Natural Gas • Crude Oil
Exploration & Production

McCOY PETROLEUM CORPORATION

Wichita, Kansas

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

Well Name:	Stewart 'A' #2-31		
Location:	Sec. 31 - T31S - R3W, Sumner County, KS		
License Number:	API #: 15-191-22680	Region:	Love-Three North
Spud Date:	April 9, 2013	Drilling Completed:	April 18, 2013
Surface Coordinates:	W/2 NE SW SE 990' FSL & 1750' FEL		
Bottom Hole Coordinates:			
Ground Elevation (ft):	1288'	K.B. Elevation (ft):	1297'
Logged Interval (ft):	2900' To: 4458'	Total Depth (ft):	4458' RTD
Formation:	Simpson		
Type of Drilling Fluid:	Chemical		

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

OPERATOR

Company: McCoy Petroleum Corporation, License #5003
Address: 8080 E. Central Ave., Suite 300
Wichita, KS 67206

GEOLOGIST

Name: Evan Stone
Company: McCoy Petroleum Corporation
Address: 8080 E. Central Ave., Suite 300
Wichita, KS 67206

REMARKS

Surface Casing: Spud at 4:15 pm on 04/09/13. Drilled 12-1/4" hole to 280'. Ran 6 joints of new 23# 8-5/8" surface casing, Tallied 265.88', set at 276.88' KB. Welded straps on bottom 3 joints. Tacked collars on remainder. Cemented with 250 sks 60/40 Poz; 2% Gel; 3% CC & 1/4# CF. Plug down at 1:45 am on 04/10/13. Cement did circulate. Quality Cementing ticket #5834.
Deviation Surveys Taken: @ 4005' = 2.5°; @ 4458' = 1°

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

McCoy Petroleum Corp

8080 E central Ste 300
Wichita, KS 67206

ATTN: Evan Stone

31-31S-3W Sumner

Stewart 2-31

Job Ticket: 50914 **DST#: 1**

Test Start: 2013.04.16 @ 18:42:35

GENERAL INFORMATION:

Formation: **Mississippi**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 21:12:05
Time Test Ended: 04:17:50

Test Type: Conventional Bottom Hole (Initial)
Tester: Leal Cason
Unit No: 45

Interval: 3980.00 ft (KB) To 4005.00 ft (KB) (TVD)
Total Depth: 4005.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

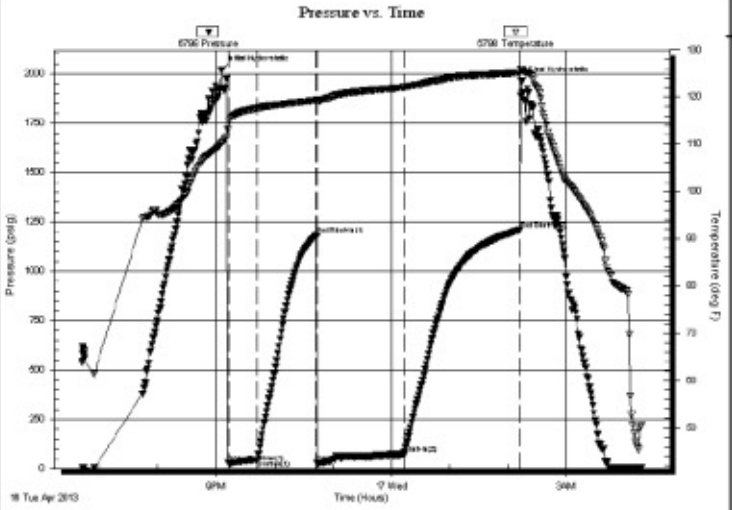
Reference Elevations: 1297.00 ft (KB)
1288.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 6798 **Inside**

Press@RunDepth: 72.29 psig @ 3981.00 ft (KB)
Start Date: 2013.04.16 End Date: 2013.04.17
Start Time: 18:42:36 End Time: 04:17:50

Capacity: 8000.00 psig
Last Calib.: 2013.04.17
Time On Btm: 2013.04.16 @ 21:05:50
Time Off Btm: 2013.04.17 @ 02:13:35

TEST COMMENT: IF: Strong Blow , BOB in 4 minutes
ISI: No Blow Back
FF: Strong Blow , BOB immediate, GTS in 60 minutes, Caught Sample, TSTM
FSI: No Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2021.85	110.21	Initial Hydro-static
7	27.32	113.22	Open To Flow (1)
37	45.59	117.57	Shut-In(1)
98	1183.93	119.29	End Shut-In(1)
99	28.20	119.44	Open To Flow (2)
187	72.29	122.03	Shut-In(2)
307	1209.14	125.14	End Shut-In(2)
308	1963.95	125.81	Final Hydro-static

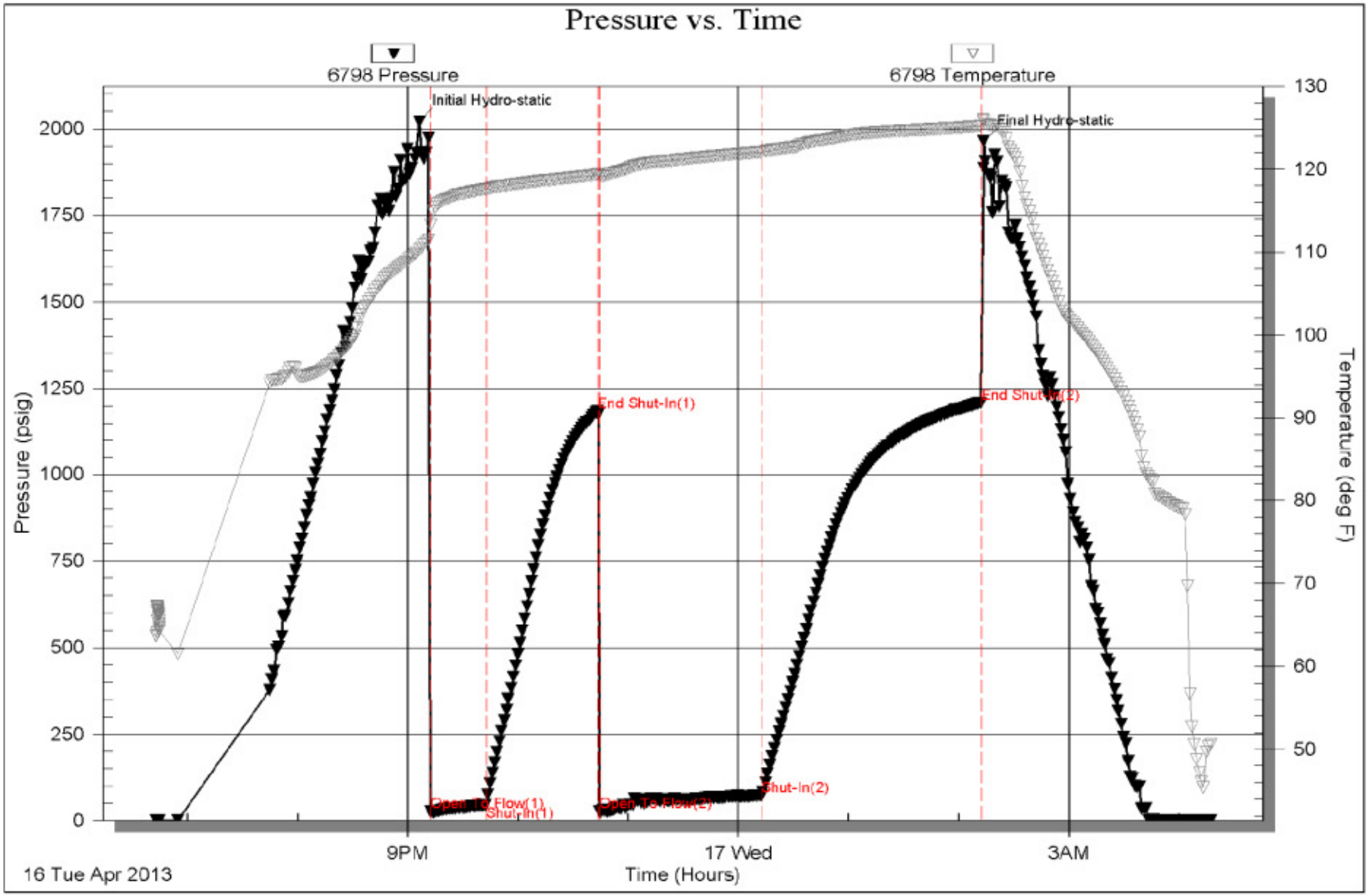
Recovery

Length (ft)	Description	Volume (bbl)
0.00	3790 GIP	0.00
178.00	GSY OWCM 66%G 5%O 5%W 24%M	0.88
2.00	Oil	0.03

Gas Rates

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

Serial #: 6798 **Inside** McCoy Petroleum Corp Stewart 2-31 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 50914 Printed: 2013.04.17 @ 08:33:23

DRILL STEM TEST REPORT

McCoy Petroleum Corp

8080 E central Ste 300
Wichita, KS 67206

ATTN: Evan Stone

31-31S-3W Sumner

Stewart 2-31

Job Ticket: 50915 **DST#: 2**

Test Start: 2013.04.19 @ 02:08:15

GENERAL INFORMATION:

Formation: **Simpson**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 04:50:15
Time Test Ended: 11:22:45

Test Type: Conventional Bottom Hole (Reset)
Tester: Leal Cason
Unit No: 45

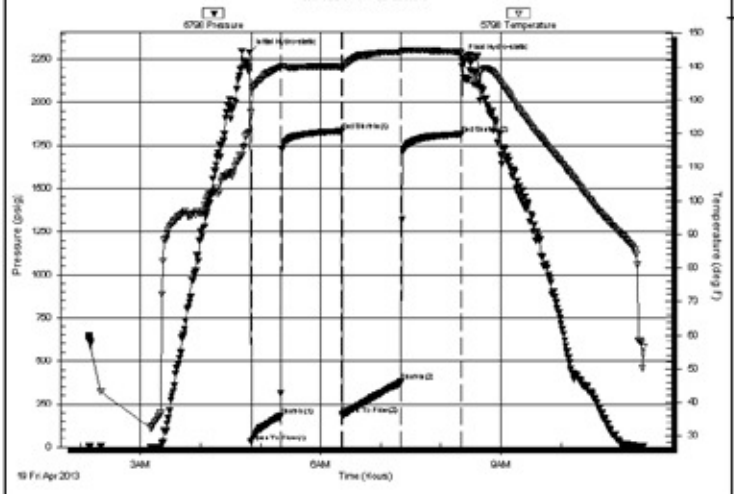
Interval: 4448.00 ft (KB) To 4458.00 ft (KB) (TVD)
Total Depth: 4458.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 1297.00 ft (KB)
1288.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 6798 **Inside**
Press@RunDepth: 377.46 psig @ 4449.00 ft (KB)
Start Date: 2013.04.19 End Date: 2013.04.19
Start Time: 02:08:16 End Time: 11:22:45

Capacity: 8000.00 psig
Last Calib.: 2013.04.19
Time On Btm: 2013.04.19 @ 04:49:00
Time Off Btm: 2013.04.19 @ 08:21:15

TEST COMMENT: IF: Fair Blow , BOB in 19 minutes
ISI: Very Weak Surface Blow Back
FF: Weak Blow , BOB in 28 minutes
FSI: Weak Surface Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2285.96	120.71	Initial Hydro-static
2	28.19	126.29	Open To Flow (1)
31	181.35	139.98	Shut-In(1)
92	1832.32	140.03	End Shut-In(1)
93	185.37	139.42	Open To Flow (2)
152	377.46	144.38	Shut-In(2)
212	1815.84	144.34	End Shut-In(2)
213	2256.93	143.04	Final Hydro-static

Recovery

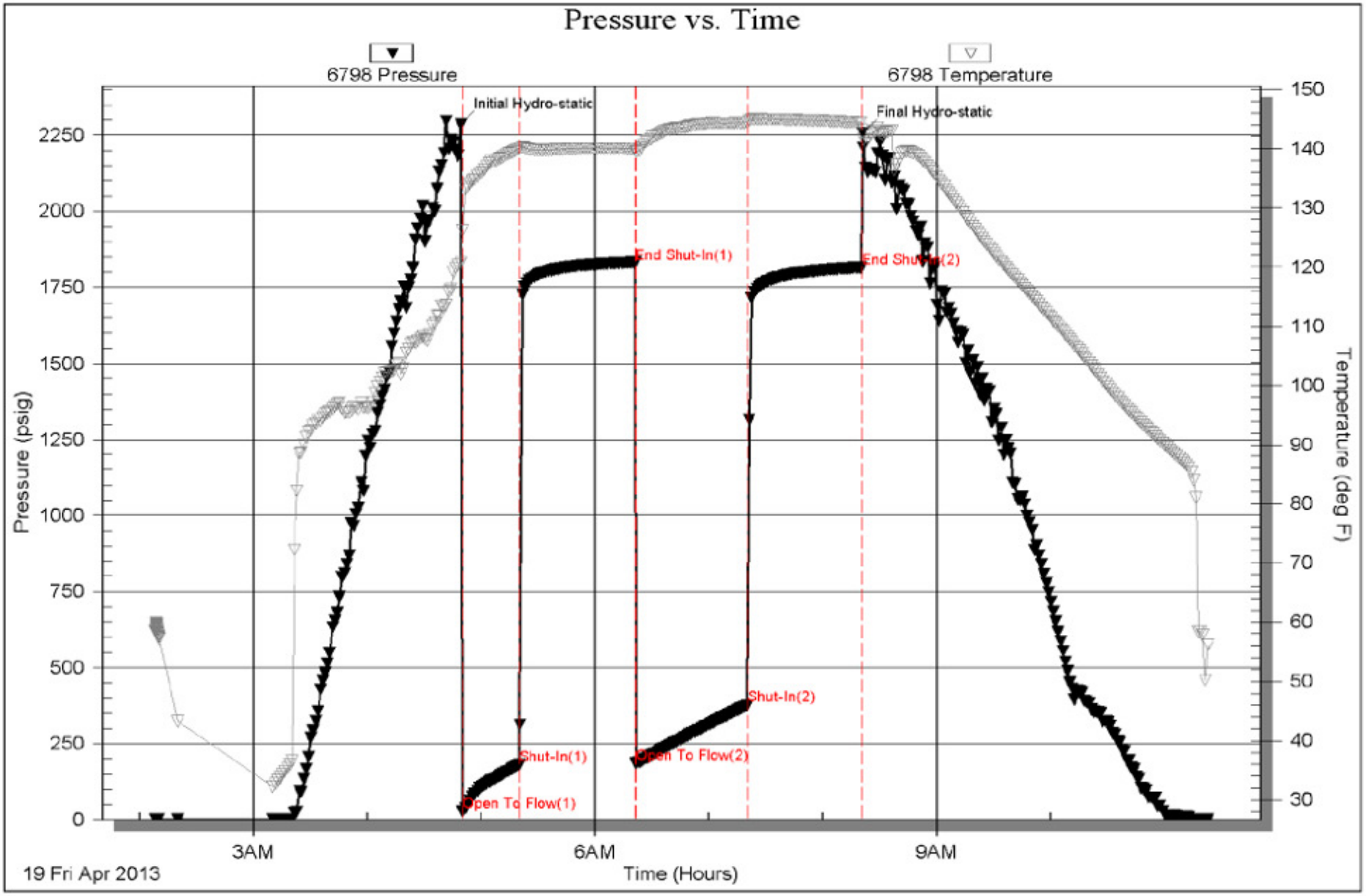
Length (ft)	Description	Volume (bbl)
682.00	Water	7.95
68.00	MCW 40%M 60%W	0.95

* Recovery from multiple tests

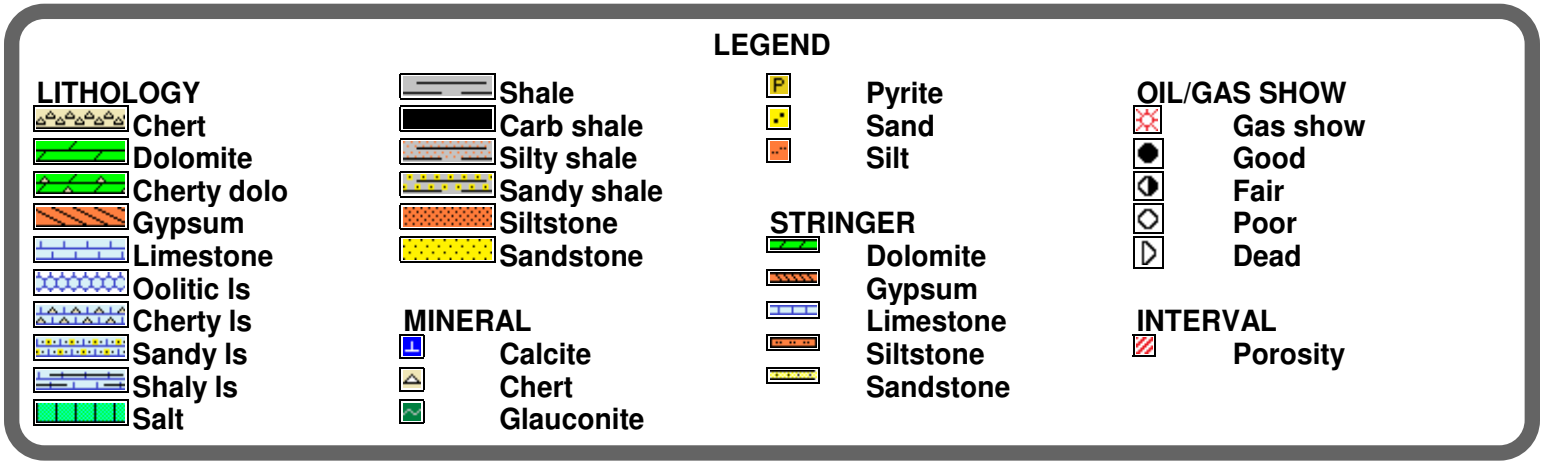
Gas Rates

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

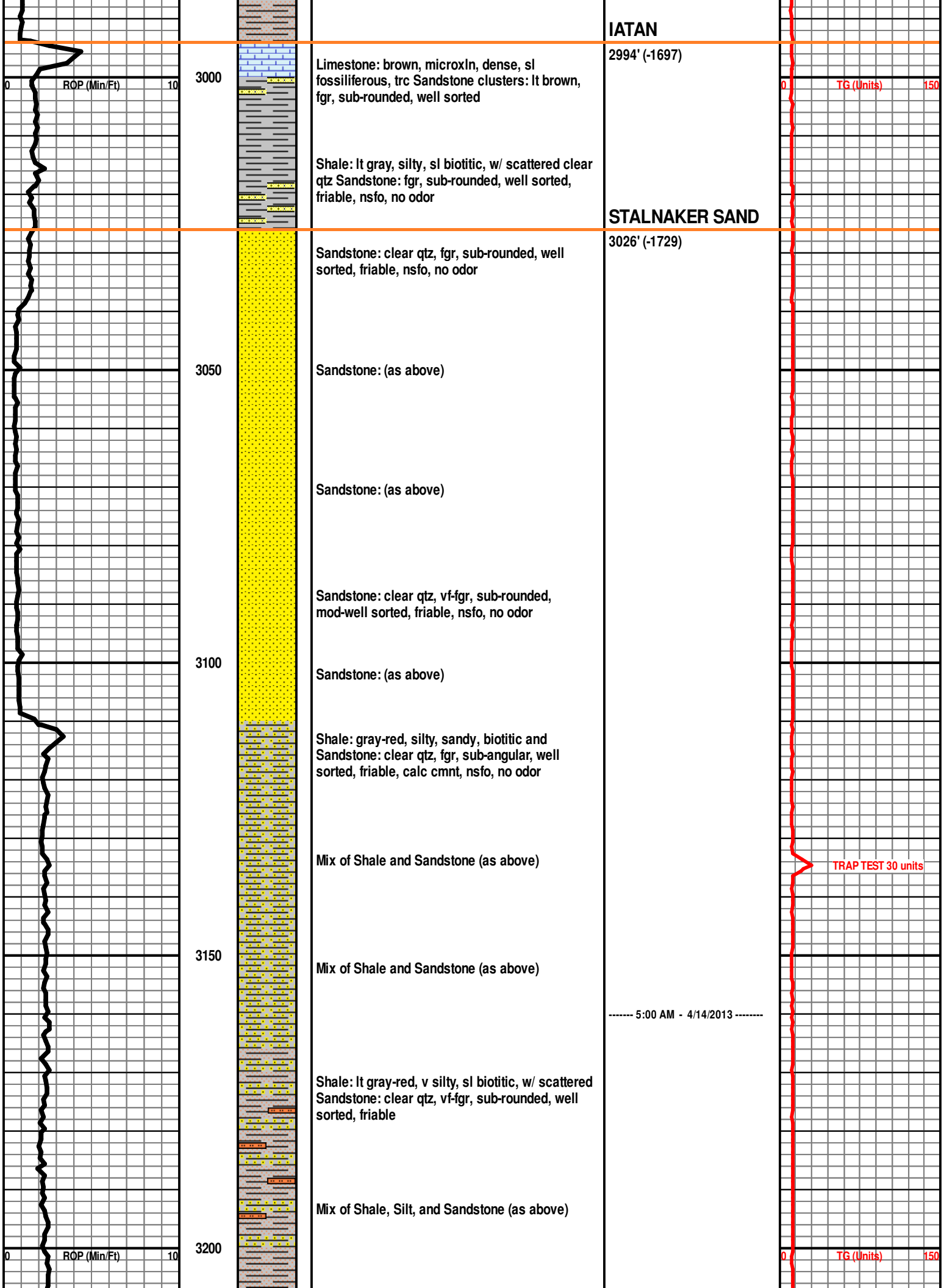
Serial #: 6798 **Inside** McCoy Petroleum Corp Stewart 2-31 DST Test Number: 2

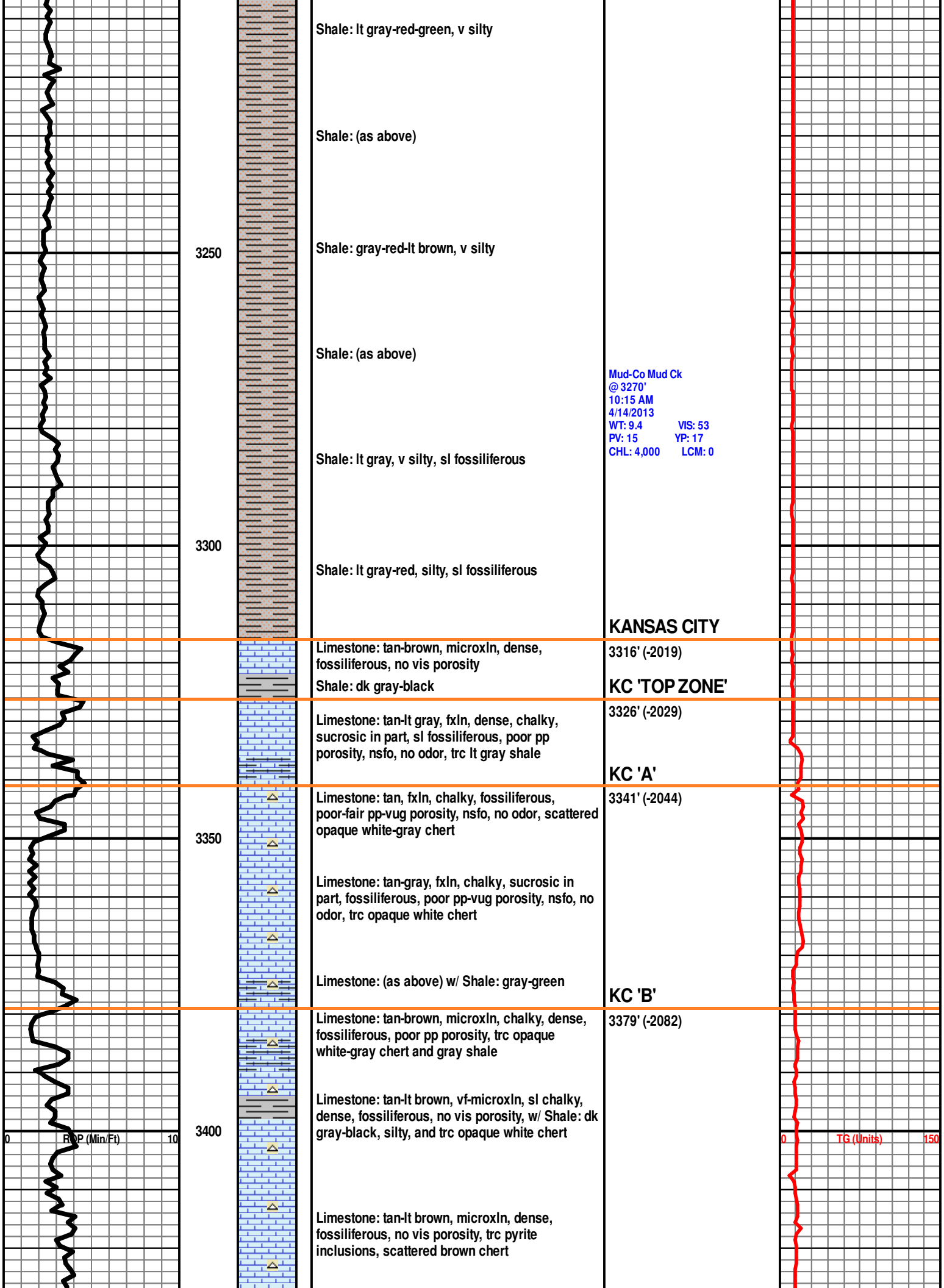


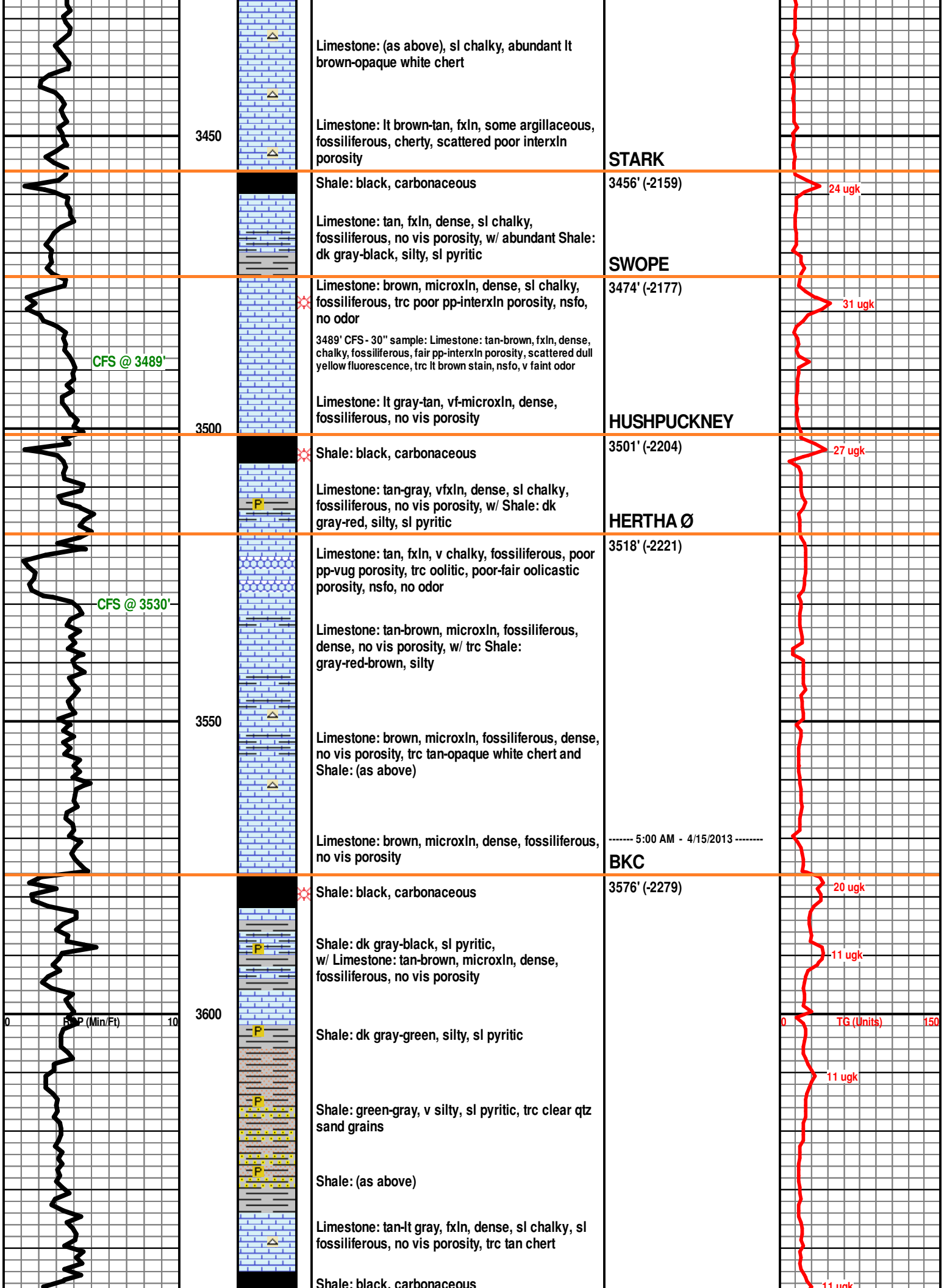
Trilobite Testing, Inc Ref. No: 50915 Printed: 2013.04.19 @ 11:38:33

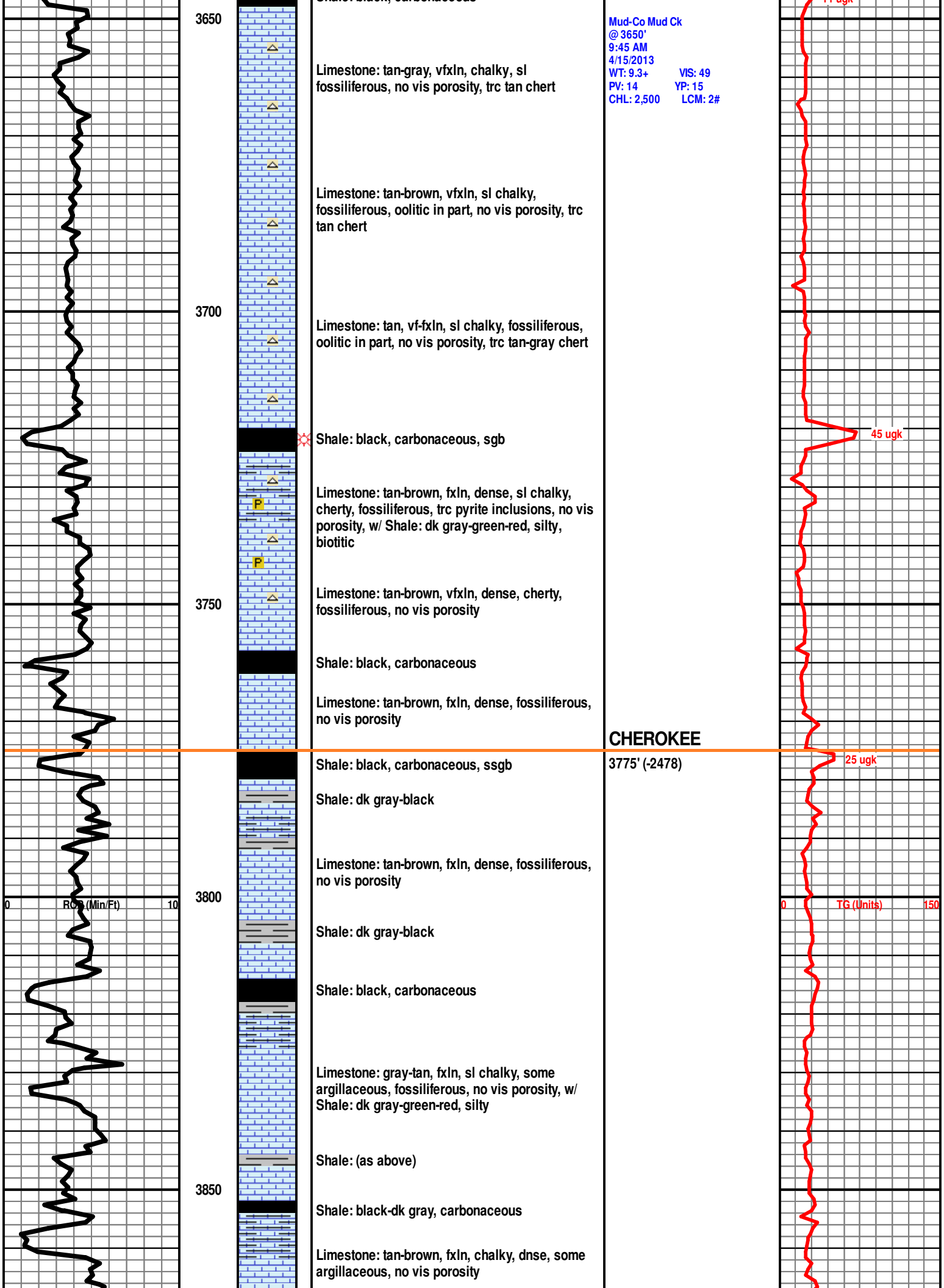


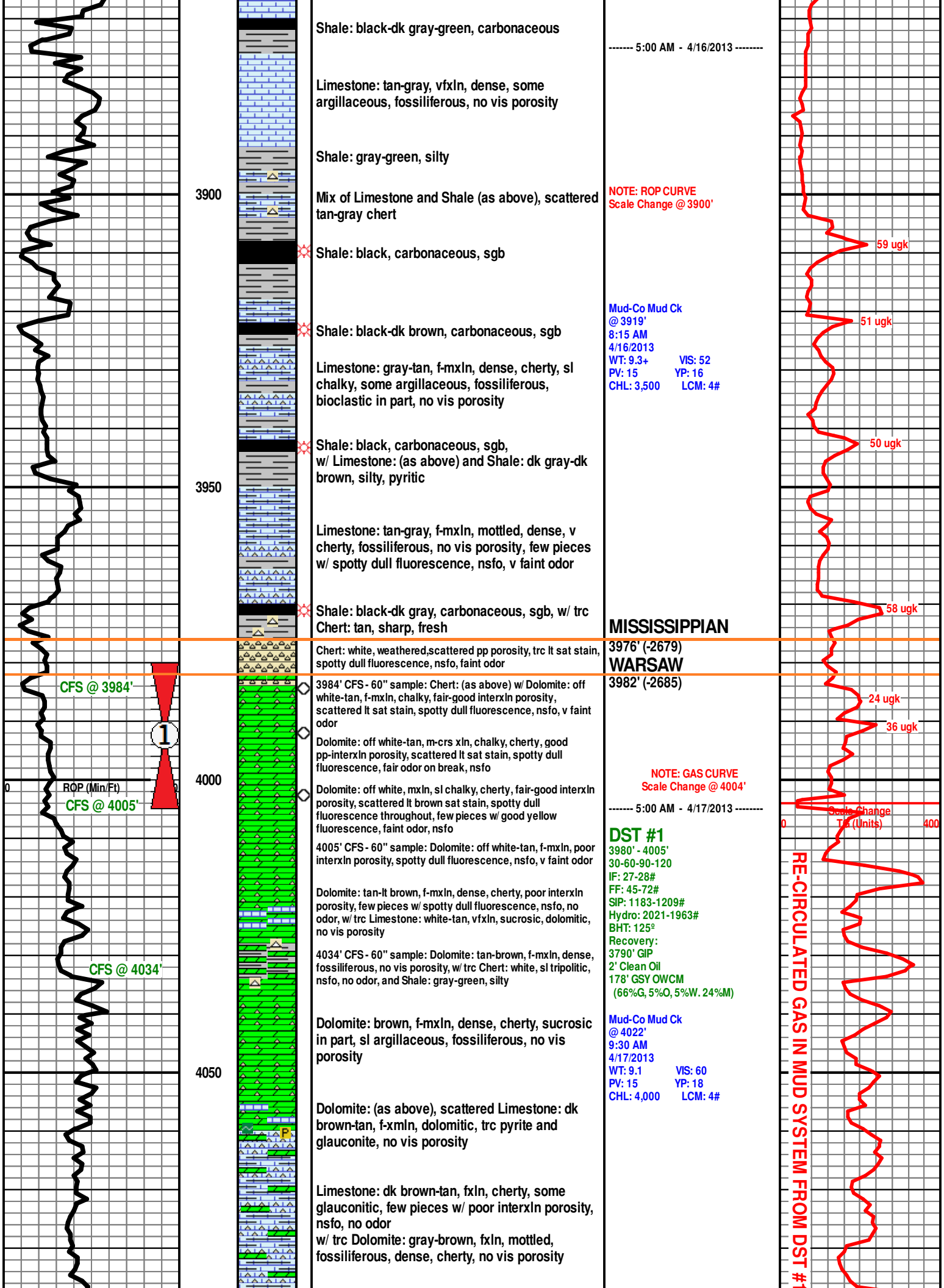
STEWART 'A' #2-31 ROP (Min/Ft)	DEPTH	LITHOLOGY	OIL SHOWS	SAMPLE DESCRIPTIONS	REMARKS	TOTAL GAS TG (Units)
0 ROP (Min/Ft) 10	2850			**McCoy Petroleum Corporation** **Stewart 'A' #2-31** **W/2 NE SW SE** **990' FSL & 1750' FEL** **Sec. 31 - T31S - R3W** **Sumner County, KS** **API: 15-191-22680** **Sterling Drilling: Rig #4** **Elevations: 1297' KB 1288' GL**		0 TG (Units) 150
	2900			Shale: gray-red-green, v silty		
				Shale: (as above)		
	2950			Shale: (as above)		
				Shale: lt gray-red-green, v silty, biotitic		
				Shale: lt gray, silty, sl biotitic		

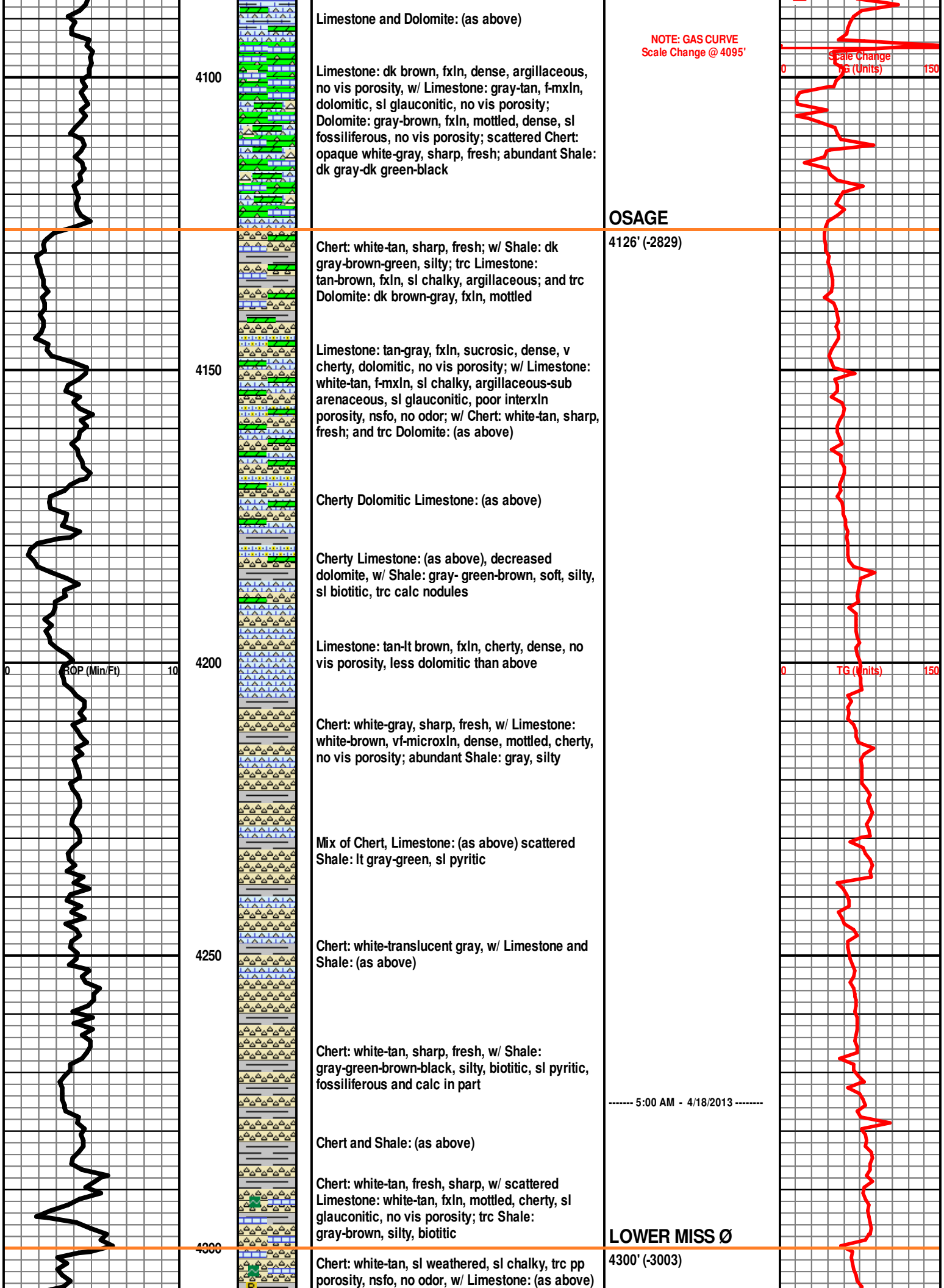

IATAN
2994' (-1697)
0
ROP (Min/Ft)
10
3000
Limestone: brown, microxln, dense, sl fossiliferous, trc Sandstone clusters: lt brown, fgr, sub-rounded, well sorted
Shale: lt gray, silty, sl biotitic, w/ scattered clear qtz Sandstone: fgr, sub-rounded, well sorted, friable, nsfo, no odor
0
TG (Units)
150
STALNAKER SAND
3026' (-1729)
Sandstone: clear qtz, fgr, sub-rounded, well sorted, friable, nsfo, no odor
3050
Sandstone: (as above)
Sandstone: (as above)
Sandstone: clear qtz, vf-fgr, sub-rounded, mod-well sorted, friable, nsfo, no odor
3100
Sandstone: (as above)
Shale: gray-red, silty, sandy, biotitic and Sandstone: clear qtz, fgr, sub-angular, well sorted, friable, calc cmnt, nsfo, no odor
Mix of Shale and Sandstone (as above)
TRAP TEST 30 units
3150
Mix of Shale and Sandstone (as above)
------- 5:00 AM - 4/14/2013 --------
Shale: lt gray-red, v silty, sl biotitic, w/ scattered Sandstone: clear qtz, vf-fgr, sub-rounded, well sorted, friable
Mix of Shale, Silt, and Sandstone (as above)
3200
0
ROP (Min/Ft)
10
0
TG (Units)
150

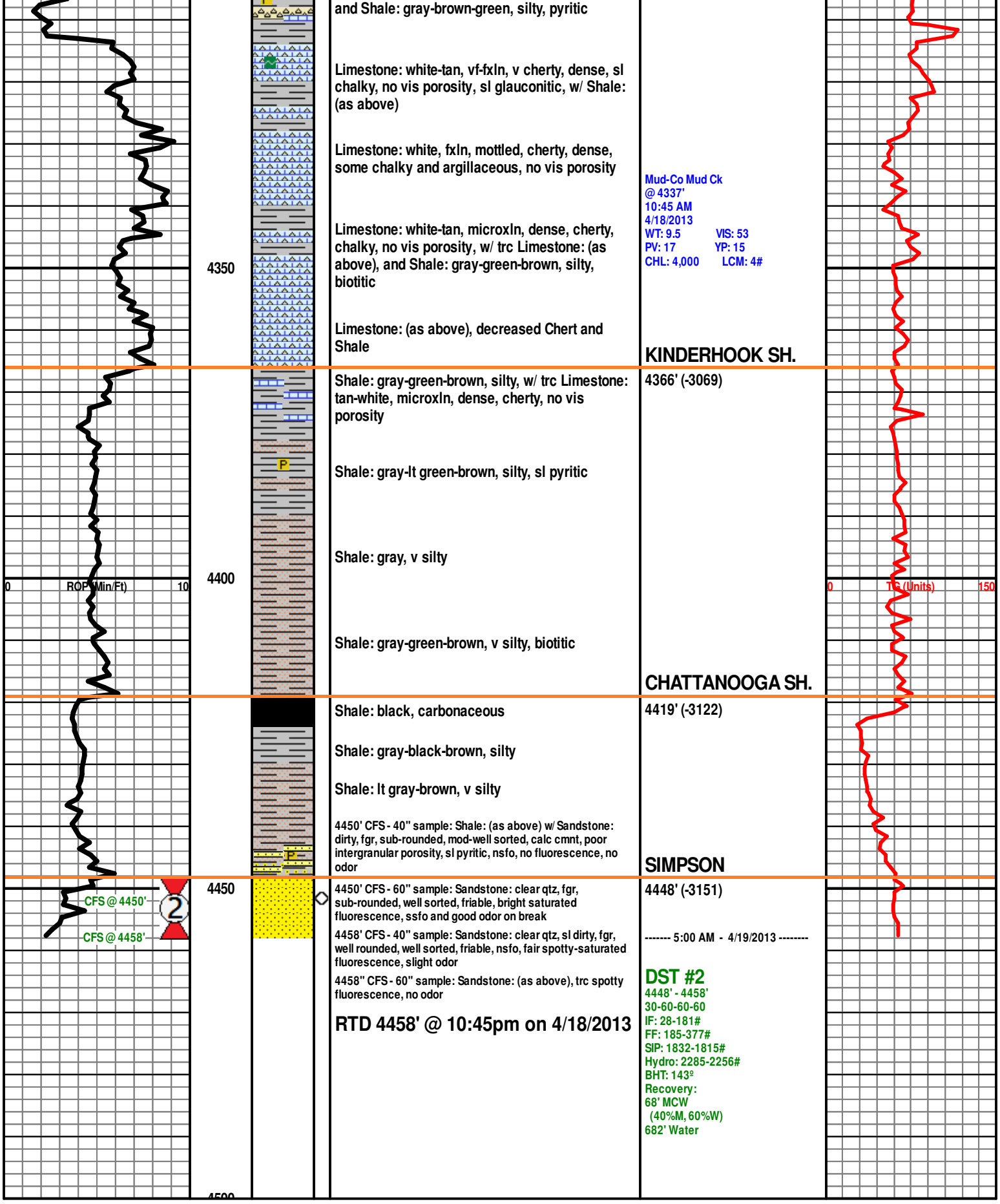

Shale: lt gray-red-green, v silty
Shale: (as above)
3250
Shale: gray-red-lt brown, v silty
Shale: (as above)
Mud-Co Mud Ck
@ 3270'
10:15 AM
4/14/2013
WT: 9.4 VIS: 53
PV: 15 YP: 17
CHL: 4,000 LCM: 0
Shale: lt gray, v silty, sl fossiliferous
3300
Shale: lt gray-red, silty, sl fossiliferous
KANSAS CITY
Limestone: tan-brown, microxln, dense, fossiliferous, no vis porosity
3316' (-2019)
Shale: dk gray-black
KC 'TOP ZONE'
Limestone: tan-lt gray, fxln, dense, chalky, sucrosic in part, sl fossiliferous, poor pp porosity, nsfo, no odor, trc lt gray shale
3326' (-2029)
KC 'A'
Limestone: tan, fxln, chalky, fossiliferous, poor-fair pp-vug porosity, nsfo, no odor, scattered opaque white-gray chert
3341' (-2044)
3350
Limestone: tan-gray, fxln, chalky, sucrosic in part, fossiliferous, poor pp-vug porosity, nsfo, no odor, trc opaque white chert
Limestone: (as above) w/ Shale: gray-green
KC 'B'
Limestone: tan-brown, microxln, chalky, dense, fossiliferous, poor pp porosity, trc opaque white-gray chert and gray shale
3379' (-2082)
Limestone: tan-lt brown, vf-microxln, sl chalky, dense, fossiliferous, no vis porosity, w/ Shale: dk gray-black, silty, and trc opaque white chert
3400
0 ROP (Min/Ft) 10
0 TG (Units) 150
Limestone: tan-lt brown, microxln, dense, fossiliferous, no vis porosity, trc pyrite inclusions, scattered brown chert


Limestone: (as above), sl chalky, abundant lt brown-opaque white chert
3450
Limestone: lt brown-tan, fxln, some argillaceous, fossiliferous, cherty, scattered poor interxln porosity
STARK
Shale: black, carbonaceous
3456' (-2159)
24 ugk
Limestone: tan, fxln, dense, sl chalky, fossiliferous, no vis porosity, w/ abundant Shale: dk gray-black, silty, sl pyritic
SWOPE
Limestone: brown, microxln, dense, sl chalky, fossiliferous, trc poor pp-interxln porosity, nsfo, no odor
3474' (-2177)
31 ugk
3489' CFS - 30" sample: Limestone: tan-brown, fxln, dense, chalky, fossiliferous, fair pp-interxln porosity, scattered dull yellow fluorescence, trc lt brown stain, nsfo, v faint odor
CFS @ 3489'
Limestone: lt gray-tan, vf-microxln, dense, fossiliferous, no vis porosity
3500
HUSHPUCKNEY
Shale: black, carbonaceous
3501' (-2204)
27 ugk
Limestone: tan-gray, vfxln, dense, sl chalky, fossiliferous, no vis porosity, w/ Shale: dk gray-red, silty, sl pyritic
HERTHA Ø
3518' (-2221)
Limestone: tan, fxln, v chalky, fossiliferous, poor pp-vug porosity, trc oolitic, poor-fair oolicastic porosity, nsfo, no odor
CFS @ 3530'
Limestone: tan-brown, microxln, fossiliferous, dense, no vis porosity, w/ trc Shale: gray-red-brown, silty
3550
Limestone: brown, microxln, fossiliferous, dense, no vis porosity, trc tan-opaque white chert and Shale: (as above)
Limestone: brown, microxln, dense, fossiliferous, no vis porosity
------- 5:00 AM - 4/15/2013 --------
BKC
Shale: black, carbonaceous
3576' (-2279)
20 ugk
Shale: dk gray-black, sl pyritic, w/ Limestone: tan-brown, microxln, dense, fossiliferous, no vis porosity
11 ugk
0
ROP (Min/Ft)
10
3600
0
TG (Units)
150
Shale: dk gray-green, silty, sl pyritic
11 ugk
Shale: green-gray, v silty, sl pyritic, trc clear qtz sand grains
Shale: (as above)
Limestone: tan-lt gray, fxln, dense, sl chalky, sl fossiliferous, no vis porosity, trc tan chert
Shale: black, carbonaceous
11 ugk


3650
3700
3750
3800
3850
Limestone: tan-gray, vfxln, chalky, sl fossiliferous, no vis porosity, trc tan chert
Limestone: tan-brown, vfxln, sl chalky, fossiliferous, oolitic in part, no vis porosity, trc tan chert
Limestone: tan, vf-fxln, sl chalky, fossiliferous, oolitic in part, no vis porosity, trc tan-gray chert
Shale: black, carbonaceous, sgb
Limestone: tan-brown, fxln, dense, sl chalky, cherty, fossiliferous, trc pyrite inclusions, no vis porosity, w/ Shale: dk gray-green-red, silty, biotitic
Limestone: tan-brown, vfxln, dense, cherty, fossiliferous, no vis porosity
Shale: black, carbonaceous
Limestone: tan-brown, fxln, dense, fossiliferous, no vis porosity
Shale: black, carbonaceous, ssgb
Shale: dk gray-black
Limestone: tan-brown, fxln, dense, fossiliferous, no vis porosity
Shale: dk gray-black
Shale: black, carbonaceous
Limestone: gray-tan, fxln, sl chalky, some argillaceous, fossiliferous, no vis porosity, w/ Shale: dk gray-green-red, silty
Shale: (as above)
Shale: black-dk gray, carbonaceous
Limestone: tan-brown, fxln, chalky, dnse, some argillaceous, no vis porosity
Mud-Co Mud Ck
@ 3650'
9:45 AM
4/15/2013
WT: 9.3+ VIS: 49
PV: 14 YP: 15
CHL: 2,500 LCM: 2#
CHEROKEE
3775' (-2478)
45 ugk
25 ugk
0 ROP (Min/Ft) 10
0 TG (Units) 150


Shale: black-dk gray-green, carbonaceous
------- 5:00 AM - 4/16/2013 --------
Limestone: tan-gray, vfxln, dense, some argillaceous, fossiliferous, no vis porosity
Shale: gray-green, silty
3900
Mix of Limestone and Shale (as above), scattered tan-gray chert
NOTE: ROP CURVE Scale Change @ 3900'
Shale: black, carbonaceous, sgb
59 ugk
Mud-Co Mud Ck @ 3919' 8:15 AM 4/16/2013 WT: 9.3+ VIS: 52 PV: 15 YP: 16 CHL: 3,500 LCM: 4#
Shale: black-dk brown, carbonaceous, sgb
51 ugk
Limestone: gray-tan, f-mxln, dense, cherty, sl chalky, some argillaceous, fossiliferous, bioclastic in part, no vis porosity
Shale: black, carbonaceous, sgb, w/ Limestone: (as above) and Shale: dk gray-dk brown, silty, pyritic
50 ugk
3950
Limestone: tan-gray, f-mxln, mottled, dense, v cherty, fossiliferous, no vis porosity, few pieces w/ spotty dull fluorescence, nsfo, v faint odor
Shale: black-dk gray, carbonaceous, sgb, w/ trc Chert: tan, sharp, fresh
58 ugk
MISSISSIPPIAN
3976' (-2679)
Chert: white, weathered,scattered pp porosity, trc lt sat stain, spotty dull fluorescence, nsfo, faint odor
WARSAW
3982' (-2685)
CFS @ 3984'
3984' CFS - 60" sample: Chert: (as above) w/ Dolomite: off white-tan, f-mxln, chalky, fair-good interxln porosity, scattered lt sat stain, spotty dull fluorescence, nsfo, v faint odor
24 ugk
Dolomite: off white-tan, m-crs xln, chalky, cherty, good pp-interxln porosity, scattered lt sat stain, spotty dull fluorescence, fair odor on break, nsfo
36 ugk
1
4000
ROP (Min/Ft)
CFS @ 4005'
Dolomite: off white, mxln, sl chalky, cherty, fair-good interxln porosity, scattered lt brown sat stain, spotty dull fluorescence throughout, few pieces w/ good yellow fluorescence, faint odor, nsfo
NOTE: GAS CURVE Scale Change @ 4004'
------- 5:00 AM - 4/17/2013 --------
Scale Change
TG (Units)
0
400
DST #1
3980' - 4005'
30-60-90-120
IF: 27-28#
FF: 45-72#
SIP: 1183-1209#
Hydro: 2021-1963#
BHT: 125º
Recovery:
3790' GIP
2' Clean Oil
178' GSY OWCM
(66%G, 5%O, 5%W. 24%M)
4005' CFS - 60" sample: Dolomite: off white-tan, f-mxln, poor interxln porosity, spotty dull fluorescence, nsfo, v faint odor
Dolomite: tan-lt brown, f-mxln, dense, cherty, poor interxln porosity, few pieces w/ spotty dull fluorescence, nsfo, no odor, w/ trc Limestone: white-tan, vfxln, sucrosic, dolomitic, no vis porosity
4034' CFS - 60" sample: Dolomite: tan-brown, f-mxln, dense, fossiliferous, no vis porosity, w/ trc Chert: white, sl tripolitic, nsfo, no odor, and Shale: gray-green, silty
CFS @ 4034'
Dolomite: brown, f-mxln, dense, cherty, sucrosic in part, sl argillaceous, fossiliferous, no vis porosity
Mud-Co Mud Ck @ 4022' 9:30 AM 4/17/2013 WT: 9.1 VIS: 60 PV: 15 YP: 18 CHL: 4,000 LCM: 4#
4050
Dolomite: (as above), scattered Limestone: dk brown-tan, f-xmln, dolomitic, trc pyrite and glauconite, no vis porosity
P
Limestone: dk brown-tan, fxln, cherty, some glauconitic, few pieces w/ poor interxln porosity, nsfo, no odor
w/ trc Dolomite: gray-brown, fxln, mottled, fossiliferous, dense, cherty, no vis porosity
RE-CIRCULATED GAS IN MUD SYSTEM FROM DST #1


Limestone and Dolomite: (as above)
NOTE: GAS CURVE
Scale Change @ 4095'
Scale Change
0
TG (Units)
150
4100
Limestone: dk brown, fxln, dense, argillaceous, no vis porosity, w/ Limestone: gray-tan, f-mxln, dolomitic, sl glauconitic, no vis porosity; Dolomite: gray-brown, fxln, mottled, dense, sl fossiliferous, no vis porosity; scattered Chert: opaque white-gray, sharp, fresh; abundant Shale: dk gray-dk green-black
OSAGE
4126' (-2829)
Chert: white-tan, sharp, fresh; w/ Shale: dk gray-brown-green, silty; trc Limestone: tan-brown, fxln, sl chalky, argillaceous; and trc Dolomite: dk brown-gray, fxln, mottled
4150
Limestone: tan-gray, fxln, sucrosic, dense, v cherty, dolomitic, no vis porosity; w/ Limestone: white-tan, f-mxln, sl chalky, argillaceous-sub arenaceous, sl glauconitic, poor interxln porosity, nsfo, no odor; w/ Chert: white-tan, sharp, fresh; and trc Dolomite: (as above)
Cherty Dolomitic Limestone: (as above)
Cherty Limestone: (as above), decreased dolomite, w/ Shale: gray- green-brown, soft, silty, sl biotitic, trc calc nodules
Limestone: tan-lt brown, fxln, cherty, dense, no vis porosity, less dolomitic than above
0
ROP (Min/Ft)
10
4200
0
TG (Units)
150
Chert: white-gray, sharp, fresh, w/ Limestone: white-brown, vf-microxln, dense, mottled, cherty, no vis porosity; abundant Shale: gray, silty
Mix of Chert, Limestone: (as above) scattered Shale: lt gray-green, sl pyritic
Chert: white-translucent gray, w/ Limestone and Shale: (as above)
4250
Chert: white-tan, sharp, fresh, w/ Shale: gray-green-brown-black, silty, biotitic, sl pyritic, fossiliferous and calc in part
------- 5:00 AM - 4/18/2013 --------
Chert and Shale: (as above)
Chert: white-tan, fresh, sharp, w/ scattered Limestone: white-tan, fxln, mottled, cherty, sl glauconitic, no vis porosity; trc Shale: gray-brown, silty, biotitic
LOWER MISS Ø
4300
4300' (-3003)
Chert: white-tan, sl weathered, sl chalky, trc pp porosity, nsfo, no odor, w/ Limestone: (as above)



and Shale: gray-brown-green, silty, pyritic

Limestone: white-tan, vf-fxln, v cherty, dense, sl chalky, no vis porosity, sl glauconitic, w/ Shale: (as above)

Limestone: white, fxln, mottled, cherty, dense, some chalky and argillaceous, no vis porosity

Mud-Co Mud Ck
@ 4337'
10:45 AM
4/18/2013
WT: 9.5 VIS: 53
PV: 17 YP: 15
CHL: 4,000 LCM: 4#

Limestone: white-tan, microxln, dense, cherty, chalky, no vis porosity, w/ trc Limestone: (as above), and Shale: gray-green-brown, silty, biotitic

Limestone: (as above), decreased Chert and Shale

KINDERHOOK SH.

Shale: gray-green-brown, silty, w/ trc Limestone: tan-white, microxln, dense, cherty, no vis porosity

4366' (-3069)

Shale: gray-lt green-brown, silty, sl pyritic

Shale: gray, v silty

Shale: gray-green-brown, v silty, biotitic

CHATTANOOGA SH.

Shale: black, carbonaceous

4419' (-3122)

Shale: gray-black-brown, silty

Shale: lt gray-brown, v silty

4450' CFS - 40" sample: Shale: (as above) w/ Sandstone: dirty, fgr, sub-rounded, mod-well sorted, calc cmnt, poor intergranular porosity, sl pyritic, nsfo, no fluorescence, no odor

SIMPSON

4448' (-3151)

4450' CFS - 60" sample: Sandstone: clear qtz, fgr, sub-rounded, well sorted, friable, bright saturated fluorescence, ssfo and good odor on break

4458' CFS - 40" sample: Sandstone: clear qtz, sl dirty, fgr, well rounded, well sorted, friable, nsfo, fair spotty-saturated fluorescence, slight odor

4458" CFS - 60" sample: Sandstone: (as above), trc spotty fluorescence, no odor

RTD 4458' @ 10:45pm on 4/18/2013

------- 5:00 AM - 4/19/2013 --------

DST #2
4448' - 4458'
30-60-60-60
IF: 28-181#
FF: 185-377#
SIP: 1832-1815#
Hydro: 2285-2256#
BHT: 143º
Recovery:
68' MCW
(40%M, 60%W)
682' Water