

Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1359677  
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: \_\_\_\_\_

1359677

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: <input type="checkbox"/> Yes <input type="checkbox"/> No
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Date of First, Resumed Production, SWD or ENHR.	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____						
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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# 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. 3145

Date	2-19-17	Sec.	15	Twp.	16	Range	10	County	Ellsworth	State	KS	On Location		Finish	5:30 PM
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Lease **Sarah** Location **Wilson S to PRd, 3E to 4th Rd**

Well No.	1	Owner	3/4 N E 15
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Contractor **Southwind 1**  
Type Job **Longstring**  
To Quality Oilwell Cementing, Inc.  
You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Hole Size	7 7/8"	T.D.	3503'	Charge To	Pauley oil
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Csg.	5 1/2" 15.50# New	Depth	3482.73	Street	
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Tbg. Size		Depth		City		State	
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Tool Depth  
The above was done to satisfaction and supervision of owner agent or contractor.

Cement Left in Csg.	23.80'	Shoe Joint	23.80'	Cement Amount Ordered	200 Com 10% Salt 2%
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Meas Line	Displace	82 1/4 BLS	Gilsonite - 500 gal mud clear 48
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**EQUIPMENT**  
Common **200**

Pumptrk	18 No.	Cementor	Helper	Nick	Poz. Mix
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Bulktrk	14 No.	Driver	Tim	Gel.
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Bulktrk	p.u. No.	Driver	Rick	Calcium
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**JOB SERVICES & REMARKS**  
Hulls

Remarks:	Salt	15
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Rat Hole	Flowseal
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Mouse Hole	Kol-Seal	850 #
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Centralizers	1, 4, 6, 7, 10, 12, 16	Mud CLR 48	500 gal
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Baskets	5, 9	CFL-117 or CD110 CAF 38
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D/V or Port Collar	pipe on bottom break	Sand
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Circulation pump	500 gal mud clear 48	Handling	213
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plug Rathole w/ 30 sx plug mud shale	w/ 20 sx Cement	5 1/2" casing	Mileage
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w/ 150 sx Shut down wash pump  
+ lines Displaced plug w/ 82 1/4' BLS Released + held

**FLOAT EQUIPMENT**

Lift pressure	700 #	Guide Shoe
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Land plug to	1500 #	Centralizer	100 7
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		Baskets	2
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		AFU Inserts	
--	--	-------------	--

		Float Shoe	1
--	--	------------	---

		Latch Down	1
--	--	------------	---

		Pumptrk Charge	prod string
--	--	----------------	-------------

		Mileage	34
--	--	---------	----

		Tax	
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		Discount	
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		Total Charge	
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Signature *[Handwritten Signature]*

# QUALITY OILWELL CEMENTING, INC.

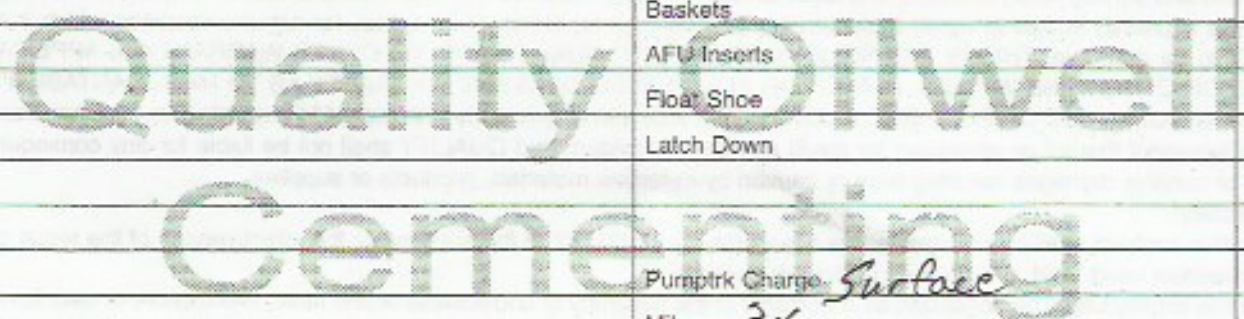
Federal Tax I.D.# 20-2886107

Phone 785-483-2025  
Cell 785-324-1041

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

No. 3142

Date	2-13-17	Sec.	15	Twp.	16	Range	10	County	Ellsworth	State	Ks	On Location		Finish	11:00 PM
Lease								Location		Wilson S to P Rd, 3E to 4th Rd					
Sarah				Well No.		1		Owner 3/4 N, E 4th							
Contractor Southwind				1		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 Surface				T.D.		433'		Charge To Pawley oil							
Hole Size 12 1/4"				Depth		433'		Street							
Csg. 8 5/8"				Depth				City							
Tbg. Size				Depth				State							
Tool				Depth				The above was done to satisfaction and supervision of owner agent or contractor.							
Cement Left in Csg. 15'				Shoe Joint		15'		Cement Amount Ordered 190 80/20 3+2							
Meas Line				Displace		26 1/2 BLS									
<b>EQUIPMENT</b>								Common 152							
Pumptrk 18 No. Cementer				Helper Nick				Poz. Mix 38							
Bulktrk 15 No. Driver				Driver Douay				Gel. 3							
Bulktrk p.u. No. Driver				Driver Rick				Calcium 11							
<b>JOB SERVICES &amp; REMARKS</b>								Hulls							
Remarks: Cement did Circulate								Salt							
Rat Hole								Flowseal							
Mouse Hole								Kol-Seal							
Centralizers								Mud CLR 48							
Baskets								CFL-117 or CD110 CAF 38							
D/V or Port Collar								Sand							
								Handling 203							
								Mileage							
<b>FLOAT EQUIPMENT</b>															
								Guide Shoe							
								Centralizer							
								Baskets							
								AFU Inserts							
								Float Shoe							
								Latch Down							
								Pumptrk Charge Surface							
								Mileage 34							
								Tax							
								Discount							
								Total Charge							
Signature <i>Randy Beaman</i>															





# Musgrove

Petroleum Geology  
212 Main Street, Claflin KS

## NOTES

Company: Pauley Oil

Lease: Sarah #1

Location: E2-W2-NW-NW (660' FNL & 495' FWL)

Sec: 15 Twsp: 16S Rge: 10W

County: Ellsworth State: Kansas

Field: Progress

KB: 1886' GL: 1876'

Contractor: Southwind Drilling, Inc. (Rig #1)

Spud: 02/13/2017 Comp: 02/19/2017

RTD: 3500' LTD: 3503'

Mud Up: 2700' Type Mud: Chemical

API #: 15-053-21350-00-00

Samples Saved From: 2800' to RTD

Drilling Time Kept From: 2800' to RTD

Samples Examined From: 2800' to RTD

Geological Supervision from: 2800' to RTD

Geologist on Well: Jim Musgrove

Surface Casing: 8 5/8" @ 408'

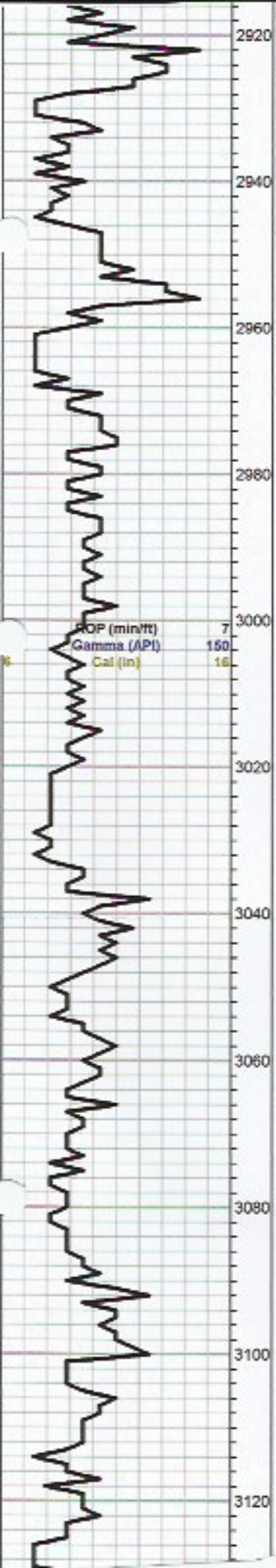
Production Casing: 5 1/2" @ 3495'

Electronic Surveys: Logged by : Gemeni Wireline, CDNL, DIL









**Heebner 2928.0 (-1042.0)**

Black carb shale  
LS, tan, fxl, dense, no shows  
Sh, gry, gryish,

**Toronto 2946.0 (-1060.0)**

LS, tan, foss, dense no shows

**Douglas 2959.0 (-1079.0)**

Sh, maroon, greenish, rusty, brown, silty

Sh, a/a, tr. vfg, mica, silty, sand

Sh, a/a

ditto a/a

**Brown Lime 3037.0 (-1151.0)**

LS, tan, brown, slightly cherty (dense)  
Sh, gry, gryish, green

**Lansing 3055.0 (-1169.0)**

LS, white, cream, fxl, dolomitic in pts, no shows

Sh, gry, green, black

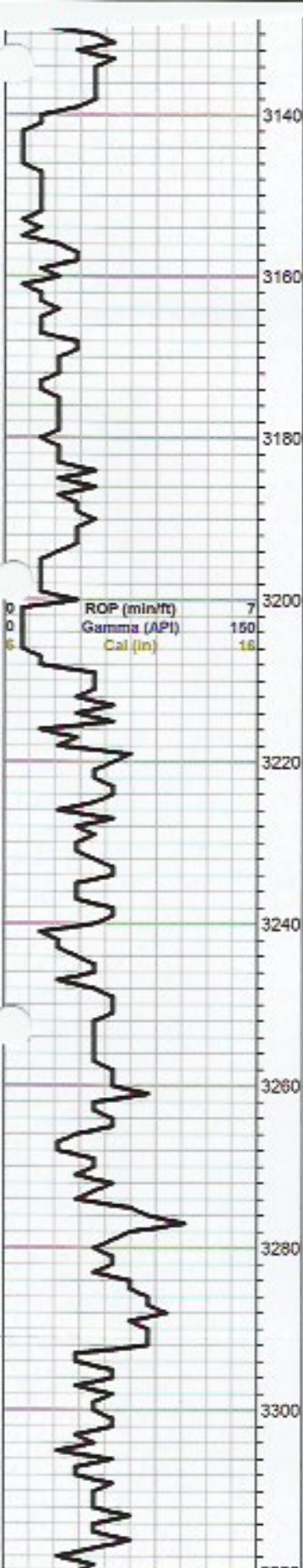
LS, gry, sub oom chalky, cherty, poor visible porosity

Sh, gry, blk

LS, gry, tan, foss, chalky, poorly developed, no shows

○ LS, gry, highly ool, chalky, tr. black stain, nsfo, or odor

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



LS, white, cream, sub oom, scattered oom porosity (barren)

LS, tan, gry, ool in pts, oom, chalky, tr. light brown stain, nsfo, no odor

LS, a/a, chalky, fr-good oom porosity, no shows

LS, white, gry, chalky, poor visible porosity

Sh, black carb, plus tr. gry cherts

LS, white, oom, good oom porosity, (barren)

Sh, gry, green

LS, gry, white, oom, sub oom, chalky, no shows, no odor

LS, tan, gry, ool, oom, fair oom porosity (barren)

LS, gry, fxl, slightly cherty (dense)

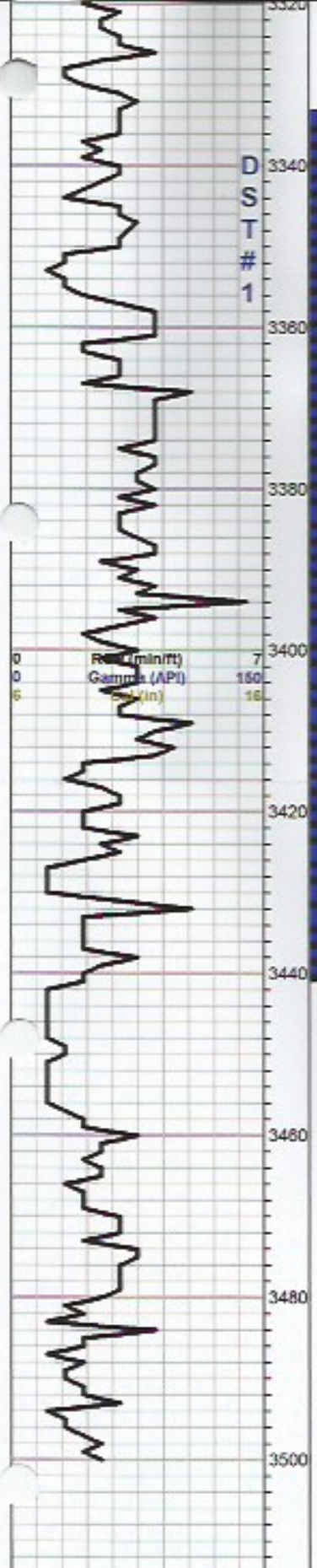
Sh, black carb

LS, white, gry, ool, foss, chalky, tr. cherty, poor visible porosity

Sh, black carb

LS, white, gry, tan, chalky in parts (dense)

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



**Base Kansas City 3327.0 (-1441.0)**

Sh, gry, dark gry

LS, gry, foss, chalky

Sh, gry, pk gry (soft)

Sh, V.C.

LS, gry, highly foss, chalky, poor visible porosity, no shows

**Conglomerate 3370.0 (-1488.0)**

Sh, maroon, pk, greenish, soft, slug, tr. LS, white, chalky, glauc.

Tr. maroon, tinted LS, plus white, vfg sd, plus brick red cherts

Tr. amber, yellow, white, cherts, plus Sd. white, clear, vfg, sub rounded, poor visible porosity, no shows

**Simpson 3415.0 (-1529.0)**

Sd. pk, maroon, greenish tinted

Sh, blue green, subwaxy shale

Sd. white, green, vfg, poorly developed

**Arbuckle 3434.0 (-1548.0)**

Dol. tan, f-med xln, no shows

Dol. tan, gry, white, f-med xln, scattered inxln porosity, tr. brown stain, sfo, faint odor

Dol. xl - fr inxln porosity, few glauc. nsfo

Dol. white, tan, med xln, fair INXLN porosity, chalky, nsfo tr. pyrite, nsfo, tr. white chert

Dol. tan, sub oom, fxl, few cherty, poor visible porosity, no shows

Dol. a/a, few pk, fxl, tr. yellow oom dol. no shows

**RTD 3500.0 (-1614.0)**

**LTD 3503.0 (-1617.0)**

**DST#1 3333-3440**

15-30-45-60

1st Open:  
Strong Blow BOB 2 mins.

2nd Open:  
Strong Blow BOB 3 mins.

Recovery:  
210' OCMW  
(20%O, 30%M, 50%W)

180' OCW  
(20%O, 30%M, 70%W)

180' OCW  
(20%O, 7%M, 72%W)

180' OCW  
(15%O, 6%M, 79%W)

180' OCW  
(12%O, 5%M, 83%W)

300' OCW  
(12%O, 3%M, 85%W)

120' W  
(W/ Tr. Oil < 1%)

Pressures  
ISIP 1176 psi  
FSIP 1180 psi  
IFP 135-317 psi  
FFP 332-663 psi  
HSH 1726-1619 psi



# DRILL STEM TEST REPORT

PAULEY GARY dba PAULEY OIL

15-16S-10W ELLSWORTH

314 5th STREET  
CLAFLIN, KANSAS 67525

SARAH 1

Job Ticket: 01152 DST#: 1

ATTN: JIM MUSGROVE

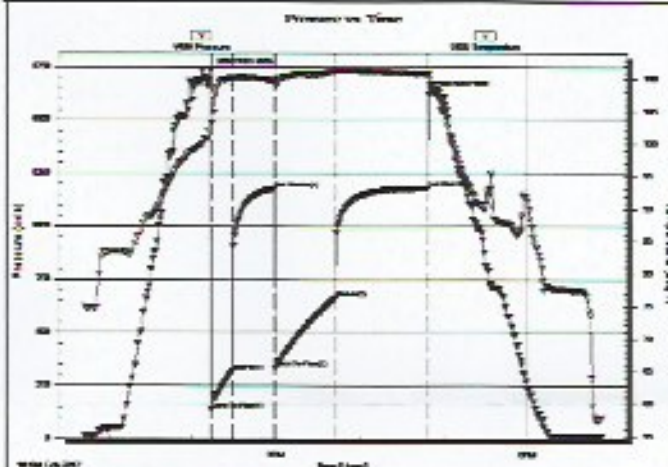
Test Start: 2017 02 18 @ 12:42:00

## GENERAL INFORMATION:

Formation: **ARBUCKLE**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 14:21:00 Tester: GENE BUDIG  
 Time Test Ended: 18:54:00 Unit No: 1-74  
 Interval: 3333.00 ft (KB) To 3440.00 ft (KB) (TVD) Reference Elevations: 1890.00 ft (KB)  
 Total Depth: 3440.00 ft (KB) (TVD) 1880.00 ft (CF)  
 Hole Diameter: 6.75 inches Hole Condition: Fair KB to GRFC: 10.00 ft

Serial #: 9139 Inside  
 Press@RunDepth: 1180.91 psia @ 3435.14 ft (KB) Capacity: 5000.00 psia  
 Start Date: 2017 02 18 End Date: 2017 02 18 Last Calib: 2017 02 18  
 Start Time: 12:42:00 End Time: 18:53:30 Time On Btm: 2017 02 18 @ 14:13:00  
 Time Off Btm: 2017 02 18 @ 16:48:00

TEST COMMENT: 1st OPENING 15 MINUTES FAIR BLOW BUILT TO THE BOTTOM OF A 5 GALLON BUCKET IN 2 MINUTES  
 1ST SHUT-IN 30 MINUTES NO BLOW BACK  
 2ND OPENING 45 MINUTES FAIR BLOW BUILT TO THE BOTTOM OF A 5 GALLON BUCKET IN 3 MINUTES  
 2ND SHUT-IN 60 MINUTES NO BLOW BACK



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1726.54	103.21	Initial Hydro-static
1	135.81	103.07	Open To Flow (1)
16	317.63	109.69	Shut-in(1)
46	1176.27	109.83	End Shut-in(1)
47	332.36	109.15	Open To Flow (2)
90	663.95	111.16	Shut-in(2)
156	1180.91	110.67	End Shut-in(2)
156	1619.31	110.78	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
210.00	OIL CUT MUDDY WATER	2.95
0.00	20 OIL 30 MUD 50 WATER	0.00
180.00	OIL CUT WATER 20 OIL 10 MUD 70 WATER	12.52
180.00	OIL CUT WATER 20 OIL 8 MUD 72 WATER	12.52
180.00	OIL CUT WATER 15 OIL 6 MUD 79 WATER	12.52
180.00	OIL CUT WATER 12 OIL 5 MUD 83 WATER	12.52

## Gas Rates

	Choke (inches)	Pressure (psia)	Gas Flow (Mscf)

This is all I  
Have on DST. I Failed  
to print all of it From  
Disc & now Disc is Bad.  
Eagle Testers Do Not Have Record.