KOLAR Document ID: 1336646

Confidentiality Requested:
☑ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1
January 2018
Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 31725
Name: Shelby Resources LLC
Address 1: 621 17TH ST STE 1155
Address 2:
City: DENVER State: CO Zip: 80293 + 1101
Contact Person: Chris Gottschalk
Phone: (785) 623-1524
CONTRACTOR: License # 5142
Name: Sterling Drilling Company
Wellsite Geologist: Jeremy Schwartz
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 #:

11/18/2016 Spud Date or Recompletion Date
11/26/2016 Date Reached TD
01/01/2017 Completion Date or Recompletion Date

API No.: 15-009-26157-00-00
Spot Description:
SE - SW - SE - NE Sec. 18 Twp. 18 S. R. 14 ☐ East ☑ West
2617 Feet from ☑ North / ☐ South Line of Section
704 Feet from ☑ East / ☐ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☑ NE ☐ NW ☐ SE ☐ SW
GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Barton
Lease Name: SCHNEIDER UNIT Well #: 1-18
Field Name:
Producing Formation: Arbuckle
Elevation: Ground: 1937 Kelly Bushing: 1948
Total Vertical Depth: 3600 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 966 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: 56000 ppm Fluid volume: 1000 bbls
Dewatering method used: Hauled to Disposal
Location of fluid disposal if hauled offsite:
Operator Name: Shelby Resources
Lease Name: Clark License #: 31725
Quarter SW Sec. 24 Twp. 17 S. R. 14 ☐ East ☑ West
County: Barton Permit #: D-31557

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: 02/17/2017
☑ **Confidential Release Date:** 02/17/2019
☑ **Wireline Log Received** ☐ **Drill Stem Tests Received**
☑ **Geologist Report / Mud Logs Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** Karen Ritter **Date:** 02/20/2017

Operator Name: Shelby Resources LLC Lease Name: SCHNEIDER UNIT Well #: 1-18

Sec. 18 Twp. 18 S. R. 14 ☐ East ☑ West County: Barton

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 *(Attach Additional Sheets)*	☑ Yes	☐ No
Samples Sent to Geological Survey	☑ Yes	☐ No
Cores Taken	☐ Yes	☑ No
Electric Log Run	☑ Yes	☐ No
Geologist Report / Mud Logs	☐ Yes	☐ No

List All E. Logs Run:
Attached

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
Topeka	2944	-996
Heebner	3157	-1209
L-KC	3237	-1289
Muncie Creek	3366	-1418
B-KC	3456	-1508
Arbuckle	3495	-1547
LTD	3600	-1652

CASING RECORD ☑ New ☐ 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
Surface	12.25	8.625	23	966	60/40 Poz	350	2% gel / 3% cc
Production	7.875	5.5	14	3591	AA2	150	2% gel / 3% cc

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
☐ Perforate ☑ Protect Casing ☐ Plug Back TD ☐ Plug Off Zone	3519-3520	AA2	50	2% cc
	-			

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: 01/01/2017	Producing Method: ☐ Flowing ☑ Pumping ☐ Gas Lift ☐ Other *(Explain)*				
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	42		0		26

DISPOSITION OF GAS:	METHOD OF COMPLETION:	PRODUCTION INTERVAL:
☐ Vented ☐ Sold ☐ Used on Lease *(If vented, Submit ACO-18.)*	☐ Open Hole ☑ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*	Top / Bottom

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

TUBING RECORD: Size: 2.35 Set At: 3498 Packer At:

Mail to: KCC - Conservation Division, 266 N. Main, Suite 220, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Shelby Resources LLC
Well Name	SCHNEIDER UNIT 1-18
Doc ID	1336646

All Electric Logs Run

Dual Induction
Compensated Neutron
Micro
Sonic

Form	ACO1 - Well Completion
Operator	Shelby Resources LLC
Well Name	SCHNEIDER UNIT 1-18
Doc ID	1336646

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
4	3519-20	Squeeze Casing	
4	3498-3502	100 gal 15% NE	

Form	ACO1 - Well Completion
Operator	Shelby Resources LLC
Well Name	SCHNEIDER UNIT 1-18
Doc ID	1336646

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	23	966	60/40 Poz	350	2% gel / 3% cc
Production	7.875	5.5	14	3591	AA2	150	2% gel / 3% cc

DRILL STEM TEST REPORT

Shelby Resources LLC

621 17th STE 1155
Denver Co, 80293+1101

ATTN: Jeremy Schwartz/ Chr

18-18s-14w

Schneider Unit #1-18

Job Ticket: 61861 **DST#: 1**

Test Start: 2016.11.22 @ 12:29:30

GENERAL INFORMATION:

Formation: **LKC 'A-G'**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 15:13:15
Time Test Ended: 19:36:30

Test Type: Conventional Bottom Hole (Initial)
Tester: Spencer J. Staab
Unit No: 84

Interval: 3234.00 ft (KB) To 3318.00 ft (KB) (TVD)
Total Depth: 3318.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

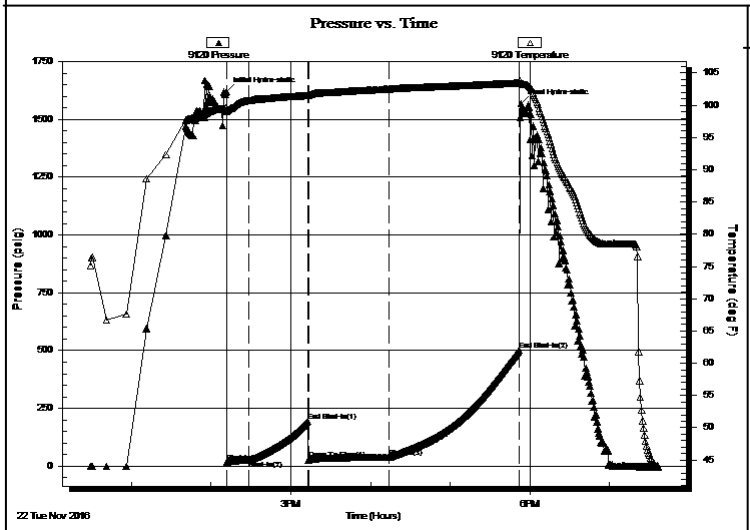
Reference Elevations: 1948.00 ft (KB)
1937.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 9120 **Outside**

Press@RunDepth: 40.07 psig @ 3235.00 ft (KB)
Start Date: 2016.11.22 End Date: 2016.11.22
Start Time: 12:29:30 End Time: 19:36:30

Capacity: 8000.00 psig
Last Calib.: 2016.11.22
Time On Btm: 2016.11.22 @ 14:11:30
Time Off Btm: 2016.11.22 @ 17:53:15

TEST COMMENT: 15-IF-Very Weak Surface Blow ; Built to 1 inch
45-ISI-No Blow Back
60-FF-Fair Blow ; Built to 6 inches
90-FSI-No Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1620.95	99.58	Initial Hydro-static
1	18.46	99.06	Shut-In(1)
17	27.57	100.72	Shut-In(2)
62	194.20	101.51	End Shut-In(1)
62	27.73	101.51	Open To Flow (1)
123	40.07	102.53	Shut-In(3)
221	501.12	103.45	End Shut-In(2)
222	1569.73	103.53	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
61.00	OCM 15% O 85% M	0.30

Gas Rates

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

DRILL STEM TEST REPORT

Shelby Resources LLC

621 17th STE 1155
Denver Co, 80293+1101

ATTN: Jeremy Schw artz/ Chr

18-18s-14w

Schneider Unit #1-18

Job Ticket: 61861 **DST#: 1**

Test Start: 2016.11.22 @ 12:29:30

GENERAL INFORMATION:

Formation: **LKC 'A-G'**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 15:13:15
Time Test Ended: 19:36:30

Test Type: Conventional Bottom Hole (Initial)
Tester: Spencer J. Staab
Unit No: 84

Interval: 3234.00 ft (KB) To 3318.00 ft (KB) (TVD)
Total Depth: 3318.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

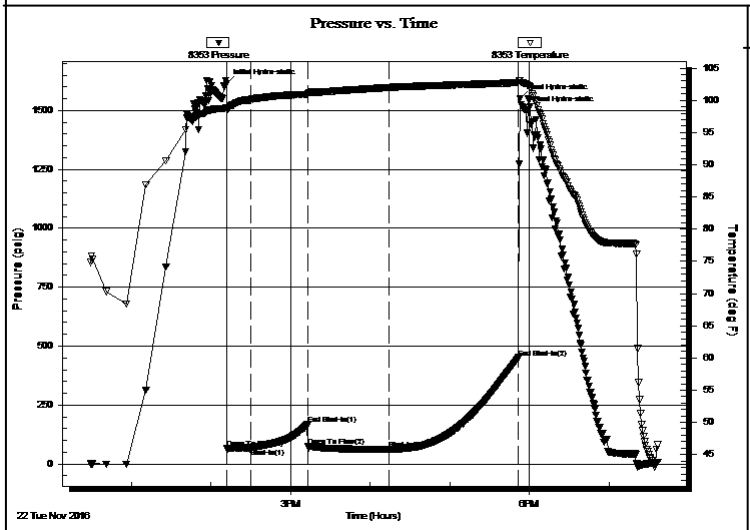
Reference Elevations: 1948.00 ft (KB)
1937.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8353 **Inside**

Press@RunDepth: 450.73 psig @ 3235.00 ft (KB)
Start Date: 2016.11.22 End Date: 2016.11.22
Start Time: 12:29:15 End Time: 19:36:30

Capacity: 8000.00 psig
Last Calib.: 2016.11.22
Time On Btm: 2016.11.22 @ 14:11:45
Time Off Btm: 2016.11.22 @ 17:53:00

TEST COMMENT: 15-IF-Very Weak Surface Blow ; Built to 1 inch
45-ISI-No Blow Back
60-FF-Fair Blow ; Built to 6 inches
90-FSI-No Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1613.38	98.91	Initial Hydro-static
1	65.19	98.62	Open To Flow (1)
19	68.00	100.09	Shut-In(1)
61	167.36	100.92	End Shut-In(1)
62	73.95	100.93	Open To Flow (2)
123	61.59	101.99	Shut-In(2)
220	450.73	102.75	End Shut-In(2)
222	1550.49	103.09	Final Hydro-static
226	1498.73	102.60	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
61.00	OCM 15% O 85% M	0.30

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Shelby Resources LLC

621 17th STE 1155
Denver Co, 80293+1101

ATTN: Jeremy Schw artz/ Chr

18-18s-14w

Schneider Unit #1-18

Job Ticket: 61861 **DST#: 1**

Test Start: 2016.11.22 @ 12:29:30

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	59.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.19 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	2700.00 ppm				
Filter Cake:	inches				

Recovery Information

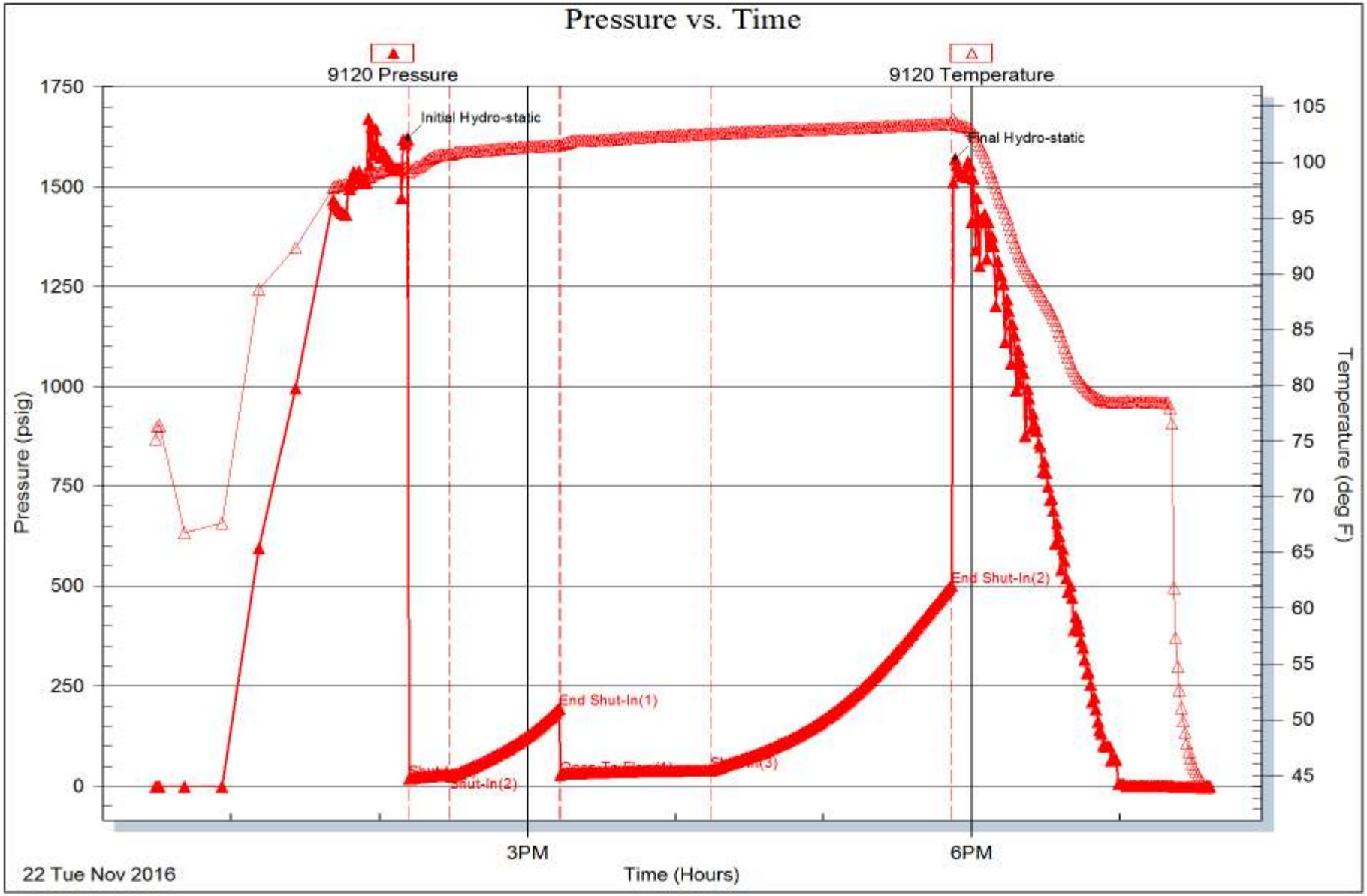
Recovery Table

Length ft	Description	Volume bbl
61.00	OCM 15% O 85% M	0.300

Total Length: 61.00 ft Total Volume: 0.300 bbl

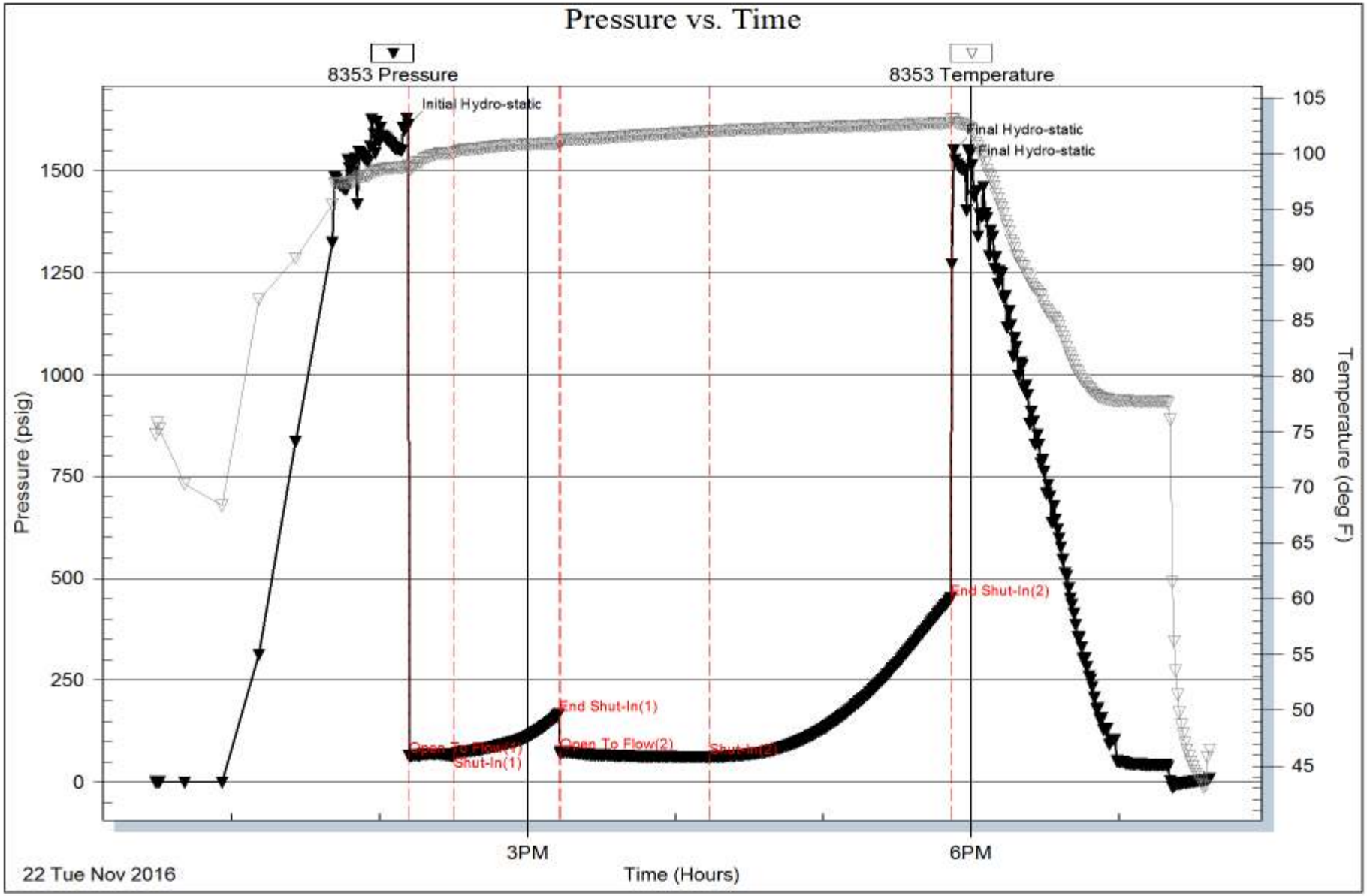
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 9120 **Outside** Shelby Resources LLC Schneider Unit #1-18 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 61861 Printed: 2016.11.22 @ 21:47:32

Serial #: 8353 **Inside** Shelby Resources LLC Schneider Unit #1-18 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 61861 Printed: 2016.11.22 @ 21:47:32

DRILL STEM TEST REPORT

Shelby Resources LLC

621 17th STE 1155
Denver Co, 80293+1101

ATTN: Jeremy Schw artz/ Chr

18-18s-14w

Schneider Unit #1-18

Job Ticket: 61862 **DST#: 2**

Test Start: 2016.11.22 @ 12:29:00

GENERAL INFORMATION:

Formation: **LKC 'H-K'**
Deviated: No Whipstock: ft (KB)
Time Tool Opened:
Time Test Ended:

Test Type: Conventional Bottom Hole (Reset)
Tester: Spencer J. Staab
Unit No: 84

Interval: 3356.00 ft (KB) To 3461.00 ft (KB) (TVD)
Total Depth: 3318.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

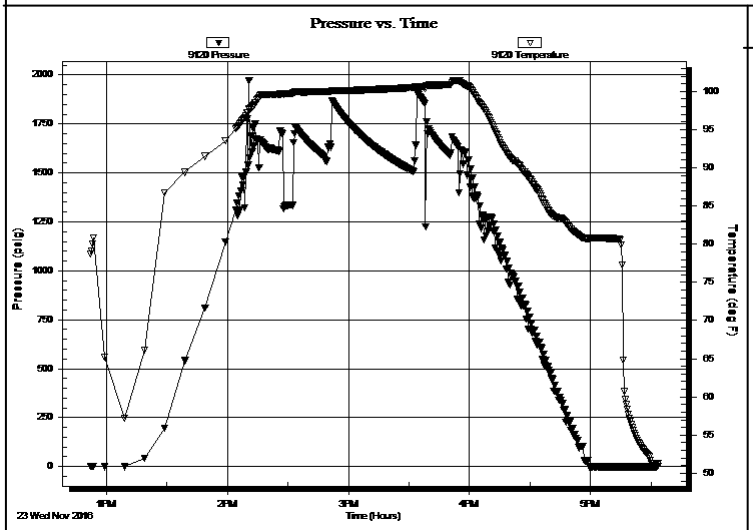
Reference Elevations: 1948.00 ft (KB)
1937.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 9120

Press@RunDepth: psig @ ft (KB)
Start Date: 2016.11.23 End Date: 2016.11.23
Start Time: 12:52:15 End Time: 17:33:30

Capacity: 8000.00 psig
Last Calib.: 2016.11.23
Time On Btm:
Time Off Btm:

TEST COMMENT: 15-IF-No Blow ; Flushed tool 5 min in; did not help; no Blow
45-ISI-No Blow Back
60-FF-No Blow ; Flushed tool 5 min in; did not help; Pulled tool after approx 18 mins



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

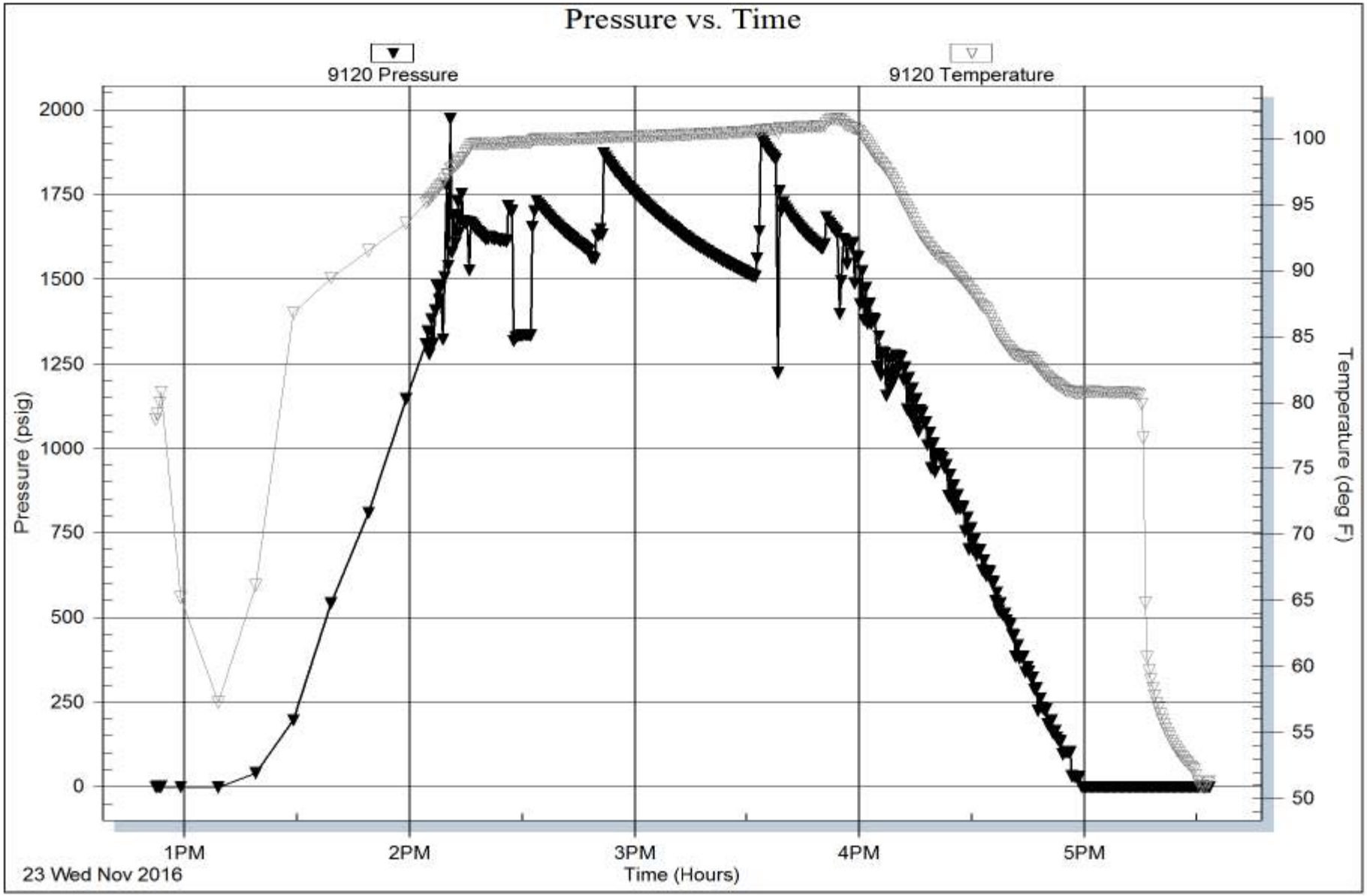
Length (ft)	Description	Volume (bbl)
1.00		0.00

* Recovery from multiple tests

Gas Rates

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

Serial #: 9120 | Shelby Resources LLC | Schneider Unit #1-18 | DST Test Number: 2



Trilobite Testing, Inc | Ref. No: 61862 | Printed: 2016.11.23 @ 18:09:59

DRILL STEM TEST REPORT

Shelby Resources LLC

621 17th STE 1155
Denver Co, 80293+1101

ATTN: Jeremy Schw artz/ Chr

18-18s-14w

Schneider Unit #1-18

Job Ticket: 61863 **DST#: 3**

Test Start: 2016.11.24 @ 04:02:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 05:46:15
Time Test Ended: 12:35:45

Test Type: Conventional Bottom Hole (Reset)
Tester: Spencer J. Staab
Unit No: 84

Interval: 3454.00 ft (KB) To 3510.00 ft (KB) (TVD)
Total Depth: 3318.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

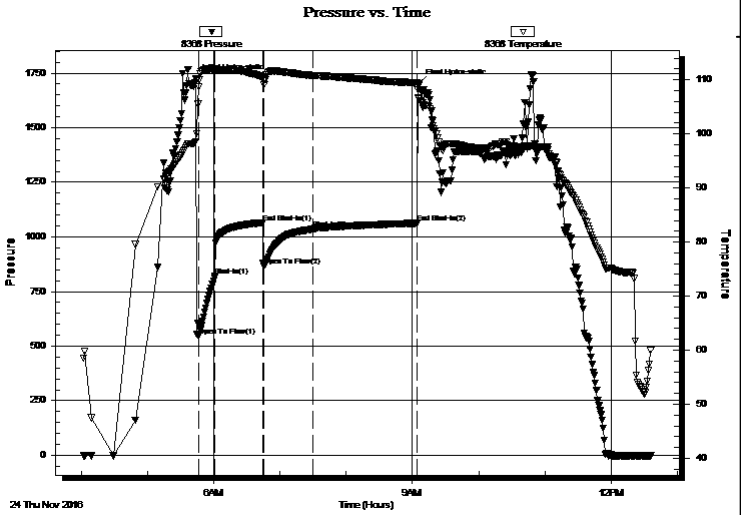
Reference Elevations: 1948.00 ft (KB)
1937.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8368 **Inside**

Press@RunDepth: 1037.57 psig @ 3455.00 ft (KB)
Start Date: 2016.11.24 End Date: 2016.11.24
Start Time: 04:02:15 End Time: 12:35:45

Capacity: 8000.00 psig
Last Calib.: 2016.11.24
Time On Btm: 2016.11.24 @ 05:44:00
Time Off Btm: 2016.11.24 @ 09:05:30

TEST COMMENT: 15-IF-BOB in 20 seconds; gas to surface
45-ISI-BOB in 10 minutes
45-FF-BOB instantaneously; gas to surface
90-FSI-Fair Blow ; Built to 4 inches



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1726.47	98.59	Initial Hydro-static
3	546.16	108.67	Open To Flow (1)
18	819.33	111.81	Shut-In(1)
61	1065.14	110.54	End Shut-In(1)
62	865.22	109.77	Open To Flow (2)
106	1037.57	110.76	Shut-In(2)
200	1062.24	109.44	End Shut-In(2)
202	1699.67	106.73	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2881.00	CGO 10%G 90% O	38.44

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

Shelby Resources LLC

621 17th STE 1155
Denver Co, 80293+1101

ATTN: Jeremy Schw artz/ Chr

18-18s-14w

Schneider Unit #1-18

Job Ticket: 61863 **DST#: 3**

Test Start: 2016.11.24 @ 04:02:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 05:46:15
Time Test Ended: 12:35:45

Test Type: Conventional Bottom Hole (Reset)
Tester: Spencer J. Staab
Unit No: 84

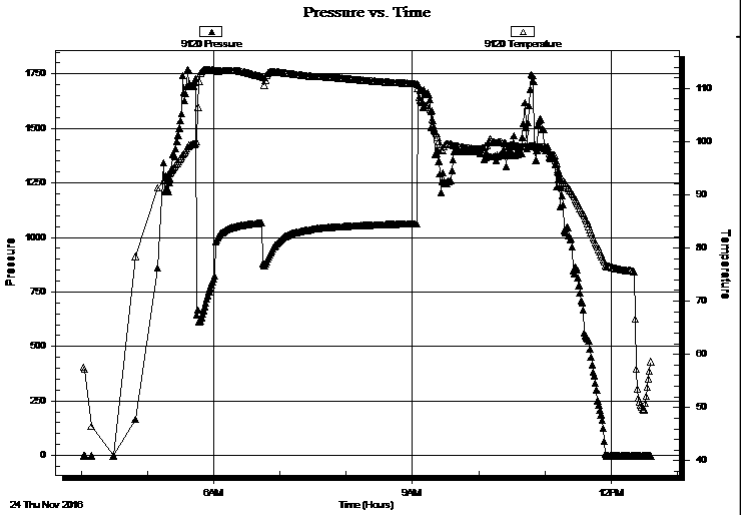
Interval: 3454.00 ft (KB) To 3510.00 ft (KB) (TVD)
Total Depth: 3318.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1948.00 ft (KB)
1937.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 9120 **Outside**
Press@RunDepth: psig @ 3455.00 ft (KB)
Start Date: 2016.11.24 End Date: 2016.11.24
Start Time: 04:02:15 End Time: 12:35:45

Capacity: 8000.00 psig
Last Calib.: 2016.11.24
Time On Btm:
Time Off Btm:

TEST COMMENT: 15-IF-BOB in 20 seconds; gas to surface
45-ISI-BOB in 10 minutes
45-FF-BOB instantaneously; gas to surface
90-FSI-Fair Blow ; Built to 4 inches



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
2881.00	CGO 10%G 90% O	38.44

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Shelby Resources LLC

621 17th STE 1155
Denver Co, 80293+1101

ATTN: Jeremy Schw artz/ Chr

18-18s-14w

Schneider Unit #1-18

Job Ticket: 61863 **DST#: 3**

Test Start: 2016.11.24 @ 04:02:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	35 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	58.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.80 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	4000.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2881.00	CGO 10%G 90% O	38.436

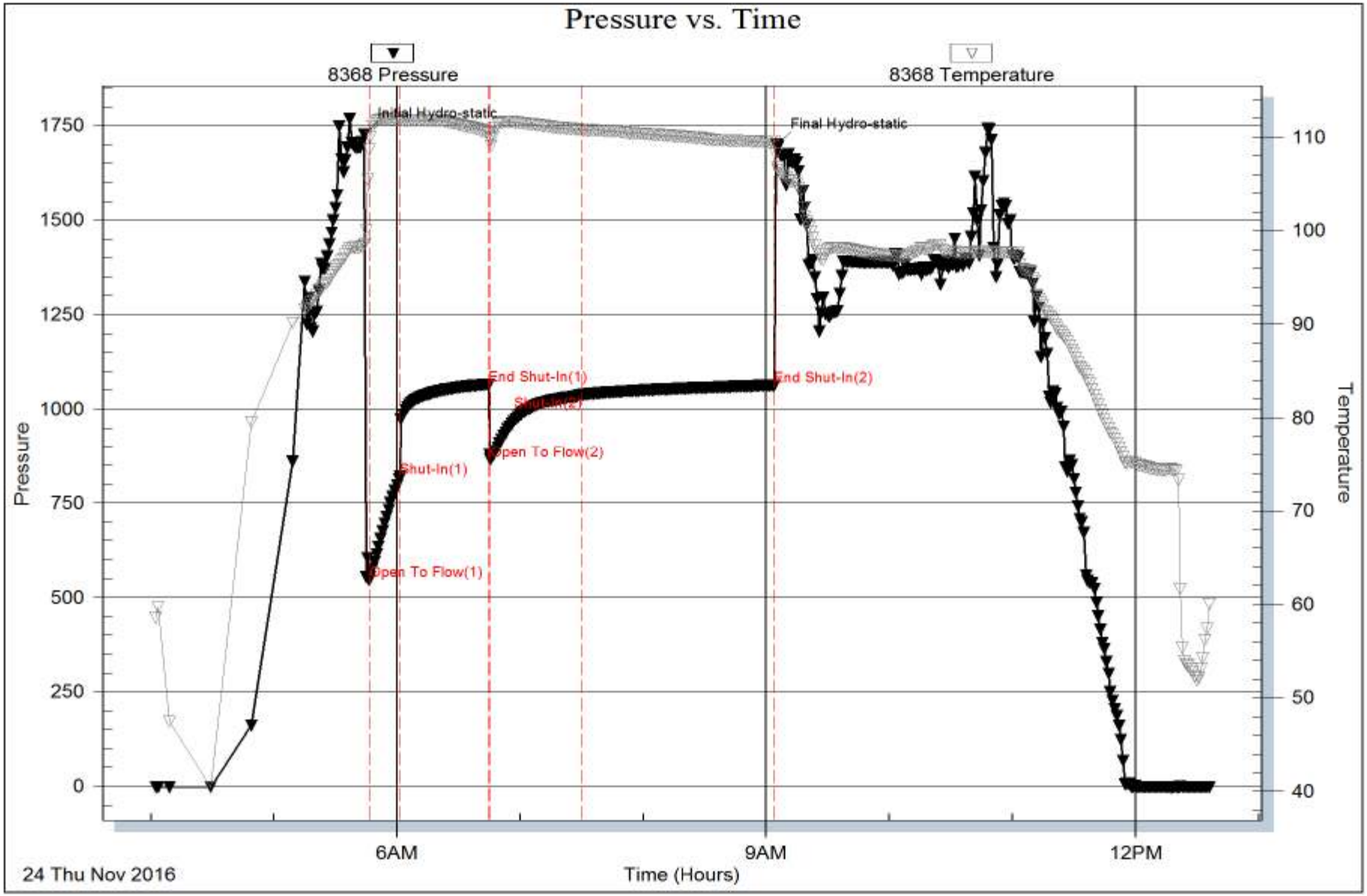
Total Length: 2881.00 ft Total Volume: 38.436 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

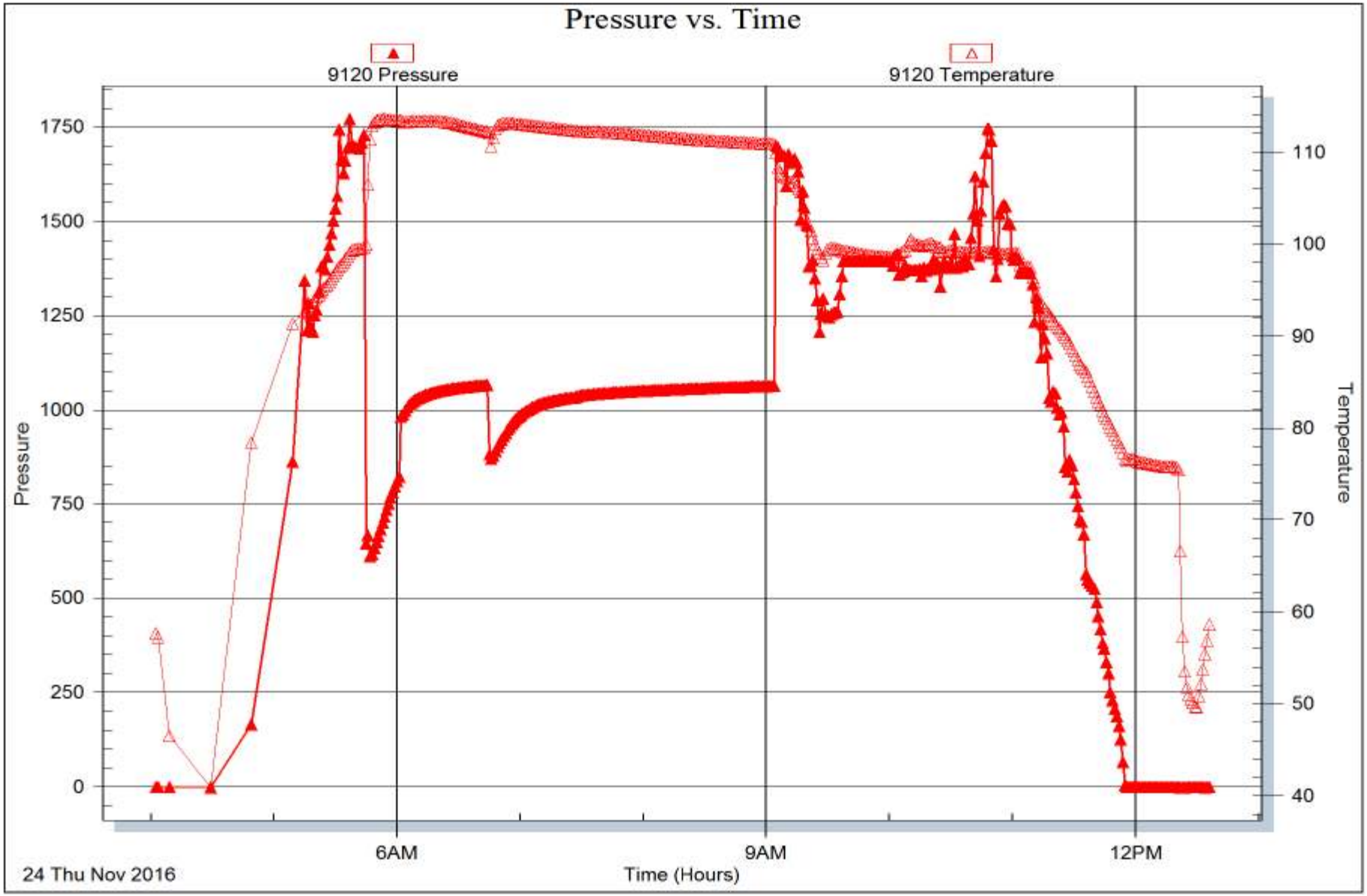
Recovery Comments: reversed oil out to tank truck

Serial #: 8368 **Inside** Shelby Resources LLC Schneider Unit #1-18 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 61863 Printed: 2016.11.24 @ 15:25:59

Serial #: 9120 **Outside** Shelby Resources LLC Schneider Unit #1-18 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 61863 Printed: 2016.11.24 @ 15:25:59

DRILL STEM TEST REPORT

Shelby Resources LLC

621 17th STE 1155
Denver Co, 80293+1101

ATTN: Jeremy Schw artz/ Chr

18-18s-14w

Schneider Unit #1-18

Job Ticket: 61864 **DST#: 4**

Test Start: 2016.11.24 @ 19:58:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 21:57:00
Time Test Ended: 03:50:30

Test Type: Conventional Bottom Hole (Reset)
Tester: Spencer J. Staab
Unit No: 84

Interval: 3512.00 ft (KB) To 3520.00 ft (KB) (TVD)
Total Depth: 3520.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

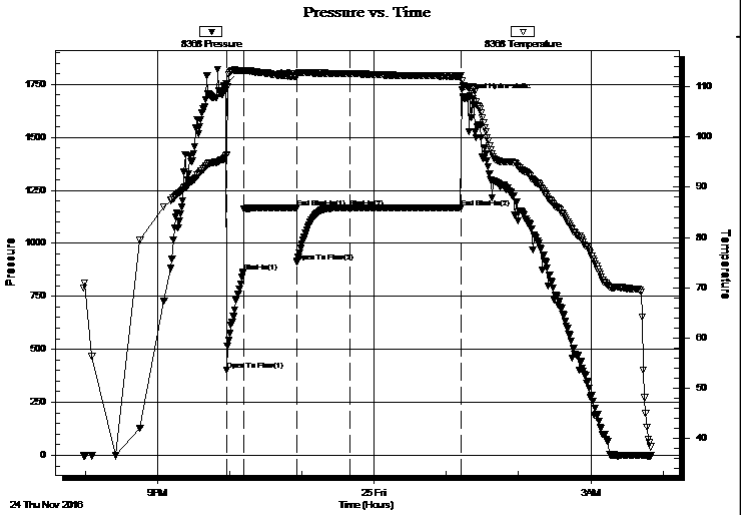
Reference Elevations: 1948.00 ft (KB)
1937.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8368

Press@RunDepth: 1166.83 psig @ ft (KB)
Start Date: 2016.11.24 End Date: 2016.11.25
Start Time: 19:58:15 End Time: 03:50:30

Capacity: 8000.00 psig
Last Calib.: 2016.11.25
Time On Btm: 2016.11.24 @ 21:56:45
Time Off Btm: 2016.11.25 @ 01:14:00

TEST COMMENT: 15-IF-BOB in 10-15 seconds;
45-ISI-Very w eak surface blow ; few bubbles
45-FF-BOB in 20 seconds;
90-FSI-No Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1751.65	96.24	Initial Hydro-static
1	401.97	96.45	Open To Flow (1)
15	865.02	113.13	Shut-In(1)
59	1166.70	112.00	End Shut-In(1)
59	910.94	111.98	Open To Flow (2)
104	1166.83	112.57	Shut-In(2)
196	1167.29	112.08	End Shut-In(2)
198	1685.99	110.15	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2650.00	Salt Water 100% W	35.20

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

Shelby Resources LLC

621 17th STE 1155
Denver Co, 80293+1101

ATTN: Jeremy Schw artz/ Chr

18-18s-14w

Schneider Unit #1-18

Job Ticket: 61864 **DST#: 4**

Test Start: 2016.11.24 @ 19:58:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 21:57:00
Time Test Ended: 03:50:30

Test Type: Conventional Bottom Hole (Reset)
Tester: Spencer J. Staab
Unit No: 84

Interval: 3512.00 ft (KB) To 3520.00 ft (KB) (TVD)
Total Depth: 3520.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

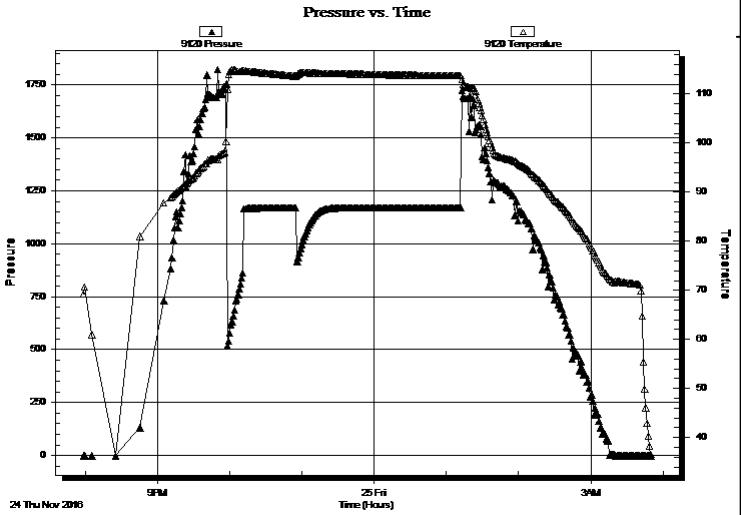
Reference Elevations: 1948.00 ft (KB)
1937.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 9120 **Inside**

Press@RunDepth: psig @ 3512.00 ft (KB)
Start Date: 2016.11.24 End Date: 2016.11.25
Start Time: 19:58:15 End Time: 03:50:30

Capacity: 8000.00 psig
Last Calib.: 2016.11.25
Time On Btm:
Time Off Btm:

TEST COMMENT: 15-IF-BOB in 10-15 seconds;
45-ISI-Very w eak surface blow ; few bubbles
45-FF-BOB in 20 seconds;
90-FSI-No Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
2650.00	Salt Water 100% W	35.20

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Shelby Resources LLC

621 17th STE 1155
Denver Co, 80293+1101

ATTN: Jeremy Schw artz/ Chr

18-18s-14w

Schneider Unit #1-18

Job Ticket: 61864 **DST#: 4**

Test Start: 2016.11.24 @ 19:58:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	9350 ppm
Viscosity:	66.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.20 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	4500.00 ppm				
Filter Cake:	inches				

Recovery Information

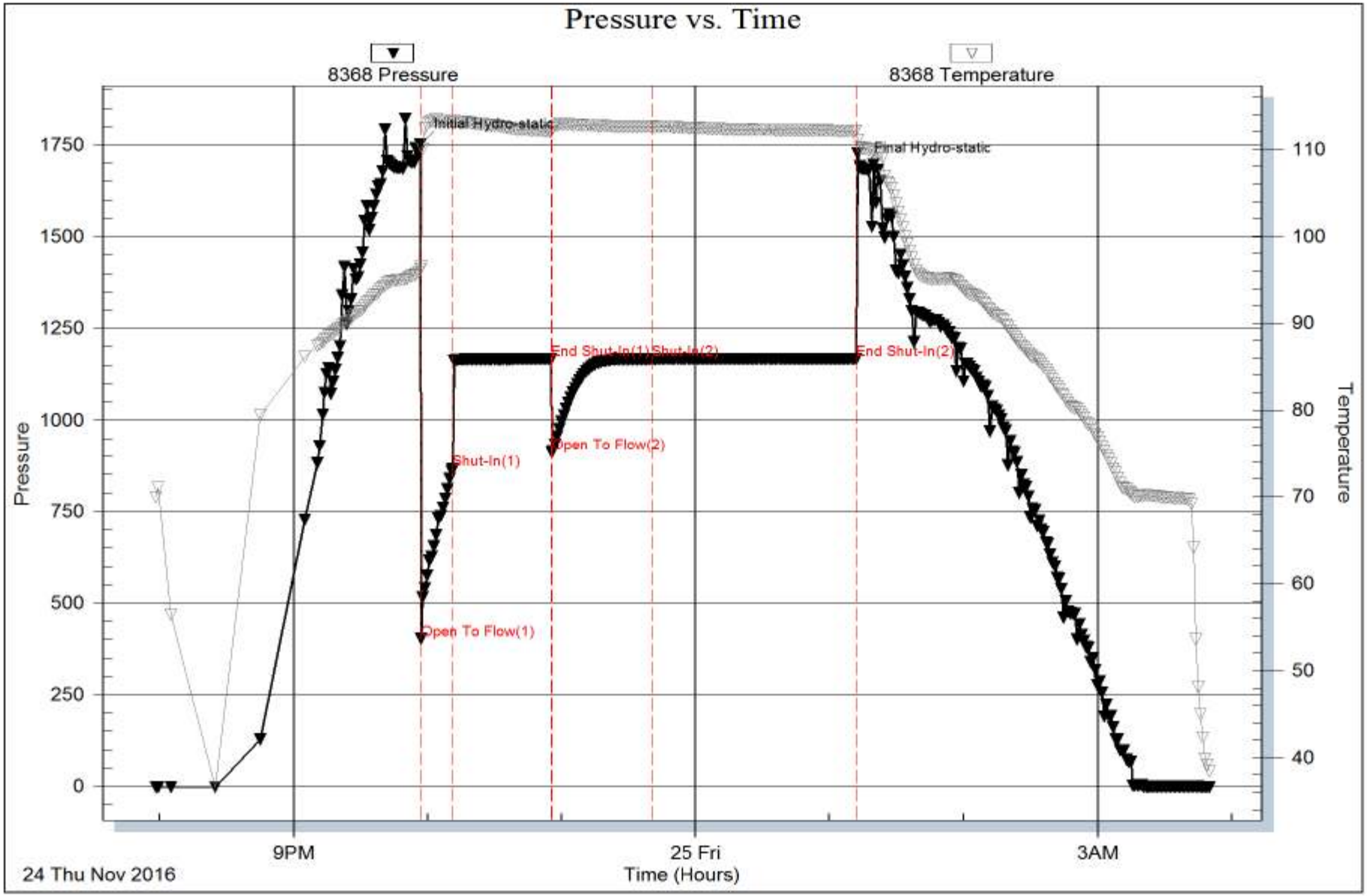
Recovery Table

Length ft	Description	Volume bbl
2650.00	Salt Water 100% W	35.196

Total Length: 2650.00 ft Total Volume: 35.196 bbl

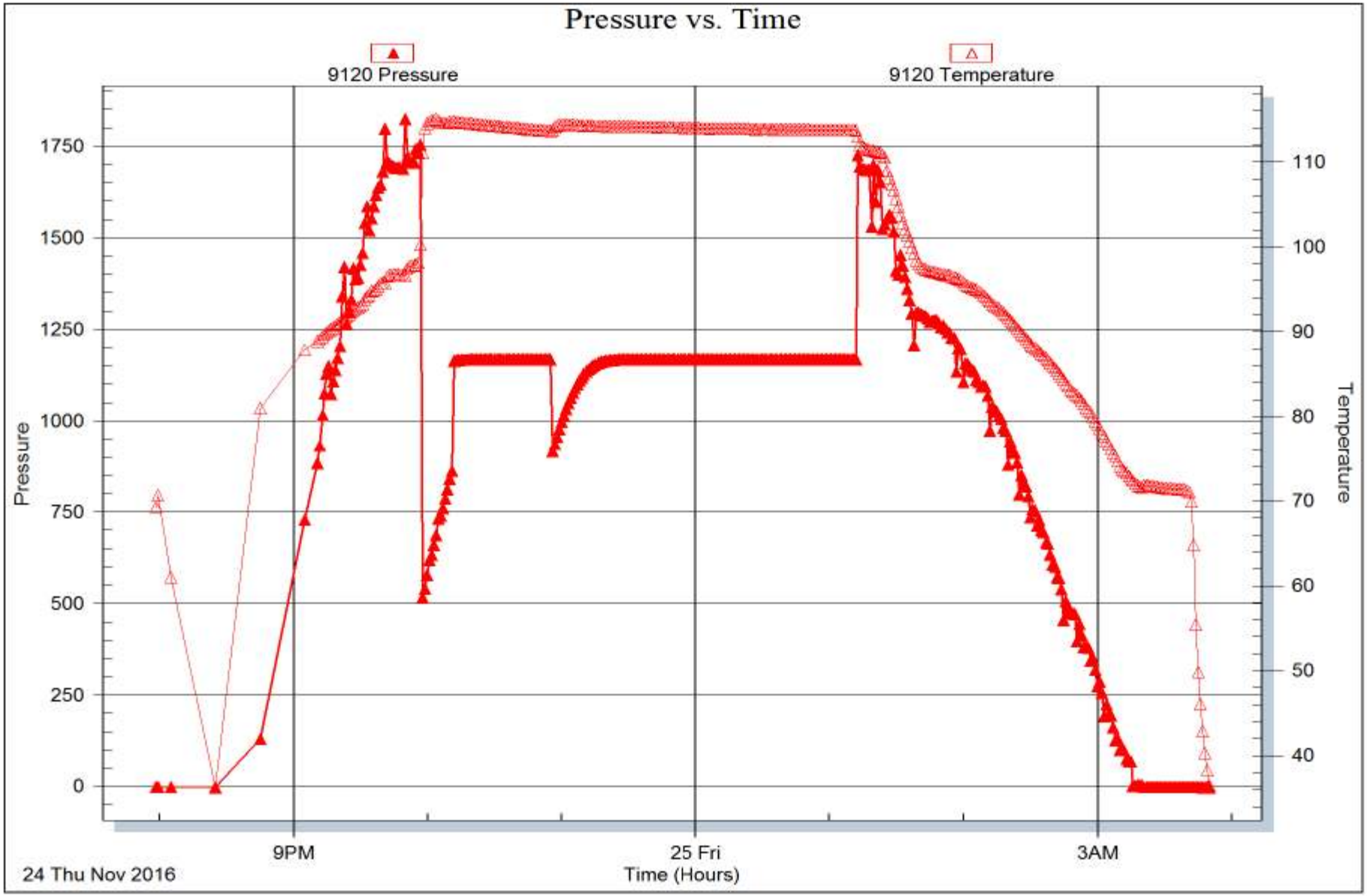
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8368 | Shelby Resources LLC | Schneider Unit #1-18 | DST Test Number: 4



Trilobite Testing, Inc | Ref. No: 61864 | Printed: 2016.11.25 @ 08:10:34

Serial #: 9120 **Inside** Shelby Resources LLC Schneider Unit #1-18 DST Test Number: 4



Trilobite Testing, Inc Ref. No: 61864 Printed: 2016.11.25 @ 08:10:34

BASIC
Energy services, L.P.

TREATMENT REPORT

Customer: Shelby Resources, LLC	Lease No.	Date: 11/26/2016	
Lease: Schneider Unit	Well #: 1-18		
Field Order #: 13937	Station: Pratt, KS	Casing: 5½ Depth: 3591	County: Barton State: KS
Type Job: 2¼2 / 5½ Longstring	Formation: TD-3600	Legal Description: 18-18-14	

PIPE DATA		PERFORATING DATA		FLUID USED	TREATMENT RESUME		
Casing Size: 5½	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP
Depth: 3591	Depth	From	To	Pre Pad	Max		5 Min.
Volume: 87½	Volume	From	To	Pad	Min		10 Min.
Max Press	Max Press	From	To	Frac	Avg		15 Min.
Well Connection	Annulus Vol.	From	To		HHP Used		Annulus Pressure
Plug Depth: 3592	Packer Depth	From	To	Flush: Freshwater	Gas Volume		Total Load

Customer Representative: Chris Goff + Schmidt | Station Manager: Kevin Gorsley | Treater: Orin Franklin

Service Units	92911	84981	19843	84580	19860						
Driver Names	Orin	McGraw	McGraw	Dunn	Dunn						

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
1:00 PM					On Location / Safety Meeting
					5½ 14# Casing set @ 3591'
					T-2, 4, 6, 9, 11 B-1
					~~100~~ 50 sk 60/40 Poz, 2% Gel
					14.4 PPS, 1.27 yield, 5.23 water
					100 sk AA2 Cement, 10% Salt, .5% Fluidloss
					.25 Lb/sk Cellflake, 5 Lb/sk Gilsonite
					15.3 PPS, 1.36 yield, 5.54 water
6:10 PM					Pipe on bottom & break Circulation
7:00 PM	300		11	5	mix 50 sk Scavenger
	300		24	5	mix 100 sk AA2 Cement
					Shut down
					Wash pump & lines & Release Plug
	200		0	6	Start displacement
	600		52	6	Lift Pressure
	800		77	3	Slow Rate
7:30 PM	1500		86	3	Bump Plug
					Float - Held
	100		7	3	Plug Rat hole - 30 sk 60/40 Poz, 2% Gel
	100		5	3	Plug Mouse hole - 20 sk 60/40 Poz, 2% Gel
					Job Complete / Orin & Crew
					Thank You!!!

Taylor Printing, Inc. 620-672-3656

Scale 1:240 Imperial

Well Name:	Schneider Unit #1-18		
Surface Location:	2617' FNL, 704' FEL, Sec. 18-18S-14W		
Bottom Location:			
API:	15-009-26157-0000		
License Number:			
Spud Date:	11/18/2016	Time:	8:15 PM
Region:	Barton County		
Drilling Completed:	11/25/2016	Time:	11:15 AM
Surface Coordinates:			
Bottom Hole Coordinates:			
Ground Elevation:	1937.00ft		
K.B. Elevation:	1948.00ft		
Logged Interval:	2800.00ft	To:	3600.00ft
Total Depth:	3600.00ft		
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:	Schneider Unit #1-18		
Location:	2617' FNL, 704' FEL, Sec. 18-18S-14W		
API:	15-009-26157-0000		
Pool:		Field:	Schneider
State:	Kansas	Country:	USA

LOGGED BY

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

NOTES

The Shelby Resources, LLC Schneider Unit #1-18 was drilled to a total depth of 3600', bottoming in the Arbuckle. A TookeDaq gas detector was employed in the drilling of said well.

4 DST's were conducted throughout the Lansing-Kansas City and Arbuckle Zones. The DST Reports can be found at the bottom of this log. **Note: DST #2 was a misrun and thus an invalid test due to plugging of the test tool**

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

Respectfully Submitted,
Jeremy Schwartz
Geologist

CONTRACTOR

Contractor:	Sterling Drilling Co

Rig #:	5		
Rig Type:	mud rotary		
Spud Date:	11/18/2016	Time:	8:15 PM
TD Date:	11/25/2016	Time:	11:15 AM
Rig Release:		Time:	

ELEVATIONS

K.B. Elevation:	1948.00ft	Ground Elevation:	1937.00ft
K.B. to Ground:	11.00ft		

DATE	DEPTH	ACTIVITY
Monday, November 21, 2016	3120'	Geologist Jeremy Schwartz on location @ 1630hrs, ~3145', drlg ahead through
		Heebner, Toronto, Douglas Shale, Brown Lime, CFS @ 3231', drop survey,
	3231'	strap out, conduct bit trip,
Tuesday, November 22, 2016	3232'	Successful bit trip, resume drlg ahead through Lansing, CFS @ 3283', resume drlg,
	3318'	CFS @ 3318', conduct DST #1 in Lansing "A-G", Successful Test, resume drlg,
Wednesday, November 23, 2016	3410'	CFS @ 3410', resume drlg, CFS @ 3461', conduct DST #2 in Lansing "H-K"
	3461'	MISRUN, Invalid Test due to plugging, trip back in hole, run 1/2 tank mud, CTCH 2hrs
Thursday, November 24, 2016	3510'	resume drlg ahead, CFS @ 3510', conduct DST #3 in the Arbuckle,
		successful test, reversed out 2881' CGO, resue drlg, CFS @ 3520', conduct DST #4
	3520'	in the Arbuckle,
Friday, November 25, 2016	3520'	successful test, drill ahead to TD, TD of 3600' reached @ 1115hrs, CTCH 1.5hrs,
	3600'	drop survey, conduct logging operations, logging operations complete @ 1800hrs
		Geologist Jeremy Schwartz off location @ 1855hrs

					OIL - P&A						OIL - P&A					
					PETRO-MARK EXPLORATION						ICER ADDIS					
					SCHNEIDER #18-1						HELEN SCHNEIDER #1					
	SCHNEIDER UNIT #1-18				NW-NW-SE 18-18S-14W						NE-SW-NE 18-18S-14W					
	KB	1948			KB	1932					KB	1936				
	LOG TOPS		SAMPLE TOPS		COMP. CARD		LOG		SMPL.		COMP. CARD		LOG		SMPL.	
FORMATION	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM	CORR.		CORR.		DEPTH	DATUM	CORR.		CORR.	
ANHYDRITE TOP	944	1004	945	1003	927	1005	-	1	-	2	939	997	+	7	+	6
BASE	970	978	972	976	956	976	+	2	+	0	969	967	+	11	+	9
TOPEKA	2944	-996	2944	-996	2934	-1002	+	6	+	6	2936	-1000	+	4	+	4
QUEEN HILL SHALE	3073	-1125	3072	-1124	3064	-1132	+	7	+	8	3066	-1130	+	5	+	6
HEEBNER SHALE	3157	-1209	3157	-1209	3152	-1220	+	11	+	11	3152	-1216	+	7	+	7
TORONTO	3171	-1223	3172	-1224	3164	-1232	+	9	+	8	3166	-1230	+	7	+	6
DOUGLAS SHALE	3185	-1237	3184	-1236	3180	-1248	+	11	+	12	3180	-1244	+	7	+	8
BROWN LIME	3229	-1281	3229	-1281	3224	-1292	+	11	+	11	3224	-1288	+	7	+	7
LKC	3237	-1289	3237	-1289	3231	-1299	+	10	+	10	3232	-1296	+	7	+	7
LKC G POROSITY	3309	-1361	3309	-1361	3303	-1371	+	10	+	10	3306	-1370	+	9	+	9
MUNCIE CREEK	3366	-1418	3369	-1421	3366	-1434	+	16	+	13	3363	-1427	+	9	+	6
LKC H	3374	-1426	3377	-1429	3374	-1442	+	16	+	13	3372	-1436	+	10	+	7
BKC	3456	-1508	3456	-1508	3454	-1522	+	14	+	14	3454	-1518	+	10	+	10
ARBUCKLE	3495	-1547	3495	-1547	3487	-1555	+	8	+	8	3496	-1560	+	13	+	13
RTD			3600	-1652	3497	-1565			-	87	3502	-1566			-	86
LTD	3602	-1654			3494	-1562	-	92			3500	-1564	-	90		

ROCK TYPES

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

ACCESSORIES

MINERAL
P Pyrite

FOSSIL
◠ Bioclastic or Fragmental
F Fossils < 20%

STRINGER
Chert
Limestone
Sandstone
Shale
red shale

TEXTURE
C Chalky

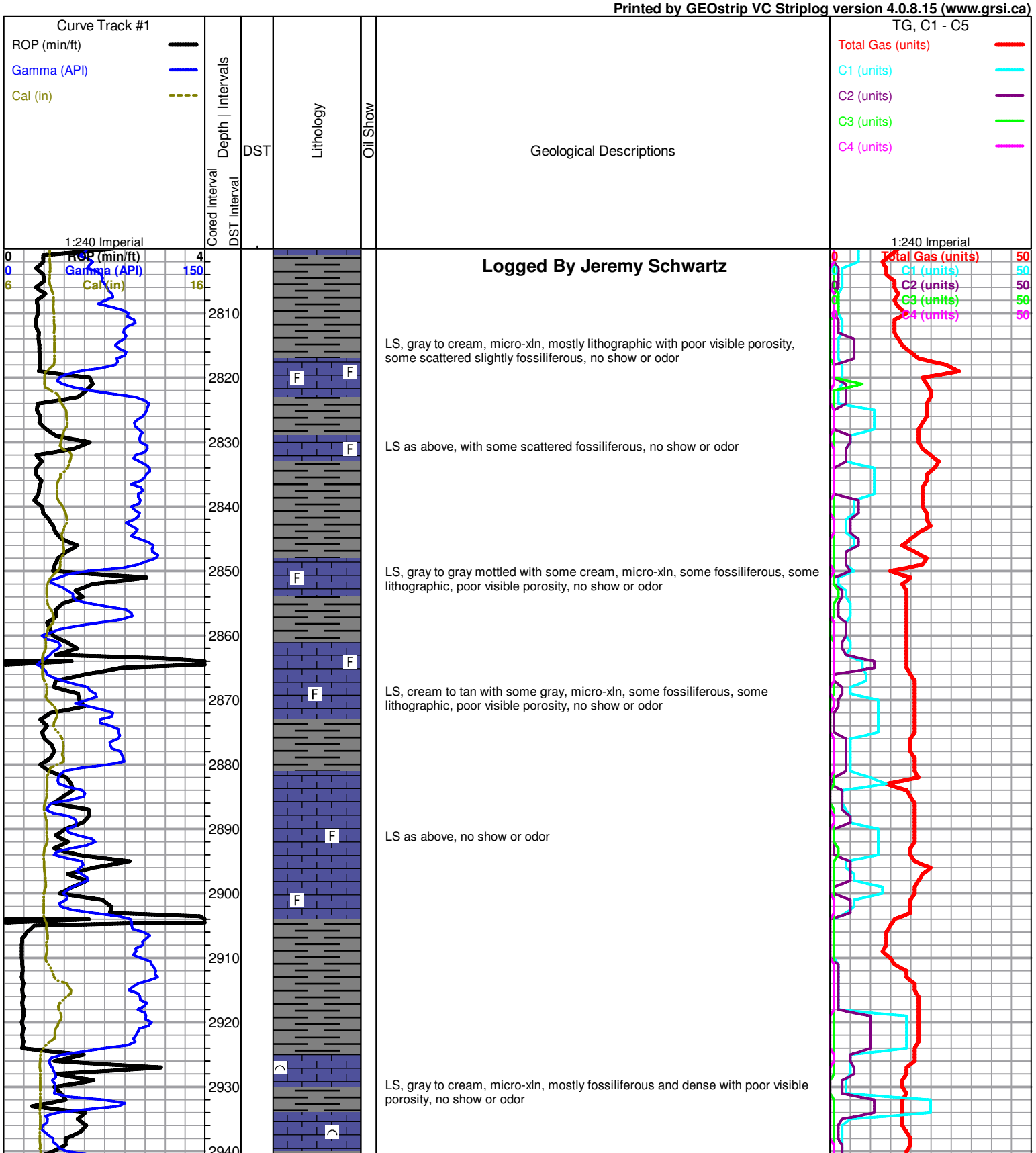
OTHER SYMBOLS

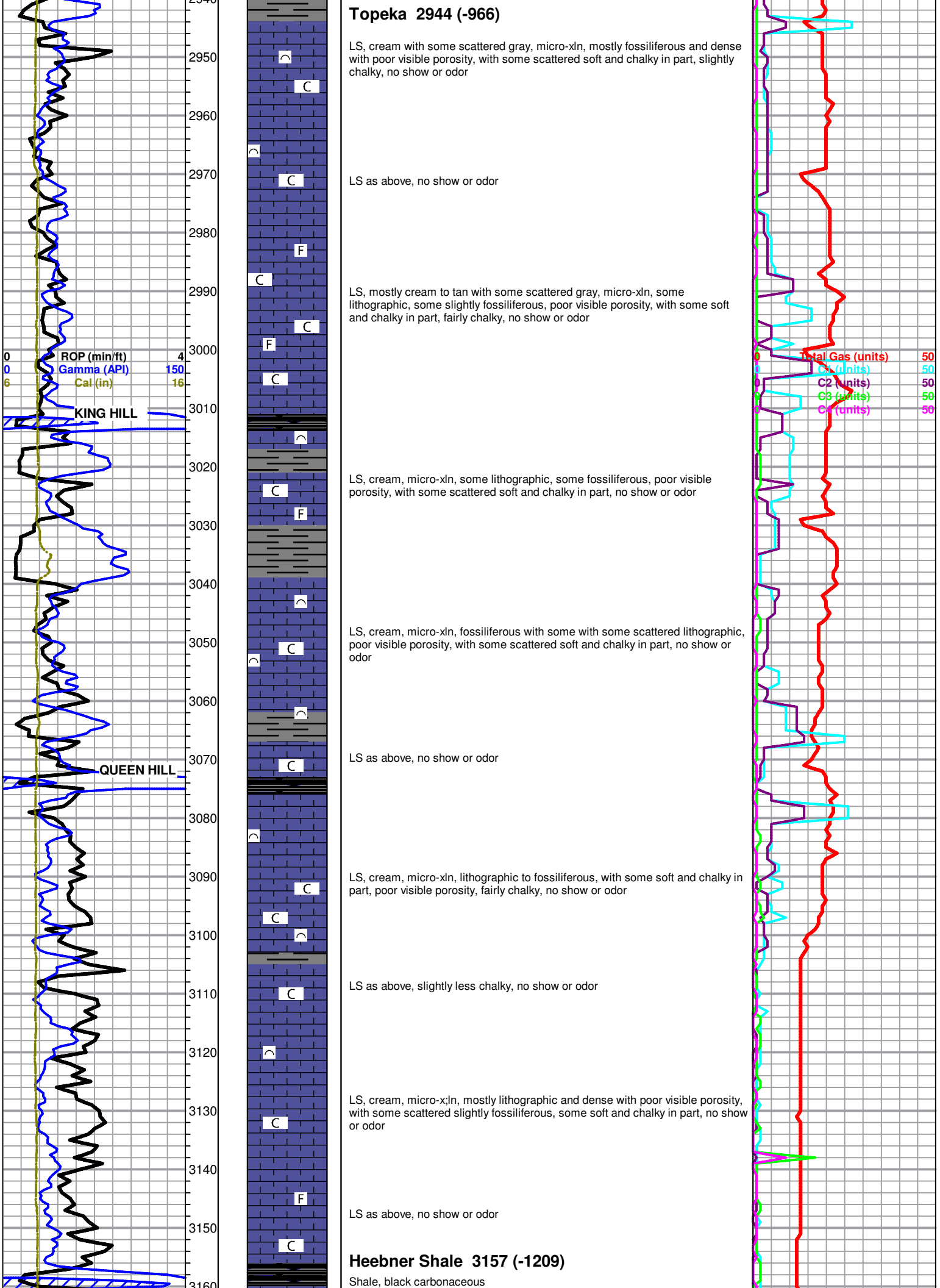
MISC
DR Daily Report

DST
DST Int
DST alt

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

Printed by GEOstrip VC Striplog version 4.0.8.15 (www.grsi.ca)





Topeka 2944 (-966)

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

LS as above, no show or odor

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

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

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

LS as above, no show or odor

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

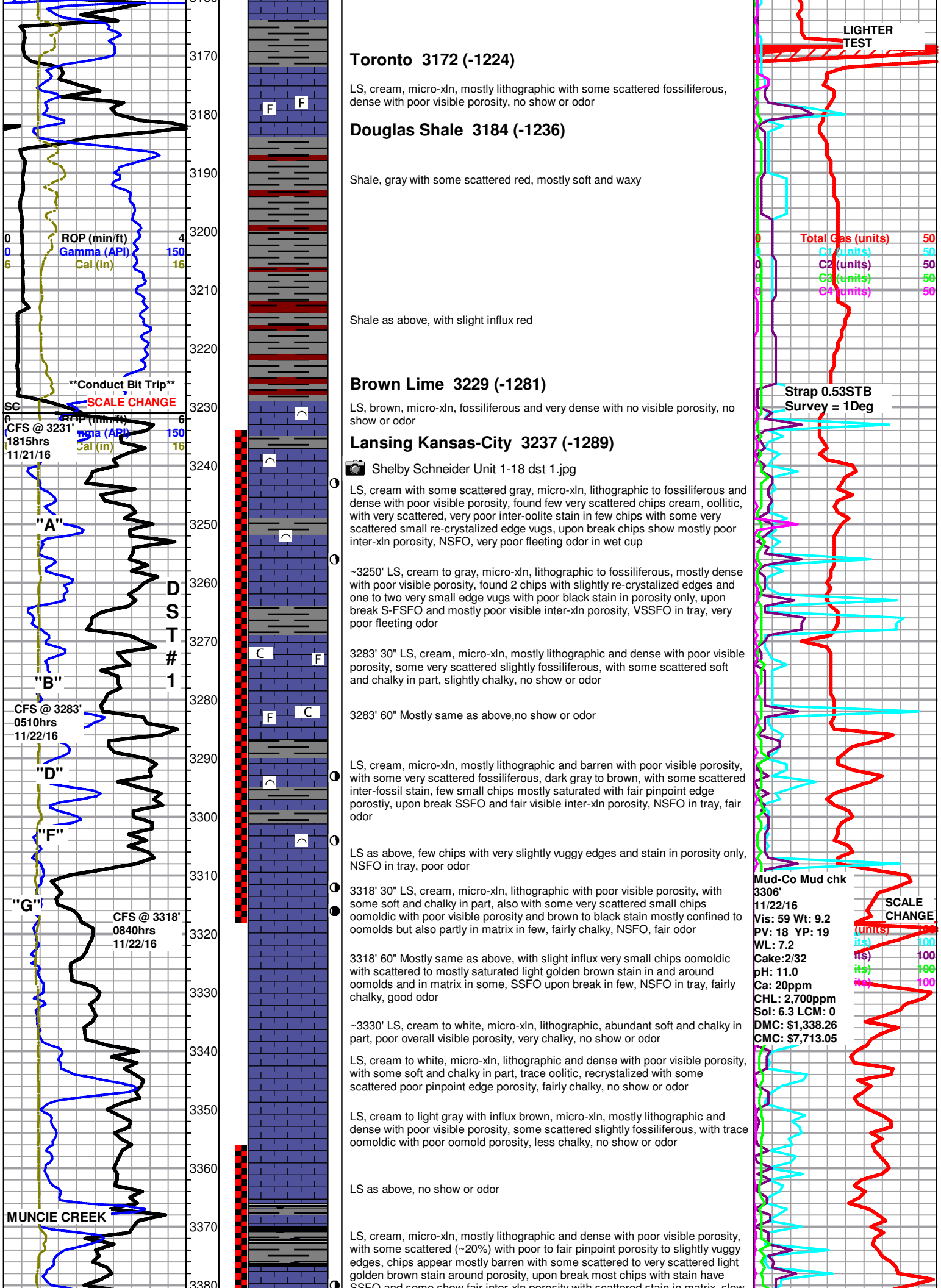
LS as above, slightly less chalky, no show or odor

LS, cream, micro-x;ln, mostly lithographic and dense with poor visible porosity, with some scattered slightly fossiliferous, some soft and chalky in part, no show or odor

LS as above, no show or odor

Heebner Shale 3157 (-1209)

Shale, black carbonaceous



Toronto 3172 (-1224)

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

Douglas Shale 3184 (-1236)

Shale, gray with some scattered red, mostly soft and waxy

Shale as above, with slight influx red

Brown Lime 3229 (-1281)

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

Lansing Kansas-City 3237 (-1289)

Shelby Schneider Unit 1-18 dst 1.jpg

LS, cream with some scattered gray, micro-xln, lithographic to fossiliferous and dense with poor visible porosity, found few very scattered chips cream, oollitic, with very scattered, very poor inter-oolite stain in few chips with some very scattered small re-crystalized edge vugs, upon break chips show mostly poor inter-xln porosity, NSFO, very poor fleeting odor in wet cup

~3250' LS, cream to gray, micro-xln, lithographic to fossiliferous, mostly dense with poor visible porosity, found 2 chips with slightly re-crystalized edges and one to two very small edge vugs with poor black stain in porosity only, upon break S-FSFO and mostly poor visible inter-xln porosity, VSSFO in tray, very poor fleeting odor

3283' 30" LS, cream, micro-xln, mostly lithographic and dense with poor visible porosity, some very scattered slightly fossiliferous, with some scattered soft and chalky in part, slightly chalky, no show or odor

3283' 60" Mostly same as above,no show or odor

LS, cream, micro-xln, mostly lithographic and barren with poor visible porosity, with some very scattered fossiliferous, dark gray to brown, with some scattered inter-fossil stain, few small chips mostly saturated with fair pinpoint edge porostiy, upon break SSFO and fair visible inter-xln porosity, NSFO in tray, fair odor

LS as above, few chips with very slightly vuggy edges and stain in porosity only, NSFO in tray, poor odor

3318' 30" LS, cream, micro-xln, lithographic with poor visible porosity, with some soft and chalky in part, also with some very scattered small chips oomoldic with poor visible porosity and brown to black stain mostly confined to oomolds but also partly in matrix in few, fairly chalky, NSFO, fair odor

3318' 60" Mostly same as above, with slight influx very small chips oomoldic with scattered to mostly saturated light golden brown stain in and around oomolds and in matrix in some, SSFO upon break in few, NSFO in tray, fairly chalky, good odor

~3330' LS, cream to white, micro-xln, lithographic, abundant soft and chalky in part, poor overall visible porosity, very chalky, no show or odor

LS, cream to white, micro-xln, lithographic and dense with poor visible porosity, with some soft and chalky in part, trace oolitic, recrystalized with some scattered poor pinpoint edge porosity, fairly chalky, no show or odor

LS, cream to light gray with influx brown, micro-xln, mostly lithographic and dense with poor visible porosity, some scattered slightly fossiliferous, with trace oomoldic with poor oomold porosity, less chalky, no show or odor

LS as above, no show or odor

LS, cream, micro-xln, mostly lithographic and dense with poor visible porosity, with some scattered (~20%) with poor to fair pinpoint porosity to slightly vuggy edges, chips appear mostly barren with some scattered to very scattered light golden brown stain around porosity, upon break most chips with stain have

"H"

"I"

0 ROP (min/ft)
0 Gamma (API)
6 Cal (in)

DST # 2

CFS @ 3410'
0535hrs
11/23/16

"J"

"K"

CFS @ 3461'
1000hrs
11/23/16

DST # 3

Bit Bounce &
Chatter @ 3502'

CFS @ 3510'
0115hrs
11/24/16

CFS @ 3520'
1725hrs
11/24/16

DST # 4

3390
3400
3410
3420
3430
3440
3450
3460
3470
3480
3490
3500
3510
3520
3530
3540
3550
3560
3570
3580
3590
3600

SSFO and some show fair inter-xln porosity with scattered stain in matrix, slow streaming cut with bright white fluor., trace oomoldic with large oomolds, recrystalized with scattered light golden brown stain in and around oomolds, NSFO in tray, scattered dull yellow fluor., fair odor

3410' 30" LS, cream, micro-xln, mostly lithographic and dense with poor visible porosity, with some very scattered chips with re-crystalized edges and mostly poor to fair pinpoint to very slightly vuggy edge porosity with very scattered stain around porosity only, upon break SSFO, NSFO in tray, no fluor., poor odor

3410' 60" LS as above, NSFO, no fluor., no odor

LS, cream, micro-xln, mostly lithographic and dense with poor visible porosity, with some very scattered oolitic with some scattered fair inter-oolite porosity and mostly poor stain in and around porosity only, SSFO upon break, SSFO in tray, no fluor., fair odor

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

3461' 30" LS, cream with some very scattered pale yellow, micro-xln, lithographic and dense with poor visible porosity, no show, fluor., or odor

BKC 3456 (-1508)

3461' 60" Mostly same as above, with slight influx gray shale with trace green, no show or odor

Shale, gray and red, also with some scattered cream to gray LS with mixed varicolored tan to opaque and red to orange cherts, heavy red wash, no show or odor

Conglomerate as above, also with abundant vf-f sub-rounded to rounded quartz SS grains in bottom of tray, heavy red wash, no show or odor

Conglomerate as above, red wash, no show or odor

Arbuckle 3495 (-1547)

3510' sample, Conglomerate as above, with trace dolomite, white, micro-med-xln, sub-sucrosic to sub-rhombic and dense with poor visible porosity, most appear barren, few chips with very scattered stain, upon break chips have fair show free oil and some show some scattered fair inter-xln porosity and stain, red wash, NSFO in tray, fair odor

3510' 30" Dolomite, white, micro-xn with some very scattered med-xln, mostly sub-sucrosic to sub-rhombic and dense with poor visible porosity, some fairly friable, most appear barren, some with very scattered brown stain, upon break some chips have slight to fair show free oil and show some fair inter-xln porosity and stain, few chips with good show free oil, SSFO in tray, chalky, good odor

3510' 60" Dolomite, mostly same as above, with slight influx med-xln, mostly sub-rhombic with some scattered fair rhombic development, with very scattered poor stain, upon break chips have good show free oil and show some scattered fair inter-xln porosity, slightly chalky, good odor

Shelby Schneider Unit 1-18 dst3.jpg

3520' 30" Dolomite, white, micro-xln with some very scattered med-xln, mostly sub-sucrosic and dense with poor visible porosity, with some very scattered fair visible porosity in few chips, mostly barren, upon break SSFO in some chips, NSFO in tray, fairly chalky, tace pyrite and dolomite with pyrite inclusions, fair odor

3520' 60" Dolomite, white, micro-med xln, mostly sub-rhombic with poor visible porosity, some scattered fair visible porosity, mostly barren, upon break VSSFO in few chips, NSFO in tray, fairly chalky, trace pyrite, fair odor

Shelby Schneider Unit 1-18 dst3.jpg

~3530' Dolomite, white, mostly micro-xln with some very scattered med-xln, sub-sucrosic to sub-rhombic and mostly dense with poor visible porosity, some very scattered fairly friable sub-rhombic with some very scattered inter-xln porosity, barren, fairly chalky, no show or odor

~3540' Dolomite as above, no show or odor

~3550' Dolomite as above, with slight influx med-xln sub-rhombic and fairly friable with some very scattered poor to fair inter-xln porosity, barren, fairly chalky, no odor

~3560' Dolomite, micro-med xln, sub-sucrosic to sub-rhombic and mostly dense with poor visible porosity, with some scattered med-xln sub-rhombic with some scattered poor to fair inter-xln porosity, barren, fairly chalky, no odor

~3570' Dolomite as above, no show or odor

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

Dolomite as above, no show or odor

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

DST # 2 Misrun Due To Plugging

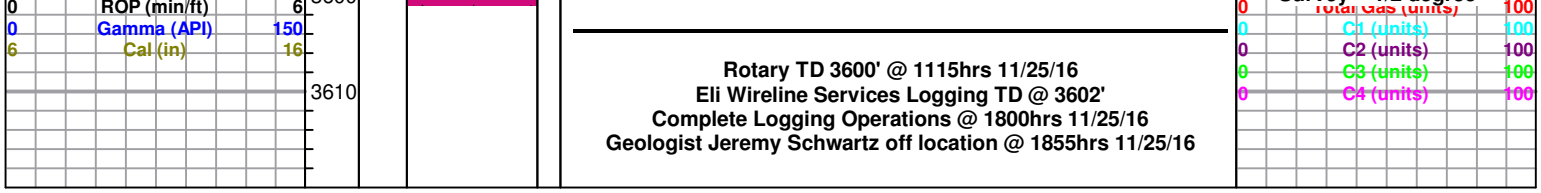
Total Gas (units) 100
C1 (units) 100
C2 (units) 100
C3 (units) 100
C4 (units) 100

**Mud-Co Mud chk 3430'
11/23/16
Vis: 58 Wt: 9.4
PV: 18 YP: 16
WL: 7.8
Cake:2/32
pH: 10.5
Ca: 30ppm
CHL: 4,000ppm
Sol: 7.6 LCM: 0
DMC: $171.10
CMC: $7,884.15**

**Mud-Co Mud chk 3510'
11/24/16
Vis: 66 Wt: 9.45
PV: 24 YP: 19
WL: 7.2
Cake:2/32
pH: 10.0
Ca: 40ppm
CHL: 4,500ppm
Sol: 7.9 LCM: 2
DMC: $1,289.54
CMC: $9,173.69**

**Mud-Co Mud chk 3529'
11/25/16
Vis: 59 Wt: 9.3
PV: 18 YP: 17
WL: 8.8
Cake:2/32
pH: 9.0
Ca: 60ppm
CHL: 6,000ppm
Sol: 6.8 LCM: 1
DMC: $0.00
CMC: $9,173.69**

Survey = 1/2 degree


0
ROP (min/ft)
6
0
Gamma (API)
150
6
Cal (in)
16
3610
0
Total Gas (units)
100
0
C1 (units)
100
0
C2 (units)
100
0
C3 (units)
100
0
C4 (units)
100
Rotary TD 3600' @ 1115hrs 11/25/16
Eli Wireline Services Logging TD @ 3602'
Complete Logging Operations @ 1800hrs 11/25/16
Geologist Jeremy Schwartz off location @ 1855hrs 11/25/16

Shelby Schneider Unit 1-18 dst 1.jpg

DRILL STEM TEST REPORT

Shelby Resources LLC

621 17th STE 1155
Denver Co, 80293+1101

ATTN: Jeremy Schw artz/ Chr

18-18s-14w

Schneider Unit #1-18

Job Ticket: 61861 **DST#: 1**

Test Start: 2016.11.22 @ 12:29:30

GENERAL INFORMATION:

Formation: **LKC 'A-G'**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 15:13:15
Time Test Ended: 19:36:30

Test Type: Conventional Bottom Hole (Initial)
Tester: Spencer J. Staab
Unit No: 84

Interval: 3234.00 ft (KB) To 3318.00 ft (KB) (TVD)
Total Depth: 3318.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

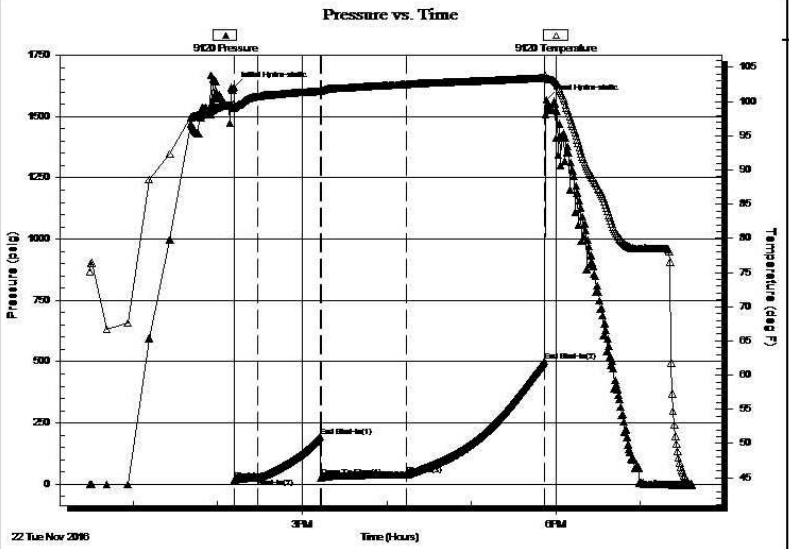
Reference Elevations: 1948.00 ft (KB)
1937.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 9120 **Outside**

Press@RunDepth: 40.07 psig @ 3235.00 ft (KB)
Start Date: 2016.11.22 End Date: 2016.11.22
Start Time: 12:29:30 End Time: 19:36:30

Capacity: 8000.00 psig
Last Calib.: 2016.11.22
Time On Btm: 2016.11.22 @ 14:11:30
Time Off Btm: 2016.11.22 @ 17:53:15

TEST COMMENT: 15-IF-Very Weak Surface Blow ; Built to 1 inch
45-ISI-No Blow Back
60-FF-Fair Blow ; Built to 6 inches
90-FSI-No Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1620.95	99.58	Initial Hydro-static
1	18.46	99.06	Shut-In(1)
17	27.57	100.72	Shut-In(2)
62	194.20	101.51	End Shut-In(1)
62	27.73	101.51	Open To Flow (1)
123	40.07	102.53	Shut-In(3)
221	501.12	103.45	End Shut-In(2)
222	1569.73	103.53	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
61.00	OCM 15% O 85% M	0.30

Gas Rates

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

Shelby Schneider Unit 1-18 dst3.jpg

DRILL STEM TEST REPORT

Shelby Resources LLC

621 17th STE 1155
Denver Co, 80293+1101

ATTN: Jeremy Schwartz/ Chr

18-18s-14w

Schneider Unit #1-18

Job Ticket: 61863 **DST#: 3**

Test Start: 2016.11.24 @ 04:02:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 05:46:15
Time Test Ended: 12:35:45

Test Type: Conventional Bottom Hole (Reset)
Tester: Spencer J. Staab
Unit No: 84

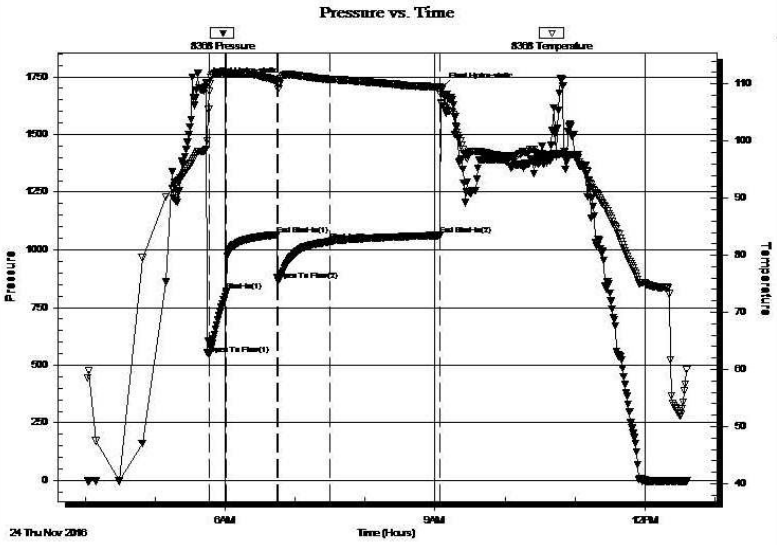
Interval: 3454.00 ft (KB) To 3510.00 ft (KB) (TVD)
Total Depth: 3318.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1948.00 ft (KB)
1937.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8368 **Inside**
Press@RunDepth: 1037.57 psig @ 3455.00 ft (KB)
Start Date: 2016.11.24 End Date: 2016.11.24
Start Time: 04:02:15 End Time: 12:35:45

Capacity: 8000.00 psig
Last Calib.: 2016.11.24
Time On Btm: 2016.11.24 @ 05:44:00
Time Off Btm: 2016.11.24 @ 09:05:30

TEST COMMENT: 15-IF-BOB in 20 seconds; gas to surface
45-ISI-BOB in 10 minutes
45-FF-BOB instantaneously; gas to surface
90-FSI-Fair Blow ; Built to 4 inches



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1726.47	98.59	Initial Hydro-static
3	546.16	108.67	Open To Flow (1)
18	819.33	111.81	Shut-In(1)
61	1065.14	110.54	End Shut-In(1)
62	865.22	109.77	Open To Flow (2)
106	1037.57	110.76	Shut-In(2)
200	1062.24	109.44	End Shut-In(2)
202	1699.67	106.73	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2881.00	CGO 10%G 90% O	38.44

* Recovery from multiple tests

Gas Rates

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

Shelby Schneider Unit 1-18 dst3.jpg

DRILL STEM TEST REPORT

Shelby Resources LLC

621 17th STE 1155
Denver Co, 80293+1101

ATTN: Jeremy Schwartz/ Chr

18-18s-14w

Schneider Unit #1-18

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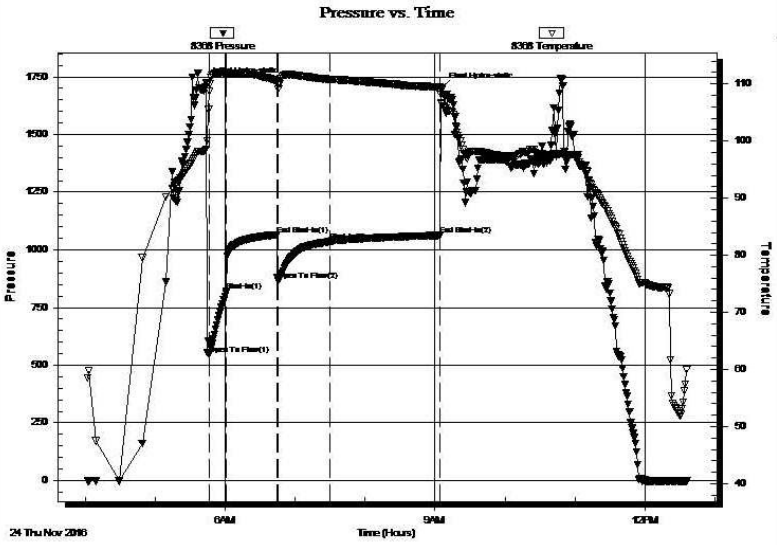

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61	1065.14	110.54	End Shut-In(1)
62	865.22	109.77	Open To Flow (2)
106	1037.57	110.76	Shut-In(2)
200	1062.24	109.44	End Shut-In(2)
202	1699.67	106.73	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2881.00	CGO 10%G 90% O	38.44

* Recovery from multiple tests

Gas Rates

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

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025 Home Office P.O. Box 32 Russell, KS 67665 No. 3103

Cell 785-324-1041

Date	Sec.	Twp.	Range	County	State	On Location	Finish
11-19-16	18	18	14	Barton	Ks		6:00 pm

Location Boyd 2S to 90th 3W to 70th N 1/2 S

Lease Schneider Well No. 1-18 Owner

Contractor Sterling Drlg

Type Job Long 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. 970

Csg. 8 5/8 Depth 968

Charge To Shelby Resources

Street

Tbg. Size Depth

City State

Tool Depth 23

Cement Left in Csg. 23" Shoe Joint ~~59 3/4~~

The above was done to satisfaction and supervision of owner agent or contractor.

Cement Amount Ordered 350 60/40 3%cc 2% gel

Meas Line Displace 59 3/4

EQUIPMENT			
Pumptrk 18	No.	Cementer	Doug
		Helper	~~Dave~~ Tim
Bulktrk 4	No.	Driver	
		Driver	
Bulktrk PU	No.	Driver	Dave
		Driver	

JOB SERVICES & REMARKS

Remarks:

Ran 8 5/8 to TD Circ for 15 min. Mixed 350 sk displaced wt plug Cement in cellar

Thanks

Common	210
Poz. Mix	140
Gel.	7
Calcium	14
Hulls	
Salt	
Flowseal	
Kol-Seal	
Mud CLR 48	
CFL-117 or CD110 CAF 38	
Sand	
Handling	371
Mileage	

FLOAT EQUIPMENT

Guide Shoe	1
Centralizer	1 8 5/8 Rubber plug
Baskets	
AFU Inserts	Baffle plate
Float Shoe	
Latch Down	

Pumptrk Charge	Long Surface
Mileage	14
Tax	
Discount	
Total Charge	

X Signature Tony L. Schneider

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025 Home Office P.O. Box 32 Russell, KS 67665 No. 3043

Cell 785-324-1041

Date 12-8-16	Sec.	Twp.	Range	County Barton	State KS	On Location	Finish 4:45 PM

Location 281 & 4 Jct, 3S on Boyd unit

Lease Schneider Well No. 1-18

Owner Rd, 3W, ½S, ¼W

Contractor D S & W well Service

Type Job Retainer Squeeze

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 T.D.

Charge To Shelby Resources

Csg. 5½" Depth

Street

Tbg. Size 2" Depth 3512'

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 50 Common

Meas Line Displace 13 ¼ BLS

EQUIPMENT

Pumptrk 18 No. Cementer / Helper Dave

Bulktrk 3 No. Driver / Driver Stan

~~Bulktrk~~ p.u. No. Driver / Driver Rick

JOB SERVICES & REMARKS

Remarks:

Rat Hole mix 50 sk Common

Mouse Hole sting into Retainer

Centralizers & Displaced w/H2O

Baskets shut down sting out

D/V or Port Collar & wash Clean

Max pressure 2250 #

Common	50
Poz. Mix	
Gel.	
Calcium	
Hulls	
Salt	
Flowseal	
Kol-Seal	
Mud CLR 48	
CFL-117 or CD110 CAF 38	
Sand	
Handling	50
Mileage	
FLOAT EQUIPMENT	
Guide Shoe	
Centralizer	
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	
Pumptrk Charge	Squeeze
Mileage	14
Tax	
Discount	
Total Charge	

X Signature