



Scale 1:240 Imperial

Well Name: Elsie Unit #1-3
 Surface Location: 2326' FSL_168' FEL Sec. 3-22S-16W
 Bottom Location:
 API: 15-145-21812-00-00
 License Number:
 Spud Date: 11/7/2015 Time: 7:15 AM
 Region: Pawnee County
 Drilling Completed: 11/12/2015 Time: 12:00 AM
 Surface Coordinates:
 Bottom Hole Coordinates:
 Ground Elevation: 1989.00ft
 K.B. Elevation: 2000.00ft
 Logged Interval: 3200.00ft To: 4115.00ft
 Total Depth: 4115.00ft
 Formation: Simp/Cong Sand
 Drilling Fluid Type: Chemical/Fresh Water Gel

OPERATOR

Company: Shelby Resources, LLC
 Address: 621 17TH ST, STE 1155
 DENVER, CO. 80293
 Contact Geologist: Janine Sturdavant
 Contact Phone Nbr: 303-907-2209 / 720-274-4682
 Well Name: Elsie Unit #1-3
 Location: 2326' FSL_168' FEL Sec. 3-22S-16W
 API: 15-145-21812-00-00
 Pool: Field: Wildcat
 State: Kansas 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 Elsie Unit #1-3 was drilled to a total depth of 4115', bottoming in the Arbuckle. A TookeDaq gas detector was employed in the drilling of said well.

1 DST was conducted. The report can be found at the bottom of this log.

Due to the DST results, gas kicks, sample shows, and log analysis, it was determined by all consenting parties to plug and abandon the well. 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: 11/7/2015 Time: 7:15 AM

Spud Date: 11/7/2015
 TD Date: 11/12/2015
 Rig Release:

Time: 7:15 AM
 Time: 12:00 AM
 Time:

ELEVATIONS









K.B. Elevation: 2000.00ft
 K.B. to Ground: 11.00ft
 Ground Elevation: 1989.00ft

DATE	DEPTH	ACTIVITY
Tuesday, November 10, 2015	3500'	Geologist Jeremy Schwartz on location @ 0245hrs, Drlg Ahead through Douglas Shale, Brown Lime, Lansing, Stark Shale, BKC, Marmaton, CFS @ 3810', CTCH 1hour, Drop
	3810'	Survey, Strap out, Conduct Bit Trip, Swap PDC for Button Bit, Successful Bit Trip, Resume Drlg ahead through Marmaton, Penn Conglomerate, Penn sand, CFS @ 3881',
	3881'	Conduct DST #1 in the Penn Conglomerate,
Wednesday, November 11, 2015	3881'	Successful Test, Resume Drlg, CFS @ 3896', Resume Drlg, CFS @ 3956', Resume Drlg
	3956'	CFS @ 4016, Drill ahead to TD of 4115' due to lack of shows and/or gas kick in Arbuckle
Thursday, November 12, 2015	4115'	TD of 4115' reached @ 0000hrs, CTCH 1hour, OOH to conduct logging operations, Logging Operations complete @ 0900hrs
		Geologist Jeremy Schwartz off location @ 0930hrs

CLIENT:	SHELBY RESOURCES, LLC
WELL NAME:	ELSIE UNIT #1-3
LEGAL:	NE NE SE 3-22S-16W
COUNTY:	PAWNEE COUNTY, KS
API :	15-142-21812-00-00
DRLG CONTRACTOR:	STERLING DRILLING CO.
RIG #:	4
DOGHOUSE #:	620-388-4192
TOOLPUSHER:	LANNY SALOGA
CELL #:	620-388-4193

FORMATION	SHELBY RESOURCES, LLC															
	ARKANSAS RIVER UNIT #1-3						D&A			D&A						
	CS/2 S/2 NE/4 3-22S-16W						BUSTER #2-3			SHELBY RESOURCES, LLC						
	SE SE SW 3-22S-16W						SE SE SW 3-22S-16W			NE SW NW NE 2-22S-16W						
LOG TOPS	2000		1999		2005		2016		COMP. CARD	LOG	SMPL.	COMP. CARD	LOG	SMPL.		
	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM								
ANHYDRITE TOP	1000	1000	1004	996	1000	999	+ 1	- 3	1002	1003	- 3	- 7	994	10 22	- 22	- 26
BASE	1018	98 2	1023	977	1024	975	+ 7	+ 2	1029	976	+ 6	+ 1	10 20	996	- 14	- 19
TOPEKA	3164	-1164	3167	-1167	3161	-1162	- 2	- 5	3171	-1166	+ 2	- 1	3147	-1131	- 33	- 36
HEEBNER SHALE	3434	-1434	3435	-1435	3430	-1431	- 3	- 4	3443	-1438	+ 4	+ 3	3413	-1397	- 37	- 38
TORONTO	3450	-1450	3451	-1451	3446	-1447	- 3	- 4	3460	-1455	+ 5	+ 4	3429	-1413	- 37	- 38
DOUGLAS SHALE	3470	-1470	3466	-1466	3463	-1464	- 6	- 2	3477	-1472	+ 2	+ 6	3448	-1432	- 38	- 34
BROWN LIME	3541	-1541	3542	-1542	3540	-1541	+ 0	- 1	3548	-1543	+ 2	+ 1	3521	-1505	- 36	- 37
LKC	3551	-1551	3554	-1554	3549	-1550	- 1	- 4	3556	-1551	+ 0	- 3	3528	-1512	- 39	- 42
STARK SHALE	3740	-1740	3740	-1740	3735	-1736	- 4	- 4	3751	-1746	+ 6	+ 6	3720	-1704	- 36	- 36
BKC	3793	-179 3	3790	-1790	3787	-1788	- 5	- 2	3800	-1795	+ 2	+ 5	3768	-1752	- 41	- 38
MARMATON	3810	-1810	3808	-1808	3810	-1811	+ 1	+ 3	3823	-1818	+ 8	+ 10	3788	-1772	- 38	- 36
PENN CONGL	3828	-1828	3830	-1830	3824	-1825	- 3	- 5	3838	-1833	+ 5	+ 3	3804	-1788	- 40	- 42
PENN SAND			3862	-18 62	3857	-1858	- 4	- 4	3870	-1865		+ 3	3832	-1816		- 46
SIMPSON SHALE	3934	-1934	3934	-19 34	3917	-1918	- 16	- 16	3942	-1937	+ 3	+ 3	3876	-1860	- 74	- 74
SIMPSON SAND	3952	-195 2	3950	-19 50	3934	-1935	- 17	- 15	3951	-1946	- 6	- 4	3888	-1872	- 80	- 78
ARBUCKLE	4011	-20 11	4011	-20 11	3991	-199 2	- 19	- 19	4013	-2008	- 3	- 3	3957	-1941	- 70	- 70
RTD			4115	-21 15	4100	-210 1		- 14	4110	-2105		- 10	4050	-2034		- 81
LTD	4116	-21 16			4101	-210 2	- 14		4110	-2105	- 11		4050	-2034	- 8 2	

ROCK TYPES

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

ACCESSORIES

MINERAL

- △ Chert White
- ▲ Chert, dark
- ◌ Varicolored chert

FOSSIL

- ∩ Bioclastic or Fragmental
- F Fossils < 20%

STRINGER

- ~~~~ Chert
- Limestone
- Sandstone
- Siltstone
- green shale

TEXTURE

- C Chalky

OTHER SYMBOLS

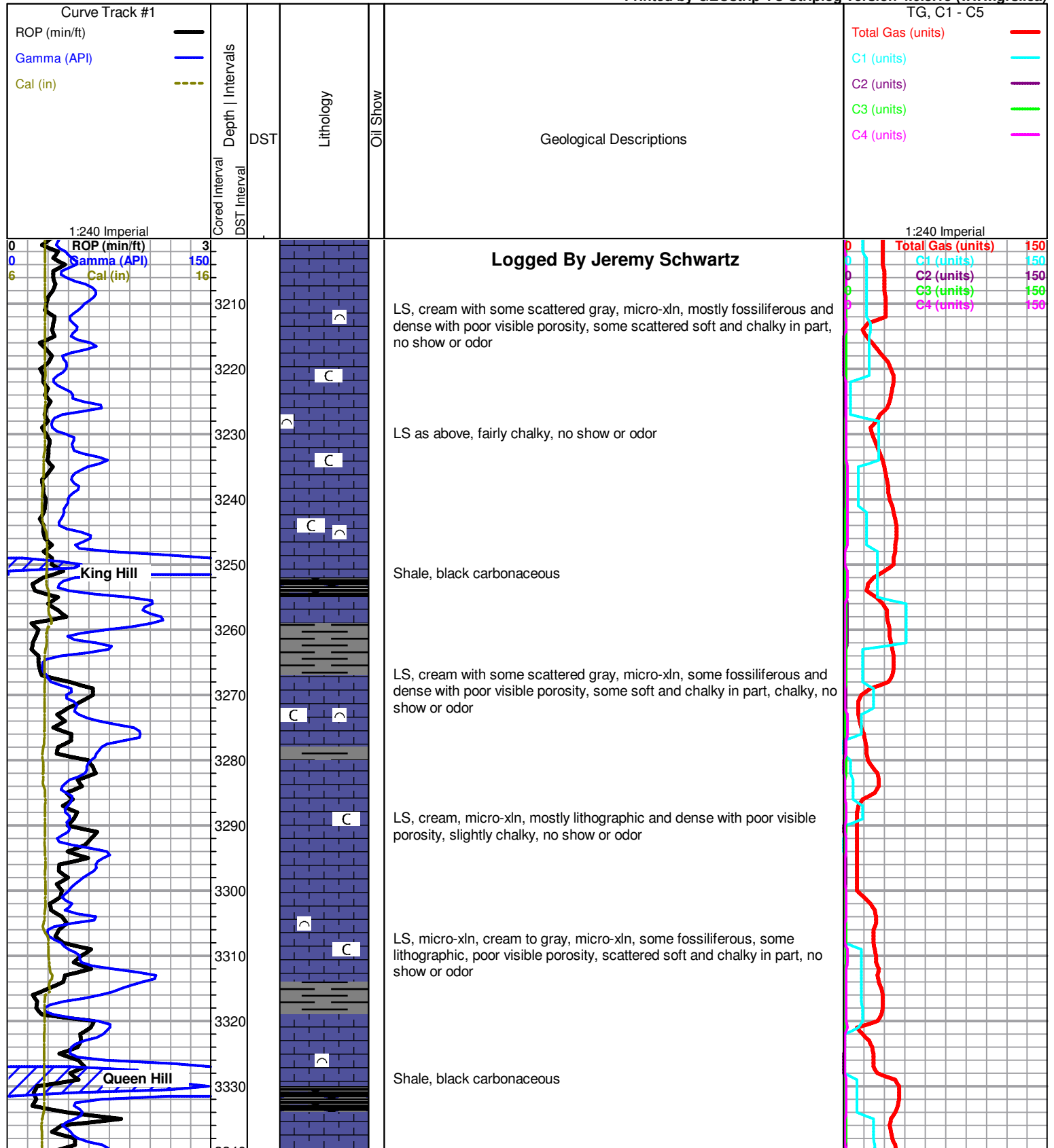
MISC

- DR Daily Report

DST

- DST Int
- DST -tk

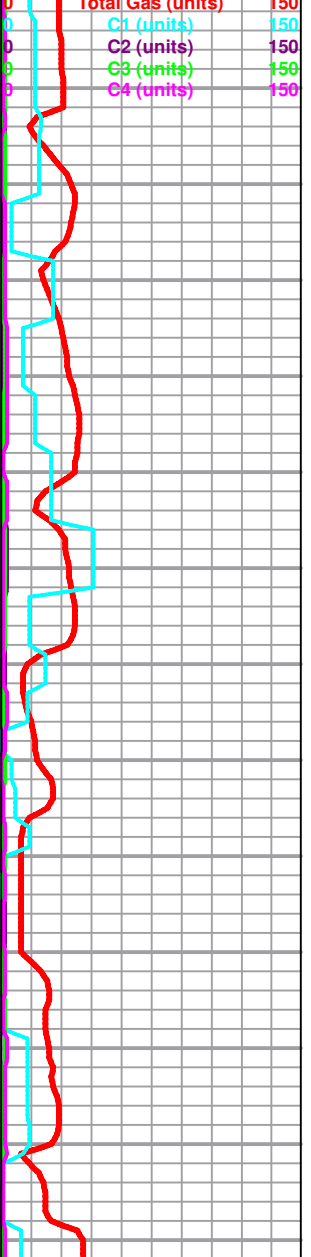
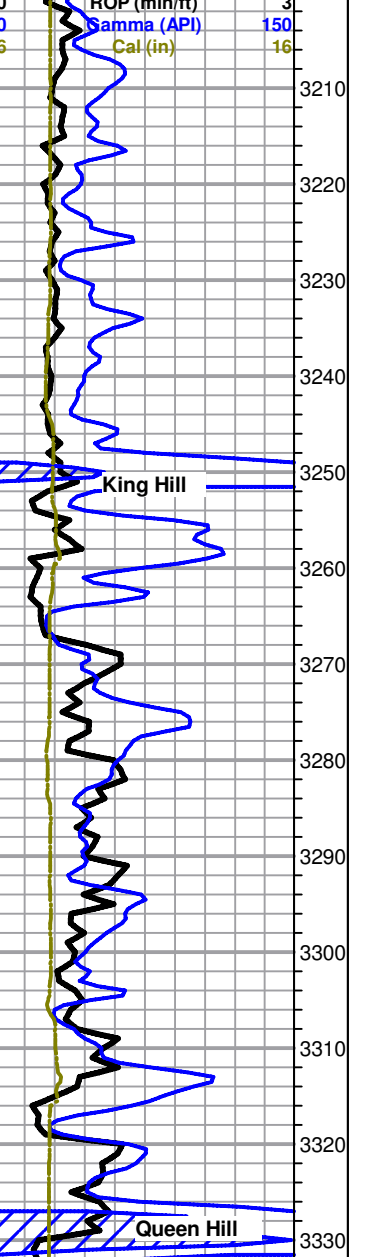
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- Document
- Folder
- Link
- Vertical Log File
- Horizontal Log File
- Core Log File
- Drill Cuttings Rpt



1:240 Imperial

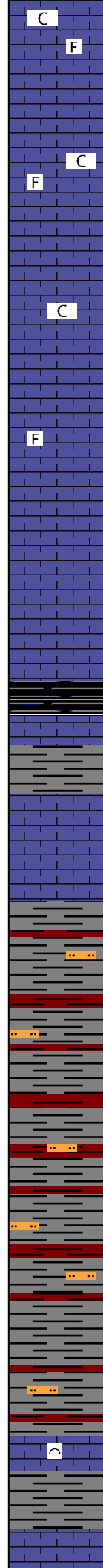
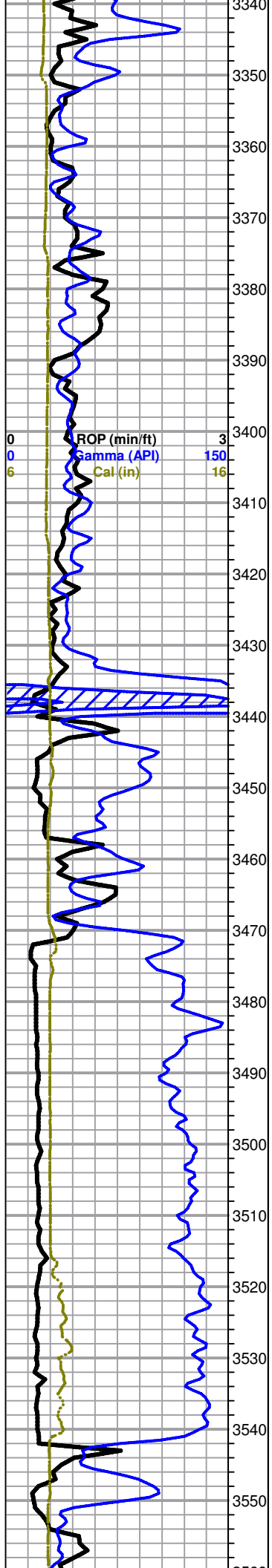
1:240 Imperial

Logged By Jeremy Schwartz



King Hill

Queen Hill



LS, cream to gray, micro-xln, some slightly fossiliferous, some lithographic, poor visible porosity, some scattered soft and chalky in part, slightly chalky, no show or odor

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

LS as above, no show or odor

LS, cream with some very scattered light brown, micro-xln, mostly lithographic and dense with poor visible porosity, no show or odor

LS as above, no show or odor

Heebner 3435 (-1435)

Shale, black carbonaceous

Toronto 3451 (-1451)

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

Douglas Shale 3466 (-1466)

Shale, mostly gray with some scattered red, some soft and waxy, some silty, with some salt and pepper siltstone

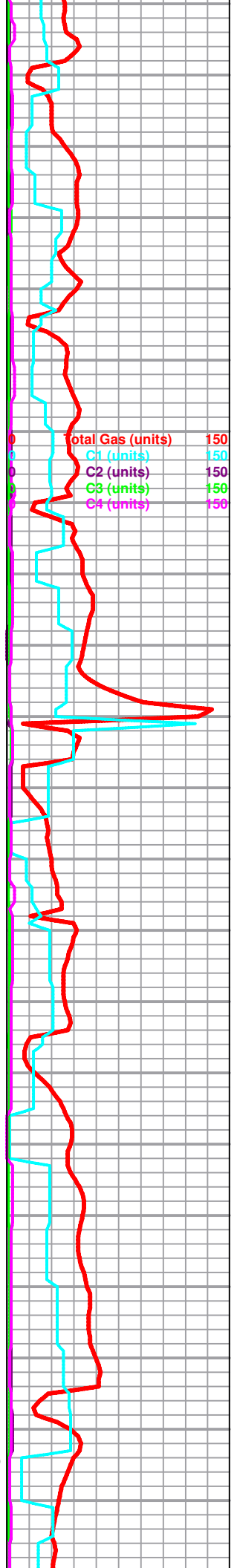
Shale as above, silty

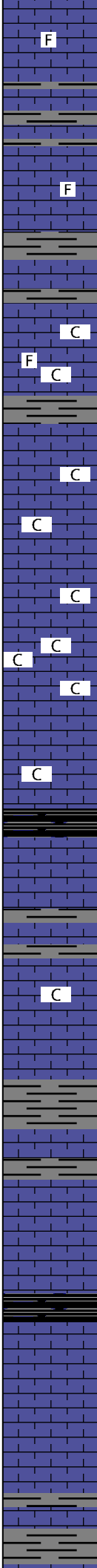
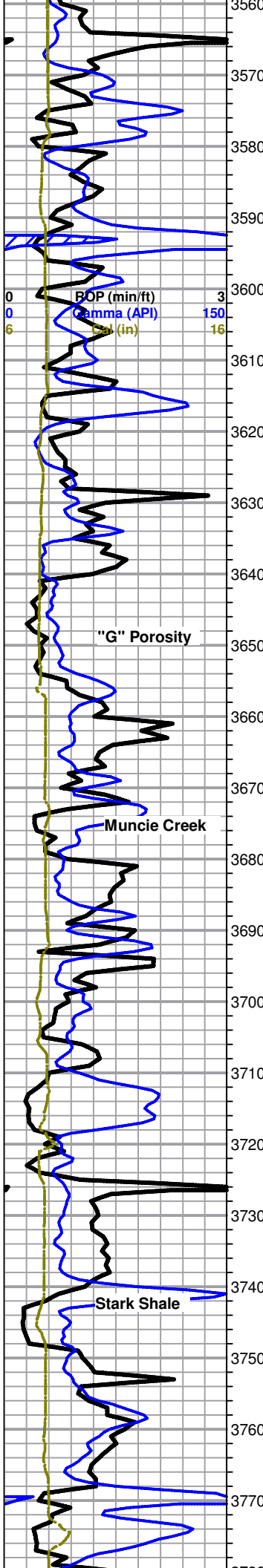
Brown Lime 3542 (-1542)

LS, brown, micro-xln, fossiliferous and dense with no visible porosity, no show or odor

Lansing 3554 (-1554)

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





dense with poor visible porosity, no show or odor

LS as above, with some very scattered gray, slightly fossiliferous, no show or odor

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

LS as above, fairly chalky, no show or odor

LS, cream to white, micro-xln, lithographic and dense with poor visible porosity, chalky, no show or odor

LS, cream to white, micro-xln, mostly sub-oomoldic to oomoldic with poor visible oomold porosity, some scattered lithographic and dense with poor visible porosity, very chalky, no show or odor

LS, cream to gray, micro-xln, lithographic and dense with poor visible porosity, some very scattered sub-oomoldic and chalk filled, chalky, no show or odor

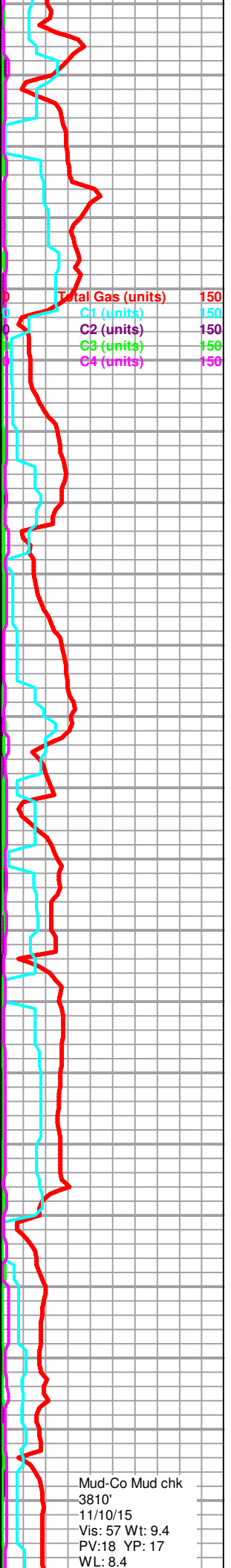
LS, cream to gray with some very scattered light brown, micro-xln, lithographic and dense with poor visible porosity, no show or odor

LS as above, slightly chalky, no show or odor

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

LS as above, no show or odor

LS, mostly cream to white with some scattered gray, micro-xln



Mud-Co Mud chk
3810'
11/10/15
Vis: 57 Wt: 9.4
PV:18 YP: 17
WL: 8.4

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

Cake: 2/32
pH: 9.5
Ca: 60ppm
CHL: 4,800ppm
Sol: 7.5 LCM: 1
DMC: \$1,933.06
CMC: \$7,919.99

BKC 3790 (-1790)

Shale, gray with some scattered red and trace black, some soft and waxy, some blocky and dense

Marmaton 3808 (-1808)

LS, cream to white, micro-xln, mostly lithographic and dense with poor visible porosity, some with re-crystallized edges, with some scattered sub-oomoldic to oomoldic with poor to fair visible porosity, barren, no odor

LS, cream to white with some scattered gray, micro-crypto xln, lithographic and dense with poor visible porosity, with some scattered gray and red shale and trace burnt orange chert, fresh and sharp, no show or odor

Mixed cream to gray and white LS, lithographic and dense with poor visible porosity, with some gray and red shale with trace green and influx tan to light brown and trace burnt orange chert, no show or odor

Mostly same as above, with trace pale yellow shale, no show or odor

Elsie #1-3 DST #1.jpg

Conglomerate Chert/Sand 3862 (-1862)

Conglomerate as above, with some scattered sand clusters, light gray to brown, vf-grained, sub-angular to sub-rounded, fairly well sorted, well cemented and fairly dense, some barren, some chalk filled, some with slight show scattered free oil droplets on surface, when agitated or broken some clusters with slight to fair show free oil, poor fleeting odor in cup

3881' 30" Cong. with some very scattered SS clusters as above, some with slight to fair show free oil and gas bubbles upon break, no odor

3881' 60" Mostly same as above, with SS clusters dropping out, no shows or odor

3896' 30" Mixed LS, shales, and cherts, with slight influx white to black chert, some very scattered slightly tripolitic to tripolitic edges with stain in and around porosity with SSFO bleeding to surface under lamp, poor fleeting odor

3896' 60" Mixed LS, shales, and cherts, no show or odor

Conglomerate as above, with influx white chert, mostly fresh and sharp, some very scattered with tripolitic edges and dark brown to black stain in and around porosity, poor odor

Mostly same as above, with shows mostly dropping out, trace green shale, no odor

Conglomerate with some scattered white chert, some slightly tripolitic to tripolitic edges with stain in and around porosity, with some very scattered green shale, fair fleeting odor

Mostly same as above, with slight influx green shale, poor odor

Conglomerate, with scattered gray to green and red shales, no shows or odor

Simpson Sand 3950 (-1950)

3956' 30" Mixed gray and red shales with some scattered green and some scattered white chert, also with some scattered SS clusters, clear, med-grained, sub-rounded, well sorted, very well cemented and dense, barren, no odor

3956' 60" As above, with influx SS clusters, some slightly chalk filled, no shows or odor

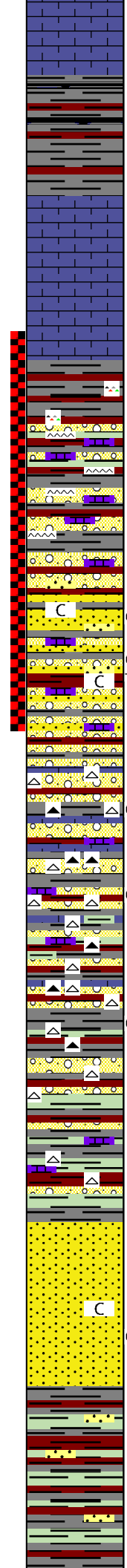
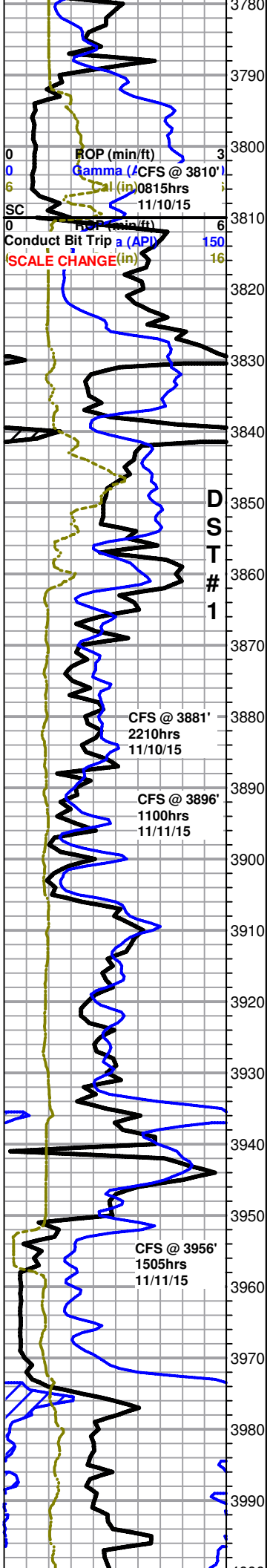
Mostly same as above, some clusters gray to green, few very scattered clusters with VS-SSFO upon break, no odor

Gray to green and red shales, with some SS clusters as above, no odor

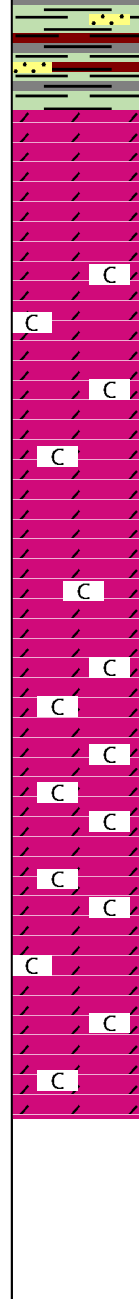
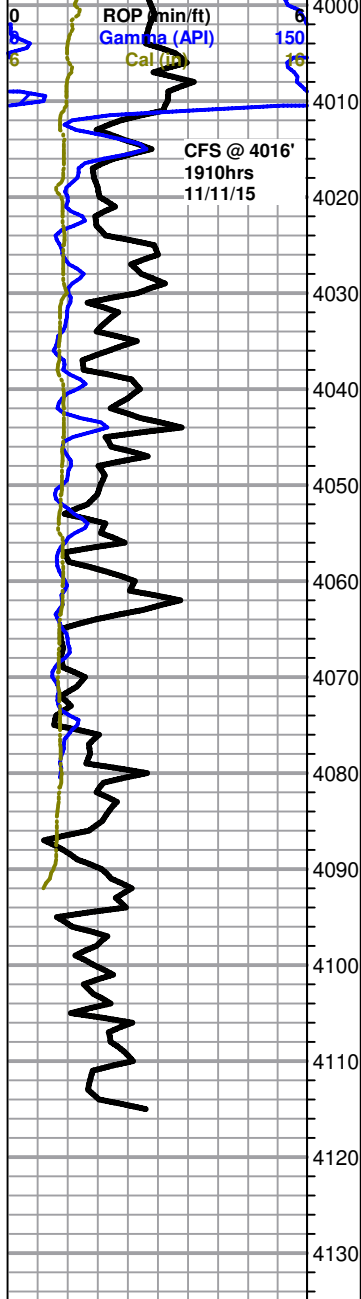
Mixed gray, green, red, and pale yellow shales with some scattered SS clusters, no shows or odor

Total Gas (units) 150
C1 (units) 150
C2 (units) 150
C3 (units) 150
C4 (units) 150

Mud-Co Mud chk
3881'
11/15/15
Vis: 61 Wt: 9.5
PV: 22 YP: 20
WL: 8.4
Cake: 2/32
pH: 9.0
Ca: 80ppm
CHL: 5,500ppm
Sol: 8.1 LCM: 1
DMC: \$956.86
CMC: \$8,876.85



3780
3790
3800
3810
3820
3830
3840
3850
3860
3870
3880
3890
3900
3910
3920
3930
3940
3950
3960
3970
3980
3990



Mixed Shales, with some scattered SS clusters as above, no show or odor

Arbuckle 4011 (-2011)

4016' 30" Mixed shales as above, with some dolomite, cream, micro-xln, sub-sucrosic and mostly dense with poor visible porosity, some fairly friable, some scattered sub-rhombic, barren, no odor

4016' 60" Mostly same as above, some very scattered sub-rhombic to rhombic with fair visible porosity, no shows or odor

~4020' Dolomite, cream, micro-xln, mostly sub-sucrosic and dense with poor visible porosity, some very scattered sub-rhombic, fairly chalky, no show or odor

~4030' Dolomite as above, slightly chalky, no show or odor

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

Dolomite as above, no show or odor

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

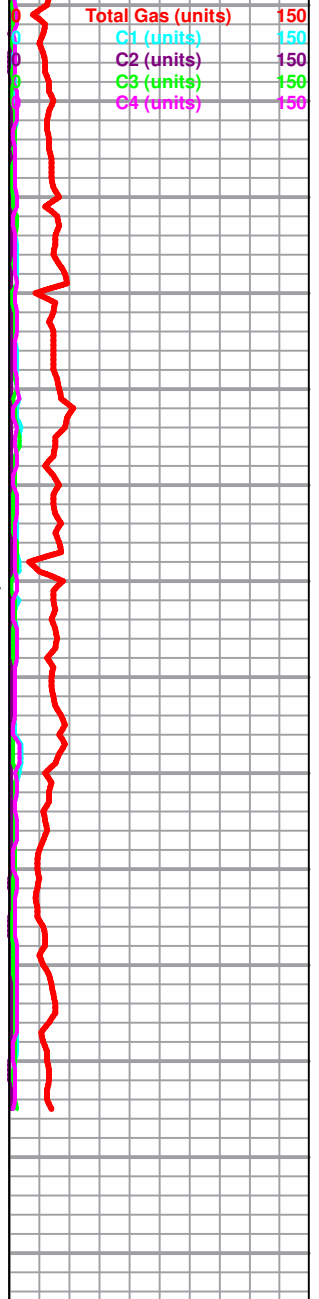
Dolomite as above, chalky, no show or odor

Dolomite, cream to light brown, micro-xln, mostly sub-sucrosic and dense with poor visible porosity, chalky, no show or odor

Dolomite as above, chalky, no show or odor

Dolomite, cream to light brown, micro-xln, mostly sub-sucrosic and dense with poor visible porosity, chalky, no show or odor

Dolomite as above, with some very scattered sub-rhombic, dense with poor visible porosity, chalky, no show or odor



Rotary TD 4115' @ 0000hrs 11/12/15
Nabors Well Services Logging TD @ 4116'
Complete Logging Operations @ 0900hrs 11/12/15
Geologist Jeremy Schwartz off location @ 0930hrs 11/12/15

DRILL STEM TEST REPORT



SHELBY RESOURCES LLC

3-22S-16W PAWNEE

621 17th STREET SUITE 1155
DENVER, COLORADO 80293

ELSIE UNIT 1-3

Job Ticket: 01250

DST#: 1

ATTN: JERMEU SCHWARTZ

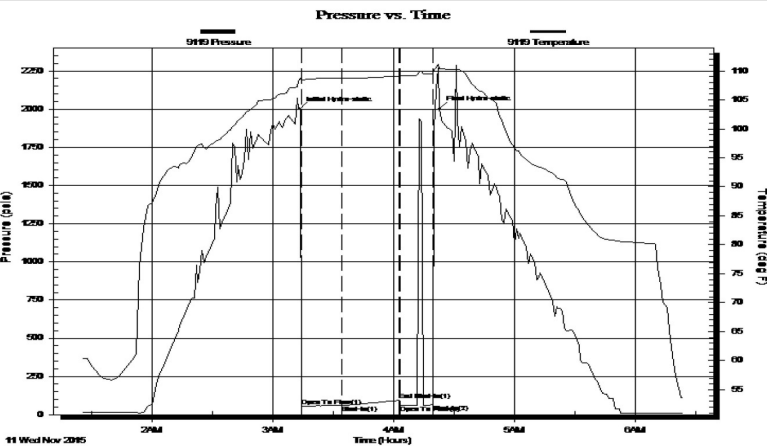
Test Start: 2015.11.11 @ 01:25:00

GENERAL INFORMATION:

Formation: **CONGLOMERATE**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 03:17:00 Tester: GENE BUDIG
 Time Test Ended: 06:25:00 Unit No: 1
 Interval: **3826.00 ft (KB) To 3881.00 ft (KB) (TVD)** Reference Elevations: 2000.00 ft (KB)
 Total Depth: 3881.00 ft (KB) (TVD) 1989.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 11.00 ft

Serial #: 9119 Inside
 Press@RunDepth: 95.19 psia @ 3875.78 ft (KB) Capacity: 5000.00 psia
 Start Date: 2015.11.11 End Date: 2015.11.11 Last Calib.: 2015.11.11
 Start Time: 01:25:00 End Time: 06:24:30 Time On Btm: 2015.11.11 @ 03:13:30
 Time Off Btm: 2015.11.11 @ 04:23:00

TEST COMMENT: 1ST OPENING 15 MINUTES-WEAK SURFACE BLOW FOR 6 MINUTES AND DIED
 1ST SHUT-IN 30 MINUTES-NO BLOW BACK
 2ND OPENING 20 MINUTES-NO BLOW -FLUSHED TOOL-GOOD SURGE -NO HELP
 2ND SHUT-IN NONE TAKEN



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2001.61	108.64	Initial Hydro-static
1	55.86	108.37	Open To Flow (1)
21	59.65	108.72	Shut-In(1)
50	95.19	109.11	End Shut-In(1)
50	59.08	109.10	Open To Flow (2)
66	64.21	109.49	Shut-In(2)
70	2002.59	110.41	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	drilling mud	0.21

Gas Rates

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