



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

Well Name: Fischer #1
Location: Sec. 24 - T09S - R21W, Graham County, KS
Licence Number: API No.: 15-065-23783-0000
Spud Date: November 5, 2011
Surface Coordinates: 330' FSL & 680' FWL; 3-D Location
Region: Morel
Drilling Completed: November 11, 2011

Bottom Hole Coordinates:

Ground Elevation (ft): 2235' K.B. Elevation (ft): 2243'
Logged Interval (ft): 3000' To: 3842' Total Depth (ft): 3840' (LTD)
Formation: Arbuckle
Type of Drilling Fluid: Chemical Gel/Polymer

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

OPERATOR

Company: Thomason Petroleum, Inc.
Address: 301 W. 13th St.
Suite 403
Hays, KS 67601

GEOLOGIST

Name: Derek W. Patterson
Company: Valhalla Exploration, LLC
Address: 133 N. Glendale
Wichita, KS 67208

REMARKS

After review of the geologic log, positive DST #2 results, and open hole logs for the Fischer #1, it was decided by operator to run 5 1/2" production casing to further evaluate the multiple Arbuckle zones encountered while drilling said well.

The well samples were saved, submitted, and will be available for review at the Kansas Geologic Survey's Well Sample Library located in Wichita, KS.

Respectfully Submitted,

Derek W. Patterson

COMMENTS

Please Note: The drill time and gas curves have been shifted anywhere from 3'-5' shallow/higher throughout the geolog to correspond to the electric log curves. The DST intervals have collectively been shifted 4' shallow/higher to correspond as well.

The RTD was 3842' and the LTD was 3840'.

Thomason Petroleum, Inc.

DAILY DRILLING REPORT

Operator: Thomason Petroleum, Inc.
301 W. 13th St., Suite 403
Hays, KS 67601

Contact: Steven Thomason
Cell: 785.623.1174
Office: 785.625.9045

Geologist: Derek W. Patterson
Cell: 316.655.3550
Office: 316.558.5202

Drilling Contractor: Discovery Drilling Co. - Rig #1
Toolpusher: Cliff Mayfield

Well: Fischer #1
Location: 330' FSL & 680' FWL
Sec. 24 - T09S - R21W
Graham Co., KS

Elevation: 2235' GL - 2243' KB
Field: Morel

API: 15-065-23783-0000
Surface Casing: 213.66' of 8 5/8" set @ 223' KB
Spud Date: November 5, 2011
Drilling Complete: November 11, 2011

DATE	7:00 AM DEPTH	PREVIOUS 24 HOURS OF OPERATIONS
11.9.2011	3728'	Drilling and connections Topeka and Heebner. Geologist Derek W. Patterson on location, 1115 hrs 11.8.11. Drilling and connections Heebner, Toronto, and into Lansing. Test Bloodhound system, rezero gas detector. Resume drilling and connections Lansing, Base Kansas City, and into Marmaton. CFS @ 3728' (Marmaton). Shows and gas kick warrant DST #1. CTCH, short trip (20 stands), CTCH, drop survey, strap out for DST #1, 0300 hrs 11.9.11. TIH with tool. Conducting DST #1. Made 432' over past 24 hrs of operations. WOB: 40k RPM: 80 SPM: 60 PP: 750 DMC: \$276.00 CMC: \$7,291.90
11.10.2011	3776'	Conducting DST #1, test successful. TIH with bit, CTCH, resume drilling following DST #1, 1245 hrs 11.9.11. Drilling and connections Marmaton and into Basal Penn Conglomerate. CFS @ 3752', CFS @ 3761', CFS @ 3766' (Arb), CFS @ 3769' (Arb). Decision made to run DST #2. CTCH, TOH for DST #2, 1830 hrs 11.9.11. TIH with tool. Conducting DST #2, test successful. TIH with bit, CTCH, resume drilling following DST #2, 0540 hrs 11.10.11. CFS @ 3776' (Arb). Made 48' over past 24 hrs of operations. WOB: 40k RPM: 80 SPM: 60 PP: 800 DCM: \$1,340.60 CMC: \$8,632.50
11.11.2011	3783'	Decision made to run DST #3. CTCH, TOH for DST #3, 0710 hrs 11.10.11. TIH with tool. Conducting DST #3, test successful. TIH with bit, CTCH, resume drilling following DST #3, 1905 hrs 11.10.11. CFS @ 3783'. Decision made to run DST #4. CTCH, TOH for DST #4, 2030 hrs 11.10.11. TIH with tool. Conducting DST #4, test successful. TIH with bit. Made 7' over past 24 hrs of operations. WOB: 40k RPM: 80 SPM: 60 PP: 800
11.12.2011	RTD - 3842' LTD - 3840'	Resume drilling following DST #4, 0700 hrs 11.11.11. Drilling and connections Arbuckle ahead to RTD of 3842'. RTD reached, 0930 hrs 11.11.11. CTCH, drop survey, TOH for open hole logging operations, 1115 hrs 11.11.11. Commence open hole logging operations, 1300 hrs 11.11.11. Open hole logging operations complete, 1800 hrs 11.11.11. Orders received to run 5 1/2" production casing to further evaluate the Arbuckle. Geologist Derek W. Patterson off location, 1835 hrs 11.11.11. Made 55' over past 24 hrs of operations. WOB: 40k RPM: 80 SPM: 60 PP: 800

Thomason Petroleum, Inc.

WELL COMPARISON SHEET

DRILLING WELL					COMPARISON WELL				COMPARISON WELL				COMPARISON WELL			
Thomason Petroleum - Fischer #1 Sec. 24 - T09S - R21W 330' FSL & 680' FWL 2243 KB					British American - Flora Barry #1 Sec. 24 - T09S - R21W NW SW SW				Murfin - Hinman #5 Sec. 23 - T09S - R21W 660' FSL & 330' FEL				Hollow Drilling - Fesler 'A' #1 Sec. 25 - T09S - R21W NW NW NW			
					Oil - Arb		Structural		Oil - Mam/Arb		Structural		Oil - Arb		Structural	
					2253 KB		Relationship		2276 KB		Relationship		2244 KB		Relationship	
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log
Topeka	3203	-960	3200	-957	3211	-958	-2	1	3237	-961	1	4	3207	-963	3	6
Heebner	3411	-1168	3408	-1165	3418	-1165	-3	0	3443	-1167	-1	2	3412	-1168	0	3
Toronto	3436	-1193	3430	-1187	3440	-1187	-6	0	3465	-1189	-4	2	3441	-1197	4	10
Lansing	3451	-1208	3447	-1204	3458	-1205	-3	1	3482	-1206	-2	2	3454	-1210	2	6
LKC 'G'	3548	-1305	3541	-1298	3550	-1297	-8	-1	3576	-1300	-5	2	3548	-1304	-1	6
Muncie Creek	3572	-1329	3569	-1326	3575	-1322	-7	-4	3602	-1326	-3	0	3573	-1329	0	3
LKC 'H'	3585	-1342	3580	-1337	3589	-1336	-6	-1	3614	-1338	-4	1	3588	-1344	2	7
Stark	3634	-1391	3629	-1386	3639	-1386	-5	0	3666	-1390	-1	4	3636	-1392	1	6
LKC 'K'	3641	-1398	3638	-1395	3647	-1394	-4	-1	3672	-1396	-2	1	3644	-1400	2	5
Hushpuckney	3660	-1417	3655	-1412	3663	-1410	-7	-2	3688	-1412	-5	0	3659	-1415	-2	3
Base Kansas City	3672	-1429	3668	-1425	3676	-1423	-6	-2	3700	-1424	-5	-1	3675	-1431	2	6
Marmaton	3705	-1462	3700	-1457	3711	-1458	-4	1	3735	-1459	-3	2	3708	-1464	2	7
Arbuckle	3767	-1524	3762	-1519	3771	-1518	-6	-1	3801	-1525	1	6	3762	-1518	-6	-1
Total Depth	3842	-1599	3840	-1597	3776	-1523	-76	-74	3900	-1624	25	27	3768	-1524	-75	-73

Please Note: DST intervals need to be shifted 4' shallow/higher to correspond to the electric log curves.

BIT RECORD

Bit #	Size	Make	Type	Serial Number	Depth In	Depth Out	Feet	Hours
1	12 1/4"	JZ	WA417	12821	0'	223'	223'	2.25
2	7 7/8"	HTC	GX20C	5195955	223'	3842'	3619'	59.25

SURFACE CASING RECORD

11.05.2011 Ran 5 joints of new 23#/ft 8 5/8" casing, tallying 213.56', set @ 223' KB. Cemented with 150 sacks common, 3% calcium chloride, 2% gel. Cement did circulate to surface. Plug down @ 0215 hrs 11.06.11.

PRODUCTION CASING RECORD

11.12.2011 Ran 95 joints of new 14#/ft 5 1/2" production casing, set @ 3824' KB. Cemented with 550 sacks QMDC and flo-seal. Cement did circulate to surface. Plug down @ 0500 hrs 11.12.11.

DEVIATION SURVEY RECORD

<u>Depth</u>	<u>Survey</u>
223'	3/4°
3732'	1°
3842'	1°

PIPE STRAP RECORD

<u>Depth</u>	<u>Pipe Strap</u>
3672'	0.58' Short to Board



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Thomason Petroleum, Inc.

2717 Canal Blvd.
PO Box 875
Hays, KS 67601
ATTN: Derek Patterson

24/9s/21w Graham KS

Fischer #1

Job Ticket: 45528 **DST#: 1**
Test Start: 2011.11.09 @ 04:58:00

GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:43:00

Time Test Ended: 10:28:30

Test Type: Conventional Bottom Hole (Initial)

Tester: James Winder

Unit Nb: 57

Interval: 3668.00 ft (KB) To 3732.00 ft (KB) (TVD)

Total Depth: 3732.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches-Hole Condition: Fair

Reference Elevations: 2243.00 ft (KB)

2235.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8366

Inside

Press@RunDepth: 24.98 psig @ 3669.00 ft (KB)

Start Date: 2011.11.09 End Date: 2011.11.09

Start Time: 04:58:05 End Time: 10:28:29

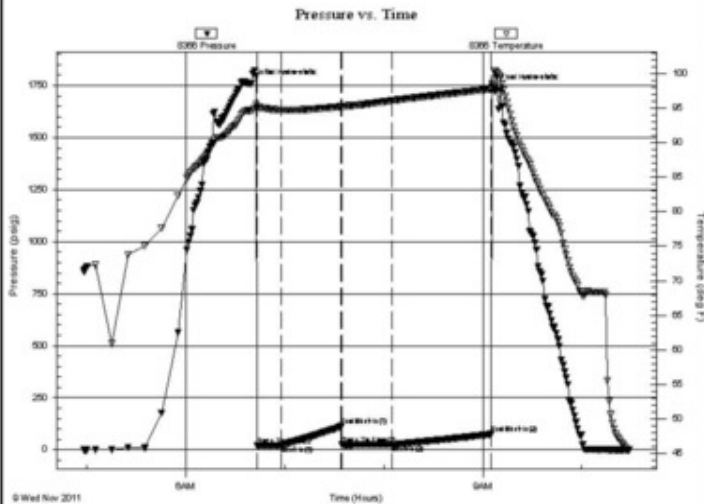
Capacity: 8000.00 psig

Last Calib.: 2011.11.09

Time On Btm: 2011.11.09 @ 06:39:30

Time Off Btm: 2011.11.09 @ 09:06:30

TEST COMMENT: 15 - F: 1/4" blow at open, built to 1"
37 - IS: No blow back
30 - FF: No blow
60 - FSI: No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1757.18	94.68	Initial Hydro-static
4	19.99	95.03	Open To Flow (1)
18	22.24	94.74	Shut-In(1)
55	113.73	95.24	End Shut-In(1)
55	23.65	95.20	Open To Flow (2)
85	24.98	96.10	Shut-In(2)
146	75.89	97.81	End Shut-In(2)
147	1733.93	100.46	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	SOCM 99%, 1%o	0.05

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Thomason Petroleum, Inc.

24/9s/21w Graham KS

2717 Canal Blvd.
PO Box 875
Hays, KS 67601
ATTN: Derek Patterson

Fischer #1

Job Ticket: 45529

DST#: 2

Test Start: 2011.11.09 @ 19:50:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:23:30

Time Test Ended: 02:38:30

Test Type: Conventional Bottom Hole (Reset)

Tester: James Winder

Unit No: 57

Interval: 3736.00 ft (KB) To 3773.00 ft (KB) (TVD)

Total Depth: 3773.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2243.00 ft (KB)

2235.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8366

Inside

Press@RunDepth: 177.18 psig @ 3737.00 ft (KB)

Start Date: 2011.11.09 End Date: 2011.11.10

Start Time: 19:50:05 End Time: 02:38:29

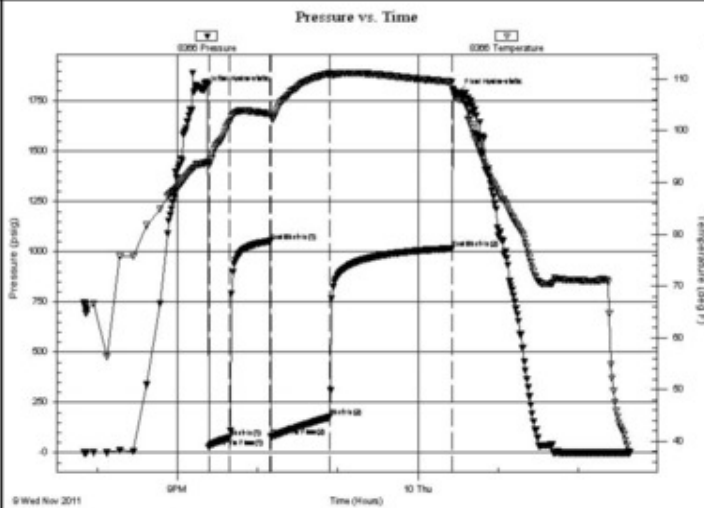
Capacity: 8000.00 psig

Last Calib.: 2011.11.10

Time On Btm: 2011.11.09 @ 21:20:00

Time Off Btm: 2011.11.10 @ 00:29:30

TEST COMMENT: 15 - F: Blow built to BOB (11") in 11 1/4 min.
30 - ISI: Blow back built to 1 1/2"
45 - FF: Blow built to BOB in 11 1/2 min.
90 - FSI: Blow back built to 4"



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1805.25	93.73	Initial Hydro-static
4	26.77	93.27	Open To Flow (1)
19	74.50	101.61	Shut-In(1)
50	1053.26	103.24	End Shut-In(1)
50	80.52	102.75	Open To Flow (2)
94	177.18	111.03	Shut-In(2)
186	1016.50	109.44	End Shut-In(2)
190	1790.29	106.23	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
110.00	GMO 51%o, 39%m, 10%g	1.27
300.00	CGO 81%o, 15%g, 4%m	4.21
0.00	GIP = 220'	0.00

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Thomason Petroleum, Inc.

24/9s/21w Graham KS

2717 Canal Blvd.
PO Box 875
Hays, KS 67601
ATTN: Derek Patterson

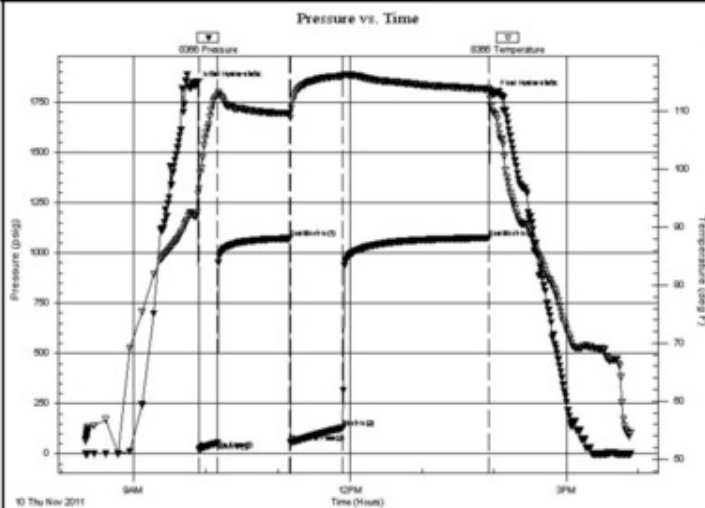
Fischer #1
Job Ticket: 45530 **DST#: 3**
Test Start: 2011.11.10 @ 08:20:00

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 09:54:30
 Time Test Ended: 15:53:30
 Test Type: Conventional Bottom Hole (Reset)
 Tester: James Winder
 Unit No: 57
 Interval: **3773.00 ft (KB) To 3780.00 ft (KB) (TVD)**
 Total Depth: 3780.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Reference Elevations: 2243.00 ft (KB)
 2235.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 8366 Inside
 Press@RunDepth: 129.97 psig @ 3774.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2011.11.10 End Date: 2011.11.10 Last Calib.: 2011.11.10
 Start Time: 08:20:05 End Time: 15:53:29 Time On Btm: 2011.11.10 @ 09:52:00
 Time Off Btm: 2011.11.10 @ 13:59:30

TEST COMMENT: 15 - F: Blow built to 7"
 60 - IS: A few bubbles at 10 min., then on/off blow back from 30 min. till end of close
 45 - FF: Blow built to BOB (11") in 25 min.
 120 FSI: Blow back started at 10 min., built to 1"



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1832.66	91.85	Initial Hydro-static
3	20.18	96.57	Open To Flow (1)
18	53.66	112.72	Shut-In(1)
78	1072.80	109.62	End Shut-In(1)
79	56.11	108.84	Open To Flow (2)
122	129.97	116.07	Shut-In(2)
244	1074.43	113.82	End Shut-In(2)
248	1788.81	109.69	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
245.00	SOMCW 94%w, 5% m, 1% o	3.16
5.00	CO 94%o, 6% m	0.07

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Thomason Petroleum, Inc.

24/9s/21w Graham KS

2717 Canal Blvd.

Fischer #1

PO Box 875

Job Ticket: 45531

DST#: 4

Hays, KS 67601

ATTN: Derek Patterson

Test Start: 2011.11.10 @ 21:53:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:38:30

Time Test Ended: 05:12:00

Test Type: Conventional Bottom Hole (Reset)

Tester: James Winder

Unit No: 57

Interval: **3780.00 ft (KB) To 3787.00 ft (KB) (TVD)**

Total Depth: 3787.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2243.00 ft (KB)

2235.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8366

Inside

Press@RunDepth: 1139.76 psig @ 3781.00 ft (KB)

Start Date: 2011.11.10

End Date:

2011.11.11

Capacity: 8000.00 psig

Last Calib.: 2011.11.11

Start Time: 21:53:05

End Time:

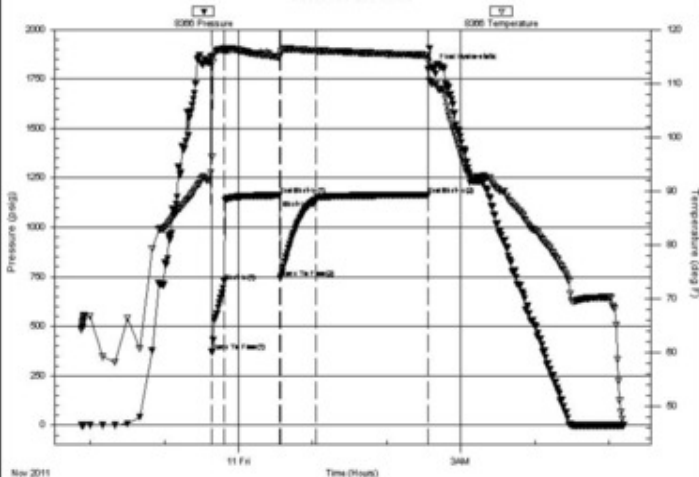
05:11:59

Time On Btm: 2011.11.10 @ 23:35:30

Time Off Btm: 2011.11.11 @ 02:37:30

TEST COMMENT: 10 - F: Blow built to BOB (11") in 40 sec
45 - IS: Surface blow back at very end of shut in
30 - FF: Blow built to BOB in 40 sec
90 - FS: No blow back

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1829.71	91.97	Initial Hydro-static
3	370.70	96.32	Open To Flow (1)
13	725.49	116.43	Shut-In(1)
58	1161.97	114.85	End Shut-In(1)
59	743.99	115.37	Open To Flow (2)
88	1139.76	116.08	Shut-In(2)
178	1163.47	115.27	End Shut-In(2)
182	1805.00	109.98	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2165.00	Water w /trace of oil 100%w	30.10
350.00	SO/MCW 87%w, 10%m, 3%o	4.91
25.00	SO/MW 56%w, 40%m, 4%o	0.35

* Recovery from multiple tests

Gas Rates

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

ROCK TYPES

LITHOLOGY

	Anhy
	Bent
	Brec
	Cht
	Clyst
	Coal
	Congl
	Dol
	Gyp
	Igne
	Lmst
	Meta
	Mrst
	Salt
	Shale
	Shcol
	Shgy
	Sltst
	Ss
	Till
	Sltstn
	Shale
	Sandylms
	Lms
	Gry sh
	Dtd
	Dol
	Carb sh
	pipesymbol

unknown lith

Red shale

FOSSIL

	Oomoldic
	Fuss
	Algae
	Amph
	Belm
	Bioclst
	Brach
	Bryozoa
	Cephal
	Coral
	Crin
	Echin
	Fish
	Foram
	Fossil
	Gastro
	Oolite
	Ostra
	Pelec
	Pellet
	Pisolite
	Plant
	Strom
	MINERAL
	Silty

	Sand
	Dol
	Chlorite
	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

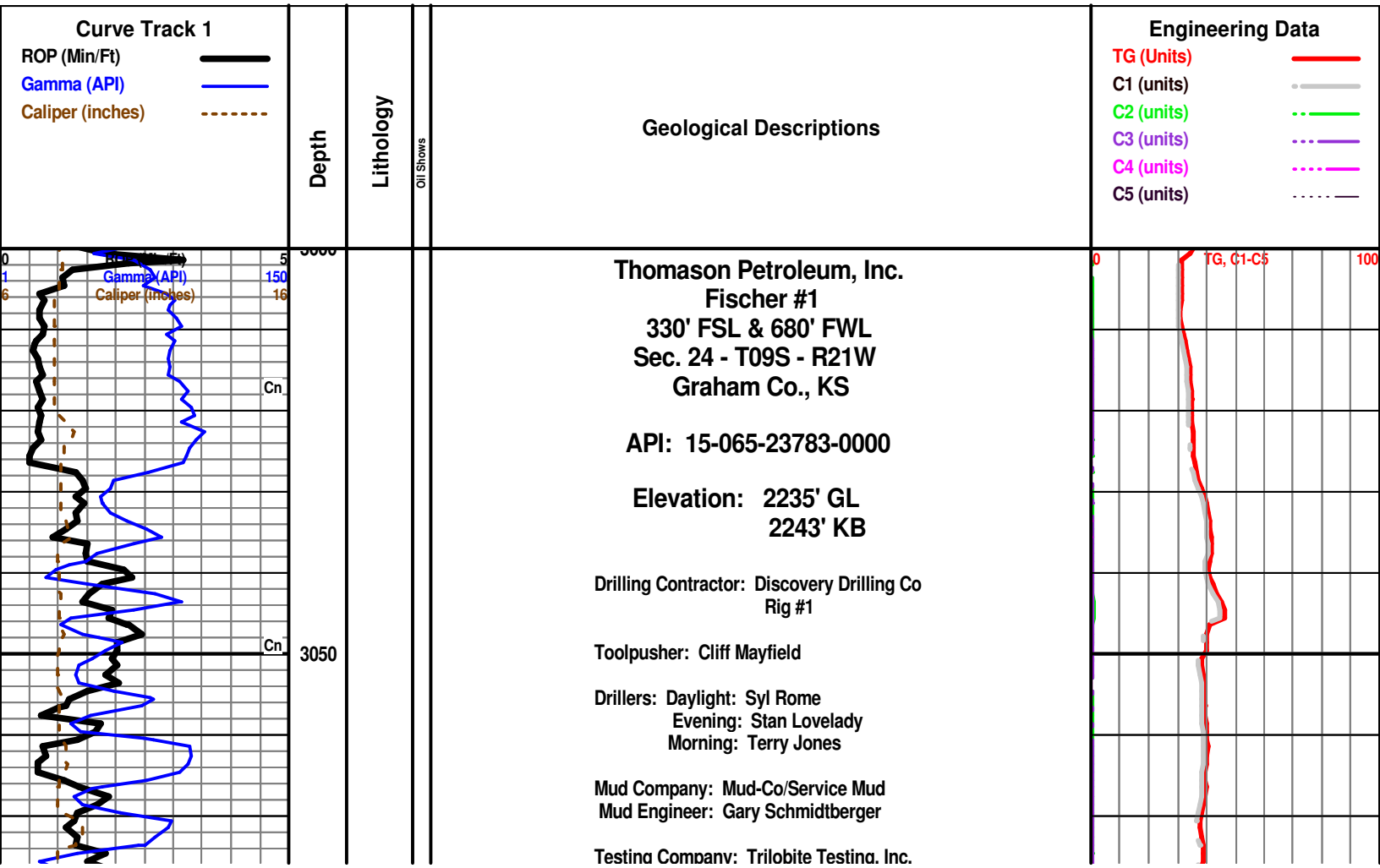
	Grainst
	Lithogr
	Microxl
	Mudst
	Packst
	Wackest
OIL SHOW	
	Gas show
	Good
	Fair
	Poor
	Dead
INTERVAL	
	Dst
	Core
	Dst
	Straddle test t
EVENT	
	Rft
	Sidewall
	Dst
	Open hole
	Perforations

STRINGER

	Red shale
	Sh
	Sandylms
	Lms
	Gryslt
	Grysh
	Dol
	Clystn
	Carbsh
	Anhy
	Arg
	Bent
	Coal
	Dol
	Gyp
	Ls
	Mrst
	Sltstrg
	Ssstrg

TEXTURE

	Boundst
	Chalky
	Cryxl
	Earthy
	Finexl



Tester: James Winder

Logging Company: Superior Well Services
Logging Engineer: Jeff Leubbers

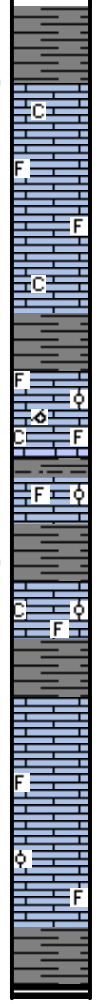
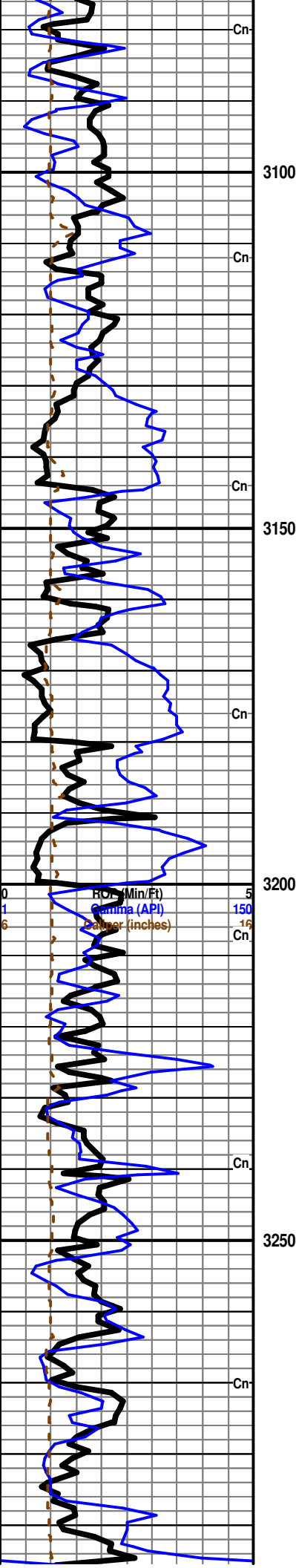
Geologist: Derek W. Patterson

Bloodhound Unit 0279 on location and operational @ 1650'. The ROP, TG, C1 (Methane), C2 (Ethane), C3 (Propane) & C4 (N-Butane = C4 Butane + C5 Iso Butane) DATA was downloaded from the Bloodhound Unit. Said DATA was imported and displayed on this Geo Log.

Displaced Mud System @ 3017'

Start 20' Wet & Dry Samples @ 3200'

Topeka 3200 (-957)



Limestone: gray lt gray some lt cream mottled, dense sub-chalky matrix, micro-vfxln, some grainy, fossiliferous to sub-fossiliferous, poor visible porosity, no shows noted, little-no mineral fluorescence.

Limestone: gray lt gray mottled, dense sub-chalky matrix, micro-vfxln, some grainy, fossiliferous, poor visible porosity, no shows noted, little-no mineral fluorescence.

Limestone: lt cream lt gray gray mottled, dense sub-chalky matrix, vfxln, grainy, fossiliferous to heavily fossiliferous, fair interfossiliferous/interlxn porosity in most, no shows noted, no fluorescence, with scattered Limestone: lt cream tan, dense tight matrix, oolitic to heavily oolitic, trace sub-oomoldic, fair-poor interoolitic/oomoldic porosity in most, no shows noted, no fluorescence.

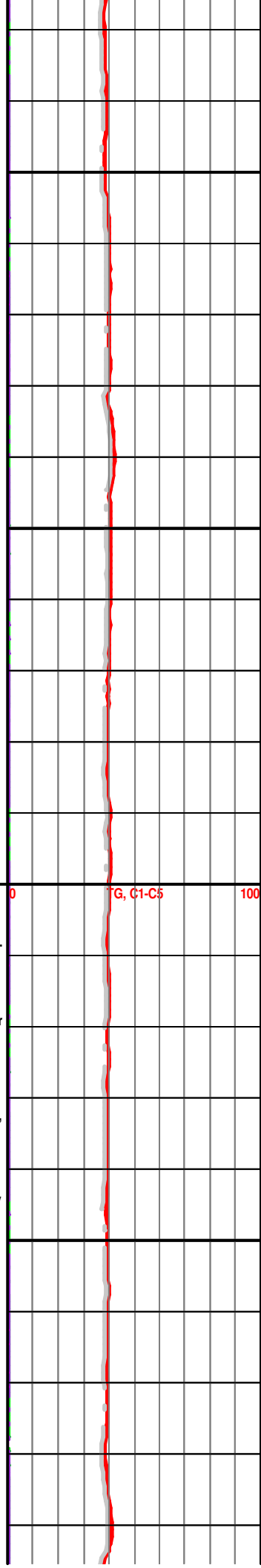
Limestone: off white lt cream lt gray gray mottled, dense sub-chalky matrix, vfxln, grainy, most heavily fossiliferous with some broken hash and trace oolitic, fair-poor interfossiliferous/interlxn porosity in most, no shows noted, no fluorescence, with fair amount loose Chalk, and interbedded Shale: predominately gray dk gray, blocky and hard.

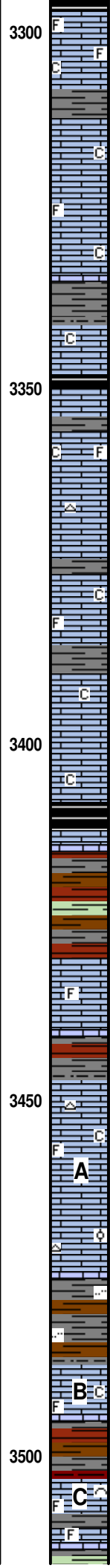
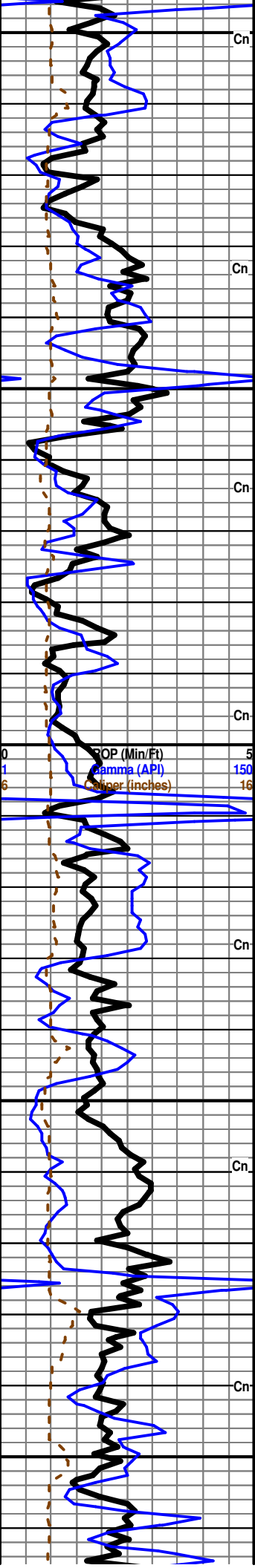
Limestone: lt cream cream tan, dense tight matrix, micro-vfxln, fossiliferous with some scattered oolitic, fair-poor interfossiliferous/pinpoint porosity, no shows noted, no fluorescence.

Limestone: lt cream lt tan off white lt gray, dense matrix, fossiliferous to heavily fossiliferous, scattered imbedded calcite crystals, trace oolitic, fair pinpoint porosity in most, no shows noted, spotty bright lt yellow mineral fluorescence in few pieces.

Shale: gray dk gray, mostly blocky and hard.

Shale: black carbonaceous, dense and hard, blocky, no show gas bubbles





Limestone: gray lt gray lt cream, dense tight matrix, microxln, mostly barren with some scattered sub-fossiliferous, poor visible porosity in most, no shows noted, no fluorescence, with fair amount of loose Chalk.

Limestone: lt gray lt cream gray, dense tight matrix, microxln, mostly barren with some scattered sub-fossiliferous, poor visible porosity, no shows noted, no fluorescence, with continued loose Chalk.

Shale: black, carbonaceous, dense and hard, blocky, no show gas bubbles.

Limestone: off white lt cream, dense tight matrix, micro-vfxln, sub-fossiliferous to barren, some slightly chalky/cherty, poor visible porosity, no shows noted, spotty-even dull to lt pale yellow mineral fluorescence, with continued Chalk, and scattered Chert: cream tan, opaque, fresh and sharp, barren.

Limestone: lt cream lt gray off white, dense sub-chalky to tight matrix, micro-vfxln, scattered fossiliferous, fair pinpoint porosity in most, no shows noted, even dull pale lt yellow mineral fluorescence, with abundant loose Chalk, sample washes white.

Limestone: off white lt gray, softer chalky matrix, microxln, mostly barren, poor visible porosity, no shows noted, even dull pale lt yellow mineral fluorescence, with abundant loose Chalk, sample washes white.

Start 10' Wet & Dry Samples @ 3400'

Heebner 3408 (-1165)

Shale: black, carbonaceous, dense and hard, blocky, some waxy, no show gas bubbles.

Shale: gray dk gray green brick red brown, blocky to rounded, hard to soft, some very mushy, sample washes brownish-red.

Geologist Derek W. Patterson on location, 1115 hrs 11.8.11

Toronto 3430 (-1187)

Limestone: white lt gray lt pale green, dense matrix, fossiliferous to barren, poor interxln porosity, no shows noted, even to spotty dull pale yellow mineral fluorescence.

Shale: gray dk gray brick red, blocky to rounded, mostly hard with some softer, sample washes reddish-brown.

Lansing 3447 (-1204)

Limestone: off white lt gray lt cream, dense matrix with some scattered sub-chalky, micro-cryptoxln with some scattered lithographic non-descript, mostly barren with some scattered sub-fossiliferous, poor visible porosity, no shows noted, poor-no mineral fluorescence, with scattered Chert: off white cream, opaque, fresh and sharp, barren.

Limestone: off white lt gray, dense matrix, mostly barren with trace sub-oolitic, poor visible porosity, no shows noted, little-no mineral fluorescence, with continued Chert as above.

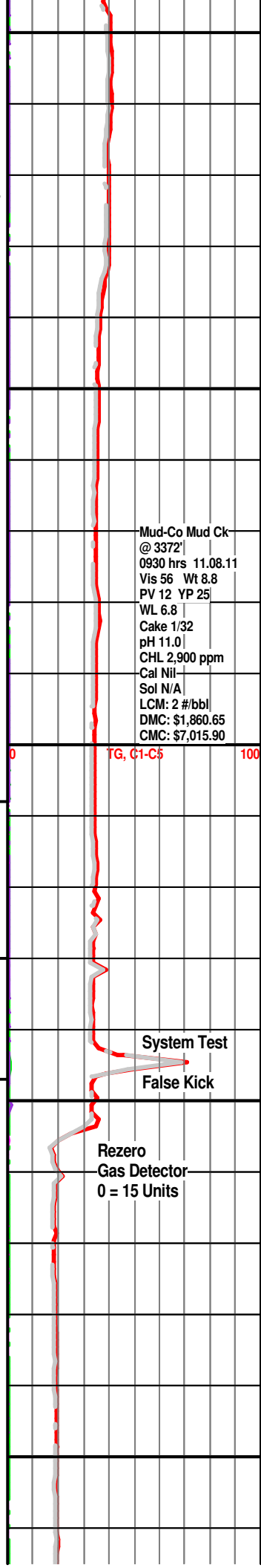
Shale: gray dk gray brown, mostly blocky and hard with some scattered softer, silty in part, sample washes reddish-brown.

Limestone: lt cream lt gray, dense tight matrix, some slightly chalky, micro-cryptoxln, mostly barren with trace sub-fossiliferous, poor-no visible porosity, no shows noted, scattered dull pale yellow mineral fluorescence.

Shale: gray dk gray brick red brown, mostly blocky and hard, sample washes reddish-brown.

Limestone (mixed): off white pale lt green pale orange, dense tight matrix, micro-vfxln, barren to fossiliferous (bioclastic), poor visible porosity, few pieces with poor dk black dead staining along edges, no live shows noted, little-no fluorescence, no odor.

INTERBEDDED Shale: gray dk gray brick red dk green, blocky and hard, sample washes reddish-brown and limestone as above, no shows noted

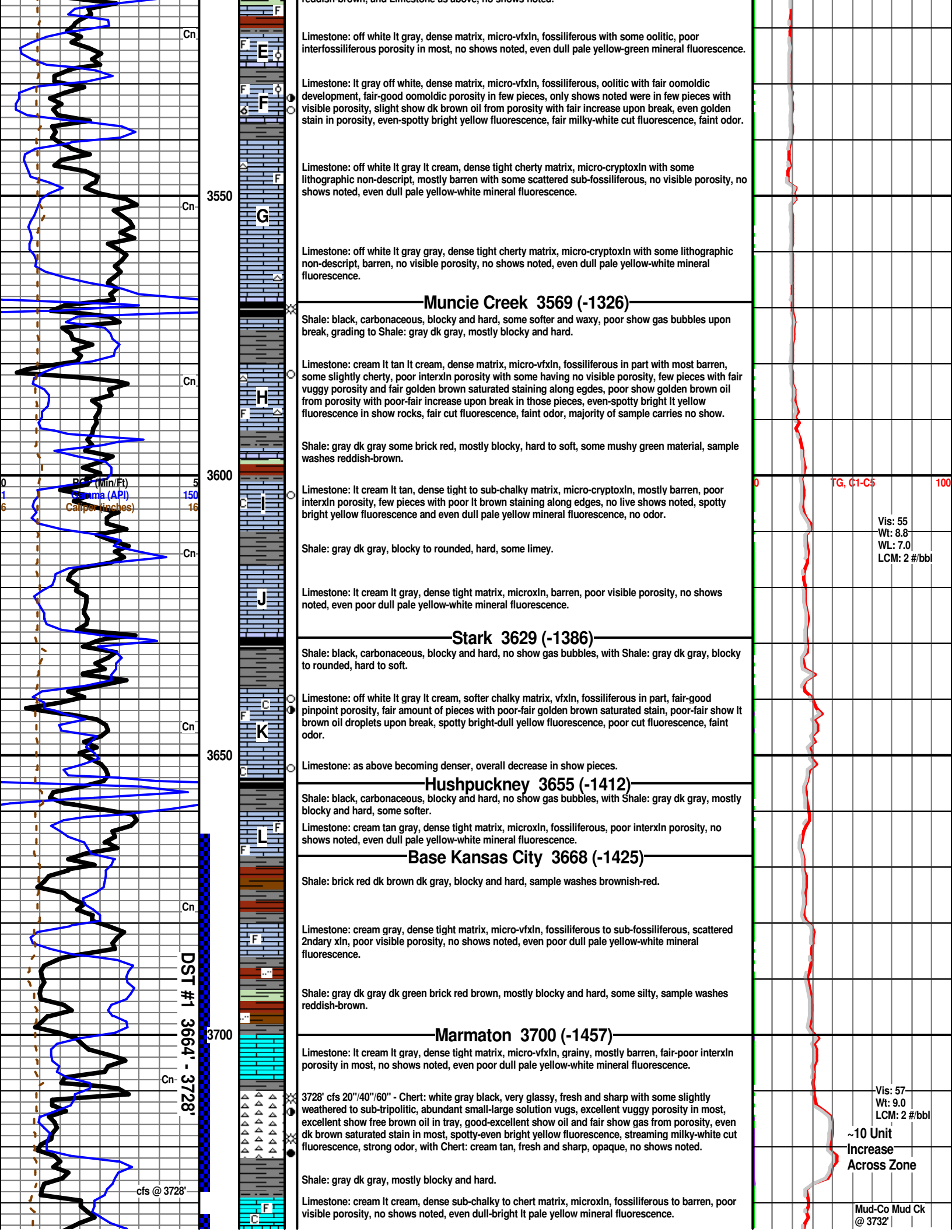


Mud-Co Mud Ck @ 3372'
0930 hrs 11.08.11
Vis 56 Wt 8.8
PV 12 YP 25
WL 6.8
Cake 1/32
pH 11.0
CHL 2,900 ppm
Cal Nil
Sol N/A
LCM: 2 #/bbl
DMC: \$1,860.65
CMC: \$7,015.90

TG, C1-C5

System Test
False Kick

Rezero
Gas Detector
0 = 15 Units



Limestone: off white lt gray, dense matrix, micro-vfxln, fossiliferous with some oolitic, poor interfossiliferous porosity in most, no shows noted, even dull pale yellow-green mineral fluorescence.

Limestone: lt gray off white, dense matrix, micro-vfxln, fossiliferous, oolitic with fair oomoldic development, fair-good oomoldic porosity in few pieces, only shows noted were in few pieces with visible porosity, slight show dk brown oil from porosity with fair increase upon break, even golden stain in porosity, even-spotty bright yellow fluorescence, fair milky-white cut fluorescence, faint odor.

Limestone: off white lt gray lt cream, dense tight cherty matrix, micro-cryptoxln with some lithographic non-descript, mostly barren with some scattered sub-fossiliferous, no visible porosity, no shows noted, even dull pale yellow-white mineral fluorescence.

Limestone: off white lt gray gray, dense tight cherty matrix, micro-cryptoxln with some lithographic non-descript, barren, no visible porosity, no shows noted, even dull pale yellow-white mineral fluorescence.

Muncie Creek 3569 (-1326)

Shale: black, carbonaceous, blocky and hard, some softer and waxy, poor show gas bubbles upon break, grading to Shale: gray dk gray, mostly blocky and hard.

Limestone: cream lt tan lt cream, dense matrix, micro-vfxln, fossiliferous in part with most barren, some slightly cherty, poor interxln porosity with some having no visible porosity, few pieces with fair vuggy porosity and fair golden brown saturated staining along edges, poor show golden brown oil from porosity with poor-fair increase upon break in those pieces, even-spotty bright lt yellow fluorescence in show rocks, fair cut fluorescence, faint odor, majority of sample carries no show.

Shale: gray dk gray some brick red, mostly blocky, hard to soft, some mushy green material, sample washes reddish-brown.

Limestone: lt cream lt tan, dense tight to sub-chalky matrix, micro-cryptoxln, mostly barren, poor interxln porosity, few pieces with poor lt brown staining along edges, no live shows noted, spotty bright yellow fluorescence and even dull pale yellow mineral fluorescence, no odor.

Shale: gray dk gray, blocky to rounded, hard, some limey.

Limestone: lt cream lt gray, dense tight matrix, microxln, barren, poor visible porosity, no shows noted, even poor dull pale yellow-white mineral fluorescence.

Stark 3629 (-1386)

Shale: black, carbonaceous, blocky and hard, no show gas bubbles, with Shale: gray dk gray, blocky to rounded, hard to soft.

Limestone: off white lt gray lt cream, softer chalky matrix, vfxln, fossiliferous in part, fair-good pinpoint porosity, fair amount of pieces with poor-fair golden brown saturated stain, poor-fair show lt brown oil droplets upon break, spotty bright-dull yellow fluorescence, poor cut fluorescence, faint odor.

Limestone: as above becoming denser, overall decrease in show pieces.

Hushpuckney 3655 (-1412)

Shale: black, carbonaceous, blocky and hard, no show gas bubbles, with Shale: gray dk gray, mostly blocky and hard, some softer.

Limestone: cream tan gray, dense tight matrix, microxln, fossiliferous, poor interxln porosity, no shows noted, even dull pale yellow-white mineral fluorescence.

Base Kansas City 3668 (-1425)

Shale: brick red dk brown dk gray, blocky and hard, sample washes brownish-red.

Limestone: cream gray, dense tight matrix, micro-vfxln, fossiliferous to sub-fossiliferous, scattered 2ndary xln, poor visible porosity, no shows noted, even poor dull pale yellow-white mineral fluorescence.

Shale: gray dk gray dk green brick red brown, mostly blocky and hard, some silty, sample washes reddish-brown.

Marmaton 3700 (-1457)

Limestone: lt cream lt gray, dense tight matrix, micro-vfxln, grainy, mostly barren, fair-poor interxln porosity in most, no shows noted, even poor dull pale yellow-white mineral fluorescence.

3728' cfs 20"/40"/60" - Chert: white gray black, very glassy, fresh and sharp with some slightly weathered to sub-tripolitic, abundant small-large solution vugs, excellent vuggy porosity in most, excellent show free brown oil in tray, good-excellent show oil and fair show gas from porosity, even dk brown saturated stain in most, spotty-even bright yellow fluorescence, streaming milky-white cut fluorescence, strong odor, with Chert: cream tan, fresh and sharp, opaque, no shows noted.

Shale: gray dk gray, mostly blocky and hard.

Limestone: cream lt cream, dense sub-chalky to chert matrix, microxln, fossiliferous to barren, poor visible porosity, no shows noted, even dull-bright lt pale yellow mineral fluorescence.

TG, C1-C5 100

Vis: 55
Wt: 8.8
WL: 7.0
LCM: 2 #/bbl

Vis: 57
Wt: 9.0
LCM: 2 #/bbl

~10 Unit Increase Across Zone

Mud-Co Mud Ck @ 3732'

DST #1 3664' - 3728'

cfs @ 3728'

3550

3600

3650

3700

Cn

Cn

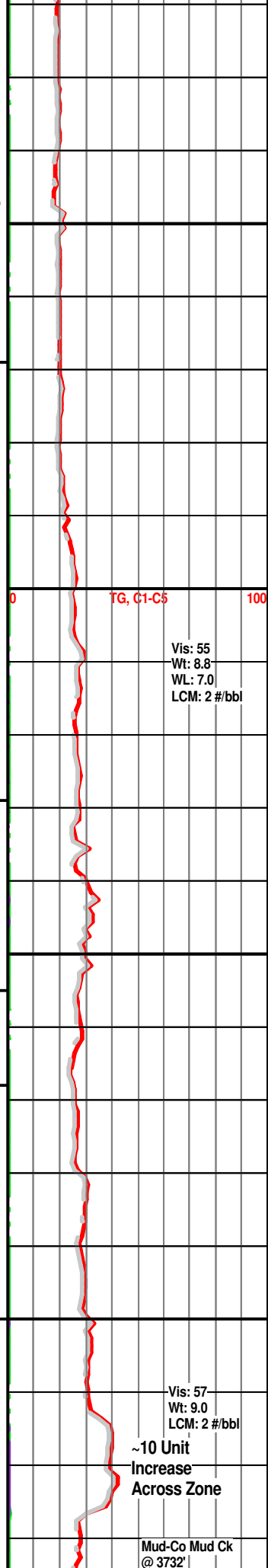
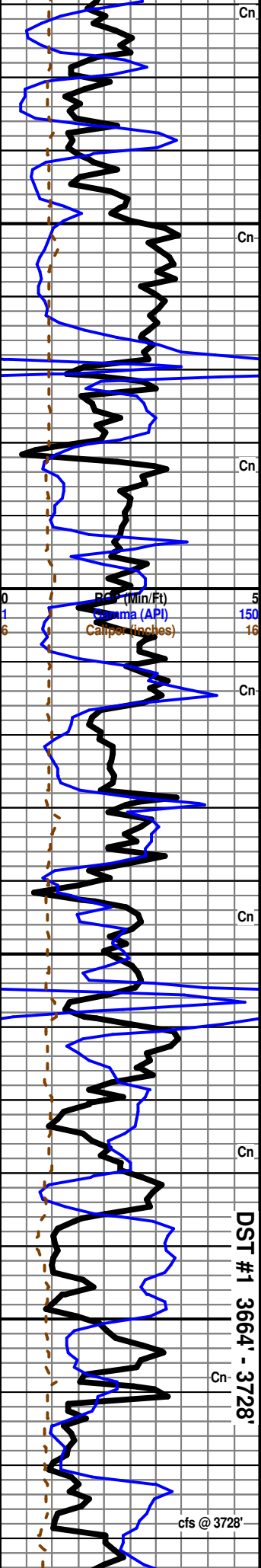
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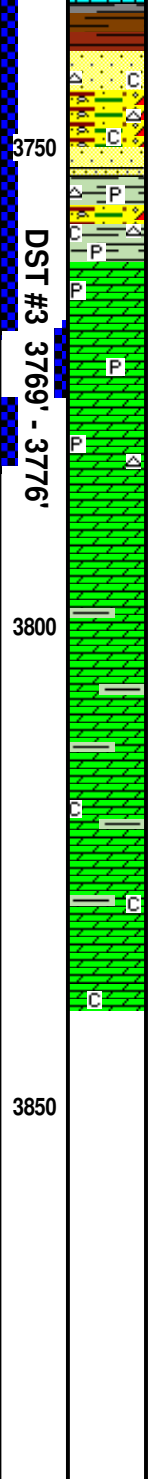
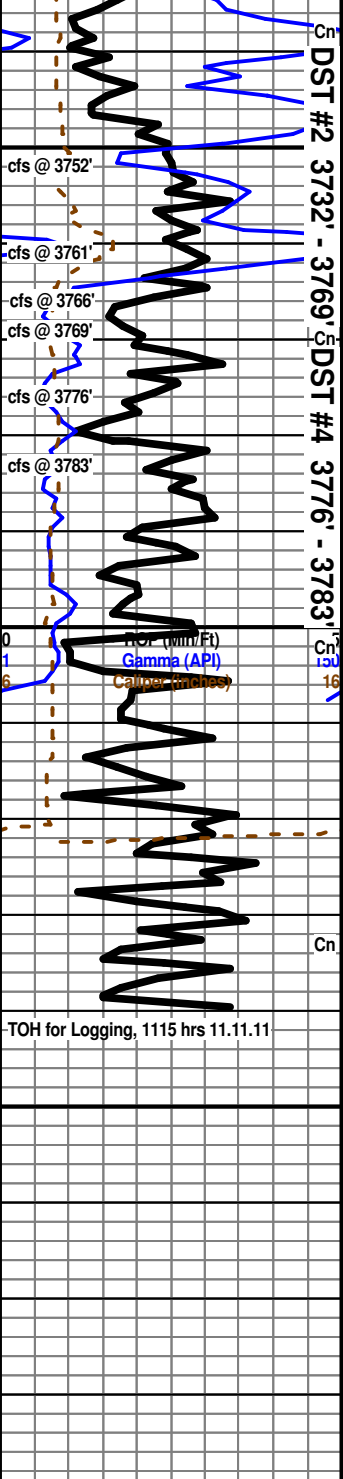
Cn

Cn

Cn

Cn





3752' cfs 20" - Conglomerate - Shale: gray dk gray brick red brown, mostly blocky and hard, some mushy shaley material, interbedded Sandstone: clear quartz grains in gray matrix, vf-fgrained, well cemented, sub-rounded to sub-angular, fairly sorted, fair show heavy to tarry brown oil upon break, little-no fluorescence, faint-no odor, Chert: cream yellow, fresh and sharp to weathered, good dk black tarry sat stain in most, few with poor live show upon break, and scattered Limestone: as above.

3761' cfs 20"/40"/60" - Predominately Shale: teal green pale green, blocky and hard, some waxy, pyritic in part, with continued abundant Conglomerate material, and still carrying Sandstone stringers as above and associated show.

Arbuckle 3762 (-1519)

3766'/3769' cfs - Dolomite: cream lt tan, dense tight matrix, vfxln with some scattered coarsexn, fair sub-rhombic dev with poor-no xln dev, barren, fair amount pyritic material, scattered solution vugs, fair interxln/vuggy porosity in most, even lt brown saturated stain, even oily sheen across sample with abundant free oil droplets, poor-fair show free oil from porosity with good increase in most upon break, even pale-bright lt yellow fl, streaming milky-white cut fl, strong oily/sulfur odor.

3776' cfs - Dolomite: cream tan lt brown, dense matrix, micro-vfxln, poor-fair rhombic dev, barren, pyritic in part, scattered vugs, fair vuggy to poor interxln porosity, fair-poor show oil from porosity, grading to Dolomite: tan lt brown, slightly friable matrix, vf-fxln, good rhombic dev, good interxln porosity, fair-good show lt brown oil from porosity with good increase upon break, some stringy, good saturated stain, even bright lt yellow fl, streaming milky-white cut fl, strong-mod odor.

3783' cfs - Dolomite: cream lt cream, slightly friable matrix, f-coarsexn, good rhombic dev, some cherty, good interxln/vuggy porosity in most, fair-good show brown oil with good increase upon break, some tarry, good saturated stain in most, with Dolomite: brown tan, friable matrix, vfxln, sucrosic, fair interxln porosity, good show brown oil from porosity with good increase upon break, good saturated stain, even bright lt yellow fl in all, streaming milky-white cut fl, strong odor, free oil.

3784' - 3798' - Dolomite: lt cream lt tan, dense matrix, micro-vfxln, poor sub-rhombic to no xln development, poor interxln porosity in most, few pieces with slight show brown oil upon break, fair-poor saturated stain in few pieces, even bright lt yellowish-green fl, poor cut fl, moderate oily-sulfur odor.

3799' - 3816' - Dolomite: lt gray lt cream some pink, dense matrix, vf-coarsexn, fair-poor rhombic development in most, fair-poor rhombic porosity, some tighter with poor interxln porosity, scattered pieces with poor show dk brown oil with fair increase upon break, majority of shows are black and dead, poor saturated stain, even bright lt yellowish-green fl, poor cut fl, moderate sulfur odor, with influx Shale: teal, blocky.

3817' - 3830' - Dolomite: lt gray lt cream some pink, dense matrix, vf-fxln, fair rhombic development in most, poor rhombic porosity, few pieces with some tarry black dead oil in porosity, no live shows noted, even bright lt yellowish-green fl, no cut fl, moderate sulfur odor, with scattered Shale as above, and influx loose Chalk.

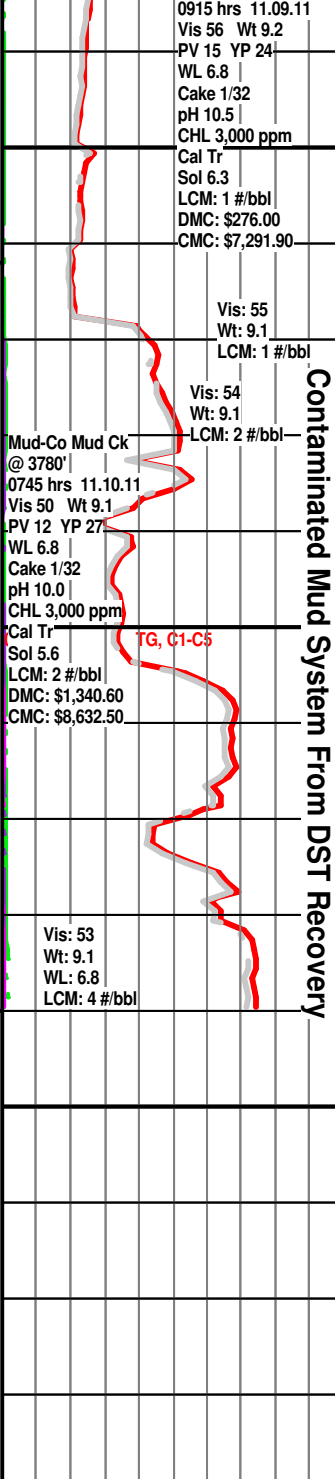
3831' - 3840' - Dolomite: as above, decrease in xln development, no shows noted, moderate-faint sulfur odor, Shales drop out, continued loose Chalk in sample.

RTD 3842 (-1599)
LTD 3840 (-1597)

Rotary TD @ 3842', 0930 hrs 11.11.11
 Superior Well Service Open Hole Logging TD @ 3840'
 Commence Open Hole Logging Operations, 1300 hrs 11.11.11
 Complete Open Hole Logging Operations, 1800 hrs 11.11.11
 Orders Received to Run 5 1/2" Production Casing

Geologist Derek W. Patterson off location, 1835 hrs 11.11.11

Respectfully Submitted,
Derek W. Patterson



Contaminated Mud System From DST Recovery