



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1095516  
OIL & GAS CONSERVATION DIVISION

Form ACO-1  
August 2013

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

WELL COMPLETION FORM  
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

CONTRACTOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Wellsite Geologist: \_\_\_\_\_

Purchaser: \_\_\_\_\_

Designate Type of Completion:

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

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

Operator: \_\_\_\_\_

Well Name: \_\_\_\_\_

Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_

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

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

Spot Description: \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE       NW       SE       SW

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

Datum:  NAD27       NAD83       WGS84

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Vertical Depth: \_\_\_\_\_ Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at: \_\_\_\_\_ Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set: \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from: \_\_\_\_\_

feet depth to: \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls

Dewatering method used: \_\_\_\_\_

Location of fluid disposal if hauled offsite:

Operator Name: \_\_\_\_\_

Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

County: \_\_\_\_\_ Permit #: \_\_\_\_\_

AFFIDAVIT

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

Submitted Electronically

KCC Office Use ONLY

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



1095516

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

<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <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> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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Form	ACO1 - Well Completion
Operator	Woolsey Operating Company, LLC
Well Name	MILLER GU D 2 H
Doc ID	1095516

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
CONDUCTOR	30	20	53	42	GROUT	4	4 yds not sx
SURFACE	17.5	13.375	54.5	312	CLASS A	300	2% gel, 3% cc
INTERMEDIATE	8.75	7	23	5207	60/40 POZ	50	2% gel, 3% cc
INTERMEDIATE	8.75	7	23	5207	CLASS H	200	10% gyp, 10% salt, .5% FL-160, ¼# flow seal
PRODUCTION	7.875	4.5	11.6	9285	NONE	0	PACKER PLUS SYS

Conservation Division  
Finney State Office Building  
130 S. Market, Rm. 2078  
Wichita, KS 67202-3802



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

Mark Sievers, Chairman  
Thomas E. Wright, Commissioner  
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

October 03, 2012

DEAN PATTISSON  
Woolsey Operating Company, LLC  
125 N MARKET STE 1000  
WICHITA, KS 67202-1729

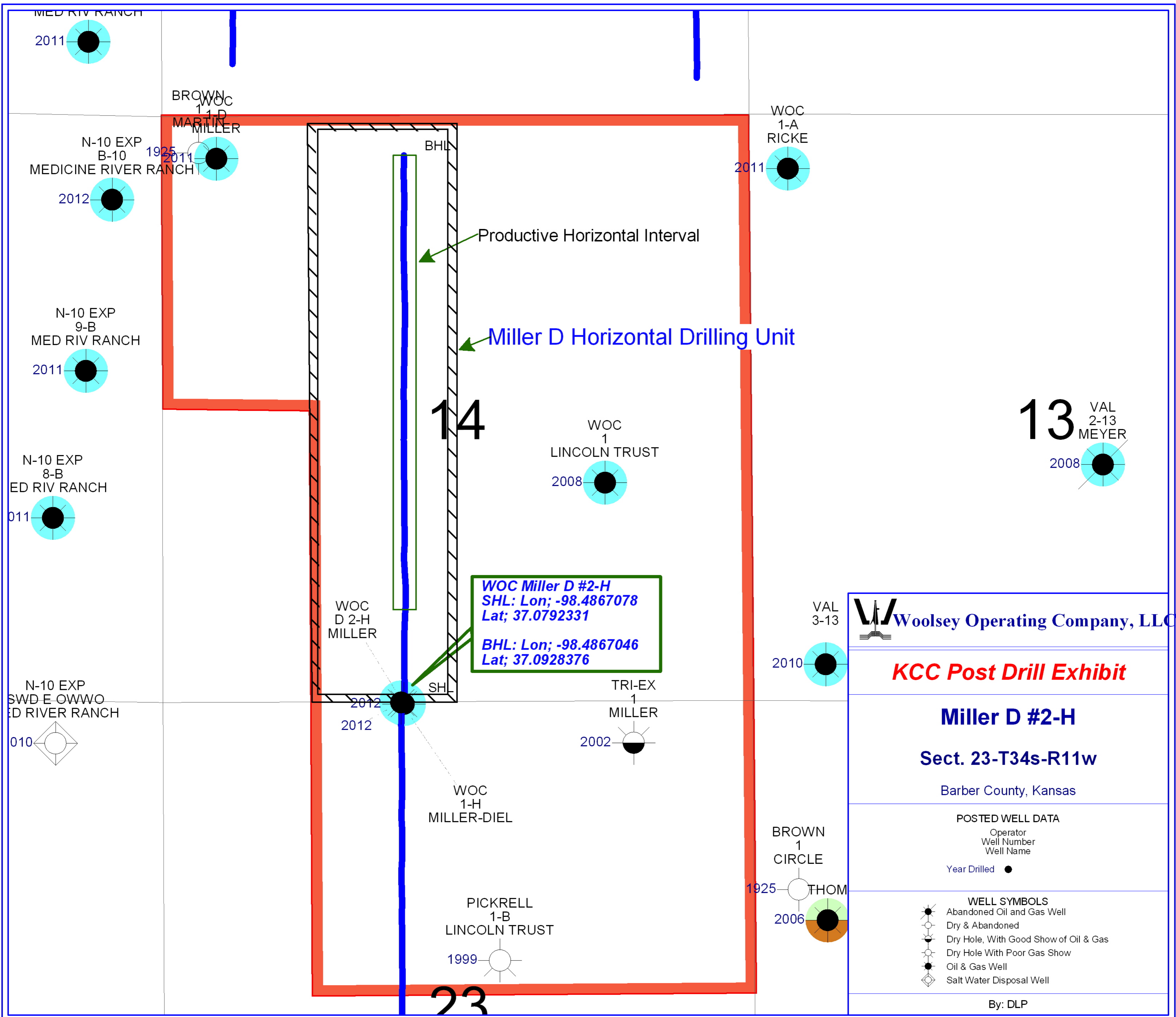
Re: ACO1  
API 15-007-23894-01-00  
MILLER GU D 2 H  
NW/4 Sec.23-34S-11W  
Barber County, Kansas

Dear Production Department:

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

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

Respectfully,  
DEAN PATTISSON



**Woolsey Operating Company, LLC**

**KCC Post Drill Exhibit**

**Miller D #2-H**

**Sect. 23-T34s-R11w**

Barber County, Kansas

**POSTED WELL DATA**

Operator  
 Well Number  
 Well Name  
 Year Drilled ●

- WELL SYMBOLS**
- Abandoned Oil and Gas Well
  - Dry & Abandoned
  - Dry Hole, With Good Show of Oil & Gas
  - Dry Hole With Poor Gas Show
  - Oil & Gas Well
  - ◇ Salt Water Disposal Well

By: DLP

P.O. # \_\_\_\_\_

**BIG BUCKETS RATHOLE DRILLING**

No 4951

P.O. Box 5252

ORDERED BY

Enid, Oklahoma 73702

Phone (580) 233-9850

Fax (580) 233-4588

Date 6/6/12

*Mike Sharp*

Bill To *Woolsey Operating LLC*

Lease *Miller GU # D2H*

Address \_\_\_\_\_

Legal *Sec 23-345-11W*

County *Barber K's.*

Rig *Don O Dalg #11*

DESCRIPTION	AMOUNT
Furnish Men & Equipment To <i>Drill rat mouse holes, 5' of 60" cellar 42ft. of 30" hole &amp; remove plug</i>	
Materials Furnished <i>42ft. of 30" pipe - 4yds of 8pk grout 5' of 60" timber (cellar) - 50ft of 15" timber (Rem Boots) KS trip permits (2 trips)</i>	<i>6500.00</i>
Operator <i>Justin Morrison</i> Approved By _____	Total <i>6500.00</i>

# ALLIED OIL & GAS SERVICES, LLC 053828

Federal Tax I.D.# 20-5975804

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

SERVICE POINT:  
Medicine Lodge KS

DATE <u>07/02/2012</u>	SEC. <u>23</u>	TWP. <u>34S</u>	RANGE <u>11W</u>	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
LEASE <u>Miller GUD</u>		WELL # <u>2H</u>		LOCATION <u>Gerlanet Bethel, South to Angus, west 1/4 mi, North into</u>		COUNTY <u>Barber</u>	STATE <u>KS</u>
OLD OR <u>NEW</u> (Circle one)							

CONTRACTOR Dan D #11 OWNER Woolsey

TYPE OF JOB Surface

HOLE SIZE 17 1/2 T.D. 320 CEMENT

CASING SIZE 13 3/8 DEPTH 312 AMOUNT ORDERED 300x Class A 3% cc + 2% Gel

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG. 18

PERFS.

DISPLACEMENT 45 1/2 bbl

**EQUIPMENT**

PUMP TRUCK CEMENTER Jason Thinasch  
# 360/265 HELPER Brett Gains  
BULK TRUCK  
# 364 DRIVER David Felio  
BULK TRUCK  
# \_\_\_\_\_ DRIVER \_\_\_\_\_

COMMON <u>Class A 300x</u>	@ <u>16.25</u>	<u>4875.-</u>
POZMIX	@	
GEL <u>1.25x</u>	@ <u>21.25</u>	<u>127.50</u>
CHLORIDE <u>11.5x</u>	@ <u>58.20</u>	<u>1440.20</u>
ASC	@	
	@	
	@	
	@	
	@	
	@	
	@	
HANDLING <u>321.4 cuft</u>	@ <u>2.10</u>	<u>681.24</u>
MILEAGE <u>14.8 x 15 x 2.35</u>		<u>521.70</u>
		TOTAL <u>\$10,845.14</u>

**REMARKS:**

Did circ cement

Thank you

**SERVICE**

DEPTH OF JOB		
PUMP TRUCK CHARGE		<u>1125.-</u>
EXTRA FOOTAGE	@	
MILEAGE <u>15</u>	@ <u>7.00</u>	<u>105.-</u>
MANIFOLD	@	
<u>15</u>	@ <u>4.00</u>	<u>60.-</u>
	@	
		TOTAL <u>\$1790.-</u>

**PLUG & FLOAT EQUIPMENT**

	@	
	@	
	@	
	@	
	@	
		TOTAL _____

SALES TAX (If Any) \_\_\_\_\_  
TOTAL CHARGES \$8135.14  
DISCOUNT 20% (\$1627.13) IF PAID IN 30 DAYS

NET \$6508.51

AUG 1 2012

CHARGE TO: Woolsey  
STREET \_\_\_\_\_  
CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

**WELL FILE**

Regulatory Correspondence  
Drig/ Comp Workovers  
Operations  
Meters

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

PRINTED NAME MIKE THARD  
SIGNATURE Mike Thard

# ALLIED CEMENTING CO., LLC. 32685

Federal Tax I.D.# 20-5975804

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

SERVICE POINT:  
*Medicine Lodge*

DATE <i>7-11-12</i>	SEC <i>23</i>	TWP <i>34</i>	RANGE <i>11</i>	CALLED OUT	ON LOCATION <i>2:00 AM</i>	JOB START <i>3:30 PM</i>	JOB FINISH <i>4:30 AM</i>
LEAS <i>Miller Blvd</i>		WELL # <i>2-11</i>		LOCATION <i>Gerhine &amp; Beebe Rd, Sta August</i>		COUNTY <i>Baker</i>	STATE <i>KS</i>
OLD OR (NEW) (Circle one)				<i>Rd, 1/4 W, N/into</i>			

CONTRACTOR *Dan Ditt 11*

TYPE OF JOB *Inter mediate*

HOLE SIZE *8 7/8"* T.D. *5210'*

CASING SIZE *7 1/2"* DEPTH *5207*

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX *1200* MINIMUM

MEAS. LINE SHOE JOINT *43.63*

CEMENT LEFT IN CSG. *43.63*

PERFS.

DISPLACEMENT *203 1/2*

EQUIPMENT

PUMP TRUCK CEMENTER *Bon Gilley 1*

# *543-548* HELPER *Eddie Pinet 2*

BULK TRUCK

# *471-553* DRIVER *Troy Lyeenz 3*

BULK TRUCK

# DRIVER

OWNER *Woolsey Operating*

CEMENT

AMOUNT ORDERED *50 sk 60' 40' 4" Page 1*

*200 sk class 11 1/4 10% salt + 10% gytt + 10% th*

*Kolseal + 0.5% FI-160 + 1/4" Flo Seal*

COMMON	<i>30</i>	@	<i>16.25</i>	<i>487.50</i>
POZMIX	<i>20</i>	@	<i>8.50</i>	<i>170.00</i>
GEL	<i>1</i>	@	<i>21.25</i>	<i>21.25</i>
CHLORIDE		@		
ASC		@		
<i>H</i>	<i>200</i>	@	<i>19.25</i>	<i>3850.00</i>
<i>Gyseal</i>	<i>19 sk</i>	@	<i>34.20</i>	<i>649.80</i>
<i>salt</i>	<i>22 sk</i>	@	<i>23.95</i>	<i>526.90</i>
<i>Kolseal</i>	<i>1200 #</i>	@	<i>.89</i>	<i>1068.00</i>
<i>FI-160</i>	<i>94 #</i>	@	<i>17.20</i>	<i>1616.80</i>
<i>Flo seal</i>	<i>50 #</i>	@	<i>2.70</i>	<i>135.00</i>
		@		
		@		
HANDLING	<i>322.91</i>	@	<i>2.10</i>	<i>678.12</i>
MILEAGE	<i>13.75/15</i>	@	<i>2.35</i>	<i>486.02</i>
TOTAL				<i>9689.39</i>

REMARKS:  
*See Cement Log*

**WELL FILE**

Regulatory Correspondence

Drig / Comp       Workovers

Tests / Meters       Operations

CHARGE TO: *Woolsey Operating*

STREET \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

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

PRINTED NAME *X MIKE THAM*

SIGNATURE *X Mike Tham*

SERVICE

DEPTH OF JOB	<i>5210'</i>
PUMP TRUCK CHARGE	<i>2695.00</i>
EXTRA FOOTAGE	@
MILEAGE	<i>15</i> @ <i>7.00</i> <i>105.00</i>
MANIFOLD	<i>Head Rental</i> @ <i>200.00</i>
<i>Light + Veh.</i>	<i>15</i> @ <i>4.00</i> <i>60.00</i>
TOTAL	

*7 1/2"* PLUG & FLOAT EQUIPMENT

<i>1-Rubber Plug</i>	@	<i>85.00</i>
<i>1-Sure Seal Shoe</i>	@	<i>609.00</i>
<i>1-Sure Seal Collar</i>	@	<i>758.00</i>
<i>5-Spiral Glider</i>	@ <i>189.20</i>	<i>946.00</i>
<i>5-Stop Rings</i>	@ <i>48.00</i>	<i>240.00</i>
TOTAL		<i>2638.00</i>

SALES TAX (If Any) *-0-*

TOTAL CHARGES *15,387.39*

DISCOUNT *20%* IF PAID IN 30 DAYS

*NET 12,309.91*

AUG 6 2012

D 3077.40



# Final Report



Do It Once  
Do It Right



## Woolsey Petroleum

Mr. Carl Durr

Prepared by  
Chad Williams 405-255-3223  
[chad.williams@packersplus.com](mailto:chad.williams@packersplus.com)

## 16-Stage 4-1/2" StackFRAC® HD

## Miller Gas Unit D-2H

Service Center  
Conway, AR  
Gary Leber  
[501-327-0241](tel:501-327-0241)

PACKERS PLUS - PACKER PLACEMENT



Do It Once.  
Do It Right.

Confidential Information - not to be disclosed outside Woolsey  
Petroleum

Completion  
FINAL

Prepared for		Company	Date		
Mr. Carl Durr		Woolsey Petroleum	31-Jul-12		
Well Name		Type of Installation	Location		
Miller Gas Unit D-2H		16-Stage 4-1/2" StackFRAC® HD	Barber, KS		
Depth	Drawing	Description	OD (in)	ID (in)	Length
kop 4023'					
<b>Page 2 of 2</b>					
SF HANGER 5094' 200BBLS		7" 23-32 ppf x 3.875" Lower Bore x 4.75" Upper Bore SF Liner Hanger Packer (3 shear pins at 482 each; 1,944 psi setting pressure) PN: 108425-000001 SF Bottom Guide 3' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106982-000001	5.875"	4.750" 3.875"	9.45' 3.875"
7" shoe 5707'		7" 23# P-110 LT&C Casing			
5233'		4-1/2" 11.60# N-80 LTC LINER JOINTS: 3 6-1/8" open hole horizontal 6' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106986-000013 w/ Centralizer PN: 104743	4.500"	4.000"	125.97'
Stage 16 5352' 204BBLS		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Hydraulic Set Open Hole Packer (6 pins @ 324 psi each for 1,944 psi setting) PN: 121381-000001 SN:EA4001883 3' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106982-000001 w/ Centralizer PN: 104743	5.75"	3.875"	14.41'
		4-1/2" 11.60# N-80 LTC LINER JOINTS: 2 Packers Plus 4-1/2" Drillable FracPORT® with 3.500" Seat for 3.625" High Pressure Ball (6 shear pins @ 315 psi each for 1,890 psi opening pressure) PN: 121332-000023 SN:EA1022007	4.500"	4.000"	84.38'
		4-1/2" 11.60# N-80 LTC LINER JOINTS: 3 6' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106986-000013 w/ Centralizer PN: 104743	4.500"	4.000"	122.29'
5456'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Hydraulic Set Open Hole Packer (6 pins @ 324 psi each for 1,944 psi setting) PN: 121381-000001 SN:EA4001834 3' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106982-000001 w/ Centralizer PN: 104743	5.75"	3.875"	14.41'
Stage 15 5548' 207BBLS		4-1/2" 11.60# N-80 LTC LINER JOINTS: 2 Packers Plus 4-1/2" Drillable FracPORT® with 3.375" Seat for 3.500" High Pressure Ball (6 shear pins @ 315 psi each for 1,890 psi opening pressure) PN: 121332-000022 SN:EA1032422	4.500"	4.000"	83.64'
		4-1/2" 11.60# N-80 LTC LINER JOINTS: 3 6' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106986-000013 w/ Centralizer PN: 104743	4.500"	4.000"	126.58'
5684'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Hydraulic Set Open Hole Packer (6 pins @ 324 psi each for 1,944 psi setting) PN: 121381-000001 SN:EA4001898 3' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106982-000001 w/ Centralizer PN: 104743	5.75"	3.875"	14.39'
Stage 14 5774' 211BBLS		4-1/2" 11.60# N-80 LTC LINER JOINTS: 2 Packers Plus 4-1/2" Drillable FracPORT® with 3.250" Seat for 3.375" High Pressure Ball (6 shear pins @ 315 psi each for 1,890 psi opening pressure) PN: 121332-000021 SN:EA1032121	4.500"	4.000"	81.95'
		4-1/2" 11.60# N-80 LTC LINER JOINTS: 3 6' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106986-000013 w/ Centralizer PN: 104743	4.500"	4.000"	124.11'
5907'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Hydraulic Set Open Hole Packer (6 pins @ 324 psi each for 1,944 psi setting) PN: 121381-000001 SN:EA2023105 3' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106982-000001 w/ Centralizer PN: 104743	5.75"	3.875"	14.39'
Stage 13 6038' 215BBLS		4-1/2" 11.60# N-80 LTC LINER JOINTS: 3 Packers Plus 4-1/2" Drillable FracPORT® with 3.125" Seat for 3.250" High Pressure Ball (6 shear pins @ 315 psi each for 1,890 psi opening pressure) PN: 121332-000020 SN:EA1029909	4.500"	4.000"	122.85'
		4-1/2" 11.60# N-80 LTC LINER JOINTS: 3 6' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106986-000013 w/ Centralizer PN: 104743	4.500"	4.000"	125.00'
6172'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Hydraulic Set Open Hole Packer (6 pins @ 324 psi each for 1,944 psi setting) PN: 121381-000001 SN:EA3019235 3' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106982-000001 w/ Centralizer PN: 104743	5.75"	3.875"	14.42'
Stage 12 6304' 219BBLS		4-1/2" 11.60# N-80 LTC LINER JOINTS: 3 Packers Plus 4-1/2" Drillable FracPORT® with 3.000" Seat for 3.125" High Pressure Ball (6 shear pins @ 315 psi each for 1,890 psi opening pressure) PN: 121332-000019 SN:EA1030962	4.500"	4.000"	124.43'
		4-1/2" 11.60# N-80 LTC LINER JOINTS: 3 6' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106986-000013 w/ Centralizer PN: 104743	4.500"	4.000"	124.94'
Service Center	Conway, AR	Contact Gary Leber	Telephone Chad Williams	405-255-3223	

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Prepared for		Company		Date		
Mr. Carl Durr		Woolsey Petroleum		31-Jul-12		
Well Name		Type of Installation		Location		
Miller Gas Unit D-2H		16-Stage 4-1/2" StackFRAC® HD		Barber, KS		
Depth	Drawing	Description		OD (in)	ID (in)	Length
<b>Page 1 of 2</b>						
6438'	<p>Con't page 1</p>	6' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106986-000013 w/ Centralizer PN: 104743		4.500"	4.000"	
		<b>Packers Plus 7" x 4-1/2" RockSEAL® II 10K Hydraulic Set Open Hole Packer</b>		5.75"	3.875"	14.41'
		(6 pins @ 324 psi each for 1,944 psi setting) PN: 121381-000001 SN:EA3019243				
		3' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106982-000001 w/ Centralizer PN: 104743		4.500"	4.000"	
		4-1/2" 11.60# N-80 LTC LINER JOINTS: 3		4.500"	4.000"	121.55'
<b>Stage 11</b>		<b>Packers Plus 4-1/2" Drillable FracPORT® with 2.875" Seat for 3.000" High Pressure Ball</b>		5.630"	<b>2.875"</b>	2.65'
6568'		(6 shear pins @ 315 psi each for 1,890 psi opening pressure) PN: 121332-000018 SN:EA1030904			3.875"	
223BBLs		4-1/2" 11.60# N-80 LTC LINER JOINTS: 3		4.500"	4.000"	121.84'
		6' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106986-000013 w/ Centralizer PN: 104743		4.500"	4.000"	
		<b>Packers Plus 7" x 4-1/2" RockSEAL® II 10K Hydraulic Set Open Hole Packer</b>		5.75"	3.875"	14.39'
		(6 pins @ 324 psi each for 1,944 psi setting) PN: 121381-000001 SN:EA2018922				
		3' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106982-000001 w/ Centralizer PN: 104743		4.500"	4.000"	
		4-1/2" 11.60# N-80 LTC LINER JOINTS: 3		4.500"	4.000"	124.04'
<b>Stage 10</b>		<b>Packers Plus 4-1/2" Drillable FracPORT® with 2.750" Seat for 2.875" High Pressure Ball</b>		5.630"	<b>2.750"</b>	2.65'
6831'		(6 shear pins @ 315 psi each for 1,890 psi opening pressure) PN: 121332-000017 SN:EA1030860			3.875"	
227BBLs		4-1/2" 11.60# N-80 LTC LINER JOINTS: 3		4.500"	4.000"	120.26'
	6' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106986-000013 w/ Centralizer PN: 104743		4.500"	4.000"		
	<b>Packers Plus 7" x 4-1/2" RockSEAL® II 10K Hydraulic Set Open Hole Packer</b>		5.75"	3.875"	14.43'	
	(6 pins @ 324 psi each for 1,944 psi setting) PN: 121381-000001 SN:EA4001897					
	3' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106982-000001 w/ Centralizer PN: 104743		4.500"	4.000"		
	4-1/2" 11.60# N-80 LTC LINER JOINTS: 3		4.500"	4.000"	125.84'	
<b>Stage 9</b>	<b>Packers Plus 4-1/2" Drillable FracPORT® with 2.625" Seat for 2.750" High Pressure Ball</b>		5.630"	<b>2.625"</b>	2.65'	
7094'	(6 shear pins @ 315 psi each for 1,890 psi opening pressure) PN: 121332-000016 SN:EA1031389			3.875"		
231BBLs	4-1/2" 11.60# N-80 LTC LINER JOINTS: 3		4.500"	4.000"	126.37'	
	6' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106986-000013 w/ Centralizer PN: 104743		4.500"	4.000"		
	<b>Packers Plus 7" x 4-1/2" RockSEAL® II 10K Hydraulic Set Open Hole Packer</b>		5.75"	3.875"	14.45'	
	(6 pins @ 324 psi each for 1,944 psi setting) PN: 121381-000001 SN:EA2023161					
	3' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106982-000001 w/ Centralizer PN: 104743		4.500"	4.000"		
	4-1/2" 11.60# N-80 LTC LINER JOINTS: 3		4.500"	4.000"	124.36'	
<b>Stage 8</b>	<b>Packers Plus 4-1/2" Drillable FracPORT® with 2.500" Seat for 2.625" High Pressure Ball</b>		5.630"	<b>2.500"</b>	2.65'	
7362'	(6 shear pins @ 315 psi each for 1,890 psi opening pressure) PN: 121332-000015 SN:EA1024786			3.875"		
235BBLs	4-1/2" 11.60# N-80 LTC LINER JOINTS: 3		4.500"	4.000"	125.82'	
	6' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106986-000013 w/ Centralizer PN: 104743		4.500"	4.000"		
	<b>Packers Plus 7" x 4-1/2" RockSEAL® II 10K Hydraulic Set Open Hole Packer</b>		5.75"	3.875"	14.42'	
	(6 pins @ 324 psi each for 1,944 psi setting) PN: 121381-000001 SN:EA3019238					
	3' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106982-000001 w/ Centralizer PN: 104743		4.500"	4.000"		
	4-1/2" 11.60# N-80 LTC LINER JOINTS: 3		4.500"	4.000"	121.62'	
<b>Stage 7</b>	<b>Packers Plus 4-1/2" Drillable FracPORT® with 2.375" Seat for 2.500" High Pressure Ball</b>		5.630"	<b>2.375"</b>	2.65'	
7626'	(6 shear pins @ 315 psi each for 1,890 psi opening pressure) PN: 121332-000014 SN:EA1030248			3.875"		
239BBLs	4-1/2" 11.60# N-80 LTC LINER JOINTS: 3		4.500"	4.000"	124.34'	
	6' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106986-000013 w/ Centralizer PN: 104743		4.500"	4.000"		
	<b>Packers Plus 7" x 4-1/2" RockSEAL® II 10K Hydraulic Set Open Hole Packer</b>		5.75"	3.875"	14.44'	
	(6 pins @ 324 psi each for 1,944 psi setting) PN: 121381-000001 SN:EA4001866					
	3' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106982-000001 w/ Centralizer PN: 104743		4.500"	4.000"		
	4-1/2" 11.60# N-80 LTC LINER JOINTS: 3		4.500"	4.000"	121.59'	
<b>Stage 6</b>	<b>Packers Plus 4-1/2" Drillable FracPORT® with 2.250" Seat for 2.375" High Pressure Ball</b>		5.630"	<b>2.250"</b>	2.65'	
7889'	(6 shear pins @ 315 psi each for 1,890 psi opening pressure) PN: 121332-000013 SN:EA1002824			3.875"		
243BBLs	4-1/2" 11.60# N-80 LTC LINER JOINTS: 3		4.500"	4.000"	124.27'	
	6' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106986-000013 w/ Centralizer PN: 104743		4.500"	4.000"		
	<b>Packers Plus 7" x 4-1/2" RockSEAL® II 10K Hydraulic Set Open Hole Packer</b>		5.75"	3.875"	14.44'	
	(6 pins @ 324 psi each for 1,944 psi setting) PN: 121381-000001 SN:EA4001859					
	3' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106982-000001 w/ Centralizer PN: 104743		4.500"	4.000"		
	4-1/2" 11.60# N-80 LTC LINER JOINTS: 3		4.500"	4.000"	122.22'	
8022'						
Service Center		Contact		Telephone		
Conway, AR 501-327-0241		Gary Leber		Chad Williams 405-255-3223		

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Prepared for		Company	Date		
Mr. Carl Durr		Woolsey Petroleum	31-Jul-12		
Well Name		Type of Installation	Location		
Miller Gas Unit D-2H		16-Stage 4-1/2" StackFRAC® HD	Barber, KS		
Depth	Drawing	Description	OD (in)	ID (in)	Length
Con't page 1			<b>Page 1 of 2</b>		
8153' 247BBLs		<b>Stage 5</b> Packers Plus 4-1/2" Drillable FracPORT® with 2.125" Seat for 2.250" High Pressure Ball (6 shear pins @ 315 psi each for 1,890 psi opening pressure) PN: 121332-000012 SN:EA3024267 4-1/2" 11.60# N-80 LTC LINER JOINTS: 3 6' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106986-000013 w/ Centralizer PN: 104743	5.630"	2.125" 3.875"	2.65'
8284'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Hydraulic Set Open Hole Packer (6 pins @ 324 psi each for 1,944 psi setting) PN: 121381-000001 SN:EA2018924 3' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106982-000001 w/ Centralizer PN: 104743 4-1/2" 11.60# N-80 LTC LINER JOINTS: 3	4.500"	4.000"	122.86'
8416' 252BBLs		<b>Stage 4</b> Packers Plus 4-1/2" Drillable FracPORT® with 2.000" Seat for 2.125" High Pressure Ball (6 shear pins @ 315 psi each for 1,890 psi opening pressure) PN: 121332-000011 SN:EA1021395 4-1/2" 11.60# N-80 LTC LINER JOINTS: 3 6' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106986-000013 w/ Centralizer PN: 104743	5.630"	2.000" 3.875"	2.65'
8560'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Hydraulic Set Open Hole Packer (6 pins @ 324 psi each for 1,944 psi setting) PN: 121381-000001 SN:EA4001840 3' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106982-000001 w/ Centralizer PN: 104743 4-1/2" 11.60# N-80 LTC LINER JOINTS: 3	4.500"	4.000"	122.95'
8704' 256BBLs		<b>Stage 3</b> Packers Plus 4-1/2" Drillable FracPORT® with 1.875" Seat for 2.000" High Pressure Ball (6 shear pins @ 315 psi each for 1,890 psi opening pressure) PN: 121332-000010 SN:EA3016428 4-1/2" 11.60# N-80 LTC LINER JOINTS: 3 6' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106986-000013 w/ Centralizer PN: 104743	5.630"	1.875" 3.875"	2.65'
8849'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Hydraulic Set Open Hole Packer (6 pins @ 324 psi each for 1,944 psi setting) PN: 121381-000001 SN:EA4001874 3' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106982-000001 w/ Centralizer PN: 104743 4-1/2" 11.60# N-80 LTC LINER JOINTS: 3	4.500"	4.000"	135.81'
8993' 260BBLs		<b>Stage 2</b> Packers Plus 4-1/2" Drillable FracPORT® with 1.750" Seat for 1.875" High Pressure Ball (6 shear pins @ 315 psi each for 1,890 psi opening pressure) PN: 121332-000009 SN:EA1021010 4-1/2" 11.60# N-80 LTC LINER JOINTS: 2 6' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106986-000013 w/ Centralizer PN: 104743	5.630"	1.750" 3.875"	2.65'
9092'		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Hydraulic Set Open Hole Packer (6 pins @ 324 psi each for 1,944 psi setting) PN: 121381-000001 SN:EA2023403 3' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106982-000001 w/ Centralizer PN: 104743 4-1/2" 11.60# N-80 LTC LINER JOINTS: 1	4.500"	4.000"	135.78'
9152'		Packers Plus 7" x 4-1/2" RockSEAL® IIS 10K Hydraulic Set Anchor Packer (6 shear pins at 324 psi each; 1,944 psi setting pressure) PN: 124306-000001 SN: EM0053906 3' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106982-000001 w/ Centralizer PN: 104743 4-1/2" 11.60# N-80 LTC LINER JOINTS: 1	5.75"	3.875"	14.45'
9213' 264BBLs		<b>Stage 1</b> Packers Plus 4-1/2" Dual Hydraulic FracPORT® (11 pins at 391 psi each: 4,301 psi Upper) / (7 pins at 630 psi each: 4,410 psi Lower) 3' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106982-000001 w/ Centralizer PN: 104743 4-1/2" 11.60# N-80 LTC LINER JOINTS: 1 6' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106986-000013	5.630"	3.875"	13.50'
9284' 265BBLs		<b>TOE SUB</b> Packers Plus 4-1/2" Toe Circulating Sub w/ 1.00" Seat for 1.25" High Pressure Ball (3 pins at 366 psi each: 1,098 psi closing pressure) PN: 103039-000011 SN:EA1022307 4-1/2" LTC Single Valve Float Collar PN: 104733-000001 6' x 4-1/2" 11.6# P-110 LTC Pup Joint PN: 106986-000013 w/ Centralizer PN: 104743 4-1/2" LTC Single Valve Float Collar PN: 104733-000001 4-1/2" LTC Guide Shoe PN: 121704-000001	5.500"	.75"	18.54'
GS9285' MD9300'			5.000"	4.000"	45.24'
			5.000"	4.000"	45.28'
			5.000"	4.000"	45.26'
			5.000"	4.000"	45.20'
			5.000"	2.250"	
Service Center	Telephone	Contact	Telephone		
Conway, AR	501-327-0241	Gary Leber	Chad Williams 405-255-3223		

		<b>Do It Once Do It Right</b>		<b>Job Record V1.1.2</b>			
Operator:	Woolsey Petroleum		Base Point:	20600 Conway			
Company Rep:	Mike Tharp		Packers Plus Rep:	Gary Goodman, Brad Kelley			
Well Name:	Miller Gas Unit D-2H		Date Started:	7/25/2012			
Ticket Number:	SOU005160		Date Completed:	7/31/2012			
County/State:	Barber Co, KS		Type of Job:	StackFrac HD			
Field	mayberry north		Formation	mississippi			
Rig Name	Dan D rig 11		Well API #	15-007-23894-01-00			
<b>DETAIL THE JOB - THIS FORM USED TO REPORT WHAT ACTUALLY TOOK PLACE - FILL OUT COMPLETELY</b>							
<b>General Well Information</b>				<b>Stages</b>			
Well Profile	Open Hole Horizontal			Number of Stages	16		
Depth TVD	4,631	Feet		MD to Packer 1	148		
Depth MD	9,300	Feet		Packer 1 to Packer 2	237.56		
Lateral Length	4,093	Feet		Packer 2 to Packer 3	283.47		
KOP	4,023	Feet		Packer 3 to Packer 4	270.62		
Hole Size	6.125	Inch		Packer 4 to Packer 5	256.92		
BHP	2,008	PSI		Packer 5 to Packer 6	257.69		
BHT	95	°F		Packer 6 to Packer 7	257.81		
Reamer run?	yes	Size	6	Packer 7 to Packer 8	262.01		
Build Rate	10/100	°/100 FT		Packer 8 to Packer 9	264.07		
Max Dog Leg	12	°/100 FT		Packer 9 to Packer 10	256.11		
Angle of Perma Plus	69	°		Packer 10 to Packer 11	255.24		
Planned Depth Bullet Guide	9,285	Feet		Packer 11 to Packer 12	261.21		
Actual Depth Bullet Guide	9,285	Feet		Packer 12 to Packer 13	259.66		
Distance Off	0	Feet		Packer 13 to Packer 14	217.86		
				Average Stage Length	247	Feet	
<b>WORK STRING INFORMATION</b>							
Casing	Weight	Thread	ID	Capacity	Grade	Shoe	
7	23	LTC	6.366	0.039368521	J55	5207	
				0			
Drill Pipe	Weight	Thread	ID	Capacity	Grade	Length	Torque
4" Full Hole	14	IF	3.34	0.010836992	XH	4193.49	10K
Heavy Weight	Weight	Thread	ID	Capacity	Grade	Length	Torque
4" Full Hole	27.2	IF	3.31	0.01064319	XH	1233	10K
Drill Collar	Weight	Thread	ID	Capacity	Grade	Length	Torque
x	x	x	x	0	x	x	x
Liner	Weight	Thread	ID	Capacity	Grade	Length	Torque
4	11.6	LTC	4	0.015543035	L80	4193.49	2280
Well Data						Open Hole	
MD	TVD	KOP	Shoe	Lateral	Size	Capacity	
9300	4631	4023	9285	4093	6.125	0.03644417	bbl/ft
<b>FLUIDS</b>							
Mud Weight		Mud Type		Fill Fluid	Fill Weight	LCM (if yes-amount- ppg)	Viscosity
8.5		water		fresh water	8.34	0	28
Fluid Level in Annulus Start	full	PUMP TYPE	SPM	BPS	Rig Type	Kelly	Weight
Fluid Level in Annulus Change	full	DH-7000	75	0.079	Kelly	double	10K
<b>AS RUN IN HOLE WEIGHTS</b>							
Liner	Push Pipe	H.W.D.P.		D.P.			
Air	Mud	Air	Mud	Air	Mud	Air	Mud
0	9	0	9	0	9	0	9
<b>Calculated Neutral Weight Including Blocks:</b>		<b>98,578</b>		<b>Weight When Released From PermaPlus:</b>		<b>92,000</b>	
				<b>Pipe Stretch in Inches Before Releasing:</b>		<b>20"</b>	
Setting Tool Part Number	108720-000001			FracPORT Part Number	PN 121332-000020		
Elastomer / Metallurgy / Pinned to				Elastomer / Metallurgy / Pinned to			
Packer Part Number	PN 121381-000001			Other Part Number			
Elastomer / Metallurgy / Pinned to				Elastomer / Metallurgy / Pinned to			
FTR				Problem on Job			
<b>Notes:</b>							
Company Confidential							

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Operator:	Woolsey Petroleum	Base Point:	20600 Conway
Company Rep:	Mike Tharp	Packers Plus Rep:	Gary Goodman
Well Name:	Miller Gas Unit D 2H	Date Started:	7/25/2012
Ticket Number:	SOU005160	Date Completed:	8/1/2012
County/State:	Barber Co, KS	Type of Job:	Stac Frac HD

Item	Description	Length	Date TMD		
			Landed @	Accumulated	Proposed
			Actual MD		
			9285.00		
	<b>GS</b>	<b>0.92</b>	9284.08	0.92	
	<b>FC</b>	<b>1.33</b>	9282.75	2.25	
	<b>PUP JOINT</b>	<b>6.13</b>	9276.62	8.38	
	<b>FC</b>	<b>1.33</b>	9275.29	9.71	
	<b>Toe Sub</b>	<b>2.72</b>	9272.57	12.43	
	<b>PUP JOINT</b>	<b>6.11</b>	9266.46	18.54	
1	4.5"11.6ppf N-80LTCLiner	45.26	9221.20	63.80	
	<b>PUP</b>	<b>3.09</b>	9218.11	66.89	
	<b>DHY</b>	<b>4.32</b>	9213.79	71.21	
	<b>PUP</b>	<b>6.09</b>	9207.70	77.30	
2	4.5"11.6ppf N-80LTCLiner	45.28	9162.42	122.58	
	<b>PUP</b>	<b>3.08</b>	9159.34	125.66	
	<b>RSIIS</b>	<b>7.28</b>	9152.06	132.94	
	<b>PUP</b>	<b>6.11</b>	9145.95	139.05	
3	4.5"11.6ppf N-80LTCLiner	45.24	9100.71	184.29	
	<b>PUP</b>	<b>3.09</b>	9097.62	187.38	
	<b>RSII</b>	<b>5.23</b>	9092.39	192.61	
	<b>PUP</b>	<b>5.52</b>	9086.87	198.13	
4	4.5"11.6ppf N-80LTCLiner	45.27	9041.60	243.40	
5	4.5"11.6ppf N-80LTCLiner	45.28	8996.32	288.68	
	<b>1.75 FRAC PORT</b>	<b>2.65</b>	8993.67	291.33	
6	4.5"11.6ppf N-80LTCLiner	45.26	8948.41	336.59	
7	4.5"11.6ppf N-80LTCLiner	45.24	8903.17	381.83	
8	4.5"11.6ppf N-80LTCLiner	45.26	8857.91	427.09	
	<b>PUP</b>	<b>3.08</b>	8854.83	430.17	
	<b>RSII</b>	<b>5.25</b>	8849.58	435.42	
	<b>PUP</b>	<b>6.12</b>	8843.46	441.54	
9	4.5"11.6ppf N-80LTCLiner	45.28	8798.18	486.82	
10	4.5"11.6ppf N-80LTCLiner	45.30	8752.88	532.12	
11	4.5"11.6ppf N-80LTCLiner	45.27	8707.61	577.39	
	<b>1.875 FRAC PORT</b>	<b>2.65</b>	8704.96	580.04	
12	4.5"11.6ppf N-80LTCLiner	45.26	8659.70	625.30	
13	4.5"11.6ppf N-80LTCLiner	45.25	8614.45	670.55	
14	4.5"11.6ppf N-80LTCLiner	45.27	8569.18	715.82	
	<b>PUP</b>	<b>3.07</b>	8566.11	718.89	
	<b>RSII</b>	<b>5.25</b>	8560.86	724.14	

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	PUP	6.13	8554.73	730.27	
15	4.5"11.6ppf N-80LTCLiner	45.25	8509.48	775.52	
16	4.5"11.6ppf N-80LTCLiner	45.30	8464.18	820.82	
17	4.5"11.6ppf N-80LTCLiner	45.26	8418.92	866.08	
	<b>2.00 FRAC PORT</b>	<b>2.65</b>	<b>8416.27</b>	<b>868.73</b>	
18	4.5"11.6ppf N-80LTCLiner	41.43	8374.84	910.16	
19	4.5"11.6ppf N-80LTCLiner	41.47	8333.37	951.63	
20	4.5"11.6ppf N-80LTCLiner	40.05	8293.32	991.68	
	PUP	3.08	8290.24	994.76	
	<b>RSII</b>	<b>5.25</b>	<b>8284.99</b>	<b>1000.01</b>	
	PUP	6.11	8278.88	1006.12	
21	4.5"11.6ppf N-80LTCLiner	41.43	8237.45	1047.55	
22	4.5"11.6ppf N-80LTCLiner	41.38	8196.07	1088.93	
23	4.5"11.6ppf N-80LTCLiner	40.05	8156.02	1128.98	
	<b>2.125 FRAC PORT</b>	<b>2.65</b>	<b>8153.37</b>	<b>1131.63</b>	
24	4.5"11.6ppf N-80LTCLiner	41.42	8111.95	1173.05	
25	4.5"11.6ppf N-80LTCLiner	41.42	8070.53	1214.47	
26	4.5"11.6ppf N-80LTCLiner	39.38	8031.15	1253.85	
	PUP	3.08	8028.07	1256.93	
	<b>RSII</b>	<b>5.25</b>	<b>8022.82</b>	<b>1262.18</b>	
	PUP	6.11	8016.71	1268.29	
27	4.5"11.6ppf N-80LTCLiner	41.40	7975.31	1309.69	
28	4.5"11.6ppf N-80LTCLiner	41.42	7933.89	1351.11	
29	4.5"11.6ppf N-80LTCLiner	41.45	7892.44	1392.56	
	<b>2.250 FRAC PORT</b>	<b>2.65</b>	<b>7889.79</b>	<b>1395.21</b>	
30	4.5"11.6ppf N-80LTCLiner	40.09	7849.70	1435.30	
31	4.5"11.6ppf N-80LTCLiner	41.41	7808.29	1476.71	
32	4.5"11.6ppf N-80LTCLiner	40.09	7768.20	1516.80	
	PUP	3.07	7765.13	1519.87	
	<b>RSII</b>	<b>5.25</b>	<b>7759.88</b>	<b>1525.12</b>	
	PUP	6.12	7753.76	1531.24	
33	4.5"11.6ppf N-80LTCLiner	41.46	7712.30	1572.70	
34	4.5"11.6ppf N-80LTCLiner	41.45	7670.85	1614.15	
35	4.5"11.6ppf N-80LTCLiner	41.43	7629.42	1655.58	
	<b>2.375 FRAC PORT</b>	<b>2.65</b>	<b>7626.77</b>	<b>1658.23</b>	
36	4.5"11.6ppf N-80LTCLiner	40.09	7586.68	1698.32	
37	4.5"11.6ppf N-80LTCLiner	41.47	7545.21	1739.79	
38	4.5"11.6ppf N-80LTCLiner	40.06	7505.15	1779.85	
	PUP	3.08	7502.07	1782.93	
	<b>RSII</b>	<b>5.24</b>	<b>7496.83</b>	<b>1788.17</b>	
	PUP	6.10	7490.73	1794.27	
39	4.5"11.6ppf N-80LTCLiner	41.41	7449.32	1835.68	
40	4.5"11.6ppf N-80LTCLiner	42.22	7407.10	1877.90	
41	4.5"11.6ppf N-80LTCLiner	42.19	7364.91	1920.09	
	<b>2.500 FRAC PORT</b>	<b>2.65</b>	<b>7362.26</b>	<b>1922.74</b>	
42	4.5"11.6ppf N-80LTCLiner	42.16	7320.10	1964.90	
43	4.5"11.6ppf N-80LTCLiner	40.05	7280.05	2004.95	
44	4.5"11.6ppf N-80LTCLiner	42.15	7237.90	2047.10	

## PACKERS PLUS - PACKER PLACEMENT

	PUP	3.08	7234.82	2050.18	
	RSII	5.25	7229.57	2055.43	
	PUP	6.12	7223.45	2061.55	
45	4.5"11.6ppf N-80LTCLiner	41.45	7182.00	2103.00	
46	4.5"11.6ppf N-80LTCLiner	42.20	7139.80	2145.20	
47	4.5"11.6ppf N-80LTCLiner	42.72	7097.08	2187.92	
	2.625 FRAC PORT	2.65	7094.43	2190.57	
48	4.5"11.6ppf N-80LTCLiner	42.18	7052.25	2232.75	
49	4.5"11.6ppf N-80LTCLiner	41.45	7010.80	2274.20	
50	4.5"11.6ppf N-80LTCLiner	42.21	6968.59	2316.41	
	PUP	3.09	6965.50	2319.50	
	RSII	5.24	6960.26	2324.74	
	PUP	6.10	6954.16	2330.84	
51	4.5"11.6ppf N-80LTCLiner	40.05	6914.11	2370.89	
52	4.5"11.6ppf N-80LTCLiner	38.79	6875.32	2409.68	
53	4.5"11.6ppf N-80LTCLiner	41.42	6833.90	2451.10	
	2.750 FRAC PORT	2.65	6831.25	2453.75	
54	4.5"11.6ppf N-80LTCLiner	41.99	6789.26	2495.74	
55	4.5"11.6ppf N-80LTCLiner	39.86	6749.40	2535.60	
56	4.5"11.6ppf N-80LTCLiner	42.19	6707.21	2577.79	
	PUP	3.06	6704.15	2580.85	
	RSII	5.21	6698.94	2586.06	
	PUP	6.12	6692.82	2592.18	
57	4.5"11.6ppf N-80LTCLiner	40.25	6652.57	2632.43	
58	4.5"11.6ppf N-80LTCLiner	41.49	6611.08	2673.92	
59	4.5"11.6ppf N-80LTCLiner	40.10	6570.98	2714.02	
	2.875 FRAC PORT	2.65	6568.33	2716.67	
60	4.5"11.6ppf N-80LTCLiner	41.44	6526.89	2758.11	
61	4.5"11.6ppf N-80LTCLiner	40.06	6486.83	2798.17	
62	4.5"11.6ppf N-80LTCLiner	40.05	6446.78	2838.22	
	PUP	3.08	6443.70	2841.30	
	RSII	5.23	6438.47	2846.53	
	PUP	6.10	6432.37	2852.63	
63	4.5"11.6ppf N-80LTCLiner	41.51	6390.86	2894.14	
64	4.5"11.6ppf N-80LTCLiner	41.40	6349.46	2935.54	
65	4.5"11.6ppf N-80LTCLiner	42.03	6307.43	2977.57	
	3.00 FRAC PORT	2.65	6304.78	2980.22	
66	4.5"11.6ppf N-80LTCLiner	42.19	6262.59	3022.41	
67	4.5"11.6ppf N-80LTCLiner	42.18	6220.41	3064.59	
68	4.5"11.6ppf N-80LTCLiner	40.06	6180.35	3104.65	
	PUP	3.09	6177.26	3107.74	
	RSII	5.23	6172.03	3112.97	
	PUP	6.10	6165.93	3119.07	
69	4.5"11.6ppf N-80LTCLiner	41.44	6124.49	3160.51	
70	4.5"11.6ppf N-80LTCLiner	41.41	6083.08	3201.92	
71	4.5"11.6ppf N-80LTCLiner	42.15	6040.93	3244.07	
	3.125 FRAC PORT	2.65	6038.28	3246.72	
72	4.5"11.6ppf N-80LTCLiner	40.05	5998.23	3286.77	



## PACKERS PLUS - PACKER PLACEMENT

73	4.5"11.6ppf N-80LTCLiner	41.38	5956.85	3328.15	
74	4.5"11.6ppf N-80LTCLiner	41.42	5915.43	3369.57	
	PUP	3.06	5912.37	3372.63	
	RSII	5.23	5907.14	3377.86	
	PUP	6.10	5901.04	3383.96	
75	4.5"11.6ppf N-80LTCLiner	40.03	5861.01	3423.99	
76	4.5"11.6ppf N-80LTCLiner	42.25	5818.76	3466.24	
77	4.5"11.6ppf N-80LTCLiner	41.83	5776.93	3508.07	
	3.250 FRAC PORT	2.65	5774.28	3510.72	
78	4.5"11.6ppf N-80LTCLiner	39.77	5734.51	3550.49	
79	4.5"11.6ppf N-80LTCLiner	42.18	5692.33	3592.67	
	PUP	3.05	5689.28	3595.72	
	RSII	5.24	5684.04	3600.96	
	PUP	6.10	5677.94	3607.06	
80	4.5"11.6ppf N-80LTCLiner	42.20	5635.74	3649.26	
81	4.5"11.6ppf N-80LTCLiner	42.16	5593.58	3691.42	
82	4.5"11.6ppf N-80LTCLiner	42.22	5551.36	3733.64	
	3.375 FRAC PORT	2.65	5548.71	3736.29	
83	4.5"11.6ppf N-80LTCLiner	42.14	5506.57	3778.43	
84	4.5"11.6ppf N-80LTCLiner	41.50	5465.07	3819.93	
	PUP	3.06	5462.01	3822.99	
	RSII	5.23	5456.78	3828.22	
	PUP	6.12	5450.66	3834.34	
85	4.5"11.6ppf N-80LTCLiner	42.17	5408.49	3876.51	
86	4.5"11.6ppf N-80LTCLiner	40.05	5368.44	3916.56	
87	4.5"11.6ppf N-80LTCLiner	40.07	5328.37	3956.63	
	3.50 FRAC PORT	2.65	5325.72	3959.28	
88	4.5"11.6ppf N-80LTCLiner	42.20	5283.52	4001.48	
89	4.5"11.6ppf N-80LTCLiner	42.18	5241.34	4043.66	
	PUP	3.07	5238.27	4046.73	
	RSII	5.23	5233.04	4051.96	
	PUP	6.11	5226.93	4058.07	
90	4.5"11.6ppf N-80LTCLiner	42.21	5184.72	4100.28	
91	4.5"11.6ppf N-80LTCLiner	41.58	5143.14	4141.86	
92	4.5"11.6ppf N-80LTCLiner	42.18	5100.96	4184.04	
	PUP	3.10	5097.86	4187.14	
	BOTTOM	1.02	5096.84	4188.16	
	SF LINER HANGER	1.84	5095.00	4190.00	
	lower lock adapter	0.67	5094.33	4190.67	
	LOWER SETTING SLEEVE	2.82	5091.51	4193.49	
	UPPER SETTING SLEEVE	4.47	5087.04	4197.96	
	TOP CONN	1.03	5086.01	4198.99	
	HANDLING SUB	7.84	5078.17	4206.83	
1	DRILL PIPE	60.57	5017.60	4267.40	
2		62.05	4955.55	4329.45	
3		62.91	4892.64	4392.36	
4		61.31	4831.33	4453.67	
5		62.59	4768.74	4516.26	

## PACKERS PLUS - PACKER PLACEMENT

6		60.75	4707.99	4577.01	
7		60.70	4647.29	4637.71	
8		62.75	4584.54	4700.46	
9		60.12	4524.42	4760.58	
10		61.59	4462.83	4822.17	
11		62.61	4400.22	4884.78	
12		61.15	4339.07	4945.93	
13		61.12	4277.95	5007.05	
14		62.01	4215.94	5069.06	
15		60.98	4154.96	5130.04	
16		58.25	4096.71	5188.29	
17		60.35	4036.36	5248.64	
18		60.95	3975.41	5309.59	
19		60.37	3915.04	5369.96	
20		62.13	3852.91	5432.09	
21		59.73	3793.18	5491.82	
22		63.39	3729.79	5555.21	
23		62.90	3666.89	5618.11	
24		61.06	3605.83	5679.17	
25	<b>DRILL PIPE</b>	58.46	3547.37	5737.63	
26	<b>HW DP</b>	61.50	3485.87	5799.13	
27		61.65	3424.22	5860.78	
28		60.79	3363.43	5921.57	
29		62.24	3301.19	5983.81	
30		61.81	3239.38	6045.62	
31		61.95	3177.43	6107.57	
32		61.29	3116.14	6168.86	
33		61.20	3054.94	6230.06	
34		61.43	2993.51	6291.49	
35		61.94	2931.57	6353.43	
36		62.05	2869.52	6415.48	
37		61.48	2808.04	6476.96	
38		61.82	2746.22	6538.78	
39		61.07	2685.15	6599.85	
40		61.96	2623.19	6661.81	
41		61.90	2561.29	6723.71	
42		61.93	2499.36	6785.64	
43		61.92	2437.44	6847.56	
44		61.94	2375.50	6909.50	
45	<b>HW DP</b>	61.79	2313.71	6971.29	
46	<b>DP</b>	62.17	2251.54	7033.46	
47		60.63	2190.91	7094.09	
48		60.48	2130.43	7154.57	
49		59.80	2070.63	7214.37	
50		62.80	2007.83	7277.17	
51		63.14	1944.69	7340.31	
52		60.12	1884.57	7400.43	
53		61.32	1823.25	7461.75	

## PACKERS PLUS - PACKER PLACEMENT

54		60.22	1763.03	7521.97	
55		61.58	1701.45	7583.55	
56		60.76	1640.69	7644.31	
57		59.12	1581.57	7703.43	
58		61.11	1520.46	7764.54	
59		61.95	1458.51	7826.49	
60		60.30	1398.21	7886.79	
61		62.72	1335.49	7949.51	
62		62.33	1273.16	8011.84	
63		62.00	1211.16	8073.84	
64		62.41	1148.75	8136.25	
65		60.87	1087.88	8197.12	
66		61.08	1026.80	8258.20	
67		62.82	963.98	8321.02	
68		60.83	903.15	8381.85	
69		62.45	840.70	8444.30	
70		58.59	782.11	8502.89	
71		62.74	719.37	8565.63	
72		60.50	658.87	8626.13	
73		60.39	598.48	8686.52	
74		62.73	535.75	8749.25	
75		61.31	474.44	8810.56	
76		59.92	414.52	8870.48	
77		62.25	352.27	8932.73	
78		59.64	292.63	8992.37	
79		62.94	229.69	9055.31	
80		60.86	168.83	9116.17	
81		60.55	108.28	9176.72	
82		60.24	48.04	9236.96	
83		62.35	-14.31	9299.31	



**Woolsey Operating Company, LLC**

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

Measured Depth Log

Well Name: Miller-Diel #1 H  
Location: Section 14 - Township 34 South - Range 11 West  
License Number: 15-007-23928-01-00 Region: Barber County, KS  
Spud Date: Drilling Completed:  
Surface Coordinates: SW SE SE SW  
13' FSL, 2115' FWL  
Bottom Hole 330' FSL, 1980' FWL  
Coordinates: Section 23 - Township 34 South - Range 11 West  
Ground Elevation (ft): 1380' K.B. Elevation (ft): 1397'  
Logged Interval (ft): 3600' To: Total Depth (ft):  
Formation: Kansas City Grp ---> Mississippian  
Type of Drilling Fluid: Chemical Mud  
Printed by WellSight Log Viewer from WellSight Systems 1-800-447-1534 www.WellSight.com

**OPERATOR**

Company: Woolsey Operating Company, LLC  
Address: 125 N. Market, Suite 1000  
Wichita, KS 67202

**GEOLOGIST**

Name: Billy G. Klaver  
Company: Woolsey Operating Co. LLC  
Address: 125 N. Market, Wichita Kansas, 67202

### COMMENTS

Surface Casing: Set 20" X 53#/ft conductor to 40' with 4 yards of grout, Ran 12 joints of new 10 3/4" X 32.75#/ft casing to 326' KB with 300 sx Class A, 2% gel, 3% cc, Cement did circulate.  
Ran ----- 7"

Bit Record: #1 14 3/4" HTC in at 40', out at 330', 3.75 hours.

Gas Detector: Woolsey Operating Co. Gas Trailer #2  
Mud System: Mud-Co. Brad Bortz, Engineer

### INFO

Bit Record: 1) 17 1/2" RR RT, 2) 12 1/4" RR RT, 3) 8 3/4" JZ PDC, 4) 8 3/4" RTC DSX 616, 5) 8 3/4" RTC R23A PD.H, 6)

Gas Detector: Woolsey Operating, Gas Trailer #2  
Mud Program: Mud-Co. Brad Bortz, Engineer

### CREWS

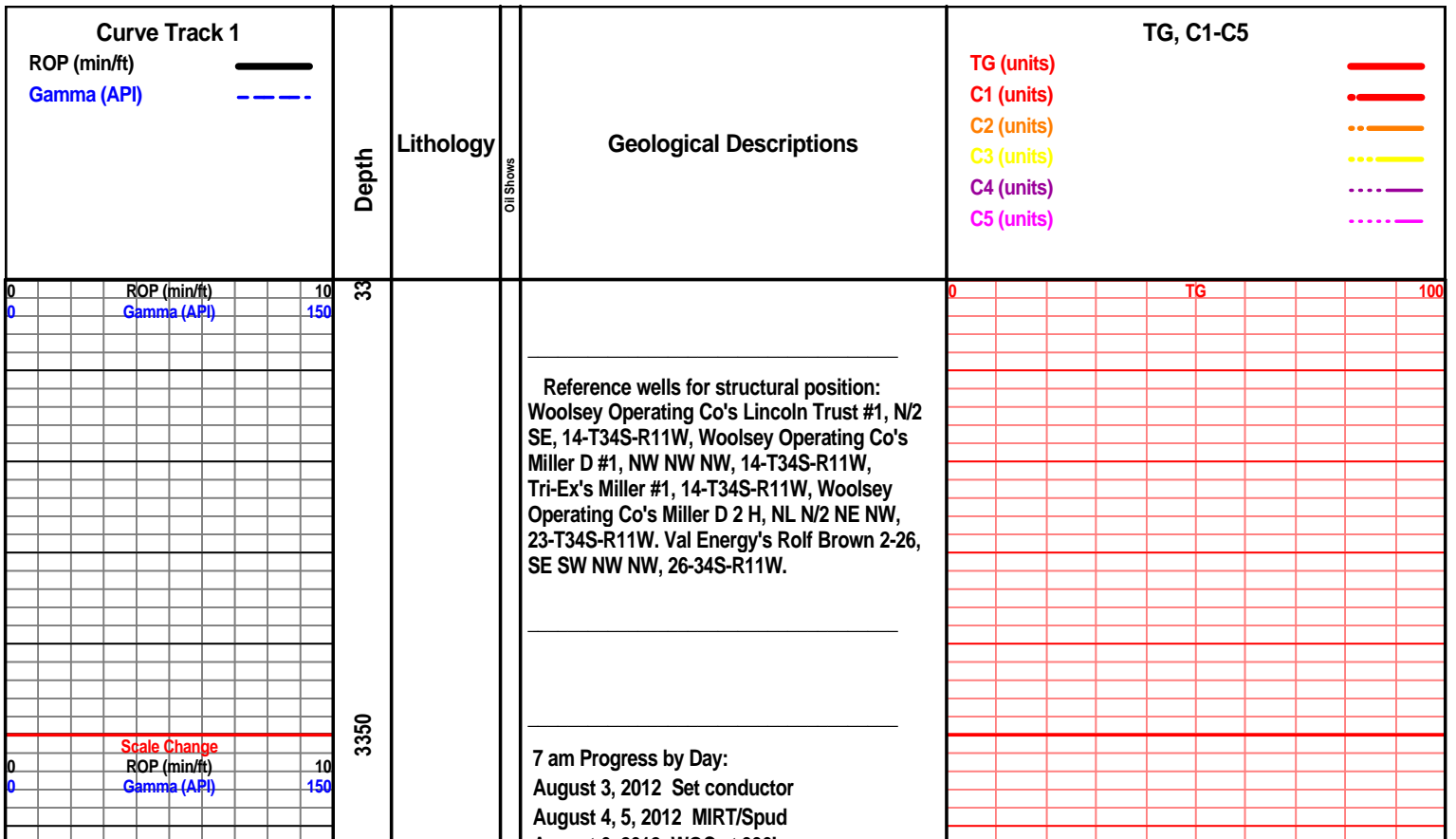
Tool Pusher: Mitch Sovia, Relief: Sammy Fry  
Drillers: (12 hour tours, 7 on 7 off) Days: Johnny Stone, David Herring, Evening: Terry Slack, Jeffery Meyers

### ROCK TYPES

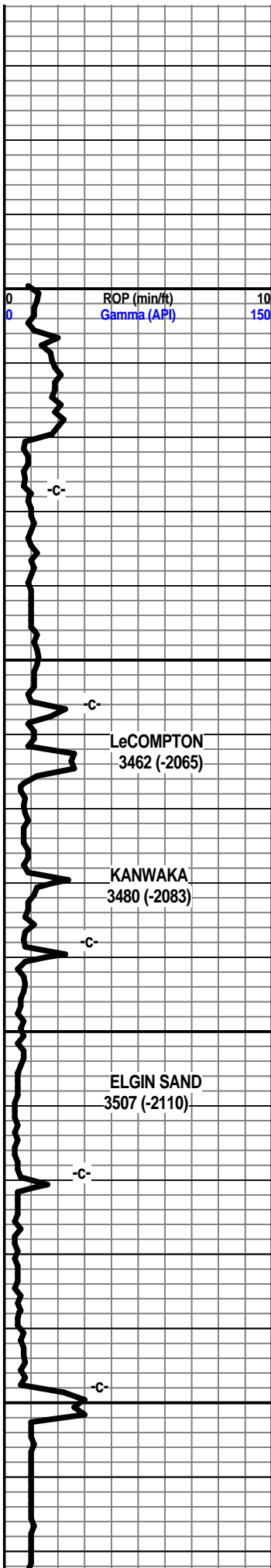
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	Bent		Sdy dolo		Mrlst		Gry sh
	Brec		Shy dolo		Salt		Shale
	Cht		Dol		Shale		Shyslstst
	Clyst		Gyp		Sltst		Sltstsh
	Coal		Sdy lmst		Ss		

### ACCESSORIES

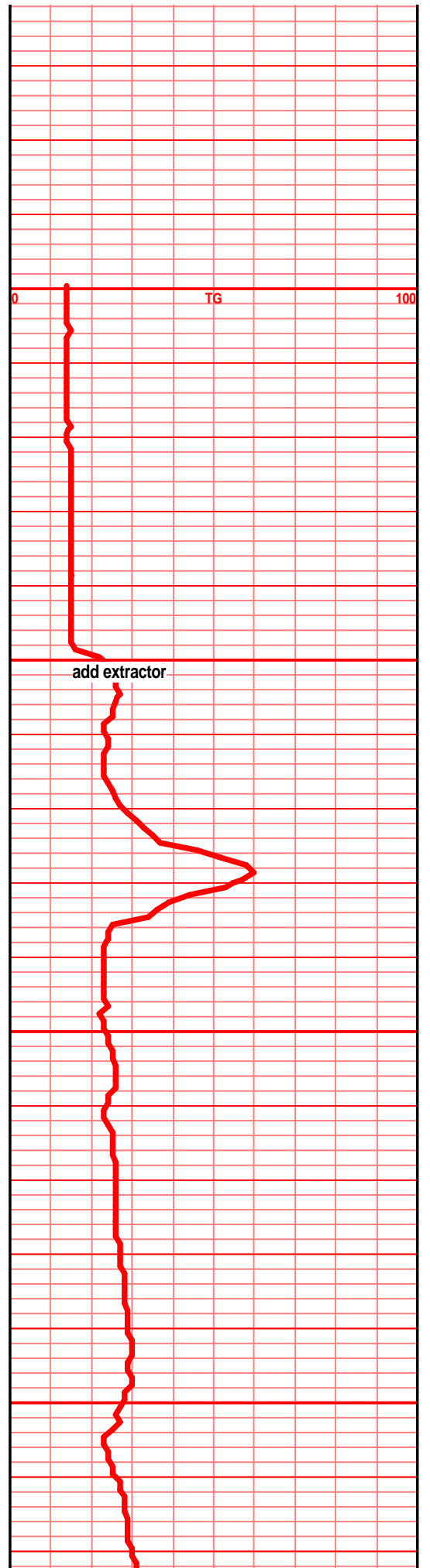
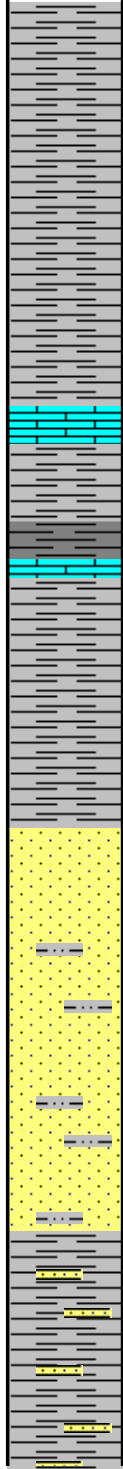
<b>MINERAL</b>		Chlorite		Pelec		Grysh	
	Anhy		Dol		Pellet	Gryslt	
	Arg		Sand		Pisolite	Lms	
	Bent		Silty		Plant	Sandylms	
	Bit	<b>FOSSIL</b>			Strom	Sh	
	Brecfrag		Algae		Fuss	Sltstn	
	Calc		Amph		Oomoldic		
	Carb		Belm	<b>STRINGER</b>		<b>TEXTURE</b>	
	Chtdk		Bioclst		Anhy		Boundst
	Chtlt		Brach		Arg		Chalky
	Dol		Bryozoa		Bent		Cryxln
	Ferrpel		Cephal		Coal		Earthy
	Ferr		Coral		Dol		Finexln
	Glau		Crin		Gyp		Grainst
	Gyp		Echin		Ls		Lithogr
	Marl		Fish		Mrst		Microxln
	Nodule		Foram		Sltstgr		Mudst
	Phos		Fossil		Ssstrg		Packst
	Pyr		Gastro		Carbsh		Wackest
	Salt		Oolite		Clystn		
	Sandy		Ostra		Dol		
	Silt						

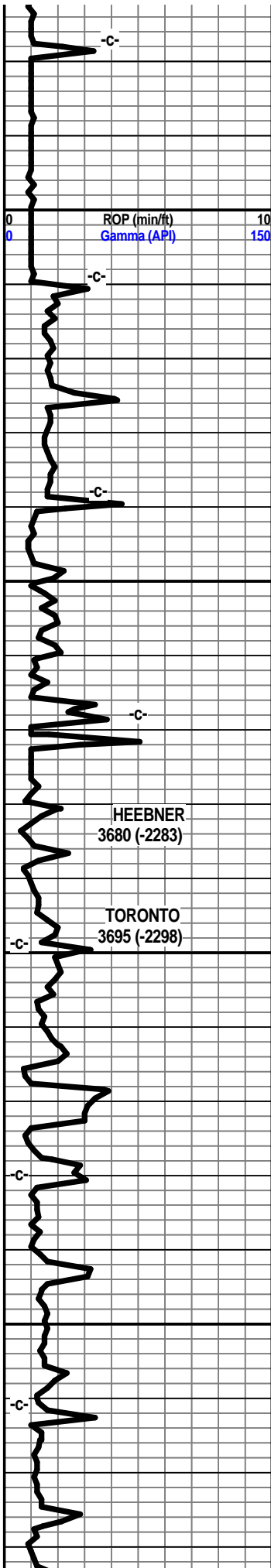


August 6, 2012 WOC at 330'  
 August 7, 2012 Nipple up BOP at 740'  
 August 8, 2012 1050'  
 August 9, 2012 Drilling at 1850'  
 August 10, 2012 Drilling at 2576'  
 August 11, 2012 Drilling at 3020'  
 August 12, 2012 Drilling at 3660'  
 August 13, 2012 TIH w/bit at 4003'  
 August 14, 2012 Drilling at 4361'



3400  
3450  
3500  
3550





3600  
3650  
3700  
3750

0.3 deg @ 98.6 az

0.2 deg @ 119.5 az



sst lt gry, f vf grnd, sub ang, silty, gritty, arg, gd inter gran por, soft fria, blk ang clstrs. shl gry silty sndy, clay fill

shl gry silty sndy gritty, sst gry lt gry, f vf grnd, soft, fria, blk ang clstrs, clay fill, silty arg

shl gry silty sndy gritty, sst gry lt gry, f vf grnd, soft fria blk ang clstrs, arg, clay fill, silty

shl gry lt med gry, silty gritty,

shl gry drk gry, silty gritty, lst tan brn vf xln dns hrd blk arg

shl gry drk brn blk, flood blk carb shl

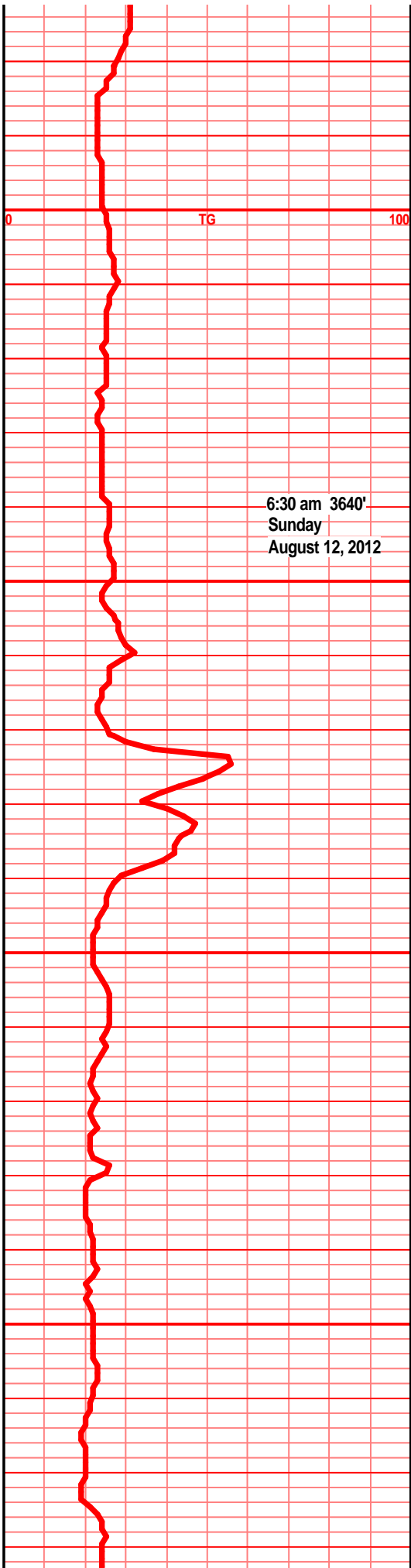
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lst wth off wht tan, f xln gran gritty, sub chlky tr foss frags, tr sndy text, soft, tr foss frags

shl gry med gry, silty gritty, tr sndy, mic

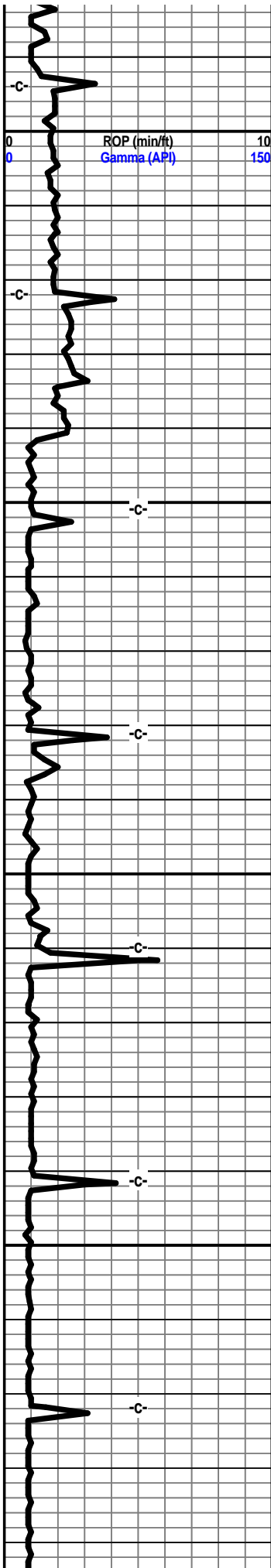
shl gry med gry silty, gritty, mic, tr blk carb plant foss flks

shl gry med gry silty soft gritty



6:30 am 3640'  
Sunday  
August 12, 2012





3800  
0.2 deg @ 121.7 az  
3850  
0.2 deg @ 114.2 az  
3900  
3950  
0.2 deg @ 99.0 az  
0.5 deg @ 155.4 az



shl gry med gry soft silty tr gritty, plant flks, carb flks

shl gry drk/med gry, soft, muddy, silty, blk carb plant frags,

shl gry med lt gry silty gritty, sndy in prt, carb foss frags

shl gry med gry lt gry, silty gritty sndy, sst lt gry f vf grnd, sub ang well srted, fria, blk carb fill, arg, clay fill

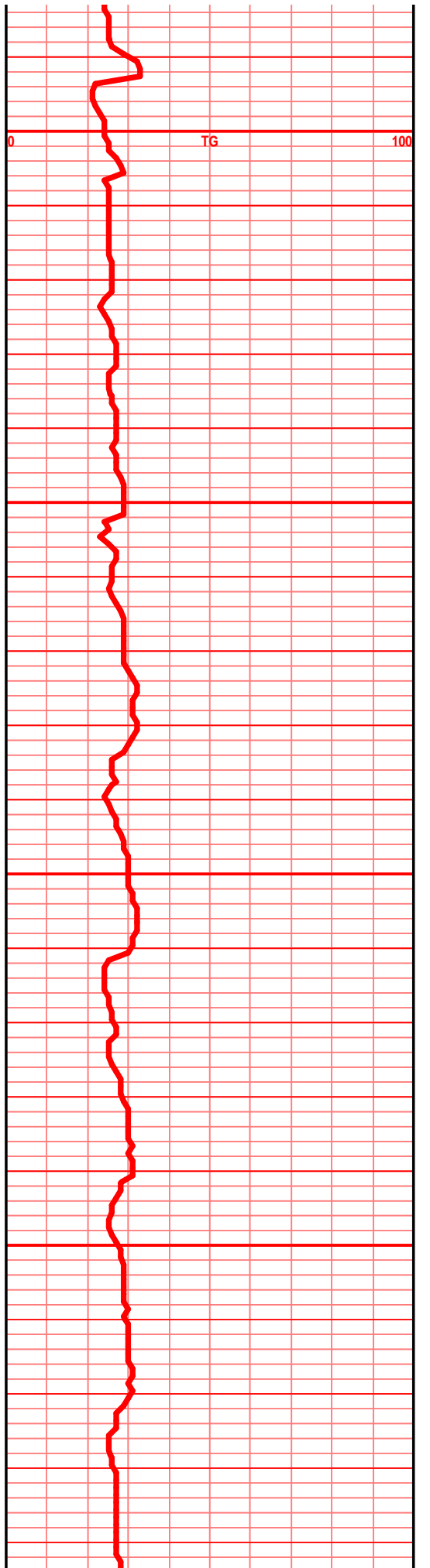
sh gry lt med gry, silty, gritty sndy in prt, sst lt gry f grnd, sub ang, prly srted, arg clay fill, blk carb fill

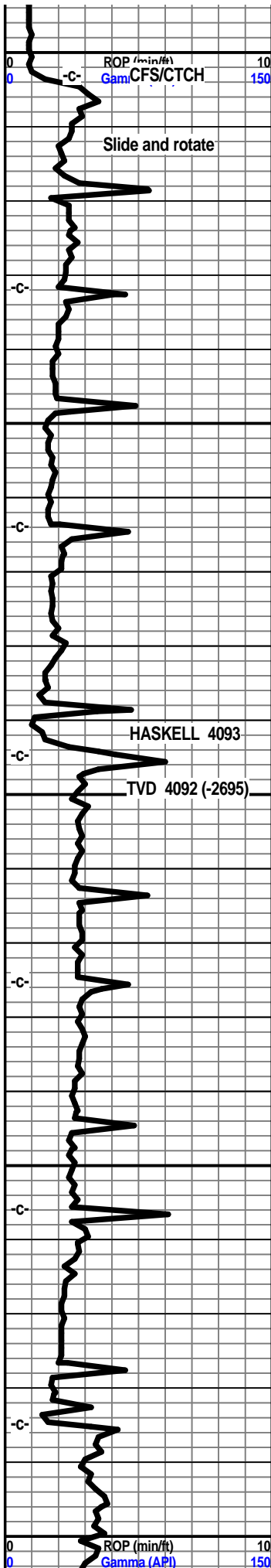
shl gry med/lt gry silty sndy gritty. sst lt gry f grnd, sub ang grains, sub fria, prly srted, arg mic, carb flks, tr plant foss

shl gry med/lt gry silty gritty sndy, sst aa

shl gry med gry soft muddy soft silty gritty tr sndy, sst lt gry green silty arg, f vf grnd, sub ang grains, sub fria, blk clstrs, blk carb fill, tr glau

shl gry med/lt gry silty gritty sndy aa, blk carb strks, snd grn inclu, glau, sst aa, arg clay fill tr glau





4000  
2.4 deg @ 163.1 az  
4050  
4.7 deg @ 166.1 az  
4100  
10.5 deg @ 173.9 az  
4150  
13.2 deg @ 175.6 az  
200  
16.3 deg @ 176.5 az



shl gry med drk gry, soft silty, muddy in prt,

shl gry drk gry muddy silty

shl gry drk gry silty soft muddy spls wsh drk grn

shl gry drk gry silty, muddy, soft

shl gry drk gry blk splinters, muddy, spls wsh drk gry

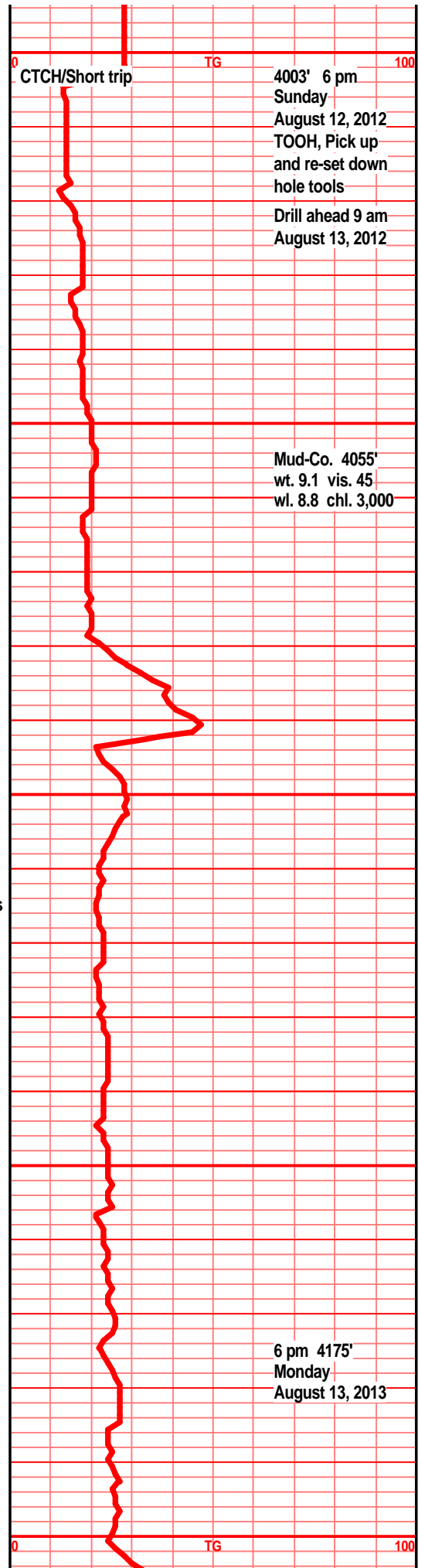
shl gry drk gry blk, 1st drk tan brn f sli med xln blk ang dns, crsly foss in prt, foss frags, tr crs calc xln fill

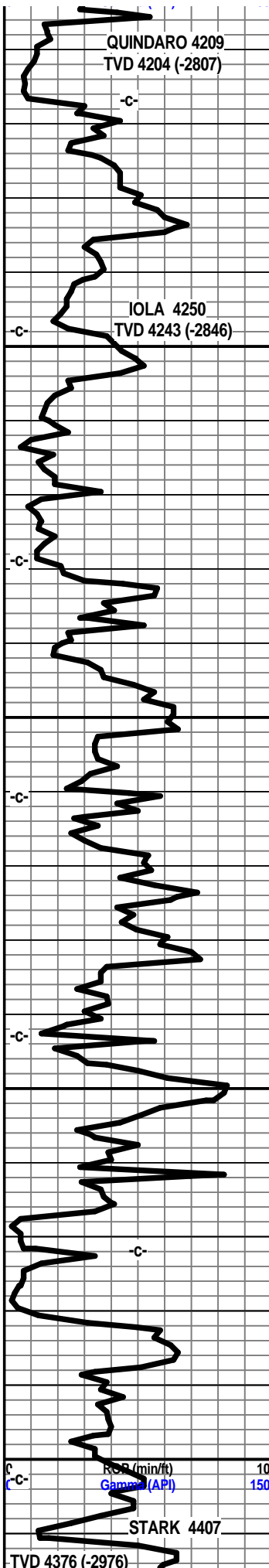
shl gry drk med drk gry, soft muddy, spls wsh drk gry/blk

shl gry drk gry silty, slick splintery, soft muddy, spls wsh drk gry

shl gry drk gry/blk silty soft

shl gry drk med drk gry soft muddy, spls wsh arv/dri arv





177.2 deg @ 177.7 az

21.8 deg @ 177.7 az

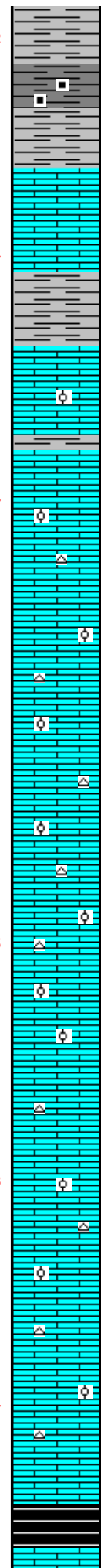
24.9 deg @ 177.4 az

28.3 deg @ 178.1 az

31.5 deg @ 179.5 az

34.9 deg @ 180.8 az

37.5 deg @ 181.4 az



shl drk gry blk, blk semi carb is prt, tr gas bubs, filmy cond

lst crm buff tan, f sli med xln, sub chlky foss frags, calc xln fill, much gry drk gry blk semi carb shl

lst wht crm buff lt tan f sli med xln flky sub chlky, gran in prt, foss frags, foss ool, calc xln fill, chrt wht shrp frsh opa

lst wth off wht tan tr buff, f sli med xln, gran blk sub chlky foss frags, foss ool, calc xln fill, chrt wht opa shrp frsh

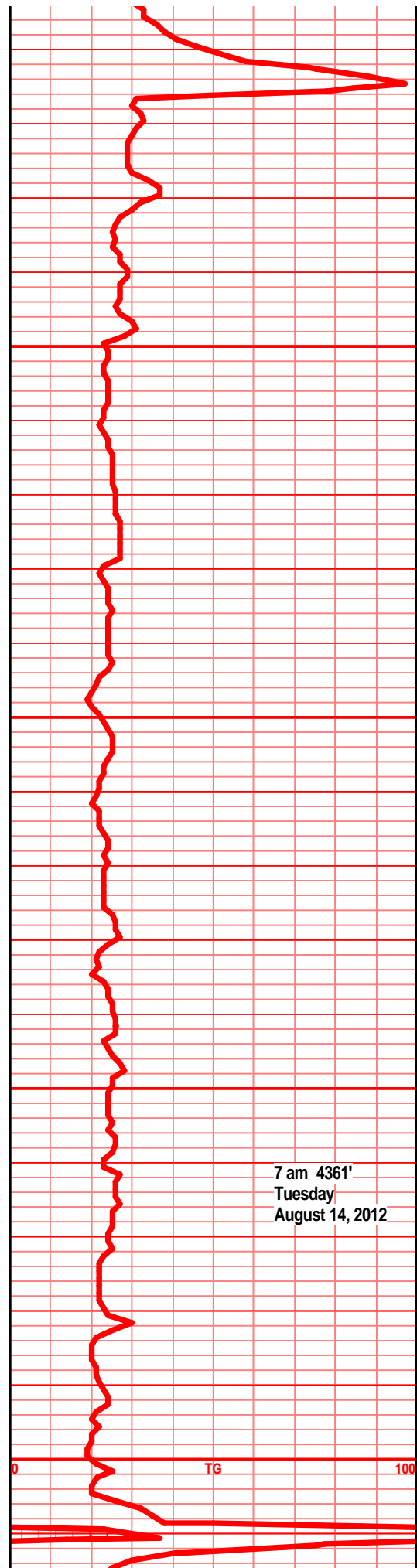
lst wht off wht lt tan tr buff f sli med xln, gran sub chlky, foss frags, calc xln fill, chrt wht shrp frsh opa

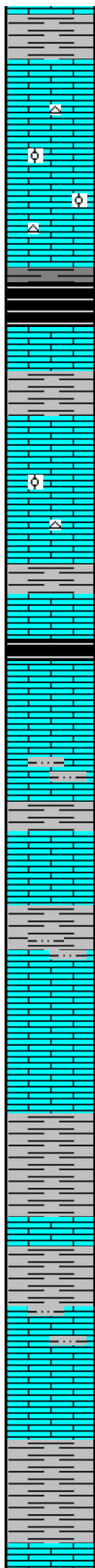
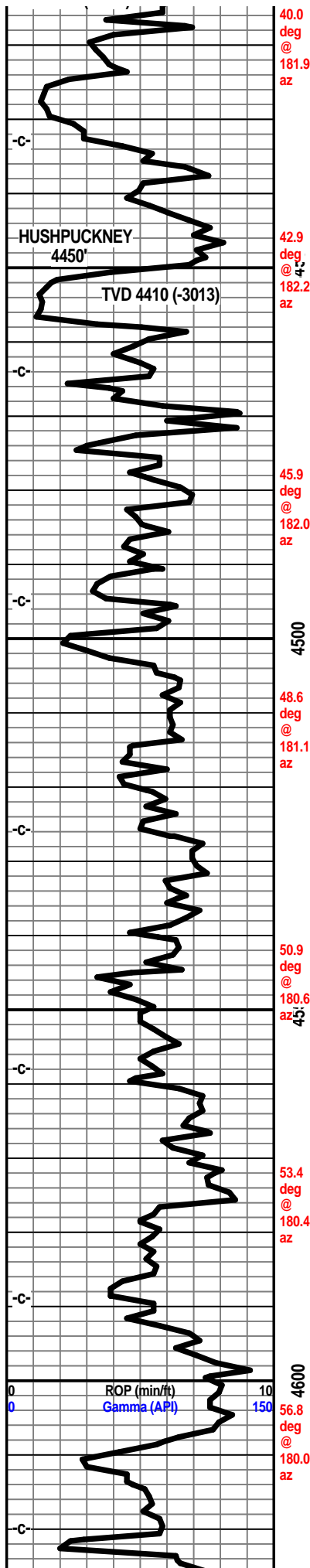
lst tan buff crm tr drk tan, f sli med xln, gran, tr soft, sub chlky to chlky, foss frags, calc xln fill, chrt wht/lt gry shrp frsh opa

lst off tan crm buff lt brn in prt, f sli med xln blk ang sub chlky, tr chlky, foss frags, calc xln fill, tr chrt tan lt gry/brn shrp frsh opa blk ang

lst crm off wht tan f sli med xln, blk ang sub chlky foss frags, tr foss ool, calc xln fill, chrt tan lt gry shrp frsh opa

lst crm tan buff f sli med xln gran soft chlky to sub chlky foss frags, tr foss ool, gran, calc xln fill





shl gry dry gry, much blk carb shl, grsy, wxy gas bubs, lst tan lt brn f xln gran dns hrd blk arg, semi chlky, tr micro foss frags,

lst off wht lt gry f xln blk arg dns hrd blk sub chky, foss frags, tr foss ool, foss mold por, calc xln fill, tr chrt lt gry wht opaqr shrp frsh

flood blk carb shl, wxy, grsy, abun gas bubs, lst tan lt gry/brn f vf xln dns hrd blk arg, tr micro foss, blk calc xln fill

lst crm tan buff lt brn f vf xln dn shrd blk arg sli sub chlky in prt, micro foss frags, calc xln fill, chrt tan brn shrp frsh opaqr foss

sh gry drk gry blk, blk carb swy grsy, tr gas bub, lst tan crm brn f vf xln dns hrd blk arg micro foss calc xln fill, tr chrt aa

shl gry drk gry brn, lst tan brn f vf lxn dns hrd blk arg, tr micro foss, calc fill frags,

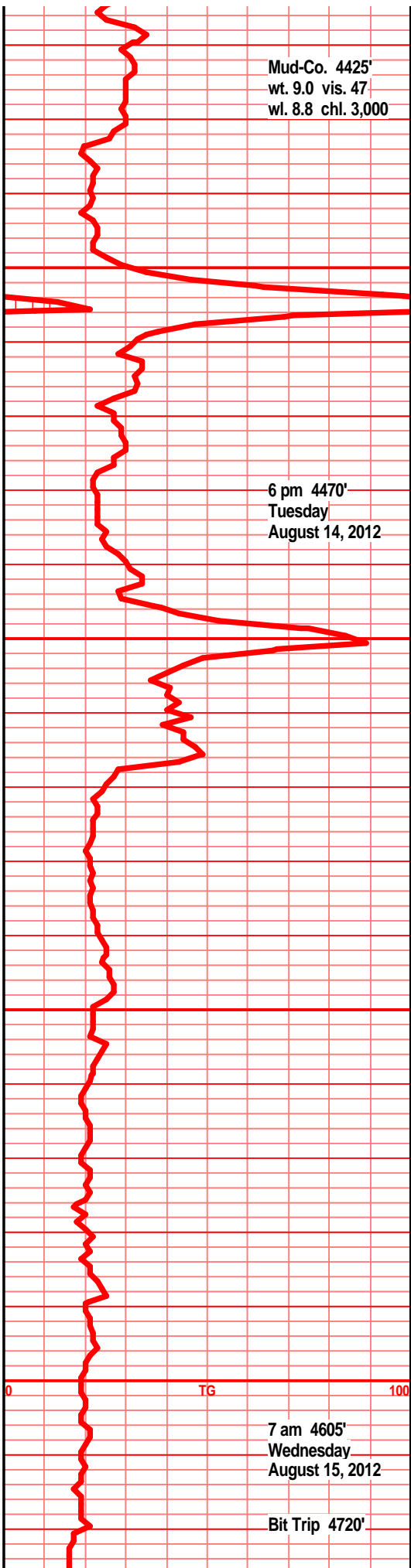
shl gry green silty gritty, tr sndy in prt, lst crm buff tan tr lt brn f vf xln dns sub chlky micro foss frags, tr chrt tan gry shrp frsh opaqr

sh lgr green silty gritty soft, lst tan lt brn buff f vf xln dns hrd blk sub chlky micro foss frags, tr chrt tan shrp frsh

lst crm tan buff off wht, f vf xln dns hrd blk arg, silty, tr foss frags, calc xln fill, tr chrt tan brn shrp frsh foss opaqr

lst crm buff tan f vf xln sub chlky micro foss frags, tr chrt wht shrp frsh, shls, tan brn gry calc

shl gry brn blk, silty calc, lst tan buff, tan brn f xln blk arg hrd arg micro foss frags, tr chrt



tan brn frsh opa

1st crm tan buff, tan brn f vf xln blk ang hrd, sub chky in prt, tr foss frags, much shl poor sample

61.1 deg @ 180.1 az

4650

4700

4750

4800

-c-

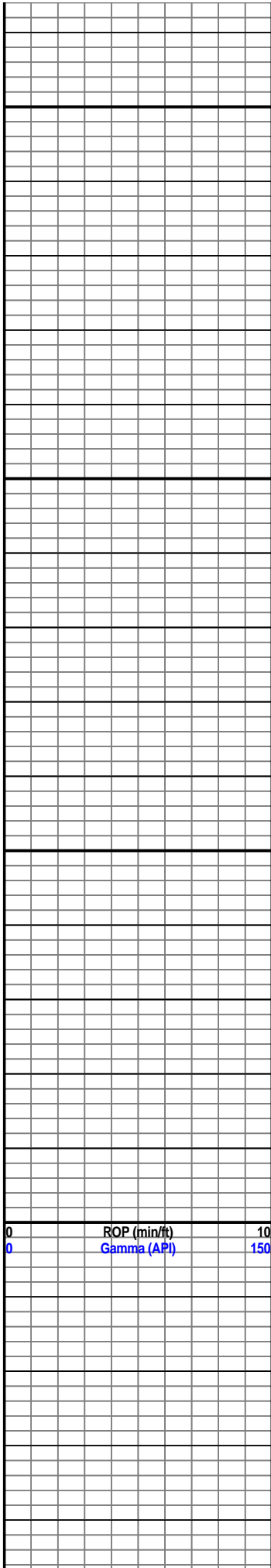
-c-

ROP (min/ft) 10  
Gamma (API) 150



7 am 4672'  
Thursday  
August 16, 2012

TG 100



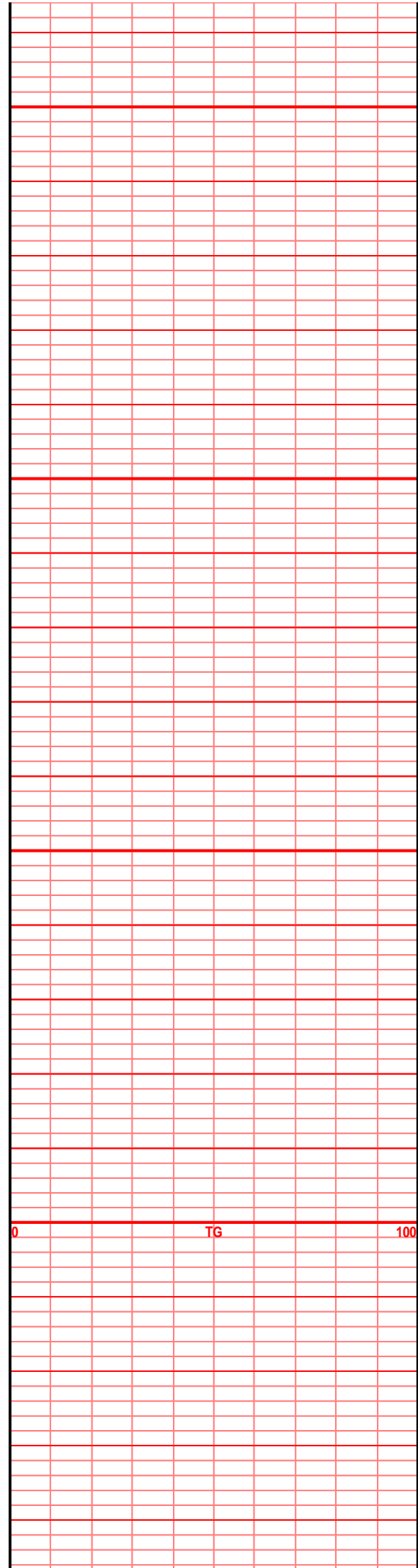
4850

4900

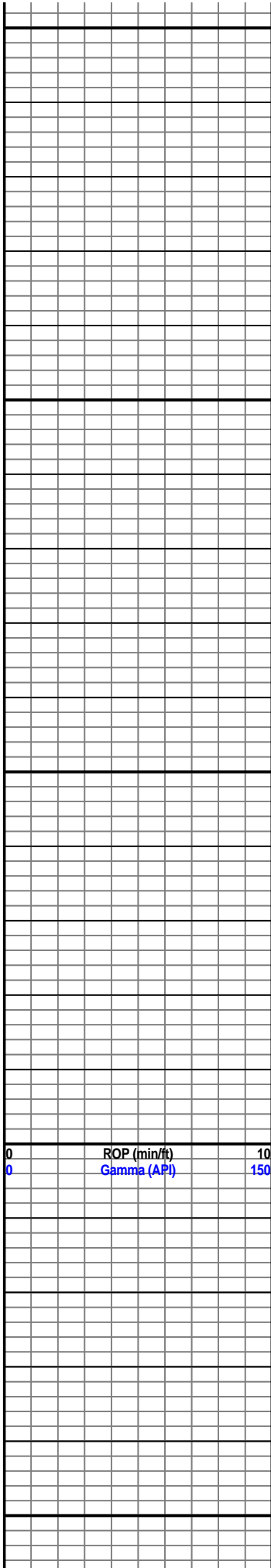
4950

5000

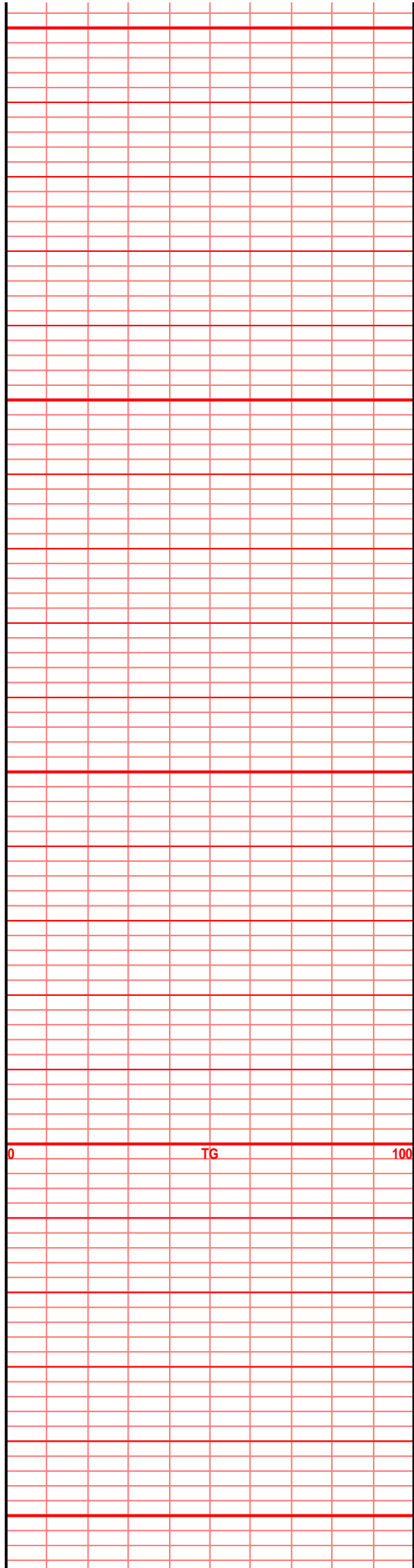
0 ROP (min/ft) 10  
0 Gamma (API) 150



0 TG 100



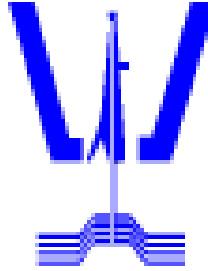
5050  
5100  
5150  
5200  
5250



0  
TG  
100







# Woolsey Operating Company, LLC

Scale 1:600 (2"=100") Metric  
Measured Depth Log

Well Name: Miller-Diel 1 H  
Location: Section 14 - Township 34 South - Range 11 West  
License Number: 15-007- 23928-01-00 Region: Barber County, KS  
Spud Date: August 5, 2012 Drilling Completed:  
Surface Coordinates: SW SE SE SW  
13' FSL, 2115' FWL  
Bottom Hole 330' FSL and 1980' FWL  
Coordinates: Section 23 - Township 34 South - Range 11 West  
Ground Elevation (m): 1380' K.B. Elevation (m): 1397'  
Logged Interval (m): 4000' To: Total Depth (m):  
Formation: Kansas City Group ----> Mississippian  
Type of Drilling Fluid: Water/Flozan  
Printed by WellSight Log Viewer from WellSight Systems 1-800-447-1534 www.WellSight.com

## OPERATOR

Company: Woolsey Operating Company, LLC  
Address: 125 N. Market Suite 1000  
Wichita, Kansas 67202

## GEOLOGIST

Name: Bill Klaver  
Company: Woolsey Operating Company, LLC  
Address: 125 N. Market Suite 1000  
Wichita, Kansas 67202


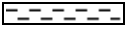

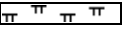
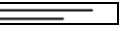
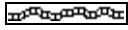


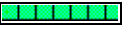

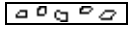


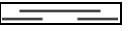




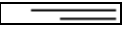

### Comments

Gas Detector: Woolsey Operating Co. Gas Trailer #2  
 Mud Program: Mud-Co. Brad Bortz, Engineer

### Crews
















Dan D Drilling Rig 11, Mitch Sovia-Toolpusher, Sammy Fry-Relief  
 Drillers: (12 hour tours)

### ROCK TYPES














	Anhy		Clyst		Gyp		Mrlst		Shgy
	Bent		Coal		Igne		Salt		Sltst
	Brec		Congl		Lmst		Shale		Ss
	Cht		Dol		Meta		Shcol		Till

### ACCESSORIES
















#### MINERAL

	Anhy
	Arggrn
	Arg
	Bent
	Bit
	Brecfrag
	Calc
	Carb
	Chtdk
	Chtlt
	Dol
	Feldspar
	Ferrpel
	Ferr
	Glau









	Gyp
	Hvymn
	Kaol
	Marl
	Minxl
	Nodule
	Phos
	Pyr
	Salt
	Sandy
	Silt
	Sil
	Sulphur
	Tuff


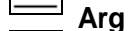
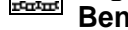
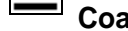



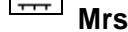
#### FOSSIL

	Algae
	Amph
	Belm
	Bioclst
	Brach
	Bryozoa
	Cephal
	Coral
	Crin
	Echin
	Fish
	Foram
	Fossil
	Gastro
	Oolite



	Ostra
	Pelec
	Pellet
	Pisolite
	Plant
	Strom












#### STRINGER

	Anhy
	Arg
	Bent
	Coal
	Dol
	Gyp
	Ls
	Mrst



	Sltstrg
	Ssstrg

#### TEXTURE

	Boundst
	Chalky
	Cryxln
	Earthy
	Finexln
	Grainst
	Lithogr
	Microxln
	Mudst
	Packst
	Wackest

**OTHER SYMBOLS**

**POROSITY**

- E Earthy
- F Fenest
- F Fracture
- X Inter
- M Moldic
- O Organic
- P Pinpoint

V Vuggy

**SORTING**

- W Well
- M Moderate
- P Poor

**ROUNDING**

- R Rounded
- S Subrnd
- a Subang
- A Angular

**OIL SHOW**

- Even

Spotted

Ques

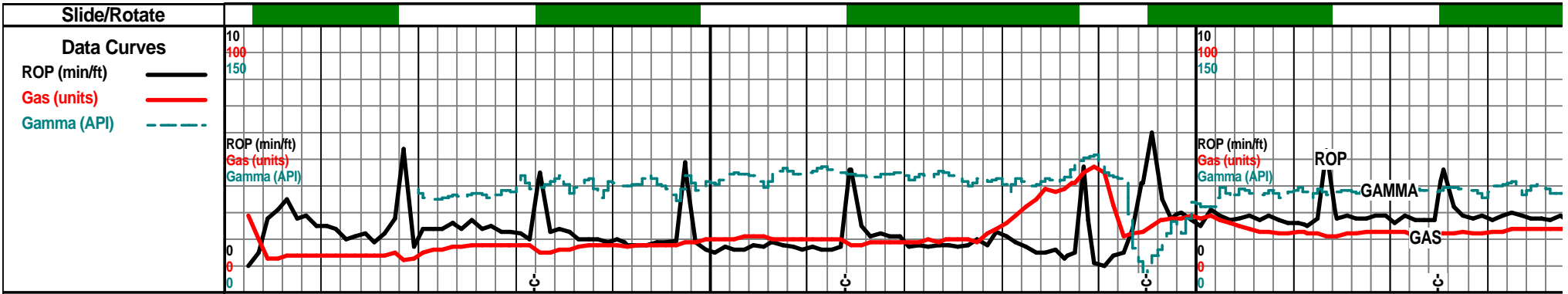
Dead

**INTERVAL**

- Core
- Dst

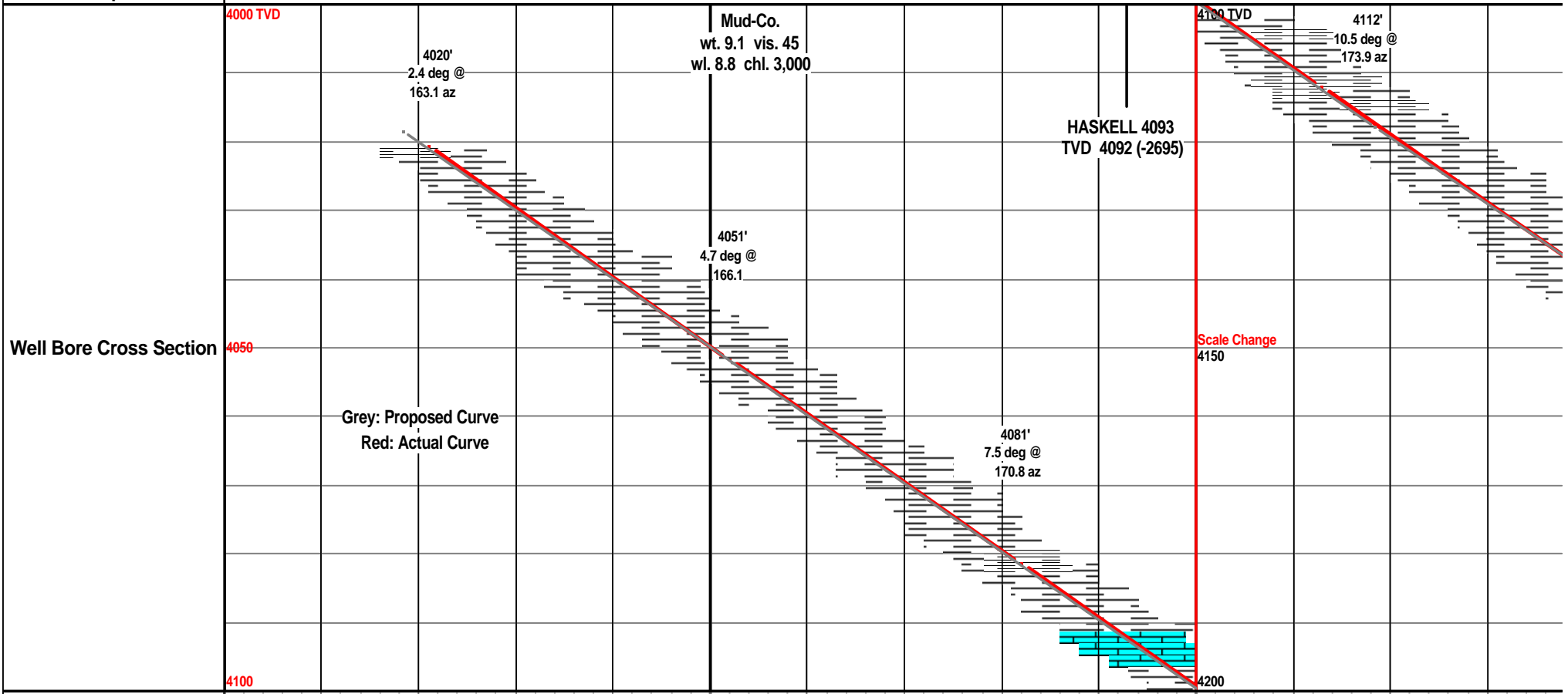
**EVENT**

- Rft
- Sidewall

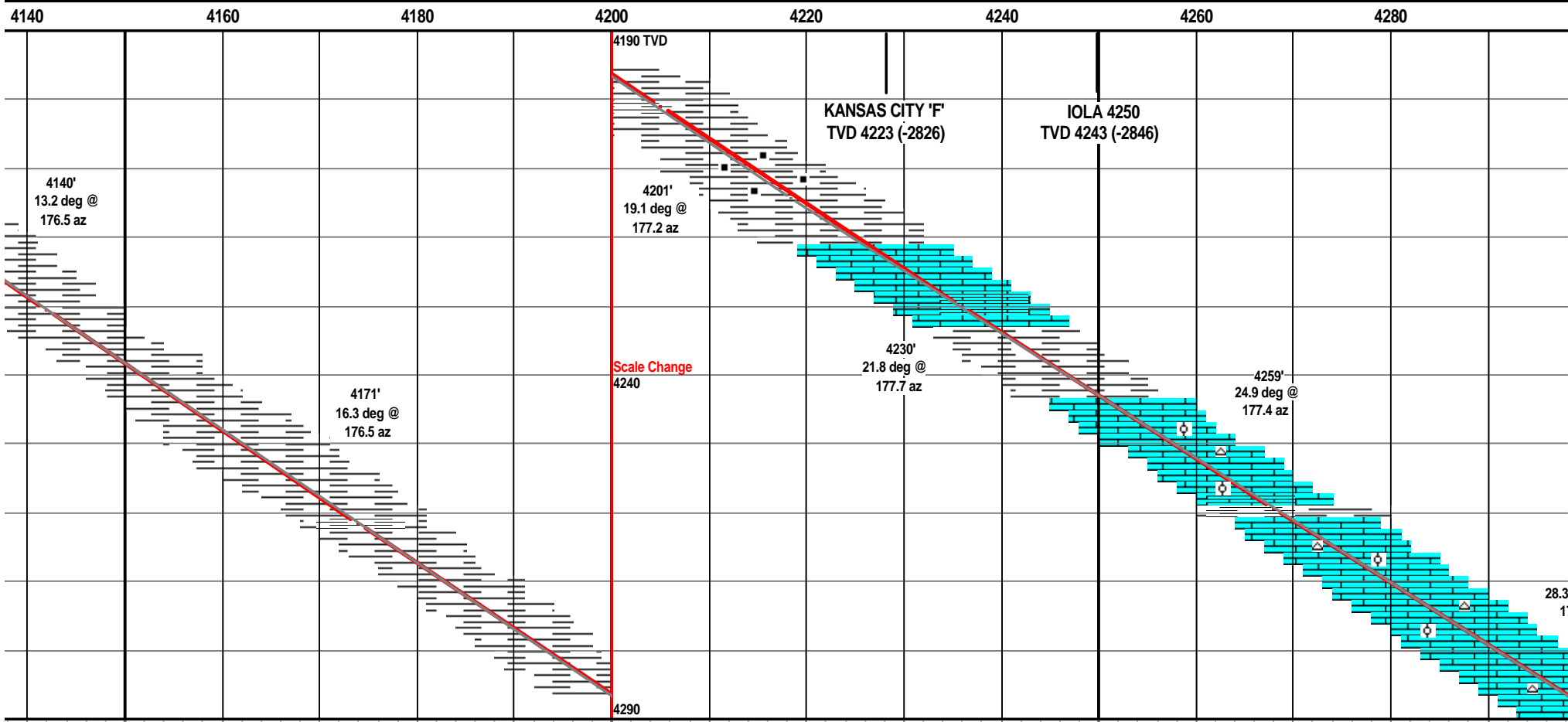
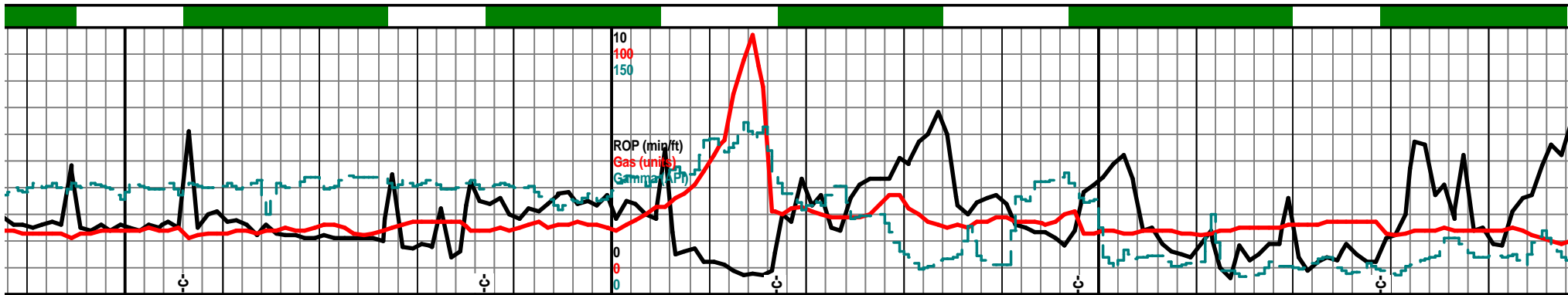


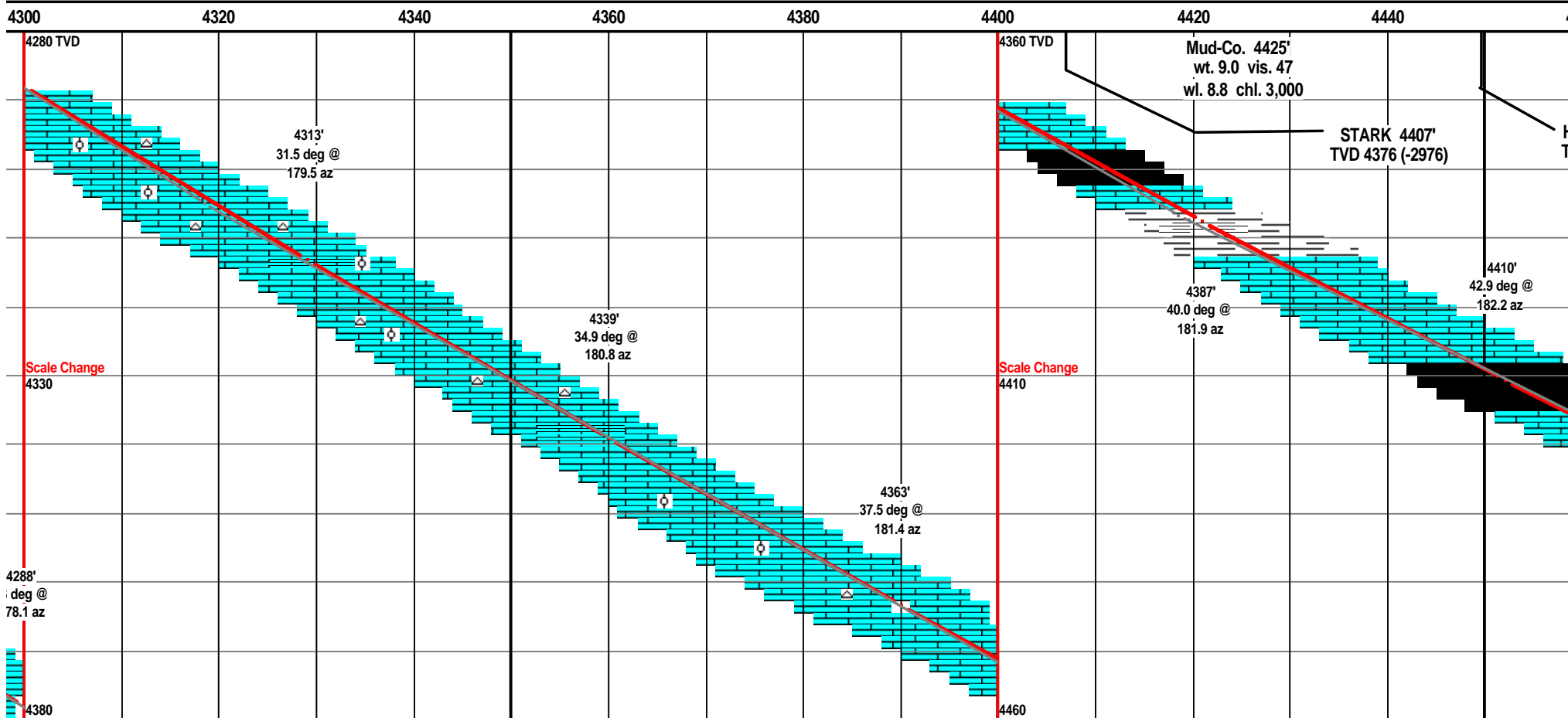
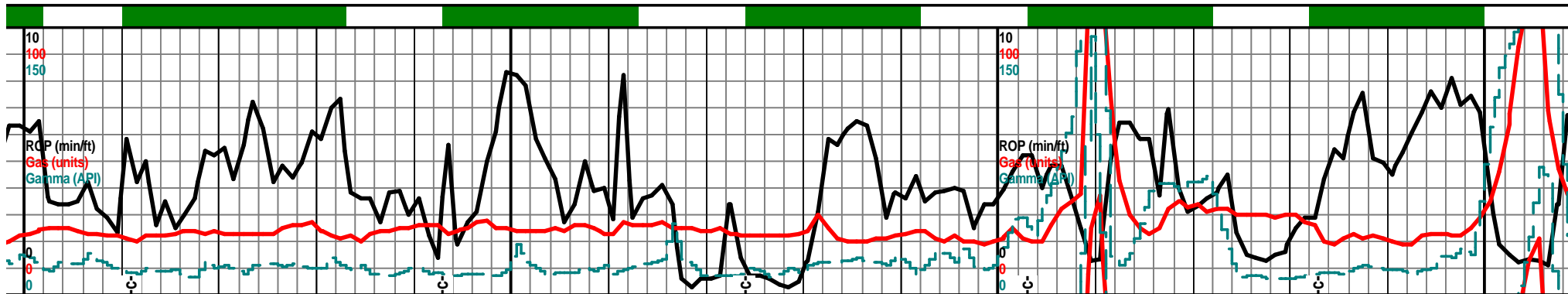
**Oil Shows**

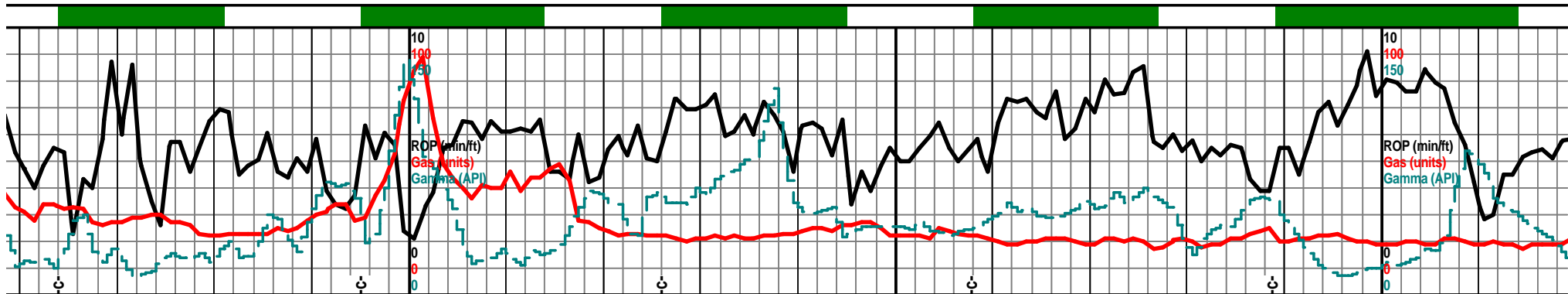
**Depth** 00 4020 4040 4060 4080 4100 4120



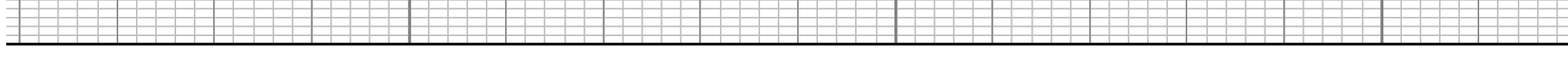
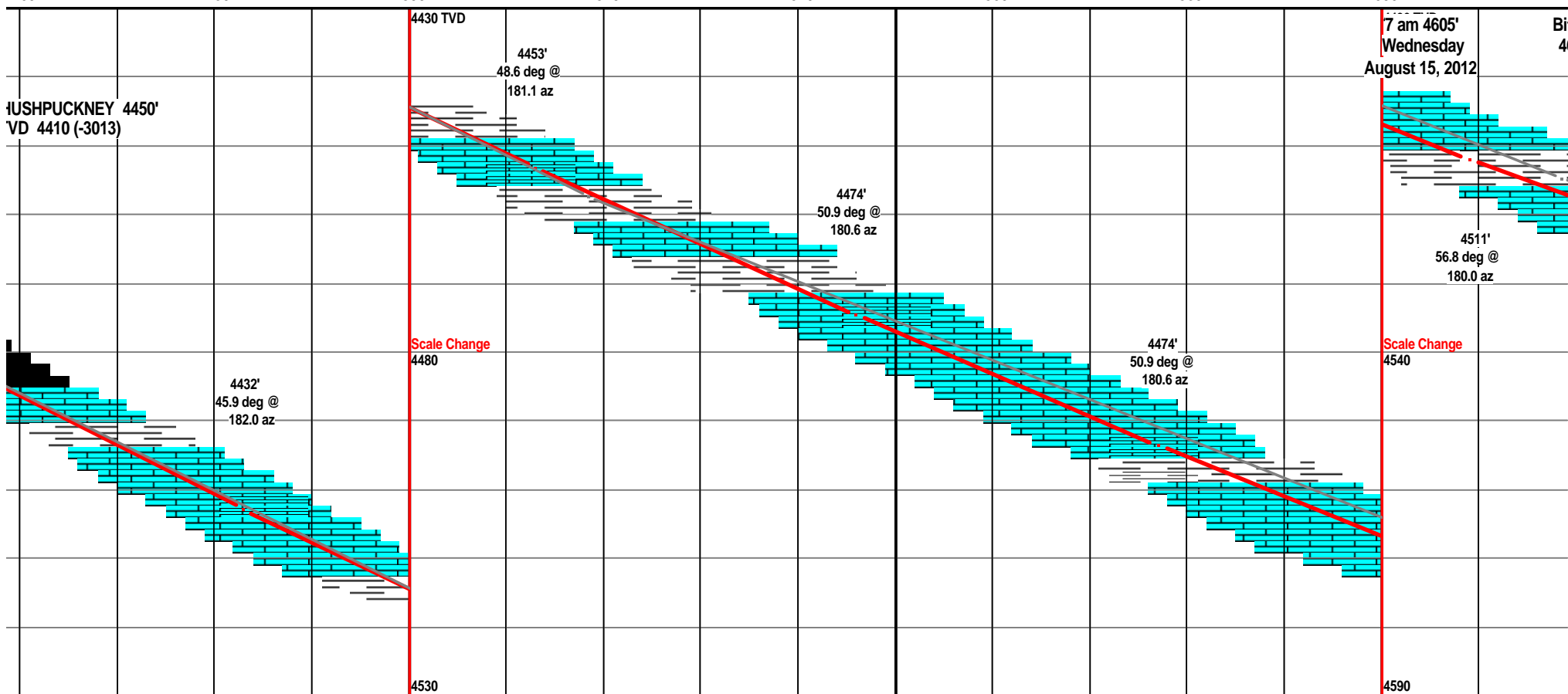
<b>Porosity</b>	24%
	18%
	12%
	6%
<b>Porosity Type</b>	

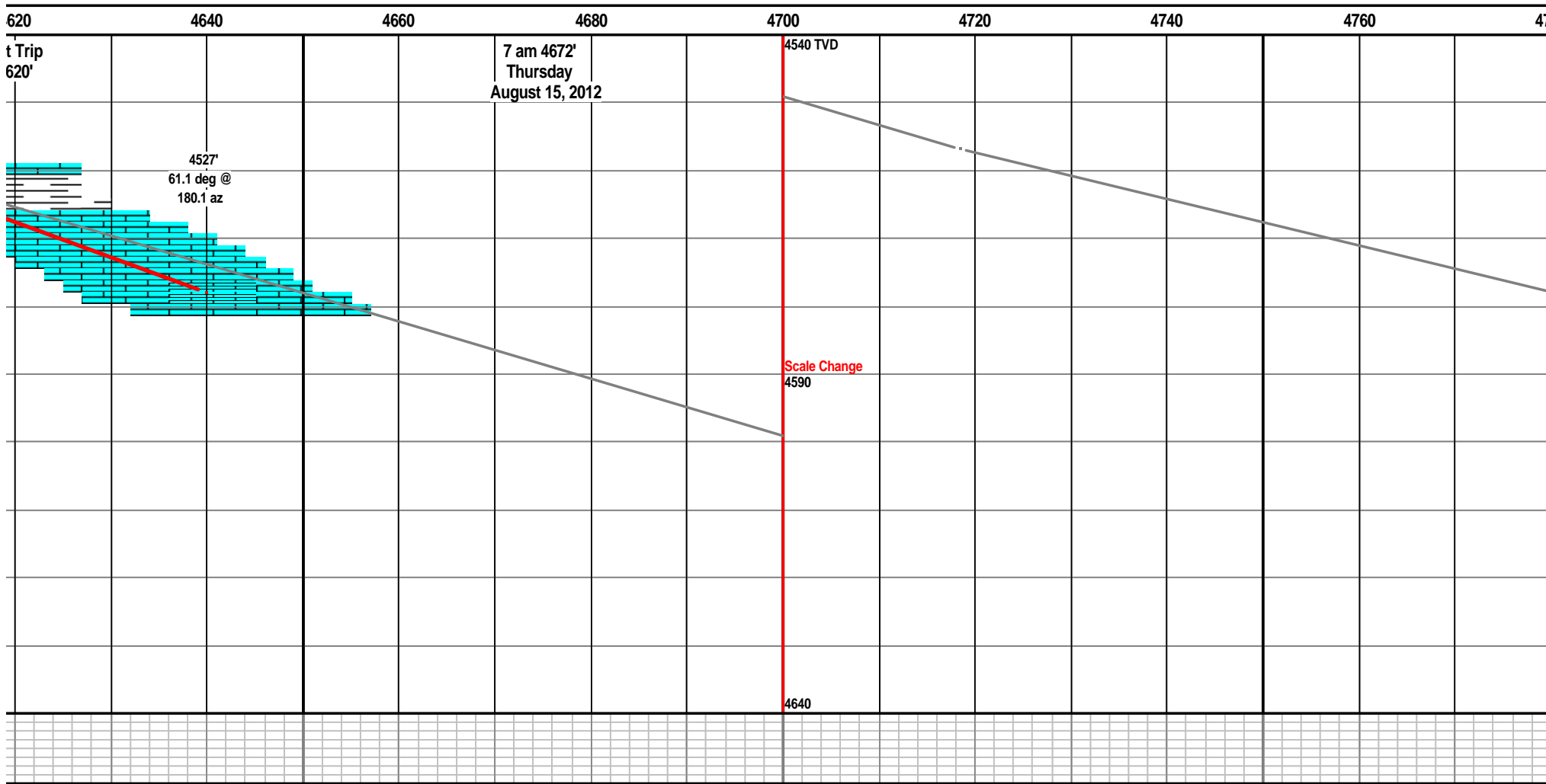
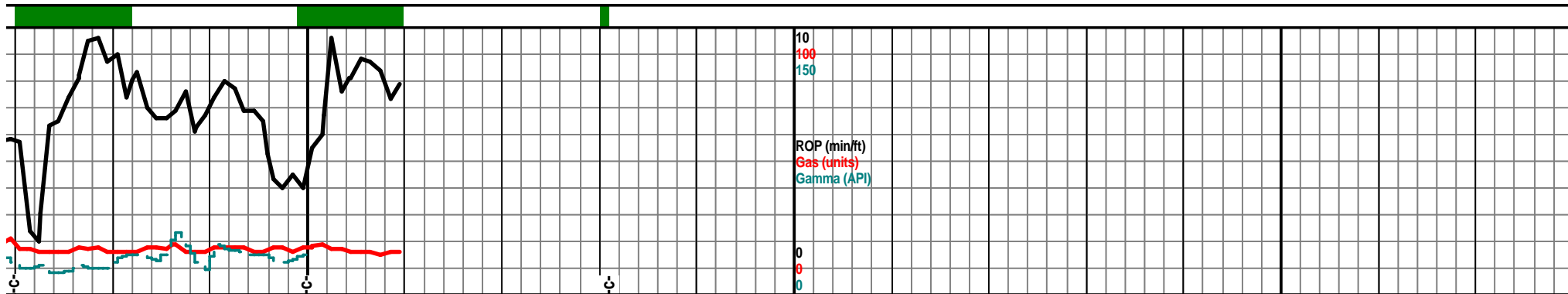






1460 4480 4500 4520 4540 4560 4580 4600 4







10  
100  
150

ROP (min/ft)  
Gas (units)  
Gamma (API)

0  
0  
0

10  
100  
150

ROP (min/ft)  
Gas (units)  
Gamma (API)

0  
0  
0

780

4800

4820

4840

4860

4880

4900

4920

49

4540 TVD

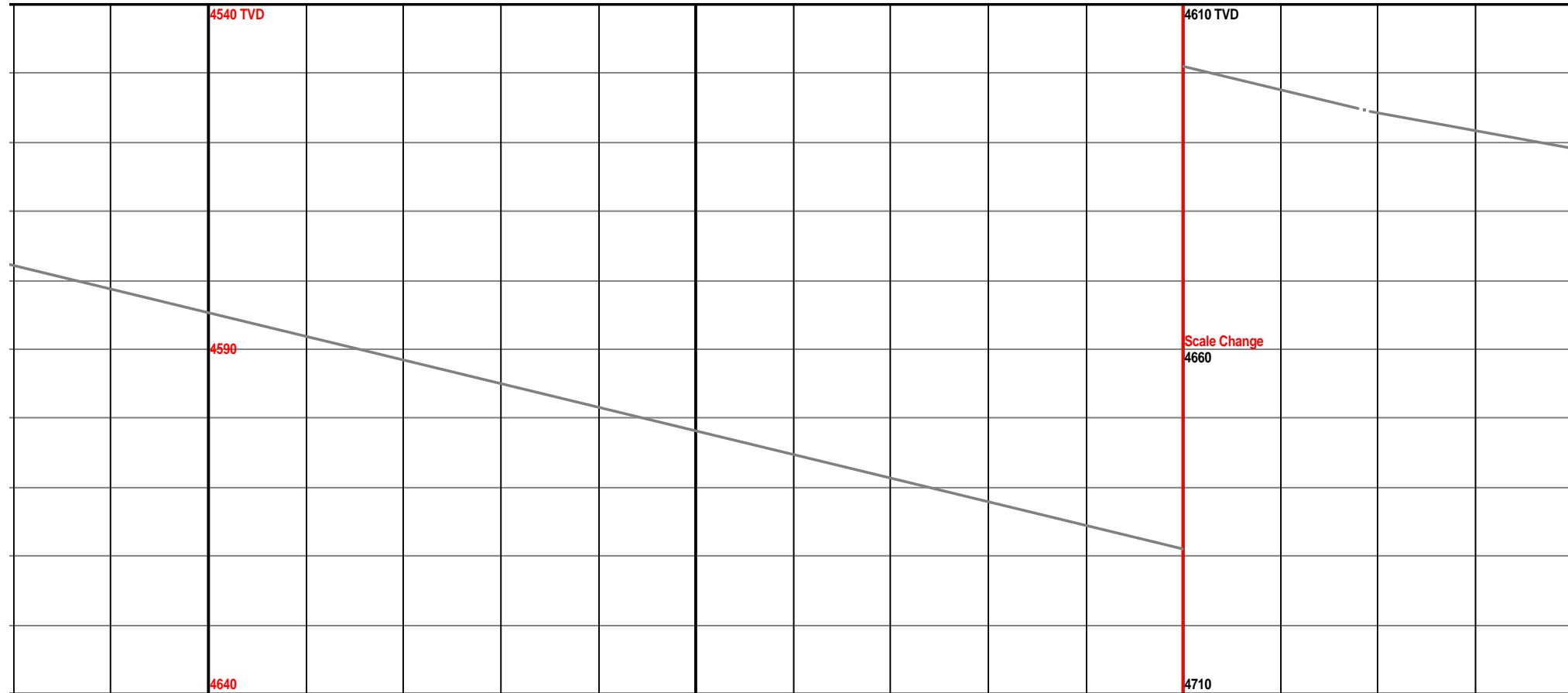
4610 TVD

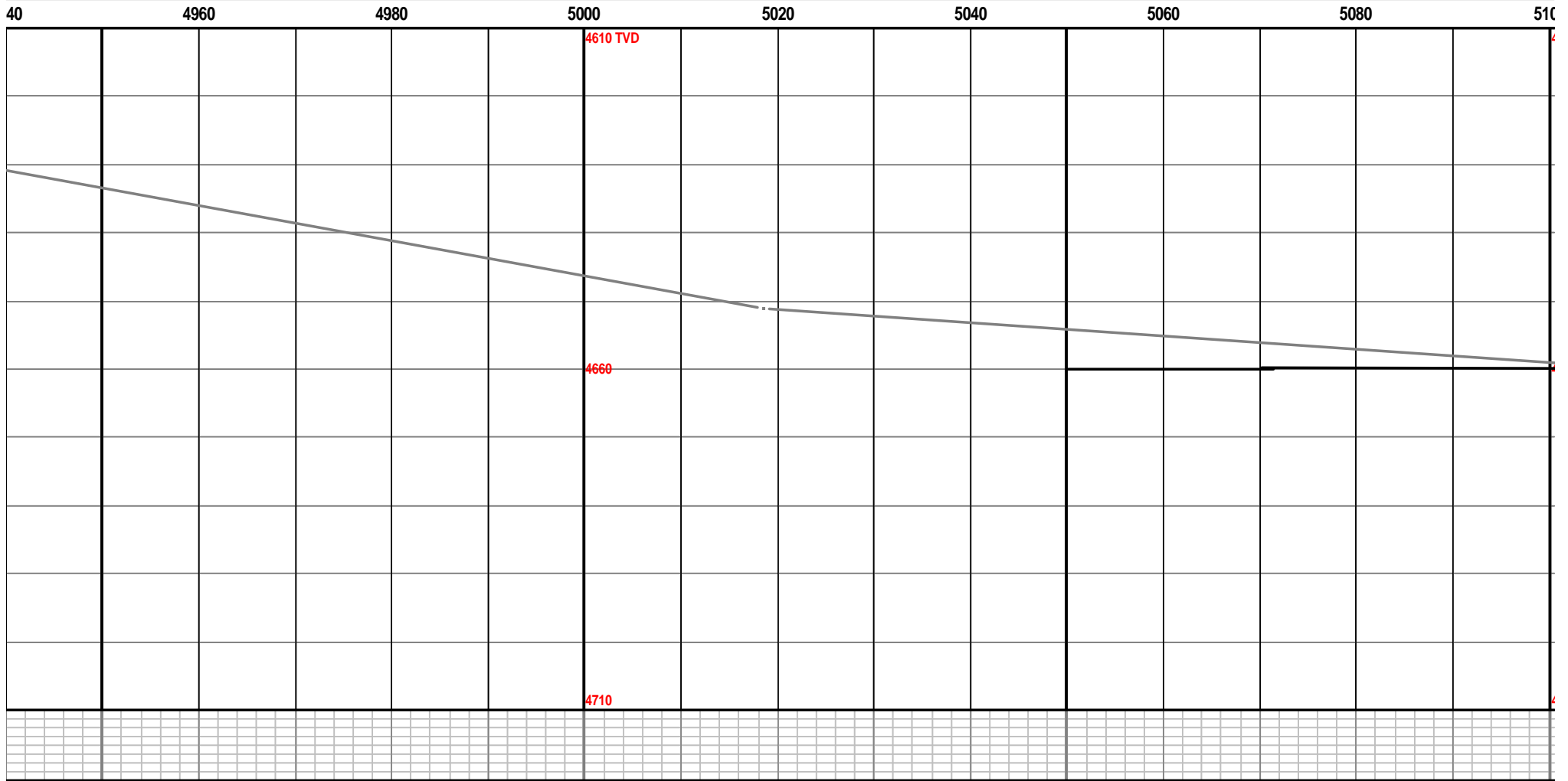
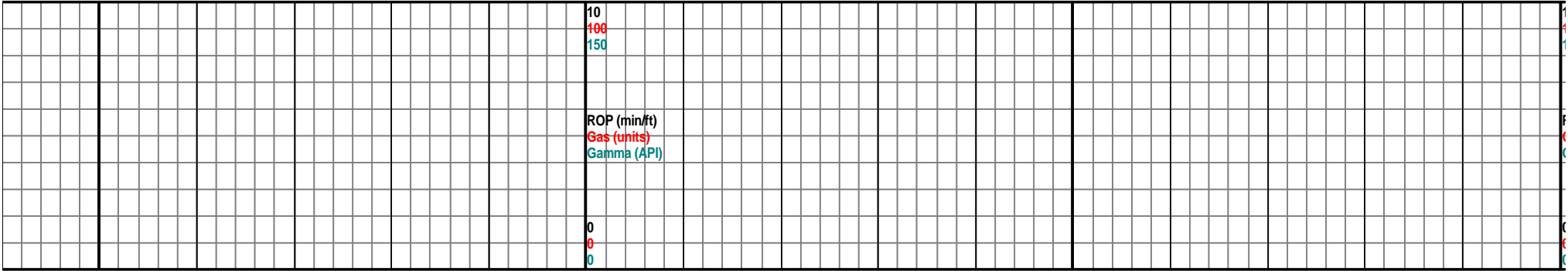
4590

Scale Change  
4660

4640

4710





10  
100  
150

ROP (min/ft)  
Gas (units)  
Gamma (API)

0  
0  
0

10  
100  
150

ROP (min/ft)  
Gas (units)  
Gamma (API)

0  
0  
0

510 5120 5140 5160 5180 5200 5220 5240 5260

4610 TVD

Projected Miss Intercept 4660' TVD

4610 TVD

4660

4660

4710

4710





10  
100  
150

ROP (min/ft)  
Gas (units)  
Gamma (API)

0  
0  
0

10  
100  
150

ROP (min/ft)  
Gas (units)  
Gamma (API)

0  
0  
0

5600

5620

5640

5660

5680

5700

5720

5740

4610 TVD

4660

4710

4620 TVD

Scale Change  
4670

4720







10  
100  
150

ROP (min/ft)  
Gas (units)  
Gamma (API)

0  
0  
0

10  
100  
150

ROP (min/ft)  
Gas (units)  
Gamma (API)

0  
0  
0

6080

6100

6120

6140

6160

6180

6200

6220

4620 TVD

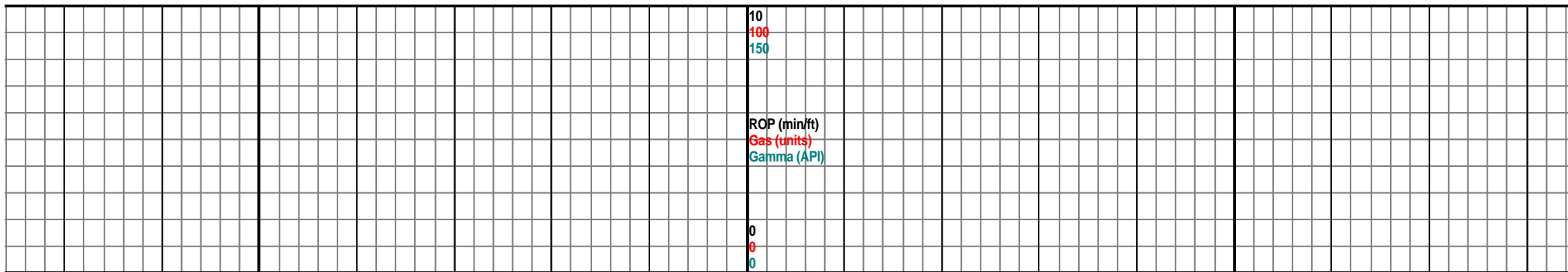
4620 TVD

4670

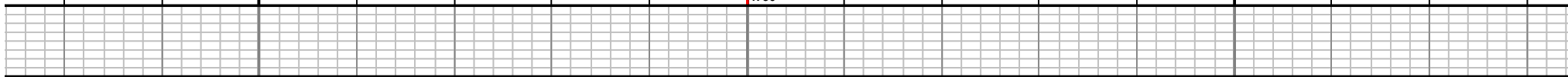
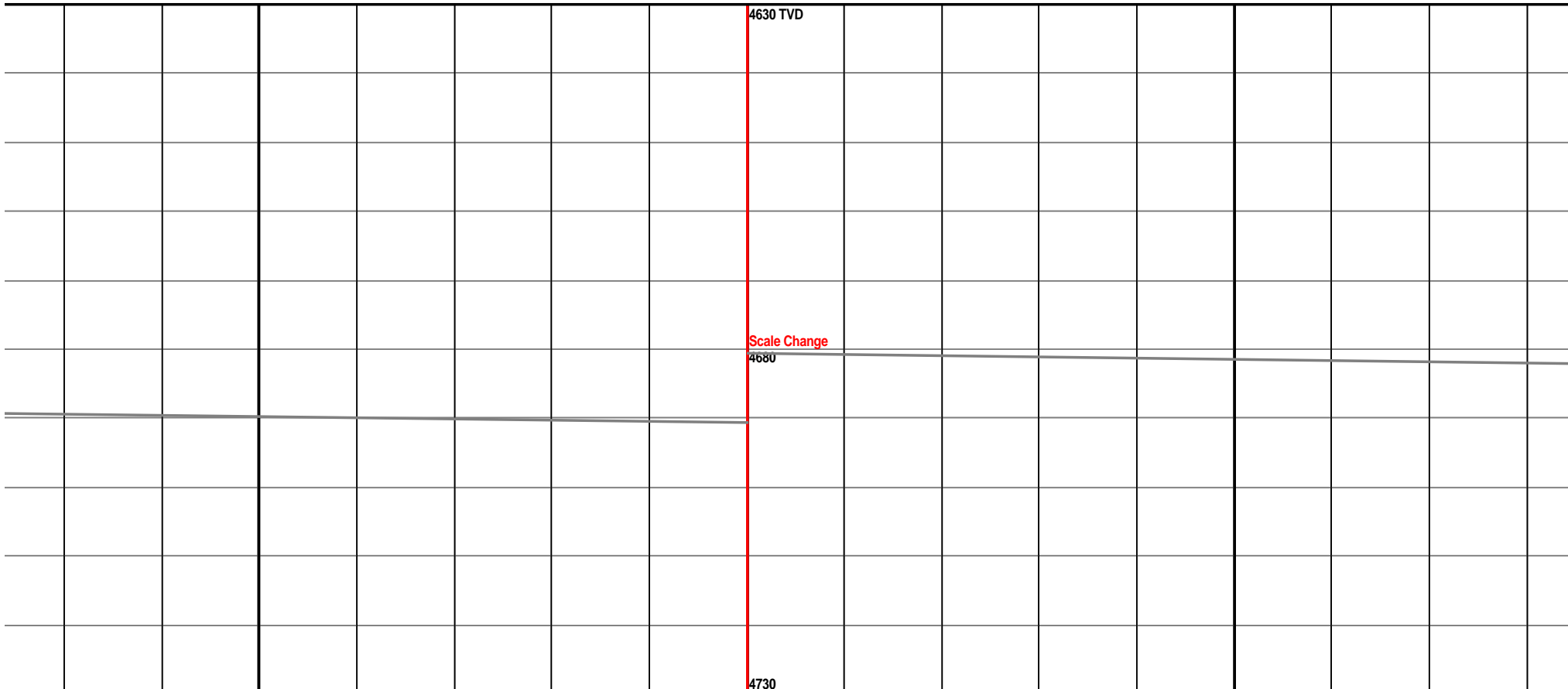
4670

4720

4720



6240                  6260                  6280                  6300                  6320                  6340                  6360                  6380



10  
100  
150

ROP (min/ft)  
Gas (units)  
Gamma (API)

0  
0  
0

10  
100  
150

ROP (min/ft)  
Gas (units)  
Gamma (API)

0  
0  
0

6400

6420

6440

6460

6480

6500

6520

6540

4630 TVD

4680

4730

4630 TVD

4680

4730





10  
100  
150

ROP (min/ft)  
Gas (units)  
Gamma (API)

0  
0  
0

10  
100  
150

ROP (min/ft)  
Gas (units)  
Gamma (API)

0  
0  
0

6880

6900

6920

6940

6960

6980

7000

7020

4640 TVD

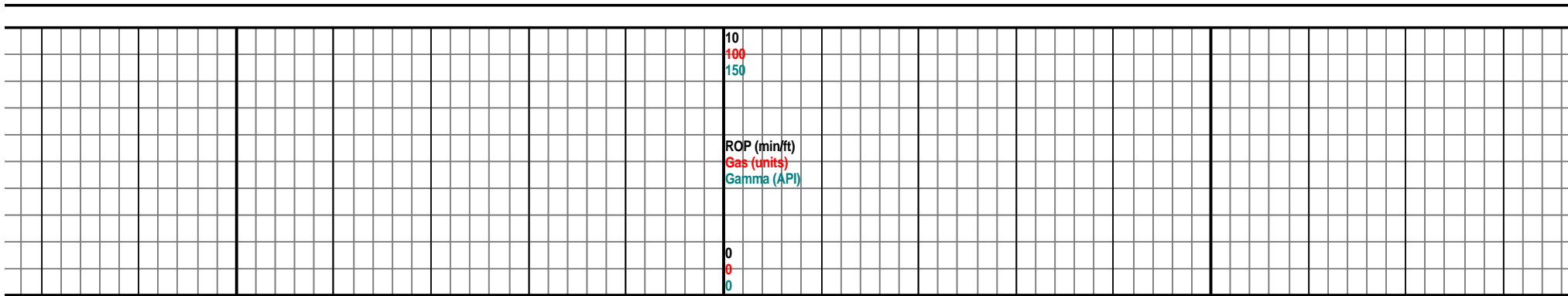
Scale Change  
4690

4740

4640 TVD

4690

4740



7040

7060

7080

7100

7120

7140

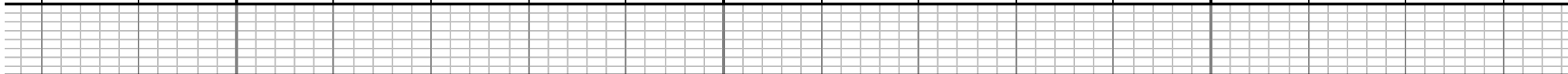
7160

7180

4640 TVD

4690

4740



10  
100  
150

ROP (min/ft)  
Gas (units)  
Gamma (API)

0  
0  
0

10  
100  
150

ROP (min/ft)  
Gas (units)  
Gamma (API)

0  
0  
0

7200

7220

7240

7260

7280

7300

7320

7340

4640 TVD

4640 TVD

4690

4690

4740

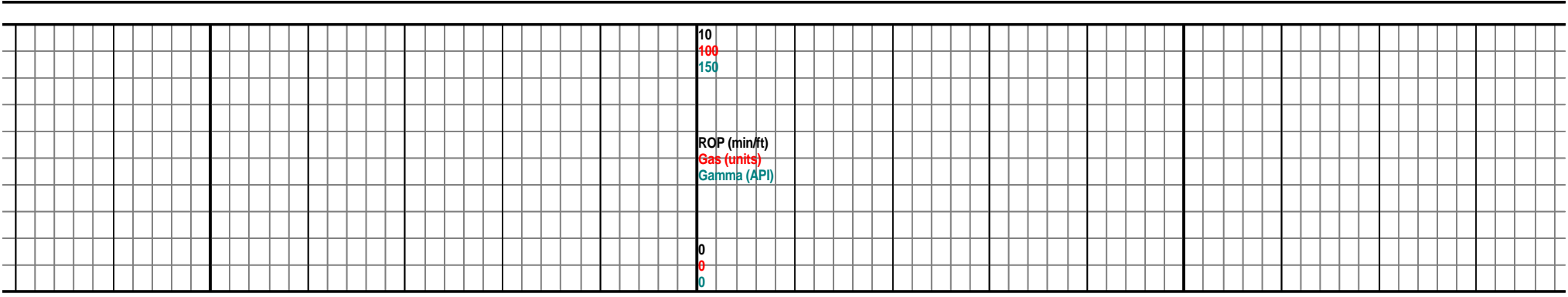
4740











7840

7860

7880

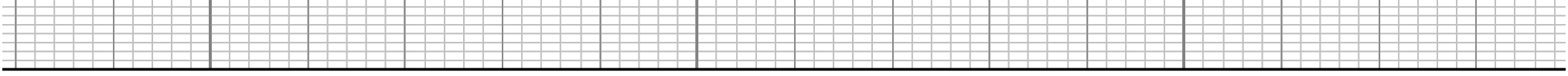
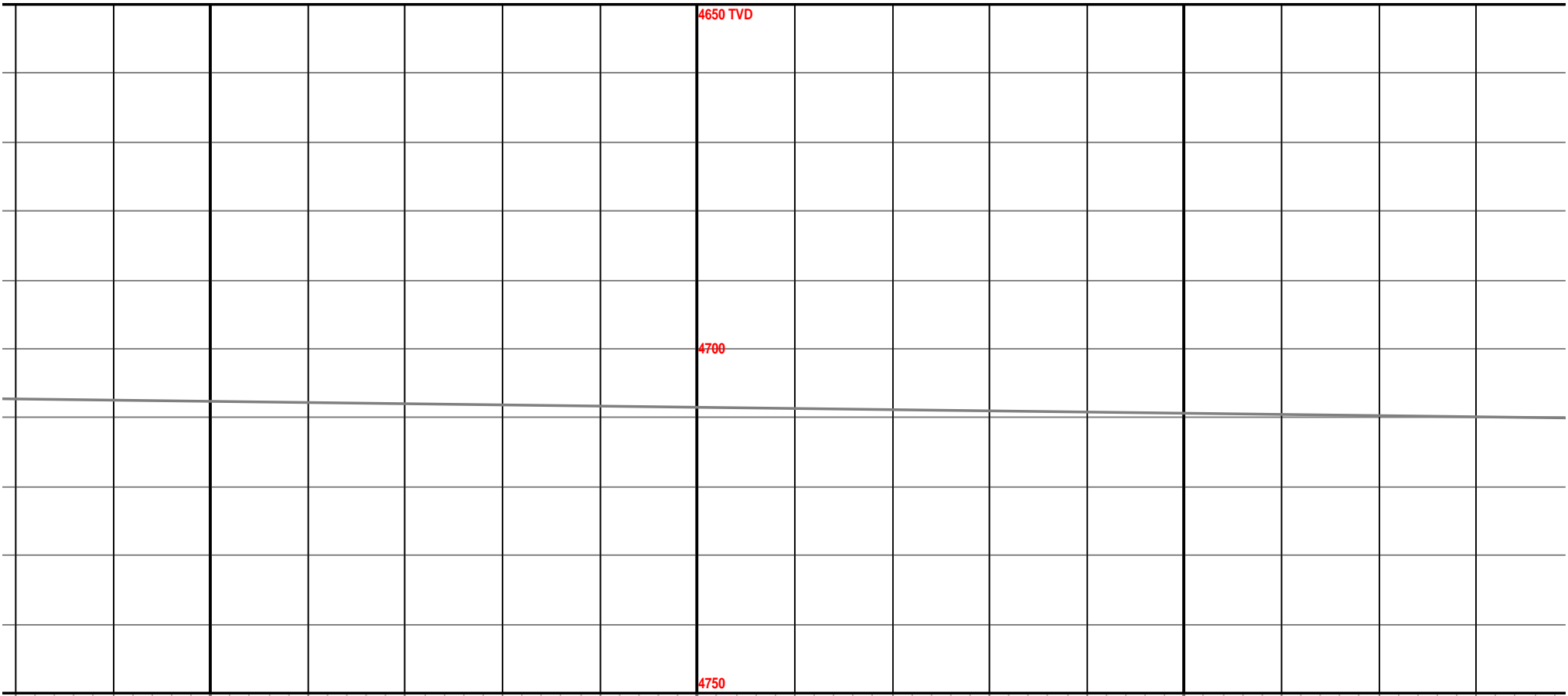
7900

7920

7940

7960

7980



10  
100  
150

ROP (min/ft)  
Gas (units)  
Gamma (API)

0  
0  
0

10  
100  
150

ROP (min/ft)  
Gas (units)  
Gamma (API)

0  
0  
0

8000

8020

8040

8060

8080

8100

8120

8140

4650 TVD

4700

4750

4660 TVD

Scale Change  
4710

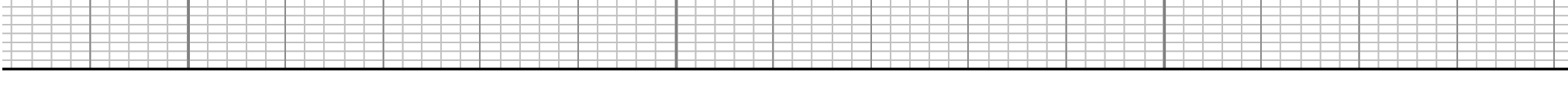
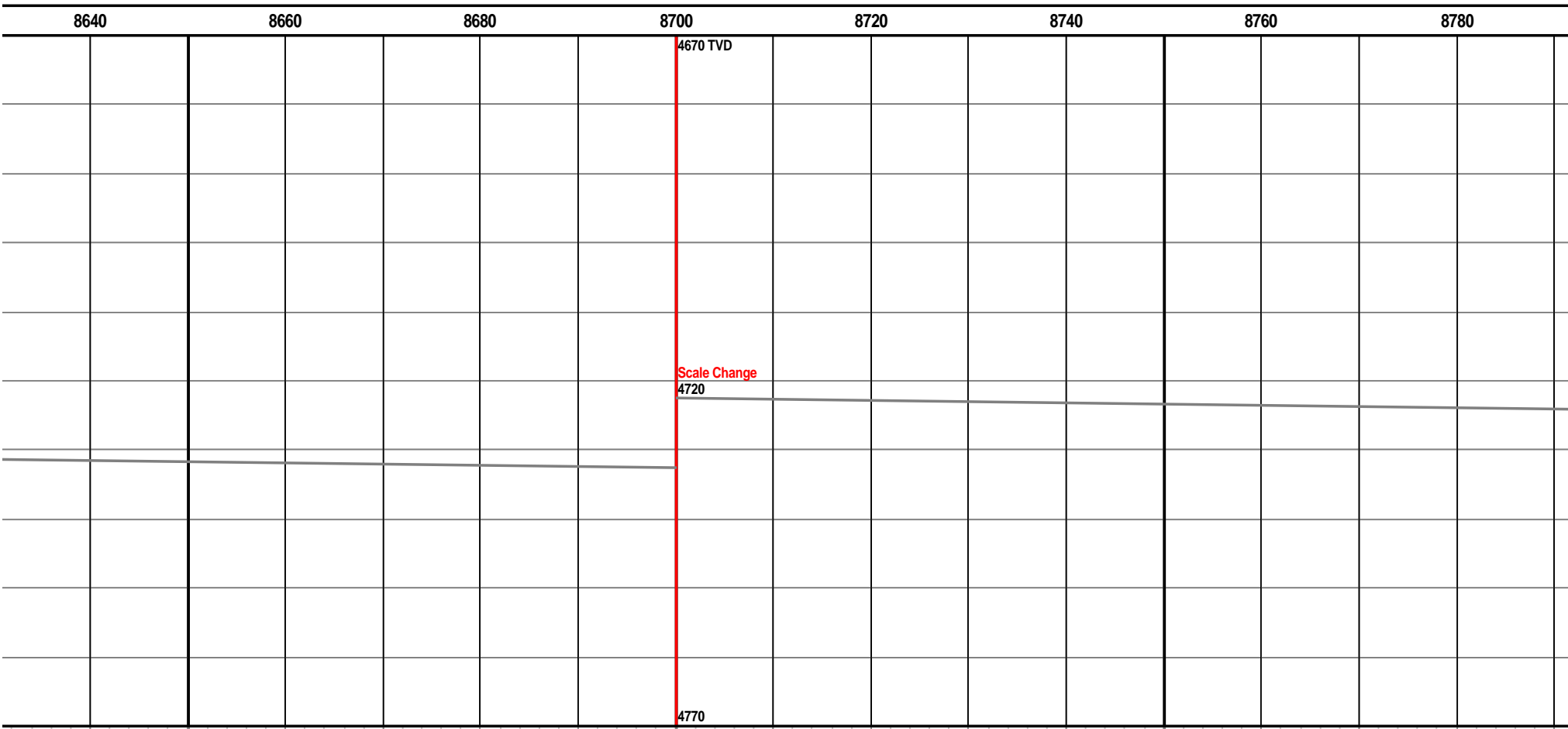
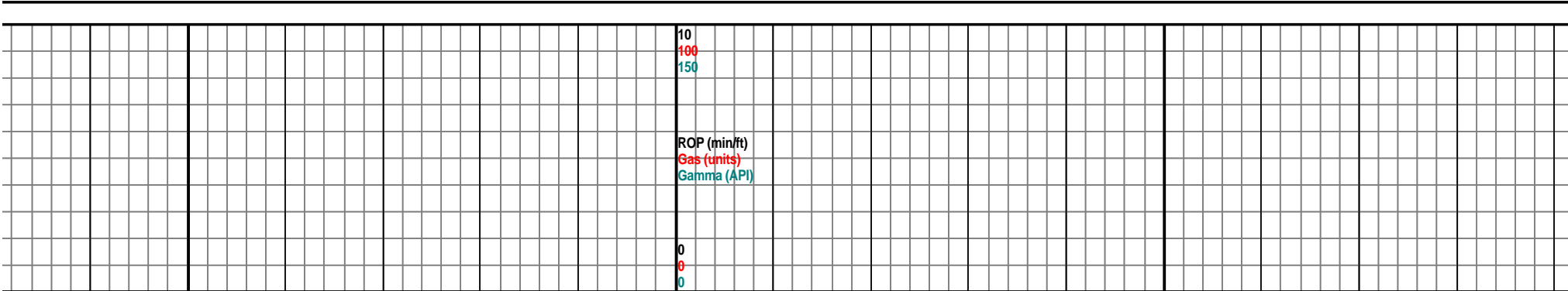
4760















10  
100  
150

ROP (min/ft)  
Gas (units)  
Gamma (API)

0  
0  
0

9120

9140

9160

9180

9200

9220

9240

9260

4670 TVD

4720

4770



