



Scale 1:240 Imperial

Well Name: Stoss #1-24
 Surface Location: 499' FSL, 498' FWL, Sec. 24-18S-14W
 Bottom Location:
 API: 15-145-26148-00-00
 License Number:
 Spud Date: 9/6/2016 Time: 5:45 PM
 Region: Barton County
 Drilling Completed: 9/13/2016 Time: 5:02 PM
 Surface Coordinates:
 Bottom Hole Coordinates:
 Ground Elevation: 1897.00ft
 K.B. Elevation: 1908.00ft
 Logged Interval: 2800.00ft To: 3475.00ft
 Total Depth: 3475.00ft
 Formation: Arbuckle
 Drilling Fluid Type: Chemical/Fresh Water Gel

OPERATOR

Company: Shelby Resources, LLC
 Address: 621 17th St, Suite 1155
 Denver, CO 80293
 Contact Geologist: Janine Sturdavant
 Contact Phone Nbr: 303-907-2209 / 720-274-4682
 Well Name: Stoss #1-24
 Location: 499' FSL, 498' FWL, Sec. 24-18S-14W
 API: 15-145-26148-00-00
 Pool:
 State: Kansas Field: Dist. 65
 Country: USA

LOGGED BY

Company:
 Address:
 Phone Nbr:
 Logged By: Geologist Name: Keith Reavis Bruce B. Ard

NOTES

The Shelby Resources, LLC Stoss #1-24 was drilled to a total depth of 3475', bottoming in the Reagan SS/Granite Wash. A TookeDaq Gas Detector was employed in the drilling of said well.

Four DST's were conducted throughout the Toronto, Lansing Kansas-City, and Arbuckle Zones. The DST reports can be found at the bottom of this log.

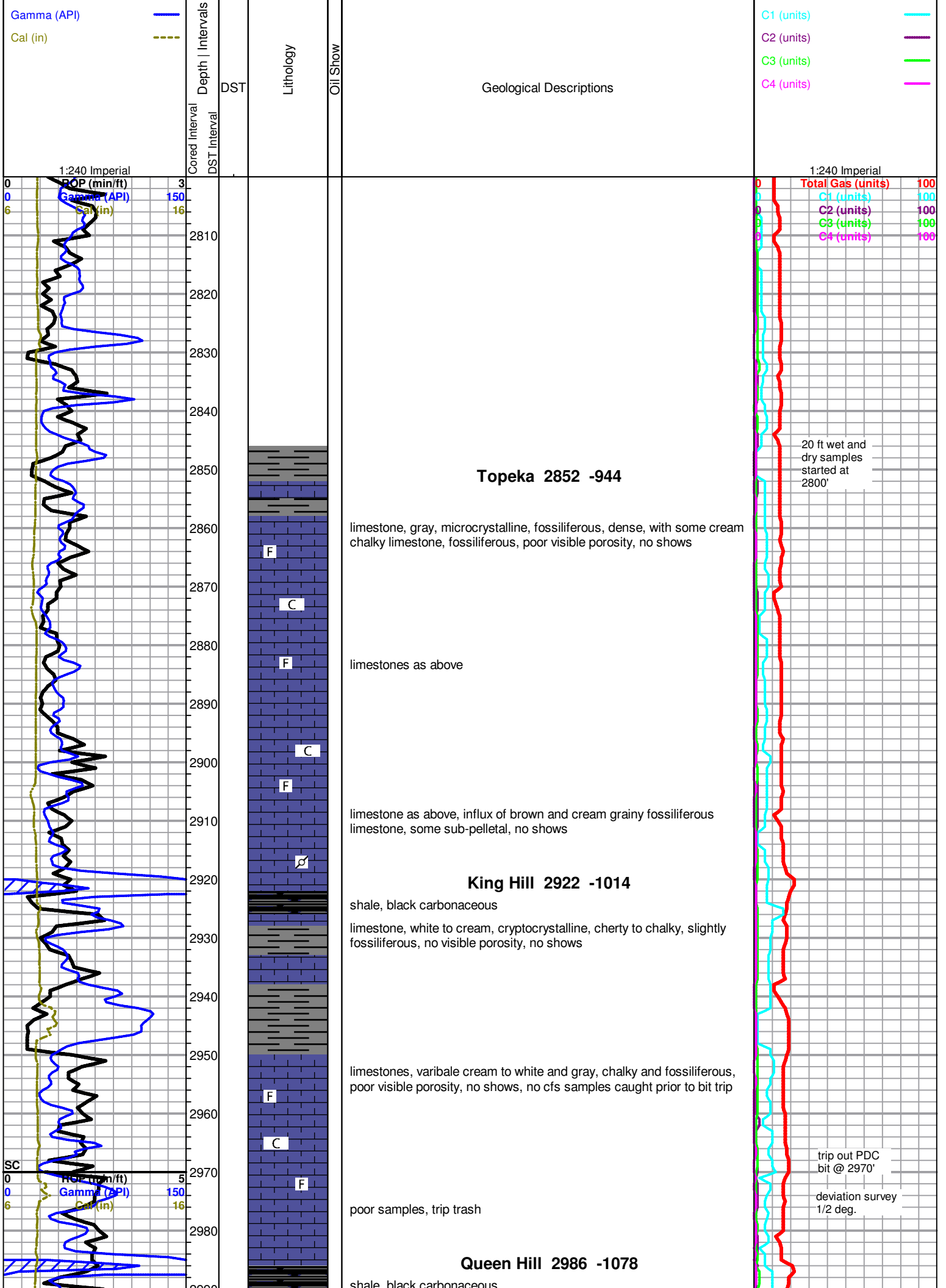
Due to positive DST results, sample shows, and log analysis it was determined by all parties to further test the well through production casing. The dry samples were saved and will be available for further review at the Kansas Geological Society Well Sample Library, located in Wichita, KS.

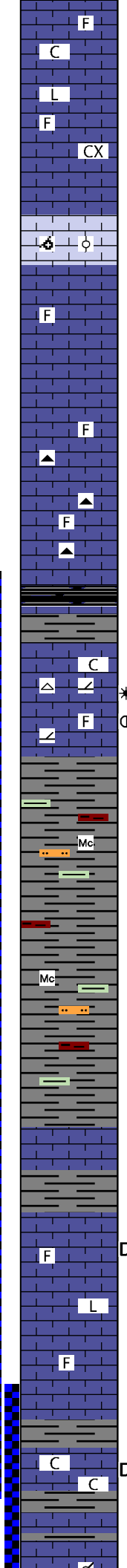
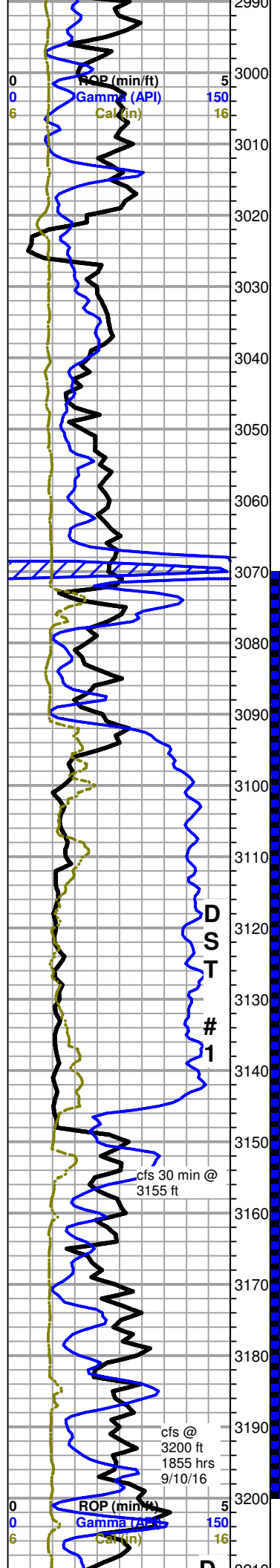
Respectfully Submitted,
Keith Reavis and Bruce B. Ard

CONTRACTOR

Contractor: Sterling Drilling Co
 Rig #: 4
 Rig Type: mud rotary
 Spud Date: 9/6/2016 Time: 5:45 PM
 TD Date: 9/13/2016 Time: 5:02 PM
 Rig Release: 9/14/2016 Time: 12:00 PM

ELEVATIONS





shale, black carbonaceous

limestone, mixed, dense tan cryptocrystalline, cherty, mixed cream to gray fossiliferous, chalky in part, gray cryptocrystalline lithographic, no shows

limestone, light gray to tan, oomoldic and oolitic, some very good mold porosity, barren, no fluorescence

limestone, gray, micro-cryptocrystalline, dense, with limestone, cream to tan, mixed dense fossiliferous to chalky, no shows

limestone a.a. with influx black and dark gray cherts, sharp, fresh, no shows

Heebner 3072 -1164
shale, black carbonaceous

Toronto 3080 -1172
stoss 1-34 dst1.jpg
limestone white to gray, microcrystalline to lithographic, some chalky, with limestone, light brown to white mottled, microcrystalline, sucrosic, dolomitic and cherty, fossil frags, some intercrystalline porosity, some associated white to brown slightly weathered chert, light brown staining, with gas bubbles, slight show very light free oil on break, no fluorescence or cut, weak to fair odor in wet cup

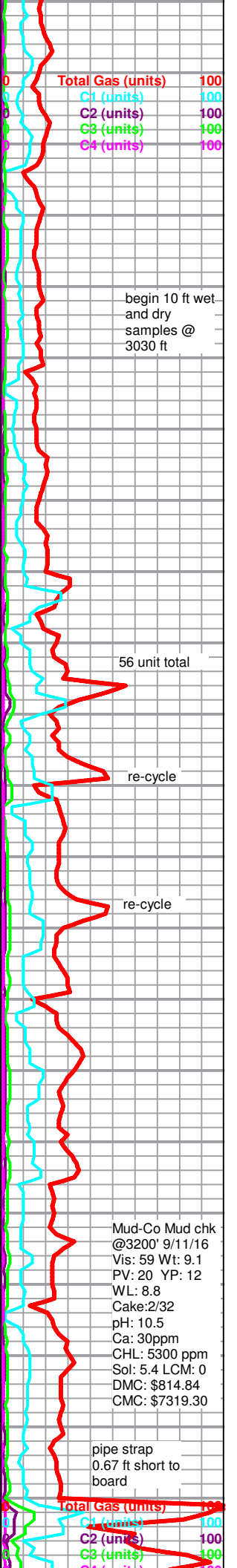
Douglas 3096 -1188
shale, mostly gray, some red and green, some micaceous, scattered light green micaceous siltstone

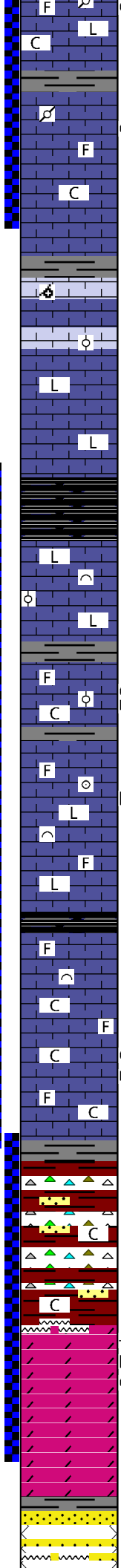
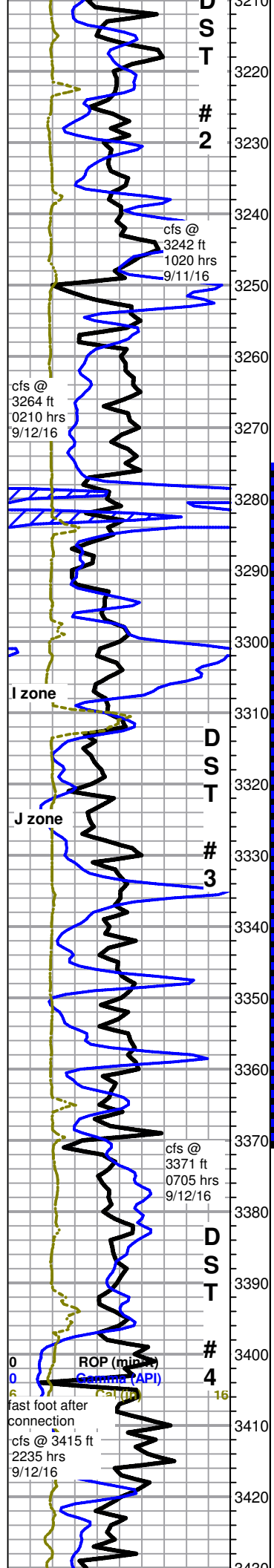
Brown Lime 3148 -1240
limestone, tan to brown, dense, cherty, fossiliferous, some striated, no porosity or shows

Lansing 3160 -1252
A zone - limestone, gray, microcrystalline, fossiliferous, some secondary calcite crystals, limestone, cream, micro-cryptocrystalline, fossiliferous to lithographic, poor overall visible porosity, few small specimens with light surface stain, no show free oil, no odor or fluorescence

stoss 1-34 dst2.jpg
limestone, white to cream, mostly cryptocrystalline, weathered, chalky, some scattered dead black stain, poor visible porosity, no odor or fluorescence

3220 samp - mixed limestone with, tan to cream, pelletal to fossiliferous, dense microcrystalline to chalky and weathered, some secondary calcite, scattered small solution vugs with staining, trace sheen, some light gray to tan





3230 samp - mixed limestone a.a. with limestone, cream, cryptocrystalline, lithographic cryptocrystalline, dense, cherty, with small solution vugs and stained calcite filled fractures, trace light gray bioclastic, good interclast porosity and secondary calcite, light sheen, fleeting odor, light fluorescence, slow light cut with halo

limestone, gray to dark gray, cryptocrystalline, dense, fossiliferous to oolitic, trace stained vugs, limestone, white to cream, fossiliferous to pelletal, chalky, some secondary calcite, trace stain, no shows free oil, light fluorescence, slow faint cut, fleeting odor in 3240 sample, cfs samples more predominately the white and cream facies above, virtually no show, no odor

limestone, white to gray, oolitic and oomoldic, widely spaced oolites and oomolds, some scattered fair porosity, barren, some chalky, with chalky white pelletal and fossiliferous limestone

limestone, gray, brown and tan, cryptocrystalline, mostly lithographic, some slightly fossiliferous, dense, trace chalky, no shows

Muncie Creek 3276 -1368

shale, black carbonaceous

limestone, a.a. with trace brown and gray oolitic and bioclastic, very dense, recrystallized, poor visible porosity, no shows

stoss 1-34 dst3.jpg

3320 sample, limestone, white to cream, cryptocrystalline, fossiliferous, chalky, few pieces oolitic with inter-oolite porosity, some secondary calcite nodules, light grayish/black inter-oolite stain, no show oil, light fluorescence, 1 piece good bright white milky cut, others poor, no odor in wet cup, some chalk

Stark Shale 3338 -1430

grayish/black shale

limestones, mixed, gray to cream, white and tan, fossiliferous to bioclastic, abundant lithographic, dense to chalky, poor visible porosity, no shows

grading to white and cream chalky limestone, fossiliferous, poor visible porosity, some secondary calcite crystals, few pieces with very light staining, trace sheen on break, light fluorescence, slow fair cut with halo, no odor in wet cup

Base KC 3370 -1462

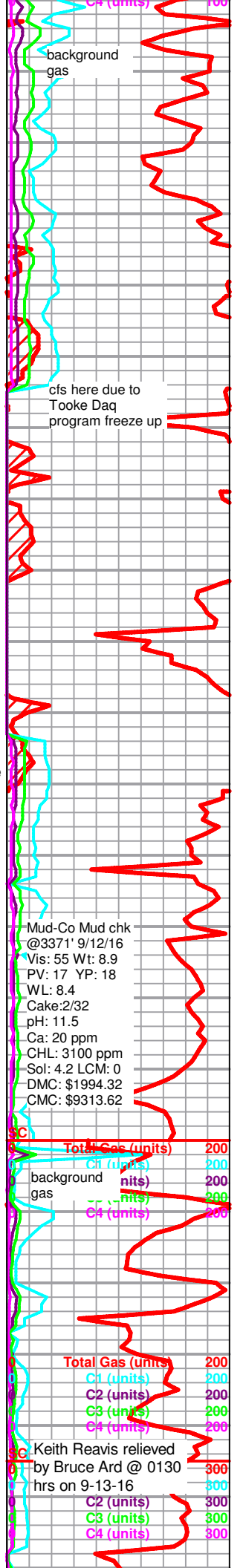
starting 3390 sample - conglomerate, red shales, red to yellow and light gray cherts, fossiliferous to oolitic, sharp, fresh, translucent, no shows, heavy red wash, abundant chalk

Arbuckle 3396 -1488

stoss 1-34 dst4.jpg

3410 sample - dolomite, white, fine to microcrystalline, recrystallized rhombs, trace chert, poor visible intercrystalline porosity, fairly dense, black flakey gilsonite staining, trace light brown staining, few pieces that bled small heavy oil globules, gassy, poor fluorescence, very poor cut, weak sulfur odor - cfs samples a.a., influx abundant white cryptocrystalline rhombic, very dense, no visible porosity, barren, fair white fluorescence, odor a.a.

dolomite, wht, fxtaln, sli rextalized, dse, trc glauc, pvis, por, ns noted, few wht, f-md rextalized rhombs w/blk gilsonite stn, some with blk hvy fo specks w/hrkn az



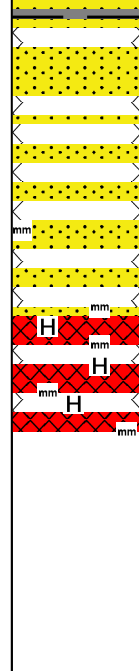
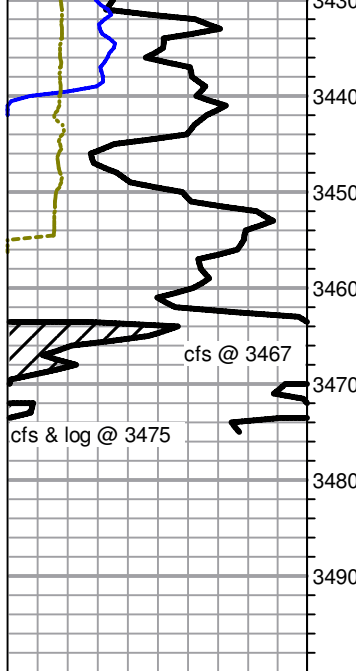
Mud-Co Mud chk
@3371' 9/12/16
Vis: 55 Wt: 8.9
PV: 17 YP: 18
WL: 8.4
Cake:2/32
pH: 11.5
Ca: 20 ppm
CHL: 3100 ppm
Sol: 4.2 LCM: 0
DMC: \$1994.32
CMC: \$9313.62

Total Gas (units) 200
C1 (units) 200
C2 (units) 200
C3 (units) 200
C4 (units) 200

background gas 200
gas 200

Total Gas (units) 200
C1 (units) 200
C2 (units) 200
C3 (units) 300
C4 (units) 300

Keith Reavis relieved
by Bruce Ard @ 0130
hrs on 9-13-16 300
C2 (units) 300
C3 (units) 300
C4 (units) 300



specks w/blk aa

REAGAN SS 3422 -1514

3440-lg influx clear to lt gry qtz, appears fractured, sharp, few w/blk gilsonite stn, nsfo, nf, does not effervess, sli incr rd & gry shs

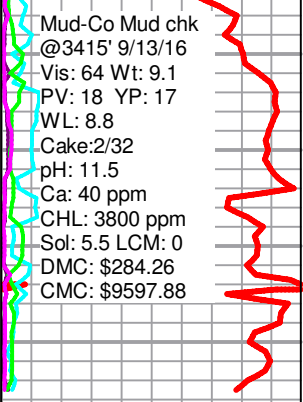
3450-same, less blk stn, less pyritic, incr rd & gry shs aa

3460-clear qtz, sharp, frac, sli muscovite, sli trc pk stn, influx micaceous, argil dk gry-blk shs, rd shs not micaceous

3467 spls-incr qtz w/pk-rd stn, incr muscovite inclusions, sli pyritic, ? blk biotite inclusions, incr vcs, rd-mar, gry-blk

3475 spls-aa, incr in vcs aa, incr pyritie, still sli musc/biotite inclusions, sli pk stn

Rotary Total Depth 3475 -1567



Mud-Co Mud chk
 @3415' 9/13/16
 Vis: 64 Wt: 9.1
 PV: 18 YP: 17
 WL: 8.8
 Cake:2/32
 pH: 11.5
 Ca: 40 ppm
 CHL: 3800 ppm
 Sol: 5.5 LCM: 0
 DMC: \$284.26
 CMC: \$9597.88

DRILL STEM TEST REPORT

SHELBY RESOURCES LLC

2717 CANAL BLVD SUITE C
HAYS, KANSAS 67601

ATTN: KEITH REAVIS

STOSS 1-24

Job Ticket: 01127

DST#: 1

Test Start: 2016.09.11 @ 11:15:00

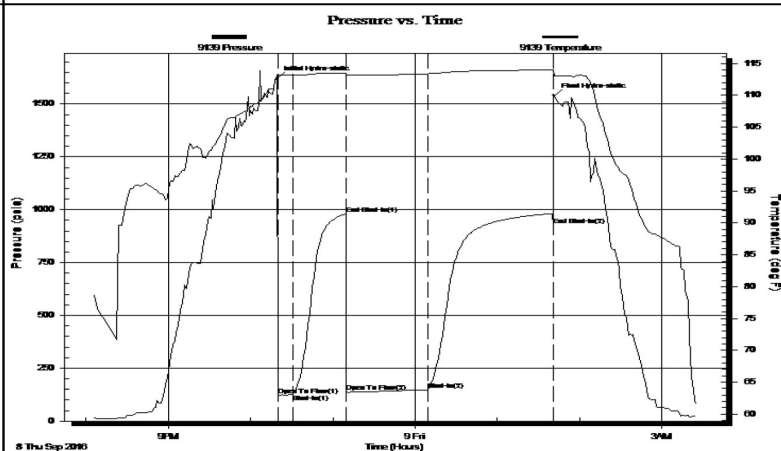


GENERAL INFORMATION:

Formation: **TORONTO LANSING A-B**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 00:00:00
 Time Test Ended:
 Interval: **3070.00 ft (KB) To 3200.00 ft (KB) (TVD)**
 Total Depth: 3200.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Poor
 Test Type: Conventional Bottom Hole (Initial)
 Tester: GENE BUDIG
 Unit No: 1-19
 Reference Elevations: 1908.00 ft (KB)
 1897.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 9139 Outside
 Press@RunDepth: 925.22 psia @ 3194.96 ft (KB)
 Start Date: 2016.09.08 End Date: 2016.09.09
 Start Time: 20:05:00 End Time: 03:25:30
 Capacity: 5000.00 psia
 Last Calib.: 2016.09.11
 Time On Btm: 2016.09.08 @ 22:19:30
 Time Off Btm: 2016.09.09 @ 01:41:30

TEST COMMENT: 1ST OPENING 10 MINUTES FAIR BLOW BUILT TO 6 1/2 INCHES INTO THE WATER
 1ST SHUT-IN 45 MINUTES NO BLOW BACK
 2ND OPENING 60 MINUTES GOOD BLOW BUILT TO THE BOTTOM OF A 5 GALLON BUCKET IN 3 MINUTES
 2ND SHUT-IN 90 MINUTES-WEAK BLOW BACK



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1620.08	113.19	Initial Hydro-static
1	123.00	113.08	Open To Flow (1)
11	126.87	113.14	Shut-In(1)
50	980.46	113.45	End Shut-In(1)
51	138.97	113.21	Open To Flow (2)
110	148.36	113.39	Shut-In(2)
201	925.22	114.00	End Shut-In(2)
202	1538.97	113.23	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
100.00	oil cut mud 10 oil 90 mud	0.58

Gas Rates

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

DRILL STEM TEST REPORT

SHELBY RESOURCES LLC

24-18s-14w BARTON

2717 CANAL BLVD SUITE C
HAYS, KANSAS 67601

STOSS 1-24

Job Ticket: 01128

DST#: 2

ATTN: KEITH REAVIS

Test Start: 2016.09.11 @ 13:10:00



GENERAL INFORMATION:

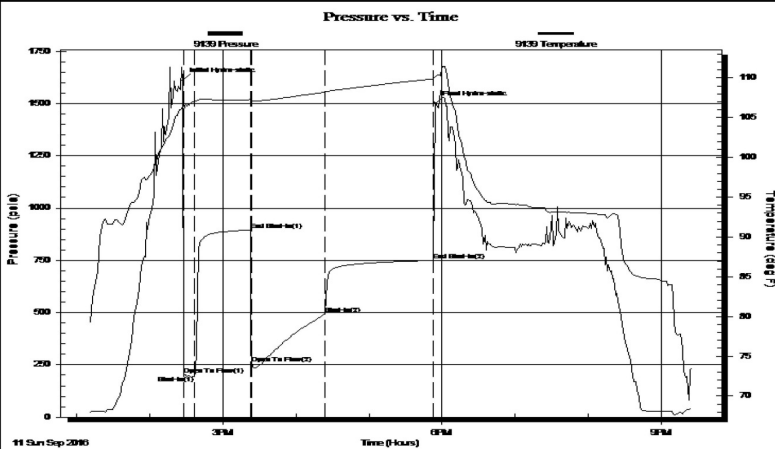
Formation: **LANSING D AND F**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 14:27:00 Tester: GENE BUDIG
 Time Test Ended: 00:00:00 Unit No: 1-19
 Interval: **3184.00 ft (KB) To 3242.00 ft (KB) (TVD)** Reference Elevations: 1908.00 ft (KB)
 Total Depth: 3242.00 ft (KB) (TVD) 1897.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 11.00 ft

Serial #: 9139

Outside

Press@RunDepth: 749.57 psia @ 3237.32 ft (KB) Capacity: 5000.00 psia
 Start Date: 2016.09.11 End Date: 2016.09.11 Last Calib.: 2016.09.11
 Start Time: 13:10:00 End Time: 21:25:00 Time On Btm: 2016.09.11 @ 14:27:00
 Time Off Btm: 2016.09.11 @ 17:54:00

TEST COMMENT: 1ST OPENING 10 MINUTES GOOD BLOW BUILT TO THE BOTTOM OF A 5 GALLON BUCKET IN 2 MINUTES
 1ST SHUT-IN 45 MINUTES-GOOD BLOW BACK
 2ND OPENING 60 MINUTES-STRONG BLOW WITH GAS TO SURFACE SEE GAS FLOW REPORT
 2ND SHUT-IN 90 MINUTES-GOOD BLOW BACK



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1609.85	106.33	Initial Hydro-static
1	200.57	105.75	Open To Flow (1)
10	196.59	107.04	Shut-In(1)
56	895.61	107.28	End Shut-In(1)
57	255.49	107.11	Open To Flow (2)
117	494.61	108.22	Shut-In(2)
206	749.57	109.89	End Shut-In(2)
207	1499.74	110.18	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1800.00	CLEAN GASSY OIL 40 GAS 60 OIL	24.43
0.00	GRAVITY 37 CORRECTED	0.00

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	0.13	49.17	18.40
Last Gas Rate	0.13	2.45	0.92
Max. Gas Rate	0.13	49.17	18.40

DRILL STEM TEST REPORT



SHELBY RESOURCES LLC

24-18s-14w BARTON

2717 CANAL BLVD SUITE C
HAYS, KANSAS 67601

STOSS 1-24

Job Ticket: 01129

DST#: 3

ATTN: KEITH REAVIS

Test Start: 2016.09.12 @ 09:41:00

GENERAL INFORMATION:

Formation: **LANSING H TO K**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 11:12:00
 Time Test Ended: 00:00:00
 Test Type: Conventional Bottom Hole (Initial)
 Tester: GENE BUDIG
 Unit No: 1-19
 Interval: **3275.00 ft (KB) To 3371.00 ft (KB) (TVD)**
 Total Depth: 3371.00 ft (KB) (TVD)
 Reference Elevations: 1908.00 ft (KB)
 1897.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 KB to GR/CF: 11.00 ft

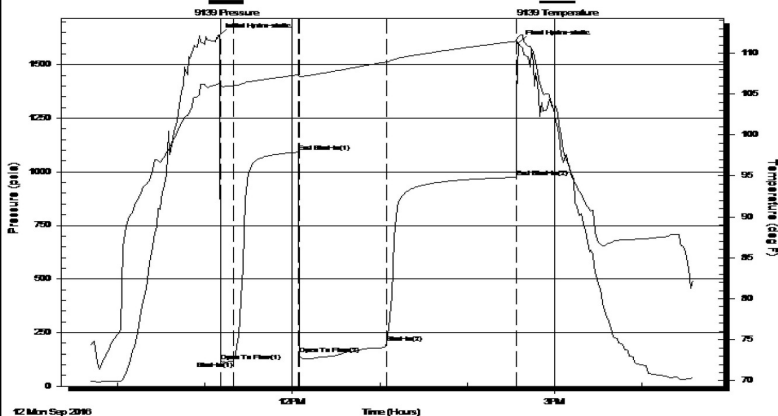
Serial #: 9139

Outside

Press@RunDepth: 974.40 psia @ 3366.18 ft (KB) Capacity: 5000.00 psia
 Start Date: 2016.09.12 End Date: 2016.09.12 Last Calib.: 2016.09.12
 Start Time: 09:41:00 End Time: 16:35:00 Time On Btm: 2016.09.12 @ 11:09:30
 Time Off Btm: 2016.09.12 @ 14:35:00

TEST COMMENT: 1ST OPENING 10 MINUTES-GOOD BLOW BUILT TO THE BOTTOM OF A 5 GALLON BUCKET IN 2 MINUTES
 1ST SHUT-IN 45 MINUTES- NO BLOW BACK
 2ND OPENING 60 MINUTES-STRONG BLOW BUIL TO BOTTOM OF THE BUCKET IN LESS THAN 1 MINUTE
 2ND SHUT-IN 90 MINUTES-GOOD BLOW BACK GAS TO SURFACE ON THE SHUT-IN

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1633.26	106.28	Initial Hydro-static
1	118.26	105.93	Open To Flow (1)
10	115.64	106.00	Shut-In(1)
55	1090.41	107.39	End Shut-In(1)
55	150.76	107.14	Open To Flow (2)
115	199.59	108.93	Shut-In(2)
204	974.40	111.46	End Shut-In(2)
206	1601.29	111.99	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
45.00	CLEAN GASSY OIL GRAVITY 46 CORRE(0.22)	
120.00	OIL AND GAS CUT MUD	1.27
0.00	5 GAS 25 OIL 70 MUD	0.00
180.00	MUDDY FROTHY OIL 15 WATER	2.52

Gas Rates

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

DRILL STEM TEST REPORT



SHELBY RESOURCES LLC
 2717 CANAL BLVD SUITE C
 HAYS, KANSAS 67601
 ATTN: KEITH REAVIS

24-18s-14w BARTON

STOSS 1-24

Job Ticket: 01130

DST#: 4

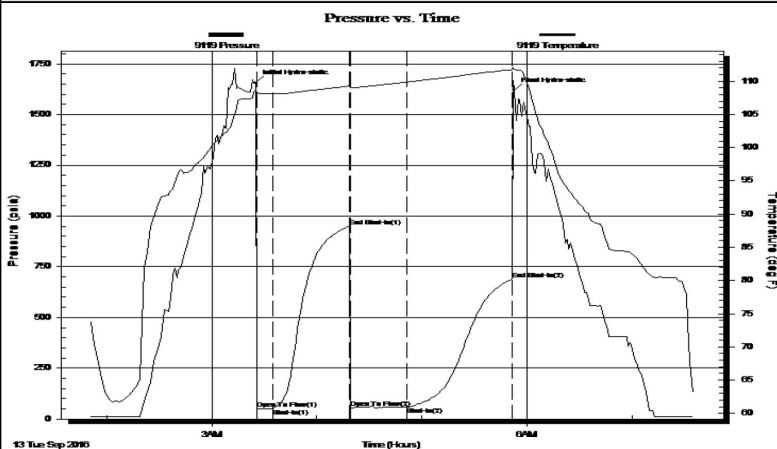
Test Start: 2016.09.13 @ 01:52:00

GENERAL INFORMATION:

Formation: **ARBUCKLE**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 00:00:00 Tester: GENE BUDIG
 Time Test Ended: 00:00:00 Unit No: 1-18
 Interval: **3369.00 ft (KB) To 3415.00 ft (KB) (TVD)** Reference Elevations: 1908.00 ft (KB)
 Total Depth: 3415.00 ft (KB) (TVD) 1897.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 11.00 ft

Serial #: 9119 Inside
 Press@RunDepth: 689.89 psia @ 3410.34 ft (KB) Capacity: 5000.00 psia
 Start Date: 2016.09.13 End Date: 2016.09.13 Last Calib.: 2016.09.13
 Start Time: 01:50:00 End Time: 07:35:30 Time On Btm: 2016.09.13 @ 03:25:00
 Time Off Btm: 2016.09.13 @ 05:52:30

TEST COMMENT: 1ST OPENING 10 MINUTES VERY WEAK SURFACE BLOW THROUGH OUT
 1ST SHUT-IN 45 MINUTES NO BLOW BACK
 2ND OPENING 30 MINUTES NO BLOW
 2ND SHUT-IN 60 MINUTES NO BLOW BACK



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1657.83	108.61	Initial Hydro-static
1	49.22	108.22	Open To Flow (1)
10	52.52	108.14	Shut-In(1)
54	948.44	109.27	End Shut-In(1)
54	54.24	108.99	Open To Flow (2)
87	57.97	109.88	Shut-In(2)
147	689.89	111.73	End Shut-In(2)
148	1621.36	111.82	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	OIL CUT MUD 85 MUD 15 OIL	0.05
1.00	CLEAN OIL	0.00

Gas Rates

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