium Induction
Shallow FE



BEFORE SURVEY CALIBRATION

C:\Temp\Weatherford PreView\0\REPEAT.dta

General Constants All 000

Last Edited on 15-FEB-2007,06:48

General Parameters

Mud Resistivity	1.180	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	

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

Caliper Calibration MTC 006

Base Calibration on 25-JAN-2007,18:14
Field Calibration on 10-FEB-2007,20:21

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)
208.70	205.70

Gamma Calibration MGS 010

Field Calibration on 7-FEB-2007,09:09

	Measured	Calibrated (API)
Background	48	31
Calibrator (Gross)	1256	825
Calibrator (Net)	1208	794

Gamma Constants MGS 010

Last Edited on 15-FEB-2007,06:48

Gamma Calibrator Number	grcc075	
Mud Density	1060.00	kg/m3
Caliper Source for Processing	Density Caliper	
Tool Position	Centred	
Concentration of KCl	0.00	kppm

Neutron Calibration MDN 144

Base Calibration on 25-JAN-2007 18:05
Field Check on 15-FEB-2007 05:21

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)	
	2094	3091
Ratio	0.677	

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 8-MAR-2007,10:54
Field Check on

Density Calibration

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

Field Check at Base		
	1184.8	1494.9

Field Check		
	0.0	0.0

PE Calibration

Base Calibration	Measured			Calibrated
	WS	WH	Ratio	Ratio
Background	213	1052		
Reference 1	22151	53000	0.422	0.400
Reference 2	5909	20800	0.288	0.272

Field Check at Base		
	213.1	1051.7

Field Check		
	0.0	0.0

Density Constants MPD 036

Last Edited on 15-FEB-2007,04:55

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	1000.00	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	Advanced	

Matrix Density (kg/m3)	Depth (m)
2710.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00

Caliper Calibration MPD 036

Base Calibration on 23-JAN-2007 04:20
Field Calibration on 7-FEB-2007,11:28

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)
166.10	166.10

DOWNHOLE EQUIPMENT

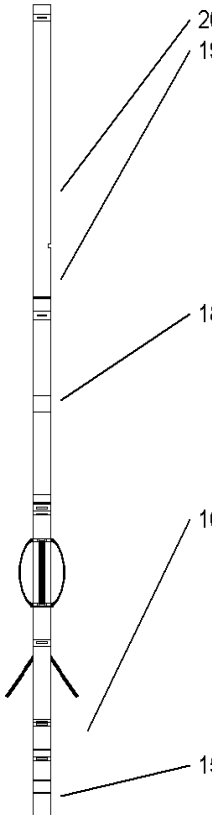
C:\Temp\Weatherford PreView\0\REPEAT.dta

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

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

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

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



20.78 m GRGC - Gamma Ray
19.90 m CGXT - MCG External Temperature
18.79 m FEFE - Shallow FE
16.33 m CLYC - Y Two Arm Caliper
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	NPRL - Limestone 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	DPRL - Limestone Density Por.
7.85 m	DCOR - Density Correction
7.83 m	PDPE - PE

Compact Sonic
MSS 60 Length: 3.82 m Weight: 72.8 lb

3.95 m	TR21 - 3' Transit Time
3.95 m	TR11 - 4' Transit Time
3.95 m	TR22 - 5' Transit Time
3.95 m	DT34 - 3-4' Compensated Sonic
3.95 m	DT35 - 3-5' Compensated Sonic
3.95 m	TR12 - 6' Transit Time

Compact Induction
MAI 72 Length: 3.29 m Weight: 48.5 lb

0.79 m	VEC0 - Shallow Induction
0.79 m	RILM - Medium Induction
0.79 m	RILD - Deep Induction
0.07 m	SPCG - Spontaneous Potential
Tool Zero	(0.28m from bottom)

Compact Hole Finder
HFS 1 Length: 0.24 m Weight: 2.2 lb

All measurements relative to tool zero.

Total Length: 22.63 m Weight: 568.8 lb

COMPANY	PARAMOUNT RESOURCES LTD.
WELL	PARAMOUNT ET AL CAMERON J-04

FIELD	CAMERON HILLS
PROVINCE/COUNTY	NORTH WEST TERRITORIES
COUNTRY/STATE	CANADA

Elevation Kelly Bushing	769.20	metres	First Reading	1448.70	metre
Elevation Drill Floor		metres	Depth Driller	1449.00	metres
Elevation Ground Level	765.20	metres	Depth Logger	1449.50	metres

Weatherford®

MINIPLOT

MICROLOG

COMPANY	PARAMOUNT RESOURCES LTD.
WELL	PARAMOUNT ET AL CAMERON J-04
FIELD	CAMERON HILLS
PROVINCE/COUNTY	NORTH WEST TERRITORIES
COUNTRY/STATE	CANADA
LOCATION	300/J-04-60-10-117-30

FIELD PRINT

LSD	SEC	TWP	RGE

Other Services

PHOTO DENSITY
ARRAY INDUCTION
DUAL SPACED NEUTRON
COMPENSTATED SONIC

API Number
Permit Number 1159

Permanent Datum GROUND LEVEL, Elevation 765.20 metres
Log Measured From 4.00 M above Permanent Datum
Drilling Measured From KB

Elevations:	metres
KB	769.20
DF	
GL	765.20

Date	15-FEB-2007			
Run Number	1			
Depth Driller	1449.00	metres		
Depth Logger	1449.50	metres		
First Reading				
Last Reading	430.00	metre		
Casing Driller	430.00	metres		
Casing Logger	429.80	metres		
Bit Size	200.00	mm		
Hole Fluid Type	GELCHEM			
Density / Viscosity	1060.0 kg/M3	93.00 CP		
PH / Fluid Loss	11.00	11.00 ml/30Min		
Sample Source	FLOWLINE			
Rm @ Measured Temp	1.18 @ 25.0	ohm-m		
Rmf @ Measured Temp	1.04 @ 25.0	ohm-m		
Rmc @ Measured Temp	1.32 @ 25.0	ohm-m		
Source Rmf / Rmc	PRESS	FILTER		
Rm @ BHT	0.78 @ 48.0	ohm-m		
Time Since Circulation	6 HRS			
Max Recorded Temp	48.00	deg C		
Equipment Name	COMPACT			
Equipment / Base	13124	GPR		
Recorded By	G. SINGER			
Witnessed By	A. AHMED			
CIRC. STOP TIME	01:30-FEB-15		Last Line	

BOREHOLE RECORD

Last Edited: 15-FEB-2007 05:01

Bit Size millimetres	Depth From metres	Depth To metres
311.000	0.00	430.00
200.000	430.00	1449.00

CASING RECORD

Type	Size millimetres	Depth From metres	Shoe Depth metres	Weight Kg/metre
SURFACE	219.100	0.00	430.00	35.72

REMARKS

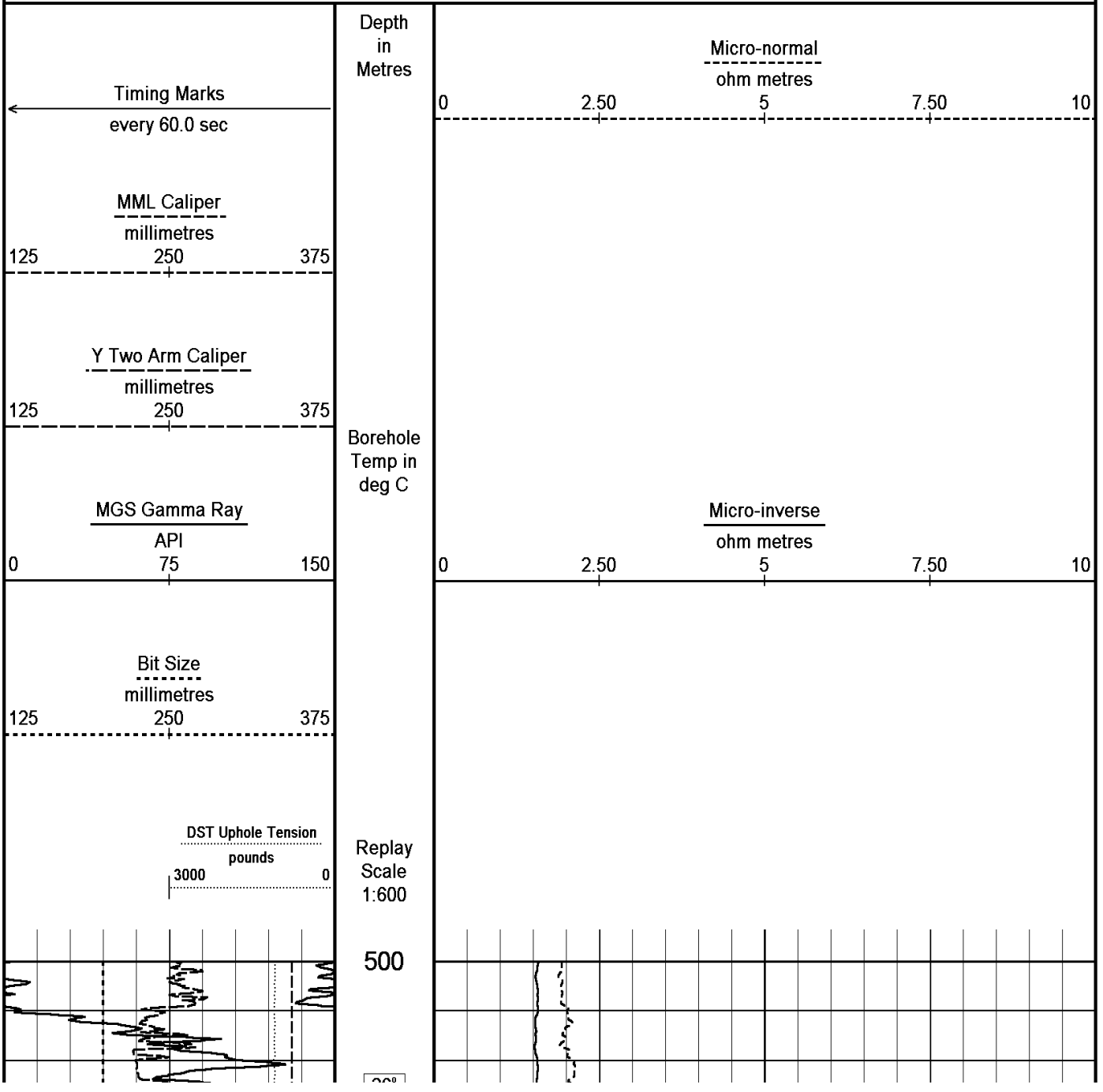
1) SOFTWARE ISSUE: WLS 7.01.0195.
2) CUSTOMER SCALES AND LOGGED INTERVALS USED
3) TOOLS RUN: MAI, MSS, MPD, MDN, MML, ISC, MGS, MTC, MFE, MCG RUN IN COMBINATION
4) HARDWARE: MAI: TWO 25.4 MM STANDOFFS
   MSS: THREE 25.4 MM STANDOFFS
   MDN: DUAL BOWSPRING AND INTERSONIC CRANK
   MTC: SIX LEAF CENTRALIZER
5) SERVICE ORDER #: 30073028 SAP #: 4147101 # FIELD PRINTS = 3
6) RIG: PD 129

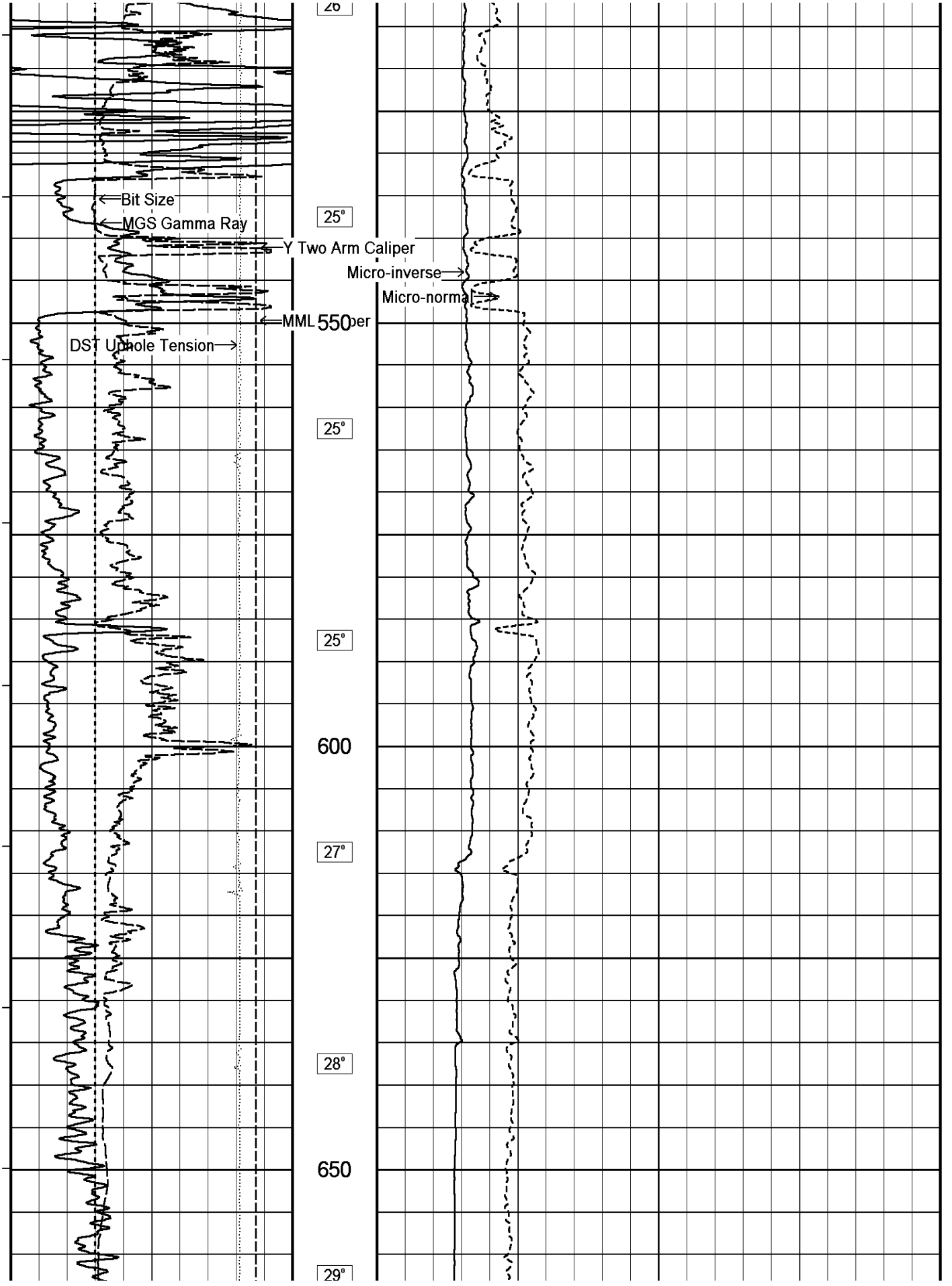
7) HOLE AND CEMENT VOLUMES CALCULATED USING DENSITY AND 2-ARM CALIPERS :
HOLE VOLUME = 37.4 CU.M.
ANNULAR VOLUME USING 139.7 MM PRODUCTION CASING = 21.8 CU.M

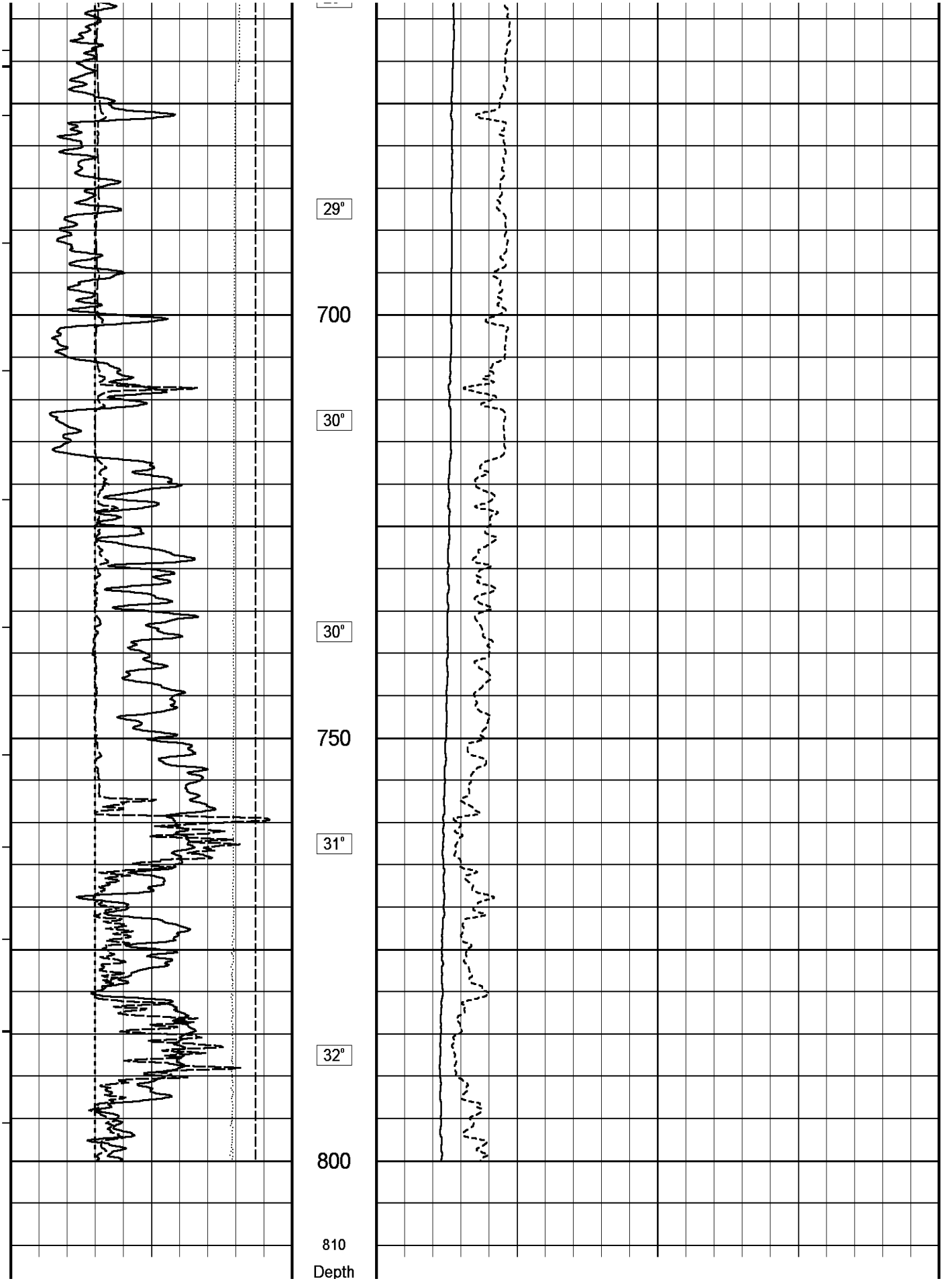
8) SONIC FREE PIPE FOUND FROM 352M - 357M

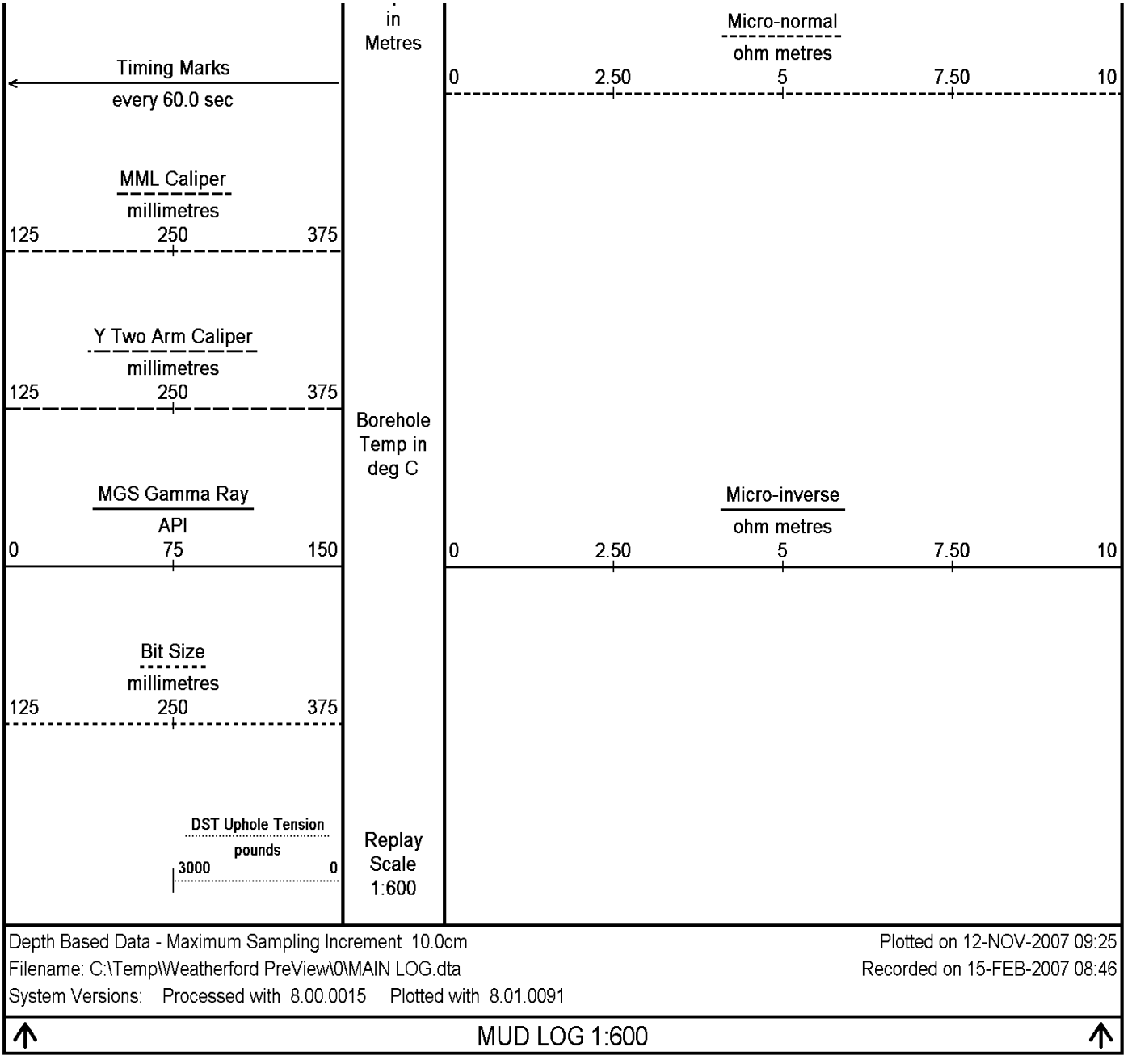
MUD LOG 1:600

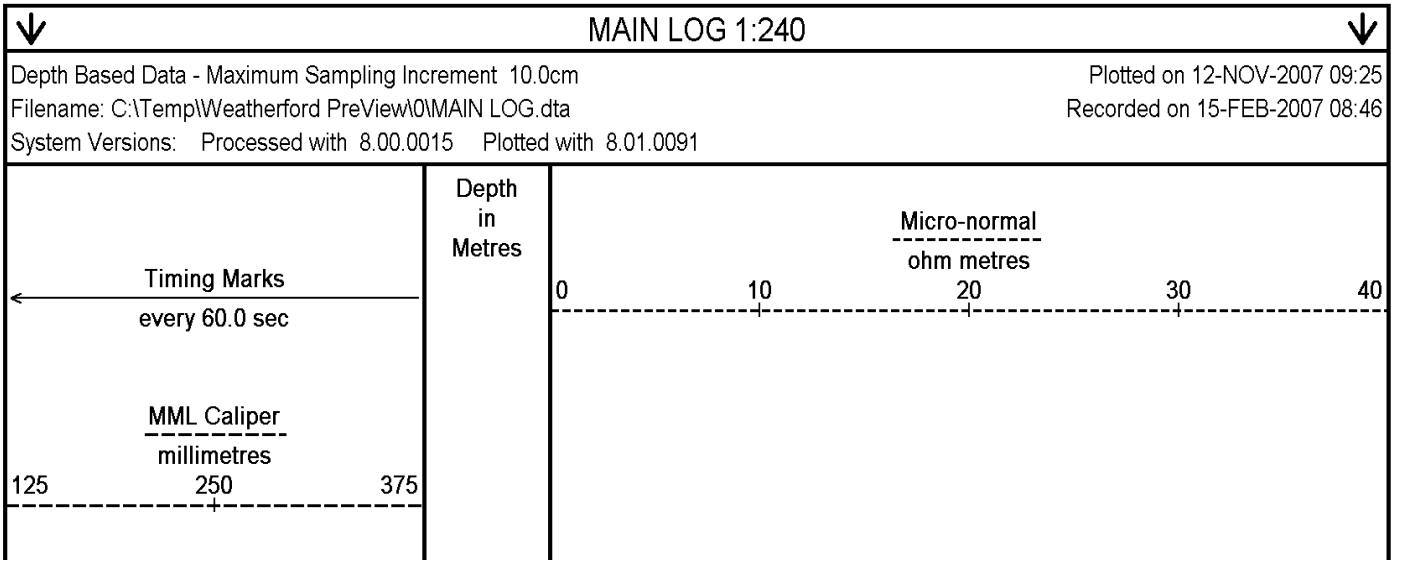
Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 12-NOV-2007 09:25
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

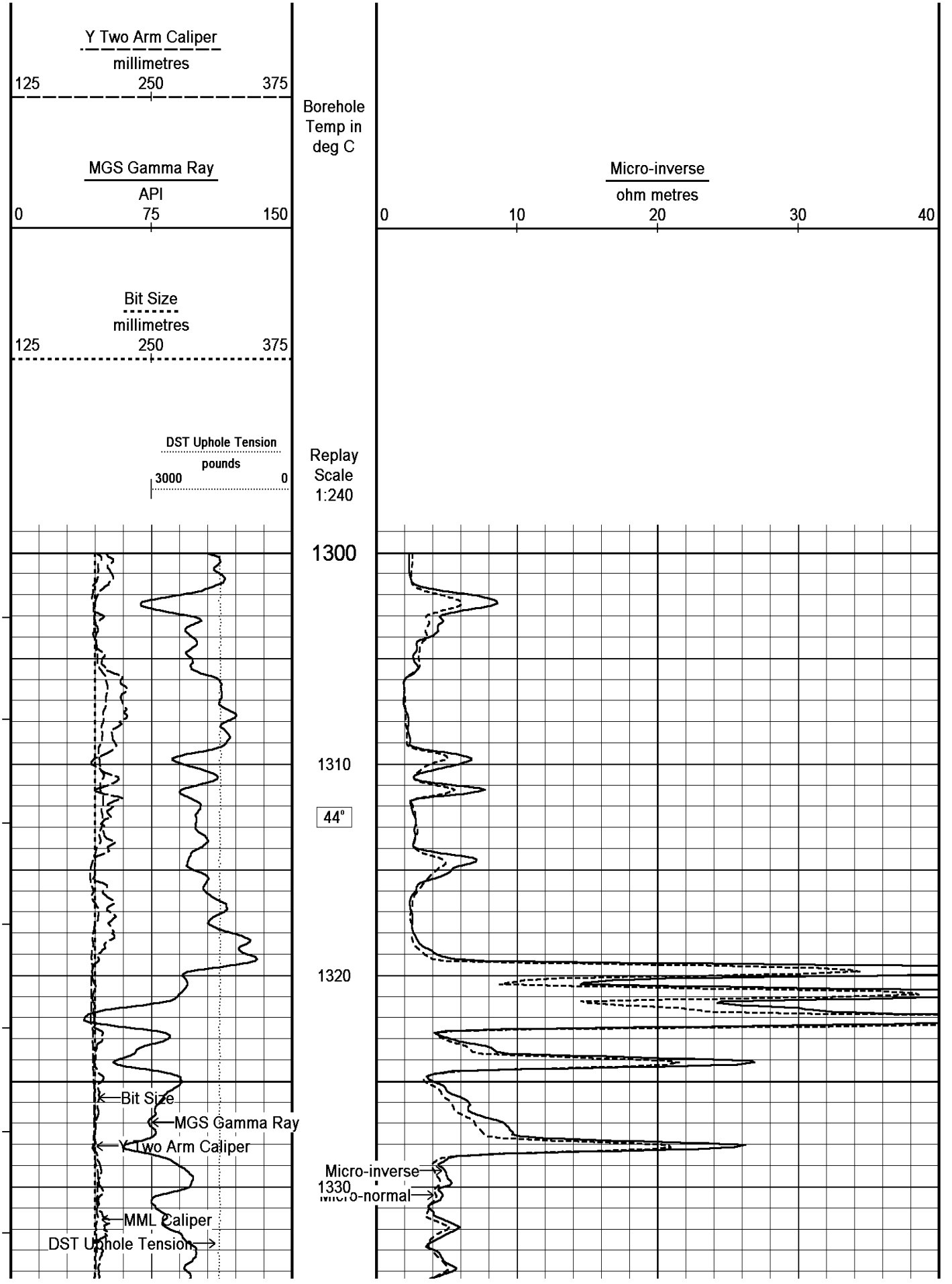


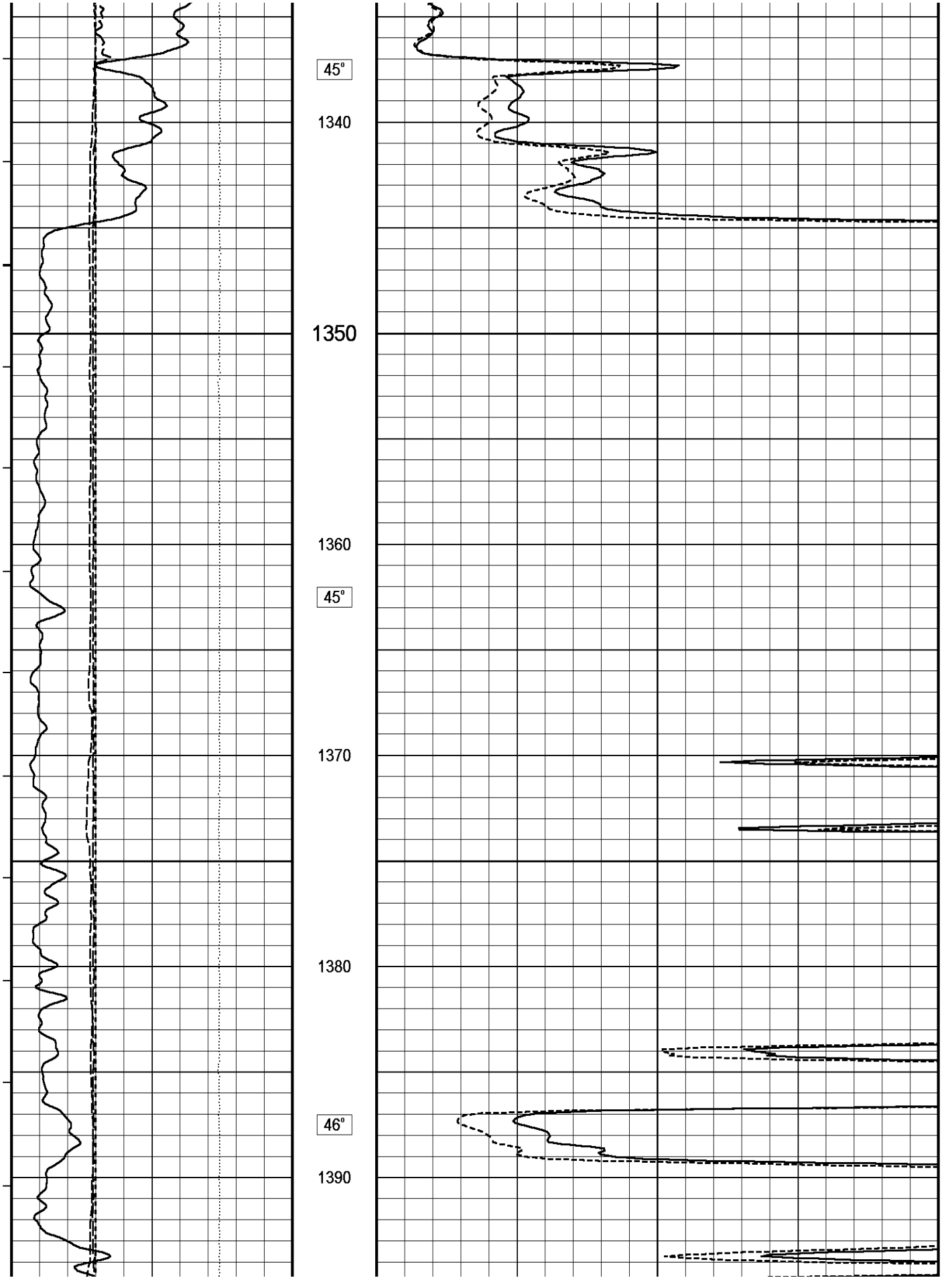

26
Bit Size
MGS Gamma Ray
25°
Y Two Arm Caliper
Micro-inverse
Micro-norma
MML
550
DST Uphole Tension
25°
25°
600
27°
28°
650
29°

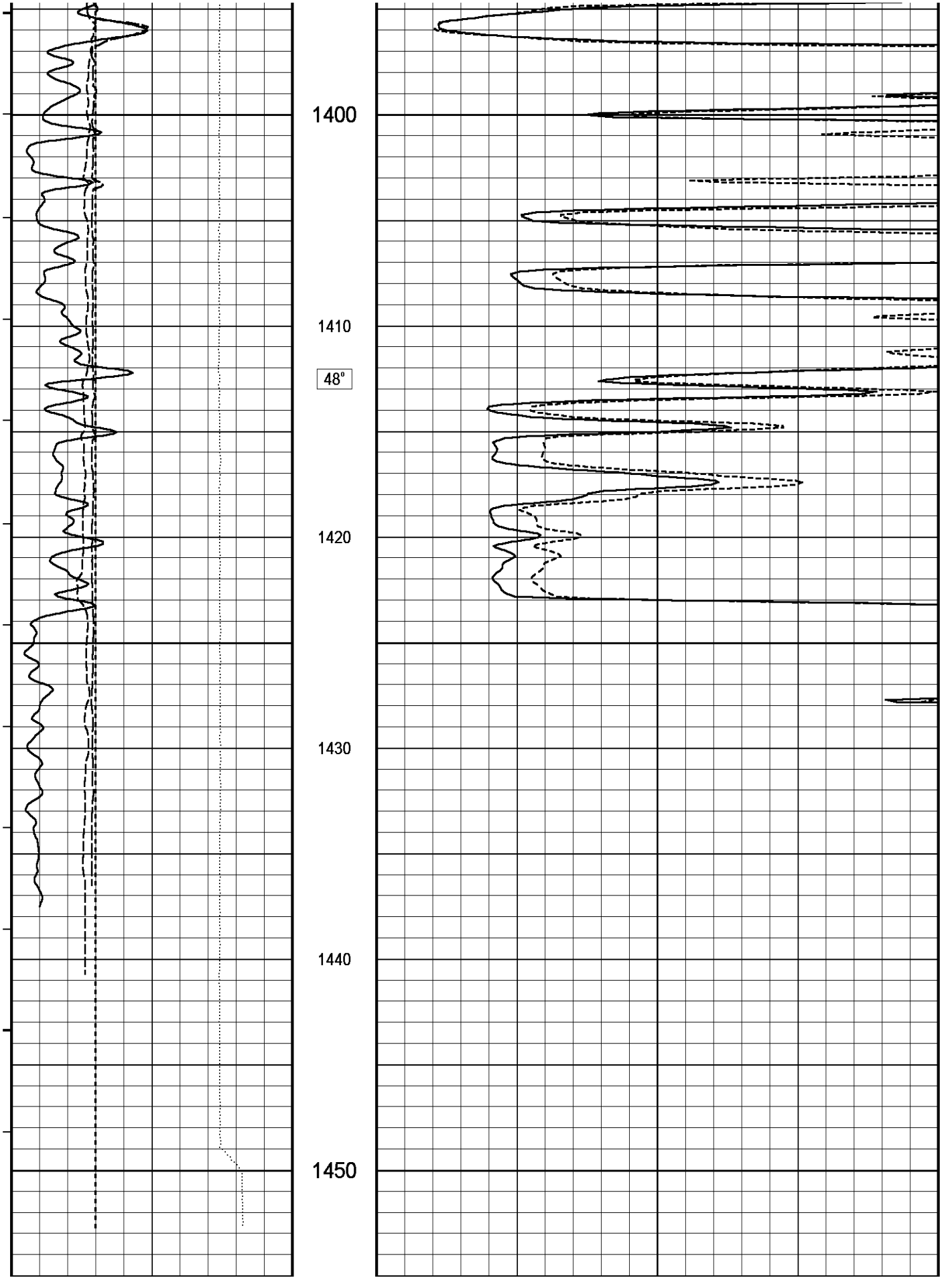

29°
700
30°
30°
750
31°
32°
800
810
Depth

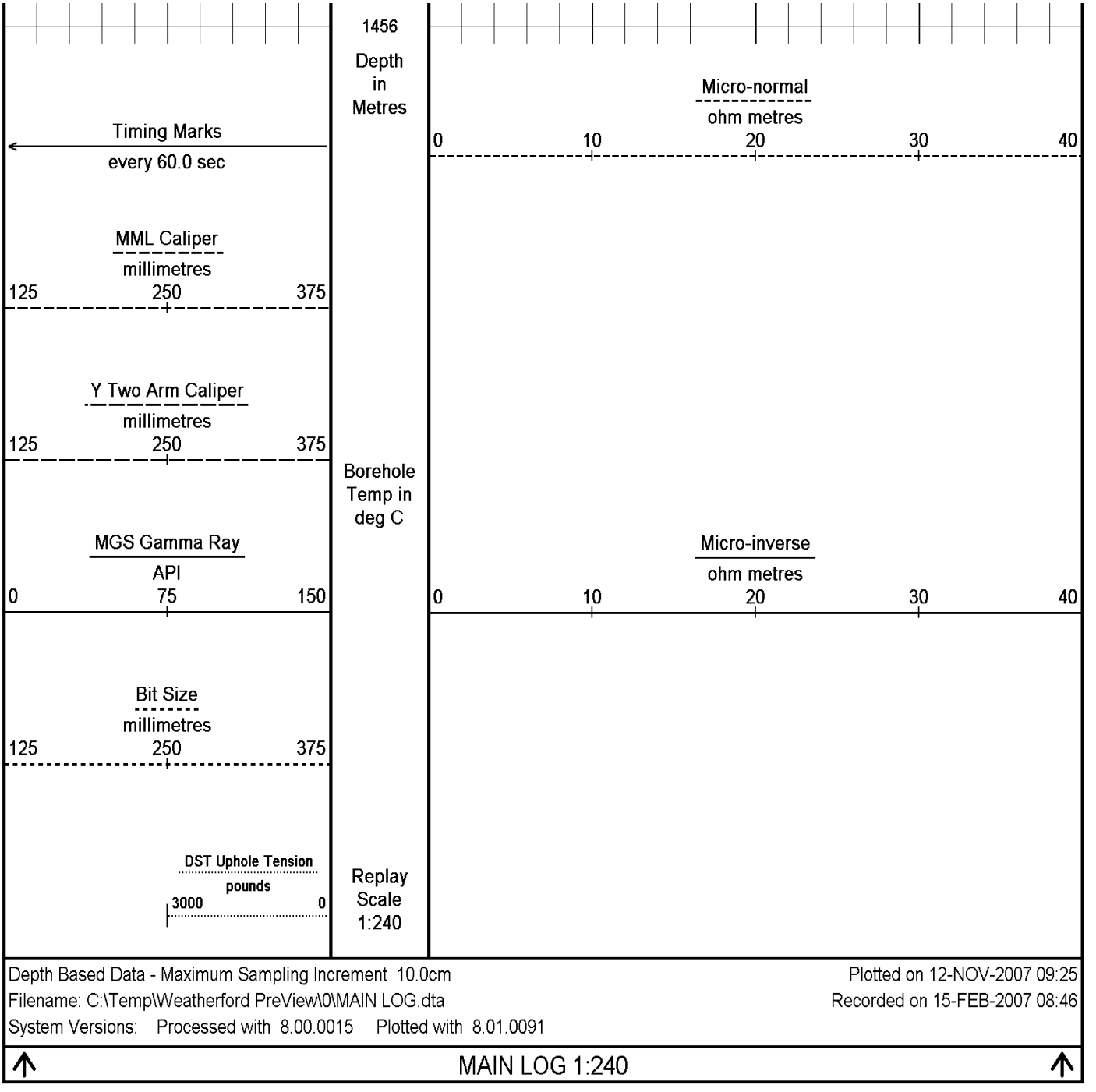

in
Metres
Micro-normal
ohm metres
0
2.50
5
7.50
10
Timing Marks
every 60.0 sec
MML Caliper
millimetres
125
250
375
Y Two Arm Caliper
millimetres
125
250
375
Borehole
Temp in
deg C
MGS Gamma Ray
API
0
75
150
Micro-inverse
ohm metres
0
2.50
5
7.50
10
Bit Size
millimetres
125
250
375
DST Uphole Tension
pounds
3000
0
Replay
Scale
1:600
Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 12-NOV-2007 09:25
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091
MUD LOG 1:600


MAIN LOG 1:240
Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 12-NOV-2007 09:25
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091
Depth
in
Metres
Micro-normal
ohm metres
0
10
20
30
40
Timing Marks
every 60.0 sec
MML Caliper
millimetres
125
250
375


Y Two Arm Caliper
millimetres
125
250
375
Borehole Temp in deg C
MGS Gamma Ray
API
0
75
150
Micro-inverse
ohm metres
0
10
20
30
40
Bit Size
millimetres
125
250
375
DST Uphole Tension
pounds
3000
0
Replay Scale 1:240
1300
1310
44°
1320
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Micro-inverse
1330
Micro-normal
MML Caliper
DST Uphole Tension


45°
1340
1350
1360
45°
1370
1380
46°
1390


1400
1410
48°
1420
1430
1440
1450

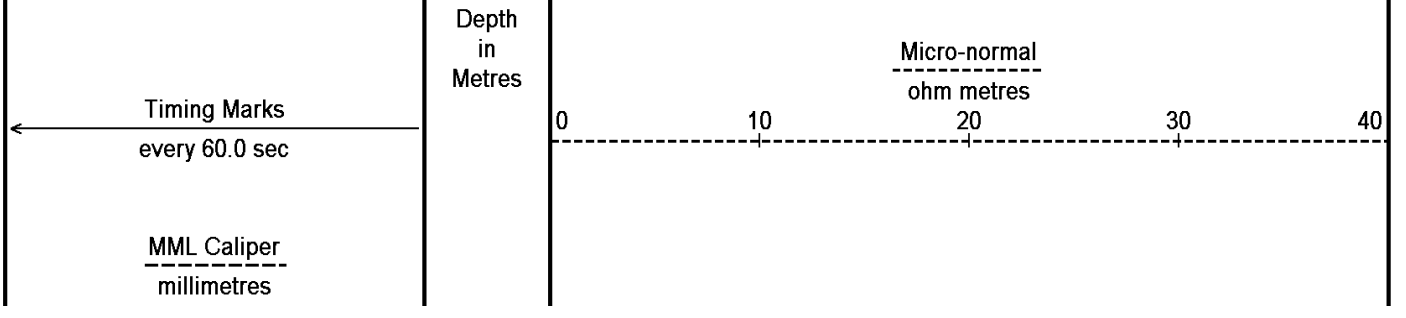


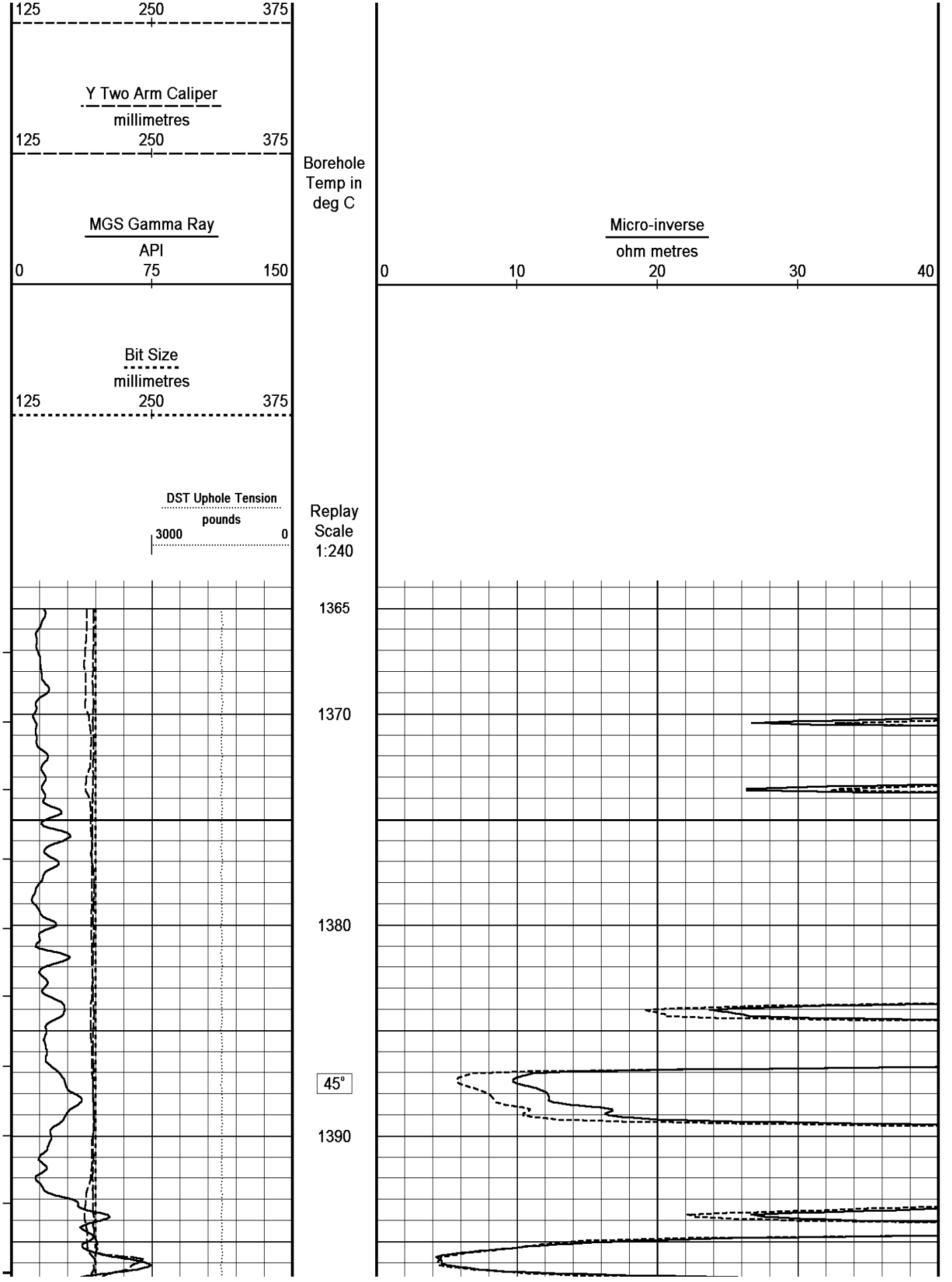
Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 12-NOV-2007 09:25
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta — Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

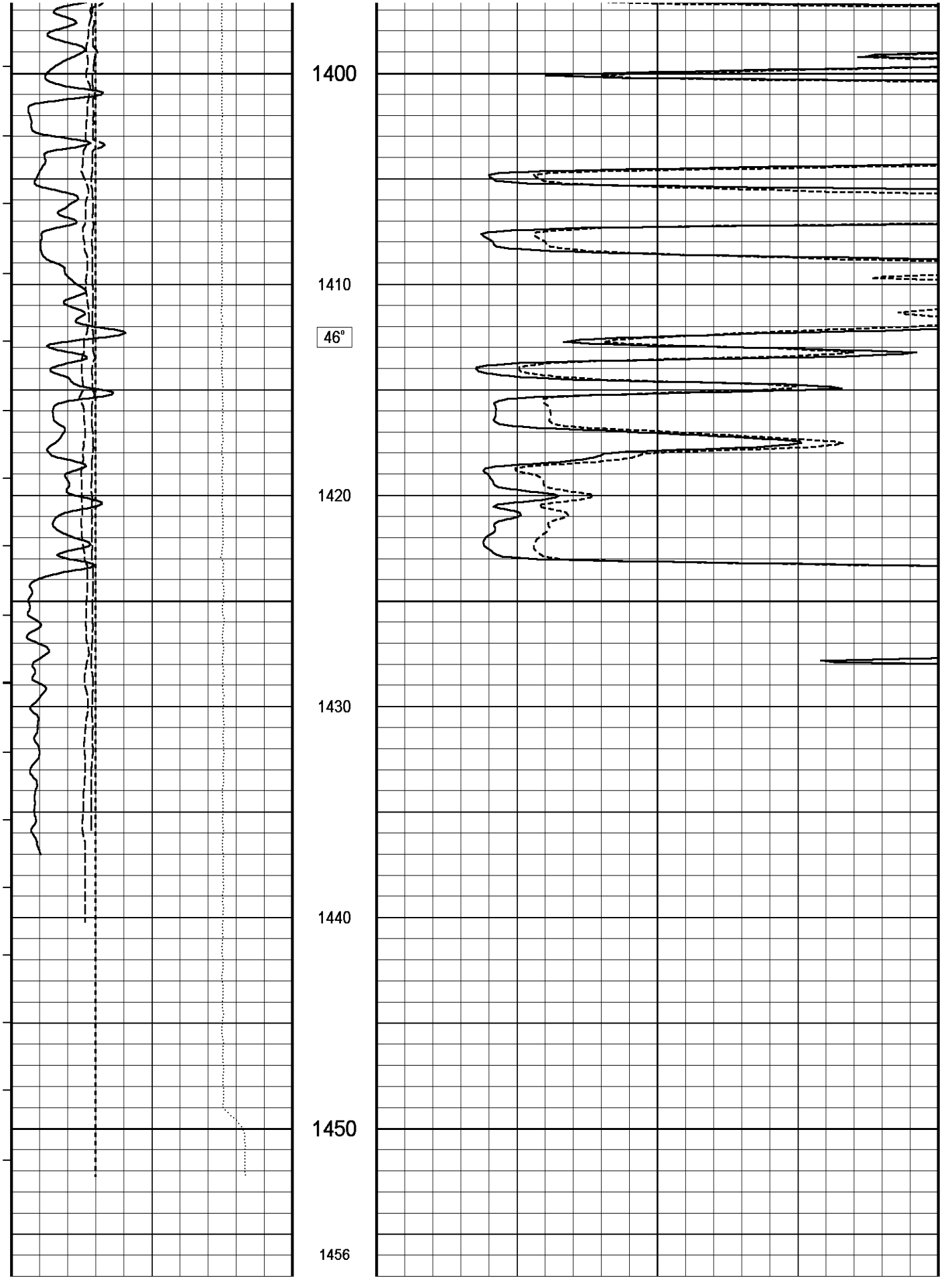
MAIN LOG 1:240

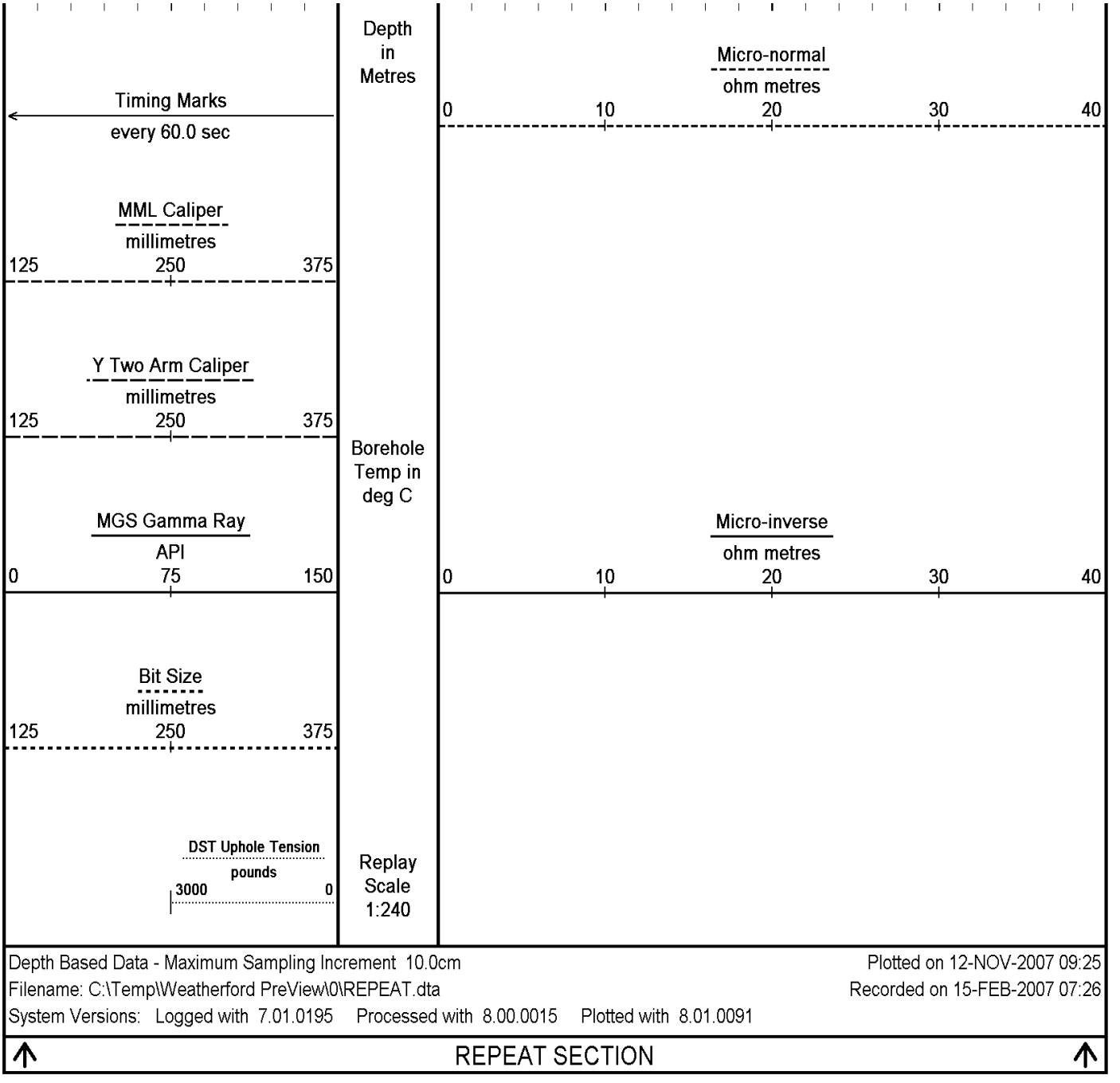
REPEAT SECTION

Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 12-NOV-2007 09:25
Filename: C:\Temp\Weatherford PreView\0\REPEAT.dta — Recorded on 15-FEB-2007 07:26
System Versions: Logged with 7.01.0195 Processed with 8.00.0015 Plotted with 8.01.0091




125
250
375
Y Two Arm Caliper
millimetres
125
250
375
MGS Gamma Ray
API
0
75
150
Bit Size
millimetres
125
250
375
DST Uphole Tension
pounds
3000
0
Borehole Temp in deg C
Replay Scale 1:240
1365
1370
1380
45°
1390
Micro-inverse
ohm metres
0
10
20
30
40


1400
1410
46°
1420
1430
1440
1450
1456



Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 12-NOV-2007 09:25
Filename: C:\Temp\Weatherford PreView\0\REPEAT.dta — Recorded on 15-FEB-2007 07:26
System Versions: Logged with 7.01.0195 Processed with 8.00.0015 Plotted with 8.01.0091

REPEAT SECTION

BEFORE SURVEY CALIBRATION

C:\Temp\Weatherford PreView\0\REPEAT.dta

General Constants All 000 — Last Edited on 15-FEB-2007,06:48

General Parameters		
Mud Resistivity	1.180	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

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

Caliper Calibration MTC 006

Base Calibration on 25-JAN-2007,18:14
Field Calibration on 10-FEB-2007,20:21

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)
208.70	205.70

Gamma Calibration MGS 010

Field Calibration on 7-FEB-2007,09:09

	Measured	Calibrated (API)
Background	48	31
Calibrator (Gross)	1256	825
Calibrator (Net)	1208	794

Gamma Constants MGS 010

Last Edited on 15-FEB-2007,06:48

Gamma Calibrator Number	grcc075	
Mud Density	1060.00	kg/m3
Caliper Source for Processing	Density Caliper	
Tool Position	Centred	
Concentration of KCl	0.00	kppm

Micro Normal and Micro Inverse Calibration MML 015

Base Calibration on 25-JAN-2007,17:08
Field Check on 12-FEB-2007 04:00

Base Calibration

	Measured		Calibrated (ohm-m)	
Channel	Resistor 1	Resistor 2	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

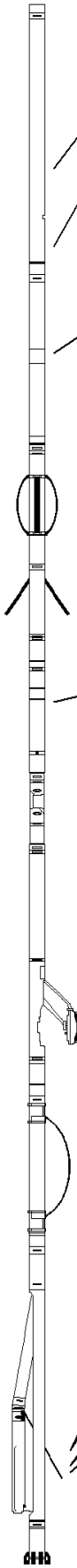
Micro Normal and Micro Inverse Constants MML 015

Last Edited on 15-FEB-2007,04:52

Micro Normal K Factor	0.5110	
Micro Inverse K Factor	0.3380	
Standoff Offset	N/A	millimetres

DOWNHOLE EQUIPMENT

C:\Temp\Weatherford PreView\0\REPEAT.dta



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

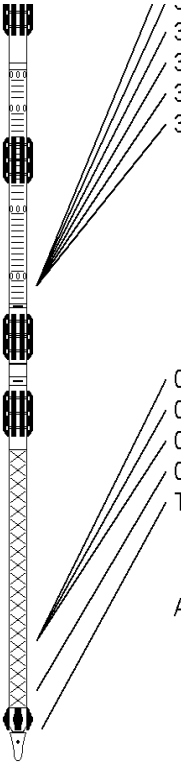
10.64 m NPRL - Limestone Neutron Por.

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 DPRL - Limestone Density Por.
7.85 m DCOR - Density Correction
7.83 m PDPE - PE

Compact Sonic
MSS 60 Length: 3.82 m Weight: 72.8 lb

3.95 m TR21 - 3' Transit Time
3.95 m TR11 - 4' Transit Time



3.95 m TR22 - 5' Transit Time
3.95 m DT34 - 3-4' Compensated Sonic
3.95 m DT35 - 3-5' Compensated Sonic
3.95 m TR12 - 6' Transit Time

Compact Induction
MAI 72 Length: 3.29 m Weight: 48.5 lb

0.79 m VEC0 - Shallow Induction
0.79 m RILM - Medium Induction
0.79 m RILD - Deep Induction
0.07 m SPCG - Spontaneous Potential
Tool Zero (0.28m from bottom)

Compact Hole Finder
HFS 1 Length: 0.24 m Weight: 2.2 lb

All measurements relative to tool zero.

Total Length: 22.63 m Weight: 568.8 lb

COMPANY	PARAMOUNT RESOURCES LTD.
WELL	PARAMOUNT ET AL CAMERON J-04
FIELD	CAMERON HILLS
PROVINCE/COUNTY	NORTH WEST TERRITORIES
COUNTRY/STATE	CANADA

Elevation Kelly Bushing	769.20	metres	First Reading		metre
Elevation Drill Floor		metres	Depth Driller	1449.00	metres
Elevation Ground Level	765.20	metres	Depth Logger	1449.50	metres

Weatherford®

MICROLOG

MICROLOG

COMPANY	PARAMOUNT RESOURCES LTD.
WELL	PARAMOUNT ET AL CAMERON J-04
FIELD	CAMERON HILLS
PROVINCE/COUNTY	NORTH WEST TERRITORIES
COUNTRY/STATE	CANADA
LOCATION	300/J-04-60-10-117-30

FIELD PRINT

LSD	SEC	TWP	RGE

Other Services

PHOTO DENSITY
ARRAY INDUCTION
DUAL SPACED NEUTRON
COMPENSTATED SONIC

API Number
Permit Number 1159

Permanent Datum GROUND LEVEL, Elevation 765.20 metres
Log Measured From 4.00 M above Permanent Datum
Drilling Measured From KB

Elevations:	metres
KB	769.20
DF	
GL	765.20

Date	15-FEB-2007			
Run Number	1			
Depth Driller	1449.00	metres		
Depth Logger	1449.50	metres		
First Reading				
Last Reading	430.00	metre		
Casing Driller	430.00	metres		
Casing Logger	429.80	metres		
Bit Size	200.00	mm		
Hole Fluid Type	GELCHEM			
Density / Viscosity	1060.0 kg/M3	93.00 CP		
PH / Fluid Loss	11.00	11.00 ml/30Min		
Sample Source	FLOWLINE			
Rm @ Measured Temp	1.18 @ 25.0	ohm-m		
Rmf @ Measured Temp	1.04 @ 25.0	ohm-m		
Rmc @ Measured Temp	1.32 @ 25.0	ohm-m		
Source Rmf / Rmc	PRESS	FILTER		
Rm @ BHT	0.78 @ 48.0	ohm-m		
Time Since Circulation	6 HRS			
Max Recorded Temp	48.00	deg C		
Equipment Name	COMPACT			
Equipment / Base	13124	GPR		
Recorded By	G. SINGER			
Witnessed By	A. AHMED			
CIRC. STOP TIME	01:30-FEB-15		Last Line	

BOREHOLE RECORD

Last Edited: 15-FEB-2007 05:01

Bit Size millimetres	Depth From metres	Depth To metres
311.000	0.00	430.00
200.000	430.00	1449.00

CASING RECORD

Type	Size millimetres	Depth From metres	Shoe Depth metres	Weight Kg/metre
SURFACE	219.100	0.00	430.00	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 INTERSONIC CRANK
   MTC: SIX LEAF CENTRALIZER
5) SERVICE ORDER #: 30073028 SAP #: 4147101 # FIELD PRINTS = 3
6) RIG: PD 129

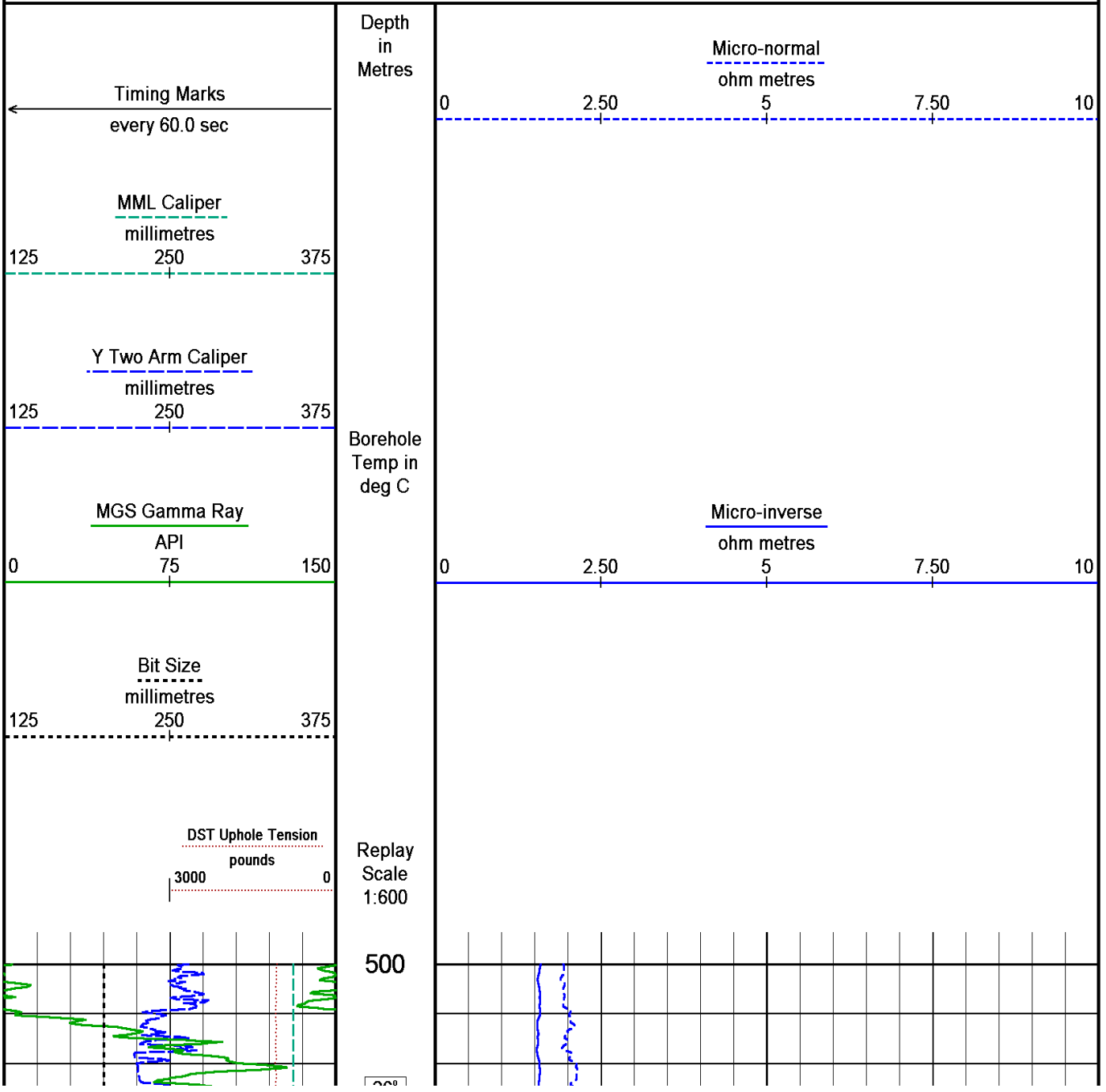
7) HOLE AND CEMENT VOLUMES CALCULATED USING DENSITY AND 2-ARM CALIPERS :
HOLE VOLUME = 37.4 CU.M.
ANNULAR VOLUME USING 139.7 MM PRODUCTION CASING = 21.8 CU.M

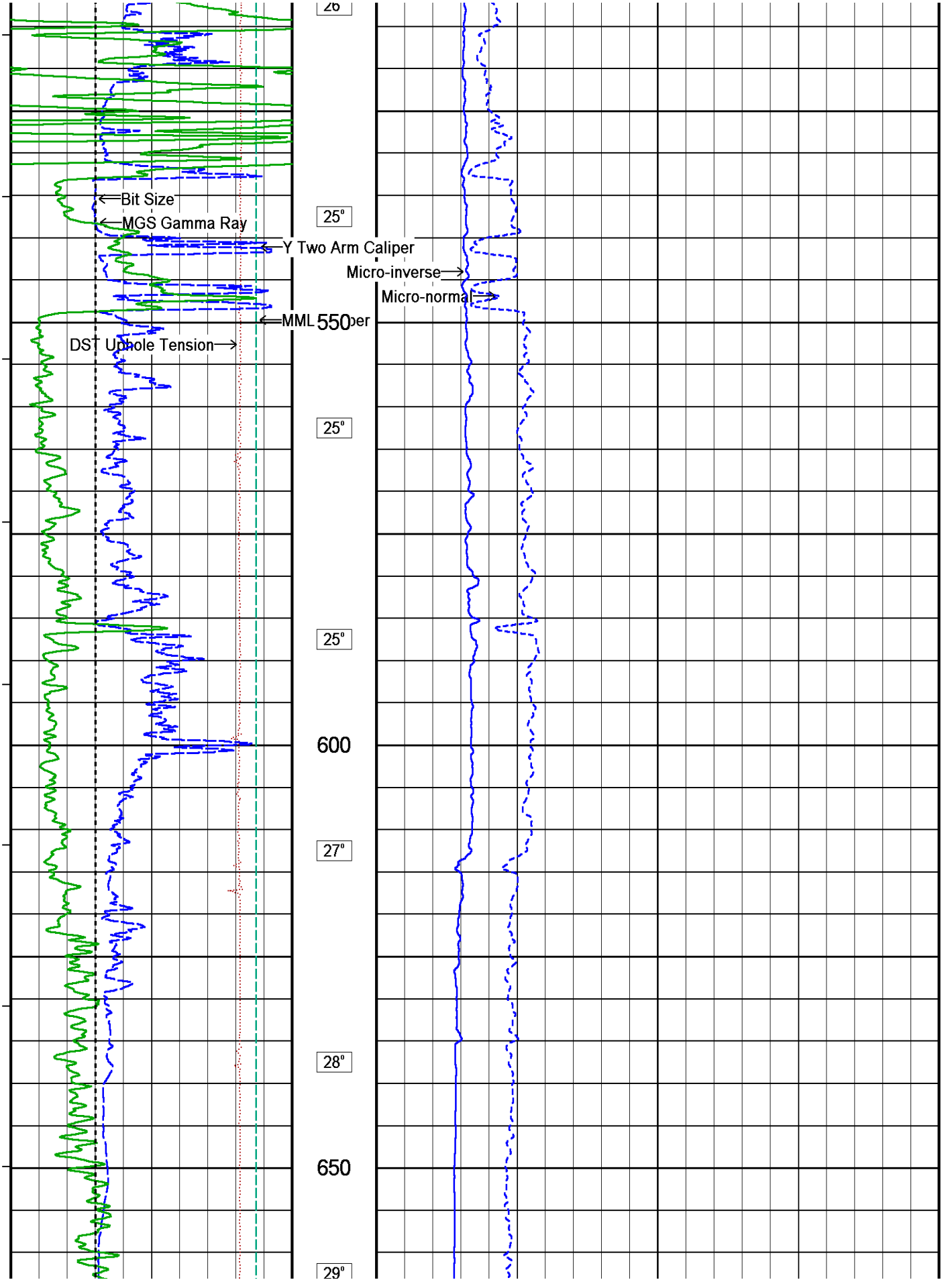
8) SONIC FREE PIPE FOUND FROM 352M - 357M

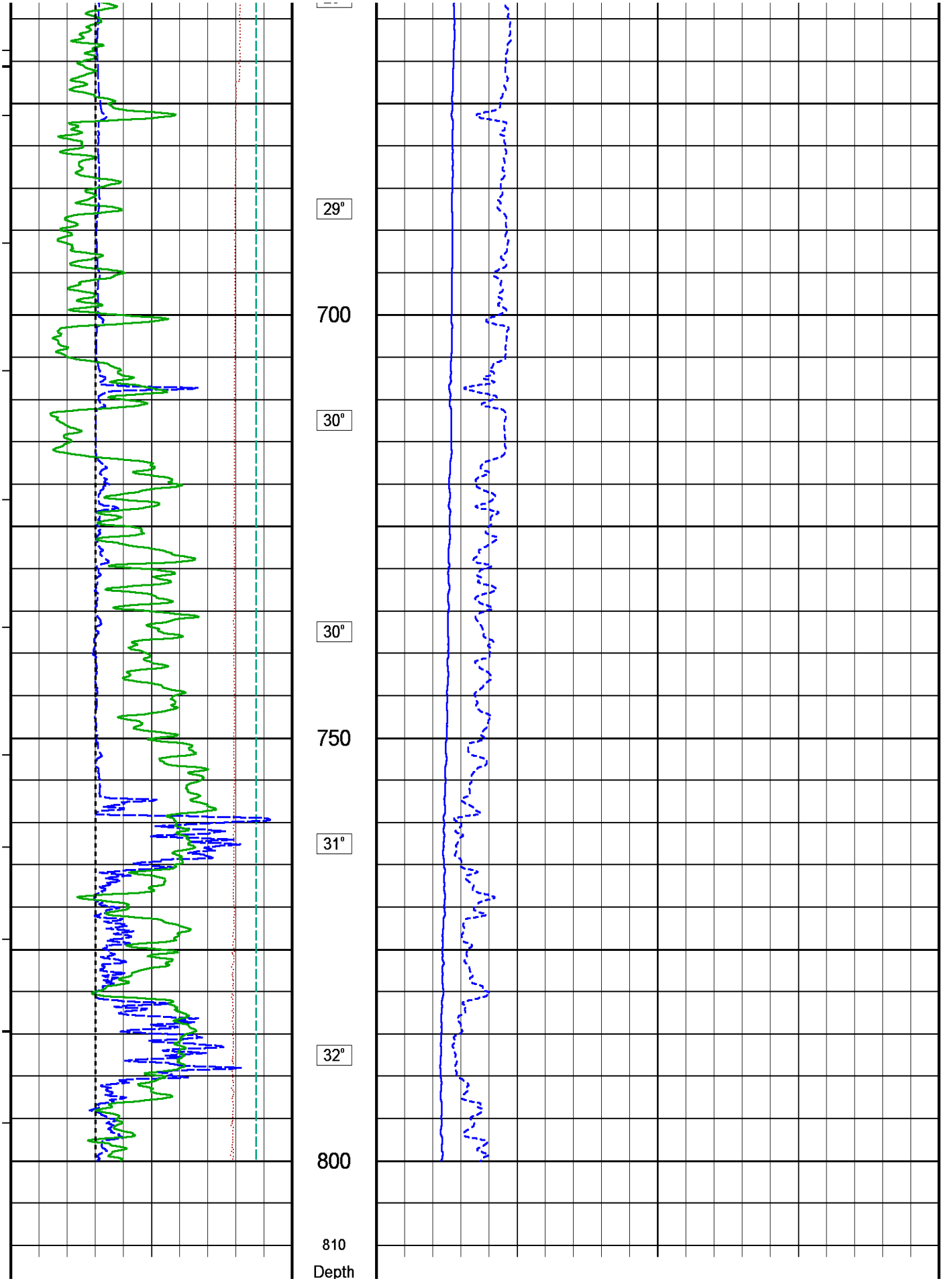
MUD LOG 1:600

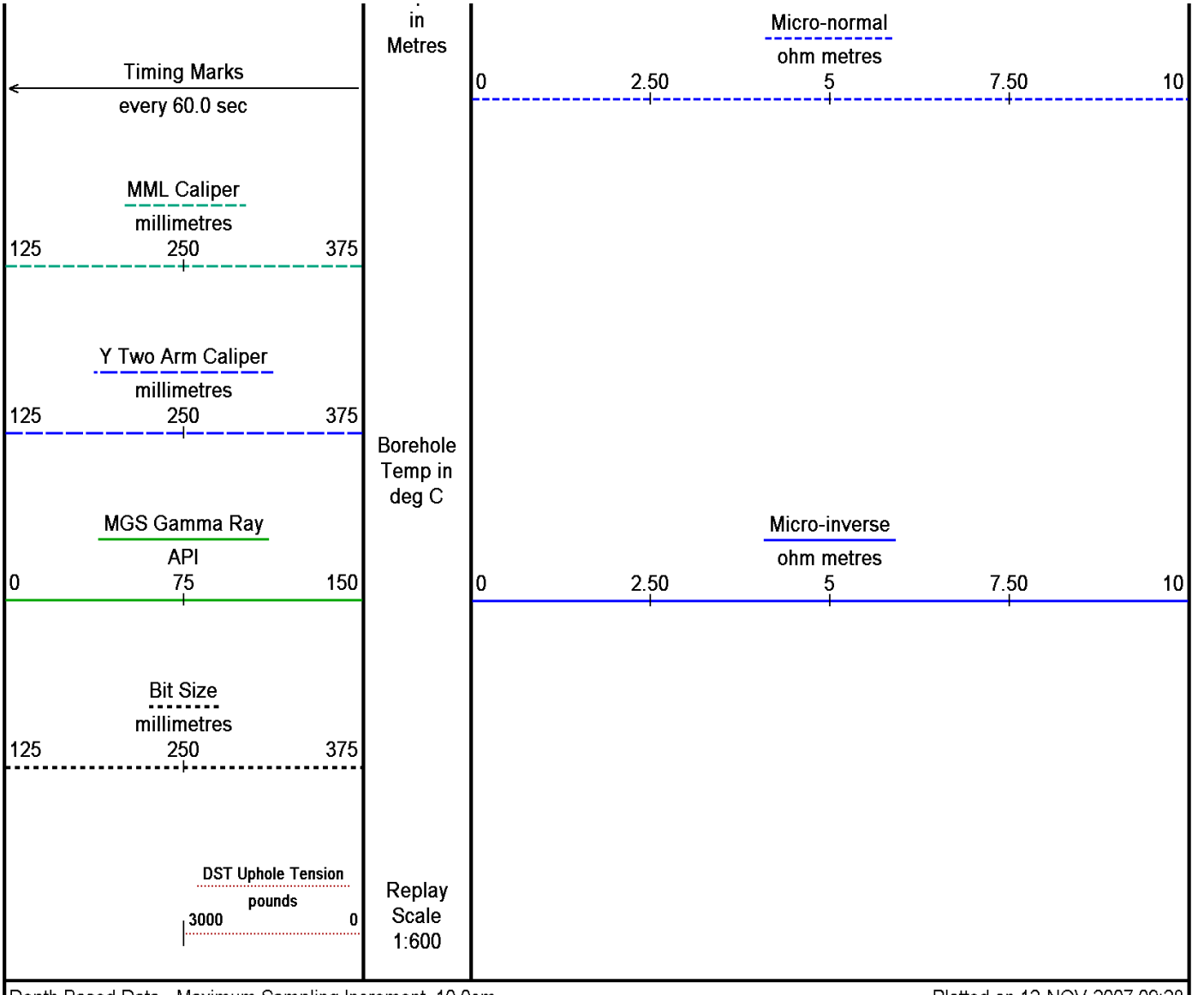
Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

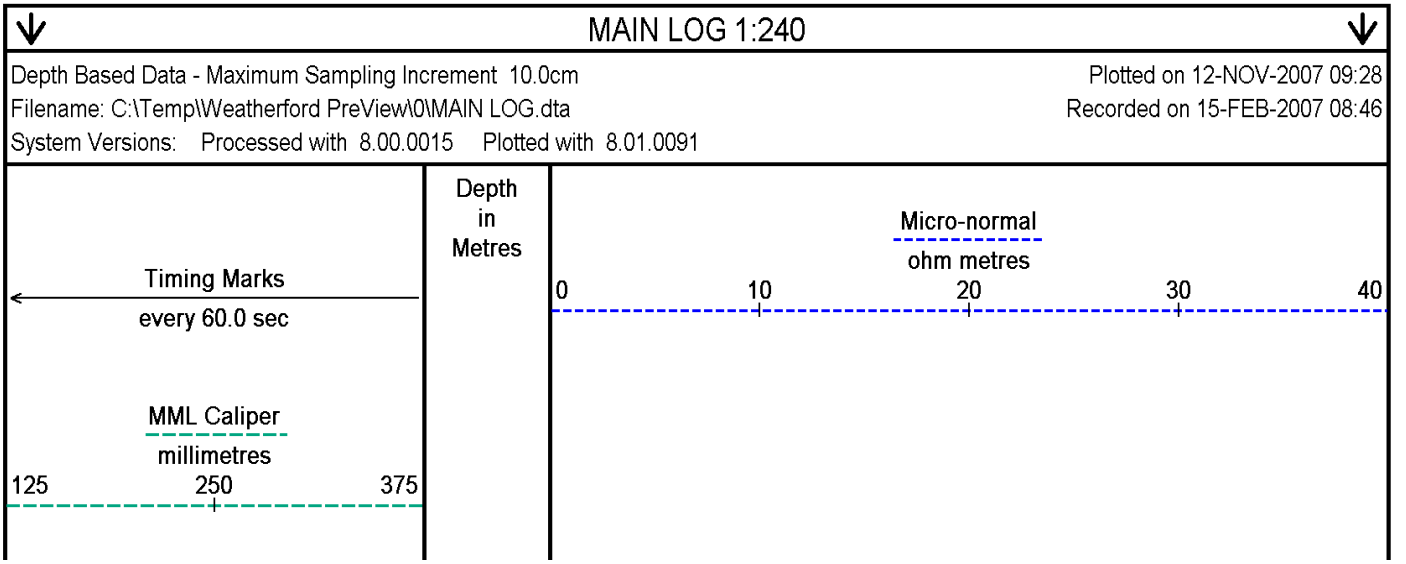
Plotted on 12-NOV-2007 09:28
Recorded on 15-FEB-2007 08:46

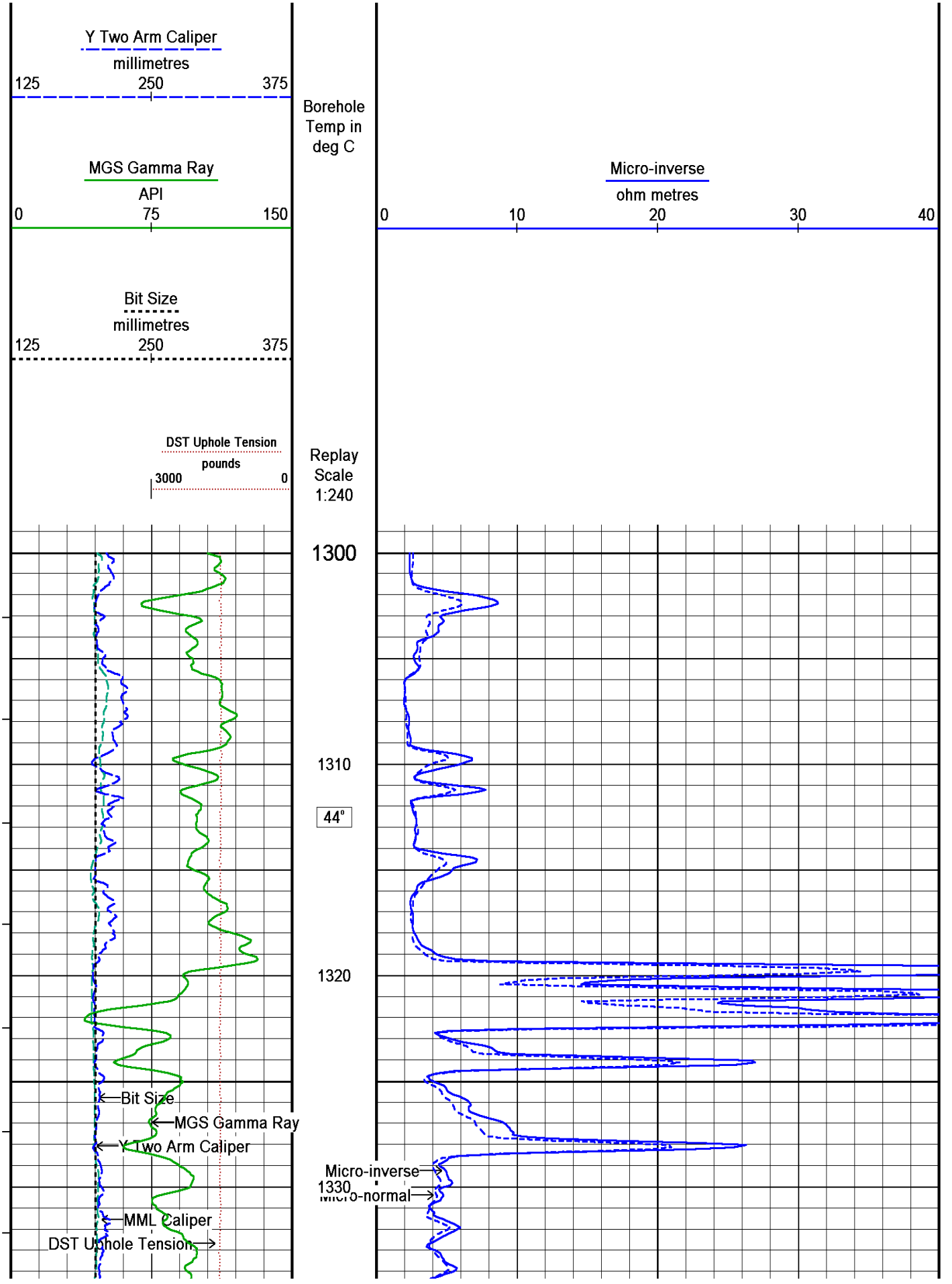


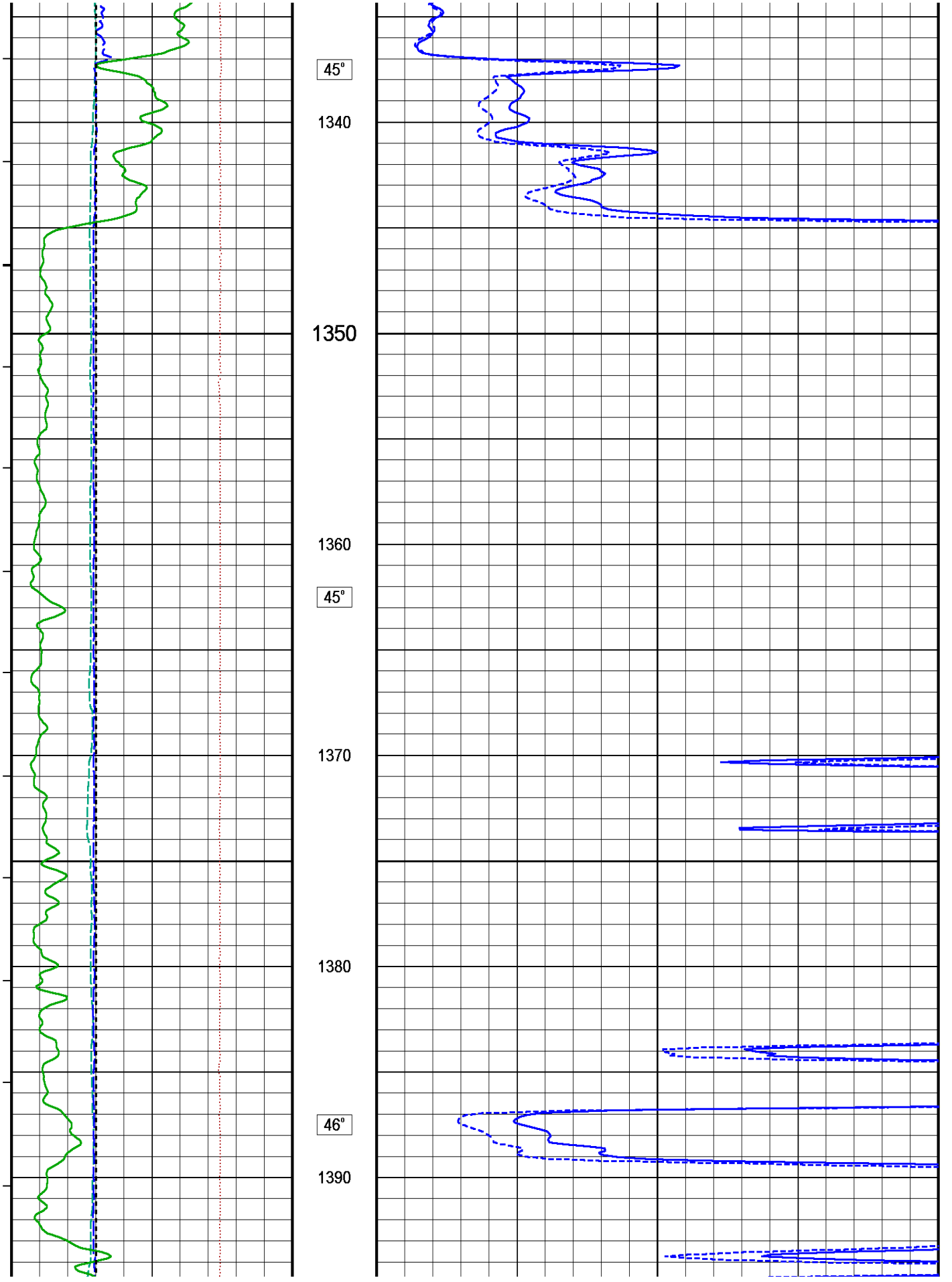

26
Bit Size
MGS Gamma Ray
25°
Y Two Arm Caliper
Micro-inverse
Micro-normal
MML
550
DST Uphole Tension
25°
25°
600
27°
28°
650
29°

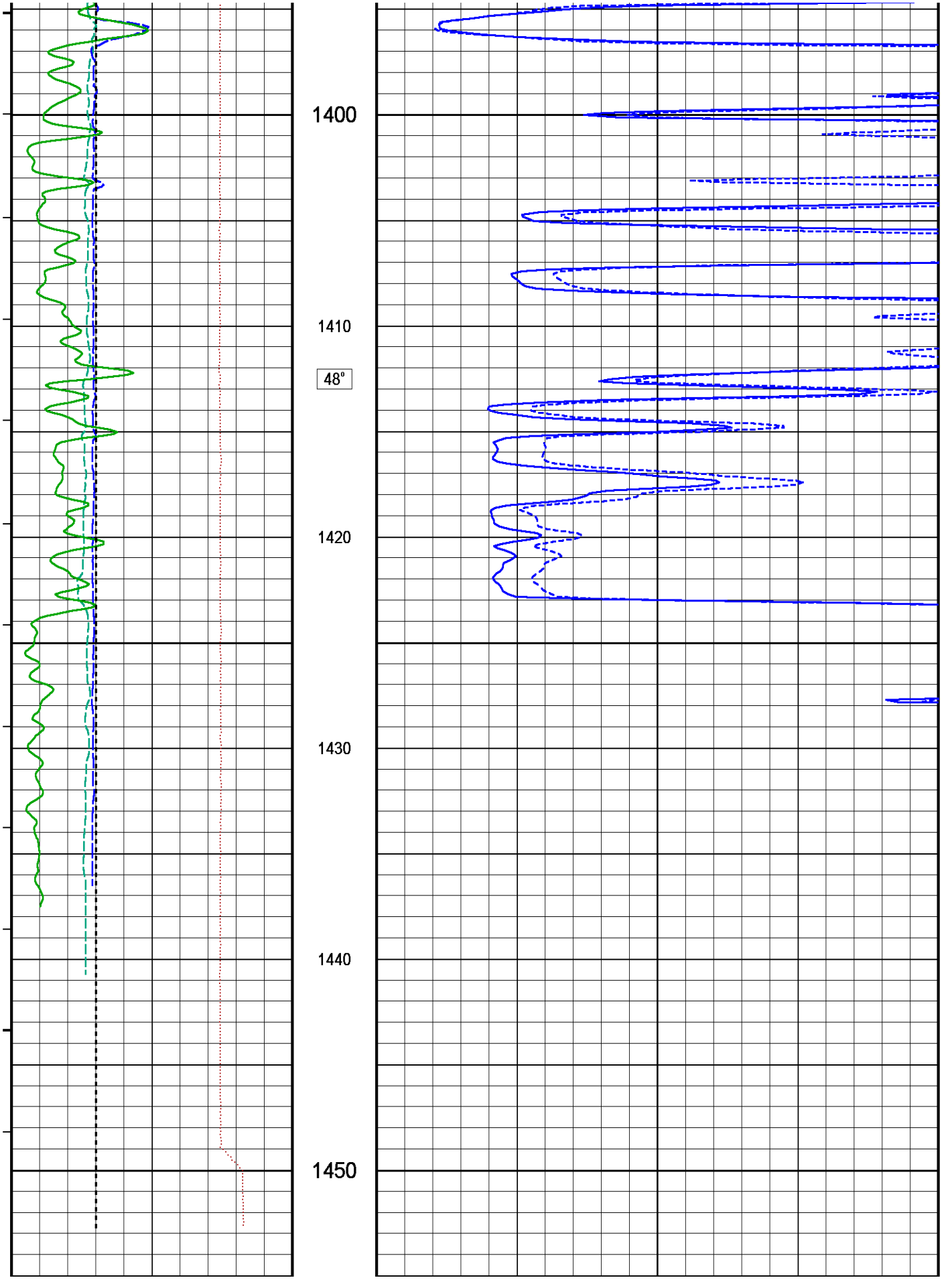

29°
700
30°
30°
750
31°
32°
800
810
Depth

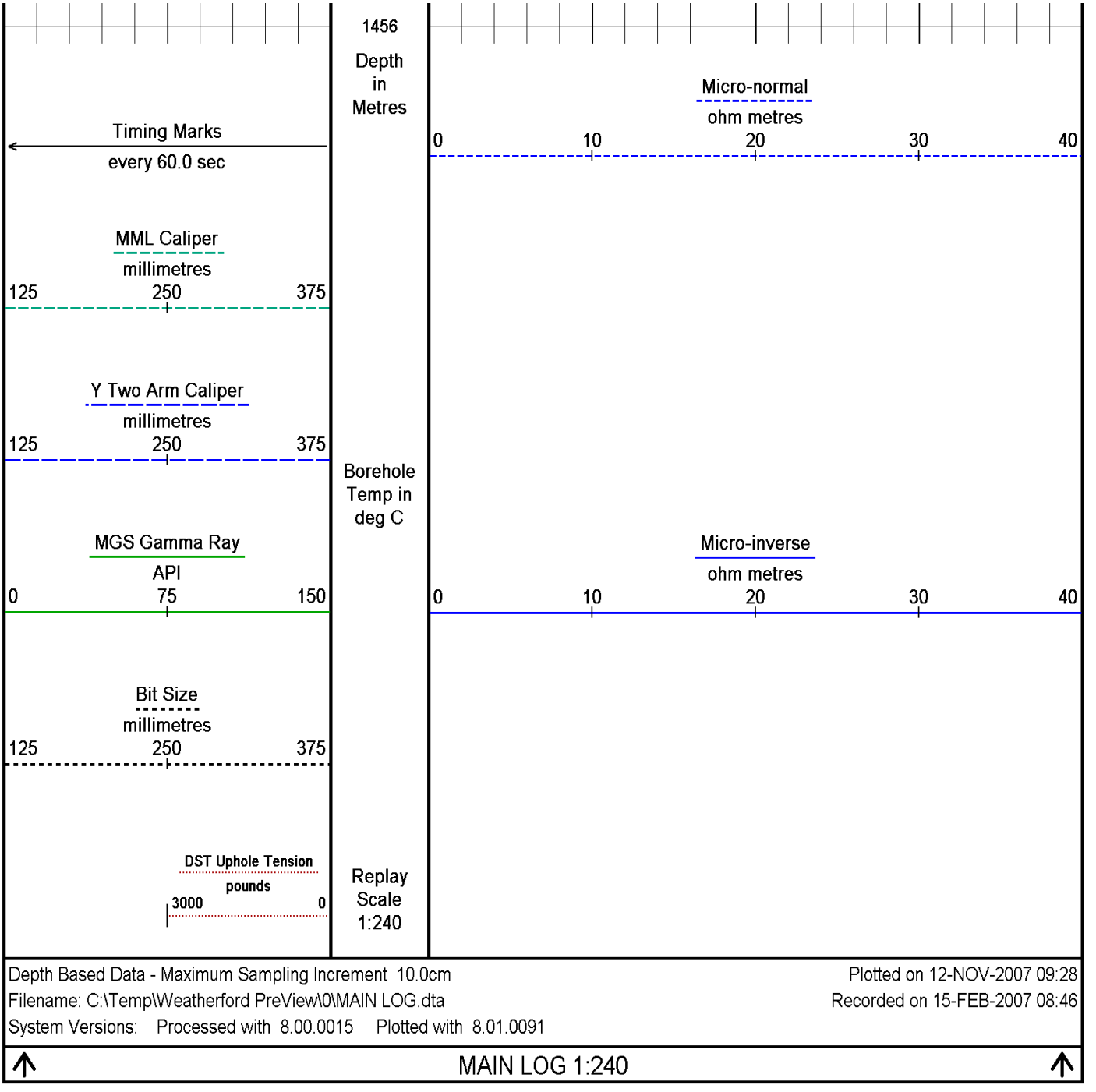

in
Metres
Micro-normal
ohm metres
0
2.50
5
7.50
10
Timing Marks
every 60.0 sec
MML Caliper
millimetres
125
250
375
Y Two Arm Caliper
millimetres
125
250
375
Borehole
Temp in
deg C
MGS Gamma Ray
API
0
75
150
Micro-inverse
ohm metres
0
2.50
5
7.50
10
Bit Size
millimetres
125
250
375
DST Uphole Tension
pounds
3000
0
Replay
Scale
1:600
Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 12-NOV-2007 09:28
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091
MUD LOG 1:600


MAIN LOG 1:240
Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 12-NOV-2007 09:28
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091
Depth
in
Metres
Micro-normal
ohm metres
0
10
20
30
40
Timing Marks
every 60.0 sec
MML Caliper
millimetres
125
250
375


Y Two Arm Caliper
millimetres
125
250
375
MGS Gamma Ray
API
0
75
150
Bit Size
millimetres
125
250
375
DST Uphole Tension
pounds
3000
0
Borehole Temp in deg C
Replay Scale 1:240
Micro-inverse
ohm metres
0
10
20
30
40
1300
1310
44°
1320
1330
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
MML Caliper
DST Uphole Tension
Micro-inverse
Micro-normal


45°
1340
1350
1360
45°
1370
1380
46°
1390


1400
1410
48°
1420
1430
1440
1450

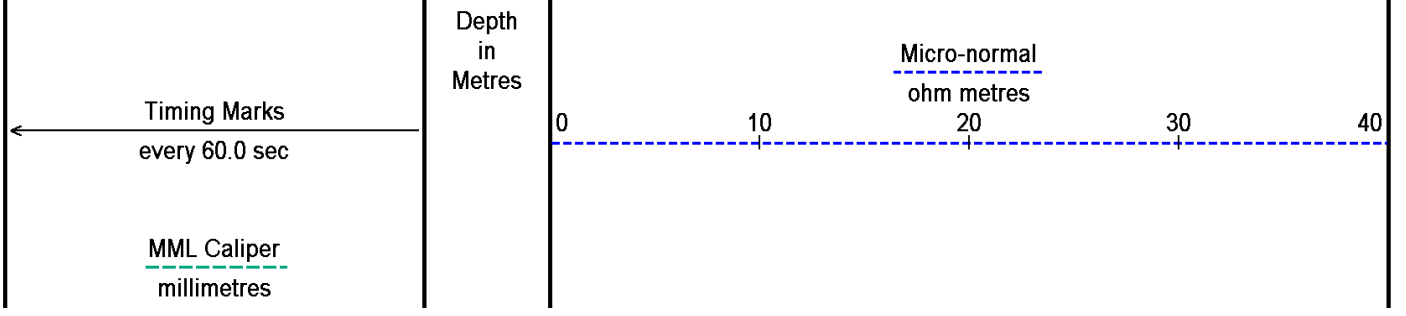


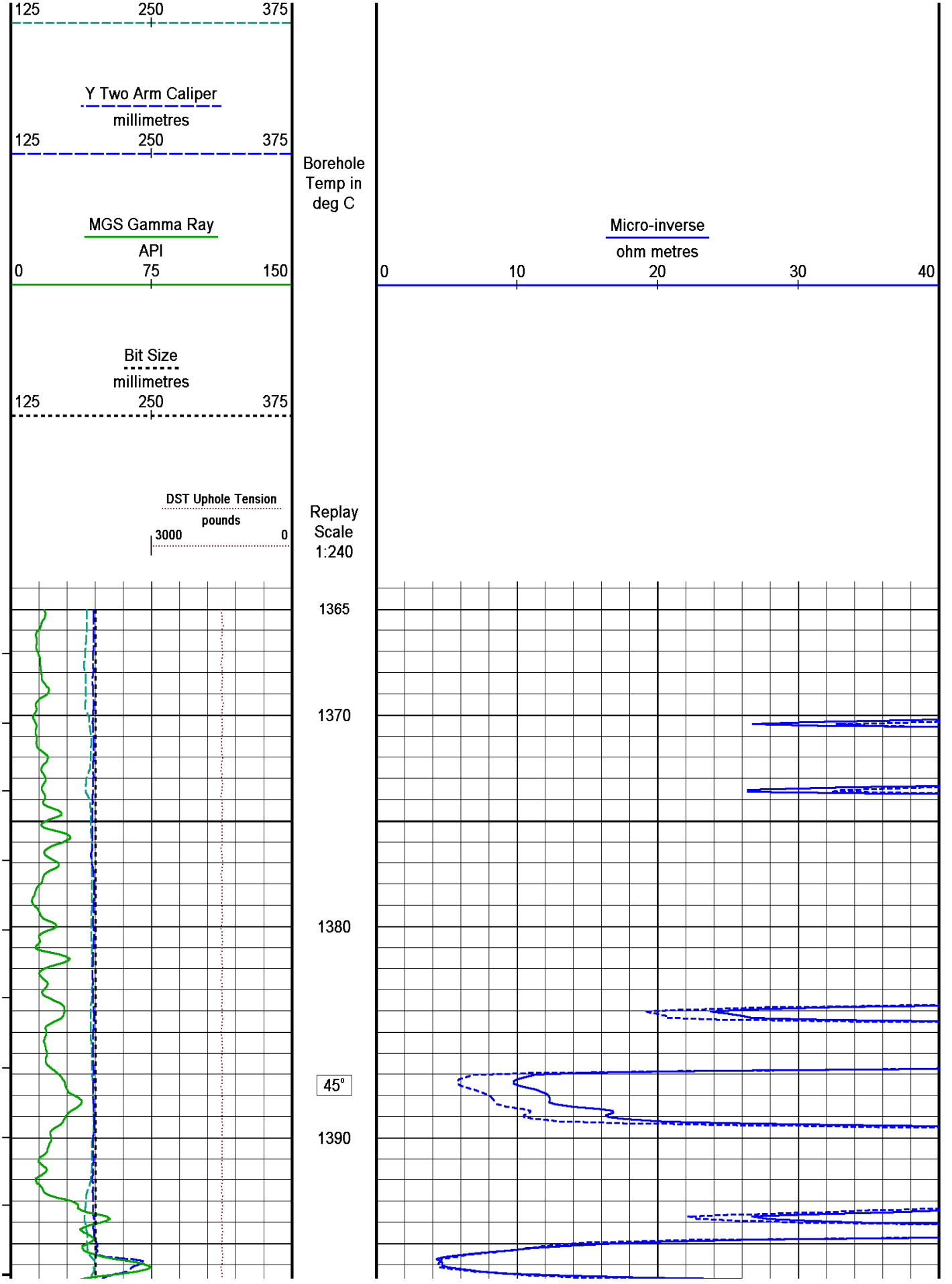
Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 12-NOV-2007 09:28
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

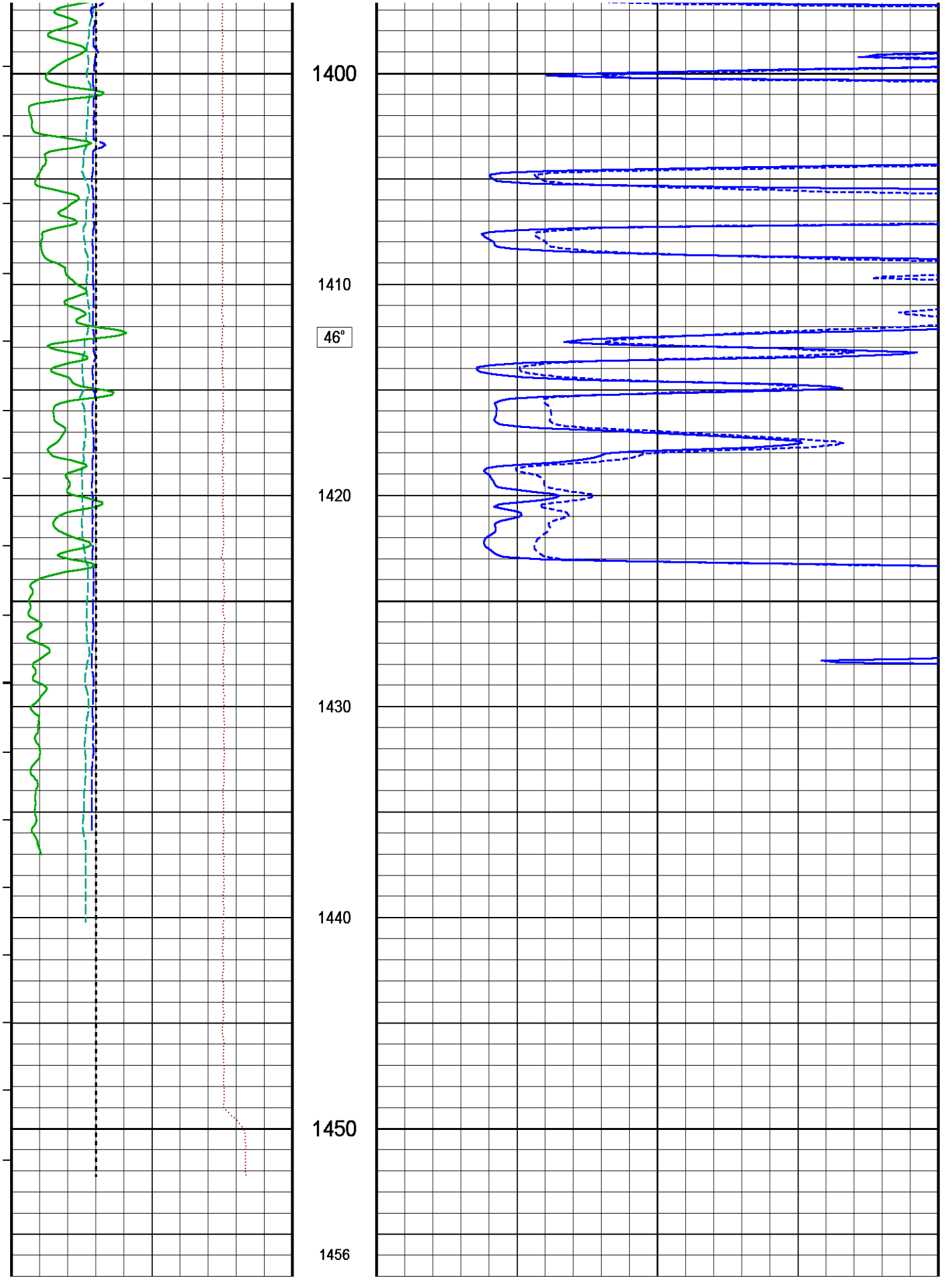
MAIN LOG 1:240

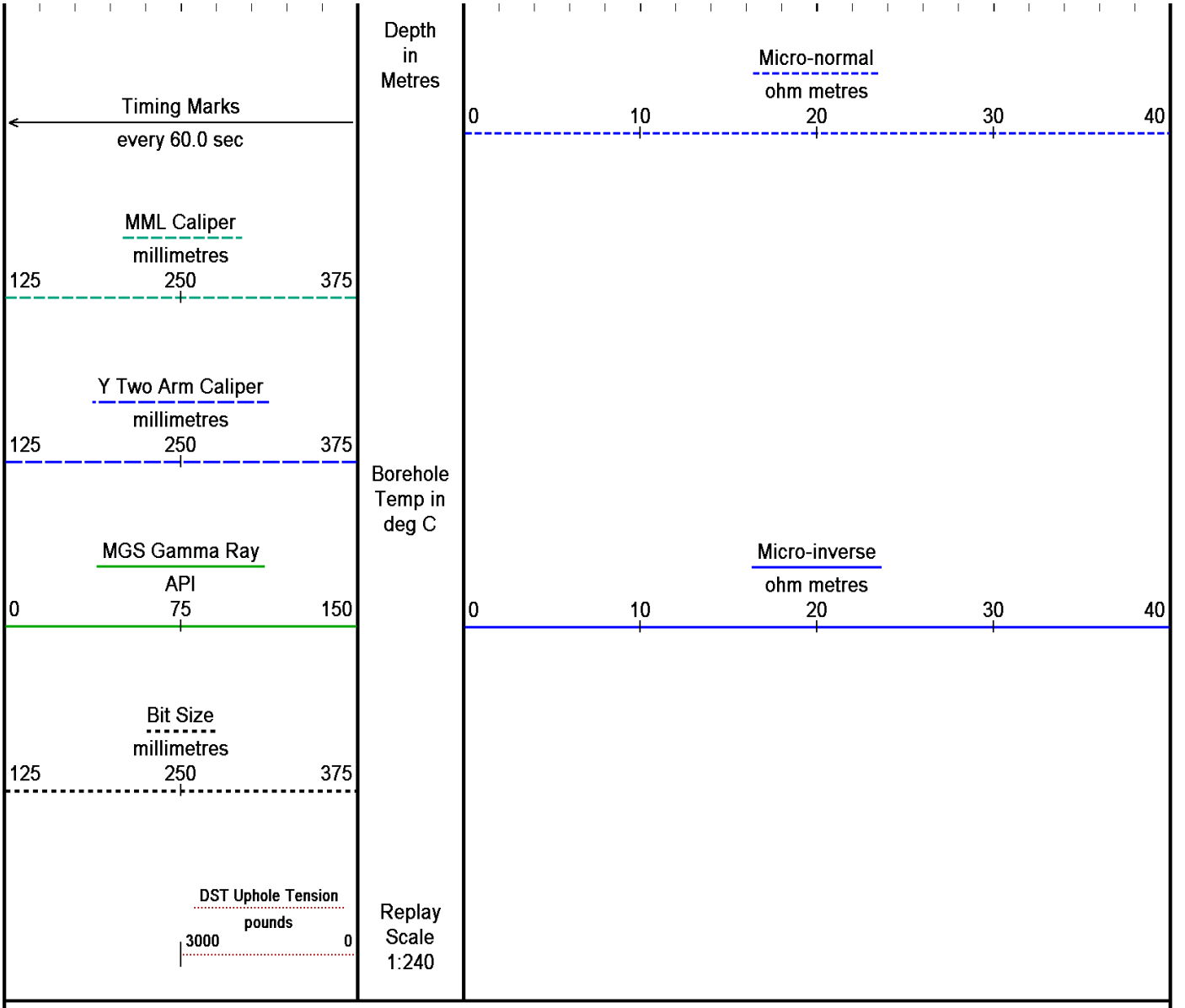
REPEAT SECTION

Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 12-NOV-2007 09:28
Filename: C:\Temp\Weatherford PreView\0\REPEAT.dta
Recorded on 15-FEB-2007 07:26
System Versions: Logged with 7.01.0195 Processed with 8.00.0015 Plotted with 8.01.0091




125
250
375
Y Two Arm Caliper
millimetres
125
250
375
MGS Gamma Ray
API
0
75
150
Bit Size
millimetres
125
250
375
DST Uphole Tension
pounds
3000
0
Borehole Temp in deg C
Replay Scale 1:240
Micro-inverse
ohm metres
0
10
20
30
40
1365
1370
1380
45°
1390


1400
1410
46°
1420
1430
1440
1450
1456



Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 12-NOV-2007 09:28

Filename: C:\Temp\Weatherford PreView\0\REPEAT.dta — Recorded on 15-FEB-2007 07:26

System Versions: Logged with 7.01.0195 Processed with 8.00.0015 Plotted with 8.01.0091

REPEAT SECTION

BEFORE SURVEY CALIBRATION

C:\Temp\Weatherford PreView\0\REPEAT.dta

General Constants All 000 — Last Edited on 15-FEB-2007,06:48

General Parameters		
Mud Resistivity	1.180	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

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

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Base Calibration on 25-JAN-2007,18:14
Field Calibration on 10-FEB-2007,20:21

Base Calibration

Reading No	Measured	Calibrator Size (mm)
1	14734	110.00
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5	25897	311.00
6	N/A	N/A

Field Calibration

Measured Caliper (mm)	Actual Caliper (mm)
208.70	205.70

Gamma Calibration MGS 010

Field Calibration on 7-FEB-2007,09:09

	Measured	Calibrated (API)
Background	48	31
Calibrator (Gross)	1256	825
Calibrator (Net)	1208	794

Gamma Constants MGS 010

Last Edited on 15-FEB-2007,06:48

Gamma Calibrator Number	grcc075	
Mud Density	1060.00	kg/m3
Caliper Source for Processing	Density Caliper	
Tool Position	Centred	
Concentration of KCl	0.00	kppm

Micro Normal and Micro Inverse Calibration MML 015

Base Calibration on 25-JAN-2007,17:08
Field Check on 12-FEB-2007 04:00

Base Calibration

	Measured		Calibrated (ohm-m)	
Channel	Resistor 1	Resistor 2	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

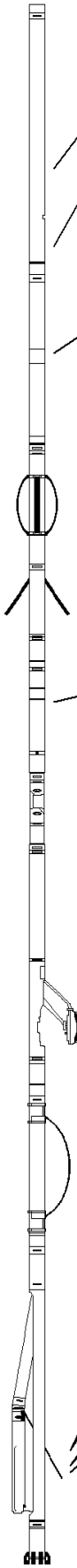
Micro Normal and Micro Inverse Constants MML 015

Last Edited on 15-FEB-2007,04:52

Micro Normal K Factor	0.5110	
Micro Inverse K Factor	0.3380	
Standoff Offset	N/A	millimetres

DOWNHOLE EQUIPMENT

C:\Temp\Weatherford PreView\0\REPEAT.dta



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MCG 159 Length: 2.65 m Weight: 63.9 lb

20.78 m GRGC - Gamma Ray
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Compact Focussed Electric
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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

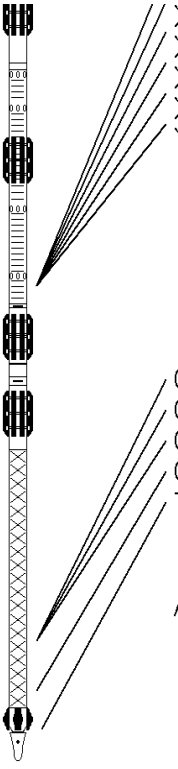
10.64 m NPRL - Limestone Neutron Por.

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 DPRL - Limestone Density Por.
7.85 m DCOR - Density Correction
7.83 m PDPE - PE

Compact Sonic
MSS 60 Length: 3.82 m Weight: 72.8 lb

3.95 m TR21 - 3' Transit Time
3.95 m TR11 - 4' Transit Time



3.95 m TR22 - 5' Transit Time
3.95 m DT34 - 3-4' Compensated Sonic
3.95 m DT35 - 3-5' Compensated Sonic
3.95 m TR12 - 6' Transit Time

Compact Induction
MAI 72 Length: 3.29 m Weight: 48.5 lb

0.79 m VEC0 - Shallow Induction
0.79 m RILM - Medium Induction
0.79 m RILD - Deep Induction
0.07 m SPCG - Spontaneous Potential
Tool Zero (0.28m from bottom)

Compact Hole Finder
HFS 1 Length: 0.24 m Weight: 2.2 lb

All measurements relative to tool zero.

Total Length: 22.63 m Weight: 568.8 lb

COMPANY	PARAMOUNT RESOURCES LTD.
WELL	PARAMOUNT ET AL CAMERON J-04
FIELD	CAMERON HILLS
PROVINCE/COUNTY	NORTH WEST TERRITORIES
COUNTRY/STATE	CANADA

Elevation Kelly Bushing	769.20	metres	First Reading		metre
Elevation Drill Floor		metres	Depth Driller	1449.00	metres
Elevation Ground Level	765.20	metres	Depth Logger	1449.50	metres

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