

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1

January 2018

Form must be Typed

Form must be Signed

All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

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

Gas DH EOR

OG GSW

CM (Coal Bed Methane)

Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

Deepening Re-perf. Conv. to EOR Conv. to SWD

Plug Back Liner Conv. to GSW Conv. to Producer

Commingled Permit #: _____

Dual Completion Permit #: _____

SWD Permit #: _____

EOR Permit #: _____

GSW Permit #: _____

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: _____

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 Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT I II III Approved by: _____ Date: _____

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 Geologist Report / Mud Logs <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
--	---

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				

1. Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*
3. Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

Date of first Production/Injection or Resumed Production/Injection:	Producing Method: <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

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> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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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. 898

Date	8-30-18	Sec.	30	Twp.	7	Range	19	County	Rooks	State	KS	On Location		Finish	7:30
Lease								Location		Belleve Stice well					

Well No.	1-30	Owner	To Quality Oilwell Cementing, Inc.
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Contractor	Discover #2	You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.	
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Type Job	Surface	Charge To	Tingo
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Hole Size	12 1/4	T.D.	262
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Csg.	8 5/8	Depth	261
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Tbg. Size		Depth	
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Tool		Depth	
------	--	-------	--

Cement Left in Csg.	10	Shoe Joint	
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Meas Line		Displace	16 BCI
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EQUIPMENT				Common
Pumptrk	5	No.	Cement	Poz. Mix
			Helper	
Bulktrk		No.	Driver	Gel.
			Driver	
Bulktrk	15	No.	Driver	Calcium
			Driver	

JOB SERVICES & REMARKS				Hulls
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Remarks:		Salt	
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Rat Hole		Flowseal	
----------	--	----------	--

Mouse Hole		Kol-Seal	
------------	--	----------	--

Centralizers		Mud CLR 48	
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Baskets		CFL-117 or CD110 CAF 38	
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DIV or Port Collar		Sand	
--------------------	--	------	--

8 5/8 on bottom PSI Check on		Handling	
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11 x 1/2 in. D. SINK		Mileage	
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FLOAT EQUIPMENT			
-----------------	--	--	--

		Guide Shoe	
--	--	------------	--

		Centralizer	
--	--	-------------	--

		Baskets	
--	--	---------	--

		AFU Inserts	
--	--	-------------	--

		Float Shoe	
--	--	------------	--

		Latch-Down	
--	--	------------	--

--	--	--	--

--	--	--	--

		Pumptrk Charge	
--	--	----------------	--

		Mileage	
--	--	---------	--

--	--	--	--

			Tax
--	--	--	-----

			Discount
--	--	--	----------

			Total Charge
--	--	--	--------------

X Signature	Kelly		
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DRILL STEM TEST REPORT

Prepared For: **Tengasco, Inc.**

PO Box 456
Hays KS. 67601

ATTN: Neil Sharp

30-17s-19w Rooks,KS

Bellerive Stice Unit #1-30

Start Date: 2018.09.03 @ 22:42:16

End Date: 2018.09.04 @ 05:29:31

Job Ticket #: 57900 DST #: 1

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2018.09.07 @ 09:24:51

Tengasco, Inc.
Bellerive Stice Unit #1-30
30-17s-19w Rooks,KS
DST # 1
LKC I - J
2018.09.03



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Tengasco, Inc.

PO Box 456
Hays KS. 67601

ATTN: Neil Sharp

Bellerive Stice Unit #1-30

30-17s-19w Rooks,KS

Job Ticket: 57900

DST#: 1

Test Start: 2018.09.03 @ 22:42:16

GENERAL INFORMATION:

Formation: **LKC I - J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:43:46

Time Test Ended: 05:29:31

Test Type: Conventional Bottom Hole (Initial)

Tester: Matt Smith

Unit No: 68

Interval: 3282.00 ft (KB) To 3325.00 ft (KB) (TVD)

Reference Elevations: 1953.00 ft (KB)

Total Depth: 3325.00 ft (KB) (TVD)

1945.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8931

Inside

Press@RunDepth: 20.17 psig @ 3283.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2018.09.03

End Date:

2018.09.04

Last Calib.: 2018.09.04

Start Time: 22:42:21

End Time:

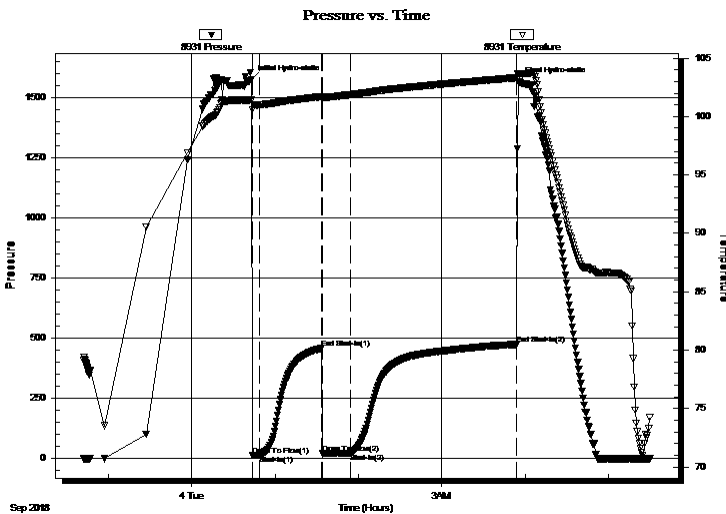
05:29:30

Time On Btm: 2018.09.04 @ 00:43:01

Time Off Btm: 2018.09.04 @ 03:55:01

TEST COMMENT: IF: No blow .
IS: No blow .
FF: No low .
FS: No blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1572.37	101.41	Initial Hydro-static
1	12.26	100.59	Open To Flow (1)
6	13.10	101.00	Shut-In(1)
51	456.66	101.71	End Shut-In(1)
51	18.53	101.54	Open To Flow (2)
71	20.17	101.87	Shut-In(2)
191	472.34	103.32	End Shut-In(2)
192	1565.67	103.66	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud 100% _m	0.07

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Tengasco, Inc.

Bellerive Stice Unit #1-30

PO Box 456
Hays KS. 67601

30-17s-19w Rooks,KS

Job Ticket: 57900

DST#: 1

ATTN: Neil Sharp

Test Start: 2018.09.03 @ 22:42:16

Tool Information

Drill Pipe:	Length: 3281.00 ft	Diameter: 3.80 inches	Volume: 46.02 bbl	Tool Weight: 2100.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 26000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 46.02 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial 55000.00 lb
Depth to Top Packer:	3282.00 ft			Final 55000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	43.00 ft			
Tool Length:	73.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments: Sampler in Tool.

Tool Description

Length (ft) Serial No. Position Depth (ft) Accum. Lengths

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3257.00	
Sampler	3.00			3260.00	
Hydraulic tool	5.00			3265.00	
Jars	5.00			3270.00	
Safety Joint	3.00			3273.00	
Packer	4.00			3277.00	30.00 Bottom Of Top Packer
Packer	5.00			3282.00	
Stubb	1.00			3283.00	
Recorder	0.00	8931	Inside	3283.00	
Recorder	0.00	8792	Outside	3283.00	
Perforations	2.00			3285.00	
Change Over Sub	1.00			3286.00	
Blank Spacing	30.00			3316.00	
Change Over Sub	1.00			3317.00	
Perforations	5.00			3322.00	
Bullnose	3.00			3325.00	43.00 Bottom Packers & Anchor
Total Tool Length:	73.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Tengasco, Inc.

Bellerive Stice Unit #1-30

PO Box 456
Hays KS. 67601

30-17s-19w Rooks,KS

Job Ticket: 57900 **DST#: 1**

ATTN: Neil Sharp

Test Start: 2018.09.03 @ 22:42:16

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:	1300 ppm
Viscosity: 49.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.79 in ³	Gas Cushion Type:		
Resistivity: 1300.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 0.00 ppm			
Filter Cake: 0.20 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Mud 100%m	0.070

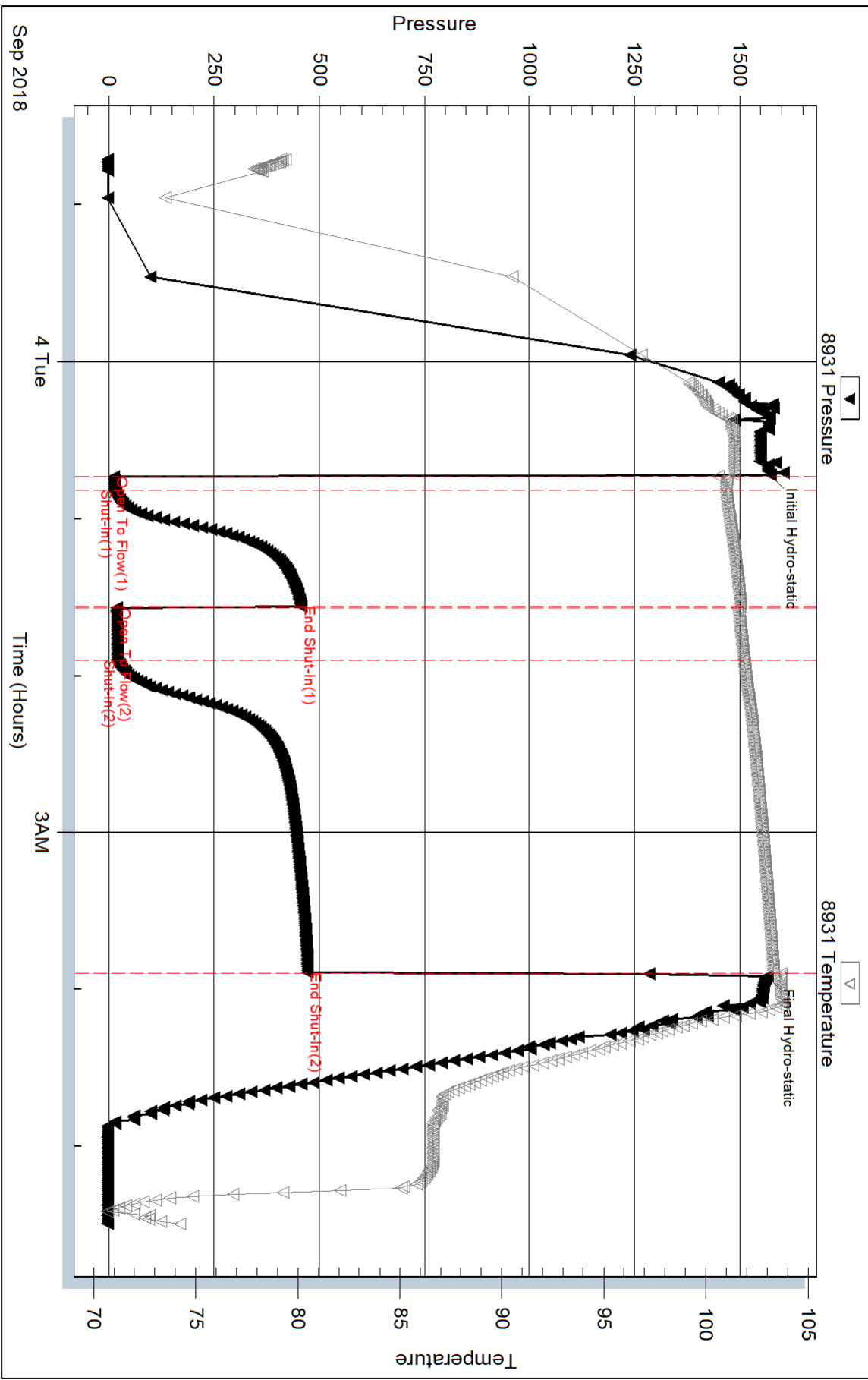
Total Length: 5.00 ft Total Volume: 0.070 bbl

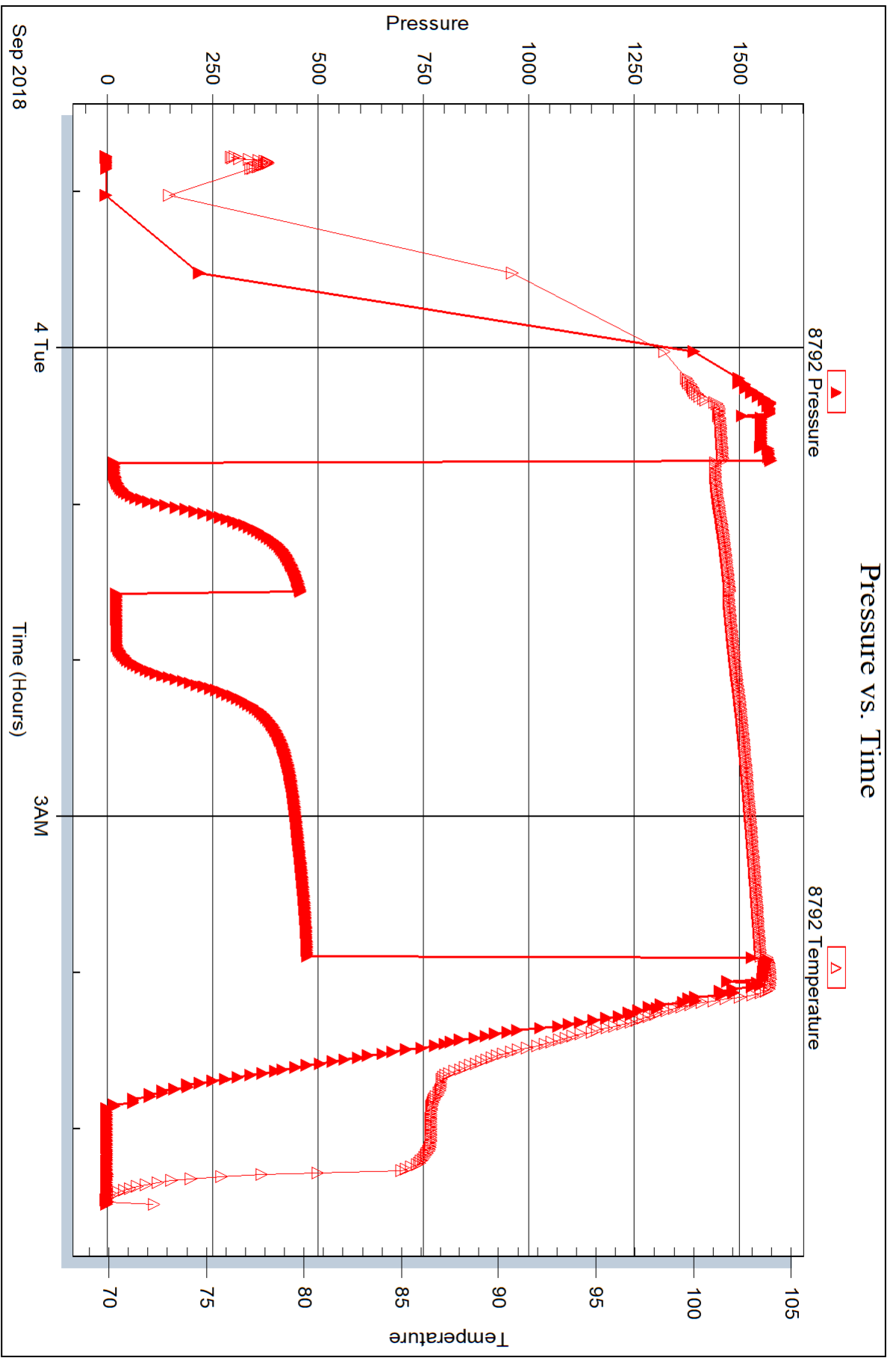
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #: none

Laboratory Name: Laboratory Location:

Recovery Comments: No pressure or and sample in tube.

Pressure vs. Time







DRILL STEM TEST REPORT

Prepared For: **Tengasco, Inc.**

PO Box 456
Hays KS. 67601

ATTN: Neil Sharp

30-17s-19w Rooks,KS

Bellerive Stice Unit #1-30

Start Date: 2018.09.04 @ 16:39:24

End Date: 2018.09.05 @ 02:06:09

Job Ticket #: 64701 DST #: 2

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2018.09.07 @ 09:24:22



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Tengasco, Inc.

PO Box 456
Hays KS. 67601

ATTN: Neil Sharp

Bellerive Stice Unit #1-30

30-17s-19w Rooks,KS

Job Ticket: 64701

DST#: 2

Test Start: 2018.09.04 @ 16:39:24

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:55:09

Time Test Ended: 02:06:09

Test Type: Conventional Bottom Hole (Reset)

Tester: Matt Smith

Unit No: 68

Interval: 3386.00 ft (KB) To 3407.00 ft (KB) (TVD)

Reference Elevations: 1953.00 ft (KB)

Total Depth: 3407.00 ft (KB) (TVD)

1945.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8931

Inside

Press@RunDepth: 212.83 psig @ 3387.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2018.09.04

End Date:

2018.09.05

Last Calib.: 2018.09.05

Start Time: 16:39:29

End Time:

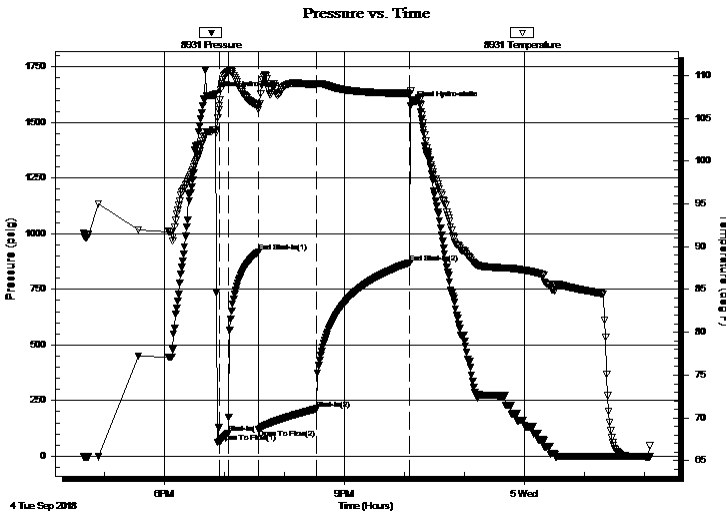
02:06:09

Time On Btm: 2018.09.04 @ 18:47:39

Time Off Btm: 2018.09.04 @ 22:06:39

TEST COMMENT: IF: Strong blow . B.O.B. in 5 min. Built to 19".
IS: Weak blow . Blow back built to 3".
FF: Strong blow . B.O.B. in 11 min. Built to 19".
FS: Weak blow . Blow back built to 3 1/2".

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1620.89	103.45	Initial Hydro-static
8	63.45	106.45	Open To Flow (1)
17	104.01	110.43	Shut-In(1)
47	917.37	106.44	End Shut-In(1)
47	121.98	106.00	Open To Flow (2)
105	212.83	109.00	Shut-In(2)
198	869.60	107.91	End Shut-In(2)
199	1575.64	108.17	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
62.00	MCOG 70% m 25% o 5% g	0.87
62.00	OCMG 70% o 15% m 15% g	0.87
62.00	OCMG 60% o 30% m 10% g	0.87
412.00	Clean Oil 100% o	5.78
0.00	341' GIP 100% g	0.00

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Tengasco, Inc.

Bellerive Stice Unit #1-30

PO Box 456
Hays KS. 67601

30-17s-19w Rooks,KS

Job Ticket: 64701

DST#: 2

ATTN: Neil Sharp

Test Start: 2018.09.04 @ 16:39:24

Tool Information

Drill Pipe:	Length: 3375.00 ft	Diameter: 3.80 inches	Volume: 47.34 bbl	Tool Weight:	2100.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	26000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	60000.00 lb
			<u>Total Volume: 47.34 bbl</u>	Tool Chased	10.00 ft
Drill Pipe Above KB:	19.00 ft			String Weight: Initial	55000.00 lb
Depth to Top Packer:	3386.00 ft			Final	60000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	21.00 ft				
Tool Length:	51.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments: Sampler in Tool.

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			3361.00	
Sampler	3.00			3364.00	
Hydraulic tool	5.00			3369.00	
Jars	5.00			3374.00	
Safety Joint	3.00			3377.00	
Packer	4.00			3381.00	30.00 Bottom Of Top Packer
Packer	5.00			3386.00	
Stubb	1.00			3387.00	
Recorder	0.00	8931	Inside	3387.00	
Recorder	0.00	8792	Outside	3387.00	
Perforations	17.00			3404.00	
Bullnose	3.00			3407.00	21.00 Bottom Packers & Anchor

Total Tool Length: 51.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Tengasco, Inc.

Bellerive Stice Unit #1-30

PO Box 456
Hays KS. 67601

30-17s-19w Rooks,KS

Job Ticket: 64701

DST#: 2

ATTN: Neil Sharp

Test Start: 2018.09.04 @ 16:39:24

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:

2200 ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.19 in³

Gas Cushion Type:

Resistivity: 2200.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 0.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
62.00	MCOG 70% _m 25% _o 5% _g	0.870
62.00	OCMG 70% _o 15% _m 15% _g	0.870
62.00	OCMG 60% _o 30% _m 10% _g	0.870
412.00	Clean Oil 100% _o	5.779
0.00	341' GIP 100% _g	0.000

Total Length: 598.00 ft

Total Volume: 8.389 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #: None

Laboratory Name:

Laboratory Location:

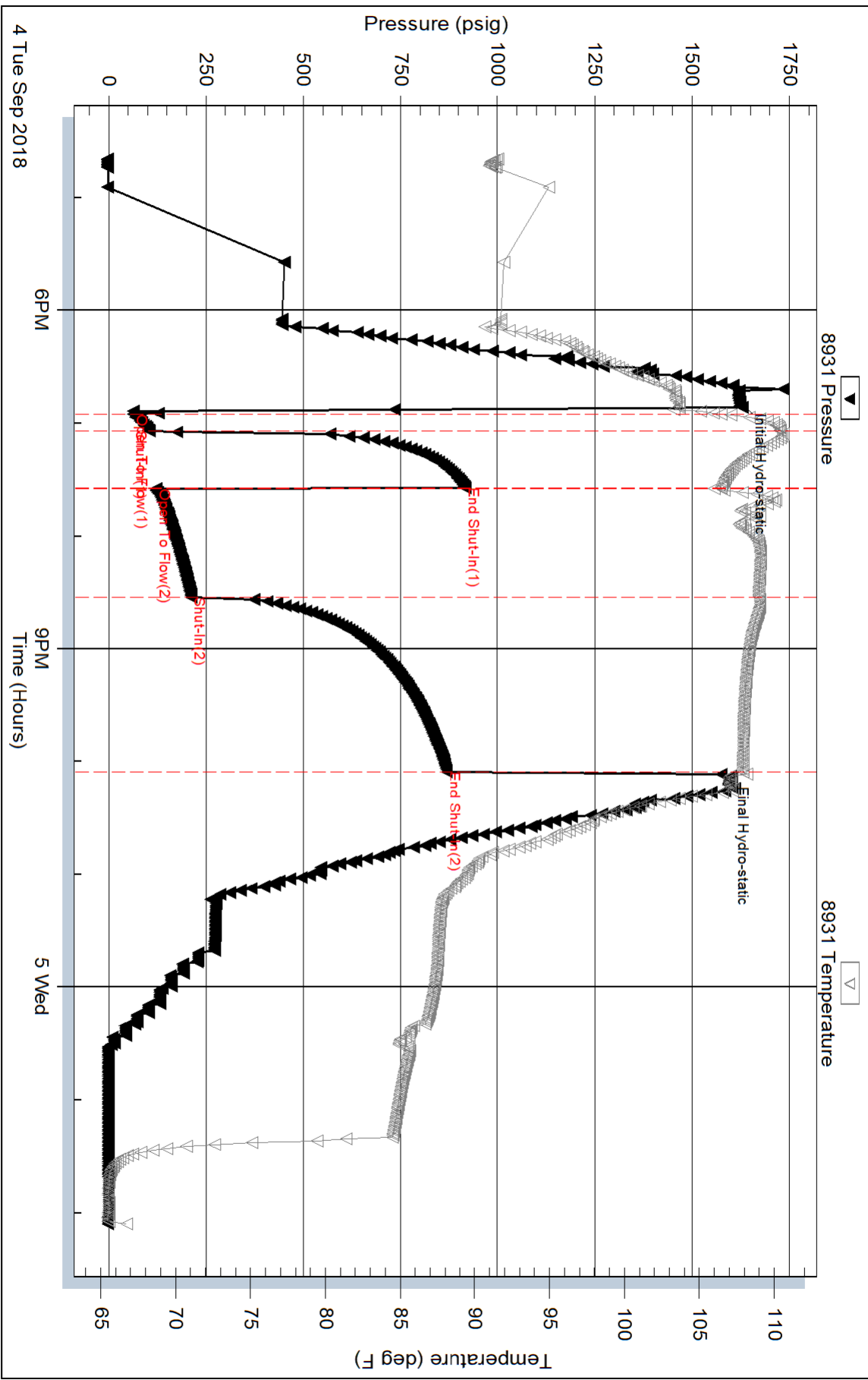
Recovery Comments: 29 @ 80 degrees corrected to 31 API

Sampler 1000 ML Oil

1000 ML gas

5.03 MCF

Pressure vs. Time

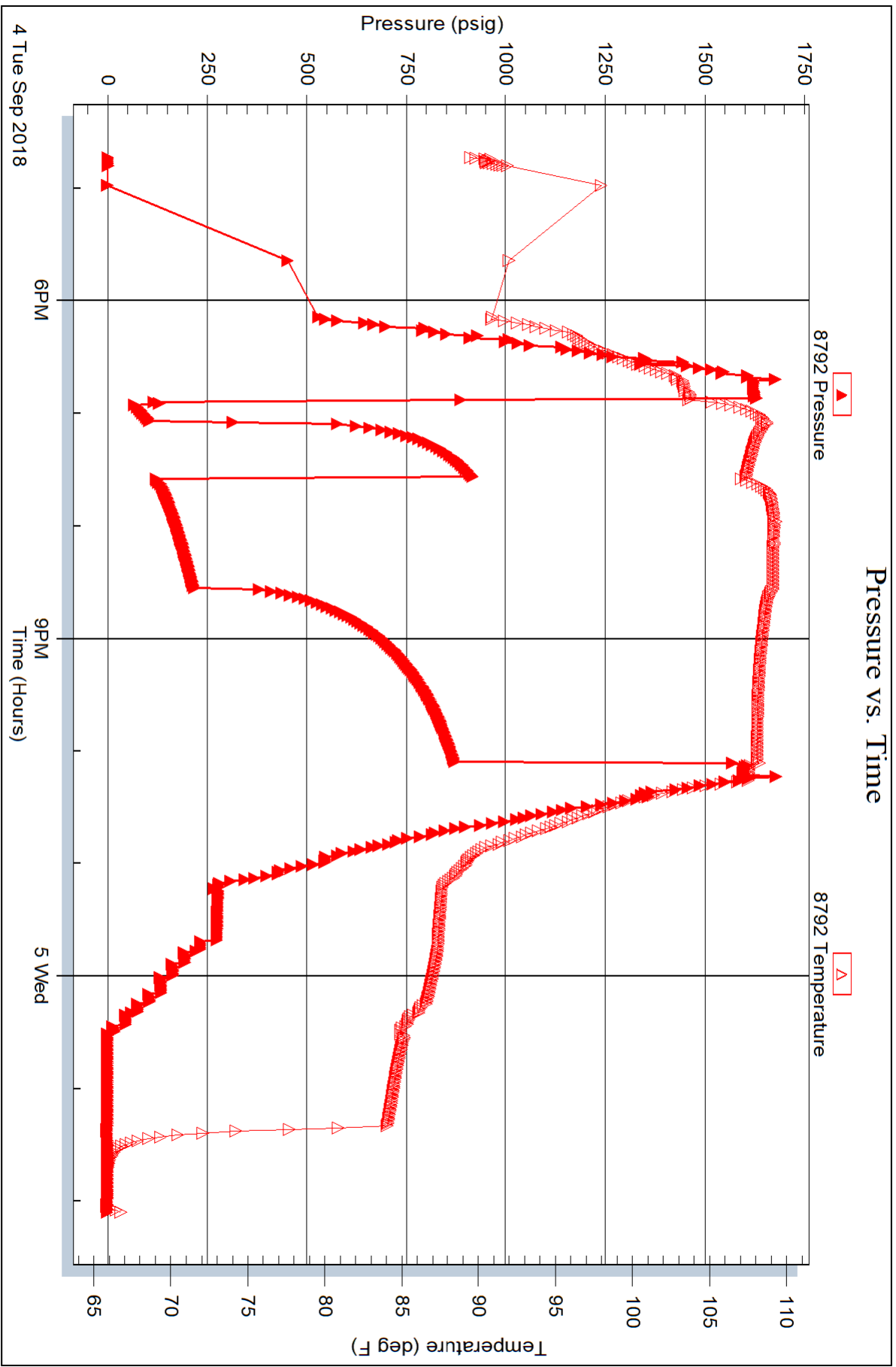


Serial #: 8792

Outside Tengasco, Inc.

30-17s-19w Rooks, KS

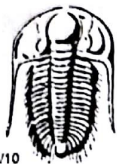
DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 64701

Printed: 2018.09.07 @ 09:24:23



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **57900**

Well Name & No. Bellerive Stice Unit #1-30 Test No. 1 Date 9-3-18
 Company Tengasco, Inc. Elevation 1953 KB 1945 GL
 Address 1327 Noose RD, P.O. Box 456 Hays, KS 67601
 Co. Rep / Geo. Neal Sharp Rig Discovery #2
 Location: Sec. 30 Twp. 17s Rge. 19w Co. Reeks State KS.

Interval Tested 3282 - 3325 Zone Tested I 4 J
 Anchor Length 43' Drill Pipe Run 3281 Mud Wt. 9.0
 Top Packer Depth 3277 Drill Collars Run 0 Vis 49
 Bottom Packer Depth 3282 Wt. Pipe Run 0 WL 6.8
 Total Depth 3325 Chlorides 1,300 ppm System LCM 2⁶

Flow Description IF: No blow.
SI: No blow.
F: No blow.
SI: No blow.

Sec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>Delg' mud</u>			<u>100</u>	
ec	Feet of	%gas	%oil	%water	%mud
ec	Feet of	%gas	%oil	%water	%mud
ec	Feet of	%gas	%oil	%water	%mud
ec	Feet of	%gas	%oil	%water	%mud

ec Total 5' BHT 101° Gravity N/A API RW N/A @ N/A °F Chlorides 1,300 ppm

a) Initial Hydrostatic <u>1572</u>	<input checked="" type="checkbox"/> Test <u>1050</u>	T-On Location <u>2047</u>
b) First Initial Flow <u>12</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>2242</u>
c) First Final Flow <u>13</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>0043</u>
d) Initial Shut-In <u>457</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>0353</u>
e) Second Initial Flow <u>19</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>0529</u>
f) Second Final Flow <u>20</u>	<input checked="" type="checkbox"/> Mileage <u>104</u> 104	Comments
g) Final Shut-In <u>472</u>	<input checked="" type="checkbox"/> Sampler <u>250</u>	
h) Final Hydrostatic <u>1566</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer

Initial Open 5
 Initial Shut-In 45
 Initial Flow 20
 Initial Shut-In 120

Shale Packer
 Extra Packer
 Extra Recorder
 Day Standby
 Accessibility

Sub Total 1729
 Total 1729
 MP/DST Disc't

Approved By [Signature] Our Representative [Signature]

TRILOBITE TESTING INC. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING, INC.

P.O. Box 362 • Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 57900 Date 9/3/18
 Company Name Tongasco, Inc.
 Lease Belleuve Slice Unit # 1-30 Test No. 1
 County Rooks Sec. 30 Twp. 17S Rng. 19W

SAMPLER RECOVERY

Gas N/A ML
 Oil N/A ML
 Mud 5' ML
 Water N/A ML
 Other _____ ML
 Pressure 0 ML
 Total 5' nothing in Jug ML

PIT MUD ANALYSIS

Chlorides 1,300 ppm.
 Resistivity _____ ohms @ _____ F
 Viscosity 49
 Mud Weight 9.0
 Filtrate 6.8
 Other _____

SAMPLER ANALYSIS

Resistivity N/A ohms @ _____ F
 Chlorides 1,300 ppm.
 Gravity N/A corrected @ 60F

PIPE RECOVERY

~~TOP
 Resistivity _____ ohms @ _____ F
 Chlorides _____ ppm.
 MIDDLE
 Resistivity _____ ohms @ _____ F
 Chlorides _____ ppm.
 BOTTOM
 Resistivity _____ ohms @ _____ F
 Chlorides _____ ppm.~~



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 64701

Well Name & No. Belleave Stice Unit #1-30 Test No. 2 Date 9/4/18
 Company Tengasco, Inc Elevation 1953 KB 1945 GL
 Address 1327 Moose Rd, P.O. Box 456 Hays, KS. 67601
 Co. Rep / Geo. Neil Sharp Rig Discovery #2
 Location: Sec. 30 Twp 17s Rge. 19w Co. Rooks State KS.

Interval Tested 3386 - 3407 Zone Tested Arbuckle
 Anchor Length 21' Drill Pipe Run 3375 Mud Wt. 9.0
 Top Packer Depth 3381 Drill Collars Run 0 Vis 56
 Bottom Packer Depth 3386 Wt. Pipe Run 0 WL 7.2
 Total Depth 3407 Chlorides 2,200 ppm System LCM 2"

Blow Description IF: Strong blow. B.O.B. in 5 mins. Built to 19"
ISI: Weak blow. Blowback built to 3"
FF: Strong blow. B.O.B. in 11 mins. Built to 19"
FSI: Weak blow. Blowback built to 3 1/2"

Rec	Feet of	%gas	%oil	%water	%mud
<u>341'</u>	<u>G.I.P.</u>	<u>100</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>342'</u>	<u>Clean Oil</u>	<u>100</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>62'</u>	<u>OCMG</u>	<u>10</u>	<u>60</u>	<u>30</u>	<u>0</u>
<u>62'</u>	<u>OCMG</u>	<u>15</u>	<u>70</u>	<u>15</u>	<u>0</u>
<u>62'</u>	<u>MCOG</u>	<u>5</u>	<u>25</u>	<u>70</u>	<u>0</u>

Rec Total 598' Fluid BHT 103° Gravity 31 API RW N/A @ N/A °F Chlorides 2,000 ppm

(A) Initial Hydrostatic <u>1621</u>	<input checked="" type="checkbox"/> Test <u>1050</u>	T-On Location <u>1617</u>
(B) First Initial Flow <u>63</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>1639</u>
(C) First Final Flow <u>104</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>1855</u>
(D) Initial Shut-In <u>917</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>2206</u>
(E) Second Initial Flow <u>122</u>	<input checked="" type="checkbox"/> Hourly Standby	T-Out <u>0206</u>
(F) Second Final Flow <u>213</u>	<input checked="" type="checkbox"/> Mileage <u>104</u> → <u>104</u>	Comments _____
(G) Final Shut-In <u>870</u>	<input checked="" type="checkbox"/> Sampler <u>250</u>	_____
(H) Final Hydrostatic <u>1576</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
Initial Open <u>10</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Final Flow <u>60</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Shut-In <u>90</u>	<input type="checkbox"/> Day Standby	Total <u>1729</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't _____
	Sub Total <u>1729</u>	

Approved By [Signature] Our Representative [Signature]

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test; tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING, INC.

P.O. Box 362 • Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 64701 Date 9/4/18
 Company Name Tengasco, Inc. 1327 Moose Rd, P.O. Box 456 Hays, KS, 67601
 Lease Belleave Strice Unit #1-30 Test No. 2
 County Rooks, KS. Sec. 30 Twp. 17S Rng. 19W

SAMPLER RECOVERY

Gas 1000 ML
 Oil ~~1000~~ 1000 ML
 Mud Q ML
 Water Q ML
 Other _____ ML
 Pressure TSM ML
 Total 2000 ML

PIT MUD ANALYSIS

Chlorides 2,200 ppm.
 Resistivity _____ ohms @ _____ F
 Viscosity 56
 Mud Weight 9.0
 Filtrate 7.2
 Other 2" LCM

SAMPLER ANALYSIS

Resistivity N/A ohms @ N/A F
 Chlorides 2,200 ppm.

Gravity 31 corrected @ 60F
5.03 MCF per day

PIPE RECOVERY

~~TOP
 Resistivity _____ ohms @ _____ F
 Chlorides _____ ppm.
 MIDDLE
 Resistivity _____ ohms @ _____ F
 Chlorides _____ ppm.
 BOTTOM
 Resistivity _____ ohms @ _____ F
 Chlorides _____ ppm.~~

Printcraft Printers 9/01

JUSTIN D. CARTER

CONSULTING GEOLOGIST

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

Well Name: BELLERIVE STICE UNIT 1-30
Well Id:
Location: E/2, SE, SE, SE Sec. 30 - 7S - 19W Rooks Co., KS
License Number: 15-163-24368-0000
Spud Date: 08/30/18
Surface Coordinates: 330' FSL & 300' FEL
Region: Reservoir West
Drilling Completed: 09/05/18

Bottom Hole Coordinates: 262': 0.5 DEG, 3325': 1.5 DEG, 3525': 2 DEG
Ground Elevation (ft): 1944' K.B. Elevation (ft): 1952'
Logged Interval (ft): 2850' To: 3525' Total Depth (ft): 3525'
Formation: OREAD, L/KC, ARBUCKLE
Type of Drilling Fluid: Chemical Mud

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

OPERATOR

Company: TENGASCO, INC.
Address: P.O. Box 458
Hays, KS 67601-9744
Co. Geo.: Mr. Neil Sharp

GEOLOGIST

Name: Justin D. Carter
Company: Consulting Geologist
Address: 1640 N. Roosevelt Ave.
Liberal, KS 67901
Phone: 620-655-1187

Comments

Drilling Contractor: Discovery Drilling Rig #2
Tool Pusher: Terry Wickham

8 5/8" surface casing set at 261'

Mud: MudCo
Engineer: Gary Schmidtberger

DSTs: Trilobite Testing
Tester: Matt Smith

Open-Hole Loggers: Halliburton



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Tengasco, Inc.
 1327 Noose RD P.O.Box 456
 Hays KS. 67601
 ATTN: Neil Sharp

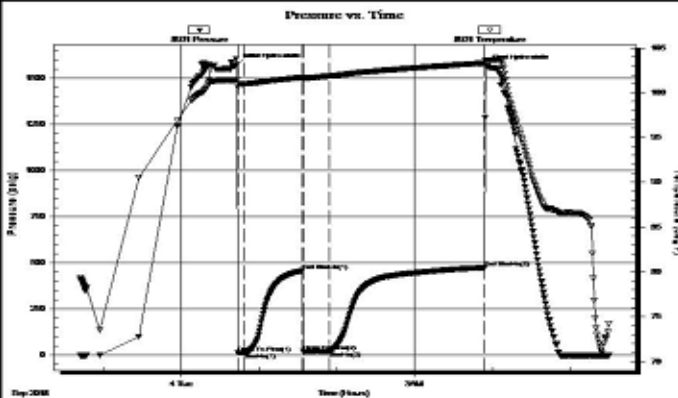
30-17s-19w Rooks Co.
Bellerive Stice 1-30
 Job Ticket: 57900 **DST#: 1**
 Test Start: 2018.09.03 @ 22:42:16

GENERAL INFORMATION:

Formation: **I & J**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 00:43:46
 Time Test Ended: 05:29:31
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Matt Smith
 Unit No: 68
 Interval: **3282.00 ft (KB) To 3325.00 ft (KB) (TVD)**
 Total Depth: 3325.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Reference Elevations: 1953.00 ft (KB)
 1945.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 8931 Inside
 Press@RunDepth: 20.17 psig @ 3283.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2018.09.03 End Date: 2018.09.04 Last Calib.: 2018.09.04
 Start Time: 22:42:21 End Time: 05:29:30 Time On Btm: 2018.09.04 @ 00:43:01
 Time Off Btm: 2018.09.04 @ 03:55:01

TEST COMMENT: IF: No blow.
 ISI: No blow.
 FF: No low.
 FSI: No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1572.37	101.41	Initial Hydro-static
1	12.26	100.59	Open To Flow (1)
6	13.10	101.00	Shut-In(1)
51	456.66	101.71	End Shut-In(1)
51	18.53	101.54	Open To Flow (2)
71	20.17	101.87	Shut-In(2)
191	472.34	103.32	End Shut-In(2)
192	1565.67	103.66	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	DRLG Mud 100% m	0.07

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Tengasco, Inc.
 1327 Noose RD P.O.Box 456
 Hays KS. 67601
 ATTN: Neil Sharp

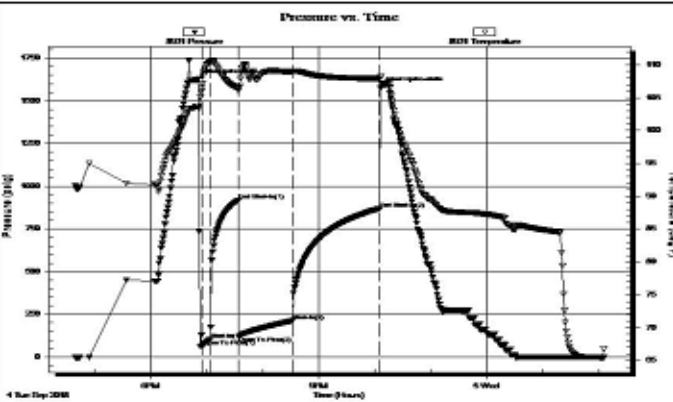
30-17s-19w Rooks Co.
Bellerive Stice 1-30
 Job Ticket: 64701 **DST#: 2**
 Test Start: 2018.09.04 @ 16:39:24

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 18:55:09
 Tester: Matt Smith
 Time Test Ended: 02:06:09
 Unit No: 68
 Interval: **3386.00 ft (KB) To 3407.00 ft (KB) (TVD)**
 Reference Elevations: 1953.00 ft (KB)
 Total Depth: 3407.00 ft (KB) (TVD)
 1945.00 ft (CF)
 Hole Diameter: 7.88 inches
 Hole Condition: Fair
 KB to GR/CF: 8.00 ft

Serial #: 8931 Inside
 Press@RunDepth: 212.83 psig @ 3387.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2018.09.04 End Date: 2018.09.05 Last Calib.: 2018.09.05
 Start Time: 16:39:29 End Time: 02:06:09 Time On Btm: 2018.09.04 @ 18:47:39
 Time Off Btm: 2018.09.04 @ 22:06:39

TEST COMMENT: IF: Strong blow . B.O.B. in 5 min. Built to 19".
 IS: Weak blow . Blow back built to 3".
 FF: Strong blow . B.O.B. in 11 min. Built to 19".
 FSI: Weak blow . Blow back built to 3 1/2".



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1620.89	103.45	Initial Hydro-static
8	63.45	106.45	Open To Flow (1)
17	104.01	110.43	Shut-In(1)
47	917.37	106.44	End Shut-In(1)
47	121.98	106.00	Open To Flow (2)
105	212.83	109.00	Shut-In(2)
198	869.60	107.91	End Shut-In(2)
199	1575.64	108.17	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
62.00	MCOG 70% <i>m</i> 25% <i>o</i> 5% <i>g</i>	0.87
62.00	OCMG 70% <i>o</i> 15% <i>m</i> 15% <i>g</i>	0.87
62.00	OCMG 60% <i>o</i> 30% <i>m</i> 10% <i>g</i>	0.87
412.00	Clean Oil 100% <i>o</i>	5.78
0.00	341' GIP 100% <i>g</i>	0.00

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

Remarks

After careful review of the sample log, electric logs, and DST reports, the decision was made to run 5 1/2" casing to do further testing of the Arbuckle zone in the BSU 1-30.

Respectfully submitted,

Justin D. Carter
 Consulting Geologist

ROCK TYPES

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

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

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

- Sandylms
- Shale
- Sltstn
- Shlyslts
- Sltyslts
- Lms

ACCESSORIES

FOSSIL

- Algae
- Amph
- Belm
- Bioclst
- Brach
- Bryozoa
- Cephal
- Coral
- Crin
- Echin
- Fish
- Foram
- Fossil
- Gastro
- Oolite
- Ostra
- Pelec
- Pellet
- Pisolite
- Plant
- Strom
- Fuss
- Oomold

MINERAL

- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Brecfrag
- Calc
- Carb
- Chtdk
- Chtlt
- Dol
- Feldspar
- Ferrpel
- Ferr
- Glau
- Gyp
- Hvymin
- Kaol
- Marl
- Minxl
- Nodule
- Phos
- Pyr

- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff
- Chlorite
- Dol
- Sand
- Sltly

- Dol
- Grysh
- Gryslt
- Lms
- Sandylms
- Sh
- Sltstn

STRINGER

- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Sltstrg
- Ssstrg
- Carbsh
- Clystn

TEXTURE

- Boundst
- Chalky
- Cryxln
- Earthy
- Finexln
- Grainst
- Lithogr
- Microxln
- Mudst
- Packst
- Wackest

OTHER SYMBOLS

INTERVALS

- Core
- Dst

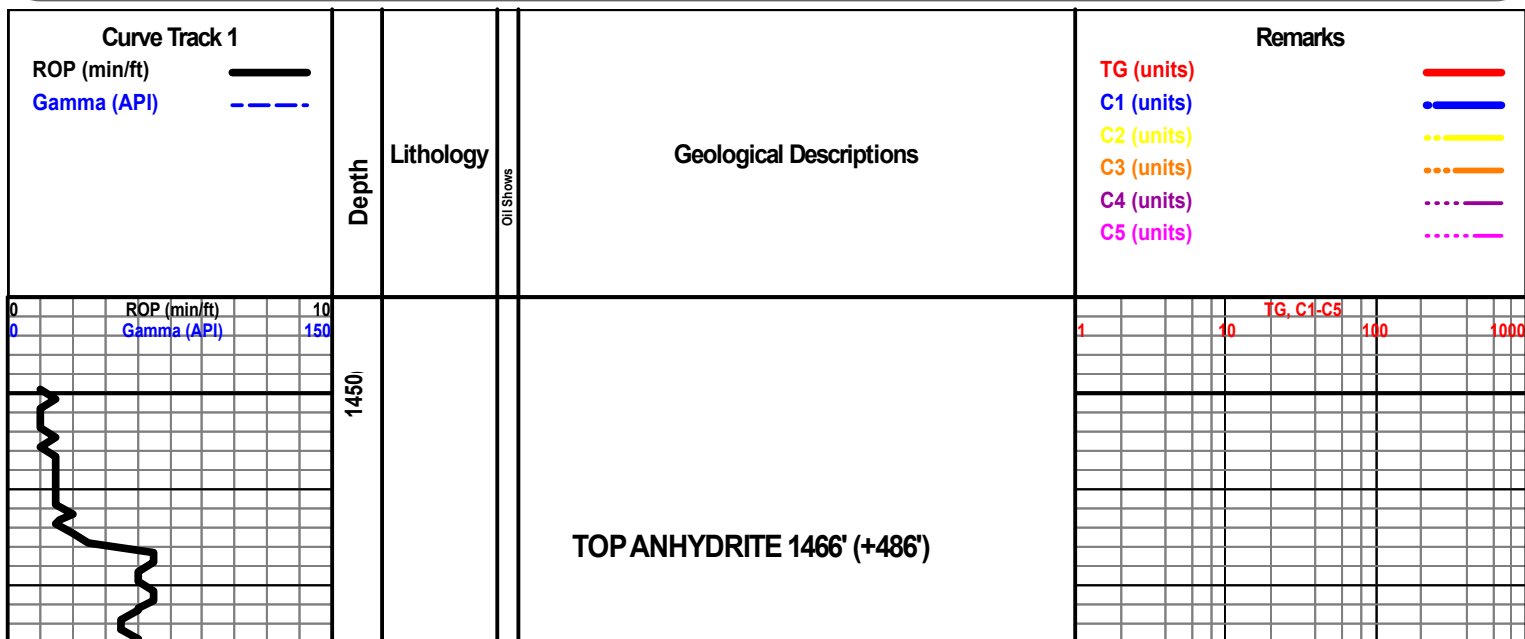
- Dst

OIL SHOWS

- Even
- Spotted

Ques

- Dead
- Gas show



BASE ANHYDRITE 1495' (+457')

DEPTH BREAK

1500

2800

ROP (min/ft) 10
Gamma (API) 150

DISPLACE HOLE @ 2750'

GEOLOGIST ON LOCATION 2:30 P.M. 9/1/18

BIT #2
BAKER HUGHES 7 7/8"
GX-20L
S/N: S287465
IN @ 262'

2850



LS- CRM BFF, HRD DNS, VF-XLN, RE-XLN MTRX IP TO TR
SUB-SUCRO MTRX, IMBED FOSS FRAGS IP, NO FLO, NO VIS
POR

SH- DK GY, FRM TO SFT IP, BLKY, SLTY TO TR LMY, IMBED FOSS
FRAGS IP

SLTST- LT GY, TT, MICABLK SH IP, NO VIS POR

2900



TOPEKA 2906' (-954')

LS- CRM, BRITT, MED-XLN, GRNST, IMBED OOL IP, NO FLO, FR
INTER-OOL POR TO FR OOMLD POR SCAT THRU, NS

LS- BFF CRM, HRD DNS, FVF-XLN, RE-XLN MTRX IP TO TR
GRNST, IMBED FOSS FRAGS, IP, NO FLO, NO VIS POR

TG, C1-C5

1 10 100 1000

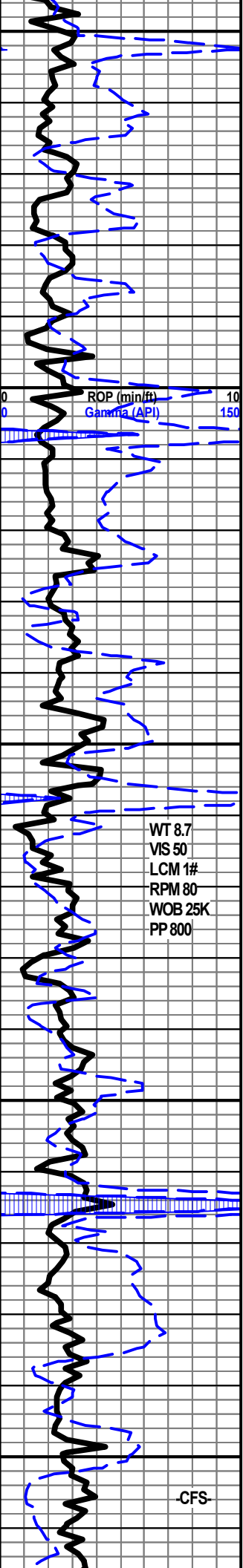
2:15 P.M. 09/02/18



CN

CN

CN



LS- CRM DK GY, HRD, F/VF-XLN, GRST, IMBED FOSS FRAGS IP, NO FLO, NO VIS POR

SH- DK GY, FRM, SLTY IP TO LMY IP, TR DK GY CHRT

LS- CRM, BRITT, F-XLN, GRNST, TR SFT WHT CHLK, NO FLO, PR/FR INTER-XLN POR THRU, NS

LS- CRM, HRD TO BRITT IP, F/VF-XLN, RE-XLN MTRX IPTO GRNST IP, IMBED FOSS FRAGS IP, NO FLO, TR INTER-XLN POR, NS

SH- GY BRN, FRM, BLKY, SLTY

LS- CRM, HRD DNS, VF-XLN, RE-XLN MTRX, TR IMBED FOSS FRAGS, NO FLO, NO VIS POR

SH- GY, FRM TO HRD IP, LMY TO TR SLTY, BLKY

LS- WHT, HRD DNS, F-XLN, SUCRO MTRX THRU, TR WHT CHLK, LT GY CHRT IP, 1 SIMPLE CLR CORSE/MID GRN SS W/ CUT, NO FLO TO DLL YEL WHEN CUT, FR FLUSH TO FR BLU TO BLK STRM CUT, PR INTER-XLN POR SCAT THRU, TARRY OIL SCAT THRU

LS- CRM, BRITT TO HRD IP, F/MED-XLN, GRNST, NO FLO, FR INTER-XLN POR THRU, NS

LS- CRM, HRD DNS, F/VF-XLN, RE-XLN MTRX THRU TO TR SUB-SUCRO MTRX, TR IMBED GY SH, NO FLO, NO VIS POR

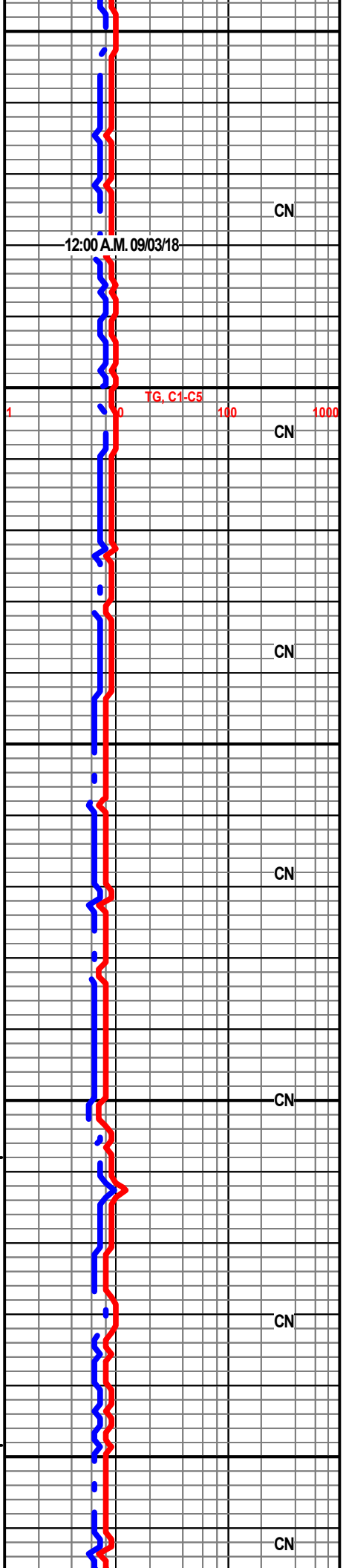
HEEBNER 3108' (-1156')

SH- GRN DK GY, FRM, BLKY, LMY

LS- GY CRM, HRD DNS, MD/VF-XLN, GRNST TO TR RE-XLN MTRX, IMBED FOSS FRAGS IP, NO FLO, NO VIS POR

LANSING 3148' (-1196')

LS- CRM, HRD DNS, VF-XLN, RE-XLN MTRX IP, TR OOL, TR FOSS FRAGS, TR CHRT, DLL YEL GLD FLO THRU, PR STRM CUT, TR FRAC POR TO TR INTER-FOSS POR, TR LIME OIL STAIN, NO ODOR



ROP (min/ft)
Gamma (API)

WT 8.7
VIS 50
LCM 1#
RPM 80
WOB 25K
PP 800

-CFS-

2950
3000
3050
3100
3150

12:00 A.M. 09/03/18

TG, C1-C5

CN

CN

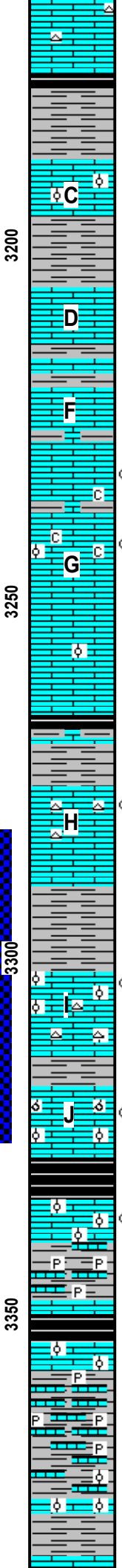
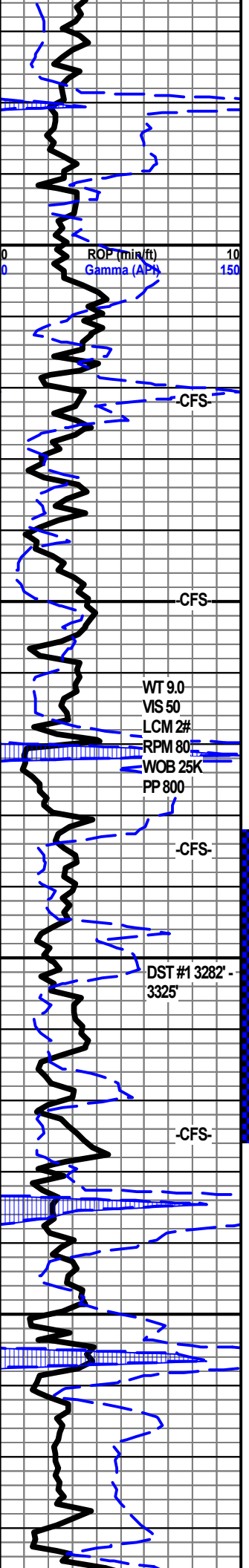
CN

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LS- CRM, HRD DNS, VF-XN, RE-XLN MTRX THRU TO TR SUB-CHLKY, WHT CRT IP, TR IMBED OOL, NO FLO, TR FRAC POR, NS

LS- LT CRM, HRD DNS, VF-XLN, RE-XLN MTRX IP, OOL IP, NO FLO, TR INTER-OOL POR, TR TN STAIN, NO ODOR

LS- LT CRM, HRD DNS, VF-XLN, RE-XLN MTRX IP, NO FLO, NO VIS CUT, NO VIS POR, TN STAIN IN 30%, NO ODOR

LS- BFF OFF WHT, BRITT TO HRD IP, FVF-XLN, GRNST TO TR RE-XLN MTRX, TR OOL, FRACS W/ IMBED CALC XLS, TR DLL YEL GLD FLO, FAINT SLO BLU STRM CUT, TR INTER-XLN POR TO TR FRAC POR, TN STAIN IN 20%, FAIR ODOR

LS- OFF WHT, BRITT TO HRD IP, F-XLN, GRNST, SFT WHT CHLK IP, TR OOL, YEL GLD FLO IN 20%, FAINT FLUSH TO FAINT BLU STRM CUT, PR INTER-XLN POR THRU, BLK/TN STAIN SCAT THRU, FAINT ODOR

LS- LT GY, HRD DNS, VF-XLN, SLI SUCRO MTRX THRU TO TR RE-XLN MTRX, TR MED CALC XLS, SLI SNDY IP, NO FLO, NO VIS POR

LS- CRM, HRD DNS, VF-XLN, RE-XLN MTRX THRU, TR GRNST, OPQ CRT IP, 1 SMPLE YEL GLD FLO THRU, FAINT FLUSH TO PR BLU STRM CUT, TR VUG POR TO NO VIS POR THRU, TR STAIN, FAINT ODOR

SH- LT GRN, FRM, LMY

LS- CRM TN, MOTT, FVF-XLN, GRNST TO TR RE-XLN MTRX IP, IMBED OOL IP, CRT IP, DLL YEL GLD THRU, FAINT FLUSH TO PR STRM CUT, PR INTER-XLN POR IP TO TR INTER-OOL POR, TN STAIN IN 30%, NO ODOR

LS- LT CRM TN, BRITT, F-XLN, GRNST, OOL IP, YEL GLD FLO THRU, GD FLUSH TO FR WHT STRM CUT, FR OOMLD POR TO TR INTER-OOL POR, BRN STAIN IP, FR ODOR, TR GAS BUBBLS

STRAP OUT @3325', 2.26' LONG

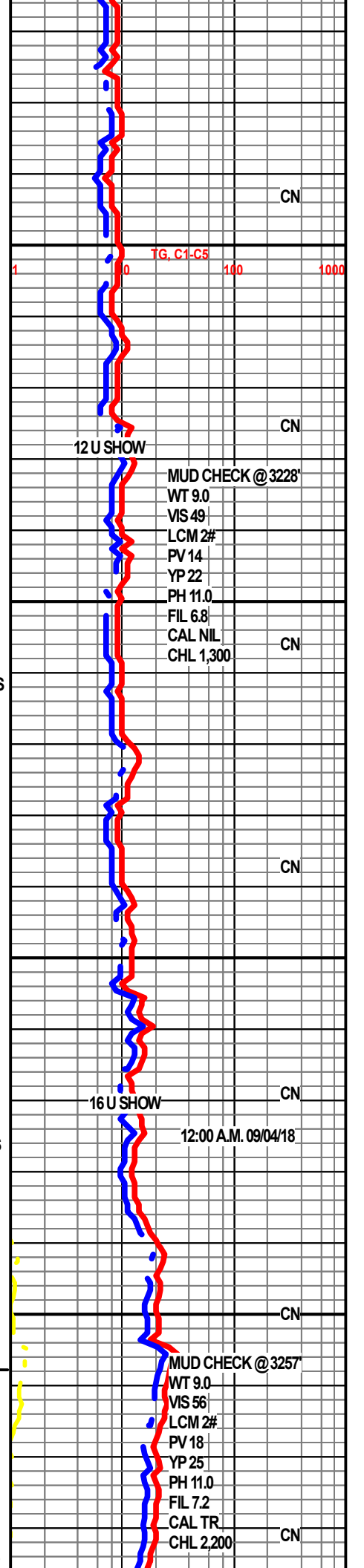
LS- BFF TN, HRD, FVF-XLN, RE-XLN MTRX IP TO GRNST IP, OOL IP, TR VUGS, BRIT YEL GLD FLO SCAT THRU, GD FLUSH TO GD WHT STRM CUT, TR VUG POR TO TR INTER-OOL POR, DK TN STAIN IN 60%, FR/STRNG ODOR, TR FREE OIL

BKC 3358' (1406')

SH- GY GRN, FRM, SLTY

LS- CRM, HRD DNS, VF-XLN, RE-XLN MTRX IP, IMBED SH IP, OOL IP, TR LG FOSS FRAGS, NO FLO, TR INTER-OOL POR TO NO VIS POR THRU

SNDY LS- BFF, HRD DNS, VF-XLN, SUCRO MTRX THRU, NO VIS



ARBUCKLE 3397' (-1445')

DOLO- WHT, HRD TO BRITT IP, MD/F-XLN, SUCRO MTRX THRU, DLL YEL GLD FLO THRU TO BRIT WHEN CUT, PR/FR FLUSH TO FR SLO WHT STRM CUT, FR INTER-XLN POR THRU, LIVE BLK STAIN SCAT THRU, TR FREE OIL, STRNG ODOR

3405' DOLO- BRN WHT, HRD, MD/F-XLN, SUCRO MTRX THRU, TR DLL YEL GLD FLO IP TO BRIT GLD WHEN CUT, FR FLUSH TO GD FAST WHT STRM CUT, FR INTER-XLN POR THRU, BRN STAIN THRU LIVE BLK STAIN IP, TR FREE OIL, STRNG ODOR

3414' DOLO- TN BLK, HRD, MD/F-XLN, SUCRO MTRX THRU, DLL YEL GLD IP TO BRIT YEL GLD THRU WHEN CUT, FR FLUSH TO GD WHT STRM CUT, FR INTER-XLN POR THRU, DK TN STAIN THRU TO TR LIVE BLK STAIN, STRNG ODOR, TR FREE OIL

3432' DOLO- CRM, HRD, MD/F-XLN, SUCRO MTRX THRU TO TR RE-XLN MTRX, SNDY IP, MED CLR RND QTZ XLS IP, GLAUC IP, NO FLO TO YELGLD THRU WHEN CUT, FR FLUSH TO FR WHT STRM CUT, PR/FR INTER-XLN POR THRU, GD SHOW FREE OIL, STRNG ODOR

DOLO- WHT LT RD, HRD, MD/F-XLN, SUCRO MTRX THRU, IRON/MAG IP, DLL YEL GLD FLO THRU, PR CUT, PR/FR INTER-XLN POR THRU, TR "TARRY" STAIN, FR ODOR, NSFO

DOLO- BFF, HRD TO BRITT IP, CORSE/F-XLN, SUCRO MTRX THRU, INTER-BED RD DNS DOLO, ABDT GLAUC THRU, RND CLR QTZ GRNS IP, "TARRY" OIL IP, FR/GD INTER-XLN POR THRU, NO ODOR

3493' SS- WHT FRSTY, TT TO FRI IP, MD/F-GRNS, FR SRT, SUB-ANG GRNS, SILI CMNT, ABDT GLAUC SCAT THRU, NO FLO, FAINT FLUSH TO V/FAINT SLO YEL STRM CUT, FR INTER-GRN POR THRU, NO ODOR

PRECAMBRIAN 3500' (-1548')

GRANITE-ORNGISH RD, HRD TT, CRYPTO-XLN, QTZITE, BLK MICA SH SCAT THRU, FRAC POR SCAT THRU

GRANITE- RDISH CLR, HRD TT, CRYPTO-XLN, QTZITE, BLK MICA SH SCAT THRU, FRAC POR

FINISH E-LOGS 10:30 P.M. 09/05/18

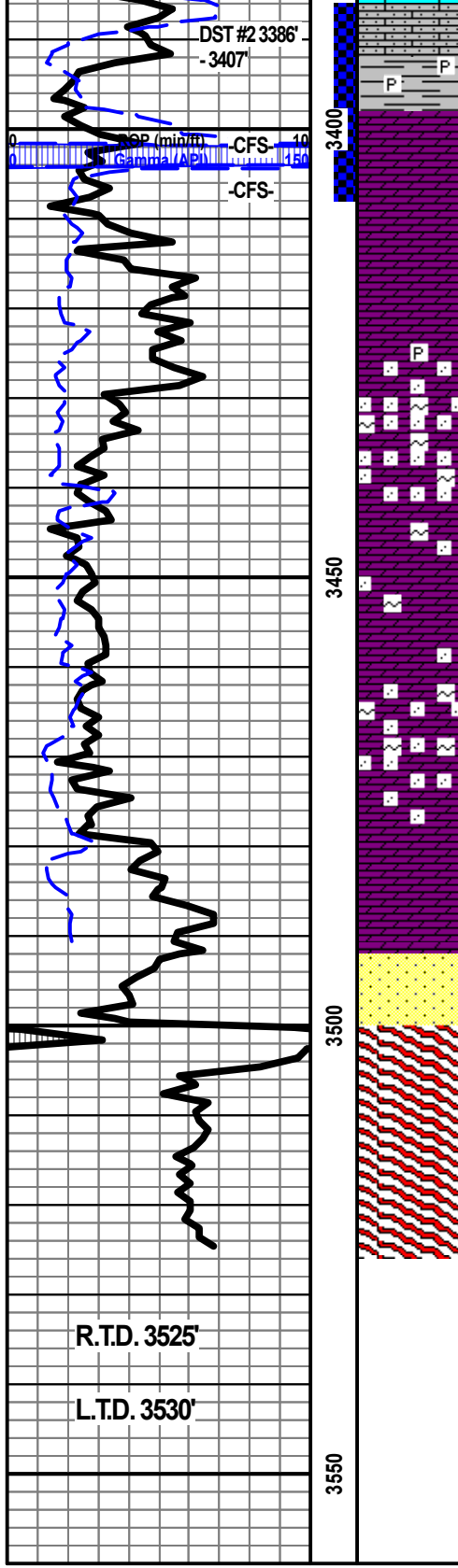
NO GAS LAGGED, 1000 LIGHT PLANT DOWN

12:00 A.M. 09/05/18

MUD CHECK @ 3480'

- WT 9.1
- VIS 52
- LCM 6#
- PV 16
- YP 25
- PH 11.0
- FIL 6.8
- CAL TR
- CHL 2,100

2:00 P.M. 09/05/18



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. 1021

Date	9-25-18	Sec.	Twp.	Range	County	State	On Location	Finish
					Rooks	KS		11:00 AM
					Location Stockton 12nd W 8 3/4 S 1/4 W 11th			
Lease	Balance 5722 unit			Well No.	1-30			
Contractor	Chito's			Owner				
Type Job	Port Collar			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.	Charge To TENGASCO			
Csg.	5 1/2			Depth	Street			
Tbg. Size	2 7/8			Depth	City State			
Tool	Expert Port Collar			Depth	1483			
The above was done to satisfaction and supervision of owner agent or contractor.					Cement Amount Ordered			
Cement Left in Csg.	Shoe Joint			300 8 1/2 QMDC 1/4 # FLO				
Meas Line	Displace			Bbl				
EQUIPMENT					Common			
Pumptrk	No.	Cementer	Craig		Poz. Mix			
		Helper						
Bulktrk	No.	Driver	DETT		Gel.			
		Driver						
Bulktrk	No.	Driver	JACK		Calcium			
		Driver						
JOB SERVICES & REMARKS					Hulls			
Remarks:	KCC Pat Before				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			
Test Casing to 800' Open Hole					Handling			
4 Pump Bore mud & BSA Circulation					Mileage			
mud 750kg Displace					FLOAT EQUIPMENT			
Cement Circulated Close Top					Guide Shoe			
Pressure to 800' Run 5 joints					Centralizer			
Wash Clean					Baskets			
(USE) 275 SK					AFU Inserts			
					Float Shoe			
					Latch Down			
					Pumptrk Charge			
					Mileage			
					Tax			
					Discount			
X Signature <i>Keith...</i>					Total Charge			