

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1251350
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: _____

1251350

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

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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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. 997

Date	Sec.	Twp.	Range	County	State	On Location	Finish
1-10-15	13	5	32	Rawlins	KS		11:30 AM

Location GEM, KS 13 1/2 N 70 CR 1 E 1/2 2 1/2 E into

Lease	<u>Ryan Trust</u>	Well No.	<u>1-13</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.
Contractor	<u>Martin #8</u>			Charge To	<u>Sam Cary Jr & Associates</u>
Type Job	<u>Surface</u>			Street	
Hole Size	<u>12 1/4</u>	T.D.	<u>344</u>	City	State
Csg.	<u>8 5/8</u>	Depth	<u>343</u>	The above was done to satisfaction and supervision of owner agent or contractor.	
Tbg. Size		Depth		Cement Amount Ordered <u>300 8 5/8 3/CC 2/Gel 1/2 # Ho</u>	
Tool		Depth			
Cement Left in Csg.	<u>20'</u>	Shoe Joint			
Meas Line		Displace	<u>20 BCL</u>		

EQUIPMENT

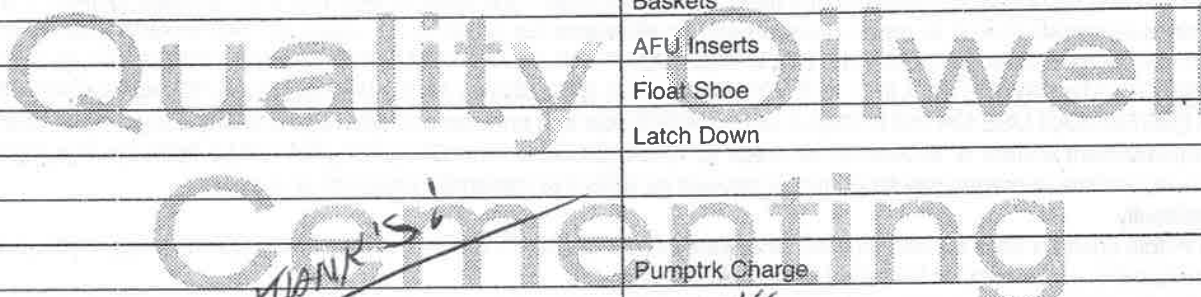
Pumptrk	<u>18</u> No.	Cementer	<u>Craig</u>	Common	<u>240</u>
		Helper	<u>Glenn</u>	Poz. Mix	<u>60</u>
Bulktrk		Driver	<u>Glenn</u>	Gel.	<u>6</u>
		Driver		Calcium	<u>10</u>
Bulktrk	<u>19</u> No.	Driver	<u>Ryan</u>	Hulls	
		Driver		Salt	

JOB SERVICES & REMARKS

Remarks:		Flowseal	<u>150#</u>
Rat Hole		Kol-Seal	
Mouse Hole		Mud CLR 48	
Centralizers		CFL-117 or CD110 CAF 38	
Baskets		Sand	
D/V or Port Collar		Handling	<u>316</u>
<u>8 5/8 on bottom. Est. Circulation.</u>		Mileage	
<u>Mix 300 SIC & Displace.</u>			

FLOAT EQUIPMENT

<u>Cement CIRCULATED</u>	Guide Shoe	
	Centralizer	<u>1 8 5/8</u>
	Baskets	
	AFU Inserts	
	Float Shoe	
	Latch Down	



THANKS!

Signature	<u>Troy W. Martin</u>	Pumptrk Charge		Tax	
		Mileage	<u>41</u>	Discount	
				Total Charge	

ALLIED OIL & GAS SERVICES, LLC 064642

Federal Tax I.D. # 20-8651475

REMIT TO P.O. BOX 93999
SOUTHLAKE, TEXAS 76092

SERVICE POINT:
Dakley, TX

DATE <u>1-18-15</u>	SEC. <u>13</u>	TWP. <u>5</u>	RANGE <u>32</u>	CALLED OUT	ON LOCATION <u>9:00am</u>	JOB START <u>11:30am</u>	JOB FINISH <u>12:30pm</u>
LEASE <u>Trust</u>	WELL# <u>1-13</u>	LOCATION <u>Gann North, 4E, W</u>	COUNTY <u>Rawlins</u>	STATE <u>KS</u>			
OLD OR NEW (Circle one) <u>NEW</u>				<u>142E</u>			

CONTRACTOR <u>Martin S</u>	OWNER <u>same</u>
TYPE OF JOB <u>PTA</u>	
HOLE SIZE <u>7 7/8</u>	T.D. <u>4490'</u>
CASING SIZE	DEPTH
TUBING SIZE	DEPTH
DRILL PIPE <u>4 1/2</u>	DEPTH <u>2725'</u>
TOOL	DEPTH
PRES. MAX	MINIMUM
MEAS. LINE	SHOE JOINT
CEMENT LEFT IN CSG.	
PERFS.	
DISPLACEMENT <u>31.69 bbl</u>	

CEMENT
AMOUNT ORDERED 255 sks 6,0/40 490gal
1/4 # flo-sol

EQUIPMENT

PUMP TRUCK CEMENTER <u>LaRone E. White</u>
<u>422</u> HELPER <u>Wayne McGughey</u>
BULK TRUCK # <u>818/207</u> DRIVER <u>Paul Beaver</u>
BULK TRUCK # _____ DRIVER _____

COMMON 17.80 @ <u>17.80</u>	
POZMIX @ _____	
GEL @ _____	
CHLORIDE @ _____	
ASC @ _____	
<u>60/40/4</u> @ <u>2.55 sks</u> @ <u>18.92</u> <u>4829.60</u>	
<u>1/2 sol</u> @ <u>69#</u> @ <u>2.77</u> <u>190.08</u>	
<u>Material total</u> @ _____ <u>5014.68</u>	
<u>(225.60/40%)</u> @ _____	
HANDLING <u>273.87</u> @ <u>2.48</u> <u>679.20</u>	
MILBAGE <u>11.44 km X 40 X 2.75</u> <u>1258.70</u>	

REMARKS:

Mix 50 sks 2725'

Mix 100 sks 1595'

Mix 30 sks 500'

Mix 10 sks 40' w/ plug

Also 13 sks m. H.

Mix 30 sks R.H.

Thank you

CHARGE TO: Sam Gary & Assoc c/o

STREET _____

CITY _____ STATE _____ ZIP _____

TOTAL _____

SERVICE

DEPTH OF JOB <u>2725'</u>	
PUMP TRUCK CHARGE _____	<u>2482.59</u>
EXTRA FOOTAGE @ _____	
MILEAGE <u>MTHU 40</u> @ <u>7.70</u> <u>308.00</u>	
MANIFOLD @ _____	
<u>MTHU 40</u> @ <u>4.40</u> <u>176.00</u>	
<u>(2207.33/45%)</u>	
TOTAL <u>4,985.19</u>	

PLUG & FLOAT EQUIPMENT

<u>wood plug</u> @ _____	<u>110.00</u>
_____ @ _____	
_____ @ _____	
_____ @ _____	
TOTAL <u>110.00</u>	

To: Allied Oil & Gas Services, LLC.
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME Travis Martin

SIGNATURE Travis W. Martin

SALES TAX (If Any) _____

TOTAL CHARGES 10,029.87

DISCOUNT 4,463.93 (45%) IF PAID IN 30 DAYS

5,565.94 Net.



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Samuel Gary & Assoc., Inc.

13/5s/32w

1515 Wynkoop, STE 700
Denver, Co. 80202

Ryan Trust #1-13

Job Ticket: 61059

DST#: 1

ATTN: Clayton Cammozzi

Test Start: 2015.01.16 @ 08:50:00

GENERAL INFORMATION:

Formation: **L. Pawnee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:20:30

Time Test Ended: 16:23:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Brandon Quintana

Unit No: 57

Interval: 4328.00 ft (KB) To 4368.00 ft (KB) (TVD)

Reference Elevations: 2984.00 ft (KB)

Total Depth: 4368.00 ft (KB) (TVD)

2979.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8647

Inside

Press@RunDepth: 531.03 psig @ 4329.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.01.16

End Date:

2015.01.16

Last Calib.:

2015.01.16

Start Time: 08:50:01

End Time:

16:23:30

Time On Btm:

2015.01.16 @ 11:19:30

Time Off Btm:

2015.01.16 @ 14:18:30

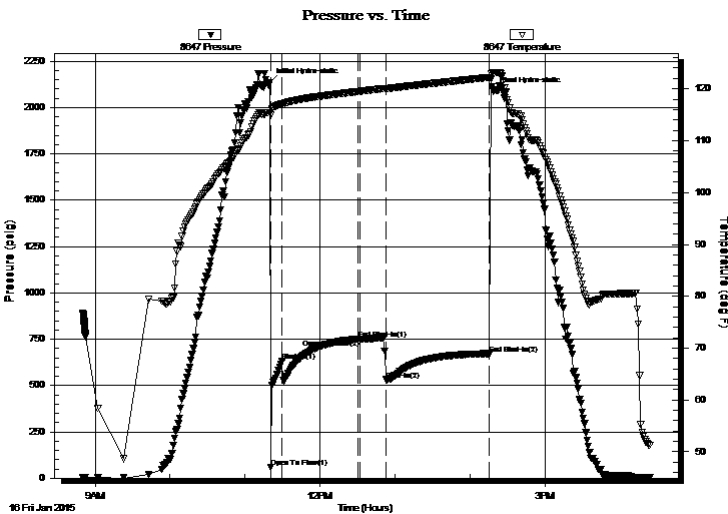
TEST COMMENT: 10 - IF - Opened w/ surface blow , built to 1"

60 - ISI - No Return

20 - FF - No Blow

90 - FSI - No Return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2135.35	115.34	Initial Hydro-static
1	58.77	114.93	Open To Flow (1)
10	631.91	117.12	Shut-In(1)
71	749.80	119.49	End Shut-In(1)
72	749.82	119.52	Open To Flow (2)
93	531.03	120.04	Shut-In(2)
176	671.97	122.21	End Shut-In(2)
179	2088.63	123.15	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
7.00	100% mud	0.03

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Samuel Gary & Assoc., Inc.

13/5s/32w

1515 Wynkoop, STE 700
Denver, Co. 80202

Ryan Trust #1-13

Job Ticket: 61059

DST#: 1

ATTN: Clayton Cammozzi

Test Start: 2015.01.16 @ 08:50:00

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: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2400.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
7.00	100% mud	0.034

Total Length: 7.00 ft Total Volume: 0.034 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

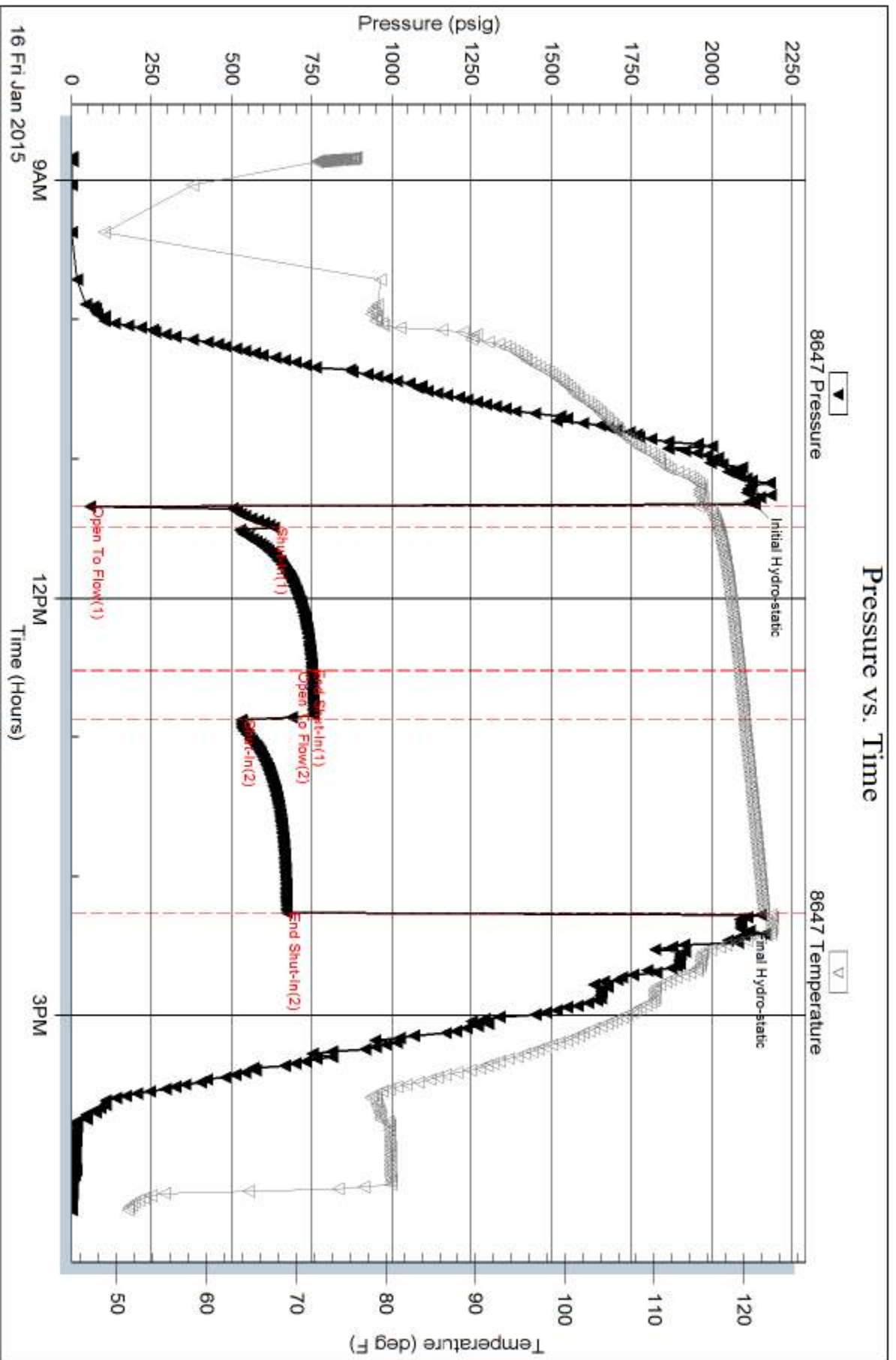
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



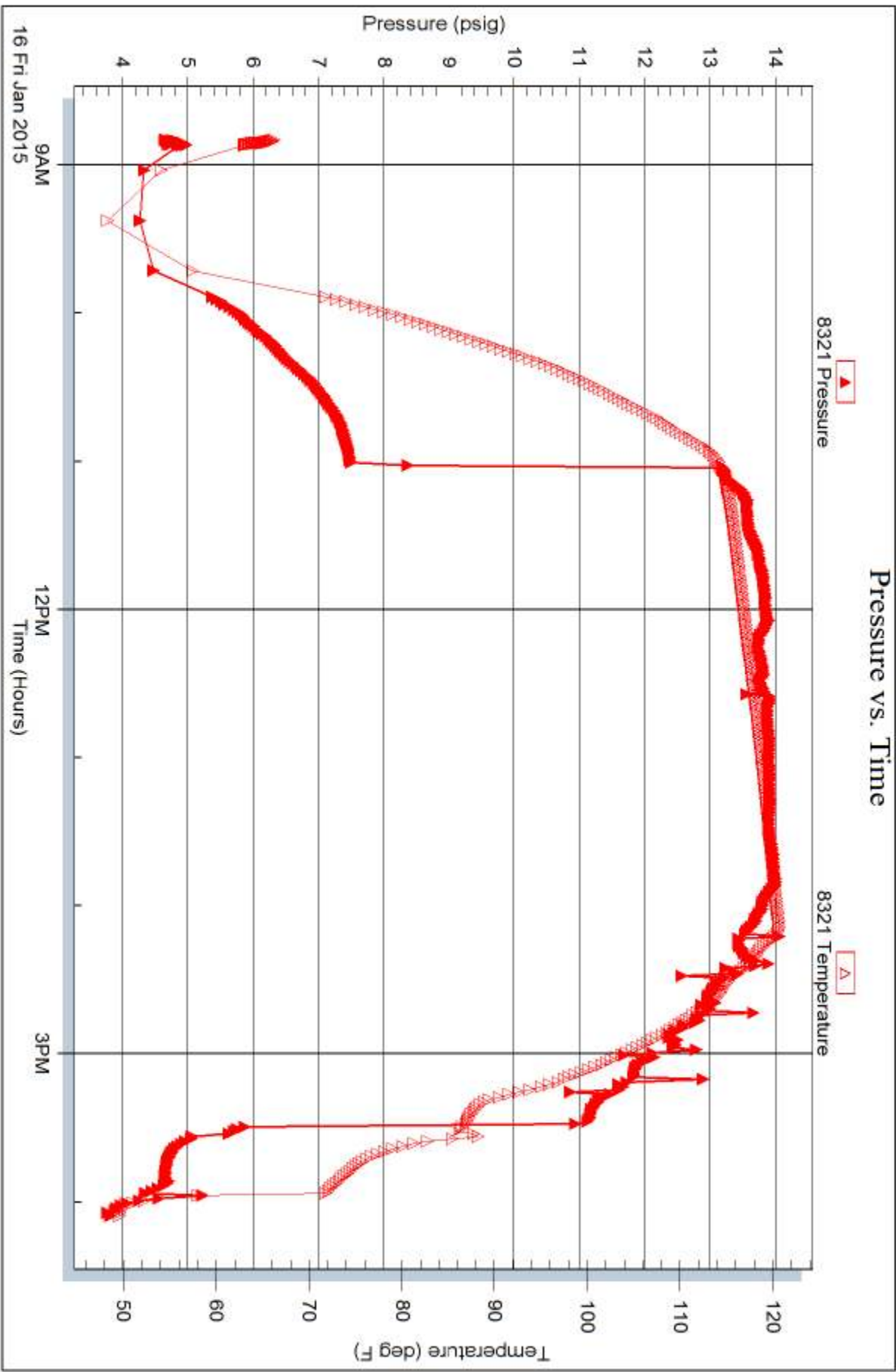
Serial #: 8321

Fluid

Samuel Gary & Assoc., Inc.

Ryan Trust#1-13

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 61059

Printed: 2015.01.16 @ 17:05:52



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Samuel Gary & Assoc., Inc.

13/5s/32w

1515 Wynkoop, STE 700
Denver, Co. 80202

Ryan Trust #1-13

Job Ticket: 61060

DST#: 2

ATTN: Clayton Cammozzi

Test Start: 2015.01.16 @ 18:08:00

GENERAL INFORMATION:

Formation: **L. Pawnee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:04:00

Time Test Ended: 04:11:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Brandon Quintana

Unit No: 57

Interval: 4332.00 ft (KB) To 4368.00 ft (KB) (TVD)

Reference Elevations: 2984.00 ft (KB)

Total Depth: 4368.00 ft (KB) (TVD)

2979.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8647

Inside

Press @ Run Depth: 165.66 psig @ 4333.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.01.16

End Date:

2015.01.17

Last Calib.:

2015.01.17

Start Time: 18:08:01

End Time:

04:11:30

Time On Btm:

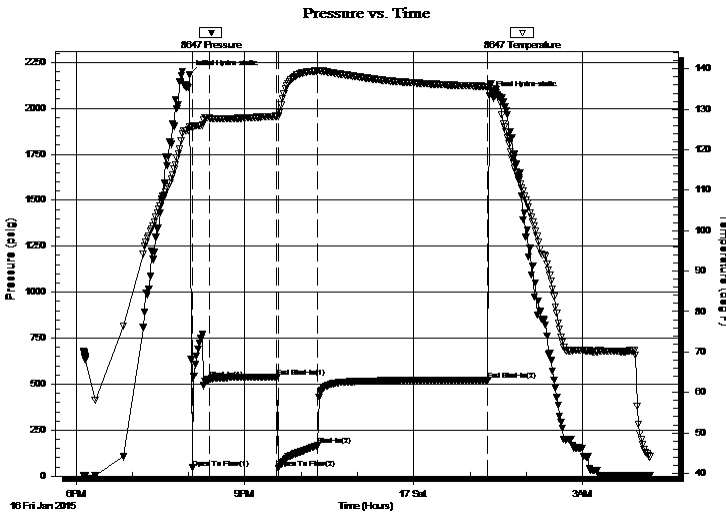
2015.01.16 @ 20:01:00

Time Off Btm:

2015.01.17 @ 01:20:30

TEST COMMENT: 20 - IF - Opened w/ surface blow , built to 1/2"
75 - ISI - No Return
45 - FF - Blow built to B.o.B in 35 min.
180 - FSI - No Return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2180.65	125.58	Initial Hydro-static
3	45.30	125.31	Open To Flow (1)
21	526.25	127.81	Shut-In(1)
93	538.51	128.31	End Shut-In(1)
95	44.22	128.28	Open To Flow (2)
137	165.66	139.51	Shut-In(2)
318	523.03	135.65	End Shut-In(2)
320	2070.78	135.64	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
285.00	MW 80%w ,20%m	2.31
42.00	100%oil	0.59

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Samuel Gary & Assoc., Inc.

13/5s/32w

1515 Wynkoop, STE 700
Denver, Co. 80202

Ryan Trust #1-13

Job Ticket: 61060

DST#: 2

ATTN: Clayton Cammozzi

Test Start: 2015.01.16 @ 18:08:00

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: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.78 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2400.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
285.00	MW 80%w ,20%m	2.307
42.00	100%oil	0.589

Total Length: 327.00 ft Total Volume: 2.896 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

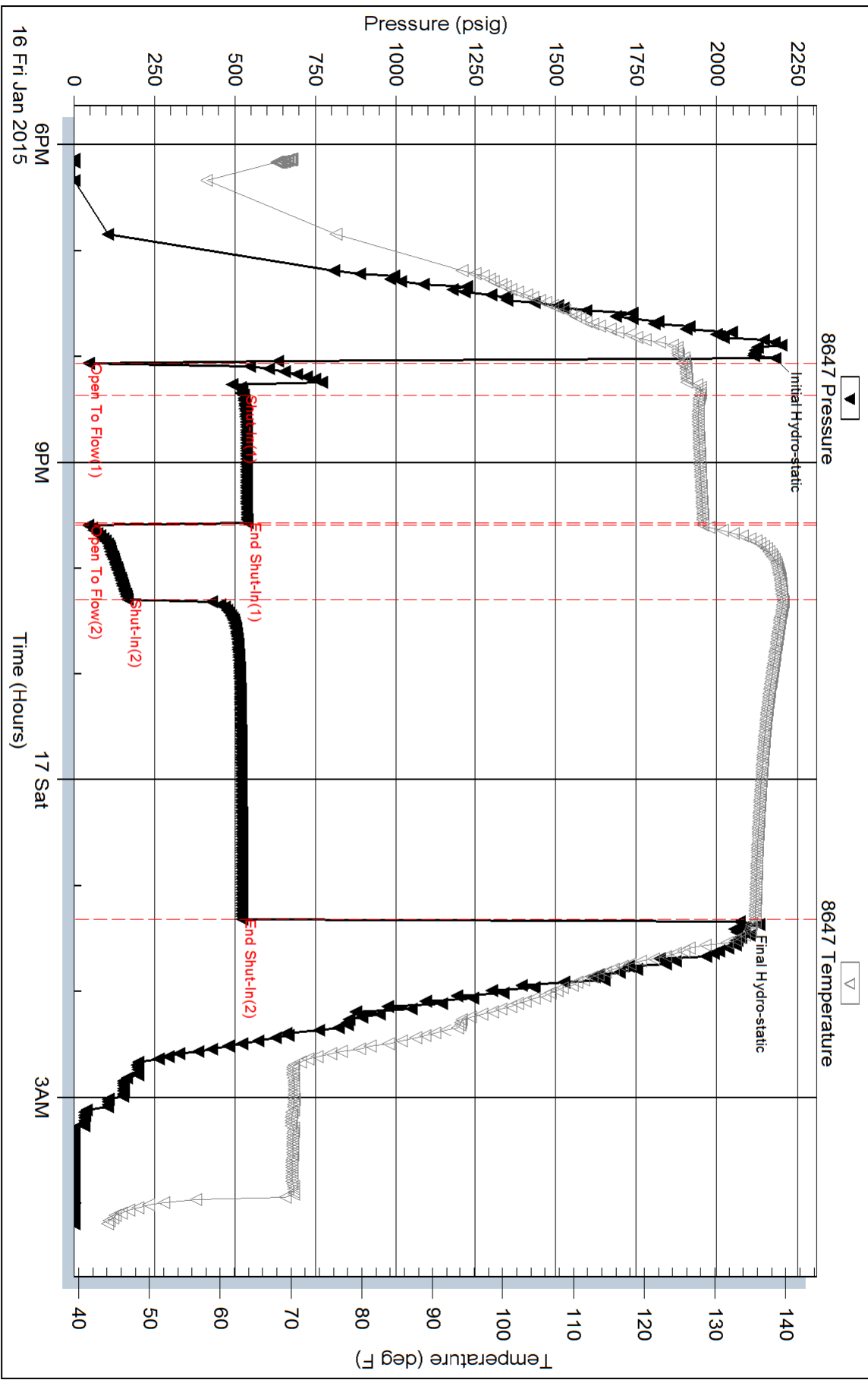
Laboratory Name:

Laboratory Location:

Recovery Comments: Gravity 28 @ 60

RW .14 @ 36 Chlorides 120,000ppm

Pressure vs. Time

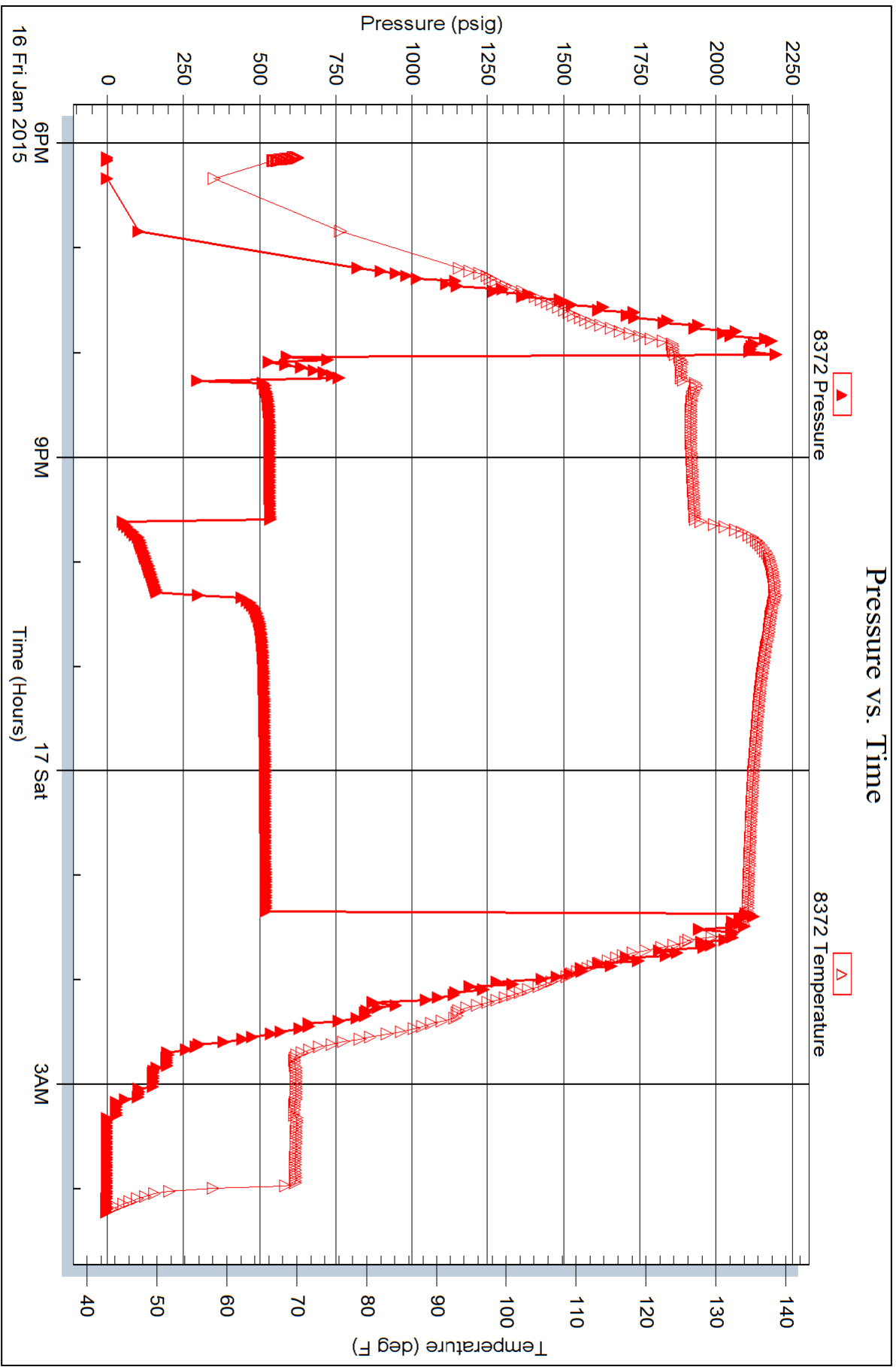


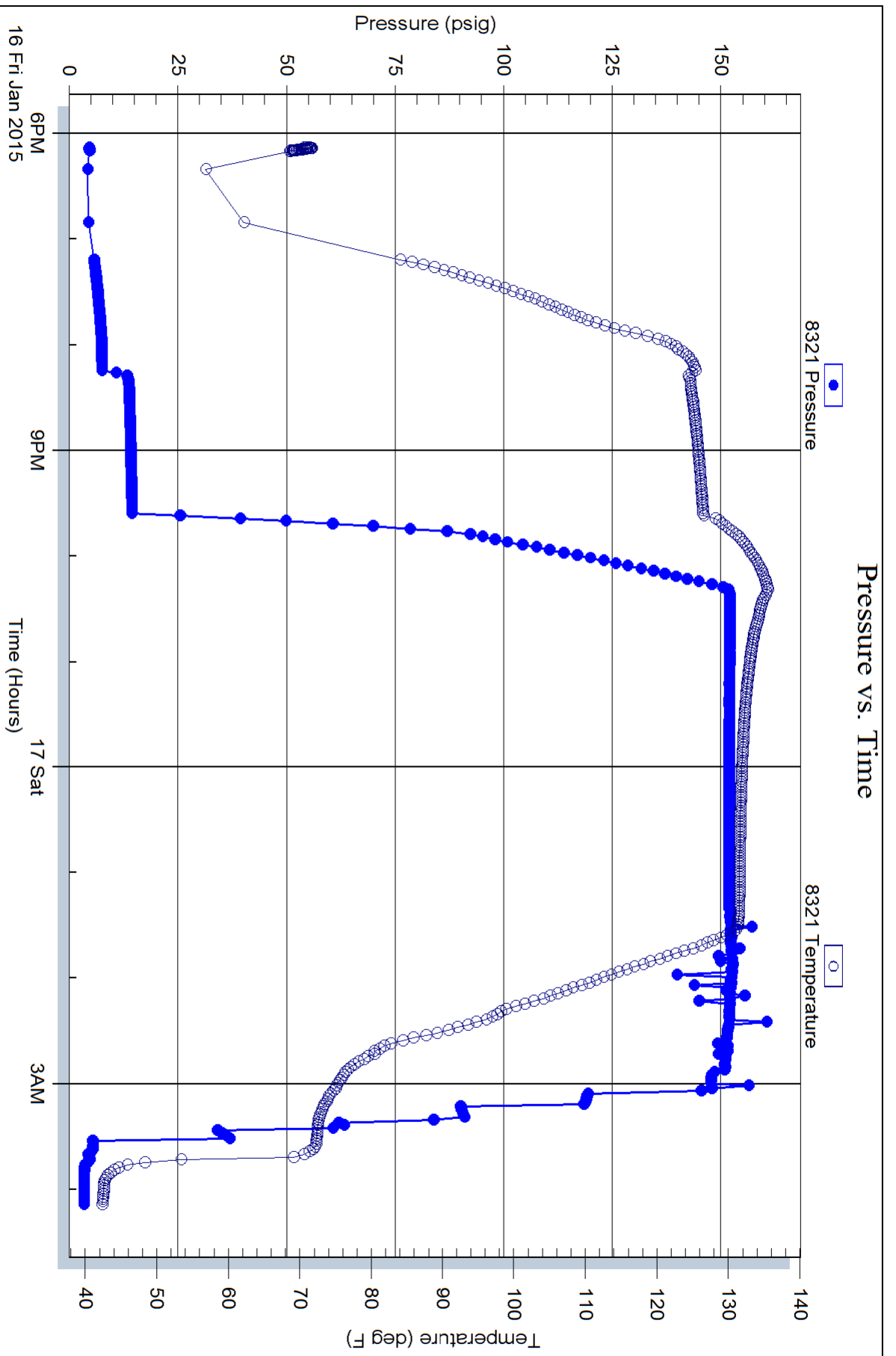
Serial #: 8372

Outside Samuel Gary & Assoc., Inc.

Ryan Trust#1-13

DST Test Number: 2







Scale 1:240 (5"=100') Imperial
Measured Depth Log

Well Name: RYAN TRUST 1-13
Well Id:
Location: SEC. 13 5S 32W RAWLINS COUNTY, KANSAS
License Number: 15-153-21091-0000 Region: WILDCAT
Spud Date: JAN. 10, 2015 Drilling Completed: JAN. 17, 2015
Surface Coordinates: 330 FSL/ 2260 FEL

Bottom Hole
Coordinates:
Ground Elevation (ft): 2979' K.B. Elevation (ft): 2984'
Logged Interval (ft): 3780' To: 4490' Total Depth (ft): 4490'
Formation: Lansing, Kansas City
Type of Drilling Fluid: Natural Chemical

Printed by WellSight Log Manager from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: Samuel Gary Jr. & Assoc.
Address: 1515 Wynkoop, Ste. # 700
Denver, Colo. 80202
Geo: Dan Pritchard

GEOLOGIST

Name: Schuyler Hedrick
Company: Earth Tech OGL, Inc.
Address: PO Box 683
Hooker, Okla . 73945
Off. 888-543-8378 Cell: 580-754-0231



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Samuel Gary & Assoc., Inc.

13/5s/32w

1515 Wynkoop, STE 700
Denver, Co. 80202

Ryan Trust #1-13

Job Ticket: 61059

DST#: 1

ATTN: Clayton Cammozzi

Test Start: 2015.01.16 @ 08:50:00

GENERAL INFORMATION:

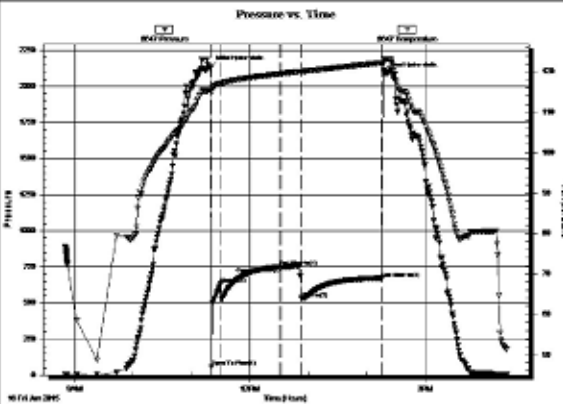
Formation: **L. Pawnee**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 11:20:30
 Time Test Ended: 16:23:30
 Interval: **4328.00 ft (KB) To 4368.00 ft (KB) (TVD)**
 Total Depth: **4368.00 ft (KB) (TVD)**
 Hole Diameter: **7.88 inches** Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Brandon Quintana
 Unit No: 57
 Reference Elevations: 2984.00 ft (KB)
 2979.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 8647

Inside

Press@RunDepth: 531.03 psig @ 4329.00 ft (KB)
 Start Date: 2015.01.16 End Date: 2015.01.16
 Start Time: 08:50:01 End Time: 16:23:30
 Capacity: 8000.00 psig
 Last Callb.: 2015.01.16
 Time On Btm: 2015.01.16 @ 11:19:30
 Time Off Btm: 2015.01.16 @ 14:18:30

TEST COMMENT: 10 - IF - Opened w / surface blow , built to 1"
 60 - ISI - No Return
 20 - FF - No Blow
 90 - FSI - No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2135.35	115.34	Initial Hydro-static
1	58.77	114.93	Open To Flow (1)
10	631.91	117.12	Shut-in(1)
71	749.80	119.49	End Shut-in(1)
72	749.82	119.52	Open To Flow (2)
93	531.03	120.04	Shut-in(2)
176	671.97	122.21	End Shut-in(2)
179	2088.63	123.15	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
7.00	100% mud	0.03

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Samuel Gary & Assoc., Inc.

13/5s/32w

1515 Wynkoop, STE 700
Denver, Co. 80202

Ryan Trust #1-13

Job Ticket: 61060

DST#: 2

ATTN: Clayton Cammozzi

Test Start: 2015.01.16 @ 18:08:00

GENERAL INFORMATION:

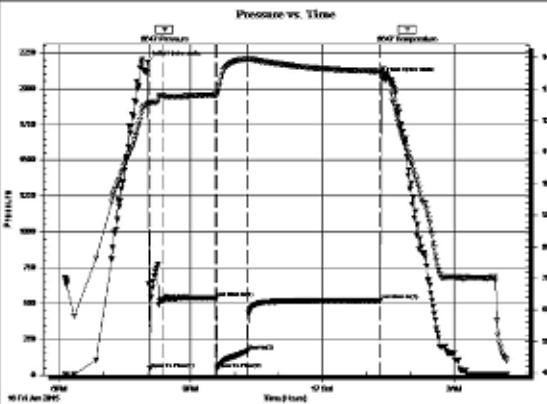
Formation: **L. Pawnee**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 20:04:00
 Time Test Ended: 04:11:30
 Interval: 4332.00 ft (KB) To 4368.00 ft (KB) (TVD)
 Total Depth: 4368.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Brandon Quintana
 Unit No: 57
 Reference Elevations: 2984.00 ft (KB)
 2979.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 8647

Inside

Press@RunDepth: 165.66 psig @ 4333.00 ft (KB)
 Start Date: 2015.01.16 End Date: 2015.01.17
 Start Time: 18:08:01 End Time: 04:11:30
 Capacity: 8000.00 psig
 Last Callb.: 2015.01.17
 Time On Btm: 2015.01.16 @ 20:01:00
 Time Off Btm: 2015.01.17 @ 01:20:30

TEST COMMENT: 20 - IF - Opened w / surface blow , built to 1/2"
 75 - ISI - No Return
 45 - FF - Blow built to B.o.B in 35 min.
 180 - FSI - No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2180.65	125.58	Initial Hydro-static
3	45.30	125.31	Open To Flow (1)
21	526.25	127.81	Shut-in(1)
93	538.51	128.31	End Shut-in(1)
95	44.22	128.28	Open To Flow (2)
137	165.66	139.51	Shut-in(2)
318	523.03	135.65	End Shut-in(2)
320	2070.78	135.64	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
285.00	MW 80%w ,20%m	2.31
42.00	100%oil	0.59

Gas Rates

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

* Recovery from multiple tests

Trilobite Testing, Inc

Ref. No: 61060

Printed: 2015.01.17 @ 02:31:25

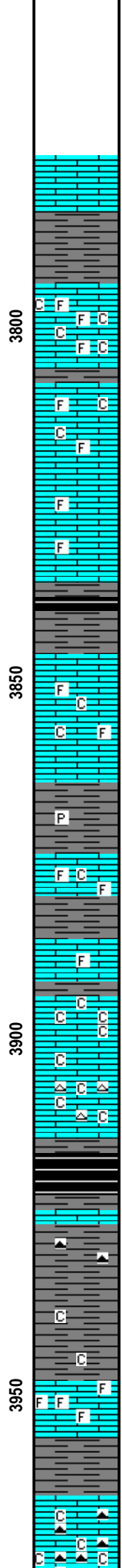
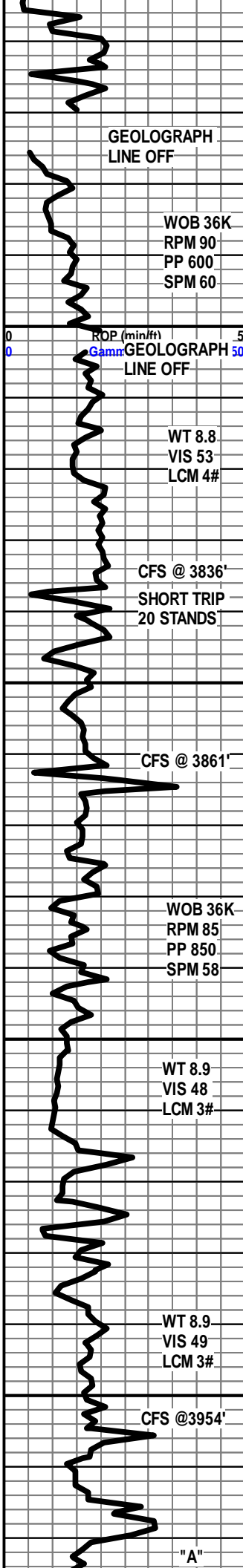
ROCK TYPES

- Anhy
- Bent
- Brec
- Cht
- Clyst
- Coal
- Congl
- Dol

- Gyp
- Igne
- Lmst
- Meta
- Mrlst
- Salt
- Shale
- Shcol

- Shgy
- Slstt
- Ss
- Till
- Carb sh
- Dol
- Dtd
- Gry sh

- Sandylms
- Shale
- Slststn
- Shlyslts
- Sltysh
- Lms



START 24 HR. MANNED UNIT 1/14/15

TOPEKA 3794' (-810')

LS- CRM TO OFF WHT, HD DNS TO BRIT IP, F-XLN, RE-XLN, S-CHLKY, IMBD MICRO FOSS THRU, HVY TR SFT TO FRM WHT CHLK THRU TRAY, DLL YEL MIN FLO THRU, NO VIS POR, NO VIS CUT OR SHOW

LS- CRM TO OFF WHT IP, HD DNS TO BRIT, F-XLN, S-CHLKY, IMBD FOSS FRGS, HVY TR SFT WHT CHLK THRU TRAY, SLI TR IMBD LT GY SH, NO VIS FLO, NO VIS POR, NO VIS CUT OR SHOW

LS- CRM TO LT TN TN, HD DNS, VF/F-XLN, RE-XLN IP, IMBD SM S-ANG CLR QRTZ GRNS, TR IMBD FOSS FRGS IP, SCAT DLL YEL MIN FLO IP, NO VIS POR NO VIS CUT OR SHOW

SH- DK GY TO GY RD IP, SFT TO FRM IP, SPLNTY SLTY TXT, W/ BLK SFT CARB

3848'-3850' LS- CRM TO LT TN (W/ BLK TAR OIL STN IN 20%), HD DNS TO BRIT IP, F-XLN, RE-XLN IP, SCAT IMBD CALC-XLS, IMBD SM FOSS FRGS IP, TR SFT WHT CHLK, DLL YEL FLO IN 20%-30%, V PR INTER-XLN POR IN 1%, PR TO FR FLW STRM IN 40%, NO VIS LCH ON DSH

SH- RD TO GRN GY, SFT TO FRM IP, SPLNTY, IMBD DISS PYR IP

LS- OFF WHT TO CRM LT GY IP, HD DNS TO BRIT, F-XLN, RE-XLN, S-CHLKY, HVY TR IMBD SM FOSS FRGS, TR SFT WHT CHLK, IMBD RD SH IP, DLL YEL TO YEL MIN FLO IN 30%, NO VIS POR, NO VIS CUT OR SHOW

LS- OFF WHT TO WHT CRM IP, HD DNS TO BRIT, F/MD-XLN, RE-XLN, V S-CHLKY, ABTD GMMY TO SFT WHT CHLK THRU TRAY, HVY TR WHT CHRT, TR IMBD SM RND CLR QRTZ GRNS, YEL MIN FLO THRU, NO VIS POR, NO VIS CUT OR SHOW

HEEBNER 3914' (-930')

SH- BLK SFT CARB

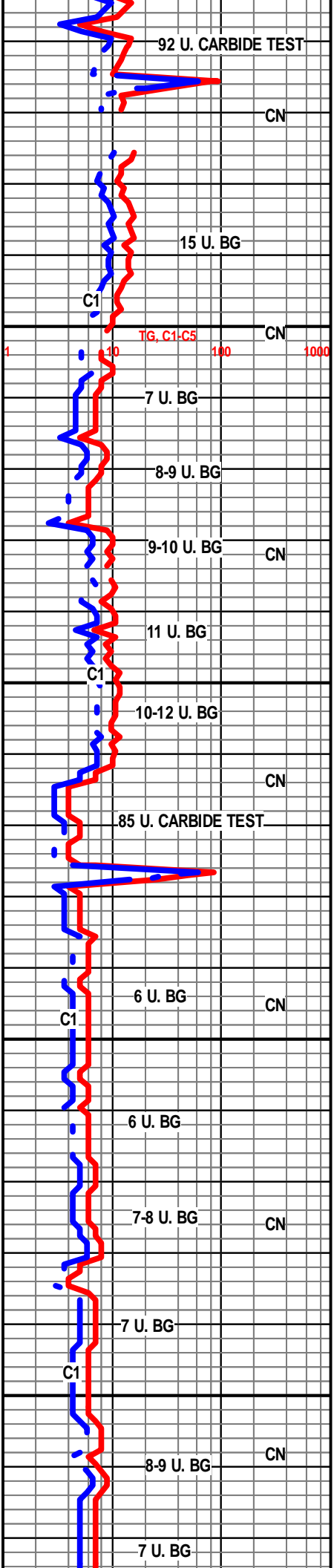
SH- GY TO MD GY RD, SFT TO FRM IP, SPLNTY, SLTY TXT IP, SLI TR ORNG CHRT

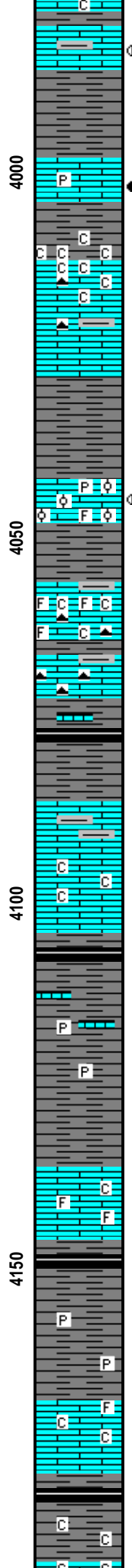
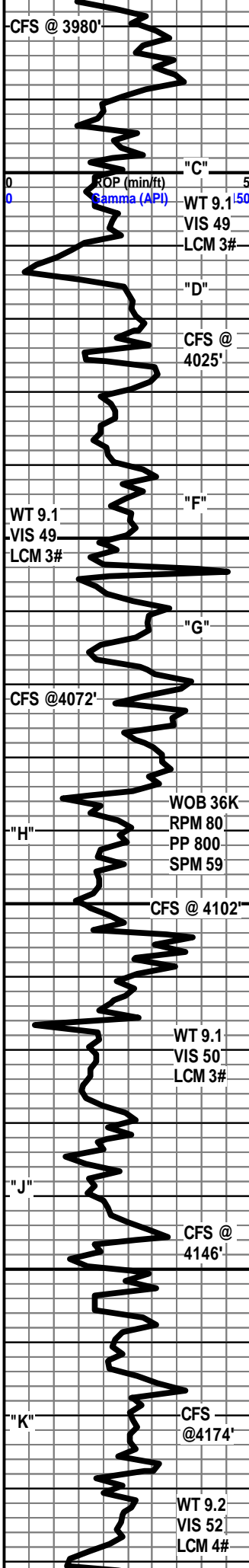
SH- RD TO DK RD GY MOTT, V GMMY TO SFT IP, TR GMMY WHT CHLK

3950'-3952' LS- OFF WHT TO LT TN, HD DNS, VF/F-XLN, RE-XLN IP, HVY TR IMBD MICRO FOSS, TR IMBD RD SH, DLL YEL FLO IN 60%, TR PR INTER-XLN POR IP, NO FLW CUT, TR FR SLW STRM IN 5%, NO LCH ON DSH, NO OIL ODOR

LANSING 3965' (-981')

LS- OFF WHT TO CRM, HD DNS, VF/F-XLN, S-CHLK IP, HVY TR ORNG TO CLR TRANS CHRT THRU TRAY, TR SFT TO FRM WHT CHLK, TR IMBD SM CALC-XLS, SLI TR IMBD DISS PYR IP, DLL YEL FLO IN 50%, V PR TO PR MICRO VUG POR IN 2%-3%, PR INTER-XLN POR IP, NO VIS CUT OR SHOW





3982'-3984' LS- OFF WHT TO CRM (W/ DK BRN TO BLCK OIL STN SCAT IN 30%), HD DNS TO BRTT IP, VF-XLN, S-SUCRO IP, IMBD LG CALC-XLS, TR IMBD RD SH, YEL GLD FLO IN 40%, SPTTD BRT YEL GLD FLO IN 10%, FR VUG POR IN 1%, PR TO FR INTER-XLN POR IN 1%, FR FLSH CUT, FR TO GD SLW STRM IN 30%, TN LCH ON DSH, V LT OIL ODOR

4001'-4004' LS- TN TO DK BRN (DUE TO OIL STN IN 80%), HD DNS TO BRTT, MD-XLN, RE-XLN MTRX, S-SUCRO, S-CHLKY IP, IMBD LM GRNS, TR IMBD V SM CALC-XLS IP, TR SCAT IMBD DISS PYR, V DLL YEL FLO IN 20%, SPTTD BRT YEL GLD FLO IP, PR TO FR INTER-XLN POR IN 2%, GD INTER-XLN POR IP, INST FLSH CUT, EXCEL SLW STRM THRU, DK BRN LCH ON DSH, GD OIL ODOR

LANSING "D" 4013' (-1029')

LS- OFF WHT TO LT GY, HD DNS, VF-XLN, S-CHLKY IP, IMBD GY SH, TR IMBD ORNG CHRT, HVY TR SFT TO GMMY WHT CHLK, NO VIS FLO, NO VIS POR, NO VIS CUT OR SHOW

4044'-4046' LS- LT TN TO TN (W/ BRN TO DK BRN OIL STN IN 30%), HD DNS TO BRTT IP, MD-XLN, RE-XLN MTRX, S-SUCRO IP, IMBD OOL THRU, TR IMBD SM FOSS FRGS, SLI TR IMBD PYR, YEL GLD FLO IN 20%, PR TO TR MICRO VUG POR IN 2%, TR FR INTER-OOL POR IP, GD FLSH CUT, GD SLW STRMS IN 50%, TN LCH ON DSH, NO OIL ODOR

LANSING "G" 4055' (-1071')

LS- WHT TO OFF WHT, HD DNS TO BRTT IP, VF/F-XLN, S-CHLKY IP, SCAT IMBD MICRO FOSS, HVY TR ORNG & CLR TRANS CHRT THRU TRAY, TR INTER-BD GRN & RD SH, DLL YEL MIN FLO THRU, NO VIS CUT OR SHOW

SH- GY TO MD GY RD GRN IP, SFT TO FRM IP, SPLNTY, TR INTER-BD LS

LS- OFF WHT TO WHT LT GY IP, HD DNS TO BRT IP, VF/F-XLN, CRYPTO-XLN IP, TR SFT TO GMMY WHT CHLK, IMBD LT GY SH IP, SH INTERBD'S, DLL YEL TO YEL MIN FLO IN 70%, NO VIS POR, NO VIS CUT OR SHOW

SH- GY TO MD GY RD GRN MOTT, FRM TO SFT, SLTY TXT, IMBD DISS PYR, LS INTER-BDS

LANSING "J" 4136' (-1152')

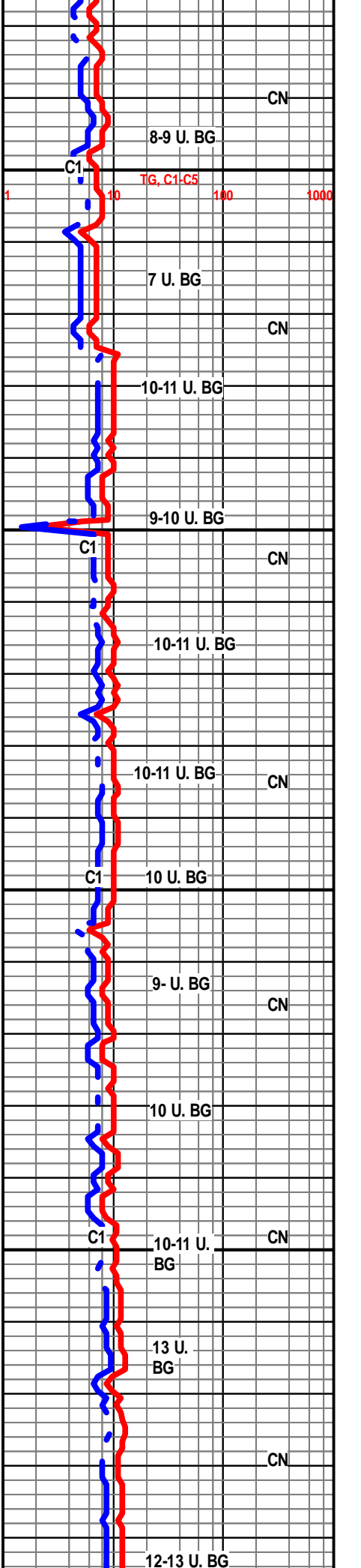
LS- OFF WHT TO CRM, HD DNS TO BRTT IP, F-XLN, RE-XLN IP, S-CHLKY, IMBD SM FOSS FRGS, IMBD CALC-XLS IP, DLL YEL TO YEL MIN FLO IN 40%, NO VIS POR, NO VIS CUT OR SHOW

SH- DK GY TO MD GY RD LT GRN MOTT, FRM TO SFT, BLCKY, TR PYR CLSTRS, W/ BLK SFT CARB IP

LS- OFF WHT TO WHT CRM IP, HD DNS TO BRTT IP, F-XLN, S-CHLKY, IMBD SFT WHT CHLK, TR IMBD FOSS FRGS, DLL YEL MIN FLO THRU, NO VIS POR, NO VIS CUT OR SHOW

SH- LT GY TO GY, V FRM TO SFT IP, BLCKY, TR FREE CALC-XLS, TR GMMY WHT CHLK

LS- LT GY TO OFF WHT, HD DNS, VF-XLN, CRYPTO-XLN IP, IMBD LT GY SH IP, TR IMBD SFT WHT CHI K V DI I



CN

8-9 U. BG

7 U. BG

CN

10-11 U. BG

9-10 U. BG

CN

10-11 U. BG

10-11 U. BG

CN

10 U. BG

9- U. BG

CN

10 U. BG

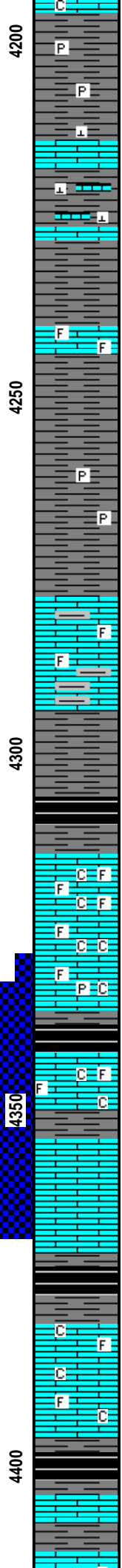
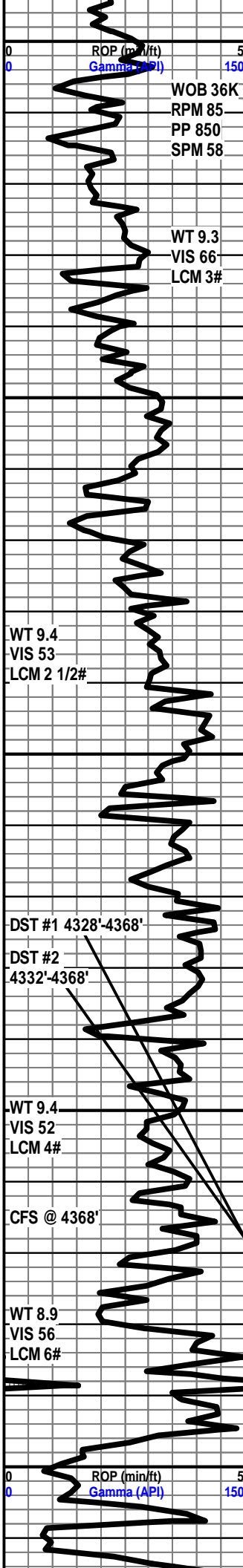
10-11 U. BG

CN

13 U. BG

CN

12-13 U. BG



BKC 4205' (-1221')
 SH- RD TO DK RD GY ORNG IP, SFT TO FRM IP, SPLNTY TO BLCKY, SLTY TXT IP, TR IMBD DISS PYR, TR GRN CLY

SH- RD TO DK RD GRN, SFT TO V GMMY, V CALC, TR INTER-BD LS

SH- DK RD TO RD ORNG GRN MOTT, SFT TO FRM IP, BLCKY, SLTY TXT, CALC-IP

LS- OFF WHT TO CRM IP, HD DNS TO BRTT IP, VF/F-XLN, RE-XLN IP, IMBD MICRO FOSS IP, TR IMBD RD SH, NO VIS FLO, NO VIS POR, NO VIS CUT OR SHOW

SH- RD TO DK RD PRP GY, SFT TO GMMY IP, SLTY TXT, TR CALC-IP, IMBD DISS PYR IP

LS- WHT TO OFF WHT LT GY, HD DNS TO BRTT IP, F/MD-XLN, RE-XLN, IMBD SM FOSS FRGS, IMBD GY SH, NO VIS FLO, NO VIS POR, NO VIS CUT OR SHOW

LABETTE SHALE 4294' (-1310')

SH- GY TO DK GY, FRM TO SFT, SPLNTY, W/ BLK SFT CARB

LS- OFF WHT TO CRM, HD DNS TO BRTT, F/MD-XLN, RE-XLN IP, S-CHLKY, IMBD MICRO-FOSS THRU, HVY TR SFT TO GMMY WHT CHLK, SLI TR PYR CLSTRS, DLL YEL TO YEL MIN FLO THRU, TR PR INTER-FOSS POR IP, NO VIS CUT OR SHOW

SH- BLCK SFT CARB, CALC-IP

4346'-4348' LS- CRM TO TN (W/ BRN OIL STN IN 40%), HD DNS TO BRTT, MD-XLN, RE-XLN, V SUCRO, TR IMBD SM FOSS FRGS IP, SLI TR IMBD SFT WHT CHLK, YEL GLD TO BRT YEL GLD FLO IN 20%, FR INTER-XLN POR IN 3%, PR TO TR FR VUG POR IN 1%, FR TO GD FLSH CUT, GD SLW STRM IN 50%, DK TN LCH ON DSH, V LT OIL ODOR

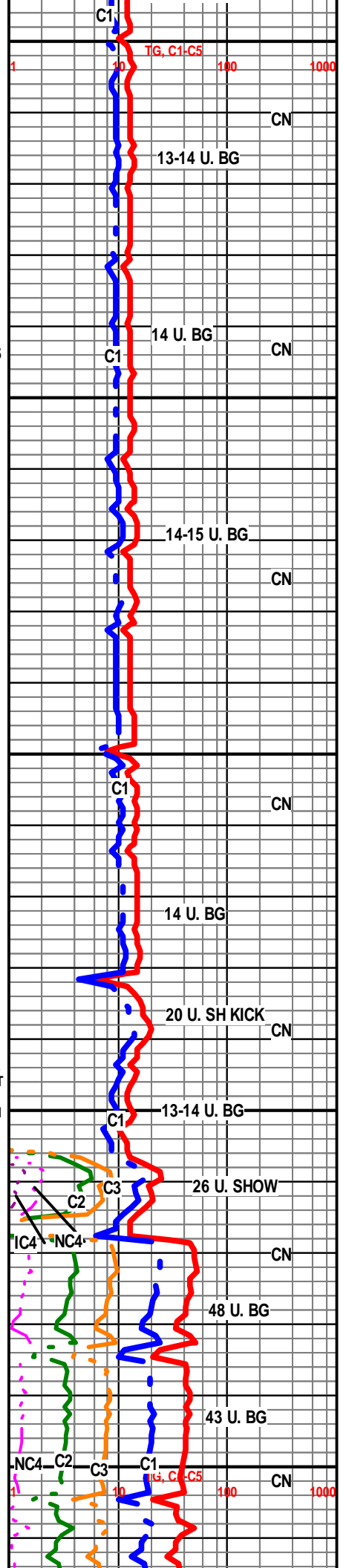
4361'-4365' LS- OFF WHT TO CRM (W/ DK TN OIL STN IN 20%), HD DNS TO BRTT IP, F-XLN, MD-XLN IP, S-SUCRO, IMBD CLR QRTZ GRNS IP, DLL YEL GLD FLO IN 30%, BRT YEL GLD FLO IN 20%, FR TO GD INTER-XLN POR IN 2%, FR TO PR MICRO-VUG POR IN 2%, FR FLSH CUT, FR SLW STRM IN 30%, LT TN TO TN LCH ON DSH, GD OIL ODOR

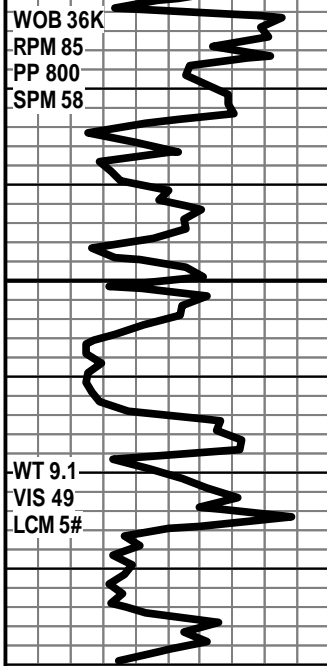
FORT SCOTT 4381' (-1497')

LS- OFF WHT TO WHT CRM IP, HD DNS, VF-XLN, CYPTO-XLN IP, S-CHLKY, IMBD SFT WHT CHLK, SLI TR IMBD FOSS FRGS IP, V DLL YEL MIN FLO IP, NO VIS CUT OR SHOW

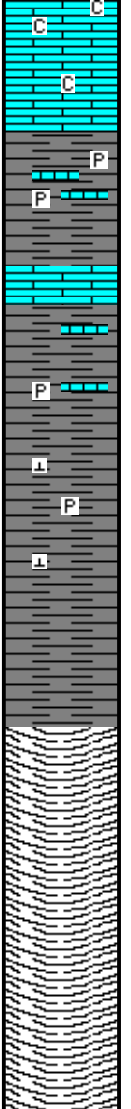
CHEROKEE SHALE 4405' (-1421')

LS- WHT TO OFF WHT, HD DNS TO BRTT IP, VF/F-XLN,





4450
4500



S-CHLKY IP, IMBD MD TO LG CLR QRTZ GRNS, TR IMBD
SFT WHT CHLK, DLL YEL TO YEL MIN FLO THRU, NO VIS
POR, NO VIS CUT OR SHOW

SH- MD GY TO GY GRN RD MOTT, SFT TO FRM IP, BLCKY,
TR PYR CLSTRS, TR INTER-BD LS

SH- MD GY TO DK GY GRN, FRM TO SFT, BLCKY, CALC-IP,
TR INTERBD LS

SH- RD TO ORNG GRN TO LT GY, V FRM TO SFT IP,
BLCKY, SMTH TXT, SLI TR IMBD DISS PYR

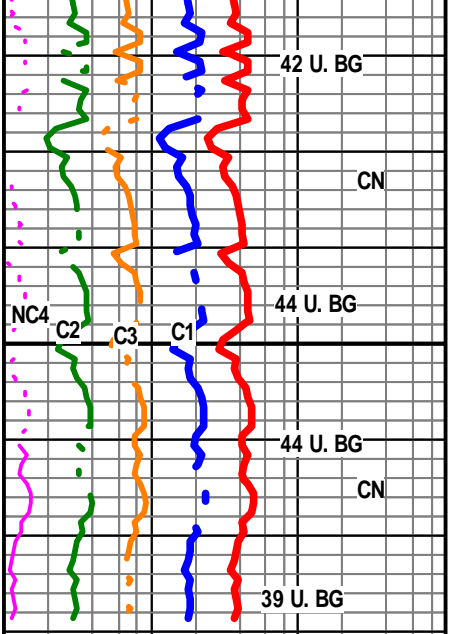
SH- GRN TO LT GY, FRM TO SFT, BLCKY TO SPLNTY,
SMTH TXT, CALC-IP

R.T.D. @ 4:00 P.M. 1/17/15

DROP SURVEY

T.O.F.L. @ 7:30 P.M. 1/17/15

WEATHERFORD/ LIBERAL, KS



R.T.D. @ 4490'

SAMPLES WILL BE DELIVERED TO KGS

THANK FOR CHOOSING EARTH TECH

LOGGED BY: SCHUYLER HEDRICK

R.T.D @ 4490'

SHORT TRIP
15 STANDS

C.T.C.H. 1.5 HRS