



Scale 1:240 Imperial

Well Name: Frick Family Farms #1-18
 Surface Location: 1003' FSL, 2001' FEL, Sec. 18-22S-16W
 Bottom Location:
 API: 15-145-21822-00-00
 License Number:
 Spud Date: 9/29/2016 Time: 7:15 AM
 Region: Pawnee County
 Drilling Completed: 10/6/2016 Time: 7:55 PM
 Surface Coordinates:
 Bottom Hole Coordinates:
 Ground Elevation: 2015.00ft
 K.B. Elevation: 2026.00ft
 Logged Interval: 3100.00ft To: 4190.00ft
 Total Depth: 4190.00ft
 Formation: Penn Conglomerate
 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: Frick Family Farms #1-18
 Location: 1003' FSL, 2001' FEL, Sec. 18-22S-16W
 API: 15-145-21822-00-00
 Pool:
 State: Kansas Field: Wildcat
 Country: USA

LOGGED BY



Company: Shelby Resources, LLC
 Address: 621 17th St., Ste 1155
 Denver, CO 80293
 Phone Nbr: 203-671-6034
 Logged By: Geologist Name: Jeremy Schwartz

NOTES

The Shelby Resources, LLC Frick Family Farms #1-18 was drilled to a total depth of 4190', bottoming in the Arbuckle. A TookeDaq Gas Detector was employed in the drilling of said well.

4 DST's were conducted throughout the Penn Conglomerate and Simpson Sand. 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,
Jeremy Schwartz
Geologist

CONTRACTOR

Contractor: Sterling Drilling Co
 Rig #: 4

Rig Type: mud rotary
 Spud Date: 9/29/2016
 TD Date: 10/6/2016
 Rig Release: 10/7/2016

Time: 7:15 AM
 Time: 7:55 PM
 Time: 12:00 PM

ELEVATIONS

K.B. Elevation: 2026.00ft
 K.B. to Ground: 11.00ft
 Ground Elevation: 2015.00ft

DATE	DEPTH	ACTIVITY
Sunday, October 02, 2016	3440'	Geologist Jeremy Schwartz on location @ 1230hrs, ~3440', Drlg ahead through Heebner, Toronto, Douglas Shale, Brown Lime, CFS @ 3598', CTCH 1hr, drop survey, strap out, conduct bit trip, swap PDC for button bit, Successful bit trip, resume drlg ahead through Lansing
Monday, October 03, 2016	3622' 3970'	Continue to drill ahead through Lansing, BKC, Marmaton, Penn Chert, CFS @ 3970' Conduct short trip, CTCH 1hr
Tuesday, October 04, 2016	3970' 3985'	Come out of hole to conduct DST #1 in the Penn Chert, successful test, resume drlg, CFS @ 3985', conduct DST #2 in the Penn Chert
Wednesday, October 05, 2016	3985' 4034' 4049'	Successful test, continue drlg ahead through Simpson Shale, Simpson Sand, CFS @ 4034', conduct DST #3 in the Simspson Sand, successful test, resume drlg, CFS @ 4049', conduct DST #4 in Lower Simpson Sand,
Thursday, October 06, 2016	4049' 4190'	Successful test, continue drlg ahead, CFS @ 4095', resume drlg, TD of 4190 reached CTCH 90 minutes, conduct logging operations, logging operations complete @ 0405hrs Geologist Jeremy Schwartz off location @ 0500hrs

FORMATION	D&A										D&A					GAS						
	K-N VOYAGER PET ETAL										VICTORY OPERATING, INC					SHELBY RESOURCES, LLC						
	EWING #1										ILS LAND #1-20					EAKIN 5-7						
	FRICK FAMILY FARMS #1-18					NE-NE-NE 19-T22S-R16W					SW-NE-NW-SW 20-T22S-R16W					SE-NW-SE-SE 7-22S-16W						
	KB		2026		KB		2045		KB		2041		KB		2021							
	LOG TOPS		SAMPLE TOPS		COMP. CARD		LOG		SMPL.		COMP. CARD		LOG		SMPL.		COMP. CARD		LOG		SMPL.	
	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM	CORR.	CORR.	DEPTH	DATUM	CORR.	CORR.	DEPTH	DATUM	CORR.	CORR.	DEPTH	DATUM	CORR.	CORR.		
ANHYDRITE TOP	1046	980	1048	978	1058	987	-	7	-	9	1060	981	-	1	-	3	1030	991	-	11	-	13
BASE	1069	957	1075	951	1087	958	-	1	-	7	1082	959	-	2	-	8	1053	968	-	11	-	17
TOPEKA	3224	-1198	3219	-1193	3260	-1215	+	17	+	22	3259	-1218	+	20	+	25	3190	-1169	-	29	-	24
HEEBNER SHALE	3496	-1470	3494	-1468	3534	-1489	+	19	+	21	3535	-1494	+	24	+	26	3458	-1437	-	33	-	31
TORONTO	3515	-1489	3514	-1488	3552	-1507	+	18	+	19	3554	-1513	+	24	+	25	3478	-1457	-	32	-	31
DOUGLAS SHALE	3532	-1506	3530	-1504	3572	-1527	+	21	+	23	3573	-1532	+	26	+	28	3495	-1474	-	32	-	30
BROWN LIME	3600	-1574	3594	-1568	3640	-1595	+	21	+	27	3642	-1601	+	27	+	33	3561	-1540	-	34	-	28
LKC	3608	-1582	3609	-1583	3648	-1603	+	21	+	20	3651	-1610	+	28	+	27	3570	-1549	-	33	-	34
LKC "G" POROSITY	3700	-1674	3696	-1670	3746	-1701	+	27	+	31	3740	-1699	+	25	+	29	3659	-1638	-	36	-	32
STARK SHALE	3804	-1778	3807	-1781	3848	-1803	+	25	+	22	3847	-1806	+	28	+	25	3766	-1745	-	33	-	36
BKC	3860	-1834	3860	-1834	3904	-1859	+	25	+	25	3906	-1865	+	31	+	31	3825	-1804	-	30	-	30
MARMATON	3871	-1845	3869	-1843	3916	-1871	+	26	+	28	3918	-1877	+	32	+	34	3834	-1813	-	32	-	30
PENN SAND/CHERT	3947	-1921	3948	-1922	4020	-1975	+	54	+	53	4026	-1985	+	64	+	63	3887	-1866	-	55	-	56
SIMPSON SHALE	3988	-1962	3984	-1958	4073	-2028	+	66	+	70	4057	-2016	+	54	+	58	3919	-1898	-	64	-	60
SIMPSON SAND	4014	-1988	4014	-1988	4082	-2037	+	49	+	49	4090	-2049	+	61	+	61						
ARBUCKLE	4086	-2060	4085	-2059							4154	-2113	+	53	+	54	3984	-1963	-	97	-	96
RTD			4190	-2164	4105	-2060				104	4260	-2219			+	55	4050	-2029				135
LTD	4192	-2166			4099	-2054	-	112			4260	-2219	+	53			4050	-2029	-	137		

ROCK TYPES

Cht	Lmst fw < 7	shale, gry	shale, red
Dolprim	shale, grn	Carbon Sh	Ss

ACCESSORIES

MINERAL

Varicolored chert
 P Pyrite

FOSSIL

Bioclastic or Fragmental
 F Fossils < 20%

STRINGER

Chert
 Sandstone

TEXTURE

C Chalky

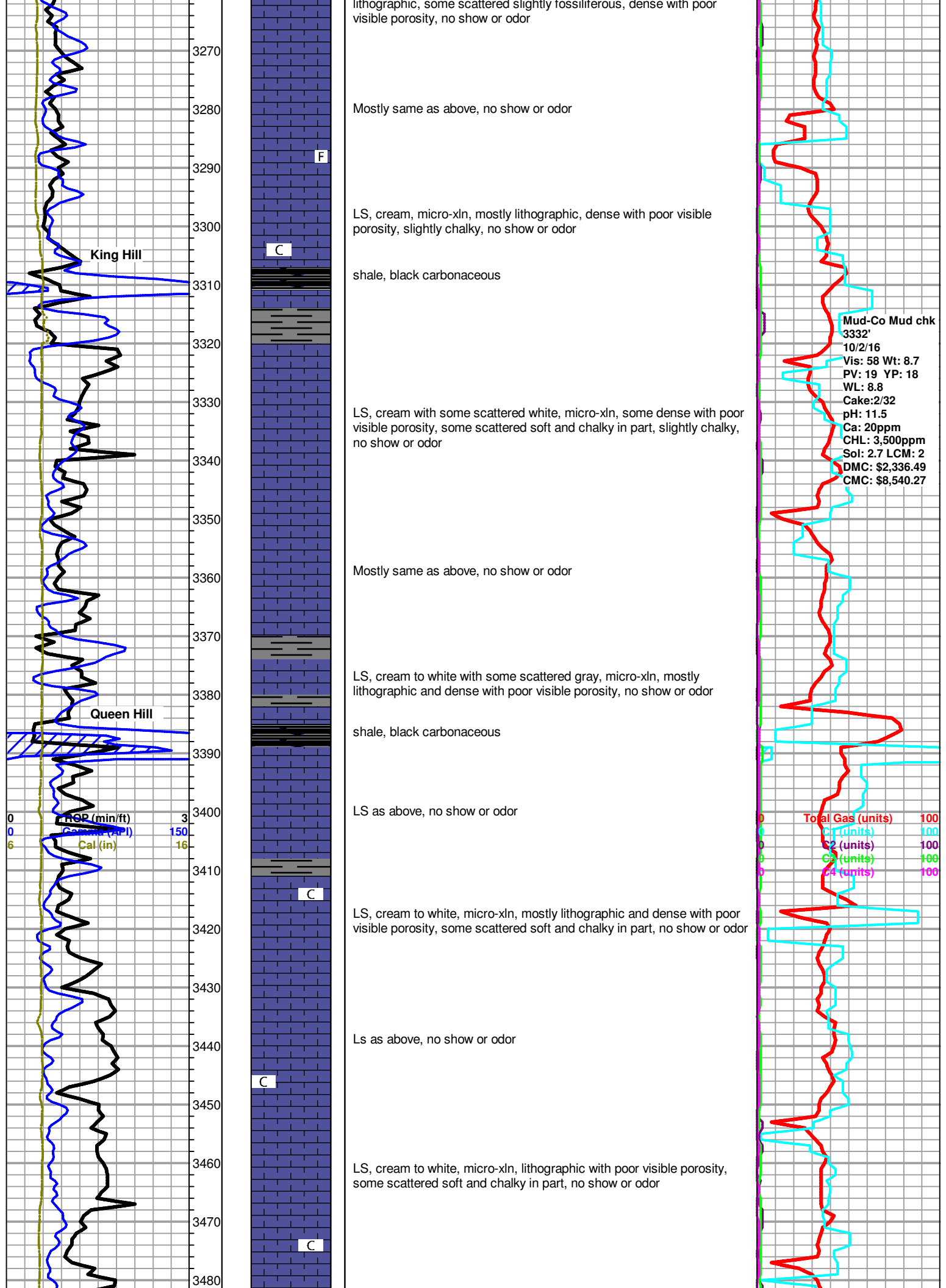
OTHER SYMBOLS

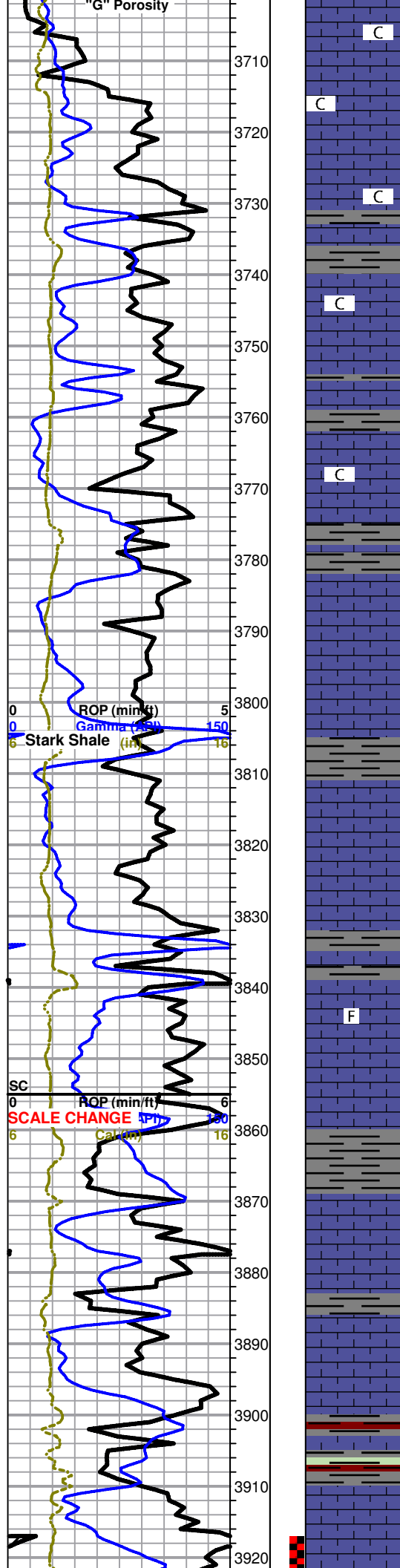
MISC

- Daily Report
- Digital Photo
- Document
- Folder
- Link

DST

- DST Int
- DST alt





chalky, no odor or fluor.

LS as above, with influx cream, micro-xln, lithographic and dense with poor visible porosity, fairly chalky, no show, odor, or fluor.

LS, cream with some scattered gray, micro-xln, lithographic and dense with poor visible porosity, some very scattered oomoldic, slightly chalky, no show, odor, or fluor.

LS as above, no show, odor, or fluor

LS, cream with some scattered gray and very scattered white, micro-xln, mostly lithographic and dense with poor visible porosity, slightly chalky, no show, odor, or fluor

LS, cream, micro-xln with some scattered crypto-xln, lithographic with poor visible porosity, no show, odor, or fluor

LS, cream to gray, micro-xln, mostly lithographic and dense with poor visible porosity, with some scattered soft and chalky in part and very scattered oomoldic, barren and dense with poor visible porosity, no show, odor, or fluor.

LS, cream with some gray and very scattered white, micro-xln, lithographic and dense with poor visible porosity, no show, odor, or fluor.

LS, cream with some very scattered gray, crypto-micro xln, poor visible porosity, no show, odor, or fluor.

LS, cream to gray, micro-crypto xln, lithographic and dense with poor visible porosity, no show, odor, or fluor.

LS as above, no show, odor, or fluor.

LS, cream to gray, micro-xln with some scattered crypto-xln, lithographic and dense with poor visible porosity, no show, odor, or fluor.

LS as above, no show, odor, or fluor.

LS, cream to gray, micro-xln, lithographic and dense with poor visible porosity, some slightly fossiliferous, no show, odor, or fluor.

LS, cream with some scattered gray, micro-xln, lithographic and dense with poor visible porosity, no show, odor, or fluor.

BKC 3860 (-1834)
Shale, gray with some very scattered red

Marmaton 3869 (-1843)

LS, cream with some scattered gray, micro-xln, lithographic and dense with poor visible porosity, no show, odor, or fluor

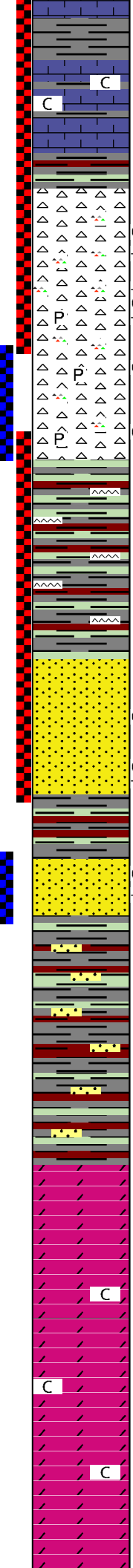
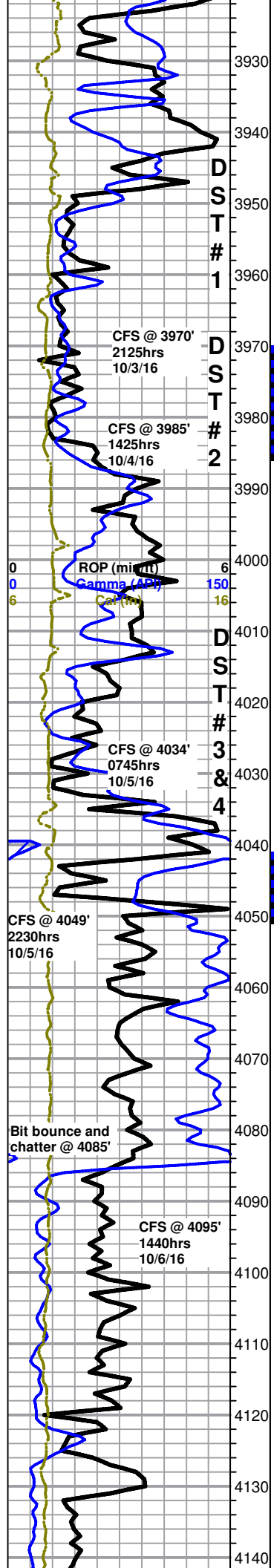
LS, mostly same as above, trace sub-oomoldic, no show, odor, or fluor.

Shale, gray with some scattered red and black and trace green

LS, cream to gray, micro-xln, lithographic and dense with poor visible porosity, no show, odor, or fluor.

Mud-Co Mud chk
3802'
10/3/16
Vis: 58 Wt: 9.3
PV: 16 YP: 13
Total WL: 9.2
Cake: 2/32
pH: 10.5
Ca: 20ppm
CHL: 4,200ppm
Sol: 6.9 LCM: 2
DMC: \$970.29
CMC: \$9,510.56

Mud-Co Mud chk
3970'
10/4/16



LS as above, with abundant gray shale with some scattered red and trace green, sample washes red, fairly chalky, no show, odor, or fluor

LS and shale as above, with some scattered reddish orange to brown and opaque cherts, no show, odor, or fluor

Penn Chert 3948 (-1922)

FRICK FAMILY FARMS 1-18. DST1.jpg

FRICK FAMILY FARMS 1-18. DST2.jpg

Chert, white to tan and opaque with some yellow to orange, fresh and sharp, some scattered (~15%) with scattered tripolitic edges and stain in tripolitic areas only, some scattered dull yellow fluor., slight to fair show free oil in tray, fair odor

3970' 30" Chert, mostly white to tan with some scattered orange/yellow, fresh and sharp, some scattered with tripolitic edges and mostly poor stain in areas of porosity only, samples gassy, SSFO in tray, trace pyrite, scattered bright to dull yellow fluor., fair fleeting odor in cup

3970' 60" Chert, mostly same as above, gassy, NSFO in tray, scattered fluor., poor fleeting odor in cup

3985' 30" Mixed LS and shale, with chert, mostly white to tan, fresh and sharp, mostly barren, few very scattered chips with slightly tripolitic edges and very scattered poor stain, trace pyrite, NSFO, some very scattered dull fluor., poor fleeting odor

3985' 60" Mostly same as above, with trace pyrite, found 1 small chip tripolitic with fair to good visible pinpoint porosity and saturated balack stain, NSFO, very scattered dull yellow fluor., no odor

Shale, gray to green and pale green/yellow with some scattered red, also with some scattered chert, white to tan, some fossiliferous, some with scattered tripolitic edges to slightly vuggy with scattered poor tarry, wet black stain, NSFO, no odor, some very scattered dull yellow fluor.

Simpson Sand 4014 (-1988)

FRICK FAMILY FARMS 1-18. DST3.jpg

FRICK FAMILY FARMS 1-18. DST4.jpg

4034' 30" SS, mostly clear to gray and fine grained, some gray/green, sub-rounded to sub-angular and poorly sorted, fairly well cemented, with some scattered white chert inclusions, also with some clear to light brown, sub-rounded to rounded and well sorted, most fairly friable, some clusters appear barren, some scattered with trace to very scattered stain, upon break some clusters show some scattered staining on grains and slight increase in odor, NSFO or fluor., poor odor

4034' 60" SS, mostly same as above, with influx clear to light brown, fine grained, some clusters appear barren, some with very scattered to scattered stain as above, upon break most clusters have fair to good show free oil, some gassy, with abundant loose sub-rounded to rounded grains in bottom of tray, some with trace stain, poor to fair fleeting odor

4049' 30" Shale, mostly gray with some scattered red and green to pale green/yellow, also with some scattered SS clusters, clear to light brown, fine grained, sub-rounded to sub-angular and well sorted, most fairly well cemented, upon break most clusters have fair to good show free oil and fair show gas bubbles as well as increased odor, some very scattered glauconitic also with shale and chert inclusions, trace pyrite, with abundant v-f loose grains in bottom of tray, NSFO in tray, no fluor., fair fleeting odor

4049' 45" Shale with SS as above, few clusters slowly bleed oil and gas bubbles under lamp, also with some scattered gray globs of clay with associated SS grains trapped, abundant v-f loose grains in bottom of tray, SSFO in tray, very scattered dull yellow fluor., fair odor

~4050-4085' Shale, mostly gray with some scattered red and green, waxy, some soft, some very dense, with some very scattered SS clusters as above, poor fleeting odor

Arbuckle 4085 (-2059)

~4085' Shale and very scattered SS clusters as above, with trace dolomite, few small chips cream, micro-xln, sub-sucrosic and fairly friable with poor visible porosity, with some very scattered slight sub-rhombic development on edges, barren, SSFO in tray, fair pungent odor in wet cup

Dolomite, cream, micro-xln, some sub-sucrosic to sucrosic and dense, some sub-rhombic and fairly friable, poor visible porosity, barren, upon break few chips with VSSFO, slightly chalky, NSFO in tray, strong pungent odor

Dolomite as above, no shows, slightly chalky, NSFO, strong pungent odor

Dolomite, cream, micro-xln, mostly sub-sucrosic to sucrosic and dense with poor visible porosity, some sub-rhombic, slightly chalky, no show, poor odor

Dolomite as above, no show or odor

Dolomite, cream, micro-xln, mostly sub-sucrosic to sucrosic and dense with poor visible porosity, some scattered sub-rhombic, with some very scattered



Vis: 62 Wt: 9.4
PV: 19 YP: 22
WL: 8.8
Cake:2/32
pH: 10.5
Ca: 30ppm
CHL: 4,100ppm
Sol: 7.6 LCM: 1
DMC: \$579.39
CMC: \$10,089.95

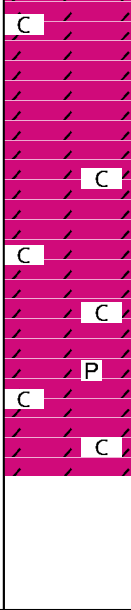
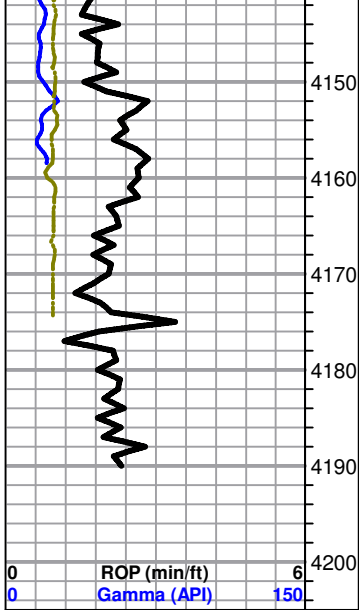
SCALE CHANGE
C2 (units) 300
C3 (units) 300
C4 (units) 300

survey @ 3970 = 3/4deg

Mud-Co Mud chk 4034'
10/5/16
Vis: 65 Wt: 8.9
PV: 21 YP: 19
WL: 7.2
Cake:2/32
pH: 11.0
Ca: 20ppm
CHL: 4,200ppm
Sol: 4.1 LCM: 1
DMC: \$1,849.61
CMC: \$11,939.56

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

Mud-Co Mud chk 4049'
10/6/16
Vis: 62 Wt: 9.3
PV: 17 YP: 18
WL: 8.4
Cake:2/32
pH: 10.5
Ca: 30ppm
CHL: 5,200ppm
Sol: 6.8 LCM: 1
DMC: \$0.00
CMC: \$11,939.56



lith brown to brown, sucrosic and dense with poor visible porosity, slightly chalky, no show or odor

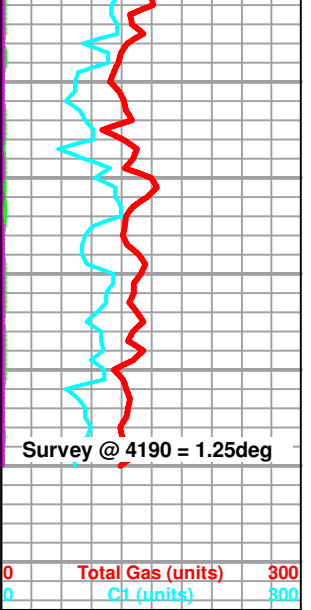
Dolomite as above, slightly chalky, no show or odor

Dolomite, cream with some scattered light brown to brown and very scattered white, micro-xln, mostly sub-sucrosic to sucrosic and dense with poor visible porosity, some scattered sub-rhombic with trace rhombic, fairly chalky, no show or odor

Dolomite as above, no show or odor

Dolomite, cream to white with some scattered brown, mostly sucrosic to sub-rhombic and dense with poor visible porosity, with trace pyrite, fairly chalky, no show or odor

Rotary TD 4190' @ 1955hrs 10/6/16
Eli Wireline Services Logging TD @ 4192'
Complete Logging Operations @ 0405hrs 10/7/16
Geologist Jeremy Schwartz off location @ 0500hrs 10/7/16





DRILL STEM TEST REPORT

SHELBY RESOURCES LLC

18-22S-16W PAWNEE

2717 CANAL BLVD SUITE C
HAYS, KnaA 67601

FRICK FAMILY FARMS 1

Job Ticket: 01131

DST#: 1

ATTN: JEREMY SCHWARTZ

Test Start: 2016.10.04 @ 02:55:00

GENERAL INFORMATION:

Formation: **PENN CHERT**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:05:00

Time Test Ended: 10:58:00

Test Type: Conventional Bottom Hole (Initial)

Tester: GENE BUDIG

Unit No: 1-54

Interval: 3917.00 ft (KB) To 3970.00 ft (KB) (TVD)

Reference Elevations: 2026.00 ft (KB)

Total Depth: 3970.00 ft (KB) (TVD)

2016.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 9139

Outside

Press@RunDepth: 1348.43 psia @ 3965.34 ft (KB)

Capacity: 5000.00 psia

Start Date: 2016.10.04

End Date: 2016.10.04

Last Calib.: 2016.10.04

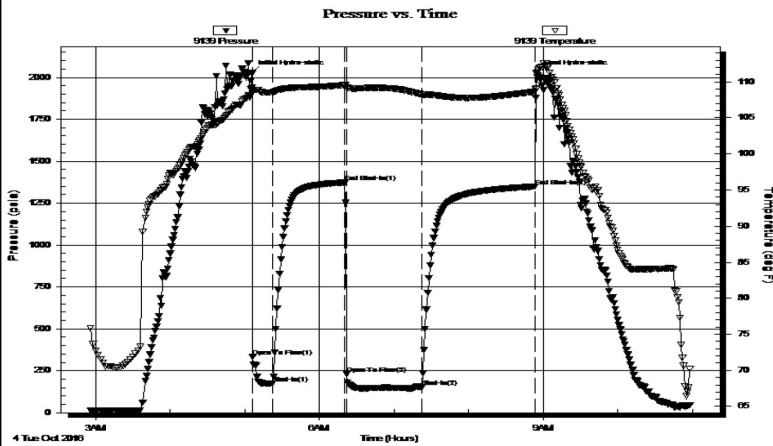
Start Time: 02:55:00

End Time: 10:58:00

Time On Btm: 2016.10.04 @ 05:05:30

Time Off Btm: 2016.10.04 @ 08:54:30

TEST COMMENT: 1ST OPENING 15 MINUTES STRONG BLOW GAS TO SURFACE IN 5 MINUTES
 1ST SHUT-IN 60 MINUTES GOOD BLOW BACK
 2ND OPENING 60 MINUTES STRONG BLOW SEE GAS FLOW REPORT
 2ND SUT-IN 90 MINUTES- GOOD BLOW BACK



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2027.19	109.14	Initial Hydro-static
1	335.60	108.74	Open To Flow (1)
17	173.82	108.55	Shut-In(1)
75	1372.39	109.55	End Shut-In(1)
77	228.66	109.27	Open To Flow (2)
137	151.60	108.23	Shut-In(2)
228	1348.43	108.66	End Shut-In(2)
229	2028.23	109.11	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
250.00	gassy mud	2.69

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	1.00	6.47	186.00
Last Gas Rate	1.00	6.47	186.00
Max. Gas Rate	1.00	8.11	233.15



DRILL STEM TEST REPORT

SHELBY RESOURCES LLC

18-22S-16W PAWNEE

2717 CANAL BLVD SUITE C
HAYS, KnaA 67601

FRICK FAMILY FARMS 1

Job Ticket: 01132

DST#: 2

ATTN: JEREMY SCHWARTZ

Test Start: 2016.10.04 @ 06:45:00

GENERAL INFORMATION:

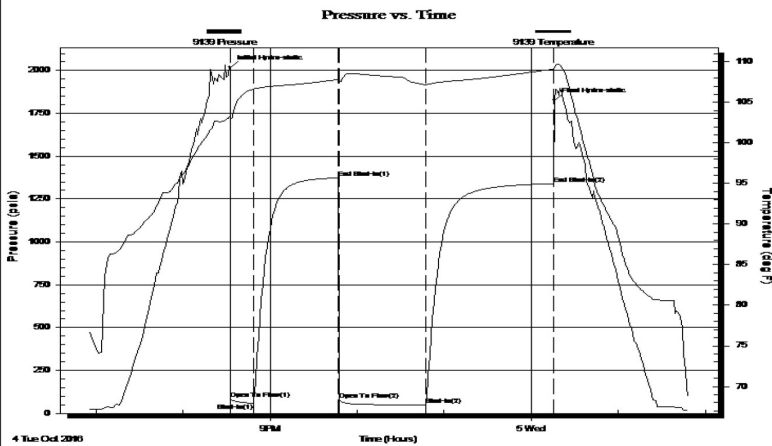
Formation: **PEN CHERT**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 08:22:00
 Time Test Ended: 00:00:00
 Interval: **3970.00 ft (KB) To 3985.00 ft (KB) (TVD)**
 Total Depth: 3985.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: GENE BUDIG
 Unit No: 1-54
 Reference Elevations: 2026.00 ft (KB)
 2016.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 9139

Inside

Press@RunDepth: 1339.72 psia @ 3980.00 ft (KB) Capacity: 5000.00 psia
 Start Date: 2016.10.04 End Date: 2016.10.05 Last Calib.: 2016.10.05
 Start Time: 18:55:00 End Time: 01:48:30 Time On Btm: 2016.10.04 @ 20:32:30
 Time Off Btm: 2016.10.05 @ 00:16:00

TEST COMMENT: 1ST OPENING 15 MINUTES GOOD BLOW BUILT TO THE BOTTOM OF THE BUCKET IN 2 MINUTES
 1ST SHUT-IN 60 MINUTES NO BLOW BACK
 2ND OPENING 60 MINUTES-STRONG BLOW GAS TO SURFACE IN 6 MINUTES
 2ND SHUT-IN 90 MINUTES NO BLOW BACK



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2018.33	103.30	Initial Hydro-static
1	82.60	102.91	Open To Flow (1)
16	59.55	106.62	Shut-In(1)
75	1374.12	107.84	End Shut-In(1)
76	79.06	107.49	Open To Flow (2)
135	49.49	107.19	Shut-In(2)
223	1339.72	109.11	End Shut-In(2)
224	1826.50	109.33	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	GASSY MUD	0.05

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	0.25	2.10	3.33
Last Gas Rate	0.25	2.80	4.44
Max. Gas Rate	0.25	2.80	4.44



DRILL STEM TEST REPORT

SHELBY RESOURCES LLC

18-22S-16W PAWNEE

2717 CANAL BLVD SUITE C
HAYS, KnaA 67601

FRICK FAMILY FARMS 1

Job Ticket: 01133

DST#: 3

ATTN: JEREMY SCHWARTZ

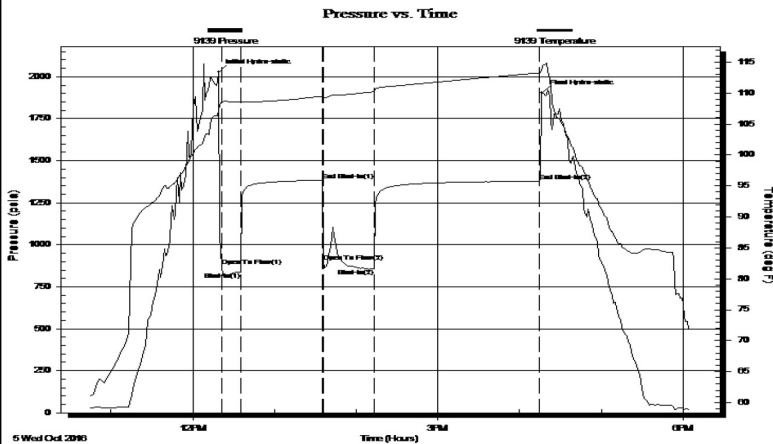
Test Start: 2016.10.05 @ 10:44:00

GENERAL INFORMATION:

Formation: **SIMPSON SAND**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 12:20:00
 Time Test Ended:
 Interval: **3982.00 ft (KB) To 4034.00 ft (KB) (TVD)**
 Total Depth: 4034.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: GENE BUDIG
 Unit No: 1
 Reference Elevations: 2026.00 ft (KB)
 2016.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 9139 Inside
 Press@RunDepth: 1377.22 psia @ 4029.34 ft (KB) Capacity: 5000.00 psia
 Start Date: 2016.10.05 End Date: 2016.10.05 Last Calib.: 1899.12.30
 Start Time: 10:44:00 End Time: 18:05:00 Time On Btm: 2016.10.05 @ 12:19:00
 Time Off Btm: 2016.10.05 @ 16:16:30

TEST COMMENT: 1ST OPENING 15 MINUTES STRONG BLOW GAS TO SURFACE IN 2 MINUTES
 1ST SHUT-IN 60 MINUTES
 2ND OPENING 40 MINUTES STRONG BLOW
 2ND SHUT-IN 120 MINUTES



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2026.93	107.12	Initial Hydro-static
2	872.80	108.61	Open To Flow (1)
16	838.92	108.57	Shut-In(1)
76	1382.08	109.50	End Shut-In(1)
77	898.65	109.24	Open To Flow (2)
115	859.18	110.23	Shut-In(2)
236	1377.22	113.27	End Shut-In(2)
238	1903.84	114.17	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
150.00	MUD	1.28

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	1.00	98.00	2817.38
Last Gas Rate	1.00	113.75	3270.18
Max. Gas Rate	1.00	123.50	3550.48

DRILL STEM TEST REPORT



SHELBY RESOURCES LLC

18-22S-16W PAWNEE

2717 CANAL BLVD SUITE C
HAYS, KnaA 67601

FRICK FAMILY FARMS 1

Job Ticket: 01134

DST#: 4

ATTN: JEREMY SCHWARTZ

Test Start: 2016.10.06 @ 01:25:00

GENERAL INFORMATION:

Formation: **LOWER SIMPSON SAND**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:00:00

Time Test Ended: 00:00:00

Test Type: Conventional Bottom Hole (Initial)

Tester: GENE BUDIG

Unit No: 1

Interval: 4041.00 ft (KB) To 4049.00 ft (KB) (TVD)

Reference Elevations: 2026.00 ft (KB)

Total Depth: 4041.00 ft (KB) (TVD)

2016.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 9139

Inside

Press@RunDepth: 1352.11 psia @ 4044.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2016.10.06

End Date: 2016.10.06

Last Calib.: 2016.10.06

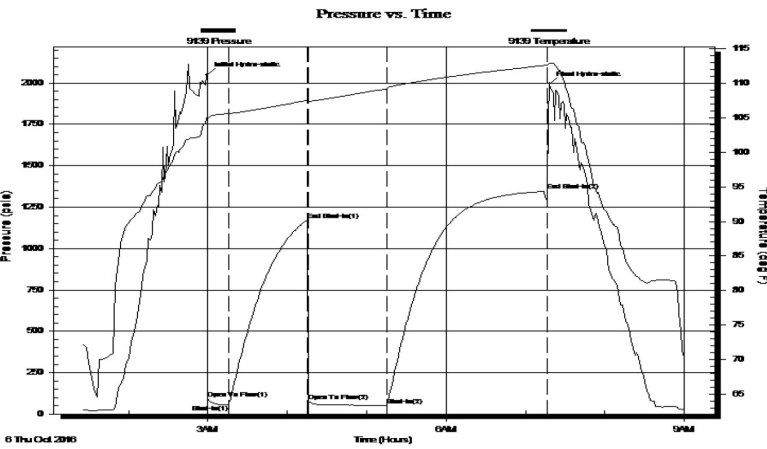
Start Time: 01:25:00

End Time: 09:00:00

Time On Btm: 2016.10.06 @ 02:59:30

Time Off Btm: 2016.10.06 @ 07:18:00

TEST COMMENT: 1ST OPENING 15 MINUTES FAIR BLOW BUILT TO THE BOTTOM OF A 5 GALLON BUCKET IN 6 MINUTES
1ST SHUT-IN 60 MINUTES NOP BLOW BACK
2ND OPENING 60 MINUTES STRONG BLOW DECREASED TO A WEAK STEADY 2 INCH BLOW
2ND SHUT-IN 120 MINUTES NO BLOW BACK



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2048.14	105.17	Initial Hydro-static
1	91.91	104.87	Open To Flow (1)
16	57.24	105.62	Shut-In(1)
76	1173.78	107.55	End Shut-In(1)
77	78.27	107.32	Open To Flow (2)
136	52.37	109.21	Shut-In(2)
257	1352.11	112.67	End Shut-In(2)
259	1994.99	112.94	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	OIL CUT MUD 20 OIL 80 MUD	0.10
0.00	2150 GAS IN THE PIPE	0.00

Gas Rates

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