

Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1244915  
OIL & GAS CONSERVATION DIVISION

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

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       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 #: \_\_\_\_\_

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - \_\_\_\_\_

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
- Geologist Report Received
- UIC Distribution
- ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

1244915

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  Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <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
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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				

Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 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)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD:      Size: \_\_\_\_\_ Set At: \_\_\_\_\_ Packer At: \_\_\_\_\_ Liner Run:  Yes  No

Date of First, Resumed Production, SWD or ENHR. \_\_\_\_\_ Producing Method:  
 Flowing  Pumping  Gas Lift  Other *(Explain)* \_\_\_\_\_

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

<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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Form	ACO1 - Well Completion
Operator	Shelby Resources LLC
Well Name	W-S 2-15
Doc ID	1244915

All Electric Logs Run

Dual Induction
Compensated Neutron
Micro
Sonic
Radial Bond





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Shelby Resources

**15-18s-14w Barton**

2717 Canal Blvd  
Hays KS 67601

**W-S #2-15**

Job Ticket: 62904

**DST#: 1**

ATTN: Jermey Schwartz

Test Start: 2015.01.31 @ 08:25:00

## GENERAL INFORMATION:

Formation: **Lansing H zone**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:14:30

Time Test Ended: 15:37:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Jared Scheck

Unit No: 55-Great Bend - 25 R

**Interval: 3312.00 ft (KB) To 3340.00 ft (KB) (TVD)**

Reference Elevations: 1934.00 ft (KB)

Total Depth: 3340.00 ft (KB) (TVD)

1925.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 9.00 ft

## Serial #: 8400

Press @ Run Depth: 151.14 psig @ ft (KB)

Capacity: 5000.00 psig

Start Date: 2015.01.31

End Date: 2015.01.31

Last Calib.: 2015.01.31

Start Time: 08:26:00

End Time: 15:37:00

Time On Btm: 2015.01.31 @ 10:13:30

Time Off Btm: 2015.01.31 @ 13:26:30

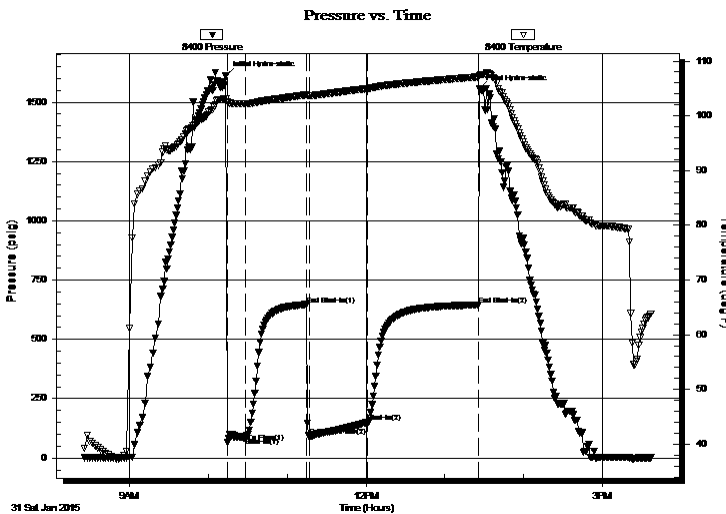
**TEST COMMENT:** IFP-15 Minutes-Strong blow built bottom of bucket in 2 1/2 minutes

ISIP-45 Minutes-Very Weak blow back

FFP-45 Minutes-Strong blow built bottom of bucket in 2 minutes gas to surface 35 minutes into open see gas report

FSIP-90 Minutes-Bottom of bucket blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1612.85	103.13	Initial Hydro-static
1	64.69	102.55	Open To Flow (1)
15	88.31	102.19	Shut-In(1)
61	646.55	103.83	End Shut-In(1)
64	93.80	103.67	Open To Flow (2)
108	151.14	104.98	Shut-In(2)
192	645.51	107.13	End Shut-In(2)
193	1554.76	107.41	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
60.00	GOM 40%gas 30%oil 30%mud	0.30
60.00	GOM 50%gas 20%oil 30%mud	0.30
300.00	GO 20%gas 80%oil	3.39
0.00	gas in pipe	0.00

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13		



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Shelby Resources

**15-18s-14w Barton**

2717 Canal Blvd  
Hays KS 67601

**W-S #2-15**

Job Ticket: 62904

**DST#: 1**

ATTN: Jermy Schwartz

Test Start: 2015.01.31 @ 08:25:00

## GENERAL INFORMATION:

Formation: **Lansing H zone**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:14:30

Time Test Ended: 15:37:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Jared Scheck

Unit No: 55-Great Bend - 25 R

**Interval: 3312.00 ft (KB) To 3340.00 ft (KB) (TVD)**

Reference Elevations: 1934.00 ft (KB)

Total Depth: 3340.00 ft (KB) (TVD)

1925.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 9.00 ft

## Serial #: 6999

Press @ Run Depth: 646.70 psig @ ft (KB)

Capacity: 5000.00 psig

Start Date: 2015.01.31

End Date: 2015.01.31

Last Calib.: 2015.01.31

Start Time: 08:26:00

End Time: 15:36:30

Time On Btm: 2015.01.31 @ 10:13:30

Time Off Btm: 2015.01.31 @ 13:26:30

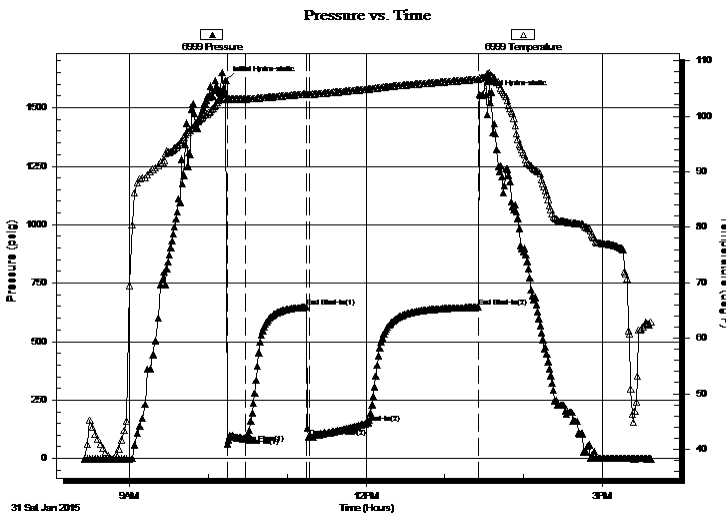
TEST COMMENT: IFP-15 Minutes-Strong blow built bottom of bucket in 2 1/2 minutes

ISIP-45 Minutes-Very Weak blow back

FFP-45 Minutes-Strong blow built bottom of bucket in 2 minutes gas to surface 35 minutes into open see gas report

FSIP-90 Minutes-Bottom of bucket blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1615.04	103.37	Initial Hydro-static
1	63.25	103.06	Open To Flow (1)
15	89.22	103.09	Shut-In(1)
61	647.37	104.00	End Shut-In(1)
64	92.89	103.93	Open To Flow (2)
107	150.76	104.86	Shut-In(2)
192	646.70	106.63	End Shut-In(2)
193	1555.62	106.87	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
60.00	GOM 40% gas 30% oil 30% mud	0.30
60.00	GOM 50% gas 20% oil 30% mud	0.30
300.00	GO 20% gas 80% oil	3.39
0.00	gas in pipe	0.00

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13		



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Shelby Resources

**15-18s-14w Barton**

2717 Canal Blvd  
Hays KS 67601

**W-S #2-15**

Job Ticket: 62904

**DST#: 1**

ATTN: Jermey Schwartz

Test Start: 2015.01.31 @ 08:25:00

## 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:

ppm

Viscosity: 61.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.20 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5100.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
60.00	GOM 40%gas 30%oil 30%mud	0.295
60.00	GOM 50%gas 20%oil 30%mud	0.295
300.00	GO 20%gas 80%oil	3.388
0.00	gas in pipe	0.000

Total Length: 420.00 ft      Total Volume: 3.978 bbl

Num Fluid Samples: 0

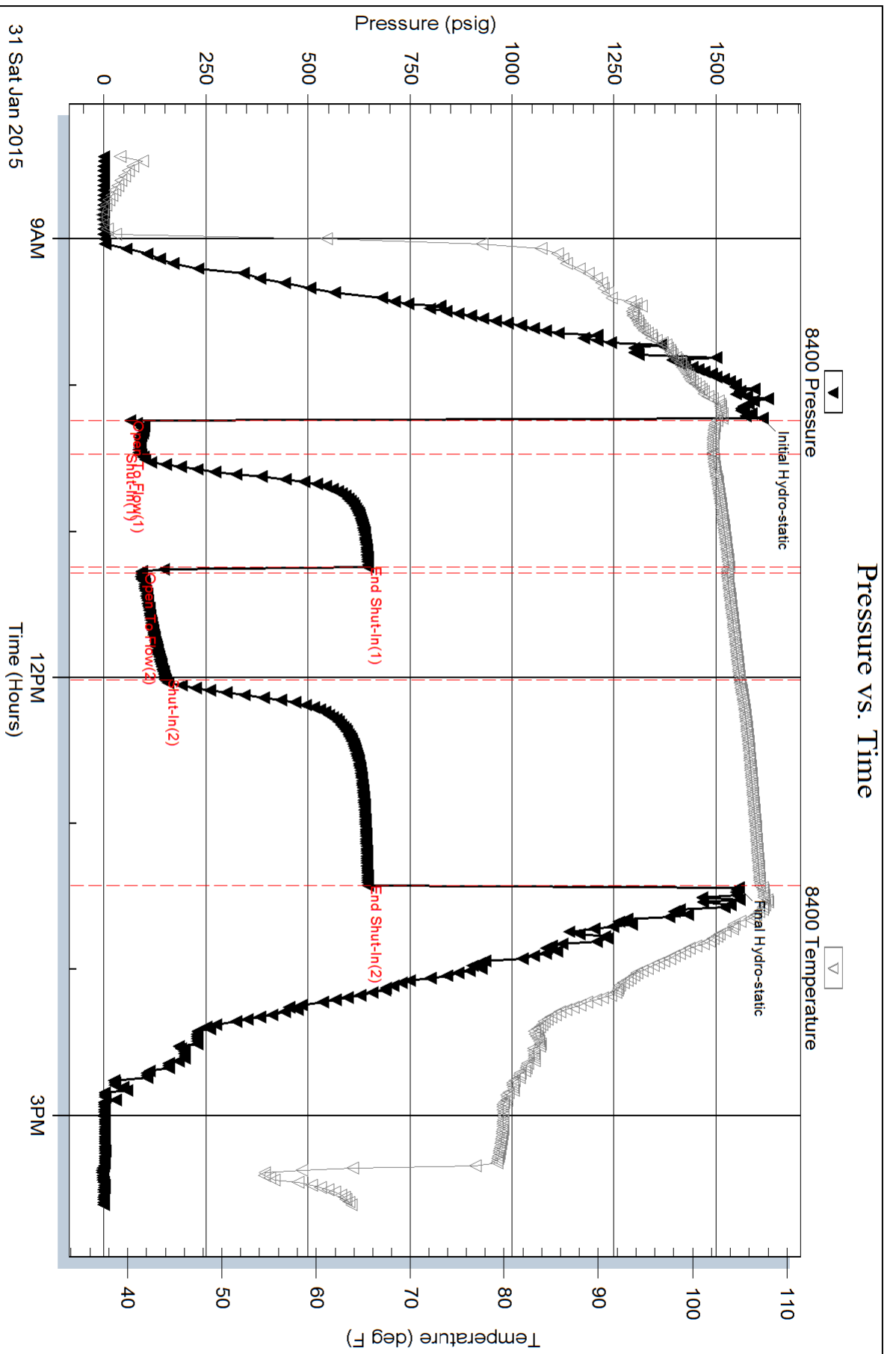
Num Gas Bombs: 0

Serial #:

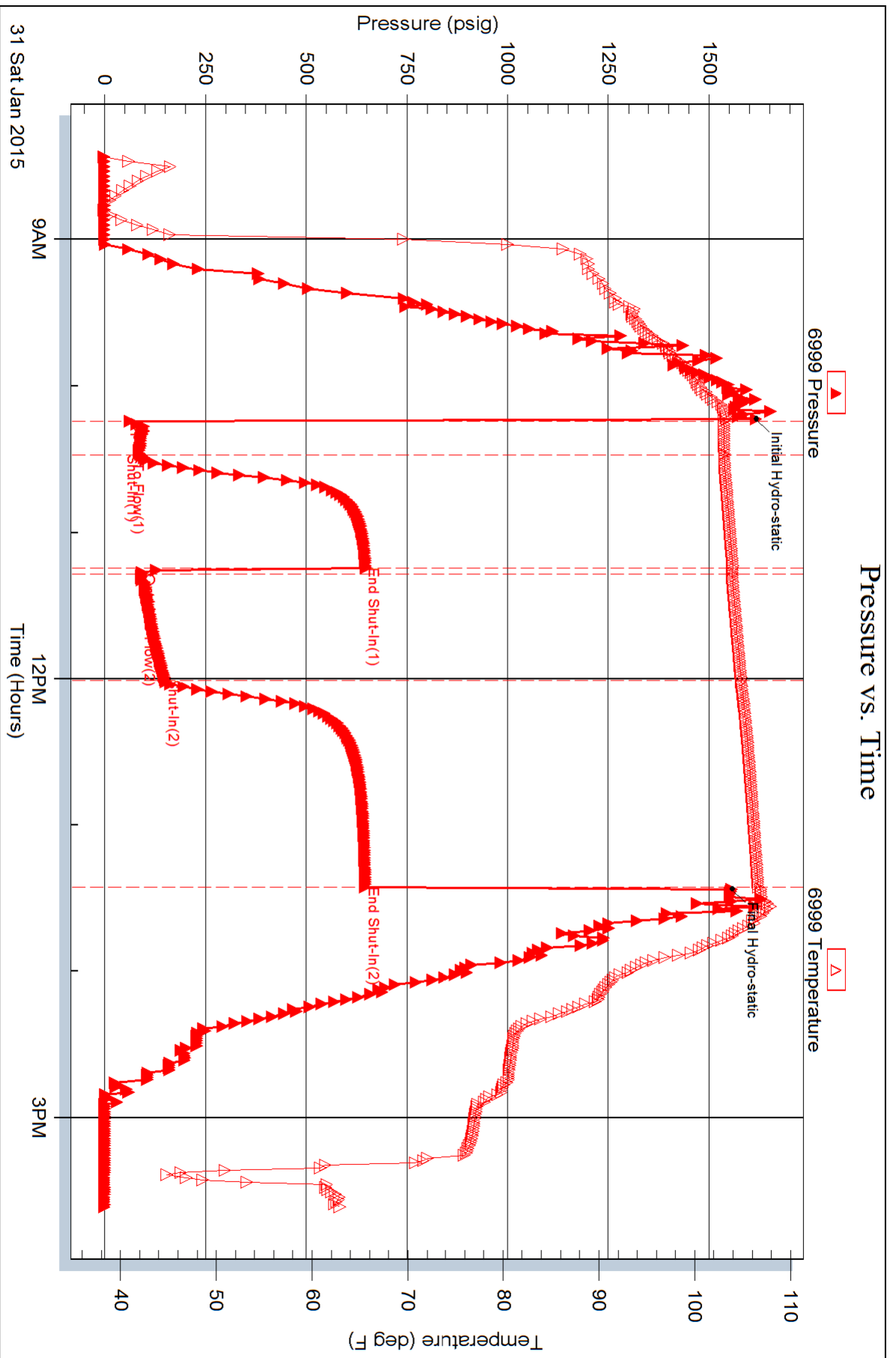
Laboratory Name:

Laboratory Location:

Recovery Comments: Gravity oil 42









**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Shelby Resources

**15-18s-14w Barton**

2717 Canal Blvd  
Hays KS 67601

**W-S #2-15**

Job Ticket: 62905

**DST#: 2**

ATTN: Jermey Schwartz

Test Start: 2015.02.01 @ 06:45:00

## GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:11:30

Time Test Ended: 14:21:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Jared Scheck

Unit No: 55-Great Bend-25

**Interval: 3400.00 ft (KB) To 3452.00 ft (KB) (TVD)**

Reference Elevations: 1934.00 ft (KB)

Total Depth: 3452.00 ft (KB) (TVD)

1925.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 9.00 ft

## Serial #: 8400

Press @ Run Depth: 174.94 psig @ ft (KB)

Capacity: 5000.00 psig

Start Date: 2015.02.01 End Date: 2015.02.01

Last Calib.: 2015.02.01

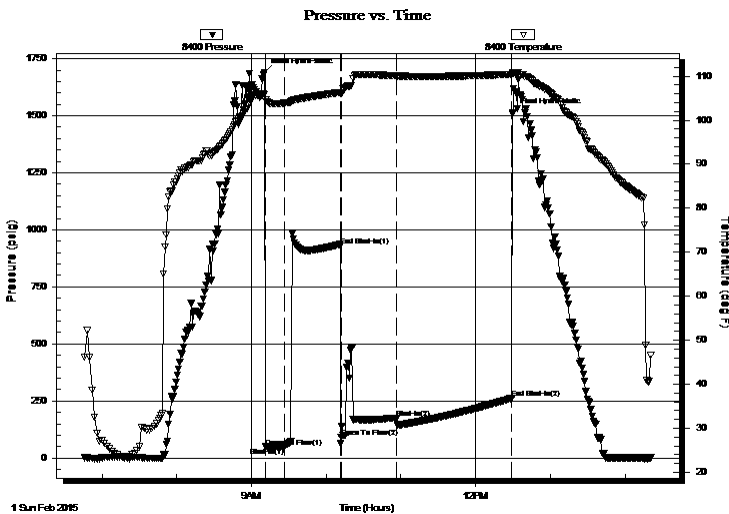
Start Time: 06:46:00 End Time: 14:21:00

Time On Btm: 2015.02.01 @ 09:10:30

Time Off Btm: 2015.02.01 @ 12:30:00

**TEST COMMENT:** IFP-15 Minutes-Weak blow built 2 1/2 inches into bucket  
ISIP-45 Minutes-No blow back  
FFP-45 Minutes-Strong blow built bottom of bucket in 12 minutes  
FSIP-90 Minutes-No blow back

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1689.87	105.81	Initial Hydro-static
1	48.49	104.71	Open To Flow (1)
16	48.71	103.90	Shut-In(1)
61	929.49	106.30	End Shut-In(1)
62	89.57	106.01	Open To Flow (2)
106	174.94	110.06	Shut-In(2)
199	262.04	110.38	End Shut-In(2)
200	1514.29	110.78	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
300.00	spot oil mud 2%oil 98%mud	2.30

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Shelby Resources

**15-18s-14w Barton**

2717 Canal Blvd  
Hays KS 67601

**W-S #2-15**

Job Ticket: 62905

**DST#: 2**

ATTN: Jermey Schwartz

Test Start: 2015.02.01 @ 06:45:00

## 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:

ppm

Viscosity: 67.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.20 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4800.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
300.00	spot oil mud 2%oil 98%mud	2.295

Total Length: 300.00 ft      Total Volume: 2.295 bbl

Num Fluid Samples: 0

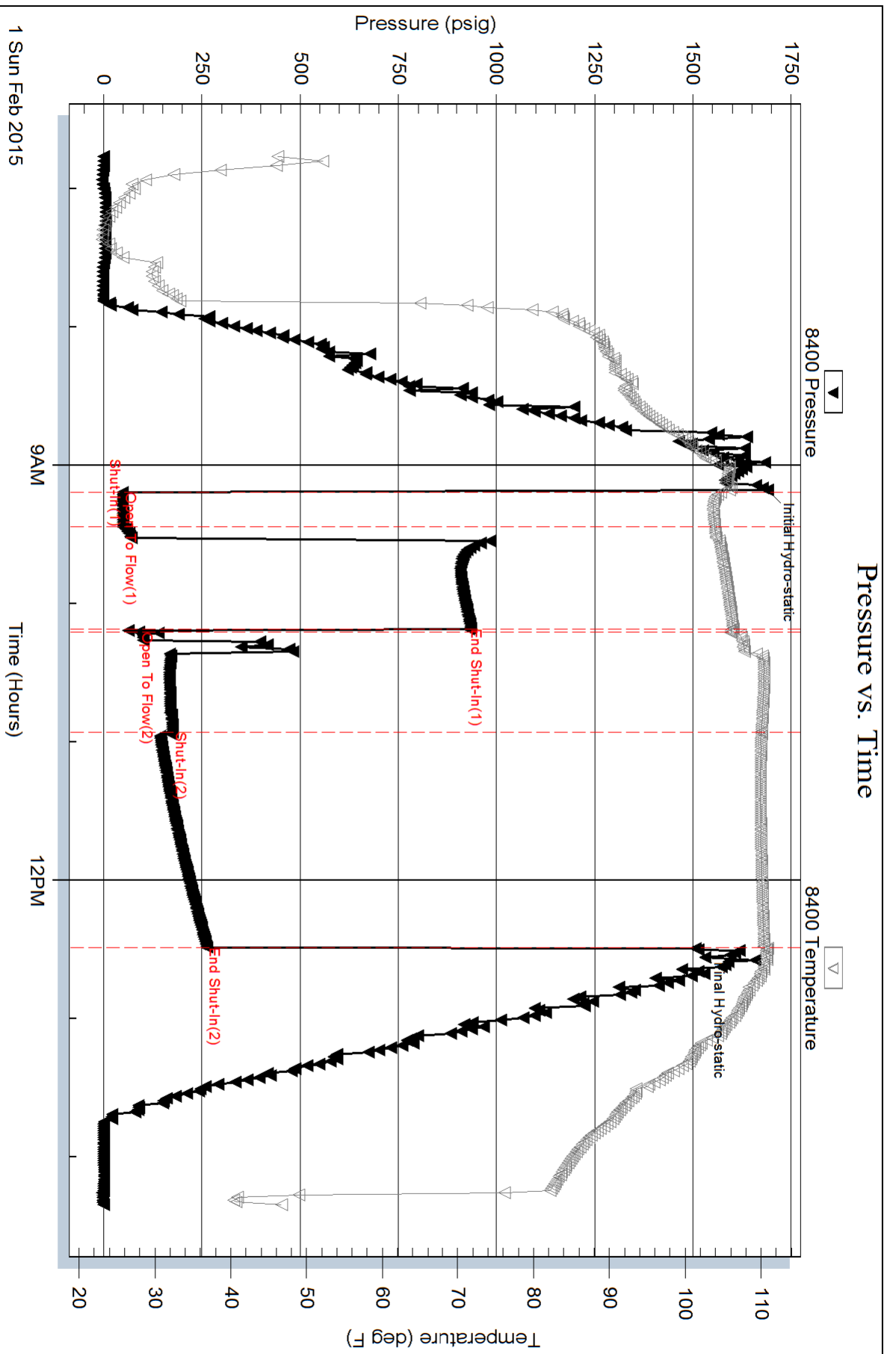
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





Scale 1:240 Imperial

Well Name: W-S #2-15  
 Surface Location: 676' FSL\_827' FWL Sec 15-18S-14W  
 Bottom Location:  
 API: 15-009-26080-00-00  
 License Number:  
 Spud Date: 1/27/2015 Time: 10:45 PM  
 Region: Barton County  
 Drilling Completed: 2/1/2015 Time: 11:30 PM  
 Surface Coordinates: Y = 660365 & X = 1895889  
 Bottom Hole Coordinates:  
 Ground Elevation: 1925.00ft  
 K.B. Elevation: 1934.00ft  
 Logged Interval: 2970.00ft To: 3540.00ft  
 Total Depth: 3540.00ft  
 Formation: Lansing-Kansas City  
 Drilling Fluid Type: Chemical/Fresh Water Gel

**OPERATOR**

Company: Shelby Resources, LLC  
 Address: 445 Union Blvd, Suite 208  
 Lakewood, CO 80228

Contact Geologist: Janine Sturdavant  
 Contact Phone Nbr: 303-907-2209 / 720-274-4682  
 Well Name: W-S #2-15  
 Location: 676' FSL\_827' FWL Sec 15-18S-14W API: 15-009-26080-00-00  
 Pool: Field: Wildcat  
 State: Kansas Country: USA

**LOGGED BY**



Company: Shelby Resources, LLC  
 Address: 445 UNION BLVD. Suite 208  
 LAKEWOOD, CO. 80228

Phone Nbr: 203-671-6034  
 Logged By: Geologist Name: Jeremy Schwartz

**NOTES**

The Shelby Resources, LLC W-S #2-15 was drilled to a total depth of 3540', bottoming in the Arbuckle. A TookeDaq gas detector was employed in the drilling of said well

2 DST's were conducted throughout the Lansing Kansas-City and Arbuckle. The DST reports can be found at the bottom of this log.

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

\*Note: The Log tops are approximately 2-4' higher than the sample tops so all DST's need to be adjusted accordingly.

Respectfully Submitted,  
 Jeremy Schwartz  
 Geologist

**SURFACE CO-ORDINATES**

Well Type: Vertical  
 Longitude:  
 N/S Co-ord: Y = 660365  
 E/W Co-ord: X = 1895889

Latitude:

**CONTRACTOR**

Contractor: Sterling Drilling Co  
 Rig #: 4  
 Rig Type: mud rotary  
 Spud Date: 1/27/2015  
 TD Date: 2/1/2015  
 Rig Release:  
 Time: 10:45 PM  
 Time: 11:30 PM  
 Time:

**ELEVATIONS**

K.B. Elevation: 1934.00ft  
 K.B. to Ground: 9.00ft  
 Ground Elevation: 1925.00ft

DATE	DEPTH	ACTIVITY
Friday, January 30, 2015	3125'	Geologist Jeremy Schwartz on location @ 1515hrs, ~3125', DRLG ahead through
	3187'	Douglas Shale, Brown Lime, CFS @ 3187', Conduct Bit Trip, Swap PDC out for Button Bit,
		Successful Bit Trip, Resume DRLG ahead through Lansing,
Saturday, January 31, 2015	3220'	CFS @ 3340', Conduct DST #1 in the Lansing "H", Successful Test, Resume DRLG,
		CFS @ 3405', Resume DRLG,
Sunday, February 01, 2015	3448'	CFS @ 3448', Resume DRLG, CFS @ 3452', Conduct DST #2 in the Arbuckle,
		Successful Test, Resume DRLG, CFS @ 3458', Resume DRLG ahead to TD,
		TD of 3540' reached @ 2330hrs, CTCH 1hour then OOH
Monday, February 02, 2015	3540'	Conduct Logging Operations, Logging Operations Complete @ 0845hrs
		Geologist Jeremy Schwartz off location @ 0915hrs

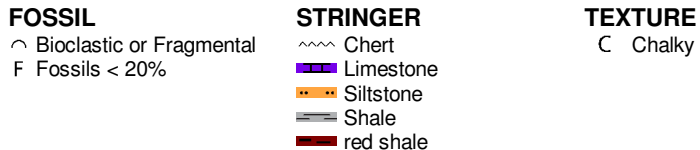
CLIENT:	SHELBY RESOURCES, LLC
WELL NAME:	W-S #2-15
LEGAL:	SW-NE-SW-SW 15-18S-14W
COUNTY:	BARTON
API :	15-009-26080-0000
DRLG CONTRACTOR:	STERLING DRILLING CO.
RIG #:	4
DOGHOUSE #:	620-388-4192
TOOLPUSHER:	LANNY SALOGA
CELL #:	620-388-4193

		SHELBY RESOURCES, LLC				LD DRILLING, INC.						
		W-S #1-15				KORIEL UNIT #1-22						
		W-S #2-15		SW SE NW SW 15-18S-14W		NE NE NW NW 22-18S-14W						
		KB	1934	KB	1942	KB	1925					
		LOG TOPS		COMP. CARD		LOG		SMPL.				
		SAMPLE TOPS		COMP. CARD		LOG		SMPL.				
FORMATION	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM	CORR.	CORR.	DEPTH	DATUM	CORR.	CORR.
ANHYDRITE TOP	875	1059	878	1056	886	1056	+ 3	+ 0	869	1056	+ 3	+ 0
BASE	904	1030	924	1010	912	1030	+ 0	- 20	898	1027	+ 3	- 17
TOPEKA	2893	-959	2896	-962	2900	-958	- 1	- 4	2890	-965	+ 6	+ 3
HEEBNER SHALE	3110	-1176	3112	-1178	3115	-1173	- 3	- 5	3106	-1181	+ 5	+ 3
TORONTO	3118	-1184	3124	-1190	3123	-1181	- 3	- 9	3115	-1190	+ 6	+ 0
DOUGLAS SHALE	3132	-1198	3134	-1200	3135	-1193	- 5	- 7	3128	-1203	+ 5	+ 3
BROWN LIME	3183	-1249	3187	-1253	3188	-1246	- 3	- 7	3180	-1255	+ 6	+ 2
LKC	3192	-1258	3195	-1261	3196	-1254	- 4	- 7	3189	-1264	+ 6	+ 3
LKC G POROSITY	3262	-1328	3266	-1332	3267	-1325	- 3	- 7	3259	-1334	+ 6	+ 2
MUNCIE CREEK	3323	-1389	3326	-1392	3328	-1386	- 3	- 6	3318	-1393	+ 4	+ 1
LKC H	3326	-1392	3333	-1399	3331	-1389	- 3	- 10	3320	-1395	+ 3	- 4
STARK SHALE	3376	-1442	3379	-1445	3382	-1440	- 2	- 5	3369	-1444	+ 2	- 1
BKC	3398	-1464	3402	-1468	3404	-1462	- 2	- 6	3389	-1464	+ 0	- 4
CONGLOMERATE	3418	-1484	3416	-1482	3420	-1478	- 6	- 4	3410	-1485	+ 1	+ 3
ARBUCKLE	3438	-1504	3439	-1505	3439	-1497	- 7	- 8	3428	-1503	- 1	- 2
RTD			3540	-1606	3507	-1565		- 41	3530	-1605		- 1
LTD	3538	-1604			3504	-1562	- 42		3531	-1606	+ 2	

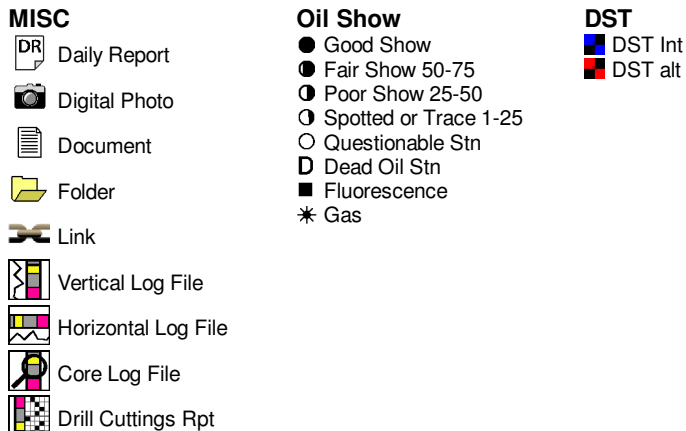
### ROCK TYPES



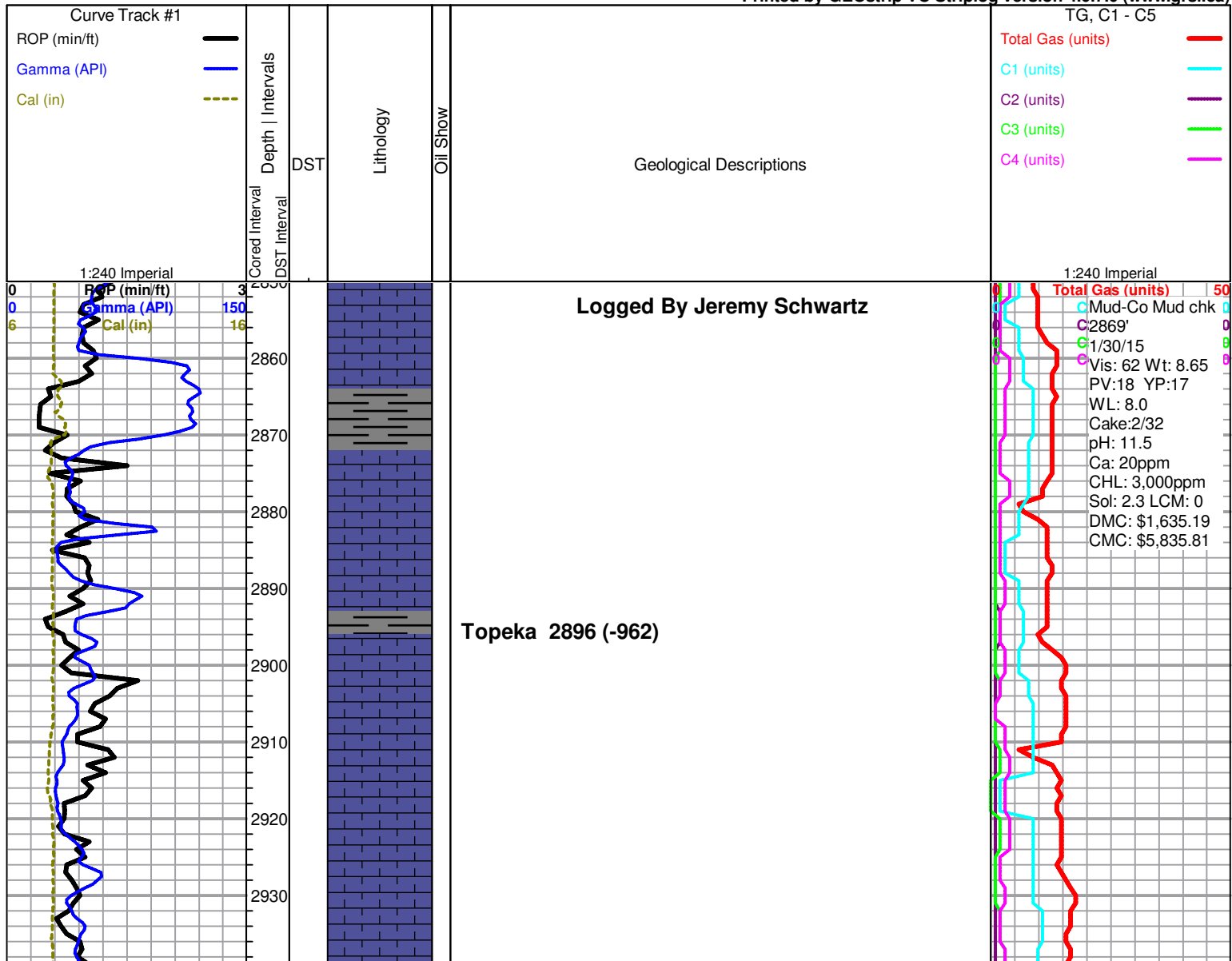
### ACCESSORIES

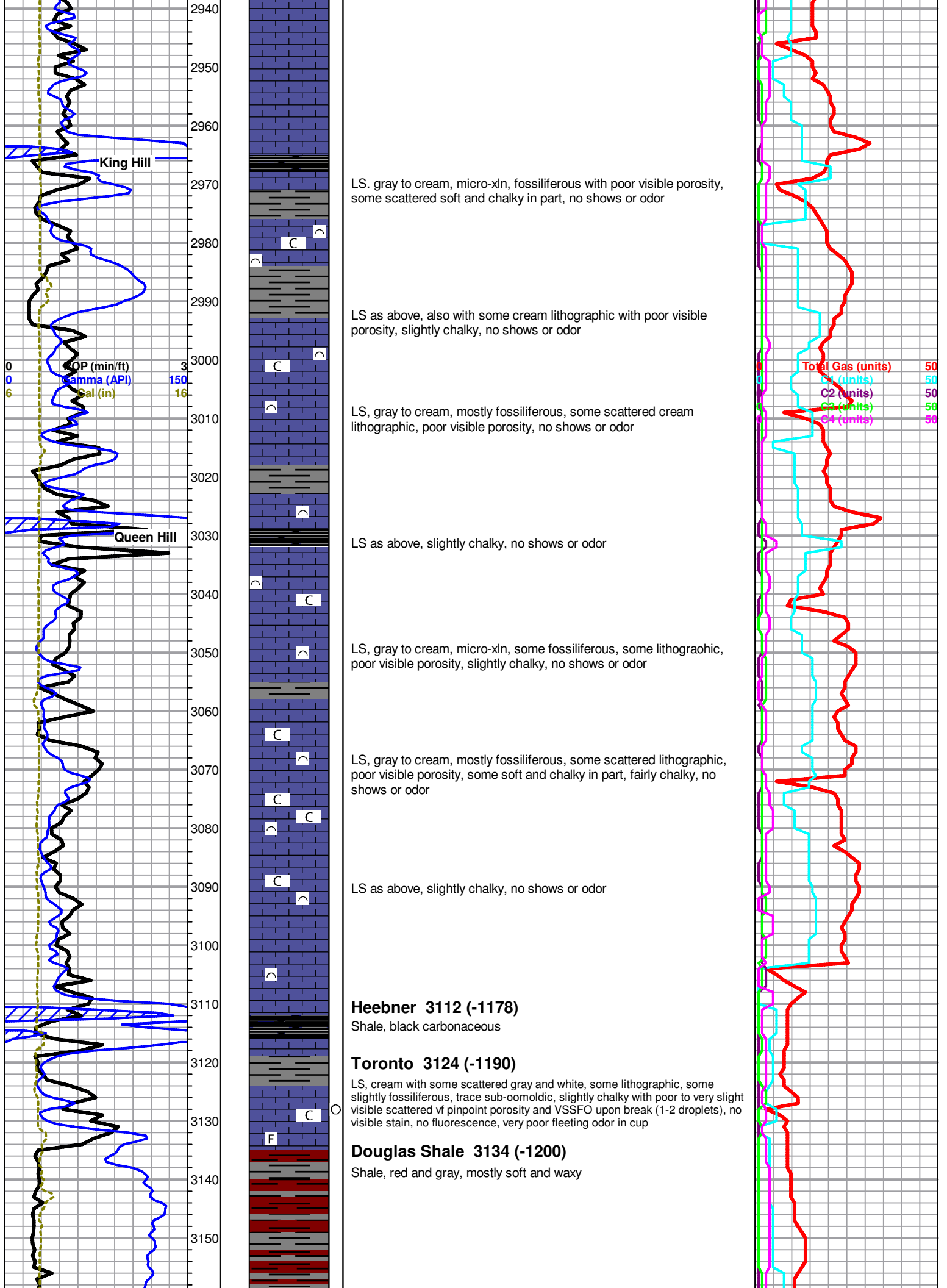


### OTHER SYMBOLS

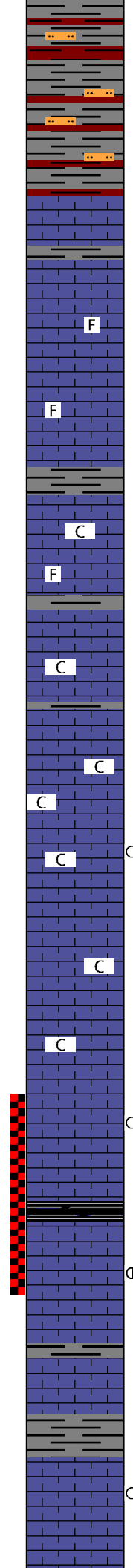
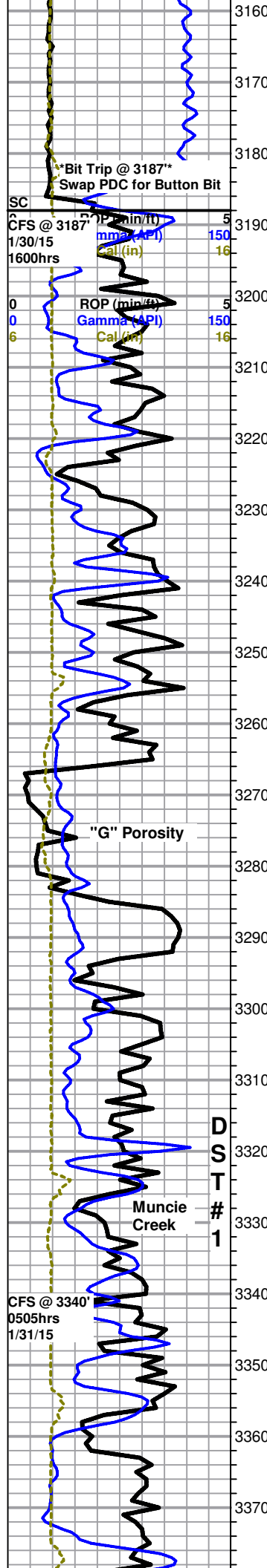


Printed by GEOstrip VC Striplog version 4.0.7.0 (www.grsi.ca)









Shale, mostly gray with scattered red, some silty

**Brown Lime 3187 (-1253)**  
LS, brown, micro-xln, slightly fossiliferous and dense with no visible porosity, no shows or odor

**Lansing 3195 (-1261)**  
LS, cream with some scattered gray, micro-xln, mostly lithographic and dense with poor visible porosity, some scattered slightly fossiliferous, trace with one to two very small edge vugs, no shows or odor

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

LS as above, also with some gray lithographic, dense with poor visible porosity, no shows or odor

LS, cream to gray, micro-xln, mostly lithographic, some slightly fossiliferous, some scattered gray mottled, trace sub-oolitic, mostly dense with poor visible porosity, some scattered soft and chalky in part, no shows or odor

LS, cream, micro-xln, mostly lithographic, some scattered sub-oolitic, dense with poor visible porosity, slightly chalky, no shows or odor

LS as above, with trace sub-oomoldic with poor to fair visible oomold porosity, barren, slightly chalky in part, no shows or odor

LS, cream to gray, micro-xln, some lithographic, some slightly fossiliferous, dense with poor visible porosity, fairly chalky, no shows or odor

LS as above, with some very scattered sub-oolitic to sub-oomoldic with poor visible porosity, no shows or odor

LS, cream to light brown, micro-xln, oomoldic with poor visible oomold porosity, some scattered chips with very scattered to scattered wet black to tarry black stain in some oomolds, fairly chalky, NSFO, fair fleeting odor

LS as above, with influx of cream to gray lithographic and dense with poor visible porosity, slightly chalky, NSFO, no odor

LS, cream to gray, micro-xln, mostly lithographic and dense with poor visible porosity, with some oomoldic as above, slightly chalky, NSFO, no odor

LS, gray to brown with some cream, micro-xln, lithographic and dense with poor visible porosity, some very scattered chips with slightly vuggy edges and black stain in vugs only, NSFO, poor odor

3340' 30" LS, cream with some scattered light gray, micro-crypto xln, lithographic and dense with poor visible porosity, some very scattered sub-oolitic to oolitic, few chips oomoldic with very scattered light golden brown stain mostly in oomolds only, also with some scattered black shale, NSFO, poor fleeting odor in cup

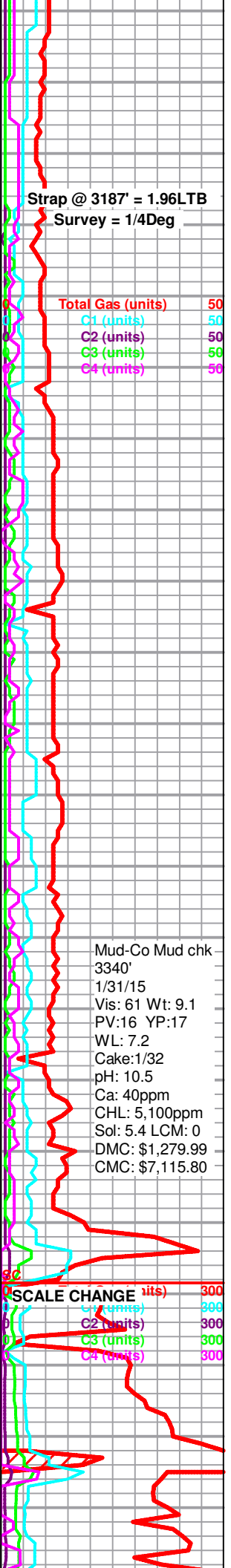
Shelby W-S #2-15 dst 1.jpg

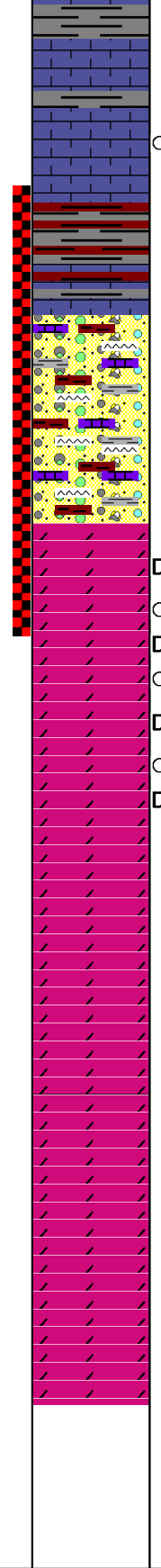
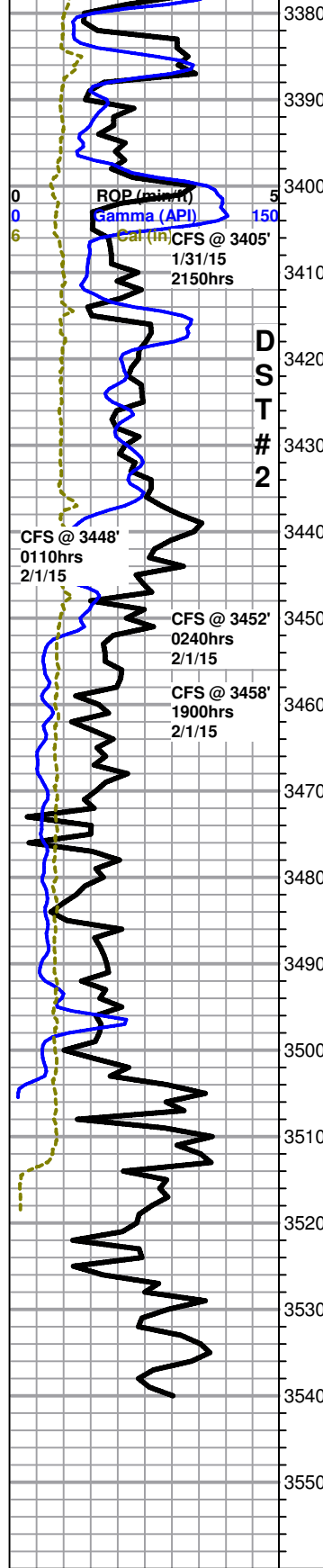
**Lansing "H" 3333 (-1399)**  
3340' 60" LS, cream to light gray, micro-xln, lithographic and dense with poor visible porosity, with some scattered (~15-20%) sub-oomoldic to oomoldic with poor to fair visible porosity, with scattered light golden brown stain mostly in and around oomolds, slight show gas bubbles in porosity, SSFO upon break, fair odor in cup

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

LS, cream to gray, micro-crypto xln, lithographic and dense with poor visible porosity, with some very scattered sub-oolitic, some with scattered to very scattered gilsonitic to tarry wet black stain, NSFO, no odor

**Stark Shale 3379 (-1445)**





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

LS as above, also with some brown, crypto-xln and dense with poor visible porosity, some very scattered with some scattered pinpoint porosity and few very small very scattered vugs in few chips, with scattered to very scattered black gilsonitic to wet tarry black stain, NSFO, no odor

**BKC 3398 (-1464)**

3405' 30" LS, cream to gray with some scattered brown, micro-xln, lithographic and dense with poor visible porosity, some very scattered with scattered to very scattered gilsonitic to tarry wet black stain,

3405' 60" Mostly same as above, with influx of red and gray shale

~3410' Gray and red shale, with some LS, cream to gray, lithographic and dense with poor visible porosity, no show or odor

Mixed shales and LS, with some scattered tan to brown and orange to red chert, trace oolitic, red wash, no show or odor

Conglomerate as above

Shelby W-S # 2-15 dst 2.jpg

**Arbuckle 3439 (-1505)**

3448' 30" Dolomite, white, micro-xln, sub-sucrosic and dense with poor visible porosity, some scattered sub-rhombic development, some barren, some (~40-50%) with scattered black gilsonitic stain, few chips (~10%) fairly friable, with scattered gilsonitic stain as above, upon break chips have fair to good show brown to black tarry, clingy free oil and slight show gas bubbles, good odor

3448' 60" Mostly same as above, good odor

3452' 30" Dolomite, white, micro-xln, sub-sucrosic and dense with poor visible porosity, some scattered sub-rhombic development, some very scattered pyritic, ~50% with scattered black gilsonitic stain, chips too dense to break, NSFO, fair odor

3452' 60" Mostly same as above, NSFO, poor odor

3459' 60" Dolomite, white, micro-xln, sub-sucrosic and dense with poor visible porosity, some scattered fair sub-rhombic development, some barren, some with scattered to very scattered black gilsonitic stain, few chips with slight show brown to black tarry, clingy free oil upon break, poor odor

~3470' Dolomite, white, micro-xln, mostly sub-sucrosic and dense with poor visible porosity, some scattered fair sub-rhombic, few very scattered chips with several very scattered very small vugs, with scattered to very scattered black gilsonitic to wet, tarry, clingy stain, few chips with VSSFO upon break, poor odor

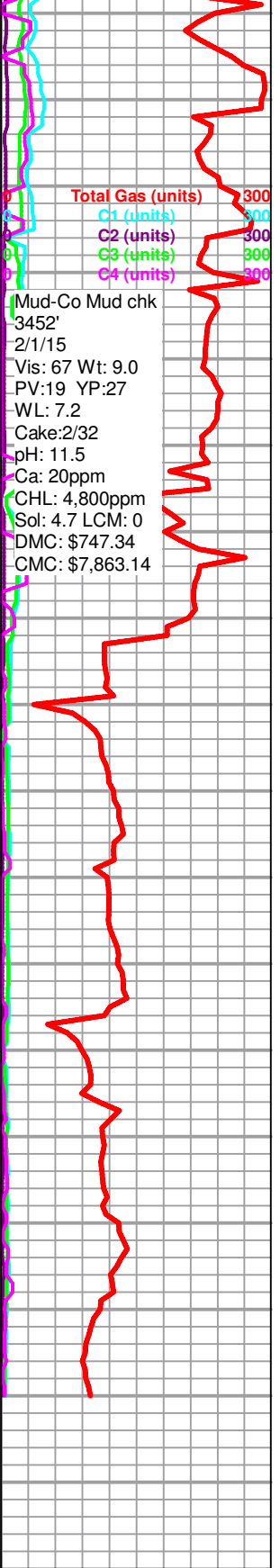
~3480-3500' Dolomite as above, mostly dense and barren, slightly chalky, NSFO, poor odor

~3500' Dolomite, white, micro-xln, sub-sucrosic and dense with poor visible porosity, some very scattered poor sub-rhombic development, barren, slightly chalky, NSFO, no odor

Dolomite, white, micro-med xln, mix of dense and barren and sub-sucrosic with poor to fair sub-rhombic development, very dense with poor visible porosity, slightly chalky, NSFO, no odor

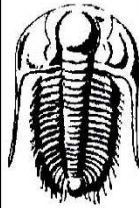
Dolomite, white, micro-xln, mostly very dense with poor visible porosity, some very scattered med-xln, sub-sucrosic with poor to fair scattered sub-rhombic development, no show or odor

Dolomite, white, micro-xln, sub-sucrosic and very dense with poor visible porosity, some very scattered sucrosic, barren, no show or odor



Mud-Co Mud chk  
3452'  
2/1/15  
Vis: 67 Wt: 9.0  
PV:19 YP:27  
WL: 7.2  
Cake:2/32  
pH: 11.5  
Ca: 20ppm  
CHL: 4,800ppm  
Sol: 4.7 LCM: 0  
DMC: \$747.34  
CMC: \$7,863.14

Rotary TD 3540' @ 2330hrs 2/1/15  
Nabors Well Services Logging TD @ 3538'  
Complete Logging Operations @ 0845hrs 2/2/15  
Geologist Jeremy Schwartz off location @ 0915hrs 2/2/15



**TRILOBITE TESTING, INC.**

**DRILL STEM TEST REPORT**

Shelby Resources

**15-18s-14w Barton**

2717 Canal Blvd  
Hays KS 67601

**W-S #2-15**

Job Ticket: 62904

**DST#: 1**

ATTN: Jermey Schwartz

Test Start: 2015.01.31 @ 08:25:00

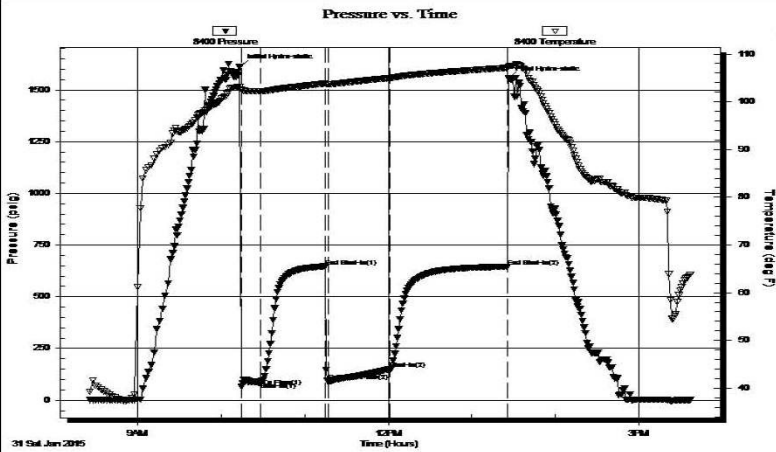
**GENERAL INFORMATION:**

Formation: **Lansing H zone**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 10:14:30  
 Time Test Ended: 15:37:00  
 Interval: **3312.00 ft (KB) To 3340.00 ft (KB) (TVD)**  
 Total Depth: 3340.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Jared Scheck  
 Unit No: 55-Great Bend - 25 R  
 Reference Elevations: 1934.00 ft (KB)  
 1925.00 ft (CF)  
 KB to GR/CF: 9.00 ft

**Serial #: 8400**

Press@RunDepth: 151.14 psig @ ft (KB) Capacity: 5000.00 psig  
 Start Date: 2015.01.31 End Date: 2015.01.31 Last Calib.: 2015.01.31  
 Start Time: 08:26:00 End Time: 15:37:00 Time On Btm: 2015.01.31 @ 10:13:30  
 Time Off Btm: 2015.01.31 @ 13:26:30

**TEST COMMENT:** IFP-15 Minutes-Strong blow built bottom of bucket in 2 1/2 minutes  
 ISIP-45 Minutes-Very Weak blow back  
 FFP-45 Minutes-Strong blow built bottom of bucket in 2 minutes gas to surface 35 minutes into open see gas report  
 FSIP-90 Minutes-Bottom of bucket blow



**PRESSURE SUMMARY**

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1612.85	103.13	Initial Hydro-static
1	64.69	102.55	Open To Flow (1)
15	88.31	102.19	Shut-In(1)
61	646.55	103.83	End Shut-In(1)
64	93.80	103.67	Open To Flow (2)
108	151.14	104.98	Shut-In(2)
192	645.51	107.13	End Shut-In(2)
193	1554.76	107.41	Final Hydro-static

**Recovery**

Length (ft)	Description	Volume (bbl)
60.00	GOM 40%gas 30%oil 30%mud	0.30
60.00	GOM 50%gas 20%oil 30%mud	0.30
300.00	GO 20%gas 80%oil	3.39
0.00	gas in pipe	0.00

**Gas Rates**

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13		

**DRILL STEM TEST REPORT**

Shelby Resources

**15-18s-14w Barton**

2717 Canal Blvd  
Hays KS 67601

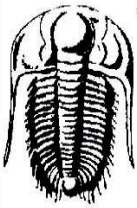
**W-S #2-15**

Job Ticket: 62905

**DST#: 2**

ATTN: Jermey Schw artz

Test Start: 2015.02.01 @ 06:45:00



**TRILOBITE TESTING, INC.**

**GENERAL INFORMATION:**

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:11:30

Time Test Ended: 14:21:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Jared Scheck

Unit No: 55-Great Bend-25

**Interval: 3400.00 ft (KB) To 3452.00 ft (KB) (TVD)**

Reference Elevations: 1934.00 ft (KB)

Total Depth: 3452.00 ft (KB) (TVD)

1925.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 9.00 ft

**Serial #: 8400**

Press@RunDepth: 174.94 psig @ ft (KB)

Capacity: 5000.00 psig

Start Date: 2015.02.01 End Date: 2015.02.01

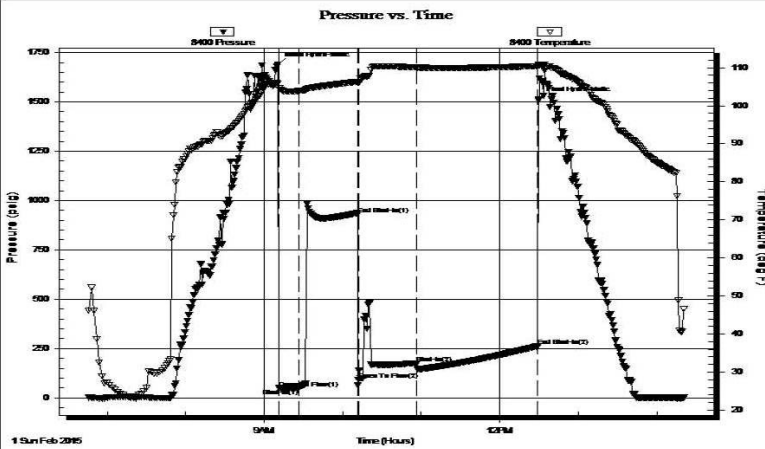
Last Calib.: 2015.02.01

Start Time: 06:46:00 End Time: 14:21:00

Time On Btm: 2015.02.01 @ 09:10:30

Time Off Btm: 2015.02.01 @ 12:30:00

**TEST COMMENT:** IFP-15 Minutes-Weak blow built 2 1/2 inches into bucket  
 ISIP-45 Minutes-No blow back  
 FFP-45 Minutes-Strong blow built bottom of bucket in 12 minutes  
 FSIP-90 Minutes-No blow back



**PRESSURE SUMMARY**

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1689.87	105.81	Initial Hydro-static
1	48.49	104.71	Open To Flow (1)
16	48.71	103.90	Shut-In(1)
61	929.49	106.30	End Shut-In(1)
62	89.57	106.01	Open To Flow (2)
106	174.94	110.06	Shut-In(2)
199	262.04	110.38	End Shut-In(2)
200	1514.29	110.78	Final Hydro-static

**Recovery**

Length (ft)	Description	Volume (bbl)
300.00	spot oil mud 2%oil 98%mud	2.30

**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. 1126

Cell 785-324-1041

Date	1-28-15	Sec.	15	Twp.	18	Range	14	County	Barton	State	KS	On Location		Finish	6:00pm
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Lease W-S Well No. 2-15 Location Byrd St 50 Rd 2W to 50 Ave 3N Owner S/E into

Contractor	<u>STERLING</u>	Owner	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	<u>Surface</u>	Charge To	<u>Shelby Resources</u>

Hole Size	<u>12 1/4</u>	T.D.	<u>893</u>
Csg.	<u>8 5/8</u>	Depth	<u>890</u>

Tbg. Size		Depth		City		State	
Tool		Depth		The above was done to satisfaction and supervision of owner agent or contractor.			

Cement Left in Csg.	<u>1033.88</u>	Shoe Joint	<u>1033.88</u>	Cement Amount Ordered	<u>350 60/40 3% cc 2% gel</u>
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Meas Line		Displace	<u>54 1/2</u>
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EQUIPMENT					
Pumptrk	<u>16</u>	No.		Common	<u>210</u>
		Cement		Poz. Mix	<u>140</u>
		Helper	<u>Rick</u>	Gel.	<u>7</u>
Bulktrk	<u>13</u>	No.		Calcium	<u>13</u>
		Driver	<u>Davis</u>		
Bulktrk	<u>16</u>	No.			
		Driver	<u>Bitly</u>		

**JOB SERVICES & REMARKS**

Remarks:	
Rat Hole	
Mouse Hole	
Centralizers	
Baskets	
D/V or Port Collar	

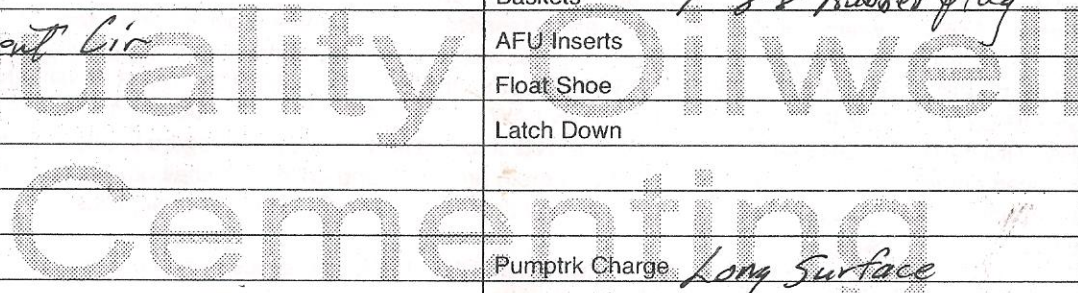
Pipe on bottom - Brake circulation  
Pumped 350 shut down released  
Plug. Displaced w 54 1/2 b/w water  
Landed plug. Shut in unhooked wash  
pump and lines.

Handling	<u>370</u>
Mileage	

FLOAT EQUIPMENT	
Guide Shoe	<u>1 Slip on 6.5</u>
Centralizer	<u>1 Baffle plate</u>
Baskets	<u>1 8" Rubber plug</u>
AFU Inserts	
Float Shoe	
Latch Down	

Pumptrk Charge	<u>Long Surface</u>
Mileage	<u>12</u>

X Signature	<u>[Signature]</u>	Tax	
		Discount	
		Total Charge	





Customer <i>Shelby Resources LLC</i>	Lease No.	Date	
Lease <i>W-5</i>	Well # <i>2-15</i>	<i>2-2-15</i>	
Field Order # <i>12160</i>	Station <i>Pratt</i>	Casing <i>5 1/2</i>	Depth <i>3525</i>
		County <i>Barton</i>	State <i>KS</i>
Type Job <i>CNW 5 1/2 LS</i>	Formation	Legal Description <i>15-18-14</i>	

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size <i>5 1/2</i>	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP	
Depth <i>3525</i>	Depth	From	To	Pre Pad	Max		5 Min.	
Volume <i>84</i>	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 <i>3483</i>	Packer Depth	From	To	Flush	Gas Volume		Total Load	

Customer Representative <i>Chris</i>	Station Manager <i>Kevin</i>	Treater <i>JOE</i>
--------------------------------------	------------------------------	--------------------

Service Units	<i>78982</i>	<i>86919</i>	<i>19826</i>	<i>73768</i>	<i>92911</i>				
Driver Names	<i>Pat</i>		<i>Aaron Gibson</i>		<i>JOE</i>				

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
<i>1600</i>					<i>on loc / safety meeting</i>
<i>1700</i>					<i>Run 84 joints 5 1/2 casing, 1411</i>
					<i>Centralizers on 1, 3, 5, 6, &amp; 8</i>
					<i>Basket on the pin of #1</i>
<i>1700</i>					<i>Start running casing</i>
<i>1920</i>					<i>Casing on "bottom" circulate with rig</i>
					<i>Hook up to pump truck to start job</i>
<i>1920</i>	<i>0</i>		<i>5</i>	<i>4.5</i>	<i>Pump 5 bbl H<sub>2</sub>O spacer</i>
			<i>6</i>	<i>2</i>	<i>pump 50 sk scavenger CMT</i>
			<i>24</i>	<i>7</i>	<i>mix 100 sk AA2 @ 15.316</i>
	<i>100</i>		<i>0</i>	<i>4.5</i>	<i>Shut down clear pump and line</i>
			<del><i>0</i></del>	<del><i>0</i></del>	<i>Release Plug</i>
<i>1940</i>	<i>100</i>		<del><i>0</i></del>	<i>5.5</i>	<i>Start H<sub>2</sub>O Displacement</i>
			<i>60</i>	<i>5.5</i>	<i>Lift Pressure</i>
			<i>74</i>	<i>4.5</i>	<i>Slow Rate</i>
<i>2000</i>	<i>1500</i>		<i>84</i>	<del><i>0</i></del>	<i>Plug Down</i>
					<i>Plug Rat &amp; Mouse Hole</i>
					<i>Job Complete, Thank You</i>
					<i>JOE</i>