KOLAR Document ID: 1317141

CORRECTION #1

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 # 31548
Name: Discovery Drilling
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 #:

07/08/2016 Spud Date or Recompletion Date
07/14/2016 Date Reached TD
07/14/2016 Completion Date or Recompletion Date

API No.: 15-009-26144-00-00
Spot Description:
NE - SW - SE - NE Sec. 16 Twp. 18 S. R. 14 ☐ East ☑ West
2214 Feet from ☑ North / ☐ South Line of Section
941 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: DALE Well #: 1-16
Field Name:
Producing Formation: N/A
Elevation: Ground: 1940 Kelly Bushing: 1948
Total Vertical Depth: 3500 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 905 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: 52000 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 #3-24 License #: 31725
Quarter SW Sec. 24 Twp. 17 S. R. 14 ☐ East ☑ West
County: Barton Permit #: D31557.0

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: 07/29/2016
☑ **Confidential Release Date:** 07/29/2018
☑ **Wireline Log Received** ☐ **Drill Stem Tests Received**
☑ **Geologist Report / Mud Logs Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** Karen Ritter **Date:** 09/16/2016

CORRECTION #1

Page Two

KOLAR Document ID: 1317141

Operator Name: Shelby Resources LLC Lease Name: DALE Well #: 1-16

Sec. 16 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: Attached Top: Attached Datum: Attached

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	24	905	60/40 Poz	350	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	-			
	-			

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: ☐ Flowing ☐ Pumping ☐ Gas Lift ☐ Other *(Explain)*

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

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: Set At: 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	DALE 1-16
Doc ID	1317141

All Electric Logs Run

Dual Induction
Compensated Neutron
Micro
Sonic

Form	ACO1 - Well Completion
Operator	Shelby Resources LLC
Well Name	DALE 1-16
Doc ID	1317141

Tops

Name	Top	Datum
Topeka	2907	-959
Heebner	3124	-1176
L-KC	3208	-1260
Muncie Creek	3332	-1384
Stark Shale	3397	-1449
BKC	3409	-1461
Arbuckle	3492	-1544
RTD	3500	-1552

Form	ACO1 - Well Completion
Operator	Shelby Resources LLC
Well Name	DALE 1-16
Doc ID	1317141

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	24	905	60/40 Poz	350	2% gel / 3% cc

Summary of Changes

Lease Name and Number: DALE 1-16

API/Permit #: 15-009-26144-00-00

Doc ID: 1317141

Correction Number: 1

Approved By: Karen Ritter

Field Name	Previous Value	New Value
Approved Date	07/29/2016	09/16/2016
Save Link	../../kcc/detail/operatorEditDetail.cfm?docID=1313084	../../kcc/detail/operatorEditDetail.cfm?docID=1317141
Spud Or Recompletion Date	07/07/2016	07/08/2016

Confidentiality Requested:
☑ Yes ☐ No

CONFIDENTIAL

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1313084

Form ACO-1
August 2013
Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

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Name: Shelby Resources LLC
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Address 2:
City: DENVER State: CO Zip: 80293 + 1101
Contact Person: Chris Gottschalk
Phone: (785) 623-1524
CONTRACTOR: License # 31548
Name: Discovery Drilling
Wellsite Geologist: Jeremy Schwartz
Purchaser:

Designate Type of Completion:
☑ New Well ☐ Re-Entry ☐ Workover

☐ Oil ☐ WSW ☐ SWD ☐ SIOW
☐ Gas ☑ D&A ☐ ENHR ☐ SIGW
☐ OG ☐ GSW ☐ Temp. Abd.
☐ 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 ENHR ☐ Conv. to SWD
☐ Plug Back ☐ Conv. to GSW ☐ Conv. to Producer

☐ Commingled Permit #:
☐ Dual Completion Permit #:
☐ SWD Permit #:
☐ ENHR Permit #:
☐ GSW Permit #:

07/07/2016	07/14/2016	07/14/2016
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-009-26144-00-00
Spot Description:
NE - SW - SE - NE Sec. 16 Twp. 18 S. R. 14 ☐ East ☑ West
2214 Feet from ☑ North / ☐ South Line of Section
941 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: DALE Well #: 1-16
Field Name:
Producing Formation: N/A
Elevation: Ground: 1940 Kelly Bushing: 1948
Total Vertical Depth: 3500 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 905 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: 52000 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 #3-24 License #: 31725
Quarter SW Sec. 24 Twp. 17 S. R. 14 ☐ East ☑ West
County: Barton Permit #: D31557.0

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: 07/29/2016
☐ **Confidential Release Date:**
☑ **Wireline Log Received**
☑ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ I ☐ II ☐ III **Approved by:** Karen Ritter **Date:** 07/29/2016

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. 1729

Date	Sec.	Twp.	Range	County	State	On Location	Finish
7-9-16	16	18	14	Barton	KS		6 PM

Location 3 W + 4 S + 3 S + 90th Rd, 1 W

Lease Dale Well No. 1-16 Owner W/S

Contractor Discovery 3

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. 905'

Csg. 8 5/8 Depth 905'

Charge To Shelby Resources

Tbg. Size Depth

Street

Tool Depth

City State

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

Cement Left in Csg. 31.71' Shoe Joint 31.71'

Cement Amount Ordered 350 60/40 3%cc 2% Gel 1/4# Flo-seal

Meas Line Displace 55 1/2

EQUIPMENT

Pumptrk 18 No. Cementer / Helper Kirk

Bulktrk No. Driver / Driver Doug

Bulktrk P.U. No. Driver / Driver Brett

JOB SERVICES & REMARKS

Remarks: Cement did Circulate

Rat Hole

Mouse Hole

Centralizers

Baskets

D/V or Port Collar

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

FLOAT EQUIPMENT

Guide Shoe	Aluminum Shoe
Centralizer	Baffle plate 1
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	
Pumptrk Charge	
Mileage	
Tax	
Discount	
Total Charge	

X Signature Mike Loucks

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025 Home Office P.O. Box 32 Russell, KS 67665 No. 1983

Cell 785-324-1041

Date	Sec.	Twp.	Range	County	State	On Location	Finish
7-14-16	16	18	14	Barton	KS		10:45pm

Location 3E 2S 1W 1/2S 1/2W into

Lease Dale Well No. 1-16

Owner

Contractor Discovery #3

Type Job Rotary Plug

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 7 7/8 T.D. 3500

Charge To Shelby Resources

Csg. Depth

Street

Tbg. Size Depth

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 230 60/40 4% Gel 1/4# Flo

Meas Line Displace

EQUIPMENT

Pumptrk 20 No. Cementer / Helper Craig

Bulktrk No. Driver / Driver

Bulktrk 3 No. Driver Brett / Driver

JOB SERVICES & REMARKS

Remarks:

Rat Hole 30SK

Mouse Hole 15SK

Centralizers

Baskets

D/V or Port Collar

1st 3472 575SK

2nd 900 125SK

3rd 40 10SK

Common	
Poz. Mix	
Gel.	
Calcium	
Hulls	
Salt	
Flowseal	
Kol-Seal	
Mud CLR 48	
CFL-117 or CD110 CAF 38	
Sand	
Handling	
Mileage	
FLOAT EQUIPMENT	
Guide Shoe	
Centralizer 8 5/8 Dry Hole Plug	
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	
Pumptrk Charge	
Mileage	
Tax	
Discount	
Total Charge	

X Signature

DRILL STEM TEST REPORT

Shelby Resources LLC

621 17th st
STE 1155
Denver Co 80293-1155
ATTN: Chris Gottschalk Jer

16-18s-14w Barton

Dale #1-16

Job Ticket: 65474 **DST#: 1**

Test Start: 2016.07.13 @ 14:30:44

GENERAL INFORMATION:

Formation: **LKC H-K**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 16:36:54
Time Test Ended: 22:10:53

Test Type: Conventional Bottom Hole (Initial)
Tester: Ray Schw ager
Unit No: 77

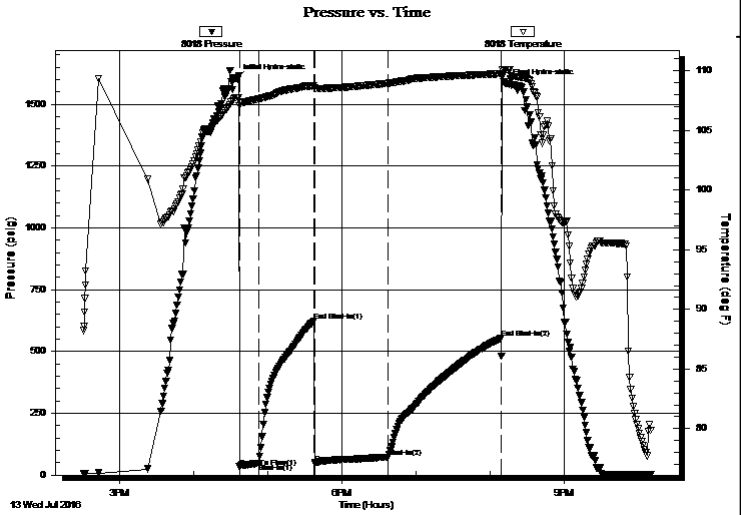
Interval: 3320.00 ft (KB) To 3415.00 ft (KB) (TVD)
Total Depth: 3415.00 ft (KB) (TVD)
Hole Diameter: 7.85 inches Hole Condition: Fair

Reference Elevations: 1948.00 ft (KB)
1940.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8018 **Inside**
Press@RunDepth: 73.54 psig @ 3322.00 ft (KB)
Start Date: 2016.07.13 End Date: 2016.07.13
Start Time: 14:30:44 End Time: 22:10:53

Capacity: 8000.00 psig
Last Calib.: 2016.07.13
Time On Btm: 2016.07.13 @ 16:34:24
Time Off Btm: 2016.07.13 @ 20:13:08

TEST COMMENT: 15-IFP-w k to a gd bl 1/2"to 6 1/2"bl
45-ISIP-no bl
60-FFP-w k to a strg bl in 40 min
90-FSIP-no bl



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1604.17	107.72	Initial Hydro-static
3	33.33	107.05	Open To Flow (1)
18	48.50	107.61	Shut-In(1)
64	625.16	108.74	End Shut-In(1)
64	49.68	108.55	Open To Flow (2)
124	73.54	108.94	Shut-In(2)
215	553.96	109.74	End Shut-In(2)
219	1583.69	110.10	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	190' GIP	0.00
62.00	HO&GCM 5%G25%O70%M	0.60
55.00	O&GCM 20%G10%O70%M	0.77

Gas Rates

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

DRILL STEM TEST REPORT

Shelby Resources LLC

621 17th st
STE 1155
Denver Co 80293-1155
ATTN: Chris Gottschalk Jer

16-18s-14w Barton

Dale #1-16

Job Ticket: 65474 **DST#: 1**

Test Start: 2016.07.13 @ 14:30:44

GENERAL INFORMATION:

Formation: **LKC H-K**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 16:36:54
Time Test Ended: 22:10:53

Test Type: Conventional Bottom Hole (Initial)
Tester: Ray Schw ager
Unit No: 77

Interval: 3320.00 ft (KB) To 3415.00 ft (KB) (TVD)
Total Depth: 3415.00 ft (KB) (TVD)
Hole Diameter: 7.85 inches Hole Condition: Fair

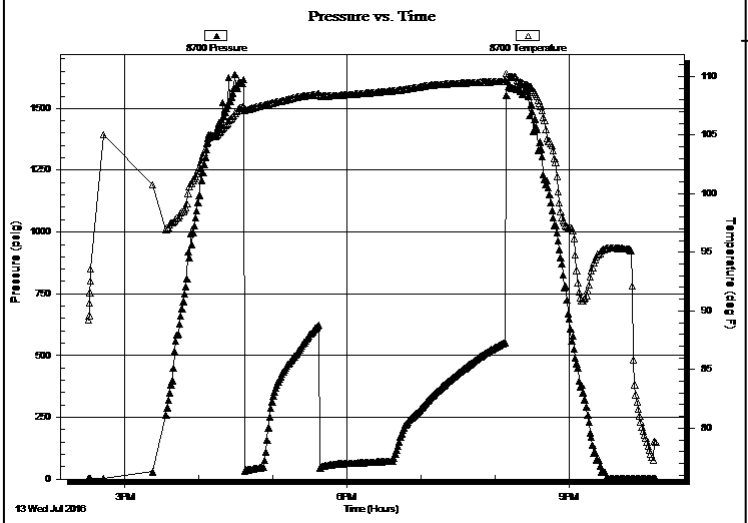
Reference Elevations: 1948.00 ft (KB)
1940.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8700 **Outside**

Press@RunDepth: psig @ 3322.00 ft (KB)
Start Date: 2016.07.13 End Date: 2016.07.13
Start Time: 14:30:31 End Time: 22:10:25

Capacity: 8000.00 psig
Last Calib.: 2016.07.13
Time On Btm:
Time Off Btm:

TEST COMMENT: 15-IFP-w k to a gd bl 1/2"to 6 1/2"bl
45-ISIP-no bl
60-FFP-w k to a strg bl in 40 min
90-FSIP-no bl



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
0.00	190' GIP	0.00
62.00	HO&GCM 5%G25%O70%M	0.60
55.00	O&GCM 20%G10%O70%M	0.77

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Shelby Resources LLC

621 17th st
STE 1155
Denver Co 80293-1155
ATTN: Chris Gottschalk Jer

16-18s-14w Barton

Dale #1-16

Job Ticket: 65474 **DST#: 1**

Test Start: 2016.07.13 @ 14:30:44

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:	51.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.75 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3000.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

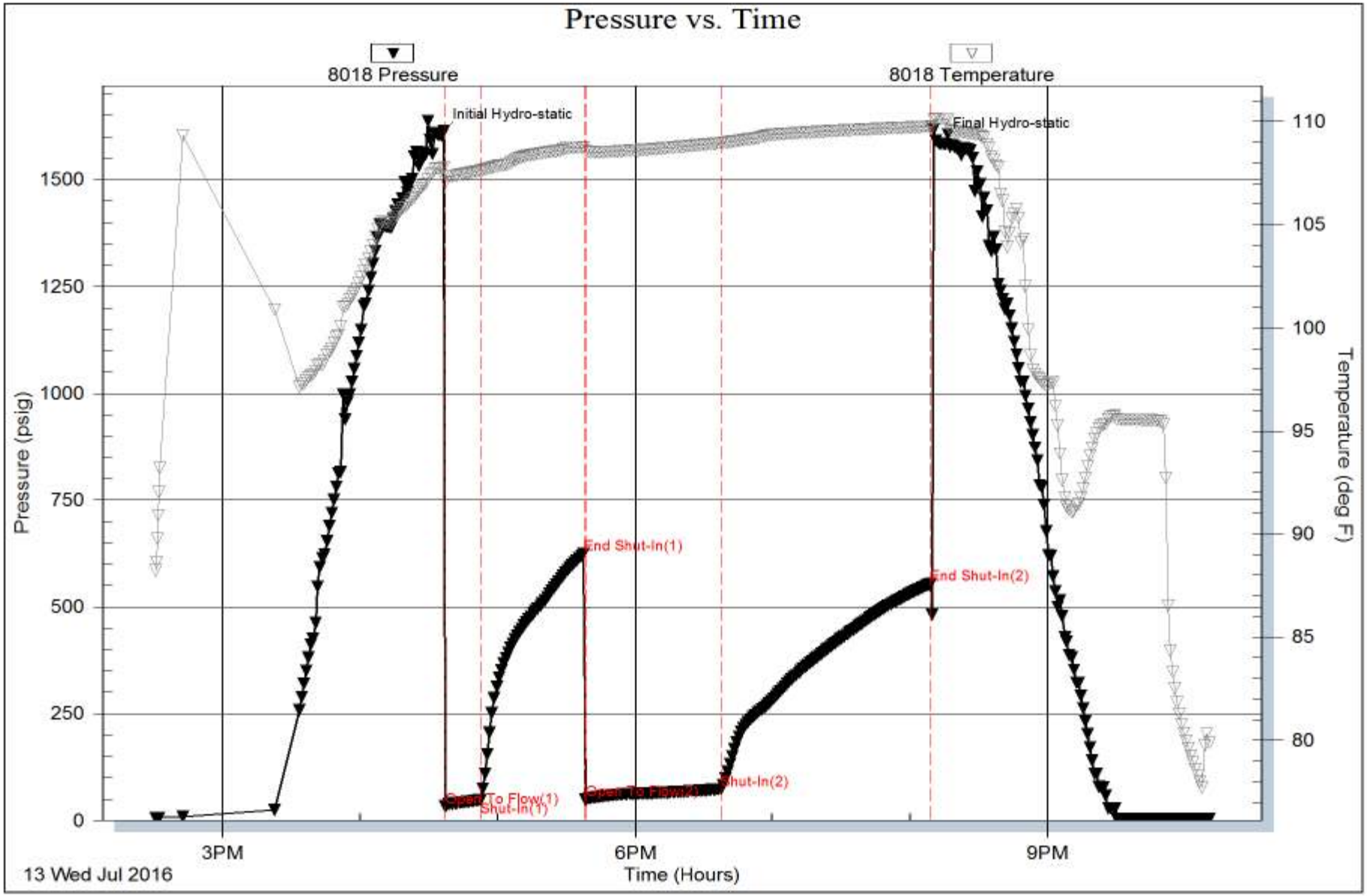
Recovery Table

Length ft	Description	Volume bbl
0.00	190' GIP	0.000
62.00	HO&GCM 5%G25%O70%M	0.596
55.00	O&GCM 20%G10%O70%M	0.772

Total Length: 117.00 ft Total Volume: 1.368 bbl

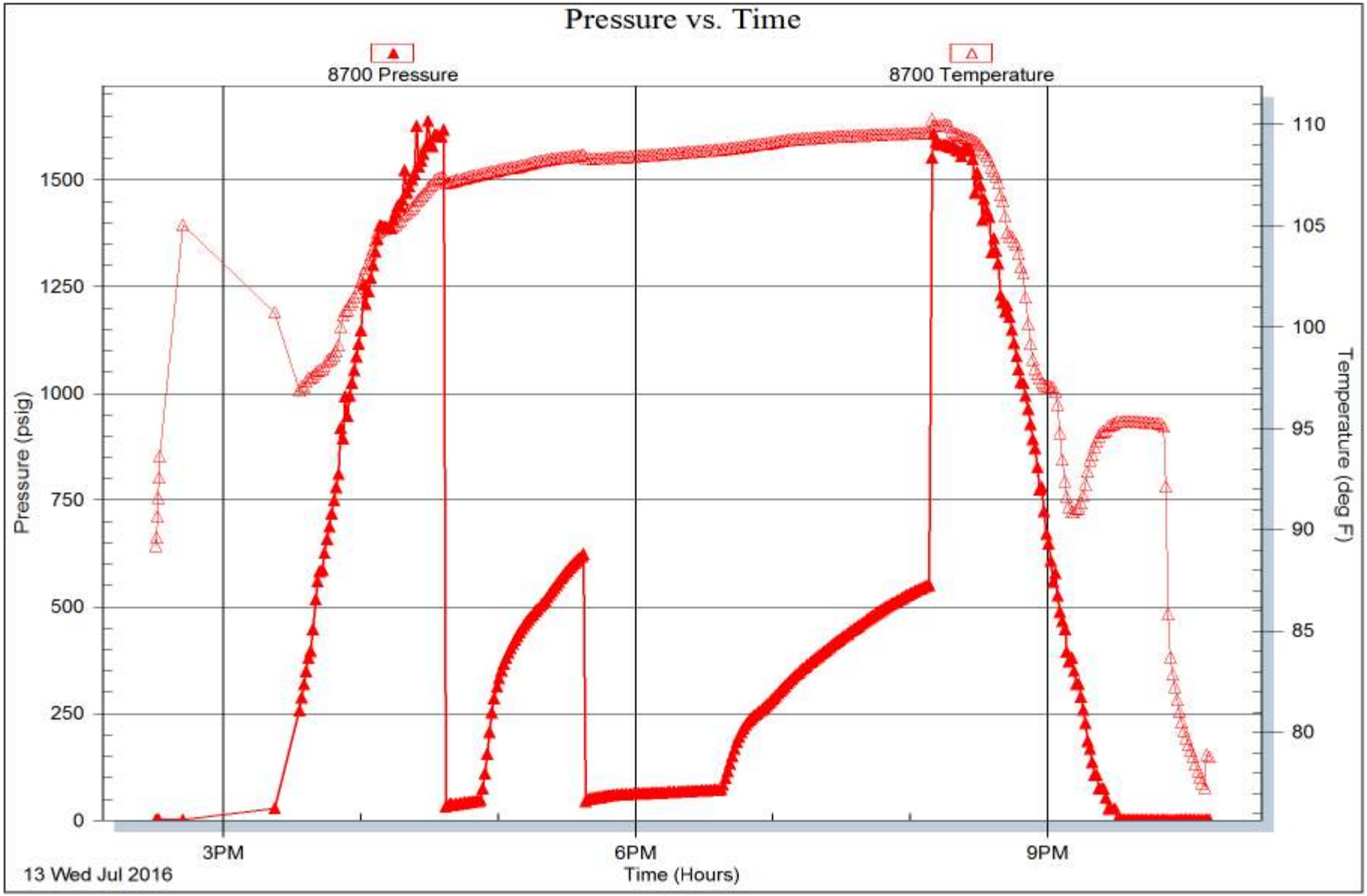
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8018 **Inside** Shelby Resources LLC Dale #1-16 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 65474 Printed: 2016.07.14 @ 04:05:25

Serial #: 8700 **Outside** Shelby Resources LLC Dale #1-16 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 65474 Printed: 2016.07.14 @ 04:05:25

Scale 1:240 Imperial

Well Name:	Dale #1-16		
Surface Location:	2214' FNL _941' FEL		
Bottom Location:			
API:	15-009-26144-00-00		
License Number:			
Spud Date:	7/8/2016	Time:	3:00 PM
Region:	Barton County		
Drilling Completed:	7/14/2016	Time:	8:15 AM
Surface Coordinates:			
Bottom Hole Coordinates:			
Ground Elevation:	1940.00ft		
K.B. Elevation:	1948.00ft		
Logged Interval:	2800.00ft	To:	3500.00ft
Total Depth:	3500.00ft		
Formation:	Lansing Kansas-City		
Drilling Fluid Type:	Chemical/Fresh Water Gel		

OPERATOR

Company:	Shelby Resources, LLC		
Address:	621 17th ST, STE 1155 Denver, CO 80293		
Contact Geologist:	Jeff Zoller		
Contact Phone Nbr:	620-786-0807		
Well Name:	Dale #1-16		
Location:	2214' FNL _941' FEL		
API:	15-009-26144-00-00		
Pool:		Field:	Wildcat
State:	KS	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 Dale #1-16 was drilled to a total depth of 3500', bottoming in the Arbuckle.

1 DST was conducted in the Lansing Kansas-City zone. The DST report can be found at the bottom of this log.

Due to negative DST results, sample shows, gas kicks, 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 furthur review at the Kansas Geological Society Well Sample Library, located in Wichita, KS.

Respectfully Submitted,
Jeremy Schwartz
Geologist

CONTRACTOR

Contractor:	Discovery Drilling		
Rig #:	3		
Rig Type:	mud rotary		
Spud Date:	7/8/2016	Time:	3:00 PM
TD Date:	7/14/2016	Time:	8:15 AM
Rig Release:		Time:	

ELEVATIONS

K.B. Elevation:	1948.00ft	Ground Elevation:	1940.00ft
K.B. to Ground:	8.00ft		

DATE	DEPTH	ACTIVITY
Tuesday, July 12, 2016	3075'	Geologist Jeremy Schwartz on location @ 1115hrs, ~3075', drlg ahead through
		Heebner Shale, Toronto, Douglas Shale, Brown Lime, CFS @ 3198', conduct
	3276'	short trip, succesful short trip, resume drlg ahead through Lansing, CFS @ 3276',
Wednesday, July 13, 2016	3371'	resume drlg, CFS @ 3351', resume drlg, CFS @ 3371', resume drlg, CFS @ 3415',
	3415'	conduct short trip, drop survey, strap out of hole for DST #1 in the Lansing "H-K"
Thursday, July 14, 2016	3415'	successful test, resume drlg ahead through the conglomerate, CFS @ 3452',
	3452'	resume drlg, CFS @ 3463', resume drlg, CFS @ 3473', resume drlg ahead
	3473'	to TD @ 3500', TD reached @ 0815hrs, CTCH 1hour, drop survey, come out of hole,
	3500'	conduct logging operations, logging operations complete @ 1515hrs,
		Geologist Jeremy Schwartz off location @ 1530hrs

					L.D. DRILLING						D&A									
					FLOREINE #1-16						SHELLEY-MILLER DRILLING, INC						SHELBY RESOURCES, LLC			
	DALE #1-16				NW SW NE SE 16-18S-14W						McGINNIS #1						W-S #1-15			
	KB	1948			KB	1940					C SE SE NE 16-18S-14W						SW SE NW SW 15-18S-14W			
	LOG TOPS		SAMPLE TOPS		COMP. CARD		LOG		SMPL.		KB	1948					KB	1942		
											COMP. CARD		LOG		SMPL.		COMP. CARD		LOG		SMPL.	
FORMATION	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM	CORR.		CORR.		DEPTH	DATUM	CORR.		CORR.		DEPTH	DATUM	CORR.		CORR.	
ANHYDRITE TOP	898	1050	889	1059	890	1050	+	0	+	9	900	1048	+	2	+	11	886	1056	-	6	+	3
BASE	923	1025	920	1028	913	1027	-	2	+	1	924	1024	+	1	+	4	912	1030	-	5	-	2
STOTLER	2607	-659	2608	-660	2598	-658	-	1	-	2	2604	-656	-	3	-	4	2597	-655	-	4	-	5
TARKIO	2675	-727	2676	-728	2665	-725	-	2	-	3	2672	-724	-	3	-	4	2665	-723	-	4	-	5
TOPEKA	2907	-959	2910	-962	2898	-958	-	1	-	4	2903	-955	-	4	-	7	2900	-958	-	1	-	4
QUEEN HILL SHALE	3039	-1091	3039	-1091	3032	-1092	+	1	+	1	3038	-1090	-	1	-	1	3032	-1090	-	1	-	1
HEEBNER SHALE	3124	-1176	3124	-1176	3116	-1176	+	0	+	0	3121	-1173	-	3	-	3	3115	-1173	-	3	-	3
TORONTO	3134	-1186	3133	-1185	3126	-1186	+	0	+	1	3132	-1184	-	2	-	1	3123	-1181	-	5	-	4
DOUGLAS SHALE	3150	-1202	3148	-1200	3141	-1201	-	1	+	1	3146	-1198	-	4	-	2	3135	-1193	-	9	-	7
BROWN LIME	3197	-1249	3196	-1248	3190	-1250	+	1	+	2	3196	-1248	-	1	+	0	3188	-1246	-	3	-	2
LKC	3208	-1260	3206	-1258	3200	-1260	+	0	+	2	3209	-1261	+	1	+	3	3197	-1255	-	5	-	3
LKC G POROSITY	3281	-1333	3279	-1331	3270	-1330	-	3	-	1	3276	-1328	-	5	-	3	3267	-1325	-	8	-	6
MUNCIE CREEK	3332	-1384	3331	-1383	3326	-1386	+	2	+	3	3330	-1382	-	2	-	1	3326	-1384	+	0	+	1
LKC H	3340	-1392	3337	-1389	3332	-1392	+	0	+	3	3338	-1390	-	2	+	1	3330	-1388	-	4	-	1
LKC J	3371	-1423	3370	-1422	3361	-1421	-	2	-	1	3370	-1422	-	1	+	0	3364	-1422	-	1	+	0
STARK SHALE	3397	-1449	3396	-1448	3387	-1447	-	2	-	1	3386	-1438	-	11	-	10	3382	-1440	-	9	-	8
BKC	3409	-1461	3408	-1460	3402	-1462	+	1	+	2	3405	-1457	-	4	-	3	3404	-1462	+	1	+	2
ARBUCKLE	3492	-1544	3492	-1544	3438	-1498	-	46	-	46	3446	-1498	-	46	-	46	3439	-1497	-	47	-	47
RTD	3500	-1552	3500	-1552	3550	-1610	+	58	+	58	3476	-1528	-	24	-	24	3507	-1565	+	13	+	13
LTD	3504	-1556			3550	-1610	+	54			3475	-1527	-	29			3507	-1565	+	9		

ROCK TYPES

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

ACCESSORIES

FOSSIL
- ◠ Bioclastic or Fragmental
- F Fossils < 20%

STRINGER
- Chert
- Limestone
- Sandstone
- Shale
- green shale
- red shale

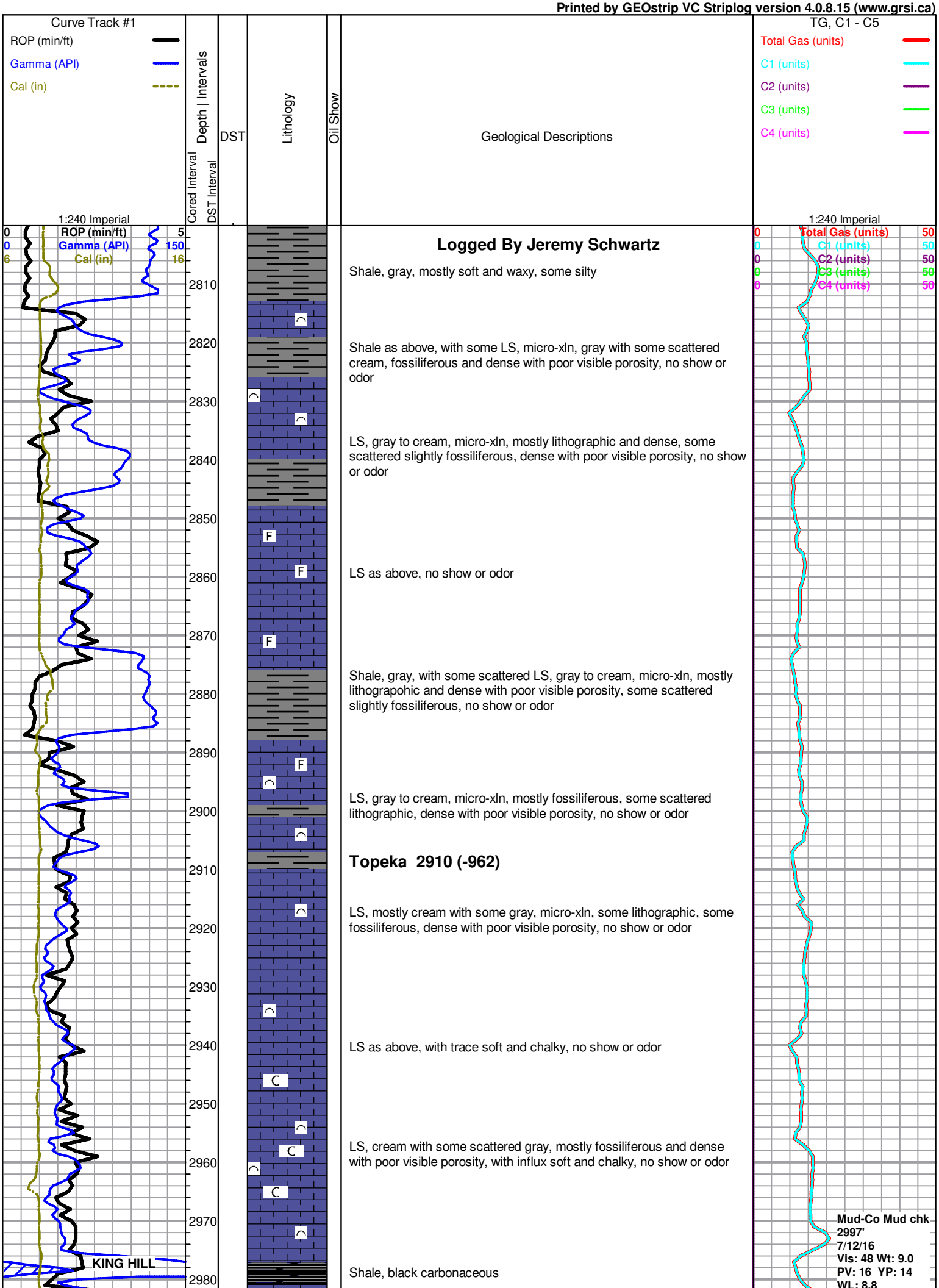
TEXTURE
- C Chalky

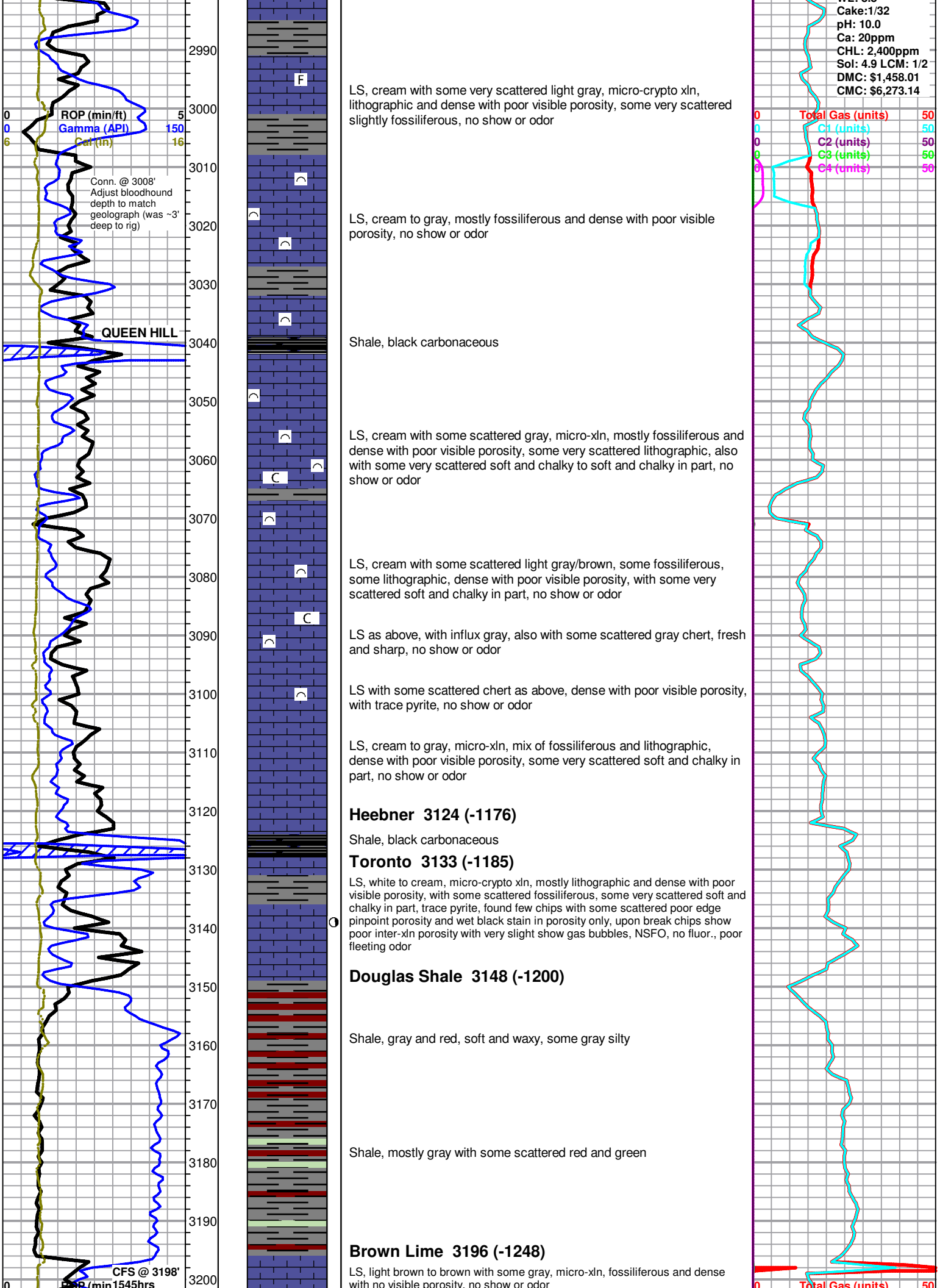
OTHER SYMBOLS

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

Oil Show
- ● Good Show
- ◐ Fair Show
- ◑ Poor show
- ◑ Spotted or Trace
- ○ Questionable Stn
- D Dead Oil Stn
- ■ Fluorescence
- ✳ Gas

DST
- DST Int
- DST alt


Curve Track #1
ROP (min/ft)
Gamma (API)
Cal (in)
1:240 Imperial
Depth | Intervals
Cored Interval
DST Interval
DST
Lithology
Oil Show
Geological Descriptions
TG, C1 - C5
Total Gas (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
1:240 Imperial
0 ROP (min/ft) 5
0 Gamma (API) 150
6 Cal (in) 16
0 Total Gas (units) 50
0 C1 (units) 50
0 C2 (units) 50
0 C3 (units) 50
0 C4 (units) 50
2810
2820
2830
2840
2850
2860
2870
2880
2890
2900
2910
2920
2930
2940
2950
2960
2970
2980
KING HILL
Logged By Jeremy Schwartz
Shale, gray, mostly soft and waxy, some silty
Shale as above, with some LS, micro-xln, gray with some scattered cream, fossiliferous and dense with poor visible porosity, no show or odor
LS, gray to cream, micro-xln, mostly lithographic and dense, some scattered slightly fossiliferous, dense with poor visible porosity, no show or odor
LS as above, no show or odor
Shale, gray, with some scattered LS, gray to cream, micro-xln, mostly lithograpohic and dense with poor visible porosity, some scattered slightly fossiliferous, no show or odor
LS, gray to cream, micro-xln, mostly fossiliferous, some scattered lithographic, dense with poor visible porosity, no show or odor
Topeka 2910 (-962)
LS, mostly cream with some gray, micro-xln, some lithographic, some fossiliferous, dense with poor visible porosity, no show or odor
LS as above, with trace soft and chalky, no show or odor
LS, cream with some scattered gray, mostly fossiliferous and dense with poor visible porosity, with influx soft and chalky, no show or odor
Shale, black carbonaceous
Mud-Co Mud chk
2997'
7/12/16
Vis: 48 Wt: 9.0
PV: 16 YP: 14
WL: 8.8


0 ROP (min/ft) 5
0 Gamma (API) 150
6 Cal (in) 16
Conn. @ 3008' Adjust bloodhound depth to match geolograph (was ~3' deep to rig)
QUEEN HILL
CFS @ 3198'
0 ROP (min1545hrs
2990
3000
3010
3020
3030
3040
3050
3060
3070
3080
3090
3100
3110
3120
3130
3140
3150
3160
3170
3180
3190
3200
F
C
C
LS, cream with some very scattered light gray, micro-crypto xln, lithographic and dense with poor visible porosity, some very scattered slightly fossiliferous, no show or odor
LS, cream to gray, mostly fossiliferous and dense with poor visible porosity, no show or odor
Shale, black carbonaceous
LS, cream with some scattered gray, micro-xln, mostly fossiliferous and dense with poor visible porosity, some very scattered lithographic, also with some very scattered soft and chalky to soft and chalky in part, no show or odor
LS, cream with some scattered light gray/brown, some fossiliferous, some lithographic, dense with poor visible porosity, with some very scattered soft and chalky in part, no show or odor
LS as above, with influx gray, also with some scattered gray chert, fresh and sharp, no show or odor
LS with some scattered chert as above, dense with poor visible porosity, with trace pyrite, no show or odor
LS, cream to gray, micro-xln, mix of fossiliferous and lithographic, dense with poor visible porosity, some very scattered soft and chalky in part, no show or odor
Heebner 3124 (-1176)
Shale, black carbonaceous
Toronto 3133 (-1185)
LS, white to cream, micro-crypto xln, mostly lithographic and dense with poor visible porosity, with some scattered fossiliferous, some very scattered soft and chalky in part, trace pyrite, found few chips with some scattered poor edge pinpoint porosity and wet black stain in porosity only, upon break chips show poor inter-xln porosity with very slight show gas bubbles, NSFO, no fluor., poor fleeting odor
Douglas Shale 3148 (-1200)
Shale, gray and red, soft and waxy, some gray silty
Shale, mostly gray with some scattered red and green
Brown Lime 3196 (-1248)
LS, light brown to brown with some gray, micro-xln, fossiliferous and dense
Cake:1/32
pH: 10.0
Ca: 20ppm
CHL: 2,400ppm
Sol: 4.9 LCM: 1/2
DMC: $1,458.01
CMC: $6,273.14
0 Total Gas (units) 50
0 C1 (units) 50
0 C2 (units) 50
0 C3 (units) 50
0 C4 (units) 50
0 Total Gas (units) 50

0 Gamma (API) 150
6 Cal (in) 16
7/12/16
Conduct Short Trip

3210
3220
3230
3240
3250
3260
3270
3280
3290
3300
3310
3320
3330
3340
3350
3360
3370
3380
3390
3400
3410
3420

CFS @ 3276'
2300hrs
7/12/16

"G" Porosity

Muncie Creek

"H"

DST#1

CFS @ 3351'
0400hrs
7/13/16

"I"

CFS @ 3371'
0615hrs
7/13/16

"J"

Stark Shale

0 ROP (min/ft) 5
0 Gamma (API) 150
6 Cal (in) 16

CFS @ 3415'
1005hrs
7/13/16

F
F
C
C
C
C
C
C

Lansing Kansas-City 3206 (-1258)

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

LS as above, no show or odor

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

LS, mostly same as above, with some very scattered oolitic, dense with poor visible porosity, no show or odor

LS, cream to light gray with some very scattered brown, mostly lithographic with some scattered fossiliferous, dense with poor visible porosity, no show or odor

LS, cream, micro-xln, mostly lithographic with some scattered fossiliferous, some fossiliferous with very scattered poor pinpoint edge porosity with very scattered poor black stain in porosity only, few chips with one to two very small edge vugs as well, most too dense to break, overall poor visible porosity, NSFO, no flour., no odor

3276' 30" LS, cream to gray, mostly fossiliferous with some lithographic and very scattered sub-oolitic to sub-oomoldic, some very scattered (<10%)with very scattered poor edge pinpoint porosity and very scattered poor stain in porosity only, few chips with one or two very small edge vugs, upon break some chips have VSSFO and fair show gas bubbles, some too dense to break, mostly poor overall porosity, SSFO in tray, no fluor., slightly chalky, poor fleeting odor

3276' 60" Mostly same as above

~3280' LS, cream to white, micro-xln, mostly lithographic and dense with poor visible porosity, some scattered sub-oomoldic, mostly barren with poor visible oomold porosity, few very small chips with fair oomold porosity and very scattered black stain in oomolds only with SSFO (heavy black) in few oomolds as well, upon break NSFO, no fluor., slightly chalky, no odor

~3290' LS as above, with slight influx sub-oomoldic, with shows mostly dropping out, NSFO, no fluor., fairly chalky, no odor

~3300' LS, cream with some scattered white, micro-xln, lithographic and dense with poor visible porosity, with some scattered sub-oomoldic, barren with poor oomold porosity, no show or odor

~3310' LS, gray with some scattered cream and white, micro-xln, lithographic and dense with poor visible porosity, chalky, no show or odor

Shelby Dale 1-16 dst 1.jpg

~3320' LS, gray to brown with some cream, micro-xln, lithographic and dense with poor visible porosity, slightly chalky, no show or odor

LS as above, with some scattered oolitic, some (<10% of tray) with scattered inter-oolite stain, dense with poor visible porosity, also found several small chips (<5%) cream, crytpo-xln, lithographic to sub-oomoldic and dense with slightly vuggy porosity and very scattered light brown stain, stain increases to darker brown, mostly saturated matrix under lamp, upon break SSFO, dull to bright yellow fluor., SSFO in tray, poor odor

3351' 30" LS, cream to gray, micro-xln, mostly lithographic with some scattered oolitic, dense with poor visible porosity, with some scattered (~20%) cream, micro-xln, sub-oomoldic to lithographic with scattered pinpoint to slightly vugggy porosity with scattered brown stain in porosity and matrix, some dense, some fairly friable, stain increases to darker brown and mostly saturated matrix under lamp, upon break some chips have fair to good show free oil and slowly bleed oil to surface, FSFO in tray, dull to bright yellow fluor., fair fleeting odor

3351' 60" Mostly same as above, fair odor

3370' sample LS, cream, micro-xln, lithographic to fossiliferous with some sub-oolitic to oolitic, ~40% with poor to fair pinpoint to slightly vuggy porosity and scattered to mostly saturated stain, upon break most chips have S-FSFO and slight show gas bubbles in some, chips show fair inter-xln porosity and mostly saturated to saturated matrix, dull yellow fluor., SSFO in tray, good odor

3371' 30" LS, cream, micro-xln, lithographic to fossiliferous with some scattered sub-oolitic to oolitic, some (~15%) with scattered fair pinpoint to slightly vuggy porosity and scattered brown stain, upon break some chips show fair inter-xln or inter-oolite staining and porosity and SSFO, some chips mostly saturated, scattered dull yellow fluor., fair odor

3371' 60" LS as above with shows mostly dropping out, NSFO in tray, fair odor

~3380' LS, cream to white with some scattered gray, micro-xln, lithographic and dense with poor visible porosity, no show or odor

~3390' LS as above, some scattered with scattered to very scattered dead black gilsonitic stain, no show or odor

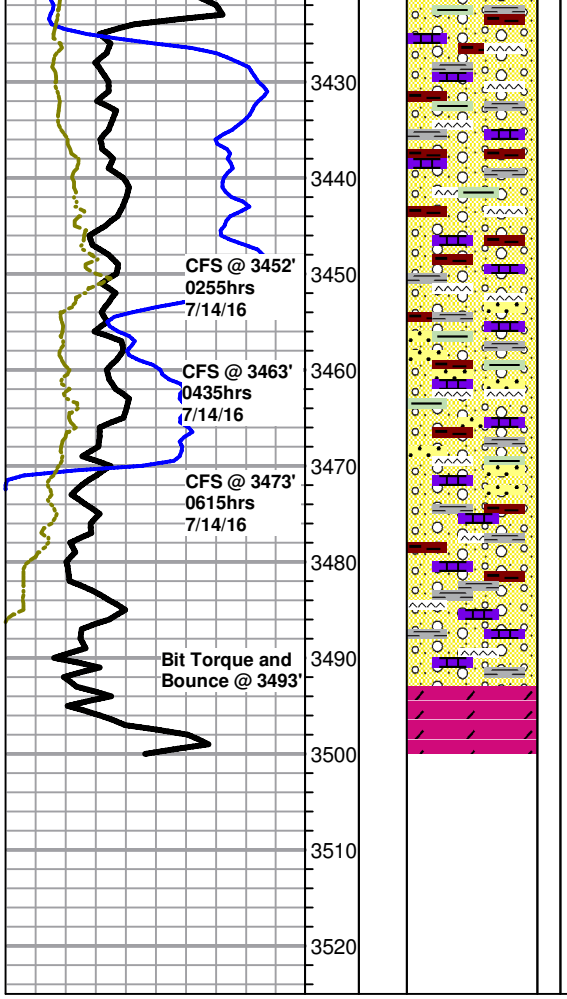
3415' 30" LS, cream to white, lithographic and dense with poor visible porosity,

0 C1 (units) 50
0 C2 (units) 50
0 C3 (units) 50
0 C4 (units) 50

SCALE CHANGE
0 100
0 C1 (units) 100
0 C2 (units) 100
0 C3 (units) 100
0 C4 (units) 100

Mud-Co Mud chk
3371'
7/13/16
Vis: 51 Wt: 9.2
PV: 16 YP: 19
WL: 8.8
Cake:2/32
pH: 10.0
Ca: 40ppm
CHL: 3,000ppm
Sol: 6.3 LCM: Tr
DMC: $1,020.61
CMC: $7,293.75

Strap .26LTB
Survey 1.75Deg



no show or odor

B/KC 3408 (-1460)

3415' 60" LS as above, with influx shale, gray with some very scattered red and green

~3425' Mixed cream to gray LS, red and gray shales with some scattered green, and white to tan and orange to red cherts, red wash, no show or odor

~3430' Conglomerate as above, no show or odor

3452' 30" Mixed Shales, LS, and cherts, red wash, no show or odor

3452' 60" Conglomerate as above, with some scattered SS clusters, dark gray to black, sub-rounded to sub-angular, with scattered tarry stain, most dense with chert and pyrite inclusions, few clusters clean and fairly friable, NSFO upon break, red wash, fair fleeting odor in cup

3463' 30" Conglomerate with scattered SS clusters as above, NSFO, heavy red wash fair fleeting odor

3463' 60" Conglomerate with SS clusters as above, heavy red wash

3473' 30" Conglomerate as above, heavy red wash

3473' 60" Conglomerate as above, SS clusters appear to be dropping out, heavy red wash

Conglomerate as above, no show or odor, reddish gray wash

Arbuckle 3492 (-1544)

3500' 30" Dolomite, cream, micro-xln, lithographic and mostly very dense with poor visible porosity, barren, cannot break most chips, some sandy, no odor

3500' 60" Dolomite as above, with some very scattered sub-rhombic development, dense and barren, no odor

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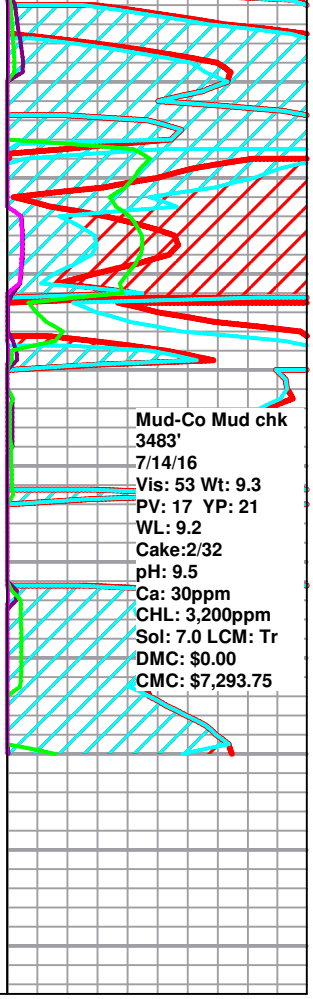
Rotary TD 3500' @ 0815hrs 7/14/16
Eli Wireline Services Logging TD @ 3504'
Complete Logging Operations @ 1515hrs 7/14/16
Geologist Jeremy Schwartz off location @ 1530hrs 7/14/16



Shelby Dale 1-16 dst 1.jpg

DRILL STEM TEST REPORT

Shelby Resources LLC

621 17th st
STE 1155
Denver Co 80293-1155
ATTN: Chris Gottschalk Jer

16-18s-14w Barton

Dale #1-16

Job Ticket: 65474 **DST#: 1**

Test Start: 2016.07.13 @ 14:30:44

GENERAL INFORMATION:

Formation: **LKC H-K**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 16:36:54
Time Test Ended: 22:10:53

Test Type: Conventional Bottom Hole (Initial)
Tester: Ray Schw ager
Unit No: 77

Interval: 3320.00 ft (KB) To 3415.00 ft (KB) (TVD)
Total Depth: 3415.00 ft (KB) (TVD)
Hole Diameter: 7.85 inches Hole Condition: Fair

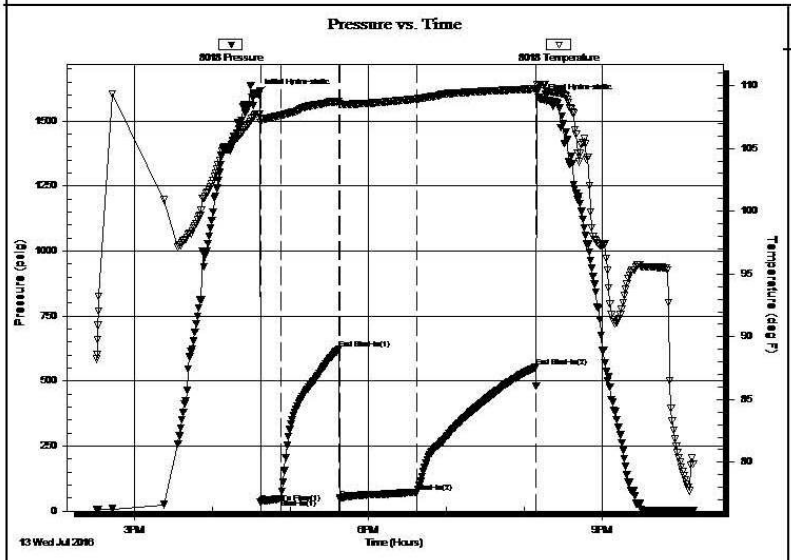
Reference Elevations: 1948.00 ft (KB)
1940.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8018 **Inside**

Press@RunDepth: 73.54 psig @ 3322.00 ft (KB)
Start Date: 2016.07.13 End Date: 2016.07.13
Start Time: 14:30:44 End Time: 22:10:53

Capacity: 8000.00 psig
Last Calib.: 2016.07.13
Time On Btm: 2016.07.13 @ 16:34:24
Time Off Btm: 2016.07.13 @ 20:13:08

TEST COMMENT: 15-IFP-w k to a gd bl 1/2"to 6 1/2"bl
45-ISIP-no bl
60-FFP-w k to a strg bl in 40 min
90-FSIP-no bl



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1604.17	107.72	Initial Hydro-static
3	33.33	107.05	Open To Flow (1)
18	48.50	107.61	Shut-In(1)
64	625.16	108.74	End Shut-In(1)
64	49.68	108.55	Open To Flow (2)
124	73.54	108.94	Shut-In(2)
215	553.96	109.74	End Shut-In(2)
219	1583.69	110.10	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	190' GIP	0.00
62.00	HO&GCM 5%G25%O70%M	0.60
55.00	O&GCM 20%G10%O70%M	0.77

Gas Rates

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