



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1205878
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
-----------------------------------	-----------------	---

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: _____

1205878

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> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
--	---	---

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Nona 3204 1-23H
Doc ID	1205878

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	8189-8468	1500 gals 15% HCL acid, 5938 bbls Fresh Slickwater, Running TLTR 6236 bbls	
5	7886-8134	1500 gals 15% HCL acid, 5859 bbls Fresh Slickwater, Running TLTR 12318 bbls	
5	7524-7828	1500 gals 15% HCL acid, 5728 bbls Fresh Slickwater, Running TLTR 18212 bbls	
5	7188-7475	1500 gals 15% HCL acid, 6393 bbls Fresh Slickwater, Running TLTR 24750 bbls	
5	6868-7110	1500 gals 15% HCL acid, 5603 bbls Fresh Slickwater, Running TLTR 30465 bbls	
5	6550-6798	1500 gals 15% HCL acid, 5392 bbls Fresh Slickwater, Running TLTR 35959 bbls	
5	6092-6458	1500 gals 15% HCL acid, 5301 bbls Fresh Slickwater, Running TLTR 41347 bbls	
5	5786-6024	1500 gals 15% HCL acid, 5763 bbls Fresh Slickwater, Running TLTR 47188 bbls	

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Nona 3204 1-23H
Doc ID	1205878

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	5460-5716	1500 gals 15% HCL acid, 5424 bbls Fresh Slickwater, Running TLTR 52682 bbls	
5	5070-5387	1500 gals 15% HCL acid, 5182 bbls Fresh Slickwater, Running TLTR 57929 bbls	
5	4842-4976	1500 gals 15% HCL acid, 5257 bbls Fresh Slickwater, Running TLTR 53229 bbls	



BASIN SERVICES, LLC
 P O BOX 4268
 ABILENE, TX 79608-4268
 Phone # (325)690-0053
 Fax # (325)698-0055

TICKET

TICKET NUMBER: WY-225-1
 TICKET DATE: 02/01/2014

ELECTRONIC

SANDRIDGE ENERGY
 ***** BILL IN ADP!! *****
 123 ROBERT S KERR AVE
 OKLAHOMA CITY, OK 73102-6406

YARD: WY WAYNOKA OK
 LEASE: Nona 3207
 WELL#: 1-23H
 RIG #: Lariat 45
 Co/St: SUMNER, KS

DESCRIPTION	QUANTITY	RATE	AMOUNT
1/31-2/1/2014 DRILLED 30" CONDUCTOR HOLE			
1/31-2/1/2014 20" CONDUCTOR PIPE (.250 WALL)			
1/31-2/1/2014 6' X 6' CELLAR TINHORN WITH PROTECTIVE RING			
1/31-2/1/2014 DRILL & INSTALL 6' X 6' CELLAR TINHORN			
1/31-2/1/2014 DRILLED 20" MOUSE HOLE (PER FOOT)			
1/31-2/1/2014 16" CONDUCTOR PIPE (.250 WALL)			
1/31-2/1/2014 MOBILIZATION OF EQUIPMENT & ROAD PERMITTING FEE			
1/31-2/1/2014 WELDING SERVICES FOR PIPE & LIDS			
1/31-2/1/2014 PROVIDED EQUIPMENT & LABOR TO ASSIST IN PUMPING CONCRETE			
1/31-2/1/2014 PROVIDED METAL LIDS (1 FOR CONDUCTOR & 2 FOR MOUSEHOLE PIPE)			
1/31-2/1/2014 19 YDS OF 10 SACK GROUT			
1/31-2/1/2014 TAXABLE ITEMS			5,490.00
1/31-2/1/2014 BID - TAXABLE ITEMS			11,360.00
		Sub Total:	16,850.00
		Tax SUMNER COUNTY (6.65 %):	365.09
		TICKET TOTAL:	<u>\$ 17,215.09</u>

I, the undersigned, acknowledge the acceptance of the above listed goods and/or services.

Approved Signature _____

JOB SUMMARY

COUNTY	State	COMPANY	PROJECT NUMBER	TICKET DATE
Sumner	Kansas	Bridge Exploration & Produc	SOK 3420	02/16/14
LEASE NAME	Well No.	JOB TYPE	CUSTOMER REP	
Nona 3204	1-23H	Surface	Bill Torbett	
EMP NAME	EMPLOYEE NAME			
Arthur Setzer	Arthur Setzer			

Arthur Setzer	0			
Jared Green				
David Settemeler				
Berry Barkly				

Form. Name _____ Type: _____

Packer Type _____ Set At _____ 0 _____

Bottom Hole Temp. _____ 80 _____ Pressure _____

Retainer Depth _____ Total Depth _____ 300'

Tools and Accessories

Type and Size	Qty	Make
Auto Fill Tube	0	IR
Insert Float Va	0	IR
Centralizers	0	IR
Top Plug	0	IR
HEAD	0	IR
Limit clamp	0	IR
Weld-A	0	IR
Texas Pattern Guide Shoe	0	IR
Cement Basket	0	IR

Well Data

Date	Called Out	On Location	Job Started	Job Completed
	2/16/2014	2/16/2014	2/16/2014	2/17/2014
Time	1300	2000	2310	0100

New/Used	Weight	Size	Grade	From	To	Max. Allow
Casing	54.5#	13 3/8"		Surface	273	1,500
Liner						
Liner						
Tubing		0				
Drill Pipe						
Open Hole		17 1/2"		Surface	300'	Shots/Ft.
Perforations						
Perforations						
Perforations						

Materials

Mud Type	WBM	Density	Lb/Gal
Disp. Fluid	Fresh Water	8.33	8.33
Spacer type	BBL.	10	8.33
Spacer type	BBL.		
Acid Type	Gal.	%	
Acid Type	Gal.	%	
Surfactant	Gal.	In	
NE Agent	Gal.	In	
Fluid Loss	Gal/Lb	In	
Gelling Agent	Gal/Lb	In	
Fric. Red.	Gal/Lb	In	
MISC.	Gal/Lb	In	

Hours On Location

Date	Hours
2/16	4.0
2/17	1.0
Total	5.0

Operating Hours

Date	Hours
2/17	2.0
Total	2.0

Description of Job

Surface

MAX 1,500 PSI	AVG. 150
MAX 6 BPM	AVG. 5
Feet 49	Cement Left in Pipe Reason SHOE JOINT

Stage	Sacks	Cement	Additives	W/Rq.	Yield	Lbs/Gal
1	210	TEX Lite Premium Plus 65	(6% Gal) 2% Calcium Chloride - 1/4pps Cello-Flake - .5% C-41P	11.11	2.01	12.40
2	120	Premium Plus (Class C)	2% Calcium Chloride - 1/4pps Cello-Flake	6.32	1.32	14.80
3	*100	Premium Plus (Class C)	*2% Calcium Chloride on side to use if necessary	*6.32	*1.32	*14.8

Summary

Preflush Breakdown	Type: _____	MAXIMUM _____ 1,500 PSI	Preflush: BBI _____ 10.00	Type: Fresh Water
	Lost Returns- _____ NO/FULL	Actual TOC _____ SURFACE	Load & Bkdn: Gal - BBI _____ N/A	Pad: Bbl - Gal _____ N/A
Average isip _____ 5 Min.	Bump Plug PSI: _____ 10 Min	_____ 15 Min	Excess /Return BBI _____ 40	Calc. Disp Bbl _____ 34
			Calc. TOC: _____ 60	Actual Disp. _____ 34.00
			Final Circ. PSI: _____	Disp: Bbl _____ 34.00
			Cement Slurry BBI _____	
			Total Volume BBI _____ 147.00	

CUSTOMER REPRESENTATIVE Bill Torbett SIGNATURE

JOB SUMMARY			PROJECT NUMBER SOK 3439	TICKET DATE 02/25/14
COUNTY Sumner	STATE Kansas	COMPANY Sandridge Exploration & Production	CUSTOMER REP Claude Hallmark	
LEASE NAME Nona 3204	Well No. 1-23H	JOB TYPE Intermediate	EMPLOYEE NAME John Hall	

EMP NAME	John Hall	0					
	Joseph Klemm						
	Roy Morris						
	Paul Thomas						

Form. Name _____ Type: _____
 Packer Type _____ Set At **2,893**
 Bottom Hole Temp. **155** Pressure _____
 Retainer Depth _____ Total Depth **4786**

	Called Out	On Location	Job Started	Job Completed
Date	2/25/2014	2/25/2014	2/25/2014	2/25/2014
Time	800	1100am	100pm	300pm

Type and Size	Qty	Make
Auto Fill Tube	0	IR
Insert Float Va	0	IR
Centralizers	0	IR
Top Plug	0	IR
HEAD	0	IR
Limit clamp	0	IR
Weld-A	0	IR
Texas Pattern Guide Shoe	0	IR
Cement Basket	0	IR

Well Data	New/Used	Weight	Size	Grade	From	To	Max. Allow
Casing		26#	7"		Surface	4,828	5,000
Liner							
Liner							
Tubing			0				
Drill Pipe							
Open Hole			8 1/4"		Surface	4,828	Shots/Ft.
Perforations							
Perforations							
Perforations							

Materials			
Mud Type	WBM	Density	9 Lb/Gal
Disp. Fluid	Fresh Water	Density	8.33 Lb/Gal
Spacer type	GEL	BBL.	30 10.00
Spacer type	BBL.		
Acid Type	Gal.	%	
Acid Type	Gal.	%	
Surfactant	Gal.	In	
NE Agent	Gal.	In	
Fluid Loss	Gal/Lb	In	
Gelling Agent	Gal/Lb	In	
Fric. Red.	Gal/Lb	In	
MISC.	Gal/Lb	In	

Hours On Location		Operating Hours		Description of Job
Date	Hours	Date	Hours	
12/23	7.0	2/25	3.0	Intermediate
2/25	4.0			
Total 11.0		Total 3.0		

Perpac Balls _____ Qty. _____
 Other _____
 Other _____
 Other _____
 Other _____
 Other _____

MAX	5,000 PSI	AVG.	Pressures
MAX	8 BPM	AVG.	Average Rates in BPM
Feet		91	Cement Left in Pipe Reason SHOE JOINT

Cement Data						
Stage	Sacks	Cement	Additives	W/Rq.	Yield	Lbs/Gal
1	250	50/50 POZ PREMIUM	4% Gel - 0.2% FL-17 - 0.1% C-51 - 0.2% C-20 - 0.1% C-37 - 0.4% C-41P	6.93	1.43	13.60
2	100	Premium	0.2% FL-17 - 0.1% C-51 - 0.1% C-20 - 0.4% C-41P	5.19	1.19	15.60
3	0	0		0	0.00	0.00

Summary			
Preflush Breakdown	Type: _____	Preflush: BBI	30.00
	MAXIMUM	Load & Bkdn: Gal - BBI	N/A
	Lost Returns-N	Excess /Return BBI	N/A
	Actual TOC	Calc. TOC:	1,796
Average	Bump Plug PSI:	Final Circ. PSI:	900
5 Min.	10 Min	Cement Slurry BBI	04.0
15 Min	15 Min	Total Volume BBI	295.00

CUSTOMER REPRESENTATIVE *Claude Hallmark* SIGNATURE

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	3/18/2014
Job End Date:	3/20/2014
State:	Kansas
County:	Sumner
API Number:	15-191-22719-01-00
Operator Name:	SandRidge Energy
Well Name and Number:	Nona 3204 1-23H
Longitude:	-97.71518000
Latitude:	37.25544000
Datum:	NAD27
Federal/Tribal Well:	NO
True Vertical Depth:	3,988
Total Base Water Volume (gal):	2,820,258
Total Base Non Water Volume:	0



Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Water	Operator	Carrier					
			Water	7732-18-5	100.00000	95.58832	
Sand, White, 40/70	Baker Hughes	Proppant					
			Crystalline Silica (Quartz)	14808-60-7	100.00000	1.97748	
Sand, Brown (40/70)	Baker Hughes	Proppant					
			Crystalline Silica: Quartz (SiO2)	14808-60-7	100.00000	0.97569	
HCl, 10.1 - 15%	Baker Hughes	Acidizing					
			Water	7732-18-5	85.00000	0.60127	SmartCare Product
			Hydrochloric Acid	7647-01-0	15.00000	0.10611	SmartCare Product
Preferred Garnet RC 40/70	Baker Hughes	Proppant					
			Crystalline Silica (Quartz)	14808-60-7	100.00000	0.34602	
			Castor Oil	8001-79-4	5.00000	0.01730	
C102	Bosque Disposal Systems, LLC	Oxidizer					
			Chlorine Dioxide	10049-04-4	15.00000	0.28297	
FRW-15DX	Baker Hughes	Friction Reducer					
			Anionic Water-Soluble Polymer	Trade Secret	100.00000	0.01841	
NE-900, tote	Baker Hughes	Non-emulsifier					
			Methanol	67-56-1	30.00000	0.01349	SmartCare Product

			Nonyl phenyl polyethylene glycol ether	9016-45-9	10.00000	0.00450	SmartCare Product
Scaletrol 7208, 330 gal tote	Baker Hughes	Scale Inhibitor					
			Ethylene Glycol	107-21-1	30.00000	0.00751	
Ferrotrol 300L (Totes)	Baker Hughes	Iron Control					
			Citric Acid	77-92-9	60.00000	0.00246	SmartCare Product
CI-27 (260 gal tote)	Baker Hughes	Corrosion Inhibitor					
			Methanol	67-56-1	60.00000	0.00043	
			Fatty Acids	Trade Secret	30.00000	0.00022	
			Thiourea Polymer	68527-49-1	30.00000	0.00022	
			Polyoxyalkylenes	Trade Secret	30.00000	0.00022	
			Propargyl Alcohol	107-19-7	10.00000	0.00007	
			Olefin	Trade Secret	5.00000	0.00004	
Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS.							
		Other Chemicals					
			Water	7732-18-5		0.03804	
			Copolymer	Trade Secret		0.01799	
			Diethylene Glycol	111-46-6		0.00125	
			Sodium Chloride	7647-14-5		0.00000	
			Formaldehyde	50-00-0		0.00000	
			Calcium Chloride	10043-52-4			
			Polyacrylate	Trade Secret			
			2-Propenoic, Polymer with Sodium Phosphinate, Sodium Salt	71050-62-9			
			Potassium Chloride	7447-40-7			

* Total Water Volume sources may include fresh water, produced water, and/or recycled water

** Information is based on the maximum potential for concentration and thus the total may be over 100%

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.

Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)



DrillRight[™]
TECHNOLOGY, INC.

END OF WELL REPORT



PREPARED FOR:
MR. CODY CONALLIS
SANDRIDGE

NONA 3204 1-23H
SEC 23 – 32S – 4W
SUMNER COUNTY, KANSAS

Sandridge

WELL PROFILE DATA

Location Kansas **Slot** Nona 3204 1-23H
Field Sec 23 - 32S - 4W **Well** Nona 3204 1-23H
Installation Sumner County **Wellbore** Nona 3204 1-23H Revision 030214 (Plan)

Installation Data

Name	Latitude	Longitude	Northing	Easting
Sumner County	N37 14 30.52	W97 42 36.61	210394.00	2229928.00

Coordinate System Kansas State Planes, Southern Zone

Slot Data

Name	North [ft]	East [ft]	Latitude	Longitude	Northing	Easting
Nona 3204 1-23H	195.00 N	-1380.00 E	N37 14 32.57	W97 42 53.65	210589.00	2228548.00

Elevation Data

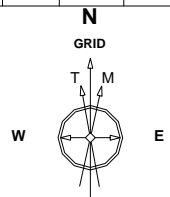
Slot - Mean Sea Level [ft]	Mean Sea Level - Mudline/Ground level [ft]	Slot - Mudline/Ground level [ft]
0.00	0.00	0.00

Point	MD	Inc	Azi	TVD	North	East	deg/100ft	V. Sect
KOP	7423.00	86.10	359.80	3993.66	3588.63	-605.35	0.00	3636.44
Target Build w/ 3° BRN	7486.38	88.00	359.87	3996.92	3651.92	-605.53	3.00	3699.24
Target Hold Section	7591.50	88.00	359.87	4000.59	3756.98	-605.77	0.00	3803.48
Target Build w/ 3° BRN	7654.83	89.90	359.87	4001.75	3820.30	-605.92	3.00	3866.31
T.D. & Target PBHL Nona	8586.52	89.90	359.87	4003.36	4751.99	-608.00	0.00	4790.72

TARGET DATA

MD	Inc	Azi	TVD	North	East	Name	Position
7486.38	88.00	359.87	3996.92	3651.92	-605.53	Build w/ 3° BRN	2227942.46 East : 214240.93 North
7591.50	88.00	359.87	4000.59	3756.98	-605.77	Hold Section	2227942.22 East : 214345.99 North
7654.83	89.90	359.87	4001.75	3820.30	-605.92	Build w/ 3° BRN	2227942.08 East : 214409.31 North
8586.52	89.90	359.87	4003.36	4751.99	-608.00	PBHL Nona 3204 1-23H	2227940.00 East : 215341.00 North

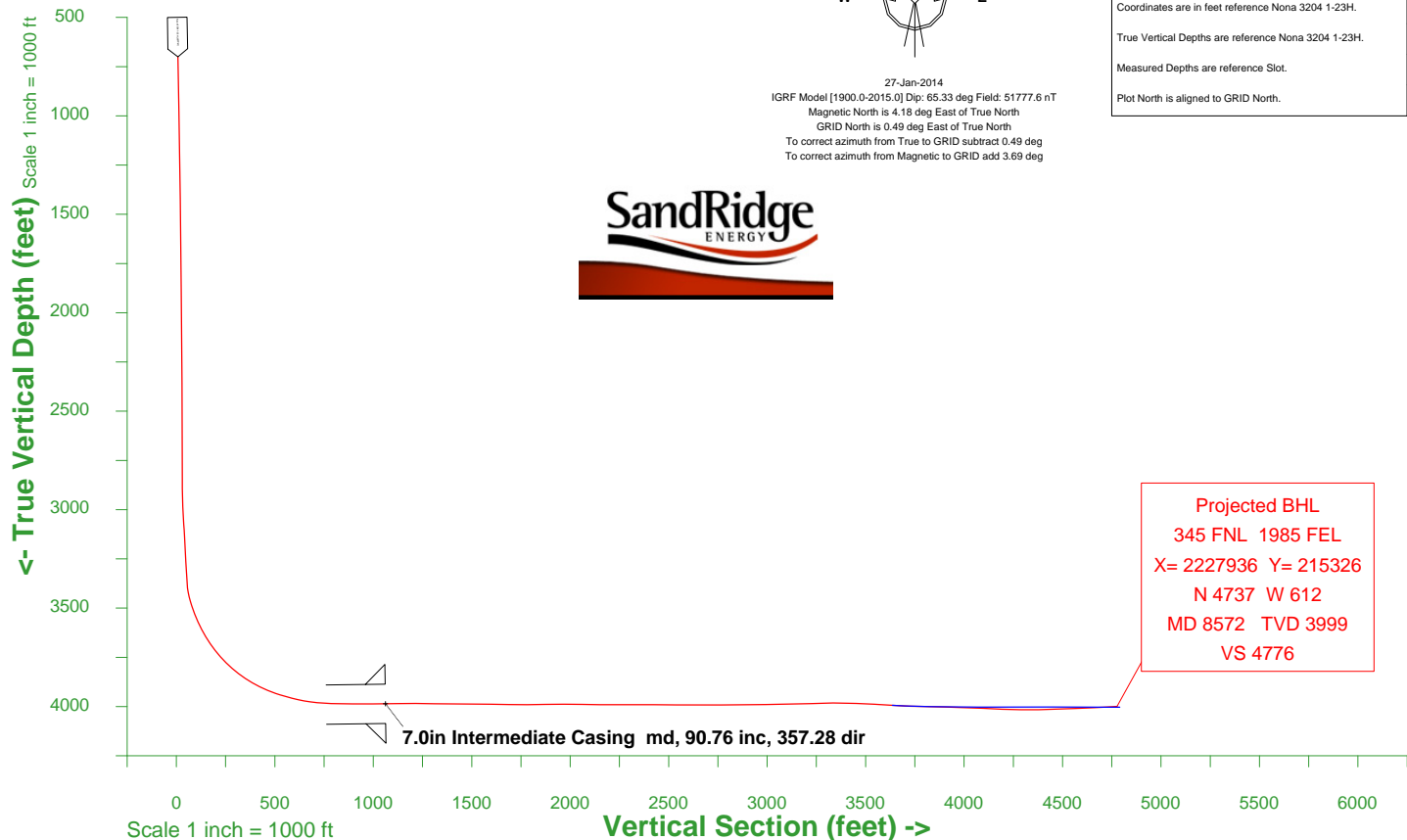
Created by admin
 Date plotted 4-Mar-2014
 Plot reference is Nona 3204 1-23H Revision 030214 (Plan).
 Ref wellpath is Nona 3204 1-23H (PWP#1).
 Coordinates are in feet reference Nona 3204 1-23H.
 True Vertical Depths are reference Nona 3204 1-23H.
 Measured Depths are reference Slot.
 Plot North is aligned to GRID North.



27-Jan-2014
 IGRF Model [1900.0-2015.0] Dip: 65.33 deg Field: 51777.6 nT
 Magnetic North is 4.18 deg East of True North
 GRID North is 0.49 deg East of True North
 To correct azimuth from True to GRID subtract 0.49 deg
 To correct azimuth from Magnetic to GRID add 3.69 deg



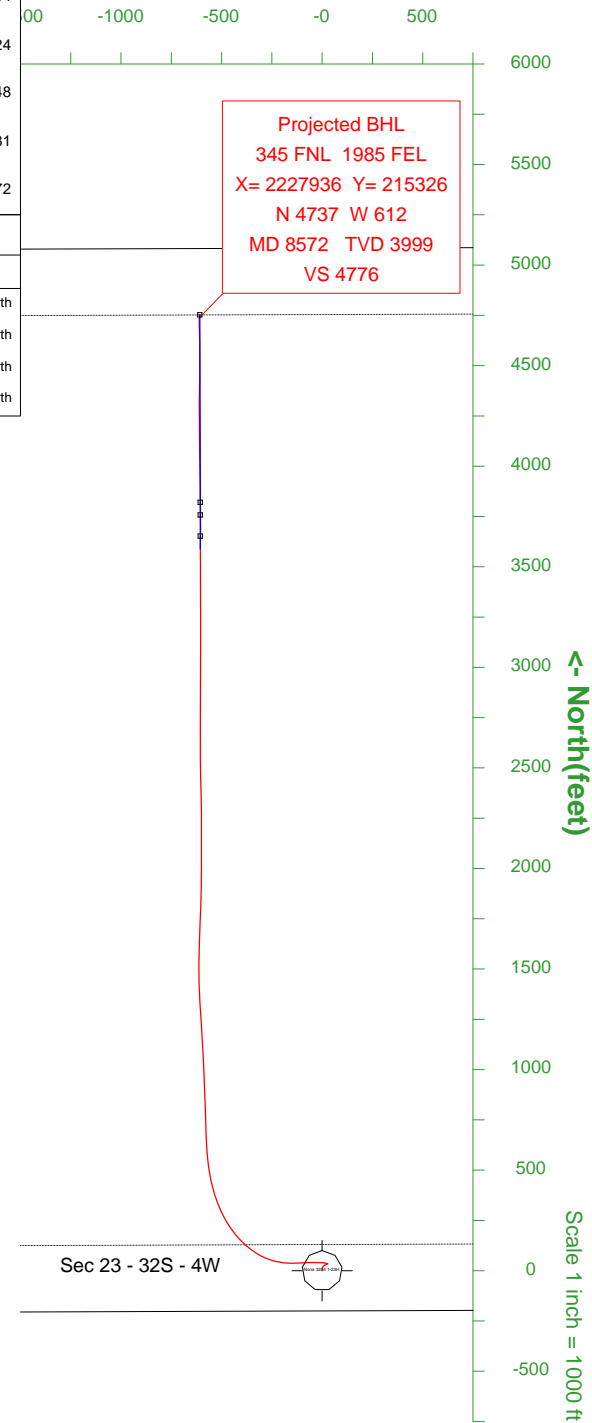
Target Line: 03-02-14
 TGT: 3995' KBTVD @ 0' VS
 89.9° @ 352.71 Azi Plane



Projected BHL
 345 FNL 1985 FEL
 X= 2227936 Y= 215326
 N 4737 W 612
 MD 8572 TVD 3999
 VS 4776

Scale 1 inch = 1000 ft

East (feet) ->



Sandridge

WELL PROFILE DATA

Location Kansas **Slot** Nona 3204 1-23H
Field Sec 23 - 32S - 4W **Well** Nona 3204 1-23H
Installation Summer County **Wellbore** Nona 3204 1-23H Revision 030214 (Plan)

Installation Data

Name	Latitude	Longitude	Northing	Easting
Summer County	N37 14 30.52	W97 42 36.61	210394.00	2229928.00

Coordinate System Kansas State Planes, Southern Zone

Slot Data

Name	North [ft]	East [ft]	Latitude	Longitude	Northing	Easting
Nona 3204 1-23H	195.00 N	-1380.00 E	N37 14 32.57	W97 42 53.65	210589.00	2228548.00

Elevation Data

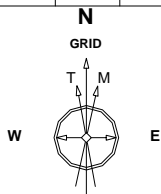
Slot - Mean Sea Level [ft]	Mean Sea Level - Mudline/Ground level [ft]	Slot - Mudline/Ground level [ft]
0.00	0.00	0.00

Point	MD	Inc	Azi	TVD	North	East	deg/100ft	V. Sect
KOP	7423.00	86.10	359.80	3993.66	3588.63	-605.35	0.00	3636.44
Target Build w/ 3° BRN	7486.38	88.00	359.87	3996.92	3651.92	-605.53	3.00	3699.24
Target Hold Section	7591.50	88.00	359.87	4000.59	3756.98	-605.77	0.00	3803.48
Target Build w/ 3° BRN	7654.83	89.90	359.87	4001.75	3820.30	-605.92	3.00	3866.31
T.D. & Target PBHL Nona	8586.52	89.90	359.87	4003.36	4751.99	-608.00	0.00	4790.72

TARGET DATA

MD	Inc	Azi	TVD	North	East	Name	Position
7486.38	88.00	359.87	3996.92	3651.92	-605.53	Build w/ 3° BRN	2227942.46 East : 214240.93 North
7591.50	88.00	359.87	4000.59	3756.98	-605.77	Hold Section	2227942.22 East : 214345.99 North
7654.83	89.90	359.87	4001.75	3820.30	-605.92	Build w/ 3° BRN	2227942.08 East : 214409.31 North
8586.52	89.90	359.87	4003.36	4751.99	-608.00	PBHL Nona 3204 1-23H	2227940.00 East : 215341.00 North

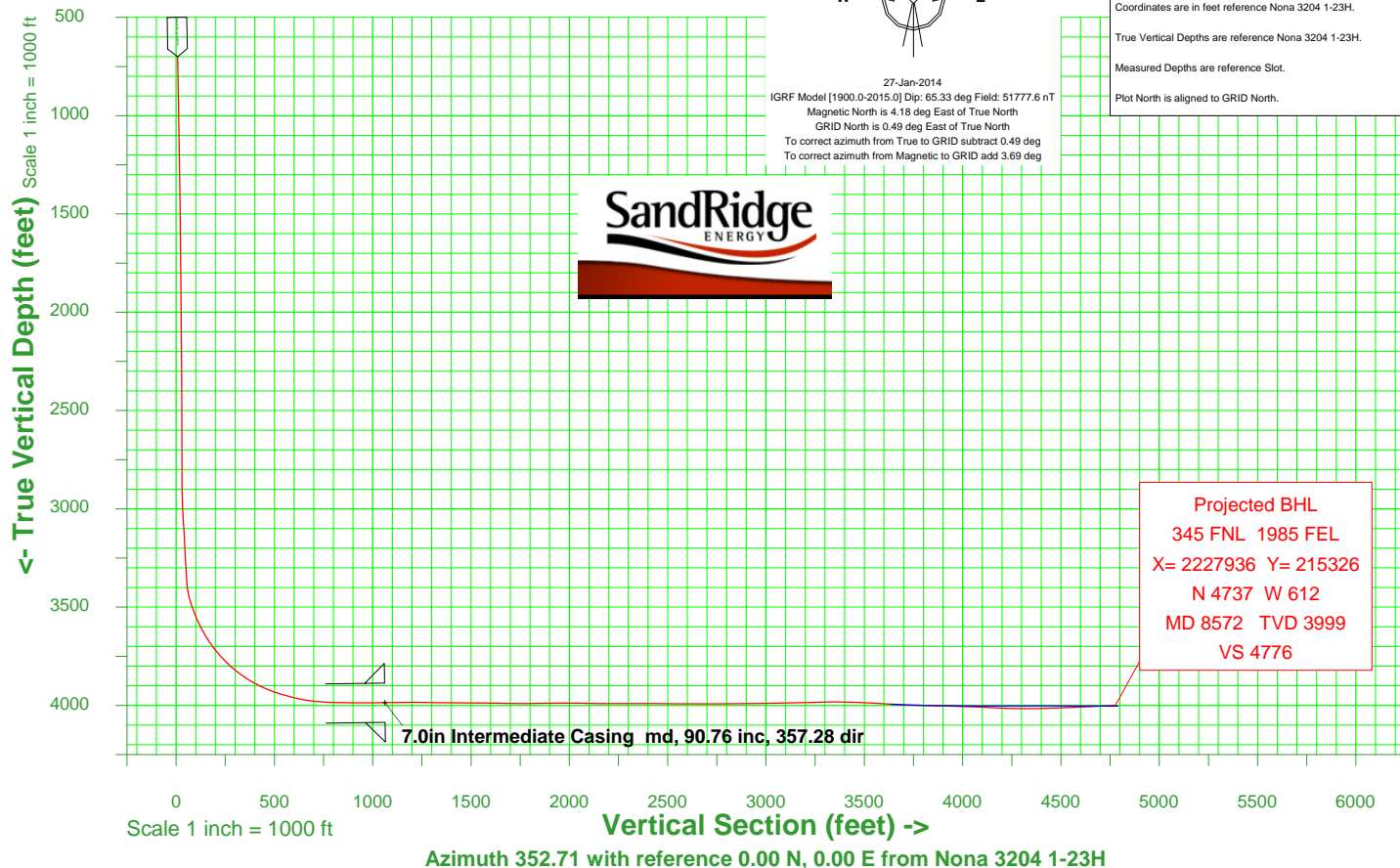
Created by admin
 Date plotted 4-Mar-2014
 Plot reference is Nona 3204 1-23H Revision 030214 (Plan).
 Ref wellpath is Nona 3204 1-23H (PWP#1).
 Coordinates are in feet reference Nona 3204 1-23H.
 True Vertical Depths are reference Nona 3204 1-23H.
 Measured Depths are reference Slot.
 Plot North is aligned to GRID North.



27-Jan-2014
 IGRF Model [1900.0-2015.0] Dip: 65.33 deg Field: 51777.6 nT
 Magnetic North is 4.18 deg East of True North
 GRID North is 0.49 deg East of True North
 To correct azimuth from True to GRID subtract 0.49 deg
 To correct azimuth from Magnetic to GRID add 3.69 deg

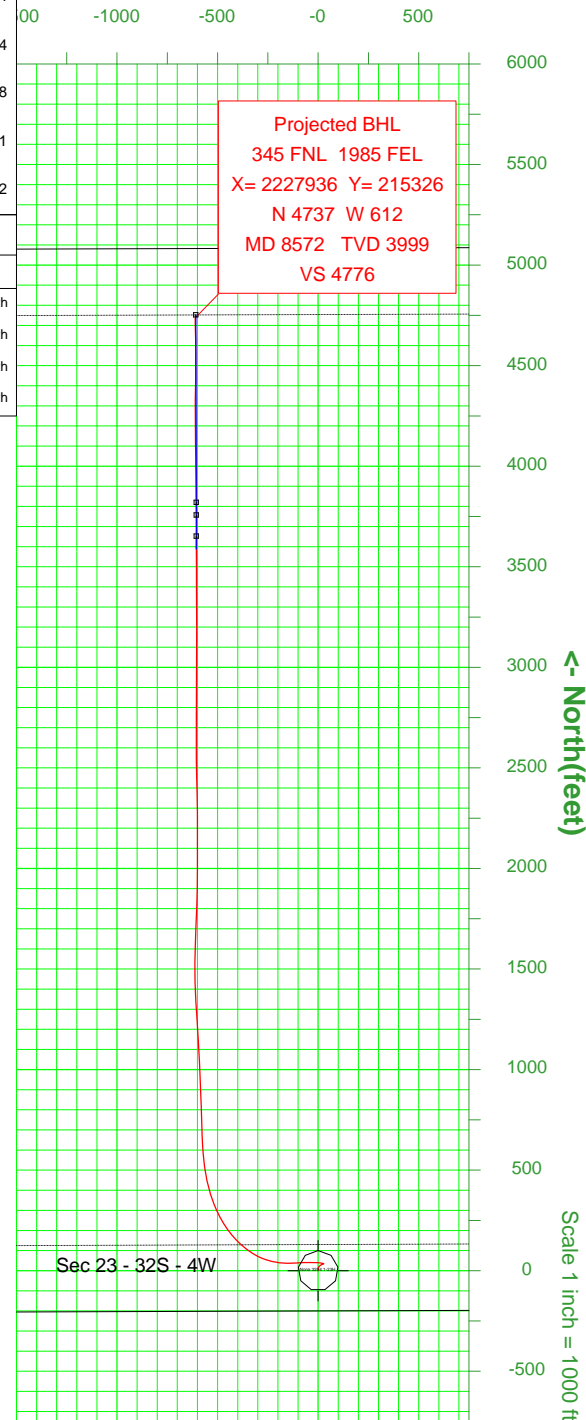


Target Line: 03-02-14
 TGT: 3995' KBTVD @ 0' VS
 89.9° @ 352.71 Azi Plane



Scale 1 inch = 1000 ft

East (feet) ->



Sec 23 - 32S - 4W

Company: Sandridge
Well Name: Nona 3204 1-23H
Legals: Sec: 23 Township: 32S
 Range: 4W
County/State: Sumner County KS
Rig Name: Lariat 45

Customer Rep	Position	Directional Driller	MWD Operator
		Monte Bryant	Blake Reid
		Tony Hatfield	
		Jake Leming	

Nona 3204 1-13H Surveys

Type	M Depth	Incl.	Azimuth	TVD	North	East	V Section	Dogleg	B Rate	T Rate	Clos Azi	Clos Dist
TieInPoint	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
Survey	504.00	1.00	355.30	503.97	4.38	-0.36	4.39	0.20	0.20	0.93	355.30	4.39
Survey	964.00	1.20	15.30	963.89	13.03	0.58	12.85	0.09	0.04	4.35	2.55	13.04
Survey	1422.00	1.00	46.60	1421.81	20.40	4.75	19.63	0.14	0.04	6.83	13.11	20.95
Survey	1881.00	1.00	45.30	1880.74	25.97	10.51	24.43	0.00	0.00	0.28	22.03	28.02
Survey	2356.00	1.20	63.80	2355.65	31.08	17.92	28.55	0.09	0.04	3.89	29.97	35.88
Survey	2842.00	1.10	81.80	2841.55	33.99	27.10	30.28	0.08	0.02	3.70	38.57	43.47
Survey	2862.00	1.30	78.60	2861.55	34.06	27.51	30.29	1.05	1.00	16.00	38.93	43.78
Survey	2893.00	0.70	65.30	2892.55	34.21	28.03	30.38	2.06	1.94	42.90	39.33	44.23
Survey	2923.00	1.80	311.10	2922.54	34.59	27.84	30.78	7.27	3.67	380.67	38.83	44.40
Survey	2954.00	3.90	291.10	2953.50	35.29	26.49	31.64	7.40	6.77	64.52	36.89	44.13
Survey	2985.00	6.80	283.30	2984.36	36.09	23.72	32.79	9.62	9.35	25.16	33.31	43.19
Survey	3016.00	9.20	281.10	3015.06	36.99	19.50	34.22	7.80	7.74	7.10	27.80	41.82
Survey	3046.00	11.80	279.20	3044.55	37.94	14.12	35.84	8.74	8.67	6.33	20.41	40.48
Survey	3076.00	14.30	277.60	3073.77	38.92	7.42	37.66	8.42	8.33	5.33	10.79	39.62
Survey	3107.00	16.70	274.20	3103.65	39.76	-0.82	39.54	8.28	7.74	10.97	358.82	39.77
Survey	3137.00	18.60	271.70	3132.23	40.21	-9.90	41.14	6.82	6.33	8.33	346.17	41.41
Survey	3168.00	20.40	270.30	3161.45	40.39	-20.25	42.63	6.00	5.81	4.52	333.37	45.18
Survey	3198.00	22.20	270.50	3189.40	40.47	-31.15	44.10	6.00	6.00	0.67	322.41	51.07
Survey	3229.00	24.00	270.10	3217.91	40.53	-43.31	45.70	5.83	5.81	1.29	313.10	59.32
Survey	3260.00	25.80	269.80	3246.03	40.52	-56.36	47.34	5.82	5.81	0.97	305.71	69.41
Survey	3290.00	28.10	268.60	3272.77	40.32	-69.95	48.87	7.88	7.67	4.00	299.96	80.74
Survey	3321.00	30.40	267.80	3299.82	39.84	-85.09	50.32	7.53	7.42	2.58	295.09	93.95
Survey	3351.00	33.80	267.20	3325.23	39.14	-101.01	51.64	11.38	11.33	2.00	291.18	108.33
Survey	3382.00	37.40	266.60	3350.43	38.16	-119.03	52.96	11.67	11.61	1.94	287.78	125.00
Survey	3412.00	39.80	266.80	3373.87	37.08	-137.71	54.25	8.01	8.00	0.67	285.07	142.61
Survey	3443.00	40.60	271.50	3397.55	36.79	-157.70	56.50	10.12	2.58	15.16	283.13	161.93
Survey	3475.00	41.30	275.70	3421.73	38.11	-178.63	60.47	8.87	2.19	13.13	282.04	182.65
Survey	3505.00	41.60	278.40	3444.21	40.55	-198.33	65.39	6.04	1.00	9.00	281.56	202.43
Survey	3536.00	41.50	281.30	3467.41	44.07	-218.58	71.45	6.21	0.32	9.35	281.40	222.98
Survey	3566.00	40.80	284.20	3490.00	48.42	-237.83	78.21	6.77	2.33	9.67	281.51	242.71
Survey	3597.00	40.50	287.30	3513.52	53.90	-257.26	86.11	6.59	0.97	10.00	281.83	262.85
Survey	3627.00	40.00	291.60	3536.42	60.35	-275.53	94.82	9.41	1.67	14.33	282.35	282.06
Survey	3658.00	39.50	295.70	3560.26	68.29	-293.68	105.00	8.61	1.61	13.23	283.09	301.52
Survey	3688.00	39.70	298.80	3583.38	77.04	-310.68	115.84	6.62	0.67	10.33	283.93	320.09
Survey	3719.00	39.90	302.30	3607.20	87.13	-327.76	128.02	7.26	0.65	11.29	284.89	339.14
Survey	3749.00	40.60	305.70	3630.10	97.97	-343.82	140.81	7.68	2.33	11.33	285.90	357.51
Survey	3780.00	41.00	308.30	3653.57	110.16	-360.00	154.95	5.63	1.29	8.39	287.01	376.48
Survey	3811.00	42.20	310.90	3676.75	123.28	-375.85	169.98	6.78	3.87	8.39	288.16	395.55
Survey	3843.00	43.30	313.30	3700.25	137.84	-391.96	186.46	6.14	3.44	7.50	289.38	415.49
Survey	3875.00	45.00	315.90	3723.21	153.50	-407.82	204.01	7.76	5.31	8.12	290.63	435.75
Survey	3906.00	46.20	319.10	3744.91	169.83	-422.78	222.10	8.33	3.87	10.32	291.89	455.62

Nona 3204 1-13H Surveys

Type	M Depth	Incl.	Azimuth	TVD	North	East	V Section	Dogleg	B Rate	T Rate	Clos Azi	Clos Dist
Survey	3938.00	47.30	322.50	3766.84	187.89	-437.50	241.89	8.47	3.44	10.62	293.24	476.14
Survey	3970.00	49.50	325.00	3788.09	207.19	-451.64	262.82	9.02	6.88	7.81	294.64	496.90
Survey	4001.00	52.00	326.90	3807.70	227.08	-465.07	284.26	9.36	8.06	6.13	296.02	517.55
Survey	4033.00	54.30	329.80	3826.89	248.88	-478.50	307.59	10.21	7.19	9.06	297.48	539.35
Survey	4065.00	56.20	332.40	3845.13	271.90	-491.20	332.03	8.93	5.94	8.12	298.97	561.43
Survey	4096.00	58.60	335.40	3861.83	295.35	-502.68	356.75	11.24	7.74	9.68	300.44	583.03
Survey	4128.00	61.30	337.40	3877.86	320.73	-513.76	383.33	10.02	8.44	6.25	301.98	605.65
Survey	4160.00	63.50	339.50	3892.68	347.10	-524.17	410.81	9.00	6.88	6.56	303.51	628.68
Survey	4191.00	65.40	342.30	3906.06	373.53	-533.31	438.18	10.20	6.13	9.03	305.01	651.11
Survey	4223.00	67.90	344.60	3918.74	401.69	-541.67	467.18	10.23	7.81	7.19	306.56	674.36
Survey	4255.00	70.40	346.90	3930.13	430.67	-549.03	496.86	10.30	7.81	7.19	308.11	697.79
Survey	4286.00	72.40	349.20	3940.02	459.41	-555.11	526.14	9.54	6.45	7.42	309.61	720.56
Survey	4318.00	74.10	351.70	3949.25	489.63	-560.19	556.76	9.18	5.31	7.81	311.15	744.01
Survey	4350.00	75.40	352.40	3957.67	520.21	-564.46	587.63	4.58	4.06	2.19	312.66	767.62
Survey	4381.00	77.60	353.50	3964.90	550.12	-568.16	617.77	7.89	7.10	3.55	314.08	790.85
Survey	4413.00	79.70	354.60	3971.20	581.32	-571.41	649.13	7.38	6.56	3.44	315.49	815.13
Survey	4445.00	81.90	356.20	3976.32	612.81	-573.94	680.68	8.46	6.87	5.00	316.88	839.61
Survey	4476.00	84.00	357.40	3980.12	643.52	-575.66	711.36	7.79	6.77	3.87	318.19	863.42
Survey	4508.00	86.40	358.00	3982.80	675.38	-576.94	743.13	7.73	7.50	1.88	319.49	888.26
Survey	4540.00	88.00	358.10	3984.36	707.32	-578.03	774.95	5.01	5.00	0.31	320.74	913.47
Survey	4571.00	88.60	358.30	3985.28	738.29	-579.00	805.79	2.04	1.94	0.65	321.89	938.25
Survey	4603.00	89.00	358.20	3985.95	770.27	-579.98	837.64	1.29	1.25	0.31	323.02	964.21
Survey	4635.00	89.30	358.30	3986.43	802.25	-580.95	869.48	0.99	0.94	0.31	324.09	990.51
Survey	4666.00	89.60	358.00	3986.73	833.24	-581.96	900.35	1.37	0.97	0.97	325.07	1016.35
Survey	4698.00	89.90	358.20	3986.86	865.22	-583.02	932.21	1.13	0.94	0.62	326.03	1043.32
Survey	4730.00	90.20	357.90	3986.84	897.20	-584.11	964.07	1.33	0.94	0.94	326.93	1070.59
Survey	4763.00	90.50	357.70	3986.64	930.18	-585.38	996.94	1.09	0.91	0.61	327.82	1099.05
Survey	4887.00	91.00	356.90	3985.02	1054.03	-591.22	1120.53	0.76	0.40	0.65	330.71	1208.52
Survey	4982.00	89.80	357.10	3984.36	1148.90	-596.19	1215.26	1.28	1.26	0.21	332.57	1294.38
Survey	5077.00	88.90	355.70	3985.43	1243.70	-602.16	1310.06	1.75	0.95	1.47	334.17	1381.81
Survey	5172.00	89.80	357.10	3986.51	1338.50	-608.12	1404.85	1.75	0.95	1.47	335.57	1470.17
Survey	5267.00	89.50	358.20	3987.09	1433.42	-612.02	1499.49	1.20	0.32	1.16	336.88	1558.61
Survey	5362.00	89.00	0.90	3988.33	1528.40	-612.77	1593.80	2.89	0.53	2.84	338.15	1646.66
Survey	5457.00	89.10	2.00	3989.91	1623.35	-610.36	1687.68	1.16	0.11	1.16	339.39	1734.30
Survey	5552.00	90.00	1.90	3990.66	1718.29	-607.13	1781.44	0.95	0.95	0.11	340.54	1822.40
Survey	5647.00	91.80	2.20	3989.17	1813.21	-603.73	1875.16	1.92	1.89	0.32	341.58	1911.08
Survey	5742.00	89.70	1.10	3987.93	1908.16	-601.00	1969.00	2.50	2.21	1.16	342.52	2000.57
Survey	5833.00	88.90	0.10	3989.04	1999.14	-600.04	2059.12	1.41	0.88	1.10	343.29	2087.25
Survey	5925.00	89.20	359.90	3990.57	2091.13	-600.04	2150.37	0.39	0.33	0.22	343.99	2175.52
Survey	6017.00	90.40	0.10	3990.89	2183.13	-600.04	2241.62	1.32	1.30	0.22	344.63	2264.09
Survey	6109.00	90.10	360.00	3990.49	2275.13	-599.96	2332.87	0.34	0.33	0.11	345.23	2352.91
Survey	6201.00	89.90	358.20	3990.49	2367.12	-601.40	2424.30	1.97	0.22	1.96	345.74	2442.32
Survey	6292.00	89.90	358.40	3990.65	2458.08	-604.10	2514.87	0.22	0.00	0.22	346.19	2531.22
Survey	6384.00	89.40	359.60	3991.21	2550.06	-605.71	2606.31	1.41	0.54	1.30	346.64	2621.01
Survey	6476.00	89.80	359.60	3991.85	2642.06	-606.35	2697.64	0.43	0.43	0.00	347.07	2710.75
Survey	6568.00	90.00	0.40	3992.01	2734.06	-606.35	2788.90	0.90	0.22	0.87	347.50	2800.49
Survey	6660.00	90.60	1.10	3991.53	2826.05	-605.15	2879.99	1.00	0.65	0.76	347.91	2890.12
Survey	6752.00	91.00	0.40	3990.25	2918.03	-603.95	2971.08	0.88	0.43	0.76	348.31	2979.87

Nona 3204 1-13H Surveys

Type	M Depth	Incl.	Azimuth	TVD	North	East	V Section	Dogleg	B Rate	T Rate	Clos Azi	Clos Dist
Survey	6844.00	91.30	359.90	3988.40	3010.01	-603.71	3062.28	0.63	0.33	0.54	348.66	3069.96
Survey	6935.00	91.50	359.50	3986.18	3100.98	-604.19	3152.58	0.49	0.22	0.44	348.97	3159.29
Survey	7027.00	92.10	359.60	3983.29	3192.93	-604.91	3243.88	0.66	0.65	0.11	349.27	3249.73
Survey	7119.00	89.60	0.30	3981.93	3284.91	-604.99	3335.12	2.82	2.72	0.76	349.56	3340.16
Survey	7238.00	88.20	359.80	3984.21	3403.88	-604.89	3453.12	1.25	1.18	0.42	349.92	3457.21
Survey	7331.00	87.00	359.90	3988.10	3496.80	-605.13	3545.32	1.29	1.29	0.11	350.18	3548.77
Survey	7423.00	86.10	359.80	3993.64	3588.63	-605.37	3636.44	0.98	0.98	0.11	350.42	3639.33
Survey	7514.00	88.20	0.10	3998.17	3679.51	-605.45	3726.59	2.33	2.31	0.33	350.66	3728.99
Survey	7606.00	89.30	1.40	4000.17	3771.48	-604.24	3817.67	1.85	1.20	1.41	350.90	3819.58
Survey	7698.00	88.20	359.00	4002.18	3863.45	-603.92	3908.85	2.87	1.20	2.61	351.12	3910.37
Survey	7793.00	88.10	357.30	4005.25	3958.35	-606.99	4003.37	1.79	0.11	1.79	351.28	4004.62
Survey	7888.00	87.20	359.20	4009.14	4053.22	-609.88	4097.84	2.21	0.95	2.00	351.44	4098.85
Survey	7983.00	87.70	359.70	4013.37	4148.12	-610.79	4192.09	0.74	0.53	0.53	351.62	4192.85
Survey	8078.00	89.00	0.50	4016.10	4243.08	-610.62	4286.26	1.61	1.37	0.84	351.81	4286.79
Survey	8172.00	91.30	0.90	4015.85	4337.07	-609.47	4379.35	2.48	2.45	0.43	352.00	4379.68
Survey	8267.00	92.00	360.00	4013.12	4432.02	-608.73	4473.44	1.20	0.74	0.95	352.18	4473.63
Survey	8362.00	92.30	0.20	4009.56	4526.95	-608.56	4567.58	0.38	0.32	0.21	352.34	4567.67
Survey	8457.00	92.30	358.90	4005.74	4621.87	-609.31	4661.83	1.37	0.00	1.37	352.49	4661.86
Survey	8520.00	93.60	358.80	4002.50	4684.77	-610.57	4724.38	2.07	2.06	0.16	352.57	4724.39
Survey	8572.00	93.60	358.80	3999.24	4736.66	-611.66	4775.99	0.00	0.00	0.00	352.64	4775.99

Day # 1 - From February 17, 2014 00:00 to February 17, 2014 23:59

Company: Sandridge
Well Name: Nona 3204 1-23H
Legals: Sec: 23 Township: 32S Range: 4W
County/State: Sumner County KS
Rig Name: Lariat 45

Customer Rep	Position	Directional Driller	MWD Operator
		Monte Bryant	Blake Reid
		Tony Hatfield	
		Jake Leming	

Daily Totals			
Start Depth:	270	Rotate Ftg:	380
End Depth:	650	Rotary Hrs:	4.07
Total Drilled:	380	Avg Rot ROP:	93.44
Below Rot. Hrs:	7.48	Circ Hours:	0
Avg Total ROP:	92.44	Rotary Hrs%:	100
Slide Footage:	0	Slide Hrs%:	0
Slide Hours:	0	Rotary Ftg%:	100
Avg Slide ROP:	0	Slide Ftg%:	0

Drilling Parameters	
WOB:	10
Press On:	1065.00
Press Off:	830.00
GPM:	460.47
SPM:	110.00
Rot. RPM:	70 - 70
Mot. RPM:	119.722 - 119.722

Mud Record	
Weight:	0
Visc:	0
Chlorides:	
YP:	
PV:	
PH:	
Gas:	
Sand:	
WL:	
Solid:	
BHT°:	
Flow T°:	
Oil %:	
LCM:	

BHA Items	
BHA # 1	
PLT516_S6	
S08275	
6.50 MOTOR	
650M6276	
6.5" FLOAT SUB	
DR655	
6.50 UBHO SUB NM	
DRTMS65001	
6.50 NMDC SLICK	
DR8941	
6.5 NMDC FLEX	
DR13676	
6.50 CROSSOVER	
SUB	
DRT4303	
HWDP 5 x 3 - 4 1/2 IF	

Casing		
Size	Lb/ft	Set Depth

Bit Record							
Name	SN	Bit Type	IADC#	MFR	TFA	Jets	GPM
PLT516_S6 S08275		PDC		1	0.982	5 - 16.00	460.467723226 161

Assembly Totals									
BH A	Motor SN	Slide Ftg.	Slide Hrs.	Rot Ftg.	Rot Hrs.	Circ Hrs.	D & C Hrs	BHA Ftg.	Avg ROP
1	650M6276	0	0	2629.00	24.98	1	25.98	2629.00	52.62

Weather			
Weather Time/Job Time	Temp	Wind Speed	Weather Notes

Day # 1 Breakdown									
Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	Misc. Data	
08:00	15:00	07:00:00				0	OTHER	Notes: ARRIVE STANDBY	
15:00	16:00	01:00:00				0	BHA Handling - Pickup BHA		
16:00	16:30	00:30:00				0	OTHER	Notes: MWD TEST	
16:30	19:00	02:30:00	270.00			0	Tripping In - Pipe	BHA: 1 Depth: 270.00	
19:00	19:40	00:40:00				0	OTHER	Notes: DRILLING OUT FLOAT, CEMENT, SHUE...	
19:40	22:45	03:05:00	270.00	561.00	291.00	94.38	Drilling (Rotating)	Depth: 270.00 - 561.00 Motor RPM: 119.7216 Table RPM: 70.0000 WOB: 10.00 Pressure on PSI: 1000.00 Pressure off PSI: 760.00	
22:45	23:00	00:15:00				0	Survey	Depth: 504.00 Inclination: 1.00 Azimuth: 355.30 Source: MWD	
23:00	23:59	00:59:00	561.00	650.00	89.00	90.51	Drilling (Rotating)	Depth: 561.00 - 650.00 Motor RPM: 119.7216 Table RPM: 70.0000 WOB: 10.00 Pressure on PSI: 1130.00 Pressure off PSI: 900.00	

Day # 2 - From February 18, 2014 00:00 to February 18, 2014 23:59

Company: Sandridge
 Well Name: Nona 3204 1-23H
 Legals: Sec: 23 Township: 32S Range: 4W
 County/State: Sumner County KS
 Rig Name: Lariat 45

Customer Rep	Position
Monte Bryant	Tony Hatfield
	Jake Leming

Directional Driller
Monte Bryant
Tony Hatfield
Jake Leming

MWD Operator
Blake Reid

Daily Totals			
Start Depth:	650	Rotate Ftg:	2249
End Depth:	2899	Rotary Hrs:	20.92
Total Drilled:	2249	Avg Rot ROP:	107.52
Below Rot. Hrs:	23.98	Circ Hours:	1
Avg Total ROP:	109.57	Rotary Hrs%:	100
Slide Footage:	0	Slide Hrs%:	0
Slide Hours:	0	Rotary Ftg%:	100
Avg Slide ROP:	0	Slide Ftg%:	0

Drilling Parameters	
WOB:	15.2
Press On:	1893.00
Press Off:	1610.00
GPM:	460.47
SPM:	110.00
Rot. RPM:	70 - 70
Mot. RPM:	119.722 - 119.722

Mud Record	
Water Based	
Weight:	9.20
Visc:	35.00
Chlorides:	28000.00
YP:	19.00
PV:	6.00
PH:	8.50
Gas:	
Sand:	0.25
WL:	
Solid:	6.3
BHT°:	
Flow T°:	
Oil %:	
LCM:	0.00

BHA Items	
BHA # 1	
PLT516_S6	
S08275	
6.50 MOTOR	
650M6276	
6.5" FLOAT SUB	
DR655	
6.50 UBHO SUB NM	
DRTMS65001	
6.50 NMDC SLICK	
DR8941	
6.5 NMDC FLEX	
DR13676	
6.50 CROSSOVER	
SUB	
DRT4303	
HWDP 5 x 3 - 4 1/2 IF	

Casing		
Size	Lb/ft	Set Depth

Bit Record							
Name	SN	Bit Type	IADC#	MFR	TFA	Jets	GPM
PLT516_S6 S08275		PDC		1	0.982	5 - 16.00	460.467723226 161

Assembly Totals									
BH A	Motor SN	Slide Ftg.	Slide Hrs.	Rot Ftg.	Rot Hrs.	Circ Hrs.	D & C Hrs	BHA Ftg.	Avg ROP
1	650M6276	0	0	2629.00	24.98	1	25.98	2629.00	52.62

Weather			
Weather Time/Job Time	Temp	Wind Speed	Weather Notes

Day # 2 Breakdown								
Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	Misc. Data
00:00	03:25	03:25:00	650.00	1021.00	371.00	108.59	Drilling (Rotating)	Depth: 650.00 - 1021.00 Motor RPM: 119.7216 Table RPM: 70.0000 WOB: 15.00 Pressure on PSI: 1350.00 Pressure off PSI: 1100.00
03:25	03:40	00:15:00					0 Survey	Depth: 964.00 Inclination: 1.20 Azimuth: 15.30 Source: MWD
03:40	07:15	03:35:00	1021.00	1479.00	458.00	127.81	Drilling (Rotating)	Depth: 1021.00 - 1479.00 Motor RPM: 119.7216 Table RPM: 70.0000 WOB: 15.00 Pressure on PSI: 1700.00 Pressure off PSI: 1500.00
07:15	07:30	00:15:00					0 Survey	Depth: 1422.00 Inclination: 1.00 Azimuth: 46.60 Source: MWD
07:30	11:15	03:45:00	1479.00	1938.00	459.00	122.4	Drilling (Rotating)	Depth: 1479.00 - 1938.00 Motor RPM: 119.7216 Table RPM: 70.0000 WOB: 15.00 Pressure on PSI: 2000.00 Pressure off PSI: 1700.00
11:15	11:45	00:30:00					0 Daily Rig Service	
11:45	12:00	00:15:00					0 Survey	Depth: 1881.00 Inclination: 1.00 Azimuth: 45.30 Source: MWD
12:00	17:00	05:00:00	1938.00	2413.00	475.00	95.00	Drilling (Rotating)	Depth: 1938.00 - 2413.00 Motor RPM: 119.7216 Table RPM: 70.0000 WOB: 15.00 Pressure on PSI: 2000.00 Pressure off PSI: 1700.00
17:00	17:15	00:15:00					0 Survey	Depth: 2356.00 Inclination: 1.20 Azimuth: 63.80 Source: MWD
17:15	22:25	05:10:00	2413.00	2899.00	486.00	94.06	Drilling (Rotating)	Depth: 2413.00 - 2899.00 Motor RPM: 119.7216 Table RPM: 70.0000 WOB: 16.00 Pressure on PSI: 2415.00 Pressure off PSI: 2050.00
22:25	22:35	00:10:00					0 Survey	Depth: 2842.00 Inclination: 1.10 Azimuth: 81.80 Source: MWD
22:35	23:35	01:00:00					0 Circulate & Condition Mud	
23:35	23:59	00:24:00					0 OTHER	Notes: TRIP OUT HOLE...

Day # 3 - From February 19, 2014 00:00 to February 19, 2014 23:59

Company: Sandridge
 Well Name: Nona 3204 1-23H
 Legals: Sec: 23 Township: 32S Range: 4W
 County/State: Sumner County KS
 Rig Name: Lariat 45

Customer Rep **Position**

Directional Driller

MWD Operator

Monte Bryant
 Tony Hatfield
 Jake Leming

Blake Reid

Daily Totals			
Start Depth:	2899	Rotate Ftg:	45
End Depth:	3426	Rotary Hrs:	1.48
Total Drilled:	527	Avg Rot ROP:	30.34
Below Rot. Hrs:	20.48	Circ Hours:	0
Avg Total ROP:	68.27	Rotary Hrs%:	16.51
Slide Footage:	482	Slide Hrs%:	83.49
Slide Hours:	7.5	Rotary Ftg%:	8.54
Avg Slide ROP:	64.27	Slide Ftg%:	482

Drilling Parameters	
WOB:	15.538
Press On:	2083.846
Press Off:	1814.615
GPM:	460.47
SPM:	110.00
Rot. RPM:	40 - 40
Mot. RPM:	128.931 - 128.931

Mud Record	
Water Based	
Weight:	8.90
Visc:	35.00
Chlorides:	2100.00
YP:	10.00
PV:	2.00
PH:	11.00
Gas:	
Sand:	.25
WL:	
Solid:	4.1
BHT°:	
Flow T°:	
Oil %:	
LCM:	0.00

BHA Items	
BHA # 2	
MMD55DM	12195034
6.75 MOTOR	67524X484DRT
6.5" FLOAT SUB	DR655
6.50 NMDC PONY	DRPM24
6.50 UBHO SUB NM	DRMS65001
6.50 NMDC SLICK	DR8941
6.5 NMDC FLEX	DR13676
6.50 CROSSOVER	SUB
	DRT4303
DP 5 x 3 - 19.5000	
HWDP 5 x 3 - 4 1/2 IF	
BHA # 1	
PLT516_S6	S08275
6.50 MOTOR	650M6276
6.5" FLOAT SUB	DR655
6.50 UBHO SUB NM	DRMS65001
6.50 NMDC SLICK	DR8941
6.5 NMDC FLEX	DR13676
6.50 CROSSOVER	SUB
	DRT4303
HWDP 5 x 3 - 4 1/2 IF	

Casing		
Size	Lb/ft	Set Depth

Bit Record							
Name	SN	Bit Type	IADC#	MFR	TFA	Jets	GPM
MMD55DM	12195034	PDC	M423	HALLIBURTON	0.982	5 - 16.00	460.467723226 16
PLT516_S6	S08275	PDC		1	0.982	5 - 16.00	460.467723226 161

Assembly Totals									
BH A	Motor SN	Slide Ftg.	Slide Hrs.	Rot Ftg.	Rot Hrs.	Circ Hrs.	D & C Hrs	BHA Ftg.	Avg ROP
2	67524X484DRT	1301.00	25.98	628.00	12.82	4.33	43.13	1929.00	49.53
1	650M6276	0	0	2629.00	24.98	1	25.98	2629.00	52.62

Weather			
Weather Time/Job Time	Temp	Wind Speed	Weather Notes

Day # 3 Breakdown								
Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	Misc. Data
00:00	02:00	02:00:00	2899.00				0 Tripping Out - Pipe	BHA: 1 Depth: 2899.00 Reason: Bit Trip & Motor
02:00	03:00	01:00:00					0 BHA Handling - Laydown BHA	
03:00	05:30	02:30:00					0 BHA Handling - Pickup BHA	
05:30	10:15	04:45:00	2899.00				0 Tripping In - Pipe	BHA: 2 Depth: 2899.00
10:15	10:30	00:15:00	2899.00	2927.00	28.00	112	Directional Work (Sliding)	Depth: 2899.00 - 2927.00 Mag. TF: 267.00 Motor RPM: 128.9310 Gravity TF: WOB: 15.00 Pressure on PSI: 1900.00 Pressure off PSI: 1600.00
10:30	10:45	00:15:00					0 Survey	Depth: 2862.00 Inclination: 1.30 Azimuth: 78.60 Source: MWD
10:45	11:00	00:15:00	2927.00	2958.00	31.00	124	Directional Work (Sliding)	Depth: 2927.00 - 2958.00 Mag. TF: 267.00 Motor RPM: 128.9310 Gravity TF: WOB: 16.00 Pressure on PSI: 1900.00 Pressure off PSI: 1600.00
11:00	11:15	00:15:00					0 Survey	Depth: 2893.00 Inclination: 0.70 Azimuth: 65.30 Source: MWD
11:15	11:30	00:15:00	2958.00	2988.00	30.00	120	Directional Work (Sliding)	Depth: 2958.00 - 2988.00 Mag. TF: 267.00 Motor RPM: 128.9310 Gravity TF: WOB: 15.00 Pressure on PSI: 1900.00 Pressure off PSI: 1600.00
11:30	12:00	00:30:00					0 Rig Repair	
12:00	12:15	00:15:00					0 Survey	Depth: 2923.00 Inclination: 1.80 Azimuth: 311.10 Source: MWD
12:15	12:30	00:15:00	2988.00	3019.00	31.00	124	Directional Work (Sliding)	Depth: 2988.00 - 3019.00 Mag. TF: 267.00 Motor RPM: 128.9310 Gravity TF: WOB: 15.00 Pressure on PSI: 1900.00 Pressure off PSI: 1600.00
12:30	12:45	00:15:00					0 Survey	Depth: 2954.00 Inclination: 3.90 Azimuth: 291.10 Source: MWD
12:45	13:15	00:30:00	3019.00	3050.00	31.00	62.0	Directional Work (Sliding)	Depth: 3019.00 - 3050.00 Mag. TF: 267.00 Motor RPM: 128.9310 Gravity TF: WOB: 16.00 Pressure on PSI: 1900.00 Pressure off PSI: 1600.00
13:15	13:30	00:15:00					0 Survey	Depth: 2985.00 Inclination: 6.80 Azimuth: 283.30 Source: MWD
13:30	13:45	00:15:00	3050.00	3075.00	25.00	100	Directional Work (Sliding)	Depth: 3050.00 - 3075.00 Mag. TF: Motor RPM: 128.9310 Gravity TF: 0.00 WOB: 15.00 Pressure on PSI: 1950.00 Pressure off PSI: 1700.00
13:45	13:50	00:05:00	3075.00	3080.00	5.00	60.00	Drilling (Rotating)	Depth: 3075.00 - 3080.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 15.00 Pressure on PSI: 1900.00 Pressure off PSI: 1600.00
13:50	14:00	00:10:00					0 Survey	Depth: 3016.00 Inclination: 9.20 Azimuth: 281.10 Source: MWD
14:00	14:15	00:15:00	3080.00	3105.00	25.00	100	Directional Work (Sliding)	Depth: 3080.00 - 3105.00 Mag. TF: Motor RPM: 128.9310 Gravity TF: 345.00 WOB: 18.00 Pressure on PSI: 1900.00 Pressure off PSI: 1700.00
14:15	14:20	00:05:00	3105.00	3111.00	6.00	72.00	Drilling (Rotating)	Depth: 3105.00 - 3111.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 15.00 Pressure on PSI: 1900.00 Pressure off PSI: 1600.00
14:20	15:00	00:40:00					0 Daily Rig Service	
15:00	15:15	00:15:00					0 Survey	Depth: 3046.00 Inclination: 11.80 Azimuth: 279.20 Source: MWD
15:15	15:30	00:15:00	3111.00	3141.00	30.00	120	Directional Work (Sliding)	Depth: 3111.00 - 3141.00 Mag. TF: Motor RPM: 128.9310 Gravity TF: 345.00 WOB: 16.00 Pressure on PSI: 1950.00 Pressure off PSI: 1600.00
15:30	15:45	00:15:00					0 Survey	Depth: 3076.00 Inclination: 14.30 Azimuth: 277.60 Source: MWD
15:45	16:00	00:15:00	3141.00	3166.00	25.00	100	Directional Work (Sliding)	Depth: 3141.00 - 3166.00 Mag. TF: Motor RPM: 128.9310 Gravity TF: 345.00 WOB: 15.00 Pressure on PSI: 1900.00 Pressure off PSI: 1700.00

Day # 3 Breakdown								
Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	Misc. Data
16:00	16:15	00:15:00	3166.00	3172.00	6.00	24	Drilling (Rotating)	Depth: 3166.00 - 3172.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 15.00 Pressure on PSI: 1900.00 Pressure off PSI: 1700.00
16:15	16:30	00:15:00				0	Survey	Depth: 3107.00 Inclination: 16.70 Azimuth: 274.20 Source: MWD
16:30	16:45	00:15:00	3172.00	3199.00	27.00	108	Directional Work (Sliding)	Depth: 3172.00 - 3199.00 Mag. TF: Motor RPM: 128.9310 Gravity TF: 345.00 WOB: 20.00 Pressure on PSI: 2950.00 Pressure off PSI: 1650.00
16:45	16:50	00:05:00	3199.00	3202.00	3.00	36.00	Drilling (Rotating)	Depth: 3199.00 - 3202.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 15.00 Pressure on PSI: 1950.00 Pressure off PSI: 1650.00
16:50	17:05	00:15:00				0	Survey	Depth: 3137.00 Inclination: 18.60 Azimuth: 271.70 Source: MWD
17:05	17:20	00:15:00	3202.00	3229.00	27.00	108	Directional Work (Sliding)	Depth: 3202.00 - 3229.00 Mag. TF: 0.00 Motor RPM: 128.9310 Gravity TF: 0.00 WOB: 17.00 Pressure on PSI: 2150.00 Pressure off PSI: 2000.00
17:20	17:30	00:10:00	3229.00	3233.00	4.00	24.00	Drilling (Rotating)	Depth: 3229.00 - 3233.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 10.00 Pressure on PSI: 2100.00 Pressure off PSI: 2000.00
17:30	17:45	00:15:00				0	Survey	Depth: 3168.00 Inclination: 20.40 Azimuth: 270.30 Source: MWD
17:45	18:00	00:15:00	3233.00	3261.00	28.00	112	Directional Work (Sliding)	Depth: 3233.00 - 3261.00 Mag. TF: 0.00 Motor RPM: 128.9310 Gravity TF: 0.00 WOB: 13.00 Pressure on PSI: 2125.00 Pressure off PSI: 1900.00
18:00	18:10	00:10:00	3261.00	3263.00	2.00	12.00	Drilling (Rotating)	Depth: 3261.00 - 3263.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 10.00 Pressure on PSI: 2150.00 Pressure off PSI: 2000.00
18:10	18:15	00:05:00				0	Survey	Depth: 3198.00 Inclination: 22.20 Azimuth: 270.50 Source: MWD
18:15	19:00	00:45:00	3263.00	3294.00	31.00	41.33	Directional Work (Sliding)	Depth: 3263.00 - 3294.00 Mag. TF: 0.00 Motor RPM: 128.9310 Gravity TF: 0.00 WOB: 15.00 Pressure on PSI: 2130.00 Pressure off PSI: 2000.00
19:00	19:10	00:10:00				0	Survey	Depth: 3229.00 Inclination: 24.00 Azimuth: 270.10 Source: MWD
19:10	20:00	00:50:00	3294.00	3325.00	31.00	37.20	Directional Work (Sliding)	Depth: 3294.00 - 3325.00 Mag. TF: 0.00 Motor RPM: 128.9310 Gravity TF: 0.00 WOB: 15.00 Pressure on PSI: 2100.00 Pressure off PSI: 2000.00
20:00	20:10	00:10:00				0	Survey	Depth: 3260.00 Inclination: 25.80 Azimuth: 269.80 Source: MWD
20:10	21:10	01:00:00	3325.00	3355.00	30.00	30.00	Directional Work (Sliding)	Depth: 3325.00 - 3355.00 Mag. TF: 0.00 Motor RPM: 128.9310 Gravity TF: 0.00 WOB: 20.00 Pressure on PSI: 2100.00 Pressure off PSI: 2000.00
21:10	21:20	00:10:00				0	Survey	Depth: 3290.00 Inclination: 28.10 Azimuth: 268.60 Source: MWD
21:20	22:05	00:45:00	3355.00	3381.00	26.00	34.67	Directional Work (Sliding)	Depth: 3355.00 - 3381.00 Mag. TF: 0.00 Motor RPM: 128.9310 Gravity TF: 0.00 WOB: 15.00 Pressure on PSI: 2200.00 Pressure off PSI: 1900.00
22:05	22:15	00:10:00	3381.00	3386.00	5.00	30.00	Drilling (Rotating)	Depth: 3381.00 - 3386.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 10.00 Pressure on PSI: 2275.00 Pressure off PSI: 2080.00
22:15	22:25	00:10:00				0	Survey	Depth: 3321.00 Inclination: 30.40 Azimuth: 267.80 Source: MWD
22:25	23:20	00:55:00	3386.00	3412.00	26.00	28.36	Directional Work (Sliding)	Depth: 3386.00 - 3412.00 Mag. TF: 0.00 Motor RPM: 128.9310 Gravity TF: 0.00 WOB: 20.00 Pressure on PSI: 2250.00 Pressure off PSI: 2100.00

Day # 3 Breakdown								
Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	Misc. Data
23:20	23:30	00:10:00	3412.00	3416.00	4.00	24.00	Drilling (Rotating)	Depth: 3412.00 - 3416.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 20.00 Pressure on PSI: 2450.00 Pressure off PSI: 2200.00
23:30	23:40	00:10:00					0 Survey	Depth: 3351.00 Inclination: 33.80 Azimuth: 267.20 Source: MWD
23:40	23:59	00:19:00	3416.00	3426.00	10.00	31.58	Drilling (Rotating)	Depth: 3416.00 - 3426.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 18.00 Pressure on PSI: 2350.00 Pressure off PSI: 2100.00

Day # 4 - From February 20, 2014 00:00 to February 20, 2014 23:59

Company: Sandridge
Well Name: Nona 3204 1-23H
Legals: Sec: 23 Township: 32S Range: 4W
County/State: Sumner County KS
Rig Name: Lariat 45

Customer Rep	Position
Monte Bryant	Tony Hatfield
	Jake Leming

Directional Driller
Monte Bryant
Tony Hatfield
Jake Leming

MWD Operator
Blake Reid

Daily Totals			
Start Depth:	3426	Rotate Ftg:	182
End Depth:	4135	Rotary Hrs:	5.17
Total Drilled:	709	Avg Rot ROP:	35.23
Below Rot. Hrs:	23.98	Circ Hours:	0
Avg Total ROP:	49.17	Rotary Hrs%:	28.47
Slide Footage:	527	Slide Hrs%:	71.53
Slide Hours:	12.983	Rotary Ftg%:	25.67
Avg Slide ROP:	40.59	Slide Ftg%:	527

Drilling Parameters	
WOB:	20.419
Press On:	2370.698
Press Off:	2136.047
GPM:	460.47
SPM:	110.00
Rot. RPM:	40 - 40
Mot. RPM:	128.931 - 128.931

Mud Record	
Water Based	
Weight:	9.10
Visc:	39.00
Chlorides:	27000.00
YP:	11.00
PV:	7.00
PH:	12.00
Gas:	
Sand:	0.25
WL:	
Solid:	5.6
BHT°:	
Flow T°:	
Oil %:	
LCM:	0.00

BHA Items	
BHA # 2	
MMD55DM	12195034
6.75 MOTOR	67524X484DRT
6.5" FLOAT SUB	DR655
6.50 NMDC PONY	DRPM24
6.50 UBHO SUB NM	DRTMS65001
6.50 NMDC SLICK	DR8941
6.5 NMDC FLEX	DR13676
6.50 CROSSOVER	SUB
	DRT4303
	DP 5 x 3 - 19.5000
	HWDP 5 x 3 - 4 1/2 IF

Casing		
Size	Lb/ft	Set Depth

Bit Record							
Name	SN	Bit Type	IADC#	MFR	TFA	Jets	GPM
MMD55DM	12195034	PDC	M423	HALLIBURTON	0.982	5 - 16.00	460.467723226 16

Assembly Totals									
BH A	Motor SN	Slide Ftg.	Slide Hrs.	Rot Ftg.	Rot Hrs.	Circ Hrs.	D & C Hrs	BHA Ftg.	Avg ROP
2	67524X484DRT	1301.00	25.98	628.00	12.82	4.33	43.13	1929.00	49.53

Weather			
Weather Time/Job Time	Temp	Wind Speed	Weather Notes

Day # 4 Breakdown									
Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	Misc. Data	
00:00	01:00	01:00:00	3426.00	3447.00	21.00	21.00	Directional Work (Sliding)	Depth: 3426.00 - 3447.00 Mag. TF: 0.00 Motor RPM: 128.9310 Gravity TF: 90.00 WOB: 18.00 Pressure on PSI: 2215.00 Pressure off PSI: 2000.00	
01:00	01:10	00:10:00				0	Survey	Depth: 3382.00 Inclination: 37.40 Azimuth: 266.60 Source: MWD	
01:10	02:00	00:50:00	3447.00	3467.00	20.00	24.00	Directional Work (Sliding)	Depth: 3447.00 - 3467.00 Mag. TF: 0.00 Motor RPM: 128.9310 Gravity TF: 90.00 WOB: 20.00 Pressure on PSI: 2250.00 Pressure off PSI: 2000.00	
02:00	02:15	00:15:00	3467.00	3477.00	10.00	40	Drilling (Rotating)	Depth: 3467.00 - 3477.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 15.00 Pressure on PSI: 2350.00 Pressure off PSI: 2100.00	
02:15	02:30	00:15:00				0	Survey	Depth: 3412.00 Inclination: 39.80 Azimuth: 266.80 Source: MWD	
02:30	04:00	01:30:00	3477.00	3495.00	18.00	12.0	Directional Work (Sliding)	Depth: 3477.00 - 3495.00 Mag. TF: 0.00 Motor RPM: 128.9310 Gravity TF: 90.00 WOB: 20.00 Pressure on PSI: 2200.00 Pressure off PSI: 1900.00	

Day # 4 Breakdown								
Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	Misc. Data
04:00	04:20	00:20:00	3495.00	3508.00	13.00	39.00	Drilling (Rotating)	Depth: 3495.00 - 3508.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 20.00 Pressure on PSI: 2280.00 Pressure off PSI: 2000.00
04:20	04:30	00:10:00				0	Survey	Depth: 3443.00 Inclination: 40.60 Azimuth: 271.50 Source: MWD
04:30	05:10	00:40:00	3508.00	3523.00	15.00	22.50	Directional Work (Sliding)	Depth: 3508.00 - 3523.00 Mag. TF: 0.00 Motor RPM: 128.9310 Gravity TF: 80.00 WOB: 20.00 Pressure on PSI: 2250.00 Pressure off PSI: 2000.00
05:10	05:15	00:05:00	3523.00	3540.00	17.00	204.00	Drilling (Rotating)	Depth: 3523.00 - 3540.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 20.00 Pressure on PSI: 2280.00 Pressure off PSI: 2200.00
05:15	05:30	00:15:00				0	Survey	Depth: 3475.00 Inclination: 41.30 Azimuth: 275.70 Source: MWD
05:30	06:00	00:30:00	3540.00	3558.00	18.00	36.0	Directional Work (Sliding)	Depth: 3540.00 - 3558.00 Mag. TF: Motor RPM: 128.9310 Gravity TF: 90.00 WOB: 20.00 Pressure on PSI: 2250.00 Pressure off PSI: 2200.00
06:00	06:15	00:15:00	3558.00	3570.00	12.00	48	Drilling (Rotating)	Depth: 3558.00 - 3570.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 20.00 Pressure on PSI: 2250.00 Pressure off PSI: 2000.00
06:15	06:30	00:15:00				0	Survey	Depth: 3505.00 Inclination: 41.60 Azimuth: 278.40 Source: MWD
06:30	07:00	00:30:00	3570.00	3585.00	15.00	30.0	Directional Work (Sliding)	Depth: 3570.00 - 3585.00 Mag. TF: Motor RPM: 128.9310 Gravity TF: 100.00 WOB: 20.00 Pressure on PSI: 2300.00 Pressure off PSI: 2100.00
07:00	07:45	00:45:00	3585.00	3601.00	16.00	21.33	Drilling (Rotating)	Depth: 3585.00 - 3601.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 20.00 Pressure on PSI: 2200.00 Pressure off PSI: 2050.00
07:45	08:00	00:15:00				0	Survey	Depth: 3536.00 Inclination: 41.50 Azimuth: 281.30 Source: MWD
08:00	08:15	00:15:00	3601.00	3623.00	22.00	88	Directional Work (Sliding)	Depth: 3601.00 - 3623.00 Mag. TF: Motor RPM: 128.9310 Gravity TF: 100.00 WOB: 20.00 Pressure on PSI: 2250.00 Pressure off PSI: 2000.00
08:15	08:30	00:15:00	3623.00	3631.00	8.00	32	Drilling (Rotating)	Depth: 3623.00 - 3631.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 20.00 Pressure on PSI: 2250.00 Pressure off PSI: 2000.00
08:30	08:45	00:15:00				0	Survey	Depth: 3566.00 Inclination: 40.80 Azimuth: 284.20 Source: MWD
08:45	09:00	00:15:00	3631.00	3653.00	22.00	88	Directional Work (Sliding)	Depth: 3631.00 - 3653.00 Mag. TF: Motor RPM: 128.9310 Gravity TF: 90.00 WOB: 20.00 Pressure on PSI: 2250.00 Pressure off PSI: 2000.00
09:00	09:30	00:30:00	3653.00	3662.00	9.00	18.0	Drilling (Rotating)	Depth: 3653.00 - 3662.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 20.00 Pressure on PSI: 2250.00 Pressure off PSI: 2000.00
09:30	09:45	00:15:00				0	Survey	Depth: 3597.00 Inclination: 40.50 Azimuth: 287.30 Source: MWD
09:45	10:00	00:15:00	3662.00	3680.00	18.00	72	Directional Work (Sliding)	Depth: 3662.00 - 3680.00 Mag. TF: Motor RPM: 128.9310 Gravity TF: 90.00 WOB: 20.00 Pressure on PSI: 2300.00 Pressure off PSI: 2100.00
10:00	10:15	00:15:00	3680.00	3692.00	12.00	48	Drilling (Rotating)	Depth: 3680.00 - 3692.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 20.00 Pressure on PSI: 2400.00 Pressure off PSI: 2100.00
10:15	10:30	00:15:00				0	Survey	Depth: 3627.00 Inclination: 40.00 Azimuth: 291.60 Source: MWD
10:30	10:45	00:15:00	3692.00	3712.00	20.00	80	Directional Work (Sliding)	Depth: 3692.00 - 3712.00 Mag. TF: Motor RPM: 128.9310 Gravity TF: 70.00 WOB: 18.00 Pressure on PSI: 2300.00 Pressure off PSI: 2100.00

Day # 4 Breakdown								
Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	Misc. Data
10:45	11:00	00:15:00	3712.00	3723.00	11.00	44	Drilling (Rotating)	Depth: 3712.00 - 3723.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 20.00 Pressure on PSI: 2300.00 Pressure off PSI: 2100.00
11:00	11:05	00:05:00				0	Survey	Depth: 3658.00 Inclination: 39.50 Azimuth: 295.70 Source: MWD
11:05	11:30	00:25:00	3723.00	3743.00	20.00	48.00	Directional Work (Sliding)	Depth: 3723.00 - 3743.00 Mag. TF: Motor RPM: 128.9310 Gravity TF: 60.00 WOB: 20.00 Pressure on PSI: 2300.00 Pressure off PSI: 2100.00
11:30	11:45	00:15:00	3743.00	3753.00	10.00	40	Drilling (Rotating)	Depth: 3743.00 - 3753.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 20.00 Pressure on PSI: 2300.00 Pressure off PSI: 2100.00
11:45	12:15	00:30:00				0	Daily Rig Service	
12:15	12:30	00:15:00				0	Survey	Depth: 3688.00 Inclination: 39.70 Azimuth: 298.80 Source: MWD
12:30	12:45	00:15:00	3753.00	3771.00	18.00	72	Directional Work (Sliding)	Depth: 3753.00 - 3771.00 Mag. TF: Motor RPM: 128.9310 Gravity TF: 70.00 WOB: 24.00 Pressure on PSI: 2250.00 Pressure off PSI: 2000.00
12:45	13:00	00:15:00	3771.00	3784.00	13.00	52	Drilling (Rotating)	Depth: 3771.00 - 3784.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 20.00 Pressure on PSI: 2250.00 Pressure off PSI: 2000.00
13:00	13:15	00:15:00				0	Survey	Depth: 3719.00 Inclination: 39.90 Azimuth: 302.30 Source: MWD
13:15	13:30	00:15:00	3784.00	3804.00	20.00	80	Directional Work (Sliding)	Depth: 3784.00 - 3804.00 Mag. TF: Motor RPM: 128.9310 Gravity TF: 50.00 WOB: 20.00 Pressure on PSI: 2400.00 Pressure off PSI: 2100.00
13:30	13:45	00:15:00	3804.00	3814.00	10.00	40	Drilling (Rotating)	Depth: 3804.00 - 3814.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 20.00 Pressure on PSI: 3500.00 Pressure off PSI: 3200.00
13:45	14:00	00:15:00				0	Survey	Depth: 3749.00 Inclination: 40.60 Azimuth: 305.70 Source: MWD
14:00	14:15	00:15:00	3814.00	3834.00	20.00	80	Directional Work (Sliding)	Depth: 3814.00 - 3834.00 Mag. TF: Motor RPM: 128.9310 Gravity TF: 50.00 WOB: 20.00 Pressure on PSI: 2400.00 Pressure off PSI: 2200.00
14:15	14:30	00:15:00	3834.00	3845.00	11.00	44	Drilling (Rotating)	Depth: 3834.00 - 3845.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 20.00 Pressure on PSI: 2500.00 Pressure off PSI: 2200.00
14:30	14:45	00:15:00				0	Survey	Depth: 3780.00 Inclination: 41.00 Azimuth: 308.30 Source: MWD
14:45	15:15	00:30:00	3845.00	3870.00	25.00	50.0	Directional Work (Sliding)	Depth: 3845.00 - 3870.00 Mag. TF: Motor RPM: 128.9310 Gravity TF: 50.00 WOB: 25.00 Pressure on PSI: 2500.00 Pressure off PSI: 2200.00
15:15	15:30	00:15:00	3870.00	3876.00	6.00	24	Drilling (Rotating)	Depth: 3870.00 - 3876.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 20.00 Pressure on PSI: 2500.00 Pressure off PSI: 2200.00
15:30	15:45	00:15:00				0	Survey	Depth: 3811.00 Inclination: 42.20 Azimuth: 310.90 Source: MWD
15:45	16:00	00:15:00	3876.00	3901.00	25.00	100	Directional Work (Sliding)	Depth: 3876.00 - 3901.00 Mag. TF: Motor RPM: 128.9310 Gravity TF: 50.00 WOB: 20.00 Pressure on PSI: 2450.00 Pressure off PSI: 2200.00
16:00	16:15	00:15:00	3901.00	3908.00	7.00	28	Drilling (Rotating)	Depth: 3901.00 - 3908.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 20.00 Pressure on PSI: 2300.00 Pressure off PSI: 2100.00
16:15	16:30	00:15:00				0	Survey	Depth: 3843.00 Inclination: 43.30 Azimuth: 313.30 Source: MWD
16:30	17:00	00:30:00	3908.00	3940.00	32.00	64.0	Directional Work (Sliding)	Depth: 3908.00 - 3940.00 Mag. TF: Motor RPM: 128.9310 Gravity TF: 60.00 WOB: 20.00 Pressure on PSI: 2400.00 Pressure off PSI: 2100.00

Day # 4 Breakdown								
Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	Misc. Data
17:00	17:15	00:15:00					0 Survey	Depth: 3875.00 Inclination: 45.00 Azimuth: 315.90 Source: MWD
17:15	18:50	01:35:00	3940.00	3967.00	27.00	17.05	Directional Work (Sliding)	Depth: 3940.00 - 3967.00 Mag. TF: 0.00 Motor RPM: 128.9310 Gravity TF: 50.00 WOB: 20.00 Pressure on PSI: 2350.00 Pressure off PSI: 2100.00
18:50	19:00	00:10:00	3967.00	3971.00	4.00	24.00	Drilling (Rotating)	Depth: 3967.00 - 3971.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 15.00 Pressure on PSI: 2450.00 Pressure off PSI: 2200.00
19:00	19:15	00:15:00					0 Survey	Depth: 3906.00 Inclination: 46.20 Azimuth: 319.10 Source: MWD
19:15	19:55	00:40:00	3971.00	3998.00	27.00	40.50	Directional Work (Sliding)	Depth: 3971.00 - 3998.00 Mag. TF: 0.00 Motor RPM: 128.9310 Gravity TF: 40.00 WOB: 23.00 Pressure on PSI: 2350.00 Pressure off PSI: 2100.00
19:55	20:10	00:15:00	3998.00	4003.00	5.00	20	Drilling (Rotating)	Depth: 3998.00 - 4003.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 15.00 Pressure on PSI: 2450.00 Pressure off PSI: 2200.00
20:10	20:15	00:05:00					0 Survey	Depth: 3938.00 Inclination: 47.30 Azimuth: 322.50 Source: MWD
20:15	20:45	00:30:00	4003.00	4035.00	32.00	64.0	Directional Work (Sliding)	Depth: 4003.00 - 4035.00 Mag. TF: 0.00 Motor RPM: 128.9310 Gravity TF: 40.00 WOB: 25.00 Pressure on PSI: 2350.00 Pressure off PSI: 2100.00
20:45	21:05	00:20:00					0 Daily Rig Service	
21:05	21:15	00:10:00					0 Survey	Depth: 3970.00 Inclination: 49.50 Azimuth: 325.00 Source: MWD
21:15	21:45	00:30:00	4035.00	4063.00	28.00	56.0	Directional Work (Sliding)	Depth: 4035.00 - 4063.00 Mag. TF: 0.00 Motor RPM: 128.9310 Gravity TF: 60.00 WOB: 27.00 Pressure on PSI: 2380.00 Pressure off PSI: 2100.00
21:45	21:55	00:10:00	4063.00	4066.00	3.00	18.00	Drilling (Rotating)	Depth: 4063.00 - 4066.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 8.00 Pressure on PSI: 2570.00 Pressure off PSI: 2300.00
21:55	22:10	00:15:00					0 Survey	Depth: 4001.00 Inclination: 52.00 Azimuth: 326.90 Source: MWD
22:10	22:30	00:20:00	4066.00	4098.00	32.00	96.00	Directional Work (Sliding)	Depth: 4066.00 - 4098.00 Mag. TF: 0.00 Motor RPM: 128.9310 Gravity TF: 50.00 WOB: 35.00 Pressure on PSI: 2550.00 Pressure off PSI: 2400.00
22:30	22:40	00:10:00					0 Survey	Depth: 4033.00 Inclination: 54.30 Azimuth: 329.80 Source: MWD
22:40	23:15	00:35:00	4098.00	4125.00	27.00	46.29	Directional Work (Sliding)	Depth: 4098.00 - 4125.00 Mag. TF: 0.00 Motor RPM: 128.9310 Gravity TF: 40.00 WOB: 30.00 Pressure on PSI: 2300.00 Pressure off PSI: 2100.00
23:15	23:25	00:10:00	4125.00	4130.00	5.00	30.00	Drilling (Rotating)	Depth: 4125.00 - 4130.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 10.00 Pressure on PSI: 2500.00 Pressure off PSI: 2300.00
23:25	23:35	00:10:00					0 Survey	Depth: 4065.00 Inclination: 56.20 Azimuth: 332.40 Source: MWD
23:35	23:59	00:24:00	4130.00	4135.00	5.00	12.5	Directional Work (Sliding)	Depth: 4130.00 - 4135.00 Mag. TF: 0.00 Motor RPM: 128.9310 Gravity TF: 40.00 WOB: 30.00 Pressure on PSI: 2515.00 Pressure off PSI: 2300.00

Day # 5 - From February 21, 2014 00:00 to February 21, 2014 23:59

Company: Sandridge
 Well Name: Nona 3204 1-23H
 Legals: Sec: 23 Township: 32S Range: 4W
 County/State: Sumner County KS
 Rig Name: Lariat 45

Customer Rep **Position**

Directional Driller

MWD Operator

Monte Bryant

Blake Reid

Tony Hatfield

Jake Leming

Daily Totals		
Start Depth:	4135	Rotate Ftg: 401
End Depth:	4828	Rotary Hrs: 6.17
Total Drilled:	693	Avg Rot ROP: 65.03
Below Rot. Hrs:	23.98	Circ Hours: 2.167
Avg Total ROP:	65.06	Rotary Hrs%: 52.86
Slide Footage:	292	Slide Hrs%: 47.14
Slide Hours:	5.5	Rotary Ftg%: 57.86
Avg Slide ROP:	53.09	Slide Ftg%: 292

Drilling Parameters	
WOB:	21.629
Press On:	2646.714
Press Off:	2426.429
GPM:	460.47
SPM:	110.00
Rot. RPM:	40 - 40
Mot. RPM:	128.931 - 128.931

Mud Record	
Water Based	
Weight:	9.40
Visc:	46.00
Chlorides:	29000.00
YP:	15.00
PV:	15.00
PH:	10.00
Gas:	
Sand:	0.25
WL:	
Solid:	7.5
BHT°:	
Flow T°:	
Oil %:	
LCM:	0.00

BHA Items	
BHA # 2	
MMD55DM	12195034
6.75 MOTOR	67524X484DRT
6.5" FLOAT SUB	DR655
6.50 NMDC PONY	DRPM24
6.50 UBHO SUB NM	DRTMS65001
6.50 NMDC SLICK	DR8941
6.5 NMDC FLEX	DR13676
6.50 CROSSOVER	SUB
	DRT4303
	DP 5 x 3 - 19.5000
	HWDP 5 x 3 - 4 1/2 IF

Casing		
Size	Lb/ft	Set Depth

Bit Record							
Name	SN	Bit Type	IADC#	MFR	TFA	Jets	GPM
MMD55DM	12195034	PDC	M423	HALLIBURTON	0.982	5 - 16.00	460.467723226 16

Assembly Totals									
BH A	Motor SN	Slide Ftg.	Slide Hrs.	Rot Ftg.	Rot Hrs.	Circ Hrs.	D & C Hrs	BHA Ftg.	Avg ROP
2	67524X484DRT	1301.00	25.98	628.00	12.82	4.33	43.13	1929.00	49.53

Weather			
Weather Time/Job Time	Temp	Wind Speed	Weather Notes

Day # 5 Breakdown									
Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	Misc. Data	
00:00	00:20	00:20:00	4135.00	4148.00	13.00	39.00	Directional Work (Sliding)	Depth: 4135.00 - 4148.00 Mag. TF: 0.00 Motor RPM: 128.9310 Gravity TF: 40.00 WOB: 30.00 Pressure on PSI: 2515.00 Pressure off PSI: 2300.00	
00:20	00:30	00:10:00	4148.00	4161.00	13.00	78.00	Drilling (Rotating)	Depth: 4148.00 - 4161.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 15.00 Pressure on PSI: 2580.00 Pressure off PSI: 2330.00	
00:30	00:40	00:10:00				0	Survey	Depth: 4096.00 Inclination: 58.60 Azimuth: 335.40 Source: MWD	
00:40	01:10	00:30:00	4161.00	4189.00	28.00	56.0	Directional Work (Sliding)	Depth: 4161.00 - 4189.00 Mag. TF: 0.00 Motor RPM: 128.9310 Gravity TF: 60.00 WOB: 30.00 Pressure on PSI: 2550.00 Pressure off PSI: 2400.00	
01:10	01:20	00:10:00	4189.00	4193.00	4.00	24.00	Drilling (Rotating)	Depth: 4189.00 - 4193.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 10.00 Pressure on PSI: 2600.00 Pressure off PSI: 2430.00	
01:20	01:30	00:10:00				0	Survey	Depth: 4128.00 Inclination: 61.30 Azimuth: 337.40 Source: MWD	

Day # 5 Breakdown								
Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	Misc. Data
01:30	02:05	00:35:00	4193.00	4219.00	26.00	44.57	Directional Work (Sliding)	Depth: 4193.00 - 4219.00 Mag. TF: 0.00 Motor RPM: 128.9310 Gravity TF: 50.00 WOB: 25.00 Pressure on PSI: 2330.00 Pressure off PSI: 2250.00
02:05	02:15	00:10:00	4219.00	4225.00	6.00	36.00	Drilling (Rotating)	Depth: 4219.00 - 4225.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 14.00 Pressure on PSI: 2400.00 Pressure off PSI: 2325.00
02:15	02:30	00:15:00				0	Survey	Depth: 4160.00 Inclination: 63.50 Azimuth: 339.50 Source: MWD
02:30	03:10	00:40:00	4225.00	4253.00	28.00	42.00	Directional Work (Sliding)	Depth: 4225.00 - 4253.00 Mag. TF: 0.00 Motor RPM: 128.9310 Gravity TF: 40.00 WOB: 30.00 Pressure on PSI: 2560.00 Pressure off PSI: 2290.00
03:10	03:20	00:10:00	4253.00	4256.00	3.00	18.00	Drilling (Rotating)	Depth: 4253.00 - 4256.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 13.00 Pressure on PSI: 2600.00 Pressure off PSI: 2400.00
03:20	03:30	00:10:00				0	Survey	Depth: 4191.00 Inclination: 65.40 Azimuth: 342.30 Source: MWD
03:30	04:00	00:30:00	4256.00	4282.00	26.00	52.0	Directional Work (Sliding)	Depth: 4256.00 - 4282.00 Mag. TF: 0.00 Motor RPM: 128.9310 Gravity TF: 40.00 WOB: 30.00 Pressure on PSI: 2500.00 Pressure off PSI: 2300.00
04:00	04:05	00:05:00	4282.00	4288.00	6.00	72.00	Drilling (Rotating)	Depth: 4282.00 - 4288.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 10.00 Pressure on PSI: 2600.00 Pressure off PSI: 2400.00
04:05	04:15	00:10:00				0	Survey	Depth: 4223.00 Inclination: 67.90 Azimuth: 344.60 Source: MWD
04:15	04:55	00:40:00	4288.00	4314.00	26.00	39.00	Directional Work (Sliding)	Depth: 4288.00 - 4314.00 Mag. TF: 0.00 Motor RPM: 128.9310 Gravity TF: 60.00 WOB: 30.00 Pressure on PSI: 2600.00 Pressure off PSI: 2400.00
04:55	05:05	00:10:00	4314.00	4320.00	6.00	36.00	Drilling (Rotating)	Depth: 4314.00 - 4320.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 14.00 Pressure on PSI: 2700.00 Pressure off PSI: 2500.00
05:05	05:15	00:10:00				0	Survey	Depth: 4255.00 Inclination: 70.40 Azimuth: 346.90 Source: MWD
05:15	05:30	00:15:00	4320.00	4340.00	20.00	80	Directional Work (Sliding)	Depth: 4320.00 - 4340.00 Mag. TF: Motor RPM: 128.9310 Gravity TF: 50.00 WOB: 18.00 Pressure on PSI: 2500.00 Pressure off PSI: 2300.00
05:30	05:45	00:15:00	4340.00	4351.00	11.00	44	Drilling (Rotating)	Depth: 4340.00 - 4351.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 20.00 Pressure on PSI: 2600.00 Pressure off PSI: 2400.00
05:45	06:00	00:15:00				0	Survey	Depth: 4286.00 Inclination: 72.40 Azimuth: 349.20 Source: MWD
06:00	06:15	00:15:00	4351.00	4371.00	20.00	80	Directional Work (Sliding)	Depth: 4351.00 - 4371.00 Mag. TF: Motor RPM: 128.9310 Gravity TF: 20.00 WOB: 25.00 Pressure on PSI: 2800.00 Pressure off PSI: 2500.00
06:15	06:30	00:15:00	4371.00	4383.00	12.00	48	Drilling (Rotating)	Depth: 4371.00 - 4383.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 20.00 Pressure on PSI: 2800.00 Pressure off PSI: 2500.00
06:30	06:45	00:15:00				0	Survey	Depth: 4318.00 Inclination: 74.10 Azimuth: 351.70 Source: MWD
06:45	07:00	00:15:00	4383.00	4403.00	20.00	80	Directional Work (Sliding)	Depth: 4383.00 - 4403.00 Mag. TF: Motor RPM: 128.9310 Gravity TF: 20.00 WOB: 28.00 Pressure on PSI: 2800.00 Pressure off PSI: 2500.00
07:00	07:15	00:15:00	4403.00	4415.00	12.00	48	Drilling (Rotating)	Depth: 4403.00 - 4415.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 20.00 Pressure on PSI: 2800.00 Pressure off PSI: 2500.00
07:15	07:30	00:15:00				0	Survey	Depth: 4350.00 Inclination: 75.40 Azimuth: 352.40 Source: MWD

Day # 5 Breakdown								
Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	Misc. Data
07:30	07:45	00:15:00	4415.00	4440.00	25.00	100	Directional Work (Sliding)	Depth: 4415.00 - 4440.00 Mag. TF: Motor RPM: 128.9310 Gravity TF: 30.00 WOB: 30.00 Pressure on PSI: 2800.00 Pressure off PSI: 2500.00
07:45	08:00	00:15:00	4440.00	4446.00	6.00	24	Drilling (Rotating)	Depth: 4440.00 - 4446.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 20.00 Pressure on PSI: 2800.00 Pressure off PSI: 2500.00
08:00	08:15	00:15:00				0	Survey	Depth: 4381.00 Inclination: 77.60 Azimuth: 353.50 Source: MWD
08:15	08:30	00:15:00	4446.00	4466.00	20.00	80	Directional Work (Sliding)	Depth: 4446.00 - 4466.00 Mag. TF: Motor RPM: 128.9310 Gravity TF: 30.00 WOB: 25.00 Pressure on PSI: 2800.00 Pressure off PSI: 2500.00
08:30	08:45	00:15:00	4466.00	4478.00	12.00	48	Drilling (Rotating)	Depth: 4466.00 - 4478.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 20.00 Pressure on PSI: 2800.00 Pressure off PSI: 2500.00
08:45	09:00	00:15:00				0	Survey	Depth: 4413.00 Inclination: 79.70 Azimuth: 354.60 Source: MWD
09:00	09:45	00:45:00	4478.00	4498.00	20.00	26.67	Directional Work (Sliding)	Depth: 4478.00 - 4498.00 Mag. TF: Motor RPM: 128.9310 Gravity TF: 0.00 WOB: 30.00 Pressure on PSI: 2550.00 Pressure off PSI: 2200.00
09:45	10:00	00:15:00	4498.00	4510.00	12.00	48	Drilling (Rotating)	Depth: 4498.00 - 4510.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 20.00 Pressure on PSI: 2600.00 Pressure off PSI: 2300.00
10:00	10:15	00:15:00				0	Survey	Depth: 4445.00 Inclination: 81.90 Azimuth: 356.20 Source: MWD
10:15	10:30	00:15:00	4510.00	4530.00	20.00	80	Directional Work (Sliding)	Depth: 4510.00 - 4530.00 Mag. TF: Motor RPM: 128.9310 Gravity TF: 0.00 WOB: 30.00 Pressure on PSI: 2650.00 Pressure off PSI: 2500.00
10:30	11:00	00:30:00	4530.00	4541.00	11.00	22.0	Drilling (Rotating)	Depth: 4530.00 - 4541.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 20.00 Pressure on PSI: 2600.00 Pressure off PSI: 2400.00
11:00	11:15	00:15:00				0	Survey	Depth: 4476.00 Inclination: 84.00 Azimuth: 357.40 Source: MWD
11:15	11:45	00:30:00	4541.00	4573.00	32.00	64.0	Drilling (Rotating)	Depth: 4541.00 - 4573.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 20.00 Pressure on PSI: 2600.00 Pressure off PSI: 2400.00
11:45	12:00	00:15:00				0	Survey	Depth: 4508.00 Inclination: 86.40 Azimuth: 358.00 Source: MWD
12:00	12:30	00:30:00				0	Daily Rig Service	
12:30	12:45	00:15:00	4573.00	4605.00	32.00	128	Drilling (Rotating)	Depth: 4573.00 - 4605.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 20.00 Pressure on PSI: 2600.00 Pressure off PSI: 2400.00
12:45	13:00	00:15:00				0	Survey	Depth: 4540.00 Inclination: 88.00 Azimuth: 358.10 Source: MWD
13:00	13:15	00:15:00	4605.00	4636.00	31.00	124	Drilling (Rotating)	Depth: 4605.00 - 4636.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 20.00 Pressure on PSI: 2600.00 Pressure off PSI: 2400.00
13:15	13:30	00:15:00				0	Survey	Depth: 4571.00 Inclination: 88.60 Azimuth: 358.30 Source: MWD
13:30	14:00	00:30:00	4636.00	4668.00	32.00	64.0	Drilling (Rotating)	Depth: 4636.00 - 4668.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 20.00 Pressure on PSI: 2700.00 Pressure off PSI: 2500.00
14:00	14:15	00:15:00				0	Survey	Depth: 4603.00 Inclination: 89.00 Azimuth: 358.20 Source: MWD
14:15	14:30	00:15:00	4668.00	4700.00	32.00	128	Drilling (Rotating)	Depth: 4668.00 - 4700.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 20.00 Pressure on PSI: 2600.00 Pressure off PSI: 2400.00
14:30	14:45	00:15:00				0	Survey	Depth: 4635.00 Inclination: 89.30 Azimuth: 358.30 Source: MWD

Day # 5 Breakdown								
Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	Misc. Data
14:45	15:00	00:15:00	4700.00	4731.00	31.00	124	Drilling (Rotating)	Depth: 4700.00 - 4731.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 20.00 Pressure on PSI: 2800.00 Pressure off PSI: 2600.00
15:00	15:15	00:15:00				0	Survey	Depth: 4666.00 Inclination: 89.60 Azimuth: 358.00 Source: MWD
15:15	15:30	00:15:00	4731.00	4763.00	32.00	128	Drilling (Rotating)	Depth: 4731.00 - 4763.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 20.00 Pressure on PSI: 2700.00 Pressure off PSI: 2600.00
15:30	15:45	00:15:00				0	Survey	Depth: 4698.00 Inclination: 89.90 Azimuth: 358.20 Source: MWD
15:45	16:00	00:15:00	4763.00	4795.00	32.00	128	Drilling (Rotating)	Depth: 4763.00 - 4795.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 20.00 Pressure on PSI: 2800.00 Pressure off PSI: 2600.00
16:00	16:15	00:15:00				0	Survey	Depth: 4730.00 Inclination: 90.20 Azimuth: 357.90 Source: MWD
16:15	17:00	00:45:00	4795.00	4828.00	33.00	44	Drilling (Rotating)	Depth: 4795.00 - 4828.00 Motor RPM: 128.9310 Table RPM: 40.0000 WOB: 20.00 Pressure on PSI: 2800.00 Pressure off PSI: 2600.00
17:00	17:15	00:15:00				0	Survey	Depth: 4763.00 Inclination: 90.50 Azimuth: 357.70 Source: MWD
17:15	19:25	02:10:00				0	Circulate & Condition Mud	
19:25	23:59	04:34:00				0	OTHER	Notes: SHORT TRIP

Day # 6 - From February 22, 2014 00:00 to February 22, 2014 23:59

Company: Sandridge
 Well Name: Nona 3204 1-23H
 Legals: Sec: 23 Township: 32S Range: 4W
 County/State: Sumner County KS
 Rig Name: Lariat 45

Customer Rep	Position	Directional Driller	MWD Operator
		Monte Bryant	Blake Reid
		Tony Hatfield	
		Jake Leming	

Daily Totals		
Start Depth:	4828	Rotate Ftg: 0
End Depth:	0	Rotary Hrs: 0
Total Drilled:	-4828	Avg Rot ROP: 0
Below Rot. Hrs:	8	Circ Hours: 2.167
Avg Total ROP:	0	Rotary Hrs%: 0
Slide Footage:	0	Slide Hrs%: 0
Slide Hours:	0	Rotary Ftg%: 0
Avg Slide ROP:	0	Slide Ftg%: 0

Drilling Parameters	
WOB:	0
Press On:	0
Press Off:	0
GPM:	0
SPM:	0
Rot. RPM:	0 - 0
Mot. RPM:	0 - 0

Mud Record	
Water Based	
Weight:	9.40
Visc:	44.00
Chlorides:	30000.00
YP:	15.00
PV:	10.00
PH:	10.50
Gas:	
Sand:	0.25
WL:	
Solid:	7.8
BHT°:	
Flow T°:	
Oil %:	
LCM:	0.00

BHA Items	
BHA # 2	
MMD55DM	12195034
6.75 MOTOR	67524X484DRT
6.5" FLOAT SUB	DR655
6.50 NMDC PONY	DRPM24
6.50 UBHO SUB NM	DRTMS65001
6.50 NMDC SLICK	DR8941
6.5 NMDC FLEX	DR13676
6.50 CROSSOVER	SUB
	DRT4303
	DP 5 x 3 - 19.5000
	HWDP 5 x 3 - 4 1/2 IF

Casing		
Size	Lb/ft	Set Depth

Bit Record							
Name	SN	Bit Type	IADC#	MFR	TFA	Jets	GPM
MMD55DM	12195034	PDC	M423	HALLIBURTON	0.982	5 - 16.00	460.467723226 16

Assembly Totals									
BH A	Motor SN	Slide Ftg.	Slide Hrs.	Rot Ftg.	Rot Hrs.	Circ Hrs.	D & C Hrs	BHA Ftg.	Avg ROP
2	67524X484DRT	1301.00	25.98	628.00	12.82	4.33	43.13	1929.00	49.53

Weather			
Weather Time/Job Time	Temp	Wind Speed	Weather Notes

Day # 6 Breakdown									
Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	Misc. Data	
00:00	01:10	01:10:00				0	OTHER	Notes: SHORT TRIP...	
01:10	03:20	02:10:00				0	Ciculate & Condition Mud		
03:20	08:00	04:40:00	4828.00			0	Tripping Out - Pipe	BHA: 2 Depth: 4828.00 Reason: Casing Point	
08:00	09:00	01:00:00				0	BHA Handling - Laydown BHA		
09:00	23:59	14:59:00				0	OTHER	Notes:	

Day # 7 - From February 23, 2014 00:00 to February 23, 2014 23:59

Company: Sandridge	Customer Rep	Position	Directional Driller	MWD Operator
Well Name: Nona 3204 1-23H			Monte Bryant	Blake Reid
Legals: Sec: 23 Township: 32S Range: 4W			Tony Hatfield	
County/State: Sumner County KS			Jake Leming	
Rig Name: Lariat 45				

Daily Totals			Drilling Parameters			Mud Record		BHA Items
Start Depth:	0	Rotate Ftg:	0	WOB:	0	Weight:	0	
End Depth:	0	Rotary Hrs:	0	Press On:	0	Visc:	0	
Total Drilled:	0	Avg Rot ROP:	0	Press Off:	0	Chlorides:		
Below Rot. Hrs:	0	Circ Hours:	0	GPM:	0	YP:		
Avg Total ROP:	0	Rotary Hrs%:	0	SPM:	0	PV:		
Slide Footage:	0	Slide Hrs%:	0	Rot. RPM:	0 - 0	PH:		
Slide Hours:	0	Rotary Ftg%:	0	Mot. RPM:	0 - 0	Gas:		
Avg Slide ROP:	0	Slide Ftg%:	0			Sand:		
						WL:		
						Solid:		
						BHT°:		
						Flow T°:		
						Oil %:		
						LCM:		

Casing		
Size	Lb/ft	Set Depth

Bit Record							
Name	SN	Bit Type	IADC#	MFR	TFA	Jets	GPM

Assembly Totals									
BH	Motor SN	Slide Ftg.	Slide Hrs.	Rot Ftg.	Rot Hrs.	Circ Hrs.	D & C Hrs	BHA Ftg.	Avg ROP
A									

Weather			
Weather Time/Job Time	Temp	Wind Speed	Weather Notes

Day # 7 Breakdown								
Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	Misc. Data
00:00	23:59	23:59:00				0	OTHER	Notes: STANDBY

Day # 8 - From February 24, 2014 00:00 to February 24, 2014 23:59

Company: Sandridge	Customer Rep	Position	Directional Driller	MWD Operator
Well Name: Nona 3204 1-23H			Monte Bryant	Blake Reid
Legals: Sec: 23 Township: 32S Range: 4W			Tony Hatfield	
County/State: Sumner County KS			Jake Leming	
Rig Name: Lariat 45				

Daily Totals			Drilling Parameters		Mud Record		BHA Items
Start Depth:	0	Rotate Ftg:	0	WOB:	0	Weight:	0
End Depth:	0	Rotary Hrs:	0	Press On:	0	Visc:	0
Total Drilled:	0	Avg Rot ROP:	0	Press Off:	0	Chlorides:	
Below Rot. Hrs:	0	Circ Hours:	0	GPM:	0	YP:	
Avg Total ROP:	0	Rotary Hrs%:	0	SPM:	0	PV:	
Slide Footage:	0	Slide Hrs%:	0	Rot. RPM:	0 - 0	PH:	
Slide Hours:	0	Rotary Ftg%:	0	Mot. RPM:	0 - 0	Gas:	
Avg Slide ROP:	0	Slide Ftg%:	0			Sand:	
						WL:	
						Solid:	
						BHT°:	
						Flow T°:	
						Oil %:	
						LCM:	

Casing		
Size	Lb/ft	Set Depth

Bit Record							
Name	SN	Bit Type	IADC#	MFR	TFA	Jets	GPM

Assembly Totals									
BH	Motor SN	Slide Ftg.	Slide Hrs.	Rot Ftg.	Rot Hrs.	Circ Hrs.	D & C Hrs	BHA Ftg.	Avg ROP
A									

Weather			
Weather Time/Job Time	Temp	Wind Speed	Weather Notes

Day # 8 Breakdown								
Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	Misc. Data
00:00	23:59	23:59:00				0	OTHER	Notes:

Day # 9 - From February 25, 2014 00:00 to February 25, 2014 23:59

Company: Sandridge
Well Name: Nona 3204 1-23H
Legals: Sec: 23 Township: 32S Range: 4W
County/State: Sumner County KS
Rig Name: Lariat 45

Customer Rep

Position

Directional Driller

MWD Operator

Monte Bryant
 Tony Hatfield
 Jake Leming

Blake Reid

Daily Totals		
Start Depth:	0	Rotate Ftg: 0
End Depth:	0	Rotary Hrs: 0
Total Drilled:	0	Avg Rot ROP: 0
Below Rot. Hrs:	0	Circ Hours: 0
Avg Total ROP:	0	Rotary Hrs%: 0
Slide Footage:	0	Slide Hrs%: 0
Slide Hours:	0	Rotary Ftg%: 0
Avg Slide ROP:	0	Slide Ftg%: 0

Drilling Parameters	
WOB:	0
Press On:	0
Press Off:	0
GPM:	0
SPM:	0
Rot. RPM:	0 - 0
Mot. RPM:	0 - 0

Mud Record	
Weight:	0
Visc:	0
Chlorides:	
YP:	
PV:	
PH:	
Gas:	
Sand:	
WL:	
Solid:	
BHT°:	
Flow T°:	
Oil %:	
LCM:	

BHA Items

Casing		
Size	Lb/ft	Set Depth

Bit Record							
Name	SN	Bit Type	IADC#	MFR	TFA	Jets	GPM

Assembly Totals									
BH	Motor SN	Slide Ftg.	Slide Hrs.	Rot Ftg.	Rot Hrs.	Circ Hrs.	D & C Hrs	BHA Ftg.	Avg ROP
A									

Weather			
Weather Time/Job Time	Temp	Wind Speed	Weather Notes

Day # 9 Breakdown								
Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	Misc. Data
00:00	21:00	21:00:00				0	OTHER	Notes: STAND BY
21:00	22:50	01:50:00				0	BHA Handling - Pickup BHA	
22:50	23:59	01:09:00				0	OTHER	Notes: TRIP IN HOLE...

Day # 10 - From February 26, 2014 00:00 to February 26, 2014 23:59

Company: Sandridge
Well Name: Nona 3204 1-23H
Legals: Sec: 23 Township: 32S Range: 4W
County/State: Sumner County KS
Rig Name: Lariat 45

Customer Rep	Position
Monte Bryant	Tony Hatfield
	Jake Leming

Directional Driller
Monte Bryant
Tony Hatfield
Jake Leming

MWD Operator
Blake Reid

Daily Totals			
Start Depth:	4828	Rotate Ftg:	487
End Depth:	5353	Rotary Hrs:	7.75
Total Drilled:	525	Avg Rot ROP:	62.84
Below Rot. Hrs:	20.98	Circ Hours:	0
Avg Total ROP:	52.2	Rotary Hrs%:	72.77
Slide Footage:	38	Slide Hrs%:	27.23
Slide Hours:	2.9	Rotary Ftg%:	92.76
Avg Slide ROP:	13.1	Slide Ftg%:	38

Drilling Parameters	
WOB:	23.714
Press On:	1431.429
Press Off:	1260.714
GPM:	460.47
SPM:	110.00
Rot. RPM:	50 - 70
Mot. RPM:	138.14 - 138.14

Mud Record	
Weight:	0
Visc:	0
Chlorides:	
YP:	
PV:	
PH:	
Gas:	
Sand:	
WL:	
Solid:	
BHT°:	
Flow T°:	
Oil %:	
LCM:	

BHA Items	
BHA # 3	
MM54DM	12163260
4.75 WZL Motor	475M5176
4.75 FLOAT SUB	DR209
4.75 UBHO SUB	DRTMS475055
4.75 NMDC SLICK	SD50570
4.75 NMDC FLEX	AWF475301480
5.00 CROSSOVER SUB	DRT52517
DP 5 x 3 - 19.5000	
HWDP 5 x 3 - 4 1/2 IF	

Casing		
Size	Lb/ft	Set Depth

Bit Record							
Name	SN	Bit Type	IADC#	MFR	TFA	Jets	GPM
MM54DM	12163260	PDC		Security-DBS	0.844	3 - 14.00, 2 - 16.00	460.467723226

Assembly Totals									
BH A	Motor SN	Slide Ftg.	Slide Hrs.	Rot Ftg.	Rot Hrs.	Circ Hrs.	D & C Hrs	BHA Ftg.	Avg ROP
3	475M5176	169.00	18.82	2237.00	40.13	3.5	62.45	2406.00	32.36

Weather			
Weather Time/Job Time	Temp	Wind Speed	Weather Notes

Day # 10 Breakdown								
Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	Misc. Data
00:00	03:00	03:00:00					0 Rig Repair	
03:00	09:30	06:30:00	4828.00				0 Tripping In - Pipe	BHA: 3 Depth: 4828.00
09:30	11:45	02:15:00					0 OTHER	Notes: DRILL CEMENT, FLOAT COLLAR AND CASING SHOE
11:45	12:00	00:15:00	4828.00	4841.00	13.00	52	Drilling (Rotating)	Depth: 4828.00 - 4841.00 Motor RPM: 138.1403 Table RPM: 70.0000 WOB: 15.00 Pressure on PSI: 1400.00 Pressure off PSI: 1200.00
12:00	12:30	00:30:00					0 Daily Rig Service	
12:30	14:15	01:45:00	4841.00	4936.00	95.00	54.29	Drilling (Rotating)	Depth: 4841.00 - 4936.00 Motor RPM: 138.1403 Table RPM: 70.0000 WOB: 15.00 Pressure on PSI: 1300.00 Pressure off PSI: 1200.00
14:15	14:30	00:15:00					0 Survey	Depth: 4887.00 Inclination: 91.00 Azimuth: 356.90 Source: MWD
14:30	14:45	00:15:00	4936.00	4968.00	32.00	128	Drilling (Rotating)	Depth: 4936.00 - 4968.00 Motor RPM: 138.1403 Table RPM: 70.0000 WOB: 18.00 Pressure on PSI: 1400.00 Pressure off PSI: 1200.00
14:45	16:00	01:15:00	4968.00	4978.00	10.00	8	Directional Work (Sliding)	Depth: 4968.00 - 4978.00 Mag. TF: Motor RPM: 138.1403 Gravity TF: 180.00 WOB: 40.00 Pressure on PSI: 1300.00 Pressure off PSI: 1200.00
16:00	16:45	00:45:00	4978.00	5031.00	53.00	70.67	Drilling (Rotating)	Depth: 4978.00 - 5031.00 Motor RPM: 138.1403 Table RPM: 60.0000 WOB: 20.00 Pressure on PSI: 2400.00 Pressure off PSI: 2200.00
16:45	17:00	00:15:00					0 Survey	Depth: 4982.00 Inclination: 89.80 Azimuth: 357.10 Source: MWD
17:00	18:15	01:15:00	5031.00	5126.00	95.00	76	Drilling (Rotating)	Depth: 5031.00 - 5126.00 Motor RPM: 138.1403 Table RPM: 60.0000 WOB: 15.00 Pressure on PSI: 1400.00 Pressure off PSI: 1200.00
18:15	18:25	00:10:00					0 Survey	Depth: 5077.00 Inclination: 88.90 Azimuth: 355.70 Source: MWD
18:25	19:00	00:35:00	5126.00	5157.00	31.00	53.14	Drilling (Rotating)	Depth: 5126.00 - 5157.00 Motor RPM: 138.1403 Table RPM: 50.0000 WOB: 19.00 Pressure on PSI: 1350.00 Pressure off PSI: 1150.00
19:00	19:30	00:30:00	5157.00	5167.00	10.00	20.0	Directional Work (Sliding)	Depth: 5157.00 - 5167.00 Mag. TF: 0.00 Motor RPM: 138.1403 Gravity TF: 70.00 WOB: 40.00 Pressure on PSI: 1250.00 Pressure off PSI: 1100.00
19:30	20:15	00:45:00	5167.00	5221.00	54.00	72	Drilling (Rotating)	Depth: 5167.00 - 5221.00 Motor RPM: 138.1403 Table RPM: 60.0000 WOB: 20.00 Pressure on PSI: 1350.00 Pressure off PSI: 1150.00
20:15	20:30	00:15:00					0 Survey	Depth: 5172.00 Inclination: 89.80 Azimuth: 357.10 Source: MWD
20:30	21:20	00:50:00	5221.00	5252.00	31.00	37.20	Drilling (Rotating)	Depth: 5221.00 - 5252.00 Motor RPM: 138.1403 Table RPM: 60.0000 WOB: 15.00 Pressure on PSI: 1400.00 Pressure off PSI: 1150.00
21:20	21:45	00:25:00	5252.00	5264.00	12.00	28.80	Directional Work (Sliding)	Depth: 5252.00 - 5264.00 Mag. TF: 0.00 Motor RPM: 138.1403 Gravity TF: 90.00 WOB: 40.00 Pressure on PSI: 1240.00 Pressure off PSI: 1200.00
21:45	22:30	00:45:00	5264.00	5316.00	52.00	69.33	Drilling (Rotating)	Depth: 5264.00 - 5316.00 Motor RPM: 138.1403 Table RPM: 65.0000 WOB: 15.00 Pressure on PSI: 1350.00 Pressure off PSI: 1200.00
22:30	22:40	00:10:00					0 Survey	Depth: 5267.00 Inclination: 89.50 Azimuth: 358.20 Source: MWD
22:40	23:15	00:35:00	5316.00	5347.00	31.00	53.14	Drilling (Rotating)	Depth: 5316.00 - 5347.00 Motor RPM: 138.1403 Table RPM: 65.0000 WOB: 15.00 Pressure on PSI: 1500.00 Pressure off PSI: 1250.00
23:15	23:59	00:44:00	5347.00	5353.00	6.00	8.18	Directional Work (Sliding)	Depth: 5347.00 - 5353.00 Mag. TF: 0.00 Motor RPM: 138.1403 Gravity TF: 90.00 WOB: 45.00 Pressure on PSI: 1400.00 Pressure off PSI: 1250.00

Day # 11 - From February 27, 2014 00:00 to February 27, 2014 23:59

Company: Sandridge
 Well Name: Nona 3204 1-23H
 Legals: Sec: 23 Township: 32S Range: 4W
 County/State: Sumner County KS
 Rig Name: Lariat 45

Customer Rep	Position
Monte Bryant	Tony Hatfield
	Jake Leming

Directional Driller
 Monte Bryant
 Tony Hatfield
 Jake Leming

MWD Operator
 Blake Reid

Daily Totals			
Start Depth:	5353	Rotate Ftg:	533
End Depth:	5938	Rotary Hrs:	10.48
Total Drilled:	585	Avg Rot ROP:	50.84
Below Rot. Hrs:	23.98	Circ Hours:	0
Avg Total ROP:	38.09	Rotary Hrs%:	60.83
Slide Footage:	52	Slide Hrs%:	39.17
Slide Hours:	6.75	Rotary Ftg%:	91.11
Avg Slide ROP:	7.7	Slide Ftg%:	52

Drilling Parameters	
WOB:	27.467
Press On:	1262.667
Press Off:	1056.667
GPM:	460.47
SPM:	110.00
Rot. RPM:	50 - 70
Mot. RPM:	138.14 - 138.14

Mud Record	
Weight:	0
Visc:	0
Chlorides:	
YP:	
PV:	
PH:	
Gas:	
Sand:	
WL:	
Solid:	
BHT°:	
Flow T°:	
Oil %:	
LCM:	

BHA Items	
BHA # 3	
MM54DM	12163260
4.75 WZL Motor	475M5176
4.75 FLOAT SUB	DR209
4.75 UBHO SUB	DRTMS475055
4.75 NMDC SLICK	SD50570
4.75 NMDC FLEX	AWF475301480
5.00 CROSSOVER SUB	DRT52517
DP 5 x 3 - 19.5000	
HWDP 5 x 3 - 4 1/2 IF	

Casing		
Size	Lb/ft	Set Depth

Bit Record							
Name	SN	Bit Type	IADC#	MFR	TFA	Jets	GPM
MM54DM	12163260	PDC		Security-DBS	0.844	3 - 14.00, 2 - 16.00	460.46773226 16

Assembly Totals									
BH A	Motor SN	Slide Ftg.	Slide Hrs.	Rot Ftg.	Rot Hrs.	Circ Hrs.	D & C Hrs	BHA Ftg.	Avg ROP
3	475M5176	169.00	18.82	2237.00	40.13	3.5	62.45	2406.00	32.36

Weather			
Weather Time/Job Time	Temp	Wind Speed	Weather Notes

Day # 11 Breakdown									
Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	Misc. Data	
00:00	00:15	00:15:00	5353.00	5361.00	8.00	32	Directional Work (Sliding)	Depth: 5353.00 - 5361.00 Mag. TF: 0.00 Motor RPM: 138.1403 Gravity TF: 90.00 WOB: 45.00 Pressure on PSI: 1400.00 Pressure off PSI: 1250.00	
00:15	01:10	00:55:00	5361.00	5411.00	50.00	54.55	Drilling (Rotating)	Depth: 5361.00 - 5411.00 Motor RPM: 138.1403 Table RPM: 65.0000 WOB: 15.00 Pressure on PSI: 1550.00 Pressure off PSI: 1200.00	
01:10	01:20	00:10:00				0	Survey	Depth: 5362.00 Inclination: 89.00 Azimuth: 0.90 Source: MWD	
01:20	03:00	01:40:00	5411.00	5506.00	95.00	57.00	Drilling (Rotating)	Depth: 5411.00 - 5506.00 Motor RPM: 138.1403 Table RPM: 50.0000 WOB: 16.00 Pressure on PSI: 1600.00 Pressure off PSI: 1300.00	
03:00	03:15	00:15:00				0	Survey	Depth: 5457.00 Inclination: 89.10 Azimuth: 2.00 Source: MWD	
03:15	05:30	02:15:00	5506.00	5601.00	95.00	42.22	Drilling (Rotating)	Depth: 5506.00 - 5601.00 Motor RPM: 138.1403 Table RPM: 50.0000 WOB: 20.00 Pressure on PSI: 2500.00 Pressure off PSI: 2300.00	
05:30	05:45	00:15:00				0	Survey	Depth: 5552.00 Inclination: 90.00 Azimuth: 1.90 Source: MWD	

Day # 11 Breakdown								
Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	Misc. Data
05:45	07:15	01:30:00	5601.00	5696.00	95.00	63.33	Drilling (Rotating)	Depth: 5601.00 - 5696.00 Motor RPM: 138.1403 Table RPM: 70.0000 WOB: 20.00 Pressure on PSI: 1200.00 Pressure off PSI: 900.00
07:15	07:30	00:15:00					0 Survey	Depth: 5647.00 Inclination: 91.80 Azimuth: 2.20 Source: MWD
07:30	08:00	00:30:00					0 OTHER	Notes: TROUBLESHOOT MWD
08:00	09:30	01:30:00	5696.00	5702.00	6.00	4.0	Directional Work (Sliding)	Depth: 5696.00 - 5702.00 Mag. TF: Motor RPM: 138.1403 Gravity TF: 220.00 WOB: 50.00 Pressure on PSI: 1000.00 Pressure off PSI: 900.00
09:30	10:30	01:00:00	5702.00	5727.00	25.00	25.00	Drilling (Rotating)	Depth: 5702.00 - 5727.00 Motor RPM: 138.1403 Table RPM: 70.0000 WOB: 20.00 Pressure on PSI: 1300.00 Pressure off PSI: 1100.00
10:30	11:30	01:00:00	5727.00	5739.00	12.00	12.00	Directional Work (Sliding)	Depth: 5727.00 - 5739.00 Mag. TF: Motor RPM: 138.1403 Gravity TF: 220.00 WOB: 50.00 Pressure on PSI: 1100.00 Pressure off PSI: 1000.00
11:30	12:00	00:30:00					0 OTHER	Notes: TRIP OUT TO CASING SHOE
12:00	16:00	04:00:00					0 OTHER	Notes: BUILD VOLUME
16:00	16:15	00:15:00					0 OTHER	Notes: TRIP IN HOLE
16:15	17:00	00:45:00	5739.00	5791.00	52.00	69.33	Drilling (Rotating)	Depth: 5739.00 - 5791.00 Motor RPM: 138.1403 Table RPM: 65.0000 WOB: 15.00 Pressure on PSI: 1100.00 Pressure off PSI: 900.00
17:00	17:20	00:20:00					0 Survey	Depth: 5742.00 Inclination: 89.70 Azimuth: 1.10 Source: MWD
17:20	18:00	00:40:00	5791.00	5821.00	30.00	45.00	Drilling (Rotating)	Depth: 5791.00 - 5821.00 Motor RPM: 138.1403 Table RPM: 65.0000 WOB: 16.00 Pressure on PSI: 1080.00 Pressure off PSI: 850.00
18:00	19:45	01:45:00	5821.00	5833.00	12.00	6.86	Directional Work (Sliding)	Depth: 5821.00 - 5833.00 Mag. TF: 0.00 Motor RPM: 138.1403 Gravity TF: 260.00 WOB: 45.00 Pressure on PSI: 900.00 Pressure off PSI: 800.00
19:45	20:30	00:45:00	5833.00	5882.00	49.00	65.33	Drilling (Rotating)	Depth: 5833.00 - 5882.00 Motor RPM: 138.1403 Table RPM: 65.0000 WOB: 15.00 Pressure on PSI: 1080.00 Pressure off PSI: 850.00
20:30	20:45	00:15:00					0 Survey	Depth: 5833.00 Inclination: 88.90 Azimuth: 0.10 Source: MWD
20:45	21:30	00:45:00	5882.00	5913.00	31.00	41.33	Drilling (Rotating)	Depth: 5882.00 - 5913.00 Motor RPM: 138.1403 Table RPM: 50.0000 WOB: 15.00 Pressure on PSI: 1080.00 Pressure off PSI: 850.00
21:30	23:45	02:15:00	5913.00	5927.00	14.00	6.22	Directional Work (Sliding)	Depth: 5913.00 - 5927.00 Mag. TF: 0.00 Motor RPM: 138.1403 Gravity TF: 0.00 WOB: 45.00 Pressure on PSI: 900.00 Pressure off PSI: 800.00
23:45	23:59	00:14:00	5927.00	5938.00	11.00	47.14	Drilling (Rotating)	Depth: 5927.00 - 5938.00 Motor RPM: 138.1403 Table RPM: 50.0000 WOB: 25.00 Pressure on PSI: 1150.00 Pressure off PSI: 850.00

Day # 12 - From February 28, 2014 00:00 to February 28, 2014 23:59

Company: Sandridge
Well Name: Nona 3204 1-23H
Legals: Sec: 23 Township: 32S Range: 4W
County/State: Sumner County KS
Rig Name: Lariat 45

Customer Rep	Position
--------------	----------

Directional Driller
Monte Bryant
Tony Hatfield
Jake Leming

MWD Operator
Blake Reid

Daily Totals			
Start Depth:	5938	Rotate Ftg:	1068
End Depth:	7045	Rotary Hrs:	16.65
Total Drilled:	1107	Avg Rot ROP:	64.14
Below Rot. Hrs:	23.98	Circ Hours:	0
Avg Total ROP:	62.36	Rotary Hrs%:	81.29
Slide Footage:	39	Slide Hrs%:	18.71
Slide Hours:	3.833	Rotary Ftg%:	96.48
Avg Slide ROP:	10.17	Slide Ftg%:	39

Drilling Parameters	
WOB:	27.391
Press On:	1233.913
Press Off:	1015.217
GPM:	460.47
SPM:	110.00
Rot. RPM:	50 - 65
Mot. RPM:	138.14 - 138.14

Mud Record	
Weight:	0
Visc:	0
Chlorides:	
YP:	
PV:	
PH:	
Gas:	
Sand:	
WL:	
Solid:	
BHT°:	
Flow T°:	
Oil %:	
LCM:	

BHA Items	
BHA # 3	
MM54DM	12163260
4.75 WZL Motor	475M5176
4.75 FLOAT SUB	DR209
4.75 UBHO SUB	DRTMS475055
4.75 NMDC SLICK	SD50570
4.75 NMDC FLEX	AWF475301480
5.00 CROSSOVER SUB	DRT52517
DP 5 x 3 - 19.5000	
HWDP 5 x 3 - 4 1/2 IF	

Casing		
Size	Lb/ft	Set Depth

Bit Record							
Name	SN	Bit Type	IADC#	MFR	TFA	Jets	GPM
MM54DM	12163260	PDC		Security-DBS	0.844	3 - 14.00, 2 - 16.00	460.467723226 16

Assembly Totals									
BH A	Motor SN	Slide Ftg.	Slide Hrs.	Rot Ftg.	Rot Hrs.	Circ Hrs.	D & C Hrs	BHA Ftg.	Avg ROP
3	475M5176	169.00	18.82	2237.00	40.13	3.5	62.45	2406.00	32.36

Weather			
Weather Time/Job Time	Temp	Wind Speed	Weather Notes

Day # 12 Breakdown									
Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	Misc. Data	
00:00	00:35	00:35:00	5938.00	5974.00	36.00	61.71	Drilling (Rotating)	Depth: 5938.00 - 5974.00 Motor RPM: 138.1403 Table RPM: 50.0000 WOB: 18.00 Pressure on PSI: 1130.00 Pressure off PSI: 850.00	
00:35	00:50	00:15:00				0	Survey	Depth: 5925.00 Inclination: 89.20 Azimuth: 359.90 Source: MWD	
00:50	01:45	00:55:00	5974.00	6005.00	31.00	33.82	Drilling (Rotating)	Depth: 5974.00 - 6005.00 Motor RPM: 138.1403 Table RPM: 50.0000 WOB: 25.00 Pressure on PSI: 1140.00 Pressure off PSI: 850.00	
01:45	02:10	00:25:00	6005.00	6012.00	7.00	16.80	Directional Work (Sliding)	Depth: 6005.00 - 6012.00 Mag. TF: 0.00 Motor RPM: 138.1403 Gravity TF: 320.00 WOB: 50.00 Pressure on PSI: 950.00 Pressure off PSI: 800.00	
02:10	03:00	00:50:00	6012.00	6066.00	54.00	64.80	Drilling (Rotating)	Depth: 6012.00 - 6066.00 Motor RPM: 138.1403 Table RPM: 50.0000 WOB: 23.00 Pressure on PSI: 1200.00 Pressure off PSI: 900.00	
03:00	03:15	00:15:00				0	Survey	Depth: 6017.00 Inclination: 90.40 Azimuth: 0.10 Source: MWD	

Day # 12 Breakdown								
Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	Misc. Data
03:15	04:30	01:15:00	6066.00	6127.00	61.00	48.8	Drilling (Rotating)	Depth: 6066.00 - 6127.00 Motor RPM: 138.1403 Table RPM: 65.0000 WOB: 25.00 Pressure on PSI: 1180.00 Pressure off PSI: 850.00
04:30	05:25	00:55:00	6127.00	6133.00	6.00	6.55	Directional Work (Sliding)	Depth: 6127.00 - 6133.00 Mag. TF: Motor RPM: 138.1403 Gravity TF: 270.00 WOB: 50.00 Pressure on PSI: 1050.00 Pressure off PSI: 900.00
05:25	06:00	00:35:00	6133.00	6158.00	25.00	42.86	Drilling (Rotating)	Depth: 6133.00 - 6158.00 Motor RPM: 138.1403 Table RPM: 65.0000 WOB: 15.00 Pressure on PSI: 1100.00 Pressure off PSI: 900.00
06:00	06:15	00:15:00				0	Survey	Depth: 6109.00 Inclination: 90.10 Azimuth: 360.00 Source: MWD
06:15	07:30	01:15:00	6158.00	6250.00	92.00	73.6	Drilling (Rotating)	Depth: 6158.00 - 6250.00 Motor RPM: 138.1403 Table RPM: 65.0000 WOB: 20.00 Pressure on PSI: 1300.00 Pressure off PSI: 1050.00
07:30	07:45	00:15:00				0	Survey	Depth: 6201.00 Inclination: 89.90 Azimuth: 358.20 Source: MWD
07:45	08:45	01:00:00	6250.00	6341.00	91.00	91.00	Drilling (Rotating)	Depth: 6250.00 - 6341.00 Motor RPM: 138.1403 Table RPM: 65.0000 WOB: 20.00 Pressure on PSI: 1200.00 Pressure off PSI: 1000.00
08:45	09:00	00:15:00				0	Survey	Depth: 6292.00 Inclination: 89.90 Azimuth: 358.40 Source: MWD
09:00	09:30	00:30:00	6341.00	6433.00	92.00	184.0	Drilling (Rotating)	Depth: 6341.00 - 6433.00 Motor RPM: 138.1403 Table RPM: 65.0000 WOB: 20.00 Pressure on PSI: 1200.00 Pressure off PSI: 1000.00
09:30	09:45	00:15:00				0	Survey	Depth: 6384.00 Inclination: 89.40 Azimuth: 359.60 Source: MWD
09:45	10:45	01:00:00	6433.00	6525.00	92.00	92.00	Drilling (Rotating)	Depth: 6433.00 - 6525.00 Motor RPM: 138.1403 Table RPM: 65.0000 WOB: 20.00 Pressure on PSI: 1300.00 Pressure off PSI: 1100.00
10:45	11:00	00:15:00				0	Survey	Depth: 6476.00 Inclination: 89.80 Azimuth: 359.60 Source: MWD
11:00	12:00	01:00:00	6525.00	6617.00	92.00	92.00	Drilling (Rotating)	Depth: 6525.00 - 6617.00 Motor RPM: 138.1403 Table RPM: 65.0000 WOB: 25.00 Pressure on PSI: 1300.00 Pressure off PSI: 1100.00
12:00	12:30	00:30:00				0	Daily Rig Service	
12:30	12:45	00:15:00				0	Survey	Depth: 6568.00 Inclination: 90.00 Azimuth: 0.40 Source: MWD
12:45	13:30	00:45:00	6617.00	6647.00	30.00	40	Drilling (Rotating)	Depth: 6617.00 - 6647.00 Motor RPM: 138.1403 Table RPM: 65.0000 WOB: 20.00 Pressure on PSI: 1300.00 Pressure off PSI: 1100.00
13:30	14:00	00:30:00	6647.00	6655.00	8.00	16.0	Directional Work (Sliding)	Depth: 6647.00 - 6655.00 Mag. TF: Motor RPM: 138.1403 Gravity TF: 270.00 WOB: 35.00 Pressure on PSI: 1200.00 Pressure off PSI: 1050.00
14:00	14:15	00:15:00	6655.00	6709.00	54.00	216	Drilling (Rotating)	Depth: 6655.00 - 6709.00 Motor RPM: 138.1403 Table RPM: 65.0000 WOB: 25.00 Pressure on PSI: 1300.00 Pressure off PSI: 1050.00
14:15	14:30	00:15:00				0	Survey	Depth: 6660.00 Inclination: 90.60 Azimuth: 1.10 Source: MWD
14:30	15:00	00:30:00	6709.00	6739.00	30.00	60.0	Drilling (Rotating)	Depth: 6709.00 - 6739.00 Motor RPM: 138.1403 Table RPM: 65.0000 WOB: 20.00 Pressure on PSI: 1300.00 Pressure off PSI: 1100.00
15:00	16:15	01:15:00	6739.00	6751.00	12.00	9.6	Directional Work (Sliding)	Depth: 6739.00 - 6751.00 Mag. TF: Motor RPM: 138.1403 Gravity TF: 270.00 WOB: 60.00 Pressure on PSI: 1300.00 Pressure off PSI: 1100.00
16:15	16:45	00:30:00	6751.00	6801.00	50.00	100.0	Drilling (Rotating)	Depth: 6751.00 - 6801.00 Motor RPM: 138.1403 Table RPM: 65.0000 WOB: 20.00 Pressure on PSI: 1300.00 Pressure off PSI: 1100.00

Day # 12 Breakdown								
Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	Misc. Data
16:45	17:00	00:15:00					0 Survey	Depth: 6752.00 Inclination: 91.00 Azimuth: 0.40 Source: MWD
17:00	18:15	01:15:00	6801.00	6893.00	92.00	73.6	Drilling (Rotating)	Depth: 6801.00 - 6893.00 Motor RPM: 138.1403 Table RPM: 65.0000 WOB: 20.00 Pressure on PSI: 1280.00 Pressure off PSI: 1000.00
18:15	18:30	00:15:00					0 Survey	Depth: 6844.00 Inclination: 91.30 Azimuth: 359.90 Source: MWD
18:30	20:40	02:10:00	6893.00	6984.00	91.00	42.00	Drilling (Rotating)	Depth: 6893.00 - 6984.00 Motor RPM: 138.1403 Table RPM: 65.0000 WOB: 24.00 Pressure on PSI: 1300.00 Pressure off PSI: 1100.00
20:40	20:55	00:15:00					0 Survey	Depth: 6935.00 Inclination: 91.50 Azimuth: 359.50 Source: MWD
20:55	21:35	00:40:00	6984.00	7015.00	31.00	46.50	Drilling (Rotating)	Depth: 6984.00 - 7015.00 Motor RPM: 138.1403 Table RPM: 65.0000 WOB: 25.00 Pressure on PSI: 1350.00 Pressure off PSI: 1150.00
21:35	22:20	00:45:00	7015.00	7021.00	6.00	8	Directional Work (Sliding)	Depth: 7015.00 - 7021.00 Mag. TF: 0.00 Motor RPM: 138.1403 Gravity TF: 180.00 WOB: 45.00 Pressure on PSI: 1200.00 Pressure off PSI: 1100.00
22:20	23:59	01:39:00	7021.00	7045.00	24.00	14.55	Drilling (Rotating)	Depth: 7021.00 - 7045.00 Motor RPM: 138.1403 Table RPM: 65.0000 WOB: 25.00 Pressure on PSI: 1500.00 Pressure off PSI: 1200.00

Day # 13 - From March 01, 2014 00:00 to March 01, 2014 23:59

Company: Sandridge
 Well Name: Nona 3204 1-23H
 Legals: Sec: 23 Township: 32S Range: 4W
 County/State: Sumner County KS
 Rig Name: Lariat 45

Customer Rep	Position	Directional Driller	MWD Operator
		Monte Bryant	Blake Reid
		Tony Hatfield	
		Jake Leming	

Daily Totals			
Start Depth:	7045	Rotate Ftg:	149
End Depth:	7234	Rotary Hrs:	5.25
Total Drilled:	189	Avg Rot ROP:	28.38
Below Rot. Hrs:	23.98	Circ Hours:	3.5
Avg Total ROP:	19.64	Rotary Hrs%:	49.61
Slide Footage:	40	Slide Hrs%:	50.39
Slide Hours:	5.333	Rotary Ftg%:	78.84
Avg Slide ROP:	7.5	Slide Ftg%:	40

Drilling Parameters	
WOB:	37.273
Press On:	1779.091
Press Off:	1595.455
GPM:	460.47
SPM:	110.00
Rot. RPM:	65 - 65
Mot. RPM:	138.14 - 138.14

Mud Record	
Weight:	0
Visc:	0
Chlorides:	
YP:	
PV:	
PH:	
Gas:	
Sand:	
WL:	
Solid:	
BHT°:	
Flow T°:	
Oil %:	
LCM:	

BHA Items	
BHA # 3	
MM54DM	12163260
4.75 WZL Motor	475M5176
4.75 FLOAT SUB	DR209
4.75 UBHO SUB	DRTMS475055
4.75 NMDC SLICK	SD50570
4.75 NMDC FLEX	AWF475301480
5.00 CROSSOVER SUB	DRT52517
DP 5 x 3 - 19.5000	
HWDP 5 x 3 - 4 1/2 IF	

Casing		
Size	Lb/ft	Set Depth

Bit Record							
Name	SN	Bit Type	IADC#	MFR	TFA	Jets	GPM
MM54DM	12163260	PDC		Security-DBS	0.844	3 - 14.00, 2 - 16.00	460.467723226

Assembly Totals									
BH A	Motor SN	Slide Ftg.	Slide Hrs.	Rot Ftg.	Rot Hrs.	Circ Hrs.	D & C Hrs	BHA Ftg.	Avg ROP
3	475M5176	169.00	18.82	2237.00	40.13	3.5	62.45	2406.00	32.36

Weather			
Weather Time/Job Time	Temp	Wind Speed	Weather Notes

Day # 13 Breakdown								
Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	Misc. Data
00:00	01:00	01:00:00					0 Ciculate & Condition Mud	
01:00	02:45	01:45:00	7045.00	7076.00	31.00	17.71	Drilling (Rotating)	Depth: 7045.00 - 7076.00 Motor RPM: 138.1403 Table RPM: 65.0000 WOB: 25.00 Pressure on PSI: 1500.00 Pressure off PSI: 1250.00
02:45	03:00	00:15:00					0 Survey	Depth: 7027.00 Inclination: 92.10 Azimuth: 359.60 Source: MWD
03:00	04:00	01:00:00					0 Ciculate & Condition Mud	
04:00	05:05	01:05:00	7076.00	7081.00	5.00	4.62	Directional Work (Sliding)	Depth: 7076.00 - 7081.00 Mag. TF: Motor RPM: 138.1403 Gravity TF: 180.00 WOB: 40.00 Pressure on PSI: 1600.00 Pressure off PSI: 1400.00
05:05	07:30	02:25:00					0 OTHER	Notes: PULL OUT 5 STDS, GO BACK TO BOTTOM
07:30	08:15	00:45:00	7081.00	7096.00	15.00	20	Directional Work (Sliding)	Depth: 7081.00 - 7096.00 Mag. TF: Motor RPM: 138.1403 Gravity TF: 180.00 WOB: 60.00 Pressure on PSI: 1600.00 Pressure off PSI: 1400.00
08:15	08:30	00:15:00	7096.00	7106.00	10.00	40	Drilling (Rotating)	Depth: 7096.00 - 7106.00 Motor RPM: 138.1403 Table RPM: 65.0000 WOB: 20.00 Pressure on PSI: 1600.00 Pressure off PSI: 1500.00
08:30	09:00	00:30:00	7106.00	7111.00	5.00	10.0	Directional Work (Sliding)	Depth: 7106.00 - 7111.00 Mag. TF: Motor RPM: 138.1403 Gravity TF: 180.00 WOB: 60.00 Pressure on PSI: 1600.00 Pressure off PSI: 1500.00
09:00	10:00	01:00:00	7111.00	7168.00	57.00	57.00	Drilling (Rotating)	Depth: 7111.00 - 7168.00 Motor RPM: 138.1403 Table RPM: 65.0000 WOB: 20.00 Pressure on PSI: 1700.00 Pressure off PSI: 1500.00
10:00	10:30	00:30:00					0 Daily Rig Service	
10:30	10:45	00:15:00					0 Survey	Depth: 7119.00 Inclination: 89.60 Azimuth: 0.30 Source: MWD
10:45	11:30	00:45:00	7168.00	7198.00	30.00	40	Drilling (Rotating)	Depth: 7168.00 - 7198.00 Motor RPM: 138.1403 Table RPM: 65.0000 WOB: 20.00 Pressure on PSI: 1700.00 Pressure off PSI: 1600.00
11:30	13:00	01:30:00	7198.00	7208.00	10.00	6.67	Directional Work (Sliding)	Depth: 7198.00 - 7208.00 Mag. TF: Motor RPM: 138.1403 Gravity TF: 180.00 WOB: 25.00 Pressure on PSI: 1800.00 Pressure off PSI: 1600.00
13:00	14:30	01:30:00	7208.00	7229.00	21.00	14.0	Drilling (Rotating)	Depth: 7208.00 - 7229.00 Motor RPM: 138.1403 Table RPM: 65.0000 WOB: 30.00 Pressure on PSI: 2800.00 Pressure off PSI: 2600.00
14:30	15:00	00:30:00	7229.00	7230.00	1.00	2.0	Directional Work (Sliding)	Depth: 7229.00 - 7230.00 Mag. TF: Motor RPM: 138.1403 Gravity TF: 180.00 WOB: 60.00 Pressure on PSI: 1800.00 Pressure off PSI: 1600.00
15:00	15:30	00:30:00					0 Ciculate & Condition Mud	
15:30	18:00	02:30:00					0 OTHER	Notes: attempt slide.... tight hole... wipper trip..
18:00	19:00	01:00:00	7230.00	7234.00	4.00	4.00	Directional Work (Sliding)	Depth: 7230.00 - 7234.00 Mag. TF: 0.00 Motor RPM: 138.1403 Gravity TF: 180.00 WOB: 50.00 Pressure on PSI: 1870.00 Pressure off PSI: 1600.00
19:00	20:00	01:00:00					0 Ciculate & Condition Mud	
20:00	23:59	03:59:00					0 OTHER	Notes: TRIP OUT OF HOLE

Day # 14 - From March 02, 2014 00:00 to March 02, 2014 23:59

Company: Sandridge
 Well Name: Nona 3204 1-23H
 Legals: Sec: 23 Township: 32S Range: 4W
 County/State: Sumner County KS
 Rig Name: Lariat 45

Customer Rep **Position**

Directional Driller

MWD Operator

Monte Bryant
 Tony Hatfield
 Jake Leming

Blake Reid

Daily Totals			
Start Depth:	7234	Rotate Ftg:	413
End Depth:	7683	Rotary Hrs:	5.75
Total Drilled:	449	Avg Rot ROP:	71.83
Below Rot. Hrs:	21.48	Circ Hours:	0
Avg Total ROP:	65.98	Rotary Hrs%:	82.14
Slide Footage:	36	Slide Hrs%:	17.86
Slide Hours:	1.25	Rotary Ftg%:	91.98
Avg Slide ROP:	28.8	Slide Ftg%:	36

Drilling Parameters	
WOB:	21.364
Press On:	2395.455
Press Off:	2218.182
GPM:	460.47
SPM:	110.00
Rot. RPM:	40 - 65
Mot. RPM:	161.164 - 161.164

Mud Record	
Water Based	
Weight:	8.80
Visc:	28.00
Chlorides:	45000.00
YP:	1.00
PV:	1.00
PH:	7.00
Gas:	
Sand:	0.0
WL:	
Solid:	3.5
BHT°:	
Flow T°:	
Oil %:	
LCM:	0.00

BHA Items	
BHA # 4	
MMD54DM #4	12217119
4.75 YA MOTOR	YA47593
4.75 FLOAT SUB	DR209
4.75 UBHO SUB	DRTMS475055
4.75 NMDC SLICK	SD50570
4.75 NMDC FLEX	AWF475301480
5.00 CROSSOVER	SUB
	DRT52517
	DP 5 x 3 - 19.5000
AGITATOR	AGAR0500-0060
	DP 5 x 3 - 19.5000
	HWDP 5 x 3 - 4 1/2 IF

Casing		
Size	Lb/ft	Set Depth

Bit Record							
Name	SN	Bit Type	IADC#	MFR	TFA	Jets	GPM
MMD54DM #4	12217119	PDC	M434	HALLIBURTON	0.752	5 - 14.00	460.467723226 161
MM54DM	12163260	PDC		Security-DBS	0.844	3 - 14.00, 2 - 16.00	460.467723226 16

Assembly Totals									
BH A	Motor SN	Slide Ftg.	Slide Hrs.	Rot Ftg.	Rot Hrs.	Circ Hrs.	D & C Hrs	BHA Ftg.	Avg ROP
4	YA47593	111.00	5.57	1227.00	13.68	2.5	21.75	1338.00	54.81
3	475M5176	169.00	18.82	2237.00	40.13	3.5	62.45	2406.00	32.36

Weather			
Weather Time/Job Time	Temp	Wind Speed	Weather Notes

BHA # 3
MM54DM 12163260
4.75 WZL Motor 475M5176
4.75 FLOAT SUB DR209
4.75 UBHO SUB DRTMS475055
4.75 NMDC SLICK SD50570
4.75 NMDC FLEX AWF475301480
5.00 CROSSOVER SUB DRT52517
DP 5 x 3 - 19.5000
HWDP 5 x 3 - 4 1/2 IF

Day # 14 Breakdown								
Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	Misc. Data
00:00	02:00	02:00:00	7234.00				0 Tripping Out - Pipe	BHA: 3 Depth: 7234.00 Reason: Bit Trip & Motor
02:00	02:45	00:45:00					0 BHA Handling - Laydown BHA	
02:45	04:30	01:45:00					0 BHA Handling - Pickup BHA	
04:30	10:30	06:00:00	7234.00				0 Tripping In - Pipe	BHA: 4 Depth: 7234.00
10:30	11:00	00:30:00					0 Washing & Reaming	
11:00	11:30	00:30:00	7234.00	7242.00	8.00	16.0	Directional Work (Sliding)	Depth: 7234.00 - 7242.00 Mag. TF: Motor RPM: 161.1637 Gravity TF: 180.00 WOB: 20.00 Pressure on PSI: 1800.00 Pressure off PSI: 1600.00
11:30	12:00	00:30:00	7242.00	7287.00	45.00	90.0	Drilling (Rotating)	Depth: 7242.00 - 7287.00 Motor RPM: 161.1637 Table RPM: 65.0000 WOB: 15.00 Pressure on PSI: 1800.00 Pressure off PSI: 1600.00
12:00	12:30	00:30:00					0 Daily Rig Service	
12:30	12:45	00:15:00					0 Survey	Depth: 7238.00 Inclination: 88.20 Azimuth: 359.80 Source: MWD
12:45	14:45	02:00:00	7287.00	7380.00	93.00	46.50	Drilling (Rotating)	Depth: 7287.00 - 7380.00 Motor RPM: 161.1637 Table RPM: 65.0000 WOB: 10.00 Pressure on PSI: 2300.00 Pressure off PSI: 2100.00
14:45	15:00	00:15:00					0 Survey	Depth: 7331.00 Inclination: 87.00 Azimuth: 359.90 Source: MWD
15:00	15:45	00:45:00	7380.00	7472.00	92.00	122.67	Drilling (Rotating)	Depth: 7380.00 - 7472.00 Motor RPM: 161.1637 Table RPM: 65.0000 WOB: 20.00 Pressure on PSI: 2500.00 Pressure off PSI: 2300.00
15:45	16:00	00:15:00					0 Survey	Depth: 7423.00 Inclination: 86.10 Azimuth: 359.80 Source: MWD
16:00	16:15	00:15:00	7472.00	7484.00	12.00	48	Directional Work (Sliding)	Depth: 7472.00 - 7484.00 Mag. TF: Motor RPM: 161.1637 Gravity TF: 10.00 WOB: 30.00 Pressure on PSI: 2500.00 Pressure off PSI: 2400.00
16:15	16:30	00:15:00	7484.00	7502.00	18.00	72	Drilling (Rotating)	Depth: 7484.00 - 7502.00 Motor RPM: 161.1637 Table RPM: 40.0000 WOB: 20.00 Pressure on PSI: 2600.00 Pressure off PSI: 2400.00
16:30	16:45	00:15:00	7502.00	7510.00	8.00	32	Directional Work (Sliding)	Depth: 7502.00 - 7510.00 Mag. TF: Motor RPM: 161.1637 Gravity TF: 350.00 WOB: 29.00 Pressure on PSI: 2500.00 Pressure off PSI: 2400.00
16:45	17:30	00:45:00	7510.00	7563.00	53.00	70.67	Drilling (Rotating)	Depth: 7510.00 - 7563.00 Motor RPM: 161.1637 Table RPM: 40.0000 WOB: 20.00 Pressure on PSI: 2600.00 Pressure off PSI: 2400.00
17:30	17:45	00:15:00					0 Survey	Depth: 7514.00 Inclination: 88.20 Azimuth: 0.10 Source: MWD
17:45	18:00	00:15:00	7563.00	7571.00	8.00	32	Directional Work (Sliding)	Depth: 7563.00 - 7571.00 Mag. TF: 0.00 Motor RPM: 161.1637 Gravity TF: 0.00 WOB: 35.00 Pressure on PSI: 2450.00 Pressure off PSI: 2350.00
18:00	18:30	00:30:00	7571.00	7655.00	84.00	168.0	Drilling (Rotating)	Depth: 7571.00 - 7655.00 Motor RPM: 161.1637 Table RPM: 40.0000 WOB: 18.00 Pressure on PSI: 2650.00 Pressure off PSI: 2450.00
18:30	18:45	00:15:00					0 Survey	Depth: 7606.00 Inclination: 89.30 Azimuth: 1.40 Source: MWD
18:45	19:45	01:00:00	7655.00	7683.00	28.00	28.00	Drilling (Rotating)	Depth: 7655.00 - 7683.00 Motor RPM: 161.1637 Table RPM: 40.0000 WOB: 18.00 Pressure on PSI: 2650.00 Pressure off PSI: 2400.00
19:45	23:59	04:14:00					0 OTHER	Notes: LOST VOLUME, PULL OUT HOLE TO SHOE TO BUILD VOLUME

Day # 15 - From March 03, 2014 00:00 to March 03, 2014 23:59

Company: Sandridge
 Well Name: Nona 3204 1-23H
 Legals: Sec: 23 Township: 32S Range: 4W
 County/State: Sumner County KS
 Rig Name: Lariat 45

Customer Rep Position

Directional Driller

MWD Operator

Monte Bryant
 Tony Hatfield
 Jake Leming

Blake Reid

Daily Totals			
Start Depth:	7683	Rotate Ftg:	319
End Depth:	8035	Rotary Hrs:	3.08
Total Drilled:	352	Avg Rot ROP:	103.46
Below Rot. Hrs:	23.98	Circ Hours:	0
Avg Total ROP:	57.44	Rotary Hrs%:	54.41
Slide Footage:	33	Slide Hrs%:	45.59
Slide Hours:	2.583	Rotary Ftg%:	90.62
Avg Slide ROP:	12.77	Slide Ftg%:	33

Drilling Parameters	
WOB:	26.6
Press On:	2238.00
Press Off:	2088.00
GPM:	460.47
SPM:	110.00
Rot. RPM:	40 - 60
Mot. RPM:	161.164 - 161.164

Mud Record	
Weight:	0
Visc:	0
Chlorides:	
YP:	
PV:	
PH:	
Gas:	
Sand:	
WL:	
Solid:	
BHT°:	
Flow T°:	
Oil %:	
LCM:	

BHA Items	
BHA # 4	
MMD54DM #4	12217119
4.75 YA MOTOR	YA47593
4.75 FLOAT SUB	DR209
4.75 UBHO SUB	DRTMS475055
4.75 NMDC SLICK	SD50570
4.75 NMDC FLEX	AWF475301480
5.00 CROSSOVER SUB	DRT52517
DP 5 x 3 - 19.5000	
AGITATOR	AGAR0500-0060
DP 5 x 3 - 19.5000	
HWDP 5 x 3 - 4 1/2 IF	

Casing		
Size	Lb/ft	Set Depth

Bit Record							
Name	SN	Bit Type	IADC#	MFR	TFA	Jets	GPM
MMD54DM #4	12217119	PDC	M434	HALLIBURTON	0.752	5 - 14.00	460.467723226 161

Assembly Totals									
BH A	Motor SN	Slide Ftg.	Slide Hrs.	Rot Ftg.	Rot Hrs.	Circ Hrs.	D & C Hrs	BHA Ftg.	Avg ROP
4	YA47593	111.00	5.57	1227.00	13.68	2.5	21.75	1338.00	54.81

Weather			
Weather Time/Job Time	Temp	Wind Speed	Weather Notes

Day # 15 Breakdown								
Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	Misc. Data
00:00	12:00	12:00:00				0	OTHER	Notes: BUILD VOLUME
12:00	14:00	02:00:00				0	OTHER	Notes: TRIP BACK TO BOTTOM
14:00	15:00	01:00:00				0	OTHER	Notes: SWAP MUD PUMPS AND SYNC MWD, MULTIPLE ATTEMPTS
15:00	15:30	00:30:00	7683.00	7691.00	8.00	16.0	Directional Work (Sliding)	Depth: 7683.00 - 7691.00 Mag. TF: Motor RPM: 161.1637 Gravity TF: 270.00 WOB: 25.00 Pressure on PSI: 2200.00 Pressure off PSI: 2100.00
15:30	16:00	00:30:00	7691.00	7750.00	59.00	118.0	Drilling (Rotating)	Depth: 7691.00 - 7750.00 Motor RPM: 161.1637 Table RPM: 60.0000 WOB: 20.00 Pressure on PSI: 2500.00 Pressure off PSI: 2300.00
16:00	17:00	01:00:00				0	Daily Rig Service	
17:00	17:15	00:15:00				0	Survey	Depth: 7698.00 Inclination: 88.20 Azimuth: 359.00 Source: MWD
17:15	17:45	00:30:00	7750.00	7756.00	6.00	12.0	Directional Work (Sliding)	Depth: 7750.00 - 7756.00 Mag. TF: Motor RPM: 161.1637 Gravity TF: 360.00 WOB: 45.00 Pressure on PSI: 2200.00 Pressure off PSI: 2100.00
17:45	18:25	00:40:00	7756.00	7845.00	89.00	133.50	Drilling (Rotating)	Depth: 7756.00 - 7845.00 Motor RPM: 161.1637 Table RPM: 40.0000 WOB: 22.00 Pressure on PSI: 2400.00 Pressure off PSI: 2100.00
18:25	19:50	01:25:00				0	Daily Rig Service	
19:50	20:00	00:10:00				0	Survey	Depth: 7793.00 Inclination: 88.10 Azimuth: 357.30 Source: MWD
20:00	20:40	00:40:00	7845.00	7853.00	8.00	12.00	Directional Work (Sliding)	Depth: 7845.00 - 7853.00 Mag. TF: 0.00 Motor RPM: 161.1637 Gravity TF: 45.00 WOB: 35.00 Pressure on PSI: 2000.00 Pressure off PSI: 1900.00
20:40	21:30	00:50:00	7853.00	7940.00	87.00	104.40	Drilling (Rotating)	Depth: 7853.00 - 7940.00 Motor RPM: 161.1637 Table RPM: 40.0000 WOB: 15.00 Pressure on PSI: 2150.00 Pressure off PSI: 1950.00
21:30	21:50	00:20:00				0	Survey	Depth: 7888.00 Inclination: 87.20 Azimuth: 359.20 Source: MWD
21:50	22:30	00:40:00	7940.00	7947.00	7.00	10.50	Directional Work (Sliding)	Depth: 7940.00 - 7947.00 Mag. TF: 0.00 Motor RPM: 161.1637 Gravity TF: 40.00 WOB: 35.00 Pressure on PSI: 2250.00 Pressure off PSI: 2100.00
22:30	22:50	00:20:00	7947.00	7971.00	24.00	72.00	Drilling (Rotating)	Depth: 7947.00 - 7971.00 Motor RPM: 161.1637 Table RPM: 40.0000 WOB: 15.00 Pressure on PSI: 2300.00 Pressure off PSI: 2150.00
22:50	23:05	00:15:00	7971.00	7975.00	4.00	16	Directional Work (Sliding)	Depth: 7971.00 - 7975.00 Mag. TF: 0.00 Motor RPM: 161.1637 Gravity TF: 0.00 WOB: 40.00 Pressure on PSI: 2100.00 Pressure off PSI: 2000.00
23:05	23:50	00:45:00	7975.00	8035.00	60.00	80	Drilling (Rotating)	Depth: 7975.00 - 8035.00 Motor RPM: 161.1637 Table RPM: 40.0000 WOB: 14.00 Pressure on PSI: 2280.00 Pressure off PSI: 2180.00
23:50	23:59	00:09:00				0	Survey	Depth: 7983.00 Inclination: 87.70 Azimuth: 359.70 Source: MWD

Day # 16 - From March 04, 2014 00:00 to March 04, 2014 23:59

Company: Sandridge
Well Name: Nona 3204 1-23H
Legals: Sec: 23 Township: 32S Range: 4W
County/State: Sumner County KS
Rig Name: Lariat 45

Customer Rep

Position

Directional Driller

MWD Operator

Monte Bryant
 Tony Hatfield
 Jake Leming

Blake Reid

Daily Totals			
Start Depth:	8035	Rotate Ftg:	495
End Depth:	8572	Rotary Hrs:	4.85
Total Drilled:	537	Avg Rot ROP:	102.06
Below Rot. Hrs:	15	Circ Hours:	2.5
Avg Total ROP:	82.87	Rotary Hrs%:	73.67
Slide Footage:	42	Slide Hrs%:	26.33
Slide Hours:	1.733	Rotary Ftg%:	92.18
Avg Slide ROP:	24.23	Slide Ftg%:	42

Drilling Parameters	
WOB:	27.231
Press On:	2446.154
Press Off:	2271.538
GPM:	460.47
SPM:	110.00
Rot. RPM:	40 - 65
Mot. RPM:	161.164 - 161.164

Mud Record	
Weight:	0
Visc:	0
Chlorides:	
YP:	
PV:	
PH:	
Gas:	
Sand:	
WL:	
Solid:	
BHT°:	
Flow T°:	
Oil %:	
LCM:	

BHA Items	
BHA # 4	
MMD54DM #4	12217119
4.75 YA MOTOR	YA47593
4.75 FLOAT SUB	DR209
4.75 UBHO SUB	DRTMS475055
4.75 NMDC SLICK	SD50570
4.75 NMDC FLEX	AWF475301480
5.00 CROSSOVER SUB	DRT52517
DP 5 x 3 - 19.5000	
AGITATOR	AGAR0500-0060
DP 5 x 3 - 19.5000	
HWDP 5 x 3 - 4 1/2 IF	

Casing		
Size	Lb/ft	Set Depth

Bit Record							
Name	SN	Bit Type	IADC#	MFR	TFA	Jets	GPM
MMD54DM #4	12217119	PDC	M434	HALLIBURTON	0.752	5 - 14.00	460.467723226 161

Assembly Totals									
BH A	Motor SN	Slide Ftg.	Slide Hrs.	Rot Ftg.	Rot Hrs.	Circ Hrs.	D & C Hrs	BHA Ftg.	Avg ROP
4	YA47593	111.00	5.57	1227.00	13.68	2.5	21.75	1338.00	54.81

Weather			
Weather Time/Job Time	Temp	Wind Speed	Weather Notes

Day # 16 Breakdown								
Start Time	End Time	Hours	Start Depth	End Depth	Delta Depth	ROP	Activity Code	Misc. Data
00:00	00:35	00:35:00	8035.00	8047.00	12.00	20.57	Directional Work (Sliding)	Depth: 8035.00 - 8047.00 Mag. TF: 0.00 Motor RPM: 161.1637 Gravity TF: 10.00 WOB: 30.00 Pressure on PSI: 2300.00 Pressure off PSI: 2200.00
00:35	01:10	00:35:00	8047.00	8098.00	51.00	87.43	Drilling (Rotating)	Depth: 8047.00 - 8098.00 Motor RPM: 161.1637 Table RPM: 40.0000 WOB: 25.00 Pressure on PSI: 2450.00 Pressure off PSI: 2250.00
01:10	01:30	00:20:00	8098.00	8112.00	14.00	42.00	Directional Work (Sliding)	Depth: 8098.00 - 8112.00 Mag. TF: 0.00 Motor RPM: 161.1637 Gravity TF: 30.00 WOB: 35.00 Pressure on PSI: 2300.00 Pressure off PSI: 2200.00
01:30	01:50	00:20:00	8112.00	8130.00	18.00	54.00	Drilling (Rotating)	Depth: 8112.00 - 8130.00 Motor RPM: 161.1637 Table RPM: 40.0000 WOB: 23.00 Pressure on PSI: 2450.00 Pressure off PSI: 2250.00
01:50	02:00	00:10:00				0	Survey	Depth: 8078.00 Inclination: 89.00 Azimuth: 0.50 Source: MWD
02:00	02:25	00:25:00	8130.00	8161.00	31.00	74.40	Drilling (Rotating)	Depth: 8130.00 - 8161.00 Motor RPM: 161.1637 Table RPM: 40.0000 WOB: 24.00 Pressure on PSI: 2500.00 Pressure off PSI: 2300.00
02:25	02:50	00:25:00	8161.00	8169.00	8.00	19.20	Directional Work (Sliding)	Depth: 8161.00 - 8169.00 Mag. TF: 0.00 Motor RPM: 161.1637 Gravity TF: 0.00 WOB: 40.00 Pressure on PSI: 2300.00 Pressure off PSI: 2200.00
02:50	03:30	00:40:00	8169.00	8224.00	55.00	82.50	Drilling (Rotating)	Depth: 8169.00 - 8224.00 Motor RPM: 161.1637 Table RPM: 40.0000 WOB: 22.00 Pressure on PSI: 2500.00 Pressure off PSI: 2350.00
03:30	03:40	00:10:00				0	Survey	Depth: 8172.00 Inclination: 91.30 Azimuth: 0.90 Source: MWD
03:40	04:00	00:20:00	8224.00	8256.00	32.00	96.00	Drilling (Rotating)	Depth: 8224.00 - 8256.00 Motor RPM: 161.1637 Table RPM: 40.0000 WOB: 20.00 Pressure on PSI: 2680.00 Pressure off PSI: 2350.00
04:00	04:24	00:24:00	8256.00	8264.00	8.00	20.0	Directional Work (Sliding)	Depth: 8256.00 - 8264.00 Mag. TF: 0.00 Motor RPM: 161.1637 Gravity TF: 0.00 WOB: 35.00 Pressure on PSI: 2480.00 Pressure off PSI: 2350.00
04:24	05:00	00:36:00	8264.00	8319.00	55.00	91.67	Drilling (Rotating)	Depth: 8264.00 - 8319.00 Motor RPM: 161.1637 Table RPM: 40.0000 WOB: 25.00 Pressure on PSI: 2580.00 Pressure off PSI: 2380.00
05:00	05:10	00:10:00				0	Survey	Depth: 8267.00 Inclination: 92.00 Azimuth: 360.00 Source: MWD
05:10	05:50	00:40:00	8319.00	8414.00	95.00	142.50	Drilling (Rotating)	Depth: 8319.00 - 8414.00 Motor RPM: 161.1637 Table RPM: 65.0000 WOB: 25.00 Pressure on PSI: 2560.00 Pressure off PSI: 2400.00
05:50	06:00	00:10:00				0	Survey	Depth: 8362.00 Inclination: 92.30 Azimuth: 0.20 Source: MWD
06:00	07:00	01:00:00	8414.00	8509.00	95.00	95.00	Drilling (Rotating)	Depth: 8414.00 - 8509.00 Motor RPM: 161.1637 Table RPM: 65.0000 WOB: 25.00 Pressure on PSI: 2300.00 Pressure off PSI: 2100.00
07:00	07:15	00:15:00				0	Survey	Depth: 8457.00 Inclination: 92.30 Azimuth: 358.90 Source: MWD
07:15	07:30	00:15:00	8509.00	8572.00	63.00	252	Drilling (Rotating)	Depth: 8509.00 - 8572.00 Motor RPM: 161.1637 Table RPM: 65.0000 WOB: 25.00 Pressure on PSI: 2400.00 Pressure off PSI: 2200.00
07:30	07:45	00:15:00				0	Survey	Depth: 8520.00 Inclination: 93.60 Azimuth: 358.80 Source: MWD
07:45	08:00	00:15:00				0	Survey	Depth: 8572.00 Inclination: 93.60 Azimuth: 358.80 Source: MWD
08:00	10:30	02:30:00				0	Circulate & Condition Mud	
10:30	15:00	04:30:00	8572.00			0	Tripping Out - Pipe BHA Handling - Laydown BHA	BHA: 4 Depth: 8572.00 Reason: Casing Point
15:00	15:45	00:45:00				0		

Company: Sandridge
Well Name: Nona 3204 1-23H
Legals: Sec: 23 Township: 32S
 Range: 4W
County/State: Sumner County KS
Rig Name: Lariat 45

Customer Rep	Position	Directional Driller	MWD Operator
		Monte Bryant	Blake Reid
		Tony Hatfield	
		Jake Leming	

Time and Depths	
Date In:	2/17/2014 4:30:00 PM
Date Out:	2/19/2014 2:00:00 AM
Hrs In Hole:	24.98
Start Depth:	270.00
End Depth:	2899.00
Total Drilled:	2629.00
Avg. Total ROP:	52.62
Circ Hours:	1
Percent Slide:	0
Percent Hrs:	0
Slide Hours:	0
Total Sliding:	0
Avg. Slide ROP:	0
Percent Rotary:	1
Percent Hrs:	100
Rotary Hrs:	24.98
Total Rotary:	2629.00
Avg. Rotary ROP:	105.23
Reason POOH:	Bit Trip & Motor

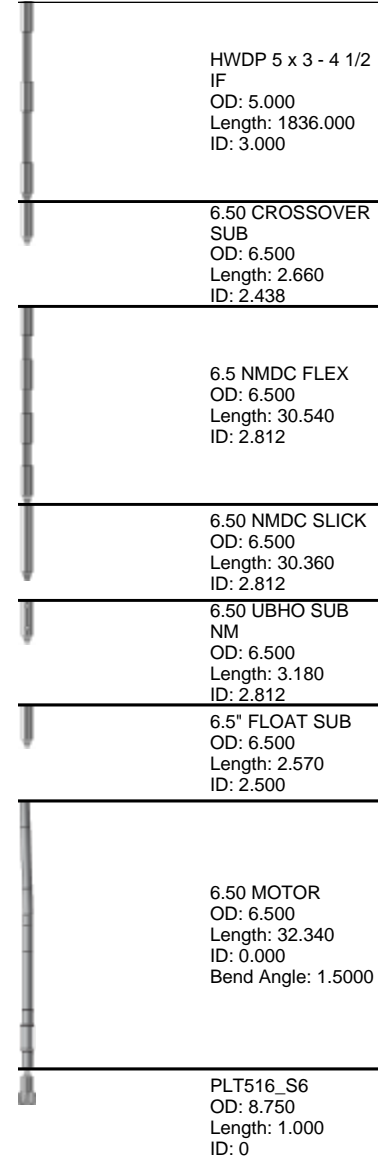
Motor Data	
6.50 MOTOR	
MFG:	Wenzel
Pad OD:	7.250
NB Stab:	0.000
Bent Hsg/Sub*:	6.562
Motor Type:	7/8 Lobe 6.0
Rev/Gal:	0.260
Rotor Jet:	0.000
Serial Number:	650M6276
Bend Angle:	1.500
Vendor:	Wenzel

Drilling Parameters	
WOB:	10.00 - 16.00
Motor RPM	119.722 - 119.722
Rotary RPM	70.000 - 70.000
GPM:	460.47
Avg Diff:	269.29
On Bot Pres.:	1656.43
Off Bot Pres:	1387.14

Mud Data	
Type:	Water Based
Weight:	9.20
Viscosity:	35.00
WL:	
Solids:	6.3
Oil %:	
Chlorides:	28000.00
Gas:	0.00
PV:	6.00
PH:	8.50
Sand:	0.25
T :	
YP:	19.00
LCM:	0.00

Last Casing	
OD:	0
ID:	0
Weight:	0
Depth:	0

Bit Record	
Name:	PLT516_S6
SN:	S08275
Bit Type:	PDC
IADC # :	
Mfr:	1
TFA:	0.982
Jets:	5 - 16.00
GPM:	460.468



BHA Detail							
Description	Serial #	I.D.	O.D.	Length	Sum	Top Conn	Fishing Neck
HWDP 5 x 3 - 4 1/2 IF		3.000	5.000	1836.00	1836.00	4 1/2" IF BOX	
6.50 CROSSOVER SUB	DRT4303	2.438	6.500	2.66	1838.66	XT39 BOX	
6.5 NMDC FLEX	DR13676	2.812	6.500	30.54	1869.20	4 1/2" XH BOX	
6.50 NMDC SLICK	DR8941	2.812	6.500	30.36	1899.56	4 1/2" XH BOX	
6.50 UBHO SUB NM	DRTMS65001	2.812	6.500	3.18	1902.74	4 1/2" XH BOX	
6.5" FLOAT SUB	DR655	2.500	6.500	2.57	1905.31	4 1/2" XH BOX	
6.50 MOTOR	650M6276	0.000	6.500	32.34	1937.65	4 1/2" XH BOX	
PLT516_S6	S08275	0	8.750	1.00	1938.65	4 1/2" REG PIN	

Company: Sandridge
Well Name: Nona 3204 1-23H
Legals: Sec: 23 Township: 32S
 Range: 4W
County/State: Sumner County KS
Rig Name: Lariat 45

Customer Rep	Position	Directional Driller	MWD Operator
		Monte Bryant	Blake Reid
		Tony Hatfield	
		Jake Leming	

Time and Depths	
Date In:	2/19/2014 5:30:00 AM
Date Out:	2/22/2014 8:00:00 AM
Hrs In Hole:	38.8
Start Depth:	2899.00
End Depth:	4828.00
Total Drilled:	1929.00
Avg. Total ROP:	49.53
Circ Hours:	4.33
Percent Slide:	0.67
Percent Hrs:	66.97
Slide Hours:	25.98
Total Sliding:	1301.00
Avg. Slide ROP:	50.07
Percent Rotary:	0.33
Percent Hrs:	33.03
Rotary Hrs:	12.82
Total Rotary:	628.00
Avg. Rotary ROP:	49
Reason POOH:	Casing Point

Motor Data	
6.75 MOTOR	
MFG:	DrillRight
Pad OD:	7.562
NB Stab:	0.000
Bent Hsg/Sub*:	6.875
Motor Type:	7/8 Lobe 5.0
Rev/Gal:	0.280
Rotor Jet:	0.000
Serial Number:	67524X484DRT
Bend Angle:	2.120
Vendor:	DrillRight Tools

Drilling Parameters	
WOB:	8.00 - 35.00
Motor RPM	128.931 - 128.931
Rotary RPM	40.000 - 40.000
GPM:	460.47
Avg Diff:	238.46
On Bot Pres.:	2391.88
Off Bot Pres:	2153.41

Mud Data	
Type:	Water Based
Weight:	9.40
Viscosity:	44.00
WL:	
Solids:	7.8
Oil %:	
Chlorides:	30000.00
Gas:	0.00
PV:	10.00
PH:	10.50
Sand:	0.25
T :	
YP:	15.00
LCM:	0.00

Last Casing	
OD:	0
ID:	0
Weight:	0
Depth:	0

Bit Record	
Name:	MMD55DM
SN:	12195034
Bit Type:	PDC
IADC # :	M423
Mfr:	HALLIBURTON
TFA:	0.982
Jets:	5 - 16.00
GPM:	460.468

HWDP 5 x 3 - 4 1/2 IF OD: 5.000 Length: 1836.000 ID: 3.000
DP 5 x 3 - 19.5000 OD: 5.000 Length: 1898.490 ID: 3.000
6.50 CROSSOVER SUB OD: 6.500 Length: 2.660 ID: 2.438
6.5 NMDC FLEX OD: 6.500 Length: 30.540 ID: 2.812
6.50 NMDC SLICK OD: 6.500 Length: 30.360 ID: 2.812
6.50 UBHO SUB NM OD: 6.500 Length: 3.180 ID: 2.812
6.50 NMDC PONY OD: 6.500 Length: 13.720 ID: 3.000
6.5" FLOAT SUB OD: 6.500 Length: 2.570 ID: 2.500
6.75 MOTOR OD: 6.750 Length: 26.560 ID: 0.000 Bend Angle: 2.1200
MMD55DM OD: 8.750 Length: 1.000 ID: 0

BHA Detail							
Description	Serial #	I.D.	O.D.	Length	Sum	Top Conn	Fishing Neck
HWDP 5 x 3 - 4 1/2 IF		3.000	5.000	1836.00	1836.00	4 1/2" IF BOX	
DP 5 x 3 - 19.5000		3.000	5.000	1898.49	3734.49	5" XH BOX	
6.50 CROSSOVER SUB	DRT4303	2.438	6.500	2.66	3737.15	XT39 BOX	
6.5 NMDC FLEX	DR13676	2.812	6.500	30.54	3767.69	4 1/2" XH BOX	
6.50 NMDC SLICK	DR8941	2.812	6.500	30.36	3798.05	4 1/2" XH BOX	
6.50 UBHO SUB NM	DRTMS65001	2.812	6.500	3.18	3801.23	4 1/2" XH BOX	
6.50 NMDC PONY	DRPM24	3.000	6.500	13.72	3814.95	4 1/2" XH BOX	
6.5" FLOAT SUB	DR655	2.500	6.500	2.57	3817.52	4 1/2" XH BOX	
6.75 MOTOR	67524X484DRT	0.000	6.750	26.56	3844.08	4 1/2" XH BOX	
MMD55DM	12195034	0	8.750	1.00	3845.08	4 1/2" REG PIN	

Company: Sandridge
Well Name: Nona 3204 1-23H
Legals: Sec: 23 Township: 32S
 Range: 4W
County/State: Sumner County KS
Rig Name: Lariat 45

Customer Rep	Position	Directional Driller	MWD Operator
		Monte Bryant	Blake Reid
		Tony Hatfield	
		Jake Leming	

Time and Depths	
Date In:	2/26/2014 3:00:00 AM
Date Out:	3/2/2014 2:00:00 AM
Hrs In Hole:	58.95
Start Depth:	4828.00
End Depth:	7234.00
Total Drilled:	2406.00
Avg. Total ROP:	32.36
Circ Hours:	3.5
Percent Slide:	0.07
Percent Hrs:	31.92
Slide Hours:	18.82
Total Sliding:	169.00
Avg. Slide ROP:	8.98
Percent Rotary:	0.93
Percent Hrs:	68.08
Rotary Hrs:	40.13
Total Rotary:	2237.00
Avg. Rotary ROP:	55.74
Reason POOH:	Bit Trip & Motor

Motor Data	
4.75 WZL Motor	
MFG:	Wenzel
Pad OD:	5.500
NB Stab:	0.000
Bent Hsg/Sub*:	4.938
Motor Type:	7/8 lobe 2.2
Rev/Gal:	0.300
Rotor Jet:	0.000
Serial Number:	475M5176
Bend Angle:	1.500
Vendor:	Wenzel

Drilling Parameters	
WOB:	15.00 - 60.00
Motor RPM	138.140 - 138.140
Rotary RPM	50.000 - 70.000
GPM:	460.47
Avg Diff:	198.89
On Bot Pres.:	1379.84
Off Bot Pres:	1180.95

Mud Data	
Type:	
Weight:	0
Viscosity:	0
WL:	
Solids:	
Oil %:	
Chlorides:	
Gas:	
PV:	
PH:	
Sand:	
T :	
YP:	
LCM:	

Last Casing	
OD:	0
ID:	0
Weight:	0
Depth:	0

Bit Record	
Name:	MM54DM
SN:	12163260
Bit Type:	PDC
IADC # :	
Mfr:	Security-DBS
TFA:	0.844
Jets:	3 - 14.00, 2 - 16.00
GPM:	460.468

BHA Detail							
Description	Serial #	I.D.	O.D.	Length	Sum	Top Conn	Fishing Neck
HWDP 5 x 3 - 4 1/2 IF		3.000	5.000	1836.00	1836.00	4 1/2" IF BOX	
DP 5 x 3 - 19.5000		3.000	5.000	5696.88	7532.88	5" XH BOX	
5.00 CROSSOVER SUB	DRT52517	2.500	5.000	2.38	7535.26	XT39 BOX	
4.75 NMDC FLEX	AWF4753014 80	2.812	4.710	30.68	7565.94	3 1/2" IF BOX	
4.75 NMDC SLICK	SD50570	2.750	4.750	29.74	7595.68	3 1/2" IF BOX	
4.75 UBHO SUB	DRTMS47505 5	2.688	4.812	2.91	7598.59	3 1/2" IF BOX	
4.75 FLOAT SUB	DR209	2.500	4.750	1.56	7600.15	3 1/2" IF BOX	
4.75 WZL Motor	475M5176	0	4.750	25.89	7626.04	3 1/2" IF BOX	
MM54DM	12163260	0	6.125	1.00	7627.04	3 1/2" REG PIN	

HWDP 5 x 3 - 4 1/2 IF OD: 5.000 Length: 1836.000 ID: 3.000
DP 5 x 3 - 19.5000 OD: 5.000 Length: 5696.880 ID: 3.000
5.00 CROSSOVER SUB OD: 5.000 Length: 2.380 ID: 2.500
4.75 NMDC FLEX OD: 4.710 Length: 30.680 ID: 2.812
4.75 NMDC SLICK OD: 4.750 Length: 29.740 ID: 2.750
4.75 UBHO SUB OD: 4.812 Length: 2.910 ID: 2.688
4.75 FLOAT SUB OD: 4.750 Length: 1.560 ID: 2.500
4.75 WZL Motor OD: 4.750 Length: 25.890 ID: 0 Bend Angle: 1.5000
MM54DM OD: 6.125 Length: 1.000 ID: 0

Company: Sandridge
Well Name: Nona 3204 1-23H
Legals: Sec: 23 Township: 32S
 Range: 4W
County/State: Sumner County KS
Rig Name: Lariat 45

Customer Rep	Position	Directional Driller	MWD Operator
		Monte Bryant	Blake Reid
		Tony Hatfield	
		Jake Leming	

Time and Depths	
Date In:	3/2/2014 4:30:00 AM
Date Out:	3/4/2014 3:00:00 PM
Hrs In Hole:	19.25
Start Depth:	7234.00
End Depth:	8572.00
Total Drilled:	1338.00
Avg. Total ROP:	54.81
Circ Hours:	2.5
Percent Slide:	0.08
Percent Hrs:	28.92
Slide Hours:	5.57
Total Sliding:	111.00
Avg. Slide ROP:	19.94
Percent Rotary:	0.92
Percent Hrs:	71.08
Rotary Hrs:	13.68
Total Rotary:	1227.00
Avg. Rotary ROP:	89.67
Reason POOH:	Casing Point

Motor Data	
4.75 YA MOTOR	
MFG:	Yellow Arrow
Pad OD:	5.500
NB Stab:	0.000
Bent Hsg/Sub*:	5.000
Motor Type:	7/8 LOBE 3.7
	STAGE
Rev/Gal:	0.350
Rotor Jet:	0.000
Serial Number:	YA47593
Bend Angle:	1.750
Vendor:	Yellow Arrow

Drilling Parameters	
WOB:	10.00 - 45.00
Motor RPM	161.164 - 161.164
Rotary RPM	40.000 - 65.000
GPM:	460.47
Avg Diff:	168.24
On Bot Pres.:	2368.53
Off Bot Pres:	2200.29

Mud Data	
Type:	Water Based
Weight:	8.80
Viscosity:	28.00
WL:	
Solids:	3.5
Oil %:	
Chlorides:	45000.00
Gas:	0.00
PV:	1.00
PH:	7.00
Sand:	0.0
T' :	
YP:	1.00
LCM:	0.00

Last Casing	
OD:	0
ID:	0
Weight:	0
Depth:	0

Bit Record	
Name:	MMD54DM #4
SN:	12217119
Bit Type:	PDC
IADC # :	M434
Mfr:	HALLIBURTON
TFA:	0.752
Jets:	5 - 14.00
GPM:	460.468

HWDP 5 x 3 - 4 1/2 IF OD: 5.000 Length: 1836.000 ID: 3.000
DP 5 x 3 - 19.5000 OD: 5.000 Length: 4273.190 ID: 3.000
AGITATOR OD: 4.750 Length: 24.830 ID: 2.750
DP 5 x 3 - 19.5000 OD: 5.000 Length: 1423.690 ID: 3.000
5.00 CROSSOVER SUB OD: 5.000 Length: 2.380 ID: 2.500
4.75 NMDC FLEX OD: 4.710 Length: 30.680 ID: 2.812
4.75 NMDC SLICK OD: 4.750 Length: 29.740 ID: 2.750
4.75 UBHO SUB OD: 4.812 Length: 2.910 ID: 2.688
4.75 FLOAT SUB OD: 4.750 Length: 1.560 ID: 2.500
4.75 YA MOTOR OD: 4.750 Length: 29.230 ID: 0.000 Bend Angle: 1.7500
MMD54DM #4 OD: 6.126 Length: 1.000 ID: 0

BHA Detail							
Description	Serial #	I.D.	O.D.	Length	Sum	Top Conn	Fishing Neck
HWDP 5 x 3 - 4 1/2 IF		3.000	5.000	1836.00	1836.00	4 1/2" IF BOX	
DP 5 x 3 - 19.5000		3.000	5.000	4273.19	6109.19	5" XH BOX	
AGITATOR	AGAR0500-0060	2.750	4.750	24.83	6134.02	XT39 BOX	
DP 5 x 3 - 19.5000		3.000	5.000	1423.69	7557.71	5" XH BOX	
5.00 CROSSOVER SUB	DRT52517	2.500	5.000	2.38	7560.09	XT39 BOX	
4.75 NMDC FLEX	AWF475301480	2.812	4.710	30.68	7590.77	3 1/2" IF BOX	
4.75 NMDC SLICK	SD50570	2.750	4.750	29.74	7620.51	3 1/2" IF BOX	
4.75 UBHO SUB	DRTMS475055	2.688	4.812	2.91	7623.42	3 1/2" IF BOX	
4.75 FLOAT SUB	DR209	2.500	4.750	1.56	7624.98	3 1/2" IF BOX	
4.75 YA MOTOR	YA47593	0.000	4.750	29.23	7654.21	3 1/2" IF BOX	
MMD54DM #4	12217119	0	6.126	1.00	7655.21	3 1/2" REG PIN	

Company: Sandridge
Well Name: Nona 3204 1-23H
Legals: Sec: 23 Township: 32S
 Range: 4W
County/State: Sumner County KS
Rig Name: Lariat 45

Customer Rep	Position	Directional Driller	MWD Operator
		Monte Bryant	Blake Reid
		Tony Hatfield	
		Jake Leming	

Total Ftg. Drilled:	8302	Avg. Total ROP:	58.79	Total Drill Hrs:	141.98
Total Ftg. Sliding:	1581	Avg. Sliding ROP:	46.98	Percent Sliding:	19.04%
Total Ftg. Rotary:	6721	Avg. Rotary ROP:	67.29	Percent Rotary:	80.96%

Date	Depth Start	Depth End	Ftg. Drilled	Mode S/R	Drig. Hrs.	ROP (fph)	WOB (Klbs)	Rot RPM	MTF	GTF	GPM	Diff PSI	SPP	BHA #	
Monday, February 17, 2014															
19:40	22:45	270	561	291	Rotating	3.08	94.38	10	70.0000	0	0	460	240	1000	1
23:00	23:59	561	650	89	Rotating	0.98	90.51	10	70.0000	0	0	460	230	1130	1
Totals:			380.00	4.07											
Tuesday, February 18, 2014															
0:00	03:25	650	1021	371	Rotating	3.42	108.59	15	70.0000	0	0	460	250	1350	1
3:40	07:15	1021	1479	458	Rotating	3.58	127.81	15	70.0000	0	0	460	200	1700	1
7:30	11:15	1479	1938	459	Rotating	3.75	122.4	15	70.0000	0	0	460	300	2000	1
12:00	17:00	1938	2413	475	Rotating	5	95.00	15	70.0000	0	0	460	300	2000	1
17:15	22:25	2413	2899	486	Rotating	5.17	94.06	16	70.0000	0	0	460	365	2415	1
Totals:			2249.00	20.92											

Wednesday, February 19, 2014

10:15	10:30	2899	2927	28	Sliding	0.25	112	15		267	0	460	300	1900	2
10:45	11:00	2927	2958	31	Sliding	0.25	124	16		267	0	460	300	1900	2
11:15	11:30	2958	2988	30	Sliding	0.25	120	15		267	0	460	300	1900	2
12:15	12:30	2988	3019	31	Sliding	0.25	124	15		267	0	460	300	1900	2
12:45	13:15	3019	3050	31	Sliding	0.5	62.0	16		267	0	460	300	1900	2
13:30	13:45	3050	3075	25	Sliding	0.25	100	15		0	0	460	250	1950	2
13:45	13:50	3075	3080	5	Rotating	0.08	60.00	15	40.0000	0	0	460	300	1900	2
14:00	14:15	3080	3105	25	Sliding	0.25	100	18		0	345	460	200	1900	2
14:15	14:20	3105	3111	6	Rotating	0.08	72.00	15	40.0000	0	0	460	300	1900	2
15:15	15:30	3111	3141	30	Sliding	0.25	120	16		0	345	460	350	1950	2
15:45	16:00	3141	3166	25	Sliding	0.25	100	15		0	345	460	200	1900	2
16:00	16:15	3166	3172	6	Rotating	0.25	24	15	40.0000	0	0	460	200	1900	2
16:30	16:45	3172	3199	27	Sliding	0.25	108	20		0	345	460	1300	2950	2
16:45	16:50	3199	3202	3	Rotating	0.08	36.00	15	40.0000	0	0	460	300	1950	2
17:05	17:20	3202	3229	27	Sliding	0.25	108	17		0	0	460	150	2150	2
17:20	17:30	3229	3233	4	Rotating	0.17	24.00	10	40.0000	0	0	460	100	2100	2
17:45	18:00	3233	3261	28	Sliding	0.25	112	13		0	0	460	225	2125	2
18:00	18:10	3261	3263	2	Rotating	0.17	12.00	10	40.0000	0	0	460	150	2150	2
18:15	19:00	3263	3294	31	Sliding	0.75	41.33	15		0	0	460	130	2130	2
19:10	20:00	3294	3325	31	Sliding	0.83	37.20	15		0	0	460	100	2100	2
20:10	21:10	3325	3355	30	Sliding	1	30.00	20		0	0	460	100	2100	2
21:20	22:05	3355	3381	26	Sliding	0.75	34.67	15		0	0	460	300	2200	2
22:05	22:15	3381	3386	5	Rotating	0.17	30.00	10	40.0000	0	0	460	195	2275	2
22:25	23:20	3386	3412	26	Sliding	0.92	28.36	20		0	0	460	150	2250	2
23:20	23:30	3412	3416	4	Rotating	0.17	24.00	20	40.0000	0	0	460	250	2450	2
23:40	23:59	3416	3426	10	Rotating	0.32	31.58	18	40.0000	0	0	460	250	2350	2
Totals:				527.00		8.98									

Thursday, February 20, 2014

0:00	01:00	3426	3447	21	Sliding	1	21.00	18		0	90	460	215	2215	2
1:10	02:00	3447	3467	20	Sliding	0.83	24.00	20		0	90	460	250	2250	2
2:00	02:15	3467	3477	10	Rotating	0.25	40	15	40.0000	0	0	460	250	2350	2
2:30	04:00	3477	3495	18	Sliding	1.5	12.0	20		0	90	460	300	2200	2
4:00	04:20	3495	3508	13	Rotating	0.33	39.00	20	40.0000	0	0	460	280	2280	2
4:30	05:10	3508	3523	15	Sliding	0.67	22.50	20		0	80	460	250	2250	2
5:10	05:15	3523	3540	17	Rotating	0.08	204.00	20	40.0000	0	0	460	80	2280	2
5:30	06:00	3540	3558	18	Sliding	0.5	36.0	20		0	90	460	50	2250	2
6:00	06:15	3558	3570	12	Rotating	0.25	48	20	40.0000	0	0	460	250	2250	2
6:30	07:00	3570	3585	15	Sliding	0.5	30.0	20		0	100	460	200	2300	2
7:00	07:45	3585	3601	16	Rotating	0.75	21.33	20	40.0000	0	0	460	150	2200	2
8:00	08:15	3601	3623	22	Sliding	0.25	88	20		0	100	460	250	2250	2
8:15	08:30	3623	3631	8	Rotating	0.25	32	20	40.0000	0	0	460	250	2250	2
8:45	09:00	3631	3653	22	Sliding	0.25	88	20		0	90	460	250	2250	2
9:00	09:30	3653	3662	9	Rotating	0.5	18.0	20	40.0000	0	0	460	250	2250	2
9:45	10:00	3662	3680	18	Sliding	0.25	72	20		0	90	460	200	2300	2
10:00	10:15	3680	3692	12	Rotating	0.25	48	20	40.0000	0	0	460	300	2400	2
10:30	10:45	3692	3712	20	Sliding	0.25	80	18		0	70	460	200	2300	2
10:45	11:00	3712	3723	11	Rotating	0.25	44	20	40.0000	0	0	460	200	2300	2
11:05	11:30	3723	3743	20	Sliding	0.42	48.00	20		0	60	460	200	2300	2
11:30	11:45	3743	3753	10	Rotating	0.25	40	20	40.0000	0	0	460	200	2300	2
12:30	12:45	3753	3771	18	Sliding	0.25	72	24		0	70	460	250	2250	2
12:45	13:00	3771	3784	13	Rotating	0.25	52	20	40.0000	0	0	460	250	2250	2
13:15	13:30	3784	3804	20	Sliding	0.25	80	20		0	50	460	300	2400	2
13:30	13:45	3804	3814	10	Rotating	0.25	40	20	40.0000	0	0	460	300	3500	2
14:00	14:15	3814	3834	20	Sliding	0.25	80	20		0	50	460	200	2400	2
14:15	14:30	3834	3845	11	Rotating	0.25	44	20	40.0000	0	0	460	300	2500	2
14:45	15:15	3845	3870	25	Sliding	0.5	50.0	25		0	50	460	300	2500	2
15:15	15:30	3870	3876	6	Rotating	0.25	24	20	40.0000	0	0	460	300	2500	2
15:45	16:00	3876	3901	25	Sliding	0.25	100	20		0	50	460	250	2450	2
16:00	16:15	3901	3908	7	Rotating	0.25	28	20	40.0000	0	0	460	200	2300	2
16:30	17:00	3908	3940	32	Sliding	0.5	64.0	20		0	60	460	300	2400	2
17:15	18:50	3940	3967	27	Sliding	1.58	17.05	20		0	50	460	250	2350	2
18:50	19:00	3967	3971	4	Rotating	0.17	24.00	15	40.0000	0	0	460	250	2450	2
19:15	19:55	3971	3998	27	Sliding	0.67	40.50	23		0	40	460	250	2350	2
19:55	20:10	3998	4003	5	Rotating	0.25	20	15	40.0000	0	0	460	250	2450	2
20:15	20:45	4003	4035	32	Sliding	0.5	64.0	25		0	40	460	250	2350	2
21:15	21:45	4035	4063	28	Sliding	0.5	56.0	27		0	60	460	280	2380	2
21:45	21:55	4063	4066	3	Rotating	0.17	18.00	8	40.0000	0	0	460	270	2570	2
22:10	22:30	4066	4098	32	Sliding	0.33	96.00	35		0	50	460	150	2550	2
22:40	23:15	4098	4125	27	Sliding	0.58	46.29	30		0	40	460	200	2300	2
23:15	23:25	4125	4130	5	Rotating	0.17	30.00	10	40.0000	0	0	460	200	2500	2
23:35	23:59	4130	4135	5	Sliding	0.4	12.5	30		0	40	460	215	2515	2
Totals:				709.00		18.15									

Friday, February 21, 2014

0:00	00:20	4135	4148	13	Sliding	0.33	39.00	30		0	40	460	215	2515	2
0:20	00:30	4148	4161	13	Rotating	0.17	78.00	15	40.0000	0	0	460	250	2580	2
0:40	01:10	4161	4189	28	Sliding	0.5	56.0	30		0	60	460	150	2550	2
1:10	01:20	4189	4193	4	Rotating	0.17	24.00	10	40.0000	0	0	460	170	2600	2
1:30	02:05	4193	4219	26	Sliding	0.58	44.57	25		0	50	460	80	2330	2
2:05	02:15	4219	4225	6	Rotating	0.17	36.00	14	40.0000	0	0	460	75	2400	2
2:30	03:10	4225	4253	28	Sliding	0.67	42.00	30		0	40	460	270	2560	2
3:10	03:20	4253	4256	3	Rotating	0.17	18.00	13	40.0000	0	0	460	200	2600	2
3:30	04:00	4256	4282	26	Sliding	0.5	52.0	30		0	40	460	200	2500	2
4:00	04:05	4282	4288	6	Rotating	0.08	72.00	10	40.0000	0	0	460	200	2600	2
4:15	04:55	4288	4314	26	Sliding	0.67	39.00	30		0	60	460	200	2600	2
4:55	05:05	4314	4320	6	Rotating	0.17	36.00	14	40.0000	0	0	460	200	2700	2
5:15	05:30	4320	4340	20	Sliding	0.25	80	18		0	50	460	200	2500	2
5:30	05:45	4340	4351	11	Rotating	0.25	44	20	40.0000	0	0	460	200	2600	2
6:00	06:15	4351	4371	20	Sliding	0.25	80	25		0	20	460	300	2800	2
6:15	06:30	4371	4383	12	Rotating	0.25	48	20	40.0000	0	0	460	300	2800	2
6:45	07:00	4383	4403	20	Sliding	0.25	80	28		0	20	460	300	2800	2
7:00	07:15	4403	4415	12	Rotating	0.25	48	20	40.0000	0	0	460	300	2800	2
7:30	07:45	4415	4440	25	Sliding	0.25	100	30		0	30	460	300	2800	2
7:45	08:00	4440	4446	6	Rotating	0.25	24	20	40.0000	0	0	460	300	2800	2
8:15	08:30	4446	4466	20	Sliding	0.25	80	25		0	30	460	300	2800	2
8:30	08:45	4466	4478	12	Rotating	0.25	48	20	40.0000	0	0	460	300	2800	2
9:00	09:45	4478	4498	20	Sliding	0.75	26.67	30		0	0	460	350	2550	2
9:45	10:00	4498	4510	12	Rotating	0.25	48	20	40.0000	0	0	460	300	2600	2
10:15	10:30	4510	4530	20	Sliding	0.25	80	30		0	0	460	150	2650	2
10:30	11:00	4530	4541	11	Rotating	0.5	22.0	20	40.0000	0	0	460	200	2600	2
11:15	11:45	4541	4573	32	Rotating	0.5	64.0	20	40.0000	0	0	460	200	2600	2
12:30	12:45	4573	4605	32	Rotating	0.25	128	20	40.0000	0	0	460	200	2600	2
13:00	13:15	4605	4636	31	Rotating	0.25	124	20	40.0000	0	0	460	200	2600	2
13:30	14:00	4636	4668	32	Rotating	0.5	64.0	20	40.0000	0	0	460	200	2700	2
14:15	14:30	4668	4700	32	Rotating	0.25	128	20	40.0000	0	0	460	200	2600	2
14:45	15:00	4700	4731	31	Rotating	0.25	124	20	40.0000	0	0	460	200	2800	2
15:15	15:30	4731	4763	32	Rotating	0.25	128	20	40.0000	0	0	460	100	2700	2
15:45	16:00	4763	4795	32	Rotating	0.25	128	20	40.0000	0	0	460	200	2800	2
16:15	17:00	4795	4828	33	Rotating	0.75	44	20	40.0000	0	0	460	200	2800	2
Totals:				693.00		11.67									

Wednesday, February 26, 2014

11:45	12:00	4828	4841	13	Rotating	0.25	52	15	70.0000	0	0	460	200	1400	3
12:30	14:15	4841	4936	95	Rotating	1.75	54.29	15	70.0000	0	0	460	100	1300	3
14:30	14:45	4936	4968	32	Rotating	0.25	128	18	70.0000	0	0	460	200	1400	3
14:45	16:00	4968	4978	10	Sliding	1.25	8	40		0	180	460	100	1300	3
16:00	16:45	4978	5031	53	Rotating	0.75	70.67	20	60.0000	0	0	460	200	2400	3
17:00	18:15	5031	5126	95	Rotating	1.25	76	15	60.0000	0	0	460	200	1400	3
18:25	19:00	5126	5157	31	Rotating	0.58	53.14	19	50.0000	0	0	460	200	1350	3
19:00	19:30	5157	5167	10	Sliding	0.5	20.0	40		0	70	460	150	1250	3
19:30	20:15	5167	5221	54	Rotating	0.75	72	20	60.0000	0	0	460	200	1350	3
20:30	21:20	5221	5252	31	Rotating	0.83	37.20	15	60.0000	0	0	460	250	1400	3
21:20	21:45	5252	5264	12	Sliding	0.42	28.80	40		0	90	460	40	1240	3
21:45	22:30	5264	5316	52	Rotating	0.75	69.33	15	65.0000	0	0	460	150	1350	3
22:40	23:15	5316	5347	31	Rotating	0.58	53.14	15	65.0000	0	0	460	250	1500	3
23:15	23:59	5347	5353	6	Sliding	0.73	8.18	45		0	90	460	150	1400	3
Totals:				525.00		10.65									

Thursday, February 27, 2014

0:00	00:15	5353	5361	8	Sliding	0.25	32	45		0	90	460	150	1400	3
0:15	01:10	5361	5411	50	Rotating	0.92	54.55	15	65.0000	0	0	460	350	1550	3
1:20	03:00	5411	5506	95	Rotating	1.67	57.00	16	50.0000	0	0	460	300	1600	3
3:15	05:30	5506	5601	95	Rotating	2.25	42.22	20	50.0000	0	0	460	200	2500	3
5:45	07:15	5601	5696	95	Rotating	1.5	63.33	20	70.0000	0	0	460	300	1200	3
8:00	09:30	5696	5702	6	Sliding	1.5	4.0	50		0	220	460	100	1000	3
9:30	10:30	5702	5727	25	Rotating	1	25.00	20	70.0000	0	0	460	200	1300	3
10:30	11:30	5727	5739	12	Sliding	1	12.00	50		0	220	460	100	1100	3
16:15	17:00	5739	5791	52	Rotating	0.75	69.33	15	65.0000	0	0	460	200	1100	3
17:20	18:00	5791	5821	30	Rotating	0.67	45.00	16	65.0000	0	0	460	230	1080	3
18:00	19:45	5821	5833	12	Sliding	1.75	6.86	45		0	260	460	100	900	3
19:45	20:30	5833	5882	49	Rotating	0.75	65.33	15	65.0000	0	0	460	230	1080	3
20:45	21:30	5882	5913	31	Rotating	0.75	41.33	15	50.0000	0	0	460	230	1080	3
21:30	23:45	5913	5927	14	Sliding	2.25	6.22	45		0	0	460	100	900	3
23:45	23:59	5927	5938	11	Rotating	0.23	47.14	25	50.0000	0	0	460	300	1150	3
Totals:				585.00		17.23									

Friday, February 28, 2014

0:00	00:35	5938	5974	36	Rotating	0.58	61.71	18	50.0000	0	0	460	280	1130	3
0:50	01:45	5974	6005	31	Rotating	0.92	33.82	25	50.0000	0	0	460	290	1140	3
1:45	02:10	6005	6012	7	Sliding	0.42	16.80	50		0	320	460	150	950	3
2:10	03:00	6012	6066	54	Rotating	0.83	64.80	23	50.0000	0	0	460	300	1200	3
3:15	04:30	6066	6127	61	Rotating	1.25	48.8	25	65.0000	0	0	460	330	1180	3
4:30	05:25	6127	6133	6	Sliding	0.92	6.55	50		0	270	460	150	1050	3
5:25	06:00	6133	6158	25	Rotating	0.58	42.86	15	65.0000	0	0	460	200	1100	3
6:15	07:30	6158	6250	92	Rotating	1.25	73.6	20	65.0000	0	0	460	250	1300	3
7:45	08:45	6250	6341	91	Rotating	1	91.00	20	65.0000	0	0	460	200	1200	3
9:00	09:30	6341	6433	92	Rotating	0.5	184.0	20	65.0000	0	0	460	200	1200	3
9:45	10:45	6433	6525	92	Rotating	1	92.00	20	65.0000	0	0	460	200	1300	3
11:00	12:00	6525	6617	92	Rotating	1	92.00	25	65.0000	0	0	460	200	1300	3
12:45	13:30	6617	6647	30	Rotating	0.75	40	20	65.0000	0	0	460	200	1300	3
13:30	14:00	6647	6655	8	Sliding	0.5	16.0	35		0	270	460	150	1200	3
14:00	14:15	6655	6709	54	Rotating	0.25	216	25	65.0000	0	0	460	250	1300	3
14:30	15:00	6709	6739	30	Rotating	0.5	60.0	20	65.0000	0	0	460	200	1300	3
15:00	16:15	6739	6751	12	Sliding	1.25	9.6	60		0	270	460	200	1300	3
16:15	16:45	6751	6801	50	Rotating	0.5	100.0	20	65.0000	0	0	460	200	1300	3
17:00	18:15	6801	6893	92	Rotating	1.25	73.6	20	65.0000	0	0	460	280	1280	3
18:30	20:40	6893	6984	91	Rotating	2.17	42.00	24	65.0000	0	0	460	200	1300	3
20:55	21:35	6984	7015	31	Rotating	0.67	46.50	25	65.0000	0	0	460	200	1350	3
21:35	22:20	7015	7021	6	Sliding	0.75	8	45		0	180	460	100	1200	3
22:20	23:59	7021	7045	24	Rotating	1.65	14.55	25	65.0000	0	0	460	300	1500	3

Totals: 1107.00 20.48

Saturday, March 01, 2014

1:00	02:45	7045	7076	31	Rotating	1.75	17.71	25	65.0000	0	0	460	250	1500	3
4:00	05:05	7076	7081	5	Sliding	1.08	4.62	40		0	180	460	200	1600	3
7:30	08:15	7081	7096	15	Sliding	0.75	20	60		0	180	460	200	1600	3
8:15	08:30	7096	7106	10	Rotating	0.25	40	20	65.0000	0	0	460	100	1600	3
8:30	09:00	7106	7111	5	Sliding	0.5	10.0	60		0	180	460	100	1600	3
9:00	10:00	7111	7168	57	Rotating	1	57.00	20	65.0000	0	0	460	200	1700	3
10:45	11:30	7168	7198	30	Rotating	0.75	40	20	65.0000	0	0	460	100	1700	3
11:30	13:00	7198	7208	10	Sliding	1.5	6.67	25		0	180	460	200	1800	3
13:00	14:30	7208	7229	21	Rotating	1.5	14.0	30	65.0000	0	0	460	200	2800	3
14:30	15:00	7229	7230	1	Sliding	0.5	2.0	60		0	180	460	200	1800	3
18:00	19:00	7230	7234	4	Sliding	1	4.00	50		0	180	460	270	1870	3

Totals: 189.00 10.58

Sunday, March 02, 2014

11:00	11:30	7234	7242	8	Sliding	0.5	16.0	20		0	180	460	200	1800	4
11:30	12:00	7242	7287	45	Rotating	0.5	90.0	15	65.0000	0	0	460	200	1800	4
12:45	14:45	7287	7380	93	Rotating	2	46.50	10	65.0000	0	0	460	200	2300	4
15:00	15:45	7380	7472	92	Rotating	0.75	122.67	20	65.0000	0	0	460	200	2500	4
16:00	16:15	7472	7484	12	Sliding	0.25	48	30		0	10	460	100	2500	4
16:15	16:30	7484	7502	18	Rotating	0.25	72	20	40.0000	0	0	460	200	2600	4
16:30	16:45	7502	7510	8	Sliding	0.25	32	29		0	350	460	100	2500	4
16:45	17:30	7510	7563	53	Rotating	0.75	70.67	20	40.0000	0	0	460	200	2600	4
17:45	18:00	7563	7571	8	Sliding	0.25	32	35		0	0	460	100	2450	4
18:00	18:30	7571	7655	84	Rotating	0.5	168.0	18	40.0000	0	0	460	200	2650	4
18:45	19:45	7655	7683	28	Rotating	1	28.00	18	40.0000	0	0	460	250	2650	4

Totals: 449.00 7.00

Monday, March 03, 2014

15:00	15:30	7683	7691	8	Sliding	0.5	16.0	25		0	270	460	100	2200	4
15:30	16:00	7691	7750	59	Rotating	0.5	118.0	20	60.0000	0	0	460	200	2500	4
17:15	17:45	7750	7756	6	Sliding	0.5	12.0	45		0	360	460	100	2200	4
17:45	18:25	7756	7845	89	Rotating	0.67	133.50	22	40.0000	0	0	460	300	2400	4
20:00	20:40	7845	7853	8	Sliding	0.67	12.00	35		0	45	460	100	2000	4
20:40	21:30	7853	7940	87	Rotating	0.83	104.40	15	40.0000	0	0	460	200	2150	4
21:50	22:30	7940	7947	7	Sliding	0.67	10.50	35		0	40	460	150	2250	4
22:30	22:50	7947	7971	24	Rotating	0.33	72.00	15	40.0000	0	0	460	150	2300	4
22:50	23:05	7971	7975	4	Sliding	0.25	16	40		0	0	460	100	2100	4
23:05	23:50	7975	8035	60	Rotating	0.75	80	14	40.0000	0	0	460	100	2280	4

Totals: 352.00 5.67

Tuesday, March 04, 2014

0:00	00:35	8035	8047	12	Sliding	0.58	20.57	30		0	10	460	100	2300	4
0:35	01:10	8047	8098	51	Rotating	0.58	87.43	25	40.0000	0	0	460	200	2450	4
1:10	01:30	8098	8112	14	Sliding	0.33	42.00	35		0	30	460	100	2300	4
1:30	01:50	8112	8130	18	Rotating	0.33	54.00	23	40.0000	0	0	460	200	2450	4
2:00	02:25	8130	8161	31	Rotating	0.42	74.40	24	40.0000	0	0	460	200	2500	4
2:25	02:50	8161	8169	8	Sliding	0.42	19.20	40		0	0	460	100	2300	4
2:50	03:30	8169	8224	55	Rotating	0.67	82.50	22	40.0000	0	0	460	150	2500	4
3:40	04:00	8224	8256	32	Rotating	0.33	96.00	20	40.0000	0	0	460	330	2680	4
4:00	04:24	8256	8264	8	Sliding	0.4	20.0	35		0	0	460	130	2480	4
4:24	05:00	8264	8319	55	Rotating	0.6	91.67	25	40.0000	0	0	460	200	2580	4
5:10	05:50	8319	8414	95	Rotating	0.67	142.50	25	65.0000	0	0	460	160	2560	4
6:00	07:00	8414	8509	95	Rotating	1	95.00	25	65.0000	0	0	460	200	2300	4
7:15	07:30	8509	8572	63	Rotating	0.25	252	25	65.0000	0	0	460	200	2400	4

Totals: 537.00 6.58



Digital Drilling Data
Systems, LLC

5" MWD MD Gamma Ray Log

(Scale: 5" : 100' (10'))

Company: SandRidge Energy

State: Kansas

Well: Nona 3204 1-23H

County: Sumner

Field: Upper Miss

Country: USA

Well ID: 15-191-22719-01-00

Job Number: DR1402027

Location: Sec 23 - 32S - 4W

Elev KB: 1241' MSL

Operator 1: Blake Reid

Elev DF: 1241' MSL

Operator 2: Jack Chapman

Elev GL: 1223' MSL

Comment 1: 5" = 100' MD Gamma API vs ROP (fph)

Comment 2: Rig: Lariat #45

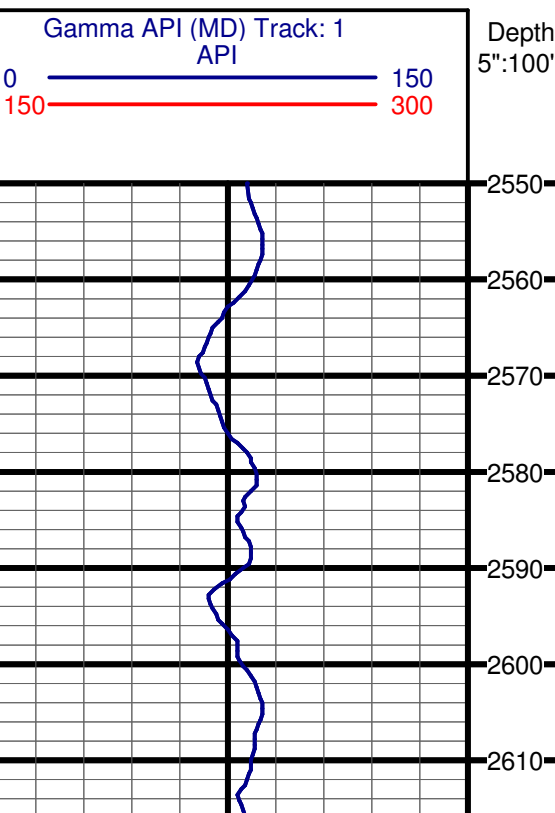
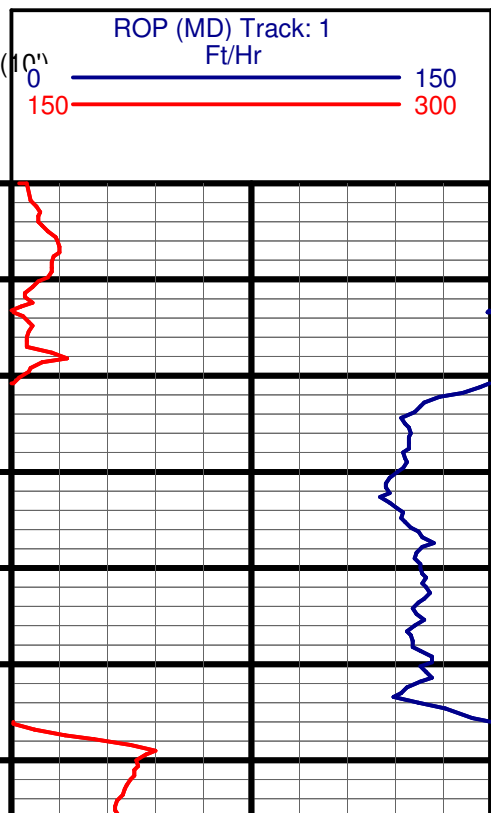
Comment 3: Latitude: N37 14 30.52 Longitude: W97 42 36.61

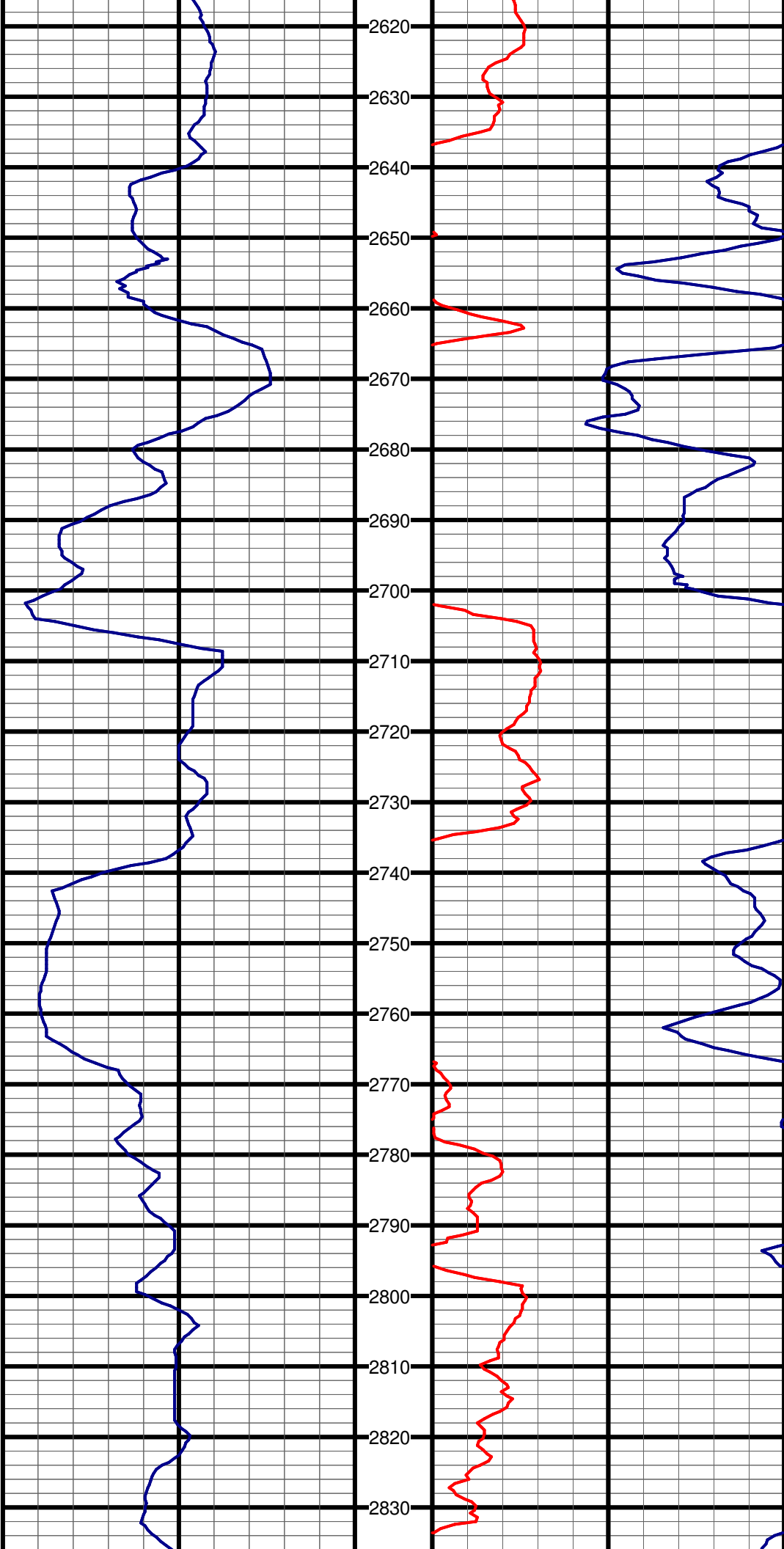
Comment 4: API Number: 15-191-22719-01-00

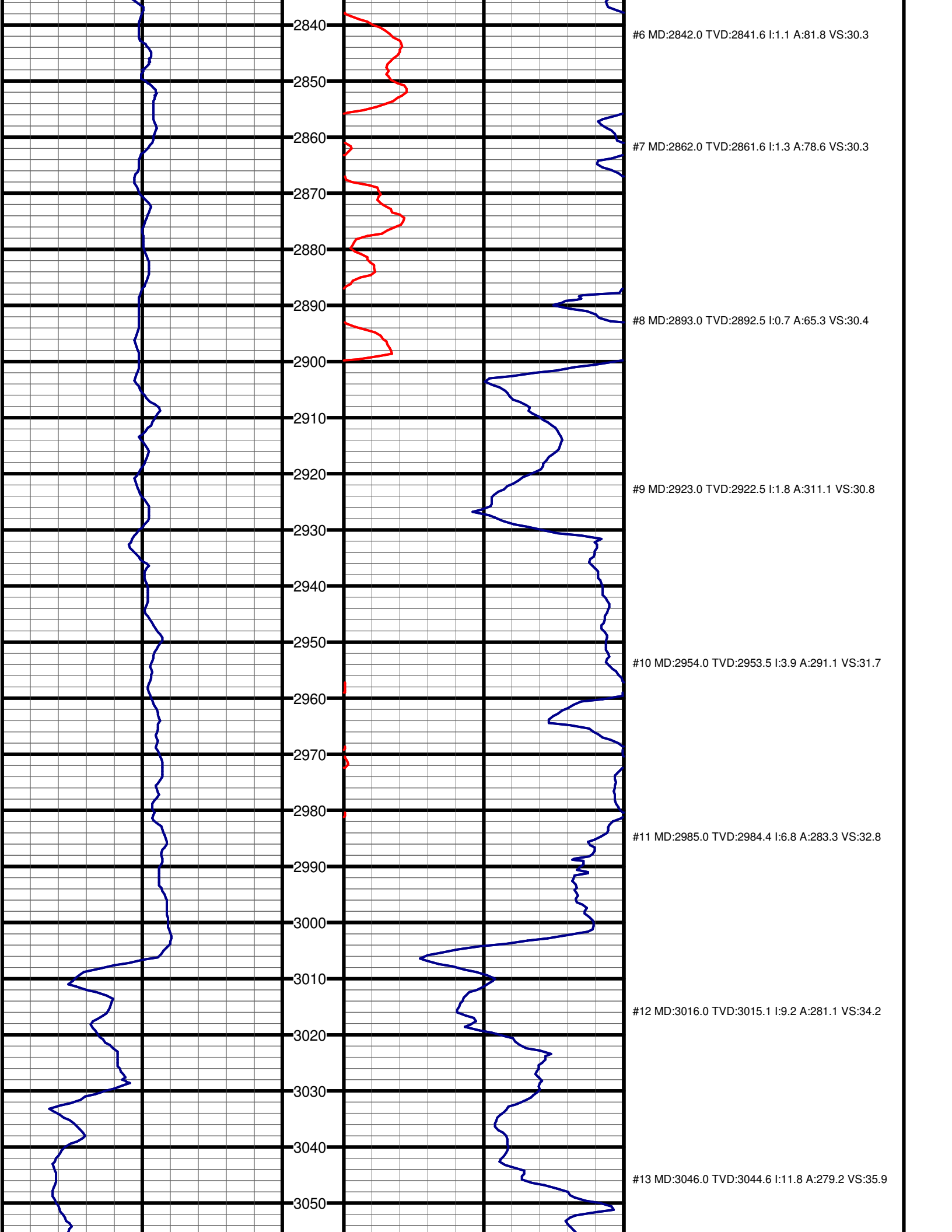
Comment 5: Spud Date: 2/16/2014 - TD Date: 3/4/2014

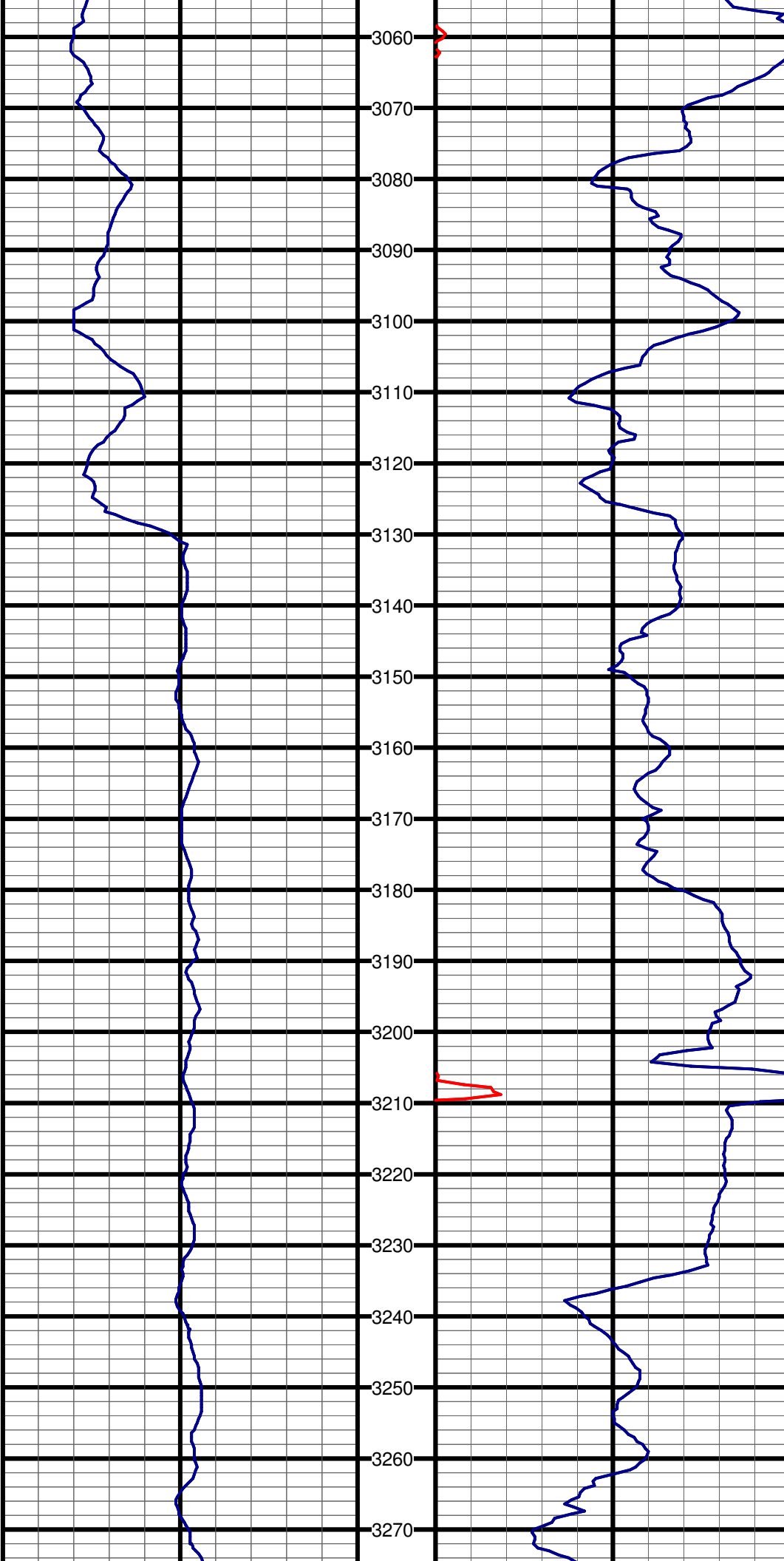
Hole Data				Casing Record		
Size	From	To	Size	From	To	
17.5"	0'	270'	13.325"	0'	270'	
8.75"	270'	4828'	7"	0'	4828'	
6.125"	4828'	8572'				

Tool Run Data		Run #1	Run #2	Run #3	Run #4	Run #5
Tool S/N	PGM 082	PGM 082	PGM 082	PGM 082	PGM 082	
Cal Factor	4.75"	4.75	2.75	2.75	2.75	
Gamma Offset	45'	53'	37'	37'	37'	
Start Depth	270'	2899'	4828'	7234'		
Start Date	2/16/2014	2/19/2014	2/25/2014	3/2/2014		
Start Time	16:30	5:30	23:00	4:30		
End Depth	2899'	4828'	7234'	8572'		
End Date	2/19/2014	2/22/2014	3/2/2014	3/4/2014		
End Time	2:00	8:00	2:30	8:00		









#14 MD:3076.0 TVD:3073.8 I:14.3 A:277.6 VS:37.7

#15 MD:3107.0 TVD:3103.7 I:16.7 A:274.2 VS:39.6

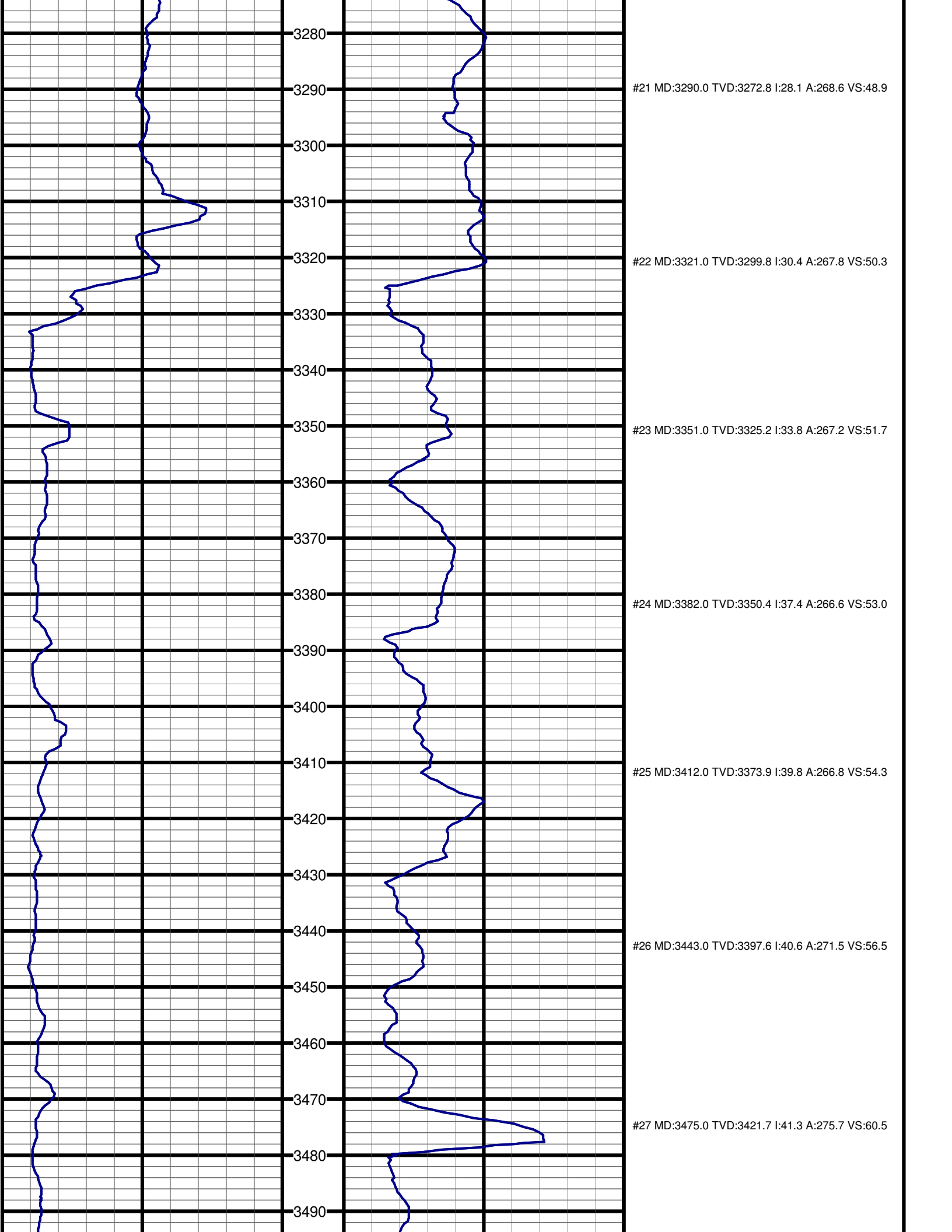
#16 MD:3137.0 TVD:3132.2 I:18.6 A:271.7 VS:41.2

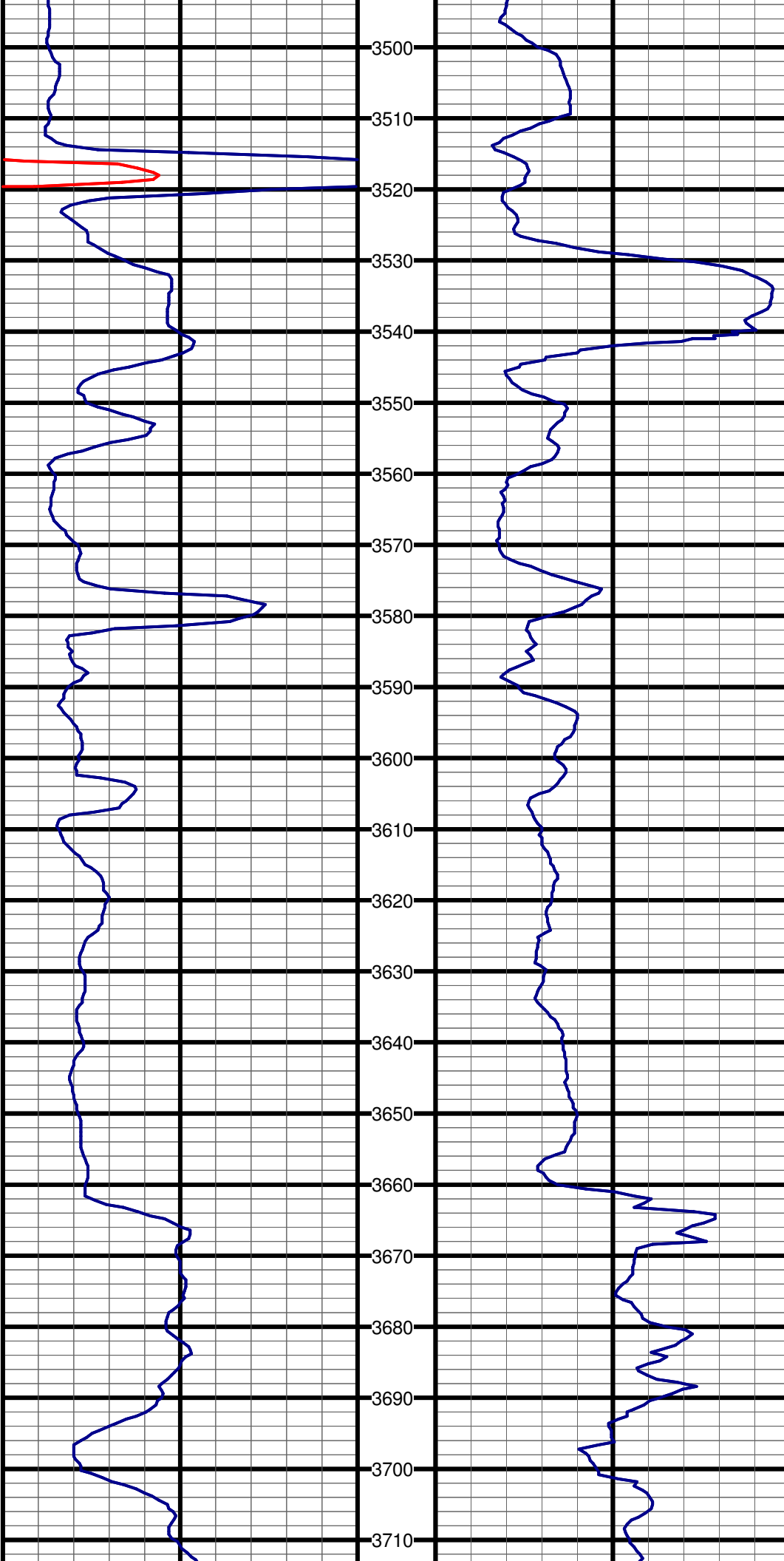
#17 MD:3168.0 TVD:3161.5 I:20.4 A:270.3 VS:42.6

#18 MD:3198.0 TVD:3189.4 I:22.2 A:270.5 VS:44.1

#19 MD:3229.0 TVD:3217.9 I:24.0 A:270.1 VS:45.7

#20 MD:3260.0 TVD:3246.0 I:25.8 A:269.8 VS:47.4





#28 MD:3505.0 TVD:3444.2 I:41.6 A:278.4 VS:65.4

#29 MD:3536.0 TVD:3467.4 I:41.5 A:281.3 VS:71.5

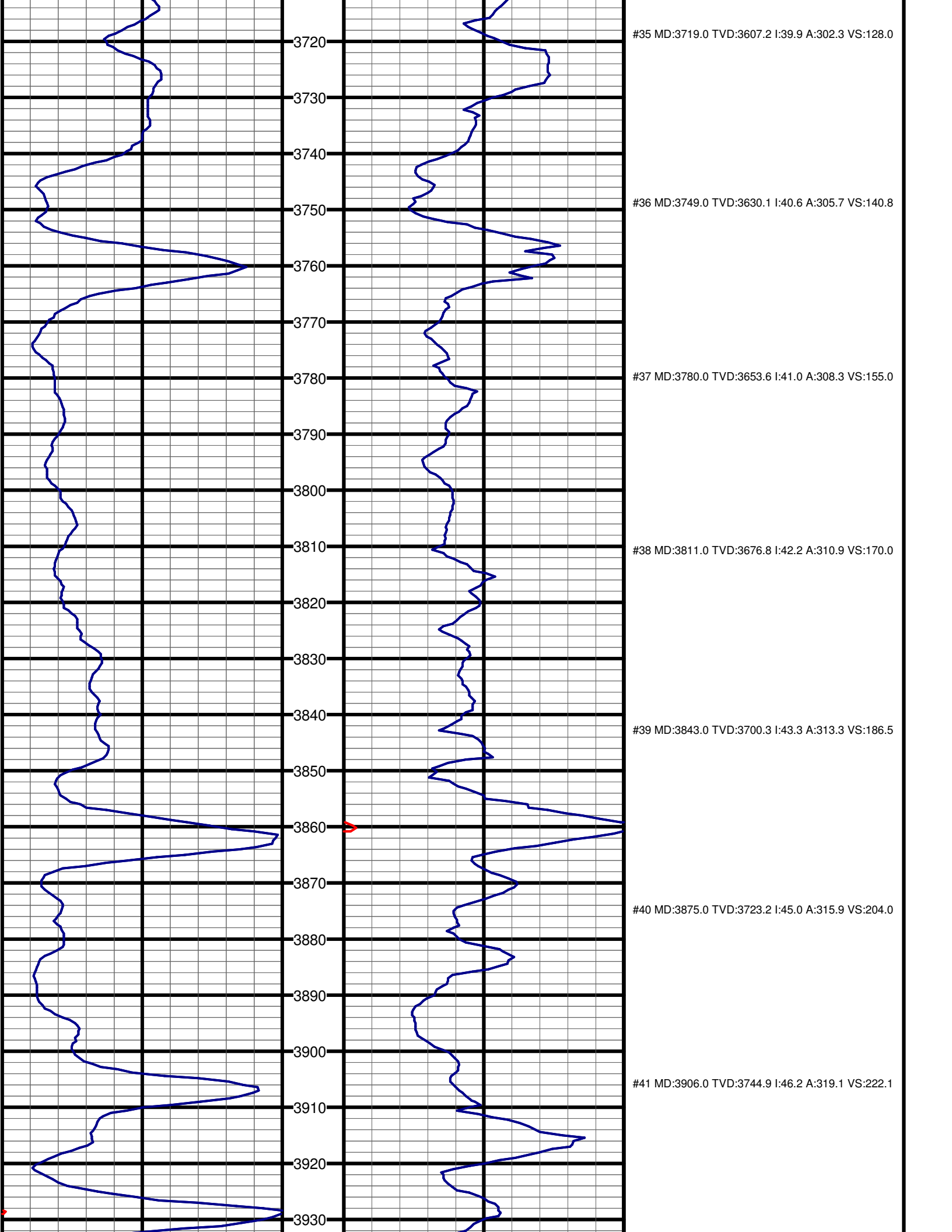
#30 MD:3566.0 TVD:3490.0 I:40.8 A:284.2 VS:78.2

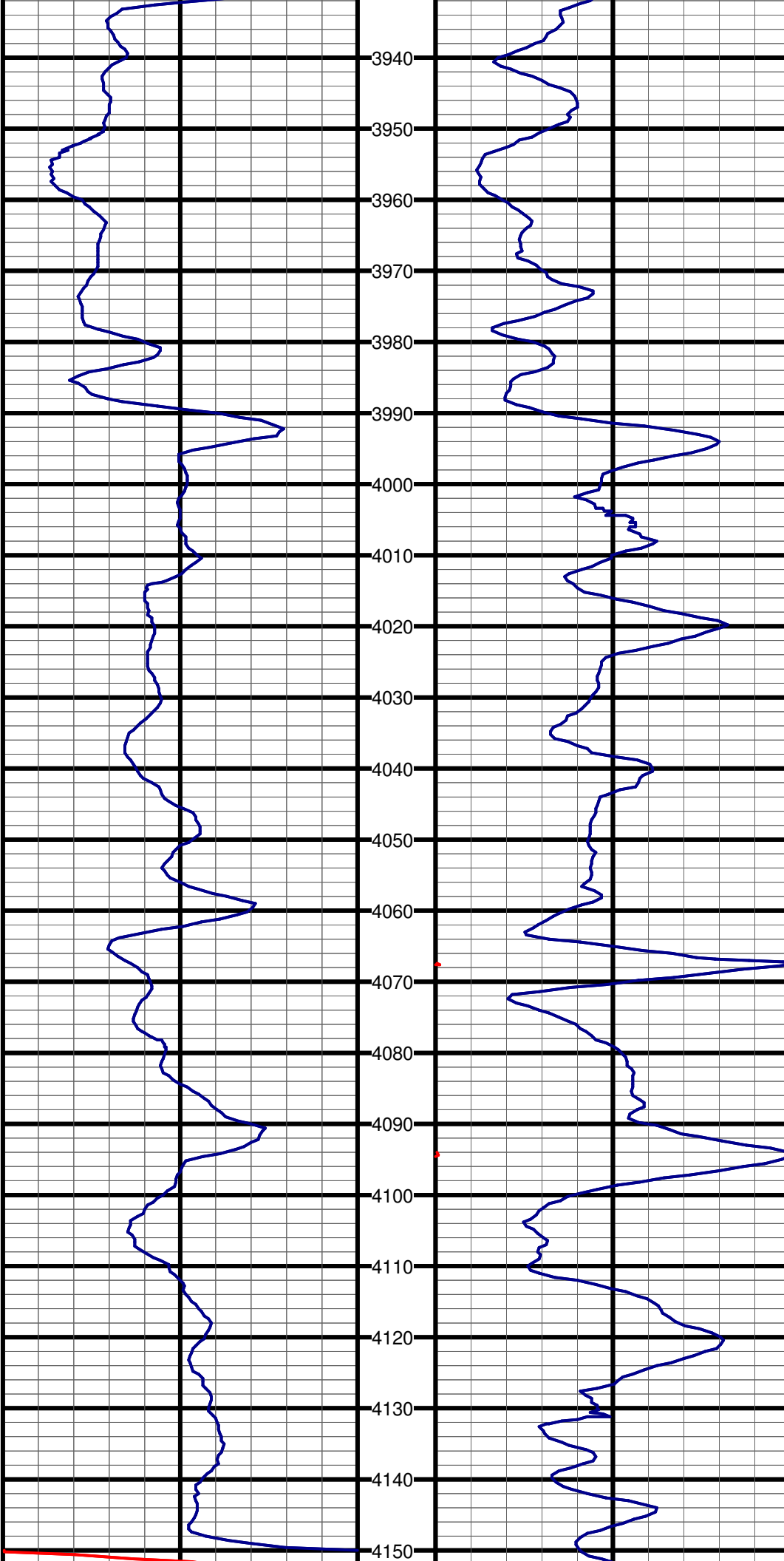
#31 MD:3597.0 TVD:3513.5 I:40.5 A:287.3 VS:86.1

#32 MD:3627.0 TVD:3536.4 I:40.0 A:291.6 VS:94.8

#33 MD:3658.0 TVD:3560.3 I:39.5 A:295.7 VS:105.0

#34 MD:3688.0 TVD:3583.4 I:39.7 A:298.8 VS:115.9





#42 MD:3938.0 TVD:3766.9 I:47.3 A:322.5 VS:241.9

#43 MD:3970.0 TVD:3788.1 I:49.5 A:325.0 VS:262.8

#44 MD:4001.0 TVD:3807.7 I:52.0 A:326.9 VS:284.3

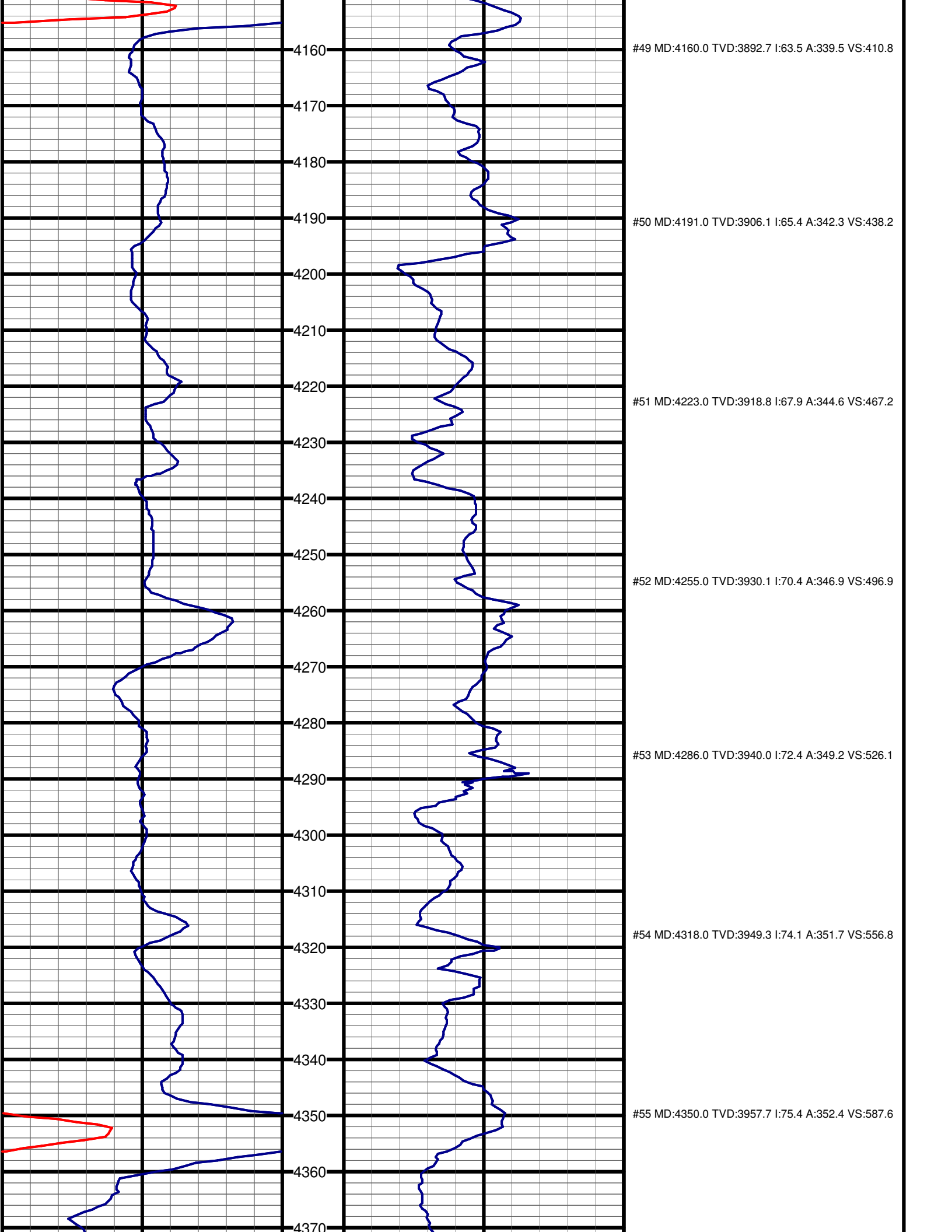
#45 MD:4033.0 TVD:3826.9 I:54.3 A:329.8 VS:307.6

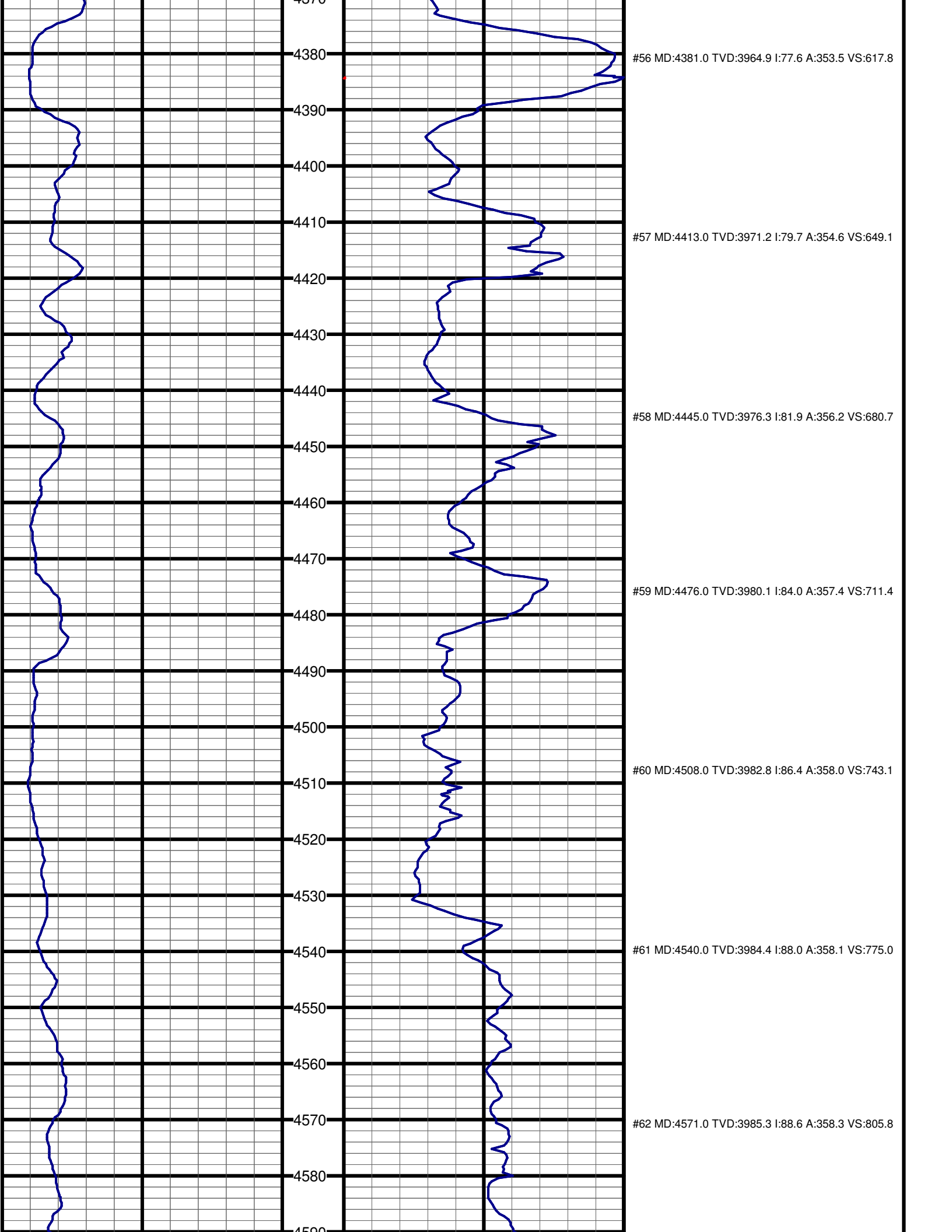
#46 MD:4065.0 TVD:3845.1 I:56.2 A:332.4 VS:332.0

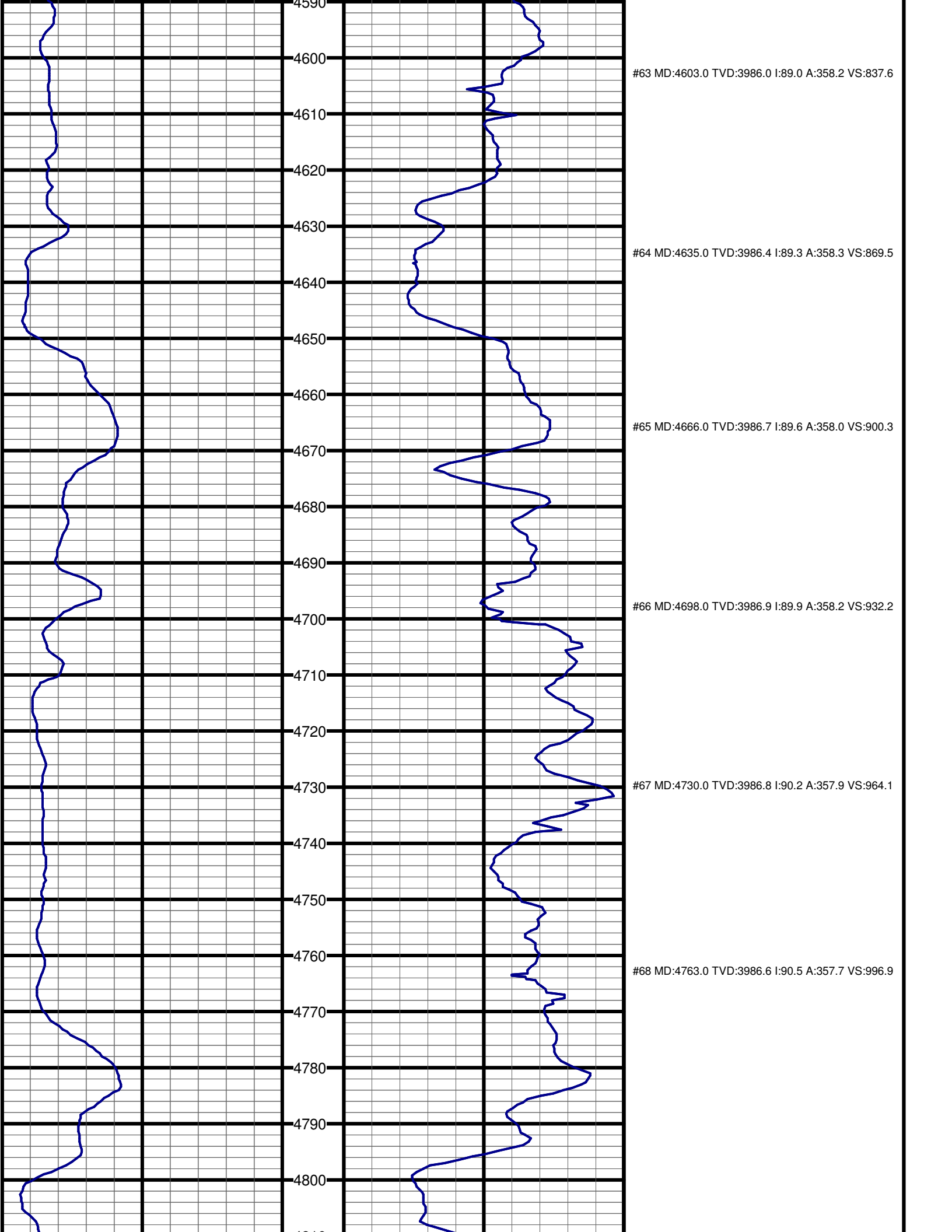
#47 MD:4096.0 TVD:3861.8 I:58.6 A:335.4 VS:356.8

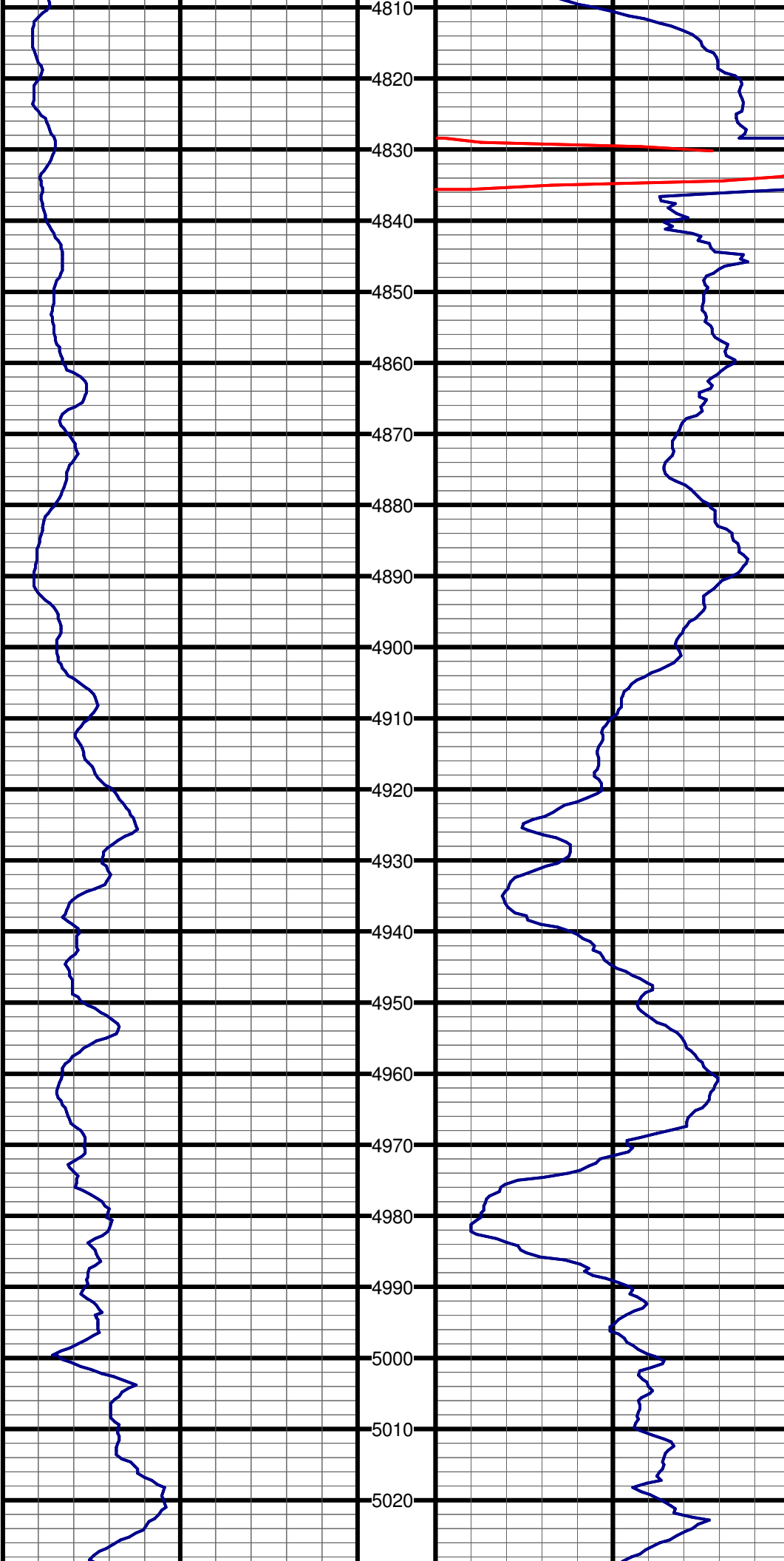
#48 MD:4128.0 TVD:3877.9 I:61.3 A:337.4 VS:383.3





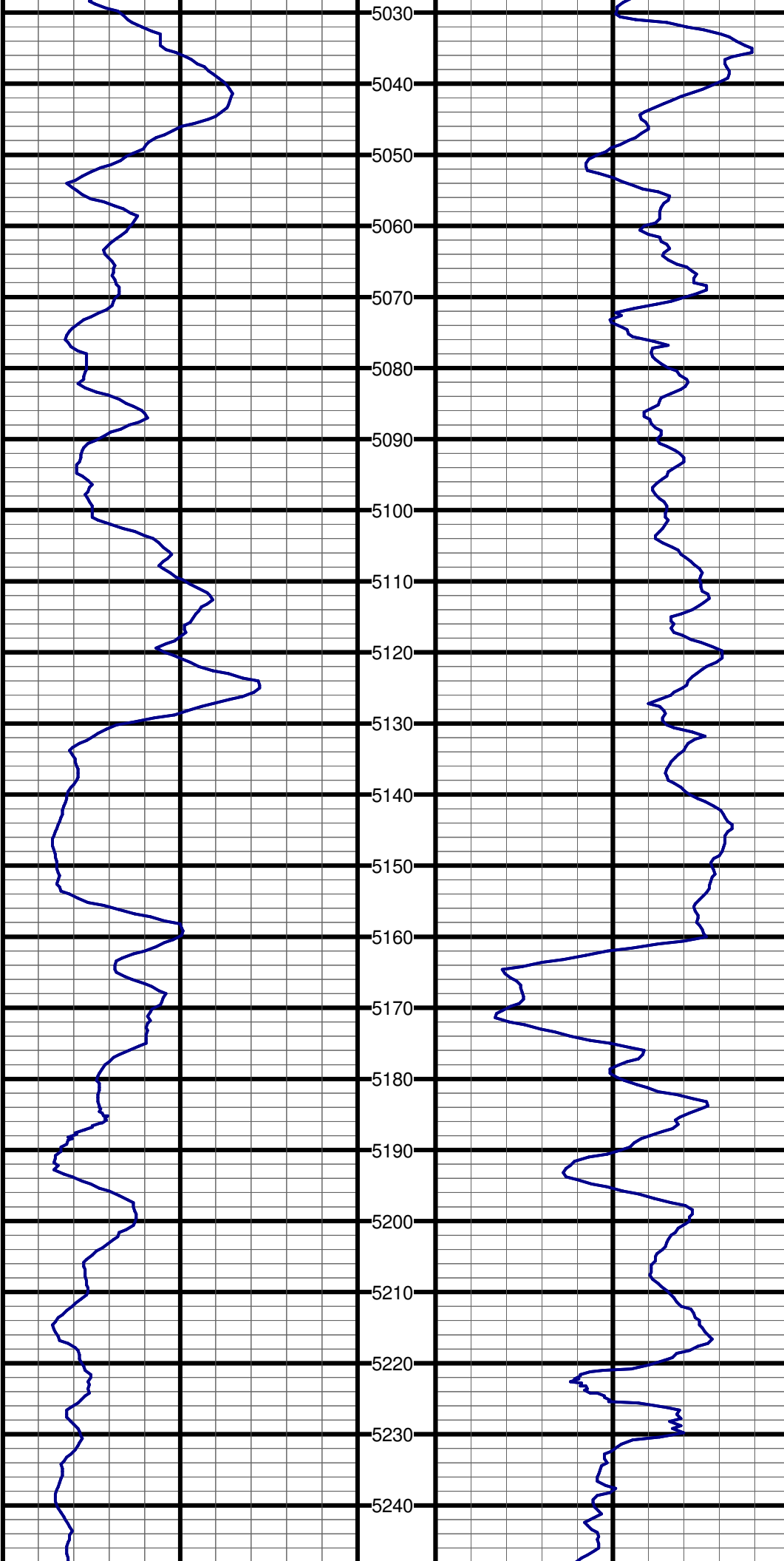






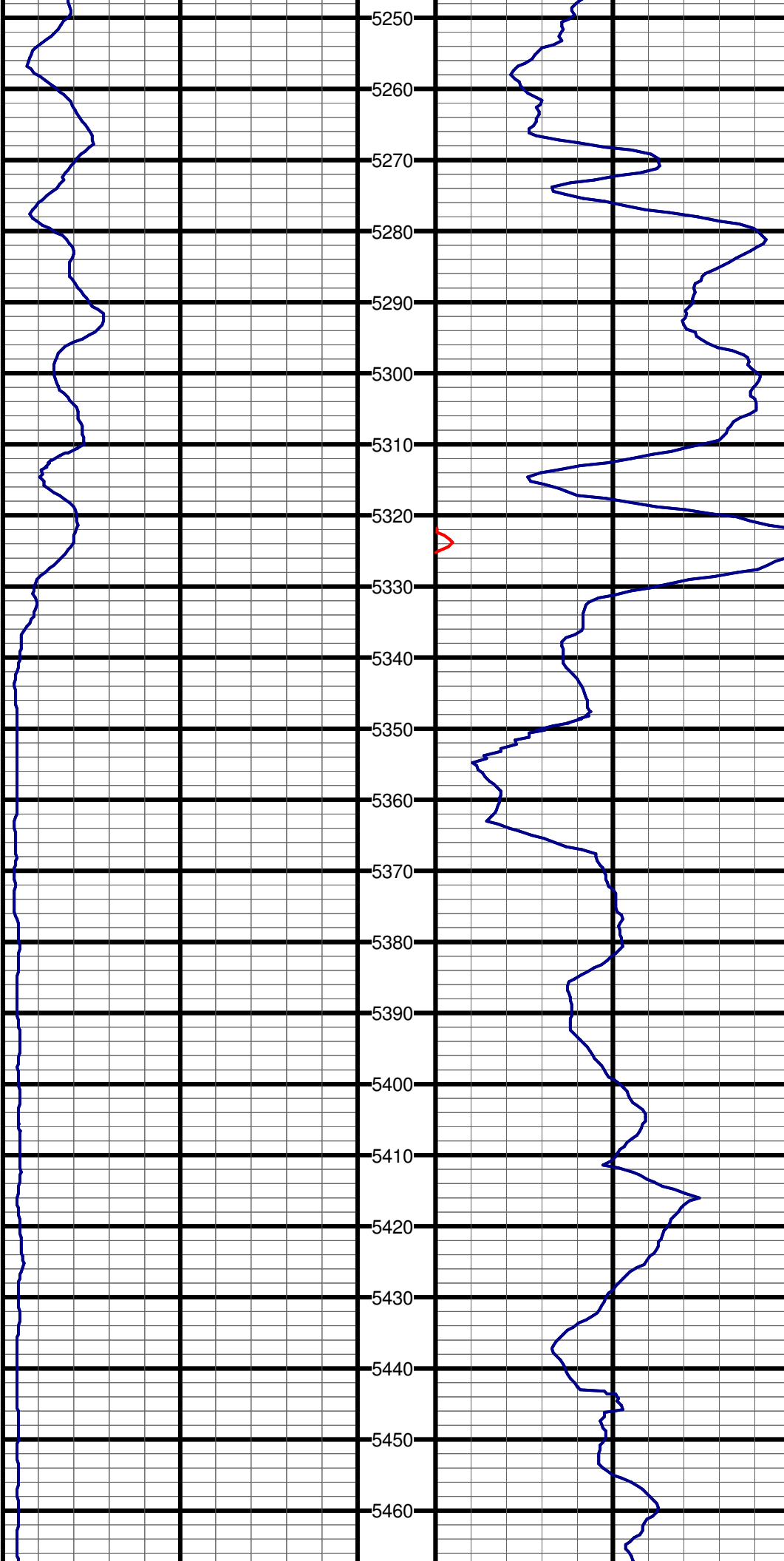
#69 MD:4887.0 TVD:3985.0 I:91.0 A:356.9 VS:1120.5

#70 MD:4982.0 TVD:3984.4 I:89.8 A:357.1 VS:1215.3



#71 MD:5077.0 TVD:3985.4 I:88.9 A:355.7 VS:1310.1

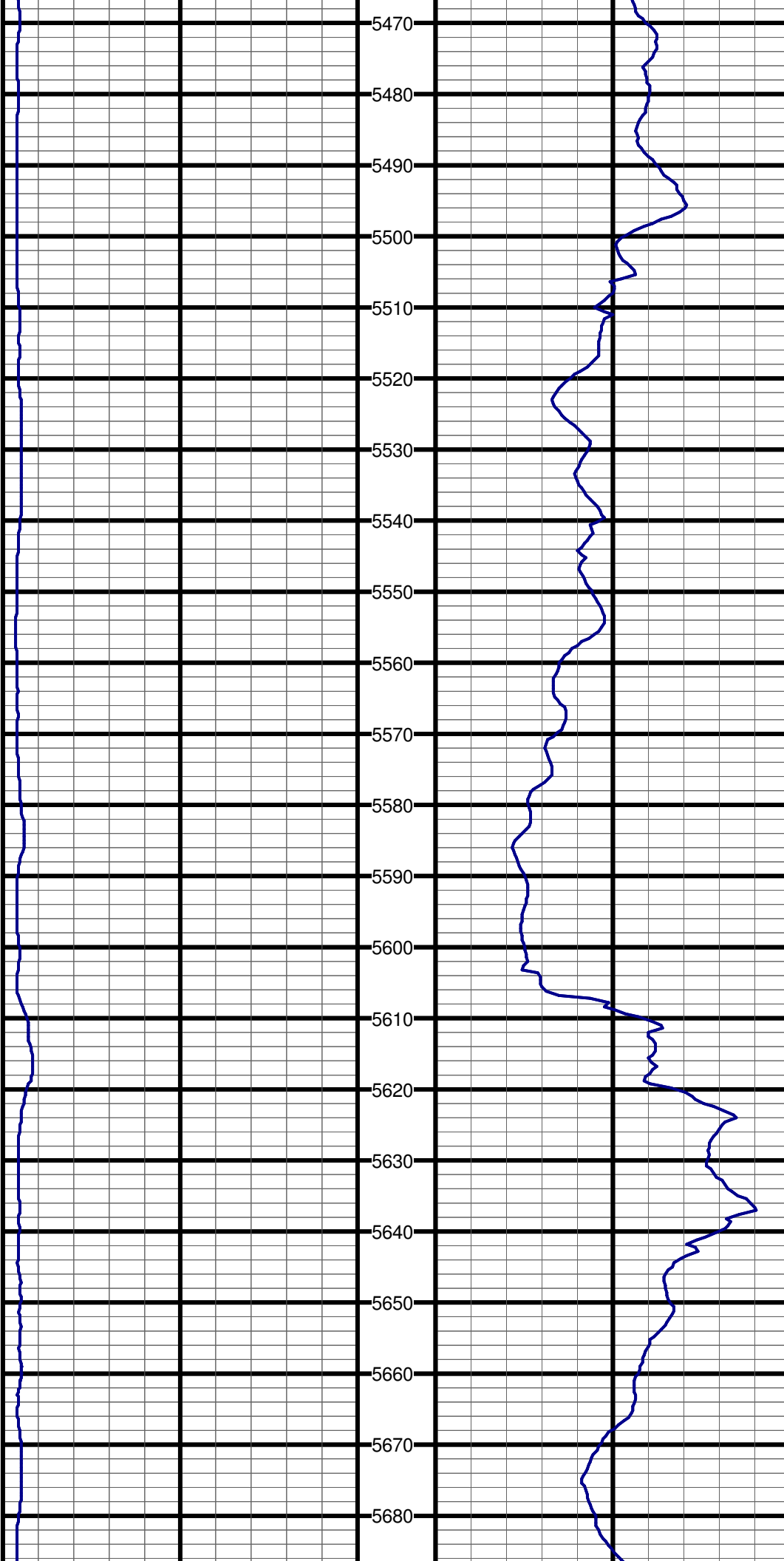
#72 MD:5172.0 TVD:3986.5 I:89.8 A:357.1 VS:1404.8



#73 MD:5267.0 TVD:3987.1 I:89.5 A:358.2 VS:1499.5

#74 MD:5362.0 TVD:3988.3 I:89.0 A:0.9 VS:1593.8

#75 MD:5457.0 TVD:3989.9 I:89.1 A:2.0 VS:1687.7



5470

5480

5490

5500

5510

5520

5530

5540

5550

5560

5570

5580

5590

5600

5610

5620

5630

5640

5650

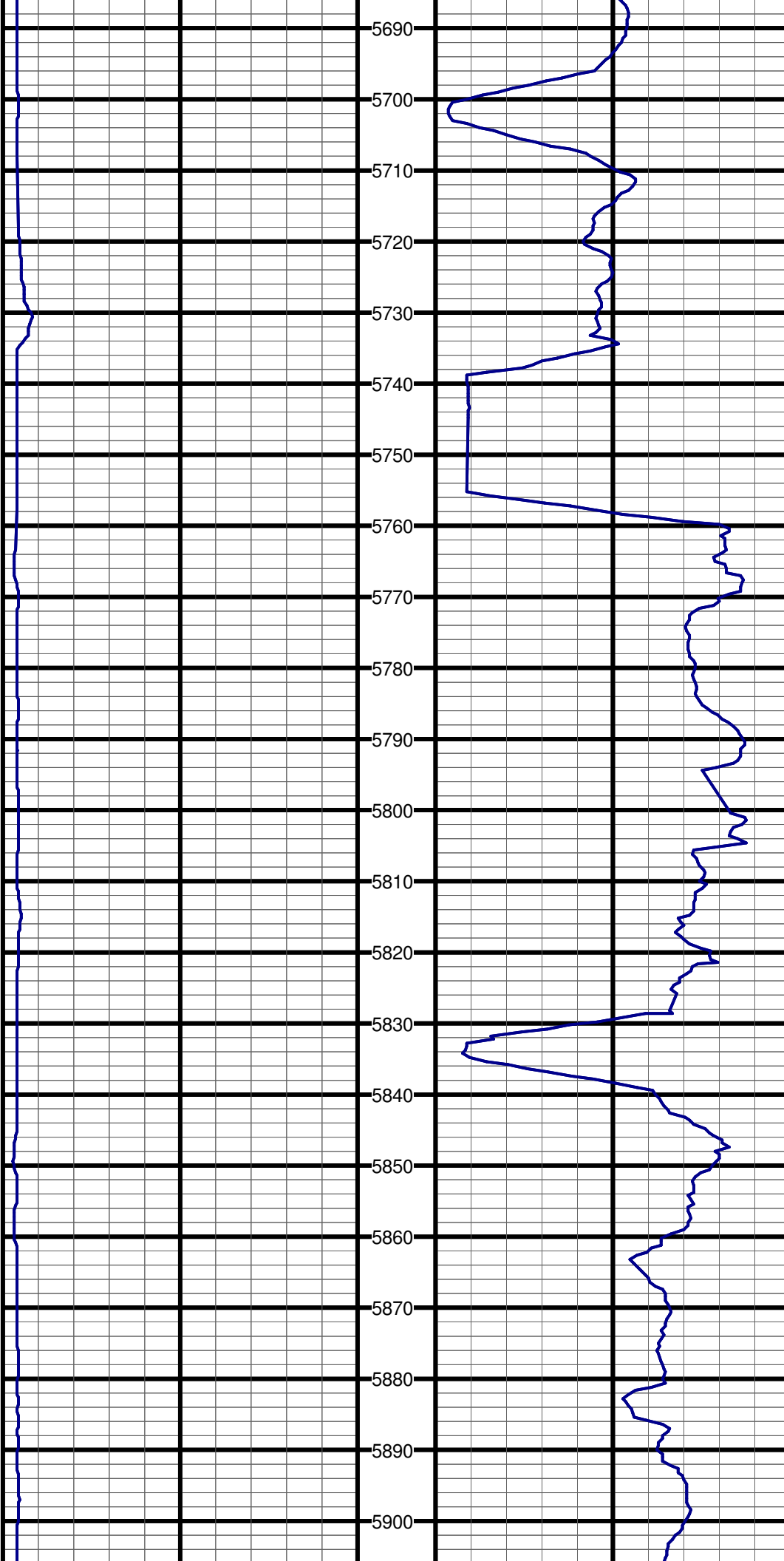
5660

5670

5680

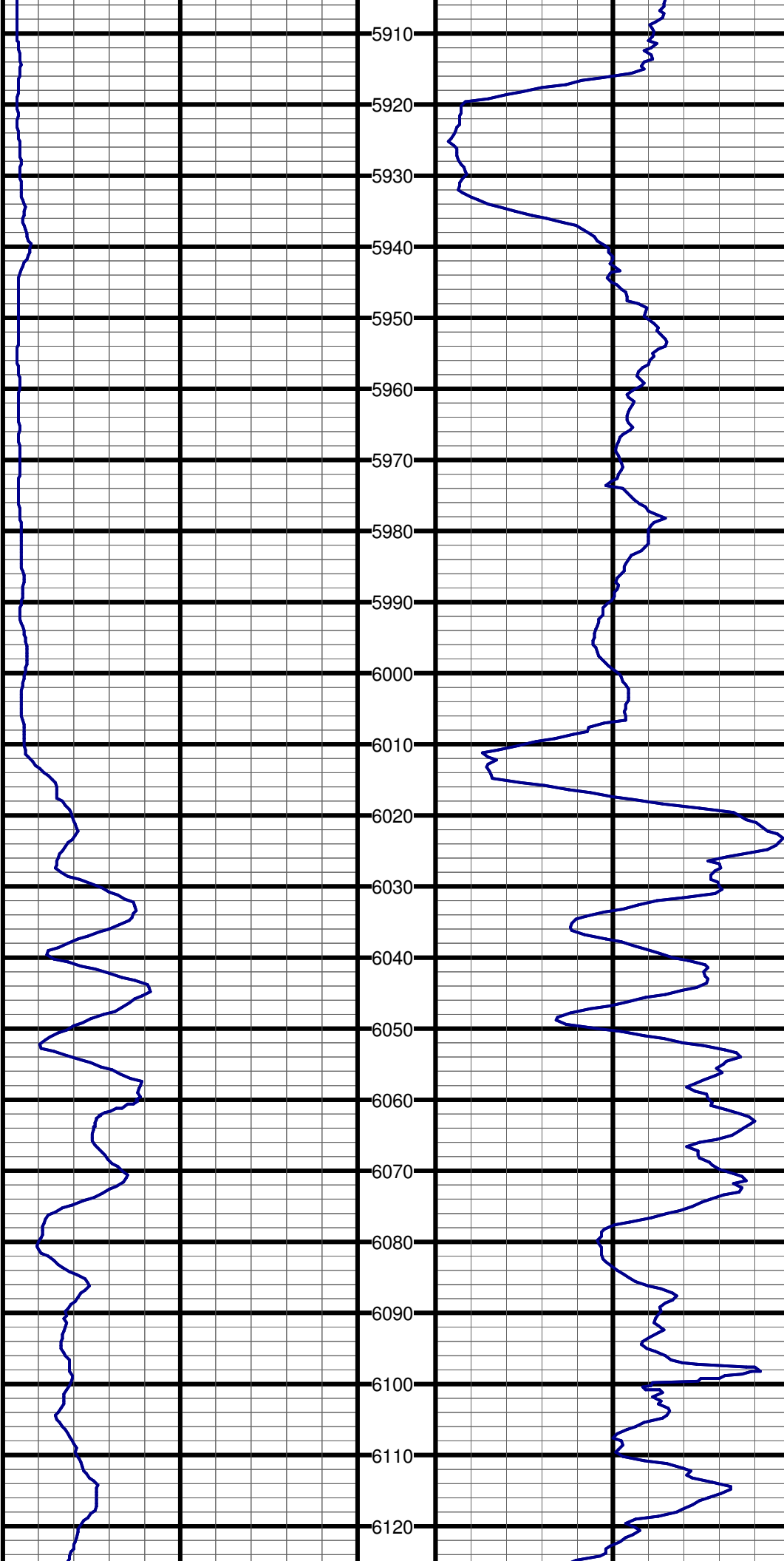
#76 MD:5552.0 TVD:3990.7 I:90.0 A:1.9 VS:1781.4

#77 MD:5647.0 TVD:3989.2 I:91.8 A:2.2 VS:1875.2



#78 MD:5742.0 TVD:3987.9 I:89.7 A:1.1 VS:1969.0

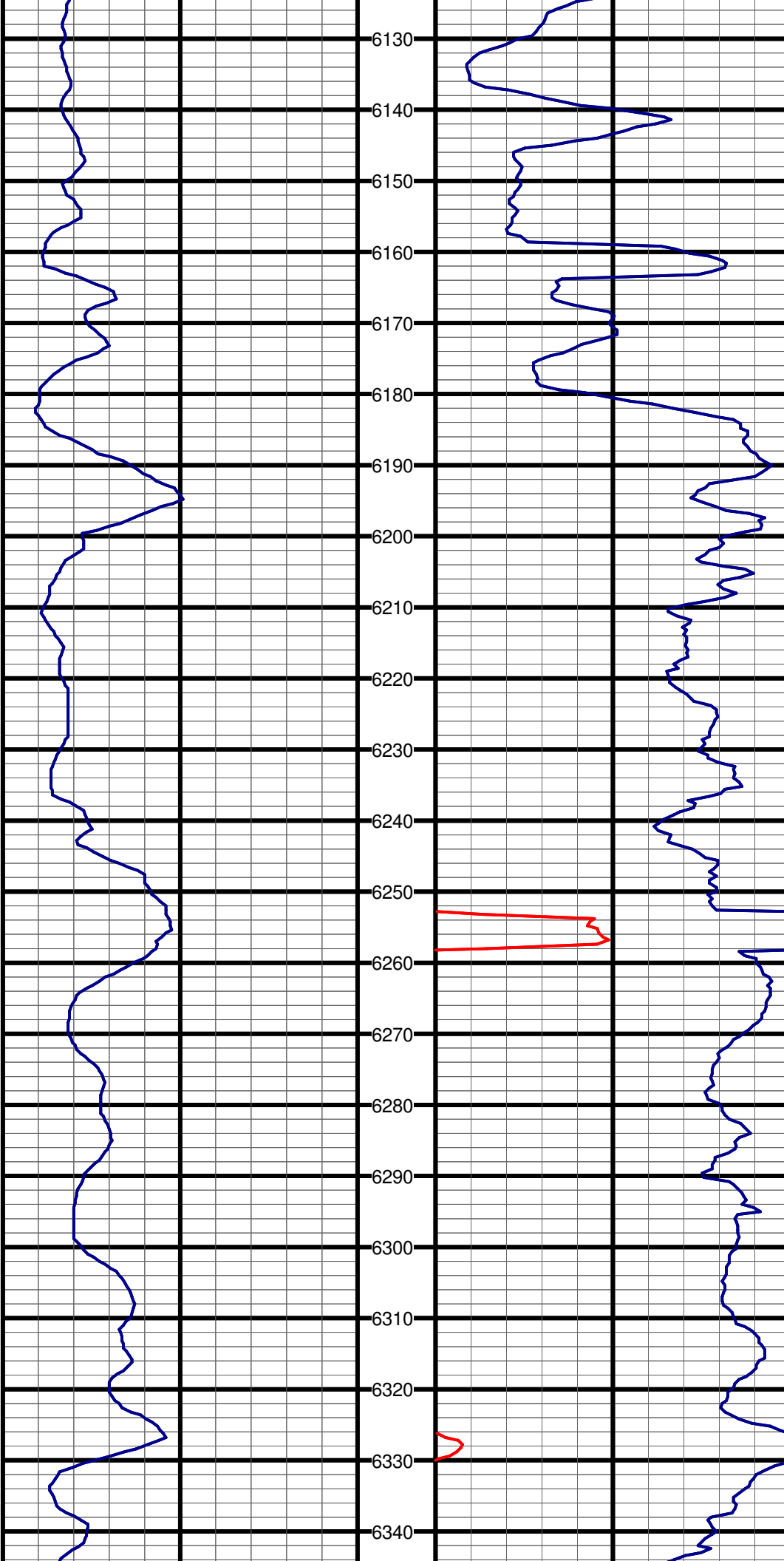
#79 MD:5833.0 TVD:3989.0 I:88.9 A:0.1 VS:2059.1



#80 MD:5925.0 TVD:3990.6 I:89.2 A:359.9 VS:2150.4

#81 MD:6017.0 TVD:3990.9 I:90.4 A:0.1 VS:2241.6

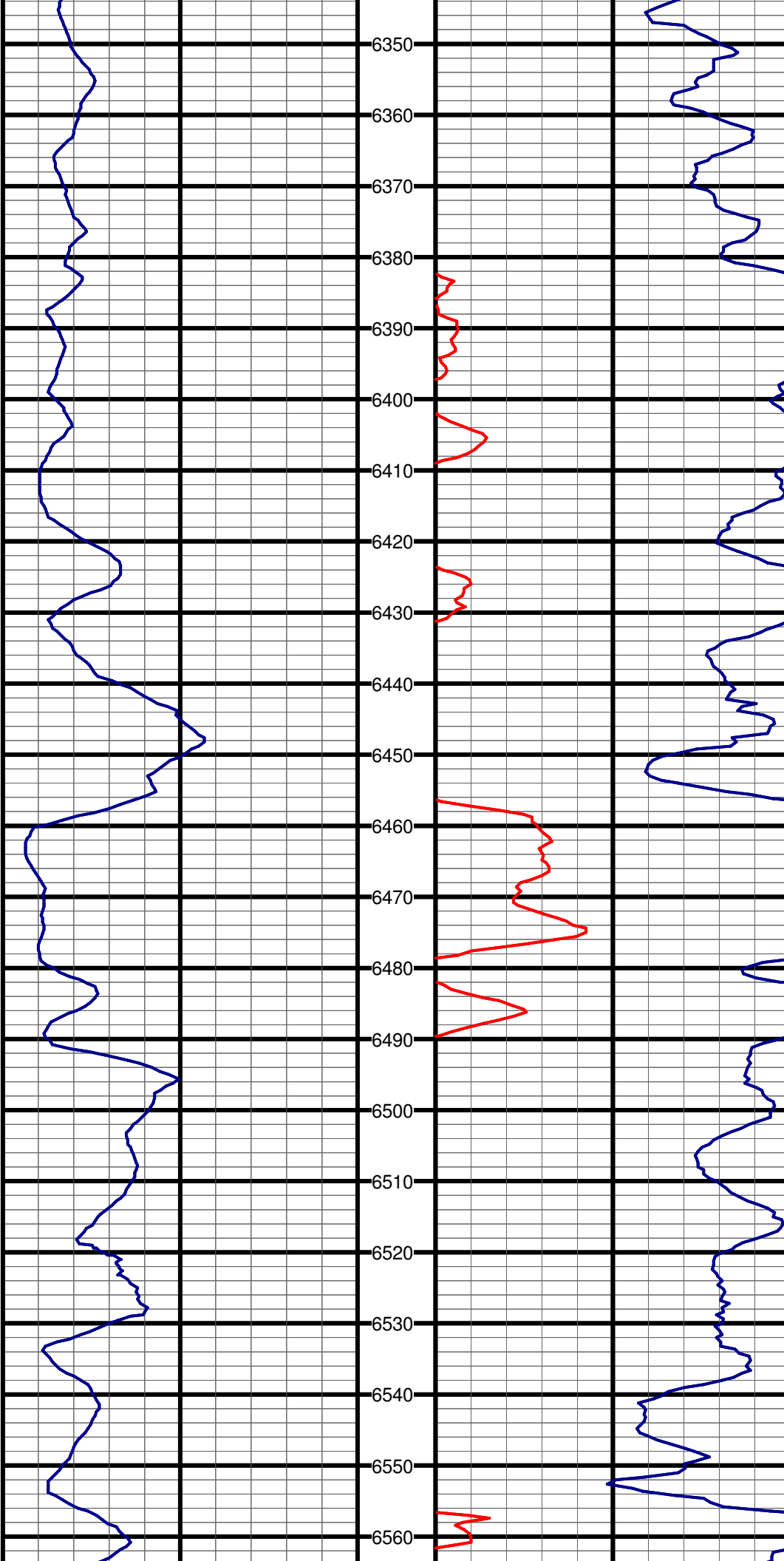
#82 MD:6109.0 TVD:3990.5 I:90.1 A:0.0 VS:2332.9



6130
6140
6150
6160
6170
6180
6190
6200
6210
6220
6230
6240
6250
6260
6270
6280
6290
6300
6310
6320
6330
6340

#83 MD:6201.0 TVD:3990.5 I:89.9 A:358.2 VS:2424.3

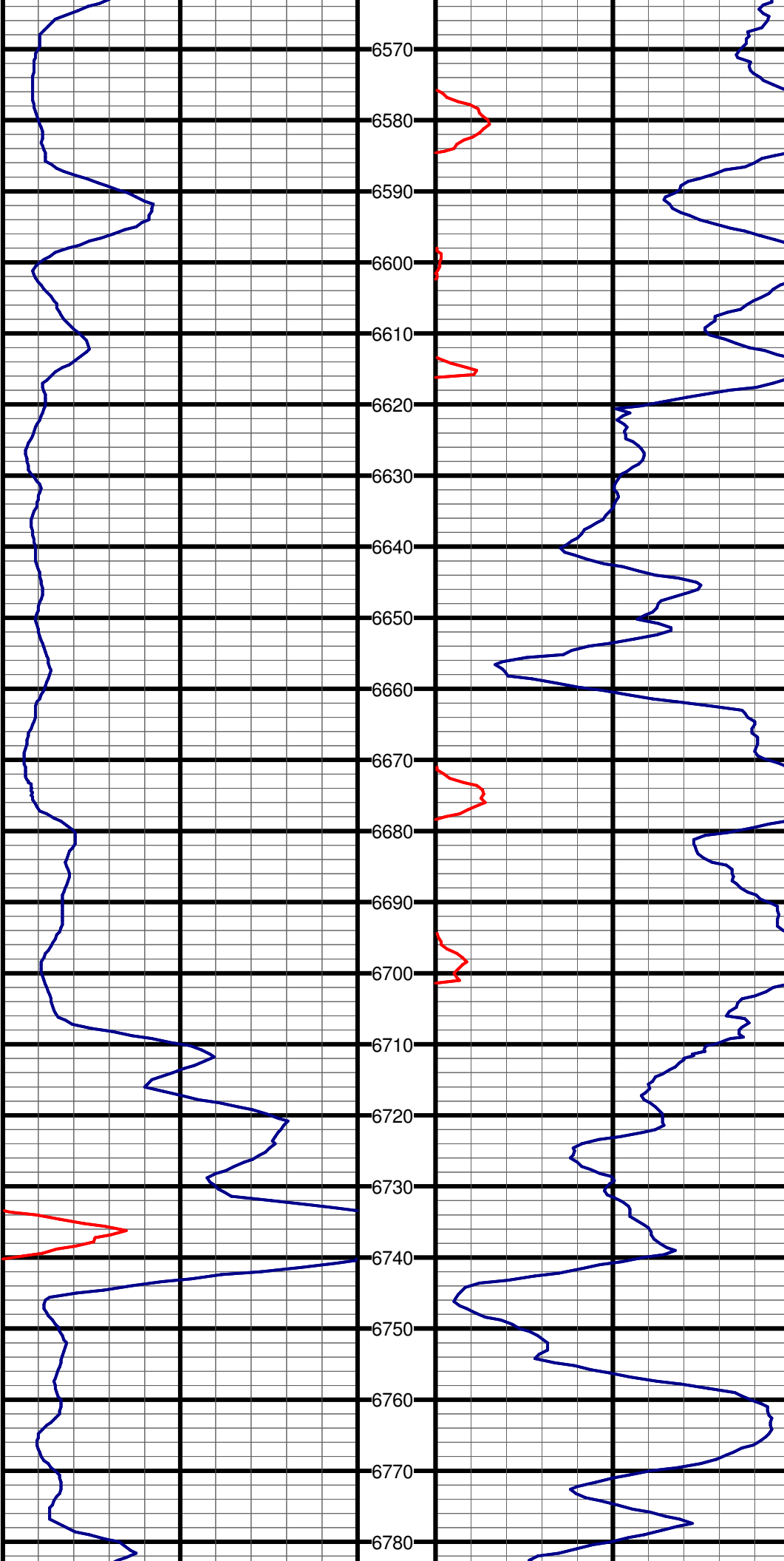
#84 MD:6292.0 TVD:3990.6 I:89.9 A:358.4 VS:2514.9



#85 MD:6384.0 TVD:3991.2 I:89.4 A:359.6 VS:2606.3

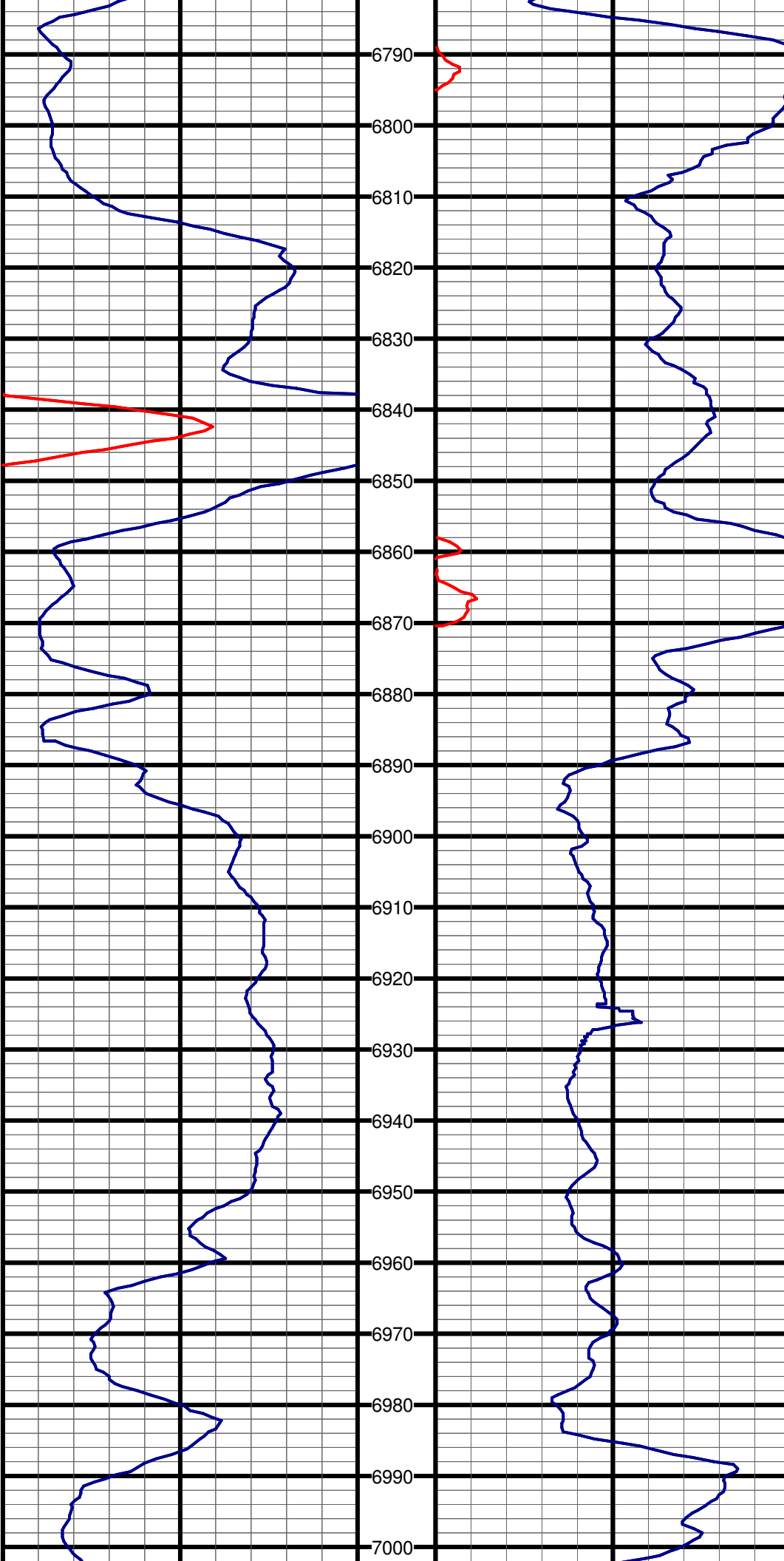
#86 MD:6476.0 TVD:3991.8 I:89.8 A:359.6 VS:2697.6

#87 MD:6568.0 TVD:3992.0 I:90.0 A:0.4 VS:2788.9



#88 MD:6660.0 TVD:3991.5 I:90.6 A:1.1 VS:2880.0

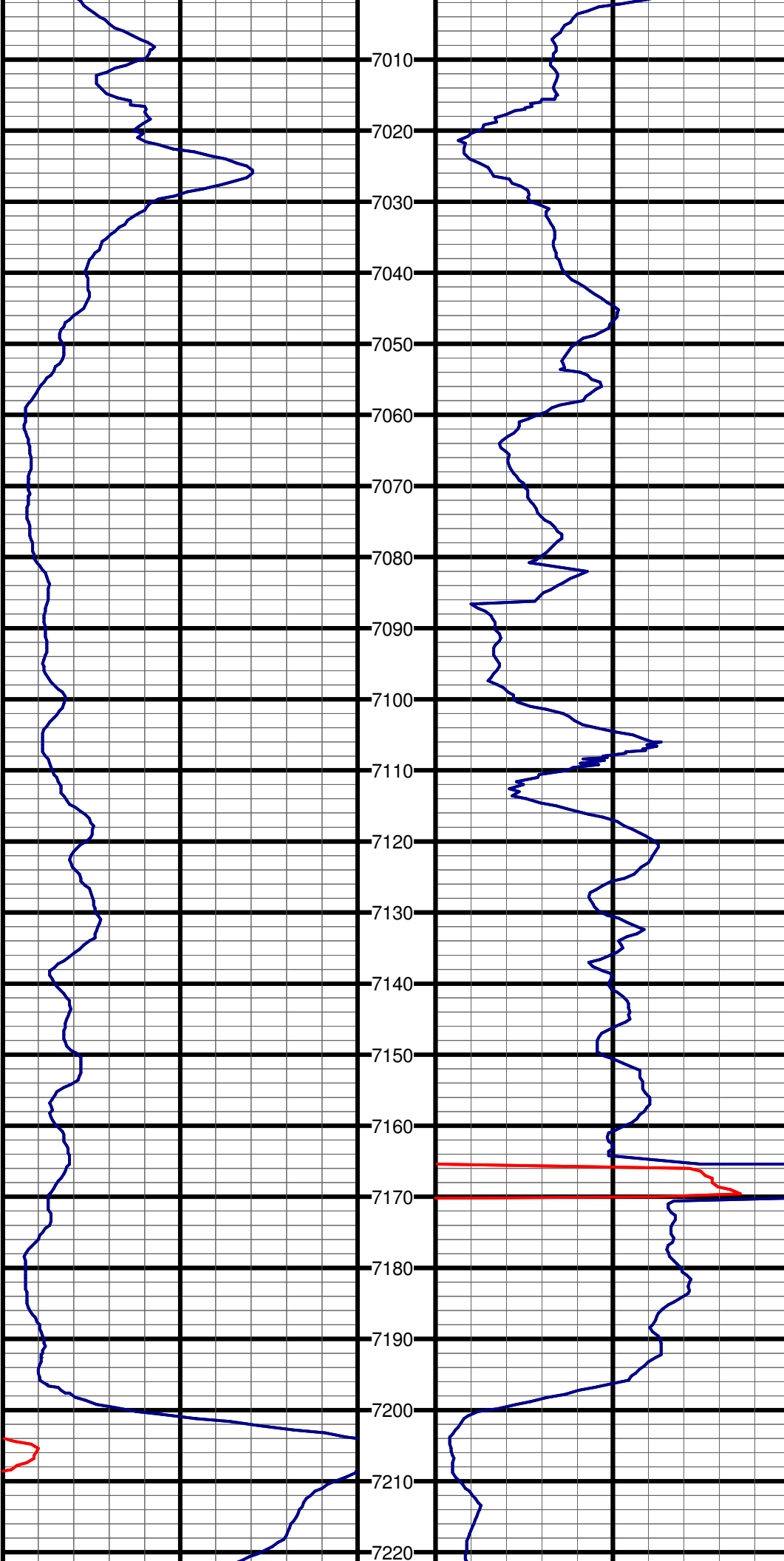
#89 MD:6752.0 TVD:3990.2 I:91.0 A:0.4 VS:2971.1



6790
6800
6810
6820
6830
6840
6850
6860
6870
6880
6890
6900
6910
6920
6930
6940
6950
6960
6970
6980
6990
7000

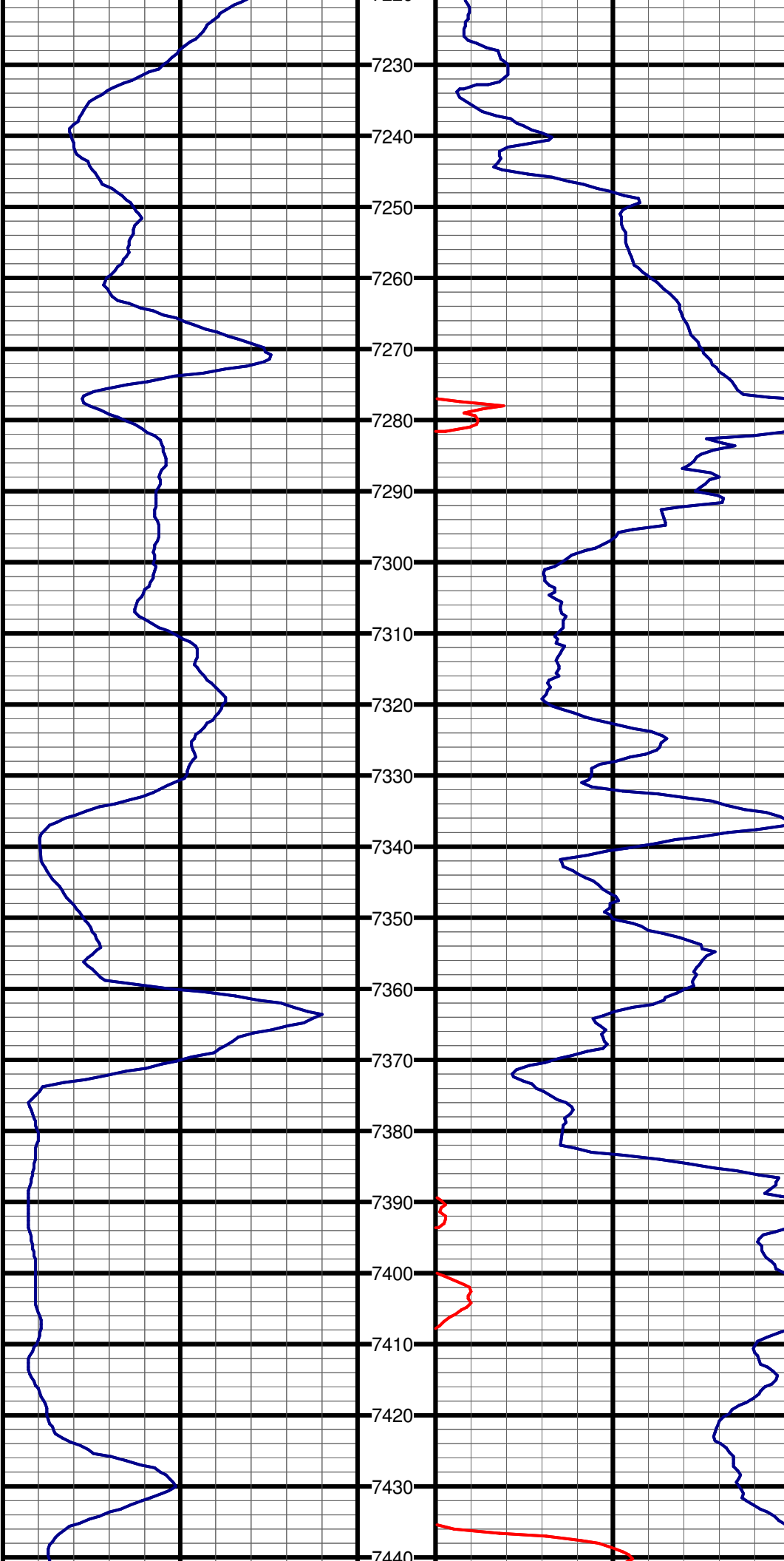
#90 MD:6844.0 TVD:3988.4 I:91.3 A:359.9 VS:3062.3

#91 MD:6935.0 TVD:3986.2 I:91.5 A:359.5 VS:3152.6



#92 MD:7027.0 TVD:3983.3 I:92.1 A:359.6 VS:3243.9

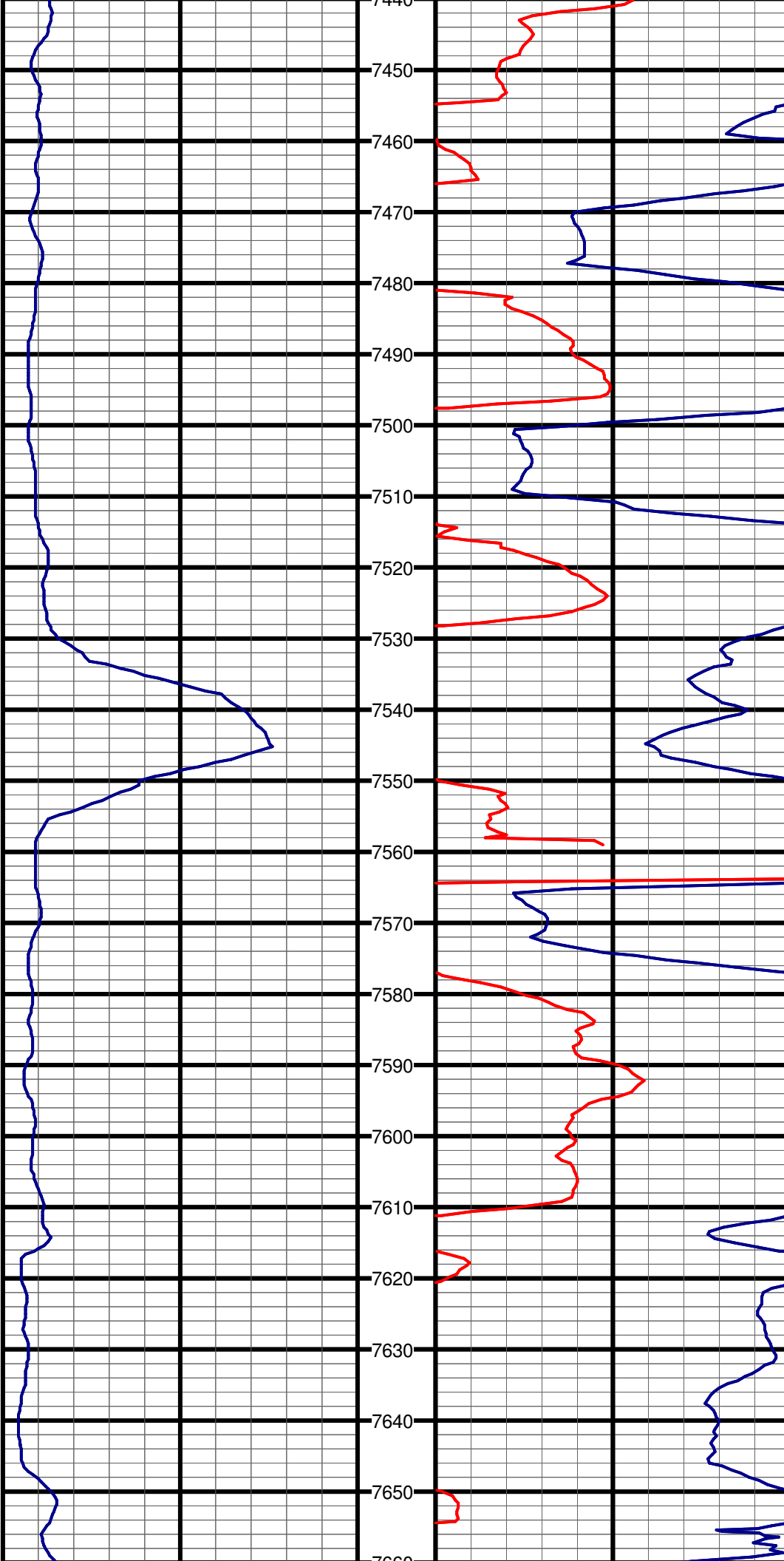
#93 MD:7119.0 TVD:3981.9 I:89.6 A:0.3 VS:3335.1



#94 MD:7238.0 TVD:3984.2 I:88.2 A:359.8 VS:3453.1

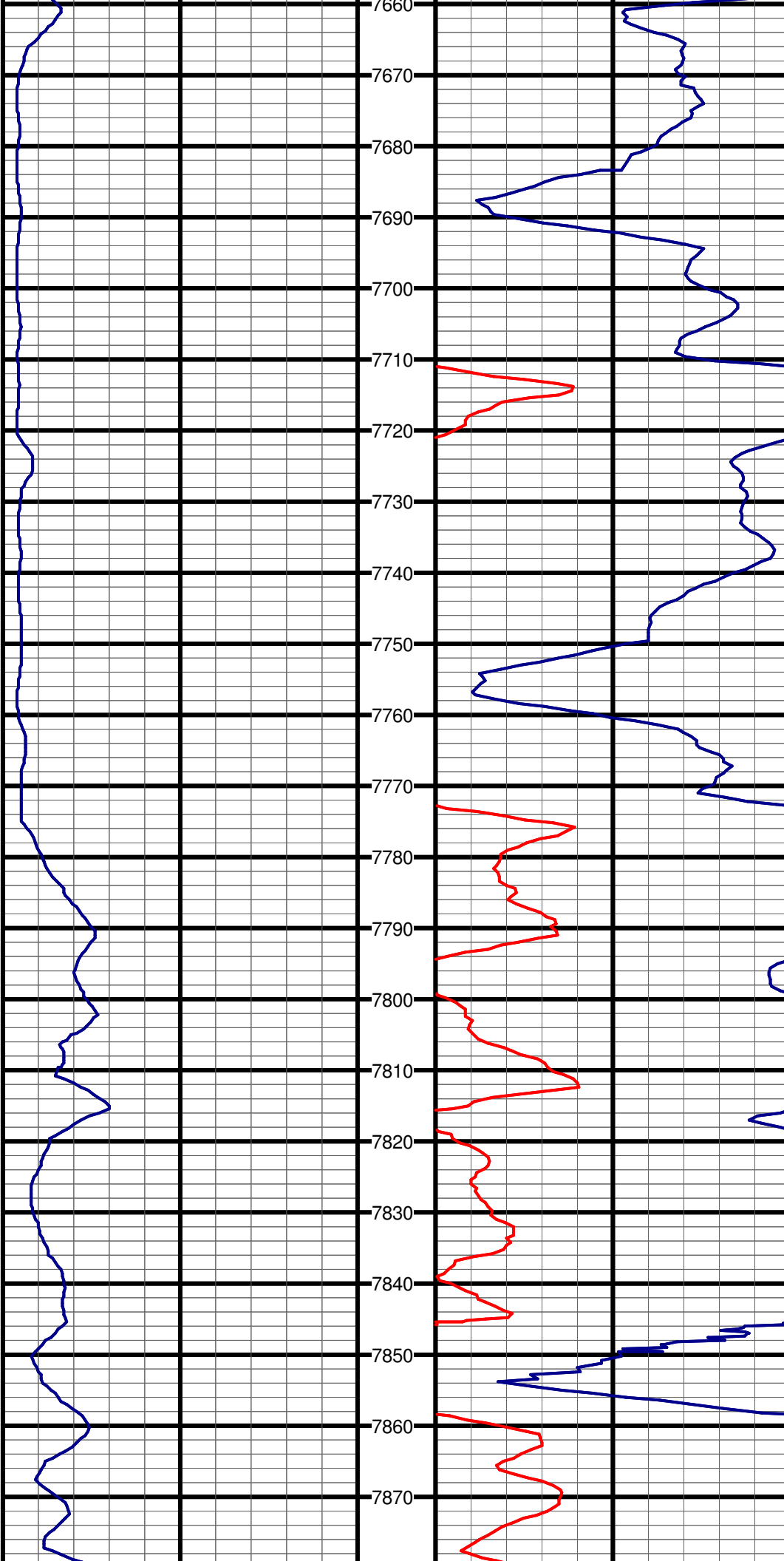
#95 MD:7331.0 TVD:3988.1 I:87.0 A:359.9 VS:3545.3

#96 MD:7423.0 TVD:3993.6 I:86.1 A:359.8 VS:3636.4



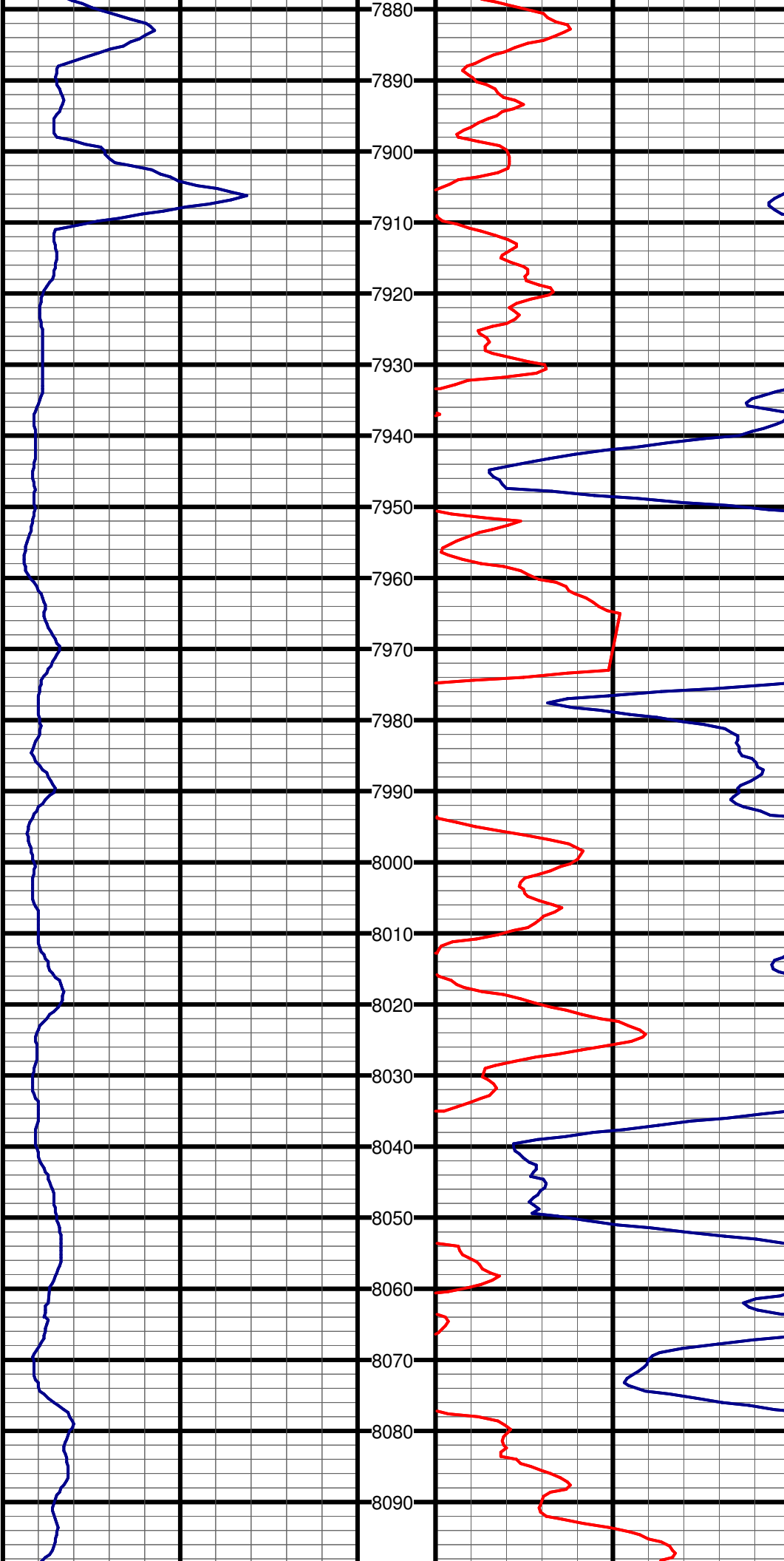
#97 MD:7514.0 TVD:3998.1 I:88.2 A:0.1 VS:3726.6

#98 MD:7606.0 TVD:4000.2 I:89.3 A:1.4 VS:3817.7



#99 MD:7698.0 TVD:4002.2 I:88.2 A:359.0 VS:3908.9

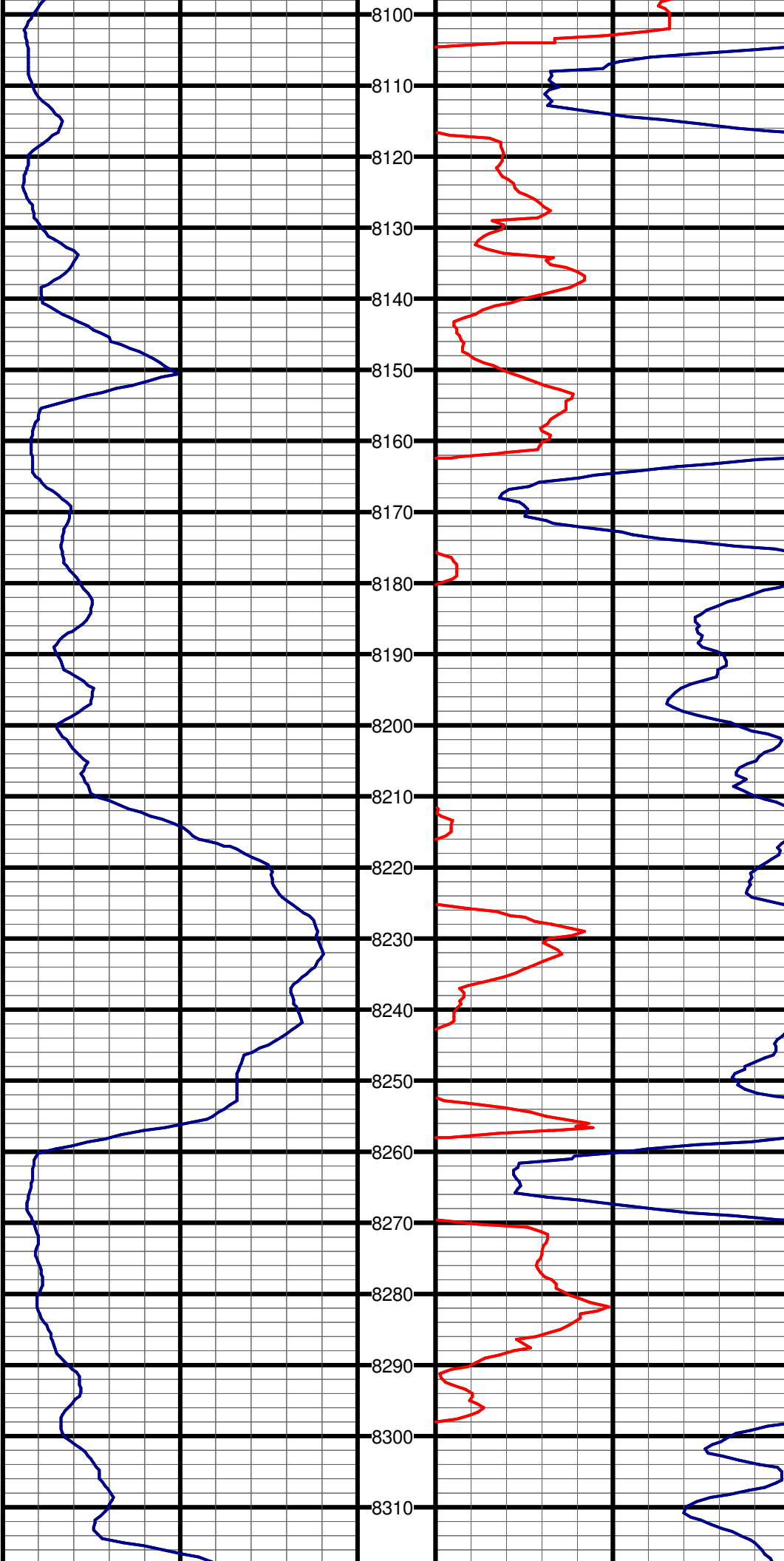
#100 MD:7793.0 TVD:4005.2 I:88.1 A:357.3 VS:4003.4



#101 MD:7888.0 TVD:4009.1 I:87.2 A:359.2 VS:4097.8

#102 MD:7983.0 TVD:4013.4 I:87.7 A:359.7 VS:4192.1

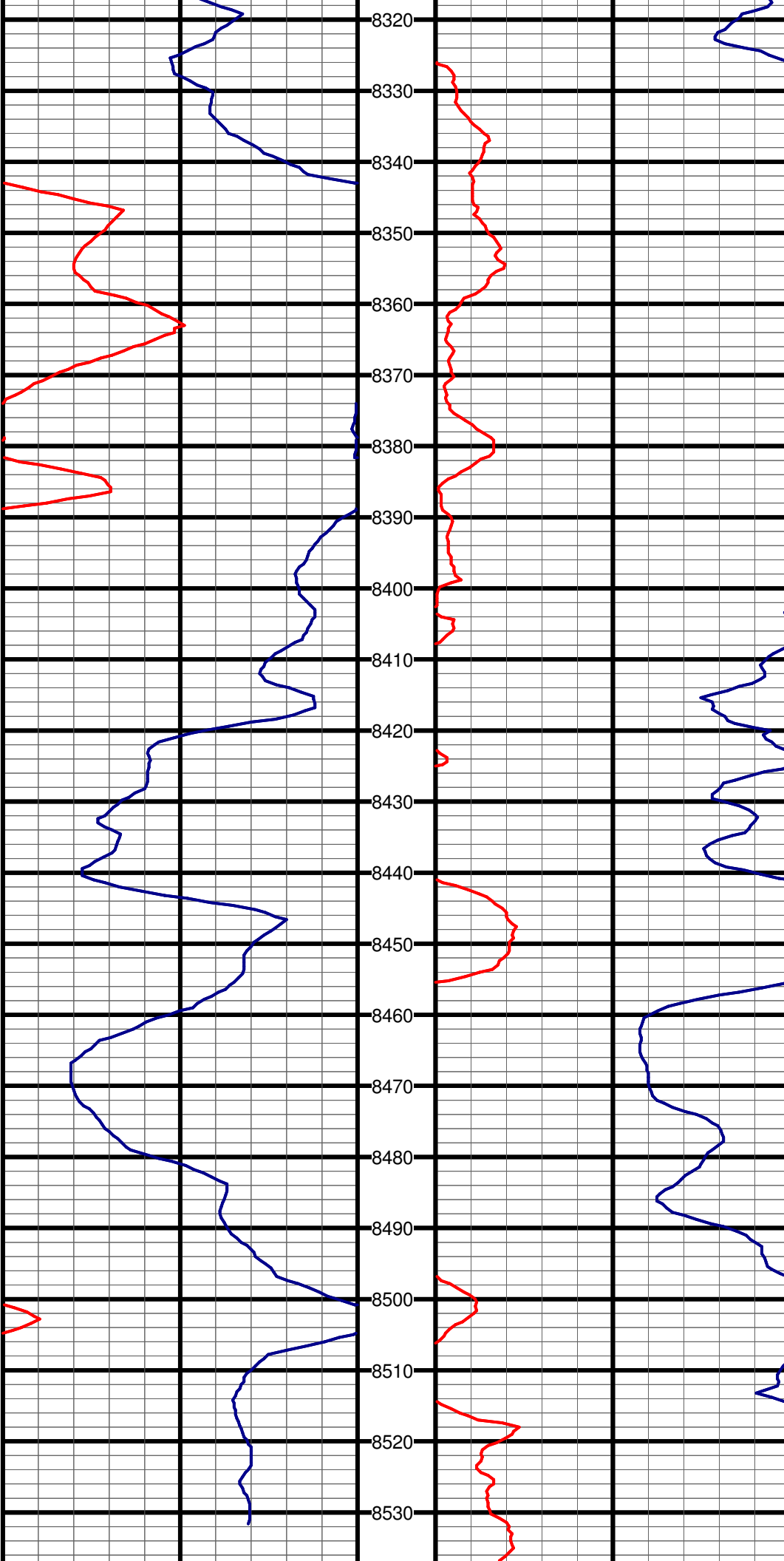
#103 MD:8078.0 TVD:4016.1 I:89.0 A:0.5 VS:4286.3



8100
8110
8120
8130
8140
8150
8160
8170
8180
8190
8200
8210
8220
8230
8240
8250
8260
8270
8280
8290
8300
8310

#104 MD:8172.0 TVD:4015.8 I:91.3 A:0.9 VS:4379.3

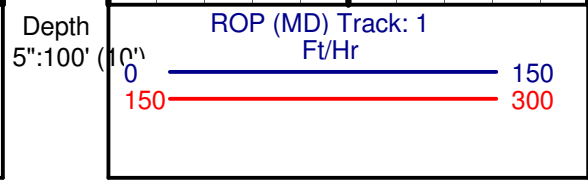
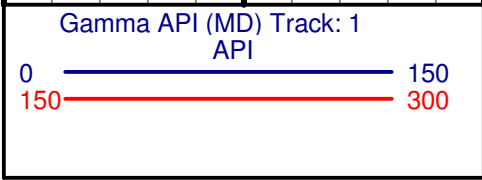
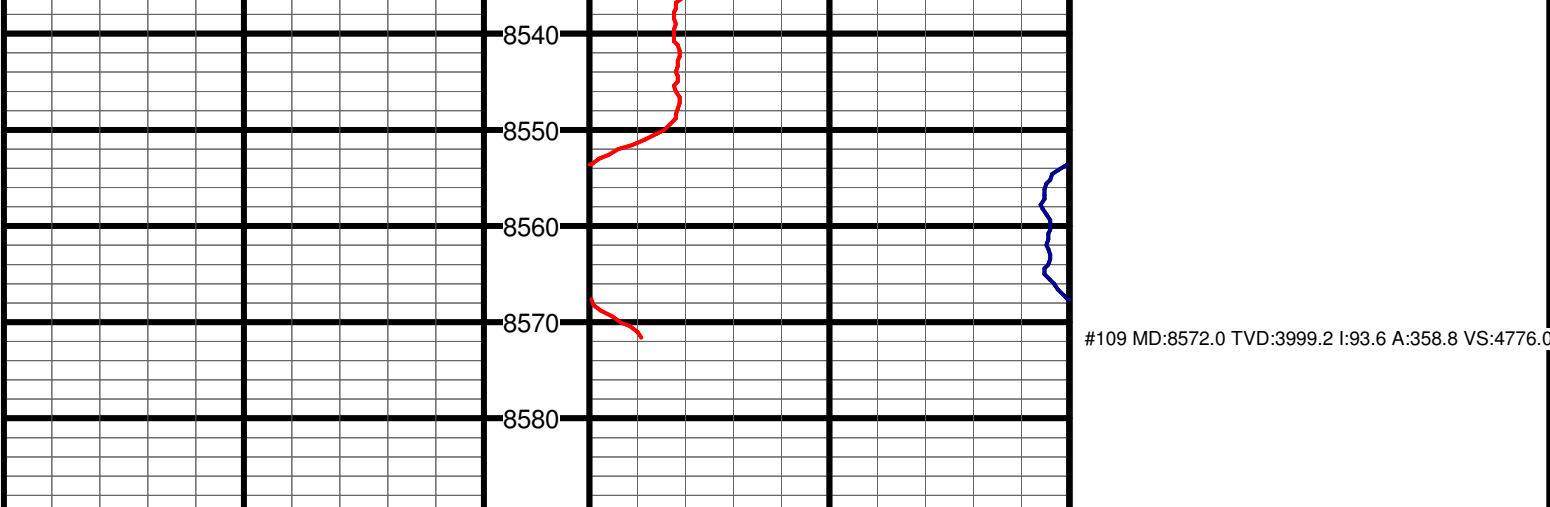
#105 MD:8267.0 TVD:4013.1 I:92.0 A:0.0 VS:4473.4



#106 MD:8362.0 TVD:4009.5 I:92.3 A:0.2 VS:4567.6

#107 MD:8457.0 TVD:4005.7 I:92.3 A:358.9 VS:4661.8

#108 MD:8520.0 TVD:4002.5 I:93.6 A:358.8 VS:4724.4



#109 MD:8572.0 TVD:3999.2 I:93.6 A:358.8 VS:4776.0



Digital Drilling Data
Systems, LLC

5" MWD TVD Gamma Ray Log

(Scale: 5" : 100' (10'))

Company: SandRidge Energy

State: Kansas

Well: Nona 3204 1-23H

County: Sumner

Field: Upper Miss

Country: USA

Well ID: 15-191-22719-01-00

Job Number: DR1402027

Location: Sec 23 - 32S - 4W

Elev KB: 1241' MSL

Operator 1: Blake Reid

Elev DF: 1241' MSL

Operator 2: Jack Chapman

Elev GL: 1223' MSL

Comment 1: 5" = 100' TVD Gamma API vs ROP (fph)

Comment 2: Rig: Lariat #45

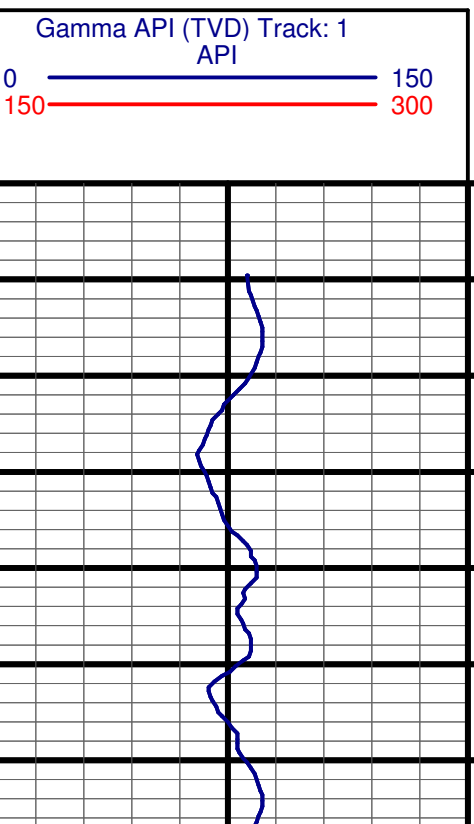
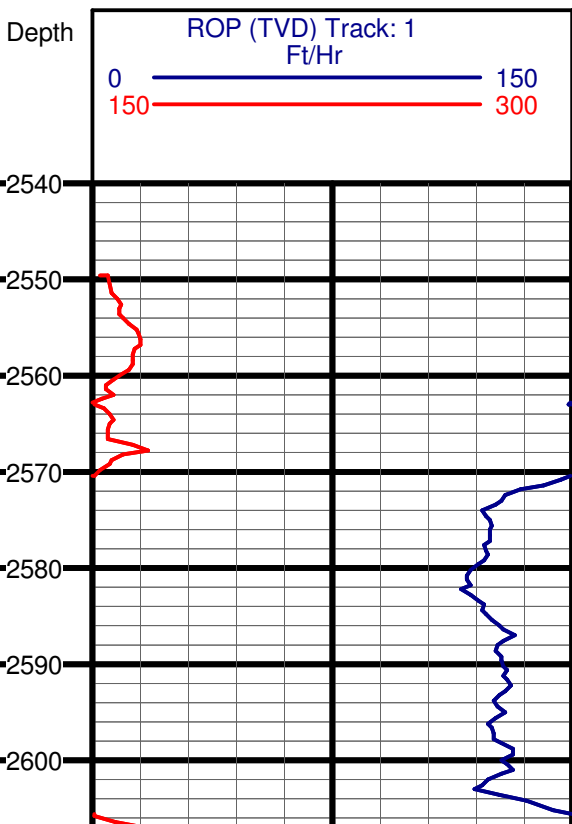
Comment 3: Latitude: N37 14 30.52 Longitude: W97 42 36.61

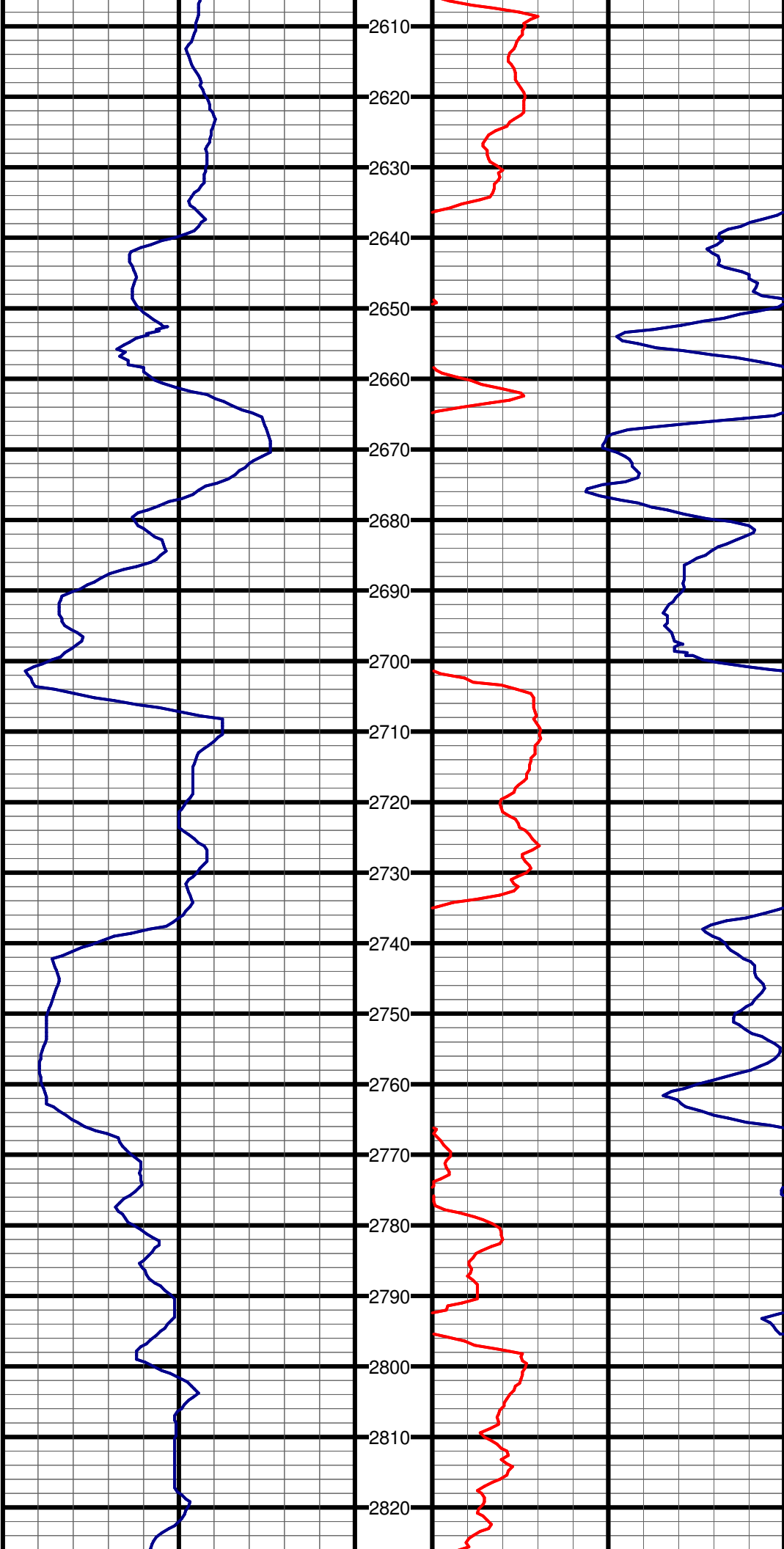
Comment 4: API Number: 15-191-22719-01-00

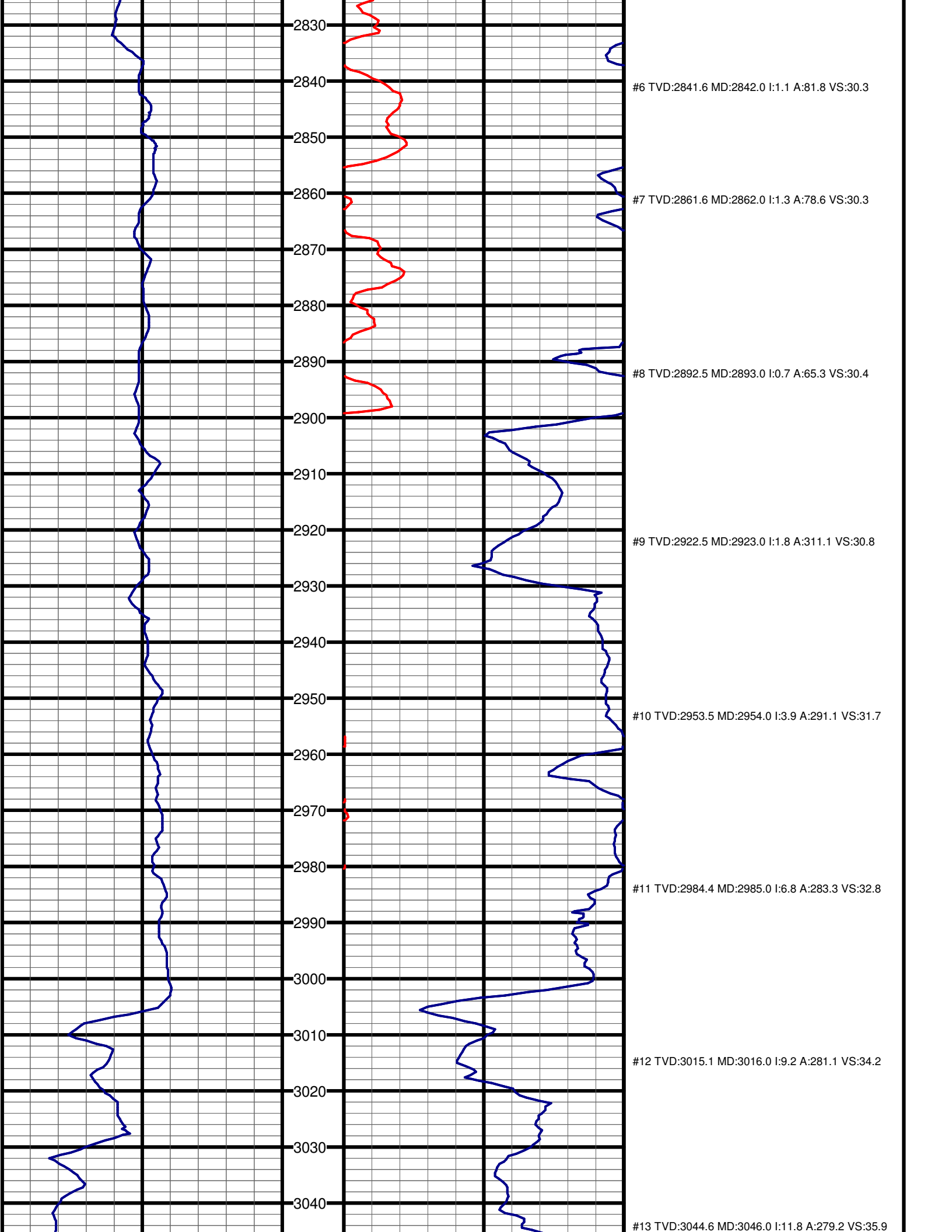
Comment 5: Spud Date: 2/16/2014 - TD Date: 3/4/2014

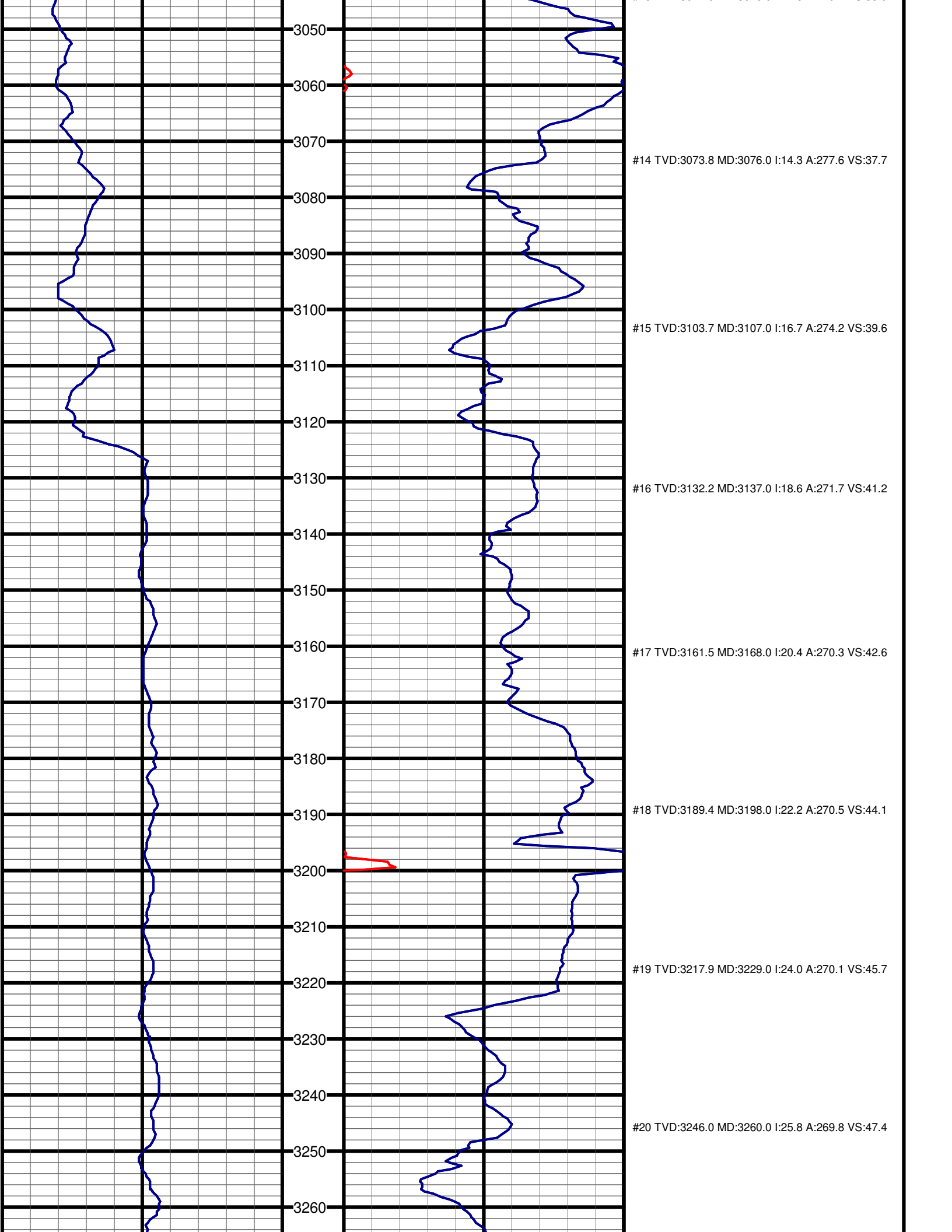
Hole Data				Casing Record		
Size	From	To	Size	From	To	
17.5"	0'	270'	13.325"	0'	270'	
8.75"	270'	4828'	7"	0'	4828'	
6.125"	4828'	8572'				

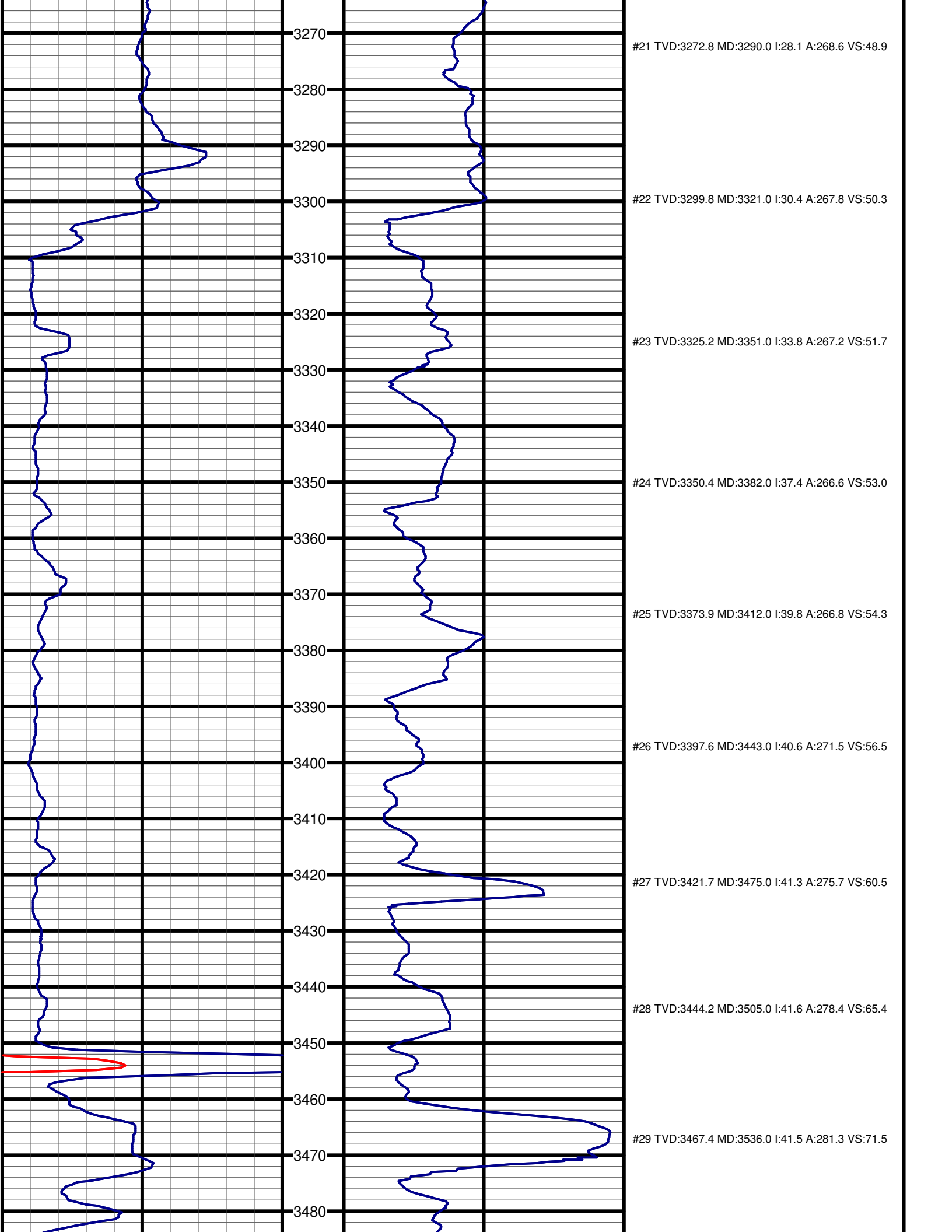
Tool Run Data		Run #1	Run #2	Run #3	Run #4	Run #5
Tool S/N	PGM 082	PGM 082	PGM 082	PGM 082	PGM 082	
Cal Factor	4.75	4.75	2.75	2.75	2.75	
Gamma Offset	45'	53'	37'	37'	37'	
Start Depth	270'	2899'	4828'	7234'		
Start Date	2/17/2014	2/19/2014	2/25/2014	3/2/2014		
Start Time	16:30	5:30	23:00	4:30		
End Depth	2899'	4828'	7234'	8572'		
End Date	2/19/2014	2/22/2014	3/2/2014	3/4/2014		
End Time	2:00	8:00	2:30	8:00		

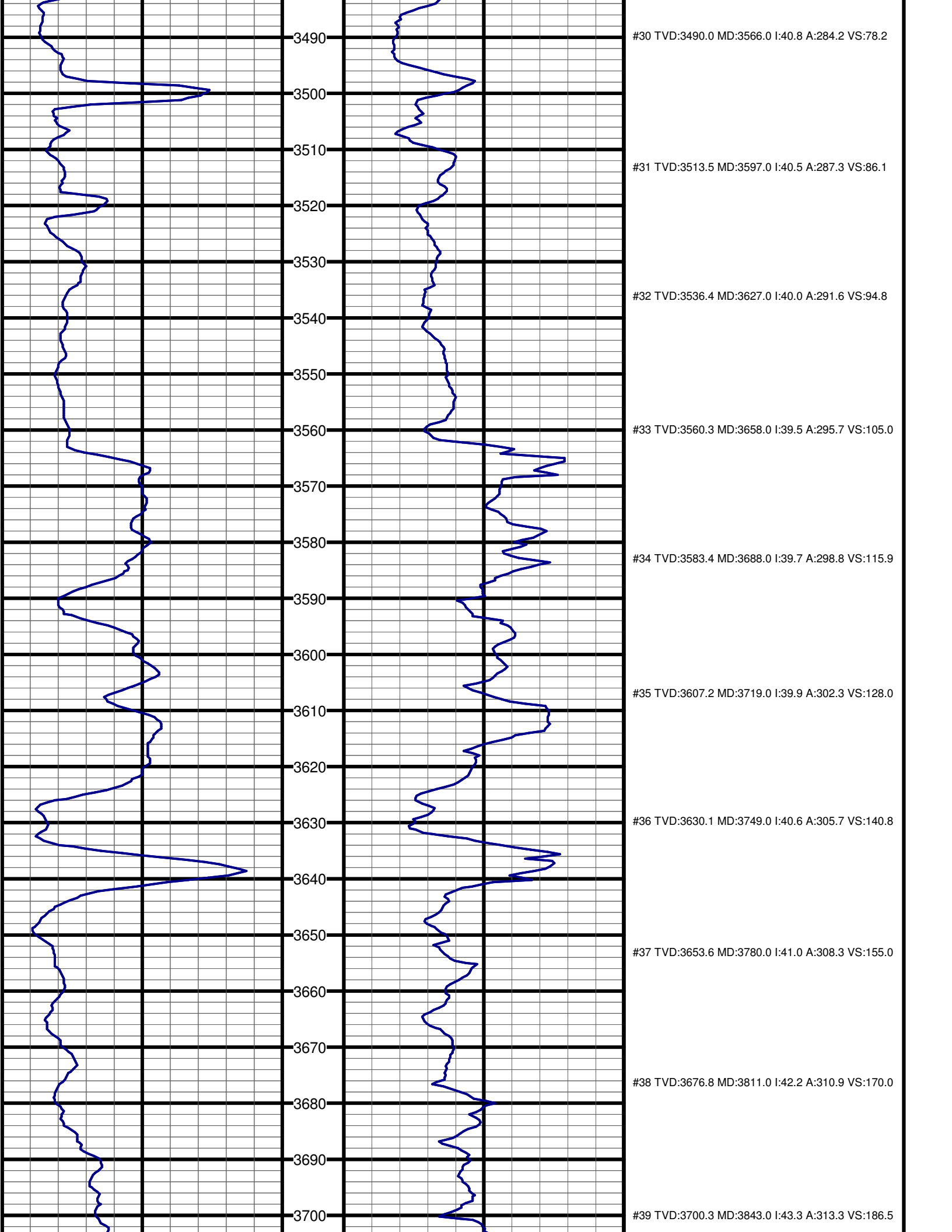


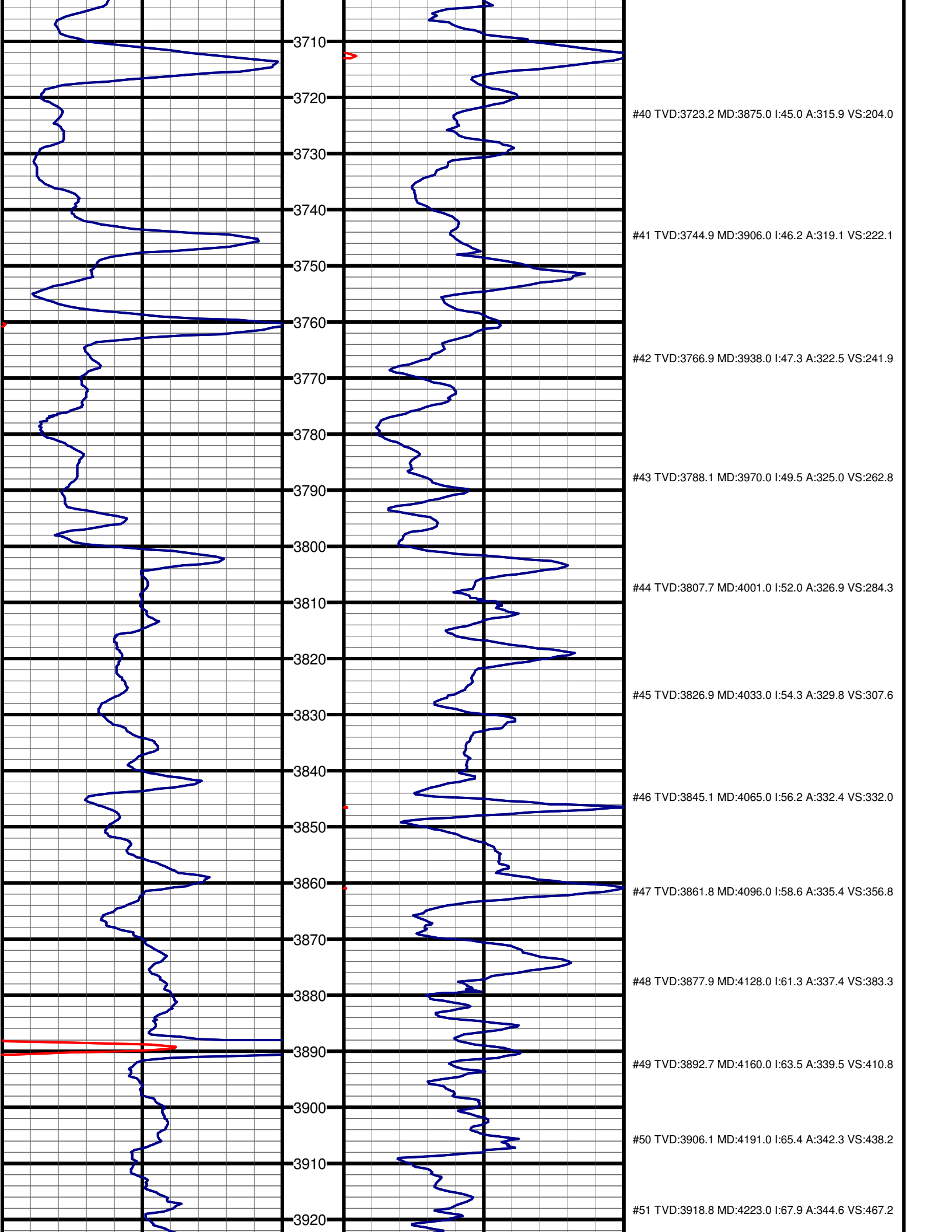


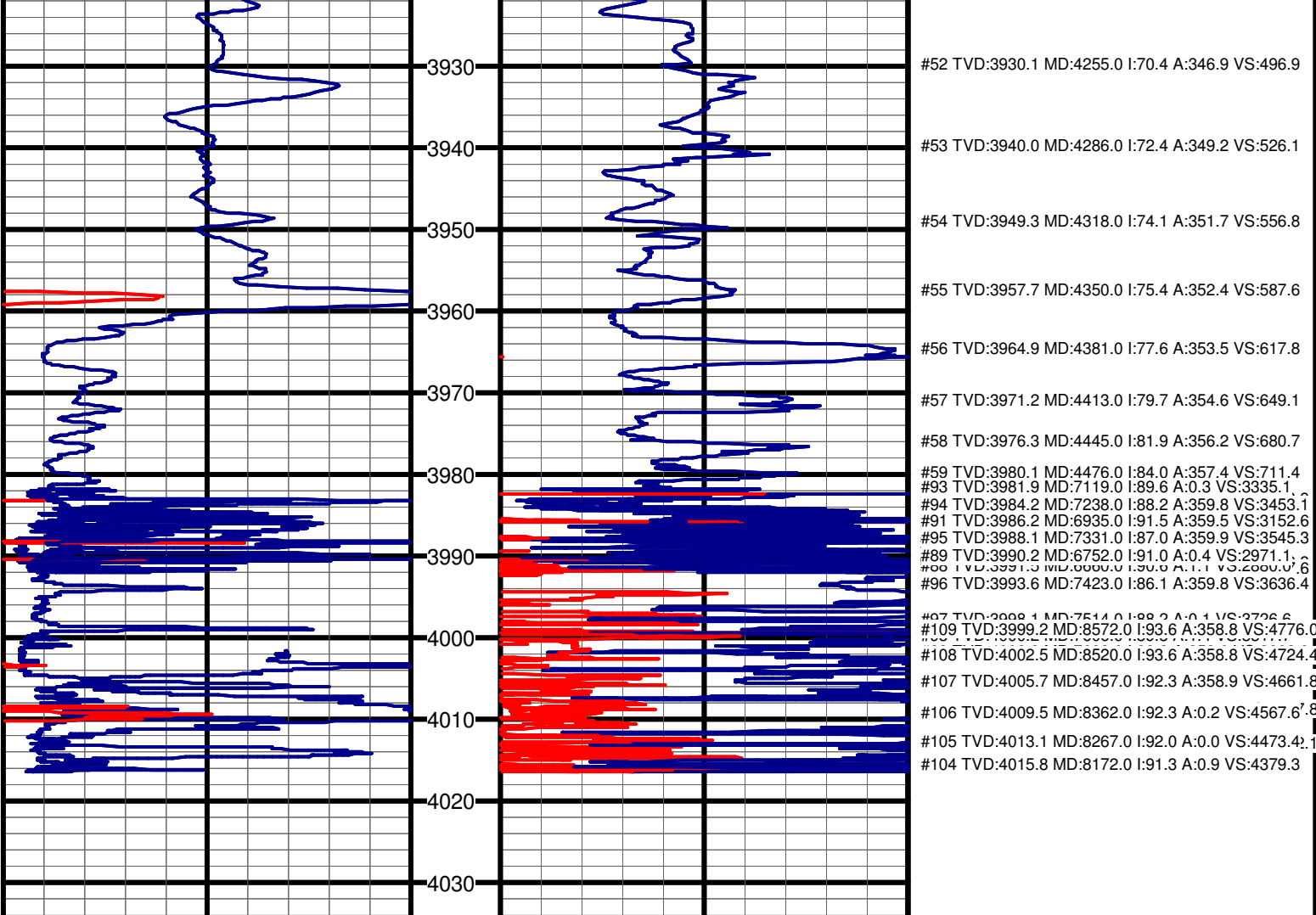












#52 TVD:3930.1 MD:4255.0 I:70.4 A:346.9 VS:496.9
 #53 TVD:3940.0 MD:4286.0 I:72.4 A:349.2 VS:526.1
 #54 TVD:3949.3 MD:4318.0 I:74.1 A:351.7 VS:556.8
 #55 TVD:3957.7 MD:4350.0 I:75.4 A:352.4 VS:587.6
 #56 TVD:3964.9 MD:4381.0 I:77.6 A:353.5 VS:617.8
 #57 TVD:3971.2 MD:4413.0 I:79.7 A:354.6 VS:649.1
 #58 TVD:3976.3 MD:4445.0 I:81.9 A:356.2 VS:680.7
 #59 TVD:3980.1 MD:4476.0 I:84.0 A:357.4 VS:711.4
 #93 TVD:3981.9 MD:7119.0 I:89.6 A:0.3 VS:3335.1
 #94 TVD:3984.2 MD:7238.0 I:88.2 A:359.8 VS:3453.1
 #91 TVD:3986.2 MD:6935.0 I:91.5 A:359.5 VS:3152.6
 #95 TVD:3988.1 MD:7331.0 I:87.0 A:359.9 VS:3545.3
 #89 TVD:3990.2 MD:6752.0 I:91.0 A:0.4 VS:2971.1
 #90 TVD:3991.5 MD:6800.0 I:90.0 A:1.1 VS:2800.0
 #96 TVD:3993.6 MD:7423.0 I:86.1 A:359.8 VS:3636.4
 #97 TVD:3998.1 MD:7514.0 I:88.2 A:0.1 VS:3726.6
 #109 TVD:3999.2 MD:8572.0 I:93.6 A:358.8 VS:4776.0
 #108 TVD:4002.5 MD:8520.0 I:93.6 A:358.8 VS:4724.4
 #107 TVD:4005.7 MD:8457.0 I:92.3 A:358.9 VS:4661.8
 #106 TVD:4009.5 MD:8362.0 I:92.3 A:0.2 VS:4567.6
 #105 TVD:4013.1 MD:8267.0 I:92.0 A:0.0 VS:4473.4
 #104 TVD:4015.8 MD:8172.0 I:91.3 A:0.9 VS:4379.3

Gamma API (TVD) Track: 1
API

0 150 150 300

Depth

ROP (TVD) Track: 1
Ft/Hr

0 150 150 300

Section 14
32S 4W

Section 13
32S 4W

395' FNL

2137' FEL

BHL: 8572'

-97.71765 37.255251

Bottom Perf: 8468'
-97.717635 37.254939

Sumner County

Section 23
32S 4W

Section 24
32S 4W

Top Perf: 4842'
-97.717348 37.245237

Miss Entry: 4369'
-97.717237 37.243868

NONA 3204 1-23H

JEROMY 3204 1-26H

NONA 3204 2-23H

Section 26
32S 4W

Section 25
32S 4W



Actual Bottom-Hole Location of Nona 3204 1-23H

Sumner County, Kansas

T&R: 32S 4W

Section: 23, 2137' FEL & 395' FNL

-97.71765 37.255251

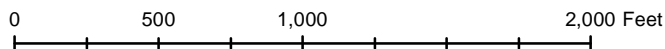
1 in = 667 ft

< Actual BH Location

| SandRidge Wells

--- Perf

□ Sections



1

Draftsman:

Aaron Birk

Draft Date: 5/21/2014

Drawing Name/Number:

Addendum_Nona 3204 1-23H.mxd

Coordinate System:

NAD 1927 State Plane
Kansas South FIPS: 1502