Confidentiality Requested:
☐ Yes ☑ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1192784

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 # 4967
Name: Berenergy Corporation
Address 1: 7114 W Jefferson Ave.
Address 2: Suite 206
City: Lakewood State: CO Zip: 80235 + __ __ __ __
Contact Person: David Braden
Phone: (303) 969-9610
CONTRACTOR: License # 5822
Name: Val Energy, Inc.
Wellsite Geologist: Ryan Thress
Purchaser: Enterprise Crude Oil, LLC

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 #:

09/24/2013	09/29/2013	11/25/2013
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-009-25867-00-00
Spot Description:
SE - SW - SE - NE Sec. 24 Twp. 20 S. R. 11 ☐ East ☑ West
2530 Feet from ☑ North / ☐ South Line of Section
775 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: Barton
Lease Name: Roetzel 'A' Well #: 26
Field Name:
Producing Formation: Arbuckle
Elevation: Ground: 1744 Kelly Bushing: 1756
Total Vertical Depth: 3260 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 1037 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: 8100 ppm Fluid volume: 1000 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:
☐ Confidential Release Date:
☑ Wireline Log Received
☑ Geologist Report Received
☐ UIC Distribution
ALT ☑ I ☐ II ☐ III Approved by: Deanna Garrison Date: 03/11/2014

[redacted] 1192784

Operator Name: Berenergy Corporation Lease Name: Roetzel 'A' Well #: 26

Sec. 24 Twp. 20 S. R. 11 ☐ East ☑ West County: Barton

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:
Attached

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

Name	Top	Datum
Attached	Attached	Attached

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	12.25	8.625	24	1037	Lead - 60/40 Pozmix, Tail - Cla	500	8% gel, 3% CaCl2 lead, 3% CaCl2 tail
Production	7.875	5.5	15.5	3250	ASC	175	10% salt, 6% Gyp Seal, 5 pps Kol Seal, (

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

TUBING RECORD: Size: 2.875 Set At: 3148 Packer At:

Liner Run: ☐ Yes ☑ No

Date of First, Resumed Production, SWD or ENHR. 01/3/2014

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

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	130		600		42

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:
3250 to 3260

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

Form	ACO1 - Well Completion
Operator	Berenergy Corporation
Well Name	Roetzel 'A' 26
Doc ID	1192784

All Electric Logs Run

Gamma Ray - Caliper
Dual Compensated Porosity
Microresistivity Log
Dual Induction Log
Borehole Compensated Sonic
Sonic Cement Bond

Form	ACO1 - Well Completion
Operator	Berenergy Corporation
Well Name	Roetzel 'A' 26
Doc ID	1192784

Tops

Name	Top	Datum
Tarkio	2263	-507
Topeka	2594	-838
Heebner	2846	-1090
Toronto	2862	-1106
Douglas	2881	-1125
Brown Lime	2970	-1214
Lansing-Kansas City	2990	-1234
Arbuckle	3251	-1479

ALLIED OIL & GAS SERVICES, LLC 061886

Federal Tax I.D. # 20-8651475

REMIT TO P.O. BOX 93999
SOUTHLAKE, TEXAS 76092

SERVICE POINT: Mount Pond Ks

DATE 9-25-13	SEC. 24	TWP. 20	RANGE 11	CALLED OUT 5:30 AM	ON LOCATION 7:30 AM	JOB START 1:00 PM	JOB FINISH 2:15 PM
LEASE Roetzel A	WELL # 26		LOCATION 281 - S mile Bldg, 1/4 East, 1/2 north			COUNTY Barton	STATE Ks
OLD OR NEW (Circle one)			wait into				

CONTRACTOR Val #2
TYPE OF JOB Surface
HOLE SIZE 12 1/4 T.D. 1037'
CASING SIZE 8 5/8" 24# DEPTH 1037'
TUBING SIZE DEPTH
DRILL PIPE DEPTH
TOOL DEPTH
PRES. MAX 800# MINIMUM 300#
MEAS. LINE SHOE JOINT 42.74
CEMENT LEFT IN CSG. 42.74'
PERFS.
DISPLACEMENT 63.38 bbls

OWNER Same

EQUIPMENT

PUMP TRUCK CEMENTER Tim Buchanan
597 HELPER Mike Scothorn
BULK TRUCK
#544-198 DRIVER Don Cooper
BULK TRUCK
#599 DRIVER Kevin Wareham

CEMENT

AMOUNT ORDERED 300 60/40 8% Gel, 3% CC, 1/4# Flocel/sk - 300 class A 3% CC

COMMON	200	@ 17.90	3580.00
POZMIX		@	
GEL		@	
CHLORIDE	16	@ 64.00	1024.00
ASC		@	
ALW	300	@ 15.95	4785.00
Flocel	75#	@ 2.97	222.75
		@	
		@	
		@	
		@	
		@	
		@	
HANDLING	562.20	@ 2.48	1394.26
MILEAGE	432 x 2.60		1123.20
		TOTAL	12,129.21

REMARKS:

Ran 1037' of 8 5/8 csg. Broke circulation. Pumped 5 bbls H2O. Mixed 300 sks 60/40 8% Gel, 3% CC, 1/4# Flocel/sk followed by 300 sks class A 3% CC. Released Plug. Displaced with H2O. Landed Plug at 800 #. Released Float Held. Approx 20 bbls to Pit. Cement Did circulate

SERVICE

DEPTH OF JOB 1037'

PUMP TRUCK CHARGE			2213.75
EXTRA FOOTAGE		@	
MILEAGE	20	@ 7.70	154.00
MANIFOLD		@	
Head Rent		@ 275.00	N/C
LVM	20	@ 4.40	88.00
		TOTAL	2455.25

CHARGE TO: Beseneryy LLC
STREET
CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

8 5/8 Wunderlee		460.98	460.98
Float Collar	@	950.04	950.04
2 Stop Rings	@	56.16	112.32
24 Centralizer	@	74.88	1797.12
2 Thread Lock	@	83.07	166.14
Rubber Plug	@	[illegible]	[illegible]
	TOTAL		3567.84

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 18,142.81
DISCOUNT 5602.18 IF PAID IN 30 DAYS
$11,645.63

PRINTED NAME X L.E. BUCHANAN

SIGNATURE X L. Edward Buchanan 9/25/2013

ALLIED OIL & GAS SERVICES, LLC

CEMENTING LOG

STAGE NO. 13

Date 10-1-13 District Hays Ticket No. 401891

Company Baronessa Rig Val 2

Lease Rowland N A Well No. 26

County Rice State KS

Location _____ Field _____

CASING DATA: Conductor ☐ PTA ☐ Squeeze ☐ Misc ☐
Surface ☐ Intermediate ☐ Production ☒ Liner ☐

Size 5½ Type New Weight 15½ Collar _____

Casing Depths: Top KB Bottom 3212.2

Drill Pipe: Size _____ Weight _____ Collars _____

Open Hole: Size 7⅞ T.D. 3260 ft. P.B. to _____ ft.

CAPACITY FACTORS:

Casing:	Bbls/Lin. ft. .0238	Lin. ft./Bbl. 42.01
Open Holes:	Bbls/Lin. ft. .0602	Lin. ft./Bbl. 16.5993
Drill Pipe:	Bbls/Lin. ft. _____	Lin. ft./Bbl. _____
Annulus:	Bbls/Lin. ft. .0309	Lin. ft./Bbl. 32.4065
	Bbls/Lin. ft. _____	Lin. ft./Bbl. _____

Perforations: From _____ ft. to _____ ft. Amt. _____

CEMENT DATA:

Spacer Type: _____

Amt. _____ Sks Yield _____ ft³/sk Density _____ PPG

LEAD: Pump Time _____ hrs. Type ASC

Excess _____

Amt. 175 Sks Yield 1.57 ft³/sk Density 14.5 PPG

TAIL: Pump Time _____ hrs. Type 5½

Excess _____

Amt. 225 Sks Yield 1.57 ft³/sk Density 14.5 PPG

WATER: Lead _____ gals/sk Tail _____ gals/sk Total _____ Bbls.

50 sx 60/40 + 4% Gel

Pump Trucks Used 597 - Chandler Kenyon

Bulk Equip. 603 - Mark Spackenberg

Float Equip: Manufacturer _____

Shoe: Type Texas Pick Shoe Depth _____

Float: Type 2 Baskets Depth _____

Centralizers: Quantity _____ Plugs Top _____ Btm. _____

Stage Collars Latch Down Plug and Baffle

Special Equip. 27 sent 2 - 5

Disp. Fluid Type H2O Amt. 74.98 Bbls. Weight _____ PPG

Mud Type _____ Weight _____ PPG

COMPANY REPRESENTATIVE _____ CEMENTER Wayne Davis

TIME AM/PM	PRESSURES PSI DRILL PIPE CASING	PRESSURES PSI ANNULUS	FLUID PUMPED DATA TOTAL FLUID	FLUID PUMPED DATA Pumped Per Time Period	FLUID PUMPED DATA RATE Bbls Min.	REMARKS
2:30PM						Arrive on Loc. S.M. Rig up Had Safety meeting Ran Float Equip
6:30PM					4	Broke Circulation at 6:30 Circulated for 1 hour
730			5	5	3	Had Safety meeting Ran 5 BBLS water Ahead
			15	10	3	Mix 500 Gal ASF
			20	5	3	Ran 5 BBLS Behind
			27.48	7.48	3	Mix 30 SX Rat hole
			32.46	4.98	3	Mouse Mix 20 SX
			140.94	108.48	6	Mix 175 SX ASC
						Wash Pump lines
						Release plug
8:45	400 PSI			30	5	Start displacement
	800 PSI			30	5	
	900			10	5	
	500			6	3	Slow down Pump Land Plug at 1100

FINAL DISP. PRESS: _____ PSI BUMP PLUG TO _____ PSI BLEEDBACK .5 BBLS.

THANK YOU

MILLER PRINTERS, INC. - Great Bend, KS

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC

Berenergy Corp.

PO Box 5850
Denver Co. 80217+5850

ATTN: Ryan Thress

24-20s-11w Barton

Roetzel "A" #~~25~~ 26

Job Ticket: 53630 **DST#: 1**

Test Start: 2013.09.28 @ 22:45:01

GENERAL INFORMATION:

Formation: LKC"D-F"
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 00:34:00
Time Test Ended: 11:33:30

Test Type: Conventional Bottom Hole (Initial)
Tester: Andy Carreira
Unit No: 68

Interval: 3016.00 ft (KB) To 3060.00 ft (KB) (TVD)
Total Depth: 3060.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

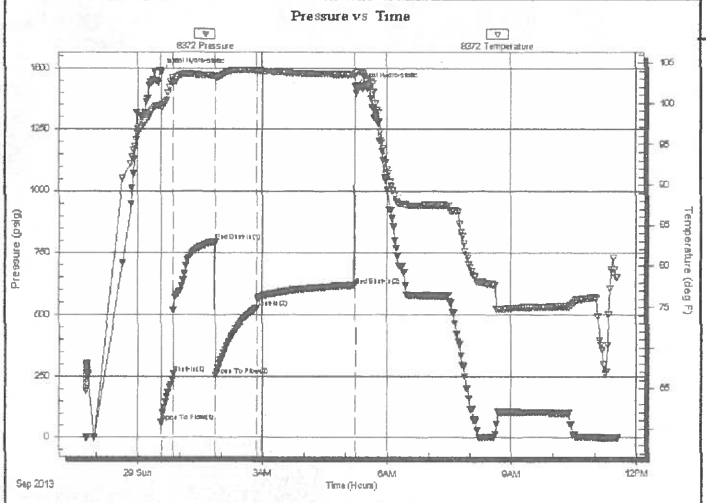
Reference Elevations: 1755.00 ft (KB)
1745.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 8372 **Inside**

Press@RunDepth: 527.90 psig @ 3021.00 ft (KB)
Start Date: 2013.09.28 End Date: 2013.09.29
Start Time: 22:45:01 End Time: 11:33:30

Capacity: 8000.00 psig
Last Calib.: 2013.09.29
Time On Btm: 2013.09.29 @ 00:33:30
Time Off Btm: 2013.09.29 @ 05:14:30

TEST COMMENT: IF:(15min) BOB in 1 Min.
ISI:(60min) No Return
FF:(60min) BOB in 2 min.
FSI:(120min) No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1482.09	99.79	Initial Hydro-static
1	61.56	99.44	Open To Flow (1)
18	261.12	102.65	Shut-In(1)
78	793.39	103.40	End Shut-In(1)
79	253.55	103.22	Open To Flow (2)
139	527.90	104.03	Shut-In(2)
281	618.31	103.54	End Shut-In(2)
281	1425.34	103.76	Final Hydro-static

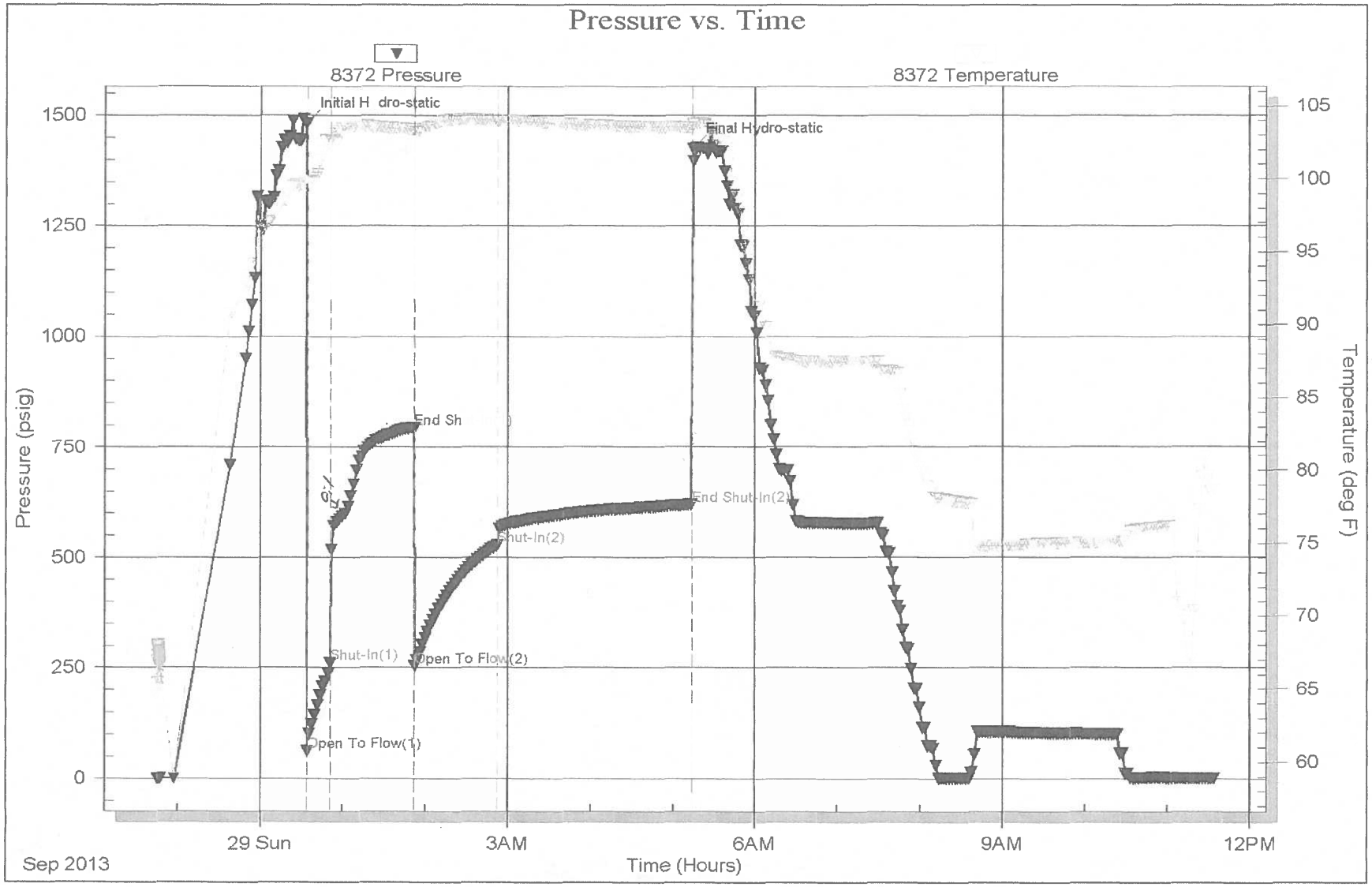
Recovery

Length (ft)	Description	Volume (bbl)
1299.00	MCGW g=15% m=10% w=75%	18.22
1.00	GO	0.01

Gas Rates

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

Serial #: 8372 **Inside** Berenergy Corp. Roetzel "A" #25 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 53630 Printed: 2013.09.29 @ 12:04:58

TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

4/10

Test Ticket

NO. 53630

Well Name & No. Roetzel "A" #2 Test No. 1 Date 9-28-13

Company BEREN ERGY CORP Elevation 1755 KB 1745 GL

Address PO BOX 37850 DENVER CO. 80217+5850

Co. Rep / Geo. RYAN THRESS Rig VAL #2

Location: Sec. 24 Twp. 20S Rge. 11W Co. BARTON State KS

Interval Tested 3016-3060 Zone Tested LKC "D-F

Anchor Length 44' Drill Pipe Run 3013 Mud Wt. ~~9.2~~ 8.8

Top Packer Depth 3011 Drill Collars Run 0 Vis ~~58~~ 52

Bottom Packer Depth 3016 Wt. Pipe Run 0 WL 8.8

Total Depth 3060 Chlorides 6700 ppm System LCM 0

Blow Description IF: BOB 1min

ISI: NO RETURN

FF: BOB 2min

FSI: NO RETURN

Rec 1	Feet of ~~MCGW~~ GO	%gas	%oil	%water	%mud
Rec 1299	Feet of MCGW	%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 1300 BHT 103° Gravity ____ API RW .273 @ 73 °F Chlorides 26000 ppm

(A) Initial Hydrostatic 1482

(B) First Initial Flow 61

(C) First Final Flow 261

(D) Initial Shut-In 793

(E) Second Initial Flow 253

(F) Second Final Flow 527

(G) Final Shut-In 618

(H) Final Hydrostatic 1425

Initial Open 15

Initial Shut-In 60

Final Flow 60

Final Shut-In 120

- ☑ Test
- ☑ Jars
- ☑ Safety Joint
- ☐ Circ Sub
- ☑ Hourly Standby 5hrs
- ☑ Mileage 180RT
- ☐ Sampler
- ☐ Straddle
- ☐ Shale Packer
- ☐ Extra Packer
- ☐ Extra Recorder
- ☐ Day Standby
- ☐ Accessibility

Sub Total

T-On Location 21:05

T-Started 22:45

T-Open ~~00:57~~ 00:42

T-Pulled 04:57

T-Out 11:40

Comments 5 hrs standby

- ☐ Ruined Shale Packer
- ☐ Ruined Packer
- ☐ Extra Copies

Sub Total

Total

MP/DST Disc't

Approved By L. Allen Brehm 9/29/2013 Our Representative Ryan Thress

DRILL STEM TEST REPORT

Berenergy Corp.

PO Box 5850
Denver Co. 80217+5850

ATTN: Ryan Thress

24-20s-11w Barton

Roetzel "A" #~~25~~ 26

Job Ticket: 53631 **DST#: 2**

Test Start: 2013.09.30 @ 06:38:01

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 08:28:30
Time Test Ended: 18:07:30

Test Type: Conventional Bottom Hole (Reset)
Tester: Andy Carreira
Unit No: 68

Interval: 3250.00 ft (KB) To 3260.00 ft (KB) (TVD)
Total Depth: 3260.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

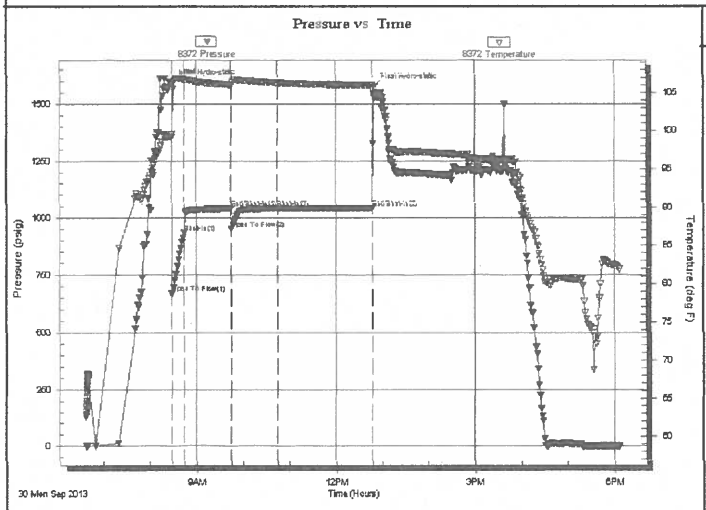
Reference Elevations: 1755.00 ft (KB)
1745.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 8372 **Inside**

Press@RunDepth: 1042.45 psig @ 3251.00 ft (KB)
Start Date: 2013.09.30 End Date: 2013.09.30
Start Time: 06:38:01 End Time: 18:07:30

Capacity: 8000.00 psig
Last Calib.: 2013.09.30
Time On Btm: 2013.09.30 @ 08:28:00
Time Off Btm: 2013.09.30 @ 12:49:30

TEST COMMENT: IF:(15min) BOB in 20 seconds
ISI:(60min) GTS during bleed off. Blow built to BOB in 12 min. Gas burned w/ orange flame
FF:(60min) BOB immediately. Gas TSTM
FSI:(120min) Return blow, built to BOB in 6 min. after bleed off



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1592.50	99.05	Initial Hydro-static
1	671.63	99.44	Open To Flow (1)
17	934.30	106.74	Shut-In(1)
77	1042.27	106.02	End Shut-In(1)
78	950.69	106.05	Open To Flow (2)
137	1042.45	106.30	Shut-In(2)
260	1043.84	105.95	End Shut-In(2)
262	1573.61	104.89	Final Hydro-static

Recovery

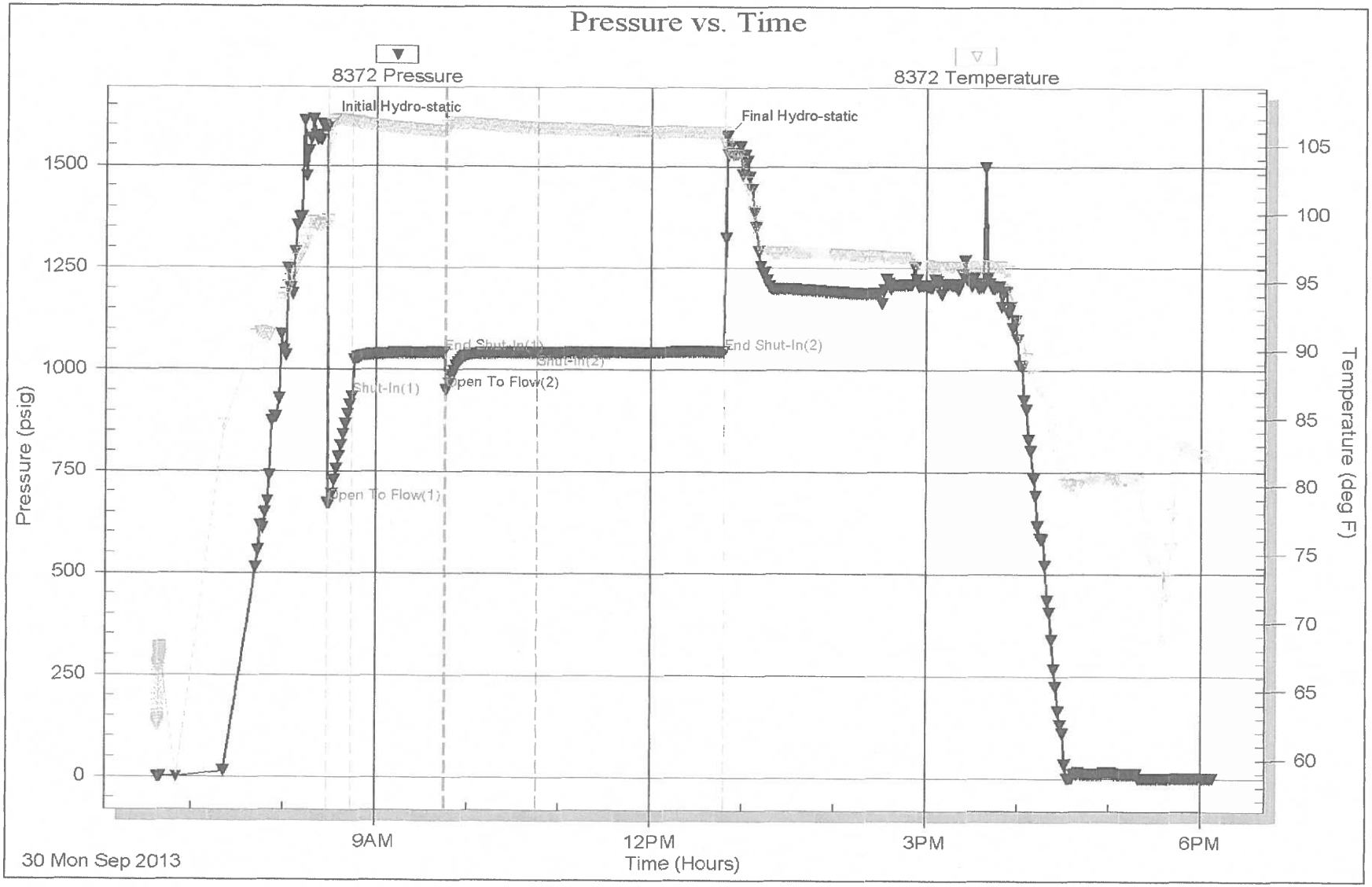
Length (ft)	Description	Volume (bbl)
1698.00	Water	21.85
932.00	Oil	12.00

* Recovery from multiple tests

Gas Rates

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

Serial #: 8372 **Inside** Berenergy Corp. Roetzel "A" #25 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 53631 Printed: 2013.09.30 @ 18:37:28

WF

NATURAL GAS ANALYSIS REPORT
GPA 2145-09

Sampled by:	Analyzed by:
Trilobite Testing, Inc.	Caraway Analytical, Inc
Hays, Kansas	P. O. Box 2137
Scott City, Kansas	Liberal, Kansas 67905
Phone: 800-728-5369	Phone: 620-482-2371
Fax: 785-625-5620	Fax: 620-626-7108

Lab Number:	20132235	Analyzed:	10/04/13
Sample From:	RUETZEL A-26	Pressure:	
Producer:	BERENERGY CORP	Temperature:	
Date:		Location:	24-20-11
Time:		County:	BARTON
Sampler:		State:	KANSAS
Source:	DST 2	Formation:	ARBUCKLE

		Mole %	GPM
Helium	He:	0.357	0.000
Hydrogen	H2:	0.000	0.000
Oxygen	O2:	0.000	0.000
Nitrogen	N2:	15.778	0.000
Carbon Dioxide	CO2:	0.027	0.000
Methane	C1:	36.899	0.000
Ethane	C2:	13.129	4.924
Propane	C3:	14.051	5.267
Iso Butane	iC4:	3.128	0.958
Normal Butane	nC4:	7.260	2.309
Iso Pentane	iC5:	2.096	0.575
Normal Pentane	nC5:	2.767	0.765
Hexanes Plus	C6+:	4.508	1.036
	TOTAL:	100.000	15.834
	Z Fact:	0.9994	
	SP.GR.:	1.1840	
	BTU (SAT):	1728.0 @ 14.73 psia	
	BTU (DRY):	1758.6 @ 14.73 psia	
	OCTANE RATING:	88.9	

COMMENTS: 303-297-951 0.000

TRILOBITE TESTING, INC.

P.O. Box 362 • Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 53631 Date 9-30-13

Company Name BEREXERGY CORP

Lease Roetzel "A" #26 Test No. 2

County Barton Sec. 24 Twp. 20s Rng. 11w

SAMPLER RECOVERY

Gas 2800 ML

Oil 300 ML

Mud — ML

Water 900 ML

Other — ML

Pressure 290 lbs ML

Total 4000 ML

PIT MUD ANALYSIS

Chlorides 8100 ppm.

Resistivity _____ ohms @ _____ F

Viscosity 53

Mud Weight 9.2

Filtrate 9.2

Other ½ # LCM

SAMPLER ANALYSIS

Resistivity .276 ohms @ 87 F

Chlorides 19000 ppm.

Gravity 40 corrected @60F

PIPE RECOVERY

TOP

Resistivity .276 ohms @ 87 F

Chlorides _____ ppm.

MIDDLE

Resistivity " ohms @ " F

Chlorides " ppm.

BOTTOM

Resistivity " ohms @ " F

Chlorides " ppm.

Printcraft Printers 9/01

TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

4/10

Test Ticket

NO. 53631

Well Name & No. Rutzel 'A' #26 Test No. 2 Date 9-30-13

Company BEREN Energy Corp Elevation 1755 KB 1745 GL

Address PO Box 5850 Denver Co. 80217 + 5850

Co. Rep / Geo. Ryan Theiss Rig VAL #2

Location: Sec. 24 Twp. 20s Rge. 11W Co. Barton State Ks

Interval Tested 3250-3260 Zone Tested Arbuckle

Anchor Length 10' Drill Pipe Run 3231 Mud Wt. 9.2

Top Packer Depth 3245 Drill Collars Run 0 Vis ~~49~~ 53

Bottom Packer Depth 3250 Wt. Pipe Run 0 WL 9.2

Total Depth 3260 Chlorides 8100 ppm System LCM ~~0~~ ½#

Blow Description IF: BOB in 20sec

ISI: GTS during bleedoff, Blow built to BOB in 12min.

FF: BOB immediately. GAS TSTM

FSI: Return Blow Built to BOB in 6min after bleedoff

Rec 932	Feet of Oil	%gas	%oil	%water	%mud
Rec ~~49~~ 1698	Feet of Water	%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 ~~2630~~ 2630 BHT 105° Gravity 40 API RW .276 @ 87 °F Chlorides 19000 ppm

(A) Initial Hydrostatic 1592	☑ Test ←	T-On Location 05:36	
(B) First Initial Flow 671	☑ Jars ←	T-Started 06:38	
(C) First Final Flow 934	☑ Safety Joint ←	T-Open 08:30	
(D) Initial Shut-In 1042	☐ Circ Sub	T-Pulled 12:45	
(E) Second Initial Flow 950	☑ Hourly Standby 3 hrs	T-Out 18:08	
(F) Second Final Flow 1042	☑ Mileage 180 RT	Comments Gas burned w/ orange flame	
(G) Final Shut-In 1043	☑ Sampler ←		
(H) Final Hydrostatic 1573	☐ Straddle	☐ Ruined Shale Packer	
	☐ Shale Packer	☐ Ruined Packer	
Initial Open 15	☐ Extra Packer	☐ Extra Copies	
Initial Shut-In 60	☐ Extra Recorder	Sub Total	
Final Flow 60	☐ Day Standby	Total	
Final Shut-In 120	☐ Accessibility	MP/DST Disc't	
	Sub Total		

Approved By L. Edward Buchman 9/30/2013 Our Representative Ryan Theiss

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BERENERGY CORPORATION

H. J. ROETZEL 'A' #26

SE NE SEC 2 T20S R11W

BARTON COUNTY, KANSAS

SUMMARY

Berenergy Corporation completed the vertical H. J. Roetzel ‘A’ #26 as an oil well in the Cambrian-Ordovician Arbuckle Group where TD was reached at 3260' MD. Onsite geologic services started after surface casing was set at 1037’ MD, and included examination of drill cuttings and Pason total gas/chromatography. Drill-cutting samples were analyzed at 30’ intervals from 1370’ - 1490’ and 2170’ - 2300’ MD to look at the top of the Chase Group and at the Tarkio Limestone, respectively. 10-ft samples were analyzed from 2590’ MD to TD. Open-hole logs were run from the base of the surface casing to TD, and included DIL-GR-SP-CNL-CDL-CAL-MLL.

Drilling
After 8 5/8” surface casing was set at 1037' MD, drilling with fresh water continued to 2520' MD. The remainder of the hole was drilled with water-based mud. At 2285’ MD, the surface casing had risen ~2 ft and drilling stopped. Orders to TOOH were given so the excess pipe could be cut off. After open-hole logs were run, it became evident that the bottom joint of surface casing had fallen to 1208’ MD. Besides abundant iron filings in the cuttings, no further problems occurred from this incident. DST 1 tested Lansing-Kansas City zones C, D, and E in interval 3016’ - 3060’ MD. Total depth was reached at 3260’ MD, where DST 2 of interval 3250’ - 3260’ MD was run at the top of the Arbuckle. Lastly, 5 1/2" production casing was set at 3250' MD, allowing for 10 ft of open-hole production from the top of the Arbuckle.

Tarkio Limestone
No significant gas shows were noted while drilling the Tarkio Limestone. No hydrocarbons were observed.

Topeka Limestone
Total gas increased from a background of 20 units to a peak of 347 units when the bit entered the top of the Topeka Limestone. No hydrocarbon shows were observed.

Lansing-Kansas City Groups
Zones A through L were documented at this site. Porosities and shows varied from zone to zone depending on the type of limestone present, ranging from the most common oil-stained vug-type porosity to no-show tight micrite. Total gas averaged 150 to 200 units, with peak formation gas at 546 units and trip gas at 1253 units. DST 1 tested zones C through E and yielded 1 ft of oil on top of 1299 ft of gas-cut muddy water. Solvent tests of drill cuttings yielded a range of results from slow streaming pale yellow cuts to fast streaming blue-white cuts with white halos.

Arbuckle Group
The Arbuckle dolomite was the primary target for the Roetzel ‘A’ #26 well. Drill cuttings commonly exhibited oil-stained visible porosity and a strong petroliferous odor. Total gas was between 100 and 150 units in the top 9 ft of dolomite. Solvent tests of cuttings commonly yielded instant bright white-blue fast streaming cuts with white halos. DST 2 recovered 1698 ft of water and 932 ft of oil.

Ryan Thress
Consulting Wellsite Geologist
October 2013

WELL DATA

OPERATOR:	Berenergy Corporation
WELL NAME:	H. J. Roetzel 'A'#26
SURFACE LOCATION:	2530' FNL & 775' FEL SE NE Sec. 2, T20S, R11W Barton County, Kansas
LAT/LONG:	38.2972944° N, 98.4820429° W
ELEVATIONS:	GL 1745' KB 1756'
API NUMBER:	15-009-25867
ROAD DIRECTIONS:	From Great Bend, KS, travel east 16 miles on KS-96; turn right on 2nd Rd and travel 4 miles to Ave Q and turn right; travel 1 mile on Ave Q then turn right on SE 160th Ave and travel 1 mile; well on the left.
SURFACE CASING:	8 5/8" set at 1037' MD
PRODUCTION CASING:	5 1/2" set at 3250' MD
SPUD DATE:	Morning of September 24, 2013
DRILLING COMPLETED:	02:00 September 30, 2013
TOTAL DEPTH:	3260' MD
LAST FORMATION:	Arbuckle Group
WELL STATUS:	Open-hole completion in the upper 9' of the Arbuckle Group
OPERATOR REPS:	Energy Operating Company Inc. David Braden – Engineer Dan Hall – Engineer
WELLSITE SUPERVISION:	L.E. Ed Buchanan

FORMATION TOPS--VERTICAL HOLE

Formation KB	Wireline Top MD	Datum 1756.0	Sample Drilled Thickness (ft)
Pennsylvanian	–		
Tarkio	2263	-507	21
Topeka	2594	-838	38
Heebner	2846	-1090	16
Toronto	2862	-1106	19
Douglas	2881	-1125	89
Brown-Lime	2970	-1214	4
Lansing-Kansas City Group	–		
Zone A	2990	-1234	16
Zone B	3006	-1250	12
Zone C	3018	-1262	14
Zone D	3032	-1276	24
Zone E	3056	-1300	7
Zone F	3063	-1307	15
Zone G	3078	-1322	56
Zone H	3134	-1378	16
Zone I	3150	-1394	17
Zone J	3167	-1411	32
Zone K	3199	-1443	36
Zone L	3235	-1479	16
Cambrian-Ordovician	–		
Arbuckle Group	3251	-1495	9
Total Depth Driller	3260	-1504	

Geologic ages from:
Moore et al. (1951); *The Kansas rock column* (No. 89-93). University of Kansas Publications.

LITHOLOGY AND SHOWS

The following descriptions are interpretive. Derrick hands collected lagged 10-ft samples over predefined intervals, along with spot samples to constrain select tops and when drilling activities dictated. Samples were reviewed with the aid of wireline logging tools from 1037' MD to a TD of 3260' MD, and wireline logs were adjusted to rig depths.

Samples were inspected using an Olympus SZ61 stereoscope. Grain sizes were determined by use of an AmStrat grain size comparator. Colors of wet cuttings were determined from the Rock-Color Chart distributed by the Geological Society of America. 10% HCl was used in acid reaction tests, and Alizarin red was used to aid with carbonate species determination.

Selected samples were examined for oil fluorescence with a US GeoSupply brand fluoroscope. Cut tests for liquid hydrocarbons were performed with solvent on wet cuttings. All samples collected were drilled with fresh water-based mud and sieved and rinsed in fresh water.

Significant gas shows, as determined with a Pason Gas Analyzer (TG; C1-C4), are described in each formation overview. The reader should refer to the accompanying mudlogs for the lagged record of all gas shows.

Surface Casing:	8 5/8" set at 1037' KB
Production Casing	5 1/2" set at 3250' KB
Total Depth:	3260' MD

WELLINGTON FM/ CHASE GROUP	SAMPLE TOP: N/A'	LOG: N/A'	TVD: N/A'	DATUM: N/A'

Overview:	Note: Samples associated with depths 1370’ MD - 1490’ MD on the log were taken at 30ft intervals and due to lapses in communication were not lagged, and therefore probably represent the base of the Wellington Formation of the Sumner Group instead of the top of the Chase Group. Gray, silty shale predominates but there are also beds of green shale and deposits of dolomite, limestone, gypsum, and anhydrite. No significant gas shows were observed.
1370' – 1490'	Predominately **SHALE**: light olive gray to greenish gray, soft to firm, occasional platy cuttings, some zones very calcareous, others non-calcareous without significant difference in appearance. Rare pyrite nodules, rare mollusk fossils, no fluorescence, no cut; locally **SILTSTONE**: medium gray to medium dark gray, firm, blocky cuttings, significant very fine sand, calcareous; with stringers of **LIMY DOLOMITE**: Light gray to medium gray, firm, sub-rounded cuttings, microcrystalline, effervescent in HCl, slight mottled stain in Alizarin, weak, diffuse cloudy dull yellow cut, patchy halo; and **LIMESTONE**: bluish white to light greenish gray, locally very pale orange, firm, platy cuttings, fossiliferous, locally sparry, very effervescent in HCl, no insoluble residue. No fluorescence, no cut, no shows; and **ANHYDRITE**: white to clear, locally dark yellowish brown, semi translucent, firm, rounded cuttings, no reaction in HCl, produces selenite crystals when reprecipitated; **GYPSUM**: selenite crystals <3mm, pearly white to transluscent, fibrous stucture, soft but brittle. Likely rehydrated and recrystalized anhydrite in fresh-water drilling fluid.

LITHOLOGY AND SHOWS

RICHARDSON GROUP SAMPLE TOP: N/A' LOG: N/A' TVD: N/A' DATUM: N/A'

Overview: The Richardson Subgroup comprises the youngest Pennsylvanian rocks of the Wabaunsee Group and includes strata from the top of the Brownville limestone to the top of the Tarkio limestone. Samples were caught at the base of the Richardson Subgroup to identify the transition into the Tarkio limestone. Predominantly shale with silty lenses and limestone stringers. No significant gas or oil shows were observed in this section.

2170' – 2263' Predominantly alternating species of **SHALE**: medium gray (N5) to meduim dark gray (N4), very soft, platy to sub rounded, no to slight reaction in HCl; with **SHALE**: dark reddish brown (10R 3/4) to very dusky red (10R 2/2), platy, soft, slight to moderate reaction to HCl, locally grity appearance; and also with **SHALE**: dark greenish gray (5GY 4/1), soft, platy, moderate reaction to HCl, light patchy oil staining; local lenses of **SILTSTONE**: medium gray (N5) to meduim dark gray (N4), sub blocky, soft, grity with local areas of high clay content, moderately reacts to HCl; with stringers of **LIMESTONE**: very light gray (N8) to light gray (N7), platy to sub blocky, firm to moderately hard, brittle, very reactive to HCl.

TARKIO LS SAMPLE TOP: 2263' LOG: 2263' TVD: 2263' DATUM: -507'

Overview: The Tarkio limestone is youngest member of the Nemaha Subgroup of the Wabaunsee Group. It is gray to weathered brown and commonly consists of two massive beds separated by a shaly zone. Fossils are very common, especially fusulinids. Algal remains are present in the upper bed. No significant gas or oil shows were observed in this section.

2263' – 2285' **LIMESTONE**: white (N9) to very light gray (N8), sub-blocky, soft to firm, reacts very strongly to HCl, very fossiliferous and local algal remains, no fluorescence, no cut.

SHAWNEE GROUP SAMPLE TOP: 2594' LOG: 2594' TVD: 2594' DATUM: -838'

Overview: The Shawnee group is part of the Upper Pennsylvanian Series and comprises four limestone formations and three shale formations. Thick limestones and a distinctive type of cyclic sedimentation are characteristics that distinguish these rocks from those of neighboring groups. Total Gas increased from a background of 20 units to a peak of 347 units when the bit entered the top of the Topeka Limestone. No hydrocarbon shows were observed.

2594' – 2676' TOPEKA LIMESTONE; **LIMESTONE**: mottled white (N9) to light gray (N7) to med. dark gray (N4), crystalline and algal limestone common, blocky, firm to very

LITHOLOGY AND SHOWS

	hard, very fossiliferous, vigorous reaction to HCl, locally limestome occurs as a white (N9) grainstone, firm to hard, smells strongly of sulfur while reacting with HCl; and **LIMESTONE**: white (N9) to grayish orange (10YR 7/4), hard, sub blocky cuttings, fossiliferous, subhedral pyrite, rare vugs, locally a grainstone but more commonly dense, pale yellow fluorescence, slow diffuse pale yellow cut, pale yellow halo; interbedded with **SHALE**: light gray (N6) to med. dark gray (N4) to grayish black (N2), platy to sub blocky, very soft to moderately firm, locally micaceous, no reaction to a moderately strong reaction to HCl, pyrite nodules common.
2676' – 2701'	Zone of **SHALE**: medium gray (N5) to brownish gray (5YR 4/1), platy, smooth, calcareous, trace pale yellow fluorescence; and **SHALE**: dark reddish brown (10R 3/4) to very dusky red (10R 2/2), platy, soft, slight to moderate reaction to HCl, locally gritty appearance.
2701' – 2752'	Second limestone formation; **LIMESTONE**: moderate yellowish brown (10YR 5/4), firm, sub blocky cuttings, various textures, hacky appearance, unidentifiable fossil debris and possible oolites, locally sparry, no visible porosity, argillaceous to very argillaceous, very dull yellow fluorescence, yellow diffuse cloudy cut.
2752' – 2756'	Zone of **SHALE**: medium gray (N5) to medium dark gray (N4), firm, platy cuttings, slightly calcareous, no fluorescence.
2756' – 2803'	Third limestone formation; **LIMESTONE**: very pale orange (10YR 8/2), sub platy cuttings, very effervescent in HCl with minimal residue, micrite, tight, possible remnant finestral porosity with calcite fill, pale yellow with splotches of yellow mineral fluorescence, pale yellow diffuse cut.
2803' – 2807'	Zone of **SHALE**: medium gray (N5) to medium dark gray (N4), firm, platy cuttings, slightly calcareous, no fluorescence; and **SHALE**: dark reddish brown (10R 3/4) to very dusky red (10R 2/2), platy, soft, slight to moderate reaction to HCl, locally gritty appearance.
2807' – 2846'	OREAD LIMESTONE: fourth limestone formation of the Shawnee Group; **LIMESTONE**: Light brownish gray (5YR 6/1), very hard, blocky cuttings, micrite, tight, pale dull yellow fluorescence.
2846' – 2862'	HEEBNER SHALE MEMBER of the OREAD LS: **SHALE**: med dark gray (N4) to dark gray (N3), platy and elongated, firm and brittle, locally very silty, strong reaction to HCl; also locally a very dusky red (10R 2/2), higher silt content, soft, slightly calcareous.
2862' – 2881'	TORONTO LIMESTONE MEMBER of the OREAD LS: **LIMESTONE**: light brownish gray (5YR 6/1) to white (N9), firm, micrite, local intraclasts, tight, pale yellow fluorescence, pale yellow cut.

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DOUGLAS GROUP SAMPLE TOP: 2881' LOG: 2881' TVD: 2881' DATUM: -1125'

Overview: The Douglas group underlies the Shawnee group conformably. The Douglas Group consists primarily of clastic rocks, the most prominent being shale. Limestones are quantitatively of minor importance. No significant oil or gas shows, though background Total Gas through the Douglas Group was on average 100 units.

2881' – 2970' Predominantly **SHALE**: medium gray (N5) to medium dark gray (N4), firm, platy cuttings, slightly calcareous, no fluorescence; and **SHALE**: moderate brown (5YR 3/4), moderately soft, sub blocky cuttings, gritty, silty, calcareous, no fluorescence; with minor stringers of **LIMESTONE**: light brownish gray (5YR 6/1) to white (N9), firm, micrite, local intraclasts, tight, pale yellow fluorescence, pale yellow cut.

BROWN LIME SAMPLE TOP: 2970' LOG: 2970' TVD: 2970' DATUM: -1214'

Overview: Easily recognizable marker bed right above the Lansing-Kansas City Group. The limestone is commonly dark brown and very hard, easily seen on engineering data. Included in this section is the shale zone that separates the BROWN LIME and the LANSING-KANSAS CITY GROUP. No significant gas or oil shows were observed in this section.

2970' – 2974' **LIMESTONE**: dark yellowish brown (10YR 4/2), blocky, angular, very hard, dense, crystalline, locally fossiliferous, reacts vigorously to HCl.

2974' – 2990' **SHALE**: medium gray (N5) to medium dark gray (N4), firm, platy cuttings, slightly calcareous, no fluorescence.

LANSING-KANSAS CITY GROUP SAMPLE TOP: 2990' LOG: 2990' TVD: 2990' DATUM: -1234'

Overview: The Lansing-Kansas City Group contains 12 limestone formations (zones ‘A’ through ‘L’) alternating with marine shale units and has a thickness of about 260 feet in this location. Many of the limestones are cross-bedded, oolitic, and algal. Porosities and shows varied from zone to zone depending on the type of limestone present, ranging from the most common oil-stained vug-type porosity to no-show tight micrite. Total Gas averaged between 150-200 units, with the peak formation gas at 546 units and trip gas at 1253 units. The first DST tested zones ‘C’ through ‘E’ and yielded 1’ of oil on top of 1299’ of gas-cut muddy water. Solvent tests also yielded a range of results from slow streaming pale yellow cuts to fast streaming blue-white cuts with white halos.

2990' – 3006' Zone A; **LIMESTONE**: moderate yellowish brown (10YR 5/4), locally very pale orange (10YR 8/2), firm, blocky cuttings, micrite, less commonly peloidial, local

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vugs and fenestral porosity, oil staining, rare ammonite fossils, slow streaming to cloudy light blue cut, light blue halo; **SHALE**: moderate brown (5YR 3/4), moderately firm, platy to sub platy cuttings, generally smooth, locally gritty/silty, calcareous.

3006' – 3018' Zone B; **LIMESTONE**: white (N9) to grayish orange (10YR 7/4), hard, sub blocky cuttings, fossiliferous, subhedral pyrite, rare vugs, locally a grainstone but more commonly dense, local oil staining, pale yellow to yellow fluorescence; **SHALE**: medium gray (N5), firm platy chips and bit scrapings, locally silty, non-calcareous, silty chips remain intact in H2O, no fluorescence.

3018' – 3032' Zone C; **LIMESTONE**: light brownish gray (5YR 6/1), firm, sub platy cuttings, varied textures, fossiliferous, well preserved ammonite, slight porosity and oil staining, yellow fluorescence, light blue streaming cut, patchy halo; **SHALE**: med. dark gray (N4) to black (N1), mod firm, locally calcareous, common pyrite, common thin (< 1mm) black lamina, no fluorescence.

3032' – 3056' Zone D; **LIMESTONE**: white (N9) to mod yellowish brown (10YR 5/4), sub blocky to platy, firm, micrite, commonly fossiliferous, locally soft and chalky, trace fenestral porosity, common light oil staining, pale yellow fluorescence, fast streaming to cloudy white blue cut, patchy halo.

3056' – 3063' Zone E; **LIMESTONE**: white (N9), boundstone or biolithite with inter- and intra-clastic porosity stained with oil residue, calcareous, slow streaming blue cut, faint halo; and **LIMESTONE**: light brownish gray (5YR 6/1), very firm, micrite, no visible porosity, locally chalky and moderately firm, locally oil stained.

3063' – 3078' Zone F; **LIMESTONE**: very pale orange (10YR 8/2), occurs as ~1mm sub-rounded chips, firm to hard, locally fossiliferous - fossils mainly occur as loose crinoid hash, reacts vigorously to HCl, occasional chip has fast streaming blue cut.

3078' – 3134' Zone G; A thick sequence of **LIMESTONE**: yellowish gray (5Y 8/1), blocky, very hard, tight, fenestral porosity in-filled with translucent calcite cement, common vug porosity, fossiliferous, occasional oil staining, pale yellow fluorescence, streaming bright yellow cut; and **LIMESTONE**: mottled yellowish gray (5Y 8/1) and greenish gray (5G 6/1) to med bluish gray (5B 5/1) packstone, soft to moderately firm, sub angular chips; and **LIMESTONE**: mod yellowish brown (10YR 5/4), locally very pale orange (10YR 8/2), firm, sub blocky cuttings, micrite but also commonly peloidal, local vug porosity and fenestral porosity, oil staining inside of vugs, rare fossils, instant fast streaming bright white blue cut, bright yellow halo.

3134' – 3150' Zone H; **LIMESTONE**: yellowish gray (5Y 8/1), micrite, very hard, sub blocky, local vug porosity and stylolites, vugs and stylolites are oil stained, locally fossiliferous, instant fast streaming blue white cut, dull yellow halo; and **SHALE**: med light gray (N6) to dark greenish gray (5GY 4/1) to dark reddish brown (10R 3/4), mod firm, platy to sub blocky cuttings, generally smooth, locally gritty/silty, locally calcareous.

3150' – 3167' Zone I; **LIMESTONE**: white (N9) to med light gray (N6) to mod yellowish brown (10YR 5/4), micrite, locally vuggy with oil stains, common fenestral porosity, also

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oil stained; grainstone to boundstone, very fossiliferous, light intraparticle oil staining, dull yellow fluorescence, slow streaming dull yellow green cut.

3167' – 3199' Zone J; **LIMESTONE**: white (N9) to light gray (N7), occurs as ~1mm sub-rounded grains/chips and ~5mm blocky chips, firm to hard, locally fossiliferous - fossils mainly occur as loose crinoid hash, reacts vigorously to HCl; also fossiliferous grainstone, rare pyrite, dull yellow fluorescence, slow streaming blue white cut; and **SHALE**: med dark gray (N4) to a dark greenish gray (5G 4/1), platy to sub blocky, soft to mod firm, locally micaceous, locally calcareous.

3199' – 3235' Zone K; **LIMESTONE**: mottled pale yellowish brown (10YR 6/2) with very light gray (N8), crystalline, firm to hard, blocky, locally fossiliferous, locally vuggy with oil residue, rare intercrystal porosity, instant fast streaming to cloudy white cut; and **LIMESTONE**: white (N9) to med light gray (N6) to mod yellowish brown (10YR 5/4), micrite, hard, blocky, locally vuggy, no oil stains, locally fossiliferous, weak slow streaming pale yellow cut; and **SHALE**: grayish black (N2) to a dark greenish gray (5G 4/1), platy, soft to mod firm, locally micaceous, locally silty, calcareous, no fluorescence, no cut.

3235' – 3251' Zone L; **LIMESTONE**: white (N9) to med light gray (N6) to moderate yellowish brown (10YR 5/4), micrite, locally crystalline, hard, locally soft and chalky, blocky, locally vuggy, no oil stains, locally fossiliferous, no fluorescence, no cut; and **LIMESTONE**: very pale orange (10YR 8/2) to pale yellowish brown (10YR 6/2), blocky, firm to hard, though can be soft, algal laminations visible, fossiliferous, no oil staining, patchy dull yellow fluorescence, no cut; and **SHALE**: med dark gray (N4) to a dark greenish gray (5G 4/1), platy to sub blocky, long thin blades common, soft to mod firm, locally micaceous, locally calcareous.

ARBUCKLE GROUP SAMPLE TOP: 3251' LOG: 3251' TVD: 3251' DATUM: -1495'

Overview: The Arbuckle Dolomite (Cambrian-Ordovician), composed mostly of light gray to white, vuggy dolomite, was the primary target for the Roetzel ‘A’ #26 well. Drill cuttings commonly had oil-stained, visible porosity and a strong petroliferous odor. Total Gas was between 100-150 units in the top 9’ of the dolomite. Solvent tests often yielded instant bright white-blue fast streaming cuts with white halos. The second DST resulted in 932’ of oil.

3251' – 3260' TD **DOLOMITE**: white (N9) to buff, crystalline, sucrosic texture common, visible porosity, hard, vugs common, no stain in Alizarin Red, slow mild reaction in HCl, strong petroliferous odor, yellow fluorescence, instant bright white blue fast streaming cut and milky cloud, white halo.

SERVICES

CONTRACTOR:	Val Energy Rig 2	Wichita, KS
SUPERVISION:	L.E. Ed Buchanan	661-204-2565
WELLSITE GEOLOGY:	T. M. McCoy & Co., Inc. Ryan J. Thress	Wilson, WY 307-733-4332
RIG INSTRUMENTATION:	Pason Systems	Golden, CO 877-255-3158
WIRELINE SERVICES:	Pioneer Energy Services Dale Legleiter	Hays, KS 785-625-3858
DRILLSTEM TESTING:	Trilobite Testing, Inc. Andy Carriera	Hays, KS 785-625-4778
PRODUCTION CASING:	Murray Casing Crews Inc.	Great Bend, KS 620-793-7587
CEMENT:	Allied Oil & Gas Services	Great Bend, KS 620-793-3600

DAILY OPERATIONS

Day	Report Date	Depth	Ft Cut	Start	End	Hrs	Reported Activity (previous 24 hr leading to 6am report time)
0	9/24	0	0	07:00	21:00	00:00	Mobe in rig & rig up equipment. Welder fabricate sample box for Pason gas detector.
				21:00	23:30	12:00	Drill rat & mouse holes
				23:30	06:00	12:00	Dry watch rig
							Note: Will spud 12.25" surface hole tomorrow morning 9/24/2013
1	9/25	1037	1037	06:00	06:30	12:00	Dry watch rig
				06:30	08:15	18:00	Finish rig up to spud 12.25" hole
				08:15	15:15	00:00	Drlg 12.25" surface hole F/surface T/420'
				15:15	15:30	06:00	Service rig
				15:30	04:00	12:00	Drlg 12.25" surface hole F/420' T/1037'
				04:00	04:30	12:00	Circ hole clean
				04:30	06:00	12:00	Wipe hole to bit
2	9/26	1037	0	06:00	06:45	18:00	Wipe hole RIH tagged at 1022' (15' fill)
				06:45	07:15	12:00	Circ hole clean
				07:15	08:30	06:00	Drop survey tool . Pooh
				08:30	12:15	18:00	3rd party safety meeting with rig crew & casing crew. R/U power tongs. Run 24 jts 24# 1040.27' J-55 ST&C 8rd 8 5/8" csg. Shoe set @ 1037', float collar @ 992'
				12:15	13:00	18:00	Install 8 5/8" circ swedge & circ 12' fill to bottom at 1037'. Reciprocate 20' while circ casing clean. R/D casing tongs. Hold 3rd party safety meeting with rig crew & cementers. Install 8 5/8" cement head
				13:00	14:15	06:00	Test lines to 2000psi. Pump 5bbls fresh water ahead followed by 591/ft3 or 105bbls or 300sx of Lead Cmt Yield=1.97ft3/sx Density=12.5ppg Water=10.7gal/sx followed by 234/ft3 or 41.6bbls or 200sx of Tail Cmt Yield=1.17ft3/sx Water=6.4gal/sx Density=14.8ppg. Drop wiper plug displace with 63.43bbls fresh water. Bump plug with 800psi with 300psi prior. Hold 800 psi for 5 minutes, release pressure, float held (ok) CIP @ 14:15hrs 9/25/2013 Received 23bbls good cmt returns to surface

DAILY OPERATIONS

Day	Report Date	Depth	Ft Cut	Start	End	Hrs	Reported Activity (previous 24 hr leading to 6am report time)
							Monitor cmt for fall back, no fall back (ok) R/D cementers
				14:15	02:15	00:00	Wait on cement
				02:15	05:15	00:00	Break off landing joint, Install Larkin wellhead. N/U annular Bop. Welder cut off 10" top of flow nipple
				05:15	06:00	18:00	Make up bit #2 7.875" tricone bit, BHA & RIH
3	9/27	2022	985	06:00	06:30	12:00	RIH tagged cement at 986'
				06:30	07:00	12:00	Service Rig
				07:00	07:45	18:00	Calibrate Pason recorder equipment
				07:45	08:45	00:00	Drlg out cement & shoe F/986' to shoe @ 1037'. 51' / 1hr / 51 fph
				08:45	14:30	18:00	Drlg 7 7/8" hole F/1037' T/1390'. 353' / 5.75hrs / 61.39 fph
				14:30	14:45	06:00	Service Rig
				14:45	19:00	06:00	Drlg 7 7/8" hole F/1390' to 1585'. 195' / 4.25hrs / 45.88 fph
				19:00	20:00	00:00	Crown-a-matic bracket broke off, relaese brakes. Pooh 4 stands to 1359'. Weld on crown-a-matic bracket. RIH T/1585'
				20:00	22:45	18:00	Drlg 7 7/8" hole F/1585' T/1771'. 186' / 2.75hrs / 67.63 fph
				22:45	23:00	06:00	Service Rig
				23:00	23:45	18:00	Drlg 7 7/8" hole F/1771' T/1802'. 31' / 0.5hrs / 62 fph
				23:45	00:00	06:00	Repair auto driller
				00:00	05:15	06:00	Drlg 7 7/8" hole F/1802' T/2019'. 217' / 5.25hrs / 41.33 fph
				05:15	05:45	12:00	Survey at 2019'
				05:45	06:00	06:00	Drlg 7/ 7/8" hole F/2019' T/2022'. 3' /0.25hrs / 12 fph
4	9/28	2688	666	06:00	06:45	18:00	Drlg 7 7/8" hole F/2022' T/2051'. 29' / 0.75hrs / 38.66 fph
				06:45	07:00	06:00	Service Rig
				07:00	12:00	00:00	Drlg 7 7/8" hole F/2051' T/2285'. 234' / 5hrs / 46.8 fph
				12:00	12:30	12:00	Pooh T/1979', main rotary chain busted. Pvc flow line broke off flow nipple from Bop Surface casing has grown 14".

DAILY OPERATIONS

Day	Report Date	Depth	Ft Cut	Start	End	Hrs	Reported Activity (previous 24 hr leading to 6am report time)
				12:30	13:30	00:00	Main input chain in drawworks to rotary clutch broke, repair same
				13:30	14:15	18:00	Pooh F/1979' to surface
				14:15	18:15	00:00	N/D Bope, Have welder cut 2' out of surface csg to lower wellhead by two foot, N/U Bope, install flow line
				18:15	19:15	00:00	RIH T/1037' tagged bridge below shoe
				19:15	19:45	12:00	Wash out bridge F/1037' to 1099'. (wash 62' bridge)
				19:45	20:00	06:00	RIH F/1099' T/2210' tagged bridge
				20:00	20:15	06:00	Wash out bridge F/2210' T/2285' (wash 75' fill to bottom)
				20:15	23:00	18:00	Drlg 7 7/8" hole F/2285' T/2422'. 137' / 2.75hrs / 49.81 fph
				23:00	23:15	06:00	Service Rig
				23:15	00:30	06:00	Drlg 7 7/8" hole F/2422' T/2495'. 73' / 1.25hrs / 58.4 fph
				00:30	01:00	12:00	Clean suction pit to displace hole with chemical mud
				01:00	06:00	00:00	Drlg 7 7/8" hole F/2495' T/2688'. 193' / 5hrs / 38.6 fph (Mud displacement completed at 2520')
5	9/29	3060	372	06:00	06:45	18:00	Drlg 7 7/8" hole F/2688' T/2703'. 15' / 0.75hrs / 20 fph
				06:45	07:00	06:00	Service Rig (EDR down reboot same)
				07:00	15:00	00:00	Drlg 7 7/8" hole F/2703' T/3015'. 312' / 8hrs / 39 fph
				15:00	15:30	12:00	Service Rig
				15:30	17:15	18:00	Drlg 7 7/8" hole F/3015' T/3060'. 45' / 1.75hrs / 25.7 fph
				17:15	17:45	12:00	Circulate bottoms up
				17:45	19:15	12:00	Wipe hole to shoe at 1037'. RIH to 3060'
				19:15	20:15	00:00	Circulate 60 minutes 2 x bottoms up
				20:15	22:15	00:00	Drop survey tool, Pooh for DST #1 (Strap drill pipe out)
				22:15	23:00	18:00	Pick up & make up DST tools
				23:00	00:45	18:00	RIH with DST #1
				00:45	05:15	12:00	Open DST tool. (IF) 15 minutes had 1 minute bottom of bucket blow, (ISI) 60 min, (FF) 60 min, (FSI)120 min

DAILY OPERATIONS

Day	Report Date	Depth	Ft Cut	Start	End	Hrs	Reported Activity (previous 24 hr leading to 6am report time)
				05:15	06:00	18:00	Pooh with DST #1 Note: Bit #2 looks new Note: Pason EDR system went down several times today, Pason showed up @ 03:30hrs 9/29/2013 to repair same
6	9/30	3260	200	06:00	06:30	12:00	Pooh with DST #1, gas at 1330', shut down & wait for daylight
				06:30	07:45	06:00	Wait on daylight to finish Pooh with DST #1
				07:45	08:45	00:00	Pooh with DST #1. 2 hand held H2S montitors alarms going off, 38 & 38.9ppm H2S
				08:45	10:30	18:00	Wait on floor fan & breeze to finish trip out with DST #1. Rig up floor fan
				10:30	11:00	12:00	Pooh with DST #1 (Very gassey)
				11:00	11:45	18:00	Remove clocks & lay down DST tools
				11:45	13:00	06:00	Make up bit #2, BHA & RIH to 493'
				13:00	14:15	06:00	Bit plugged. Pooh BHA rebuild drill string float
				14:15	16:45	12:00	Make up bit #2, BHA & RIH to 3060' (fill pipe at 1458')
				16:45	23:00	06:00	Drlg 7 7/8" hole F/3060' T/3234'. 174' / 6.25hrs / 27.8 fph
				23:00	03:00	00:00	Drlg 7 7/8" hole in 5' increments. Circ samples F/3234' t 3260'. 26' / 4hrs / 6.5 fph
				03:00	04:15	06:00	Wipe hole 10 stands F/3260' T/2609', RIH to 3260'
				04:15	05:15	00:00	Circ hole clean for DST #2
				05:15	06:00	18:00	Pooh for DST #2
7	10/1	3260	0	06:00	07:00	00:00	Pooh for DST #2
				07:00	07:30	12:00	Make up tools for DST #2
				07:30	08:30	00:00	RIH with DST #2
				08:30	13:00	12:00	Open DST for 15 min (IF) bottom of bucket 20 sec. (ISI) 60 min gas to surface bottom of bucket in 12 min. (FF) 60 minutes, bottom of bucket immediately caught gas sample 2nd open (FSI) 120 min
				13:00	13:30	12:00	Release packers. Pooh with DST #2 to 2567', oil & gas at 11 stands out with 28-30 ppm H2S gas
				13:30	14:30	00:00	Wait on vac truck to reverse out oil from DST #2

DAILY OPERATIONS

Day	Report Date	Depth	Ft Cut	Start	End	Hrs	Reported Activity (previous 24 hr leading to 6am report time)
				14:30	16:00	12:00	Reverse out 9bbls live oil to vac truck, reverse 20bbls gassey water to reserve pit (Estimate 12bbls oil recovery DST #2)
				16:00	16:45	18:00	Pooh with DST #2
				16:45	17:45	00:00	Remove clocks & lay down DST tools
				17:45	19:30	18:00	Make up bit #2, BHA & RIH to 3260' (Fill BHA at 500')
				19:30	20:00	12:00	Circulate bottoms up
				20:00	20:30	12:00	Wipe hole 12 stands to 2500', RIH to 3260'
				20:30	22:00	12:00	Circulate hole clean for logs
				22:00	23:30	12:00	Pooh for logs
				23:30	06:00	12:00	Held 3rd party safety meeting with rig crew & Pioneer loggers. R/U logging tools. Run GR-DILL-CND / GR on bottom / Son-Mill. Drillers TD=3260' Loggers TD=3257'. R/D Loggers
8	10/2	3260	0	06:00	06:45	18:00	Make up 7 7/8" bit #2, BHA T/493' (Fill BHA)
				06:45	07:15	12:00	Service Rig
				07:15	08:30	06:00	Crew & Tools cost
				08:30	11:30	00:00	Circulate hole clean for 5.5" production casing (Unload 5.5" casing, drift, clean threads, & strap same)
				11:30	15:45	06:00	Lay down drill pipe, dcs', swivel, kelly,rat hole & mouse hole
				15:45	18:00	06:00	Held 3rd party safety meeting with rig crew & casing crew. R/U power tongs. Run 79 jonts of 15.5#/ft 5.5" production csg. Shoe set @ 3250', latch plug @ 3213.10', flag joint @ 2821.44'. R/D casing tongs & tools (Baker-Lok triplex shoe & 2nd jnt csg)
				18:00	19:30	12:00	Install head, circulate to bottom, mark csg & pickup 10' off bottom @ 3250'. Drop ball set cement basket & open sliding sleeve Held 3rd party safety meeting with rig crew & cementers while circulate 5.5" csg
				19:30	21:00	12:00	Test lines to 2000psi, pump 5bbls fresh water, followed by 10bbls mud flush, followed by 5bbls fresh water.

DAILY OPERATIONS

Day	Report Date	Depth	Ft Cut	Start	End	Hrs	Reported Activity (previous 24 hr leading to 6am report time)
							Mix 30sx cmt pump in rat hole, mix 20sx cmt pump in mouse hole. Pump 274.75/ft3 or 48.93bbls or 175sx of ASC cmt rate of 6 bpm Yield=1.57ft3/sx Water=7.23gal/sx Density=14.5ppg. Shut down flush lines clean, drop latch plug, displace with 76.47bbls fresh water. Bump plug with 1100psi with 500psi prior to bump rate of 5bpm. Hold 1100psi for 5 minutes, release pressure latch plug held (ok) CIP @ 21:00hrs
				21:00	22:30	12:00	N/D Bop & lift same, set 5.5" csg slips with 56K. Cut off 5.5" csg, L/D Bop. Cap 5.5" csg with weep hole. R/D cementers
				22:30	06:00	12:00	Clean mud pits, shovel out cuttings from same
9	10/3	3260	0	06:00	07:00	00:00	Finish clean out mud pits ((Release Val Rig #2 @ 07:00hrs 10/02/2013))
				07:00	13:00	00:00	Return 7 joints 5.5" & 12' cut 5.5" csg with weld head, nipple, ball valve, bull plug & csg thread dope to Sunrise yard Pason R/D gas detector, geologist work station, rig monitor equipment
				13:00	06:00	00:00	Dry watch rig (Wait for morning to R/D & load out Hoppes & Pason equipment) Hoppes will be Here in the morning between 09:00 /10:00hrs 10/03/2013 to R/D man camp & equipment & move out same Pason will be here in morning 08:00hrs 10/03/2013 to R/D Satelite System & move out same
10	10/4	3260	0	06:00	08:00	00:00	Wait for Pason & Hoppes
				08:00	14:00	00:00	R/D Pason Satelite System, load out same. R/D Hoppes man camp, potable water tank, generator,pump out septic tanks & load out all equipment Rainbow Trucking loading up & moving Val Rig #2 off location at 07:00hrs

Berenergy Corporation
H. J. Roetzel 'A' #26

MUD RECORD

Date	Depth	Wt	Vis	PV	YP	Gels	WL	Cake	pH	Alkilinity	H_2O %	Chlorides	Solids	Sand	Calcium	LCM	Remarks
9/24	0																
9/25	1037	9.8	35														
9/26	1037	9.8	36	5	11	16/18	n/c	n/c	8.0		89	35,000	10.7	1		0.5	
9/27	2022	8.7	26	1	1	0	n/c	n/c	11.5	1.5	99.5	49,000	10.7	trace	hvy	0	
9/28	2688	9.3	30	4	5	2/2	n/c	n/c	7.0	0.0	95.4	49,000	4.6	trace	hvy	0	
9/29	3060	8.8	48	11	11	15/18	8.80	1	11.0	1.1/-	96.7	6,700	3.3	trace	20	0	
9/30	3260	9.2	49	13	11	10/52	9.20	2	10.5	0.45/-	94.7	7,100	5.3	trace	20	0	
10/1	3260	9.2	53	12	12	13/53	9.20	1	11.0	0.59/-	94	8,300	6	trace	0	0.5	
10/2	3260	9.2	68	16	14	18/64	9.60	2	10.5	0.33/-	94.2	9,500	5.8	trace	60	trace	
10/3	3260																
10/4	3260																

ABBREVIATIONS & UNITS

Weight (Wt)	lbs/gal
Viscosity (Vis)	sec/qt
Plastic Viscosity (PV)	centipoise
Yield Point (YP)	lbs/100 sq ft
Gel Strengths (Gels)	lbs/100 sq ft (10 sec / 10 min)
Filter cake	x/32"
Alkinlinity	ppm
H_2O %	% water by volume
Chlorides	ppm in water phase
Solids	% by volume
Sand	% by volume
Calcium	ppm in water phase
Lost circulation material (LCM)	lb/bbl added

Berenergy Corporation
H. J. Roetzel 'A' #26

BIT RECORD

Run	Bit	Size	Make	Serial No.	Type	Depth Out	Ft Cut	Hrs	Ft/Hr	WOB K	RPM	Pump Press	Pump GPM	Nozzle Size	Condition TBG	Reason Pulled
1	1	12 1/4	J2	N/A	Rerip Tricone	1037	1037	19.5	53.1	15	140	400	335	3x15	6/6/1/8"out	Surface Casing
1	2	7 7/8	J2	1315501	HA20 Tricone	1979	942	33.8	51.8	26-35	80-100	800	358	2x14-1x15	-	
2	2	7 7/8	J2	1315501	HA20 Tricone	3060	1081	44.5	45.7	26-35	80-100	800	358	2x14-1x15	1/1/IN	
3	2	7 7/8	J2	1315501	HA20 Tricone	3260	200	54.5	40.8	35	80	980	300	2x14-1x15	1/1/IN	

DEVIATIONS

MD ft	INC deg
0	0
1037	1
2019	1
3060	1

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC

Berenergy Corp.

PO Box 5850
Denver Co. 80217+5850

ATTN: Ryan Thress

24-20s-11w Barton

Roetzel "A" #~~25~~ 26

Job Ticket: 53630 **DST#: 1**

Test Start: 2013.09.28 @ 22:45:01

GENERAL INFORMATION:

Formation: LKC"D-F"
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 00:34:00
Time Test Ended: 11:33:30

Test Type: Conventional Bottom Hole (Initial)
Tester: Andy Carreira
Unit No: 68

Interval: 3016.00 ft (KB) To 3060.00 ft (KB) (TVD)
Total Depth: 3060.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

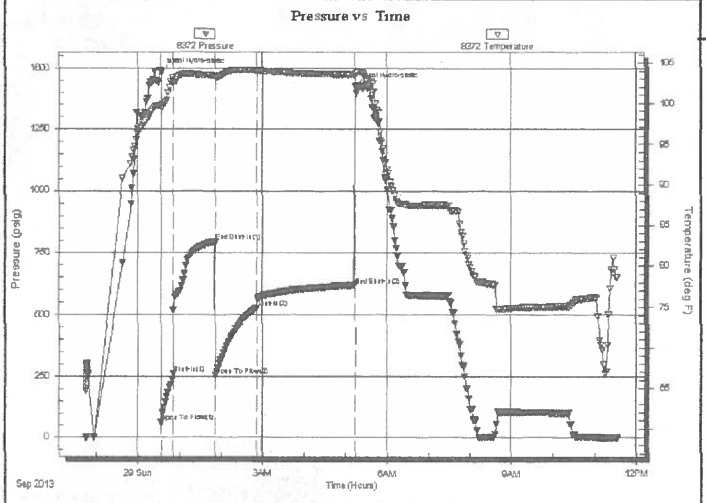
Reference Elevations: 1755.00 ft (KB)
1745.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 8372 **Inside**

Press@RunDepth: 527.90 psig @ 3021.00 ft (KB)
Start Date: 2013.09.28 End Date: 2013.09.29
Start Time: 22:45:01 End Time: 11:33:30

Capacity: 8000.00 psig
Last Calib.: 2013.09.29
Time On Btm: 2013.09.29 @ 00:33:30
Time Off Btm: 2013.09.29 @ 05:14:30

TEST COMMENT: IF:(15min) BOB in 1 Min.
ISI:(60min) No Return
FF:(60min) BOB in 2 min.
FSI:(120min) No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1482.09	99.79	Initial Hydro-static
1	61.56	99.44	Open To Flow (1)
18	261.12	102.65	Shut-In(1)
78	793.39	103.40	End Shut-In(1)
79	253.55	103.22	Open To Flow (2)
139	527.90	104.03	Shut-In(2)
281	618.31	103.54	End Shut-In(2)
281	1425.34	103.76	Final Hydro-static

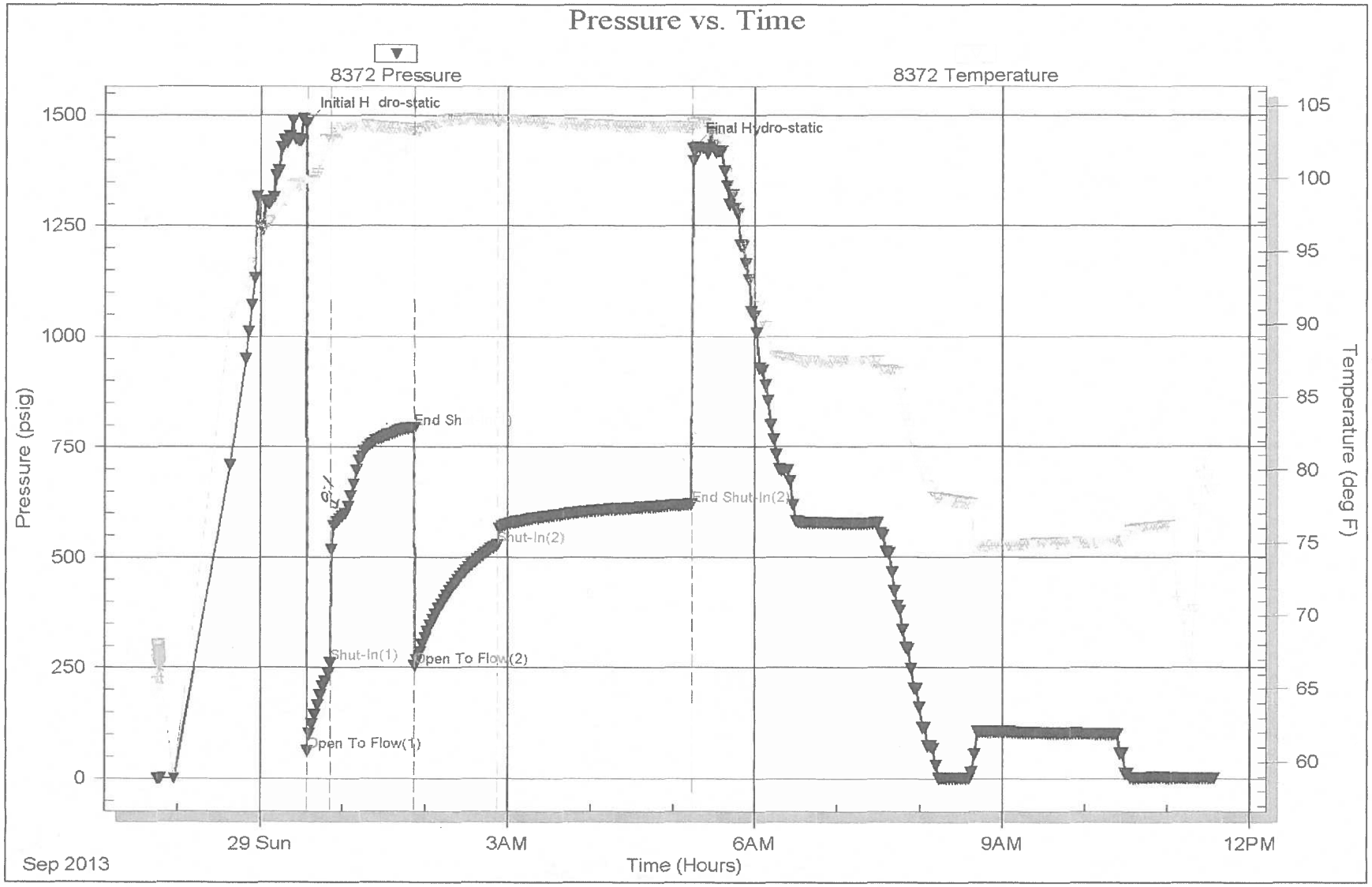
Recovery

Length (ft)	Description	Volume (bbl)
1299.00	MCGW g=15% m=10% w=75%	18.22
1.00	GO	0.01

Gas Rates

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

Serial #: 8372 **Inside** Berenergy Corp. Roetzel "A" #25 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 53630 Printed: 2013.09.29 @ 12:04:58

TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

4/10

Test Ticket

NO. 53630

Well Name & No. Roetzel "A" #2 Test No. 1 Date 9-28-13

Company BEREN ERGY CORP Elevation 1755 KB 1745 GL

Address PO BOX 37850 DENVER CO. 80217+5850

Co. Rep / Geo. RYAN THRESS Rig VAL #2

Location: Sec. 24 Twp. 20S Rge. 11W Co. BARTON State KS

Interval Tested 3016-3060 Zone Tested LKC "D-F

Anchor Length 44' Drill Pipe Run 3013 Mud Wt. ~~9.2~~ 8.8

Top Packer Depth 3011 Drill Collars Run 0 Vis ~~58~~ 52

Bottom Packer Depth 3016 Wt. Pipe Run 0 WL 8.8

Total Depth 3060 Chlorides 6700 ppm System LCM 0

Blow Description IF: BOB 1min

ISI: NO RETURN

FF: BOB 2min

FSI: NO RETURN

Rec 1	Feet of ~~MCGW~~ GO	%gas	%oil	%water	%mud
Rec 1299	Feet of MCGW	%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 1300 BHT 103° Gravity ____ API RW .273 @ 73 °F Chlorides 26000 ppm

(A) Initial Hydrostatic 1482

(B) First Initial Flow 61

(C) First Final Flow 261

(D) Initial Shut-In 793

(E) Second Initial Flow 253

(F) Second Final Flow 527

(G) Final Shut-In 618

(H) Final Hydrostatic 1425

Initial Open 15

Initial Shut-In 60

Final Flow 60

Final Shut-In 120

- ☑ Test
- ☑ Jars
- ☑ Safety Joint
- ☐ Circ Sub
- ☑ Hourly Standby 5hrs
- ☑ Mileage 180RT
- ☐ Sampler
- ☐ Straddle
- ☐ Shale Packer
- ☐ Extra Packer
- ☐ Extra Recorder
- ☐ Day Standby
- ☐ Accessibility

Sub Total

T-On Location 21:05

T-Started 22:45

T-Open ~~00:57~~ 00:42

T-Pulled 04:57

T-Out 11:40

Comments 5 hrs standby

- ☐ Ruined Shale Packer
- ☐ Ruined Packer
- ☐ Extra Copies

Sub Total

Total

MP/DST Disc't

Approved By L. Allen Brehm 9/29/2013 Our Representative Ryan Thress

DRILL STEM TEST REPORT

Berenergy Corp.

PO Box 5850
Denver Co. 80217+5850

ATTN: Ryan Thress

24-20s-11w Barton

Roetzel "A" #~~25~~ 26

Job Ticket: 53631 **DST#: 2**

Test Start: 2013.09.30 @ 06:38:01

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 08:28:30
Time Test Ended: 18:07:30

Test Type: Conventional Bottom Hole (Reset)
Tester: Andy Carreira
Unit No: 68

Interval: 3250.00 ft (KB) To 3260.00 ft (KB) (TVD)
Total Depth: 3260.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

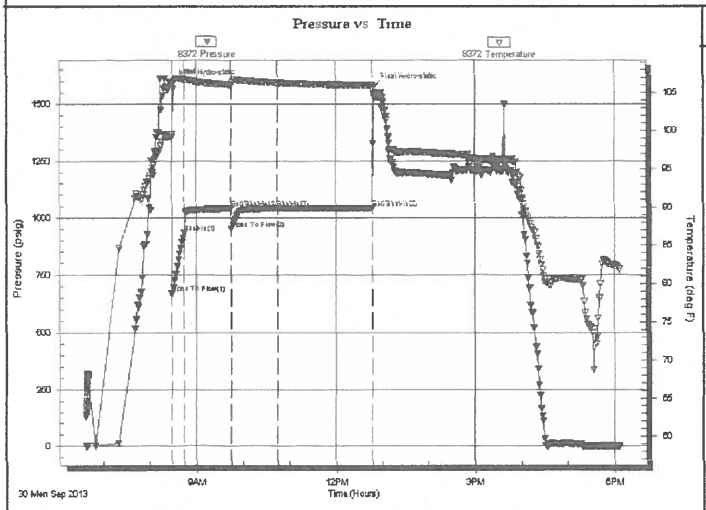
Reference Elevations: 1755.00 ft (KB)
1745.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 8372 **Inside**

Press@RunDepth: 1042.45 psig @ 3251.00 ft (KB)
Start Date: 2013.09.30 End Date: 2013.09.30
Start Time: 06:38:01 End Time: 18:07:30

Capacity: 8000.00 psig
Last Calib.: 2013.09.30
Time On Btm: 2013.09.30 @ 08:28:00
Time Off Btm: 2013.09.30 @ 12:49:30

TEST COMMENT: IF:(15min) BOB in 20 seconds
ISI:(60min) GTS during bleed off. Blow built to BOB in 12 min. Gas burned w/ orange flame
FF:(60min) BOB immediately. Gas TSTM
FSI:(120min) Return blow, built to BOB in 6 min. after bleed off



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1592.50	99.05	Initial Hydro-static
1	671.63	99.44	Open To Flow (1)
17	934.30	106.74	Shut-In(1)
77	1042.27	106.02	End Shut-In(1)
78	950.69	106.05	Open To Flow (2)
137	1042.45	106.30	Shut-In(2)
260	1043.84	105.95	End Shut-In(2)
262	1573.61	104.89	Final Hydro-static

Recovery

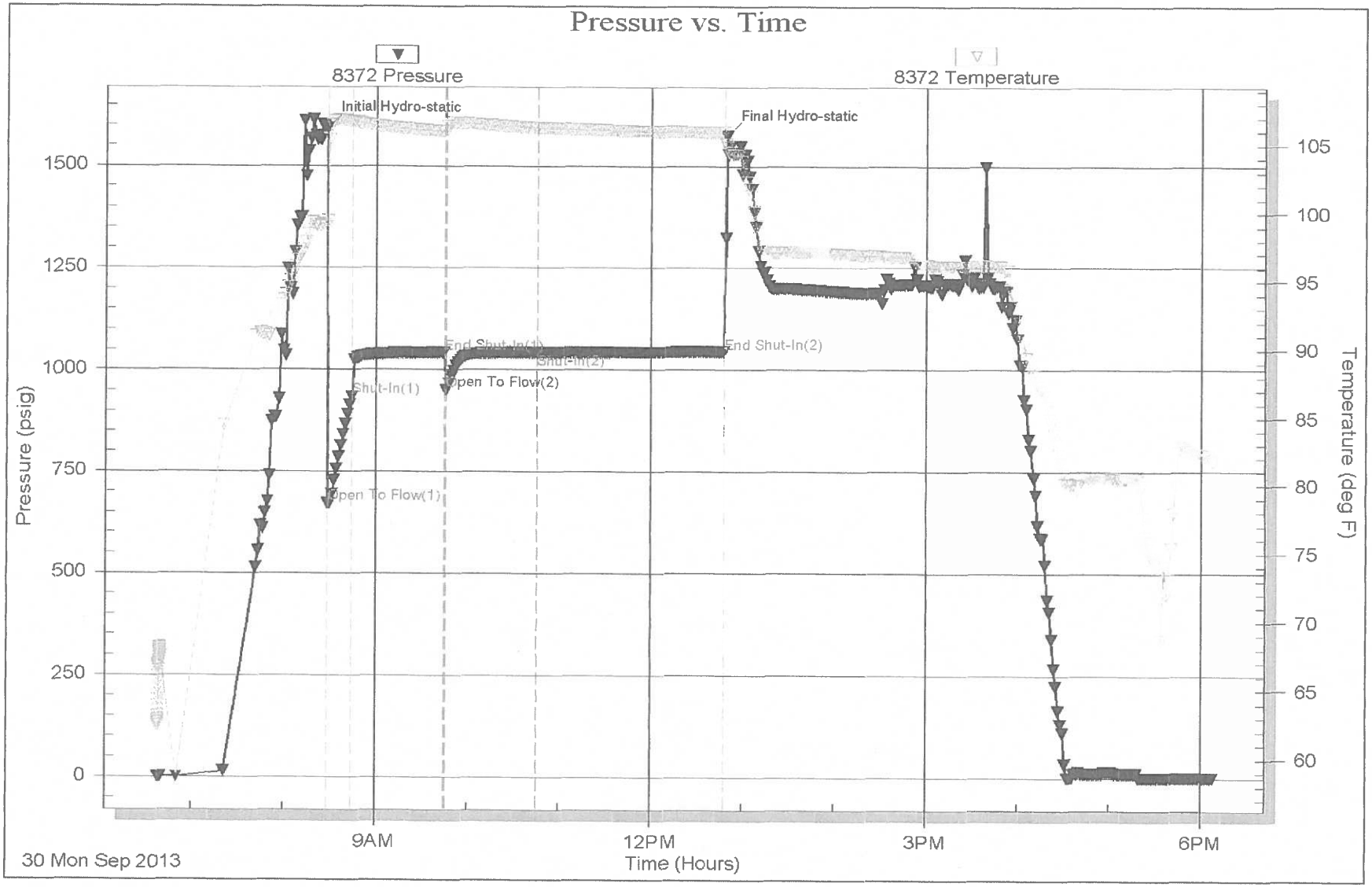
Length (ft)	Description	Volume (bbl)
1698.00	Water	21.85
932.00	Oil	12.00

* Recovery from multiple tests

Gas Rates

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

Serial #: 8372 **Inside** Berenergy Corp. Roetzel "A" #25 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 53631 Printed: 2013.09.30 @ 18:37:28

WF

NATURAL GAS ANALYSIS REPORT
GPA 2145-09

Sampled by:	Analyzed by:
Trilobite Testing, Inc.	Caraway Analytical, Inc
Hays, Kansas	P. O. Box 2137
Scott City, Kansas	Liberal, Kansas 67905
Phone: 800-728-5369	Phone: 620-482-2371
Fax: 785-625-5620	Fax: 620-626-7108

Lab Number:	20132235	Analyzed:	10/04/13
Sample From:	RUETZEL A-26	Pressure:	
Producer:	BERENERGY CORP	Temperature:	
Date:		Location:	24-20-11
Time:		County:	BARTON
Sampler:		State:	KANSAS
Source:	DST 2	Formation:	ARBUCKLE

		Mole %	GPM
Helium	He:	0.357	0.000
Hydrogen	H2:	0.000	0.000
Oxygen	O2:	0.000	0.000
Nitrogen	N2:	15.778	0.000
Carbon Dioxide	CO2:	0.027	0.000
Methane	C1:	36.899	0.000
Ethane	C2:	13.129	4.924
Propane	C3:	14.051	5.267
Iso Butane	iC4:	3.128	0.958
Normal Butane	nC4:	7.260	2.309
Iso Pentane	iC5:	2.096	0.575
Normal Pentane	nC5:	2.767	0.765
Hexanes Plus	C6+:	4.508	1.036
	TOTAL:	100.000	15.834
	Z Fact:	0.9994	
	SP.GR.:	1.1840	
	BTU (SAT):	1728.0 @ 14.73 psia	
	BTU (DRY):	1758.6 @ 14.73 psia	
	OCTANE RATING:	88.9	

COMMENTS: 303-297-951 0.000

TRILOBITE TESTING, INC.

P.O. Box 362 • Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 53631 Date 9-30-13

Company Name BEREXERGY CORP

Lease Roetzel "A" #26 Test No. 2

County Barton Sec. 24 Twp. 20s Rng. 11w

SAMPLER RECOVERY

Gas 2800 ML

Oil 300 ML

Mud — ML

Water 900 ML

Other — ML

Pressure 290 lbs ML

Total 4000 ML

PIT MUD ANALYSIS

Chlorides 8100 ppm.

Resistivity _____ ohms @ _____ F

Viscosity 53

Mud Weight 9.2

Filtrate 9.2

Other ½ # LCM

SAMPLER ANALYSIS

Resistivity .276 ohms @ 87 F

Chlorides 19000 ppm.

Gravity 40 corrected @60F

PIPE RECOVERY

TOP

Resistivity .276 ohms @ 87 F

Chlorides _____ ppm.

MIDDLE

Resistivity " ohms @ " F

Chlorides " ppm.

BOTTOM

Resistivity " ohms @ " F

Chlorides " ppm.

Printcraft Printers 9/01

TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

4/10

Test Ticket

NO. 53631

Well Name & No. Rutzel 'A' #26 Test No. 2 Date 9-30-13

Company BEREN Energy Corp Elevation 1755 KB 1745 GL

Address PO Box 5850 Denver Co. 80217 + 5850

Co. Rep / Geo. Ryan Theiss Rig VAL #2

Location: Sec. 24 Twp. 20s Rge. 11W Co. Barton State Ks

Interval Tested 3250-3260 Zone Tested Arbuckle

Anchor Length 10' Drill Pipe Run 3231 Mud Wt. 9.2

Top Packer Depth 3245 Drill Collars Run 0 Vis ~~49~~ 53

Bottom Packer Depth 3250 Wt. Pipe Run 0 WL 9.2

Total Depth 3260 Chlorides 8100 ppm System LCM ~~0~~ ½#

Blow Description IF: BOB in 20sec

ISI: GTS during bleedoff, Blow built to BOB in 12min.

FF: BOB immediately. GAS TSTM

FSI: Return Blow Built to BOB in 6min after bleedoff

Rec 932	Feet of Oil	%gas	%oil	%water	%mud
Rec ~~49~~ 1698	Feet of Water	%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 ~~2630~~ 2630 BHT 105° Gravity 40 API RW .276 @ 87 °F Chlorides 19000 ppm

(A) Initial Hydrostatic 1592	☑ Test ←	T-On Location 05:36	
(B) First Initial Flow 671	☑ Jars ←	T-Started 06:38	
(C) First Final Flow 934	☑ Safety Joint ←	T-Open 08:30	
(D) Initial Shut-In 1042	☐ Circ Sub	T-Pulled 12:45	
(E) Second Initial Flow 950	☑ Hourly Standby 3 hrs	T-Out 18:08	
(F) Second Final Flow 1042	☑ Mileage 180 RT	Comments Gas burned w/ orange flame	
(G) Final Shut-In 1043	☑ Sampler ←		
(H) Final Hydrostatic 1573	☐ Straddle	☐ Ruined Shale Packer	
	☐ Shale Packer	☐ Ruined Packer	
Initial Open 15	☐ Extra Packer	☐ Extra Copies	
Initial Shut-In 60	☐ Extra Recorder	Sub Total	
Final Flow 60	☐ Day Standby	Total	
Final Shut-In 120	☐ Accessibility	MP/DST Disc't	
	Sub Total		

Approved By L. Edward Buchman 9/30/2013 Our Representative Ryan Theiss

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.

T. M. MCCOY & CO., INC.

CONSULTING GEOLOGISTS
P.O. BOX 608 · WILSON, WYOMING 83014 · 307-733-4332

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

Well Name:	**Berenergy Corporation H.J. Roetzel 'A' #26**
Location:	**Barton County, Kansas**
License Number:	**15-009-25867**
Region:	
Spud Date:	**September 24, 2013**
Drilling Completed:	**September 30, 2013**
Surface Coordinates:	**2530' FNL & 775 FEL**
	SE NE Sec. 2, T20S, R11W
Bottom Hole Coordinates:	**Vertical Hole**
Ground Elevation (ft):	**1745'**
K.B. Elevation (ft):	**1756'**
Logged Interval (ft):	**1400'** **To: TD**
Total Depth (ft):	**3260'**
Formation:	**Chase Group through Arbuckle**
Type of Drilling Fluid:	**Fresh water and water based mud**

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: **Berenergy Corporation**
Address: **1888 Sherman St #600**
Denver, Colorado
80203

GEOLOGIST

Name: **Ryan Thress**
Company: **T. M. McCoy & Co., Inc.**
Address: **P.O. Box 608**
Wilson, WY 83014
307-733-4332

ROCK TYPES

- Gypsum
- Anhy
- Cht
- Cgl ss
- Dol
- Lmst
- Salt
- Shale
- Sh gybrn
- Sh red-brn
- Sh gy-grn
- Sltst--gray
- Sltst- red brn
- Ss
- Bent
- Sh--green
- Sltst brn
- Sh-brn-blk
- Slty sh rd-brn
- Lmy sh brn-blk
- Cement

ACCESSORIES

MINERAL
- Anhy
- Arg
- Calc
- Carb
- Chtdk
- Chtlt
- Dol
- Glau
- Gyp
- Minxl

- Nodule
- Pyr
- Sandy
- Silt
- Sil

FOSSIL
- Brach
- Fossil
- Pellet

STRINGER
- Sltstrg brn
- Sltsstrg rd-brn
- Shstrg gybrn
- Shstrg red-brn
- Shstrg gy red
- Arg
- Bent
- Dol
- Ls
- Sltsstrg gray

- Ssstrg
- Anhystrg
- Shstrg gy-grn
- Shstrg brn-blk
- Chtstrg
- Salt strg

TEXTURE
- Chalky
- Cryxln
- Microxln

OTHER SYMBOLS

POROSITY
- Earthy
- Fenest
- Fracture
- Inter

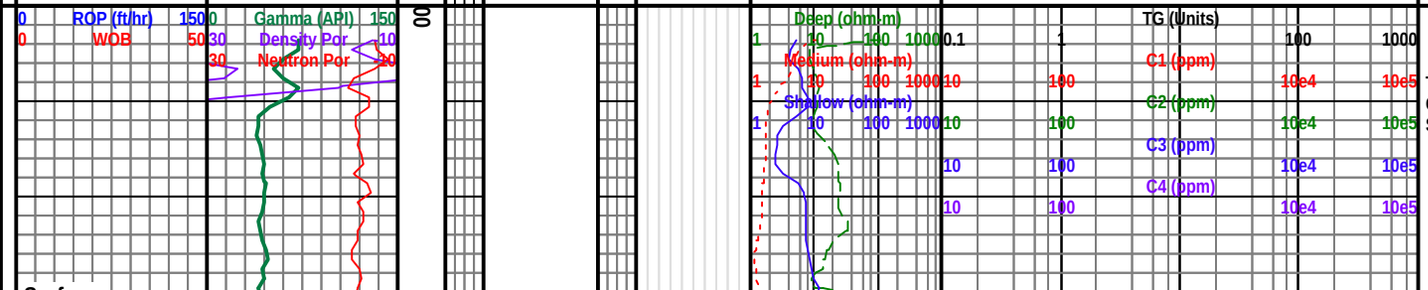
- Moldic
- Organic
- Pinpoint
- Vuggy

OIL SHOW

EVENT
- Csg shoe right
- Csg shoe left

- Off btm
- Connection
- Fm-bit line
- Csg shoe

Fm Tops	Engineering	ROP	GR, N-D Por	Depth	Porosity 0 - 24%	Lithology	Visual Show	% Lithology	Resistivity	TG, C1-C4	Geological Descriptions
		ROP (ft/hr) WOB	Gamma (API) Density Por Neutron Por						Deep (ohm-m) Medium (ohm-m) Shallow (ohm-m)	TG (Units) C1 (ppm) C2 (ppm) C3 (ppm) C4 (ppm)	

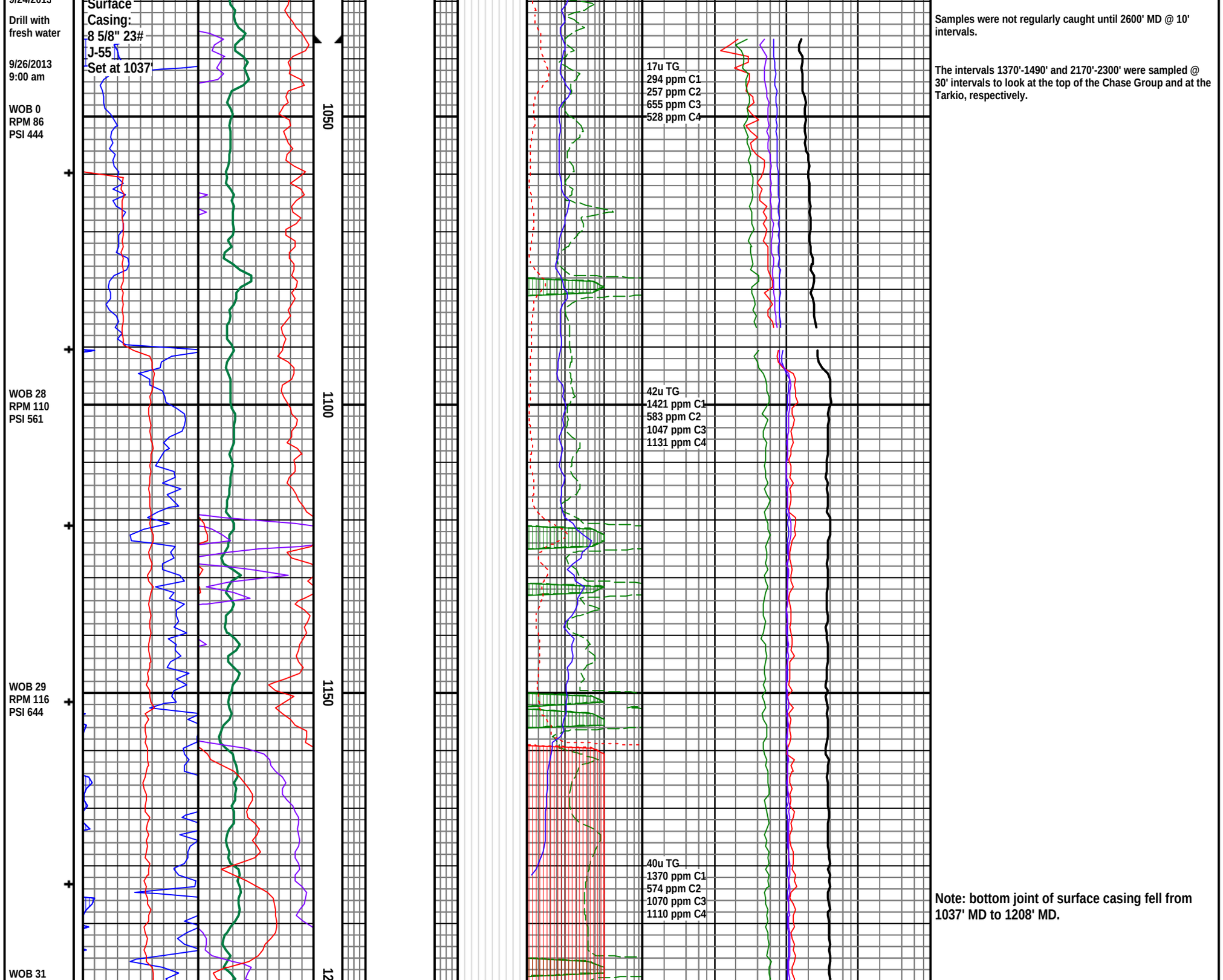


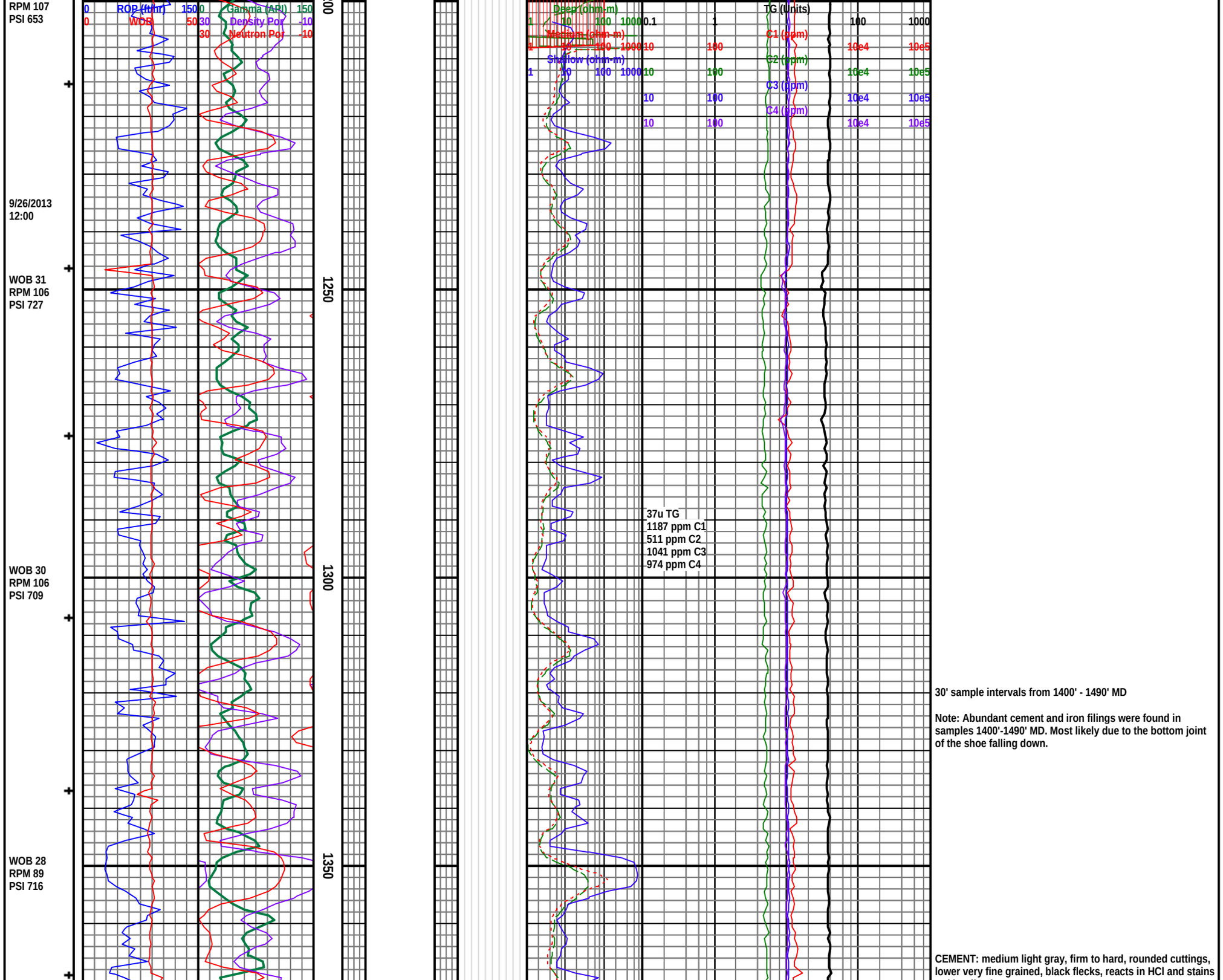
Ber-energy
H.J. Roetzel 'A' #26
KB 1753'

Rig: Val 2

SPUD 9/24/2013

T. M. McCoy & Co., Inc.
Consulting Wellsite Geologists
September 2013


9/24/2013
Drill with fresh water
9/26/2013 9:00 am
WOB 0
RPM 86
PSI 444
Surface Casing:
8 5/8" 23# J-55
Set at 1037'
WOB 28
RPM 110
PSI 561
WOB 29
RPM 116
PSI 644
WOB 31
1050
1100
1150
17u TG
294 ppm C1
257 ppm C2
655 ppm C3
528 ppm C4
42u TG
1421 ppm C1
583 ppm C2
1047 ppm C3
1131 ppm C4
40u TG
1370 ppm C1
574 ppm C2
1070 ppm C3
1110 ppm C4
Samples were not regularly caught until 2600' MD @ 10' intervals.
The intervals 1370'-1490' and 2170'-2300' were sampled @ 30' intervals to look at the top of the Chase Group and at the Tarkio, respectively.
Note: bottom joint of surface casing fell from 1037' MD to 1208' MD.



30' sample intervals from 1400' - 1490' MD

Note: Abundant cement and iron filings were found in samples 1400'-1490' MD. Most likely due to the bottom joint of the shoe falling down.

CEMENT: medium light gray, firm to hard, rounded cuttings, lower very fine grained, black flecks, reacts in HCl and stains

red in Alizarin

LIMESTONE: bluish white to light greenish gray, locally very pale orange, firm, platy cuttings, fossiliferous, locally sparry, very effervescent in HCl, no insoluble residue. No fluorescence, no cut, no shows.

SHALE: light olive gray to greenish gray, soft to firm, occasional platy cuttings, some zones very calcareous, others non calcaeous, without significant difference in appearance. Rare pyrite nodules, rare mollusc fossil.

GYPSUM: selenite crystals <3mm, pearly white to transluscent, fibrous stucture, soft but brittle. Likely rehydrated and recrystalized anhydrite.

ANHYDRITE: white to semi translucent, firm, amorphous structure, rounded, no reaction in HCl, produces selenite crystals when reprecipitated.

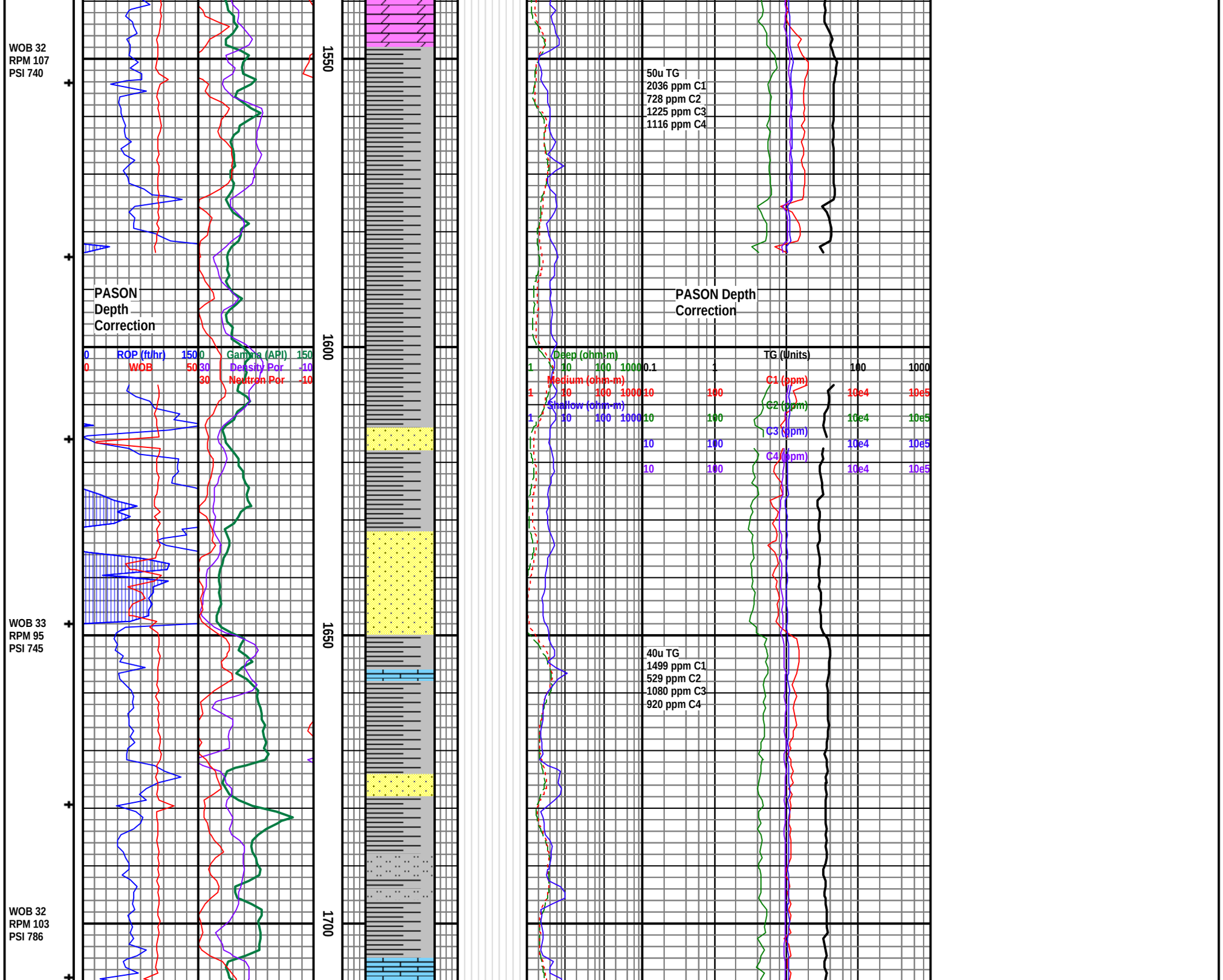
SHALE: light olive gray to greenish gray, soft to firm, occasional platy cuttings, some zones very calcareous, others non calcaeous, without significant difference in appearance, no fluorescence, no cut

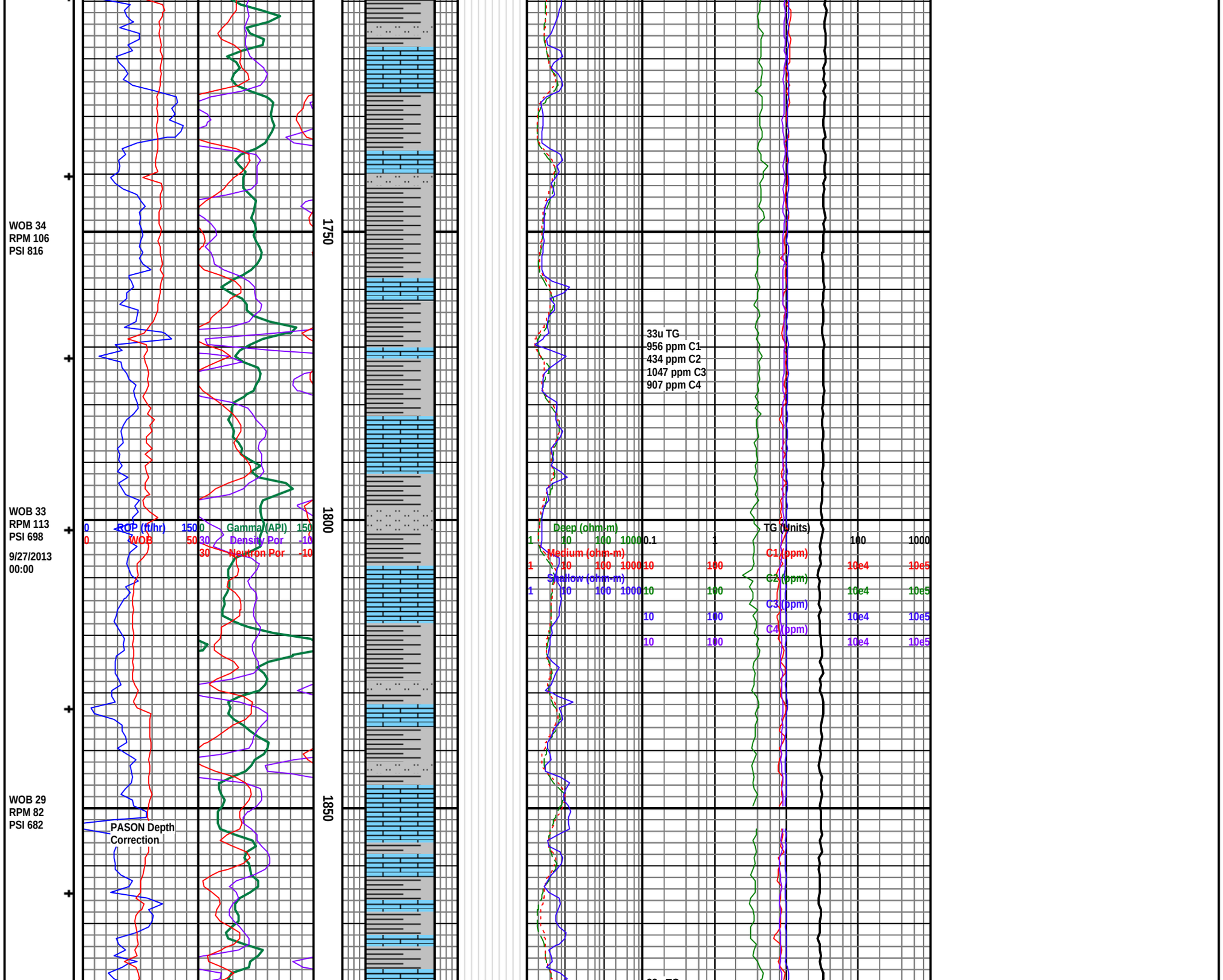
ANHYDRITE: white to clear, locally dark yellowish brown, semi translucent, firm, rounded cuttings, no reaction in HCl, produces selenite crystals when reprecipitated.

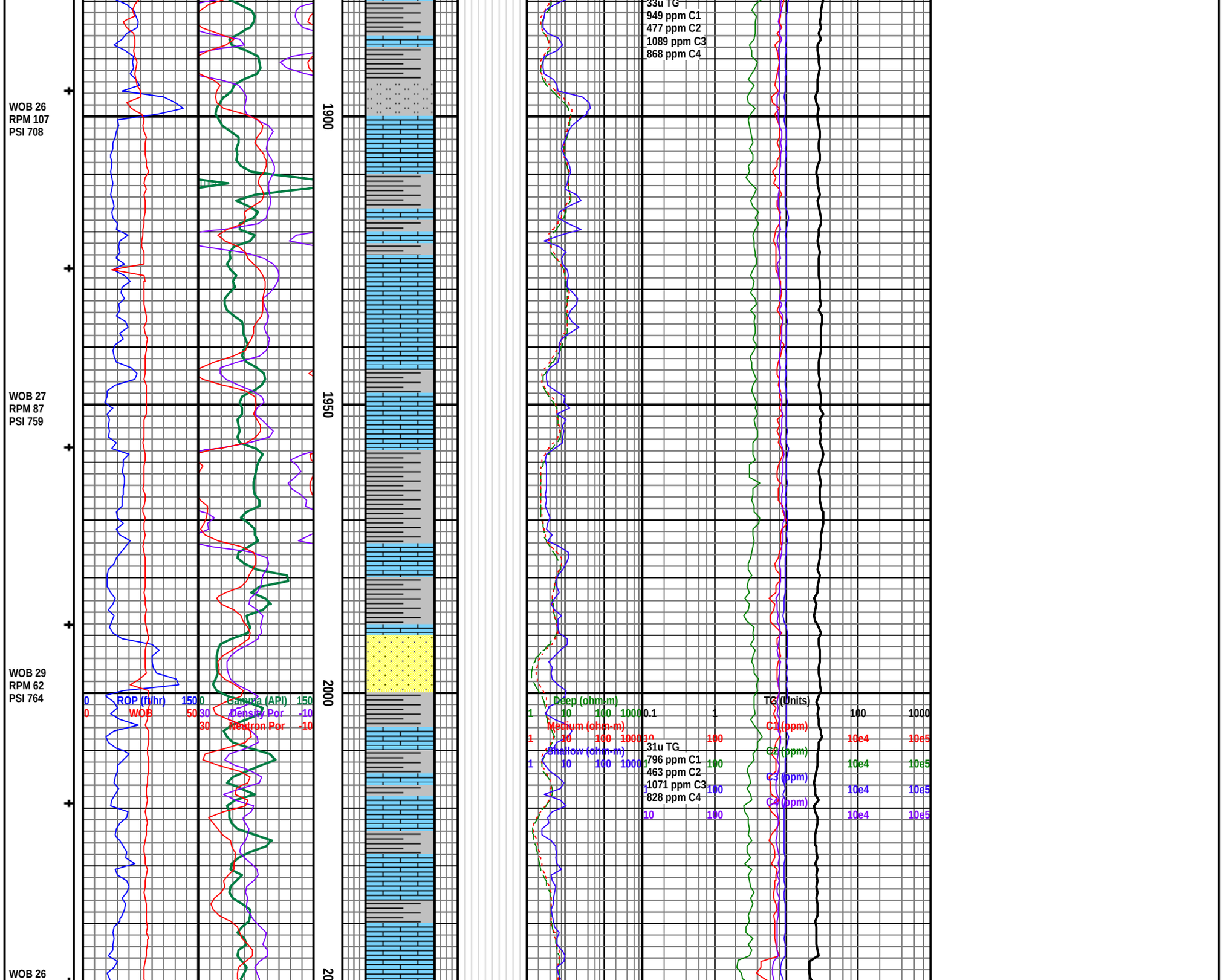
SILTSTONE: medium gray to medium dark gray, firm, blocky cuttings, significant very fine sand, calcareous.

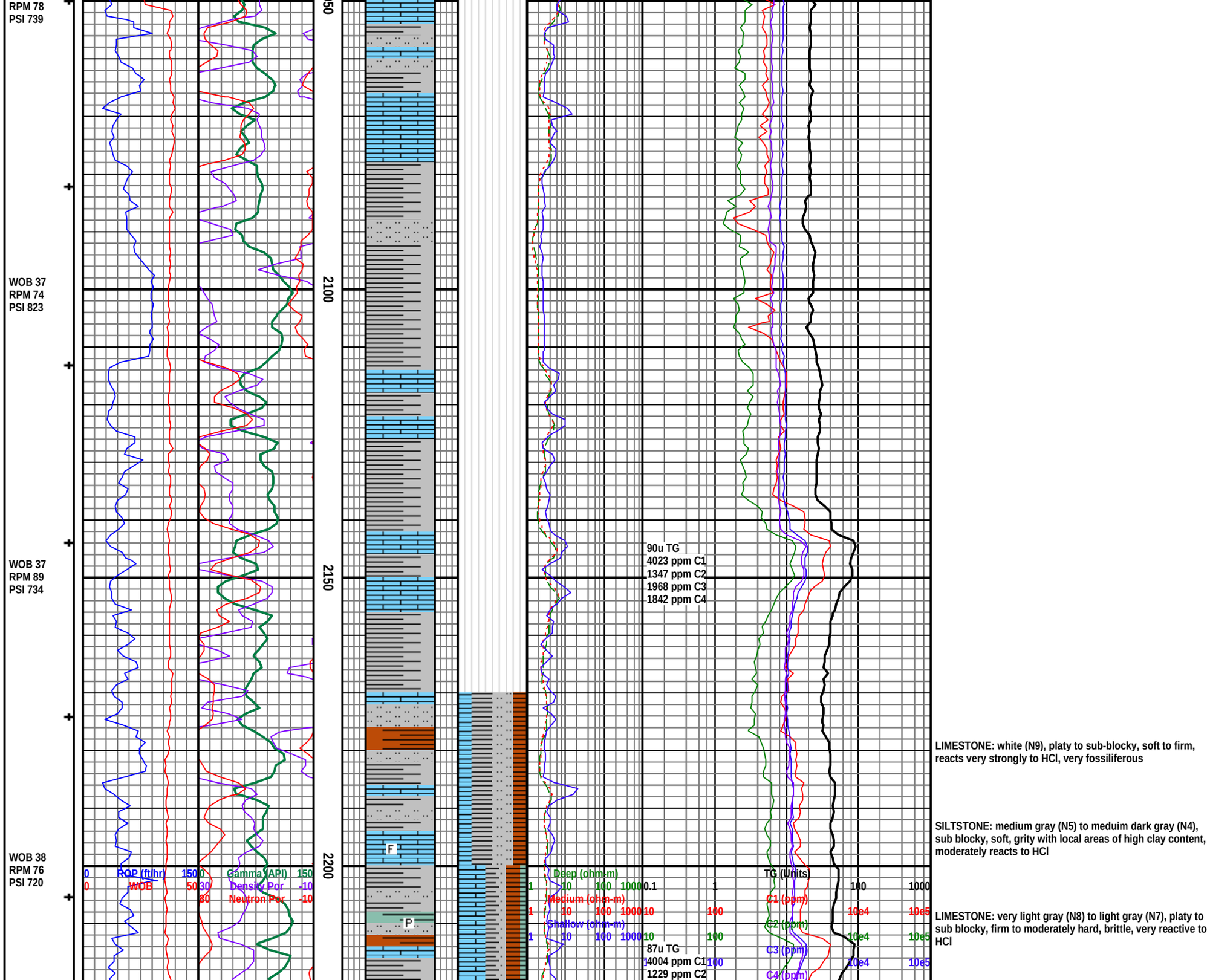
LIMY DOLOMITE: Light gray to medium gray, firm, sub-rounded cuttings, microcrystalline, effervescent in HCl, slight mottled stain in Alizarin, weak, diffuse cloudy dull yellow cut, patchy halo

trace CHERT: white to clear, hard, conchoidal fracture, no reaction with HCl.


WOB 32
RPM 107
PSI 740
WOB 33
RPM 95
PSI 745
WOB 32
RPM 103
PSI 786
1550
1600
1650
1700
PASON
Depth
Correction
0 ROP (ft/hr) 1500
0 WOB 50
Gamma (API) 150
30 Density Por -10
30 Neutron Por -10
Deep (ohm-m)
1 10 100 1000
Medium (ohm-m)
1 10 100 1000
Shallow (ohm-m)
1 10 100 1000
50u TG
2036 ppm C1
728 ppm C2
1225 ppm C3
1116 ppm C4
PASON Depth
Correction
TG (Units)
0.1 1 100 1000
C1 (ppm)
10 100 10e4 10e5
C2 (ppm)
10 100 10e4 10e5
C3 (ppm)
10 100 10e4 10e5
C4 (ppm)
10 100 10e4 10e5
40u TG
1499 ppm C1
529 ppm C2
1080 ppm C3
920 ppm C4


WOB 34
RPM 106
PSI 816
WOB 33
RPM 113
PSI 698
9/27/2013
00:00
WOB 29
RPM 82
PSI 682
1750
1800
1850
0 ROP (ft/hr) 150
0 WOB 50
Gamma (API) 150
30 Density Por -10
30 Neutron Por -10
PASON Depth
Correction
33u TG
956 ppm C1
434 ppm C2
1047 ppm C3
907 ppm C4
Deep (ohm-m)
1 10 100 1000
Medium (ohm-m)
1 10 100 1000
Shallow (ohm-m)
1 10 100 1000
TG (Units)
0.1 1 10 100 1000
C1 (ppm)
10 100 10e4 10e5
C2 (ppm)
10 100 10e4 10e5
C3 (ppm)
10 100 10e4 10e5
C4 (ppm)
10 100 10e4 10e5

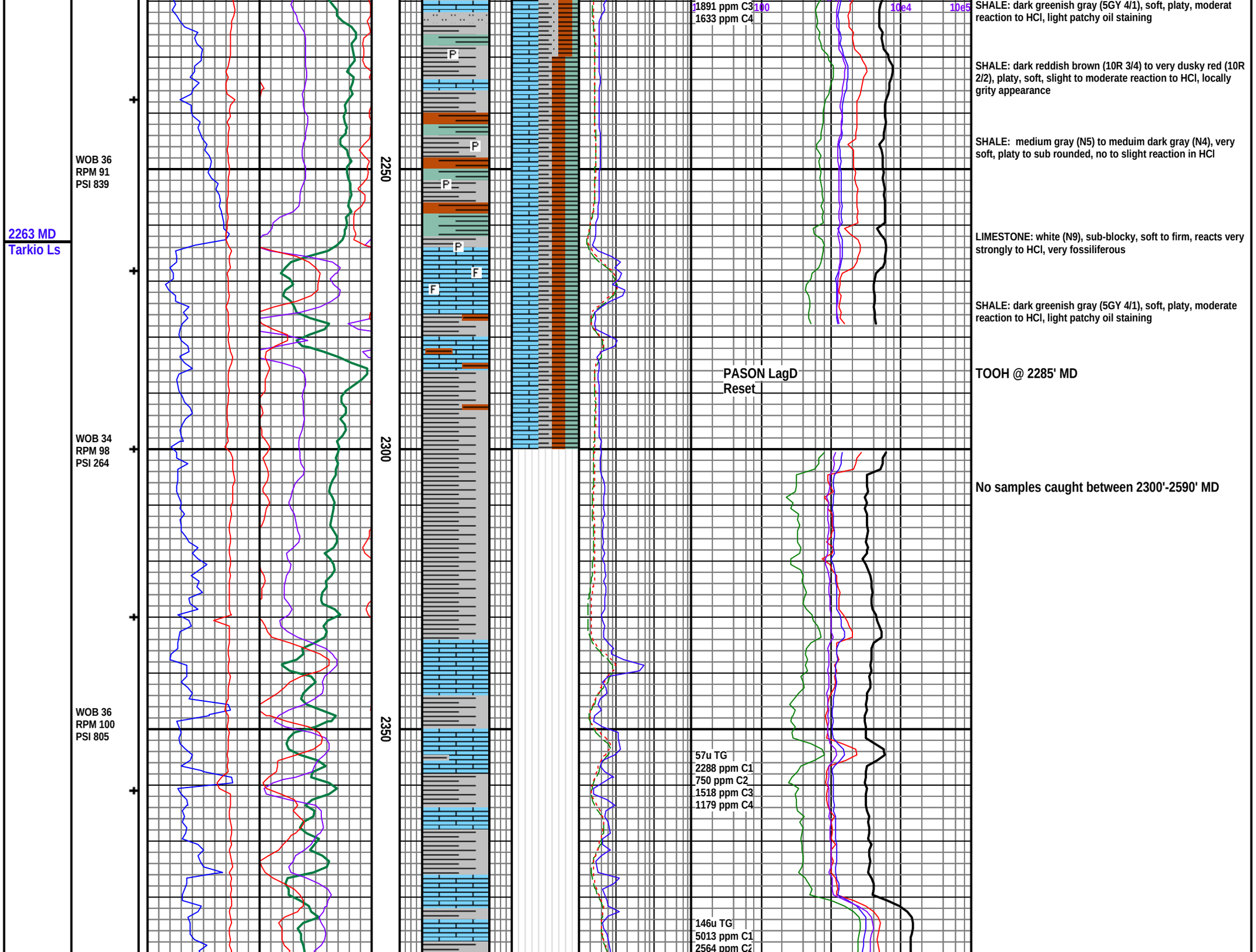

WOB 26
RPM 107
PSI 708
WOB 27
RPM 87
PSI 759
WOB 29
RPM 62
PSI 764
WOB 26
1900
1950
2000
2050
33u TG
949 ppm C1
477 ppm C2
1089 ppm C3
868 ppm C4
0 ROP (ft/hr) 1500
0 WOB 50
Gamma (API) 150
30 Density Por -10
30 Neutron Por -10
1 Deep (ohm-m) 1000
1 Medium (ohm-m) 1000
1 Shallow (ohm-m) 1000
31u TG
796 ppm C1
463 ppm C2
1071 ppm C3
828 ppm C4
TG (Units)
0.1 1 100 1000
C1 (ppm)
10 100 10e4 10e5
C2 (ppm)
C3 (ppm)
C4 (ppm)

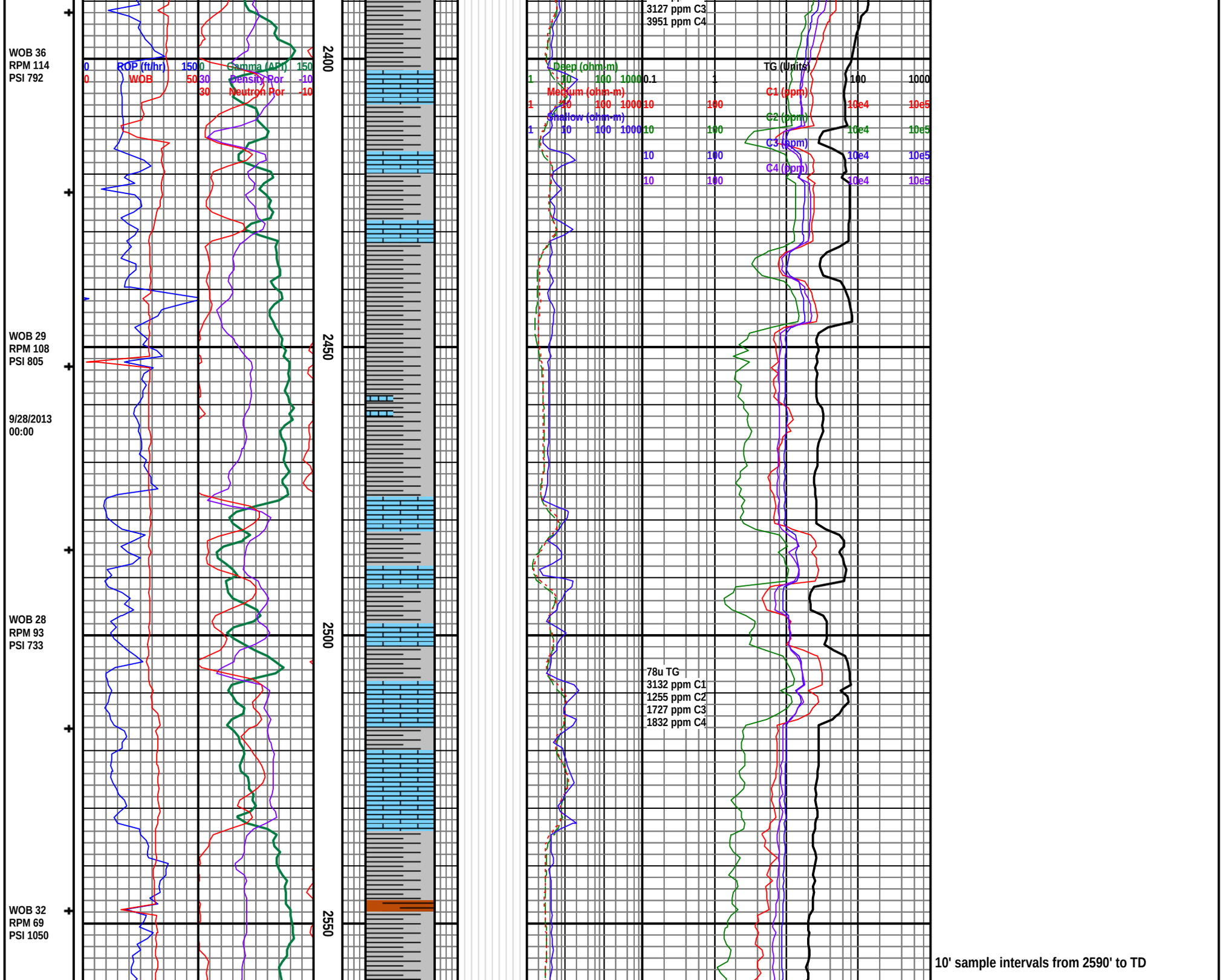


LIMESTONE: white (N9), platy to sub-blocky, soft to firm, reacts very strongly to HCl, very fossiliferous

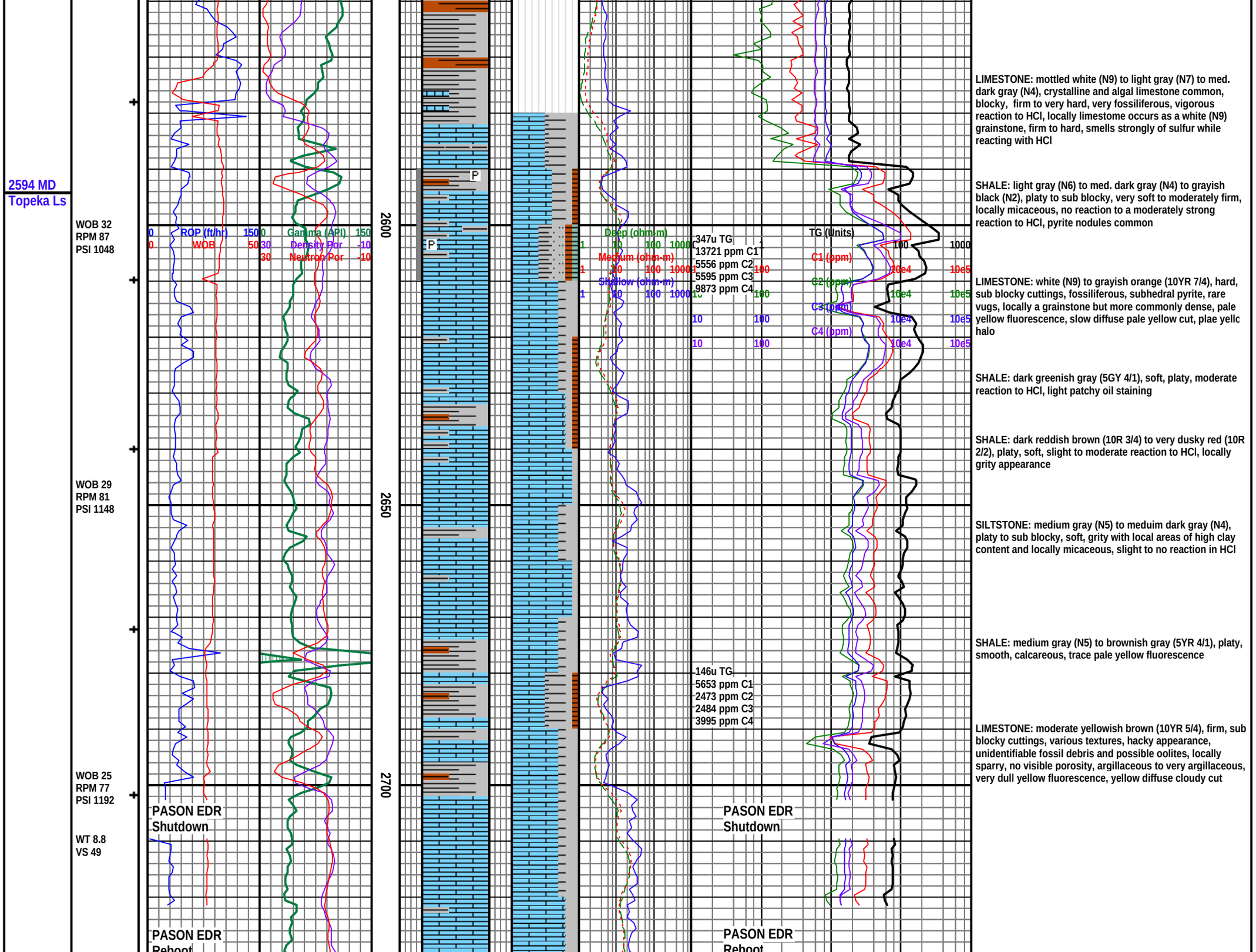
SILTSTONE: medium gray (N5) to meduim dark gray (N4), sub blocky, soft, grity with local areas of high clay content, moderately reacts to HCl

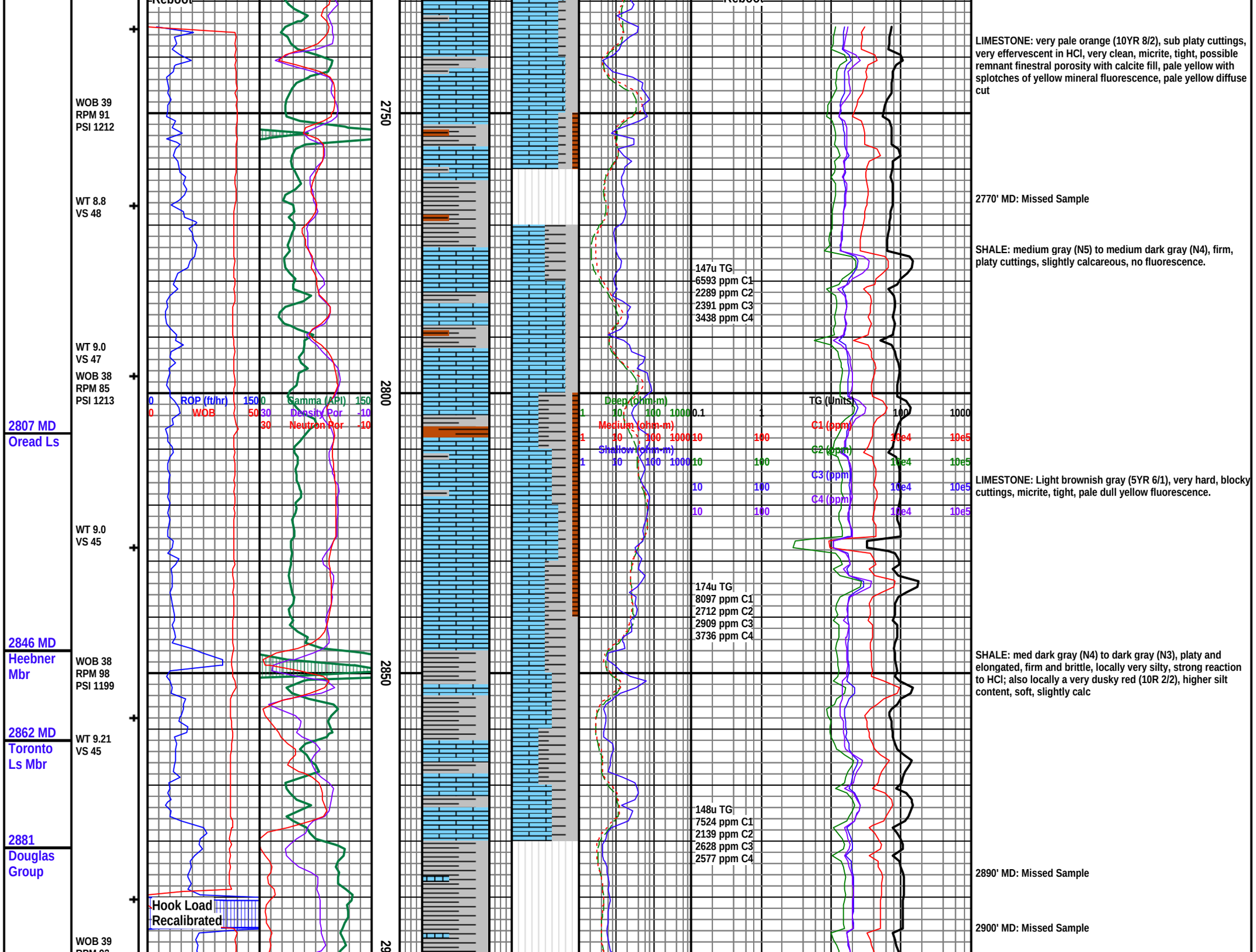
LIMESTONE: very light gray (N8) to light gray (N7), platy to sub blocky, firm to moderately hard, brittle, very reactive to HCl

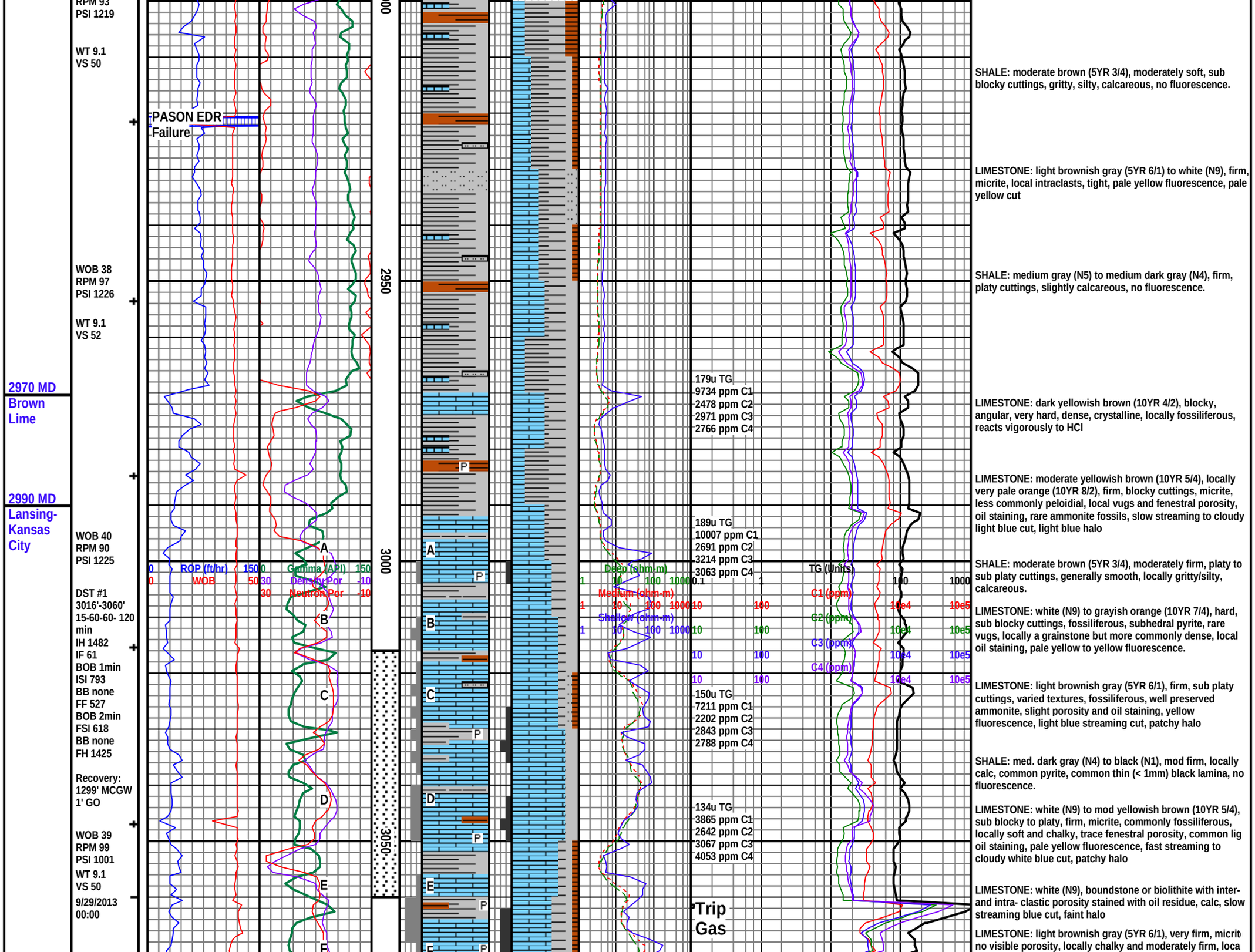

1891 ppm C3
1633 ppm C4
100
10e4
10e5
SHALE: dark greenish gray (5GY 4/1), soft, platy, moderat reaction to HCl, light patchy oil staining
SHALE: dark reddish brown (10R 3/4) to very dusky red (10R 2/2), platy, soft, slight to moderate reaction to HCl, locally grity appearance
SHALE: medium gray (N5) to meduim dark gray (N4), very soft, platy to sub rounded, no to slight reaction in HCl
WOB 36
RPM 91
PSI 839
2263 MD
Tarkio Ls
LIMESTONE: white (N9), sub-blocky, soft to firm, reacts very strongly to HCl, very fossiliferous
SHALE: dark greenish gray (5GY 4/1), soft, platy, moderate reaction to HCl, light patchy oil staining
PASON LagD
Reset
TOOH @ 2285' MD
WOB 34
RPM 98
PSI 264
No samples caught between 2300'-2590' MD
WOB 36
RPM 100
PSI 805
57u TG
2288 ppm C1
750 ppm C2
1518 ppm C3
1179 ppm C4
146u TG
5013 ppm C1
2564 ppm C2
2250
2300
2350
P
F



10' sample intervals from 2590' to TD


2594 MD
Topeka Ls
WOB 32
RPM 87
PSI 1048
WOB 29
RPM 81
PSI 1148
WOB 25
RPM 77
PSI 1192
WT 8.8
VS 49
0 ROP (ft/hr) 1500
0 WOB 50
Gamma (API) 150
30 Density Por -10
30 Neutron Por -10
Deep (ohm-m)
Medium (ohm-m)
Shallow (ohm-m)
1 10 100 1000
347u TG
13721 ppm C1
5556 ppm C2
5595 ppm C3
9873 ppm C4
146u TG
5653 ppm C1
2473 ppm C2
2484 ppm C3
3995 ppm C4
TG (Units)
C1 (ppm)
C2 (ppm)
C3 (ppm)
C4 (ppm)
100 1000
10e4 10e5
2600
2650
2700
PASON EDR
Shutdown
PASON EDR
Reboot
PASON EDR
Shutdown
PASON EDR
Reboot
LIMESTONE: mottled white (N9) to light gray (N7) to med. dark gray (N4), crystalline and algal limestone common, blocky, firm to very hard, very fossiliferous, vigorous reaction to HCl, locally limestome occurs as a white (N9) grainstone, firm to hard, smells strongly of sulfur while reacting with HCl
SHALE: light gray (N6) to med. dark gray (N4) to grayish black (N2), platy to sub blocky, very soft to moderately firm, locally micaceous, no reaction to a moderately strong reaction to HCl, pyrite nodules common
LIMESTONE: white (N9) to grayish orange (10YR 7/4), hard, sub blocky cuttings, fossiliferous, subhedral pyrite, rare vugs, locally a grainstone but more commonly dense, pale yellow fluorescence, slow diffuse pale yellow cut, plae yello halo
SHALE: dark greenish gray (5GY 4/1), soft, platy, moderate reaction to HCl, light patchy oil staining
SHALE: dark reddish brown (10R 3/4) to very dusky red (10R 2/2), platy, soft, slight to moderate reaction to HCl, locally grity appearance
SILTSTONE: medium gray (N5) to meduim dark gray (N4), platy to sub blocky, soft, grity with local areas of high clay content and locally micaceous, slight to no reaction in HCl
SHALE: medium gray (N5) to brownish gray (5YR 4/1), platy, smooth, calcareous, trace pale yellow fluorescence
LIMESTONE: moderate yellowish brown (10YR 5/4), firm, sub blocky cuttings, various textures, hacky appearance, unidentifiable fossil debris and possible oolites, locally sparry, no visible porosity, argillaceous to very argillaceous, very dull yellow fluorescence, yellow diffuse cloudy cut


Reboot
WOB 39
RPM 91
PSI 1212
WT 8.8
VS 48
WT 9.0
VS 47
WOB 38
RPM 85
PSI 1213
2807 MD
Oread Ls
WT 9.0
VS 45
2846 MD
Heebner Mbr
WOB 38
RPM 98
PSI 1199
2862 MD
Toronto Ls Mbr
WT 9.21
VS 45
2881
Douglas Group
Hook Load Recalibrated
WOB 39
2750
2800
2850
0 ROP (ft/hr) 1500
0 WOB 50
Gamma (API) 150
30 Density Por -10
30 Neutron Por -10
Deep (ohm-m)
Medium (ohm-m)
Shallow (ohm-m)
1 10 100 1000
0.1 1
10 100
TG (Units)
C1 (ppm)
C2 (ppm)
C3 (ppm)
C4 (ppm)
10e4 10e5
147u TG
6593 ppm C1
2289 ppm C2
2391 ppm C3
3438 ppm C4
174u TG
8097 ppm C1
2712 ppm C2
2909 ppm C3
3736 ppm C4
148u TG
7524 ppm C1
2139 ppm C2
2628 ppm C3
2577 ppm C4
LIMESTONE: very pale orange (10YR 8/2), sub platy cuttings, very effervescent in HCl, very clean, micrite, tight, possible remnant finestral porosity with calcite fill, pale yellow with splotches of yellow mineral fluorescence, pale yellow diffuse cut
2770' MD: Missed Sample
SHALE: medium gray (N5) to medium dark gray (N4), firm, platy cuttings, slightly calcareous, no fluorescence.
LIMESTONE: Light brownish gray (5YR 6/1), very hard, blocky cuttings, micrite, tight, pale dull yellow fluorescence.
SHALE: med dark gray (N4) to dark gray (N3), platy and elongated, firm and brittle, locally very silty, strong reaction to HCl; also locally a very dusky red (10R 2/2), higher silt content, soft, slightly calc
2890' MD: Missed Sample
2900' MD: Missed Sample



SHALE: moderate brown (5YR 3/4), moderately soft, sub blocky cuttings, gritty, silty, calcareous, no fluorescence.

LIMESTONE: light brownish gray (5YR 6/1) to white (N9), firm, micrite, local intraclasts, tight, pale yellow fluorescence, pale yellow cut

SHALE: medium gray (N5) to medium dark gray (N4), firm, platy cuttings, slightly calcareous, no fluorescence.

LIMESTONE: dark yellowish brown (10YR 4/2), blocky, angular, very hard, dense, crystalline, locally fossiliferous, reacts vigorously to HCl

LIMESTONE: moderate yellowish brown (10YR 5/4), locally very pale orange (10YR 8/2), firm, blocky cuttings, micrite, less commonly peloidial, local vugs and fenestral porosity, oil staining, rare ammonite fossils, slow streaming to cloudy light blue cut, light blue halo

SHALE: moderate brown (5YR 3/4), moderately firm, platy to sub platy cuttings, generally smooth, locally gritty/silty, calcareous.

LIMESTONE: white (N9) to grayish orange (10YR 7/4), hard, sub blocky cuttings, fossiliferous, subhedral pyrite, rare vugs, locally a grainstone but more commonly dense, local oil staining, pale yellow to yellow fluorescence.

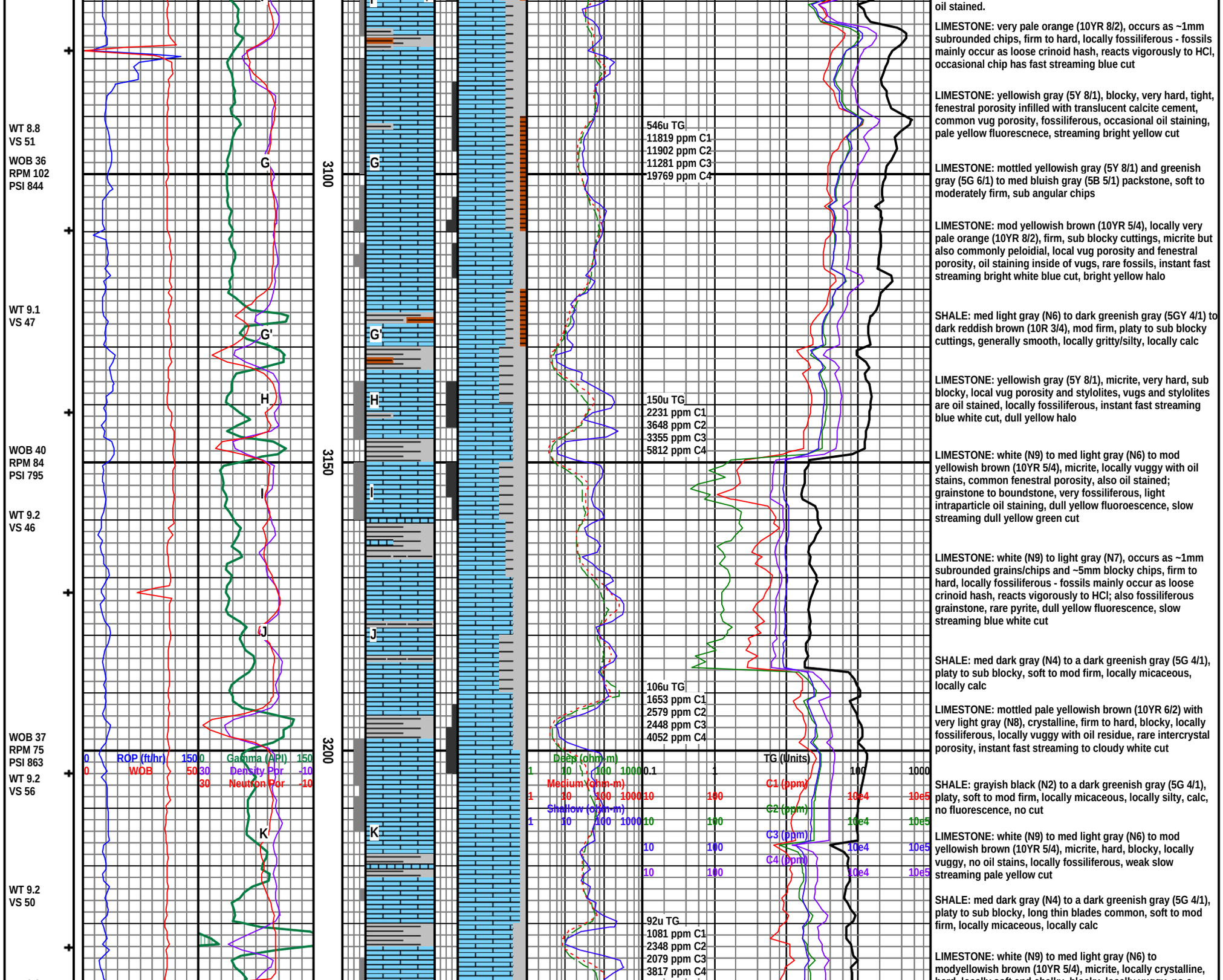
LIMESTONE: light brownish gray (5YR 6/1), firm, sub platy cuttings, varied textures, fossiliferous, well preserved ammonite, slight porosity and oil staining, yellow fluorescence, light blue streaming cut, patchy halo

SHALE: med. dark gray (N4) to black (N1), mod firm, locally calc, common pyrite, common thin (< 1mm) black lamina, no fluorescence.

LIMESTONE: white (N9) to mod yellowish brown (10YR 5/4), sub blocky to platy, firm, micrite, commonly fossiliferous, locally soft and chalky, trace fenestral porosity, common lig oil staining, pale yellow fluorescence, fast streaming to cloudy white blue cut, patchy halo

LIMESTONE: white (N9), boundstone or biolithite with inter- and intra- clastic porosity stained with oil residue, calc, slow streaming blue cut, faint halo

LIMESTONE: light brownish gray (5YR 6/1), very firm, micrit no visible porosity, locally chalky and moderately firm, loca



oil stained.

LIMESTONE: very pale orange (10YR 8/2), occurs as ~1mm subrounded chips, firm to hard, locally fossiliferous - fossils mainly occur as loose crinoid hash, reacts vigorously to HCl, occasional chip has fast streaming blue cut

LIMESTONE: yellowish gray (5Y 8/1), blocky, very hard, tight, fenestral porosity infilled with translucent calcite cement, common vug porosity, fossiliferous, occasional oil staining, pale yellow fluorescnece, streaming bright yellow cut

LIMESTONE: mottled yellowish gray (5Y 8/1) and greenish gray (5G 6/1) to med bluish gray (5B 5/1) packstone, soft to moderately firm, sub angular chips

LIMESTONE: mod yellowish brown (10YR 5/4), locally very pale orange (10YR 8/2), firm, sub blocky cuttings, micrite but also commonly peloidial, local vug porosity and fenestral porosity, oil staining inside of vugs, rare fossils, instant fast streaming bright white blue cut, bright yellow halo

SHALE: med light gray (N6) to dark greenish gray (5GY 4/1) to dark reddish brown (10R 3/4), mod firm, platy to sub blocky cuttings, generally smooth, locally gritty/silty, locally calc

LIMESTONE: yellowish gray (5Y 8/1), micrite, very hard, sub blocky, local vug porosity and stylolites, vugs and stylolites are oil stained, locally fossiliferous, instant fast streaming blue white cut, dull yellow halo

LIMESTONE: white (N9) to med light gray (N6) to mod yellowish brown (10YR 5/4), micrite, locally vuggy with oil stains, common fenestral porosity, also oil stained; grainstone to boundstone, very fossiliferous, light intraparticle oil staining, dull yellow fluoroescence, slow streaming dull yellow green cut

LIMESTONE: white (N9) to light gray (N7), occurs as ~1mm subrounded grains/chips and ~5mm blocky chips, firm to hard, locally fossiliferous - fossils mainly occur as loose crinoid hash, reacts vigorously to HCl; also fossiliferous grainstone, rare pyrite, dull yellow fluorescence, slow streaming blue white cut

SHALE: med dark gray (N4) to a dark greenish gray (5G 4/1), platy to sub blocky, soft to mod firm, locally micaceous, locally calc

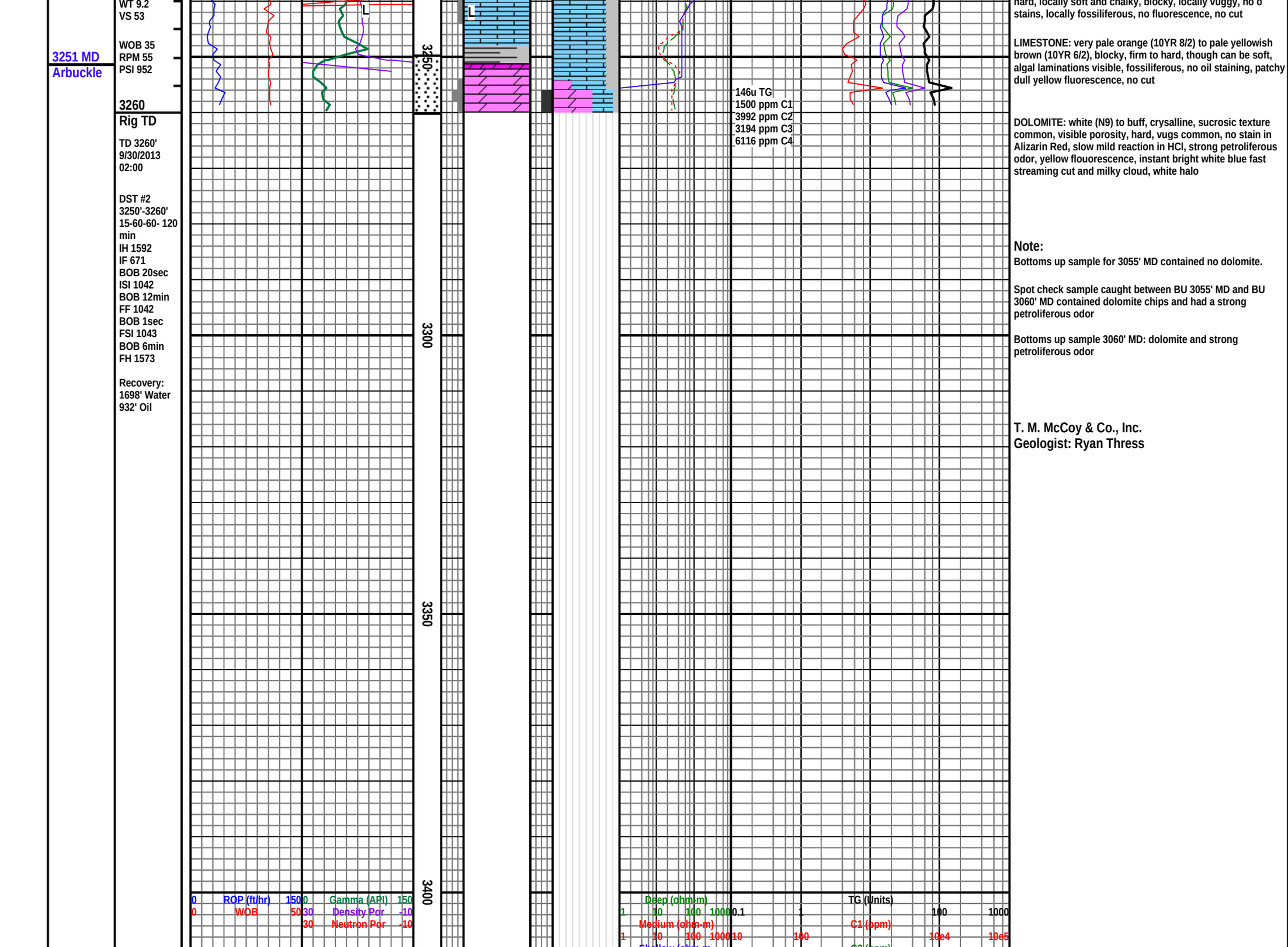
LIMESTONE: mottled pale yellowish brown (10YR 6/2) with very light gray (N8), crystalline, firm to hard, blocky, locally fossiliferous, locally vuggy with oil residue, rare intercrystal porosity, instant fast streaming to cloudy white cut

SHALE: grayish black (N2) to a dark greenish gray (5G 4/1), platy, soft to mod firm, locally micaceous, locally silty, calc, no fluorescence, no cut

LIMESTONE: white (N9) to med light gray (N6) to mod yellowish brown (10YR 5/4), micrite, hard, blocky, locally vuggy, no oil stains, locally fossiliferous, weak slow streaming pale yellow cut

SHALE: med dark gray (N4) to a dark greenish gray (5G 4/1), platy to sub blocky, long thin blades common, soft to mod firm, locally micaceous, locally calc

LIMESTONE: white (N9) to med light gray (N6) to modyellowish brown (10YR 5/4), micrite, locally crystalline,



hard, locally soft and chalky, blocky, locally vuggy, no o stains, locally fossiliferous, no fluorescence, no cut

LIMESTONE: very pale orange (10YR 8/2) to pale yellowish brown (10YR 6/2), blocky, firm to hard, though can be soft, algal laminations visible, fossiliferous, no oil staining, patchy dull yellow fluorescence, no cut

DOLOMITE: white (N9) to buff, crysalline, sucrosic texture common, visible porosity, hard, vugs common, no stain in Alizarin Red, slow mild reaction in HCl, strong petroliferous odor, yellow flouorescence, instant bright white blue fast streaming cut and milky cloud, white halo

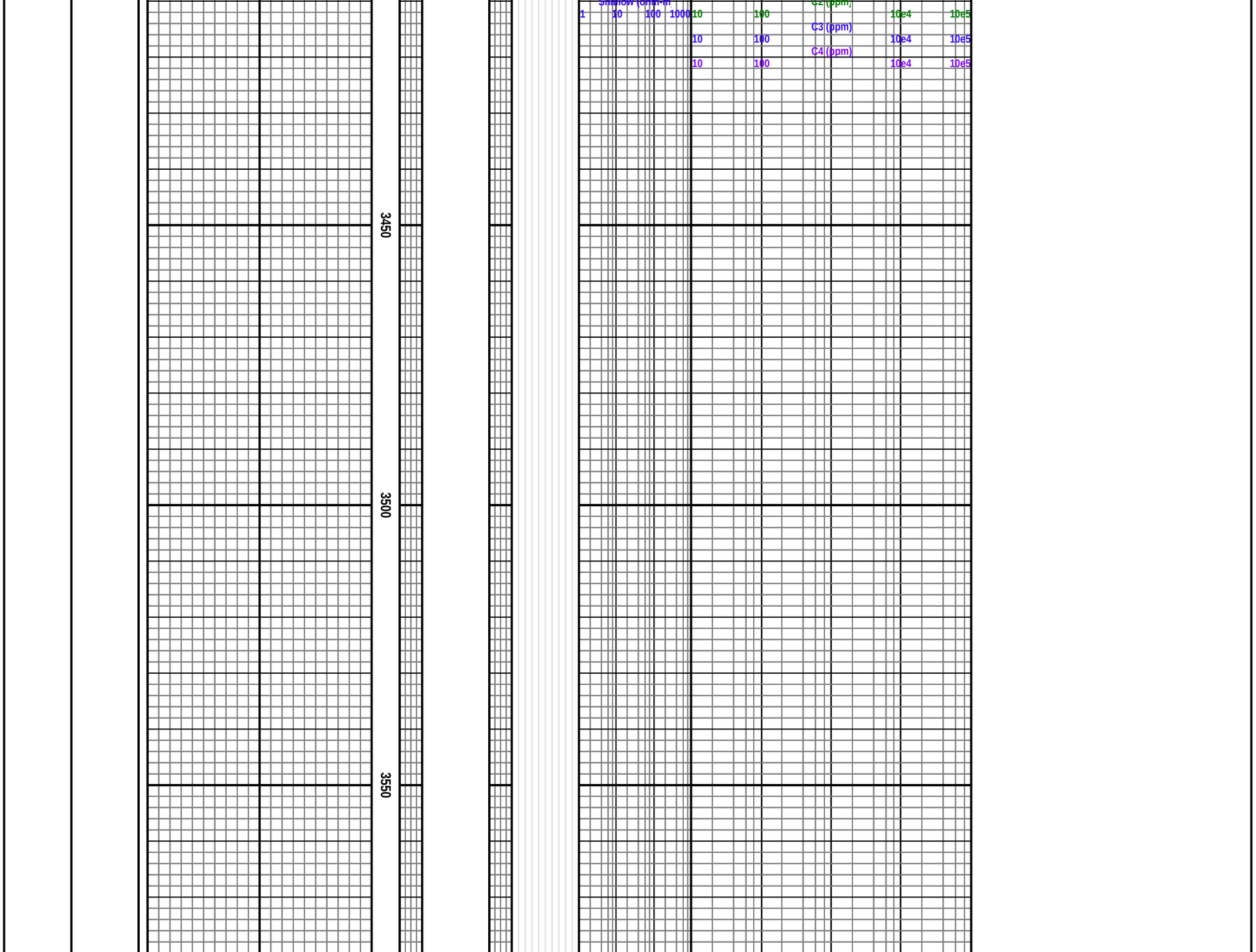
Note:

Bottoms up sample for 3055' MD contained no dolomite.

Spot check sample caught between BU 3055' MD and BU 3060' MD contained dolomite chips and had a strong petroliferous odor

Bottoms up sample 3060' MD: dolomite and strong petroliferous odor

T. M. McCoy & Co., Inc.
Geologist: Ryan Thress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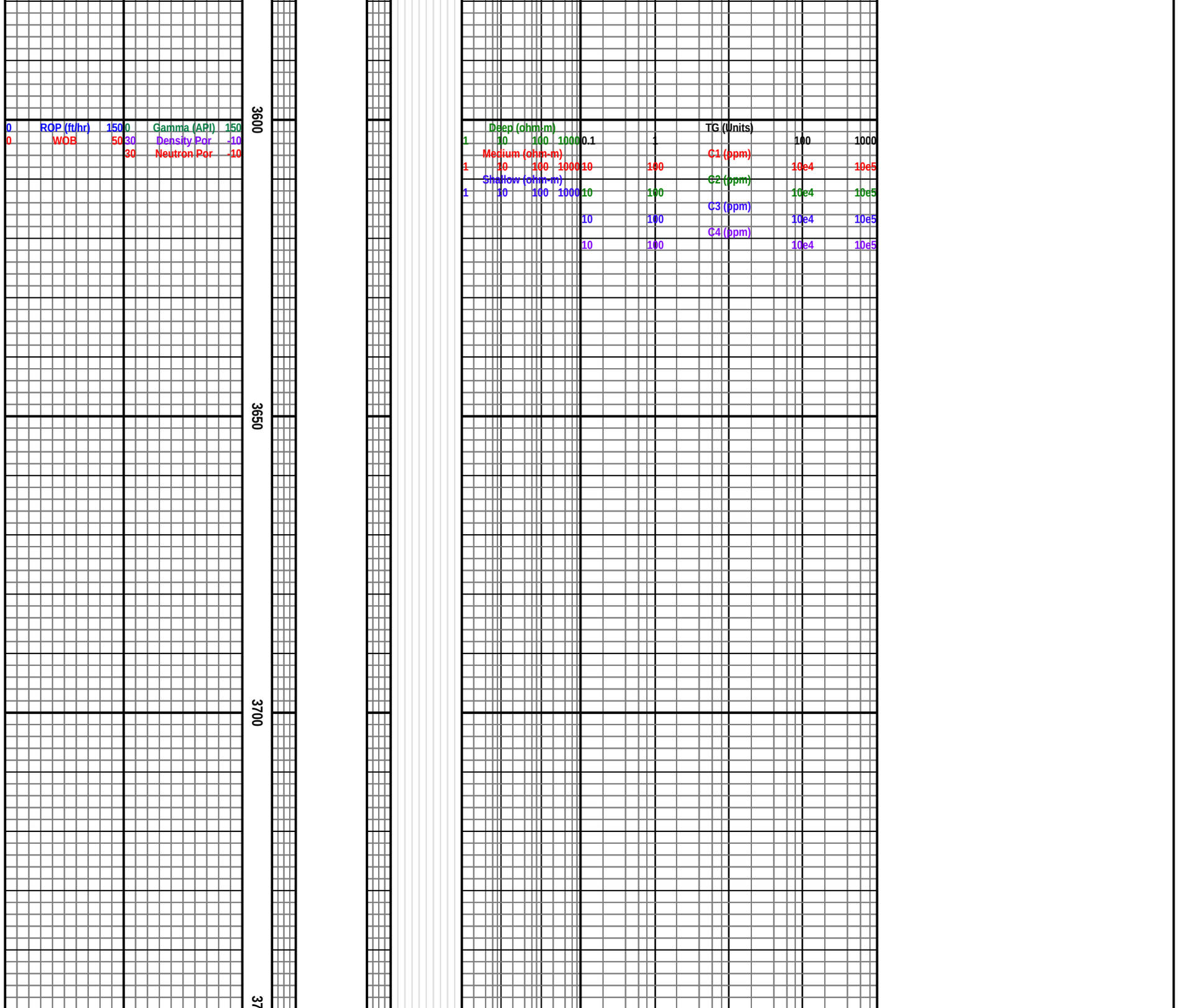
10
100
1000
C2 (ppm)
10
100
10e4
10e5
C3 (ppm)
10
100
10e4
10e5
C4 (ppm)
10
100
10e4
10e5
3450
3500
3550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0 WOB 50
0 Gamma (API) 150
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30 Neutron Por -10
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1 10 100 1000
Medium (ohm-m)
1 10 100 1000
Shallow (ohm-m)
1 10 100 1000
TG (Units)
0.1 1 10 100 1000
C1 (ppm)
10 100 10e4 10e5
C2 (ppm)
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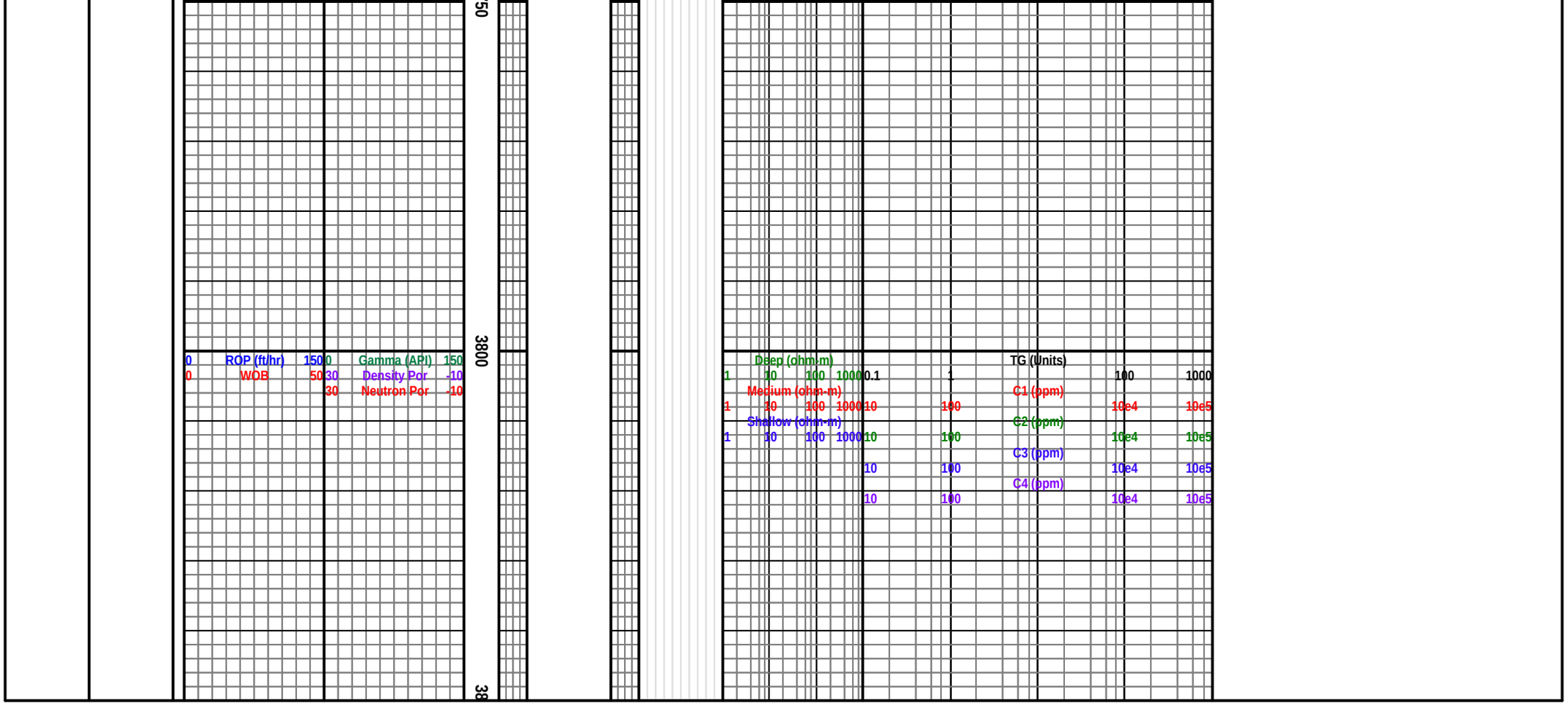
C3 (ppm)
10 100 10e4 10e5
C4 (ppm)
10 100 10e4 10e5
3600
3650
3700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3800
3850
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0 WOB 50
Gamma (API) 150
30 Density Por -10
30 Neutron Por -10
Deep (ohm-m)
1 10 100 1000
Medium (ohm-m)
1 10 100 1000
Shallow (ohm-m)
1 10 100 1000
TG (Units)
0.1 1 100 1000
C1 (ppm)
10 100 10e4 10e5
C2 (ppm)
10 100 10e4 10e5
C3 (ppm)
10 100 10e4 10e5
C4 (ppm)
10 100 10e4 10e5