KOLAR Document ID: 1755070

Confidentiality Requested:
☐ Yes ☑ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1
January 2018
Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 35920
Name: NEC Operating - Kansas, LLC
Address 1: 538 SILICON DR
Address 2:
City: SOUTHLAKE State: TX Zip: 76092 + 7516
Contact Person: Lonnie Lumpkins
Phone: (817) 600-4246
CONTRACTOR: License # 5123
Name: Pickrell Drilling Company, Inc.
Wellsite Geologist: Keaton Jones
Purchaser:

Designate Type of Completion:
☑ New Well ☐ Re-Entry ☐ Workover
☐ Oil ☐ WSW ☐ SWD
☐ Gas ☑ DH ☐ EOR
☐ OG ☐ GSW
☐ 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 EOR ☐ Conv. to SWD
☐ Plug Back ☐ Liner ☐ Conv. to GSW ☐ Conv. to Producer

☐ Commingled Permit #:
☐ Dual Completion Permit #:
☐ SWD Permit #:
☐ EOR Permit #:
☐ GSW Permit #:

10/17/2023 Spud Date or Recompletion Date
10/24/2023 Date Reached TD
5/28/2024 Completion Date or Recompletion Date

API No.: 15-047-21673-00-00
Spot Description:
NW - SE - SE - SW Sec. 15 Twp. 26 S. R. 16 ☐ East ☑ West
400 Feet from ☐ North / ☑ South Line of Section
2081 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: Edwards
Lease Name: IRON ORCHARD Well #: 1
Field Name:
Producing Formation: Arbuckle
Elevation: Ground: 2081 Kelly Bushing: 2088
Total Vertical Depth: 4820 Plug Back Total Depth: 48236
Amount of Surface Pipe Set and Cemented at: 320 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: 2300 ppm Fluid volume: 136 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** ☐ **Drill Stem Tests Received**
☑ **Geologist Report / Mud Logs Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** Kelsey Cox **Date:** 06/06/2024

Operator Name: NEC Operating - Kansas, LLC Lease Name: IRON ORCHARD Well #: 1

Sec. 15 Twp. 26 S. R. 16 ☐ East ☑ West County: Edwards

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 *(Attach Additional Sheets)*	☐ Yes	☑ No
Samples Sent to Geological Survey	☑ Yes	☐ No
Cores Taken	☐ Yes	☑ No
Electric Log Run	☐ Yes	☑ No
Geologist Report / Mud Logs	☑ Yes	☐ No

List All E. Logs Run:

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

Name	Top	Datum
Anhy	1078	1010
Heebner	3787	-1699
Toronto	3808	-1720
LKC	3950	-1862
MIss	4412	-2324
Viola	4524	-2436
Arbuckle	4741	-2653

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	12.5	8.625	24	320	CLASS A	130	2%CC
Production	7.875	5.5	15.5	4836	CLASS A	350	3% calcium chloride + 2% bentonite + 0.2

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	-			
	-			

1. Did you perform a hydraulic fracturing treatment on this well? ☐ Yes ☑ No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? ☐ Yes ☐ No *(If No, skip question 3)*
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)*

Date of first Production/Injection or Resumed Production/ Injection:	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:	METHOD OF COMPLETION:	PRODUCTION INTERVAL:
☐ Vented ☐ Sold ☐ Used on Lease *(If vented, Submit ACO-18.)*	☐ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*	Top / Bottom

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record *(Amount and Kind of Material Used)*
3	4422	4432			

TUBING RECORD: Size: Set At: Packer At:

Mail to: KCC - Conservation Division, 266 N. Main, Suite 220, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	NEC Operating - Kansas, LLC
Well Name	IRON ORCHARD 1
Doc ID	1755070

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.5	8.625	24	320	CLASS A	130	2%CC
Production	7.875	5.5	15.5	4836	CLASS A	350	3% calcium chloride + 2% bentonite + 0.25 pps celloflake

Iron Orchard
WellSight Systems
Scale 1:240 (5"=100') Imperial
Measured Depth Log

Well Name: Iron Orchard
API: 15-047-21673-00-00
Location: 400' FSL, 2081' FWL (Sec 15.TWP 26S R16W)
License Number: 35920 **Region:** Edwards
Spud Date: 10/17/2023 **Drilling Completed:** 10/24/2023
Surface Coordinates: 37.777885, -99.060931

Bottom Hole Coordinates: Same As Surface
Ground Elevation (ft): 2081 **K.B. Elevation (ft):** 2088
Logged Interval (ft): 3650 **To:** R.T.D **Total Depth (ft):** 4850
Formation: Arbuckle
Type of Drilling Fluid: Chemical "Andys Mud"

OPERATOR

Company: NEC Operating Kansas
Address: 542 Silicon Dr Suite 100
South Lake TX 67092

GEOLOGIST

Name: Keaton Jones
Company: Rockhound Petroleum, LLC
Address: 255 NE 30th
St. John KS 67576

Well Tops Comparison

Lease:	Iron Orchard			Lease:	Norweigan			Lease:	Salser 1-15			Lease:	Wood E 1-15	
KB	2088		Strat	KB	2107		Strat	KB	2074		Strat	KB	2081	
Formation	Top	Datum	Comp	Formation	Top	Datum	Comp	Formation	Top	Datum	Comp	Formation	Top	Datum
Anhy	1078	1010	-1097	Anhy		2107	-1064	Anhy		2074	-1071	Anhy		2081
Heebner	3787	-1699	4	Heebner	3810	-1703	-4	Heebner	3769	-1695	-4	Heebner	3776	-1695
toronto	3808	-1720	3	toronto	3830	-1723	-6	toronto	3788	-1714	-5	toronto	3796	-1715
douglas	3820	-1732	11	douglas	3850	-1743	4	douglas	3810	-1736	3	douglas	3816	-1735
Brown L	3934	-1846	3	Brown L	3956	-1849	-7	Brown L	3913	-1839	-2	Brown L	3925	-1844
LKC	3950	-1862	5	LKC	3974	-1867	-6	LKC	3930	-1856	-1	LKC	3942	-1861
lansing "B"	3970	-1882	2	lansing "B"	3991	-1884	-6	lansing "B"	3950	-1876	0	lansing "B"	3963	-1882
Lansing "F"	4026	-1938	1	Lansing "F"	4046	-1939	-6	Lansing "F"	4006	-1932	-2	Lansing "F"	4017	-1936
lansing "G"	4044	-1956	6	lansing "G"	4069	-1962	-7	lansing "G"	4023	-1949	-1	lansing "G"	4036	-1955
Lansing "H"	4086	-1998	14	Lansing "H"	4119	-2012	0	Lansing "H"	4072	-1998	4	Lansing "H"	4083	-2002
Lansing "I"				Lansing "I"	4138	-2031		Lansing "I"	4096	-2022		Lansing "I"	4105	-2024
Lansing "J"	4127	-2039	8	Lansing "J"	4154	-2047	0	Lansing "J"	4113	-2039	2	Lansing "J"	4122	-2041
BKC	4246	-2158	15	BKC	4280	-2173	5	BKC	4237	-2163	5	BKC	4244	-2163
Cherokee SD		2088	-19	Cherokee SD		2107	14	Cherokee SD		2074	7	Cherokee SD		2081
Miss	4412	-2324	23	Miss	4454	-2347	14	Miss	4412	-2338	7	Miss	4412	-2331
Misner	4445	-2357	59	Misner	4523	-2416	-4431	Misner		2074	12	Misner	4450	-2369
Viola	4524	-2436	38	Viola	4581	-2474	-4510	Viola		2074	-4517	Viola		2081
Simpson	4652	-2564		Simpson	N/A		-4638	Simpson		2074	-4645	Simpson		2081
Arbuckle	4741	-2653		Arbuckle	N/A		-4727	Arbuckle		2074	-4734	Arbuckle		2081

NEC Operating Kansas

Iron Orchard

Casing Size:	5.5	API 15.5#	Guide Shoe		1.1	Plugged Back Total Depth:		4823.60	KB	GL
RTD:	4850	LTD:	4851	Casing TD	4836	FT off LTD:	15	Elevation:	2088	2081

JT. #	Length	Csg. Tally	Top of Jt.	JT. #	Length	Csg. Tally	Top of Jt.	JT.#	Length	Csg. Tally	Top of Jt.
SH JT	10.30	11.40	4824.60	49	42.06	2083.95	2752.05	99	42.15	4187.61	648.39
1	41.61	53.01	4782.99	50	42.07	2126.02	2709.98	100	42.14	4229.75	606.25
2	42.11	95.12	4740.88	51	42.10	2168.12	2667.88	101	42.13	4271.88	564.12
3	42.12	137.24	4698.76	52	42.09	2210.21	2625.79	102	42.06	4313.94	522.06
4	42.11	179.35	4656.65	53	42.05	2252.26	2583.74	103	41.74	4355.68	480.32
5	42.05	221.40	4614.60	54	42.08	2294.34	2541.66	104	42.08	4397.76	438.24
6	42.03	263.43	4572.57	55	42.10	2336.44	2499.56	105	42.07	4439.83	396.17
7	42.04	305.47	4530.53	56	42.11	2378.55	2457.45	106	42.05	4481.88	354.12
8	42.08	347.55	4488.45	57	42.09	2420.64	2415.36	107	42.13	4524.01	311.99
9	42.10	389.65	4446.35	58	42.07	2462.71	2373.29	108	42.12	4566.13	269.87
10	42.08	431.73	4404.27	59	42.06	2504.77	2331.23	109	42.05	4608.18	227.82
11	42.06	473.79	4362.21	60	42.07	2546.84	2289.16	110	41.47	4649.65	186.35
12	42.05	515.84	4320.16	61	42.11	2588.95	2247.05	111	42.08	4691.73	144.27
13	42.09	557.93	4278.07	62	42.12	2631.07	2204.93	112	42.10	4733.83	102.17
14	42.07	600.00	4236.00	63	42.08	2673.15	2162.85	113	42.09	4775.92	60.08
15	42.11	642.11	4193.89	64	42.12	2715.27	2120.73	114	42.12	4818.04	17.96
16	42.09	684.20	4151.80	65	42.04	2757.31	2078.69	PUP	10.70	4828.74	7.26
17	42.10	726.30	4109.70	66	42.12	2799.43	2036.57	LJ	10.00	4838.74	-2.74
18	42.08	768.38	4067.62	67	42.11	2841.54	1994.46	115 TG	42.10	OUT	OUT
19	42.11	810.49	4025.51	68	41.66	2883.20	1952.80				
Marker	10.72	821.21	4014.79	69	42.13	2925.33	1910.67				
20	42.06	863.27	3972.73	70	42.12	2967.45	1868.55				
21	42.09	905.36	3930.64	71	42.07	3009.52	1826.48				
22	42.08	947.44	3888.56	72	42.08	3051.60	1784.40				
23	42.07	989.51	3846.49	73	41.74	3093.34	1742.66				
24	42.08	1031.59	3804.41	74	42.05	3135.39	1700.61				
25	42.10	1073.69	3762.31	75	42.07	3177.46	1658.54				
26	42.10	1115.79	3720.21	76	42.06	3219.52	1616.48				
27	42.09	1157.88	3678.12	77	42.10	3261.62	1574.38				
28	42.10	1199.98	3636.02	78	42.12	3303.74	1532.26				
29	42.11	1242.09	3593.91	79	42.13	3345.87	1490.13				
30	42.12	1284.21	3551.79	80	42.11	3387.98	1448.02				
31	42.10	1326.31	3509.69	81	42.12	3430.10	1405.90				
32	42.09	1368.40	3467.60	82	42.10	3472.20	1363.80				
33	42.10	1410.50	3425.50	83	42.06	3514.26	1321.74				
34	42.09	1452.59	3383.41	84	42.04	3556.30	1279.70				
35	42.10	1494.69	3341.31	85	42.11	3598.41	1237.59				
36	42.11	1536.80	3299.20	86	42.07	3640.48	1195.52				
37	42.09	1578.89	3257.11	87	42.04	3682.52	1153.48				
38	42.11	1621.00	3215.00	88	42.09	3724.61	1111.39				
39	42.09	1663.09	3172.91	89	42.11	3766.72	1069.28				
40	42.08	1705.17	3130.83	90	42.15	3808.87	1027.13				
41	42.10	1747.27	3088.73	91	42.13	3851.00	985.00				
42	42.09	1789.36	3046.64	92	42.10	3893.10	942.90				
43	42.05	1831.41	3004.59	93	42.06	3935.16	900.84				
44	42.10	1873.51	2962.49	94	42.14	3977.30	858.70				
45	42.09	1915.60	2920.40	95	42.13	4019.43	816.57				
46	42.10	1957.70	2878.30	96	42.12	4061.55	774.45				
47	42.08	1999.78	2836.22	97	41.78	4103.33	732.67				
48	42.11	2041.89	2794.11	98	42.13	4145.46	690.54				
Totals	2040.79		2794.11		2103.57	4144.36	690.54		735.38	4879.74	4836.00

3	Pup Joints
10	Turbo Centralizers
0	Port Collar
0	Packer Shoe
1	Joints Out / Not Run
1	Cement Basket

Rotating Scratchers:	None		
Centralizers:	3973, 4025, 4109, 4320, 4404, 4489, 4572, 4656, 4740, 4824	Basket:	4698-4740 Floating
Latch Down Insert Baffle	Top of Shoe JT	Packer Shoe:	Bottom of the Shoe Joint
Equipment/Pipe Not Run:	Joint 115		

Comments

Survey 346' 3/4 degree - Survey 847' 3/4 Degree - Survey 1352' 1 Degree - Survey 1857' 1 Degree - Survey 2362' 1.5 Degree - Survey 2489' 1.5 Degree - Survey 2646' 2.5 Degree - Bit Trip, Ran in with Button to Straighten out hole.

ROCK TYPES

ACCESSORIES

MINERAL
- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Brecfrag
- Calc
- Carb
- Chtdk
- Chtlt
- Dol
- Feldspar
- Ferrpel
- Ferr
- Glau
- Gyp
- Hvymin
- Kaol
- Marl
- Minxl
- Nodule
- Phos
- Pyr
- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff

FOSSIL
- Algae
- Amph
- Belm
- Bioclst
- Brach
- Bryozoa
- Cephal
- Coral
- Crin
- Echin
- Fish
- Foram
- Fossil
- Gastro
- Oolite
- Ostra
- Pelec
- Pellet
- Pisolite
- Plant
- Strom

STRINGER
- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Sltstrg
- Ssstrg

TEXTURE
- Boundst
- Chalky
- Cryxln
- Earthy
- Finexln
- Grainst
- Lithogr
- Microxln
- Mudst
- Packst
- Wackest

OTHER SYMBOLS

POROSITY
- Earthy
- Fenest
- Fracture
- Inter
- Moldic
- Organic
- Pinpoint
- Vuggy

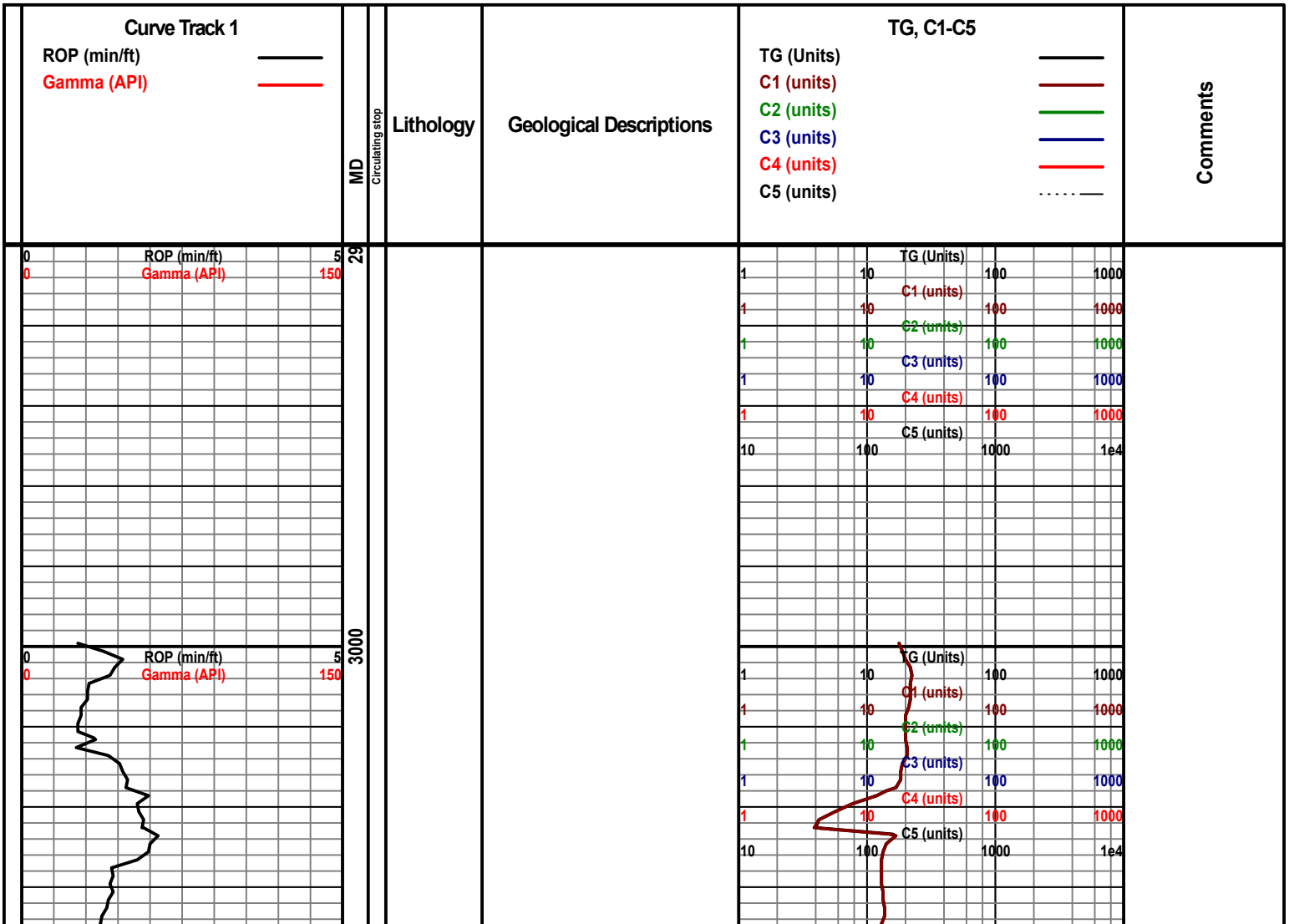
SORTING
- Well
- Moderate
- Poor

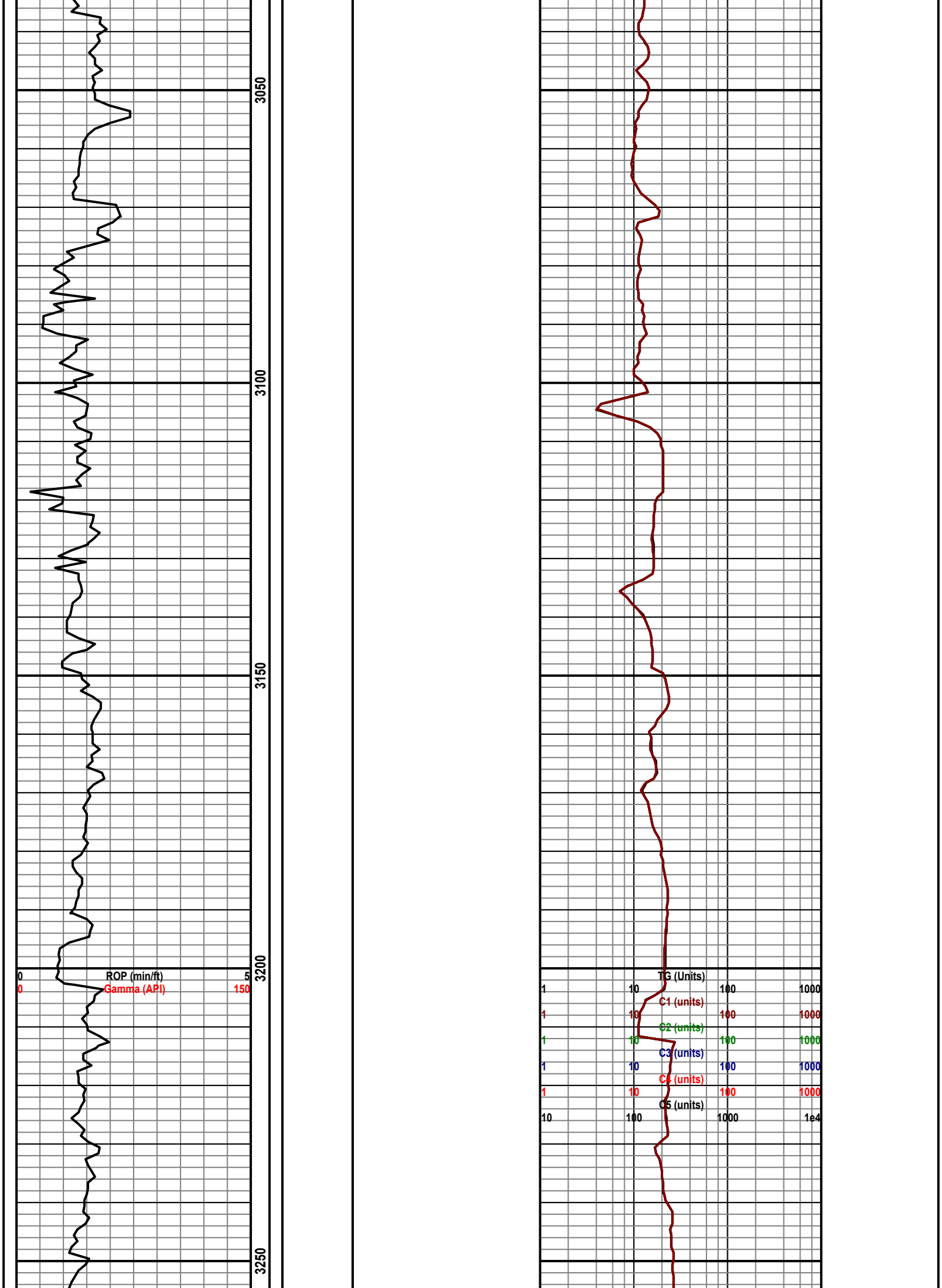
ROUNDING
- Rounded
- Subrnd
- Subang
- Angular

OIL SHOW
- Even

INTERVAL
- Core
- Dst 2
- Dst 4
- Spotted
- Ques
- Dead
- Dst 3
- Dst

EVENT
- Rft
- Sidewall

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3150
3200
3250
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5
0
Gamma (API)
150
TG (Units)
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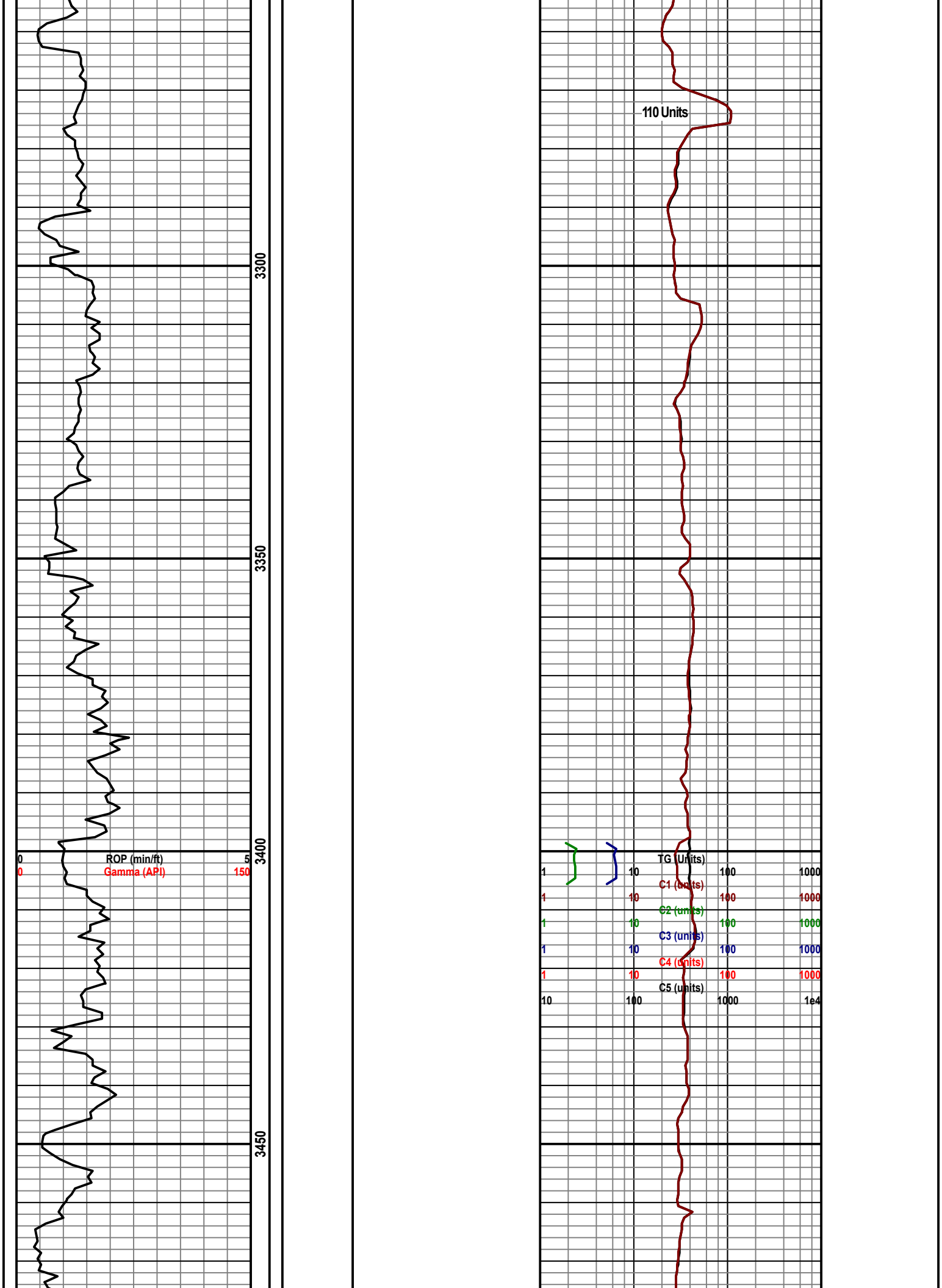
100
1000
C1 (units)
1
10
100
1000
C2 (units)
1
10
100
1000
C3 (units)
1
10
100
1000
C4 (units)
1
10
100
1000
C5 (units)
10
100
1000
1e4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3300
3350
3400
3450
0
ROP (min/ft)
5
0
Gamma (API)
150
TG (Units)
1
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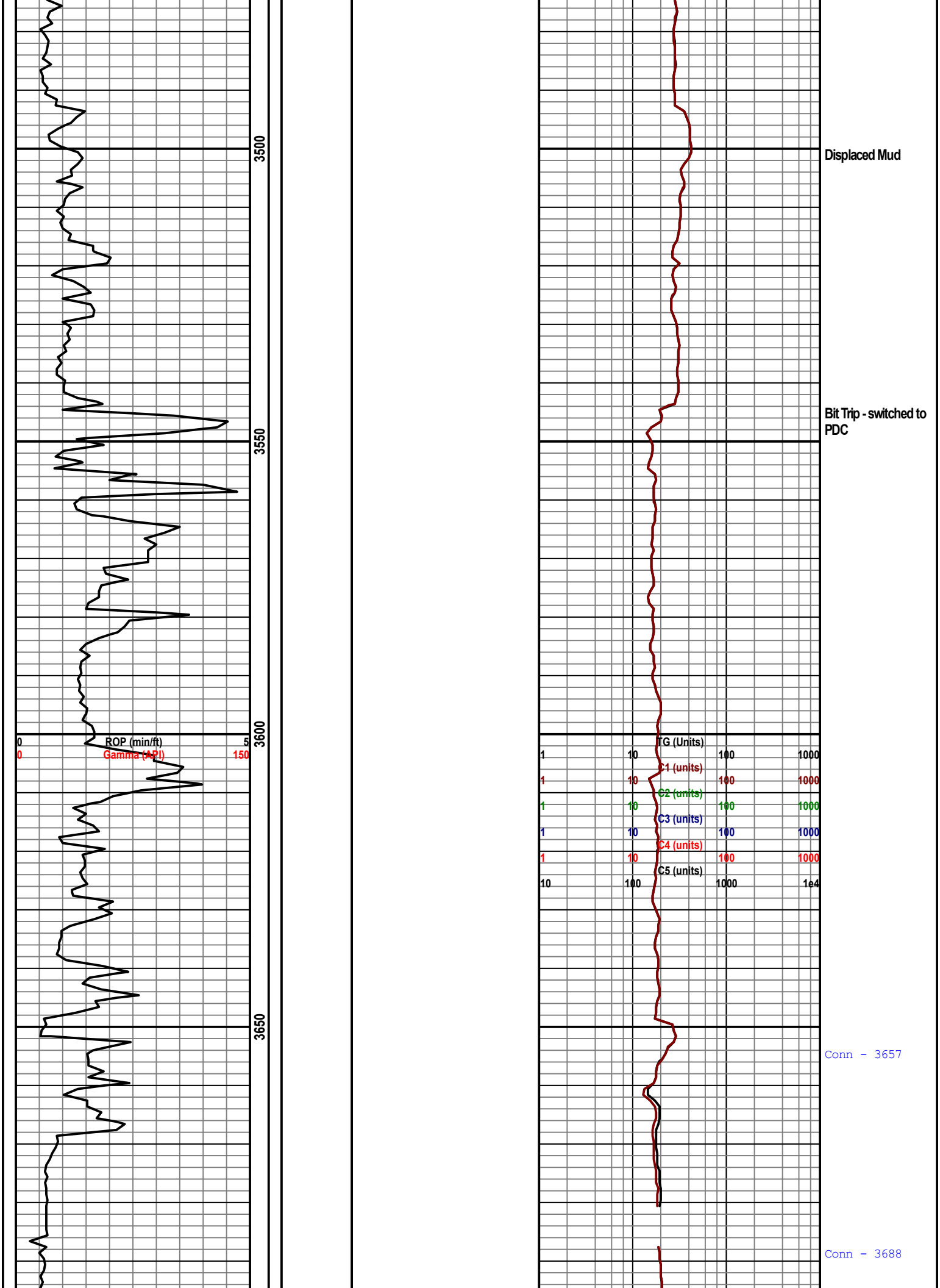
1000
C1 (units)
1
10
100
1000
C2 (units)
1
10
100
1000
C3 (units)
1
10
100
1000
C4 (units)
1
10
100
1000
C5 (units)
10
100
1000
1e4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Gamma (API)
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TG (Units)
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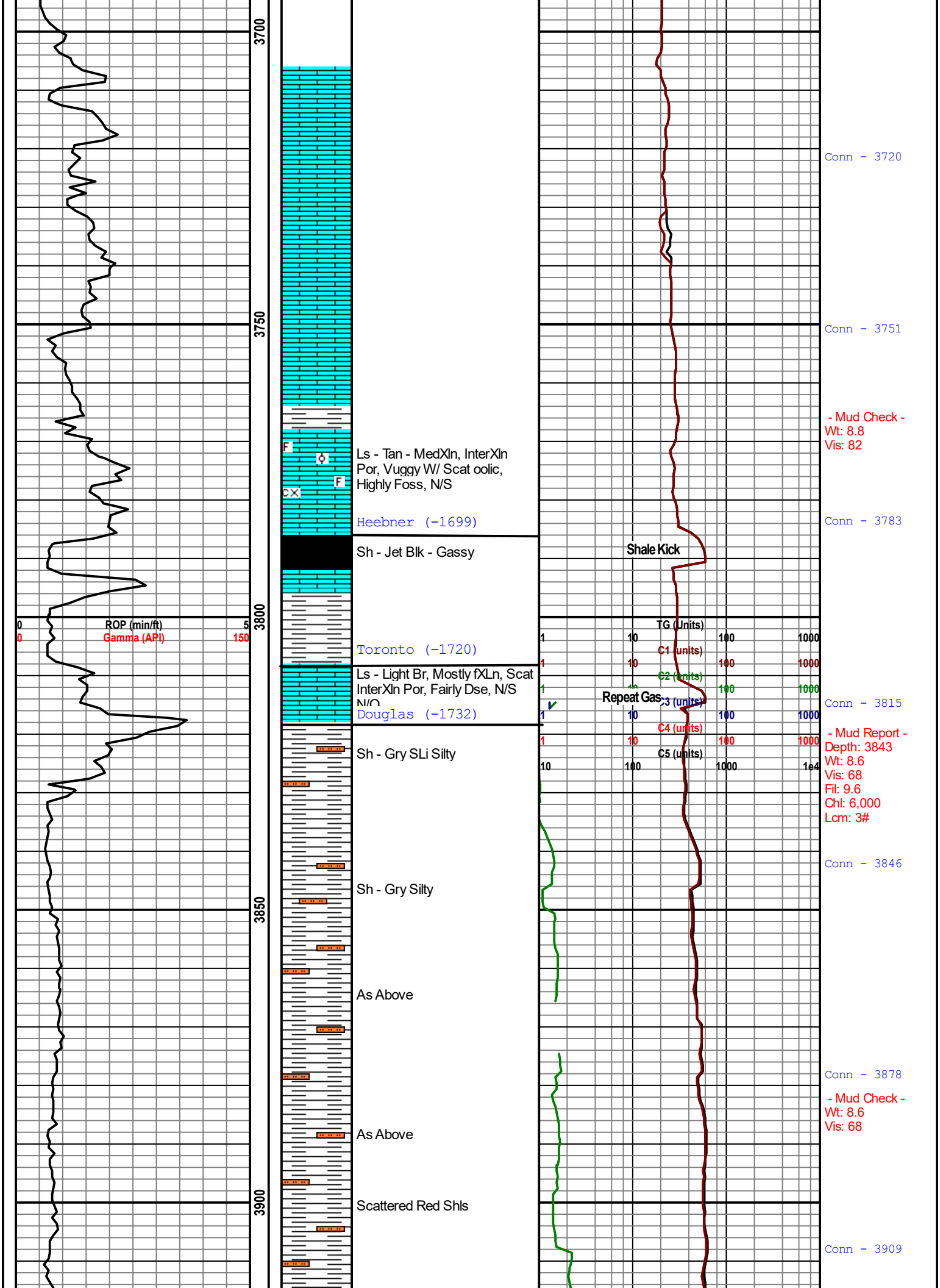
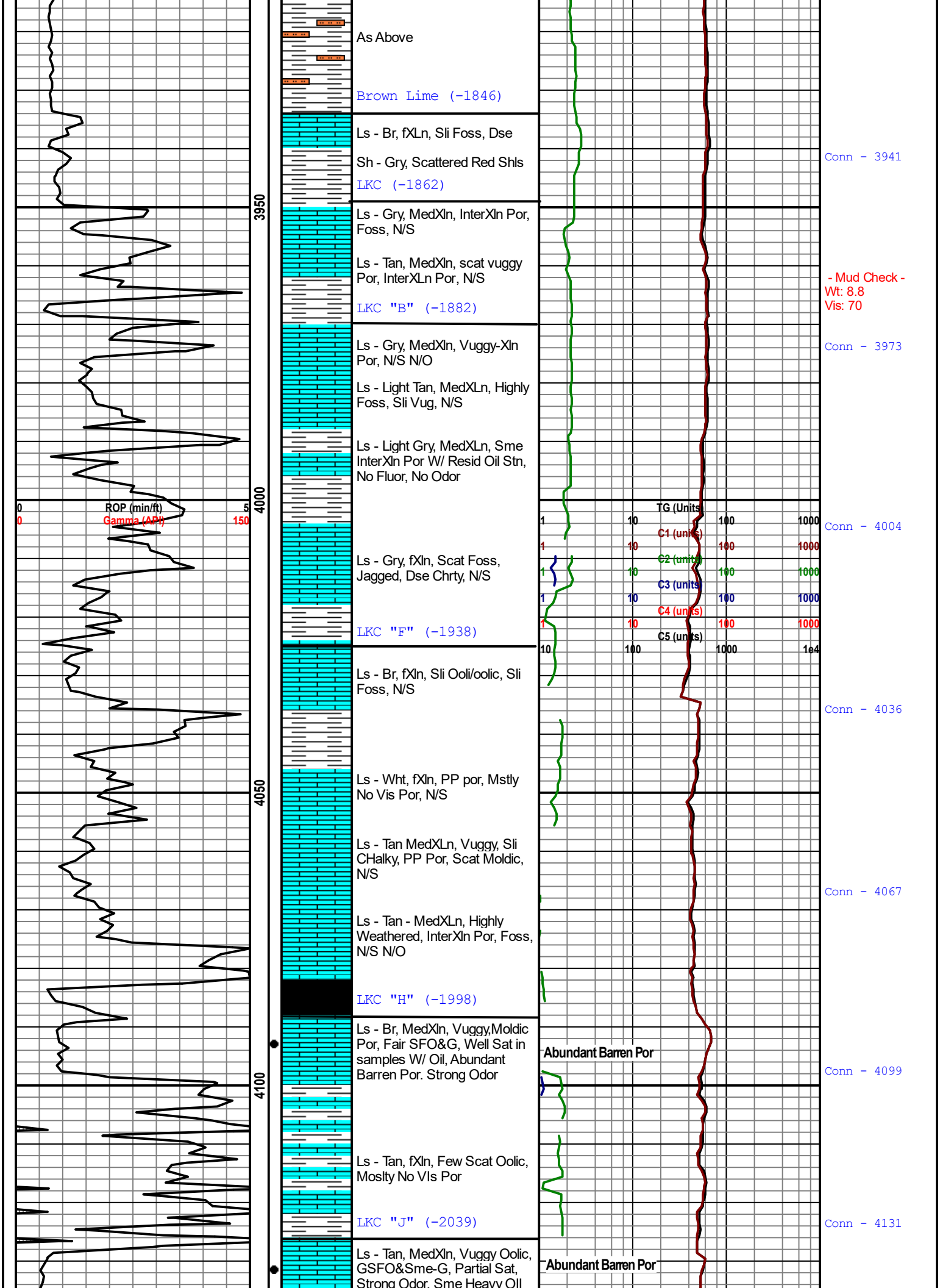
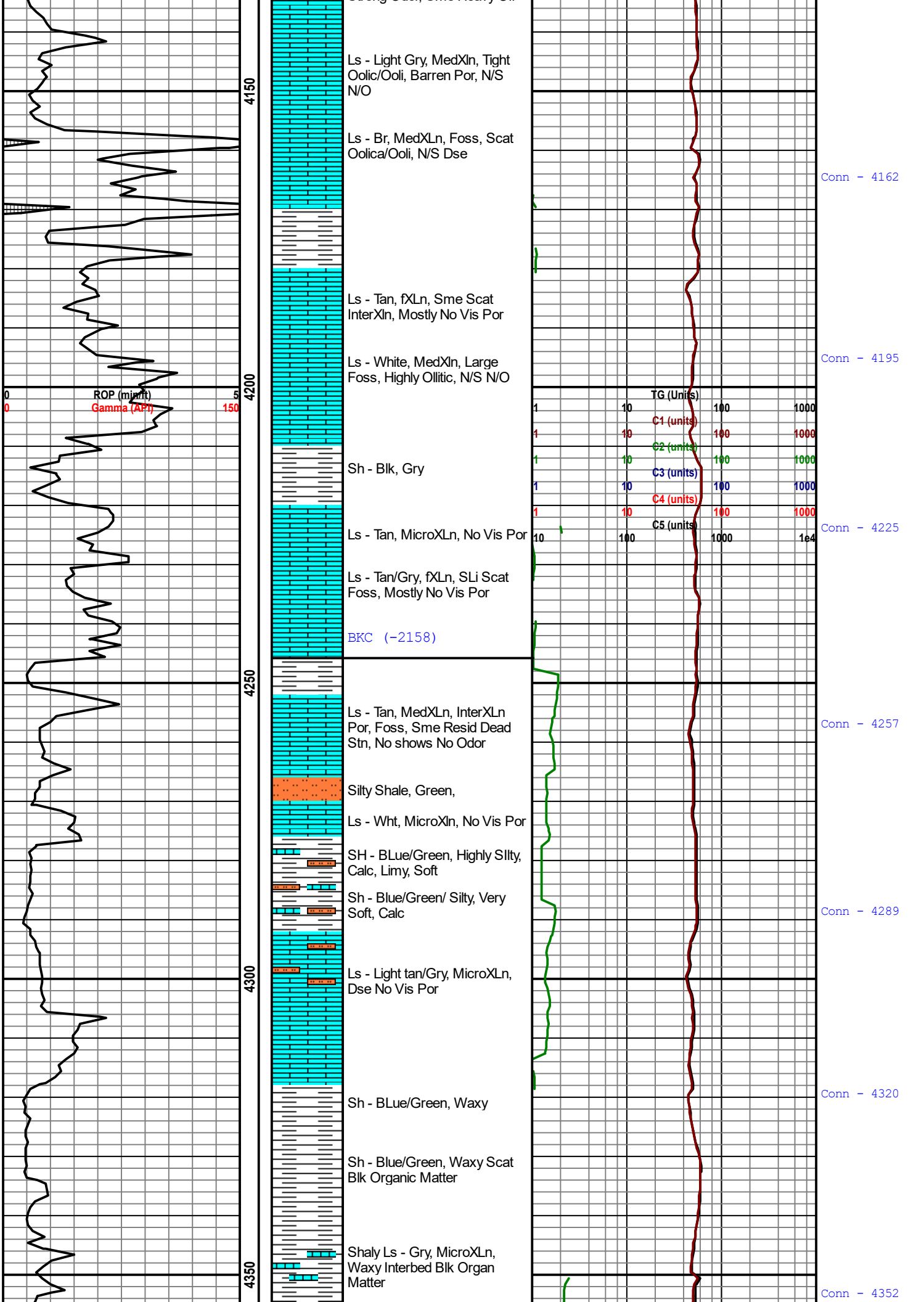
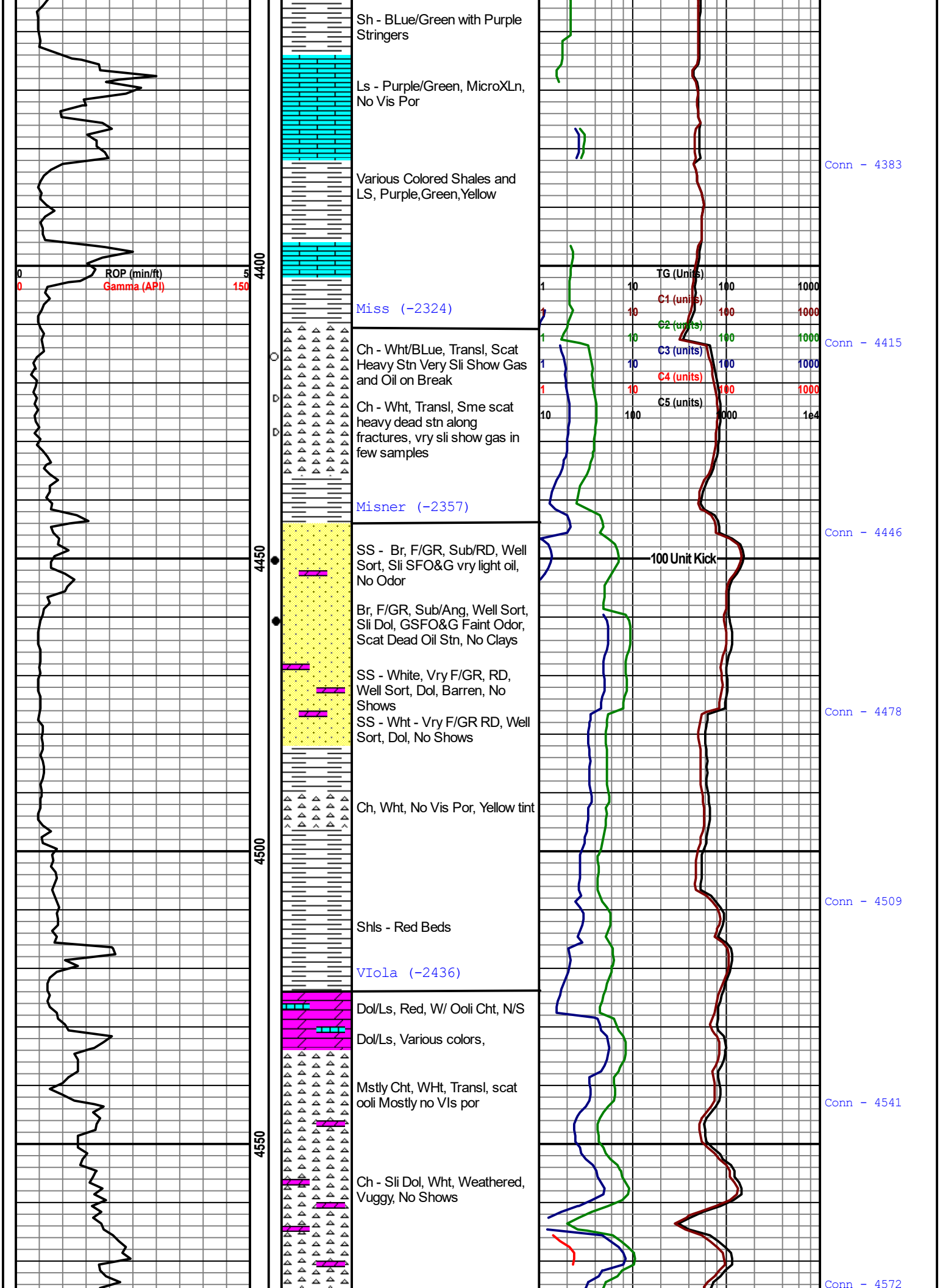
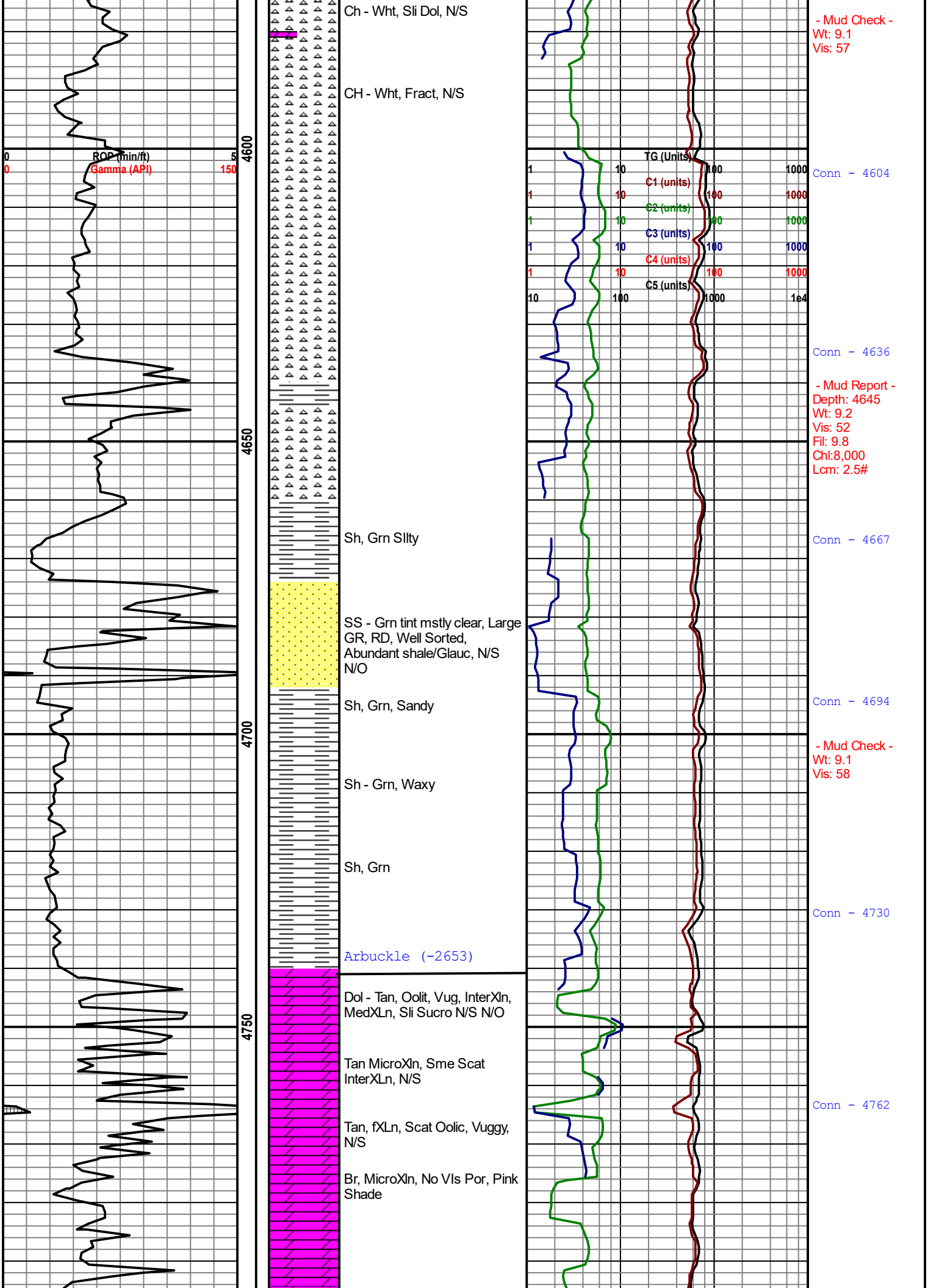
100
1000
C2 (units)
1
10
100
1000
C3 (units)
1
10
100
1000
C4 (units)
1
10
100
1000
C5 (units)
10
100
1000
1e4
Displaced Mud
Bit Trip - switched to PDC
Conn - 3657
Conn - 3688

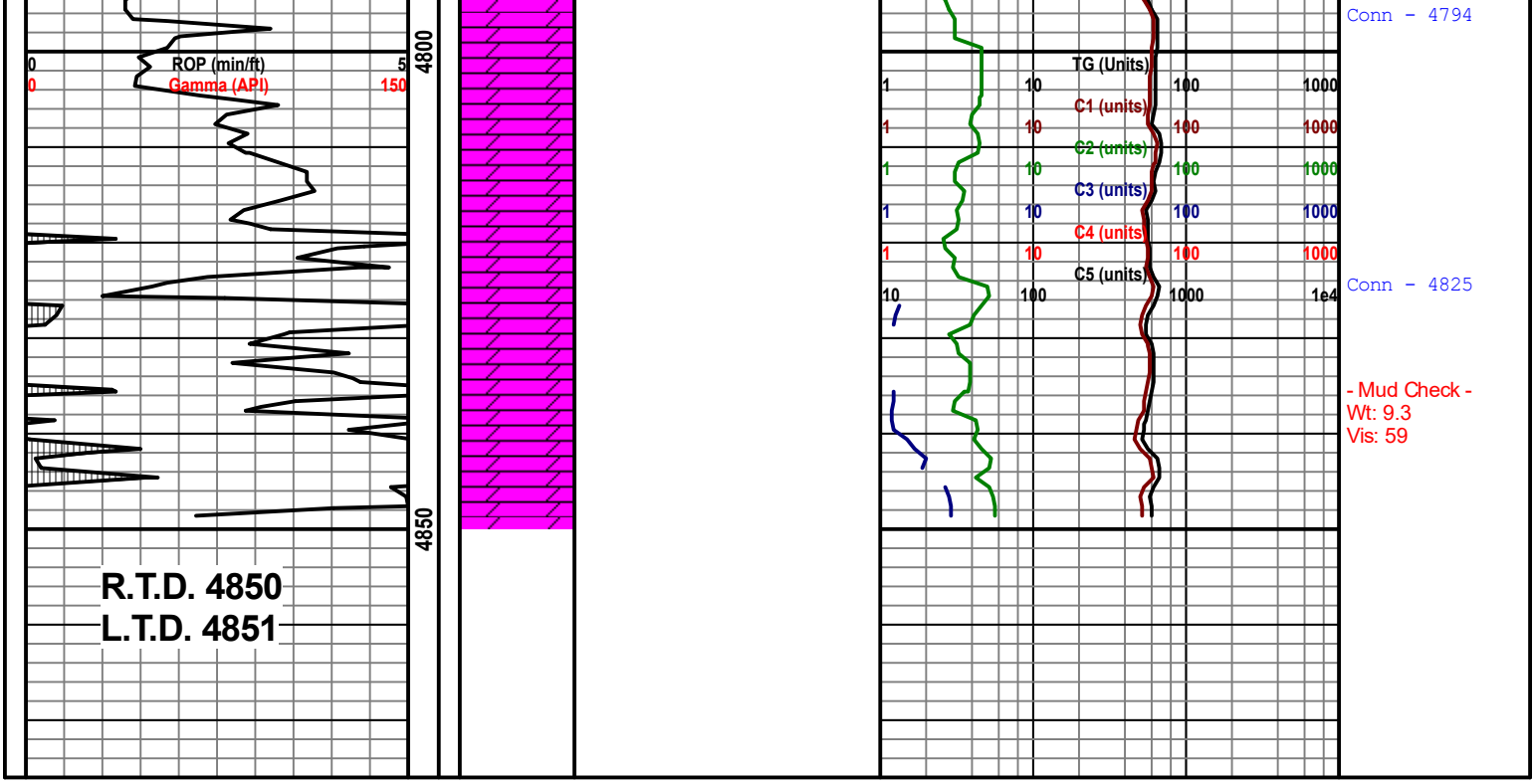

3700
3750
3800
3850
3900
0
ROP (min/ft)
5
0
Gamma (API)
150
F
F
Ls - Tan - MedXln, InterXln Por, Vuggy W/ Scat oolic, Highly Foss, N/S
Heebner (-1699)
Sh - Jet Blk - Gassy
Toronto (-1720)
Ls - Light Br, Mostly fXLn, Scat InterXln Por, Fairly Dse, N/S
N/O
Douglas (-1732)
Sh - Gry SLi Silty
Sh - Gry Silty
As Above
As Above
Scattered Red Shls
TG (Units)
1
10
100
1000
C1 (units)
C2 (units)
C3 (units)
C4 (units)
C5 (units)
1e4
Shale Kick
Repeat Gas
Conn - 3720
Conn - 3751
- Mud Check -
Wt: 8.8
Vis: 82
Conn - 3783
Conn - 3815
- Mud Report -
Depth: 3843
Wt: 8.6
Vis: 68
Fil: 9.6
Chl: 6,000
Lcm: 3#
Conn - 3846
Conn - 3878
- Mud Check -
Wt: 8.6
Vis: 68
Conn - 3909


As Above
Brown Lime (-1846)
Ls - Br, fXLn, Sli Foss, Dse
Sh - Gry, Scattered Red Shls
LKC (-1862)
Ls - Gry, MedXln, InterXln Por, Foss, N/S
Ls - Tan, MedXln, scat vuggy Por, InterXLn Por, N/S
LKC "B" (-1882)
Ls - Gry, MedXln, Vuggy-Xln Por, N/S N/O
Ls - Light Tan, MedXLn, Highly Foss, Sli Vug, N/S
Ls - Light Gry, MedXLn, Sme InterXln Por W/ Resid Oil Stn, No Fluor, No Odor
Ls - Gry, fXln, Scat Foss, Jagged, Dse Chrty, N/S
LKC "F" (-1938)
Ls - Br, fXln, Sli Ooli/oolic, Sli Foss, N/S
Ls - Wht, fXln, PP por, Mstly No Vis Por, N/S
Ls - Tan MedXLn, Vuggy, Sli CHalky, PP Por, Scat Moldic, N/S
Ls - Tan - MedXLn, Highly Weathered, InterXln Por, Foss, N/S N/O
LKC "H" (-1998)
Ls - Br, MedXln, Vuggy,Moldic Por, Fair SFO&G, Well Sat in samples W/ Oil, Abundant Barren Por. Strong Odor
Ls - Tan, fXln, Few Scat Oolic, Moslty No VIs Por
LKC "J" (-2039)
Ls - Tan, MedXln, Vuggy Oolic, GSFO&Sme-G, Partial Sat, Strong Odor, Sme Heavy Oil
ROP (min/ft)
Gamma (API)
TG (Units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
C5 (units)
Abundant Barren Por
Abundant Barren Por
Conn - 3941
- Mud Check -
Wt: 8.8
Vis: 70
Conn - 3973
Conn - 4004
Conn - 4036
Conn - 4067
Conn - 4099
Conn - 4131


ROP (min/ft)
0
5
Gamma (API)
0
150
4150
4200
4250
4300
4350
Ls - Light Gry, MedXln, Tight Oolic/Ooli, Barren Por, N/S N/O
Ls - Br, MedXLn, Foss, Scat Oolica/Ooli, N/S Dse
Ls - Tan, fXLn, Sme Scat InterXln, Mostly No Vis Por
Ls - White, MedXln, Large Foss, Highly Ollitic, N/S N/O
Sh - Blk, Gry
Ls - Tan, MicroXLn, No Vis Por
Ls - Tan/Gry, fXLn, SLi Scat Foss, Mostly No Vis Por
BKC (-2158)
Ls - Tan, MedXLn, InterXLn Por, Foss, Sme Resid Dead Stn, No shows No Odor
Silty Shale, Green,
Ls - Wht, MicroXln, No Vis Por
SH - BLue/Green, Highly SIlty, Calc, Limy, Soft
Sh - Blue/Green/ Silty, Very Soft, Calc
Ls - Light tan/Gry, MicroXLn, Dse No Vis Por
Sh - BLue/Green, Waxy
Sh - Blue/Green, Waxy Scat Blk Organic Matter
Shaly Ls - Gry, MicroXLn, Waxy Interbed Blk Organ Matter
TG (Units)
1
10
100
1000
C1 (units)
C2 (units)
C3 (units)
C4 (units)
C5 (units)
1e4
Conn - 4162
Conn - 4195
Conn - 4225
Conn - 4257
Conn - 4289
Conn - 4320
Conn - 4352


0
ROP (min/ft)
5
0
Gamma (API)
150
4400
4450
4500
4550
Sh - BLue/Green with Purple Stringers
Ls - Purple/Green, MicroXLn, No Vis Por
Various Colored Shales and LS, Purple,Green,Yellow
Miss (-2324)
Ch - Wht/BLue, Transl, Scat Heavy Stn Very Sli Show Gas and Oil on Break
Ch - Wht, Transl, Sme scat heavy dead stn along fractures, vry sli show gas in few samples
Misner (-2357)
SS - Br, F/GR, Sub/RD, Well Sort, Sli SFO&G vry light oil, No Odor
Br, F/GR, Sub/Ang, Well Sort, Sli Dol, GSFO&G Faint Odor, Scat Dead Oil Stn, No Clays
SS - White, Vry F/GR, RD, Well Sort, Dol, Barren, No Shows
SS - Wht - Vry F/GR RD, Well Sort, Dol, No Shows
Ch, Wht, No Vis Por, Yellow tint
Shls - Red Beds
VIola (-2436)
Dol/Ls, Red, W/ Ooli Cht, N/S
Dol/Ls, Various colors,
Mstly Cht, WHt, Transl, scat ooli Mostly no VIs por
Ch - Sli Dol, Wht, Weathered, Vuggy, No Shows
TG (Units)
1
10
100
1000
C1 (units)
C2 (units)
C3 (units)
C4 (units)
C5 (units)
1e4
100 Unit Kick
Conn - 4383
Conn - 4415
Conn - 4446
Conn - 4478
Conn - 4509
Conn - 4541
Conn - 4572


0
ROP (min/ft)
5
0
Gamma (API)
150
4600
4650
4700
4750
Ch - Wht, Sli Dol, N/S
CH - Wht, Fract, N/S
Sh, Grn SIlty
SS - Grn tint mstly clear, Large GR, RD, Well Sorted, Abundant shale/Glauc, N/S N/O
Sh, Grn, Sandy
Sh - Grn, Waxy
Sh, Grn
Arbuckle (-2653)
Dol - Tan, Oolit, Vug, InterXln, MedXLn, Sli Sucro N/S N/O
Tan MicroXln, Sme Scat InterXLn, N/S
Tan, fXLn, Scat Oolic, Vuggy, N/S
Br, MicroXln, No Vis Por, Pink Shade
TG (Units)
1
10
100
1000
C1 (units)
C2 (units)
C3 (units)
C4 (units)
C5 (units)
1e4
- Mud Check -
Wt: 9.1
Vis: 57
Conn - 4604
Conn - 4636
- Mud Report -
Depth: 4645
Wt: 9.2
Vis: 52
Fil: 9.8
Chl:8,000
Lcm: 2.5#
Conn - 4667
Conn - 4694
- Mud Check -
Wt: 9.1
Vis: 58
Conn - 4730
Conn - 4762


0
ROP (min/ft)
5
0
Gamma (API)
150
4800
4850
R.T.D. 4850
L.T.D. 4851
TG (Units)
1
10
100
1000
C1 (units)
C2 (units)
C3 (units)
C4 (units)
C5 (units)
1e4
Conn - 4794
Conn - 4825
- Mud Check -
Wt: 9.3
Vis: 59

Hurricane Services, Inc.
250 N. Water St., Suite #200
Wichita, KS 67202

Customer	NEC Opoerating Kansas LLC	Lease & Well #	Iron Orchard 1			Date	10/17/2023
Service District	Pratt Kansas	County & State	Edwards Kansas	Legals S/T/R	15-26s-16w	Job #	
Job Type	Surface	☑ PROD ☐ INJ ☐ SWD		New Well?	☑ YES ☐ No	Ticket #	wp 4811

Equipment #	Driver
916	M Brungardt
540/522	M McGraw
176/532	M Lawrence

Job Safety Analysis - A Discussion of Hazards & Safety Procedures

☐ Hard hat	☐ Gloves	☐ Lockout/Tagout	☐ Warning Signs & Flagging
☐ H2S Monitor	☐ Eye Protection	☐ Required Permits	☐ Fall Protection
☐ Safety Footwear	☐ Respiratory Protection	☐ Slip/Trip/Fall Hazards	☐ Specific Job Sequence/Expectations
☐ FRC/Protective Clothing	☐ Additional Chemical/Acid PPE	☐ Overhead Hazards	☐ Muster Point/Medical Locations
☐ Hearing Protection	☐ Fire Extinguisher	☐ Additional concerns or issues noted below	

Comments

Product/ Service Code	Description	Unit of Measure	Quantity			Net Amount
cp015	H-325	sack	350.00			$7,875.00
fe285	8 5/8" Rubber Plug	ea	1.00			$175.00
m015	Light Equipment Mileage	mi	30.00			$60.00
m010	Heavy Equipment Mileage	mi	90.00			$360.00
m020	Ton Mileage	tm	494.00			$741.00
c060	Cement Blending & Mixing Service	sack	350.00			$490.00
d010	Depth Charge: 0'-500'	job	1.00			$1,000.00
c035	Cement Data Acquisition	job	1.00			$250.00
c050	Cement Plug Container	job	1.00			$250.00
r061	Service Supervisor	day	1.00			$275.00
cp010	Class A Cement	sack	130.00			$2,600.00
cp100	Calcium Chloride	lb	245.00			$183.75
m020	Ton Mileage	tm	61.10			$91.65

Customer Section: On the following scale how would you rate Hurricane Services Inc.?

Based on this job, how likely is it you would recommend HSI to a colleague?

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Unlikely 1 2 3 4 5 6 7 8 9 10 Extremely Likely

				Net:	$14,351.40
Total Taxable	$ -	Tax Rate:			
State tax laws deem certain products and services used on new wells to be sales tax exempt. Hurricane Services relies on the customer provided well information above to make a determination if services and/or products are tax exempt.			Sale Tax:	$ -	
			Total:	$ 14,351.40	

HSI Representative: *Mark Brungardt*

TERMS: Cash in advance unless Hurricane Services Inc. (HSI) has approved credit prior to sale. Credit terms of sale for approved accounts are total invoice due on or before the 30th day from the date of invoice. Past due accounts shall pay interest on the balance past due at the rate of 1 ½% per month or the maximum allowable by applicable state or federal laws. In the event it is necessary to employ an agency and/or attorney to affect the collection, Customer hereby agrees to pay all fees directly or indirectly incurred for such collection. In the event that Customer's account with HSI becomes delinquent, HSI has the right to revoke any discounts previously applied in arriving at net invoice price. Upon revocation, the full invoice price without discount is immediately due and subject to collection. Prices quoted are estimates only and are good for 30 days from the date of issue. Pricing does not include federal, state, or local taxes, or royalties and stated price adjustments. Actual charges may vary depending upon time, equipment, and material ultimately required to perform these services. Any discount is based on 30 days net payment terms or cash. DISCLAIMER NOTICE: Technical data is presented in good faith, but no warranty is stated or implied. HSI assumes no liability for advice or recommendations made concerning the results fom the use of any product or service. The information presented is a best estimate of the actual results that may be achieved and should be used for comparison purposes and HSI makes no guarantee of future production performance. Customer represents and warrants that well and all associated equipment in acceptable condition to receive services by HSI. Likewise, the customer guarantees proper operational care of all customer owned equipment and property while HSI is on location performing services. The authorization below acknowledges the receipt and acceptance of all terms/conditions stated above, and Hurricane has been provided accurate well informaiton in determining taxable services.

X _____ **CUSTOMER AUTHORIZATION SIGNATURE**

ftv: 15-2021/01/25
mplv: 425-2023/10/06

CEMENT TREATMENT REPORT

Customer:	NEC Opoerating Kansas LLC	Well:	Iron Orchard 1	Ticket:	wp 4811
City, State:	Trousdale Kansas	County:	Edwards Kansas	Date:	10/17/2023
Field Rep:	Scott Piland	S-T-R:	15-26s-16w	Service:	Surface

Downhole Information	
Hole Size:	12 1/4 in
Hole Depth:	347 ft
Casing Size:	8 5/8 in
Casing Depth:	345 ft
Tubing / Liner:	in
Depth:	ft
Tool / Packer:	
Tool Depth:	ft
Displacement:	20.0 bbls

Calculated Slurry - Lead	
Blend:	H-325
Weight:	14.8 ppg
Water / Sx:	6.5 gal / sx
Yield:	1.39 ft^3 / sx
Annular Bbls / Ft.:	bbs / ft.
Depth:	ft
Annular Volume:	0.0 bbls
Excess:	
Total Slurry:	86.6 bbls
Total Sacks:	350 sx

Calculated Slurry - Tail	
Blend:	A2%cc
Weight:	15.6 ppg
Water / Sx:	gal / sx
Yield:	1.20 ft^3 / sx
Annular Bbls / Ft.:	bbs / ft.
Depth:	ft
Annular Volume:	0 bbls
Excess:	
Total Slurry:	27.7 bbls
Total Sacks:	130 sx

TIME	RATE	PSI	STAGE BBLs	TOTAL BBLs	REMARKS
9:00 PM			-	-	on location job and safety
9:15 PM				-	spot trucks and rig up
				-	
10:30 PM				-	start casing in the hole
11:45 PM				-	pipe on bottom and establish circulation
				-	
11:55 PM				-	start cement
	3.0	150.0	2.0	2.0	fresh water
	3.5	200.0	86.0	88.0	mix 350 sacks H-325 at 14.8
12:20 AM					cement in and shut down
				-	
					release plug and start displacement
	3.5	100.0	20.0		
12:30 AM					displacement in and close in the well
					cement did not circulate
					send bulk truck in for more cement
					run 1 joint 1 inch
3:30 AM	1.0	50.0	1.0		fresh water
	1.5	50.0	27.0		mix 130 sacks A2%cc to surface

	CREW	UNIT
Cementer:	M Brungardt	916
Pump Operator:	M McGraw	540/522
Bulk #1:	M Lawrence	176/532
Bulk #2:		

SUMMARY		
Average Rate	Average Pressure	Total Fluid
2.5 bpm	110 psi	136 bbls