



KANSAS CORPORATION COMMISSION 1164217
OIL & GAS CONSERVATION DIVISION

Form ACO-1

June 2009

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
- Conv. to GSW
- Plug Back: _____ Plug Back Total Depth _____
- 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

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total 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

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



1164217

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

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

INSTRUCTIONS: Show important tops and base 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. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

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

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
_____ Perforate _____ Protect Casing _____ Plug Back TD _____ Plug Off Zone				

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
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DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	Palmer Oil, Inc.
Well Name	UPC 23-5
Doc ID	1164217

All Electric Logs Run

Induction
Porosity
Micro
Sonic

ALLIED OIL & GAS SERVICES, LLC 052329

Federal Tax I.D.# 20-5975804

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

SERVICE POINT:
Liberal, KS

DATE <u>9-3-13</u>	SEC. <u>23</u>	TWP. <u>32S</u>	RANGE <u>36W</u>	CALLED OUT	ON LOCATION	JOB START <u>7600</u>	JOB FINISH <u>1800</u>
LEASE <u>DOC</u>		WELL # <u>23-5</u>		LOCATION <u>Hugoton KS 5N-11W, 1/2S, E1/4</u>		COUNTY <u>Stevens</u>	STATE <u>KS</u>
OLD OR NEW (Circle one)							

CONTRACTOR <u>Duke #9</u>	OWNER
TYPE OF JOB <u>PTO</u>	
HOLE SIZE _____ T.D. _____	CEMENT
CASING SIZE _____ DEPTH _____	AMOUNT ORDERED <u>170 sk 60/40-480</u>
TUBING SIZE _____ DEPTH _____	
DRILL PIPE <u>4 1/2 1610</u> DEPTH <u>1800 ft</u>	
TOOL _____ DEPTH _____	
PRES. MAX _____ MINIMUM _____	COMMON <u>102 sk @ 17.90</u> <u>1825.80</u>
MEAS. LINE _____ SHOE JOINT _____	POZMIX <u>68 sk @ 9.35</u> <u>635.40</u>
CEMENT LEFT IN CSG. _____	GEL <u>65 sk @ 23.40</u> <u>140.70</u>
PERFS. _____	CHLORIDE _____ @ _____
DISPLACEMENT _____	ASC _____ @ _____

EQUIPMENT

PUMP TRUCK CEMENTER <u>Kirby H</u>
<u>530-454</u> HELPER <u>Alto E</u>
BULK TRUCK
<u>774-744</u> DRIVER <u>Patterson G (Pedro G)</u>
BULK TRUCK
_____ DRIVER _____

REMARKS:

CHARGE TO: Palmer O.I.

STREET _____

CITY _____ STATE _____ ZIP _____

HANDLING <u>176 ft</u> @ <u>2.48</u> <u>431.48</u>
MILEAGE <u>380 TM</u> @ <u>2.60</u> <u>988.00</u>
TOTAL <u>4026.48</u>

SERVICE

DEPTH OF JOB _____
PUMP TRUCK CHARGE _____ <u>1250.00</u>
EXTRA FOOTAGE _____ @ _____
MILEAGE <u>50MT</u> @ <u>7.50</u> <u>385.00</u>
MANIFOLD _____ @ _____
<u>50MT</u> @ <u>4.40</u> <u>220.00</u>
TOTAL <u>1855.00</u>

PLUG & FLOAT EQUIPMENT

_____ @ _____
_____ @ _____
_____ @ _____
_____ @ _____
TOTAL <u>0</u>

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 Emigdio Rojas

SIGNATURE Emigdio Rojas

SALES TAX (If Any) _____

TOTAL CHARGES 5881.48

DISCOUNT Net - 4,705.12 IF PAID IN 30 DAYS

Date 9/3/2013 District Liberal # 21 Ticket No. _____
 Company PALMER OIL Rig DUKE # 9
 Lease UPC Well No 23-5
 County STEVENS State KS

Location _____
 Field _____

Casing Data Conductor PTA Squeeze Misc.
 Surface Intermediate Production Liner

Size 8 5/8 Type _____ Weight 24 Collar _____
50 SK @ 1800 FT
50 SK @ 610 FT
20 SK @ 60 FT
 Casing Depths Top _____ Bottom 1754
30 SK RAT HOLE
20 SK MOUSE HOLE

Drill Pipe: BBLS/LIN. FT 0.01422 LIN. FT/BBL _____
 Open Hole: BBLS/LIN. FT 0.0406 LIN. FT/BBL BF - .05482
 Capacity Factors: BBLS/LIN. FT _____ LIN. FT/BBL _____
 Casing BBLS/LIN. FT 0.044 LIN. FT/BBL BF - .05822
 Open Holes BBLS/LIN. FT _____ LIN. FT/BBL _____
 Drill Pipe BBLS/LIN. FT _____ LIN. FT/BBL _____
 Annulus BBLS/LIN. FT _____ LIN. FT/BBL _____
 BBLS/LIN. FT _____ LIN. FT/BBL _____
 Perforations From _____ ft to _____ ft Amt _____

CEMENT DATA

Spacer Type FRESH WATER
 Amt. _____ Sks Yield _____ ft³/sk Density _____ PPG

LEAD: Time _____ hrs. Type 60/40

4% TOTAL GEL Excess _____
 Amt. 170 Sks Yield 1.4 ft³/sk Density 13.5 PPG

TAIL: Time _____ hrs. Type _____
 Excess _____

Amt. _____ Sks Yield _____ ft³/sk Density _____ PPG
 WATER Lead 7.5 Gal/sk Tail _____ Gal/sk Total _____ BBLs

Pump Trucks Used: 530 - 484
 Bulk Equipment 774 - 744

Float Equipment: Manufacturer _____
 Shoe: Type _____ Depth _____
 Float: Type _____ Depth _____
 Centralizers: Quantity _____ Plugs Top _____ Bottom _____
 Stage Collars _____
 Special Equipment _____
 Disp: Fluid Type _____ Amt _____ bbls Weight _____ PPG
 Mud Type _____ Weight _____

COMPANY REPRESENTATIVE _____ CEMENTER KIRBY HARPER

TIME AM/PM	PRESSURES PSI		FLUID PUMPED DATA			REMARKS
	DRILL PIPE CASING	ANNULUS	TOTAL FLUID	PUMPED PER TIME PERIOD	RATE BBLs/MIN	
1400						ON LOCATION - SPOT AND RIG UP
1530						DRILL PIPE SET @ 1800 FT
1545						SAFETY MEETING
1556	200			10	4	START PUMPING 10 BBL FRESH WATER
1559	200			13	4	START MIXING 50 SK 60/40 @ 13.5 PPG
1604	200		0		4	START PUMPING 3 BBL FRESH WATER
1607	200		3		4	START PUMPING 18 BBL MUD
1613	--		21			SHUT DOWN - PULL D.P. TO 610 FT
1711	100			25	4	START PUMPING 25 BBL FRESH WATER
1718	100			13	4	START MIXING 50 SK 60/40 @ 13.5 PPG
1724	100		0		4	START DISPLACING WITH 5 BBL FRESH WATER
1726	--		5			SHUT DOWN - PULL D.P. TO 60 FT
1836				5		MIX 20 SK 60/40 @ 13.5 PPG
1842				8		PLUG RAT HOLE WITH 30 SK 60/40 @ 13.5 PPG
1847				5		PLUG MOUSE HOLE WITH 20 SK 60/40 @ 13.5 PPG

FINAL DISP. PRESS _____ PSI BUMP PLUG TO _____ PSI BLEEDBACK _____ BBLs THANK YOU



DRILL STEM TEST REPORT

Prepared For: **Palmer Oil ,Inc**

PO Box 399
Garden City, KS 67846

ATTN: Wyatt Urban

UPC # 23-5

23-32s-37w Stevens,KS

Start Date: 2013.09.02 @ 04:22:39

End Date: 2013.09.02 @ 15:45:34

Job Ticket #: 52846 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2013.09.05 @ 15:39:46

Palmer Oil ,Inc
23-32s-37w Stevens,KS
UPC # 23-5
DST # 1
St. Louis "B"
2013.09.02



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Palmer Oil, Inc
 PO Box 399
 Garden City, KS 67846
 ATTN: Wyatt Urban

23-32s-37w Stevens, KS

UPC # 23-5

Job Ticket: 52846

DST#: 1

Test Start: 2013.09.02 @ 04:22:39

GENERAL INFORMATION:

Formation: **St. Louis "B"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:57:19

Time Test Ended: 15:45:34

Test Type: Conventional Bottom Hole (Initial)

Tester: Shane McBride

Unit No: 55

Interval: 6380.00 ft (KB) To 6431.00 ft (KB) (TVD)

Total Depth: 6431.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 3135.00 ft (KB)

3123.00 ft (CF)

KB to GR/CF: 12.00 ft

Serial #: 8368 Outside

Press @ Run Depth: 845.37 psig @ 6381.00 ft (KB)

Start Date: 2013.09.02

End Date: 2013.09.02

Start Time: 04:22:39

End Time: 15:15:34

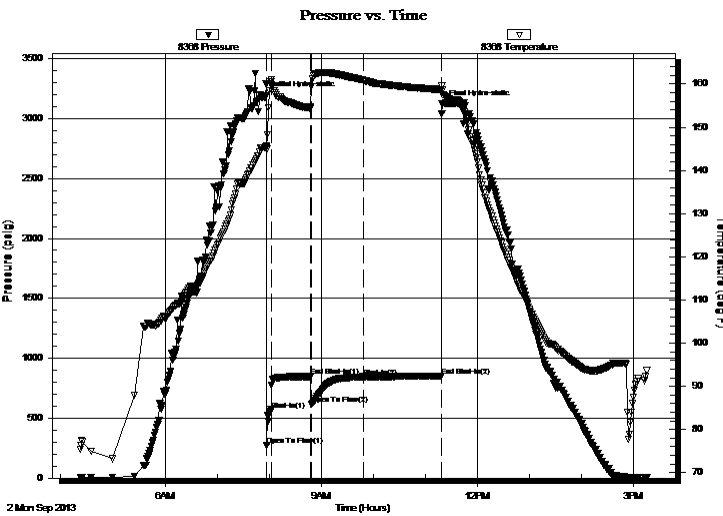
Capacity: 8000.00 psig

Last Calib.: 2013.09.02

Time On Btm: 2013.09.02 @ 07:57:04

Time Off Btm: 2013.09.02 @ 11:19:19

TEST COMMENT: B.O.B. in 2 min.
 No return
 B.O.B. in 3 min.
 No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	3191.44	145.66	Initial Hydro-static
1	276.55	144.90	Open To Flow (1)
6	571.04	160.56	Shut-In(1)
51	848.15	154.42	End Shut-In(1)
52	618.26	159.44	Open To Flow (2)
112	845.37	160.86	Shut-In(2)
202	850.12	158.73	End Shut-In(2)
203	3119.17	158.58	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
787.00	g w w / trace of oil 10g 90 w	9.34
600.00	g s o & m c w 10g 2o 5m 83w	8.42
235.00	g s o c m w 15g 5o 20m 60w	3.30
0.00	365' w eak gas in pipe	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Palmer Oil ,Inc
 PO Box 399
 Garden City, KS 67846
 ATTN: Wyatt Urban

23-32s-37w Stevens,KS

UPC # 23-5

Job Ticket: 52846

DST#: 1

Test Start: 2013.09.02 @ 04:22:39

GENERAL INFORMATION:

Formation: **St. Louis "B"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 07:57:19
 Time Test Ended: 15:45:34
 Interval: **6380.00 ft (KB) To 6431.00 ft (KB) (TVD)**
 Total Depth: 6431.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Shane McBride
 Unit No: 55
 Reference Elevations: 3135.00 ft (KB)
 3123.00 ft (CF)
 KB to GR/CF: 12.00 ft

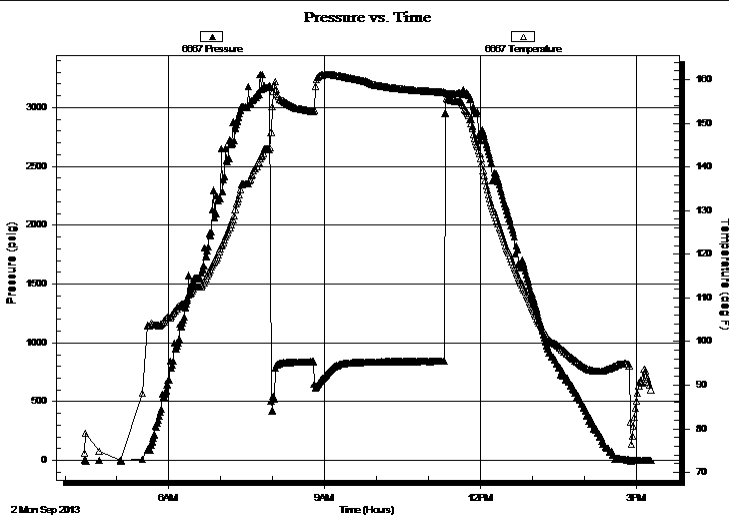
Serial #: 6667

Inside

Press @RunDepth: psig @ 6381.00 ft (KB)
 Start Date: 2013.09.02 End Date: 2013.09.02
 Start Time: 04:22:41 End Time: 15:16:41
 Capacity: 8000.00 psig
 Last Calib.: 2013.09.02
 Time On Btm:
 Time Off Btm:

TEST COMMENT: B.O.B. in 2 min.
 No return
 B.O.B. in 3 min.
 No return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
787.00	g w w / trace of oil 10g 90 w	9.34
600.00	g s o & m c w 10g 2o 5m 83w	8.42
235.00	g s o c m w 15g 5o 20m 60w	3.30
0.00	365' weak gas in pipe	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Palmer Oil ,Inc
 PO Box 399
 Garden City, KS 67846
 ATTN: Wyatt Urban

23-32s-37w Stevens,KS
UPC # 23-5
 Job Ticket: 52846 **DST#: 1**
 Test Start: 2013.09.02 @ 04:22:39

Tool Information

Drill Pipe:	Length: 6190.00 ft	Diameter: 3.80 inches	Volume: 86.83 bbl	Tool Weight:	1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 187.00 ft	Diameter: 2.25 inches	Volume: 0.92 bbl	Weight to Pull Loose:	110000.0 lb
			<u>Total Volume: 87.75 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial	88000.00 lb
Depth to Top Packer:	6380.00 ft			Final	102000.0 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	51.00 ft				
Tool Length:	79.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		
Tool Comments:					

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			6353.00	
Shut In Tool	5.00			6358.00	
Hydraulic tool	5.00			6363.00	
Jars	5.00			6368.00	
Safety Joint	3.00			6371.00	
Packer	5.00			6376.00	28.00 Bottom Of Top Packer
Packer	4.00			6380.00	
Stubb	1.00			6381.00	
Recorder	0.00	6667	Inside	6381.00	
Recorder	0.00	8368	Outside	6381.00	
Perforations	11.00			6392.00	
Change Over Sub	1.00			6393.00	
Drill Pipe	32.00			6425.00	
Change Over Sub	1.00			6426.00	
Bullnose	5.00			6431.00	51.00 Bottom Packers & Anchor

Total Tool Length: 79.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Palmer Oil ,Inc
PO Box 399
Garden City, KS 67846
ATTN: Wyatt Urban

23-32s-37w Stevens,KS
UPC # 23-5
Job Ticket: 52846 **DST#: 1**
Test Start: 2013.09.02 @ 04:22:39

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 49500 ppm
Viscosity: 62.00 sec/qt	Cushion Volume: bbl	
Water Loss: 7.59 in ³	Gas Cushion Type:	
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig	
Salinity: 1700.00 ppm		
Filter Cake: 1.00 inches		

Recovery Information

Recovery Table

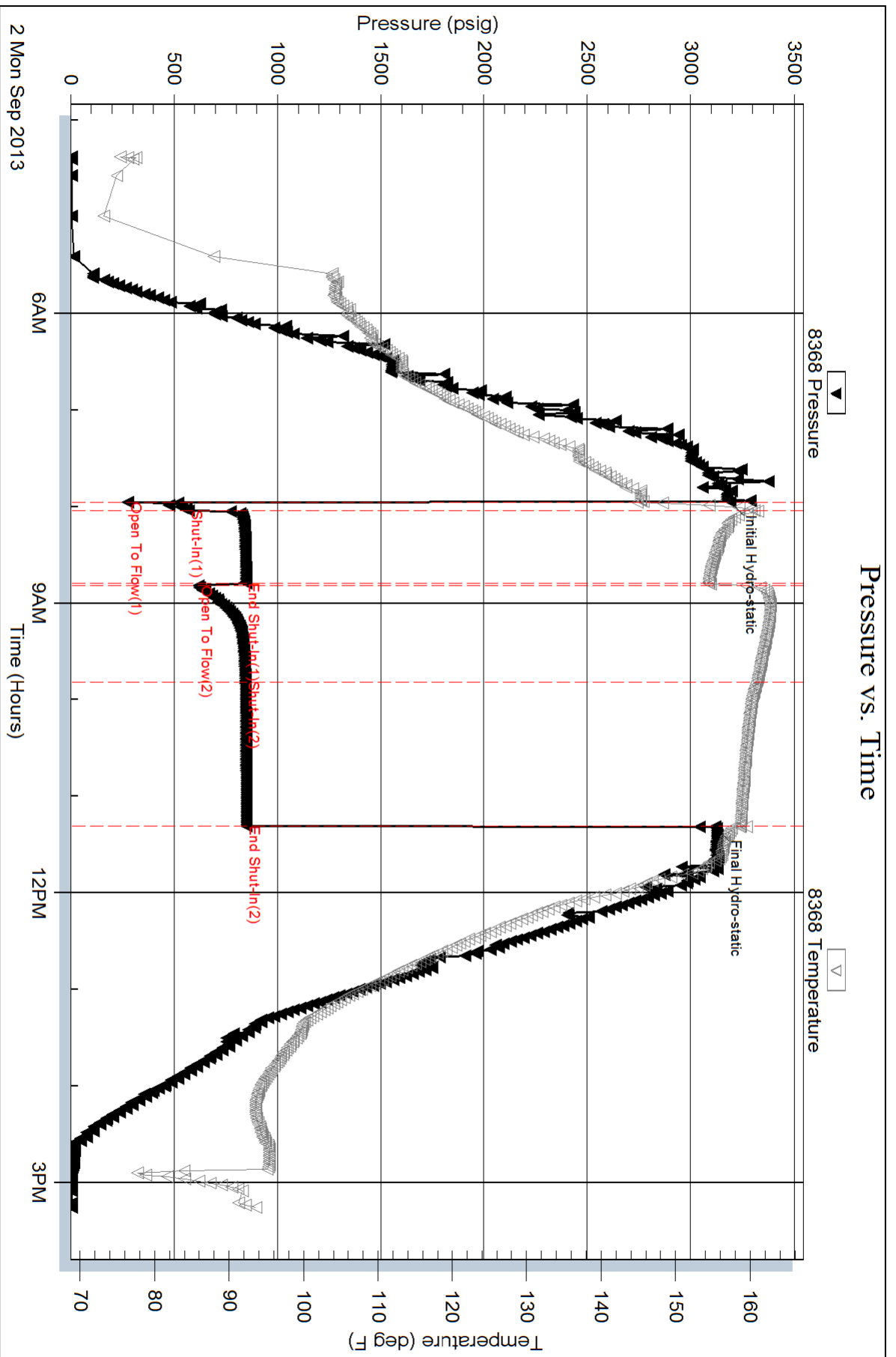
Length ft	Description	Volume bbl
787.00	g w w / trace of oil 10g 90 w	9.336
600.00	g s o & m c w 10g 2o 5m 83w	8.416
235.00	g s o c m w 15g 5o 20m 60w	3.296
0.00	365' weak gas in pipe	0.000

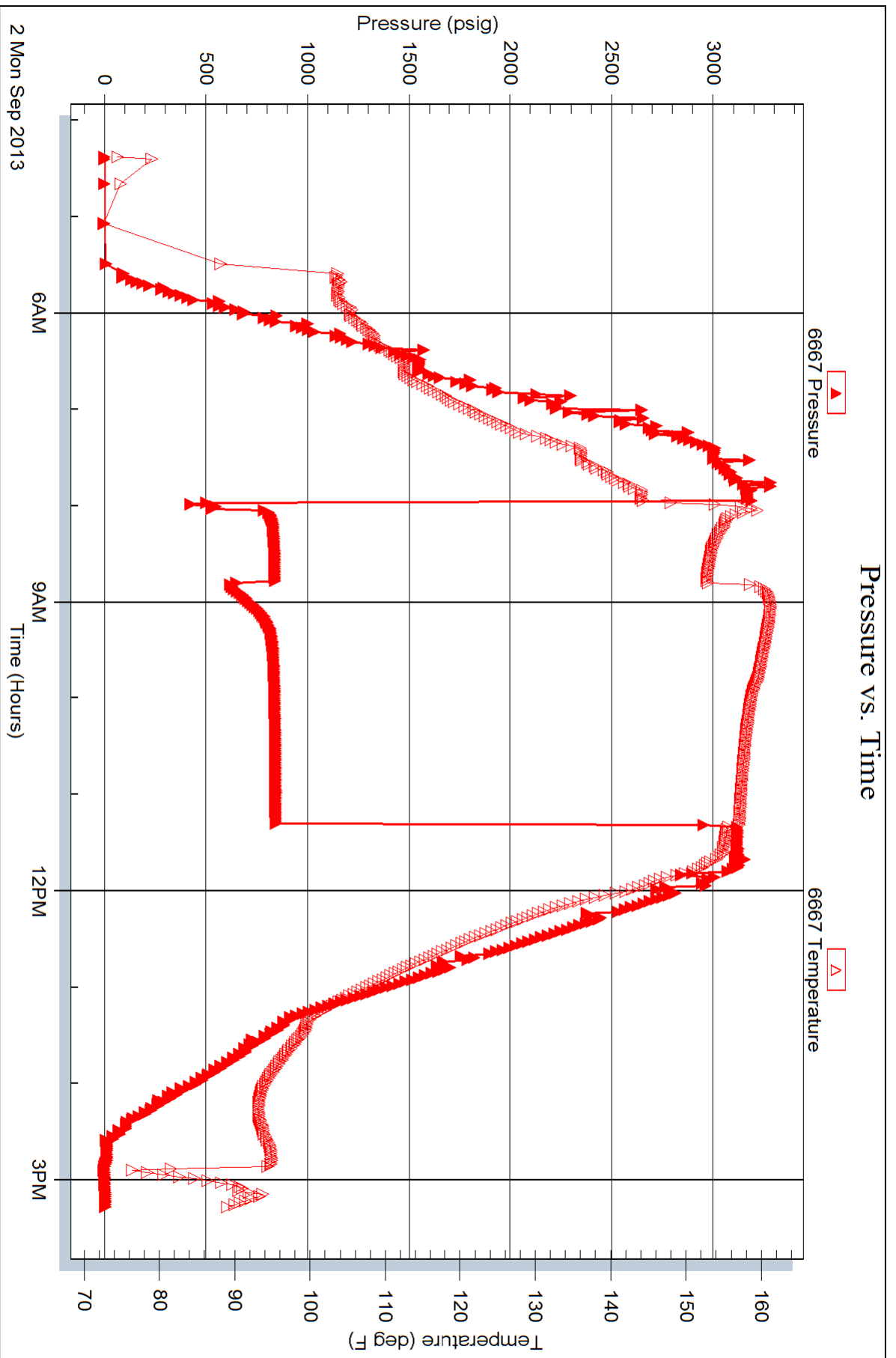
Total Length: 1622.00 ft Total Volume: 21.048 bbl

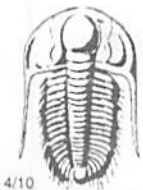
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: rw .111 @ 99*f = 49,500 chlor







TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 52846

Well Name & No. UPC #23-5 Test No. #1 Date 9-2-13
 Company Palmer Oil, Inc Elevation 3135' KB 3123' GL
 Address 3118 N. Cummings Rd, Garden City, KS 67846
 Co. Rep / Geo Wyatt Rig Duke #9
 Location: Sec. 23 Twp. 32 Rge. 37 Co. Stevens State KS

Interval Tested 6380 6431 Zone Tested St. Louis "B"
 Anchor Length 51 Drill Pipe Run 6190' Mud Wt. 9.3
 Top Packer Depth 6375 Drill Collars Run 187' Vis 62
 Bottom Packer Depth 6380 Wt. Pipe Run --- WL 7.4
 Total Depth 6431 Chlorides 1700 ppm System LCM #4
 Blow Description B.O.B. in 2 min
No return
B.O.B. in 3 min
No return

Rec	Feet of	%gas	%oil	%water	%mud
<u>235</u>	<u>950 cmw</u>	<u>15</u>	<u>5</u>	<u>60</u>	<u>20</u>
<u>600</u>	<u>950 1/2 mcw</u>	<u>10</u>	<u>2</u>	<u>83</u>	<u>5</u>
<u>787</u>	<u>9w w/Tr of oil</u>	<u>10</u>	<u>Trace</u>	<u>90</u>	<u>---</u>
<u>---</u>	<u>365' weak Gas m.p. pipe</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>

Rec Total 1622 BHT 160° Gravity --- API RW .111 @ 99° F Chlorides 49,500 ppm

(A) Initial Hydrostatic <u>3191</u>	<input checked="" type="checkbox"/> Test <u>1450</u>	T-On Location <u>03:45</u>
(B) First Initial Flow <u>276</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>04:22</u>
(C) First Final Flow <u>571</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>07:58</u>
(D) Initial Shut-In <u>848</u>	<input checked="" type="checkbox"/> Circ Sub <u>---</u>	T-Pulled <u>11:18</u>
(E) Second Initial Flow <u>618</u>	<input type="checkbox"/> Hourly Standby <u>---</u>	T-Out <u>---</u>
(F) Second Final Flow <u>845</u>	<input checked="" type="checkbox"/> Mileage <u>222 RT</u> 344.10	Comments <u>---</u>
(G) Final Shut-In <u>850</u>	<input type="checkbox"/> Sampler <u>---</u>	<u>---</u>
(H) Final Hydrostatic <u>3119</u>	<input type="checkbox"/> Straddle <u>---</u>	<input type="checkbox"/> Ruined Shale Packer <u>---</u>
Initial Open <u>5</u>	<input type="checkbox"/> Shale Packer <u>---</u>	<input checked="" type="checkbox"/> Ruined Packer <u>320</u>
Initial Shut-In <u>45</u>	<input type="checkbox"/> Extra Packer <u>---</u>	<input type="checkbox"/> Extra Copies <u>---</u>
Final Flow <u>60</u>	<input type="checkbox"/> Extra Recorder <u>---</u>	Sub Total <u>0</u>
Final Shut-In <u>90</u>	<input type="checkbox"/> Day Standby <u>---</u>	Total <u>2439.10</u>
	<input type="checkbox"/> Accessibility <u>---</u>	MP/DST Disc't <u>---</u>
	Sub Total <u>2119.10</u>	

Approved By [Signature] Our Representative [Signature]

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



NOTES

Company:Palmer Oil, Inc.

Lease: UPC 23-5

Field:

Location: (2250' FSL & 660'FWL)

Sec:23 **Twsp:** 32 **Rge:**37W

County: Stevens **State:** Kansas

GL: 3123' **KB:**3135'

Contractor: Duke Rig 9

Spud: 08/25/2013 **Comp:**09/03/2013

RTD: 6532' **LTD:**6534'

Mud Up:4600' **Type Mud:** Chemical

Samples Saved From:4700'

Drilling Time Kept from:4100'

Samples Examined from:4700'

Geological Supervision From:4700'

Geologist On Well: Wyatt Urban

Surface Casing:8 5/8 @ 1754'

Production Casing:


Electrical Surveys:By Pioneer; DIL, CNL/CDL, Micro, Sonic

Palmer Oil, Inc. Formation Tops

PALMER OIL, INC - UPC 23-5 S2-N2-NW-SW (2250' FSL & 660' FWL) 23-32-37 3135 KB				
Formation	Sample	Sub-Sea	Log	Sub-Sea
Heebner	4145	-4145	4145	-1010
Lansing	4277	-4277	4280	-1145
Marmaton	4955	-4955	4946	-1811
Cherokee	5128	-5128	5130	-1995

Morrow	5638	-5638	5646	-2511
St. Gen	6223	-3088	6225	-3090
St. Louis	6314	-3179	6311	-3176
St. Louis B	6395	-3260	6392	-3257
RTD	6532	-3397	6532	-3397
LTD	6534	-3399	6534	-3399

DST #1

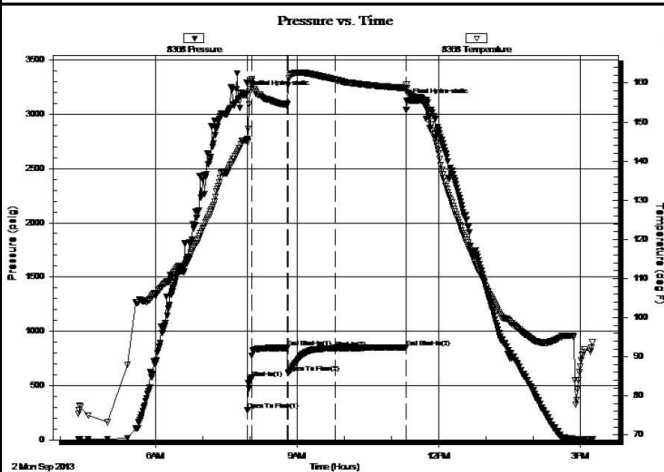
	DRILL STEM TEST REPORT	
	Palmer Oil, Inc 3118 N Cummings Rd Garden City, Ks 67846 ATTN: Wyatt	23-32-37 Stevens, Ks UPC # 23-5 Job Ticket: 52846 DST#: 1 Test Start: 2013.09.02 @ 04:22:39

GENERAL INFORMATION:

Formation: St. Louis "B"	Test Type: Conventional Bottom Hole (Initial)
Deviated: No Whipstock: 0.00 ft (KB)	Tester: Shane McBride
Time Tool Opened: 07:57:19	Unit No: 55
Time Test Ended: 15:45:34	Reference Elevations: 3135.00 ft (KB)
Interval: 6380.00 ft (KB) To 6431.00 ft (KB) (TVD)	3123.00 ft (CF)
Total Depth: 6431.00 ft (KB) (TVD)	KB to GR/CF: 12.00 ft
Hole Diameter: 7.88 inches Hole Condition: Fair	

Serial #: 8368 Outside	Capacity: 8000.00 psig
Press@RunDepth: 845.37 psig @ 6381.00 ft (KB)	Last Calib.: 2013.09.02
Start Date: 2013.09.02 End Date: 2013.09.02	Time On Btm: 2013.09.02 @ 07:57:04
Start Time: 04:22:39 End Time: 15:15:34	Time Off Btm: 2013.09.02 @ 11:19:19

TEST COMMENT: B.O.B. in 2 min.
 No return
 B.O.B. in 3 min.
 No return





PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	3191.44	145.66	Initial Hydro-static
1	276.55	144.90	Open To Flow (1)
6	571.04	160.56	Shut-In(1)
51	848.15	154.42	End Shut-In(1)
52	618.26	159.44	Open To Flow (2)
112	845.37	160.86	Shut-In(2)
202	850.12	158.73	End Shut-In(2)
203	3119.17	158.58	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
787.00	g w w/ trace of oil 10g 90 w	9.34
600.00	g s o & m c w 10g 2o 5m 83w	8.42
235.00	g s o c m w 15g 5o 20m 60w	3.30
0.00	365' weak gas in pipe	0.00

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

0.00	000 weak gas in pipe	0.00

ROCK TYPES

 Clystgy	 Lmst fw<7	 shale, gry	 shale, red
 sdy lmst	 Lmst fw7>	 Carbon Sh	 Ss

ACCESSORIES

MINERAL

- ☒ Chert, tripolitic
- P Pyrite
- Sandy
- Silty

FOSSIL










- Crinoids
- ◇ Oolite
- ♁ Pellets
- ⊕ Oomoldic

TEXTURE

- C Chalky
- FX FinexIn

OTHER SYMBOLS


MISC

-  Daily Report
-  Digital Photo
-  Document
-  Folder
-  Link
-  Vertical Log File
-  Horizontal Log File
-  Core Log File
-  Drill Cuttings Rpt

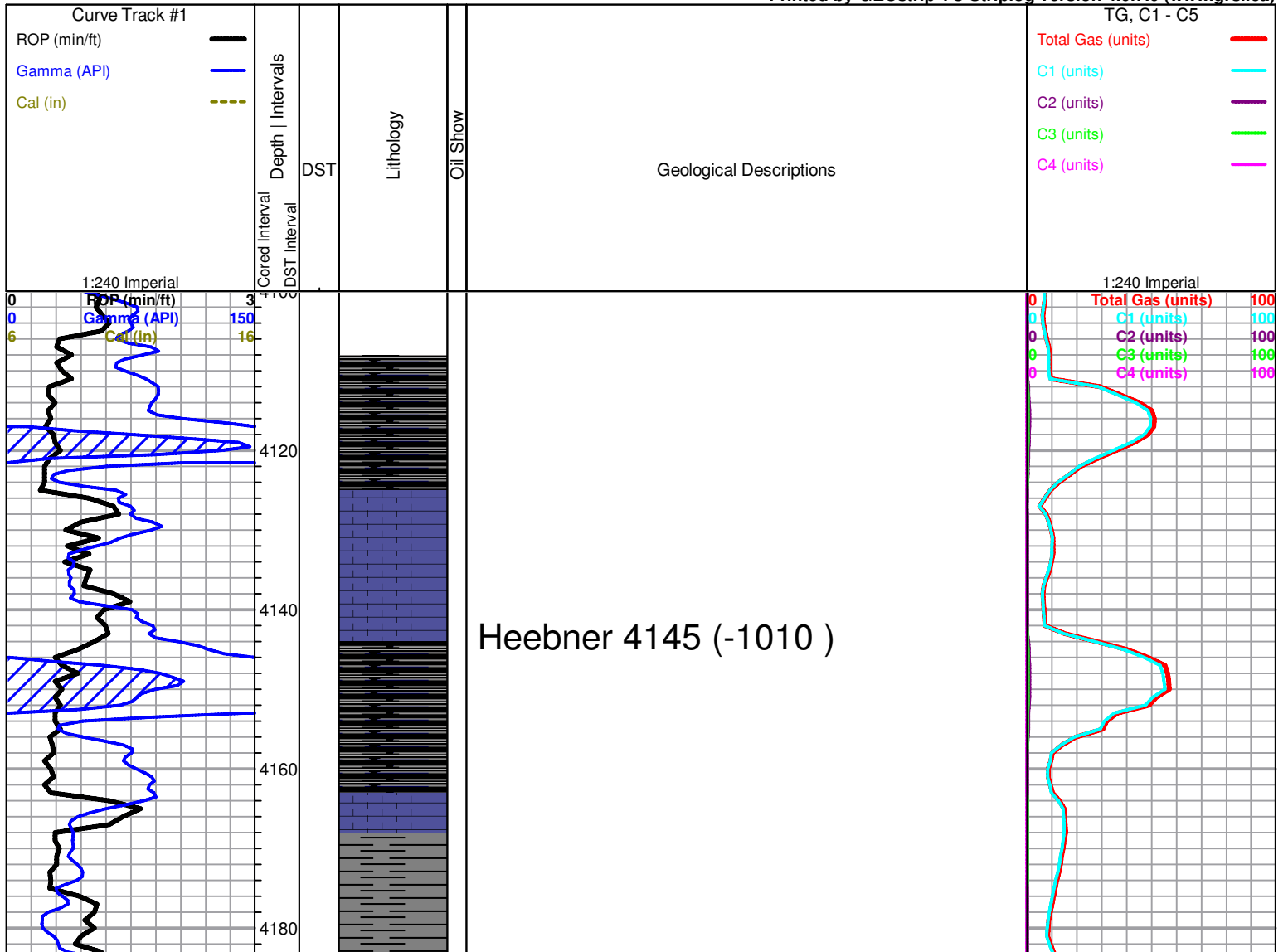
Oil Show

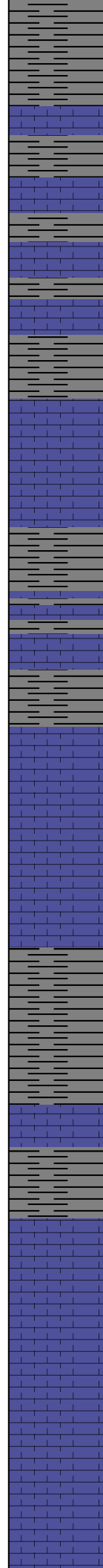
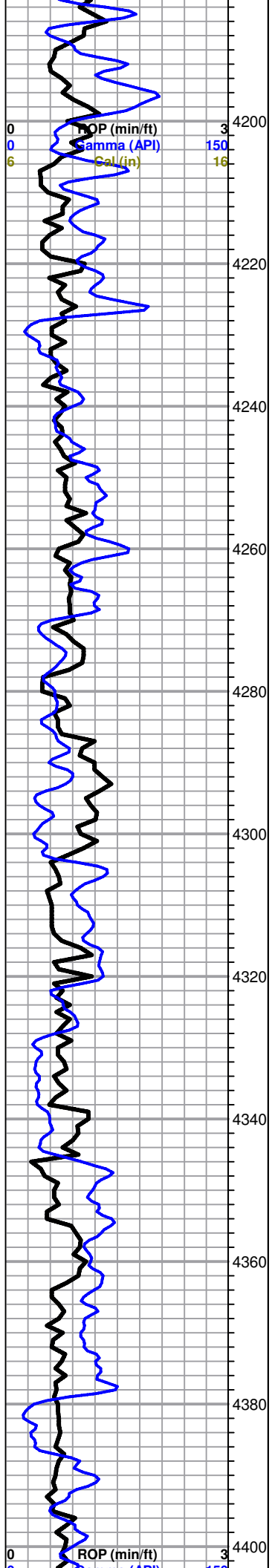
- Good Show
- Fair Show
- Poor Show
- Spotted or Trace
- Questionable Stn
- D Dead Oil Stn
- Fluorescence
- * Gas

DST

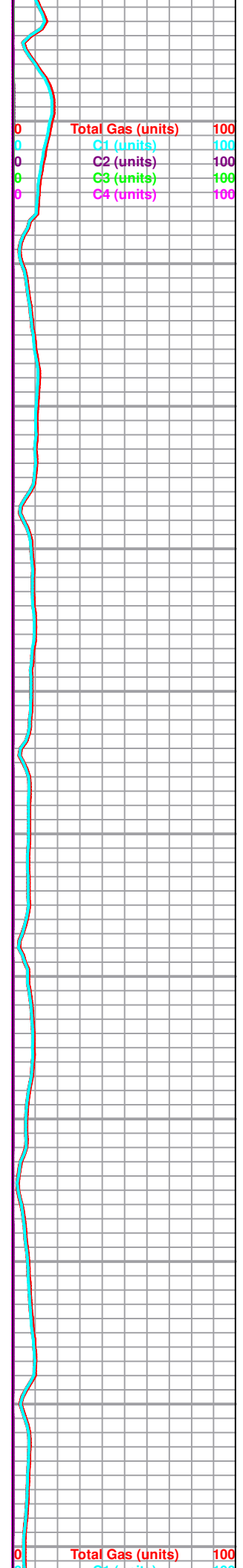
-  DST Int
-  DST alt
-  Core
-  tail pipe

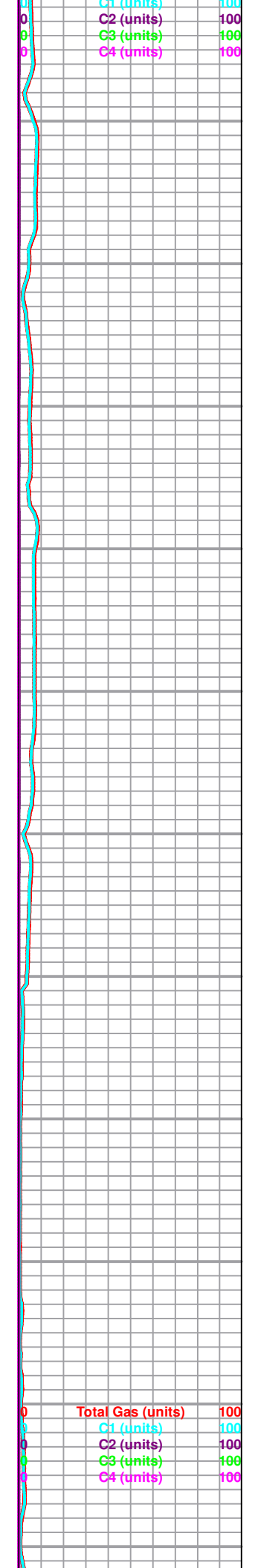
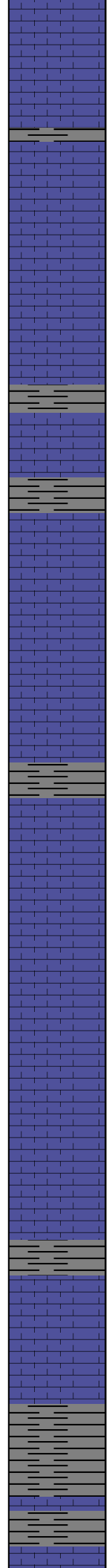
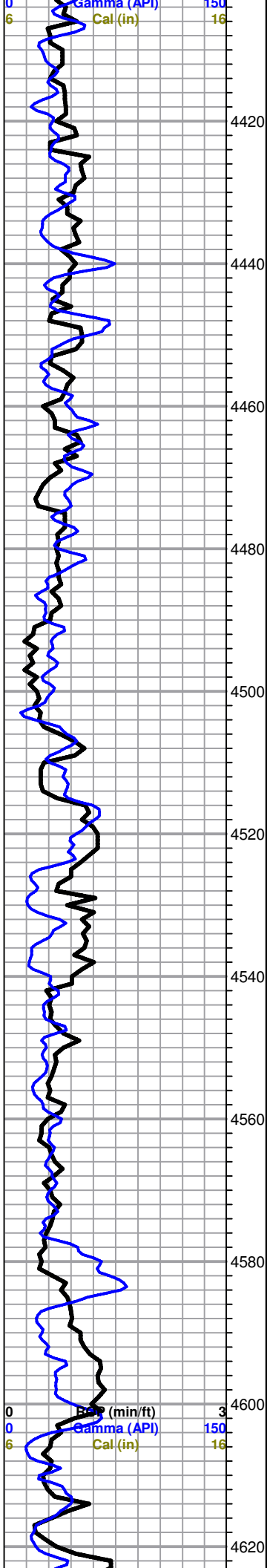
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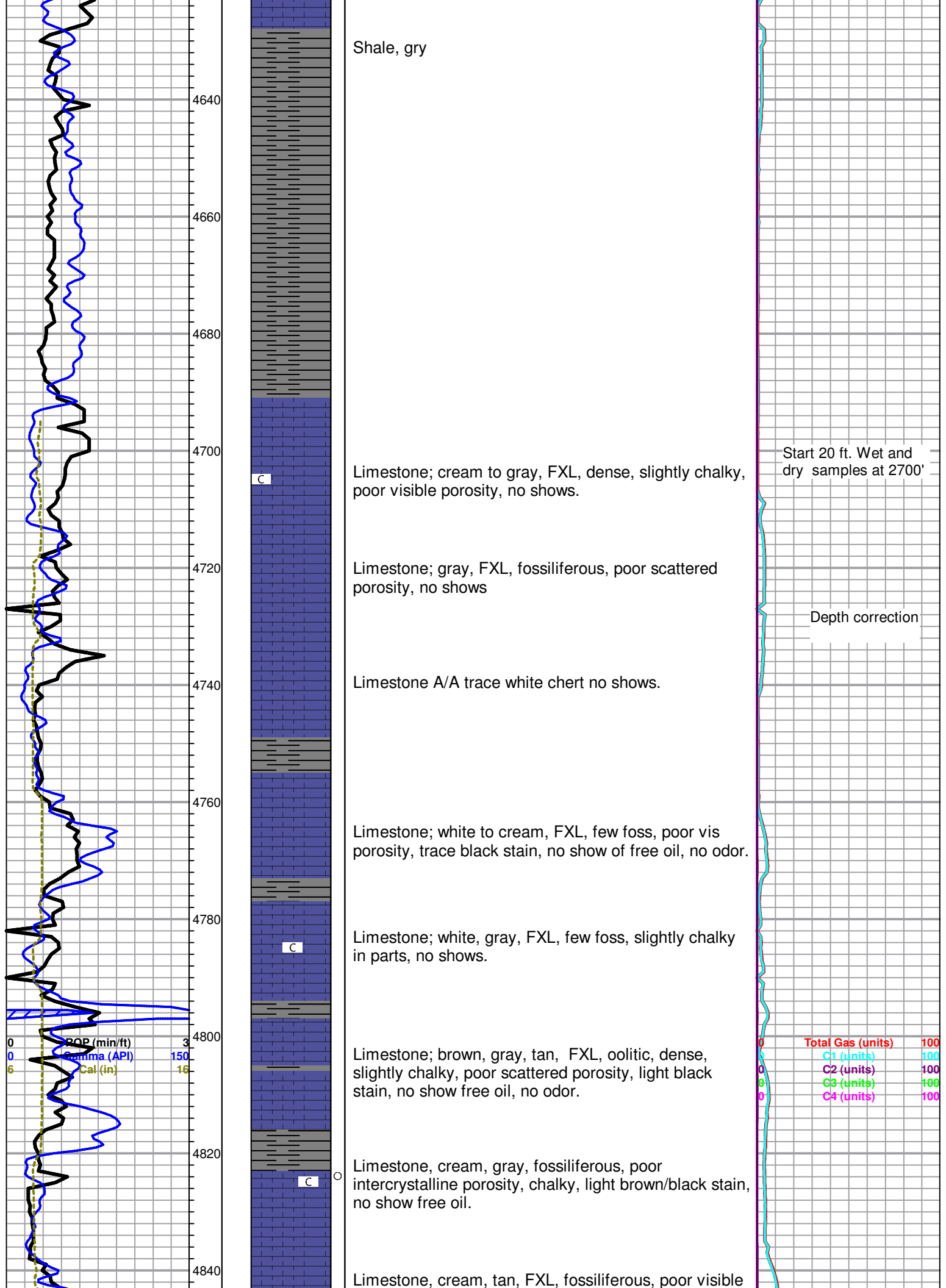


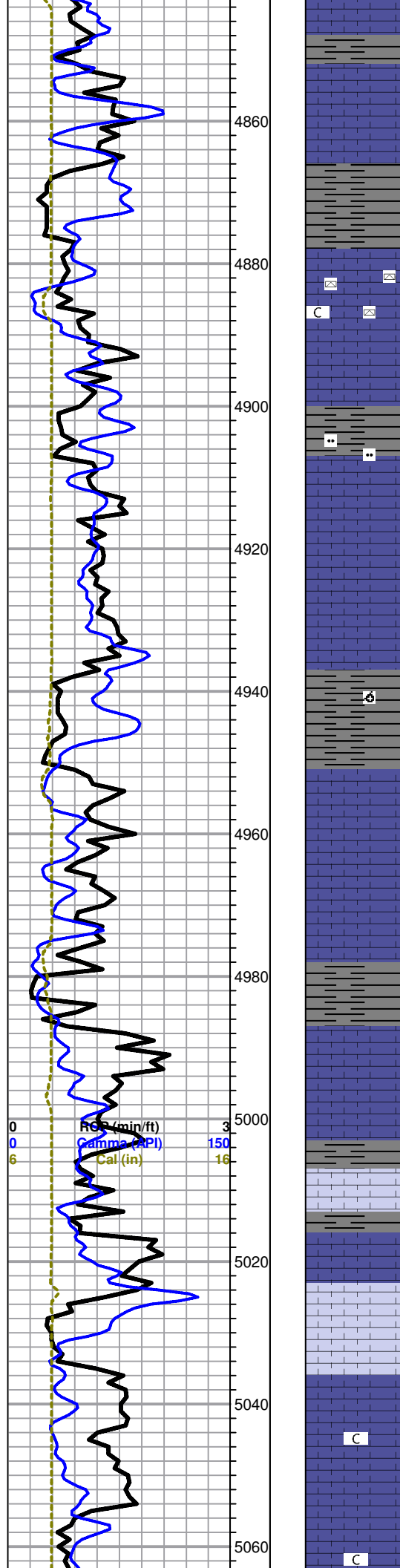


Lansing 4280 (-1145)









porosity, light black trace stain, no show of free oil, no odor.

Shale, black, gray

Limestone, gray, tan, FXL, poor visible porosity, cherty, slightly chalky, dense, no show.

L.S. A/A, Black to gray shale, silty, limey

Limestone; white, cream, FXL, poor scattered porosity, no show

Limestone; tan, cream, oolitic, chalky, poor oomoldic porosity, no show

MARMATON 4946 -1811

Limestone, tan, cream, FXL, few fossils, chalky, sandy in parts, poor visible porosity, no shows

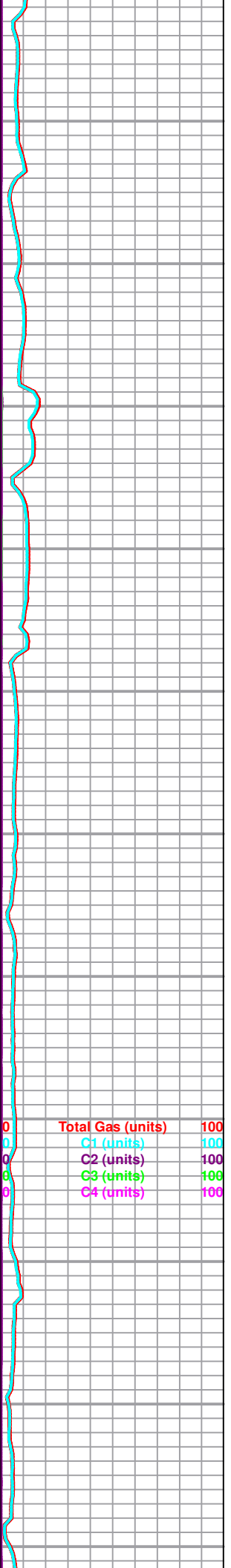
Shale, gray, black, silty

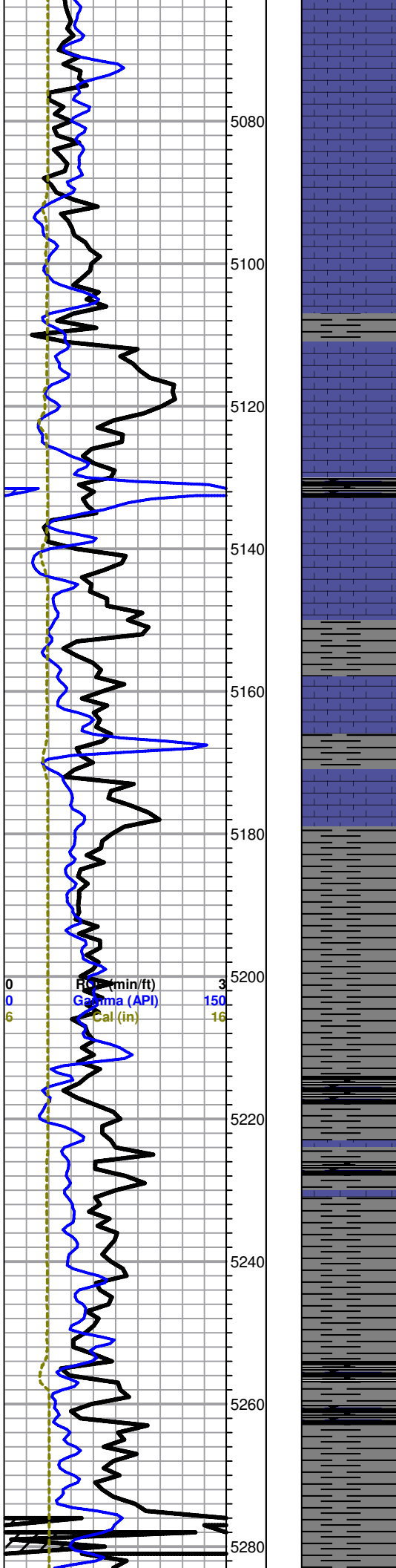
Limestone; cream to tan, FXL, dense, chalky, slightly cherty in parts, fossiliferous, no shows, no odor

Shale, black to gray, silty

Limestone, gray to tan, FXL, few fossils, poor visible porosity, chalky, no shows, no odor

Limestone, white, cream, to gray, FXL, poor visible porosity, dense, cherty, slightly chalky, poor scattered porosity, no shows





Limestone brown to tan, FXL, slightly chalk, cherty in parts, poor visible porosity

5080

Shale, gray, dense to silty,

5100

Limestone, cream to tan chalky poor scattered porosity, no shows

5120

Cherokee 5130 -1995

5140

Shale black carbonaceous

Shale, black to gray, limey, dense
Limestone cream to white, FXL, chalky, fossiliferous, poor scattered porosity, no shows

5160

Shale black to gray, silty to limey

5180

5200

Shale A/A,

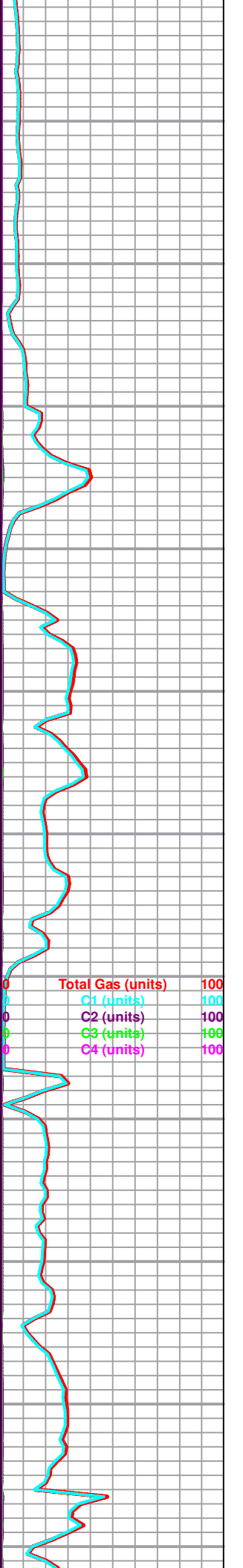
5220

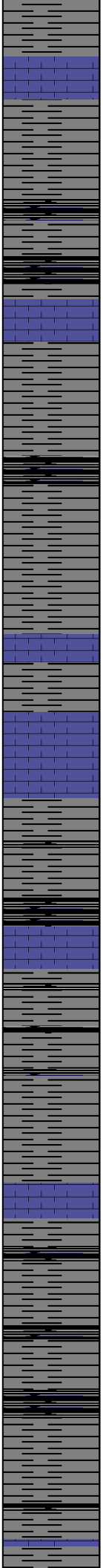
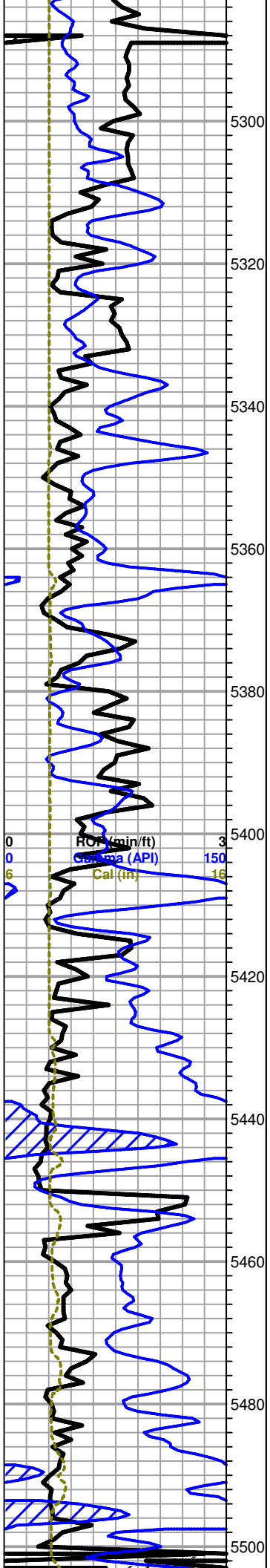
5240

Shale black to gray, dense to silty, with limestone cream to tan, dense, few fossils, poor visible porosity, no shows

5260

5280





Shale gray, black, maroon, silty to limey, with limestone, cream to tan, dense, poor visible porosity, no shows

Shale A/A

Shale black to gray, dense, with few limestone cream to gray, chalky, dense, poor visible porosity, no shows

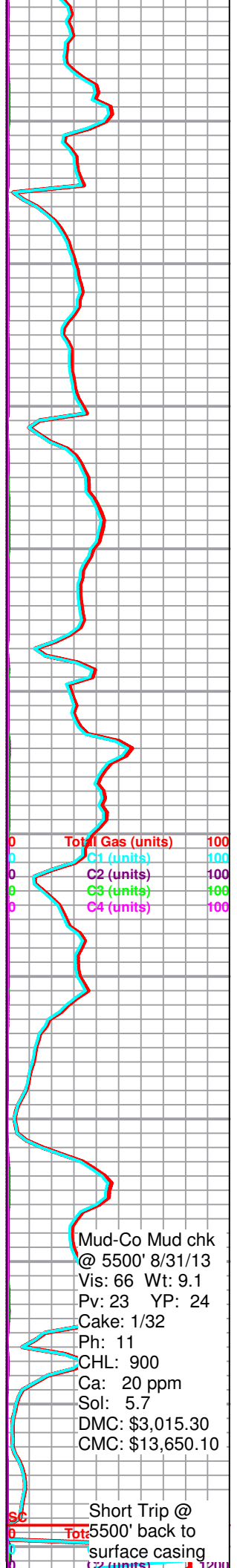
Shale A/A

Shale black to gray dense, silty, with limestone, cream to white, fine crystalline, dense, chalky, poor scattered porosity, no shows

Shale A/A

Shale black to gray,

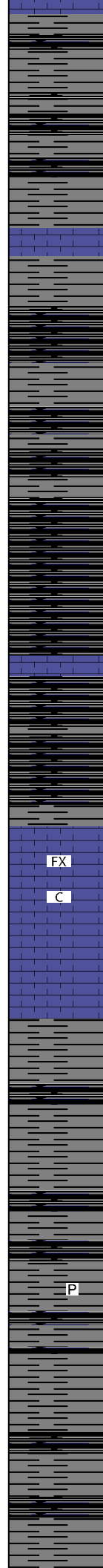
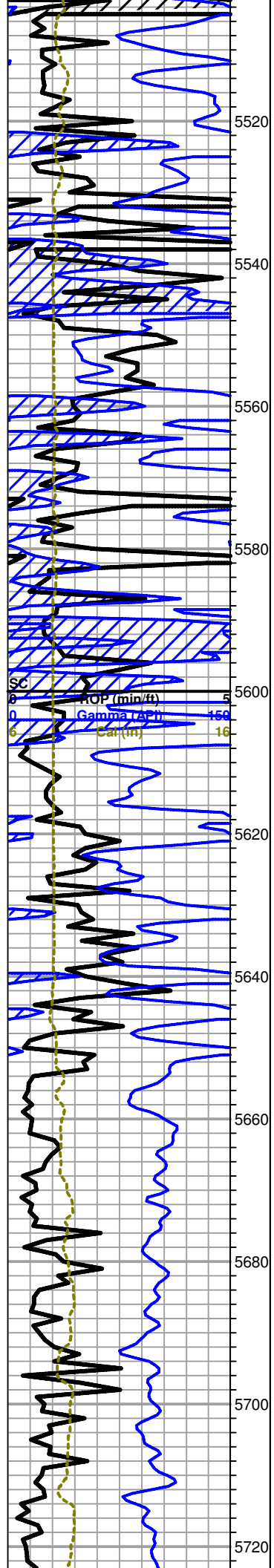
Shale black carbonaceous and gray to maroon silty



Total Gas (units)	100
C1 (units)	100
C2 (units)	100
C3 (units)	100
C4 (units)	100

Mud-Co Mud chk
 @ 5500' 8/31/13
 Vis: 66 Wt: 9.1
 Pv: 23 YP: 24
 Cake: 1/32
 Ph: 11
 CHL: 900
 Ca: 20 ppm
 Sol: 5.7
 DMC: \$3,015.30
 CMC: \$13,650.10

Short Trip @
 5500' back to
 surface casing



shale, trace limestone cream to white, FXL, very chalky, few fossils, poor visible porosity, trace white chert

Shale as above with scattered cream to tan limestone

Shale black carb

Shale black carbonaceous, with maroon shale, scattered limestone, cream to tan, fine crystalline, slightly chalky, dense, poor scattered porosity, no show

Shale A/A

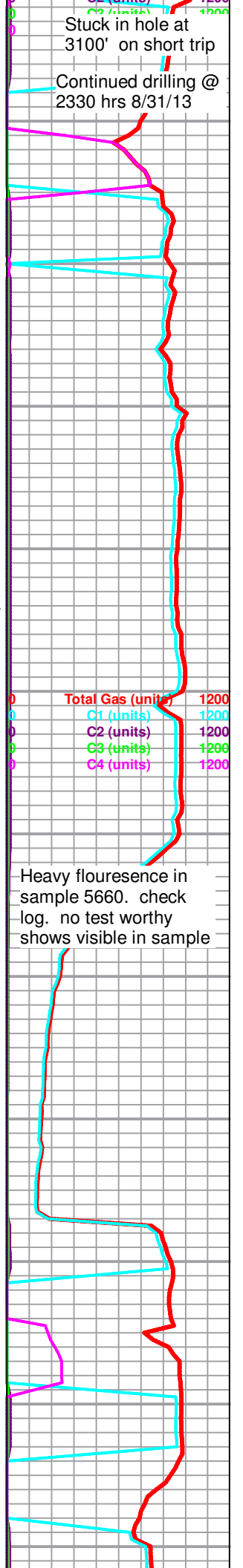
Limestone, gray, FXL, fossiliferous, slightly chalky, poor visible porosity, good fluorescence, no odor, no shows

Morrow 5646 -2511

Shale gray, few fissile, mostly silty, soft

Black carb shale, some scattered gray to cream limestone

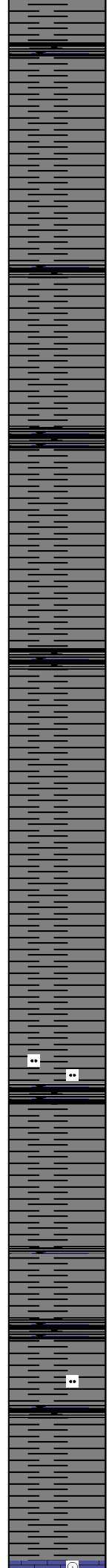
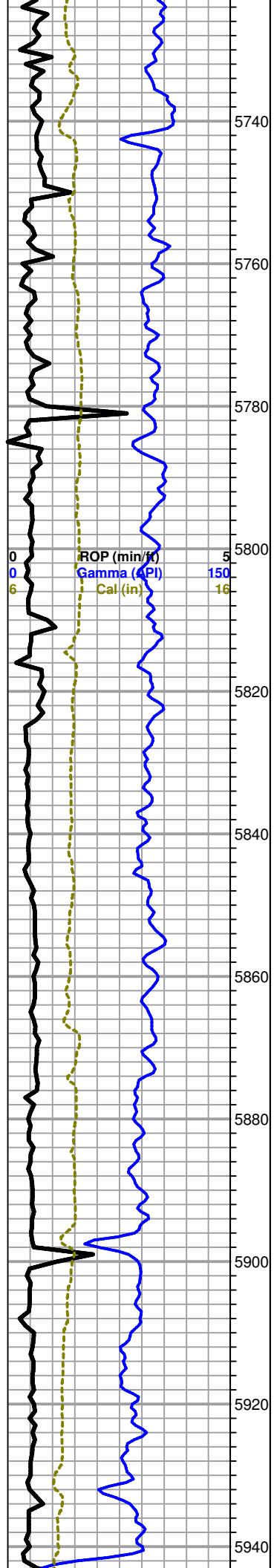
Shale black to gray silty, soft, few fissile, trace pyrite



Stuck in hole at 3100' on short trip
Continued drilling @ 2330 hrs 8/31/13

Total Gas (units) 1200
C1 (units) 1200
C2 (units) 1200
C3 (units) 1200
C4 (units) 1200

Heavy fluorescence in sample 5660. check log. no test worthy shows visible in sample



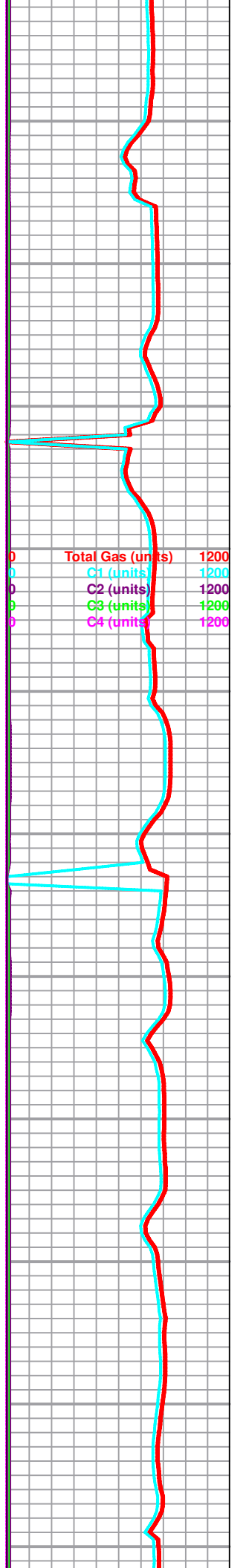
Shale A/A

Shale A/A

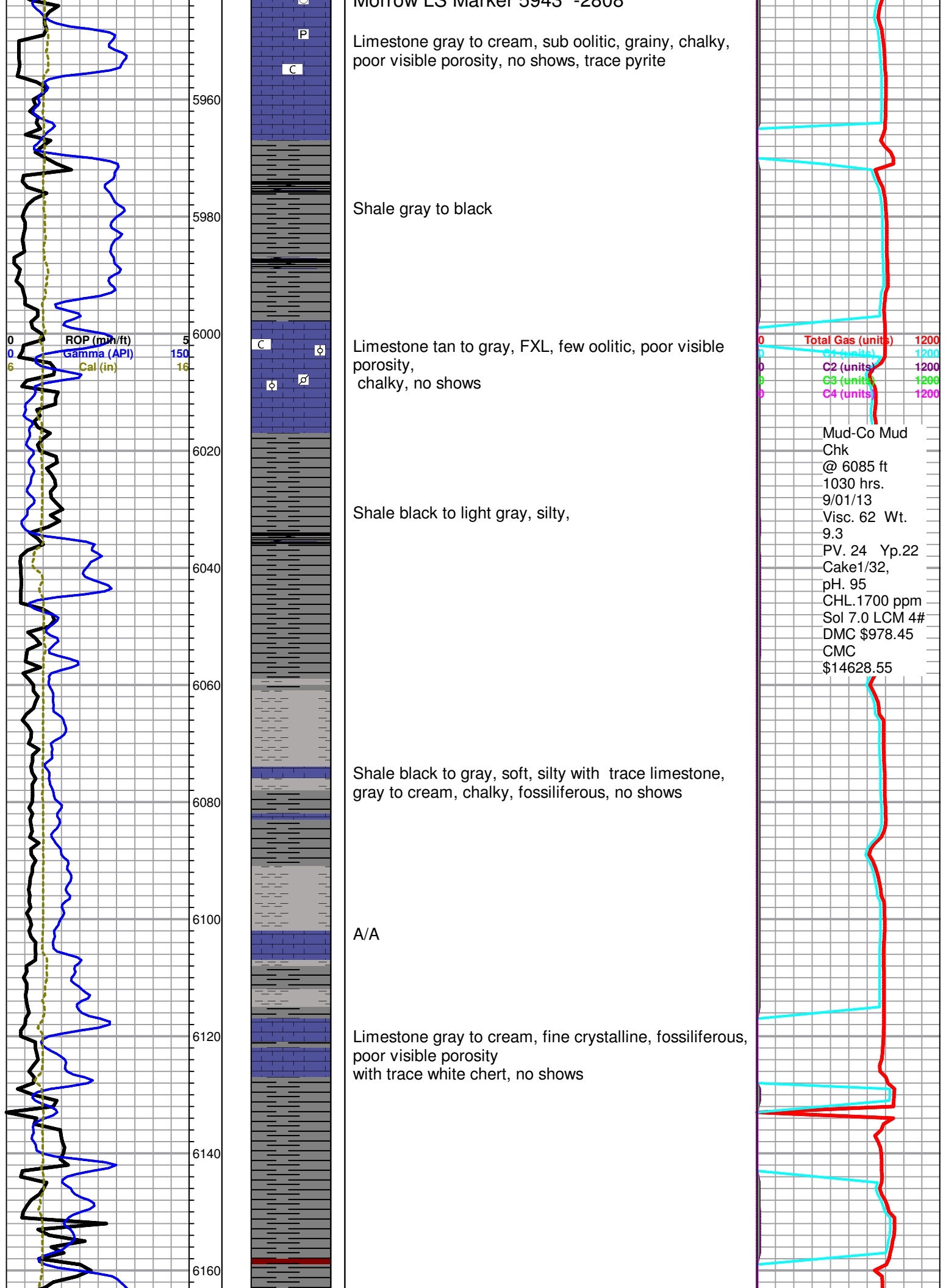
Shale black to gray, some plated to fissile, some silty, soft

Shale A/A

Shale black carb



Total Gas (units) 1200
 C1 (units) 1200
 C2 (units) 1200
 C3 (units) 1200
 C4 (units) 1200



5960
5980
6000
6020
6040
6060
6080
6100
6120
6140
6160

Limestone gray to cream, sub oolitic, grainy, chalky, poor visible porosity, no shows, trace pyrite

Shale gray to black

Limestone tan to gray, FXL, few oolitic, poor visible porosity, chalky, no shows

Shale black to light gray, silty,

Shale black to gray, soft, silty with trace limestone, gray to cream, chalky, fossiliferous, no shows

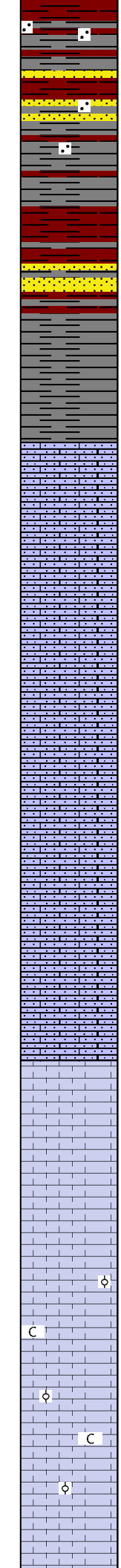
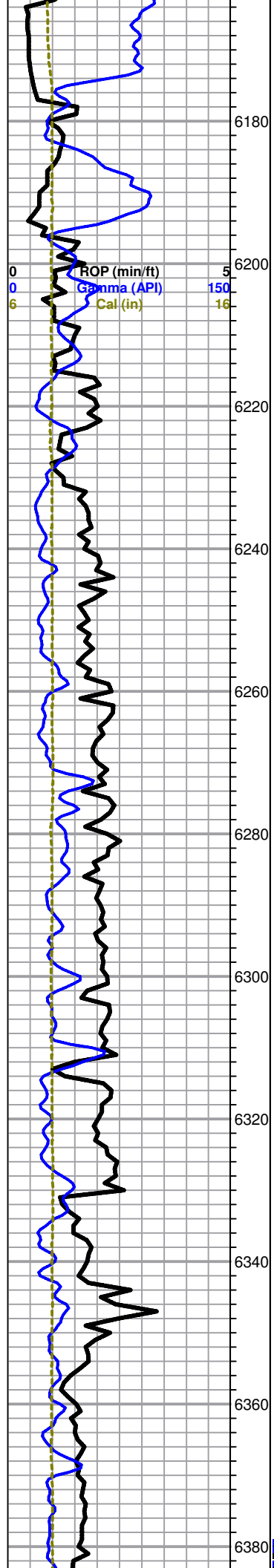
A/A

Limestone gray to cream, fine crystalline, fossiliferous, poor visible porosity with trace white chert, no shows

Total Gas (units) 1200
C1 (units) 1200
C2 (units) 1200
C3 (units) 1200
C4 (units) 1200

Mud-Co Mud
Chk
@ 6085 ft
1030 hrs.
9/01/13
Visc. 62 Wt.
9.3
PV. 24 Yp.22
Cake1/32,
pH. 95
CHL.1700 ppm
Sol 7.0 LCM 4#
DMC \$978.45
CMC
\$14628.55

ROP (m/h/ft) 5
Gamma (API) 150
Cal (in) 16



Shale gray, red, green, soft, with sandstone brown to red, fine grained well sorted, rounded grains, no shows

Shale A/A, Limestone, gray , tan, brown, finely crystalline, chalky, poor visible porosity no shows

Shale , maroon, black, green, gry, silty, trace sandstone, brown to an fine grained, well rounded, well sorted, no show

St. Gen. 6225 -3090

Limestone, tan to light gray, sandy, friable, fine grain, well sorted, no shows

Limestone A/A

A/A

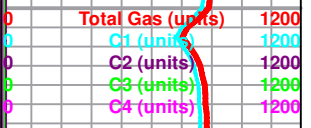
Limestone, lt gry , sandy, silty, friabe, no shows.

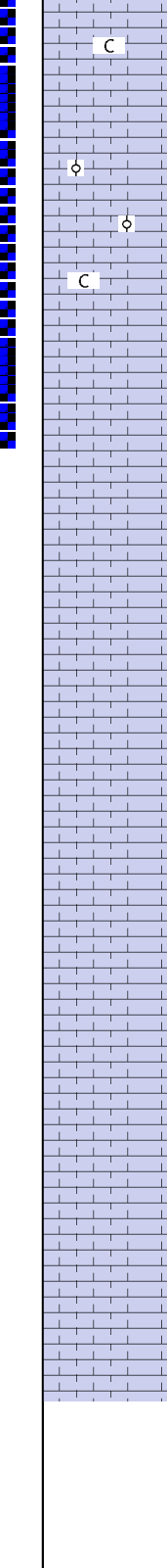
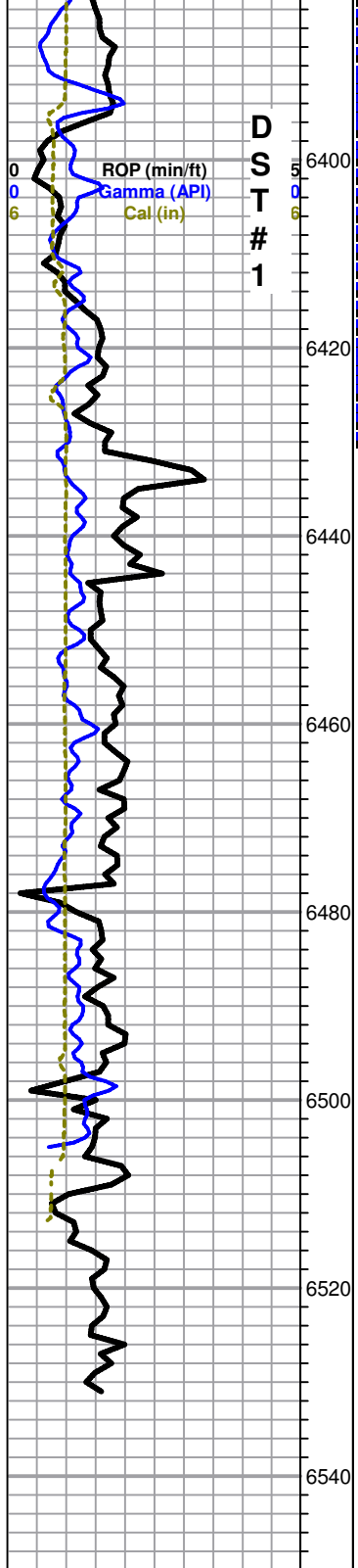
.St. Louis 6311 -3176

Limestone, Cray to white, slight oolitic, chalky, friable, poor visible porosity, no shows

6410 sample A/A with traces of white, opaque, orange chert, poor flourescence,

A/A





St. Louis B 6392 -3257

Limestone, tan to cream, oolitic, chalky, fair inter oolitic porosity, light brown trace stain, light show of free oil, faint odor in freshly broken samples. fair fluorescence

Limestone cream to gray, few oolitic, poor visible porosity, trace light brown stain, no shows, no odor.

Limestone, cream to tan, few oolitic, fine crystalline, chalky, poor visile porosity, no shows.

Limestone cream to tan with few gray, fine crystalline, few sub oolitic, dense, poor visible porosity, no show, no odor

Limestone A/A and white chert, no shows.

RTD 6532 ft. @ 2130 hrs 9/2/13

