



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1234857  
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: \_\_\_\_\_



1234857

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](mailto: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> _____ <i>(Submit ACO-4)</i>	<b>PRODUCTION INTERVAL:</b> _____ _____
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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. 618

Date	Sec.	Twp.	Range	County	State	On Location	Finish
8-26-14	36	15	14	Russell	Ks		12:30PM

Location 281 + Mineral's rd, 1E, 54th

Lease	Drines	Well No.	4 SWD	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	Southwind	#8		Charge To	Aleo Oil Company
Type Job	Surface			Street	
Hole Size	12 1/4"	T.D.	853'	City	State
Csg.	8 3/5	Depth	853'	The above was done to satisfaction and supervision of owner agent or contractor.	
Tbg. Size		Depth		Cement Amount Ordered	325 Com 3% CC 2% Gel
Tool		Depth			
Cement Left in Csg.	42'	Shoe Joint	42'		
Meas Line		Displace	5 1/2 BLS		

**EQUIPMENT**

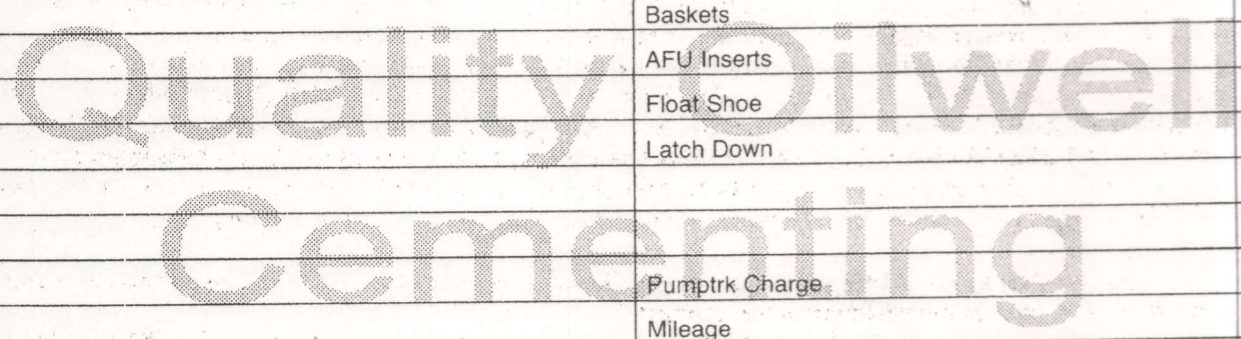
Pumptrk	16	No.	Cementer		Common
			Helper	Billy	Poz. Mix
Bulktrk	19	No.	Driver	Doug	Gel.
Bulktrk	p.u.	No.	Driver	Rick	Calcium

**JOB SERVICES & REMARKS**

Remarks:	Cement did Circulate.	Hulls
Rat Hole		Salt
Mouse Hole		Flowseal
Centralizers		Kol-Seal
Baskets		Mud CLR 48
D/V or Port Collar		CFL-117 or CD110 CAF 38
		Sand
		Handling
		Mileage

**FLOAT EQUIPMENT**

Guide Shoe	Basic plate
Centralizer	Rubber plug
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	



Pumptrk Charge	
Mileage	
	Tax
	Discount
	Total Charge

X Signature *[Handwritten Signature]*

# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025

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

No. 380

Cell 785-324-1041

Date	Sec.	Twp.	Range	County	State	On Location	Finish
8-31-14	36	15	14	Russell	KS	10:30pm	2:15am

Location 251 + Michaels Rd

Lease DEINES Well No. #4 Owner I E Sinto

Contractor Southwind 8 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 Long string Charge To

Hole Size 7.718 T.D. 3894

Csg. 510 Depth 3291 Street ALEO

Tbg. Size Depth City State

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

Cement Left in Csg. 28.5 Shoe Joint 28.5 Cement Amount Ordered 150 Com 10%

Meas Line 13.5 Displace 77.5 (313) Salt Yc flow

**EQUIPMENT**

Pumptrk 20 No. Cementer Matt	Common
Bulktrk 9 No. Driver Matt	Poz. Mix
Bulktrk pu No. Driver Tylof	Gel.
	Calcium

**JOB SERVICES & REMARKS**

Remarks:	Salt HCL 10/31/14
Rat Hole 30	Flowseal
Mouse Hole 15	Kol-Seal
Centralizers 135, 7, 9, 11	Mud CLR 48 300 g
Baskets	CFL-117 or CD110 CAF 38
D/V or Port Collar	Sand
Circulated 20 min	Handling
Set tri shoe off	Mileage
Circulated 20 min	Sho

**FLOAT EQUIPMENT**

Plug Rat mouse hole	Guide Shoe
Ben flush and 10/31/14 HCL	Centralizer 6 F.4r 605
Mixed 135 Shs down hole	Baskets
dis placed with water	AFU Inserts
	Float Shoe
Lit 700 PSI	Latch Down
Land 1500 PSI	Triplex Shoe
	plus
	Pumptrk Charge
	Mileage

	Tax
	Discount
	Total Charge

X Signature Ann Weaving



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Aleo Oil Company**

5907 West Broadway  
Great Bend, KS 67530

ATTN: Steve Murphy

**Deines #4**

**36-15s-14w Russell,KS**

Start Date: 2014.08.29 @ 22:03:00

End Date: 2014.08.30 @ 02:11:30

Job Ticket #: 60263                      DST #: 1

Trilobite Testing, Inc

1515 Commerce Parkway Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.09.02 @ 13:47:15

Aleo Oil Company

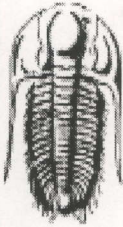
36-15s-14w Russell,KS

Deines #4

DST # 1

LKC J

2014.08.29



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Aleo Oil Company  
5907 West Broadway  
Great Bend, KS 67530  
ATTN: Steve Murphy

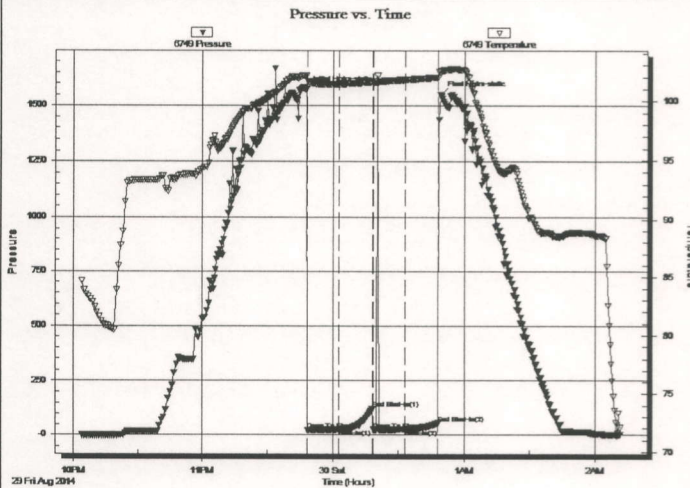
**36-15s-14w Russell,KS**  
**Deines #4**  
Job Ticket: 60263      DST#: 1  
Test Start: 2014.08.29 @ 22:03:00

## GENERAL INFORMATION:

Formation: **LKC J**  
Deviated: No      Whipstock:      ft (KB)  
Time Tool Opened: 23:48:30  
Time Test Ended: 02:11:30  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Ken Swinney  
Unit No: S1  
Interval: **3214.00 ft (KB) To 3236.00 ft (KB) (TVD)**  
Reference Elevations: 1854.00 ft (KB)  
Total Depth: 3236.00 ft (KB) (TVD)      1845.00 ft (CF)  
Hole Diameter: 7.88 inches      Hole Condition: Fair      KB to GR/CF: 9.00 ft

**Serial #: 6749      Inside**  
Press@RunDepth: 26.20 psig @ 3232.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2014.08.29      End Date: 2014.08.30      Last Calib.: 2014.08.30  
Start Time: 22:04:00      End Time: 02:11:30      Time On Btm: 2014.08.29 @ 23:48:00  
Time Off Btm: 2014.08.30 @ 00:49:00

**TEST COMMENT:** IFP 15 Weak surface blow died in 3 minutes  
ISI 15 No blow back  
FFP 15 Dead no blow - Flush tool - no blow  
FSI 15 No blow back



## PRESSURE SUMMARY

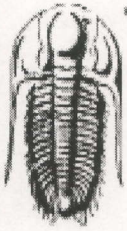
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1572.01	102.10	Initial Hydro-static
1	21.98	101.67	Open To Flow (1)
15	26.62	101.43	Shut-In(1)
30	120.72	101.62	End Shut-In(1)
31	25.12	101.61	Open To Flow (2)
45	26.20	101.80	Shut-In(2)
60	55.69	102.00	End Shut-In(2)
61	1547.23	102.44	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
1.00	Mud 100%	0.01

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Aleo Oil Company  
5907 West Broadway  
Great Bend, KS 67530  
ATTN: Steve Murphy

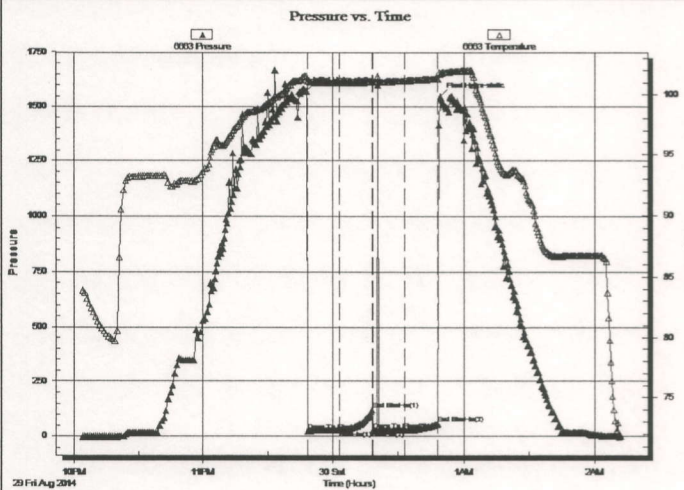
**36-15s-14w Russell,KS**  
**Deines #4**  
Job Ticket: 60263      **DST#: 1**  
Test Start: 2014.08.29 @ 22:03:00

## GENERAL INFORMATION:

Formation: **LKC J**  
Deviated: No      Whipstock:      ft (KB)  
Time Tool Opened: 23:48:30  
Time Test Ended: 02:11:30  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Ken Swinney  
Unit No: S1  
Interval: **3214.00 ft (KB) To 3236.00 ft (KB) (TVD)**  
Reference Elevations: 1854.00 ft (KB)  
Total Depth: 3236.00 ft (KB) (TVD)      1845.00 ft (CF)  
Hole Diameter: 7.88 inches      Hole Condition: Fair      KB to GR/CF: 9.00 ft

**Serial #: 6663      Outside**  
Press@RunDepth: 56.69 psig @ 3233.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2014.08.29      End Date: 2014.08.30      Last Calib.: 2014.08.30  
Start Time: 22:04:00      End Time: 02:12:00      Time On Btm: 2014.08.29 @ 23:48:00  
Time Off Btm: 2014.08.30 @ 00:49:00

TEST COMMENT: IFP 15 Weak surface blow died in 3 minutes  
ISI 15 No blow back  
FFP 15 Dead no blow - Flush tool - no blow  
FSI 15 No blow back



## PRESSURE SUMMARY

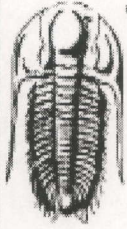
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1573.41	101.50	Initial Hydro-static
1	24.74	101.09	Open To Flow (1)
15	28.09	100.94	Shut-In(1)
30	121.58	101.05	End Shut-In(1)
31	28.52	101.02	Open To Flow (2)
45	28.74	101.14	Shut-In(2)
60	56.69	101.30	End Shut-In(2)
61	1547.81	101.71	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
1.00	Mud 100%	0.01

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

TOOL DIAGRAM

Aleo Oil Company  
5907 West Broadway  
Great Bend, KS 67530  
ATTN: Steve Murphy

**36-15s-14w Russell,KS**  
**Deines #4**  
Job Ticket: 60263      DST#: 1  
Test Start: 2014.08.29 @ 22:03:00

### Tool Information

Drill Pipe:	Length: 3193.00 ft	Diameter: 3.80 inches	Volume: 44.79 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 45000.00 lb
			<u>Total Volume: 44.79 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3214.00 ft			Final 40000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	22.00 ft			
Tool Length:	49.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-In Tool	5.00			3192.00	
Hydraulic tool	5.00			3197.00	
Jars	5.00			3202.00	
Safety Joint	2.00			3204.00	
Top Packer	5.00			3209.00	
Packer	5.00			3214.00	27.00      Bottom Of Top Packer
Anchor	17.00			3231.00	
Recorder	1.00	6749	Inside	3232.00	
Recorder	1.00	6663	Outside	3233.00	
Bullnose	3.00			3236.00	22.00      Anchor Tool
<b>Total Tool Length:</b>	<b>49.00</b>				





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Aleo Oil Company  
5907 West Broadway  
Great Bend, KS 67530  
ATTN: Steve Murphy

**36-15s-14w Russell,KS**  
**Deines #4**  
Job Ticket: 60263      **DST#: 1**  
Test Start: 2014.08.29 @ 22:03:00

## 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: 60.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.98 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 5600.00 ppm			
Filter Cake: 1.00 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	Mud 100%	0.014

Total Length: 1.00 ft      Total Volume: 0.014 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments:

Serial #: 6749

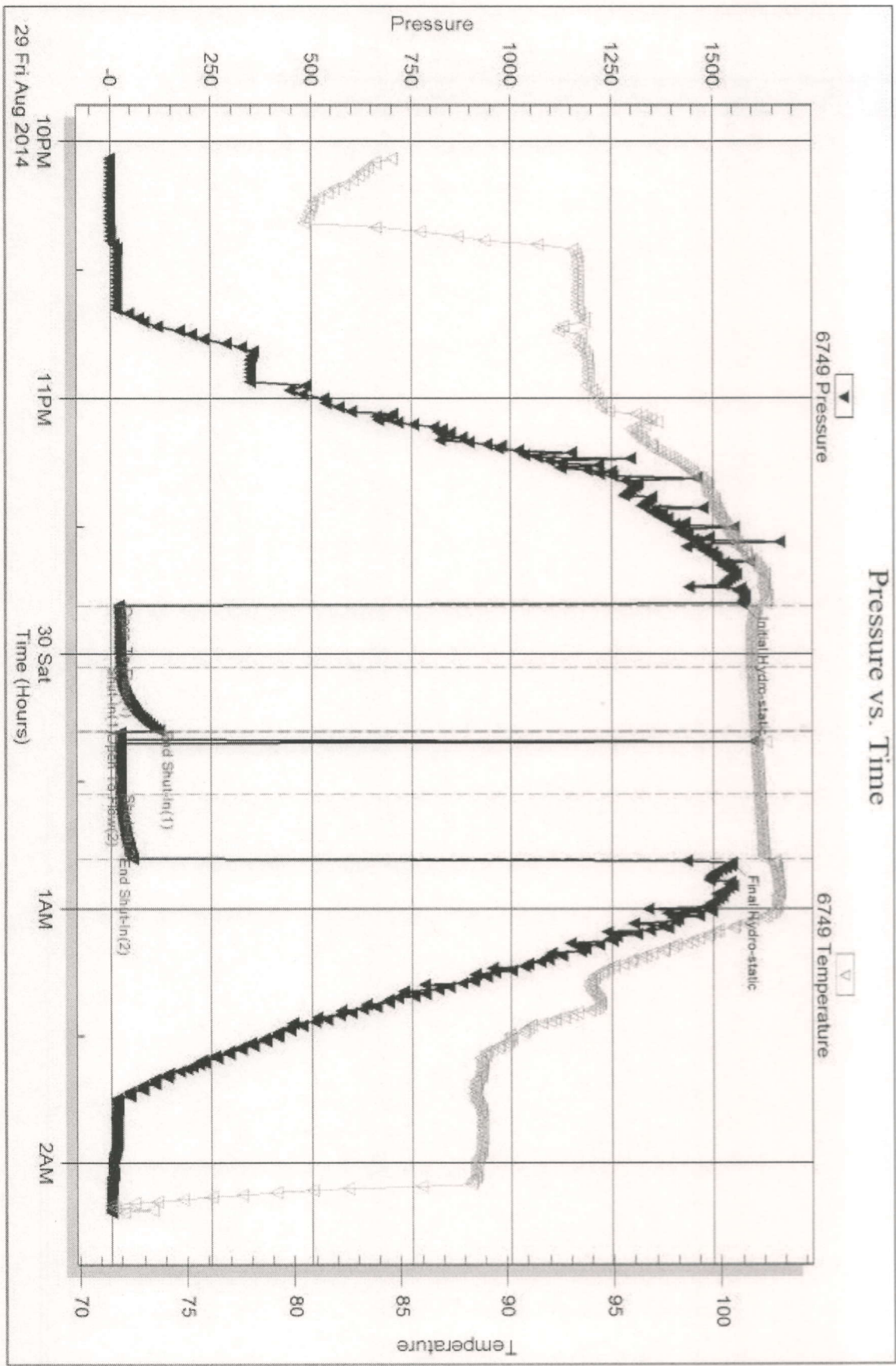
Inside

Also Oil Company

Dehes #4

DST Test Number: 1

### Pressure vs. Time



Tribble Testing, Inc

Ref. No: 60263

Printed: 2014.09.02 @ 13:47:16

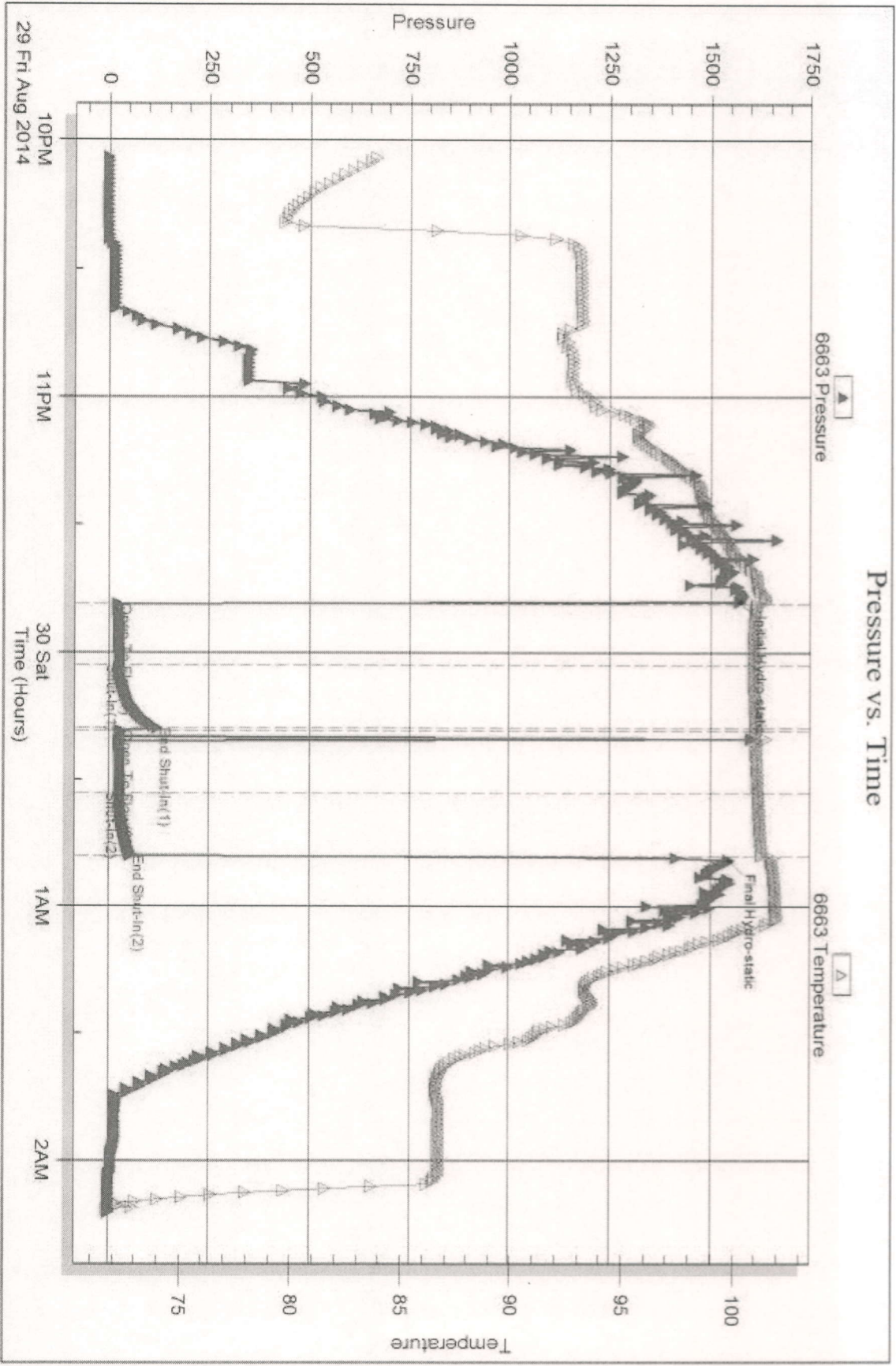
Serial #: 6663

Outside Also Oil Company

Deines #4

DST Test Number: 1

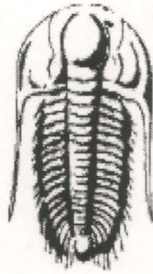
### Pressure vs. Time



Tribble Testing, Inc

Ref. No: 60263

Printed: 2014.09.02 @ 13:47:17



**TRILOBITE**  
**TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Aleo Oil Company**

5907 West Broadway  
Great Bend, KS 67530

ATTN: Steve Murphy

**Deines #4**

**36-15s-14w Russell,KS**

Start Date: 2014.08.30 @ 11:51:00

End Date: 2014.08.30 @ 17:35:30

Job Ticket #: 60264                      DST #: 2

Trilobite Testing, Inc

1515 Commerce Parkway Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.09.02 @ 13:46:48

Aleo Oil Company

36-15s-14w Russell,KS

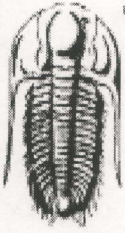
Deines #4

DST # 2

Arbuckle

2014.08.30





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Aleo Oil Company  
 5907 West Broadway  
 Great Bend, KS 67530  
 ATTN: Steve Murphy

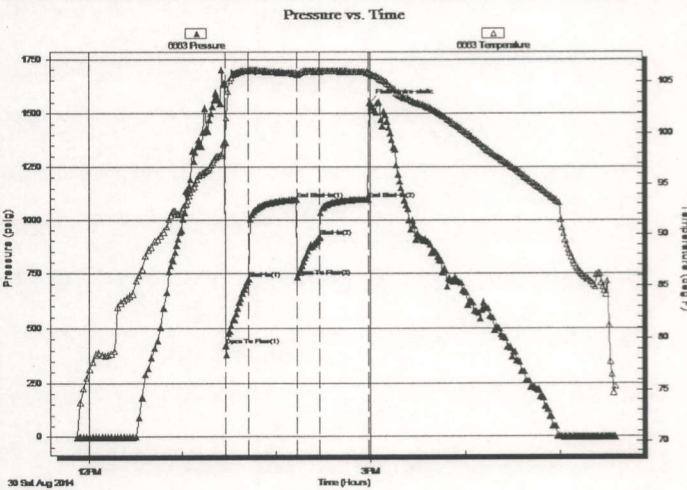
**36-15s-14w Russell, KS**  
**Deines #4**  
 Job Ticket: 60264      **DST#: 2**  
 Test Start: 2014.08.30 @ 11:51:00

## GENERAL INFORMATION:

Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 13:28:00  
 Time Test Ended: 17:35:30  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Ken Swinney  
 Unit No: S1 Great Bend/58  
 Interval: **3278.00 ft (KB) To 3294.00 ft (KB) (TVD)**  
 Total Depth: 3290.00 ft (KB) (TVD)  
 Reference Elevations: 1854.00 ft (KB)  
 1845.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 KB to GR/CF: 9.00 ft

**Serial #: 6663 Outside**  
 Press@RunDepth: 1098.17 psig @ 3291.00 ft (KB)      Capacity: 8000.00 psig  
 Start Date: 2014.08.30      End Date: 2014.08.30      Last Calib.: 2014.08.30  
 Start Time: 11:52:00      End Time: 17:35:30      Time On Btm: 2014.08.30 @ 13:27:00  
 Time Off Btm: 2014.08.30 @ 14:59:30

**TEST COMMENT:** IFP 15 Strong blow BOB in 45 seconds  
 ISI 30 Slight surface blow back  
 FFP 15 Strong blow BOB in 1 minute  
 FSi 30 Blow back built to 2"



## PRESSURE SUMMARY

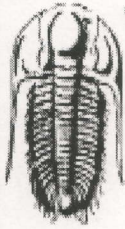
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1637.32	99.05	Initial Hydro-static
1	422.57	99.12	Open To Flow (1)
16	725.64	106.03	Shut-In(1)
46	1095.75	105.77	End Shut-In(1)
47	736.57	105.64	Open To Flow (2)
61	918.58	105.97	Shut-In(2)
92	1098.17	105.88	End Shut-In(2)
93	1549.00	105.79	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
186.00	Water with show of oil Water 100%	2.61
1049.00	SOCW Oil 3% Water 97%	14.71
620.00	OGW Oil 15% Gas 15% Water 70%	8.70
10.00	Clean oil Oil 100%	0.14

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Aleo Oil Company  
5907 West Broadway  
Great Bend, KS 67530  
  
ATTN: Steve Murphy

**36-15s-14w Russell, KS**  
  
**Deines #4**  
Job Ticket: 60264      **DST#: 2**  
Test Start: 2014.08.30 @ 11:51:00

**Tool Information**

Drill Pipe:	Length: 3256.00 ft	Diameter: 3.80 inches	Volume: 45.67 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 45.67 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3278.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	16.00 ft			
Tool Length:	43.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-In Tool	5.00			3256.00	
Hydraulic tool	5.00			3261.00	
Jars	5.00			3266.00	
Safety Joint	2.00			3268.00	
Top Packer	5.00			3273.00	
Packer	5.00			3278.00	27.00      Bottom Of Top Packer
Anchor	11.00			3289.00	
Recorder	1.00	6749	Inside	3290.00	
Recorder	1.00	6663	Outside	3291.00	
Bullnose	3.00			3294.00	16.00      Anchor Tool
<b>Total Tool Length:</b>	<b>43.00</b>				



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Aleo Oil Company  
5907 West Broadway  
Great Bend, KS 67530  
  
ATTN: Steve Murphy

**36-15s-14w Russell,KS**  
**Deines #4**  
Job Ticket: 60264      **DST#: 2**  
Test Start: 2014.08.30 @ 11:51:00

**Mud and Cushion Information**

Mud Type: Gel Chem	Cushion Type:	Oil API:	37 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 60.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.97 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 5600.00 ppm			
Filter Cake: 1.00 inches			

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
186.00	Water with show of oil Water 100%	2.609
1049.00	SOCW Oil 3% Water 97%	14.715
620.00	OGW Oil 15% Gas 15% Water 70%	8.697
10.00	Clean oil Oil 100%	0.140

Total Length: 1865.00 ft      Total Volume: 26.161 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:



Serial #: 6749

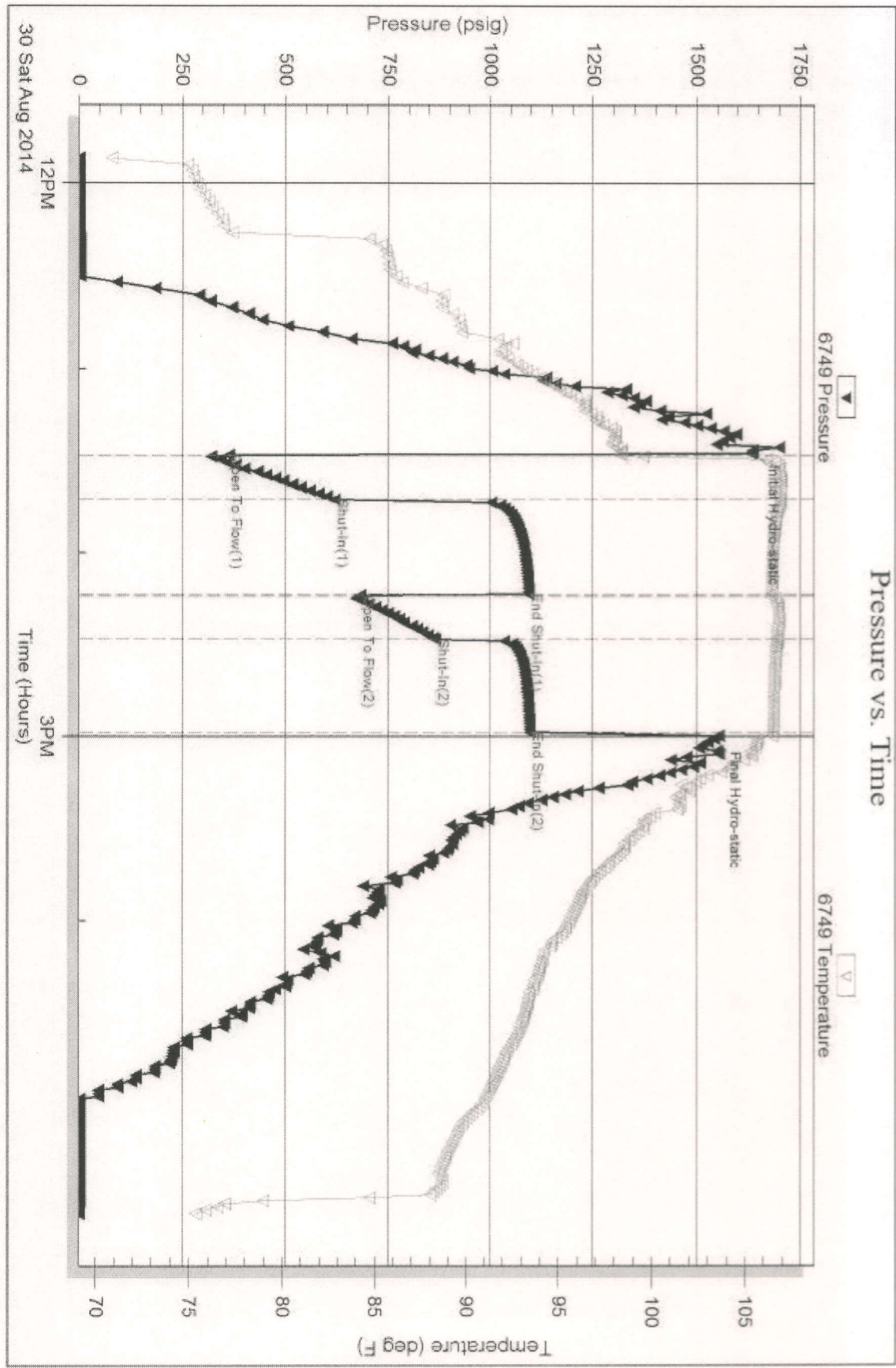
Inside

Also Oil Company

Denes #4

DST Test Number: 2

### Pressure vs. Time



Tribble Testing, Inc

Ref. No: 60264

Printed: 2014.09.02 @ 13:46:49

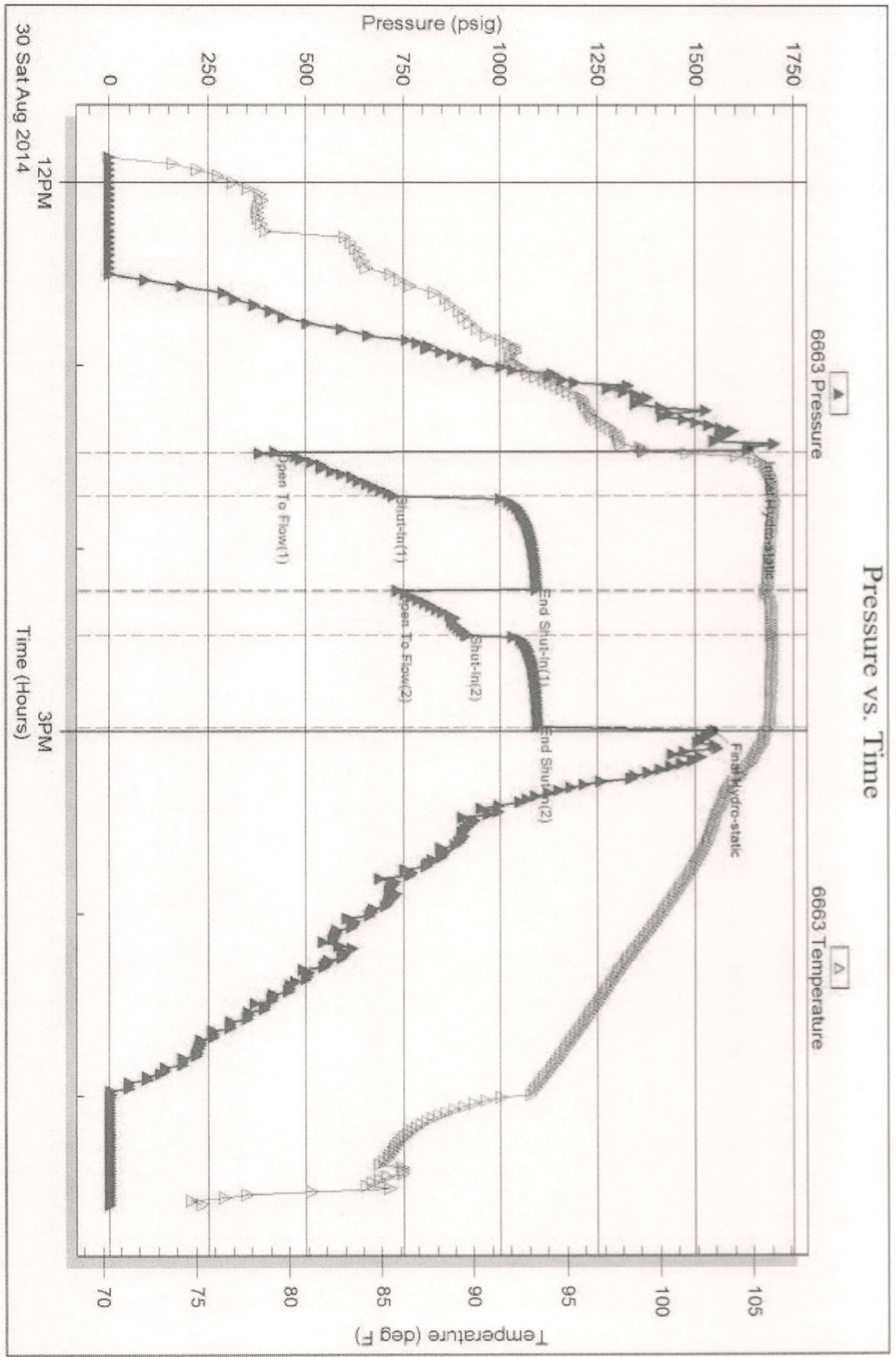
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Outside Also Oil Company

Denes #4

DST Test Number: 2

### Pressure vs. Time



Triobite Testing, Inc

Ref. No: 60264

Printed: 2014.09.02 @ 13:46:49



# STEVEN P. MURPHY, P.G.

*Petroleum Geologist (KS #228)*

Cell 620.639.3030  
Fax 785.387.2400

RR#1, Box 69  
Otis, Kansas 67565  
geomurphy@gbta.net

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

Well Name: Deines #4  
API: 15-167-23993-00-00  
Location: Russell County  
License Number: 32826  
Spud Date: 8/25/14  
Surface Coordinates: 1518' FNL & 1271' FEL (NW NW SE NE)  
Section 36-T15S-R14W  
Bottom Hole Coordinates: Same as above, vertical well with minimal deviation  
Region: Kansas  
Drilling Completed: 8/30/14  
Ground Elevation (ft): 1845'      K.B. Elevation (ft): 1854'  
Logged Interval (ft): 2700      To: TD      Total Depth (ft): 3290'  
Formation: Topeka through Arbuckle  
Type of Drilling Fluid: Chemical (Mudco - Gary Schmidtberger)

Printed by STRIP.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

## OPERATOR

Company: Michaelis, Roger dba ALEO Oil Co.  
Address: 5907 W. Broadway  
Great Bend, KS 67530

## GEOLOGIST

Name: Steven P. Murphy, PG  
Company: Consulting Petroleum Geologist  
Address: 3365 CR 390  
Otis, KS 67565

## LogTops (Datum)

An open hole was not run. The following are sample tops based on ROP & sample examination:

Anhydrite Top - 818 (+1036)  
Anhydrite Base - 853 (+1001)  
Topeka - 2749 (-895)  
Heebner - 3043 (-1189)  
Lansing - 3050 (-1155)  
Arbuckle - 3284 (-1430)

DSTs

Drillstem testing was performed by Trilobite Testing (Hays, KS shop):

DST #1 3214-3236 (LKC "J" Zone)

15:15:15:15  
 IF: Wk surf blow died in 3 min, NR  
 FF: NB, flushed tool, NB  
 Recovery: 1' Mud  
 IHP: 1572 FHP: 1547  
 IFP: 21-26 ISIP: 120  
 FFP: 25-26 FSIP: 56  
 BHT - 102 F

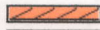


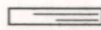
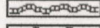
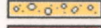

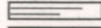
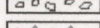
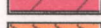
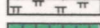
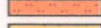
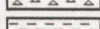

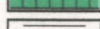
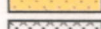
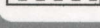

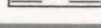

DST #2 3278-3294 (Arbuckle)

15:30:15:30  
 IF: BOB 45 sec, surface blow return  
 FF: BOB 1 min, 2" return  
 Recovery: 10' Oil,  
 620' OGW (15% O, 85% W),  
 1049' SI OCW (3% ), 97% W),  
 186' W w/show of oil  
 IHP: 1635 FHP: 1097  
 IFP: 363-619 ISIP: 1094  
 FFP: 682-865 FSIP: 1097  
 BHT - 106 F  
 Chlorides - 27,000 ppm

COMMENTS

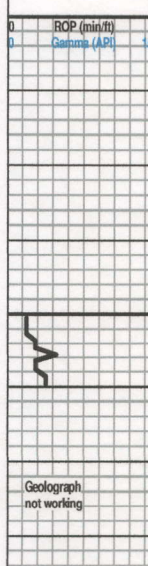
The operator elected to run 5 1/2" production casing to perform an open-hole completion in the Arbuckle.

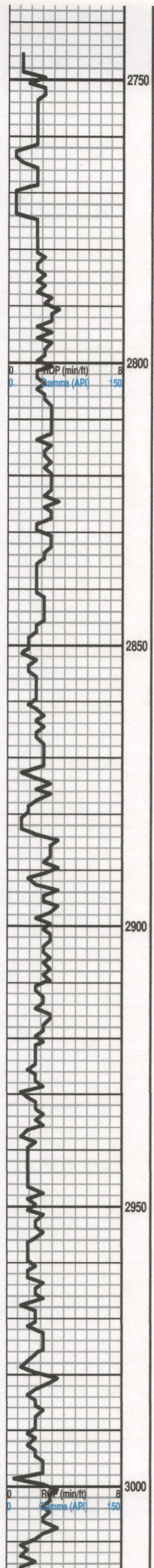
ROCK TYPES

 Anhy	 Coal	 Lmst	 Shcol
 Bent	 Congl	 Meta	 Shgy
 Brec	 Dol	 Mrlst	 Slstst
 Cht	 Gyp	 Salt	 Ss
 Clyst	 Igne	 Shale	 Till

OTHER SYMBOLS

 Even	 Dead	 Core	 Conn
 Spotted	 Gas	 Dst	 Rft
 Ques			 Sidewall

Curve Track 1 ROP (min/ft) Gamma (API)	Depth	Lithology	Oil Shows	Geological Descriptions	REMARKS
	2700			*Displaced @ 2650'-2681'  Begin 20' sample examination  LS: cm-gry, vfxln, dense, sl foss, NS  LS: as above w/abund gry-gm-brn shale, NS	Southwind Rig #8 MIRU 8/25/14 Toolpusher - Darrell Yott  8 5/8" set @ 853' w/325 sacks Deviation survey @ 853' - 1 1/2 degree  NOTE: The following tops are based on ROP & sample examination. An open-hole log was not run.  ANHYDRITE TOP - 818' (+1036) ANHYDRITE BASE - 853 (+1001)



LS: cm-tan-gry, vfxln, dense, w/abund gry shale/slst

TOPEKA 2749 (-895)

LS: cm-brn, vfxln, sl foss, dense, shaley in pt

LS: cm-tan-gry, vfxln, dense, sl chalky, NS

LS: as above

\*Bit trip (hole in pipe) @ 2808'

LS: as above, sl foss, NS

LS: wht-tan, vfxln, dense, sl chalky, NS

LS: cm-gry, vfxln, dense, sl foss, sl chalky, NS

LS: as above w/abund blk-gry shale

LS: cm-tan-gry, vfxln, dense, NS

LS: as above

\*Start 10' sample examination

LS: tan-gry, vfxl, foss, sl chalky, dense, NS

LS: as above

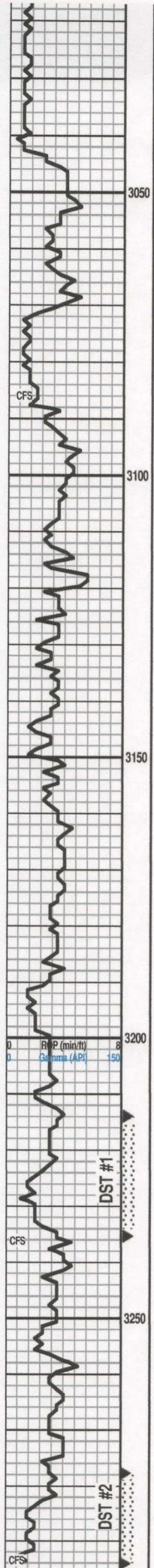
LS: cm-tan, vfxln, dense, NS

SH: blk, carb

HEEBNER 2975 (-1121)

LS: cm-gry, vfxln, dense, sl chalky, NS

LS: cm-tan, sl ool, mostly dense, rare fr vug por, nsfo, spotty live stn, sl odor



SH: gry

LS: wht-tan-gry, vfxln, foss, sl chalky, dense, NS

LANSING 3043 (-1189)

SH: gry-gm

LS: crm-tan, vfxln, dense, sl chalky, NS

LS: wht-tan-gry, f-vfxln, oolitic in pt, mostly dense, nsfo, rare spotty stn, no odor w/abund gry-gm-brn shale

LS: crm-tan, vfxln, dense, minor chert, NS

LS: wht-tan-gry, vfxln, dense, sl chalky, NS

LS: wht-tan-brn, vfxln, dense w/abund blk-gry-gm shale, NS

LS & SH: as above

LS: wht-crm-gry, vfxln, dense, sl chalky, NS

LS: as above

LS: wht-tan-gry, vfxln, dense, oolitic/oolic, nsfo, tr lite stn, sl odor

LS: wht-tan, vfxln, dense, sl chalky, NS

LS: as above w/blk chert

SH: blk-gry-rust

LS: crm-tan-gry, vfxln, dense, minor chert, NS

LS: crm-tan-gry, fxl, oolic, fr oomold por, NS

SH: gry-blk-gm

LS: wht-tan, fxl, oolic, fr inter-ool & vug por, ssfo on brk, spotty live stn, fr odor

DST #1 3214-3236 (LKC "J" Zone)  
 15:15:15  
 IF: Wk surf blow died in 3 min, NR  
 FF: NB, flushed tool, NB  
 Recovery: 1' Mud  
 IHP: 1572 FHP: 1547  
 IFP: 21-26 ISIP: 120  
 FFP: 25-26 FSIP: 56  
 BHT - 102 F

LS: crm-tan-gry, vfxln, dense, NS

SH: blk-gry-gm

LS: wht-tan, vfxln, dense, NS

SH: gry-blk-gm

LS: wht-tan-gry, vfxln, dense, NS

DOL: crm-tan, f-mxlm, rhombic in pt, gd vug & inxln por, fsfo, even sat stn, strong odor

ARBUCKLE 3284 (-1430)

DST #2 3278-3294 (Arbuckle)

