Joshua R. Austin

Petroleum Geologist

report for

Thomas Garner, Inc.

COMPANY: Thomas Garner, Inc.

LEASE: Garner #6

FIELD: Leiss Northwest

LOCATION: Nw-Nw-Ne (330' FNL & 2344' FEL)

SEC: 15 TWSP: 25s RGE: 13w

COUNTY: Stafford STATE: Kansas

KB: 1939' GL: 1926'

API # 15-185-23939-0000

CONTRACTOR: Sterling Drilling Company (Rig #5)

Spud: 06/23/2015 Comp: 06/30/2015

RTD: 4290' LTD: 4198'

Mud Up: 2900' Type Mud: Chemical was displaced

Samples Saved From: 3400' to RTD

Drilling Time Kept From: 3400' to RTD

Samples Examined From: 3400' to RTD

Geological Supervision From: 3400' to RTD

Geologist on Well: Josh Austin

Surface Casing: 8 5/8" @ 303'

Production Casing: 5 1/2" @ 4283'

Electronic Surveys: By Pioneer Energy Services

NOTES

On the basis of the positive structural position, drill stem test and after reviewing the electric logs, it was recommended by all parties involved in the Garner #6 to run 5 1/2" production casing to further test the following zones before plugging. Arbuckle, Mississippi, Lansing

Thomas Garner, Inc

well comparison sheet

DRILLING WELL	COMPARISON WELL	COMPARISON WELL	COMPARISON WELL
Garner #6	Garner #3	Fair #1	Garner 5-15

					C-W/2-NE				SE-SW-SE (sec 10)				C-N/2-NE			
	1939 KB				1931 KB		Structural Relationship		1933 KB		Structural Relationship		1933 KB		Structural Relationship	
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log
Anhydrite	787	1152							785	1148	4		773	1160	-8	
Heebner	3488	-1549	3484	-1545	3477	-1546	-3	1	3486	-1553	4	8	3479	-1546	-3	1
Toronto	3508	-1569	3502	-1563	3498	-1567	-2	4	3506	-1573	4	10				
Douglas	3527	-1588	3524	-1585	3520	-1589	1	4	3528	-1595	7	10				
Brown Lime	3639	-1700	3634	-1695	3631	-1700	0	5	3640	-1707	7	12	3633	-1700	0	5
Lansing	3671	-1732	3668	-1729	3664	-1733	1	4	3665	-1732	0	3	3661	-1728	-4	-1
BKC	3952	-2013	3950	-2011	3948	-2017	4	6	3955	-2022	9	11	3945	-2012	-1	1
Mississippi	4057	-2118	4054	-2115	4030	-2099	-19	-16	4067	-2134	16	19	4028	-2095	-23	-20
Viola	4154	-2215	4150	-2211	4101	-2170	-45	-41	4138	-2205	-10	-6	4114	-2181	-34	-30
Simpson Shale	4207	-2268	N/A	N/A	4211	-2280	12	N/A	4238	-2305	37	N/A	4219	-2286	18	N/A
Simpson Sand	4215	-2276	N/A	N/A	4220	-2289	13	N/A	4246	-2313	37	N/A	4226	-2293	17	N/A
Arbuckle	4269	-2330	N/A	N/A	4278	-2347	17	N/A	4299	-2366	36	N/A	4286	-2353	23	N/A
Total Depth	4290	-2351	N/A	N/A	4290	-2359			4333	-2400			4329	-2396		

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Thomas Garner Inc

305 E 7th St
St John, KS 67576

ATTN: Josh Austin

15-25S-13W Stafford

Garner 6

Job Ticket: 59772 **DST#: 1**

Test Start: 2015.06.28 @ 04:34:15

GENERAL INFORMATION:

Formation: **Lansing "H"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 06:28:15
Time Test Ended: 11:24:30

Test Type: Conventional Bottom Hole (Initial)
Tester: Leal Cason
Unit No: 74

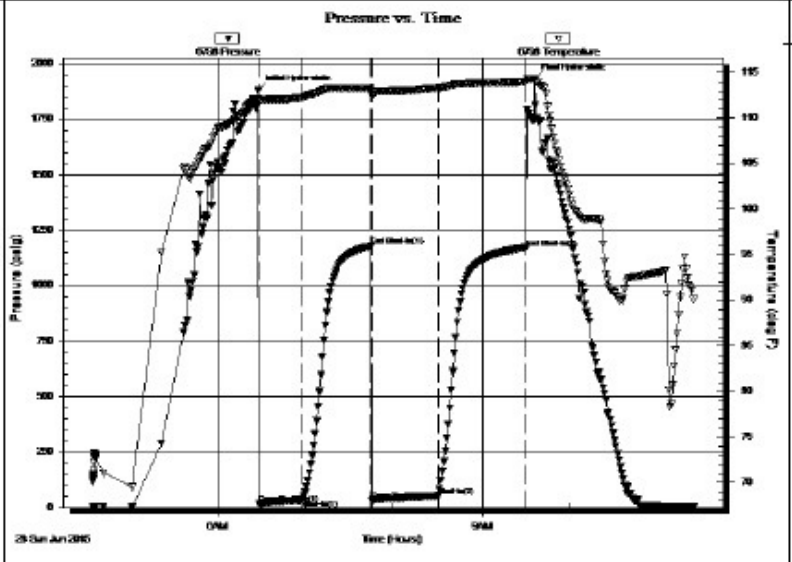
Interval: 3800.00 ft (KB) To 3815.00 ft (KB) (TVD)
Total Depth: 3815.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 1939.00 ft (KB)
1926.00 ft (CF)
KB to GR/CF: 13.00 ft

Serial #: 6798 **Inside**
Press@RunDepth: 53.47 psig @ 3801.00 ft (KB)
Start Date: 2015.06.28 End Date: 2015.06.28
Start Time: 04:34:16 End Time: 11:24:30

Capacity: 8000.00 psig
Last Calib.: 2015.06.28
Time On Btm: 2015.06.28 @ 06:27:30
Time Off Btm: 2015.06.28 @ 09:35:45

TEST COMMENT: IF: Strong Blow , BOB in 5 minutes
ISI: 1/4 inch Blow Back
FF: Strong Blow , BOB in 30 seconds
FSI: No Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1880.20	112.14	Initial Hydro-static
1	18.86	111.78	Open To Flow (1)
31	34.63	112.25	Shut-In(1)
77	1176.62	113.29	End Shut-In(1)
78	31.27	112.54	Open To Flow (2)
122	53.47	113.33	Shut-In(2)
182	1171.42	113.99	End Shut-In(2)
189	1929.46	114.38	Final Hydro-static

Recovery

Gas Rates

Recovery

Length (ft)	Description	Volume (bbl)
0.00	1071 GIP	0.00
100.00	GMWCO 12%G 5%M 10%W 73%O	0.86

Gas Rates

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

DRILL STEM TEST REPORT

Thomas Garner Inc

305 E 7th St
St John, KS 67576-1652

ATTN: Josh Austin

15-25S-13W Stafford

Garner 6

Job Ticket: 59773 **DST#: 2**

Test Start: 2015.06.29 @ 15:07:16

GENERAL INFORMATION:

Formation: **Simpson**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 17:33:01
Time Test Ended: 21:23:01

Test Type: Conventional Bottom Hole (Reset)
Tester: Leal Cason
Unit No: 74

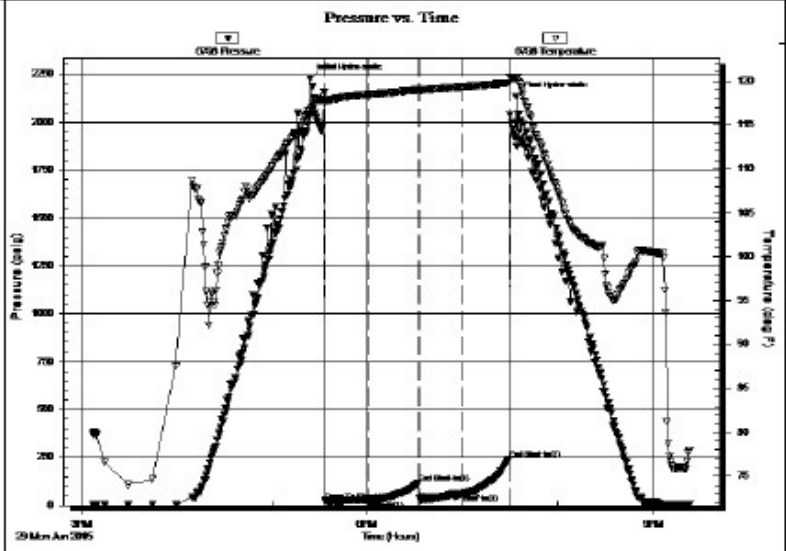
Interval: **4207.00 ft (KB) To 4245.00 ft (KB) (TVD)**
Total Depth: 4207.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 1939.00 ft (KB)
1926.00 ft (CF)
KB to GR/CF: 13.00 ft

Serial #: 6798 **Inside**
Press@RunDepth: 58.34 psig @ 4208.00 ft (KB)
Start Date: 2015.06.29 End Date: 2015.06.29
Start Time: 15:07:17 End Time: 21:23:01

Capacity: 8000.00 psig
Last Calib.: 2015.06.29
Time On Btm: 2015.06.29 @ 17:23:46
Time Off Btm: 2015.06.29 @ 19:33:46

TEST COMMENT: IF: Weak 1/4 inch Blow
ISI: No Blow Back
FF: No Blow
FSI: No Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2226.32	116.89	Initial Hydro-static
10	23.48	117.51	Open To Flow (1)
37	25.99	118.46	Shut-In(1)
69	117.27	118.98	End Shut-In(1)
70	28.62	118.96	Open To Flow (2)
97	58.34	119.34	Shut-In(2)
126	242.65	119.78	End Shut-In(2)
130	2132.72	120.24	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud	0.02

Gas Rates

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

* Recovery from multiple tests

DRILL STEM TEST REPORT

Thomas Gaerner Inc

305 E 7th St
St John, KS 67576

ATTN: Josh Austin

15-25S-13W Stafford

Garner 6

Job Ticket: 59774 **DST#: 3**

Test Start: 2015.06.30 @ 07:51:24

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 09:25:09
Time Test Ended: 14:00:31

Test Type: Conventional Bottom Hole (Reset)
Tester: Leal Cason
Unit No: 74

Interval: 4283.00 ft (KB) To 4290.00 ft (KB) (TVD)
Total Depth: 4290.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

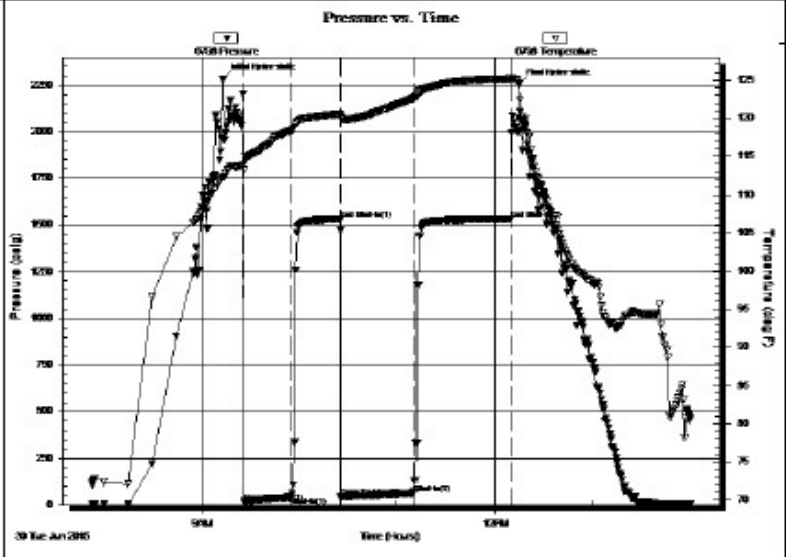
Reference Elevations: 1939.00 ft (KB)
1926.00 ft (CF)
KB to GR/CF: 13.00 ft

Serial #: 6798 **Inside**

Press@RunDepth: 62.99 psig @ 4284.00 ft (KB)
Start Date: 2015.06.30 End Date: 2015.06.30
Start Time: 07:51:25 End Time: 14:00:31

Capacity: 8000.00 psig
Last Calib.: 2015.06.30
Time On Btm: 2015.06.30 @ 09:12:24
Time Off Btm: 2015.06.30 @ 12:14:54

TEST COMMENT: IF: Weak Blow , Built to 6 inches
ISI: No Blow Back
FF: Fair Blow , Built to 9 inches
FSI: No Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2284.10	112.30	Initial Hydro-static
13	18.66	113.19	Open To Flow (1)
43	41.34	118.38	Shut-In(1)
73	1530.96	120.56	End Shut-In(1)
73	43.84	120.08	Open To Flow (2)
118	62.99	122.55	Shut-In(2)
177	1531.11	125.17	End Shut-In(2)
183	2252.10	124.49	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	124 GIP	0.00
60.00	GOWCM 10%G 28%W 30%O 32%M	0.30
64.00	GSY Oil 10%G 90&O	0.90

Gas Rates

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

* Recovery from multiple tests

ROCK TYPES

Cht	Dolprim	shale, grn	Ss
Cht vari	Dolsec	shale, gry	Sltst
Chtcongl	Lmst fw7>	Carbon Sh	

ACCESSORIES

MINERAL
- Chert, dark
- Dolomitic
- P Pyrite
- Chert White

FOSSIL
- Oolite
- Oomoldic

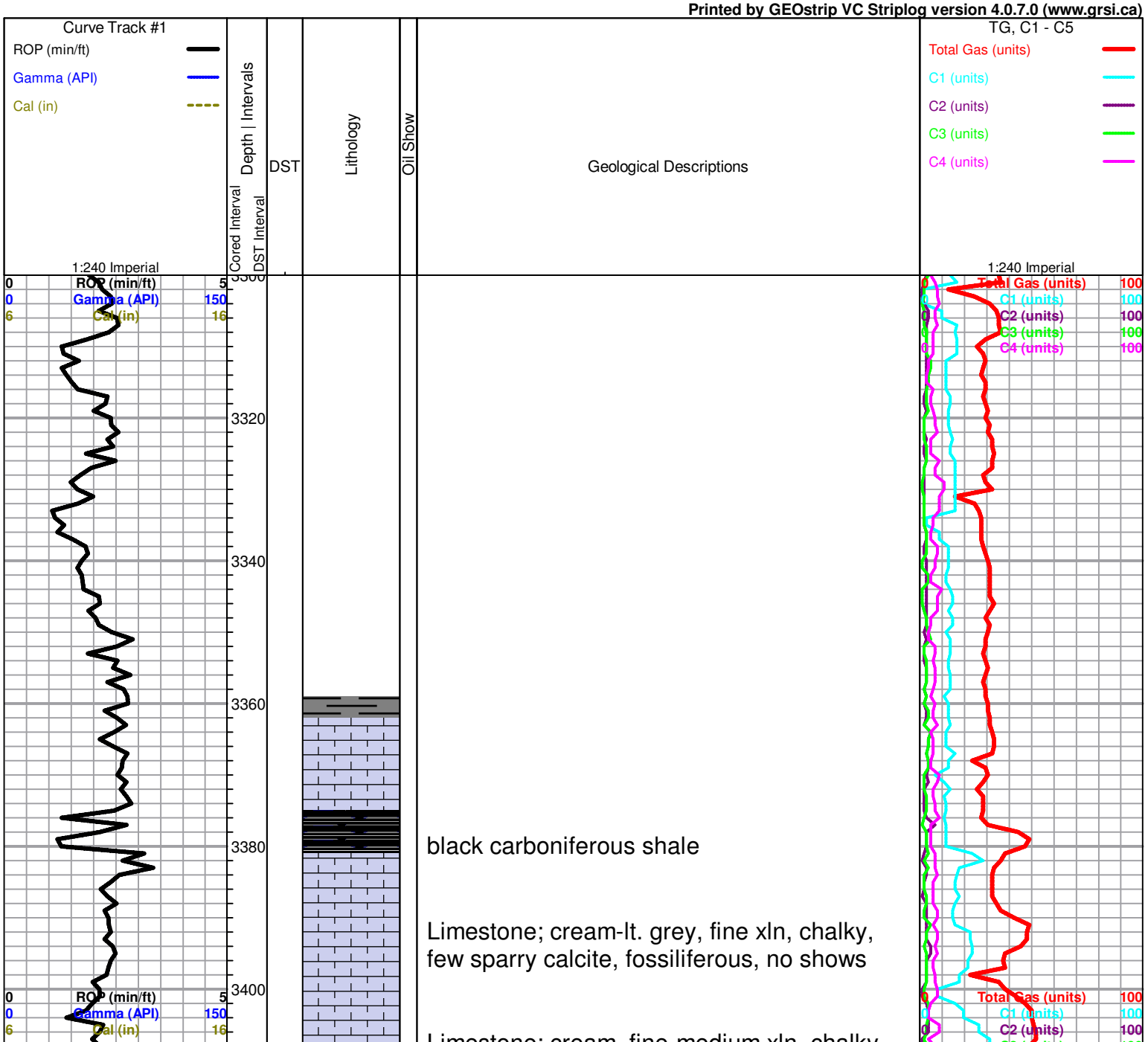
STRINGER
- Sandstone

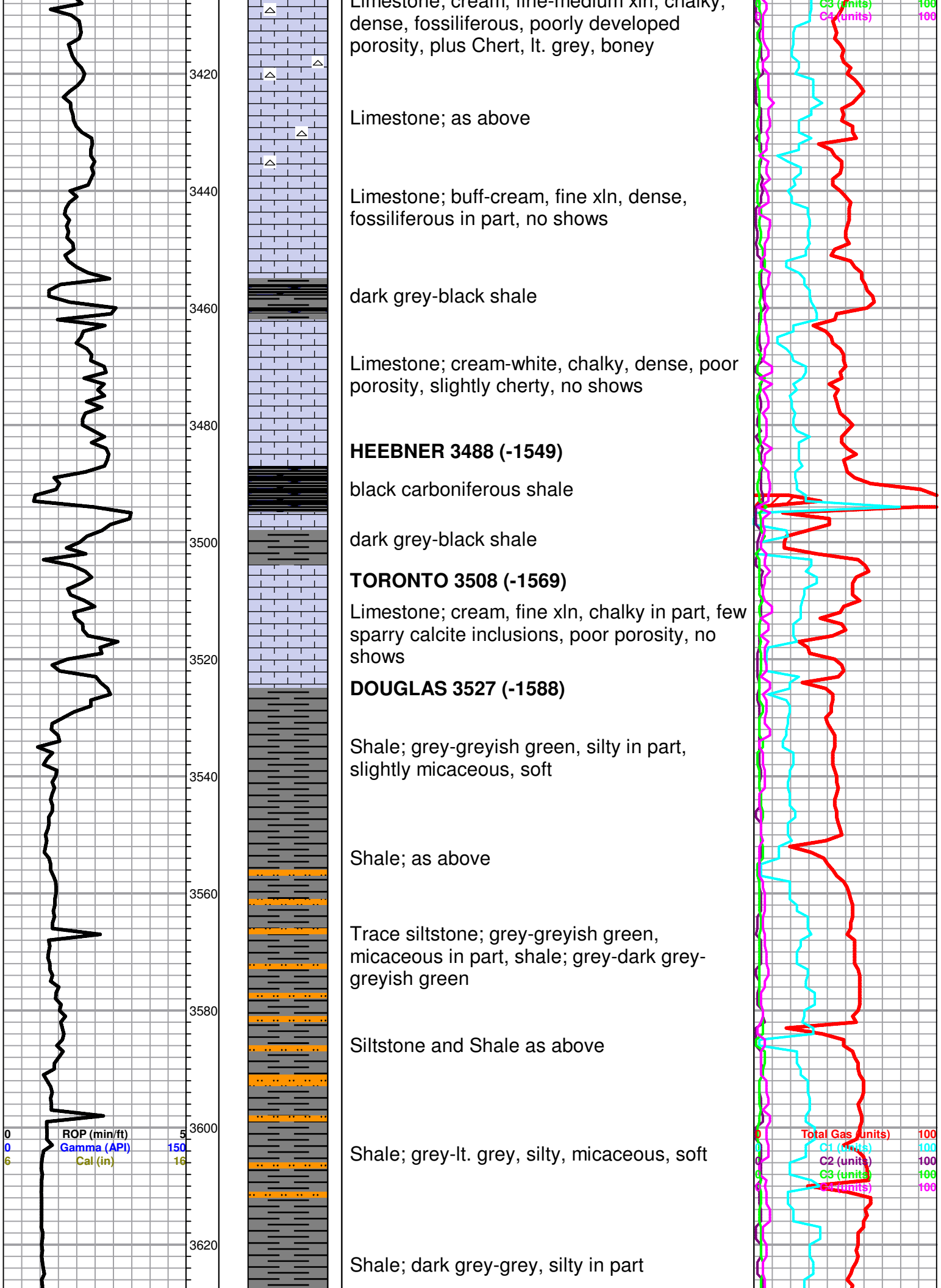
TEXTURE
- C Chalky

OTHER SYMBOLS

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

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





Limestone, cream, fine-medium xln, chalky, dense, fossiliferous, poorly developed porosity, plus Chert, lt. grey, boney

Limestone; as above

Limestone; buff-cream, fine xln, dense, fossiliferous in part, no shows

dark grey-black shale

Limestone; cream-white, chalky, dense, poor porosity, slightly cherty, no shows

HEEBNER 3488 (-1549)

black carboniferous shale

dark grey-black shale

TORONTO 3508 (-1569)

Limestone; cream, fine xln, chalky in part, few sparry calcite inclusions, poor porosity, no shows

DOUGLAS 3527 (-1588)

Shale; grey-greyish green, silty in part, slightly micaceous, soft

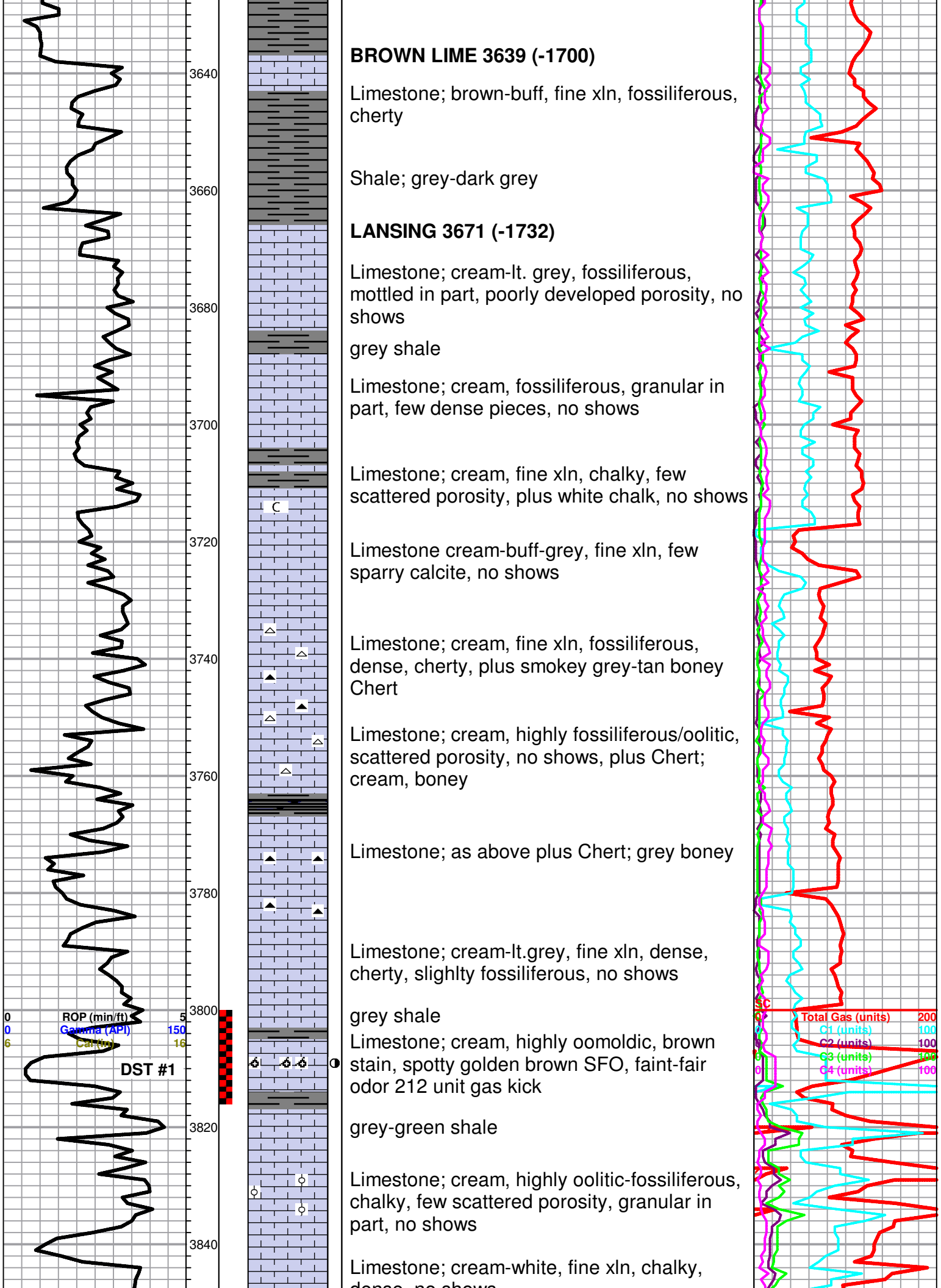
Shale; as above

Trace siltstone; grey-greyish green, micaceous in part, shale; grey-dark grey-greyish green

Siltstone and Shale as above

Shale; grey-lt. grey, silty, micaceous, soft

Shale; dark grey-grey, silty in part



BROWN LIME 3639 (-1700)

Limestone; brown-buff, fine xln, fossiliferous, cherty

Shale; grey-dark grey

LANSING 3671 (-1732)

Limestone; cream-lt. grey, fossiliferous, mottled in part, poorly developed porosity, no shows

grey shale

Limestone; cream, fossiliferous, granular in part, few dense pieces, no shows

Limestone; cream, fine xln, chalky, few scattered porosity, plus white chalk, no shows

Limestone cream-buff-grey, fine xln, few sparry calcite, no shows

Limestone; cream, fine xln, fossiliferous, dense, cherty, plus smokey grey-tan boney Chert

Limestone; cream, highly fossiliferous/oolitic, scattered porosity, no shows, plus Chert; cream, boney

Limestone; as above plus Chert; grey boney

Limestone; cream-lt.grey, fine xln, dense, cherty, slighlty fossiliferous, no shows

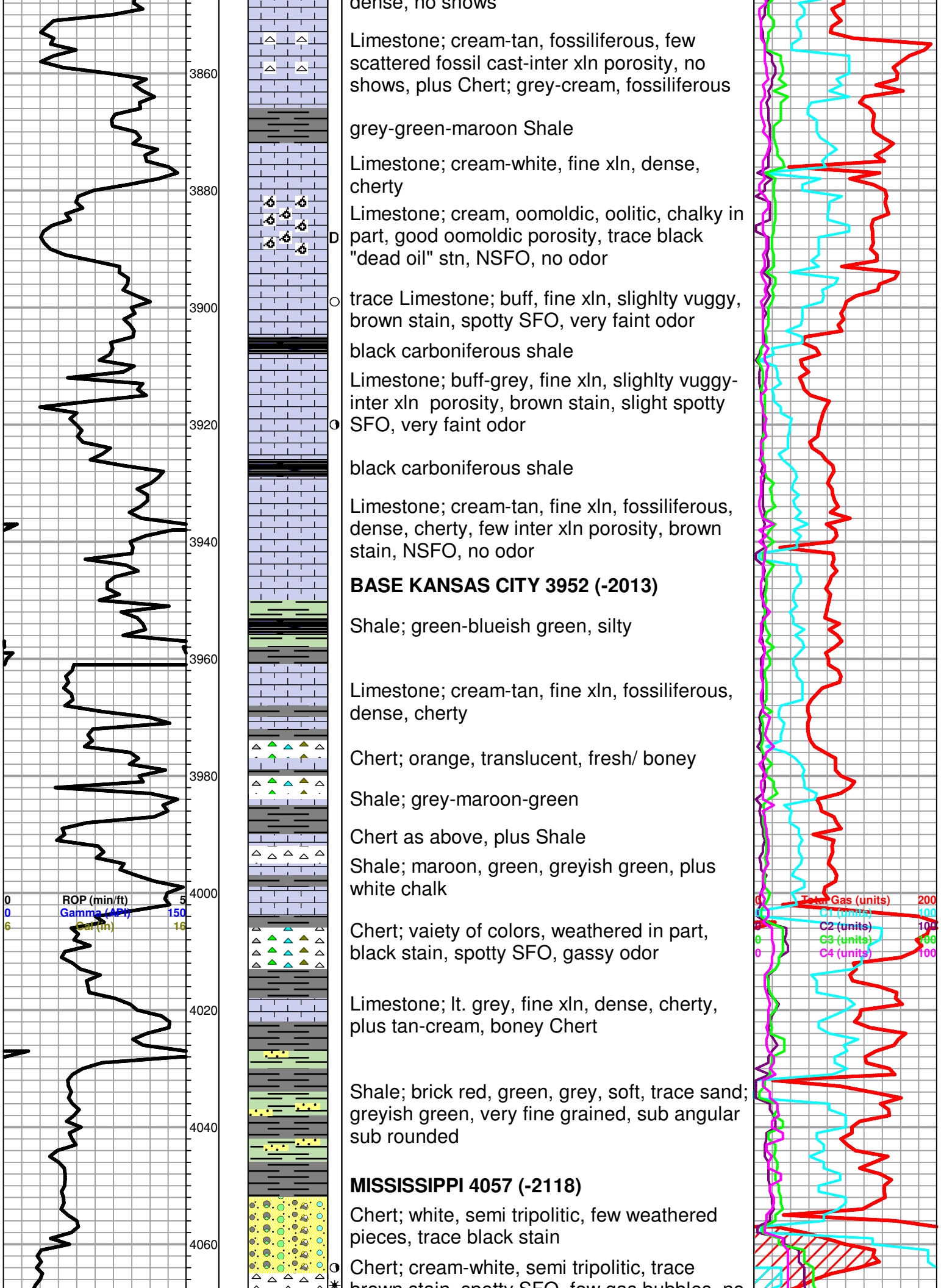
grey shale

Limestone; cream, highly oomoldic, brown stain, spotty golden brown SFO, faint-fair odor 212 unit gas kick

grey-green shale

Limestone; cream, highly oolitic-fossiliferous, chalky, few scattered porosity, granular in part, no shows

Limestone; cream-white, fine xln, chalky,



dense, no shows

Limestone; cream-tan, fossiliferous, few scattered fossil cast-inter xln porosity, no shows, plus Chert; grey-cream, fossiliferous

grey-green-maroon Shale

Limestone; cream-white, fine xln, dense, cherty

Limestone; cream, oomoldic, oolitic, chalky in part, good oomoldic porosity, trace black "dead oil" stn, NSFO, no odor

trace Limestone; buff, fine xln, slighlty vuggy, brown stain, spotty SFO, very faint odor

black carboniferous shale

Limestone; buff-grey, fine xln, slighlty vuggy-inter xln porosity, brown stain, slight spotty SFO, very faint odor

black carboniferous shale

Limestone; cream-tan, fine xln, fossiliferous, dense, cherty, few inter xln porosity, brown stain, NSFO, no odor

BASE KANSAS CITY 3952 (-2013)

Shale; green-blueish green, silty

Limestone; cream-tan, fine xln, fossiliferous, dense, cherty

Chert; orange, translucent, fresh/ boney

Shale; grey-maroon-green

Chert as above, plus Shale

Shale; maroon, green, greyish green, plus white chalk

Chert; vaiety of colors, weathered in part, black stain, spotty SFO, gassy odor

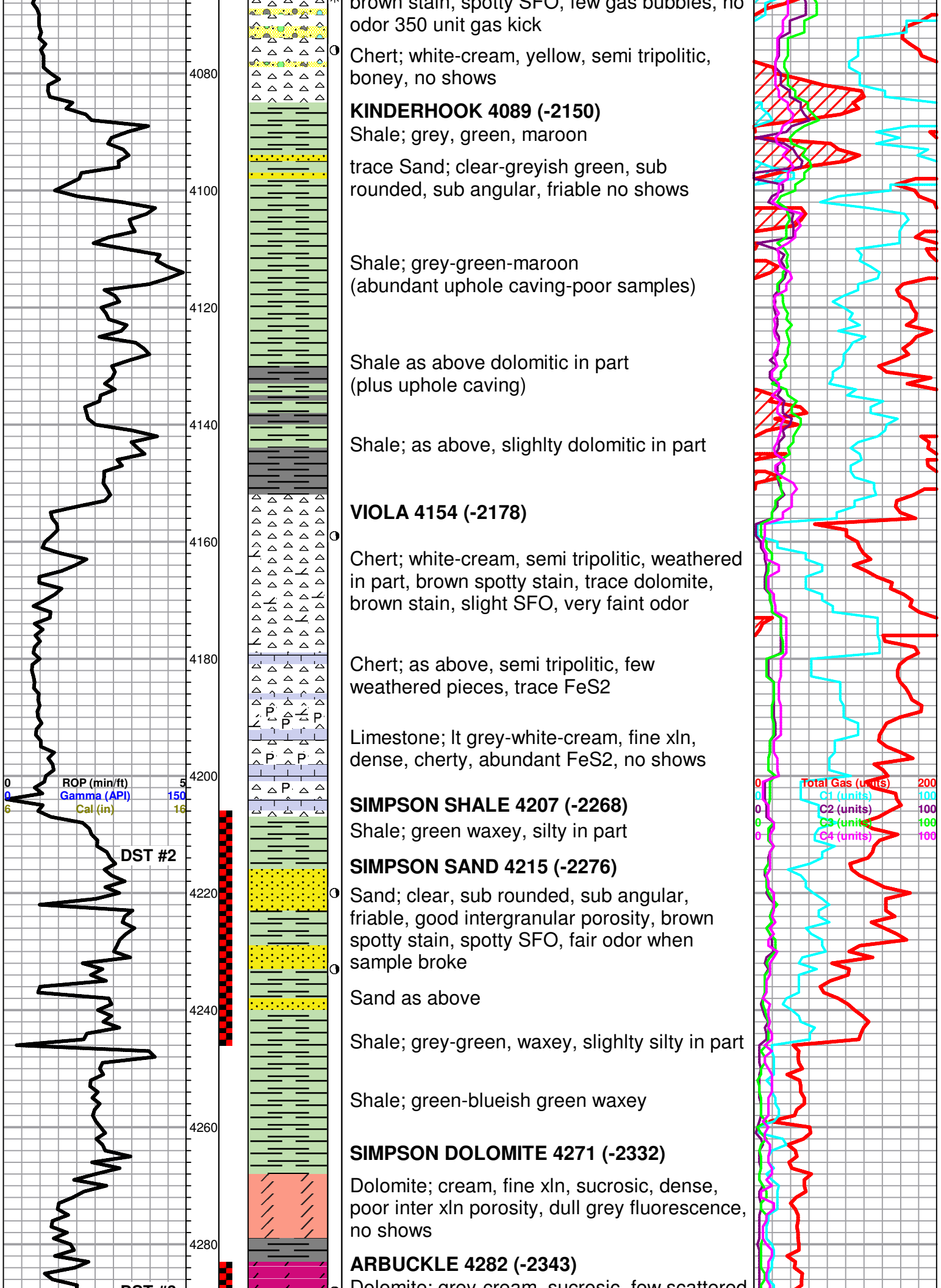
Limestone; lt. grey, fine xln, dense, cherty, plus tan-cream, boney Chert

Shale; brick red, green, grey, soft, trace sand; greyish green, very fine grained, sub angular sub rounded

MISSISSIPPI 4057 (-2118)

Chert; white, semi tripolitic, few weathered pieces, trace black stain

Chert; cream-white, semi tripolitic, trace



brown stain, spotty SFO, few gas bubbles, no odor 350 unit gas kick

Chert; white-cream, yellow, semi tripolitic, boney, no shows

KINDERHOOK 4089 (-2150)

Shale; grey, green, maroon

trace Sand; clear-greyish green, sub rounded, sub angular, friable no shows

Shale; grey-green-maroon
(abundant uphole caving-poor samples)

Shale as above dolomitic in part
(plus uphole caving)

Shale; as above, slighlty dolomitic in part

VIOLA 4154 (-2178)

Chert; white-cream, semi tripolitic, weathered in part, brown spotty stain, trace dolomite, brown stain, slight SFO, very faint odor

Chert; as above, semi tripolitic, few weathered pieces, trace FeS2

Limestone; lt grey-white-cream, fine xln, dense, cherty, abundant FeS2, no shows

SIMPSON SHALE 4207 (-2268)

Shale; green waxey, silty in part

SIMPSON SAND 4215 (-2276)

Sand; clear, sub rounded, sub angular, friable, good intergranular porosity, brown spotty stain, spotty SFO, fair odor when sample broke

Sand as above

Shale; grey-green, waxey, slighlty silty in part

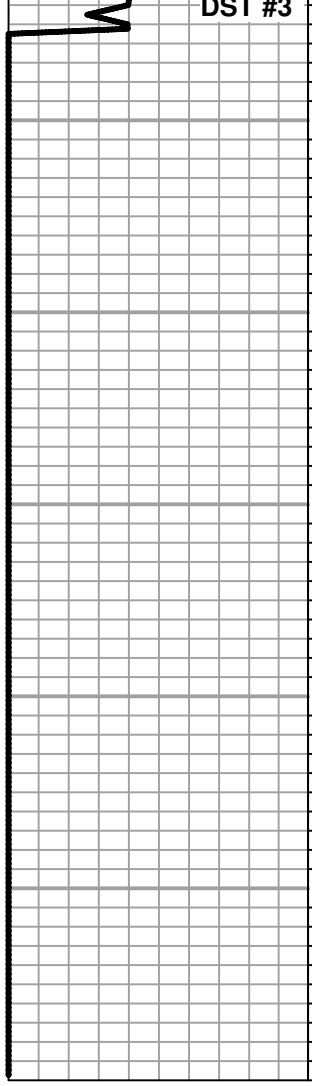
Shale; green-blueish green waxey

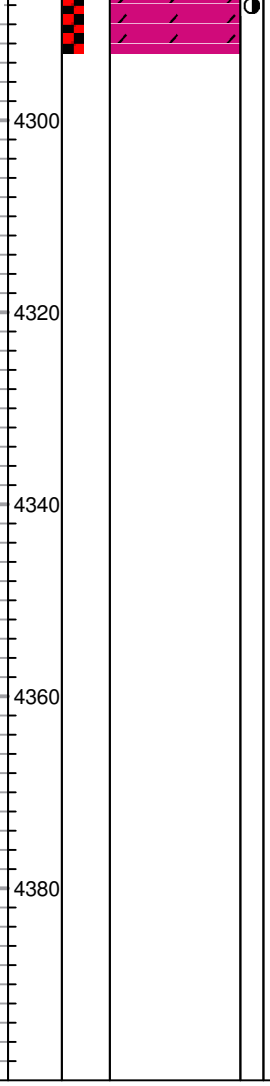
SIMPSON DOLOMITE 4271 (-2332)

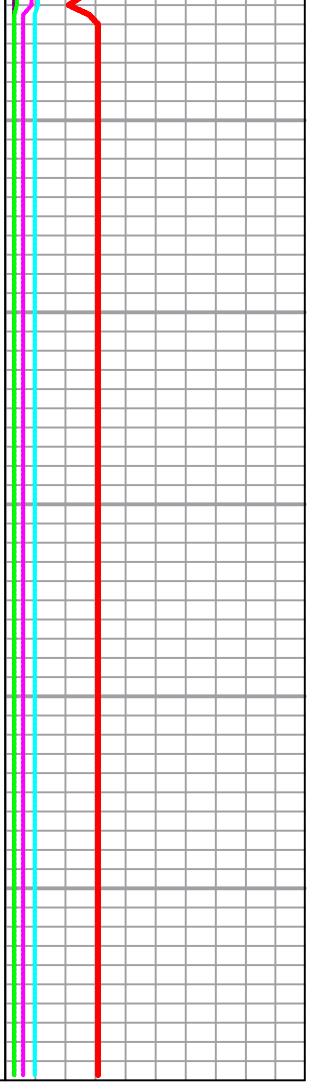
Dolomite; cream, fine xln, sucrosic, dense, poor inter xln porosity, dull grey fluorescence, no shows

ARBUCKLE 4282 (-2343)

Dolomite; grey-cream, sucrosic, few scattered







Dolomite, grey-cream, sucrosic, few scattered vuggy porosity, spotty brown stain, SFO when sample broke, fair-good odor

ROTARY TOTAL DEPTH 4290 (-2351)

DST #1 3800-3815 (30-45-45-60)
Blow; BOB in 5 minutes, 1/4" blow back
Final; BOB in 30 seconds, no blow back
Recovery; 1071' GIP
100' GMWCO (12%G, 5%M, 10%W, 73%O)
Pressures; IFP 19-35, FFP 31-54,
BHP 1176-1171, HSH 1880-1929

DST #2 3800-3815 (30-30-30-30)
Blow; Weak 1/4" blow
Final; no blow
Recovery; 5' Mud
Pressures; IFP 23-26, FFP 28-58,
BHP 117-243, HSH 2226-2132

DST #3 42830-4290 (30-30-45-60)
Blow; Built to 6", no blow back
Final; Built to 9", no blow back
Recovery; 124' GIP
64' Gassy Oil (10%G, 90%O)
60' GOWCM (10%G, 28%W, 30%O, 32%M)
Pressures; IFP 18-41, FFP 43-62,
BHP 1530-1531, HSH 2284-2252