

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1272795
OIL & GAS CONSERVATION DIVISION

Form ACO-1
November 2016

Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

New Well Re-Entry Workover

Oil WSW SWD

Gas DH EOR

OG GSW

CM (Coal Bed Methane)

Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

Deepening Re-perf. Conv. to EOR Conv. to SWD
 Plug Back Liner Conv. to GSW Conv. to Producer

Commingled Permit #: _____

Dual Completion Permit #: _____

SWD Permit #: _____

EOR Permit #: _____

GSW Permit #: _____

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

Confidentiality Requested

Date: _____

Confidential Release Date: _____

Wireline Log Received Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT I II III Approved by: _____ Date: _____

1272795



Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No TCores aken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Geologist Report / Mud Logs <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
--	---

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

1. Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*
3. Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

Date of first Production/Injection or Resumed Production/Injection:	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____			
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5) (Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
---	--	------------------------------------

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
----------------	-------	---------	------------	--

Form	ACO1 - Well Completion
Operator	Shelby Resources LLC
Well Name	Elsie Unit 1-3
Doc ID	1272795

All Electric Logs Run

Dual Induction
Compensated Neutron
Micro
Sonic

Form	ACO1 - Well Completion
Operator	Shelby Resources LLC
Well Name	Elsie Unit 1-3
Doc ID	1272795

Tops

Name	Top	Datum
Heebner	3434	-1434
L-KC	3551	-1551
Stark Shale	3740	-1740
BKC	3793	-1793
Penn. Congl.	3828	-1828
Simpson Shale	3934	-1934
Arbuckle	4011	-2011
LTD	4116	-2116



DRILL STEM TEST REPORT

Prepared For: **SHELBY RESOURCES LLC**

621 17th STREET SUITE 1155
DENVER, COLORADO 80293

ATTN: JERMEU SCHWARTZ

ELSIE UNIT 1-3

3-22S-16W PAWNEE

Start Date: 2015.11.11 @ 01:25:00

End Date: 2015.11.11 @ 06:25:00

Job Ticket #: 01250 DST #: 1

Eagle Testers
1309 Patton Road Great Bend, Kansas 67530
620-791-7394

Printed: 2015.11.11 @ 06:39:28

SHELBY RESOURCES LLC

3-22S-16W PAWNEE

ELSIE UNIT 1-3

DST # 1

CONGLOMERATE

2015.11.11



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)

Time Tool Opened: 03:17:00

Time Test Ended: 06:25:00

Test Type: Conventional Bottom Hole (Initial)

Tester: GENE BUDIG

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

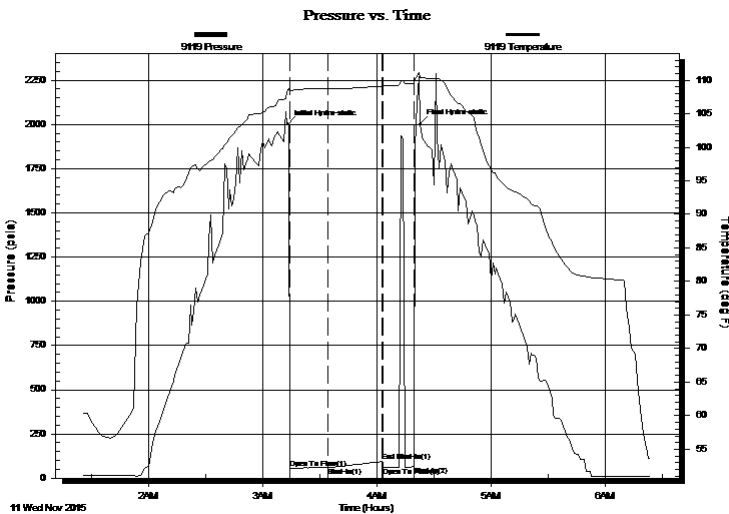
End Time: 06:24:30

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)



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

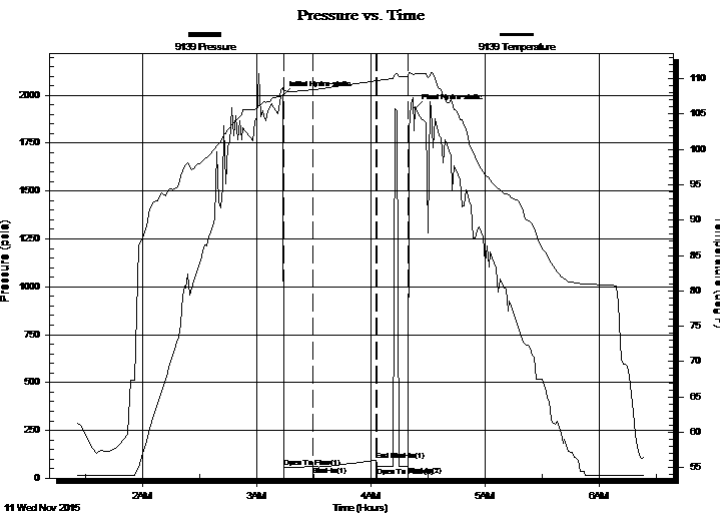
Test Start: 2015.11.11 @ 01:25:00

GENERAL INFORMATION:

Formation: **CONGLOMERATE**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 03:17:00
 Time Test Ended: 06:25:00
 Interval: **3826.00 ft (KB) To 3881.00 ft (KB) (TVD)**
 Total Depth: 3881.00 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: 2000.00 ft (KB)
 1989.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 9139 Outside
 Press@RunDepth: 93.77 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 @ 03:14:00
 Time Off Btm: 2015.11.11 @ 04:23:30

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	1997.62	108.71	Initial Hydro-static
1	57.83	108.23	Open To Flow (1)
16	59.44	108.44	Shut-In(1)
50	93.77	109.71	End Shut-In(1)
50	58.81	109.72	Open To Flow (2)
66	64.35	110.32	Shut-In(2)
70	1932.22	110.69	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)



DRILL STEM TEST REPORT

TOOL DIAGRAM

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

Tool Information

Drill Pipe:	Length: 3812.00 ft	Diameter: 3.80 inches	Volume: 53.47 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 110000.0 lb
			<u>Total Volume: 53.47 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 65000.00 lb
Depth to Top Packer:	3826.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	54.78 ft			
Tool Length:	83.78 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Length (ft) Serial No. Position Depth (ft) Accum. Lengths

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3802.00	
Hydraulic tool	5.00			3807.00	
Jars	7.00			3814.00	
Safety Joint	2.00		Fluid	3816.00	
Top Packer	5.00			3821.00	
Packer	5.00			3826.00	29.00 Bottom Of Top Packer
Anchor	5.00			3831.00	
Change Over Sub	0.75			3831.75	
Drill Pipe	31.28			3863.03	
Change Over Sub	0.75			3863.78	
Anchor	12.00			3875.78	
Recorder	0.00	9119	Inside	3875.78	
Recorder	0.00	9139	Outside	3875.78	
Bullnose	5.00			3880.78	54.78 Anchor Tool

Total Tool Length: 83.78



DRILL STEM TEST REPORT

FLUID SUMMARY

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

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 57.00 sec/qt

Water Loss: 8.40 in³

Resistivity: ohm.m

Salinity: 4800.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psia

Oil API:

Water Salinity: deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	drilling mud	0.210

Total Length: 15.00 ft Total Volume: 0.210 bbl

Num Fluid Samples: 0

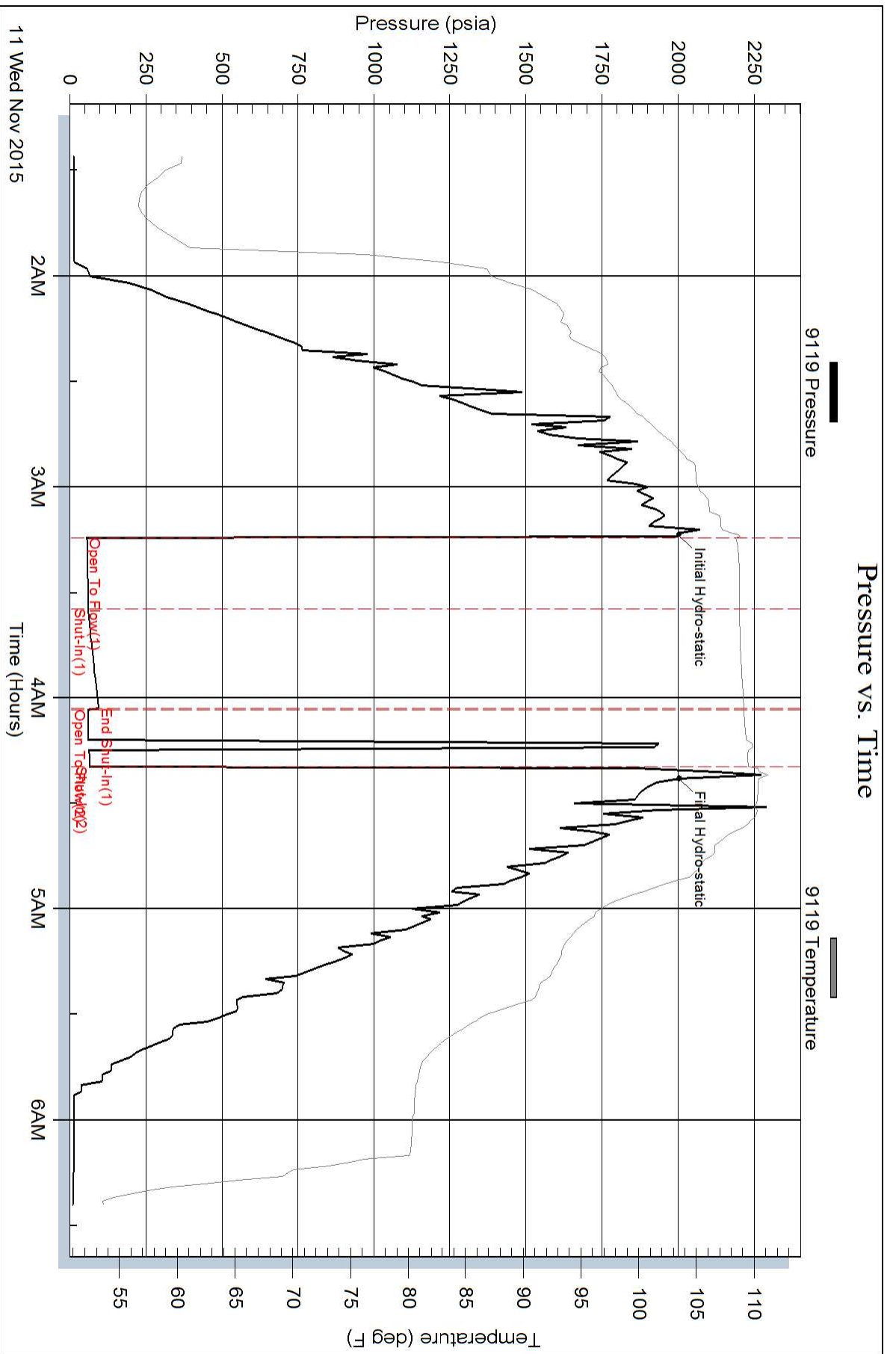
Num Gas Bombs: 0

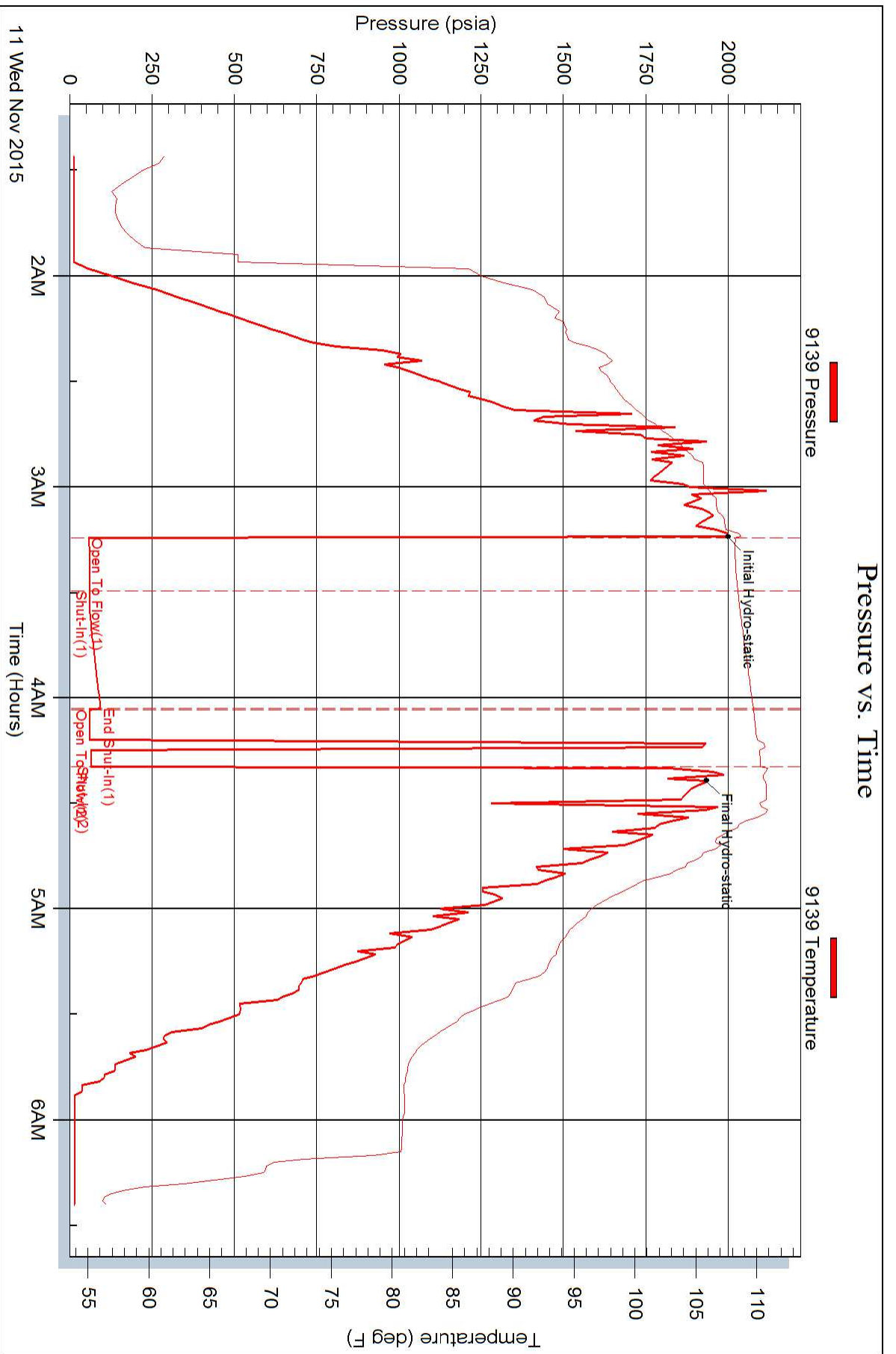
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 1287

Date	11-8-15	Sec.	3	Twp.	22	Range	16	County	Pawnee	State	Ks	On Location		Finish	5:45 AM
------	---------	------	---	------	----	-------	----	--------	--------	-------	----	-------------	--	--------	---------

Lease **Elsie unit** Location **Larned Ks - S to K-19 Hwy, 2w**
Well No. **1-3** Owner **to 90th Rd, 1/2 N, w/s**

Contractor **Sterling** **4**
Type Job **Surface**
To Quality Oilwell Cementing, Inc.
You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Hole Size **12 1/4"** T.D. **1020'** Charge To **Shelby Resources**
Csg. **8 5/8"** Depth **1016'** Street

Tbg. Size Depth City State
Tool Depth

Cement Left in Csg. **31.19'** Shoe Joint **31.19'** The above was done to satisfaction and supervision of owner agent or contractor.
Cement Amount Ordered **450 60/40 3% CC 2% Gel**

Meas Line Displace **62 3/4 PLS** **1/2# Flo.seal**
EQUIPMENT

Pumptrk 18 No. Cementer Billy	Common 270
Bulktrk 19 No. Helper David	Poz. Mix 180
Bulktrk p.u. No. Driver Rick	Gel. 9
	Calcium 19

JOB SERVICES & REMARKS
Remarks: **Cement did Circulate.**

Rat Hole Flowseal **225#**

Mouse Hole Kol-Seal

Centralizers Mud CLR 48

Baskets CFL-117 or CD110 CAF 38

D/V or Port Collar Sand

Handling **477**

Mileage

FLOAT EQUIPMENT

Guide Shoe **1 - weld on**

Centralizer **Baffle plate**

Baskets **Rubber plug**

AFU Inserts

Float Shoe

Latch Down

Pumptrk Charge **Long Surface**
Mileage **23**

Signature **[Signature]**
Tax
Discount
Total Charge

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 1290

Date	11-12-15	Sec.	3	Twp.	22	Range	16	County	Pawnee	State	Ks	On Location		Finish	7:30 PM
Location													Larned, Ks + K-19, 2E to 90th Rd, 1/2N		
Lease	Elsie unit			Well No.	1-3			Owner	W/S						
Contractor	Sterling			#	4			To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.							
Type Job	Plug							Charge To	Shelby Resources						
Hole Size	7 7/8"			T.D.	4115'										
Csg.				Depth				Street							
Tbg. Size	4 1/2" D.P.			Depth	4011'			City State							
Tool				Depth				The above was done to satisfaction and supervision of owner agent or contractor.							
Cement Left in Csg.				Shoe Joint				Cement Amount Ordered 220 60/40 4% Gel							
Meas Line				Displace	H2O/mud										
EQUIPMENT													Common 132		
Pumptrk	18	No.	Cement	Helper			Travis			Poz. Mix 88					
Bulktrk	15	No.	Driver	Billy			Gel. 8								
Bulktrk	P.W.	No.	Driver	Rick			Calcium								
JOB SERVICES & REMARKS													Hulls		
Remarks:	4011' - 50 SKS			Salt											
Rat Hole	1040' - 50 SKS			Flowseal 55#											
Mouse Hole	300' - 50 SKS			Kol-Seal											
Centralizers	60' - 20 SKS			Mud CLR 48'											
Baskets	Rathole - 30 SKS			CFL-117 or CD110 CAF 38											
D/V or Port Collar	Mousehole - 20 SKS			Sand											
Cement did Circulate													Handling 228		
													Mileage		
FLOAT EQUIPMENT															
													Guide Shoe		
													Centralizer		
													Baskets		
													AFU Inserts		
													Float Shoe		
													Latch Down		
													Pumptrk Charge plug		
													Mileage 23		
													Tax		
													Discount		
													Total Charge		
X Signature	[Signature]														

Quality Oilwell Cementing



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

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 :	15-142-21.812-00-00
DRLG CONTRACTOR:	STERLING DRILLING CO.
RIG #:	4
DOGHOUSE #:	620-388-4192
TOOLPUSHER:	LANNY SALOGA
CELL #:	620-388-4193

FORMATION	SHELBY RESOURCES, LLC												D&A				D&A			
	ARKANSAS RIVER UNIT #1-3												BUSTER #2-3				WFOG #1-2			
	ELSIE UNIT #1-3						CS/2 S/2 NE/4 3-22S-16W						SE SE SW 3-22S-16W				NE SW NW NE 2-22S-16W			
	2000		1999		2005		2016		2000		1999		2005		2016					
	LOG TOPS	SAMPLE TOPS	COMP. CARD	LOG	SMPL.	COMP. CARD	LOG	SMPL.	COMP. CARD	LOG	SMPL.	COMP. CARD	LOG	SMPL.						
DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM					
ANHYDRITE TOP	1000	1004	996	1000	999	+	1	-	3	1002	1003	-	3	-	7					
BASE	1018	982	1023	977	1024	975	+	7	+	2	1029	976	+	6	+	1				
TOPEKA	3164	-1164	3167	-1167	3161	-1162	-	2	-	5	3171	-1166	+	2	-	1				
HEEBNER SHALE	3434	-1434	3435	-1435	3430	-1431	-	3	-	4	3443	-1438	+	4	+	3				
TORONTO	3450	-1450	3451	-1451	3446	-1447	-	3	-	4	3460	-1455	+	5	+	4				
DOUGLAS SHALE	3470	-1470	3466	-1466	3463	-1464	-	6	-	2	3477	-1472	+	2	+	6				
BROWN LIME	3541	-1541	3542	-1542	3540	-1541	+	0	-	1	3548	-1543	+	2	+	1				
LKC	3551	-1551	3554	-1554	3549	-1550	-	1	-	4	3556	-1551	+	0	-	3				
STARK SHALE	3740	-1740	3740	-1740	3735	-1736	-	4	-	4	3751	-1746	+	6	+	6				
BKC	3793	-1793	3790	-1790	3787	-1788	-	5	-	2	3800	-1795	+	2	+	5				
MARMATON	3810	-1810	3808	-1808	3810	-1811	+	1	+	3	3823	-1818	+	8	+	10				
PENN CONGL	3828	-1828	3830	-1830	3824	-1825	-	3	-	5	3838	-1833	+	5	+	3				
PENN SAND			3862	-1862	3857	-1858	-		-	4	3870	-1865			+	3				
SIMPSON SHALE	3934	-1934	3934	-1934	3917	-1918	-	16	-	16	3942	-1937	+	3	+	3				
SIMPSON SAND	3952	-1952	3950	-1950	3934	-1935	-	17	-	15	3951	-1946	-	6	-	4				
ARBUCKLE	4011	-2011	4011	-2011	3991	-1992	-	19	-	19	4013	-2008	-	3	-	3				
RTD			4115	-2115	4100	-2101				14	4110	-2105			-	10				
LTD	4116	-2116			4101	-2102	-	14			4110	-2105	-	11						

ROCK TYPES









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

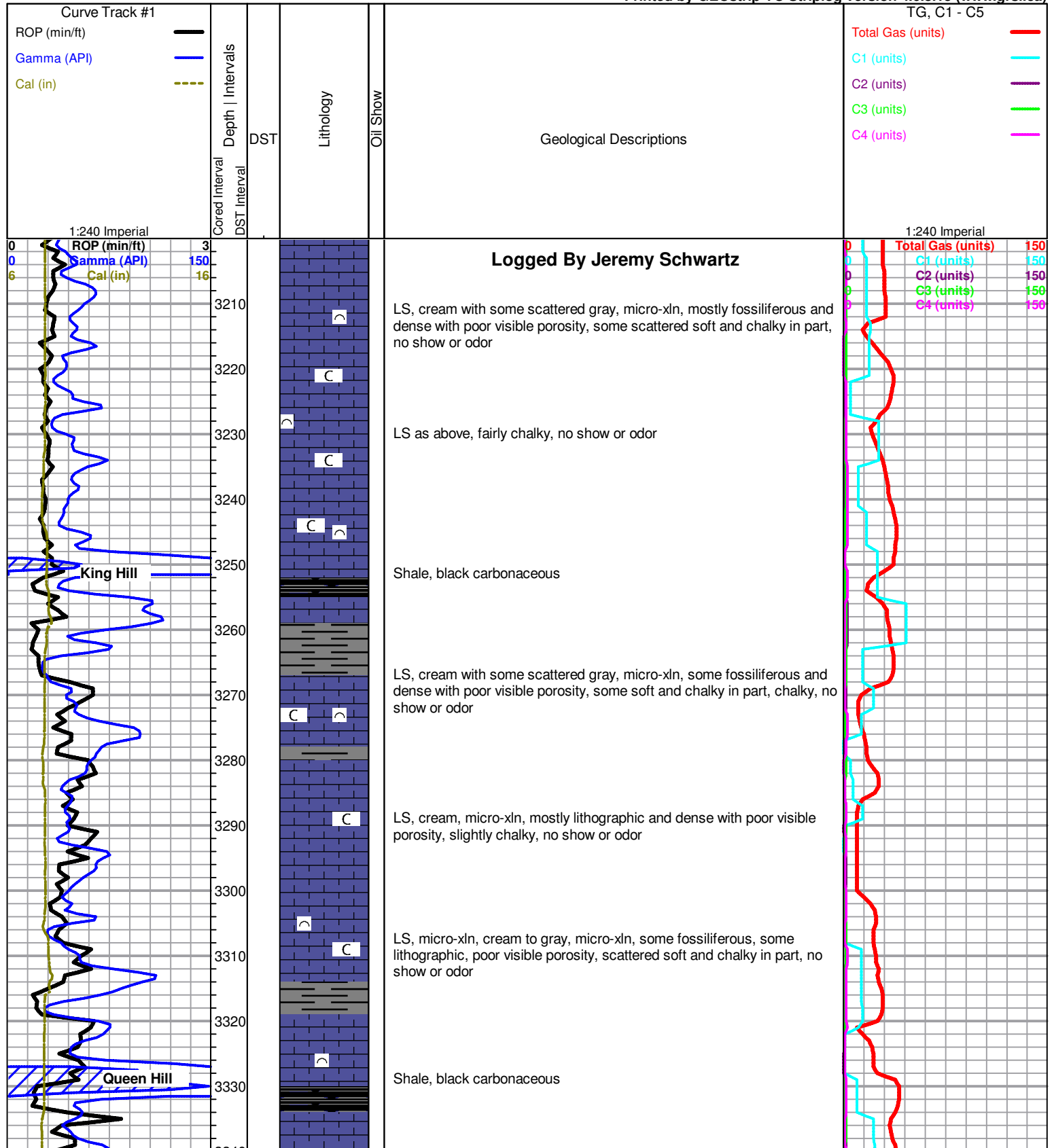
ACCESSORIES

MINERAL	FOSSIL	STRINGER	TEXTURE
△ Chert White	∩ Bioclastic or Fragmental	~~~~ Chert	C Chalky
▲ Chert, dark	F Fossils < 20%	■ Limestone	
∴ Varicolored chert		••• Sandstone	
		••• Siltstone	
		— green shale	

OTHER SYMBOLS

MISC	DST
Daily Report	DST Int
	DST -lt

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



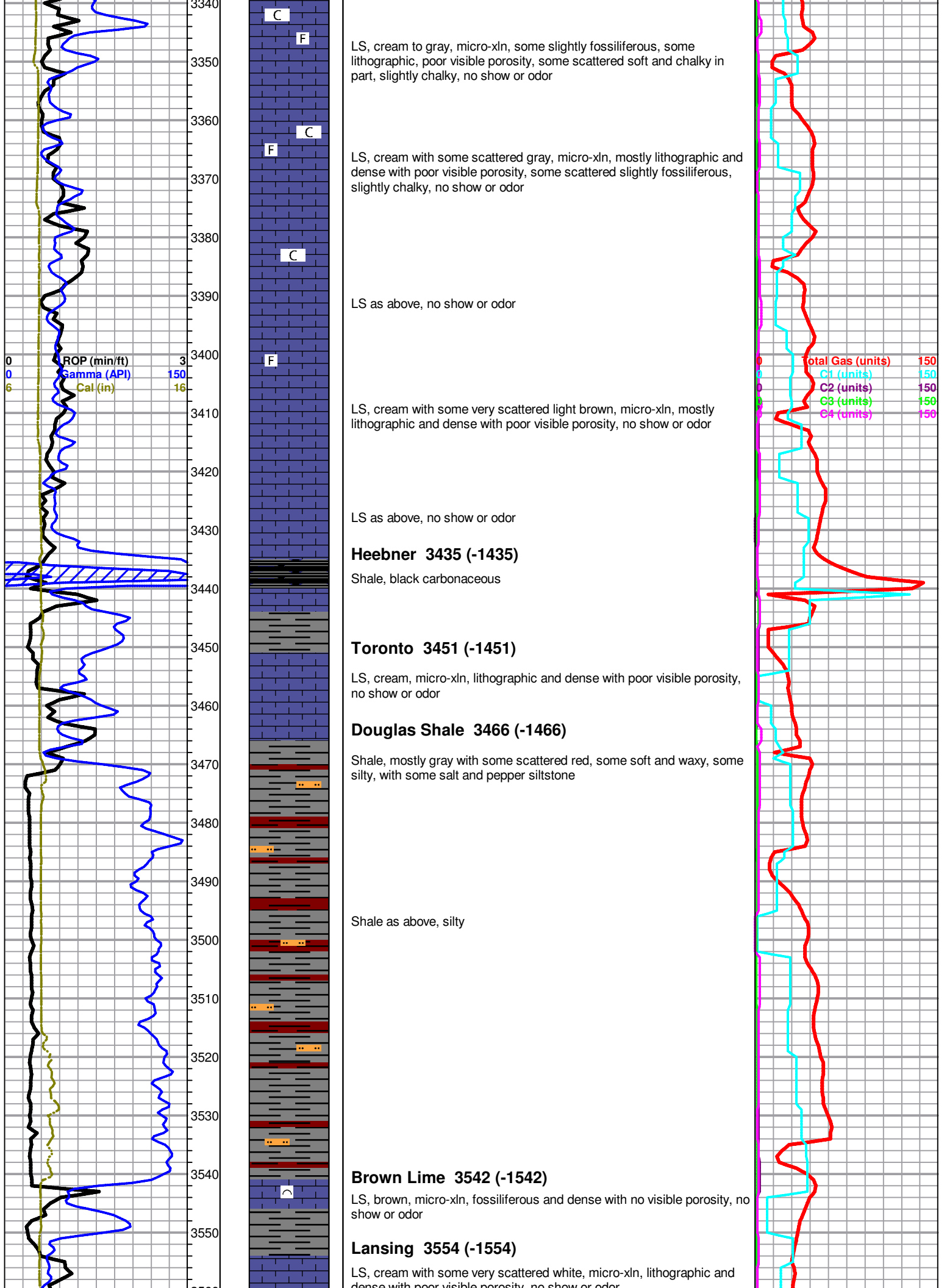
1:240 Imperial

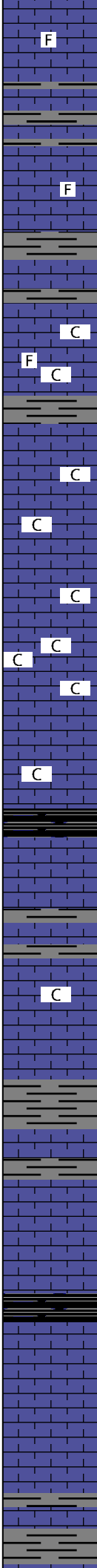
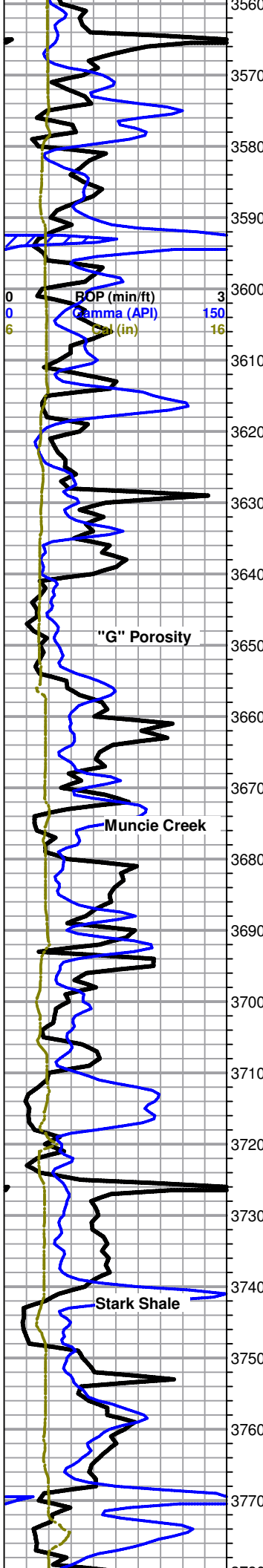
1:240 Imperial

Logged By Jeremy Schwartz

King Hill

Queen Hill





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

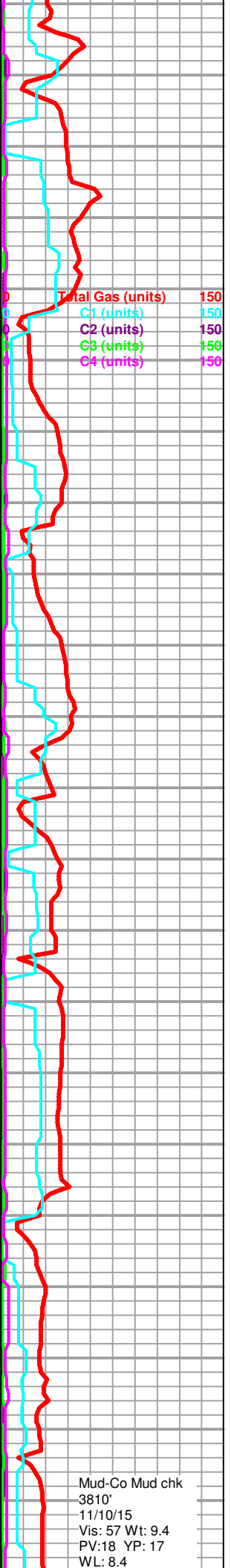
LS, cream to gray with some very scattered light brown, micro-xln, lithographic and dense with poor visible porosity, no show or odor

LS as above, slightly chalky, no show or odor

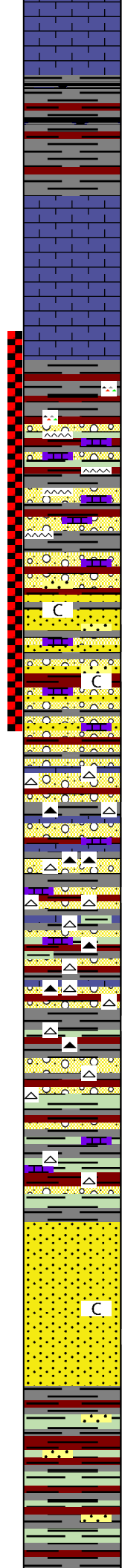
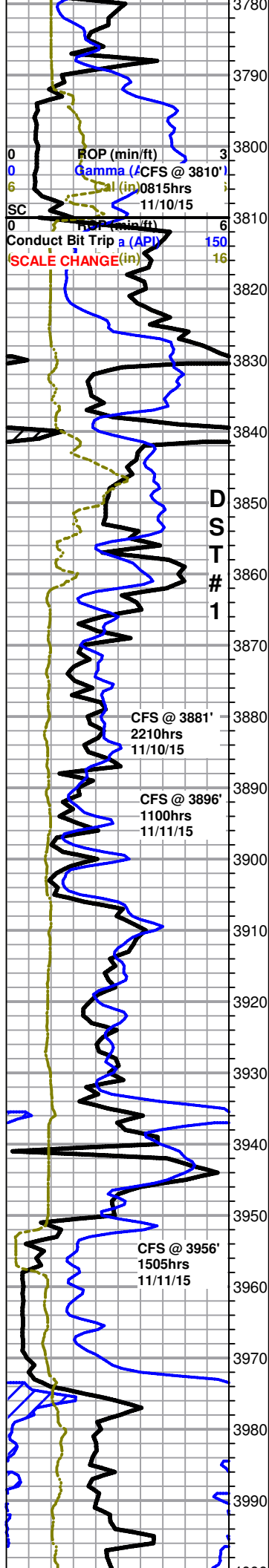
LS, mostly cream with some scattered gray and white, micro-xln, lithographic and dense with poor visible porosity, no show or odor

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

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

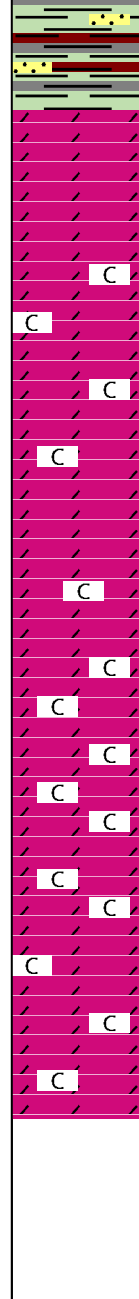
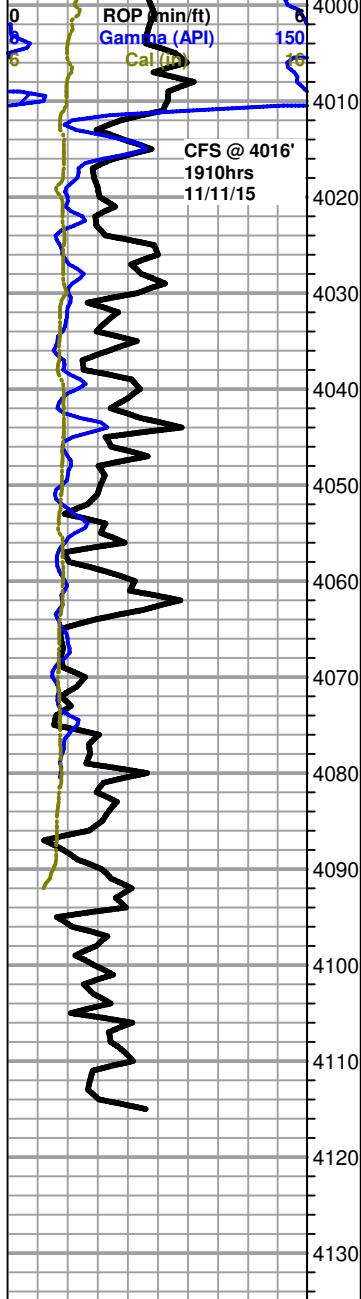
Gray to green and red shales, with some SS clusters as above, no odor

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

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

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



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

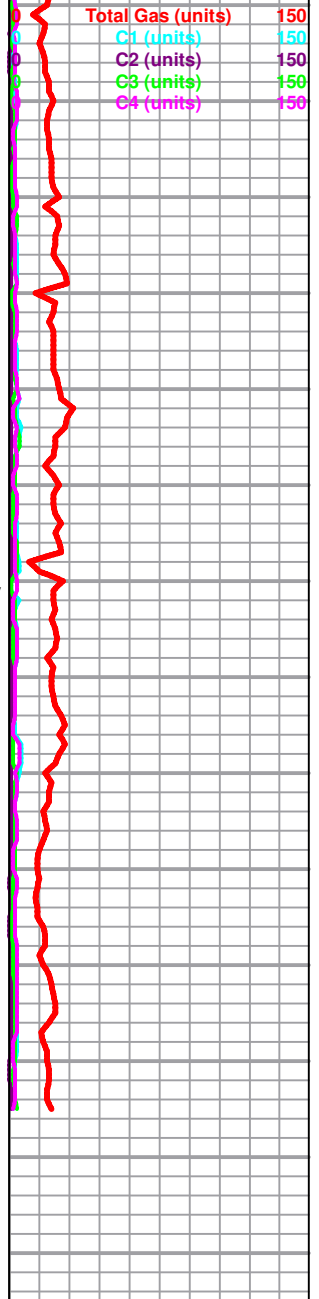
Dolomite, cream to light brown, micro-xln, mostly sub-sucrosic and dense with poor visible porosity, chalky, no show or odor

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

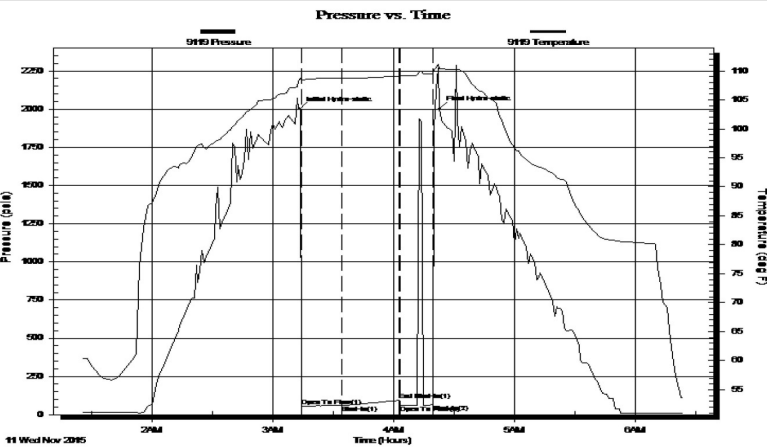
Test Start: 2015.11.11 @ 01:25:00

GENERAL INFORMATION:

Formation: **CONGLOMERATE**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 03:17:00
 Time Test Ended: 06:25:00
 Test Type: Conventional Bottom Hole (Initial)
 Tester: GENE BUDIG
 Unit No: 1
 Interval: **3826.00 ft (KB) To 3881.00 ft (KB) (TVD)**
 Total Depth: 3881.00 ft (KB) (TVD)
 Reference Elevations: 2000.00 ft (KB)
 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)