



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1070686
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SIOW
- Gas D&A ENHR SIGW
- OG GSW Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

- Deepening Re-perf. Conv. to ENHR Conv. to SWD
- Plug Back Conv. to GSW Conv. to Producer
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - _____

Spot Description: _____

_____-_____-_____-_____-_____-_____-_____-_____-_____-_____-_____-_____-_____-_____-_____-
Sec. _____ Twp. _____ S. R. _____ East West

_____-_____-_____-_____-_____-_____-_____-_____-_____-_____-_____-_____-_____-_____-_____-
Feet from North / South Line of Section

_____-_____-_____-_____-_____-_____-_____-_____-_____-_____-_____-_____-_____-_____-_____-
Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite: _____

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- Confidentiality Requested
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____

1070686

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Electric Log Run	<input type="checkbox"/> Yes <input type="checkbox"/> No			
List All E. Logs Run:				

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or ENHR. _____ Producing Method:
 Flowing Pumping Gas Lift Other *(Explain)* _____

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802



Phone: 316-337-6200
Fax: 316-337-6211
<http://kcc.ks.gov/>

Mark Sievers, Chairman
Ward Loyd, Commissioner
Thomas E. Wright, Commissioner

Sam Brownback, Governor

January 09, 2012

Tom Denning
TDI, Inc.
1310 BISON RD
HAYS, KS 67601-9696

Re: ACO1
API 15-051-26191-00-00
Virginia 1
NE/4 Sec.16-15S-19W
Ellis County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,
Tom Denning



DRILL STEM TEST REPORT

Prepared For: **TDI Inc**

1310 Bison Rd
Hays, KS 67601

ATTN: Herb Deines

Virginia #1

16-15s-19w Ellis,KS

Start Date: 2011.11.15 @ 16:20:13

End Date: 2011.11.15 @ 22:49:52

Job Ticket #: 44271 DST #: 1

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2011.11.21 @ 16:59:39

TDI Inc
16-15s-19w Ellis,KS
Virginia #1
DST # 1
KC "H-J"
2011.11.15



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

TDI Inc
 1310 Bison Rd
 Hays, KS 67601
 ATTN: Herb Deines

16-15s-19w Ellis, KS
Virginia #1
 Job Ticket: 44271 **DST#: 1**
 Test Start: 2011.11.15 @ 16:20:13

GENERAL INFORMATION:

Formation: **KC "H-J"**
 Deviated: No Whipstock: 3520.00 ft (KB)
 Time Tool Opened: 18:25:23
 Time Test Ended: 22:49:52
 Interval: **3434.00 ft (KB) To 3520.00 ft (KB) (TVD)**
 Total Depth: 3520.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Paul Simpson
 Unit No: 39
 Reference Elevations: 2024.00 ft (KB)
 2014.00 ft (CF)
 KB to GR/CF: 10.00 ft

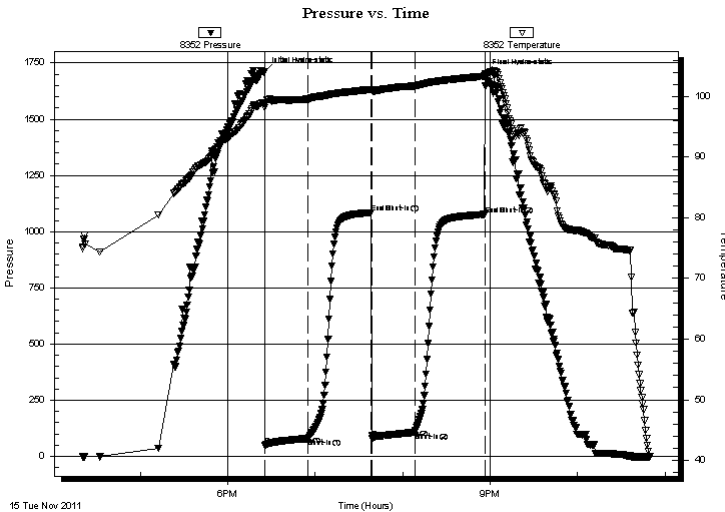
Serial #: 8352

Inside

Press @ Run Depth: 106.78 psig @ 3502.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2011.11.15 End Date: 2011.11.15 Last Calib.: 2011.11.21
 Start Time: 16:20:18 End Time: 22:49:53 Time On Btm: 2011.11.15 @ 18:25:13
 Time Off Btm: 2011.11.15 @ 20:56:33

TEST COMMENT: IF- surface blow building to BOB in 10 minutes
 IS- surface blow building to 7"
 FF -strong blow BOB in 90 seconds
 FS- surface blow building to 7"

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1711.03	98.90	Initial Hydro-static
1	48.58	98.12	Open To Flow (1)
30	80.31	99.57	Shut-In(1)
73	1084.60	101.16	End Shut-In(1)
74	81.27	100.94	Open To Flow (2)
103	106.78	101.72	Shut-In(2)
151	1076.17	103.36	End Shut-In(2)
152	1701.61	103.54	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	gsy mo 20%g 40%o 40%m	0.84
90.00	gsy hocm 5%g 25%o 70%m	1.26
0.00	850' GIP	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

TDI Inc
1310 Bison Rd
Hays, KS 67601
ATTN: Herb Deines

16-15s-19w Ellis, KS
Virginia #1
Job Ticket: 44271 **DST#: 1**
Test Start: 2011.11.15 @ 16:20:13

Tool Information

Drill Pipe:	Length: 3425.00 ft	Diameter: 3.80 inches	Volume: 48.04 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 41000.00 lb
			<u>Total Volume: 48.04 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3434.00 ft			Final 39000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	86.00 ft			
Tool Length:	106.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			3419.00	
Hydraulic tool	5.00			3424.00	
Packer	5.00			3429.00	20.00 Bottom Of Top Packer
Packer	5.00			3434.00	
Stubb	1.00			3435.00	
Perforations	3.00			3438.00	
Change Over Sub	0.50			3438.50	
Blank Spacing	63.00			3501.50	
Change Over Sub	0.50			3502.00	
Recorder	0.00	8352	Inside	3502.00	
Recorder	0.00	8017	Outside	3502.00	
Perforations	15.00			3517.00	
Bullnose	3.00			3520.00	86.00 Bottom Packers & Anchor

Total Tool Length: 106.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

TDI Inc
1310 Bison Rd
Hays, KS 67601
ATTN: Herb Deines

16-15s-19w Ellis,KS
Virginia #1
Job Ticket: 44271
Test Start: 2011.11.15 @ 16:20:13

DST#: 1

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 51.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.18 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	gsy mo 20%g 40%o 40%m	0.842
90.00	gsy hocm 5%g 25%o 70%m	1.262
0.00	850' GIP	0.000

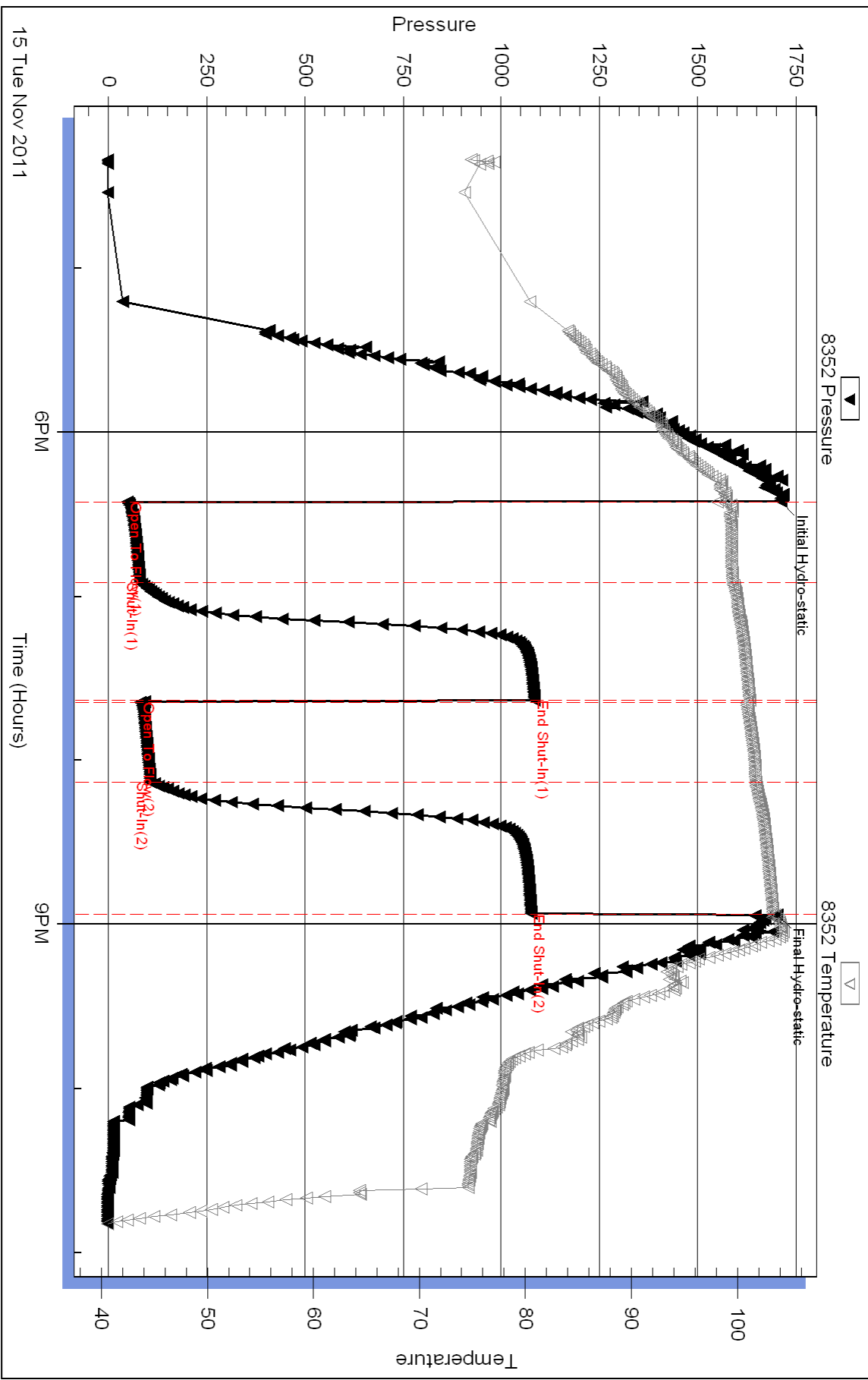
Total Length: 150.00 ft Total Volume: 2.104 bbl

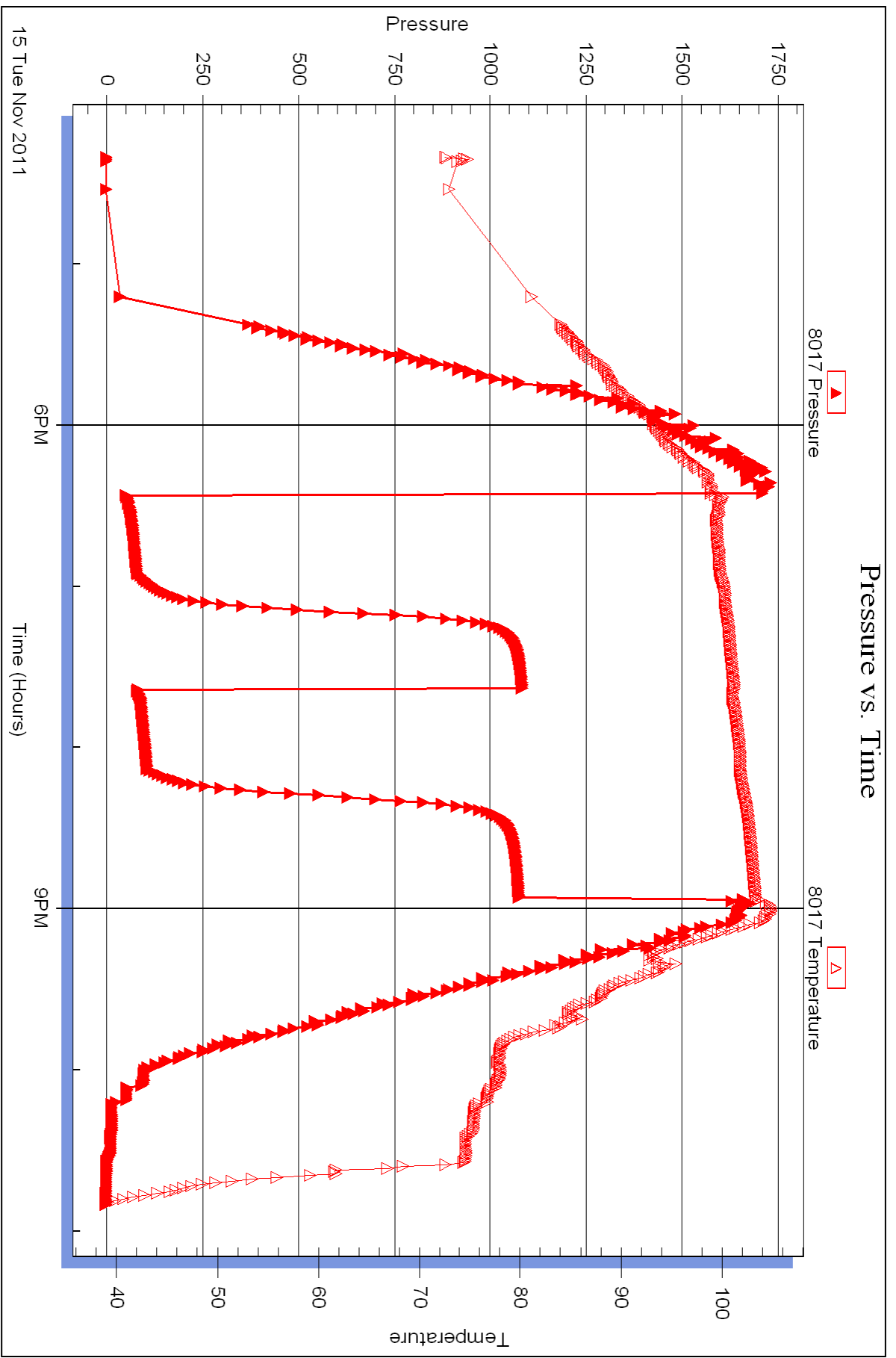
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:

Pressure vs. Time







DRILL STEM TEST REPORT

Prepared For: **TDI Inc**

1310 Bison Rd
Hays, KS 67601

ATTN: Herb Deines

Virginia #1

16-15s-19w Ellis,KS

Start Date: 2011.11.17 @ 01:18:05

End Date: 2011.11.17 @ 07:34:59

Job Ticket #: 44272 DST #: 2

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2011.11.21 @ 17:02:36

TDI Inc
16-15s-19w Ellis,KS
Virginia #1
DST # 2
LKC "C"
2011.11.17



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TDI Inc
1310 Bison Rd
Hays, KS 67601
ATTN: Herb Deines

16-15s-19w Ellis, KS
Virginia #1
Job Ticket: 44272 **DST#: 2**
Test Start: 2011.11.17 @ 01:18:05

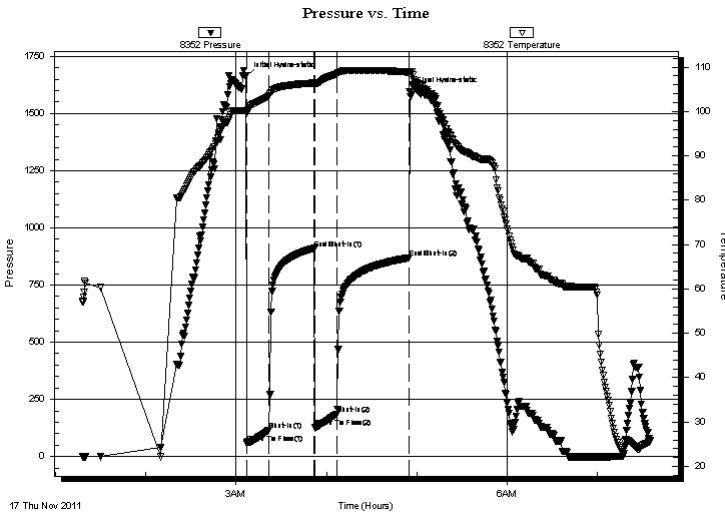
GENERAL INFORMATION:

Formation: **LKC "C"**
Deviated: No Whipstock: 3520.00 ft (KB)
Time Tool Opened: 03:07:00
Time Test Ended: 07:34:59
Interval: **3330.00 ft (KB) To 3362.00 ft (KB) (TVD)**
Total Depth: 3750.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Straddle (Reset)
Tester: Andy Carreira
Unit No: 39
Reference Elevations: 2024.00 ft (KB)
2014.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 8352 Inside
Press @ Run Depth: 185.98 psig @ 3331.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2011.11.17 End Date: 2011.11.17 Last Calib.: 2011.11.17
Start Time: 01:18:05 End Time: 07:34:59 Time On Btm: 2011.11.17 @ 03:06:40
Time Off Btm: 2011.11.17 @ 04:55:20

TEST COMMENT: IF: BOB 1 Min
IS: BOB 5 Min, After bleed off
FF: BOB Immediately
FS: Gas to surface during bleed off

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1663.29	100.21	Initial Hydro-static
1	56.23	99.56	Open To Flow (1)
16	114.85	103.48	Shut-In(1)
46	909.96	106.39	End Shut-In(1)
46	125.81	106.23	Open To Flow (2)
61	185.98	108.47	Shut-In(2)
108	868.57	108.84	End Shut-In(2)
109	1597.60	108.98	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
125.00	GMCO g=40% m=20% o=40%	1.75
350.00	GCO g=30% o=70%	4.91

* Recovery from multiple tests

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

TDI Inc
1310 Bison Rd
Hays, KS 67601
ATTN: Herb Deines

16-15s-19w Ellis,KS
Virginia #1
Job Ticket: 44272 **DST#: 2**
Test Start: 2011.11.17 @ 01:18:05

Tool Information

Drill Pipe:	Length: 3327.00 ft	Diameter: 3.80 inches	Volume: 46.67 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 28000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 52000.00 lb
			<u>Total Volume: 46.67 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3330.00 ft			Final 45000.00 lb
Depth to Bottom Packer:	3362.00 ft			
Interval between Packers:	32.00 ft			
Tool Length:	445.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments: TD Log=3752, TD Geograph=3750, TD Test=3751

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3311.00	
Shut In Tool	5.00			3316.00	
Hydraulic tool	5.00			3321.00	
Packer	5.00			3326.00	20.00 Bottom Of Top Packer
Packer	4.00			3330.00	
Stubb	1.00			3331.00	
Recorder	0.00	8352	Inside	3331.00	
Recorder	0.00	8017	Outside	3331.00	
Perforations	27.00			3358.00	
Blank Off Sub	1.00			3359.00	
Blank Spacing	3.00			3362.00	32.00 Tool Interval
Packer	4.00			3366.00	
Stubb	1.00			3367.00	
Perforations	4.00			3371.00	
Change Over Sub	1.00			3372.00	
Recorder	0.00	8647	Below	3372.00	
Drill Pipe	378.00			3750.00	
Change Over Sub	1.00			3751.00	
Perforations	1.00			3752.00	
Bullnose	3.00			3755.00	393.00 Bottom Packers & Anchor
Total Tool Length:	445.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

TDI Inc
1310 Bison Rd
Hays, KS 67601
ATTN: Herb Deines

16-15s-19w Ellis, KS
Virginia #1
Job Ticket: 44272 **DST#: 2**
Test Start: 2011.11.17 @ 01:18:05

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 49.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.79 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 3600.00 ppm			
Filter Cake: inches			

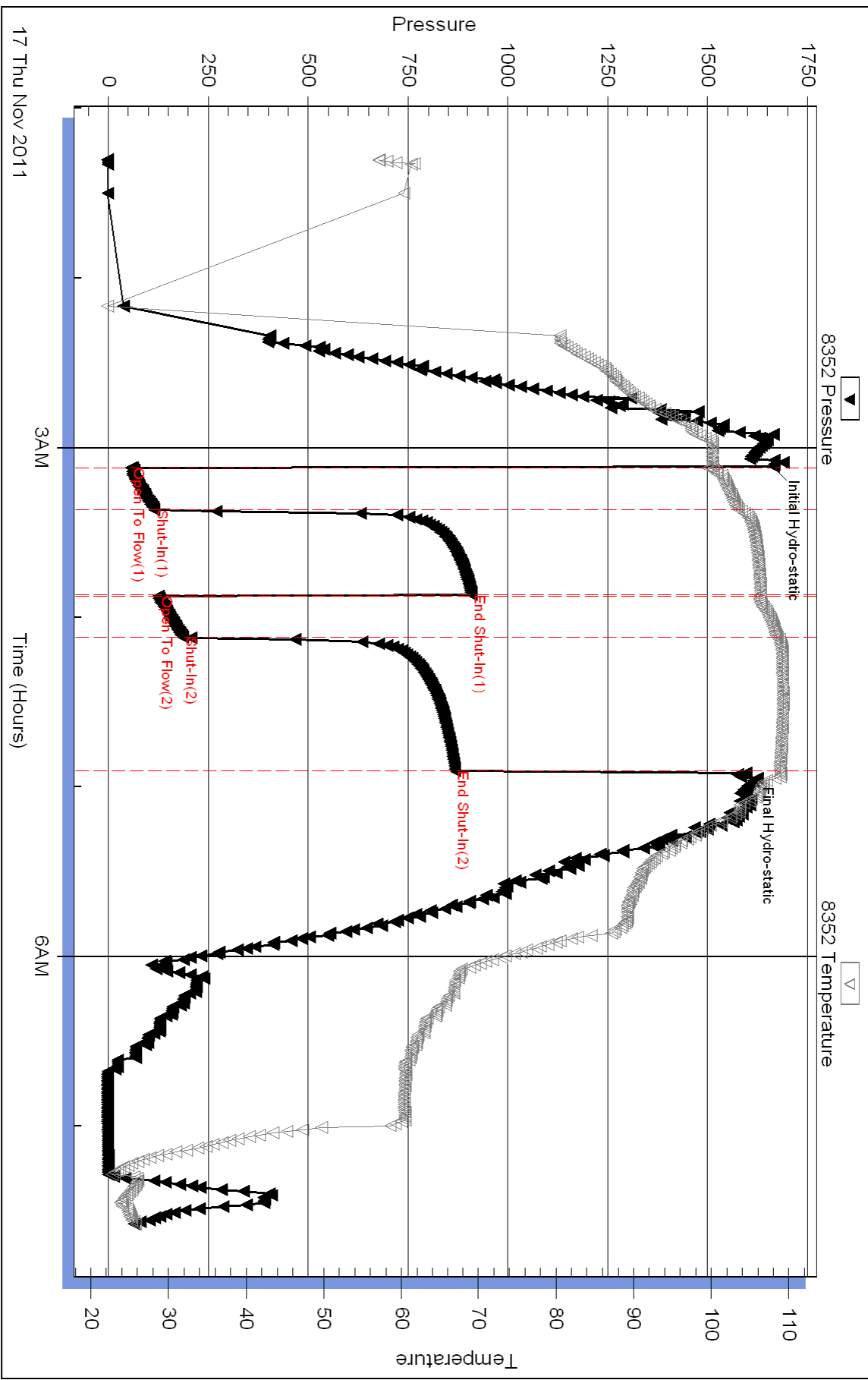
Recovery Information

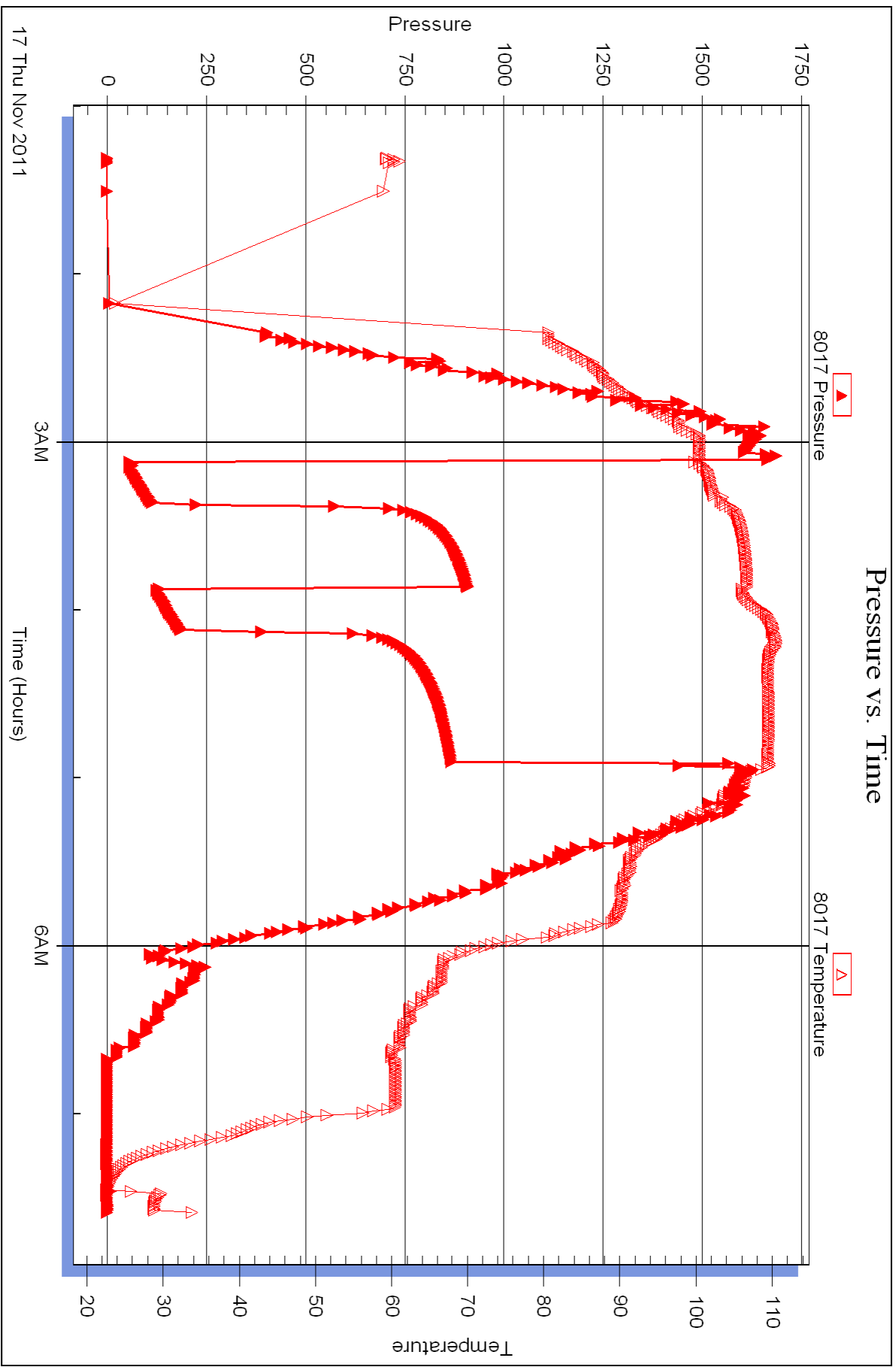
Recovery Table

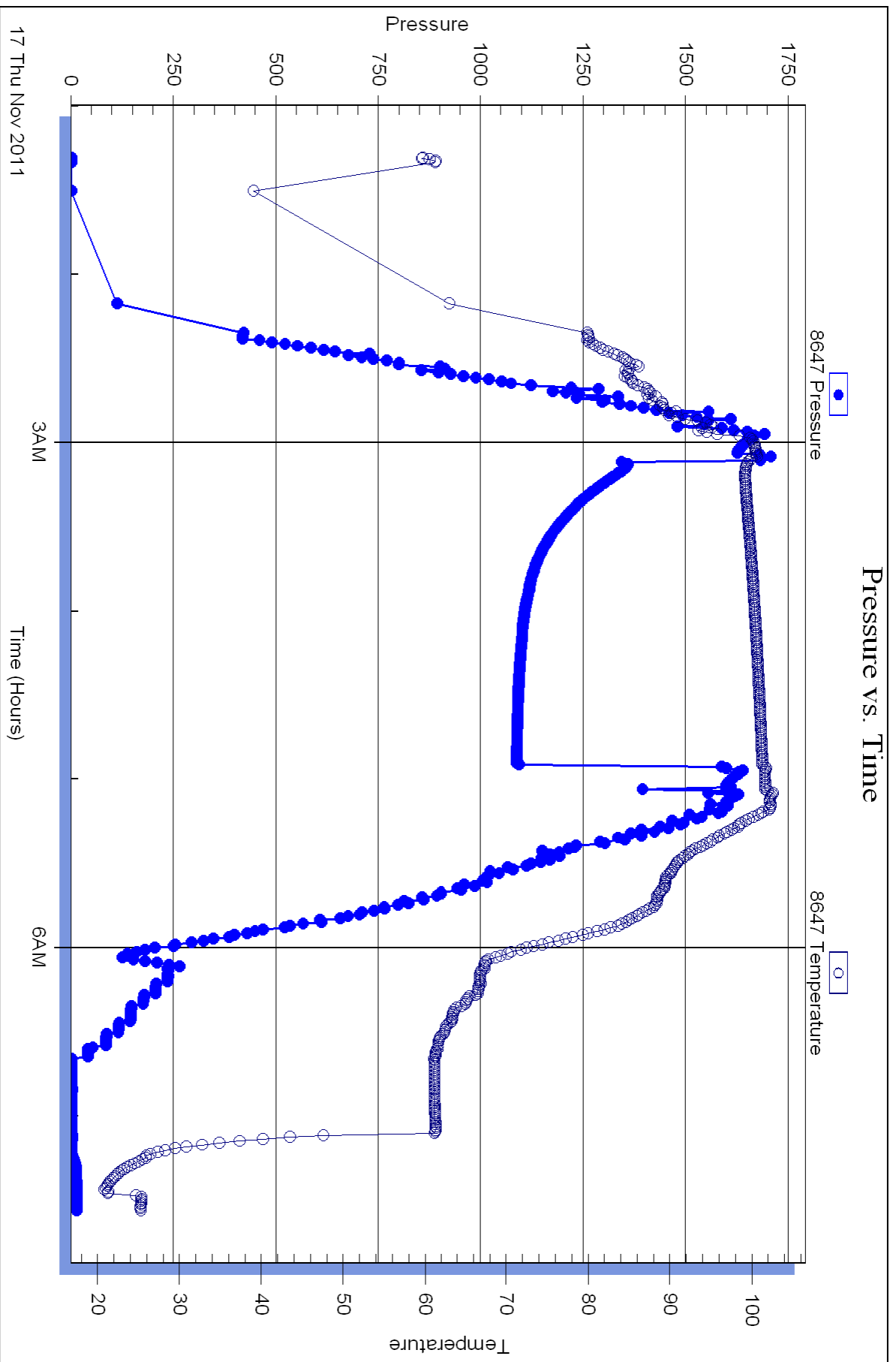
Length ft	Description	Volume bbl
125.00	GMCO g=40% m=20% o=40%	1.753
350.00	GCO g=30% o=70%	4.910

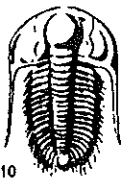
Total Length: 475.00 ft Total Volume: 6.663 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

Pressure vs. Time









TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

RECEIVED
NOV 18 2011

NO. 44271

Well Name & No. Virginia #1 BY: _____ Test No. 1 Date 11-15-11
 Company TDT Inc. Elevation 2024 KB 2014 GL _____
 Address 1310 Bison Rd. Hays Ks. 67601
 Co. Rep / Geo. Heb Deives Rig Southwind #1
 Location: Sec. 16 Twp. 15 Rge. 19 Co. Ellis State KS

Interval Tested 3434 - 3520 Zone Tested KC - HES
 Anchor Length 86' Drill Pipe Run 3425 Mud Wt. 9.0
 Top Packer Depth 3429 Drill Collars Run _____ Vis 51
 Bottom Packer Depth 3434 Wt. Pipe Run _____ WL 7.2
 Total Depth 3520 Chlorides _____ ppm System LCM Ni/

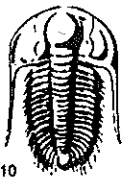
Blow Description ± F SURFACE Blow Building to Bottom of Bucket 10min.
ISI - SURFACE Blow Building to 7" IN 13min
F.P. - Blew Bottom of Bucket 1.5 min
FS - SURFACE Blow Building to 4" IN 7min

Rec	Feet of	%gas	%oil	%water	%mud
<u>60</u>	<u>AMO</u>	<u>00</u>	<u>40</u>	<u>40</u>	<u>20</u>
<u>90</u>	<u>HOCM</u>	<u>5</u>	<u>25</u>	<u>70</u>	<u>0</u>
<u>850</u>	<u>2 IP</u>				
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total _____ BHT _____ Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1711 Test 1125' T-On Location 1500
 (B) First Initial Flow 49 Jars _____ T-Started 16:20
 (C) First Final Flow 80 Safety Joint _____ T-Open 18:25
 (D) Initial Shut-In 1085 Circ Sub _____ T-Pulled 20:55
 (E) Second Initial Flow 81 Hourly Standby _____ T-Out 22:49
 (F) Second Final Flow 107 Mileage 30 RT 42' Comments _____
 (G) Final Shut-In 1076 Sampler _____
 (H) Final Hydrostatic 1701 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 30 Extra Recorder _____ Sub Total 0
 Initial Shut-In 45 Day Standby _____ Total 1167'
 Final Flow 30 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 45 Sub Total 1167'

Approved By _____ Our Representative [Signature]
 TriLOBITE TESTING INC. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED
NOV 18 2011

Test Ticket

NO. 44272

Well Name & No. Virginia #1 Test No. 2 Date 11-18-11
 Company TDI INC Elevation 2024 KB 2014 GL
 Address 1310 Bison Rd Hays KS 67601
 Co. Rep / Geo. Herb Deines Rig Southwind #1
 Location: Sec. 16 Twp. 15 Rge. 19 Co. Ellis State KS

Interval Tested 3330-3362 Zone Tested LKC "C"
 Anchor Length 32' Drill Pipe Run 3327 Mud Wt. 9.2
 Top Packer Depth 3330 Drill Collars Run 0 Vis 49
 Bottom Packer Depth 3362 Wt. Pipe Run 0 WL 6.8
 Total Depth 3750 Chlorides 3600 ppm System LCM 0

Blow Description FF: BOB 1min.
ISI: BOB 5min After Bleedoff
FF: BOB IMMEDIATELY
FSH WAS TO SURFACE DURING BLEEDOFF

Rec	Feet of	%gas	%oil	%water	%mud
<u>125</u>	<u>BMCO</u>	<u>40</u>	<u>40</u>		<u>20</u>
<u>350</u>	<u>GC0</u>	<u>30</u>	<u>70</u>		
<u>125</u>	<u>BMCO</u>	<u>40</u>	<u>40</u>		<u>20</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 475' BHT 108 Gravity 42 API RW @ ° F Chlorides ppm

(A) Initial Hydrostatic 1663 Test 1125' T-On Location 00:01
 (B) First Initial Flow 56 Jars T-Started 01:18
 (C) First Final Flow 114 Safety Joint T-Open 03:07
 (D) Initial Shut-In 909 Circ Sub T-Pulled 04:52
 (E) Second Initial Flow 125 Hourly Standby T-Out 07:35
 (F) Second Final Flow 185 Mileage 30 RT 42' Comments TD Log = 3752
 (G) Final Shut-In 868 Sampler TD Geolograph = 3750
 (H) Final Hydrostatic 1597 Straddle 600' Test TD = 3751
 Ruined Shale Packer
 Ruined Packer

Initial Open 15 Extra Packer Extra Copies
 Initial Shut-In 30 Extra Recorder Sub Total 0
 Final Flow 15 Day Standby Total 1767'
 Final Shut-In 45 Accessibility MP/DST Disc't
 Sub Total 1767'

Approved By _____ Our Representative [Signature] + Jim

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

HERB DEINES

CONSULTING GEOLOGIST

HAYS, KS 67801

108 W. 35th ST. PH. 888-625-3380

COMPANY TDI, Inc.

WELL Channel #1

FIELD

COUNTY Ellis STATE Kansas

LOGGING BY: 430 FSL + 455 FEL/SEH

Log Tech SEC 15 TYP 15a RCE 19a

1. Dual Induction Log 4

2. Dual Compensated Density Log 6

3. 4

Contractor: Southwind Drilling Co. 415 S 1

Completed 10-14-2011

RTD 3480' LTD 3481'

Surface casing 8 3/4" set to 1202' w/ 3255 SMD

Production casing

Drilling Time 2900' - RTD

Samples 2950' - RTD

Daily Penetration Rate

Table with columns: Date, Depth, Activity

FOLD HERE

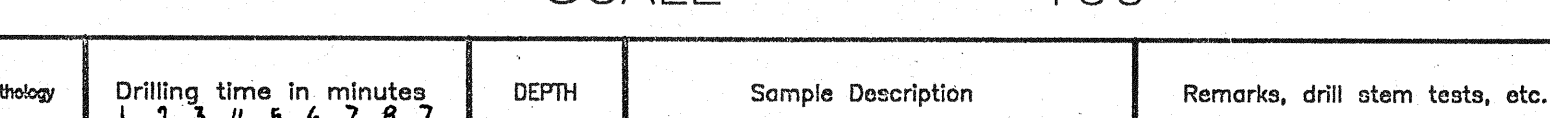
REMARKS: Show zones in upper LKC Test and Recovered salt water. Conglomerate sand did not develop and Arbuckle too low. Recommendation: To plug and abandon well.

Herb Deines

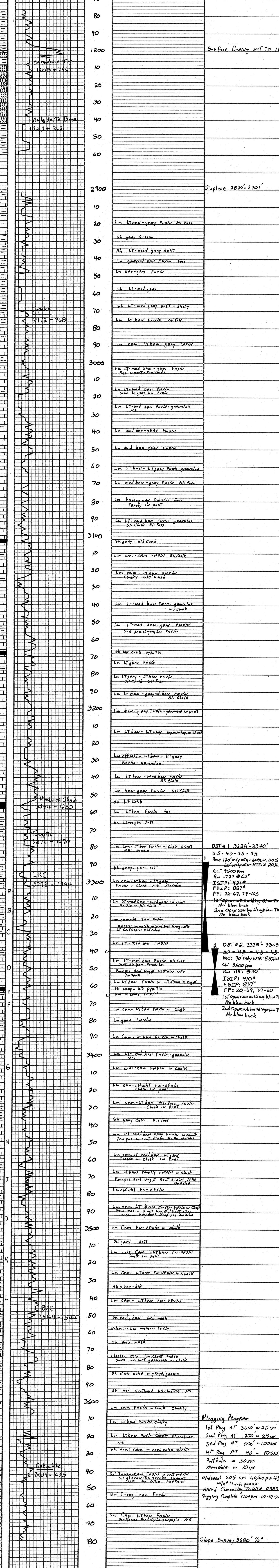
Table with columns: Formation, Sample, Log, Datum, * Formation, Sample, Log, Datum, *

* Structural Position to:

LEGEND



SCALE 1" = 100'



LOG 7703

JOB LOG

SWIFT Services, Inc.

DATE 10-8-11 PAGE NO. 1

CUSTOMER **T D I** WELL NO. **#1** LEASE **Char-Lotte** JOB TYPE **Deep Surface** TICKET NO. **20189**

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	2330							on loc w/FE
								TD 1204'
								8 5/8" x 23" x 1202' x 27'
	0335							start 8 5/8"
	0530							Break Circ
	0600	4.5	0				200	start Mud flush 50 gal
	0603	4.5	12/0				200	start KCL flush 20 bbl
	0608	6	20/0				250	start SMD Cement @ 11.8" 100 sks
	0616	6	46/0				250	start SMD Cement @ 12.5" 100 sks
	0623	6	40/0				250	start SMD Cement @ 13" 100 sks
	0629	6	36/0				250	start SMD Cement @ 14.5" 25 sks
	0633		21					End Cement Drop Plug
	0637	5	0				200	start Displacement
	0642	4.5	25				200	Circ Cement
	0650	4.5	30				250	catch cement
	0700		75				400	Plug did not land
							300	Shut In

Circ 75sks to pit

Thank you

Nick, Josh F., Brandon, & Darrin

ALLIED CEMENTING CO., LLC. 038317

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT:

Russell KS

DATE <u>10-14-2011</u>	SEC. <u>15</u>	TWP. <u>15S</u>	RANGE <u>19W</u>	CALLED OUT	ON LOCATION	JOB START <u>3:00 PM</u>	JOB FINISH <u>3:30 PM</u>
LEASE <u>CHARLOTTE</u>	WELL# <u>1</u>	LOCATION <u>ANTONINO KS, 1W 3S 1/4 NW 1/4</u>			COUNTY <u>ELLIS</u>	STATE <u>KANSAS</u>	
OLD OR NEW (Circle one)							

CONTRACTOR Southwind Dals Right 1

TYPE OF JOB Rotary Plug

HOLE SIZE 7 7/8 T.D. 3680

CASING SIZE 8 5/8 Surface DEPTH

TUBING SIZE DEPTH

DRILL PIPE 4 1/2 x 4 DEPTH 3610

TOOL DEPTH

PRES. MAX MINIMUM L

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG.

PERFS.

DISPLACEMENT

OWNER

CEMENT AMOUNT ORDERED 60
205 SX 40 48 gal
4 # FLO Seal Per SX

COMMON	<u>123</u>	@	<u>16.25</u>	<u>1998.75</u>
POZMIX	<u>82</u>	@	<u>8.50</u>	<u>697.00</u>
GEL	<u>7</u>	@	<u>21.25</u>	<u>148.75</u>
CHLORIDE		@		
ASC		@		
	<u>Flo Seal 5/8</u>	@	<u>2.70</u>	<u>137.70</u>
		@		
		@		
		@		
		@		
HANDLING	<u>212</u>	@	<u>2.25</u>	<u>477.00</u>
MILEAGE	<u>111/19/26</u>			<u>816.20</u>
TOTAL				<u>4275.40</u>

EQUIPMENT

PUMP TRUCK CEMENTER Glen

417 HELPER Woody

BULK TRUCK

481 DRIVER Roy

BULK TRUCK

DRIVER

REMARKS:

25 SX @ 360'

25 SX @ 12' 10'

100 SX @ 500'

10 SX @ 40' Swiper Plug

30 SX @ Rockhole

15 SX @ mouse hole

THANKS

SERVICE

DEPTH OF JOB

PUMP TRUCK CHARGE 1250.00

EXTRA FOOTAGE @

MILEAGE 35 @ 7.00 245.00

MANIFOLD @

@

35 @ 4.00 140.00

TOTAL 1635.00

CHARGE TO: T.D.T. Inc.

STREET

CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

8 5/8 Dry Hole Wiper @ N-C

@

@

@

@

TOTAL

To Allied Cementing Co., LLC.
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME Derby Keever

SIGNATURE [Signature]

SALES TAX (If Any)

TOTAL CHARGES 5910.40

DISCOUNT 202 IF PAID IN 30 DAYS



Dual Induction Log

DIGITAL LOG (785) 625-3858

15-051-26191-00-00

API No.

Company **TDI, Inc.**
 Well **Virginia #1**
 Field **Wildcat**
 County **Elilis** State **Kansas**

Location **SW NE NW NE
 560' FNL / 1845' FEL**

Sec: **16** Twp: **15S** Rge: **19W**

Other Services
 CNL / CDL
 MEL

Permanent Datum **Ground Level** Elevation **2014**
 Log Measured From **Kelly Bushing** **10 Ft. Above Perm. Datum**
 Drilling Measured From **Kelly Bushing**

Elevation
 K.B. 2024
 D.F. 2014
 G.L. 2014

Date	11/16/2011	
Run Number	One	
Depth Driller	3750	
Depth Logger	3752	
Bottom Logged Interval	3751	
Top Log Interval	1200	
Casing Driller	8.625 @ 1242	
Casing Logger	1240	
Bit Size	7.875	
Type Fluid in Hole	Chemical	
Salinity, ppm CL	3600	
Density / Viscosity	9.0 54	
pH / Fluid Loss	10.5 6.8	
Source of Sample	Flowline	
Rm @ Meas. Temp	1.30 @ 60	
Rmf @ Meas. Temp	0.98 @ 60	
Rmc @ Meas. Temp	1.76 @ 60	
Source of Rmf / Rmc	Charts	
Rm @ BHT	0.69 @ 114	
Operating Rig Time	3 Hours	
Max Rec. Temp. F	114	
Equipment Number	15	
Location	Hays	
Recorded By	R. Barnhart	
Witnessed By	Tom Denning	Herb Deines

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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

Thank you for using Log-Tech, Inc.
 (785) 625-3858

Antonino, KS:
 2W, 2S, 1/2W, S into

Database File: c:\warrior\data\tdi_virginia #1\tdihd.db
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 Charted by: Depth in Feet scaled 1:600

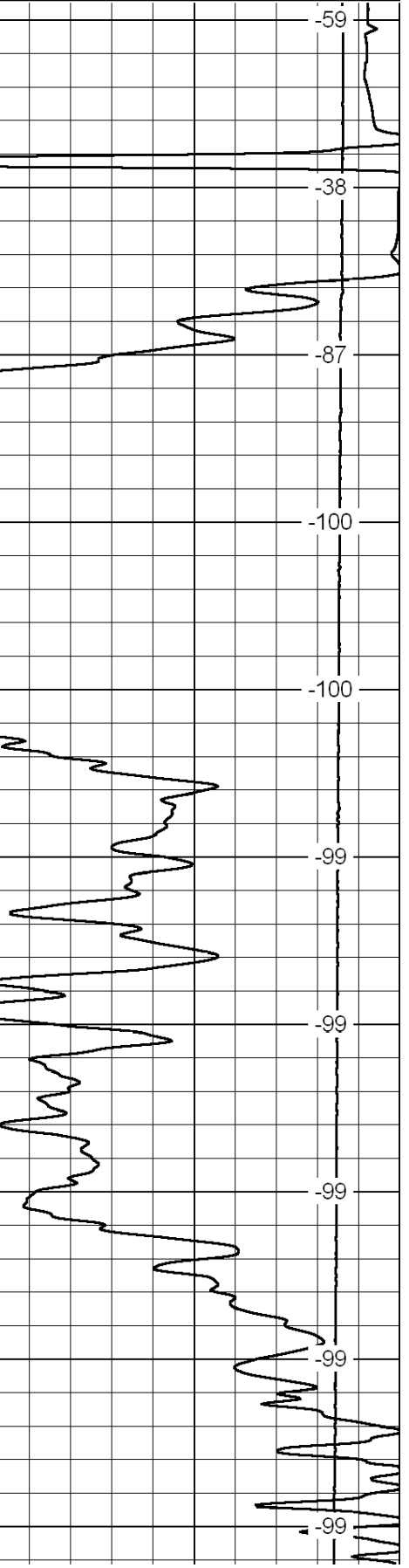
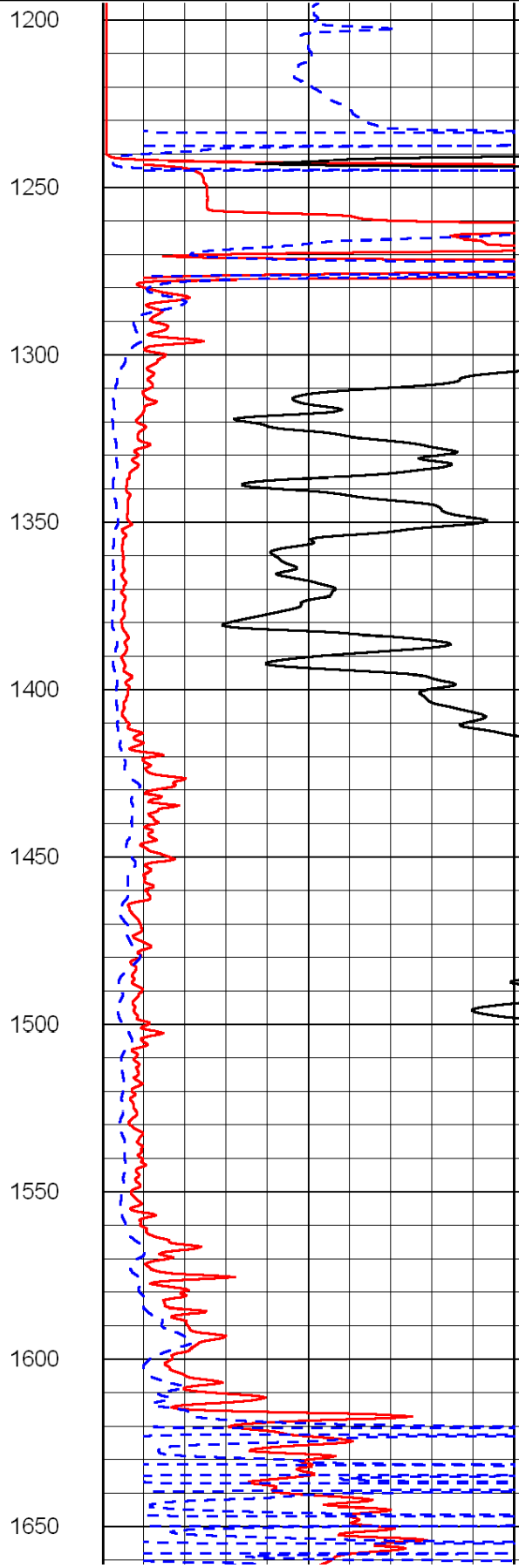
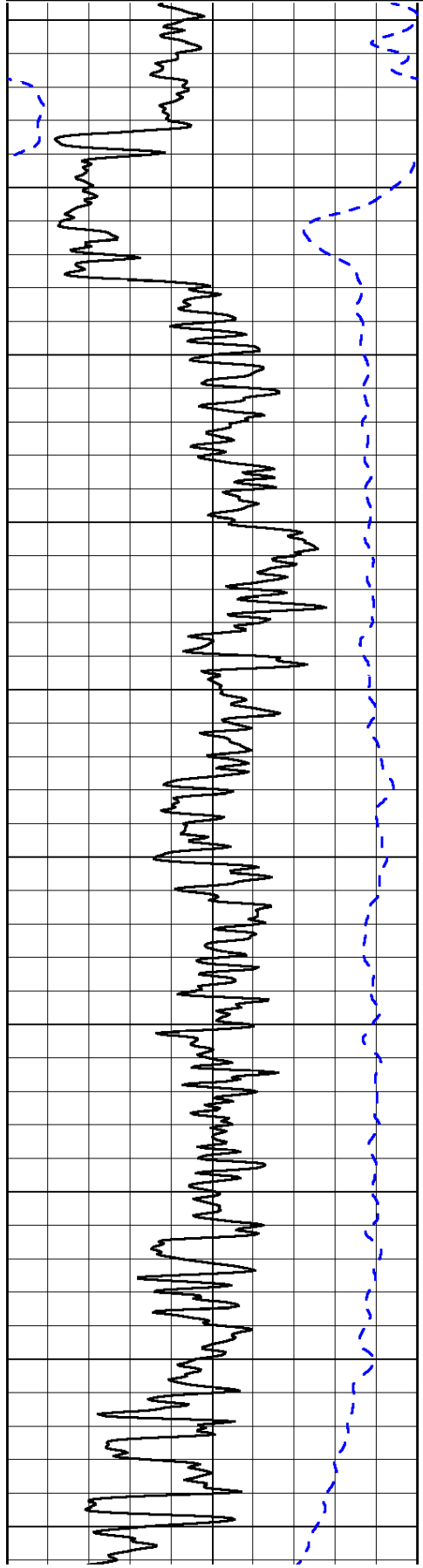
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-200	SP (mV)	0

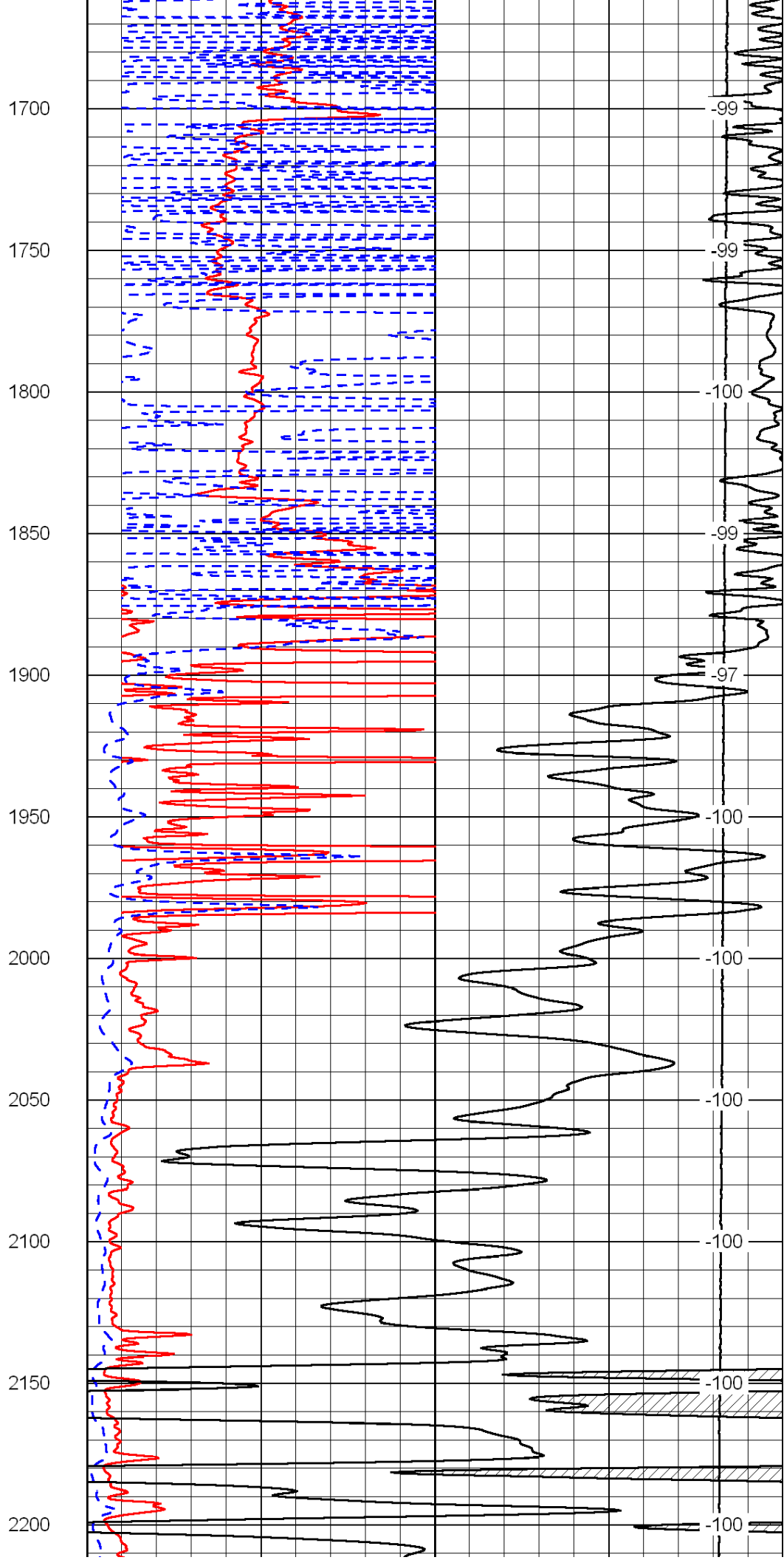
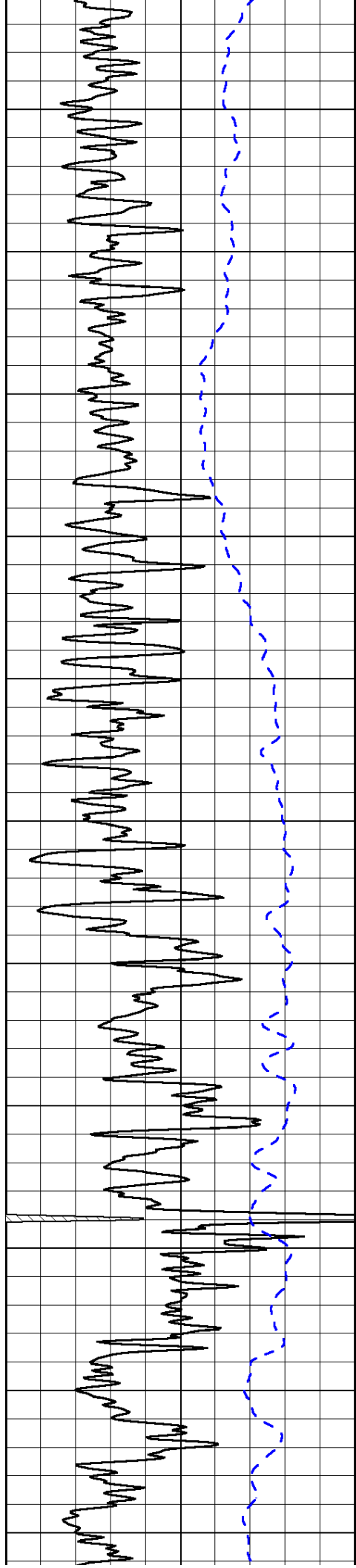
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0	Deep Resistivity	50

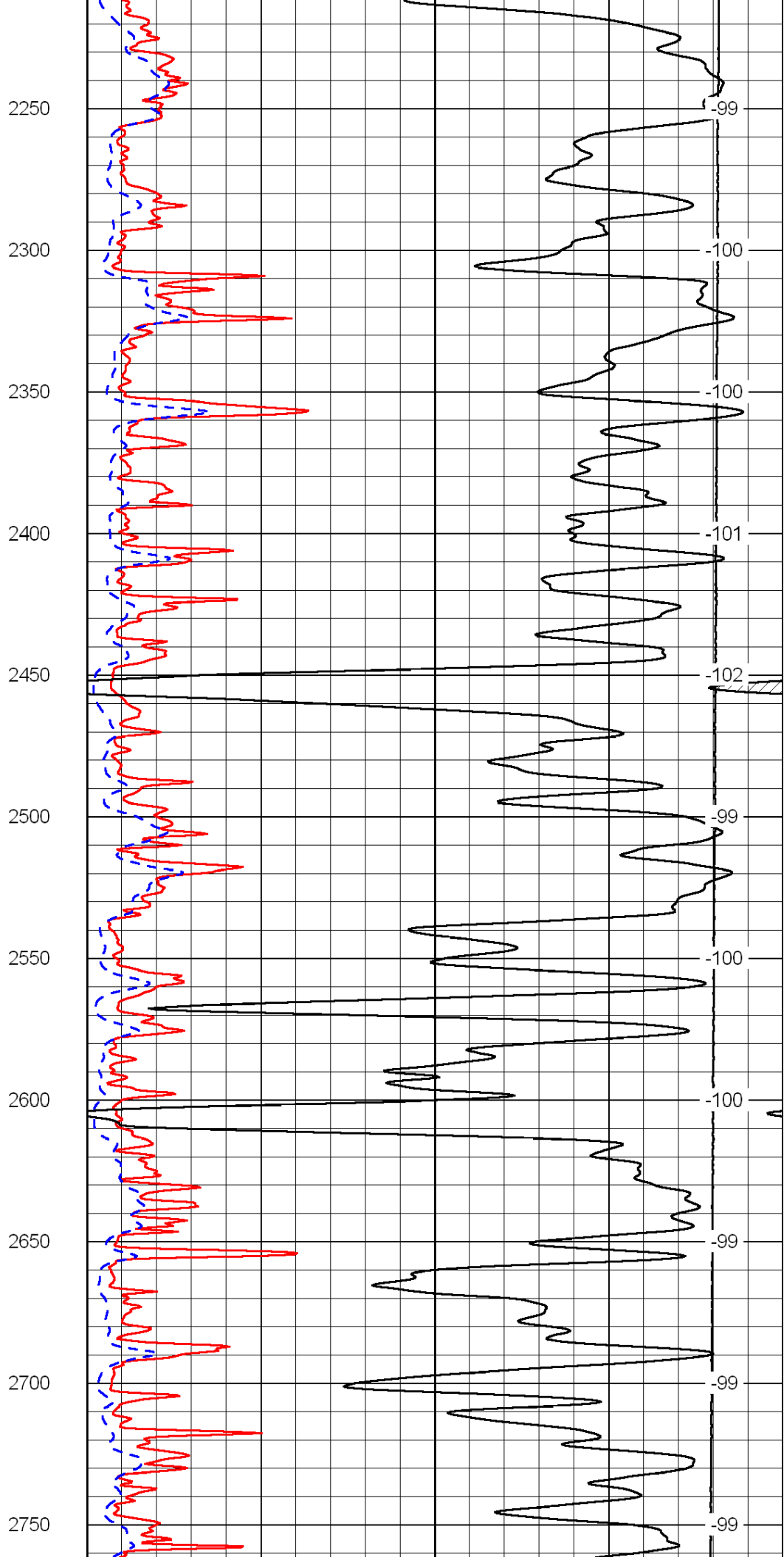
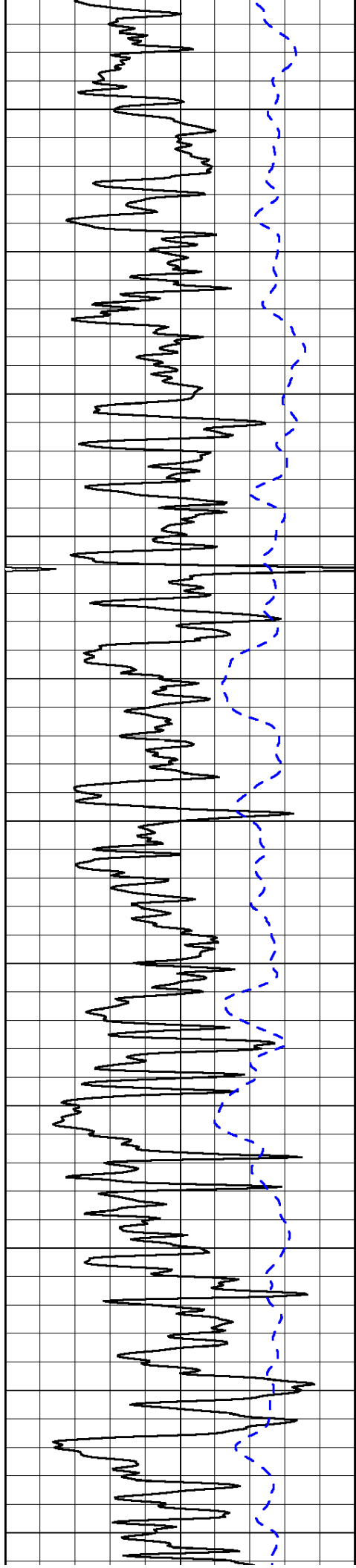
LSPD

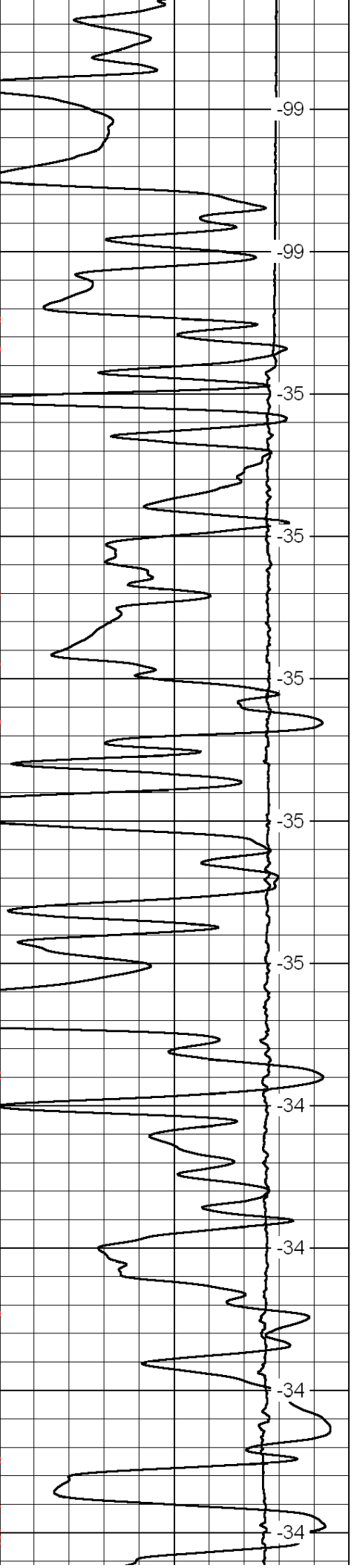
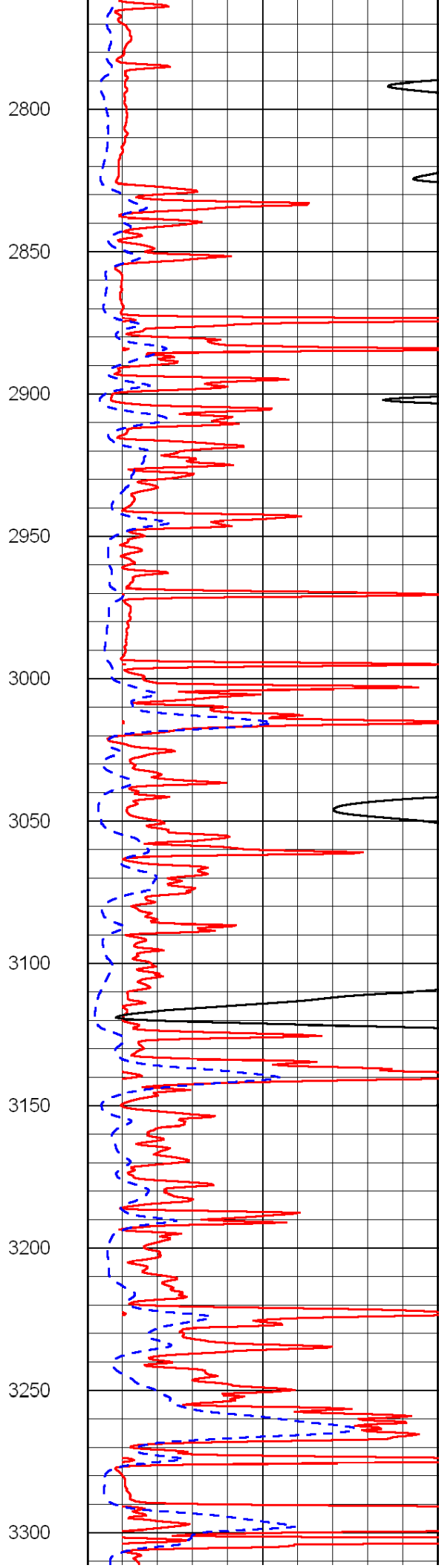
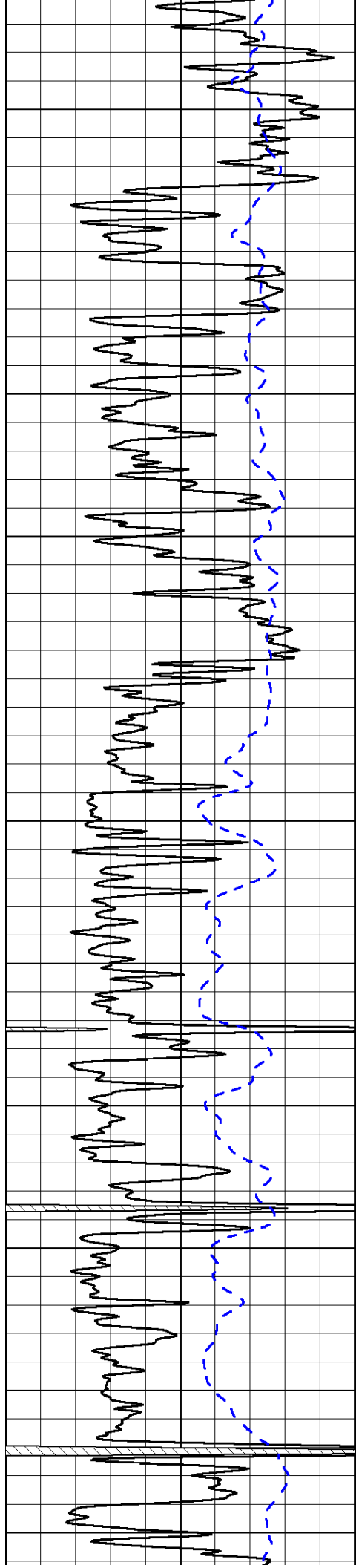
1000	Conductivity	0
15000	Line Tension	0

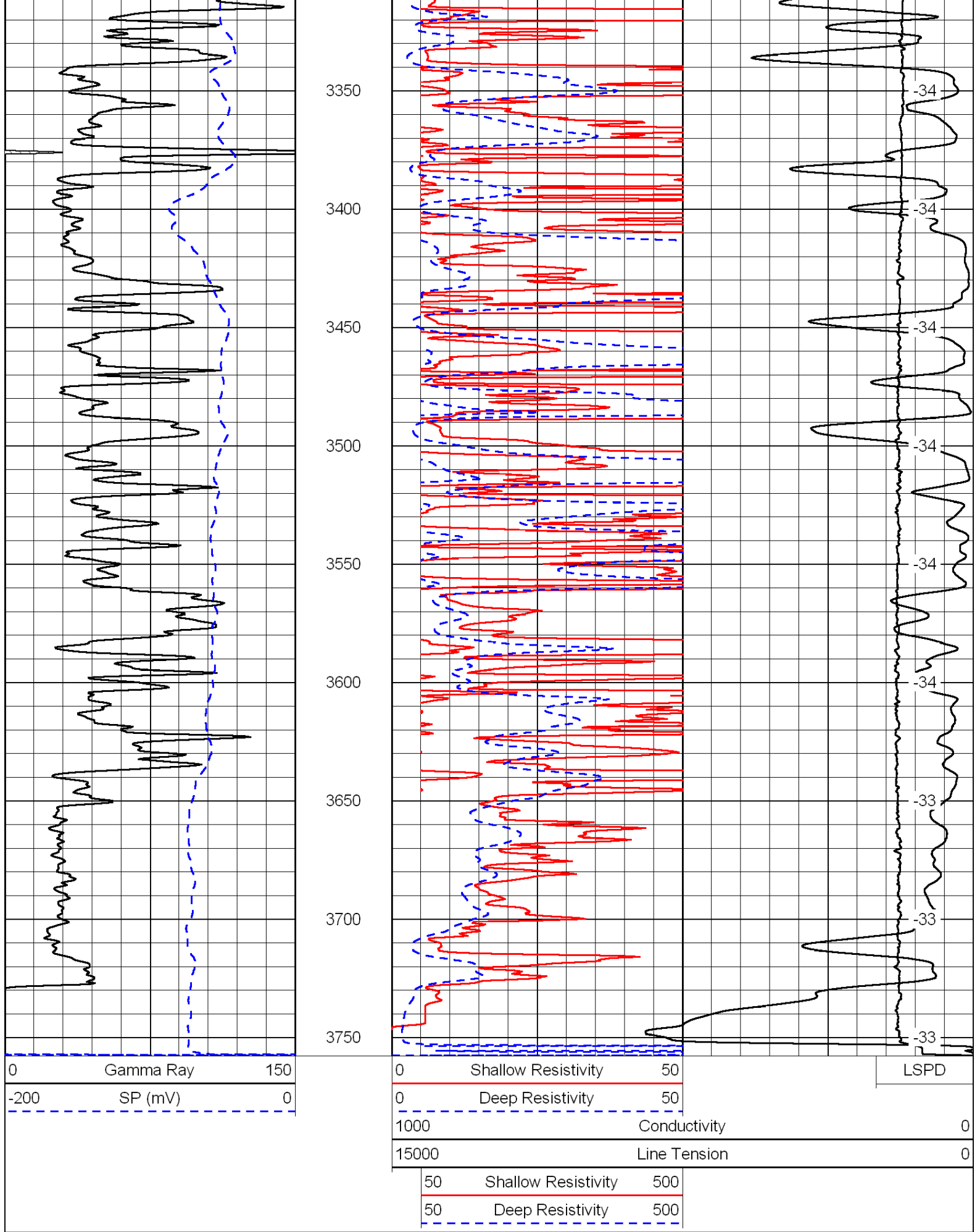
50	Shallow Resistivity	500
50	Deep Resistivity	500









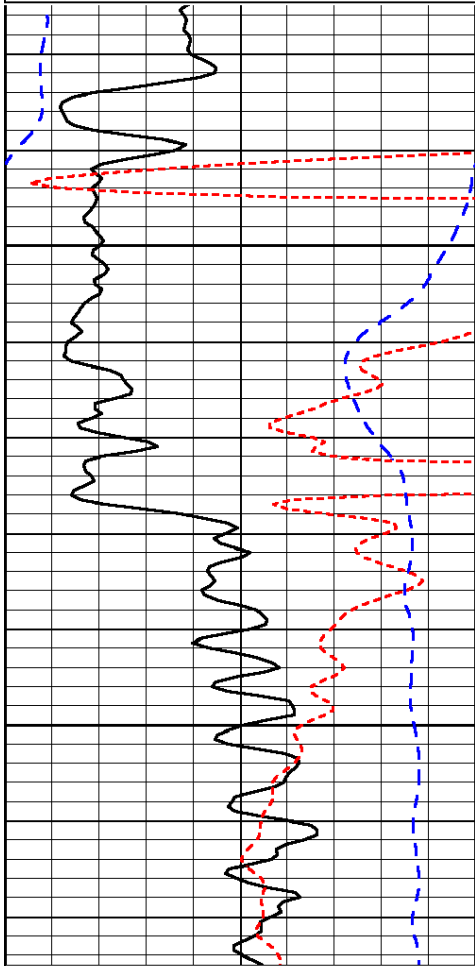


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 Presentation Format: dil
 Dataset Creation: Wed Nov 16 22:10:46 2011
 Charted by: Depth in Feet scaled 1:240

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-200	SP (mV)	0
-160	Rxo / Rt	40

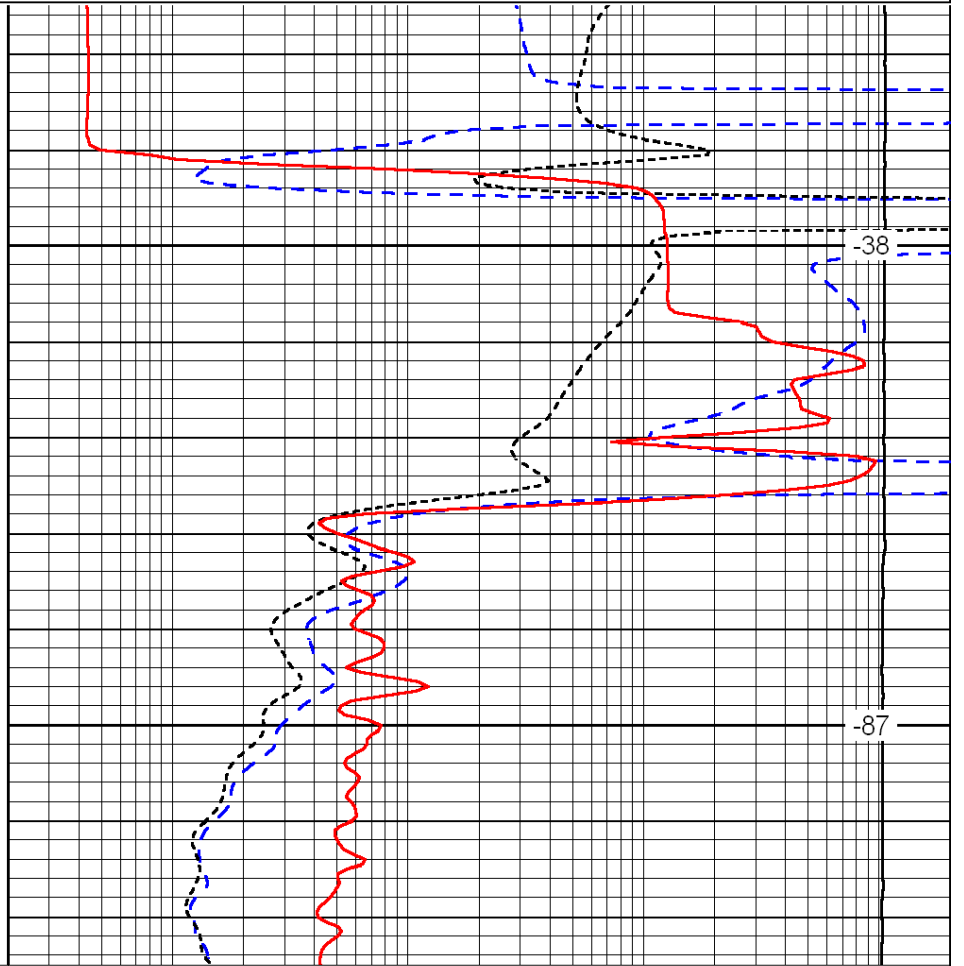
0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
15000	Line Tension	0

LSPD



1250

1300



-38

-87

0	Gamma Ray	150
-200	SP (mV)	0
-160	Rxo / Rt	40

0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
15000	Line Tension	0

LSPD

Database File: c:\warrior\data\tdi_virginia #1\tdihd.db
 Dataset Pathname: dil/tdimain
 Presentation Format: dil
 Dataset Creation: Wed Nov 16 22:10:46 2011
 Charted by: Depth in Feet scaled 1:240

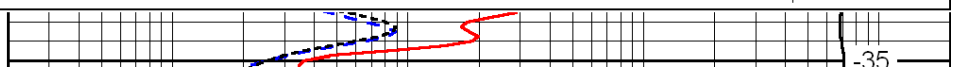
0	Gamma Ray	150
-200	SP (mV)	0
-160	Rxo / Rt	40

0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
15000	Line Tension	0

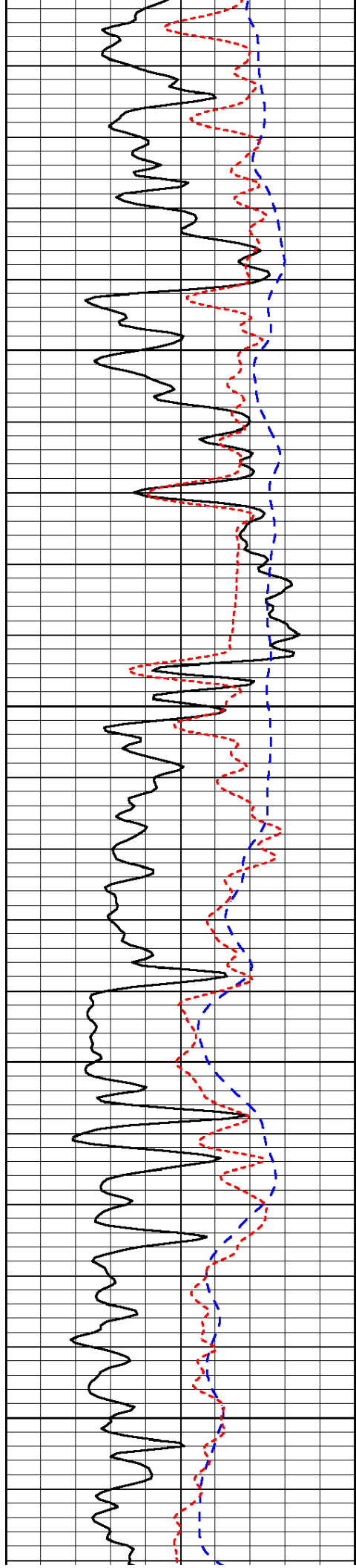
LSPD



2900



-35

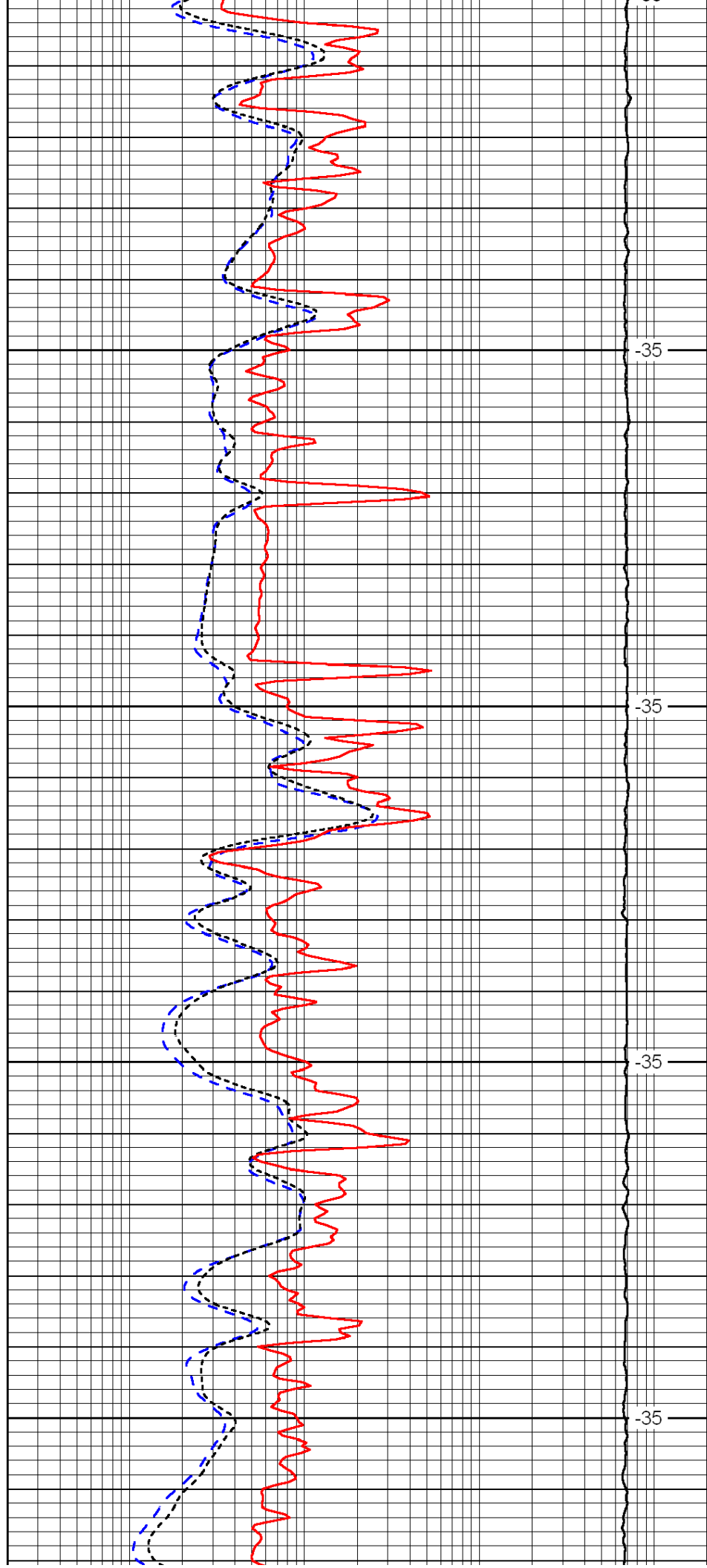


2950

3000

3050

3100

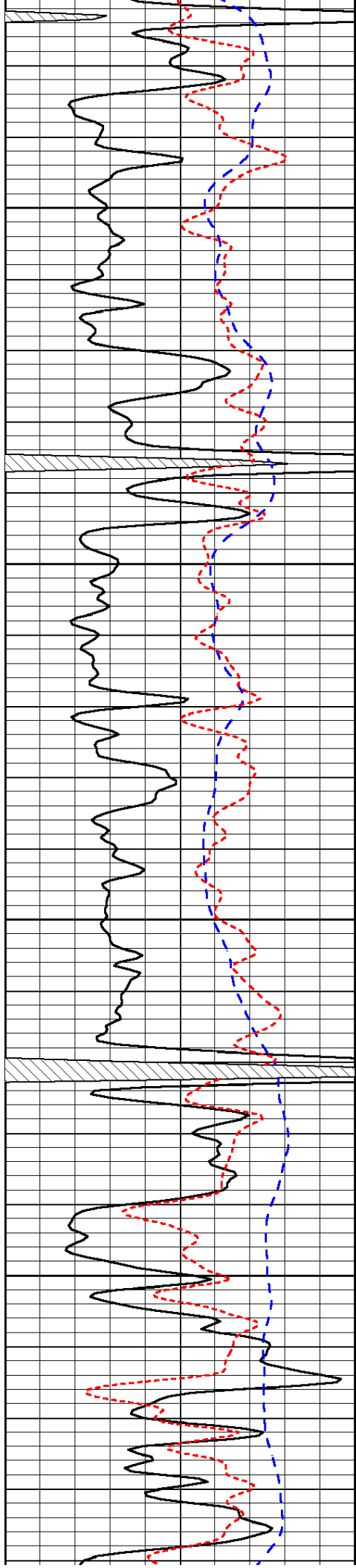


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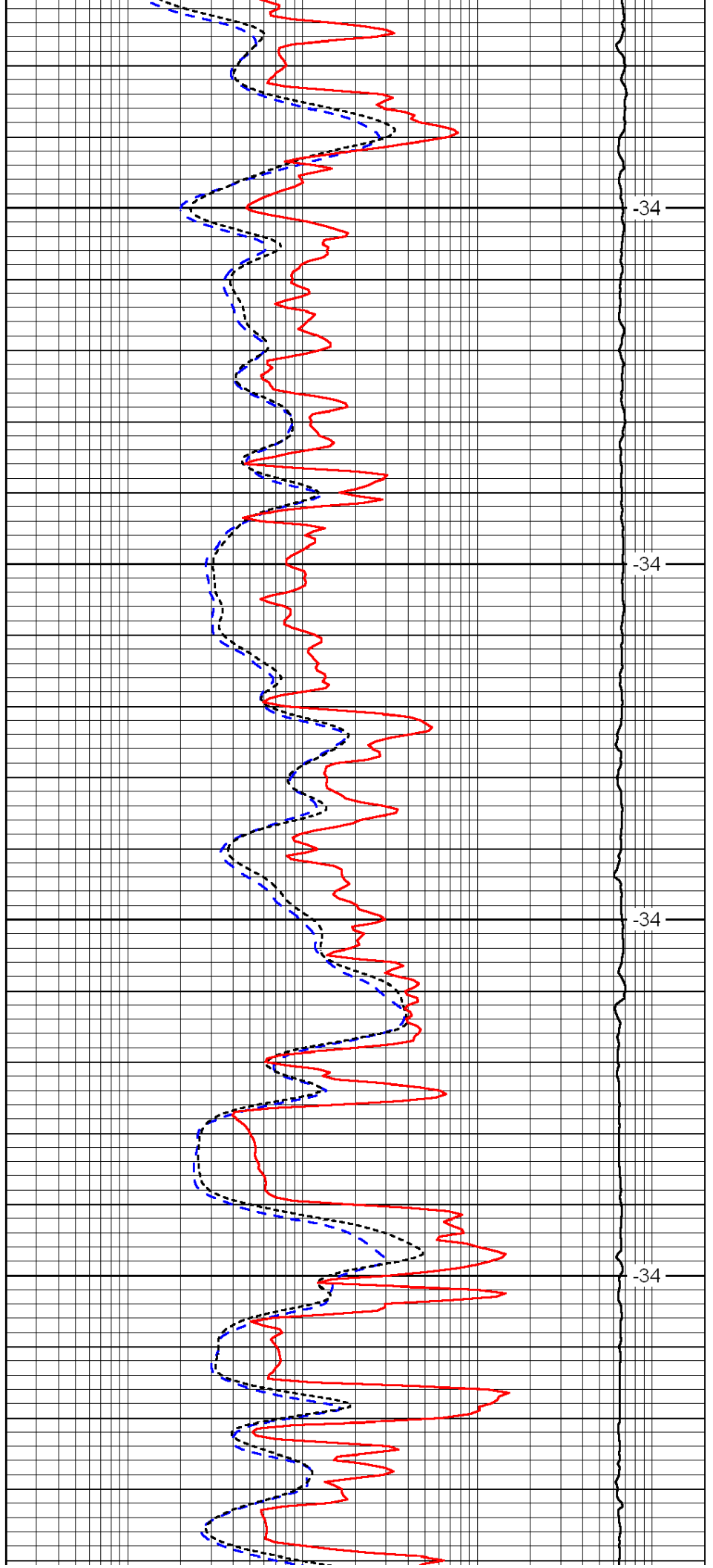


3150

3200

3250

3300

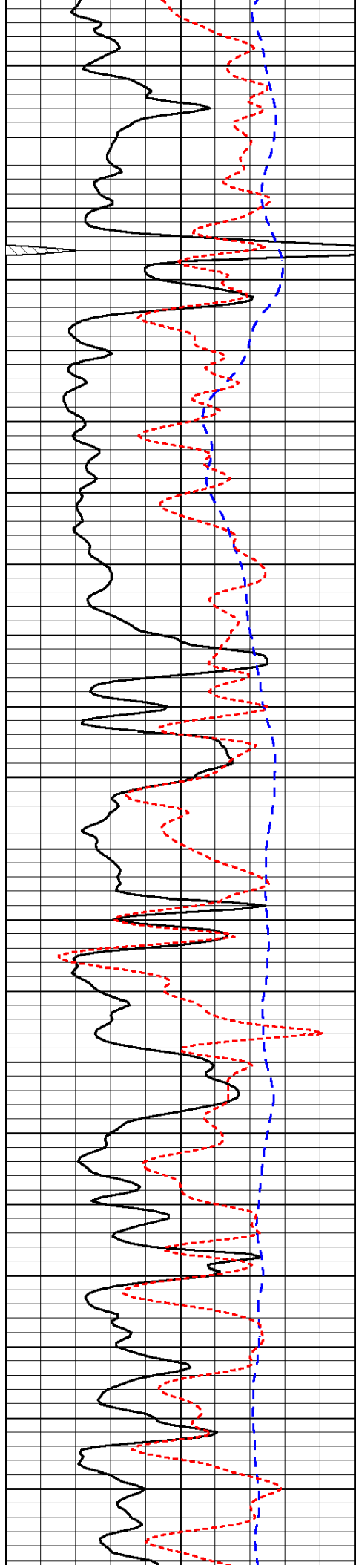


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-34

-34



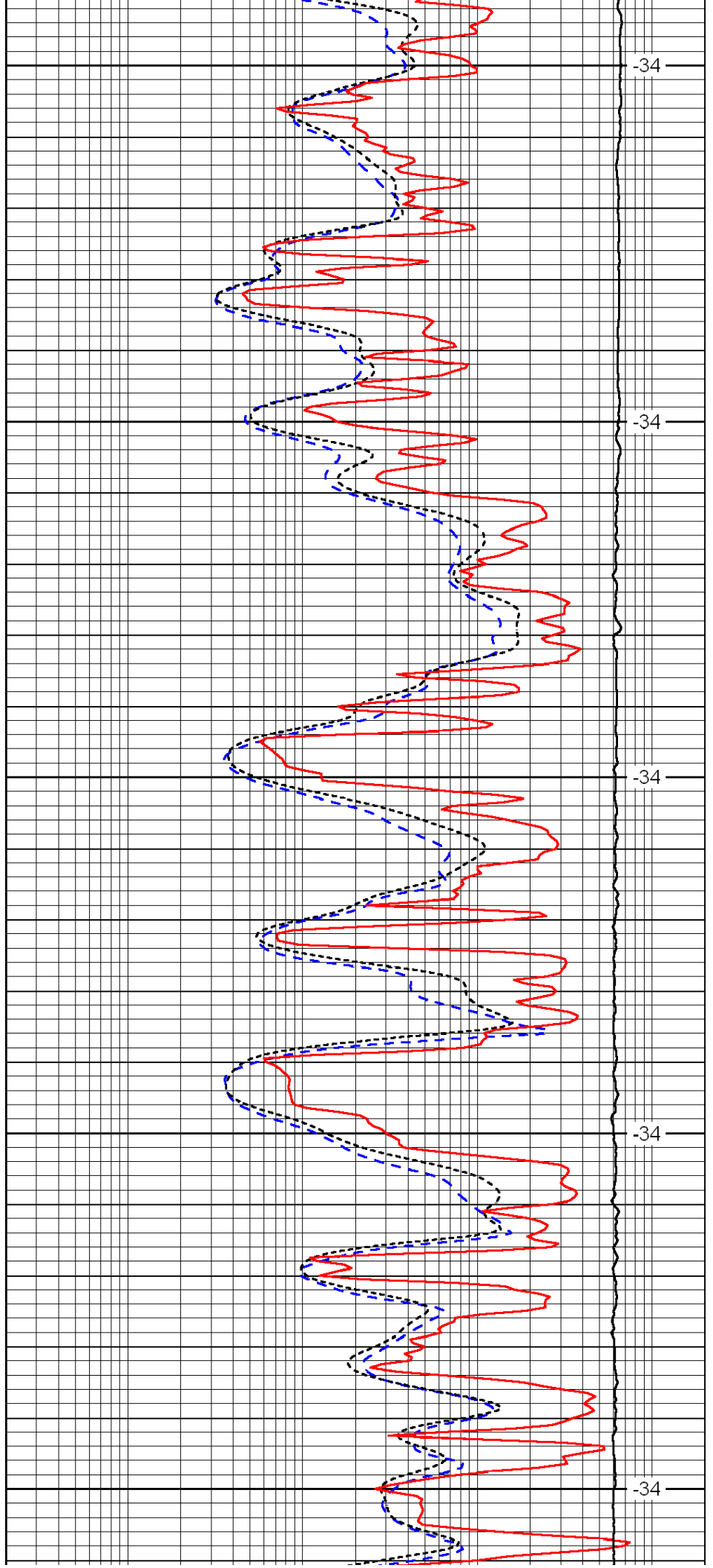
3350

3400

3450

3500

3550



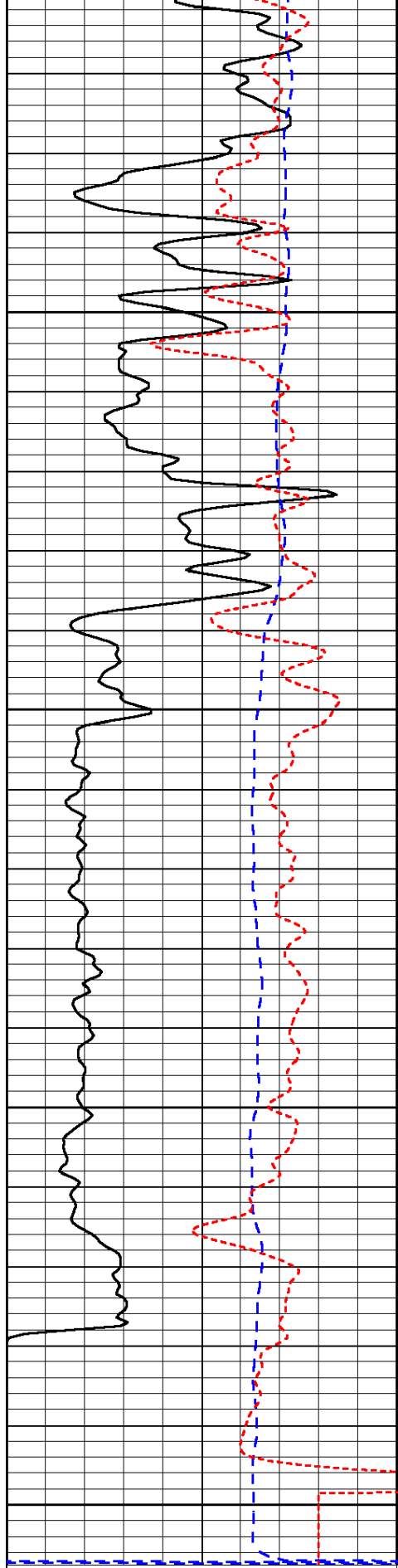
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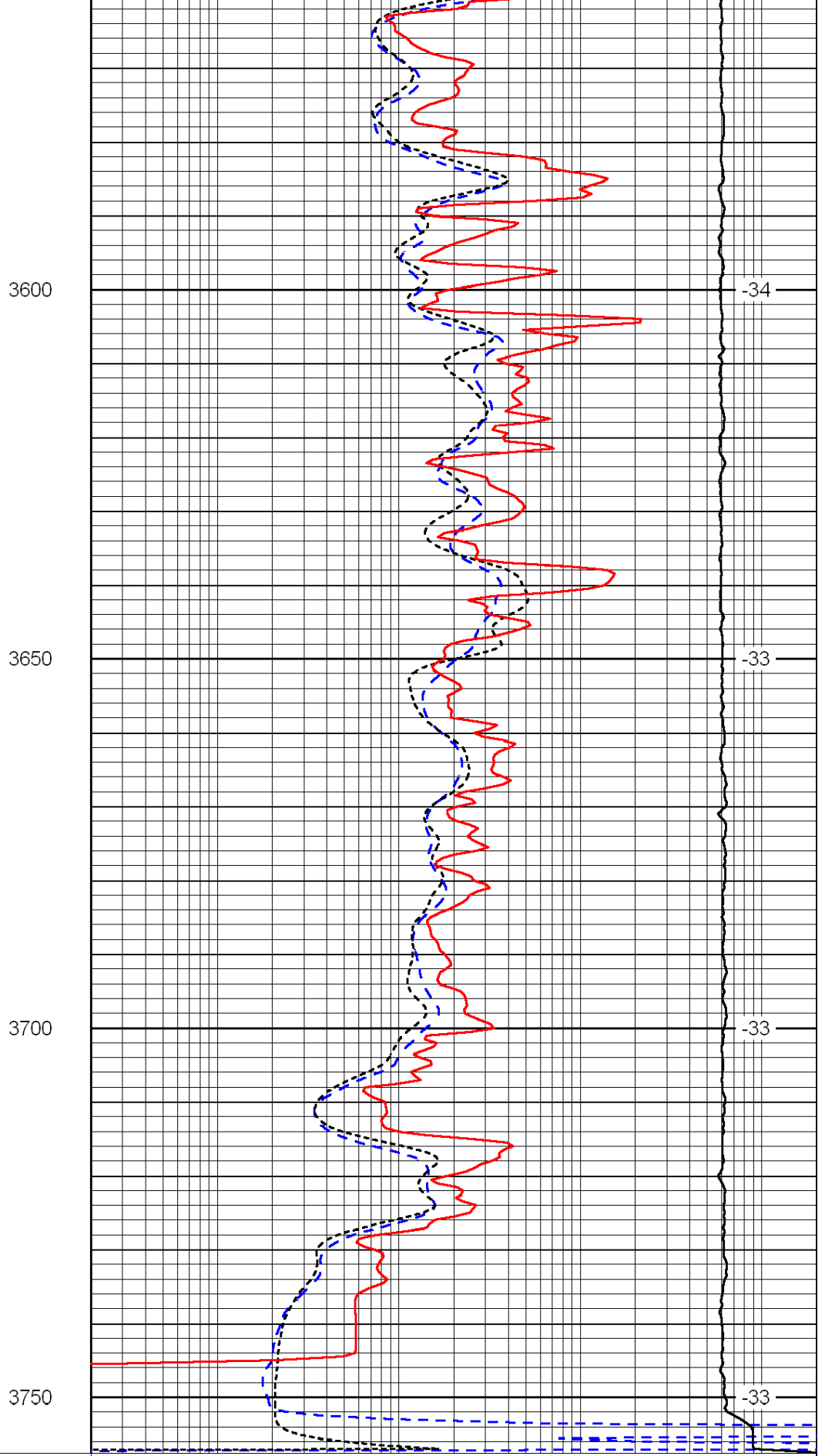
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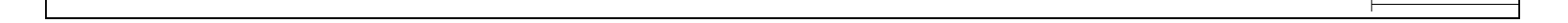
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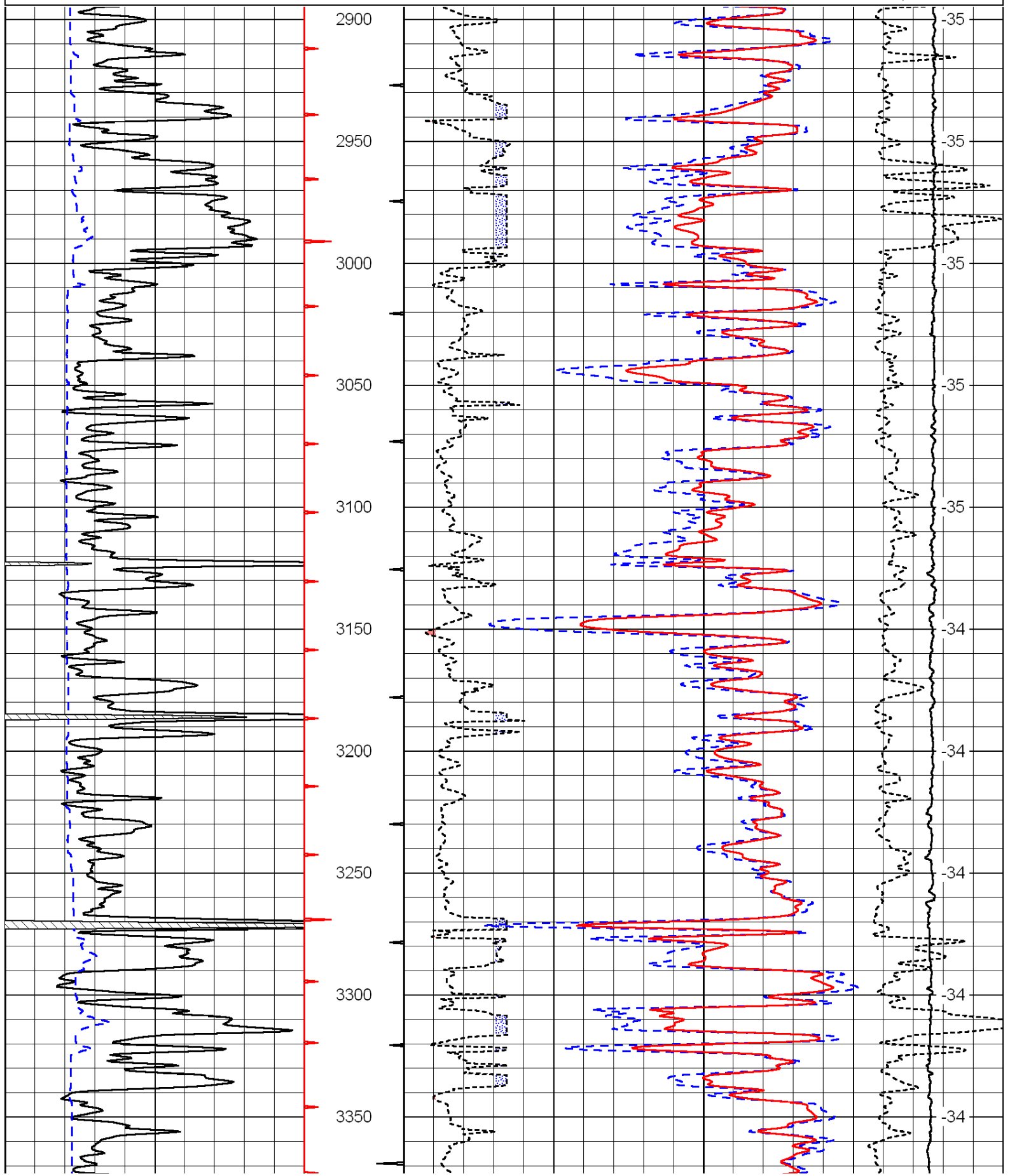
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-200	SP (mV)	0
-160	Rxo / Rt	40

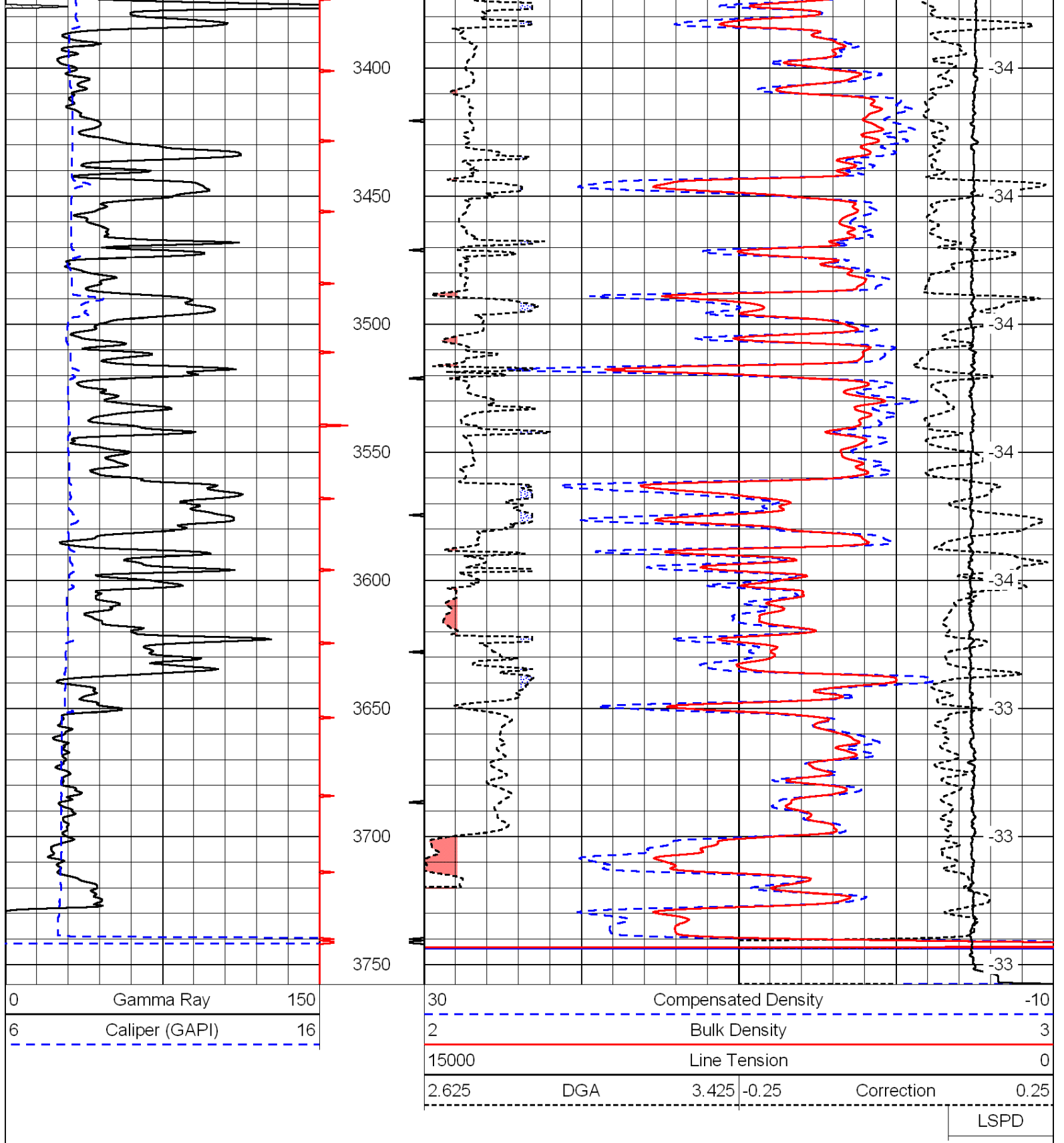


0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
15000	Line Tension	0



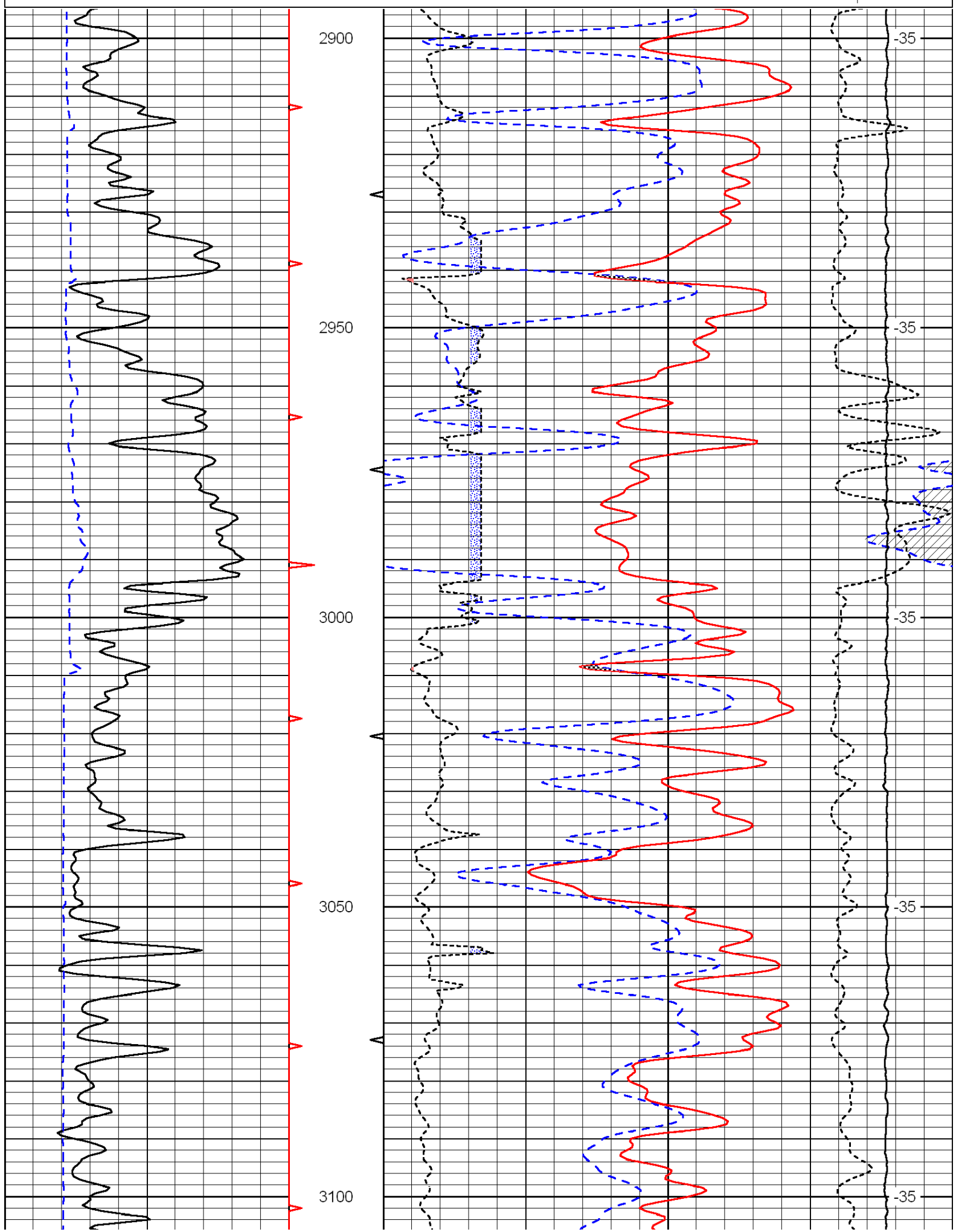
0	Gamma Ray	150	30	Compensated Density		-10
6	Caliper (GAPI)	16	2	Bulk Density		3
			15000	Line Tension		0
			2.625	DGA	3.425 -0.25	Correction 0.25
						LSPD

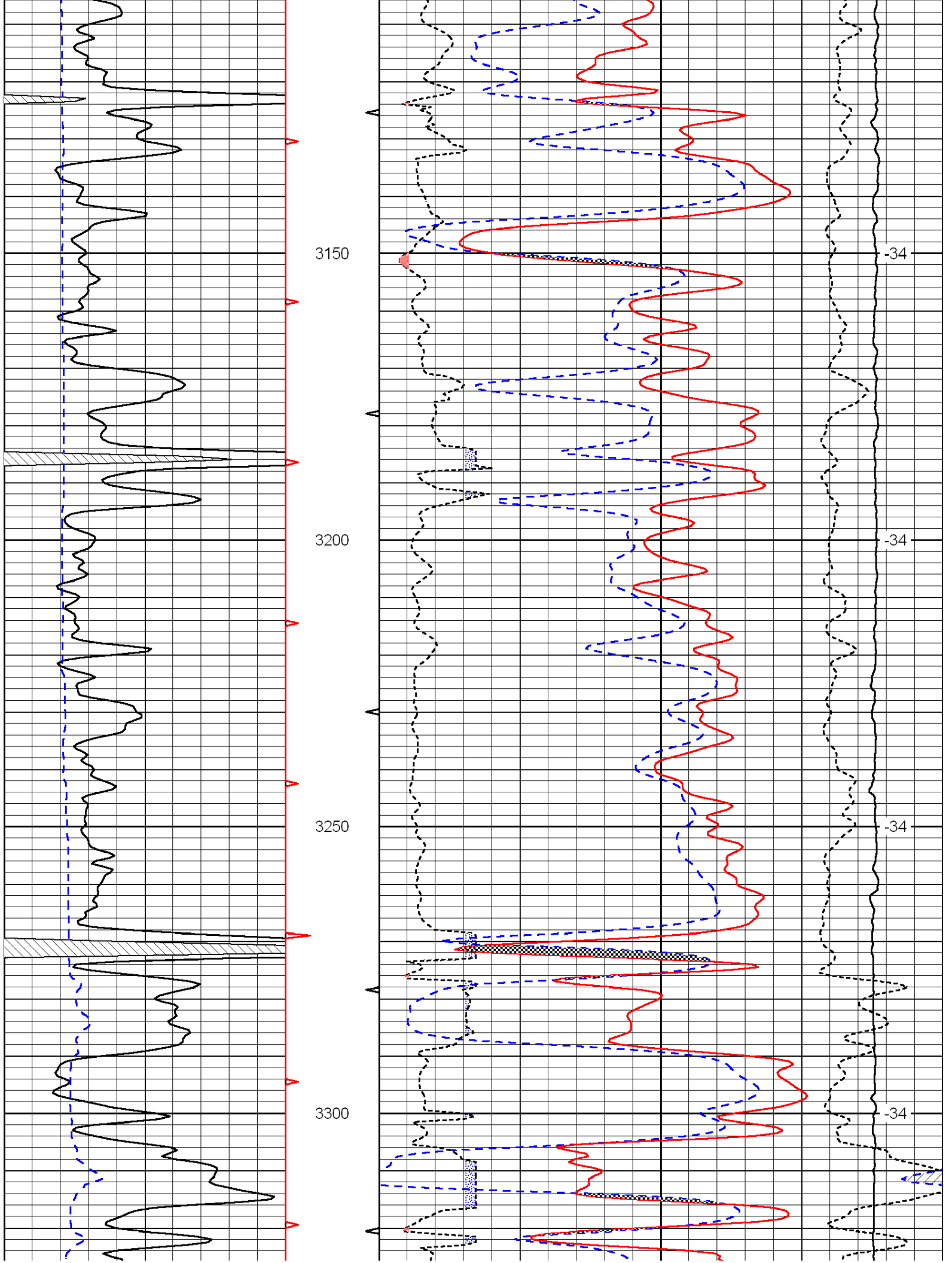


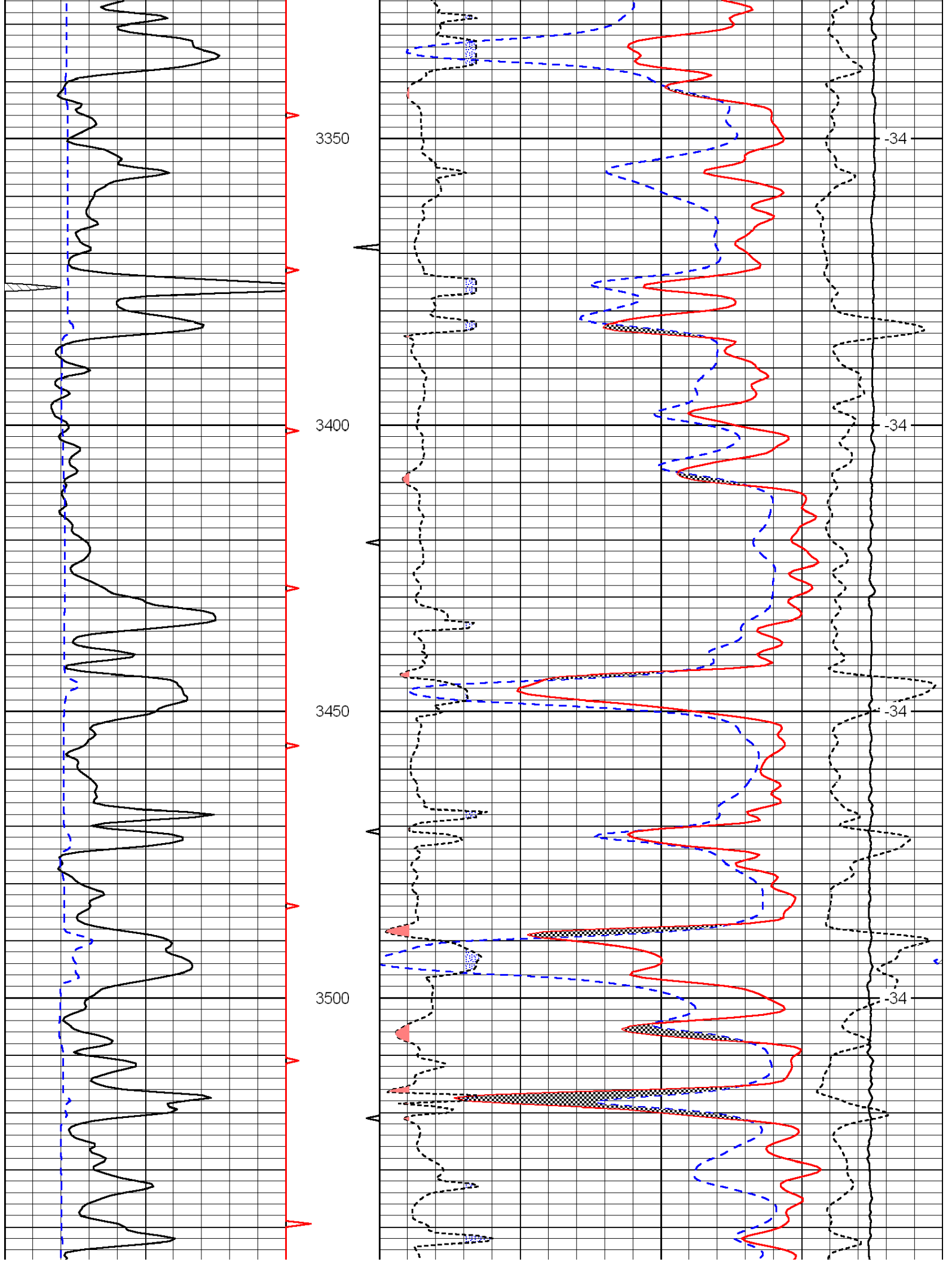


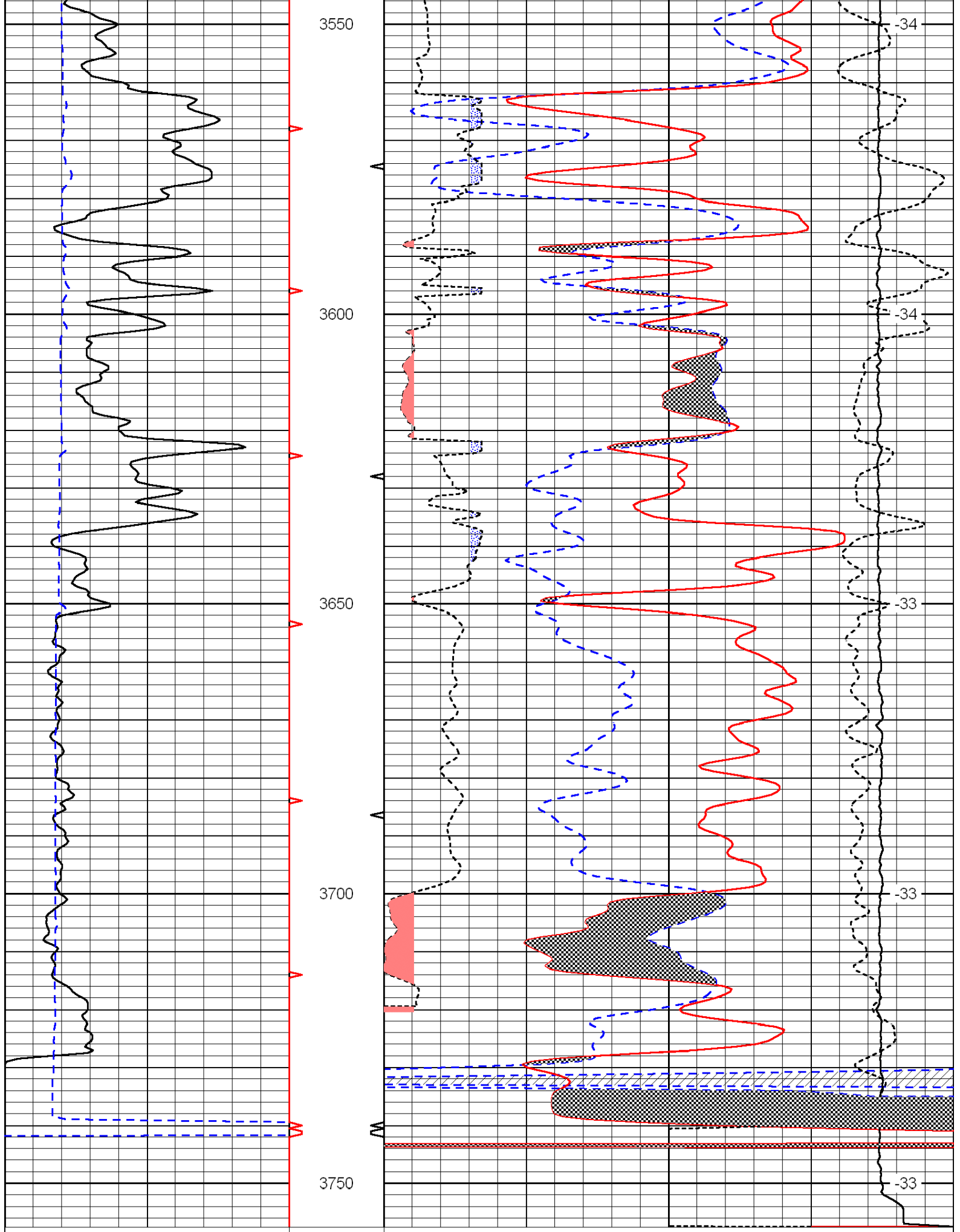
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 Charted by: Depth in Feet scaled 1:240

0	Gamma Ray	150
6	Caliper (GAPI)	16
30	Compensated Neutron (Limestone)	-10
30	Compensated Density (Limestone)	-10
2.625	DGA	3.425 -0.25
	Correction	0.25
	LSPD	









0	Gamma Ray	150
6	Caliper (GAPI)	16

30	Compensated Neutron (Limestone)	-10
30	Compensated Density (Limestone)	-10

2.625	DGA	3.425	-0.25	Correction	0.25
15000		Line Tension			0
					LSPD



DIGITAL LOG (785) 625-3858

Microresistivity Log

API No. 15-051-26191-00-00

Company **TDI, Inc.**
 Well **Virginia #1**
 Field **Wildcat**
 County **Eliis** State **Kansas**

Location **SW NE NW NE
 560' FNL / 1845' FEL**

Other Services
 CNL / CDL
 DIL

Permanent Datum **Ground Level** Elevation **2014**
 Log Measured From **Kelly Bushing** 10 Ft. Above Perm. Datum
 Drilling Measured From **Kelly Bushing**

Sec: **16** Twp: **15S** Rge: **19W**

Elevation
 K.B. 2024
 D.F. 2014
 G.L. 2014

Date	11/16/2011
Run Number	Two
Depth Driller	3750
Depth Logger	3752
Bottom Logged Interval	3751
Top Log Interval	2900
Casing Driller	8.625 @ 1242
Casing Logger	1240
Bit Size	7.875
Type Fluid in Hole	Chemical
Salinity, ppm CL	3600
Density / Viscosity	9.0 54
pH / Fluid Loss	10.5 6.8
Source of Sample	Flowline
Rm @ Meas. Temp	1.30 @ 60
Rmf @ Meas. Temp	0.98 @ 60
Rmc @ Meas. Temp	1.76 @ 60
Source of Rmf / Rmc	Charts
Rm @ BHT	0.69 @ 114
Operating Rig Time	3 Hours
Max Rec. Temp. F	114
Equipment Number	15
Location	Hays
Recorded By	R. Barnhart
Witnessed By	Tom Denning

<<< Fold Here >>>

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Comments

Thank you for using Log-Tech, Inc.
 (785) 625-3858

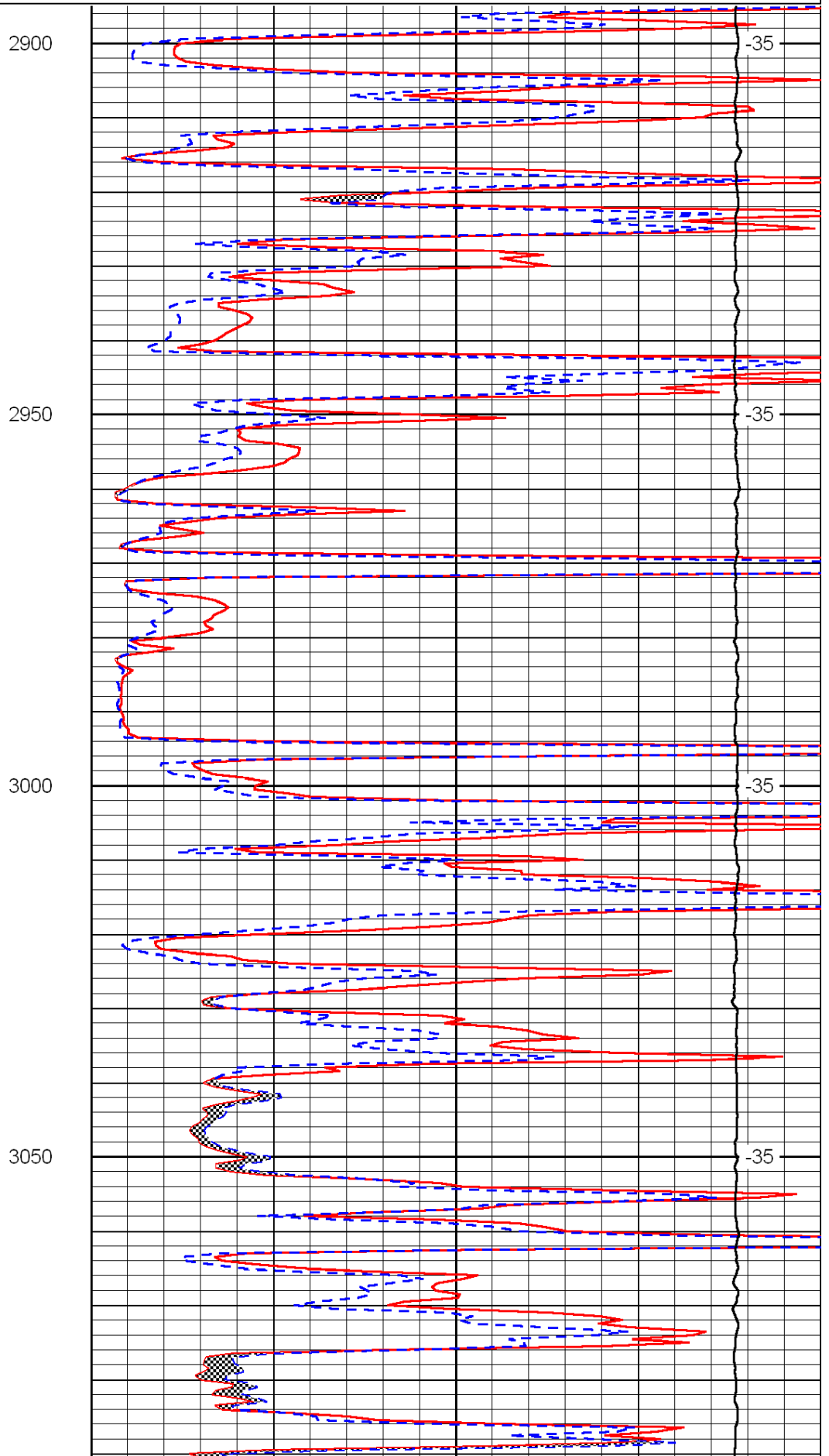
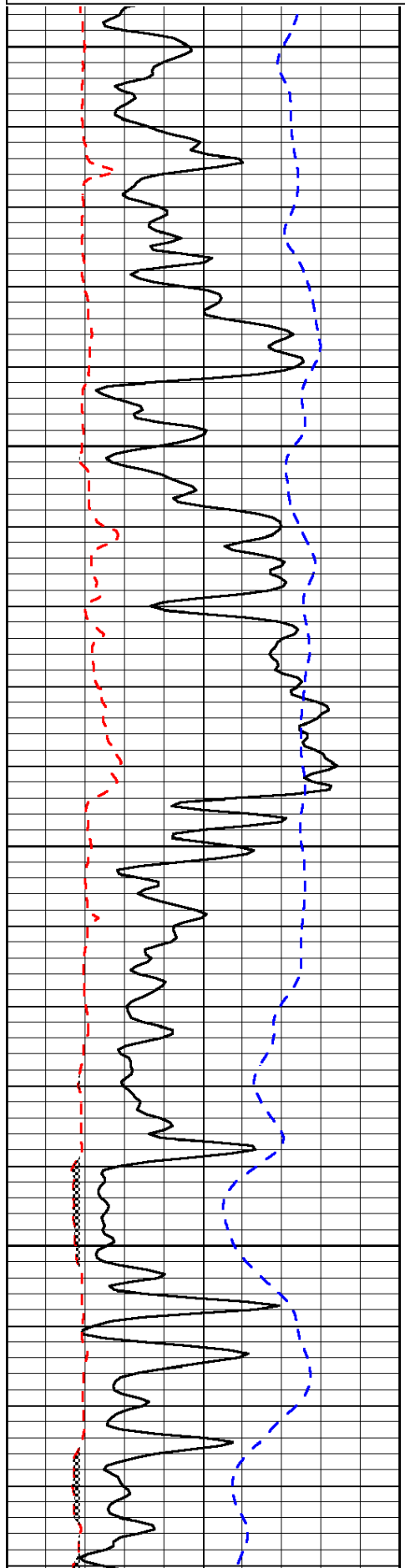
Antonino, KS:
 2W, 2S, 1/2W, S into

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 Presentation Format: micro
 Dataset Creation: Wed Nov 16 22:10:46 2011
 Charted by: Depth in Feet scaled 1:240

0	Gamma Ray	150
6	Micro Log Caliper (GAPI)	16
-200	SP (mV)	0

0	Micro Inverse 1 X 1	40
0	Micro Normal 2"	40
15000	Line Weight	0

LSPD



2900

2950

3000

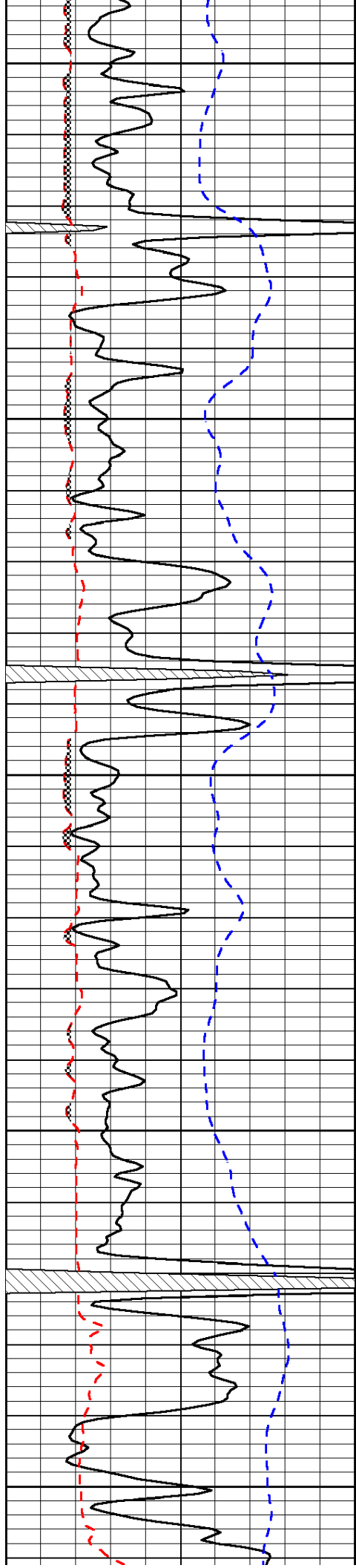
3050

-35

-35

-35

-35



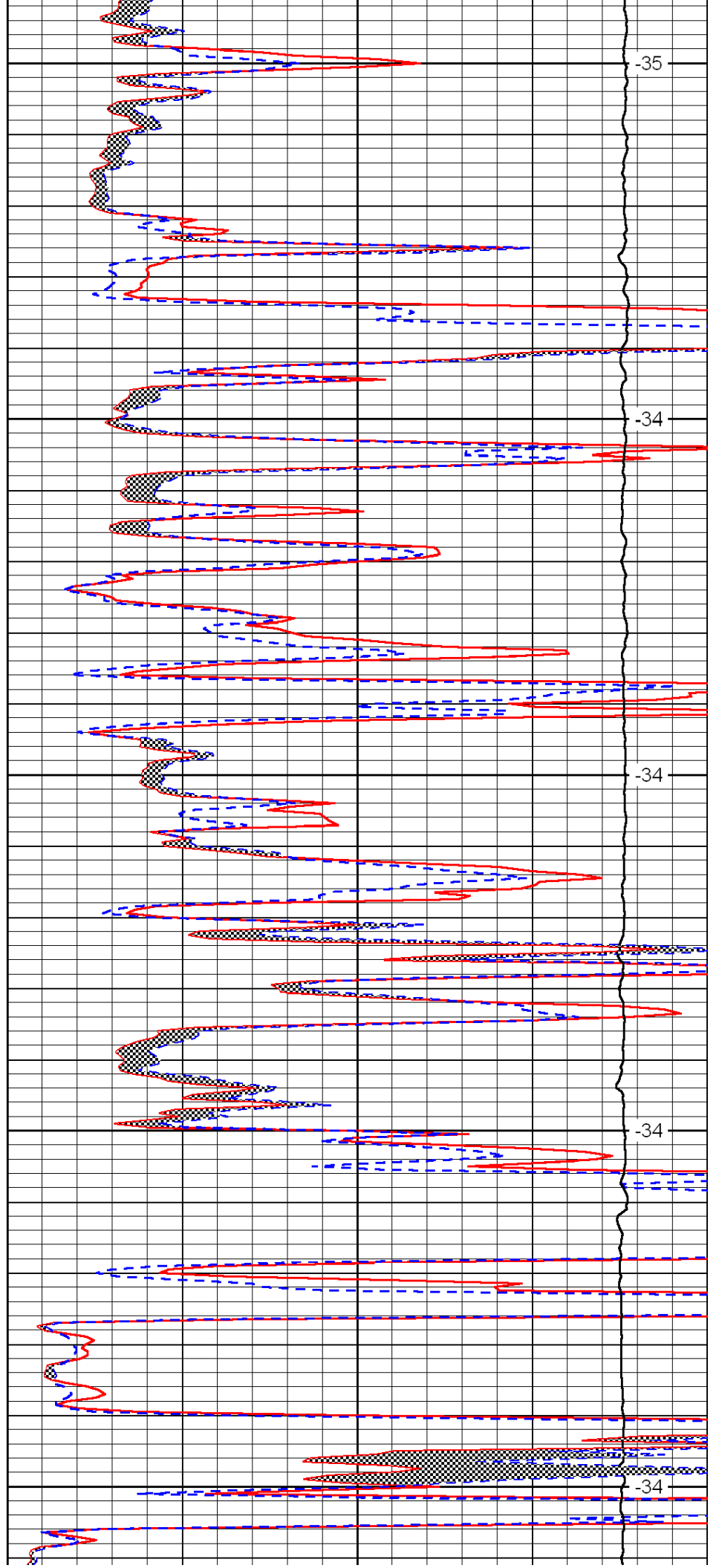
3100

3150

3200

3250

3300



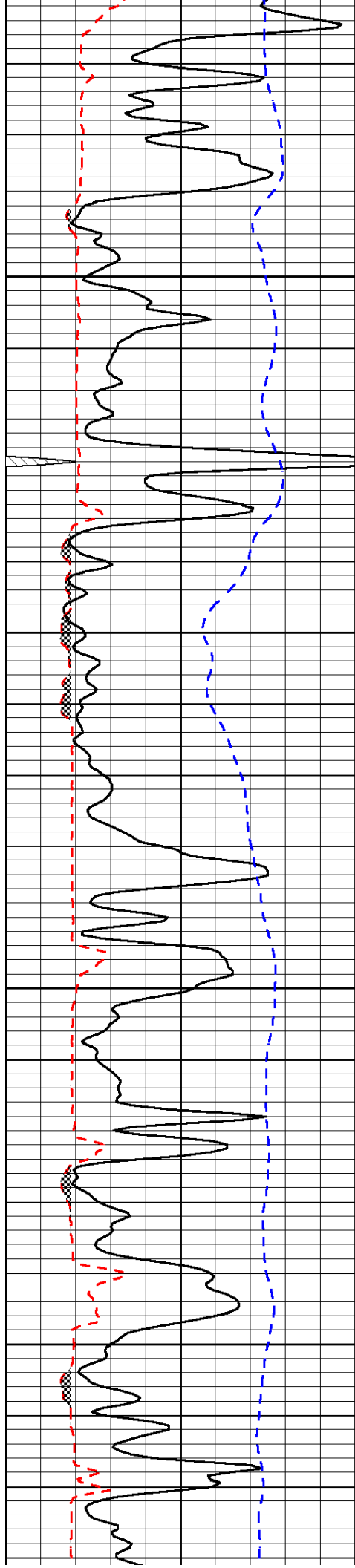
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-34

-34

-34

-34

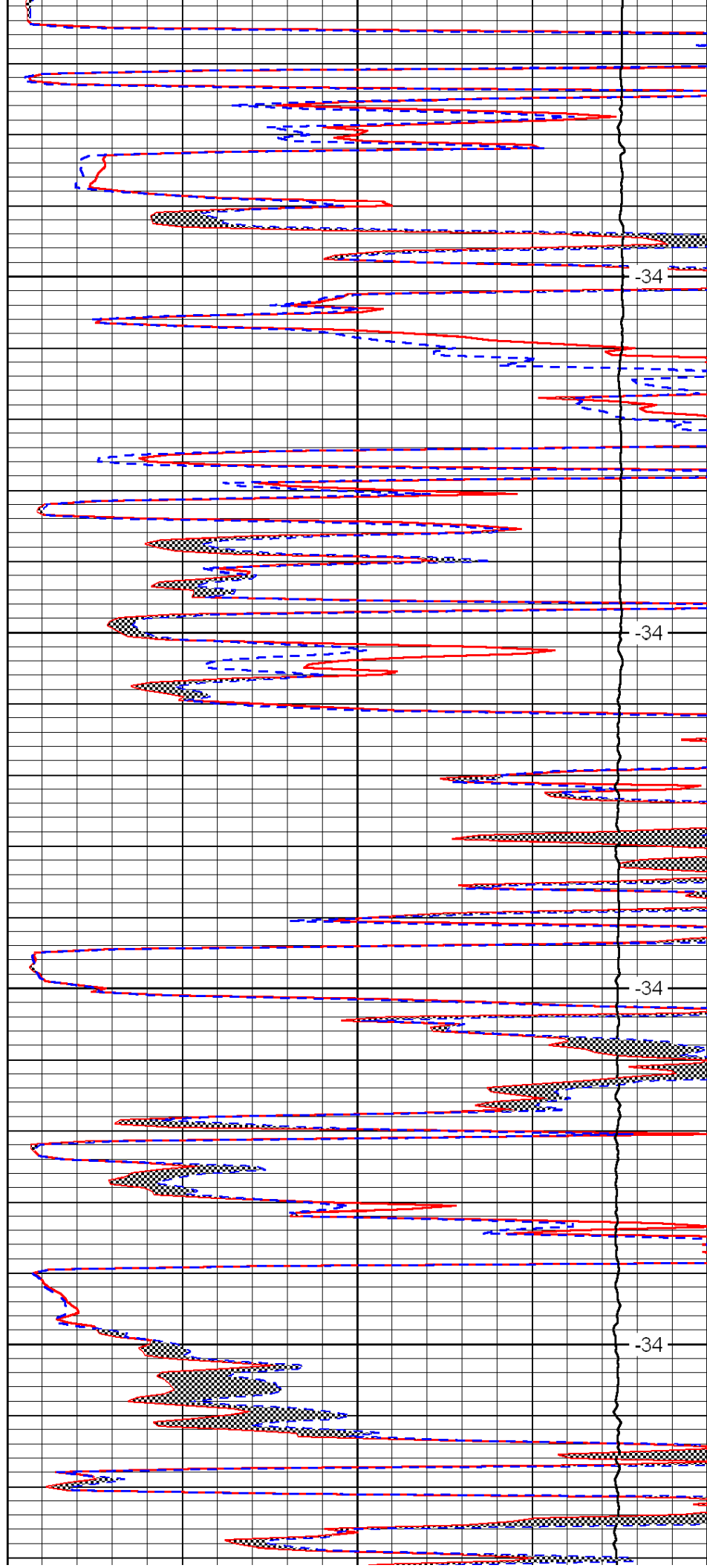


3350

3400

3450

3500

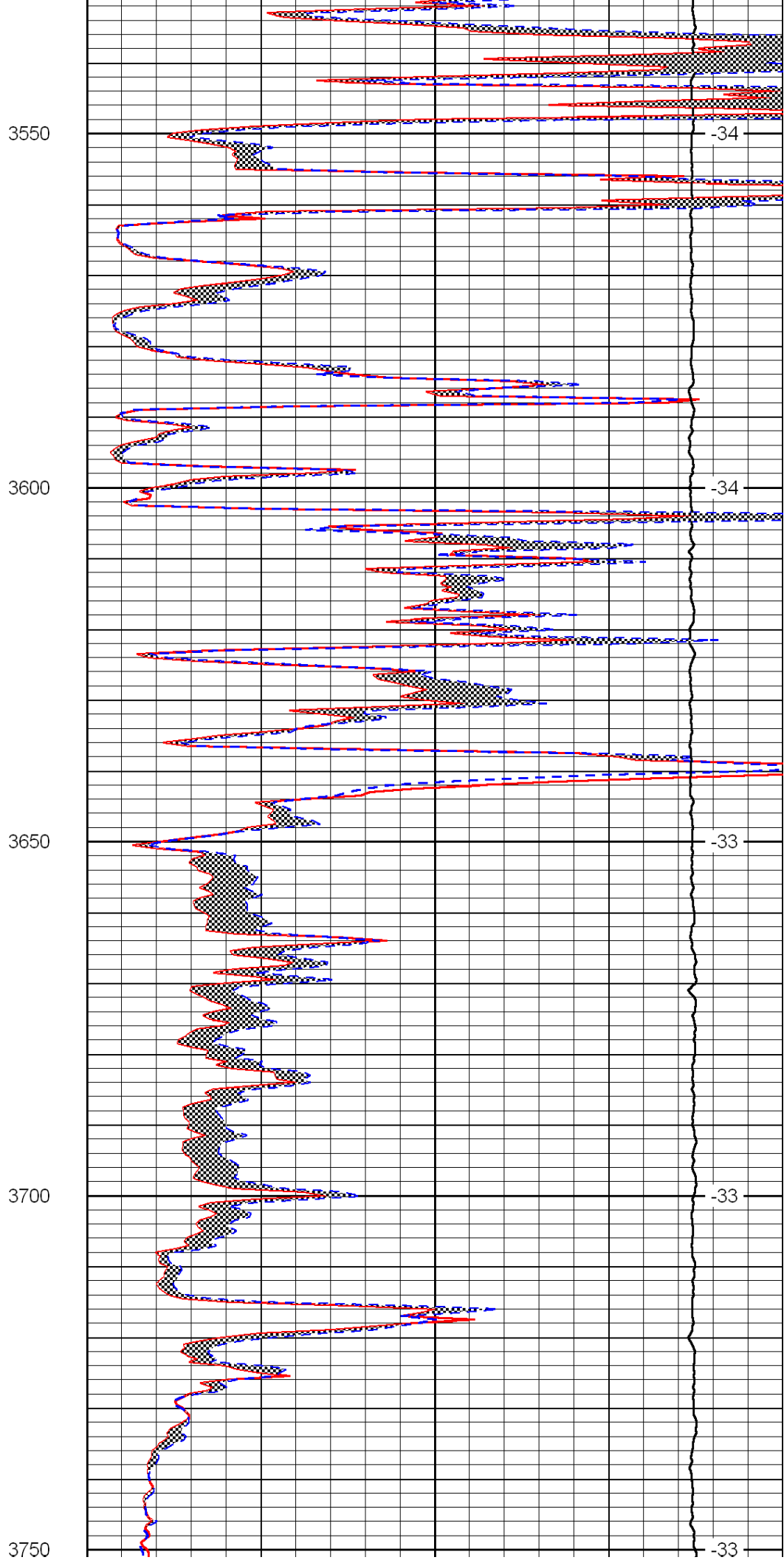
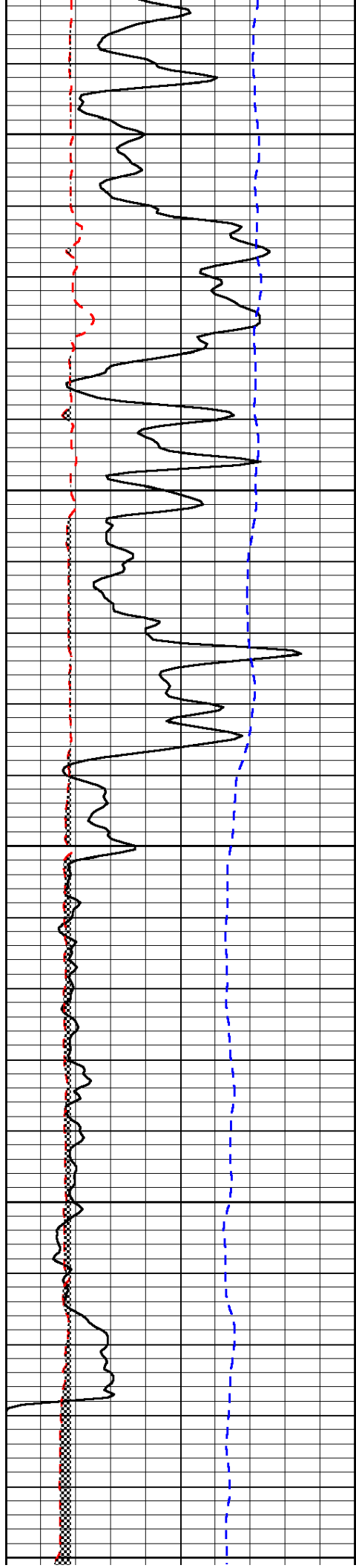


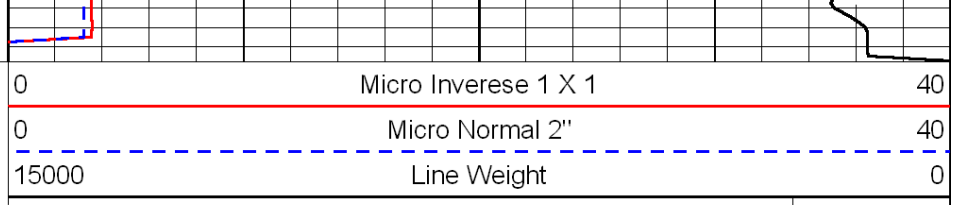
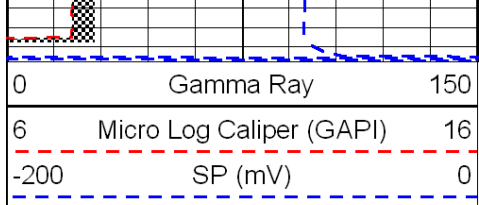
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