Final Well Report

FINAL WELL REPORT

PARAMOUNT RESOURCES LTD.

PARA ET AL CAMERON F-19

Grid: 60^0 10′, 117^0 30′

DATE: May 13, 2004

COMPANY REPRESENTATIVE:
Dave Block

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D. GEOLOGY Page

A. INTRODUCTION

Paramount Resources Ltd. (Paramount) drilled a 1481 meter development well spudded on February 4, 2004 and finishing drilling on February 9, 2004 to evaluate hydrocarbon potential. The primary target was the Sulphur Point formation at a depth of 1433 mKB. The secondary target was the Slave Point formation at 1370 mKB

The drilling contractor was Precision Drilling Ltd based out of Calgary, Alberta. Precision's Rig # 247 was used and is a land rig rated for 2200 m. The rig had a mud system capacity of 63 m^3 and was equipped with a boiler.

The well was drilled on Production License No PL-005 in which Paramount has an 88% working interest. Operating License No 2003 was issued to Paramount on January 13, 2004.

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

Latitude: 60^0 08' 18.499"
Longitude: 117^0 33' 15.533"

Shadow Rathole Drilling Ltd. drilled a 610 mm conductor hole to 12.2 meters. From surface to 1.0 meters was snow, 1.0 – 4.0 m was frozen peat moss, 4.0 - 9.0 was permafrost, and 9.0 – 12.2 m was clay and rock. A 406 mm conductor pipe was set and cemented at 12.2 meters.

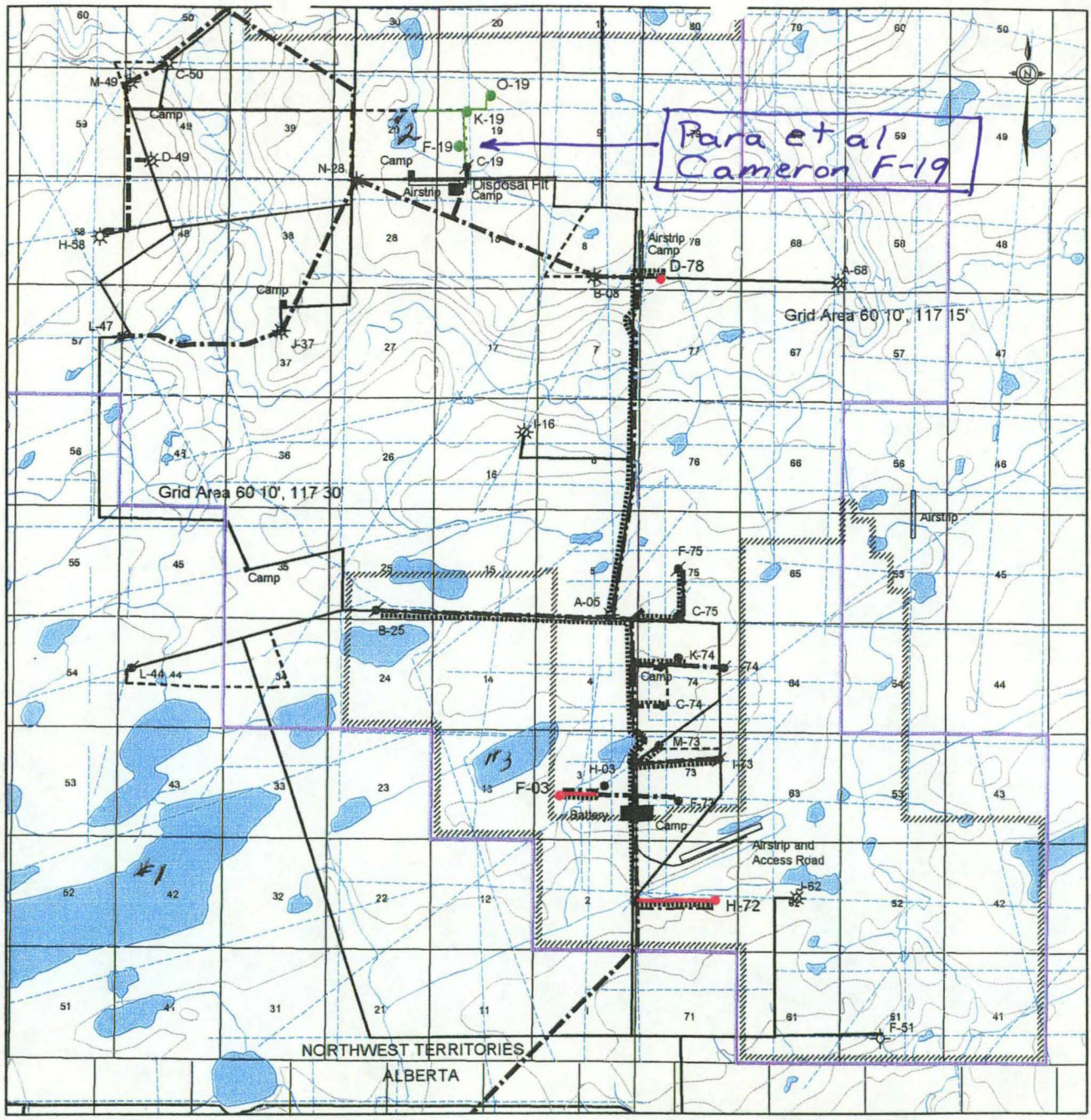
Precision #247 was partially moved onto the location on January 26, 2004. The derrick was damaged during the rig move and had to be transported to Nisku in Alberta for repairs. On February 3, 2004 the repaired and re-inspected derrick arrived back at the location and the rig up was completed. The diverter was nippled up and drilling commenced February 4, 2004 at 08:00 hours. A 311 mm surface hole was drilled to 431 mKB. There were no major lost circulation or mud ring problems encountered in the surface hole. A string of 219.1 mm, 35.7 kg/m, J-55, ST&C surface casing was run to 431 mKB. The casing was cemented with 32 t class 'G' cement plus 2% $CaCl_2$. There were 3 m^3 of cement returned to surface while cementing. The plug was bumped and the float held OK. The plug was down at 04:47 hours on February 6, 2004.

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 12000 kPa high pressure.

The float collar and shoe were drilled out to 441 mKB on February 7, 2004 A leak off test was performed with the leak off gradient found to be 29.8 kPa/m. A 200 mm hole was drilled with a flocculated water system to approximately 1300 m. A gel/chem mud system was then used to drill to a total depth of 1481 mKB. Precision Wireline ran induction, density, and sonic logs from bottom to surface casing and a micro resistivity log from bottom to 1350 mKB.

139.7 mm, 20.83 kg/m, J-55, ST&C production casing was run and set at 1481 mKB. It was cemented with 27 t Thixlite + 1% SMS and 4 t Expando LWL + 0.1% CFL-3 + 0.2% LTR + 0.2% SPC-II. There were 2.0 m^3 cement returns and the plug was bumped with 17.0 MPa.

Precision #247 was rigged out and released at 06:00 hours on February 11, 2004.



LEGEND

- SDL
- WELLSITE/ACCESS
- EMERGENCY ACCESS
- SEISMIC LINE
- PIPELINE
- 3D SEISMIC
- POWERLINE/FUEL LINE
- SATELLITE/AIRSTRIP & ACCESS

EXISTING OR PERMITTED BUT NOT YET CONSTRUCTED BY MAY 2003

- AMENDED WELLSITE/ACCESS
- DELETED

NOTE: EMERGENCY ACCESS NOT SHOWN FOR THIS APPLICATION

THIS APPLICATION

Proposed Location | Abandoned Gas Well | Suspended Gas Well | Abandoned Well | Suspended Oil Well | Active Oil Well | Active Gas Well

REFERENCE

ORIGINAL PLANIMETRIC DATA SUPPLIED BY UNIVERSAL SURVEYS INC. IN NAD 83 UTM ZONE 11. PROJECT DATA OBTAINED FROM PARAMOUNT RESOURCES LTD.

2 0 2
SCALE KILOMETRES

NOTE: WIDTH OF LINES NOT TO SCALE

PROJECT: Paramount resources ltd. — CAMERON HILLS PROJECTS

TITLE

F-19, K-19 AND O-19 AMENDMENT WELLS

Golder Associates Calgary, Alberta

PROJECT 03-1322-134.9000			FILE No.	Application-2
DESIGN	DJ	09/10/03	SCALE AS SHOWN	REV. 0
CADD	RFM	09/10/03		
CHECK				
REVIEW				

FIGURE: 2

R:\CAD\2003\1322\03-1322-132\Application Figures\ Drawing file: Application-2.dwg Oct 10, 2003 - 1:40pm

B. GENERAL DATA

1. Well Name: Para et al Cameron F-19

   Authority to Drill a Well No: 2003

   Exploration Agreement Number: PL-005

   Location Unit: F

   Section: 19

   Grid Area: 60^0 10' N, 117^0 30' W

   Classification: Development

2. Coordinates:
   Latitude: 60^0 08' 18.499"
   Longitude: 117^0 33' 15.533"

3. Unique Well Identifier: 300F196010117300

4. Operator: Paramount Resources Ltd.

5. Contractor: Precision Drilling

6. Drilling Unit: Precision Rig # 247, Land Rig

7. Position Keeping: N/A

8. Support Craft (Helicopter): N/A

9. Drilling Unit Performance: Good

10. Difficulties and Delays: None

11. Total Well Cost: $722,000

12. Bottom Hole Co-ordinates: Same as surface

C. SUMMARY OF DRILLING OPERATIONS

1. Elevations:
   Ground: 783.74 m above sea level
   KB: 788.34 m above sea level
   KB to Casing Flange: 4.6 m

2. Total Depth:
   FTD: 1481 mKB
   PBTD: 1475 mKB
   TVD: 1481 mKB

3. Date and Hour Spudded: February 4, 2004 at 08:00

4. Date Drilling Completed: February 9, 2004

5. Date of Rig Release: February 11, 2004

6. Well status: Cased and Suspended

7. Hole Sizes and Depths:

Conductor Hole:	610 mm to 12.2 m
Surface Hole:	311 mm to 431 mKB
Main Hole:	200 mm to 1481 mKB

8. Casing and Cementing Record:

   Conductor Hole:

Casing Size:	406 mm
Wall Thickness:	7 mm
Depth Set:	12.2 m
Cut Height:	At Surface
Date Set:	January 24, 2004
Cement Volume:	40 sacks
Cement Type:	Portland Normal

   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:	33
Depth Set:	431 mKB
Cut Height:	At surface
Date Set:	February 5, 2004
Cement Volume:	32 Tonnes

Float Shoe Depth:	431 mKB
Float Collar Depth:	426 mKB
Cement Type:	Class 'G'
Additives:	2% $CaCl_2$
Cement Top:	Surface
Casing Bowl Size:	279 mm x 21 MPa
Casing Bowl Make:	ABB Vetco

Main Hole:

Casing Size:	139 mm
Casing Weight:	20.83 kg/m
Casing Grade:	J-55
Casing Make:	Ipsco
Number of Joints:	112
Thread:	ST&C
Depth Set:	1481 m KB
Cut Height:	Surface
Date Set:	February 10, 2004
Float Shoe Depth:	1481 mKB
Float Collar Depth:	1475 mKB
Cement Volume 1:	27.0 Tonnes
Cement Type 1:	Thixlite
Additives 1:	1% SMS
Cement Volume 2:	4.0 Tonnes
Cement Type 2:	Expando LWL
Additives 2:	0.1% CFL-3 & 0.2% LTR & 0.2% SPC-II
Cement Top:	Surface

9. Sidetracked Hole: N/A

10. Drilling Fluid:

Conductor Hole: Water
Properties: N/A

Surface Hole:	Gel - Chemical	
Properties:	Viscosity:	28 - 72 sec/L
	Weight:	1000 - 1140 kg/m^3
	PH:	8.5 – 11.0

Main (431 – 1300 m):	Floc water	
Properties:	Viscosity:	29 sec/L
	Weight:	1010 kg/m^3
PH:	8.5 - 9.5	

Main (1300 m – TD):	Gel-chem	
Properties:	Viscosity:	41 - 84 sec/L
	Weight:	1050 - 1130 kg/m^3
	PH:	9.0 – 10.5
	Water loss:	9.0 – 10.0 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:	441 m
Fluid Density:	1000 kg/m^3
Applied Pressure:	8600 kPa
Hydrostatic Pressure:	4228 kPa
Mud Weight Equivalent:	3033 kg/m^3
Casing setting depth:	431 mKB

The surface casing leak-off test was taken to a gradient of 29.8 kPa/m before leak off was detected.

14. Time Distribution

Date	Hours	Activity
04/01/26	4.0	Move in / rig up
	4.0	Wait on daylight
04/01/27	4.0	Wait on daylight
	8.0	Move in / rig up
	12.0	Wait on derrick repair
04/01/28	24.0	Wait on derrick repair
04/01/29	24.0	Wait on derrick repair
04/01/30	24.0	Wait on derrick repair
04/01/31	24.0	Wait on derrick repair
04/02/01	24.0	Wait on derrick repair
04/02/02	24.0	Wait on derrick repair
04/02/03	8.0	Wait on daylight
	16.0	Move in / rig up
04/02/04	0.25	Safety meeting
	0.25	Rig service
	7.5	Nipple up diverter
	0.25	Test diverter
	9.25	Drill
	4.5	Ream
	1.0	Circulate and condition mud
	1.0	Survey
04/02/05	0.25	Safety meeting
	0.75	Rig service
	0.25	Rig repair
	8.75	Drill
	2.0	Survey
	1.25	Circulate and condition mud
	7.75	Trip
	3.0	Run casing
04/02/06	0.5	Safety meeting
	1.25	Run casing
	1.25	Cement casing
	4.0	Wait on cement
	2.0	Weld bowl
	3.25	Nipple up BOP's

	4.0	Pressure test BOP's
	2.25	Trip
	1.5	Drill out casing shoe
	0.75	Drill
	0.75	Leak off test
	2.5	Circulate and condition mud
04/02/07	0.75	Rig service
	1.25	Survey
	21.75	Drill
	0.25	BOP drill
04/02/08	0.25	Safety meeting
	0.75	Rig service
	0.5	Rig repair
	2.0	Survey
	19.5	Drill
	0.25	Work tight hole
	0.75	Clean screens
04/02/09	0.5	Rig service
	0.25	Survey
	3.5	Drill
	1.5	Circulate and condition mud
	1.75	Clean screens
	9.0	Trip
	7.5	Logging
04/02/10	0.5	Safety meeting
	0.5	Rig service
	0.25	Clean screens
	9.5	Circulate and condition mud
	5.0	Run casing
	1.25	Cement casing
	2.0	Trip
	5.0	Lay down drill string
04/02/11	0.25	Cement casing
	1.0	Set slips
	6.75	Tear out rig

Time Break Down by Activity:

Activity	Hours
Move in / rig up:	20.0
Wait on daylight:	16.0
Wait on derrick repair:	164.0
Drilling:	63.5
Surveying:	6.5
Circulate and condition mud:	15.75
Running casing:	9.25
Cementing casing:	2.75
Wait on cement	4.0
Drill out casing shoe:	1.5
Rig service:	3.5
Rig repair:	0.75
Tripping:	21.0
Safety meetings:	1.75
Nipple up diverter:	7.5
Test diverter:	0.25
Ream:	4.5
Clean screens:	2.75
Weld casing bowl:	2.0
Nipple up BOP's:	3.25
Pressure test BOP's:	4.0
BOP drill:	0.25
Leak off tests:	0.75
Logging:	7.5
Lay down drill string:	5.0
Set slips:	1.0
Tear out rig:	6.75

15. Deviation Survey: See page 7 of the Geological Report in the Attachment Section

16. Abandonment Plugs: N/A

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

18. Completion Record: Reported in a separate report.

D: GEOLOGY

GEOLOGICAL SUMMARY

Tops: See page 10 of the Geological Report in the Attachment Section.

Sample Descriptions: See page 11 - 15 of the Geological Report in the Attachment Section.

Total Depth: 1481 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 Appendix Section.

DRILL STEM TESTS: N/A

WELL EVALUATION

The following logs were run:

Simultaneous Triple Induction Shallow Focused Log:	431 – 1477 mKB
Spectral Density Compensated Neutron Log:	431 – 1470 mKB
Borehole Compensated Sonic Log:	431 – 1478 mKB
Micro Resistivity Log:	1350 – 1460 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 the next lease for re-use. The solids were hauled to a remote site at E-78 60^0 10' N, 117^0 15' W where they were disposed of using the mix/bury/cover technique.

RUNNING HORSE RESOURCES INC.

CALGARY ALBERTA CANADA
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wellsitegeologists@telusplanet.net
www.wellsitegeologists.com

Geological Report

on

Para et al Cameron F-19
Unit F Section 19

Well Reached Total Depth of 1481.0 metres
on
Feb 09, 2004 @ 05:35 hours

for

Paramount resources ltd.

Prepared for: Mr. Llew Williams, Manager
Paramount Resources Ltd.

Wellsite Geologist: Brad Powell, B.Sc.
Running Horse Resources Inc.

Approved by: D. Winchester

Dennis Winchester, P.Geol.
Running Horse Resources Inc.

PROFESSIONAL GEOLOGIST OF ALBERTA
DENNIS WINCHESTER

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Executive Summary

Para et al Cameron F-19 is a vertical development well spudded by Precision Drilling Rig #247 on February 4, 2004 @ 08:00. Surface hole is 311mm drilled to 431.0m with 219.1mm casing landed at 431.0m. The 200mm main hole terminated in the **Muskeg** formation at 1481.0m February 9, 2004 @ 05:35.

This well was drilled primarily to produce oil from the **Sulphur Point Dolomite** and secondarily to evaluate the **Slave Point** for possible gas. Cutting samples were taken from 530-570m and 1340m to TD at 1481.0m. Triple Induction, SP, Neutron Density, Compensated Sonic, Gamma Ray and XY Caliper logs were run from TD to surface casing. Microlog was run from TD to 1350m.

The **Sulphur Point Dolomite** is a microcrystalline to finely crystalline packstone to grainstone. The dolomite occurred on logs at 1439.0m. It was 15.8m thick, conformably and sharply underlain by anhydrite of the Muskeg formation. Observation of samples saw common subhedral and euhedral crystal growth. Grain size was cryptocrystalline to medium crystalline with streaks of fair to good vug porosity and fair intercrystalline in part sucrosic porosity. The samples appeared quite granular in texture. The most promising interval from 1448-1458m shows 10-20% porosity on density logs. Excellent ROP rates also indicate good porosity, and Microlog indicates permeability. The samples were light brown to brown and saw common dark brown oil staining. They showed deep yellow fluorescence and a slow streaming watery to milky yellowish white cut, and a strong petroliferous odor. Induction log analysis showed 15-20ohms on the deep induction in the porous intervals. Gas detector readings in this 1448-1458m interval peaked at 841 units over a baseline of 290 units. A gas zone in the above Sulphur Point limestone formation should act favourably by providing pressure for production. **The Sulphur Point Dolomite appears to have good potential for oil production.**

The **Slave Point** was picked in samples at 1379m, which was confirmed on logs. It is a massive, clean limestone mudstone to wackestone, 41.0m thick, resting conformably on the dolomitic F4 marker. The Slave Point is cream to brown, in part mottled, cryptocrystalline to microcrystalline, with trace very fine crystalline. It appears in part chalky, argillaceous in part, and flaky to blocky, with scattered pyrite nodules and locally disseminated pyrite crystals. The lower section has minor anhydrite stringers. It was dense with traces of poor intercrystalline porosity, and inferred minor earthy porosity. This was confirmed by density logs and over the slightly porous upper interval of 1385-1400m, it showed 3-5% porosity. The samples had a slight petroliferous odor, and common yellow fluorescence, with a questionable watery greenish cut. Deep induction logs show over 50-200ohms. Gas detector readings peak at 640units over a baseline of 250units over the 1385-1400m interval. **The Slave Point does not appear to have production potential at this location.**

Para et al Cameron F-19 was cased for production as an oil well from the Sulphur Point Dolomite.

Well Data Summary

OPERATOR	Paramount Resources Ltd.
WELL NAME	Para et al Cameron F-19
LOCATION	Unit F Section 19
	Grid Area: Lat 60° 10' N Long 117° 30' W
UWI	300F196010117300
POOL	Undefined
FIELD	Cameron Hills
PROVINCE	Northwest Territories
LICENCE NUMBER	2000
CLASSIFICATION	Production
A.F.E. NUMBER	03N410022
SURFACE COORDINATES	Latitude: 60° 08' 18.499" North
	Longitude: 117° 33' 15.533" West
ELEVATIONS	KB: 788.34m
	GL: 783.74m
TOTAL DEPTH	Driller: 1481.0m (-692.66m SubSea)
	Logger: 1479.3m (-690.96m SubSea)
DRILLING CONTRACTOR	Precision Drilling Rig #247
ENGINEER	Meril Schrader 780-446-3768
GEOLOGIST	Brad Powell, B.Sc. 403-861-0838
SPUD DATE	February 4, 2004 @ 08:00
COMPLETED DRILLING	February 9, 2004 @ 05:35
RIG RELEASE	February 10, 2004 @ 23:59

Well Data Summary

HOLE SIZE Surface hole: 311mm
Main hole: 200mm

CASING Surface: 219.1mm, 35.70 kg/m set @ 431.0m
Production: 139.7mm, 20.83 kg/m set @ 1481.0m

LOGGING STI / MRT/ SpeD / CNS / GR / XY CAL / BCS from TD to surface casing. Microlog from TD to top of Slave Point.

DSTs none

CORES none

SAMPLES

Operator:	1 set vials (@ 5m) over interval:	1340m - TD
NEB:	2 sets vials (@ 5m) over interval:	1340m - TD
	1 set bags (@ 5m) over interval:	1340m - TD

MUD RECORD

0-431m	Gelchem
431-1300m	Floc Water
1300-TD	Gelchem

DIRECTIONS From High Level, Alberta, go north on Highway 35. 1.3km south of Indian Cabins, turn west onto main road and go 33km, staying right at all Y forks. Turn right up big hill, drive 22km, following rig signs.

PROBLEMS

On Surface Hole: None.

On Main Hole: Minor anhydrite contamination in mud from Muskeg formation.

Logging Summary

Date: February 9, 2004

Logging Company: Precision Wireline Engineer: Scott Treadwell

Mud Properties: WT: 1130 kg/m3 Visc: 80 s/L WL: 10.0 pH: 9.0

Hole Size: 200mm

Surface Casing: 219.1mm, 35.7kg/m, set @ 431.0m

Depths: Driller: 1481.0m Strap: 1484.41m Logger: 1479.3m

Logging Times: First Alerted: 08:30 February 8, 2004

Time Required: 13:30 February 9, 2004 (7.0hr final notice)

Arrived: 14:15 February 9, 2004

Rig Up: 15:00 February 9, 2004
Rig Out: 22:00 February 9, 2004 (7.0hr rig time)

Hole Condition: Good

Circulations: 1.0hr after TD then 1.0hr after wiper trip

Wiper Trips: TD to 431.0m (surface casing)

LOGGING SEQUENCE

Run #1: STI / MRT/ SpeD / CNS / Pe / GR / XY CAL

Interval: TD to surface casing (with MRT from TD to top of Slave Point)

Run #2: BCS / XY CAL / GR

Interval: TD to surface casing

REMARKS: No problems getting logging tools to bottom for Run #1. On bottom with Run #1 @ 16:30 February 9, 2004. Run #2 no problems.

Bit Record & Casing Summary

Bit Record

Bit #	Make	Type	Size	In (m)	Out (m)	Meters (m)	Hours	ROP (m/hr)	CONDITION
1A		FGX1C	311mm	0	255	255	11.00	23.18	7 - 6 – WT – 1mm - PR
2A		GFX1C	311mm	255	431	176	7.00	25.14	4 – 4 - IN
1	Varel	MKS-55	200mm	431	1481	1050	45.50	23.08	2 – 2 – WC – 1mm - TD

Casing / Cement Summary

Type	Casing Size	Hole Size	Landed	Total Joints	Remarks
Surface	219.1mm	311mm	431.0m	33	33 joints of 219.1mm 35.72kg/m, J-55, ST&C new Ipsco casing ran. Cemented with Sanjel 32t of 0:1:0 Class G + 2% CaCl2 with density 1901 kg/m3.. Approximately 3.0m3 of good returns, float OK, plug down @ 04:47 February 6, 2004.
Production	139.7mm	200mm	1481m	112	112 joints of 139.7mm 20.83kg/m, J-55, 8RD ST&C new Camanch casing ran. Cemented with Sanjel with 27.5t Thixlite with 1% SMS for lead. Tail cement 4.5t Expandomix LWL with 0.1% CFL-3 and 0.2% LTR and 0.2% SPC-11. 3m3 good returns. Plug down 01:00 on February 11, 2004.

Deviation Surveys

Depth Meters	Inclination Degrees	Azimuth Degrees	TVD Meters	North Meters	East Meters	Section Meters	Dogleg /30m	Build Rate /30m	Turn Rate /30m
THIS WELL IS A VERTICAL WELL									
30	0.25								
57	0.25								
95	0.25								
131	0.25								
168	0.25								
207	0.50								
245	0.75								
284	0.25								
320	0.75								
368	1.00								
425	1.50								
487	0.50								
593	0.25								
696	0.25								
802	0.25								
908	0.50								
1014	0.50								
1120	0.75								
1227	0.50								
1332	0.75								
1468	0.25								

Daily Drilling Summary

Date	Depth	Progress	Operations
			*** note that operations are as reported from 00:00 to 23:59 on the date shown**
Feb 3	0	0	Crews and rig arrived. Rig up.
Feb 4	191	191	Rig up. Nipple up diverter, function test. Test accumulator and related BOP equipment. Pre-spud inspection. Spud well February 4, 2004 @ 08:00. Drill 311mm surface hole with Bit #1A with surveys and required rig service to 191m. Minor back reaming.
Feb 5	240	431	Drill 311mm surface hole with required surveys and rig service from 191m to 419m. Circulate, POOH for bit trip. Wiper trip, circulate. RIH with Bit #2A. Drill to surface casing point at 431m. Condition mud and circulate hole clean. POOH to run casing. Rig for and run 33 joints 219.1mm surface casing.
Feb 6	470	39	Continue running surface casing. Cement with Sanjel. WOC. Weld on bowl, nipple up BOPs. Pressure test related equipment. Make up BHA with Bit #1 and RIH. Drill out float and shoe to 441m @ 22:30. Leak off test, rig service and safety meeting. Drill ahead 200mm main hole with required rig service and surveys from 441m to 470m.
Feb 7	962	492	Drill ahead 200mm main hole with required rig service and surveys from 470m to 962m.
Feb 8	1451	589	Drill ahead 200mm main hole with required rig service and surveys from 962m to 1451m.

Daily Drilling Summary

Feb 9	1481	30	Drill ahead 200mm main hole with required rig service and surveys from 1451m to 1481m. Total Depth February 9, 2004 @ 05:35. Circulate up sample, then 1 hour. POOH for wiper trip to casing, RIH. Circulate 1hour. Chain out with strap to log. Rig up Precision Wireline. Log Run #1. Rig out tools, rig for Log Run #2. Log Run # 2. Rig out loggers. RIH.
Feb 10	1481	0	RIH to condition hole for casing. Circulate. POOH sideways. Run 112 joints 139.7mm production casing. Circulate casing. Rig for cementers. Wait on cementers.
Feb 11	1481	0	Cement hole with Sanjel. WOC. Nipple down, strip mud, tear out for rig move. Rig release 02:00 February 11, 2004.

Formation Tops

Kelly Bushing Elevation: **788.34m**

Formation	Sample (m)	Logger (m)	Elevation (m)
Wabamun	559.8	559.8	+228.54
Fort Simpson	754.2	754.2	+ 34.14
Twin Falls	869.5	868.0	- 79.66
Slave Point *	1379.0	1379.0	- 590.66
F4 Marker	1420.0	1420.0	- 631.66
Watt Mountain	1428.3	1427.7	- 639.36
Sulphur Point LS	1430.6	1430.6	- 642.26
Sulphur Point DOL **	1439.0	1439.0	- 650.66
Muskeg	1454.8	1454.3	- 665.96
Total Depth	1481.0	1479.3	- 690.96

***Primary Zones of Interest*
** Secondary Zones of Interest*

520-540 SHALE, medium gray, mudstone, micromicaceous, dull, lumpy, soft, in part rugose texture, trace dolomitic stringers

540-550 SHALE, medium to dark gray, very dark brown to black, carbonaceous with scattered coal, platy to lumpy, in part white speckled, soft, occasional pyrite nodules

550-555.5 SHALE, essentially as above, organic, trace coal, scattered pyrite

BLUESKY ? @ 555.5m

555.5-559.8 SANDSTONE, frosted to light gray quartz sand, fine upper to m upper grained, occasional free coarse grained, moderately well sorted, angular to sub angular, siliceous and calcareous cement, in part argillaceous, friable to firm, in part loose grains, fine grained relief, fine to good intergranular porosity (12 to 15%), assumed 2 to 3% non visible porosity in argillaceous matrix, abundant glauconite, abundant pyrite, no fluorescence or cut

WABAMUN @ 559.8m

559.8-565 LIMESTONE, cream to buff, predominantly cryptocrystalline to microcrystalline, occasionally very fine crystalline, mudstone to wackestone, in part chalky, argillaceous in part, lumpy to blocky, massive, trace locally disseminated pyrite crystals, fossil ghosts?, dense with trace poor intercrystalline porosity, inferred minor earthy porosity, tight, no show

565-580 LIMESTONE, as above, chalky, slightly lighter in color

FORT SIMPSON @ 754.2m

TWIN FALLS @ 869.5m

1335-1350 SHALE 85%, 1) medium gray, gray to slightly green gray, very calcareous grading to shaly limestone, dull to micromicaceous in part, platy to blocky, sub fissile to firm, smooth to waxy texture in part, trace pyrite, 2) dark brown to black, micromicaceous in part, blocky, bituminous in part?, LIMESTONE 15%, off white to light gray, cryptocrystalline to predominantly microcrystalline, argillaceous mudstone, lumpy, local disseminated pyrite, tight, no show

MUSKWA ? @ 1348m

1350-1365 SHALE 70%, gray brown to medium brown, dark brown to occasional black, bituminous appearance in part, micromicaceous in part, blocky, firm, calcareous in part, silty in part, occasionally grading to coal, trace calcite veining, SHALE 30%, medium gray, gray to slightly green gray, very calcareous grading to shaly limestone, dull to micromicaceous in part, platy to blocky, sub fissile to firm, smooth to waxy texture in part, trace pyrite, minor LIMESTONE as above

1365-1370 SHALE 80%, medium gray, gray to slightly green gray, very calcareous grading to shaly limestone, dull to micromicaceous in part, platy to blocky, sub fissile to firm, very smooth to waxy texture in part, common pyrite clusters and cubic crystals, LIMESTONE 20%, white to light gray, cryptocrystalline to predominantly microcrystalline, argillaceous mudstone, lumpy, local disseminated pyrite, tight, no show

1370-1379 SHALE 65%, as above, LIMESTONE 35%, as above

SLAVE POINT @ 1379.0m

1379-1385 LIMESTONE 100%, cream to light brown, brown, in part mottled, cryptocrystalline to predominantly microcrystalline, mudstone to wackestone, in part chalky, argillaceous in part, flaky to blocky, scattered pyrite nodules and locally disseminated pyrite crystals, dense with trace poor intercrystalline porosity, inferred minor earthy porosity, tight, very pale yellow fill, questionable watery greenish cut

1385-1395 LIMESTONE 100%, cream to brown, more brown than as above, in part mottled, cryptocrystalline to microcrystalline, trace very fine crystalline, mudstone to wackestone, in part chalky, argillaceous in part, flaky to blocky, scattered pyrite nodules and locally disseminated pyrite crystals, dense with trace poor intercrystalline porosity, inferred minor earthy porosity, slightly petroliferous odor, common yellow fluorescence, questionable watery greenish cut

1395-1400 LIMESTONE 100%, cream to tan to brown, mottled, argillaceous mudstone to wackestone, cryptocrystalline to microcrystalline, occasional very fine crystalline, in part chalky, argillaceous in part, flaky to blocky, soft to firm, scattered pyrite, trace sparry calcite infill, trace poor porosity, slightly petroliferous odor, common yellow fill, weak slow greenish cut

1400-1415 LIMESTONE 100%, cream to tan to light gray tan, scattered brown, mottled, argillaceous mudstone to wackestone, cryptocrystalline to very fine crystalline, flaky to lumpy, chalky texture in part, tight, spot pale yellow to yellow fluorescence, weak watery green cut, minor ANHYDRITE

1415-1420 LIMESTONE 100%, cream to light gray brown to brown, mottled, argillaceous mudstone to wackestone, cryptocrystalline to very fine crystalline, flaky to lumpy to blocky, in part chalky, spot pale yellow to yellow fluorescence, weak greenish slow cut, minor ANHYDRITE, light gray, translucent to pearly lustre, microcrystalline

F4 MARKER @ 1420.0m

1420-1425 LIMESTONE 50%, as above, yellow fluorescence, no cut, DOLOMITE 50%, cream to light brown, microcrystalline, sandy texture, slightly anhydritic, scattered poor pinpoint porosity, no shows, minor ANHYDRITE, off white to light brown

1425-1428.3 LIMESTONE 80%, cream to brown, mottled, mudstone to wackestone, microcrystalline to very fine crystalline, soft, anhydritic, flaky to lumpy, tight, pale yellow fluorescence, no cut, ANHYDRITE 20%, white, pearly to watery appearance, amorphous, soft

WATT MOUNTAIN @ 1428.3m

1428.3-1430 SHALE 20%, light gray green to mint green, argillaceous, waxy, lumpy, soft, scattered disseminated pyrite, in part calcareous, LIMESTONE 80%

SULPHUR POINT LIMESTONE @ 1430.6m

1430-1439 LIMESTONE 100%, predominantly white to tan, light brown to dark brown, gray, cryptocrystalline to medium crystalline, mudstone to wackestone, brown rock fragments in white argillaceous lime matrix, dolomitic in part, mottled, chalky, in part resinous, lumpy to blocky, scattered local pyrite crystals, tight with streaks of poor pinpoint porosity, assumed minor earthy porosity, very spot yellow fill, no show

SULPHUR POINT DOLOMITE @ 1439m

1439-1445 DOLOMITE 100%, light brown to brown, patchy dark brown oil stain, microcrystalline to fine crystalline packstone to grainstone, streaks of fair pinpoint/vug porosity, poor to fair intercrystalline porosity, scattered sparry calcite, in part sandy appearance, strong petroliferous odor, common yellow fluorescence, slow streaming milky yellow white cut

1445-1450 DOLOMITE 100%, essentially as above, becoming coarser, becoming darker brown, clear euhedral and subhedral dolomite crystalline, local micro sucrosic texture, even bright yellow fluorescence, slow streaming milky yellow white cut

1450-1454.8 DOLOMITE 100%, light brown to brown, dark brown oil stain, microcrystalline to fine crystalline packstone to grainstone, fair to good vug porosity, fair to good intercrystalline porosity, sucrosic, clear euhedral and subhedral dolomite crystalline growth along cutting edges suggests vug and/or fracture porosity, scattered sparry calcite, in part sandy appearance, strong petroliferous odor, slight oily sheen in sample, common deep yellow to yellow fluorescence, slow streaming milky to watery yellow white cut

MUSKEG @ 1454.8m

1454.8-1470 ANHYDRITE 60%, white amorphous nodules, off white to tan, occasional light gray brown, pearly to watery lustre, cryptocrystalline, slightly dolomitic in part, dense, tight, DOLOMITE 40%, buff to light brown, trace spot dark brown oil stain, microcrystalline to very fine crystalline in part argillaceous grainstone, occasionally sucrosic, anhydritic in part, streaky poor intercrystalline porosity, pale yellow to yellow fluorescence, no show

1470-1481 ANHYDRITE 80%, white amorphous nodules, off white to tan, occasional light gray brown, pearly to watery lustre, cryptocrystalline, slightly dolomitic in part, dense, tight, DOLOMITE 20%, buff to light brown, trace spot dark brown oil stain, microcrystalline to very fine crystalline in part argillaceous grainstone, occasionally sucrosic euhedral crystalline growth, anhydritic in part, streaky poor intercrystalline porosity, occasional poor vug porosity, pale yellow fluorescence, no show

TOTAL DEPTH @ 1481m MD

1370m, Beaverhill Lake, cubic pyrite crystals, 26X

1390m, Slave Point, 20X

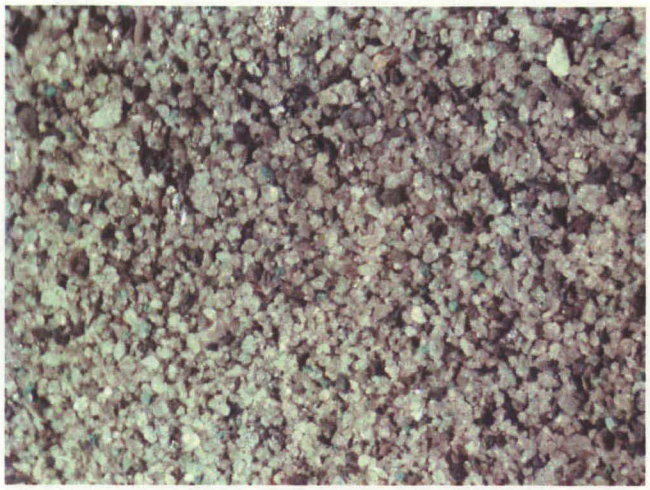
1435m, Watt Mountain, 20X

1455m, Sulphur Point DOL, 60X

1455m, Sulphur Point Dolomite, 20X

1360m, Muskwa, 20X

525m, Shale mudstone, 20X



560m, Bluesky, 20X

560m, Bluesky, 60X

580m, Wabamun, 20X

1345m, Twin Falls, 20X

1360m, Muskwa, 20X

Paramount resources ltd.

Scale 1:240 (5"=100') Metric

Well Name:	Para et al Cameron F-19
Location:	Unit F Section 19 Grid Area: Lat 60° 10' N Long 117° 30' W
Licence Number:	2000 Region: Cameron Hills, NWT
Spud Date:	Feb 4, 2004 @ 08:00 Drilling Completed: Feb 9, 2004 @ 05:35
Surface Coordinates:	Latitude: 60° 08' 18.499" North
	Longitude: 117° 33' 15.533" West
Bottom Hole Coordinates	as surface
Ground Elevation (m):	783.74m K.B. Elevation (m): 788.34m
Logged Interval (m):	1340m To: 1481m Total Depth (m): 1481m
Formation:	Primary = Sulphur Point DOL Secondary = Slave Point
Type of Drilling Fluid:	Gel Chemical

OPERATOR

Company: Paramount Resources Ltd.
Address: 4700 Bankers Hall West
888 3rd Street S.W.
Calgary, Alberta T2P 5C5

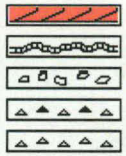
GEOLOGIST

Name: Brad Powell, B.Sc.
Company: Running Horse Resources
Address: 66A New Streeet S.E.
Calgary, Alberta T2G 3X9
(403) 660-9883

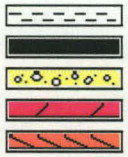
Comments

This well was drilled by Precision Drilling Rig #247.
Paramount AFE #03N410022
A Wellsite Gas Detection gas detector was run.
Logging Program: Precision Wireline
Run #1: STI-SP-MRT-SPED-CNT-GR-CAL
Run #2: BHS-GR-CAL

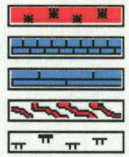
ROCK TYPES



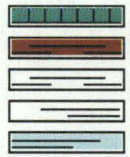
Anhy
Bent
Brec
Chtlt&dk
Cht



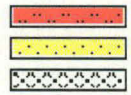
Clyst
Coal
Congl
Dol
Gyp



Igne
Lime mud
Lmst
Meta
Mrlst



Salt
Shorg
Shale
Shcol
Shgy



Sltst
Ss
Till

ACCESSORIES

MINERAL

- Anhy
- Arg
- Bent
- Bit
- Brecfrag
- Calc
- Carb
- Chtdk
- Chtlt
- Dol
- Feldspar
- Ferrpel
- Ferr
- Gyp
- Hvymin
- Kaol
- Marl
- Minxl
- Nodule
- Phos
- Pyr
- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff
- Quartz
- Mmica
- Micromica
- Glau

FOSSIL

- Algae
- Amph
- Belm
- Bioclst
- Brach
- Bryozoa
- Cephal
- Coral
- Crin
- Echin
- Fish
- Foram
- Fossil
- Gastro
- Oolite
- Ostra
- Pelec
- Pellet
- Pisolite
- Plant
- Strom

STRINGER

- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Sltstrg
- Ssstrg

TEXTURE

- Boundst
- Chalky
- Cryxln
- Earthy
- Finexln
- Grainst
- Lithogr
- Microxln
- Mudst
- Packst
- Wackest

OTHER SYMBOLS

POROSITY

- Earthy
- Fenest
- Fracture
- Inter
- Moldic
- Organic
- Pinpoint
- Vuggy

SORTING

- Well
- Moderate
- Poor

ROUNDING

- Rounded
- Subrnd
- Subang
- Angular

OIL SHOW

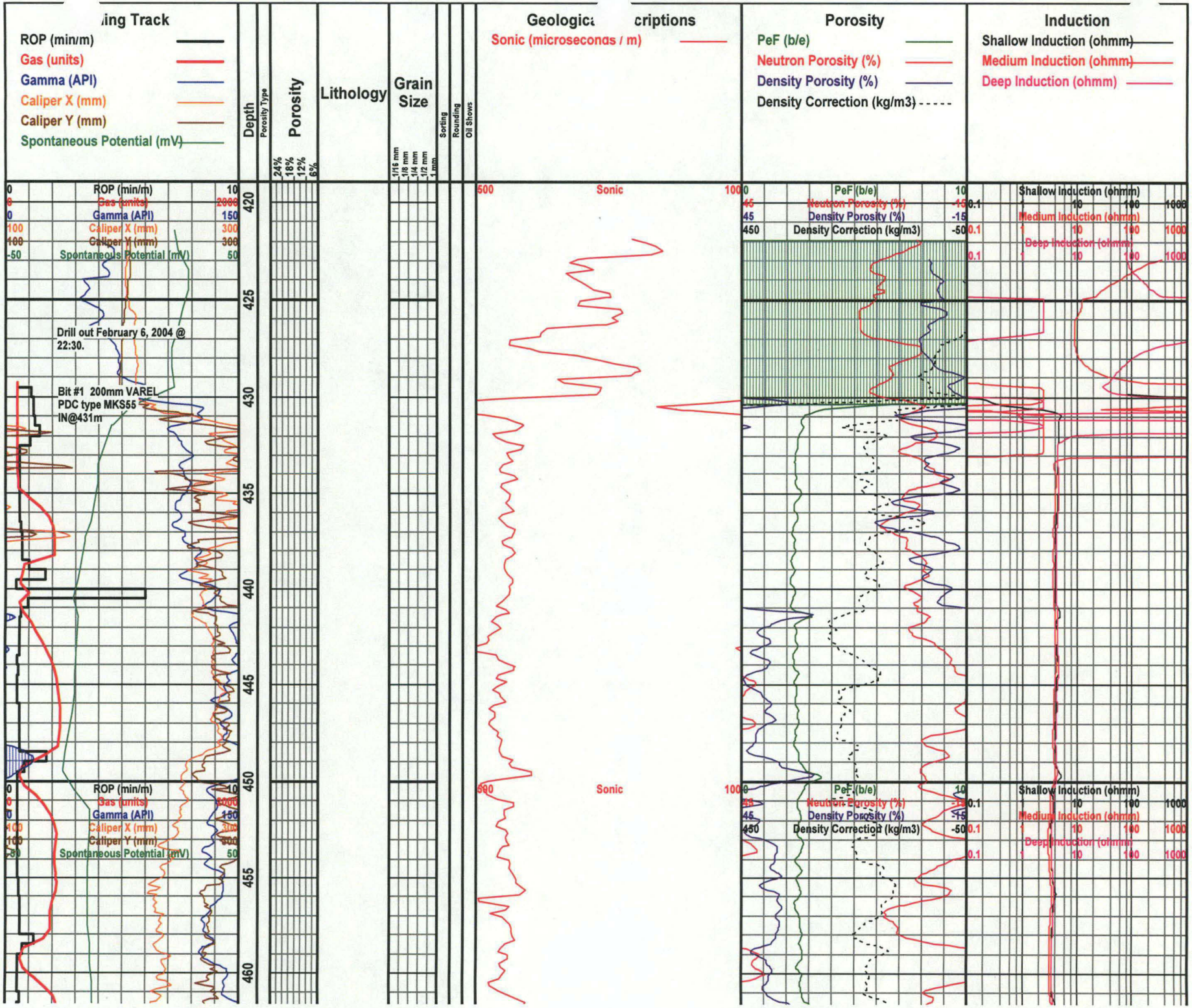
- Even
- Spotted
- Ques
- Dead

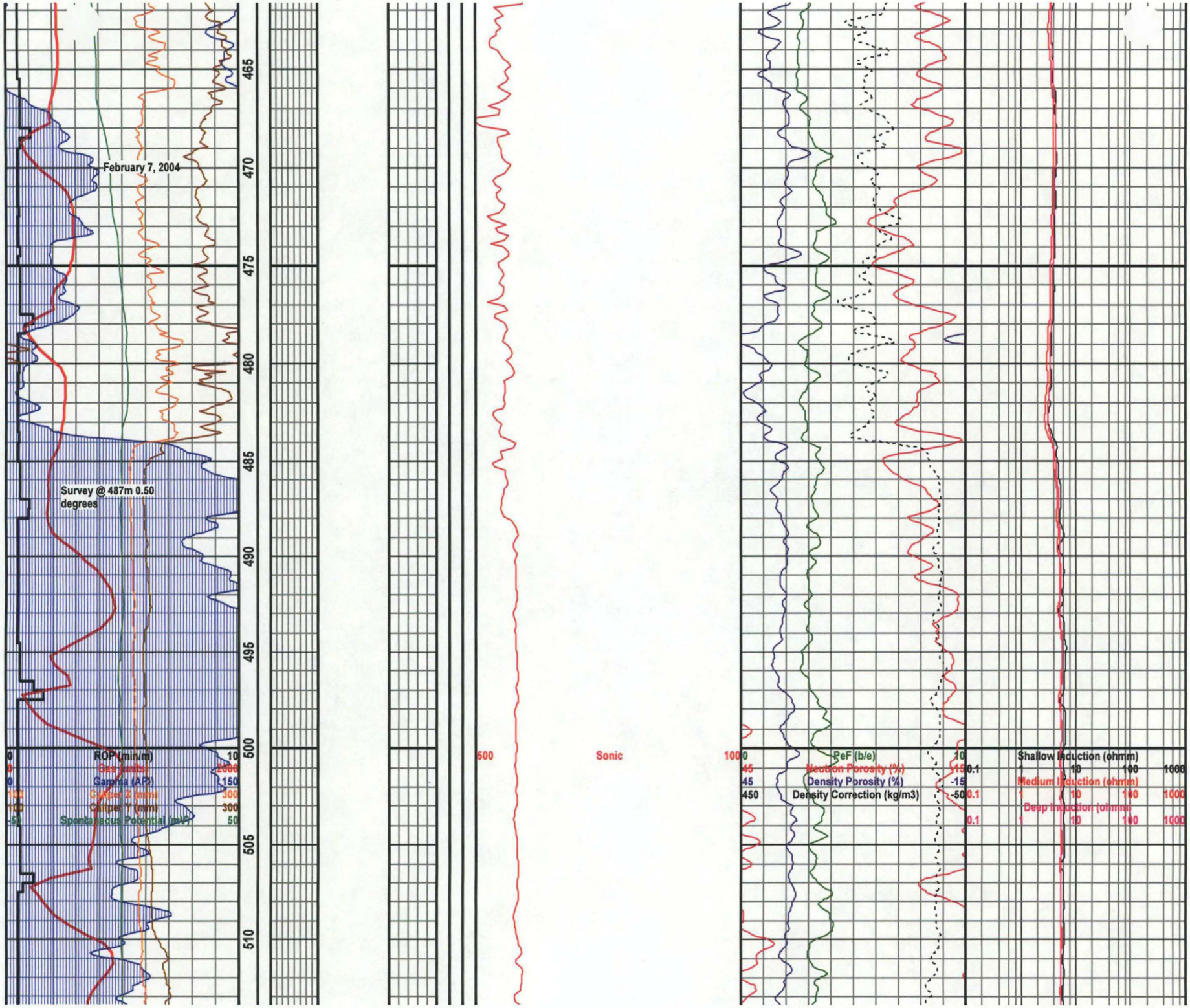
INTERVAL

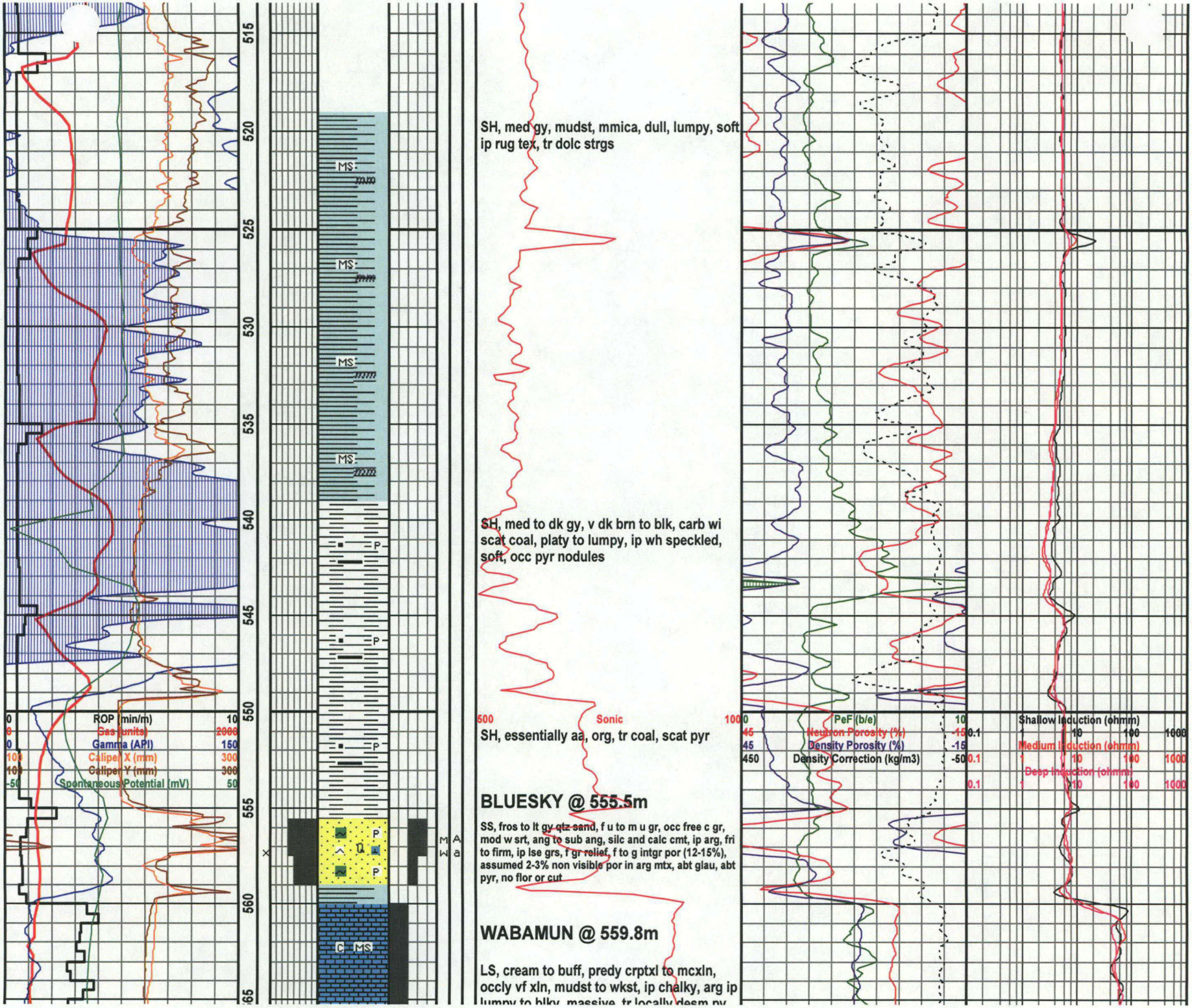
- Core
- Dst

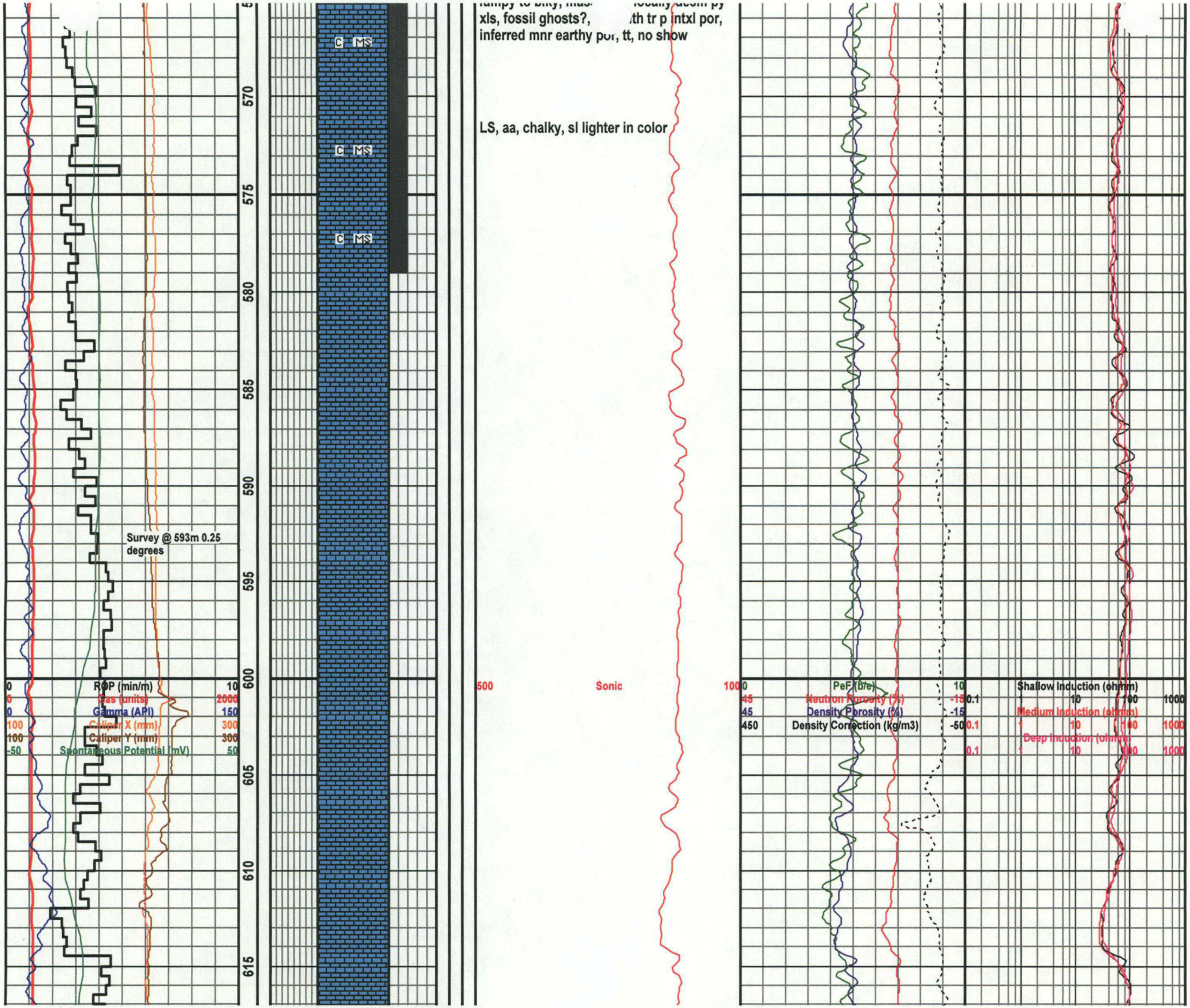
EVENT

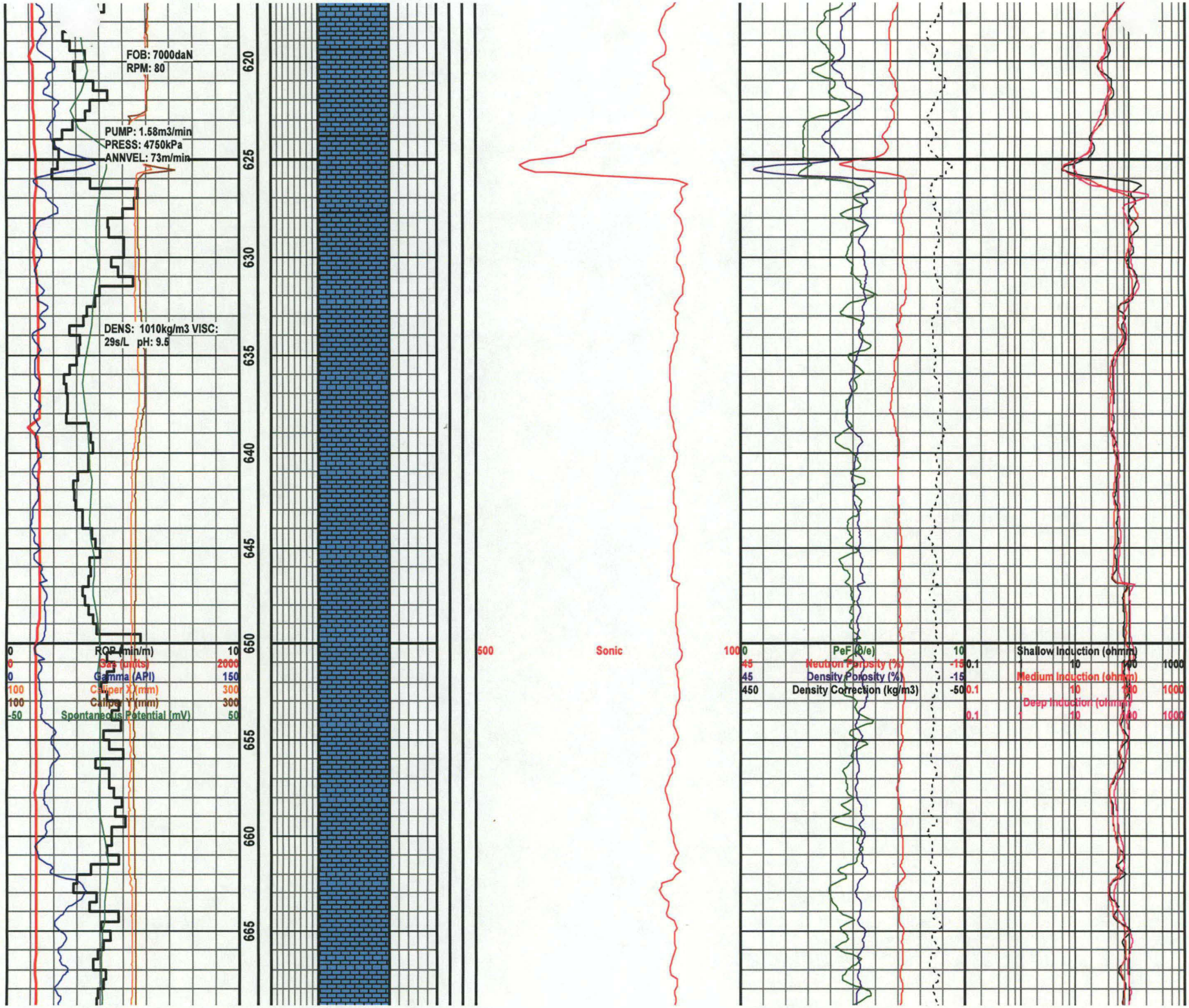
- Rft
- Sidewall

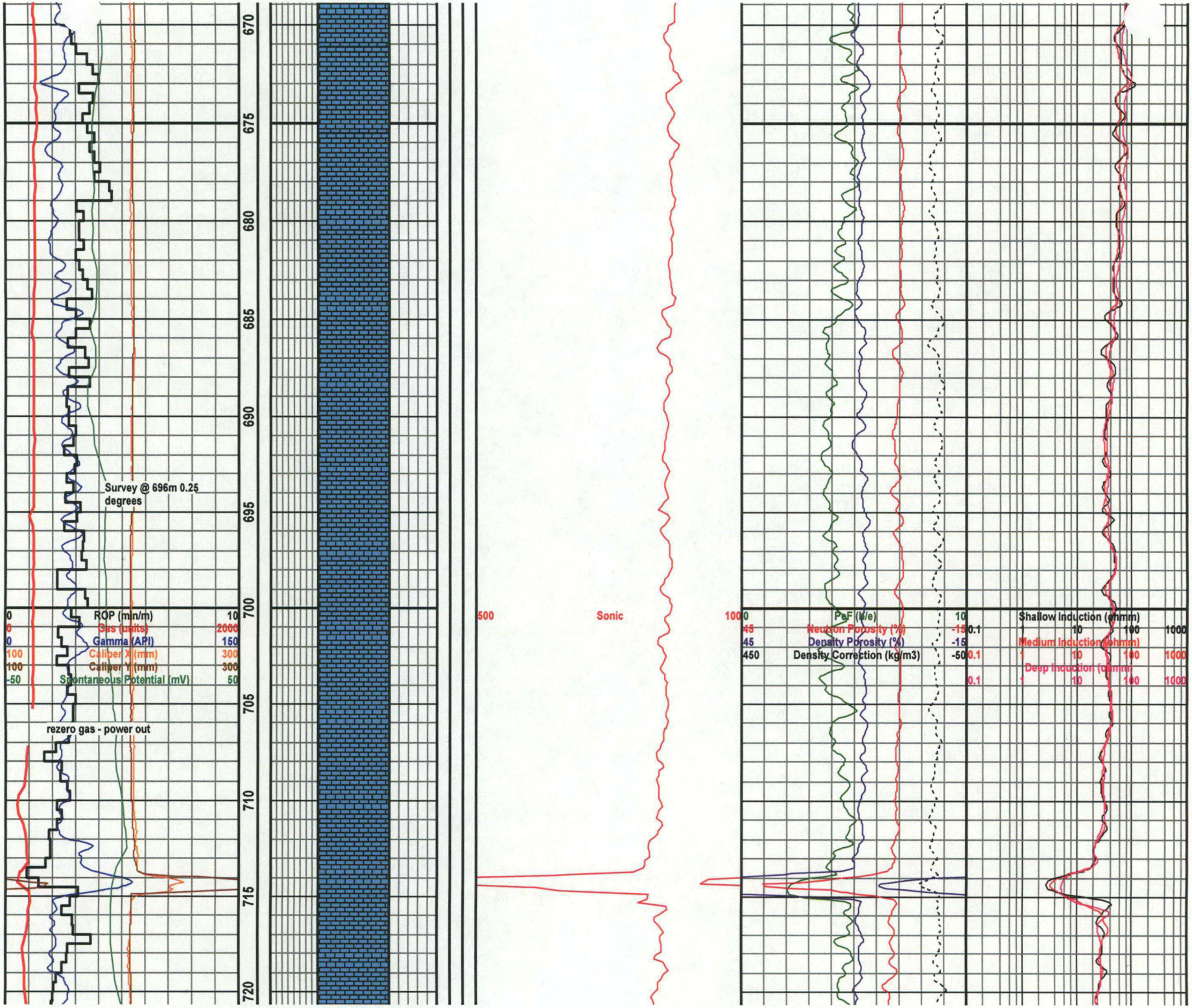

ing Track
ROP (min/m)
Gas (units)
Gamma (API)
Caliper X (mm)
Caliper Y (mm)
Spontaneous Potential (mV)
Depth
Porosity Type
Porosity
24%
18%
12%
6%
Lithology
Grain Size
1/16 mm
1/8 mm
1/4 mm
1/2 mm
1 mm
Sorting
Rounding
Oil Shows
Geologic criptions
Sonic (microseconds / m)
Porosity
PeF (b/e)
Neutron Porosity (%)
Density Porosity (%)
Density Correction (kg/m3)
Induction
Shallow Induction (ohmm)
Medium Induction (ohmm)
Deep Induction (ohmm)
0 ROP (min/m) 10
0 Gas (units) 2000
0 Gamma (API) 150
100 Caliper X (mm) 300
100 Caliper Y (mm) 300
-50 Spontaneous Potential (mV) 50
Drill out February 6, 2004 @ 22:30.
Bit #1 200mm VAREL PDC type MKS55 IN@431m
500 Sonic 1000
0 PeF (b/e) 10
45 Neutron Porosity (%) -15
45 Density Porosity (%) -15
450 Density Correction (kg/m3) -50
0.1 Shallow Induction (ohmm) 1000
0.1 Medium Induction (ohmm) 1000
0.1 Deep Induction (ohmm) 1000
420
425
430
435
440
445
450
455
460

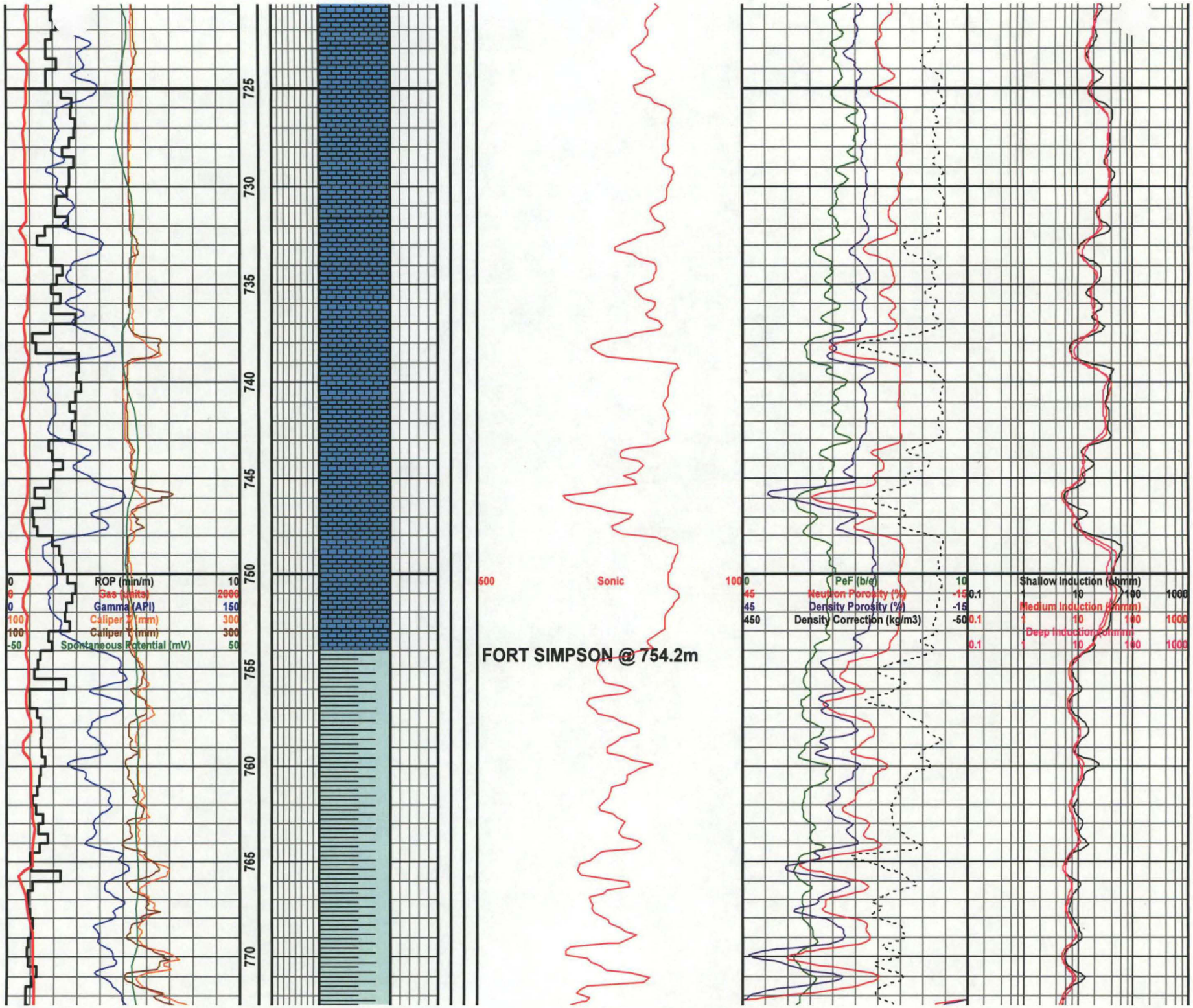

February 7, 2004
Survey @ 487m 0.50 degrees
ROP (min/m)
Gamma (API)
Caliper X (mm)
Caliper Y (mm)
Spontaneous Potential (mV)
Sonic
ReF (b/e)
Neutron Porosity (%)
Density Porosity (%)
Density Correction (kg/m3)
Shallow Induction (ohmm)
Medium Induction (ohmm)
Deep Induction (ohmm)

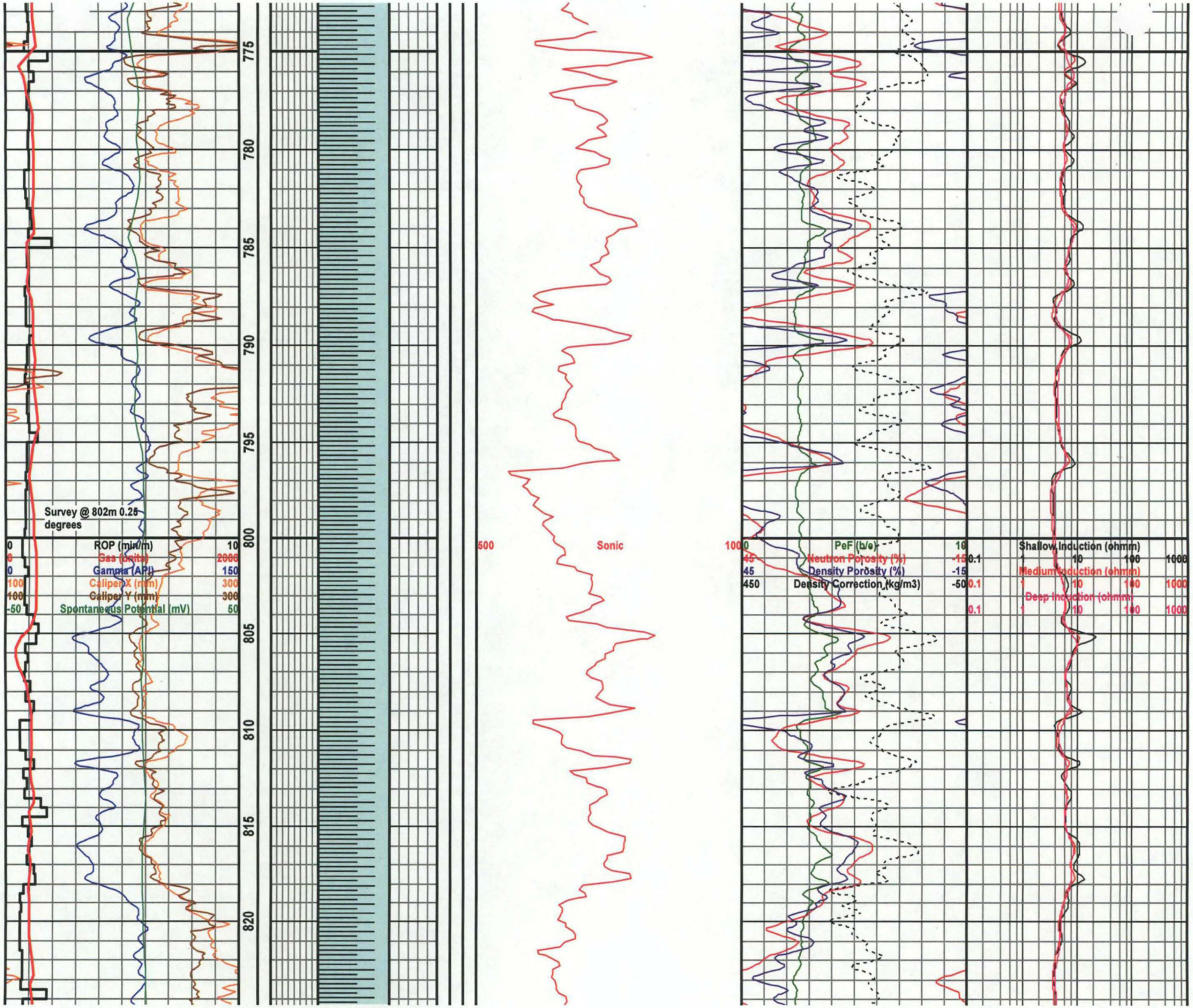

ROP (min/m) 0 10
Gas (units) 0 2000
Gamma (API) 0 150
Caliper X (mm) 100 300
Caliper Y (mm) 100 300
Spontaneous Potential (mV) -50 50
515
520
525
530
535
540
545
550
555
560
565
MS
P
C
MA
Wa
SH, med gy, mudst, mmica, dull, lumpy, soft ip rug tex, tr dolc strgs
SH, med to dk gy, v dk brn to blk, carb wi scat coal, platy to lumpy, ip wh speckled, soft, occ pyr nodules
500 Sonic 100
SH, essentially aa, org, tr coal, scat pyr
BLUESKY @ 555.5m
SS, fros to lt gy qtz sand, f u to m u gr, occ free c gr, mod w srt, ang to sub ang, silc and calc cmt, ip arg, fri to firm, ip lse grs, f gr relief, f to g intgr por (12-15%), assumed 2-3% non visible por in arg mtx, abt glau, abt pyr, no flor or cut
WABAMUN @ 559.8m
LS, cream to buff, predy crptxl to mcxln, occly vf xln, mudst to wkst, ip chalky, arg ip
0 PeF (b/e) 10
45 Neutron Porosity (%) -15
45 Density Porosity (%) -15
450 Density Correction (kg/m3) -500.1
0.1 Shallow Induction (ohmm) 1000
Medium Induction (ohmm)
Deep Induction (ohmm)
1 10 100 1000

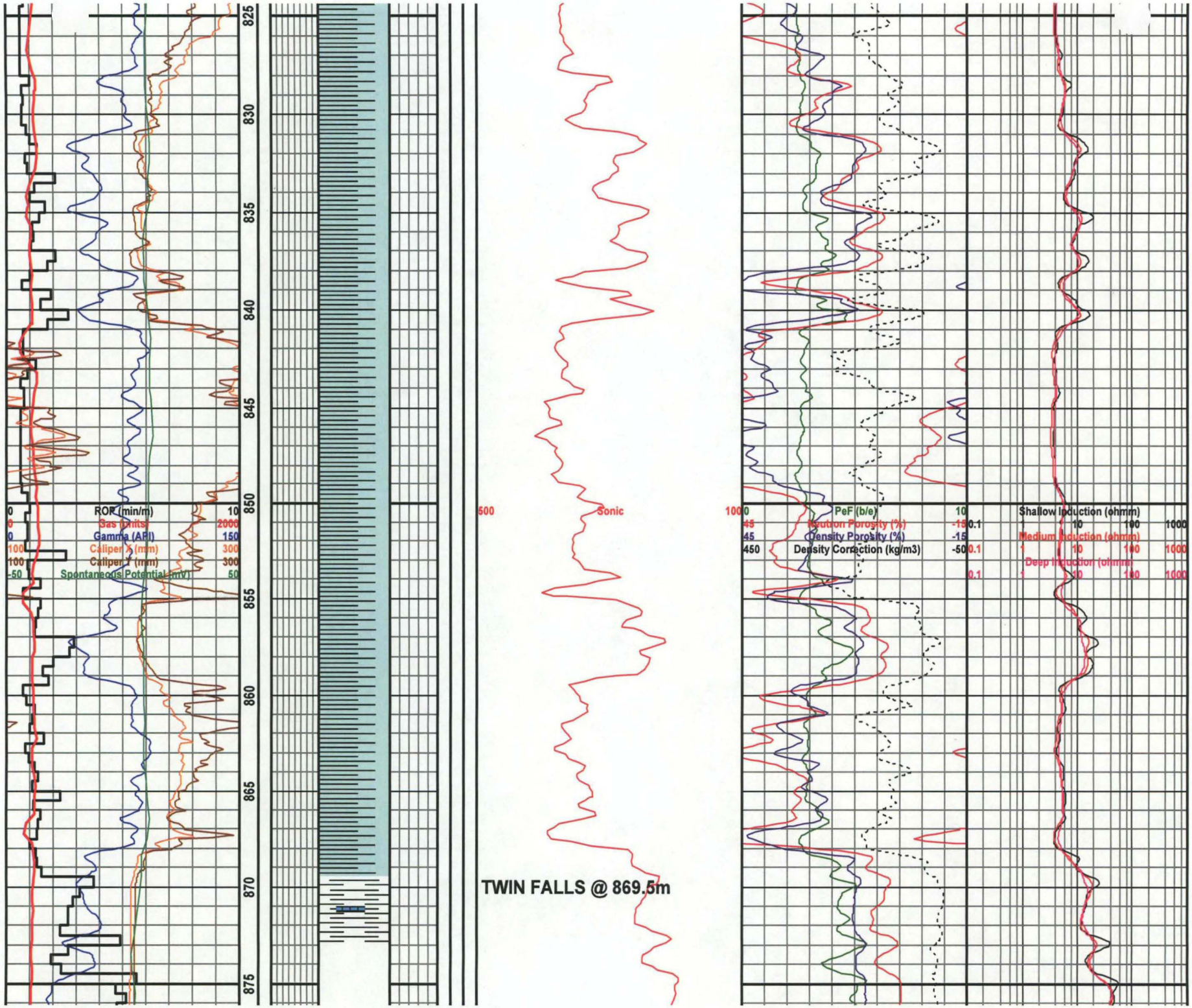

xls, fossil ghosts?,
inferred mnr earthy por, tt, no show
LS, aa, chalky, sl lighter in color
C MS
C MS
C MS
Survey @ 593m 0.25 degrees
570
575
580
585
590
595
600
605
610
615
0 ROP (min/m) 10
0 Gas (units) 2000
0 Gamma (API) 150
100 Caliper X (mm) 300
100 Caliper Y (mm) 300
-50 Spontaneous Potential (mV) 50
500 Sonic 1000
0 PeF (b/e) 10
45 Neutron Porosity (%) -15
45 Density Porosity (%) -15
450 Density Correction (kg/m3) -500
0.1 Shallow Induction (ohmm) 1000
0.1 Medium Induction (ohmm) 1000
0.1 Deep Induction (ohmm) 1000

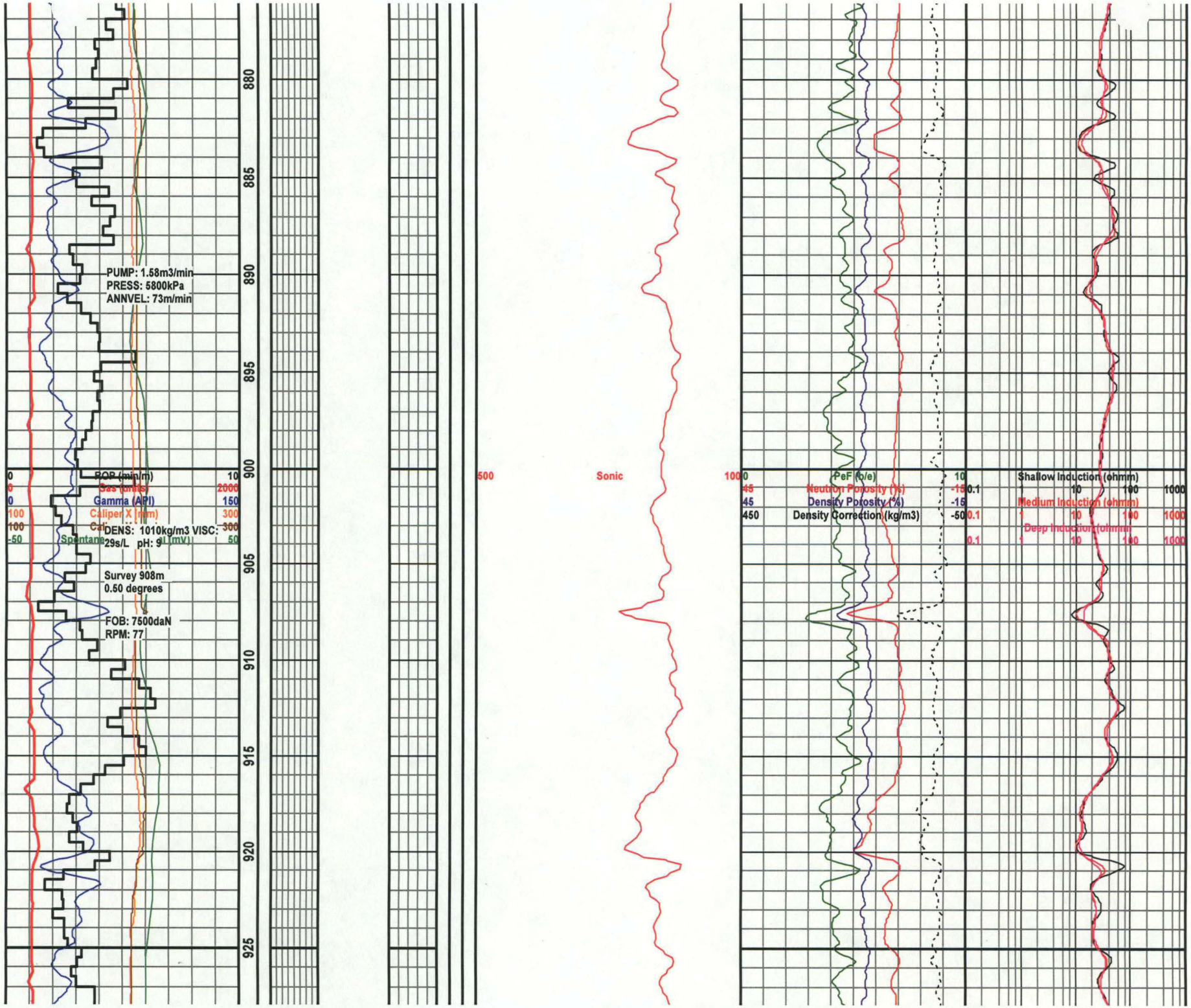

FOB: 7000daN
RPM: 80
PUMP: 1.58m3/min
PRESS: 4750kPa
ANNVEL: 73m/min
DENS: 1010kg/m3 VISC:
29s/L pH: 9.5
620
625
630
635
640
645
650
655
660
665
0 ROP (min/m) 10
0 Gas (units) 2000
0 Gamma (API) 150
100 Caliper X (mm) 300
100 Caliper Y (mm) 300
-50 Spontaneous Potential (mV) 50
500
Sonic
1000
0 PeF (b/e) 10
45 Neutron Porosity (%) -15
45 Density Porosity (%) -15
450 Density Correction (kg/m3) -50
0.1 Shallow Induction (ohmm) 1000
0.1 Medium Induction (ohmm) 1000
0.1 Deep Induction (ohmm) 1000

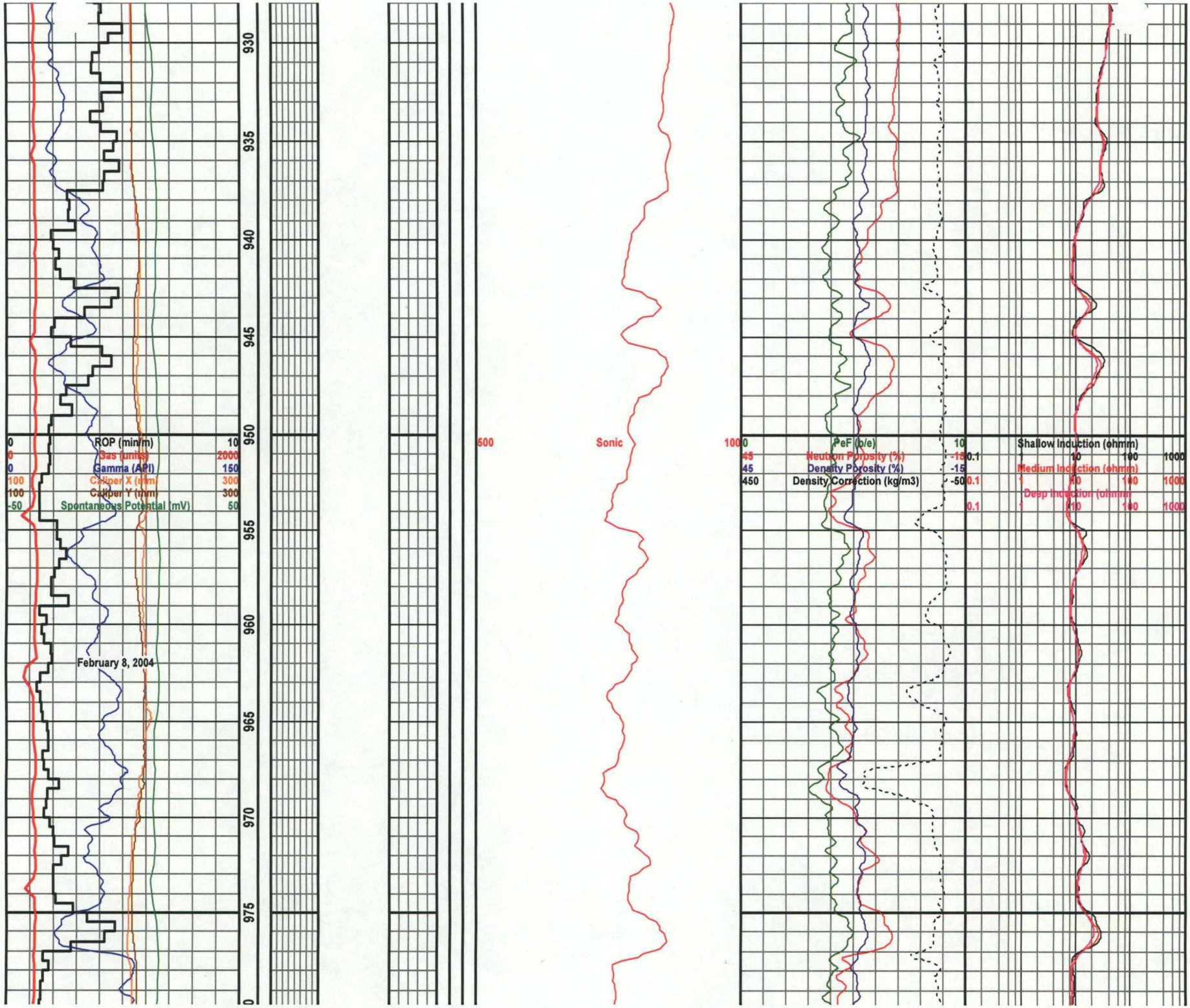

670
675
680
685
690
695
700
705
710
715
720
Survey @ 696m 0.25 degrees
rezero gas - power out
0 ROP (min/m) 10
0 Gas (units) 2000
0 Gamma (API) 150
100 Caliper X (mm) 300
100 Caliper Y (mm) 300
-50 Spontaneous Potential (mV) 50
500
Sonic
1000
0 PeF (b/e) 10
45 Neutron Porosity (%) -15
45 Density Porosity (%) -15
450 Density Correction (kg/m3) -500
0.1 Shallow Induction (ohmm) 1000
0.1 Medium Induction (ohmm) 1000
0.1 Deep Induction (ohmm) 1000
1 10 100

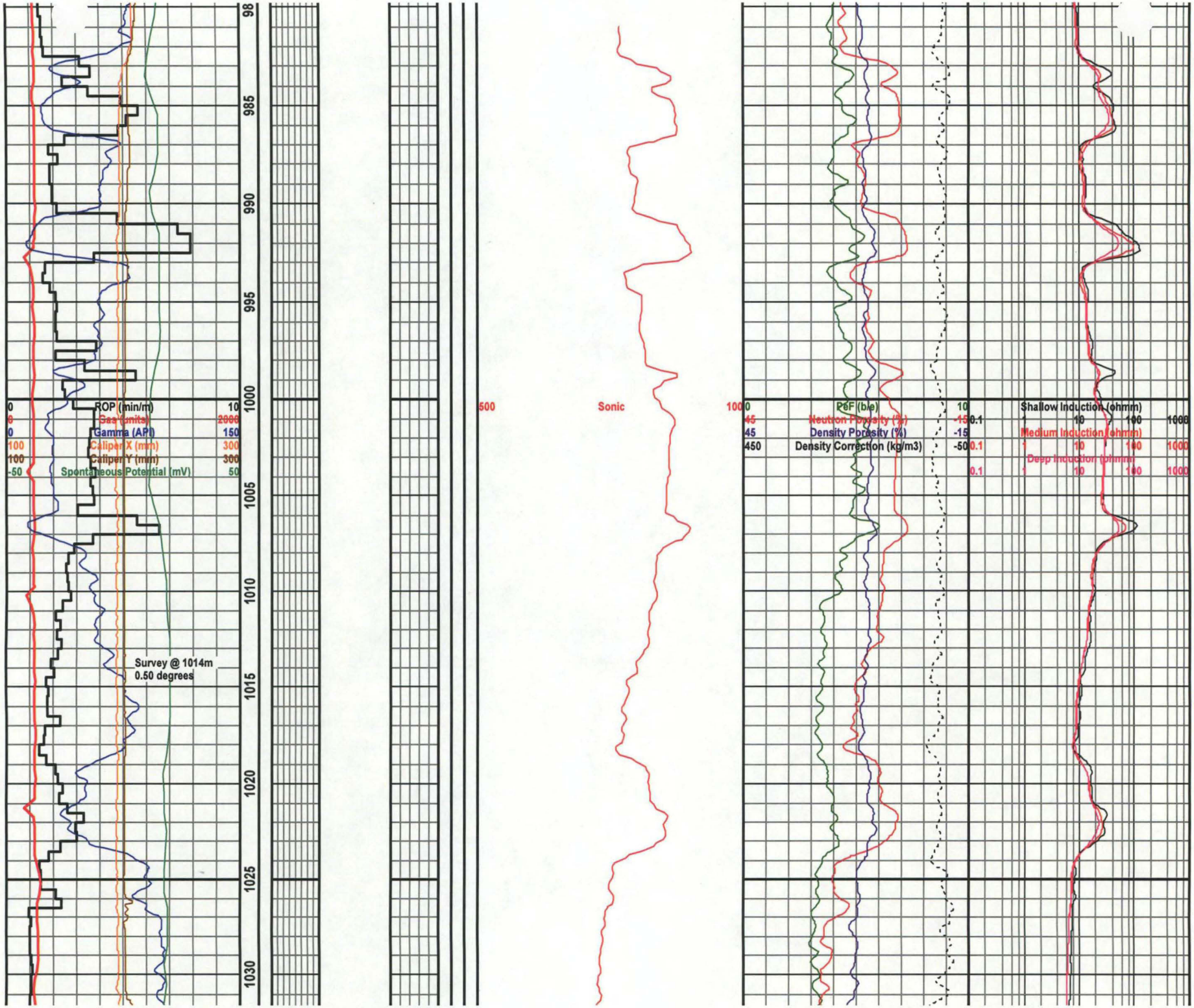

725
730
735
740
745
750
755
760
765
770
0
ROP (min/m)
10
0
Gas (units)
2000
0
Gamma (API)
150
100
Caliper 2 (mm)
300
100
Caliper 1 (mm)
300
-50
Spontaneous Potential (mV)
50
500
Sonic
1000
0
PeF (b/e)
10
45
Neutron Porosity (%)
-15
45
Density Porosity (%)
-15
450
Density Correction (kg/m3)
-500.1
0.1
Shallow Induction (ohmm)
1
10
100
1000
Medium Induction (ohmm)
1
10
100
1000
Deep Induction (ohmm)
0.1
1
10
100
1000
FORT SIMPSON @ 754.2m

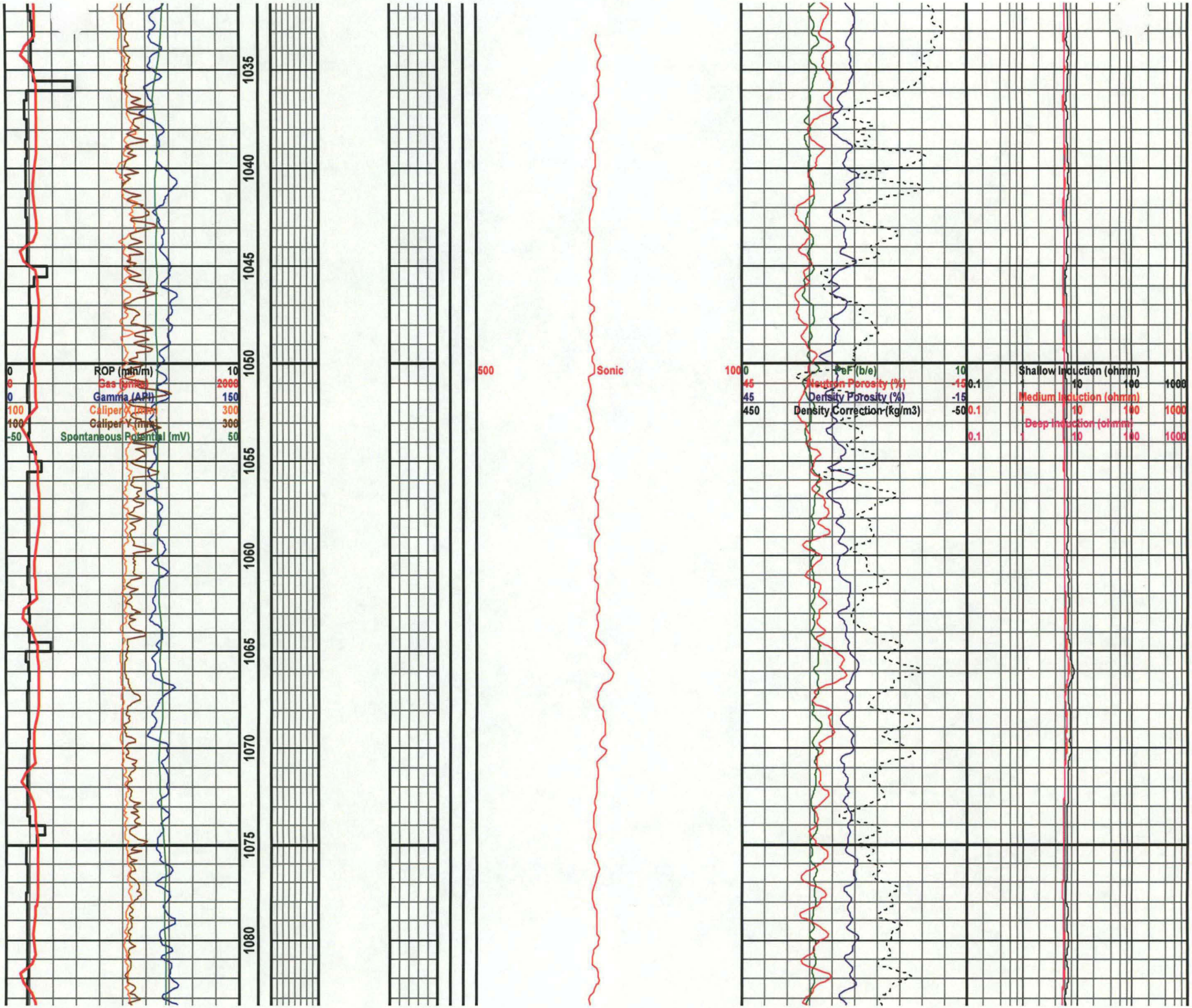

775
780
785
790
795
800
805
810
815
820
Survey @ 802m 0.25 degrees
0
ROP (min/m)
10
0
Gas (units)
2000
0
Gamma (API)
150
100
Caliper X (mm)
300
100
Caliper Y (mm)
300
-50
Spontaneous Potential (mV)
50
500
Sonic
1000
0
PeF (b/e)
10
45
Neutron Porosity (%)
-15
0.1
45
Density Porosity (%)
-15
450
Density Correction (kg/m3)
-500.1
0.1
Shallow Induction (ohmm)
1
10
100
1000
Medium Induction (ohmm)
1
10
100
1000
Deep Induction (ohmm)
1
10
100
1000

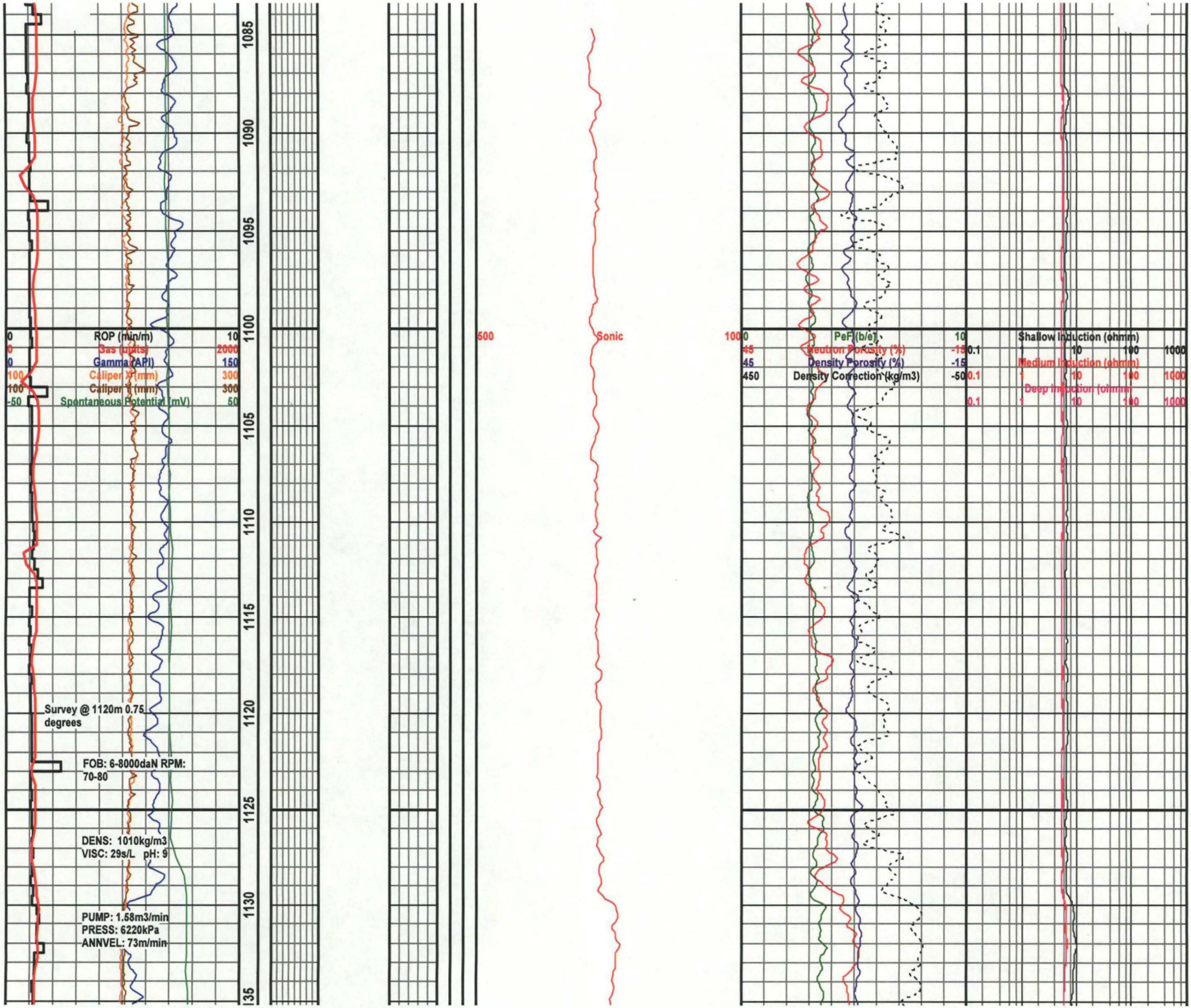

825
830
835
840
845
850
855
860
865
870
875
0
ROP (min/m)
10
0
Gas (units)
2000
0
Gamma (API)
150
100
Caliper 2 (mm)
300
100
Caliper 1 (mm)
300
-50
Spontaneous Potential (mV)
50
500
Sonic
TWIN FALLS @ 869.5m
1000
PeF (b/e)
10
45
Neutron Porosity (%)
-15
0.1
45
Density Porosity (%)
-15
450
Density Correction (kg/m3)
-50
0.1
0.1
Shallow Induction (ohmm)
1
10
100
1000
Medium Induction (ohmm)
1
10
100
1000
Deep Induction (ohmm)
1
10
100
1000

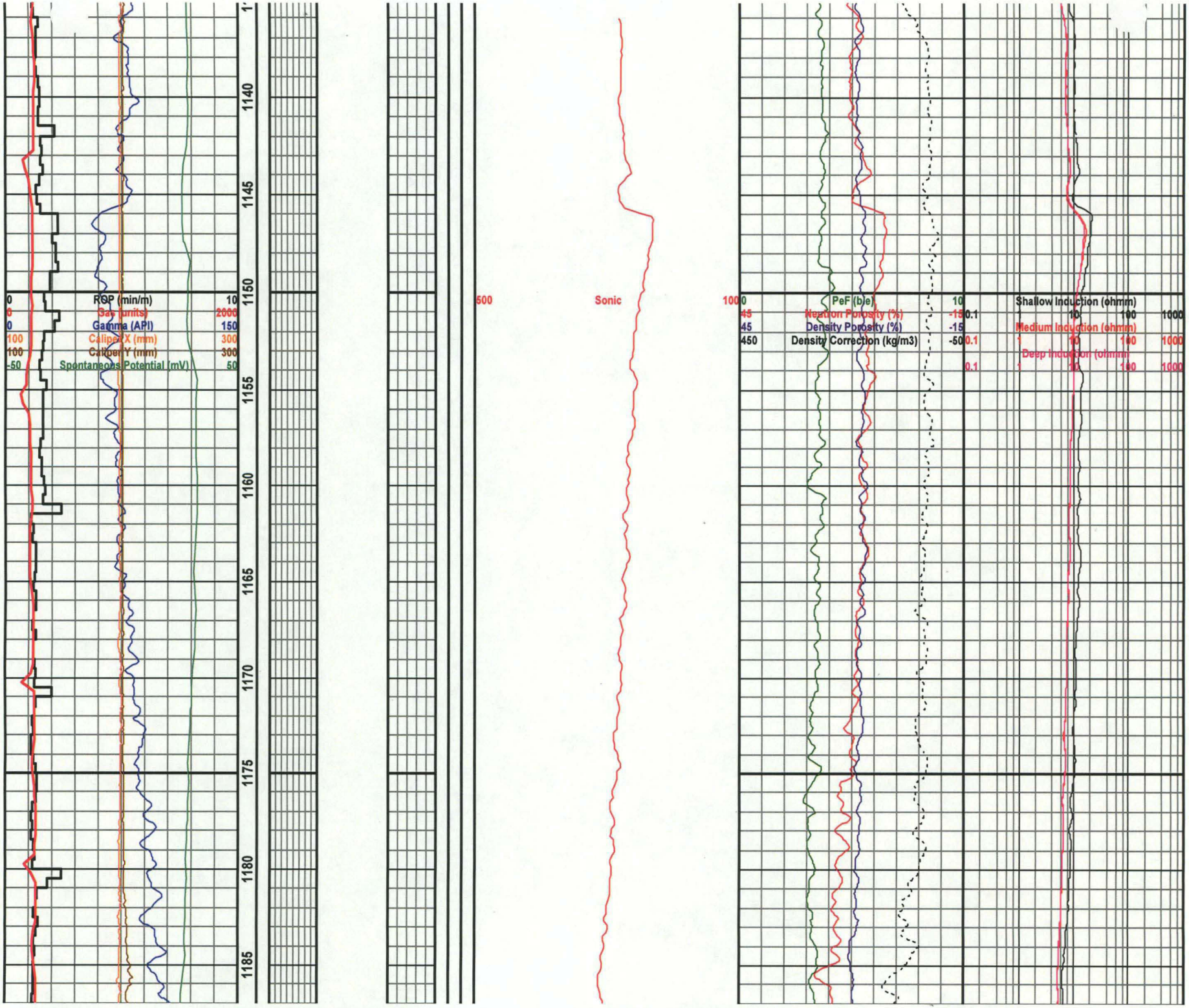

PUMP: 1.58m3/min
PRESS: 5800kPa
ANNVEL: 73m/min
ROP (min/m)
Gas (units)
Gamma (API)
Caliper X (mm)
Cal
DENS: 1010kg/m3 VISC: 29s/L pH: 9
Spontane
Survey 908m
0.50 degrees
FOB: 7500daN
RPM: 77
Sonic
PeF (b/e)
Neutron Porosity (%)
Density Porosity (%)
Density Correction (kg/m3)
Shallow Induction (ohmm)
Medium Induction (ohmm)
Deep Induction (ohmm)
880
885
890
895
900
905
910
915
920
925

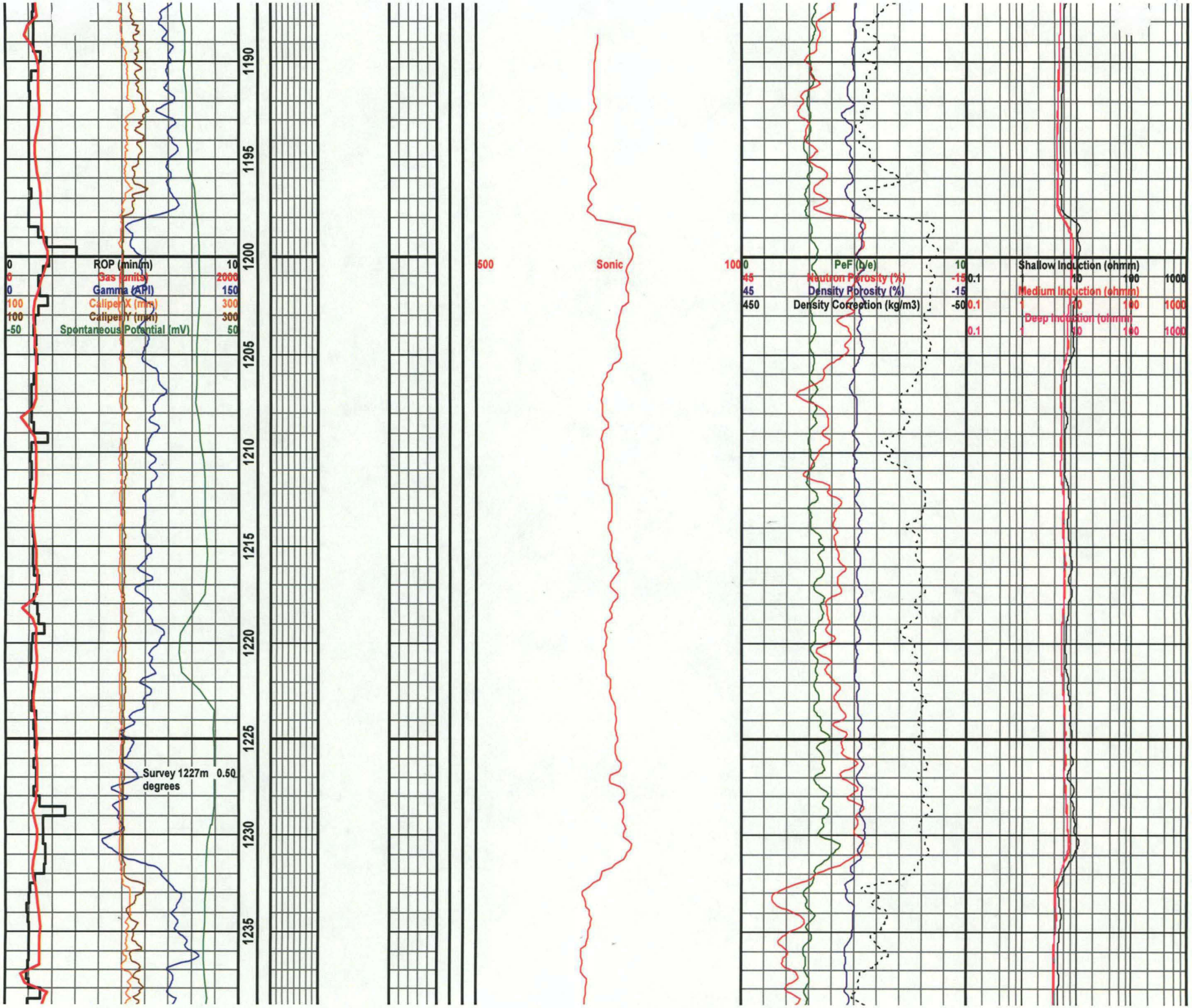

930
935
940
945
950
955
960
965
970
975
0
ROP (min/m)
10
0
Gas (units)
2000
0
Gamma (API)
150
100
Caliper X (mm)
300
100
Caliper Y (mm)
300
-50
Spontaneous Potential (mV)
50
February 8, 2004
500
Sonic
1000
0
PeF (b/e)
10
45
Neutron Porosity (%)
-15
45
Density Porosity (%)
-15
450
Density Correction (kg/m3)
-50
0.1
Shallow Induction (ohmm)
1
10
100
1000
0.1
Medium Induction (ohmm)
1
10
100
1000
0.1
Deep Induction (ohmm)
1
10
100
1000

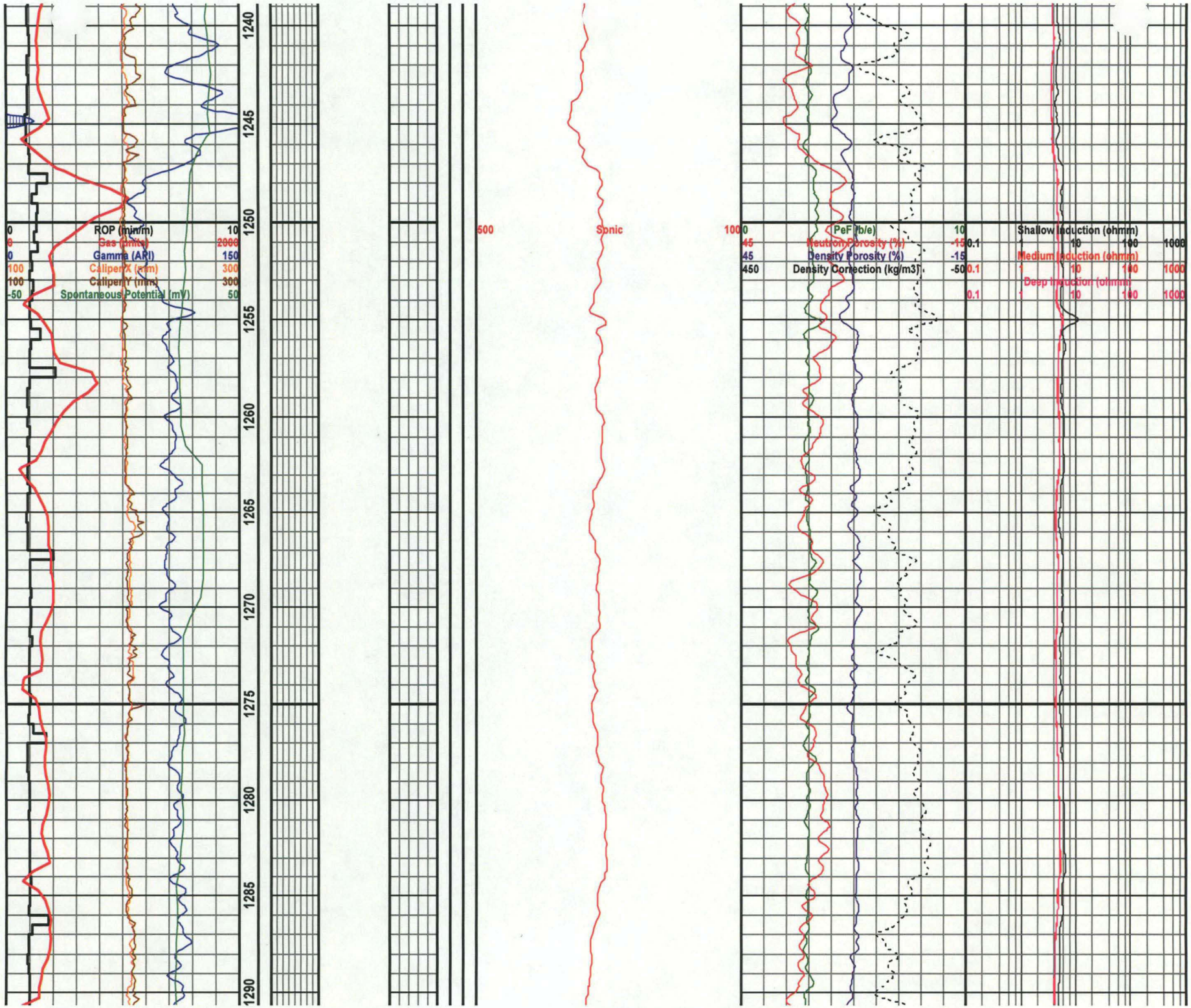

0
ROP (min/m)
10
0
Gas (units)
2000
0
Gamma (API)
150
100
Caliper X (mm)
300
100
Caliper Y (mm)
300
-50
Spontaneous Potential (mV)
50
Survey @ 1014m
0.50 degrees
98
985
990
995
1000
1005
1010
1015
1020
1025
1030
500
Sonic
1000
0
P&F (b/e)
10
45
Neutron Porosity (%)
-15
45
Density Porosity (%)
-15
450
Density Correction (kg/m3)
-50
0.1
Shallow Induction (ohmm)
1
10
100
1000
0.1
Medium Induction (ohmm)
1
10
100
1000
0.1
Deep Induction (ohmm)
1
10
100
1000

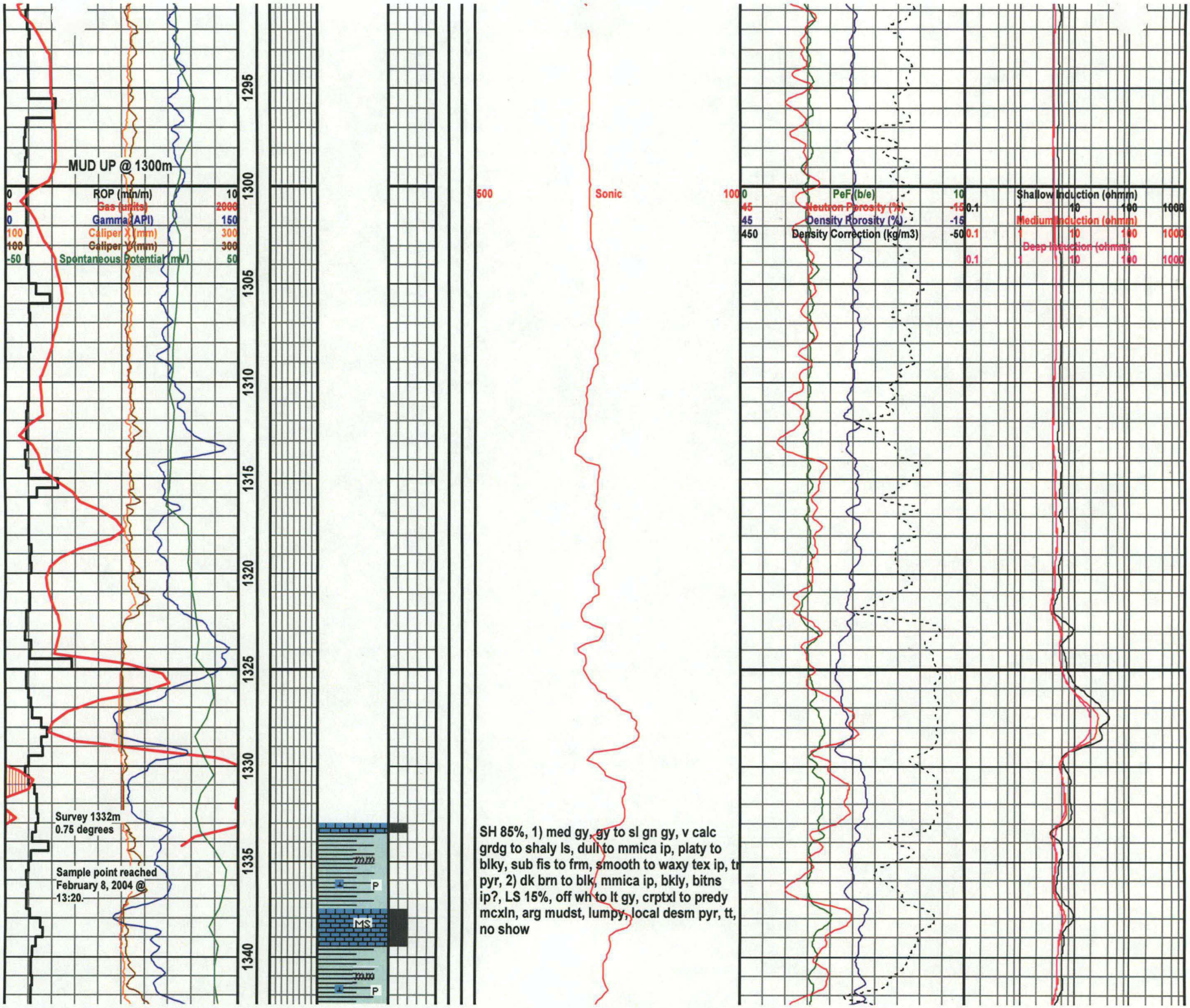

0
ROP (min/m)
10
0
Gas (units)
2000
0
Gamma (API)
150
100
Caliper X (ins)
300
100
Caliper Y (ins)
300
-50
Spontaneous Potential (mV)
50
1035
1040
1045
1050
1055
1060
1065
1070
1075
1080
500
Sonic
1000
PeF (b/e)
10
45
Neutron Porosity (%)
-15
45
Density Porosity (%)
-15
450
Density Correction (kg/m3)
-50
0.1
Shallow Induction (ohmm)
1
10
100
1000
0.1
Medium Induction (ohmm)
1
10
100
1000
0.1
Deep Induction (ohmm)
1
10
100
1000

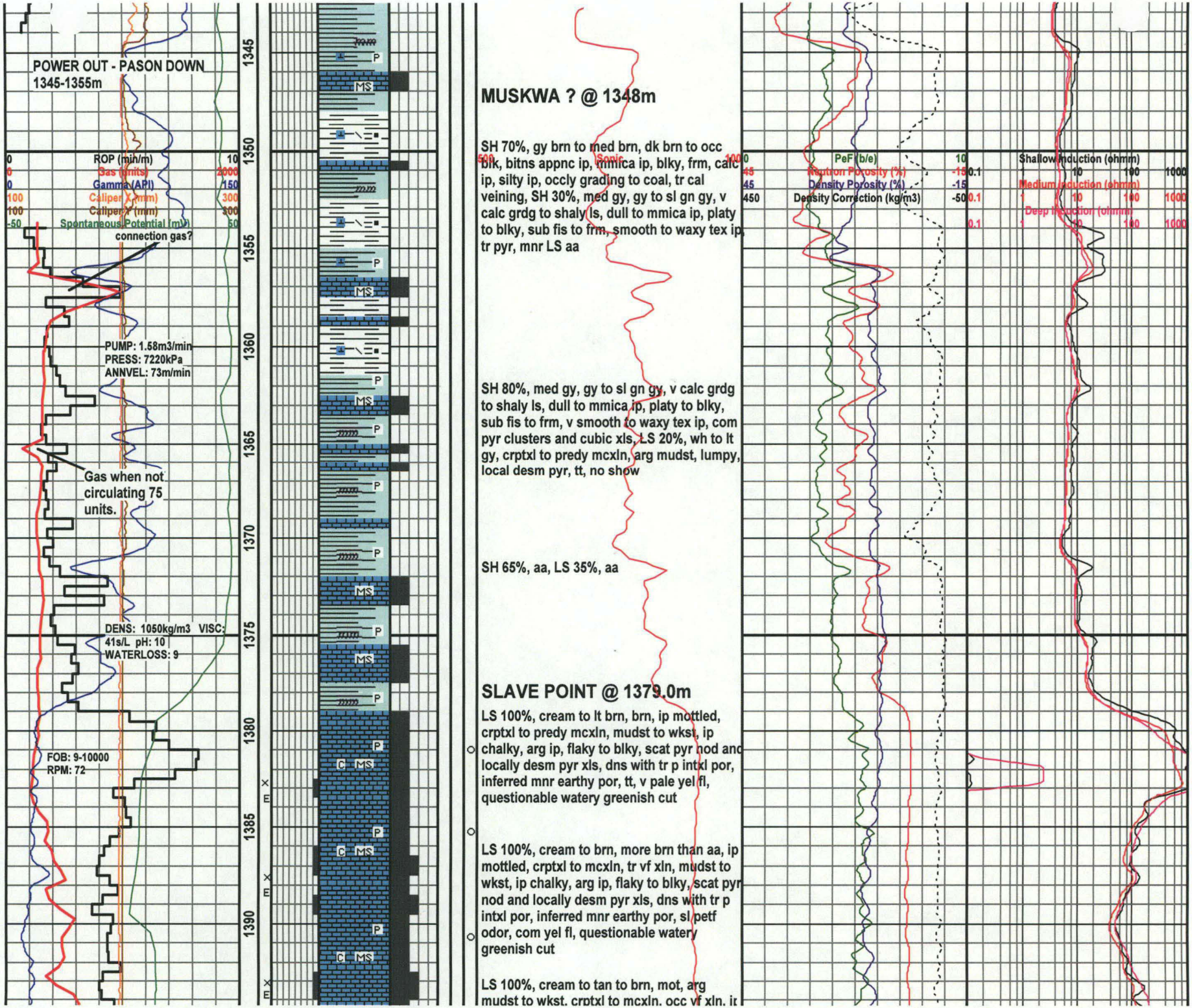

0
ROP (min/m)
10
0
Gas (units)
2000
0
Gamma (API)
150
100
Caliper X (mm)
300
100
Caliper Y (mm)
300
-50
Spontaneous Potential (mV)
50
1085
1090
1095
1100
1105
1110
1115
1120
1125
1130
1135
Survey @ 1120m 0.75 degrees
FOB: 6-8000daN RPM: 70-80
DENS: 1010kg/m3
VISC: 29s/L pH: 9
PUMP: 1.58m3/min
PRESS: 6220kPa
ANNVEL: 73m/min
500
Sonic
1000
PeF (b/e)
10
45
Neutron Porosity (%)
-15
45
Density Porosity (%)
-15
450
Density Correction (kg/m3)
-500
0.1
Shallow Induction (ohmm)
1
10
100
1000
Medium Induction (ohmm)
Deep Induction (ohmm)

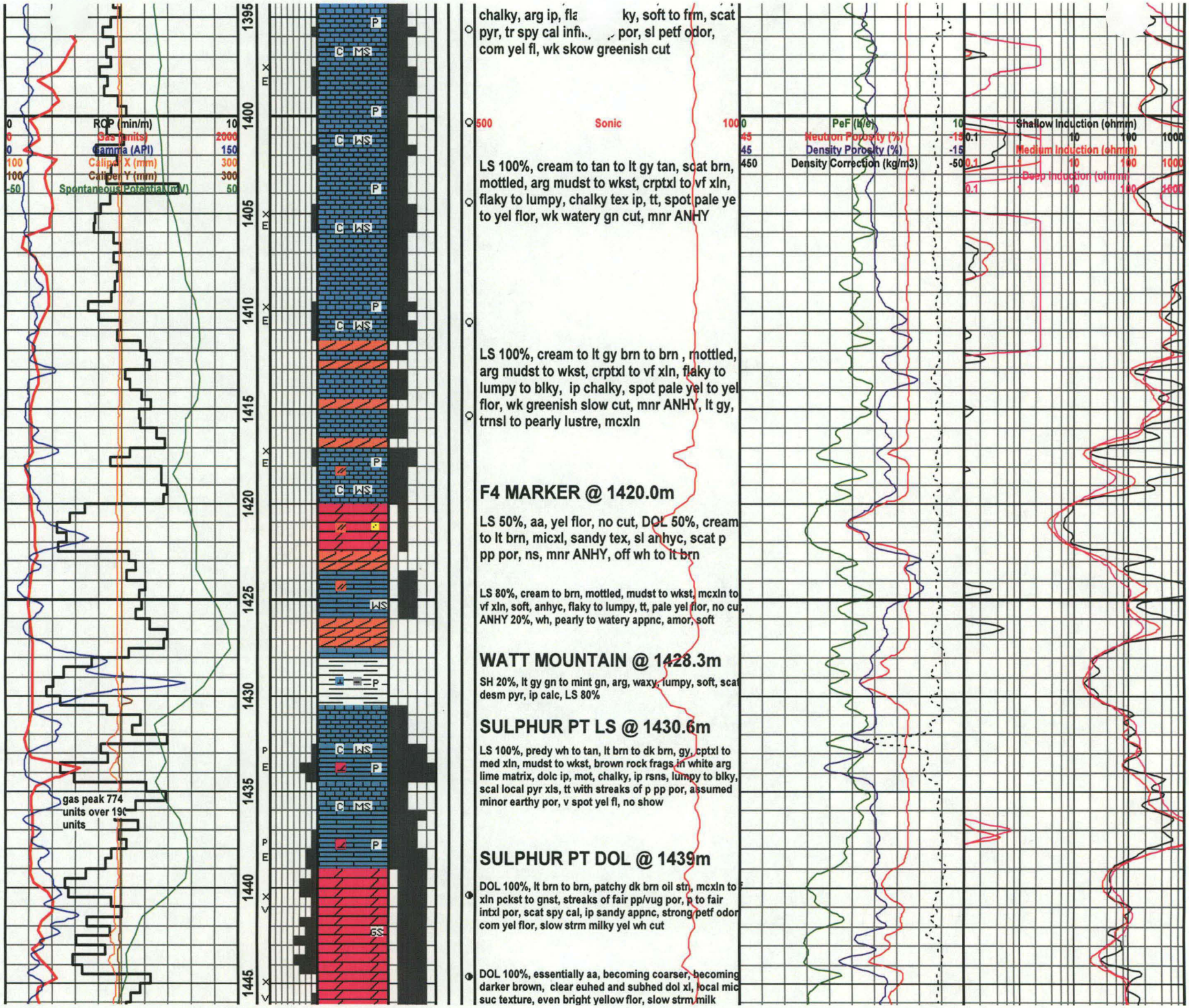

0
ROP (min/m)
10
0
Gas (units)
2000
0
Gamma (API)
150
100
Caliper X (mm)
300
100
Caliper Y (mm)
300
-50
Spontaneous Potential (mV)
50
1140
1145
1150
1155
1160
1165
1170
1175
1180
1185
500
Sonic
1000
0
PeF (b/e)
10
45
Neutron Porosity (%)
-15
45
Density Porosity (%)
-15
450
Density Correction (kg/m3)
-50
0.1
Shallow Induction (ohmm)
1
10
100
1000
0.1
Medium Induction (ohmm)
1
10
100
1000
0.1
Deep Induction (ohmm)
1
10
100
1000

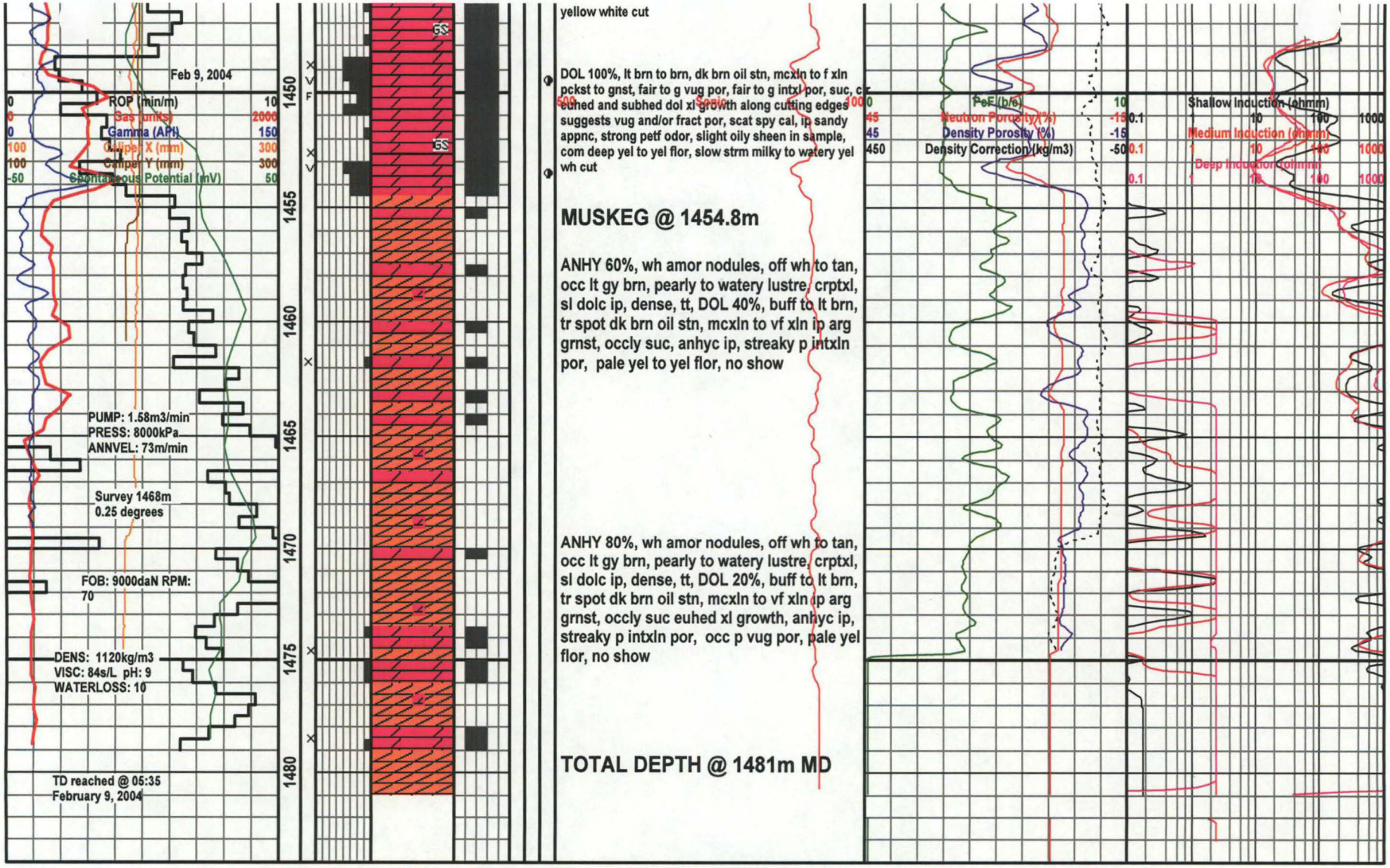

0
ROP (min/m)
10
0
Gas (units)
2000
0
Gamma (API)
150
100
Caliper X (mm)
300
100
Caliper Y (mm)
300
-50
Spontaneous Potential (mV)
50
Survey 1227m 0.50 degrees
1190
1195
1200
1205
1210
1215
1220
1225
1230
1235
500
Sonic
1000
PeF (b/e)
10
45
Neutron Porosity (%)
-15
45
Density Porosity (%)
-15
450
Density Correction (kg/m3)
-50
0.1
Shallow Induction (ohmm)
1
10
100
1000
Medium Induction (ohmm)
Deep Induction (ohmm)

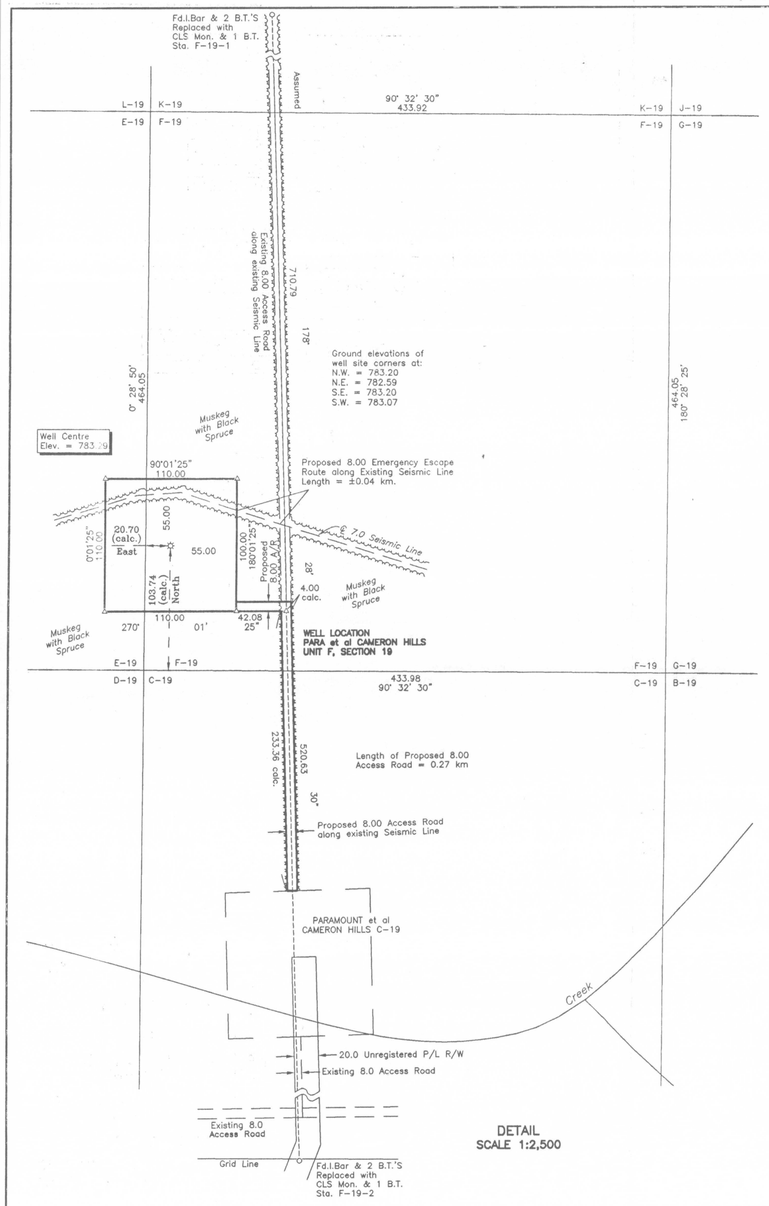

0
ROP (min/m)
10
0
Gas (units)
2000
0
Gamma (API)
150
100
CaliperX (mm)
300
100
CaliperY (mm)
300
-50
Spontaneous Potential (mV)
50
1240
1245
1250
1255
1260
1265
1270
1275
1280
1285
1290
500
Sonic
1000
PeF (b/e)
10
45
Neutron Porosity (%)
-15
45
Density Porosity (%)
-15
450
Density Correction (kg/m3)
-500
0.1
Shallow Induction (ohmm)
1
10
100
1000
Medium Induction (ohmm)
1
10
100
1000
0.1
Deep Induction (ohmm)
1
10
100
1000


MUD UP @ 1300m
0 ROP (min/m) 10
0 Gas (units) 2000
0 Gamma (API) 150
100 Caliper X (mm) 300
100 Caliper Y (mm) 300
-50 Spontaneous Potential (mV) 50
1295
1300
1305
1310
1315
1320
1325
1330
1335
1340
Survey 1332m
0.75 degrees
Sample point reached
February 8, 2004 @
-13:20.
500
Sonic
1000
0 PeF (b/e) 10
45 Neutron Porosity (%) -15
45 Density Porosity (%) -15
450 Density Correction (kg/m3) -500
0.1
Shallow Induction (ohmm)
1 10 100 1000
Medium Induction (ohmm)
1 10 100 1000
Deep Induction (ohmm)
1 10 100 1000
MS
P
SH 85%, 1) med gy, gy to sl gn gy, v calc grdg to shaly ls, dull to mmica ip, platy to blky, sub fis to frm, smooth to waxy tex ip, tr pyr, 2) dk brn to blk, mmica ip, bkly, bitns ip?, LS 15%, off wh to lt gy, crptxl to predy mcxln, arg mudst, lumpy, local desm pyr, tt, no show

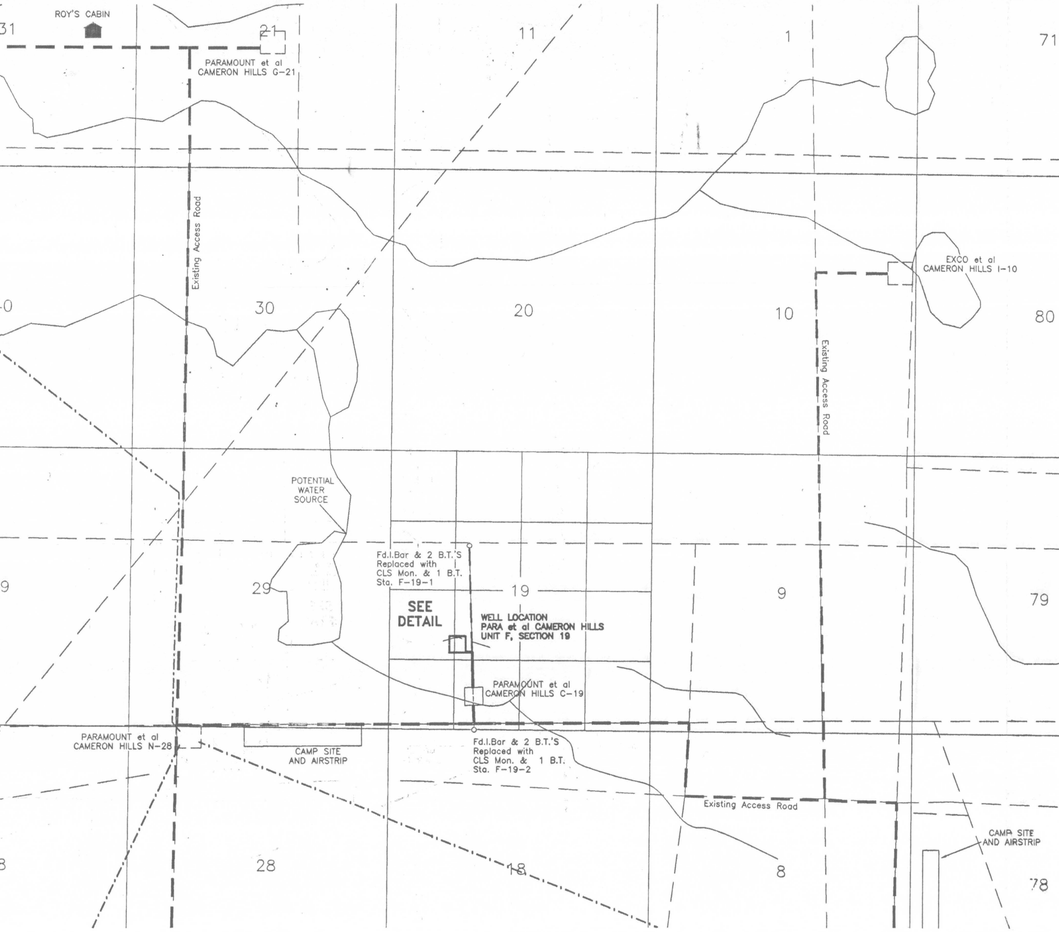

POWER OUT - PASON DOWN
1345-1355m
ROP (min/m)
Gas (units)
Gamma (API)
Caliper X (mm)
Caliper Y (mm)
Spontaneous Potential (mV)
connection gas?
PUMP: 1.58m3/min
PRESS: 7220kPa
ANNVEL: 73m/min
Gas when not circulating 75 units.
DENS: 1050kg/m3 VISC: 41s/L pH: 10
WATERLOSS: 9
FOB: 9-10000
RPM: 72
1345
1350
1355
1360
1365
1370
1375
1380
1385
1390
MUSKWA ? @ 1348m
SH 70%, gy brn to med brn, dk brn to occ blk, bitns appnc ip, mmica ip, blky, frm, calc ip, silty ip, occly grading to coal, tr cal veining, SH 30%, med gy, gy to sl gn gy, v calc grdg to shaly ls, dull to mmica ip, platy to blky, sub fis to frm, smooth to waxy tex ip, tr pyr, mnr LS aa
Sonic
SH 80%, med gy, gy to sl gn gy, v calc grdg to shaly ls, dull to mmica ip, platy to blky, sub fis to frm, v smooth to waxy tex ip, com pyr clusters and cubic xls, LS 20%, wh to lt gy, crptxl to predy mcxln, arg mudst, lumpy, local desm pyr, tt, no show
SH 65%, aa, LS 35%, aa
SLAVE POINT @ 1379.0m
LS 100%, cream to lt brn, brn, ip mottled, crptxl to predy mcxln, mudst to wkst, ip chalky, arg ip, flaky to blky, scat pyr nod and locally desm pyr xls, dns with tr p intxl por, inferred mnr earthy por, tt, v pale yel fl, questionable watery greenish cut
LS 100%, cream to brn, more brn than aa, ip mottled, crptxl to mcxln, tr vf xln, mudst to wkst, ip chalky, arg ip, flaky to blky, scat pyr nod and locally desm pyr xls, dns with tr p intxl por, inferred mnr earthy por, sl petf odor, com yel fl, questionable watery greenish cut
LS 100%, cream to tan to brn, mot, arg mudst to wkst, crptxl to mcxln, occ vf xln, ir
PeF (b/e)
Neutron Porosity (%)
Density Porosity (%)
Density Correction (kg/m3)
Shallow Induction (ohmm)
Medium Induction (ohmm)
Deep Induction (ohmm)

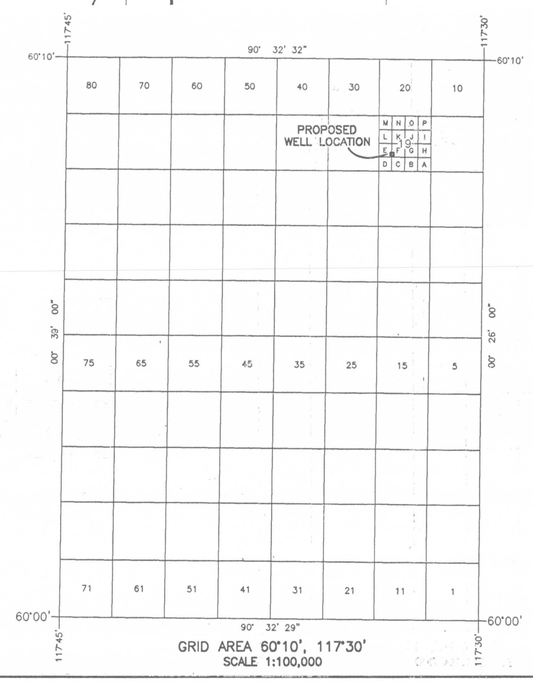

0 ROP (min/m) 10
0 Gas (units) 2000
0 Gamma (API) 150
100 Caliper X (mm) 300
100 Caliper Y (mm) 300
-50 Spontaneous Potential (mV) 50
1395
1400
1405
1410
1415
1420
1425
1430
1435
1440
1445
gas peak 774 units over 19(units
chalky, arg ip, fla ky, soft to frm, scat pyr, tr spy cal infi.. por, sl petf odor, com yel fl, wk skow greenish cut
500 Sonic 100
LS 100%, cream to tan to lt gy tan, scat brn, mottled, arg mudst to wkst, crptxl to vf xln, flaky to lumpy, chalky tex ip, tt, spot pale ye to yel flor, wk watery gn cut, mnr ANHY
LS 100%, cream to lt gy brn to brn , mottled, arg mudst to wkst, crptxl to vf xln, flaky to lumpy to blky, ip chalky, spot pale yel to yel flor, wk greenish slow cut, mnr ANHY, lt gy, trnsl to pearly lustre, mcxln
F4 MARKER @ 1420.0m
LS 50%, aa, yel flor, no cut, DOL 50%, cream to lt brn, micxl, sandy tex, sl anhyc, scat p pp por, ns, mnr ANHY, off wh to lt brn
LS 80%, cream to brn, mottled, mudst to wkst, mcxln to vf xln, soft, anhyc, flaky to lumpy, tt, pale yel flor, no cut, ANHY 20%, wh, pearly to watery appnc, amor, soft
WATT MOUNTAIN @ 1428.3m
SH 20%, lt gy gn to mint gn, arg, waxy, lumpy, soft, scat desm pyr, ip calc, LS 80%
SULPHUR PT LS @ 1430.6m
LS 100%, predy wh to tan, lt brn to dk brn, gy, crptxl to med xln, mudst to wkst, brown rock frags in white arg lime matrix, dolc ip, mot, chalky, ip rsns, lumpy to blky, scal local pyr xls, tt with streaks of p pp por, assumed minor earthy por, v spot yel fl, no show
SULPHUR PT DOL @ 1439m
DOL 100%, lt brn to brn, patchy dk brn oil str, mcxln to f xln pckst to gnst, streaks of fair pp/vug por, p to fair intxl por, scat spy cal, ip sandy appnc, strong petf odor com yel flor, slow strm milky yel wh cut
DOL 100%, essentially aa, becoming coarser, becoming darker brown, clear euhed and subhed dol xl, local mic suc texture, even bright yellow flor, slow strm milk
0 PeF (b/e) 10
45 Neutron Porosity (%) -15
45 Density Porosity (%) -15
450 Density Correction (kg/m3) -500
0.1 Shallow Induction (ohmm) 1000
0.1 Medium Induction (ohmm) 1000
0.1 Deep Induction (ohmm) 1000


Feb 9, 2004
ROP (min/m)
Gas (units)
Gamma (API)
Caliper X (mm)
Caliper Y (mm)
Spontaneous Potential (mV)
PUMP: 1.58m3/min
PRESS: 8000kPa
ANNVEL: 73m/min
Survey 1468m
0.25 degrees
FOB: 9000daN RPM: 70
DENS: 1120kg/m3
VISC: 84s/L pH: 9
WATERLOSS: 10
TD reached @ 05:35
February 9, 2004
1450
1455
1460
1465
1470
1475
1480
GS
GS
yellow white cut
DOL 100%, lt brn to brn, dk brn oil stn, mcxln to f xln pckst to gnst, fair to g vug por, fair to g intxl por, suc, cr euhed and subhed dol xl growth along cutting edges suggests vug and/or fract por, scat spy cal, ip sandy appnc, strong petf odor, slight oily sheen in sample, com deep yel to yel flor, slow strm milky to watery yel wh cut
MUSKEG @ 1454.8m
ANHY 60%, wh amor nodules, off wh to tan, occ lt gy brn, pearly to watery lustre, crptxl, sl dolc ip, dense, tt, DOL 40%, buff to lt brn, tr spot dk brn oil stn, mcxln to vf xln ip arg grnst, occly suc, anhyc ip, streaky p intxln por, pale yel to yel flor, no show
ANHY 80%, wh amor nodules, off wh to tan, occ lt gy brn, pearly to watery lustre, crptxl, sl dolc ip, dense, tt, DOL 20%, buff to lt brn, tr spot dk brn oil stn, mcxln to vf xln ip arg grnst, occly suc euhed xl growth, anhyc ip, streaky p intxln por, occ p vug por, pale yel flor, no show
TOTAL DEPTH @ 1481m MD
PeF (b/e)
Neutron Porosity (%)
Density Porosity (%)
Density Correction (kg/m3)
Shallow Induction (ohmm)
Medium Induction (ohmm)
Deep Induction (ohmm)



DETAIL
SCALE 1:2,500





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

AREAS:

	Hectares	Acres
Well Site =	1.210	2.99
Access Road =	0.223	0.55
Total =	1.433	3.54

PLAN AND FIELD NOTES
OF SURVEY OF
PROPOSED EXPLORATORY WELL
PARA ET AL CAMERON
IN UNIT F, SECTION 19
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.

BY : GREG A. BOGGS, C.L.S.
August & September, 2003.

THIS SURVEY WAS EXECUTED ON
AUGUST 28th 2003.

Certified correct and completed on the 22nd day of September 2003.

G A Boggs
Canada Lands Surveyor

PARAMOUNT RESOURCES LTD.

Dave Blair
WITNESS

Nov 24/03
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 0.999493.

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

Statutory iron posts placed are shown thus:..... ○
Statutory iron posts found are shown thus:..... ●
Wooden posts placed are shown thus:..... □
Alberta Survey Control Markers found are shown thus:..... ◉
Traverse stations placed are shown thus:..... △
Areas dealt with shown thus:.....
Buried pipe lines are shown thus:.....
Seismic lines are shown thus:.....

Elevations were derived from Alberta Survey Control Marker 440958
Elev. = 713.96 m.
(Geoid Separation HT1-01)

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

GEOGRAPHIC AND UTM COORDINATES, (1983 NAD)

Station	Latitude(N)	Longitude(W)	Northings	Eastings	Elev.
CONTROL MONUMENTS					
F-19-1	60°08'40.080"	117°33'15.967"	6667629.486	469210.057	784.93
F-19-2	60°08'00.300"	117°33'13.168"	6666398.518	469242.923	782.94
PROPOSED WELL					
F-19, WELL CENTRE	60°08'18.870"	117°33'20.634"	6666973.970	469132.535	783.29

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
F-19, N.E.	60°09'15.130"	117°32'48.750"	6668504.067	469637.696
F-19, N.W.	60°09'15.146"	117°33'16.875"	6668508.171	469203.958
F-19, S.W.	60°09'00.146"	117°33'16.875"	6668044.135	469200.064
F-19, S.E.	60°09'00.130"	117°32'48.750"	6668040.030	469633.857
PROPOSED WELL				
F-19	60°08'18.499"	117°33'15.533"	6666755.567	469209.947

BEARING TREES

STATION	BEARING	DISTANCE	TREE
F-19-1	–	–	–
	–	–	–
	–	–	–
F-19-2	116°34'10"	23.46	5 cm Spruce
	298°36'15"	18.81	10 cm Spruce
	339°31'20"	21.39	10 cm Spruce

REV.	DESCRIPTION	BY	DATE
1	Revised text and removed portion of P/L 60	JDS	OCT. 23/03
0	PLAN ISSUED	JDS	SEPT. 22/03

GREG A. BOGGS
CANADA LANDS SURVEYOR

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138, 14315-118 Avenue
Edmonton, Alberta
PH: (780) 451-3420 FAX: (780) 452-7033

Date: Sept. 10, 2003
Plan No.: 1 of 1
Job No.: 321114300

SCALE AS SHOWN
File No.: 14300
JDS

Plan ID 14300ws1