Confidentiality Requested:
☑ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1173048

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 # 34904
Name: Palmer Oil, Inc.
Address 1: 3118 N. Cummings Rd.
Address 2: PO BOX 399
City: GARDEN CITY State: KS Zip: 67846 + ____
Contact Person: Joe Smith
Phone: (620) 275-9231
CONTRACTOR: License # 5929
Name: Duke Drilling Co., Inc.
Wellsite Geologist: Wyatt Urban
Purchaser: Valero

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 #:

10/26/2013 — Spud Date or Recompletion Date
11/4/2013 — Date Reached TD
12/13/2013 — Completion Date or Recompletion Date

API No. 15 - 15-189-22821-00-00
Spot Description:
SW NW SE SE Sec. 21 Twp. 31 S. R. 35 ☐ East ☑ West
800 Feet from ☐ North / ☑ South Line of Section
1100 Feet from ☑ East / ☐ West Line of Section

Footages Calculated from Nearest Outside Section Corner:
☐ NE ☐ NW ☑ SE ☐ SW

GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Stevens
Lease Name: Lola Well #: 21-4
Field Name:
Producing Formation: Morrow
Elevation: Ground: 3002 Kelly Bushing: 3011
Total Vertical Depth: 6400 Plug Back Total Depth: 5990
Amount of Surface Pipe Set and Cemented at: 1762 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: 15000 ppm Fluid volume: 80 bbls
Dewatering method used: Evaporated

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: 12/16/2013
☑ **Confidential Release Date:** 12/16/2015
☑ **Wireline Log Received**
☑ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** NAOMI JAMES **Date:** 12/16/2013

1173048

Operator Name: Palmer Oil, Inc. Lease Name: Lola Well #: 21-4

Sec. 21 Twp. 31 S. R. 35 ☐ East ☑ West County: Stevens

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 ☑ Yes ☐ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☑ Yes ☐ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

List All E. Logs Run:

Induction
Porosity
Micro

☐ Log Formation (Top), Depth and Datum ☑ Sample

Name	Top	Datum
Heebner	4101'	-1090
Lansimg	4209'	-1198
Marmaton	4898'	-1887
Cherokee	5111'	-2100
Atoka	5396'	-2385
Morrow	5506'	-2495
Chester	5893'	-2792

CASING RECORD ☑ New ☐ 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
Surface	12.250	8.625	24	1762	65/35 &class A	825	3%CC, 2%gel
Production	7.875	5.50	17	6394	AA2	200	

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	-			
	-			

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 *(Amount and Kind of Material Used)*	Depth
4	5767'to5771'		
	5990'CIBP		
4	6013'to 6021'		

TUBING RECORD: Size: 2.375 Set At: 5987 Packer At: Liner Run: ☐ Yes ☐ No

Date of First, Resumed Production, SWD or ENHR.

Producing Method: ☐ Flowing ☐ Pumping ☐ Gas Lift ☐ Other *(Explain)*

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

DISPOSITION OF GAS:
☐ Vented ☐ Sold ☐ Used on Lease
(If vented, Submit ACO-18.)

METHOD OF COMPLETION:
☐ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*
☐ Other *(Specify)*

PRODUCTION INTERVAL:

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

Musgrove PETROLEUM CORPORATION
Claflin, Kansas

NOTES

Company: Palmer Oil, Inc.

Lease: Lola 21-4

Field: Cutter South

Location: SW-NW-SE-SE (800' FSL & 1100' FEL)

Sec: 21 Twsp: 31S Rge: 35W

County: Stevens State: Kansas

KB: 3011' GL: 2998'

API #: 15-189-22821-00-00

Contractor: Duke Drilling, Co. (Rig # 9)

Spud: 10/26/2013 Comp:11/4/2013

RTD:6400' LTD:6362'

Mud Up: 4500' Type Mud: Chemical

Samples Saved From: 4600' to RTD
Drilling Time Kept From: 4000' to RTD
Samples Examined From: 4600' to RTD
Geological Supervision From: 4600' to RTD
Geologist on Well: Wyatt Urban

Surface Casing: 8 5/8" @ 1765'

Electronic Surveys: Pioneer Energy Services, DIL, DCP, MICRO,

	DRILLING WELL Palmer Oil - Lola 21-4 SW-NW-SE-SE 21-31S-35W				COMPARISON WELL EOG Resources 21-1 Lola C-SE-SE-SE 21-31S-35W				COMPARISON WELL EOG Resourses 3-21 Lola C-S2-SW-SE 21-31S-35W			
	3011 KB				3010 KB		Structural Relationship		3013 KB		Structural Relationship	
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log
Heebner	4101	-1090							4097	-1084		
Base Heebner	4108	-1097			4105	-1095	-2			3013		
Lansing	4209	-1198			4210	-1200	2		4218	-1205	7	
Marmaton	4898	-1887			4891	-1881	-6		4906	-1893	6	
Cherokee	5111	-2100			5114	-2104	4			3013	-5113	

Atoka	5396	-2385			5394	-2384	-1		5395	-2382	-3	
Morrow	5506	-2495			5506	-2496	1		5512	-2499	4	
Chester	5803	-2792			5786	-2776	-16		5797	-2784	-8	
Lower Chester	6005	-2994			5985	-2975	-19		6000	-2987	-7	
PERFS UPPER					5985	-2975			6000	-2987		
PERFS LOWER					6000	-2990			6018	-3005		
LTD	6362	-3351				3010						
RTD	6400	-3389			6210	-3200			6500	-3487		

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Palmer Oil

3118 N Cummings Rd
Garden City, Ks
67846

ATTN: Wyatt Urban

21-31-35 Stevens, Ks

Lola #21-4

Job Ticket: 54656 **DST#: 1**

Test Start: 2013.11.02 @ 07:35:41

GENERAL INFORMATION:

Formation: **Lower Chester**
Deviated: No Whipstock: 0.00 ft (KB)
Time Tool Opened: 10:54:41
Time Test Ended: 16:20:26

Test Type: Conventional Bottom Hole (Initial)
Tester: Shane McBride
Unit No: 55

Interval: 5980.00 ft (KB) To 6015.00 ft (KB) (TVD)
Total Depth: 6015.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

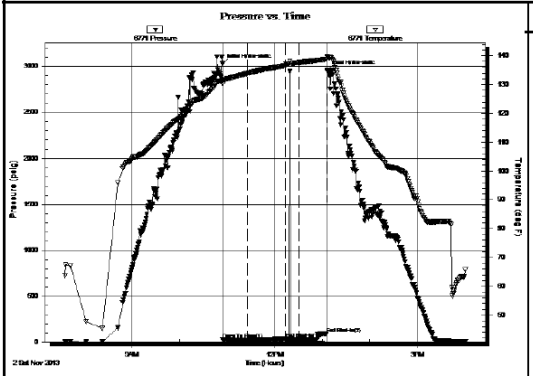
Reference Elevations: 3011.00 ft (KB)
3000.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 6771 **Inside**

Press@RunDepth: 25.39 psig @ 5981.00 ft (KB)
Start Date: 2013.11.02 End Date: 2013.11.02
Start Time: 07:35:41 End Time: 16:00:26

Capacity: 8000.00 psig
Last Calib.: 2013.11.02
Time On Btm: 2013.11.02 @ 10:54:26
Time Off Btm: 2013.11.02 @ 13:05:56

TEST COMMENT: 1/4"in blow
No return
No blow , Flush tool after 5 min good surge, No blow
No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	3029.45	131.57	Initial Hydro-static
1	30.57	130.20	Open To Flow (1)
32	22.54	133.97	Shut-In(1)
79	34.69	136.62	End Shut-In(1)
79	28.22	136.68	Open To Flow (2)
96	25.39	137.67	Shut-In(2)
131	92.62	138.82	End Shut-In(2)
132	2957.75	139.85	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
3.00	mud 100%m	0.01

Gas Rates

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

ROCK TYPES

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

ACCESSORIES

FOSSIL

STRINGER

TEXTURE

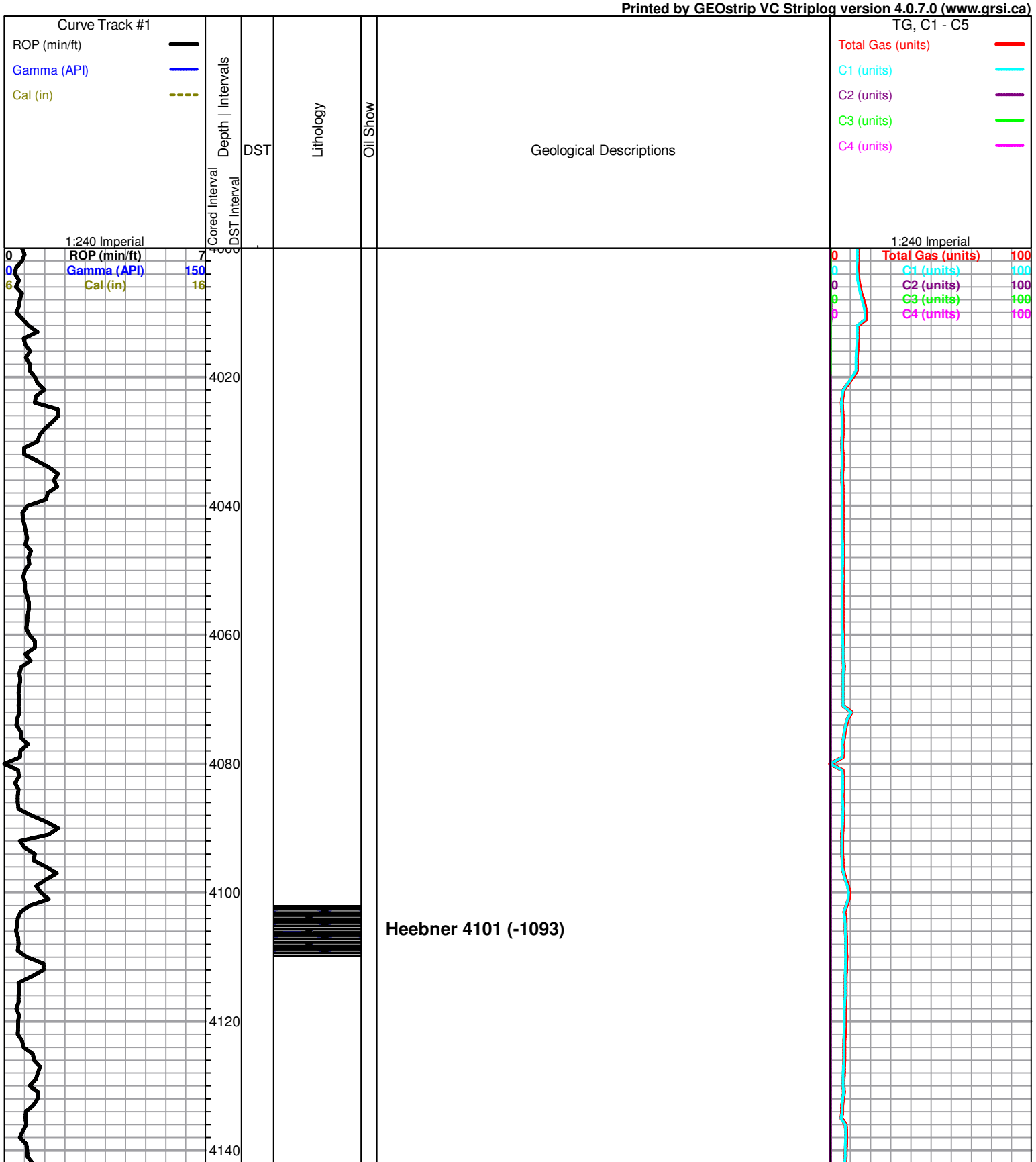
Oolite
Chert
Shale
FX Finexin

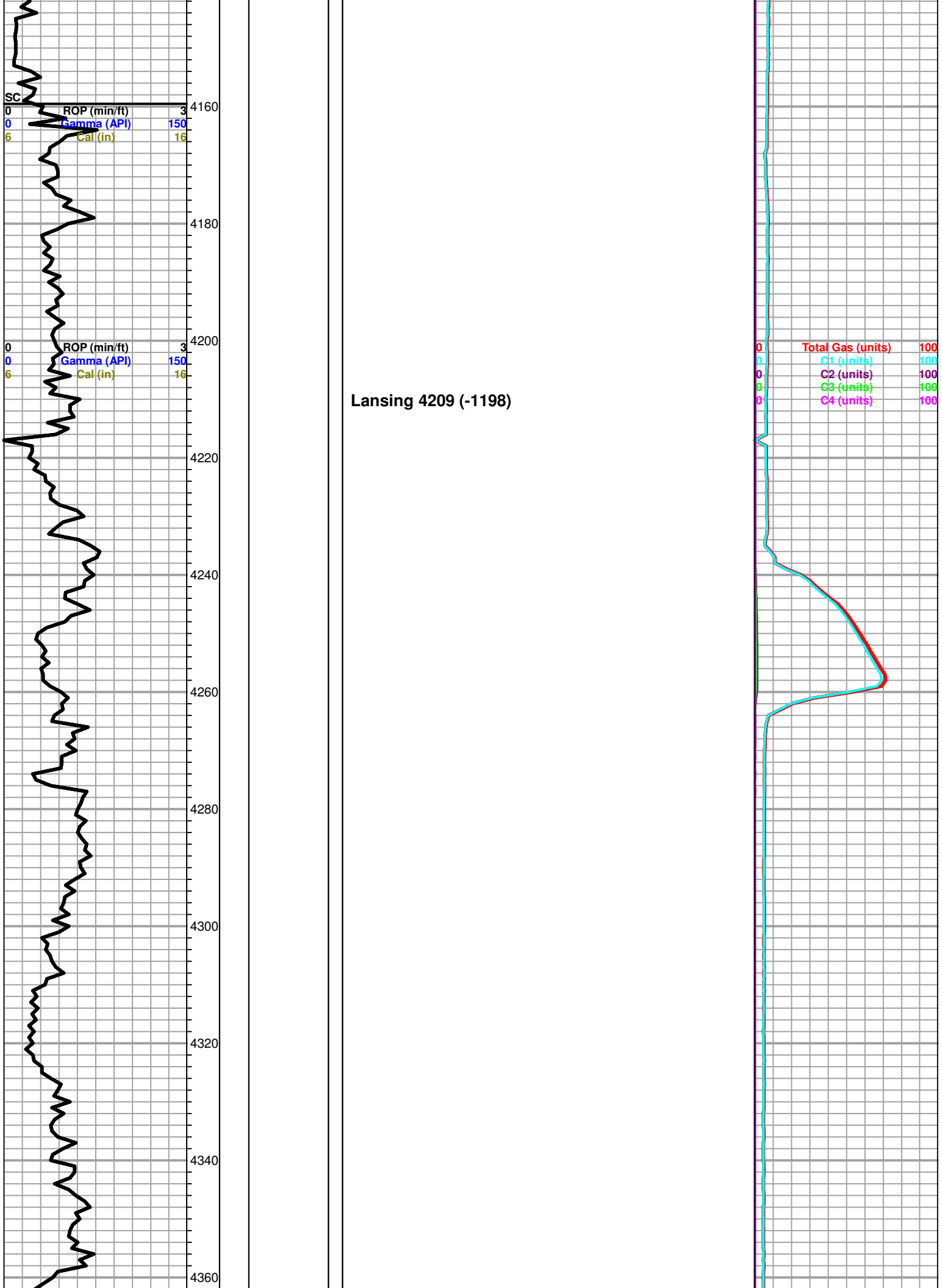
OTHER SYMBOLS

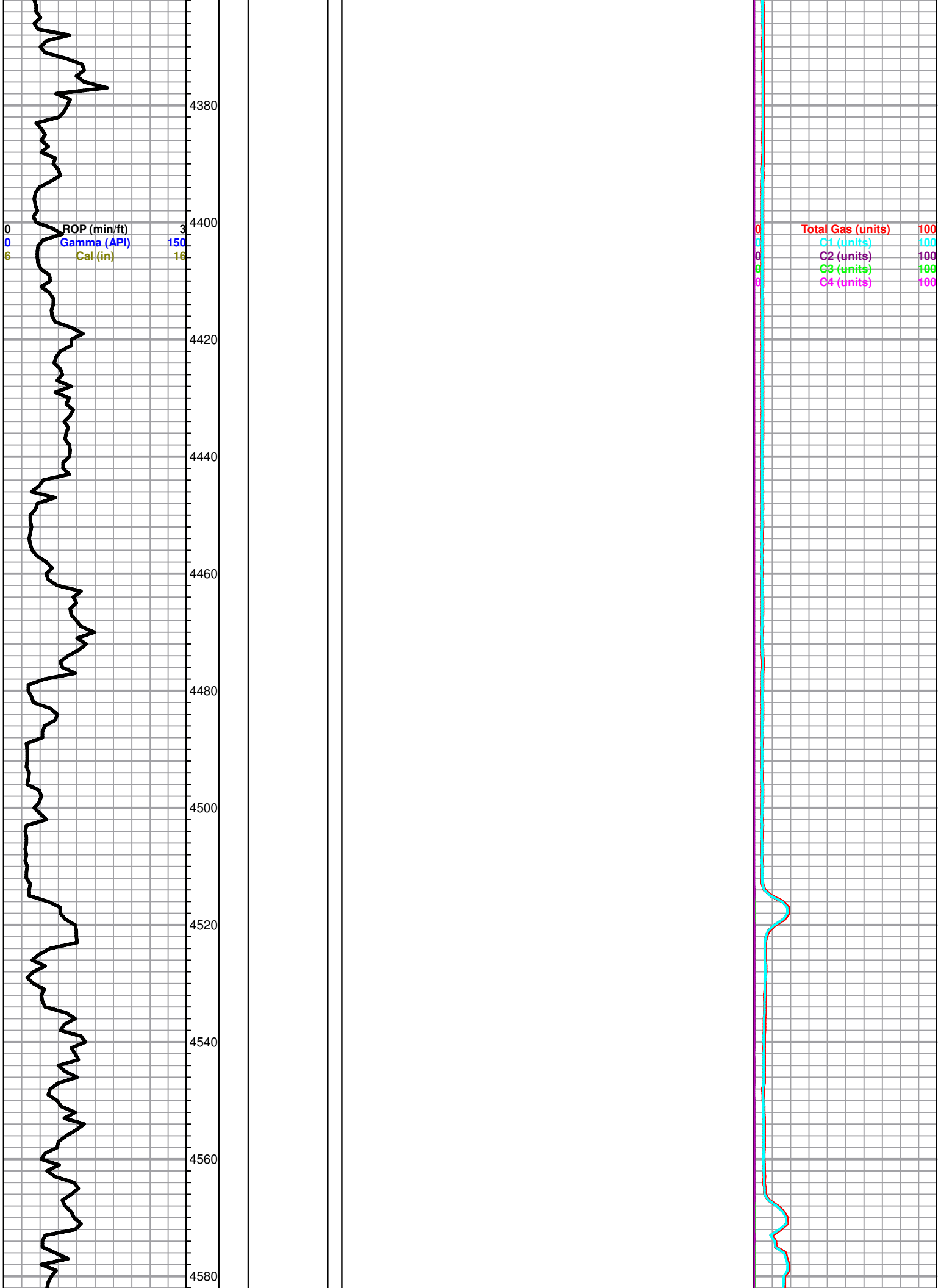
Oil Show
- Good Show
- Fair Show
- Poor Show
- Spotted or Trace
- Questionable Stn
- Dead Oil Stn
- Fluorescence
- Gas

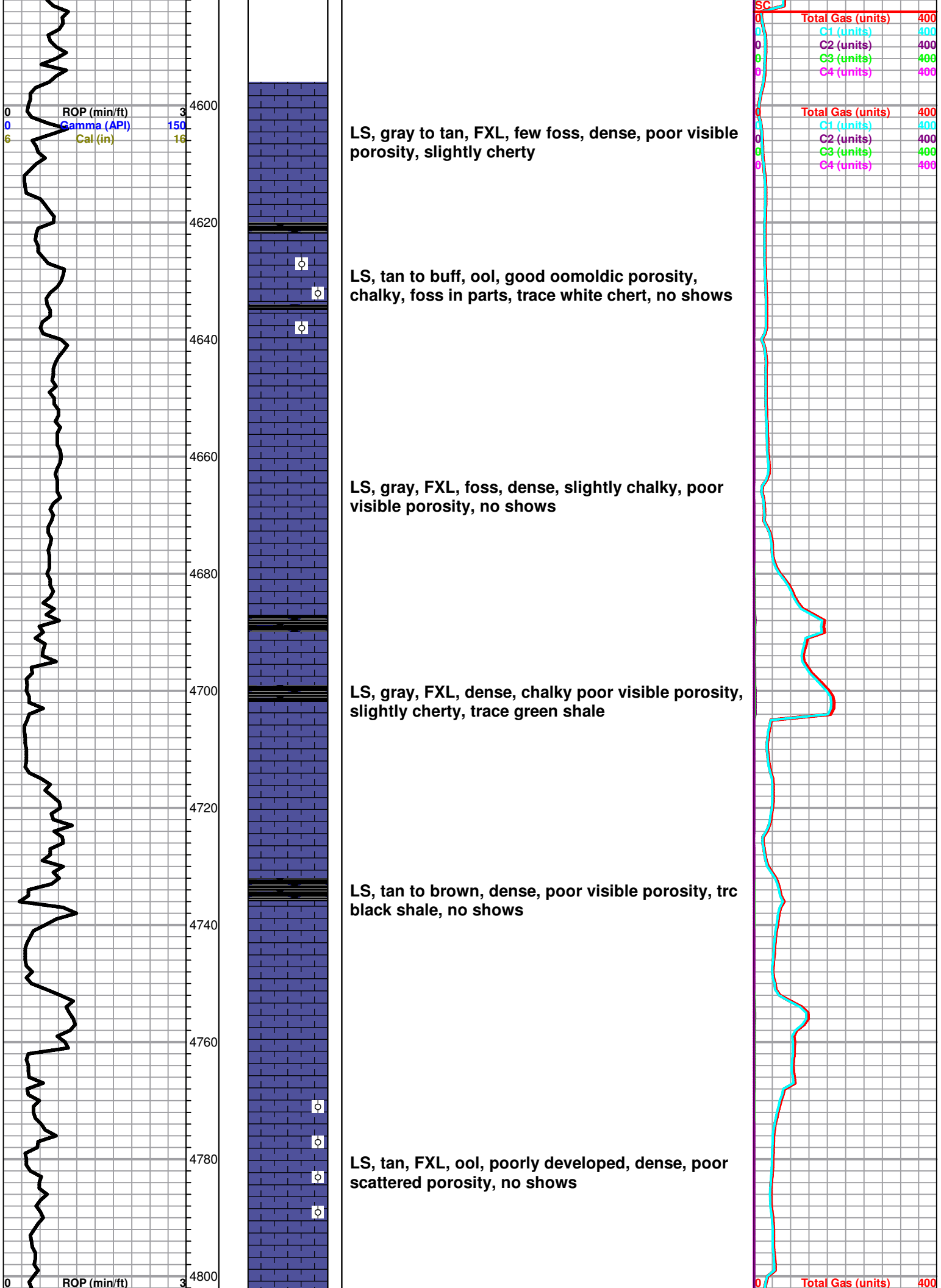
DST
- DST Int
- DST alt
- Core
- tail pipe

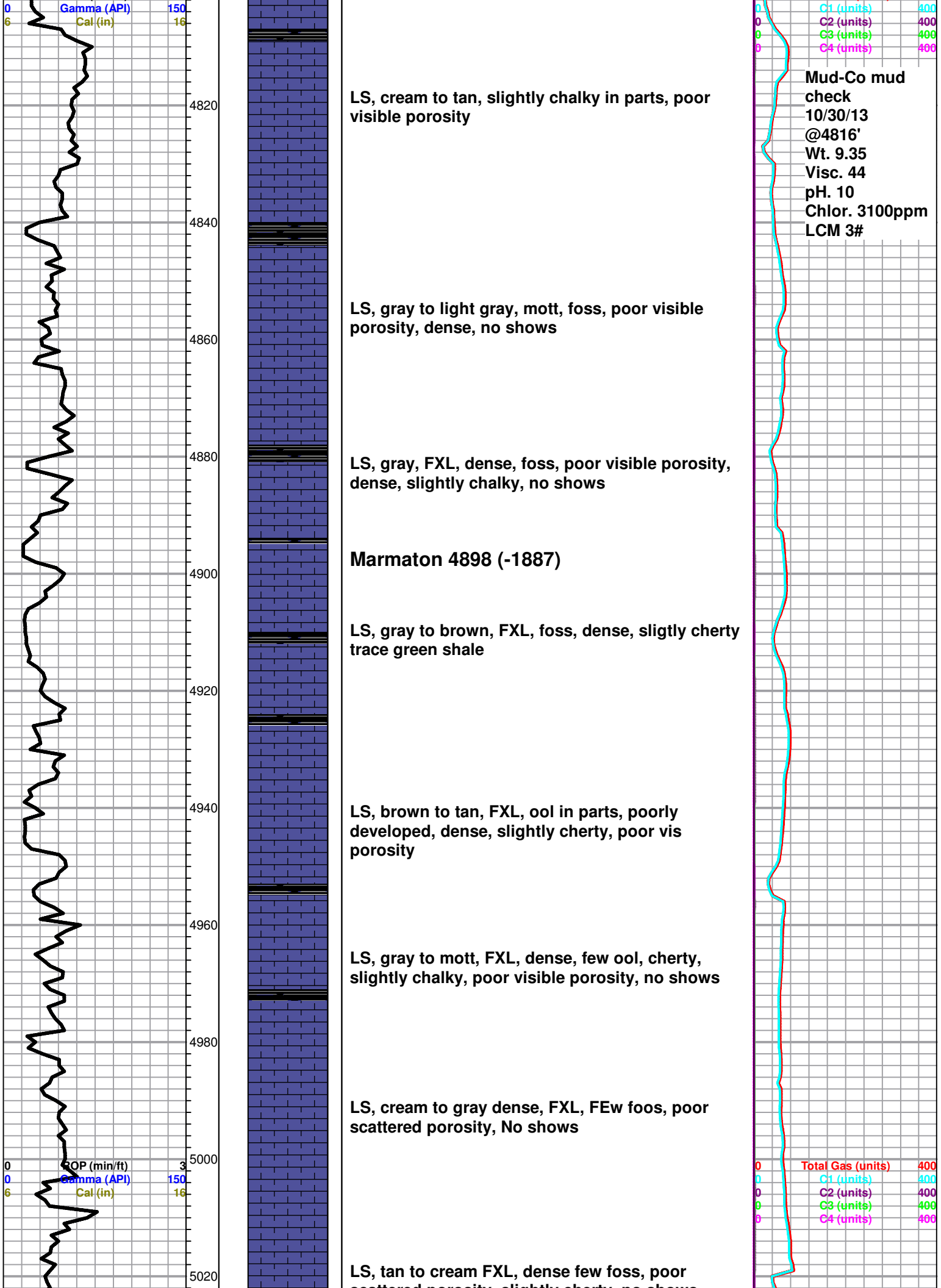
Printed by GEOstrip VC Striplog version 4.0.7.0 (www.grsi.ca)

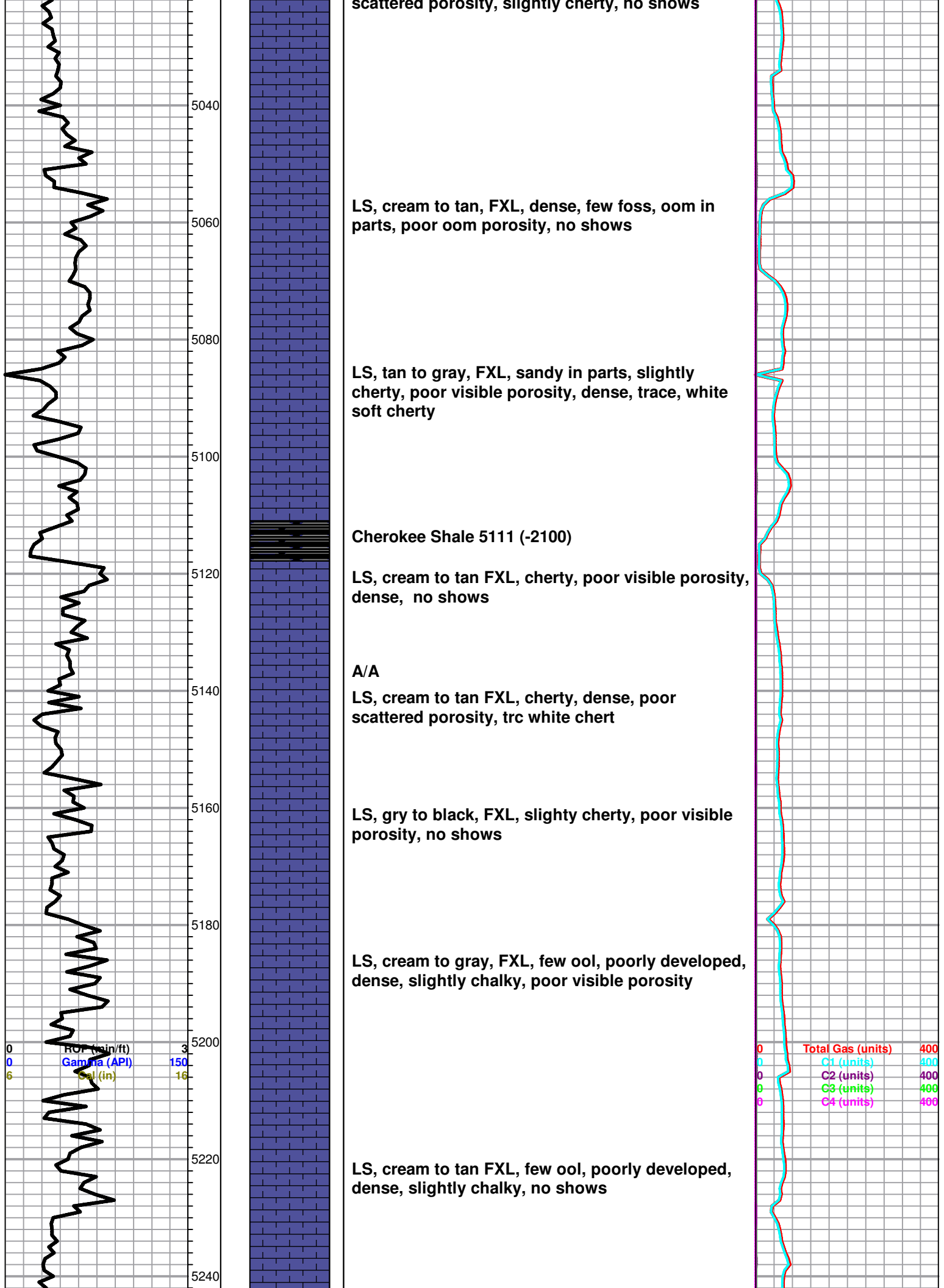


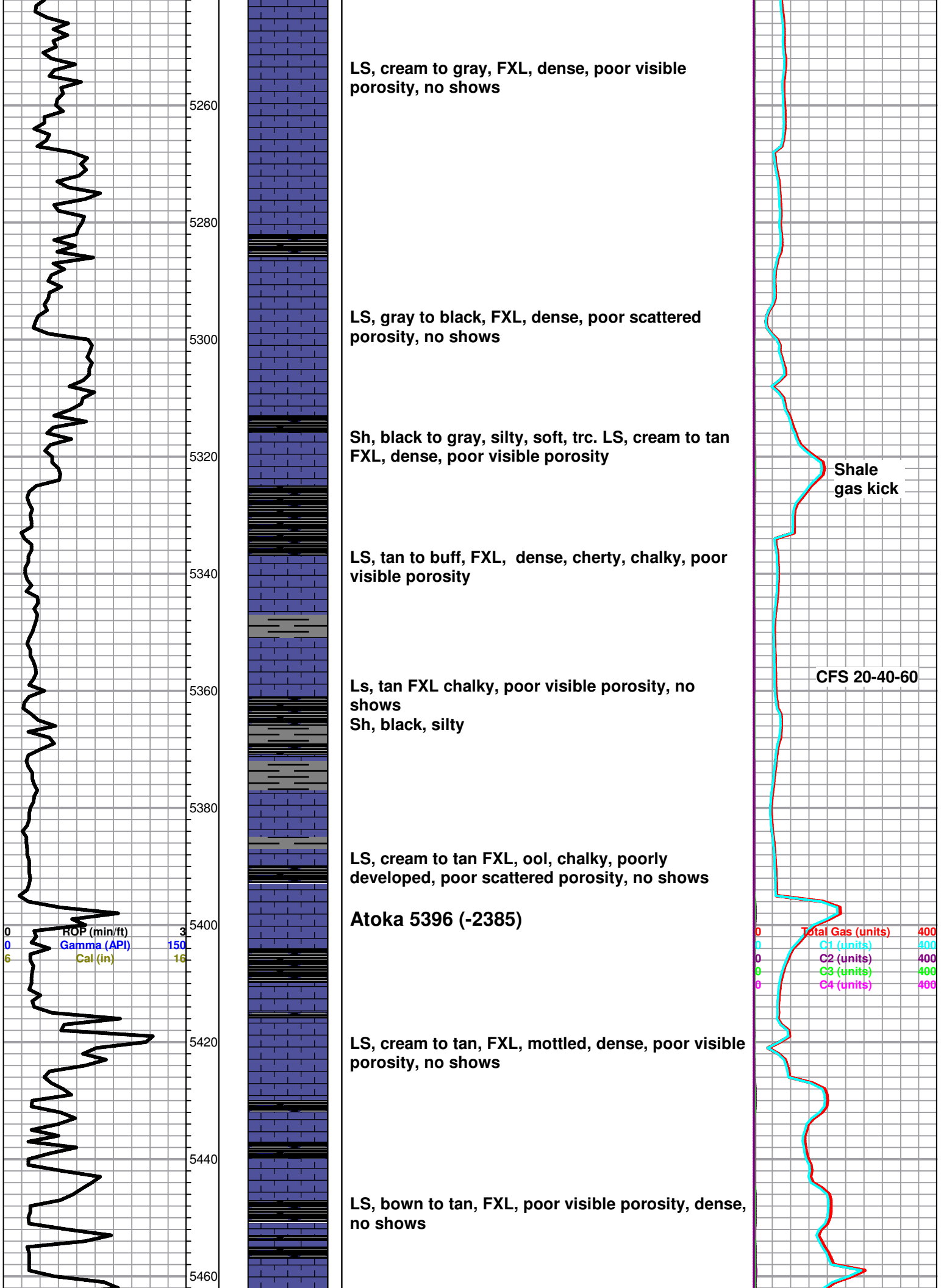

SC
0 ROP (min/ft) 3
0 Gamma (API) 150
6 Cal (in) 16
4160
4180
4200
0 ROP (min/ft) 3
0 Gamma (API) 150
6 Cal (in) 16
4220
4240
4260
4280
4300
4320
4340
4360
Lansing 4209 (-1198)
0 Total Gas (units) 100
0 C1 (units) 100
0 C2 (units) 100
0 C3 (units) 100
0 C4 (units) 100

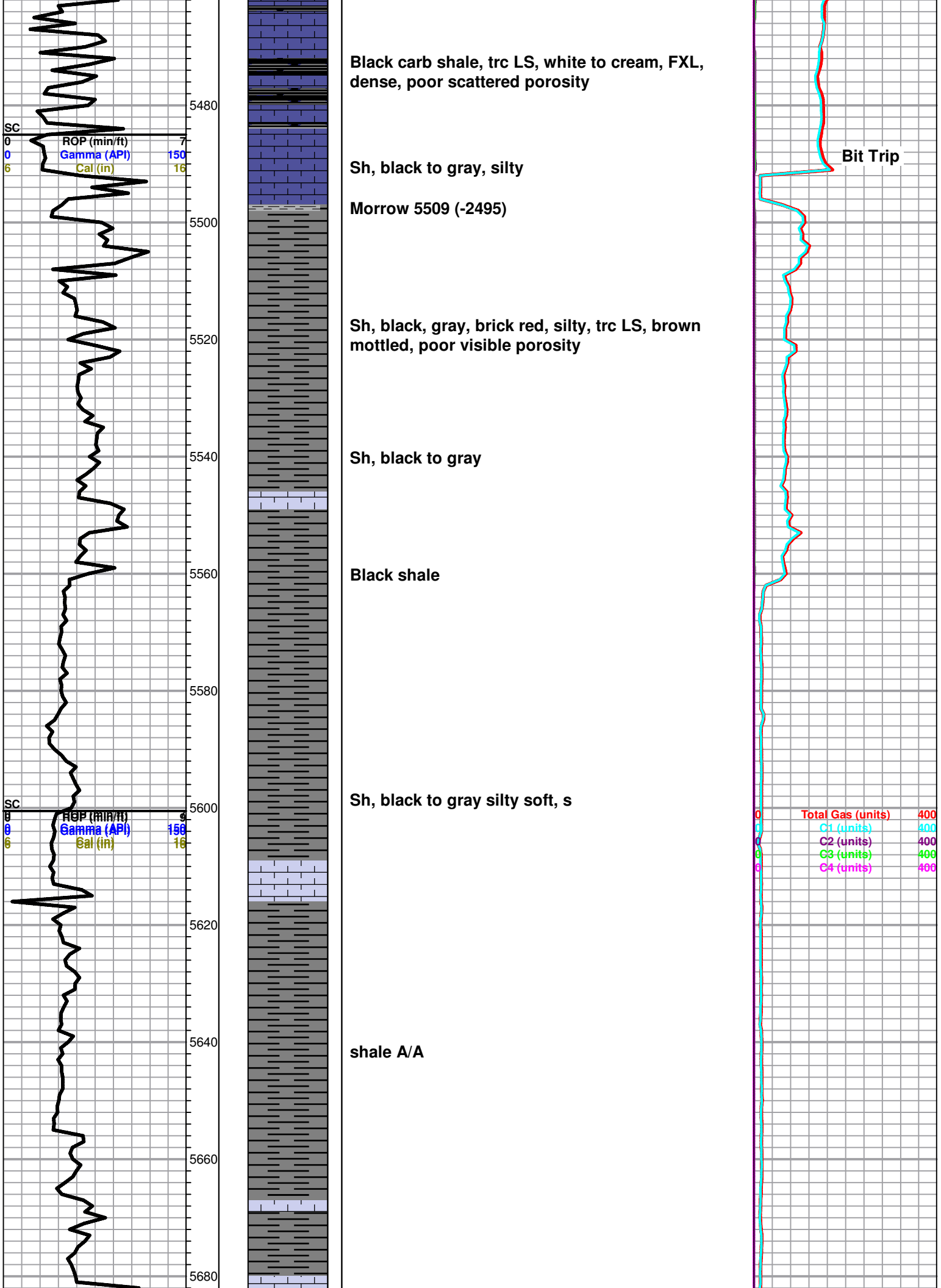

0
ROP (min/ft)
3
0
Gamma (API)
150
6
Cal (in)
16
4380
4400
4420
4440
4460
4480
4500
4520
4540
4560
4580
0
Total Gas (units)
100
0
C1 (units)
100
0
C2 (units)
100
0
C3 (units)
100
0
C4 (units)
100

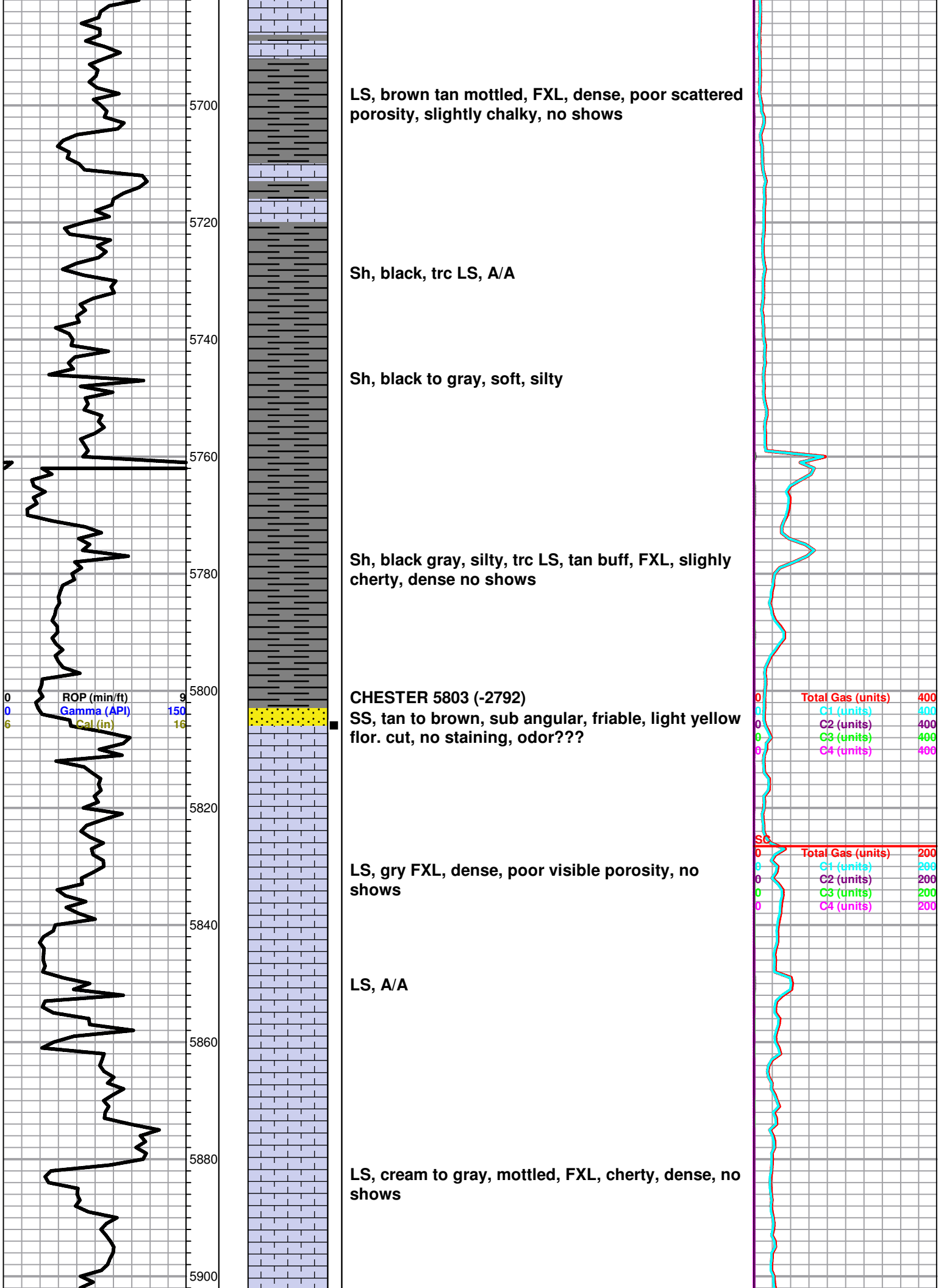

0 ROP (min/ft) 3
0 Gamma (API) 150
6 Cal (in) 16
4600
4620
4640
4660
4680
4700
4720
4740
4760
4780
4800
0 ROP (min/ft) 3
SC
0 Total Gas (units) 400
0 C1 (units) 400
0 C2 (units) 400
0 C3 (units) 400
0 C4 (units) 400
LS, gray to tan, FXL, few foss, dense, poor visible porosity, slightly cherty
LS, tan to buff, ool, good oomoldic porosity, chalky, foss in parts, trace white chert, no shows
LS, gray, FXL, foss, dense, slightly chalky, poor visible porosity, no shows
LS, gray, FXL, dense, chalky poor visible porosity, slightly cherty, trace green shale
LS, tan to brown, dense, poor visible porosity, trc black shale, no shows
LS, tan, FXL, ool, poorly developed, dense, poor scattered porosity, no shows

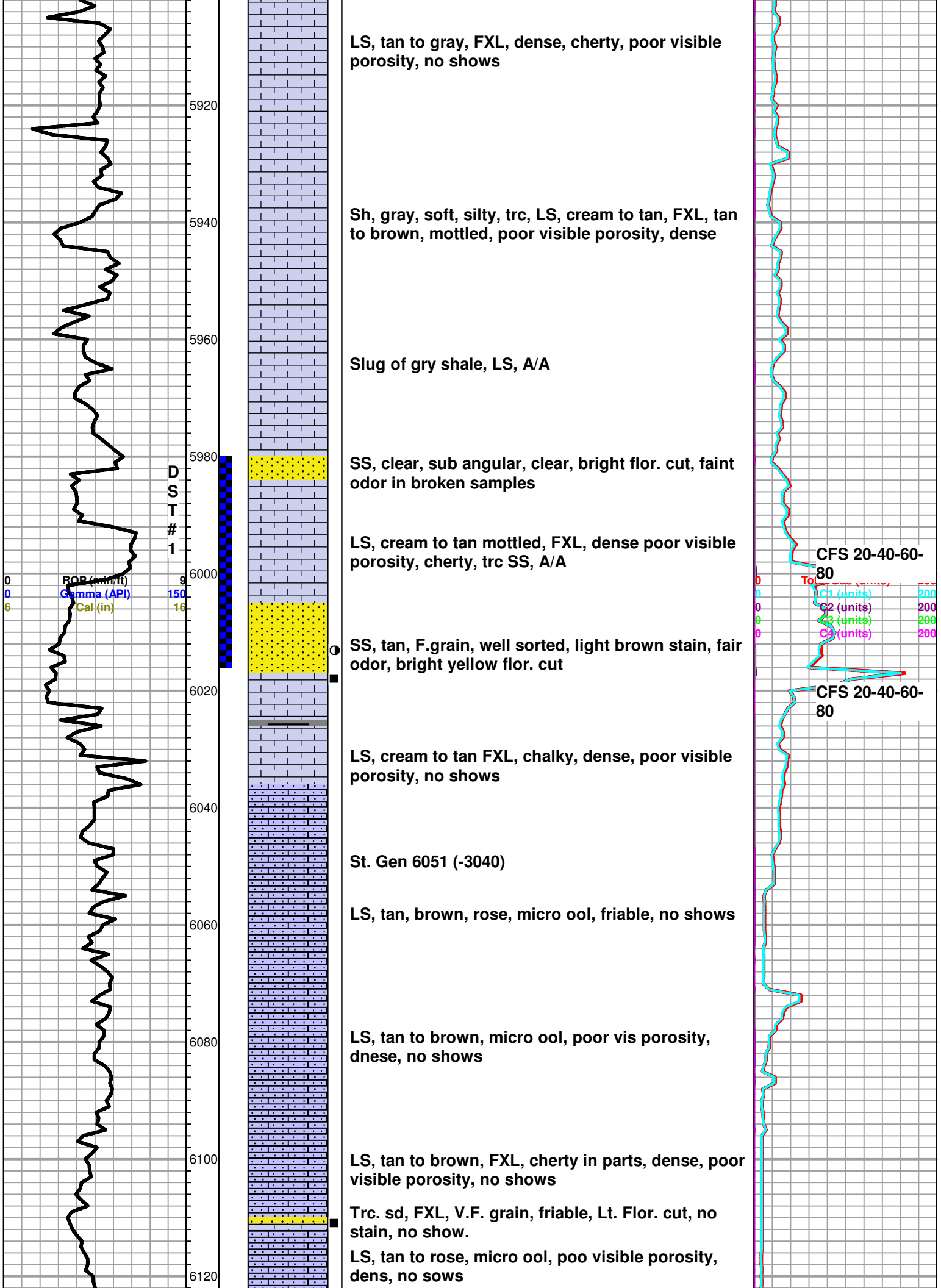

0 Gamma (API) 150
6 Cal (in) 16
4820
4840
4860
4880
4900
4920
4940
4960
4980
5000
5020
0 ROP (min/ft) 3
0 Gamma (API) 150
6 Cal (in) 16
0 C1 (units) 400
0 C2 (units) 400
0 C3 (units) 400
0 C4 (units) 400
0 Total Gas (units) 400
0 C1 (units) 400
0 C2 (units) 400
0 C3 (units) 400
0 C4 (units) 400
LS, cream to tan, slightly chalky in parts, poor visible porosity
Mud-Co mud check
10/30/13
@4816'
Wt. 9.35
Visc. 44
pH. 10
Chlor. 3100ppm
LCM 3#
LS, gray to light gray, mott, foss, poor visible porosity, dense, no shows
LS, gray, FXL, dense, foss, poor visible porosity, dense, slightly chalky, no shows
Marmaton 4898 (-1887)
LS, gray to brown, FXL, foss, dense, sligtly cherty trace green shale
LS, brown to tan, FXL, ool in parts, poorly developed, dense, slightly cherty, poor vis porosity
LS, gray to mott, FXL, dense, few ool, cherty, slightly chalky, poor visible porosity, no shows
LS, cream to gray dense, FXL, FEw foos, poor scattered porosity, No shows
LS, tan to cream FXL, dense few foss, poor

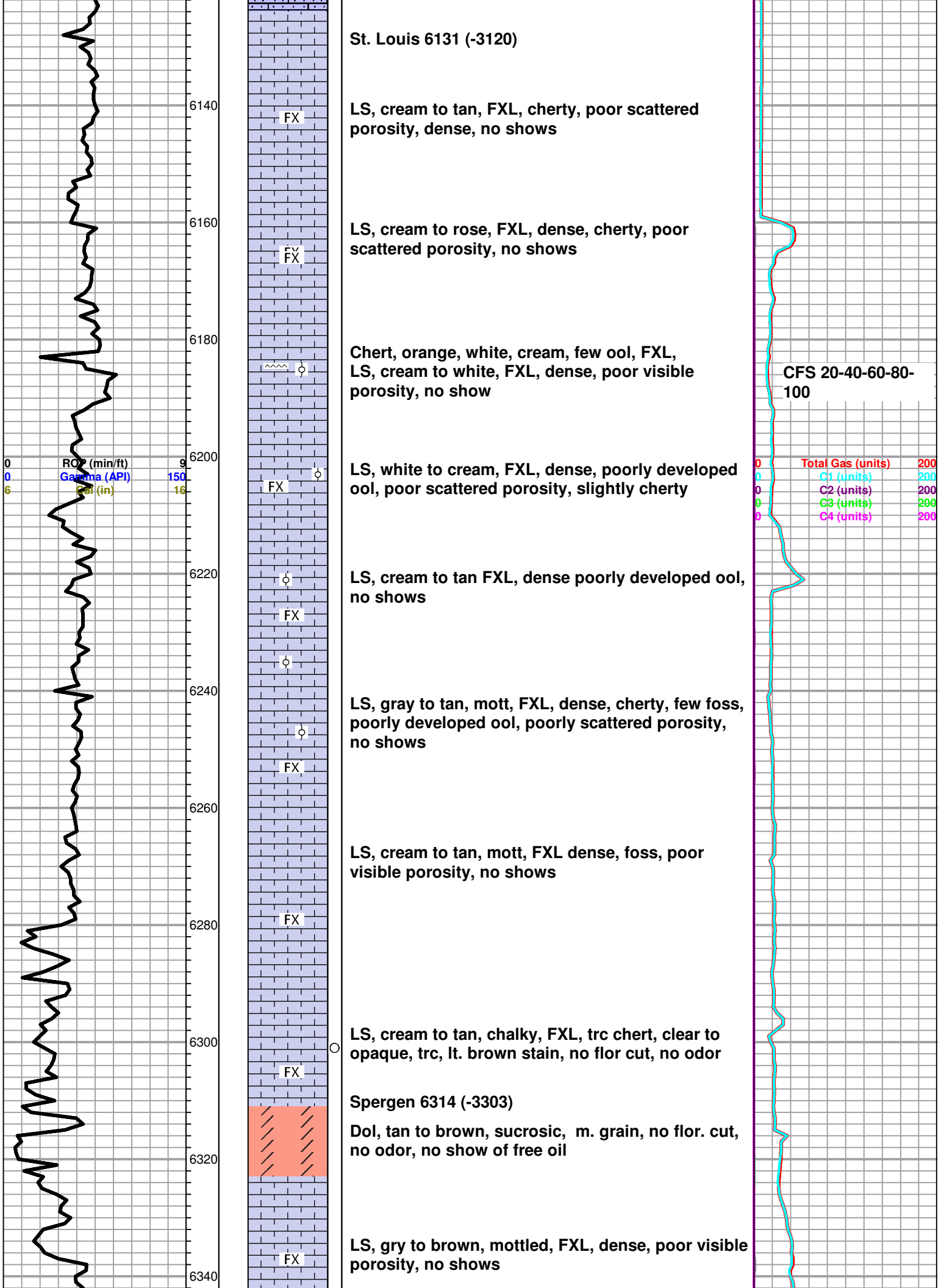

5040
5060
5080
5100
5120
5140
5160
5180
5200
5220
5240
0 ROP (min/ft) 3
0 Gamma (API) 150
6 Cal (in) 16
0 Total Gas (units) 400
0 C1 (units) 400
0 C2 (units) 400
0 C3 (units) 400
0 C4 (units) 400
scattered porosity, slightly cherty, no shows
LS, cream to tan, FXL, dense, few foss, oom in parts, poor oom porosity, no shows
LS, tan to gray, FXL, sandy in parts, slightly cherty, poor visible porosity, dense, trace, white soft cherty
Cherokee Shale 5111 (-2100)
LS, cream to tan FXL, cherty, poor visible porosity, dense, no shows
A/A
LS, cream to tan FXL, cherty, dense, poor scattered porosity, trc white chert
LS, gry to black, FXL, slighty cherty, poor visible porosity, no shows
LS, cream to gray, FXL, few ool, poorly developed, dense, slightly chalky, poor visible porosity
LS, cream to tan FXL, few ool, poorly developed, dense, slightly chalky, no shows

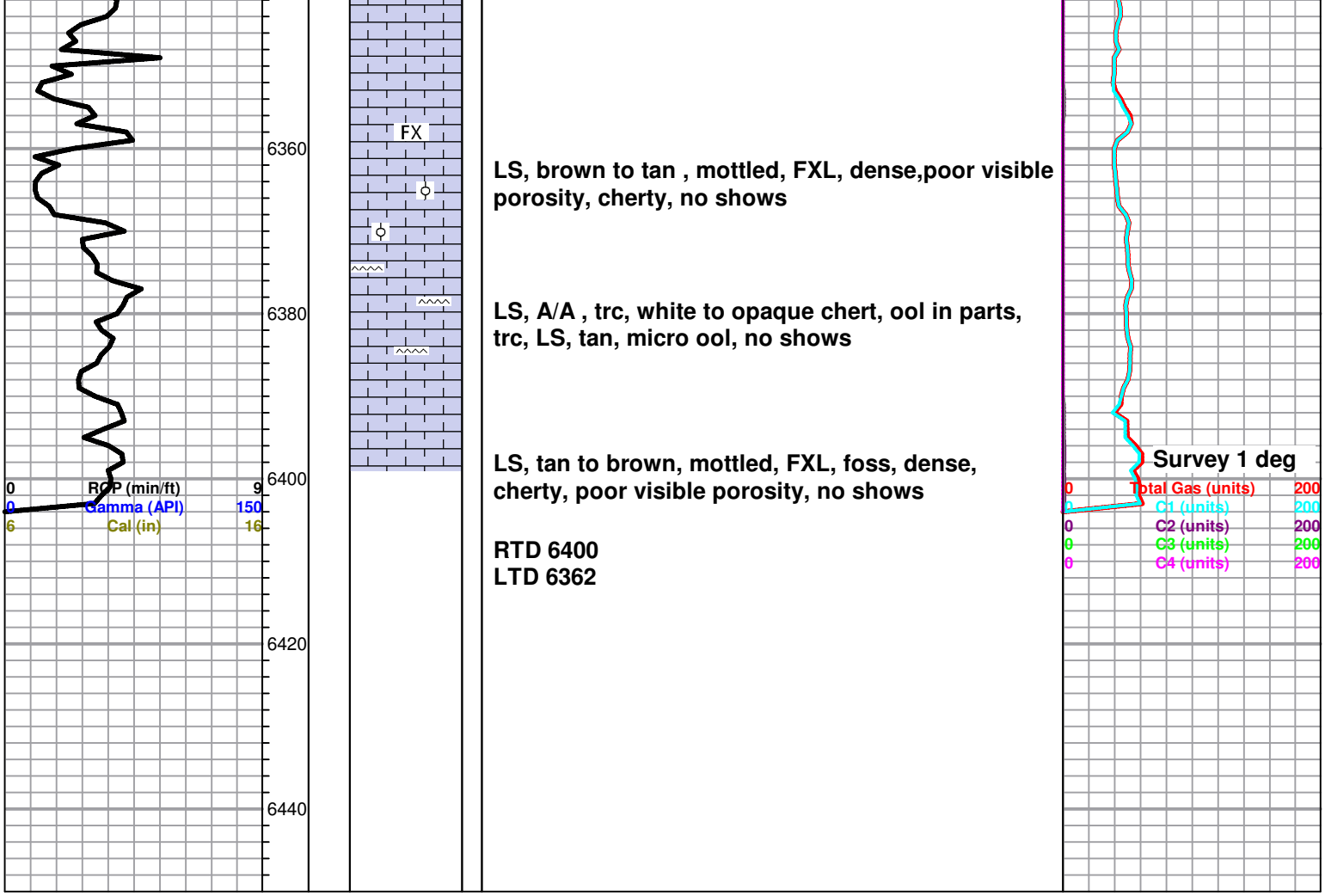

5260
5280
5300
5320
5340
5360
5380
5400
5420
5440
5460
0 ROP (min/ft) 3
0 Gamma (API) 150
6 Cal (in) 16
LS, cream to gray, FXL, dense, poor visible porosity, no shows
LS, gray to black, FXL, dense, poor scattered porosity, no shows
Sh, black to gray, silty, soft, trc. LS, cream to tan FXL, dense, poor visible porosity
LS, tan to buff, FXL, dense, cherty, chalky, poor visible porosity
Ls, tan FXL chalky, poor visible porosity, no shows
Sh, black, silty
LS, cream to tan FXL, ool, chalky, poorly developed, poor scattered porosity, no shows
Atoka 5396 (-2385)
LS, cream to tan, FXL, mottled, dense, poor visible porosity, no shows
LS, bown to tan, FXL, poor visible porosity, dense, no shows
Shale gas kick
CFS 20-40-60
0 Total Gas (units) 400
0 C1 (units) 400
0 C2 (units) 400
0 C3 (units) 400
0 C4 (units) 400

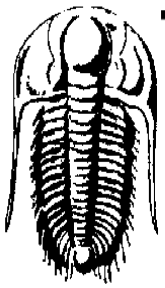

SC
0 ROP (min/ft) 7
0 Gamma (API) 150
6 Cal (in) 16
5480
5500
5520
5540
5560
5580
5600
5620
5640
5660
5680
Black carb shale, trc LS, white to cream, FXL, dense, poor scattered porosity
Sh, black to gray, silty
Morrow 5509 (-2495)
Sh, black, gray, brick red, silty, trc LS, brown mottled, poor visible porosity
Sh, black to gray
Black shale
Sh, black to gray silty soft, s
shale A/A
Bit Trip
0 Total Gas (units) 400
0 C1 (units) 400
0 C2 (units) 400
0 C3 (units) 400
0 C4 (units) 400


5700
5720
5740
5760
5780
5800
5820
5840
5860
5880
5900
0 ROP (min/ft) 9
0 Gamma (API) 150
6 Cal (in) 16
LS, brown tan mottled, FXL, dense, poor scattered porosity, slightly chalky, no shows
Sh, black, trc LS, A/A
Sh, black to gray, soft, silty
Sh, black gray, silty, trc LS, tan buff, FXL, slighly cherty, dense no shows
CHESTER 5803 (-2792)
SS, tan to brown, sub angular, friable, light yellow flor. cut, no staining, odor???
LS, gry FXL, dense, poor visible porosity, no shows
LS, A/A
LS, cream to gray, mottled, FXL, cherty, dense, no shows
0 Total Gas (units) 400
0 C1 (units) 400
0 C2 (units) 400
0 C3 (units) 400
0 C4 (units) 400
SC
0 Total Gas (units) 200
0 C1 (units) 200
0 C2 (units) 200
0 C3 (units) 200
0 C4 (units) 200


0
ROP (min/ft)
9
0
Gamma (API)
150
6
Cal (in)
16
5920
5940
5960
5980
6000
6020
6040
6060
6080
6100
6120
DST#1
LS, tan to gray, FXL, dense, cherty, poor visible porosity, no shows
Sh, gray, soft, silty, trc, LS, cream to tan, FXL, tan to brown, mottled, poor visible porosity, dense
Slug of gry shale, LS, A/A
SS, clear, sub angular, clear, bright flor. cut, faint odor in broken samples
LS, cream to tan mottled, FXL, dense poor visible porosity, cherty, trc SS, A/A
SS, tan, F.grain, well sorted, light brown stain, fair odor, bright yellow flor. cut
LS, cream to tan FXL, chalky, dense, poor visible porosity, no shows
St. Gen 6051 (-3040)
LS, tan, brown, rose, micro ool, friable, no shows
LS, tan to brown, micro ool, poor vis porosity, dnese, no shows
LS, tan to brown, FXL, cherty in parts, dense, poor visible porosity, no shows
Trc. sd, FXL, V.F. grain, friable, Lt. Flor. cut, no stain, no show.
LS, tan to rose, micro ool, poo visible porosity, dens, no sows
CFS 20-40-60-80
C1 (units)
200
C2 (units)
200
C3 (units)
200
C4 (units)
200
CFS 20-40-60-80


0 ROP (min/ft) 9
0 Gamma (API) 150
6 Cal (in) 16
6140
6160
6180
6200
6220
6240
6260
6280
6300
6320
6340
FX
St. Louis 6131 (-3120)
LS, cream to tan, FXL, cherty, poor scattered porosity, dense, no shows
LS, cream to rose, FXL, dense, cherty, poor scattered porosity, no shows
Chert, orange, white, cream, few ool, FXL,
LS, cream to white, FXL, dense, poor visible porosity, no show
CFS 20-40-60-80-100
LS, white to cream, FXL, dense, poorly developed ool, poor scattered porosity, slightly cherty
0 Total Gas (units) 200
0 C1 (units) 200
0 C2 (units) 200
0 C3 (units) 200
0 C4 (units) 200
LS, cream to tan FXL, dense poorly developed ool, no shows
LS, gray to tan, mott, FXL, dense, cherty, few foss, poorly developed ool, poorly scattered porosity, no shows
LS, cream to tan, mott, FXL dense, foss, poor visible porosity, no shows
LS, cream to tan, chalky, FXL, trc chert, clear to opaque, trc, lt. brown stain, no flor cut, no odor
Spergen 6314 (-3303)
Dol, tan to brown, sucrosic, m. grain, no flor. cut, no odor, no show of free oil
LS, gry to brown, mottled, FXL, dense, poor visible porosity, no shows


0
ROP (min/ft)
9
0
Gamma (API)
150
6
Cal (in)
16
6360
6380
6400
6420
6440
FX
LS, brown to tan , mottled, FXL, dense,poor visible porosity, cherty, no shows
LS, A/A , trc, white to opaque chert, ool in parts, trc, LS, tan, micro ool, no shows
LS, tan to brown, mottled, FXL, foss, dense, cherty, poor visible porosity, no shows
RTD 6400
LTD 6362
Survey 1 deg
0
Total Gas (units)
200
0
C1 (units)
200
0
C2 (units)
200
0
C3 (units)
200
0
C4 (units)
200



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Palmer Oil**

3118 N Cummings Rd
Garden City, KS 67846

ATTN: Wyatt Urban

Lola #21-4

21-31s-35w Stevens,KS

Start Date: 2013.11.02 @ 07:35:41

End Date: 2013.11.02 @ 16:20:26

Job Ticket #: 54656 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.11.06 @ 11:30:38

DRILL STEM TEST REPORT

Palmer Oil

3118 N Cummings Rd
Garden City, KS 67846

ATTN: Wyatt Urban

21-31s-35w Stevens,KS

Lola #21-4

Job Ticket: 54656 **DST#: 1**

Test Start: 2013.11.02 @ 07:35:41

GENERAL INFORMATION:

Formation: **Lower Chester**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 10:54:41
Time Test Ended: 16:20:26

Test Type: Conventional Bottom Hole (Initial)
Tester: Shane McBride
Unit No: 55

Interval: 5980.00 ft (KB) To 6015.00 ft (KB) (TVD)
Total Depth: 6015.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

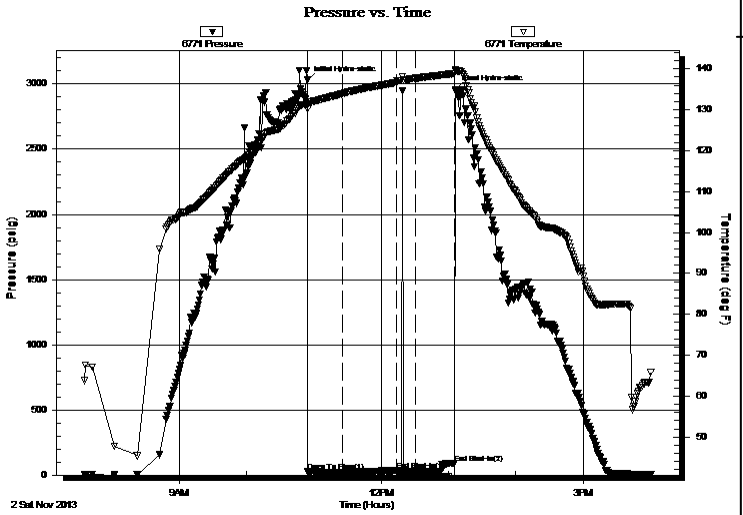
Reference Elevations: 3011.00 ft (KB)
3000.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 6771 **Inside**

Press@RunDepth: 25.39 psig @ 5981.00 ft (KB)
Start Date: 2013.11.02 End Date: 2013.11.02
Start Time: 07:35:41 End Time: 16:00:26

Capacity: 8000.00 psig
Last Calib.: 2013.11.02
Time On Btm: 2013.11.02 @ 10:54:26
Time Off Btm: 2013.11.02 @ 13:05:56

TEST COMMENT: 1/4" blow
No return
No blow , Flush tool after 5 min good surge, No blow
No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	3029.45	131.57	Initial Hydro-static
1	30.57	130.20	Open To Flow (1)
32	22.54	133.97	Shut-In(1)
79	34.69	136.62	End Shut-In(1)
79	28.22	136.68	Open To Flow (2)
96	25.39	137.67	Shut-In(2)
131	92.62	138.82	End Shut-In(2)
132	2957.75	139.85	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
3.00	mud 100%m	0.01

Gas Rates

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

DRILL STEM TEST REPORT

Palmer Oil

3118 N Cummings Rd
Garden City, KS 67846

ATTN: Wyatt Urban

21-31s-35w Stevens,KS

Lola #21-4

Job Ticket: 54656 **DST#: 1**

Test Start: 2013.11.02 @ 07:35:41

GENERAL INFORMATION:

Formation: **Lower Chester**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 10:54:41
Time Test Ended: 16:20:26

Test Type: Conventional Bottom Hole (Initial)
Tester: Shane McBride
Unit No: 55

Interval: 5980.00 ft (KB) To 6015.00 ft (KB) (TVD)
Total Depth: 6015.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

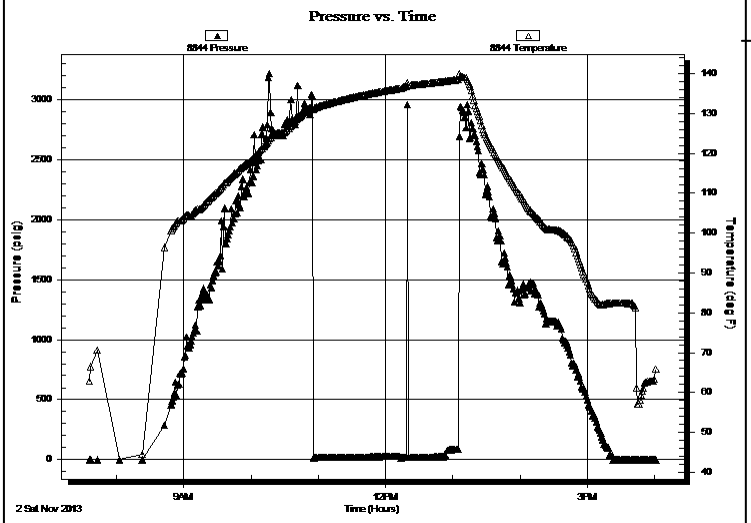
Reference Elevations: 3011.00 ft (KB)
3000.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8844 **Outside**

Press@RunDepth: psig @ 5981.00 ft (KB)
Start Date: 2013.11.02 End Date: 2013.11.02
Start Time: 07:36:12 End Time: 16:00:42

Capacity: 8000.00 psig
Last Calib.: 2013.11.02
Time On Btm:
Time Off Btm:

TEST COMMENT: 1/4" blow
No return
No blow , Flush tool after 5 min good surge, No blow
No return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
3.00	mud 100%m	0.01

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Palmer Oil

3118 N Cummings Rd
Garden City, KS 67846

ATTN: Wyatt Urban

21-31s-35w Stevens,KS

Lola #21-4

Job Ticket: 54656 **DST#: 1**

Test Start: 2013.11.02 @ 07:35:41

Tool Information

Drill Pipe:	Length:	5782.00 ft	Diameter:	3.80 inches	Volume:	81.11 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:	180.00 ft	Diameter:	2.25 inches	Volume:	0.89 bbl	Weight to Pull Loose:		102000.0 lb
					Total Volume:	82.00 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		10.00 ft					String Weight:	Initial	85000.00 lb
Depth to Top Packer:		5980.00 ft						Final	85000.00 lb
Depth to Bottom Packer:		ft							
Interval between Packers:		35.00 ft							
Tool Length:		63.00 ft							
Number of Packers:		2	Diameter:	6.75 inches					

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			5953.00		
Shut In Tool	5.00			5958.00		
Hydraulic tool	5.00			5963.00		
Jars	5.00			5968.00		
Safety Joint	3.00			5971.00		
Packer	5.00			5976.00	28.00	Bottom Of Top Packer
Packer	4.00			5980.00		
Stubb	1.00			5981.00		
Recorder	0.00	6771	Inside	5981.00		
Recorder	0.00	8844	Outside	5981.00		
Perforations	29.00			6010.00		
Bullnose	5.00			6015.00	35.00	Bottom Packers & Anchor
Total Tool Length:	**63.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Palmer Oil

3118 N Cummings Rd
Garden City, KS 67846

ATTN: Wyatt Urban

21-31s-35w Stevens,KS

Lola #21-4

Job Ticket: 54656 **DST#: 1**

Test Start: 2013.11.02 @ 07:35:41

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:	0 ppm
Viscosity:	53.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.96 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3300.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
3.00	mud 100%m	0.015

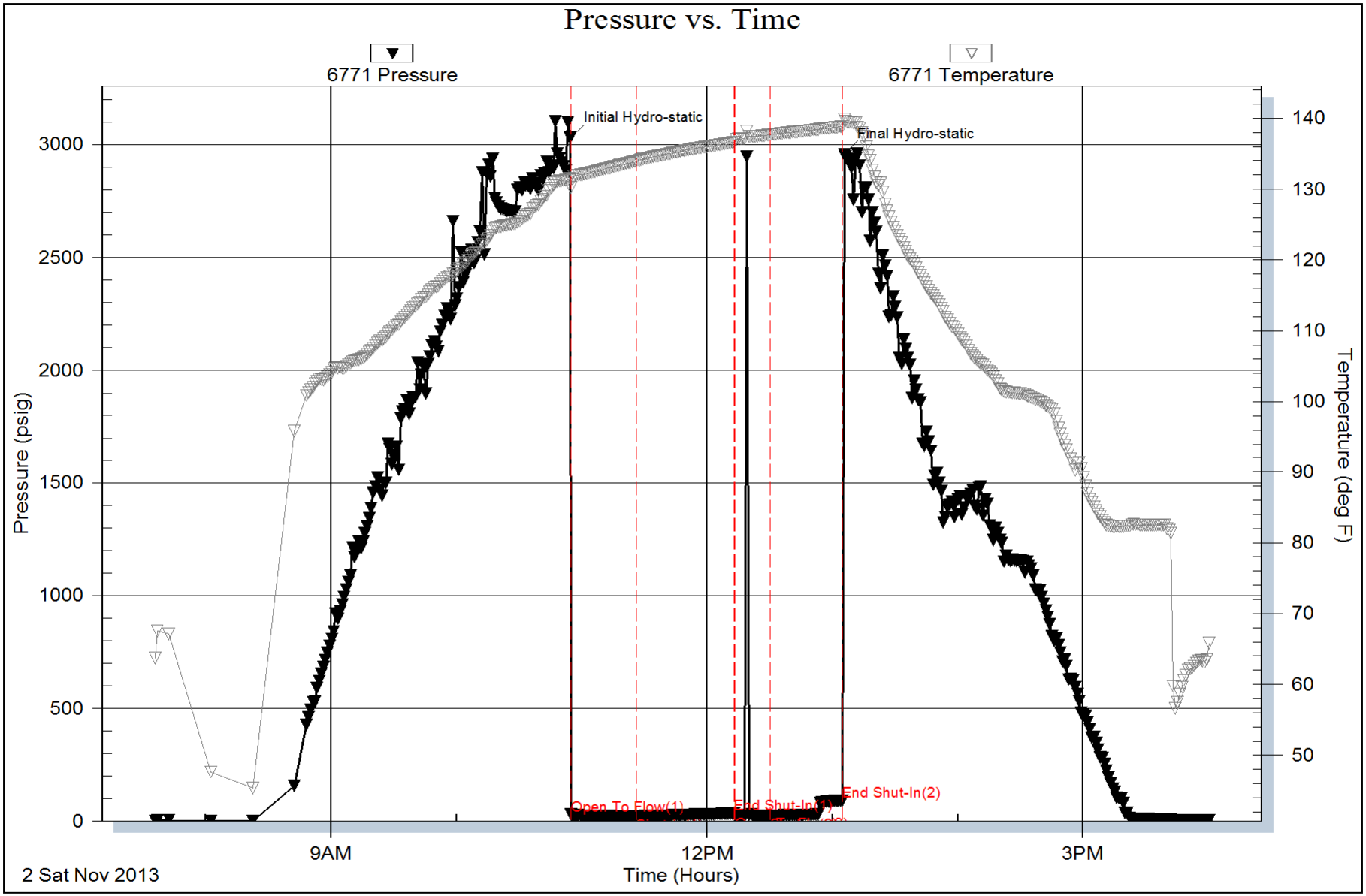
Total Length: 3.00 ft Total Volume: 0.015 bbl

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

Laboratory Name: Laboratory Location:

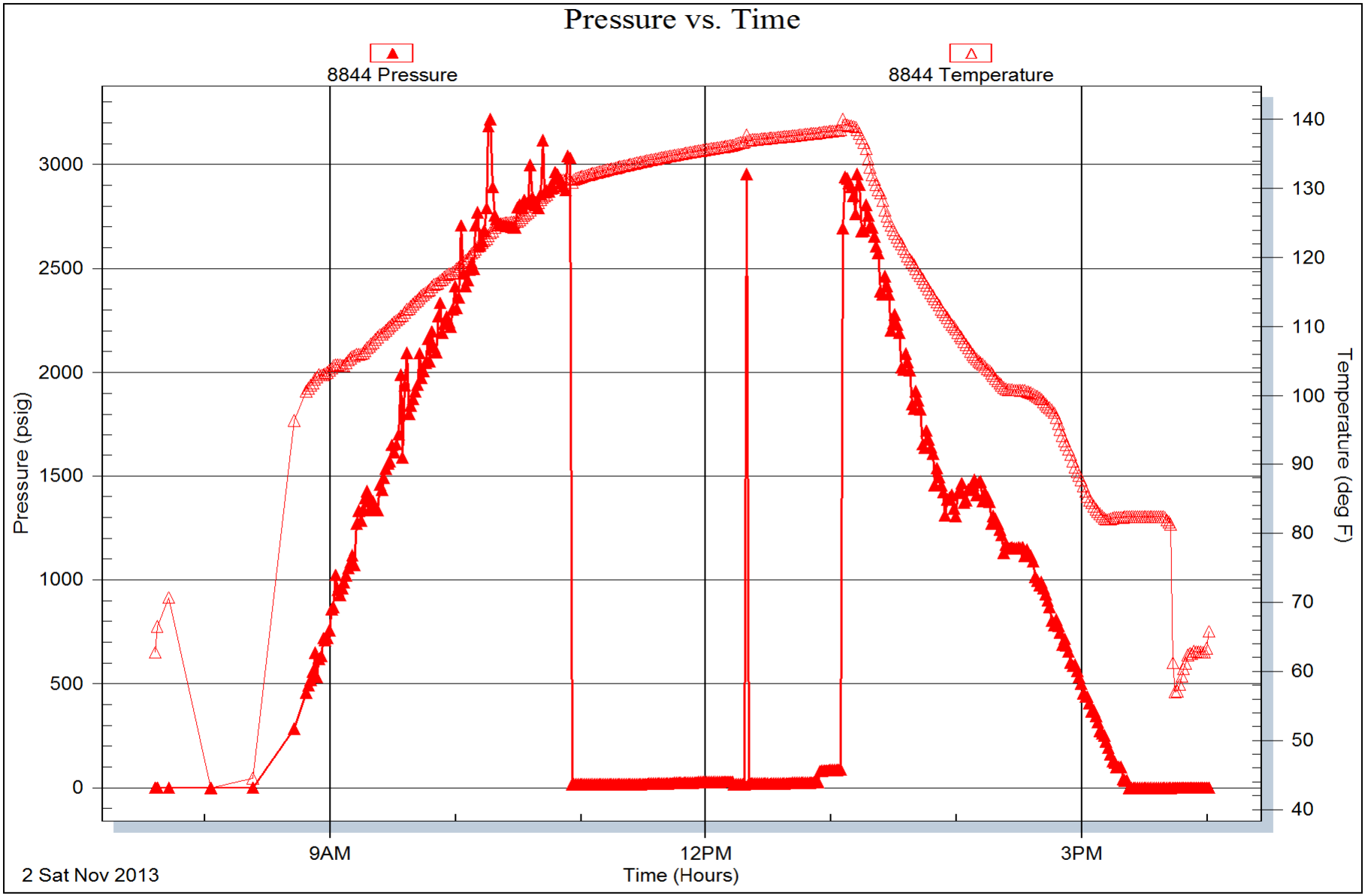
Recovery Comments:

Serial #: 6771 **Inside** Palmer Oil Lola #21-4 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 54656 Printed: 2013.11.06 @ 11:30:39

Serial #: 8844 **Outside** Palmer Oil Lola #21-4 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 54656 Printed: 2013.11.06 @ 11:30:39

TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

4/10

Test Ticket

NO. 54656

Well Name & No. Lola #21-4 Test No. #1 Date 11/2/13

Company Palmer O.I. Elevation 3011 KB 3000 GL

Address 3118 N. Cummings Rd Garden City, Ks 67846

Co. Rep / Geo. Wyatt Urban Rig Duke #9

Location: Sec. 21 Twp. 31 Rge. 35 Co. Stevens State Ks

Interval Tested 5980 6015 Zone Tested Lower Chester

Anchor Length 35 Drill Pipe Run 5782 Mud Wt. 9.1

Top Packer Depth 5975 Drill Collars Run 180' Vis 53

Bottom Packer Depth 5980 Wt. Pipe Run — WL 8.0

Total Depth 6015 Chlorides 3300 ppm System LCM #3

Blow Description 1/4"in blow
No return
No blow, Flush Tool after 5min Good Surge, No blow
No return

Rec 3'	Feet of Mud	%gas	%oil	%water	100 %mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 3' BHT 140° Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic	3029	☒ Test	1450	T-On Location	06:35
(B) First Initial Flow	30	☒ Jars	250	T-Started	07:35
(C) First Final Flow	22	☒ Safety Joint	75	T-Open	10:56
(D) Initial Shut-In	34	☒ Circ Sub	N/C	T-Pulled	12:56
(E) Second Initial Flow	28	☐ Hourly Standby		T-Out	16:20
(F) Second Final Flow	25	☒ Mileage 180 RT	582.80	Comments	
(G) Final Shut-In	92	☐ Sampler		loaded tools 11/4 9:00	
(H) Final Hydrostatic	2957	☐ Straddle		☐ Ruined Shale Packer	
		☐ Shale Packer		☒ Ruined Packer	320
Initial Open	30	☐ Extra Packer		☐ Extra Copies	
Initial Shut-In	45	☐ Extra Recorder		Sub Total	800
Final Flow	15	☐ Day Standby	1d 16.75h	Total	3477.80
Final Shut-In	30	☐ Accessibility		MP/DST Disc't	
		Sub Total	2357.80		

Approved By _____ Our Representative _____

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.

ALLIED OIL & GAS SERVICES, LLC 052939

Federal Tax I.D.# 20-5975804

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

SERVICE POINT: Liberal KS.

DATE 10-27-13	SEC. 21	TWP. 31 S	RANGE 35 W	CALLED OUT	ON LOCATION	JOB START 10:00	JOB FINISH 11:30 PM
LEASE Lola	WELL # 21-4	LOCATION Vec Moscow KS				COUNTY Stevens	STATE KS
OLD OR (NEW) (Circle one)							

CONTRACTOR Duke #9
TYPE OF JOB Surface
HOLE SIZE 12 1/4 T.D. 1765
CASING SIZE 8 5/8 #24 DEPTH 1762
TUBING SIZE DEPTH
DRILL PIPE DEPTH
TOOL DEPTH
PRES. MAX 1100 PSI - 1800 PSI MINIMUM
MEAS. LINE SHOE JOINT 42.71 FT
CEMENT LEFT IN CSG. 42.71 FT
PERFS.
DISPLACEMENT 109.5 BBL

OWNER Palmer Oil

EQUIPMENT

PUMP TRUCK CEMENTER Ruben Chavez
#531,541 HELPER Cesar Rivia
BULK TRUCK
#774-744 DRIVER Ernie Smith
BULK TRUCK
#470-467 DRIVER Jaime Maldonado

CEMENT

AMOUNT ORDERED 625 SK 65/35/6% gel, 3% CC, 1/4# Flo-seal
200 SK Class A, 3% CC, 1/4# Flo-seal

COMMON 200 SK "A"	@	17.90	3580.00
POZMIX	@		
GEL	@		
CHLORIDE 27 SK	@	64	1728.00
ASC	@		
ALC2A "A" 625 SK	@	16.50	10312.50
Flo-Seal 206 LB	@	2.97	611.82
	@		
	@		
	@		
	@		
	@		
	@		
HANDLING 932.0 CU.F.	@	2.43	2264.76
MILEAGE 1576.8 ton mile		2.60	4097.68
		TOTAL	25613.76

REMARKS:

SERVICE

DEPTH OF JOB 1767 FT			
PUMP TRUCK CHARGE			2713.25
EXTRA FOOTAGE	@		
MILEAGE Heavy 40 MILES	@	7.70	308.00
MANIFOLD +head 1	@	275.00	275.00
Light Vehicle 40 MILES	@	4.40	176.00
	@		
		TOTAL	2,172.75

CHARGE TO: Palmer Oil
STREET
CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

Guide shoe 1	@	250.00	250.00
AFU Float Valve 1	@	339.00	339.00
Centralizer 3	@	37.00	111.00
Cement Basket 1	@	226.00	226.00
Top Rubber Plug 1	@	76.95	76.95
		TOTAL	903.95

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.

SALES TAX (If Any)
TOTAL CHARGES 25,616.18 + 903.95
DISCOUNT IF PAID IN 30 DAYS

PRINTED NAME Todd Bates

SIGNATURE

NET = 21,397.90

BASIC ENERGY SERVICES
PRESSURE PUMPING & WIRELINE

1700 S. Country Estates Rd.
Liberal, Kansas 67905
Phone 620-624-2277

FIELD SERVICE TICKET
1717 04537 A

DATE TICKET NO.

DATE OF JOB 11/5/13 DISTRICT 1717	NEW WELL ☑ OLD WELL ☐ PROD ☐ INJ ☐ WDW ☐ CUSTOMER ORDER NO.:
CUSTOMER Palmer Oil/American Warrior	LEASE Lola 21-4 WELL NO.
ADDRESS	COUNTY Stevens STATE KS
CITY STATE	SERVICE CREW Tommy, Daniel
AUTHORIZED BY Tyce	JOB TYPE: 7 1/2 L.S.

EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS
174939	4				
37223 37726	6				
30464 37724	4				

TRUCK CALLED	11/4 DATE	AM PM TIME 1:00
ARRIVED AT JOB		AM PM 6:30
START OPERATION	11/5	AM PM [illegible]
FINISH OPERATION		AM PM 1:05
RELEASED		AM PM 2:00
MILES FROM STATION TO WELL		50

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).
The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

SIGNED: [signature]
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	$ AMOUNT
CC105	AA-2 Cement	SK	200		3640 00
CC103	60/40 Poz	SK	50		600 00
CC113	Gypsum	LB	940		705 00
CC111	Salt	LB	1,107		553 50
CC103	C-15	LB	113		1412 50
CC105	C-41P	LB	47		188 00
CC201	Gilsonite	LB	1000		670 00
CF1251	Auto Fill Float Shoe	EA	1		360 00
CF607	Latch Down PHB	EA	1		400 00
CF4452	Centralizer	EA	12		900 00
CF4552	Basket	EA	1		955 00
CF3000	Thread Lock	EA	1		34 00
CC151	Mud Flush	gal	500		430 00
E101	Heavy Equip. Mileage	mi	100		700 00
CE240	Blending + Mixing Charge	SK	250		350 00
E113	Bulk Delivery	TM	578		924 00
CE207	Depth Charge 6001' to 7000'	HRS	4		3240 00
CE504	Plug Container	JOB	1		250 00
E100	Pick UP Mileage	mi	50		212 50
				SUB TOTAL	10,854.64

CHEMICAL / ACID DATA:

SERVICE & EQUIPMENT	%TAX ON $	
MATERIALS	%TAX ON $	
	TOTAL	

SERVICE REPRESENTATIVE Chad Hinz

THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: [signature]
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

FIELD SERVICE ORDER NO.

C.L.DUC LITHO - Abilene, TX

BASIC ENERGY SERVICES
PRESSURE PUMPING & WIRELINE

1700 S. Country Estates Rd.
P.O. Box 129
Liberal, Kansas 67905
Phone 620-624-2277

FIELD SERVICE TICKET CONT.

TICKET NO. 1717045371

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	$ AMOUNT
5003	Service Supervisor	ea	1		175 00

TAYLOR PRINTING, INC.
(800) 870-7102

BASIC ENERGY SERVICES
Liberal, Kansas

Cement Report

Customer: Palmer Oil/American Warrior	Lease No.		Date: 11/5/13
Lease: Lola	Well #: 21-4		Service Receipt
Casing: 5 1/2	Depth: 6391'	County: Stevens	State: KS
Job Type: L.S.	Formation	Legal Description	

Pipe Data		Perforating Data		Cement Data
Casing size: 5 1/2	Tubing Size	Shots/Ft		Lead 200 SX AA-2 @ 14.8#
Depth: 6394.38	Depth	From	To	
Volume: 147.56	Volume	From	To	1.51 6.64
Max Press: 2500	Max Press	From	To	Tail in 50 SX 60/40 POZ @ 13.5
Well Connection: P.C.	Annulus Vol.	From	To	
Plug Depth	Packer Depth	From	To	1.48 7.37

	Time	Casing Pressure	Tubing Pressure	Bbls. Pumbed	Rate	Service Log
11/4	18:30					on Loc, Spot + R.U, Safty mtg
11/5	10:56	3000				Test Lines
	10:58	420		10	4	Mud flush
	11:01	420		5	4	H2O
	11:07					Plug R+M
	11:15	280		0	4	Start Mixing @ 14.8#
	11:29	0		54	0	Finished Mixing, Drop Plug, Wash up
	11:35	160		0	6	Start Disp
	11:59	640		137	2	Slow Rate
	12:03	980-1500				Plug Down
	12:05	0				Release Psi, Float held
						Job Complete

Service Units	74939	37223 37726	30464 37924			
Driver Names	C Hintz	T. Marcellus	D. Beck			

Customer Representative

Jerry Barnett
Station Manager

Chris Hintz
Cementer

Taylor Printing, Inc.