

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
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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				

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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Form	ACO1 - Well Completion
Operator	O'Brien Energy Resources Corp.
Well Name	CLAYTON 5-33
Doc ID	1362470

Tops

Name	Top	Datum
Heebner	4401	-1850
Toronto	4434	-1883
Lansing	4566	-2015
Marmaton	5206	-2655
Cherokee	5408	-2857
Atoka	5598	-3047
Morrow	5730	-3179
Mississippi Chester	5824	-3273
Ste. Genevieve	6134	-3583
St. Louis	6272	-3721

Form	ACO1 - Well Completion
Operator	O'Brien Energy Resources Corp.
Well Name	CLAYTON 5-33
Doc ID	1362470

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
2	5760-5792	acidize w/ 3500 gal 7.5% Hcl	perfs



Liberal Yard #1717 - Phone 620-624-2277 - 1700 S. Country Estates Road, Liberal KS 67901

Job Log

Customer:	Obrien Energy	Cement Pump No.:	38117-19919	Operator TRK No.:	78939
Address:	18 Congress St. Suite 207	Ticket #:	1718-14351 L	Bulk TRK No.:	14355-37724 30463-37547
City, State, Zip:	Portsmouth NH 03801	Job Type:	Z41 Cement Surface Casing		
Service District:		Well Type:	OIL		
Well Name and No.:	Clayton 5-33	Well Location:	33,33,29	County:	Meade State: Ks

Type of Cmt	Sacks	Additives	Truck Loaded On	
A - CON	385	2%CaCl, 1/4# POLYFLAKE	14355-37724	Front Back
PREMIUM PLUS	150	2%CaCl, 1/4# POLYFLAKE	30463-37547	Front Back
				Front Back

Lead/Tail:	Weight #1 Gal.	Cu/Ft/sk	Water Requirements	CU. FT.	Man Hours / Personnel	
Lead:	11.4	2.95	18.1	1135.75	Man Hours:	7
Tail:	14.8	1.34	6.33	201	# of Men on Job:	4

Time (am/pm)	(BPM)	Volume (BBLs)	Pumps		Pressure (PSI)		Description of Operation and Materials
			T	C	Tubing	Casing	
17:00							ON LOC, SAFTEY MTG, R.U.
20:42					2000		TEST LINES
8:46 PM	5.5				90		START MIXING LEAD @ 11.4#
9:36 PM	5.7	202			170		ON TAIL @ 14.8#
9:44 PM		36					SHUT DOWN, DROP PLUG
9:46	5.6				60		START DISPLACEMENT, WASHUP ON PLUG
22:03	2	85			330		SLOW ARTE
10:10 PM		95			400-1500		PLUG DOWN
22:12					1500-0		RELEASE PSI, FLOAT HELD
							JOB COMPLETE
							THANK YOU FOR YOUR BUSINESS!!!

Size Hole	12 1/4	Depth			TYPE	
Size & Wt. Csg.	8 5/8 24	Depth	1527.9	New / Used	NEW	Packer
tbg.		Depth				Retainer
Top Plugs		Type				Perfs

Customer Signature:	Basic Representative:	CHAD HINZ
	Basic Signature:	
	Date of Service:	4/13/2017



BASIC
ENERGY SERVICES

Liberal Yard #1717 - Phone 620-624-2277 - 1700 S. Country
Estates Road, Liberal KS 67901

PRESSURE PUMPING

Job Log

Customer:	Obrien Energy	Cement Pump No.:	70897, 19919 3.5Hrs.	Operator TRK No.:	78938
Address:	18 Congress St. Suite 207	Ticket #:	1718 14321 L	Bulk TRK No.:	14355, 37724 Willie
City, State, Zip:	Portsmouth NH 03801	Job Type:	Z41 Cement Production Casing		
Service District:	1718 - Liberal, Ks.	Well Type:	OIL		
Well Name and No.:	Clayton 5-33	Well Location:	33,33,29	County:	Meade State: Ks

Type of Cmt	Sacks	Additives	Truck Loaded On		
AA2	215	5% W-60, 10% Salt, .6% C-15, 1/4# Defoamer, 5# Gilsomite	14355, 37724 Willie	Front	Back
AA2	50	5% W-60, 10% Salt, .6% C-15, 1/4# Defoamer, 5# Gilsomite	14355, 37724	Front	Back
				Front	Back

Lead/Tail:	Weight #1 Gal.	Cu/Ft/sk	Water Requirements	CU. FT.	Man Hours / Personnel	
Lead:	14.8	1.51	6.64	324.65	TT Man Hours:	32
Tail:	14.8	1.51	6.64	75.5	# of Men on Job:	3

Time (am/pm)	BPM	Volume (BBLs)	Pumps		Pressure(PSI)		Description of Operation and Materials
			T	C	Tubing	Casing	
22:30							ON LOCATION & SAFETY MEETING
23:00							RIG UP & WAIT
2:45 AM							RIG UP TO CIRCULATE
3:00 AM							RIG TO P.T.
3:40 AM							PRESSURE TEST TO 2900PSI
3:41	1.9	11.9				500	PUMP 500GALLONS MUD FLUSH
3:50	1.9	13.4slurry				20	PUMP 50SX @ 14.8# RAT AND MOUSE
4:03 AM	4.7	57.8slurry				450	PUMP 215SX TAIL @ 14.8#
4:26							SHUTDOWN / DROP PLUG / W.P.
4:36	3.4	10				20	DISPLACE
	6	20				80	
	6	30				80	
	6	40				80	
	6	50				80	
	6	60				580	
	6	70				750	
	5.8	80				840	
	5.5	90				1000	SLOW RATE TO 2.0B.P.M. @ 670PSI
	1.9	100				910	
5:00	1.9	101.6				910	LAND PLUG / PRESSURE UP TO 1200PSI
5:01							RELEASE BACK -- FLOAT HELD
							JOB COMPLETE

Size Hole	7 7/8"	Depth			TYPE	Plug Container	
Size & Wt. Csg.	4 1/2" 10.5#	Depth	6435.66'	New / Used	Packer	Depth	
tbg.		Depth			Retainer	Depth	
Top Plugs		Type			Perfs	CIBP	

Customer Signature: <i>[Signature]</i> 4-19-17	Basic Representative:	Daniel Beck
	Basic Signature:	<i>Daniel Beck</i>
	Date of Service:	4/19/2017

O'Brien Energy Resources, Corp.

Clayton No. 5-33

Section 33, T33S, R29W

Meade County, Kansas

April, 2017

Well Summary

The Clayton No. 5-33 was drilled to a total depth of 6430' in a record setting 60 rotating hours for an average of 107 ft./hr. It offset the Clayton No. 1-33 by approximately 1200' to the Southeast. Formation tops ran relatively even to this offset from the Heebner to the Chester. The Ste. Genevieve and St. Louis came in 11' and 9' high. The Morrow "C" pay sand came in 7' high.

Minor hydrocarbon shows and gas increases occurred during the drilling of this test. The Morrow "C" Sandstone consists of a Sandstone in 15% of the samples: White, clear, speckled green and salt and pepper, friable to hard, very fine upper to fine lower well sorted subround grains, siliceous cement, glauconitic, clean to argillaceous in part, good to tight intergranular porosity, trace vuggy porosity, no fluorescence, no stain or cut. No gas increase occurred on the hotwire. This interval was drilled stem tested (5788' -5840') and recovered gas to surface in 28 minutes of the initial flow period and gauged at 89.47 Mcf/d.

A Chester sand was documented from 5986' to 5988' and consists of relatively tight Sandstone in less than .5% of the samples and with brown matrix oil staining and live oil, goldbrown hydrocarbon fluorescence and excellent streaming cut.

Additional live oil shows occurred in the Basal Chester (attached mudlog),

4 1/2" production casing was run on the Clayton 5-33 for Morrow gas sand production.

Respectfully Submitted,

Peter Debenham

WELL DATA

Operator: O'Brien Energy Resources, Inc., John Forma – Portsmouth, NH
Geologist: Paul Wiemann – Denver, CO

Prospect Geologist: Ed Schuett and Dave Ward

Well: Clayton No. 5-33, Mohler Field

API No.: 15-119-21405

Location: 1855' FNL & 750' FEL, Section 33, T33S, R29W, Meade County, Kansas
– South of Meade.

Elevation: Ground Level 2539', Kelly Bushing 2551'

Contractor: Duke Drilling Rig No. 1, Type: Double jackknife, double stand, Toolpusher
Mike Godfrey, Drillers: Brothers Carlos and Saul Garcia and Henry Daiz

Company Man: Keith Clumsky – Liberal, Kansas

Spud Date: 4/13/2017

Total Depth: 4/17/2017, Driller 6430', Logger 6418', St. Louis Fm.

Casing Program: 36 joints of 8 5/8", J55, 24Lbs/ft, set at 1543' with 385 sacks A-
Con(3%cc, ¼ floreal), 150 sacks PKem Plus(2%cc & ¼ lb floreal), did
circulate. Services by Basic. 4 ½", J 55, 10 ½ Lbs/ft production casing set
to TD.

Mud Program: Winter Mud, engineer Drew Smith. Displaced 2600'.

Wellsite Consultant: Peter Debenham with mudlogging trailer, Call depth 3000', Box 350,
Drake, CO 80515, 720/220-4860.

Samples: 30' to 4700', 20' to TD.

Electric Logs: Weatherford, engineer Lynn Scott, 1)Array Induction, 2)Photo
Density/Neurton, 3) Microlog – High Res. repeat section.

Drill stem testing: DST NO. 1: (5788'-5840'), Log depths(5772'-5826'), Trilobite Testing
engineer Leal Cason

Status: 4 ½" production casing run to TD on 4/19/17.

WELL CHRONOLOGY

<u>10 PM</u>	<u>DATE</u>	<u>DEPTH</u>	<u>FOOTAGE</u>	<u>RIG ACTIVITY</u>
	4/12			Move to location and rig up rotary tools. Pump water and mix spud mud.
	4/13	1543'	1543'	Spud in 12 ¼" surface hole to 1543' and circulate. Drop survey(3/4 deg.) and trip for surface casing and run and cement 36 joints of 8 5/8", J55, 24Lbs/ft, set at 1543' with 385 sacks A-Con(3%cc, ¼ floeal), 150 sacks PKem Plus(2%cc & ¼ lb floeal), did circulate. Services by Basic. Plug down 10 PM.
	4/14	2980'	1437'	Wait on cement. Nipple up and pressure test BOP to 300 PSI. Drill plug and cement and 7 7/8" hole to 2980'. Service rig and clean suction. Displace mud system at 2600'.
	4/15	4746'	1766'	Service and clean suction.
	4/16	5977'	1231'	To 5028' and circulate and wiper trip and circulate. To 5977'.
	4/17	6430'TD	453'	To 6430'TD and circulate. Wiper trip 37 stands and circulate. Drop survey(1 ¼ deg.) and trip out for logs. Wait on loggers and run eLogs.
	4/18	TD		Run eLogs. Wait on tester and trip in and run DST NO. 1: (5788'-5840'), Log depths(5772'-5826'), Morrow "C" Sandstone. Pull tool and wait on casing. Run and cement 4 ½" production casing.
	4/19	TD		Run and cement production casing to TD. Rig down.

BIT RECORD

<u>NO.</u>	<u>MAKE</u>	<u>TYPE</u>	<u>SIZE</u>	<u>OUT</u>	<u>FOOTAGE</u>	
	<u>HOURS</u>					
1	Varel	UTD 519	12 ¼"	1543'	1543'	10 ½
2	Varel	VDT 516	7 7/8"	6430'	4887'	49 ½
				Total Rotating Hours:		60
				Average:		107.2 ft/hr

DEVIATION RECORD - degree

1543' ¾, TD 1 ¼

MUD PROPERTIES

<u>DATE</u> <u>LBS/BBL</u>	<u>DEPTH</u>	<u>WT</u>	<u>VIS</u>	<u>PV</u>	<u>YP</u>	<u>WL</u>	<u>pH</u>	<u>CL</u>	<u>LCM-</u>
4/12	0'	8.3	27						
4/14	1600'	8.6	28	1	1	nc	11.0	38K	--
4/15	3846'	8.7	40	9	20	32.0	9.0	9.5K	4
4/16	5028'	9.2	40	16	6	11.6	10.0	6.5K	2
4/17	6430'	9.0	56	24	9	7.0	10.5	4K	8

ELECTRIC LOG FORMATION TOPS- KB Elev. 2551'

<u>FORMATION</u>	<u>DEPTH</u>	<u>DATUM</u>	<u>*Clayton No. 1-14</u> <u>DATUM</u>	<u>POSITION</u>
Surface casing	1535'			
Heebner	4401'	-1850'	-1851'	+1'
Toronto	4434'	-1883'	-1883'	0'
Lansing	4566'	-2015'	-2011'	-4'
Marmaton	5206'	-2655'	-2643'	-12'
Cherokee	5408'	-2857'	-2860'	+3'
Atoka	5598'	-3047'	-3053'	+6'
Morrow	5730'	-3179'	-3182'	+3'
Morrow "C" SS	5766'	-3215'	-3222'	+7'
Mississippi Chester	5824'	-3273'	-3271'	-2'
Ste. Genevieve	6134'	-3583'	-3594'	+11'
St. Louis	6272'	-3721'	-3730'	+9'
TD	6418'	-3867'		

*O'Brien Energy, Clayton No. 1-33, 990'FNL & 1650'FEL, Section 33, 33S, 29W, K.B. Elevation 2575', app. 1200' to the Northwest.

DRILL STEM DATA

DST NO. 1: (5788'-5840'), Log depths(5772'-5826'), Morrow "C" Sandstone

Type: Straddle Test Times: 30-60-60-120

<u>PERIOD</u>	<u>TIME</u>	<u>PSI</u>
IH		3043
IF	30	45 - 57
ISI	60	395
FF	60	61 - 95
FSI	120	390
FH		3106

BHT 128 deg. F.

BLOWS: IF – Strong, bottom of bucket in 2 minutes, gas to surface in 28 minutes. ISI – 1/2" blowback. FF – Strong, bottom of bucket immediate – gauged at 89.47 Mcf/d at end of period. FSI – 1/4" blowback.

RECOVERY: Gas to surface, 125' of slightly gas cut mud(2% gas, 98% mud).



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

O'Brien Energy
18 Congress St Ste 207
Portsmouth, NH 03801
ATTN: Keith Clumsky

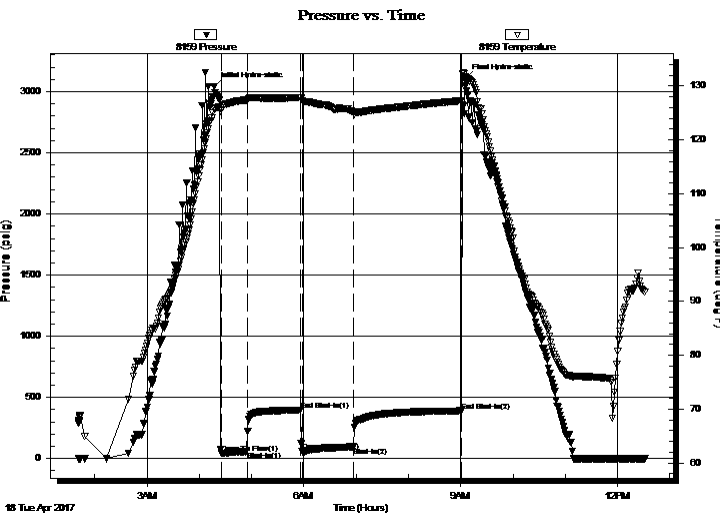
33-33S-29W Meade
Clayton 5-33
Job Ticket: 59936 **DST#: 1**
Test Start: 2017.04.18 @ 01:41:18

GENERAL INFORMATION:

Formation: **Morrow**
Deviated: No Whipstock: ft (KB) Test Type: Conventional Straddle (Initial)
Time Tool Opened: 04:25:03 Tester: Leal Cason
Time Test Ended: 12:32:18 Unit No: 74
Interval: **5788.00 ft (KB) To 5840.00 ft (KB) (TVD)** Reference Elevations: 2351.00 ft (KB)
Total Depth: 6430.00 ft (KB) (TVD) 2339.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 12.00 ft

Serial #: 8159 Inside
Press@RunDepth: 95.39 psig @ 5789.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2017.04.18 End Date: 2017.04.18 Last Calib.: 2017.04.18
Start Time: 01:41:19 End Time: 12:32:18 Time On Btm: 2017.04.18 @ 04:16:48
Time Off Btm: 2017.04.18 @ 09:04:48

TEST COMMENT: IF: Strong Blow , BOB in 2 minutes, GTS in 28 minutes, Caught Sample
IS: 1/2 inch Blow Back
FF: Strong Blow , BOB & GTS Immediate, Gauged Gas
FS: 1/4 inch Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	3042.80	125.68	Initial Hydro-static
9	45.30	125.53	Open To Flow (1)
38	57.46	127.37	Shut-In(1)
100	394.75	127.86	End Shut-In(1)
101	60.91	127.26	Open To Flow (2)
160	95.39	125.26	Shut-In(2)
284	389.85	127.27	End Shut-In(2)
288	3105.97	131.77	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	5656 GIP	0.00
125.00	SGCM 2%G 98%M	0.61

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	20.00	54.57
Last Gas Rate	0.25	42.00	89.47
Max. Gas Rate	0.25	42.00	89.47



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

O'Brien Energy
 18 Congress St Ste 207
 Portsmouth, NH 03801
 ATTN: Keith Clumsky

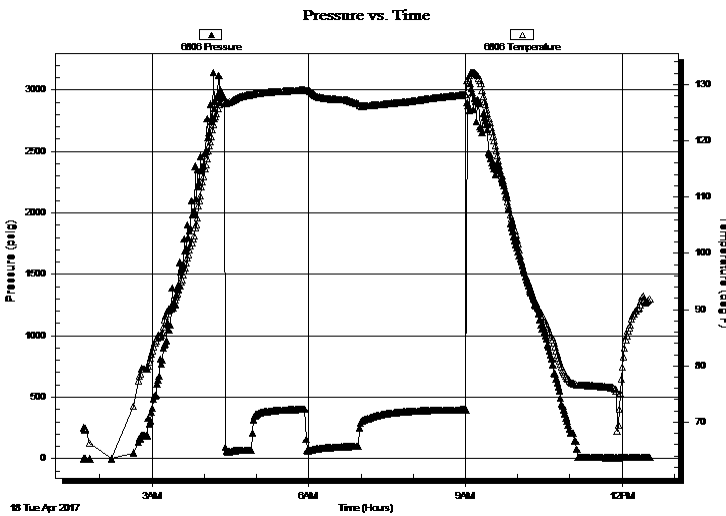
33-33S-29W Meade
Clayton 5-33
 Job Ticket: 59936 **DST#: 1**
 Test Start: 2017.04.18 @ 01:41:18

GENERAL INFORMATION:

Formation: **Morrow**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 04:25:03
 Time Test Ended: 12:32:18
Interval: 5788.00 ft (KB) To 5840.00 ft (KB) (TVD)
 Total Depth: 6430.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Straddle (Initial)
 Tester: Leal Cason
 Unit No: 74
 Reference Elevations: 2351.00 ft (KB)
 2339.00 ft (CF)
 KB to GR/CF: 12.00 ft

Serial #: 6806 Outside
 Press@RunDepth: psig @ 5789.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2017.04.18 End Date: 2017.04.18 Last Calib.: 1899.12.30
 Start Time: 01:41:19 End Time: 12:32:33 Time On Btm:
 Time Off Btm:

TEST COMMENT: IF: Strong Blow , BOB in 2 minutes, GTS in 28 minutes, Caught Sample
 IS: 1/2 inch Blow Back
 FF: Strong Blow , BOB & GTS Immediate, Gauged Gas
 FS: 1/4 inch Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
0.00	5656 GIP	0.00
125.00	SGCM 2%G 98%M	0.61

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	20.00	54.57
Last Gas Rate	0.25	42.00	89.47
Max. Gas Rate	0.25	42.00	89.47



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

O'Brien Energy
 18 Congress St Ste 207
 Portsmouth, NH 03801
 ATTN: Keith Clumsky

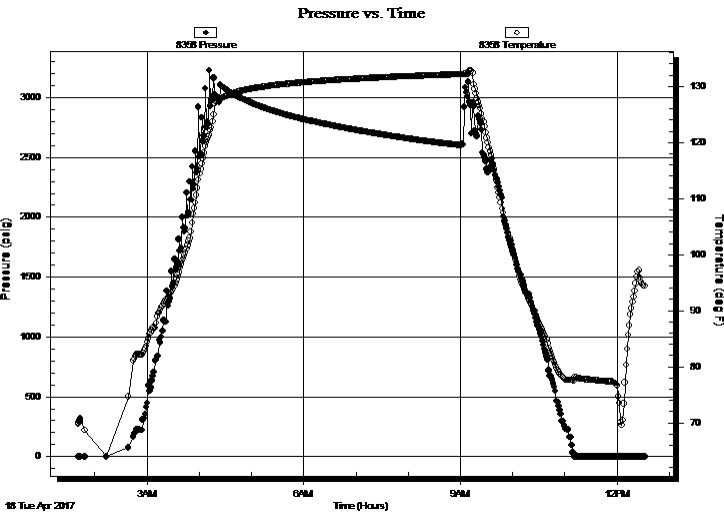
33-33S-29W Meade
Clayton 5-33
 Job Ticket: 59936 **DST#: 1**
 Test Start: 2017.04.18 @ 01:41:18

GENERAL INFORMATION:

Formation: **Morrow**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 04:25:03
 Time Test Ended: 12:32:18
Interval: 5788.00 ft (KB) To 5840.00 ft (KB) (TVD)
 Total Depth: 6430.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Straddle (Initial)
 Tester: Leal Cason
 Unit No: 74
 Reference Elevations: 2351.00 ft (KB)
 2339.00 ft (CF)
 KB to GR/CF: 12.00 ft

Serial #: 8358 Below (Straddle)
 Press@RunDepth: psig @ 5857.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2017.04.18 End Date: 2017.04.18 Last Calib.: 2017.04.18
 Start Time: 01:41:19 End Time: 12:32:48 Time On Btm:
 Time Off Btm:

TEST COMMENT: IF: Strong Blow , BOB in 2 minutes, GTS in 28 minutes, Caught Sample
 IS: 1/2 inch Blow Back
 FF: Strong Blow , BOB & GTS Immediate, Gauged Gas
 FS: 1/4 inch Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
0.00	5656 GIP	0.00
125.00	SGCM 2%G 98%M	0.61

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	20.00	54.57
Last Gas Rate	0.25	42.00	89.47
Max. Gas Rate	0.25	42.00	89.47



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

O'Brien Energy
18 Congress St Ste 207
Portsmouth, NH 03801
ATTN: Keith Clumsky

33-33S-29W Meade
Clayton 5-33
Job Ticket: 59936 **DST#: 1**
Test Start: 2017.04.18 @ 01:41:18

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: 56.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.00 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 4000.00 ppm			
Filter Cake: 0.02 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	5656 GIP	0.000
125.00	SGCM 2%G 98%M	0.615

Total Length: 125.00 ft Total Volume: 0.615 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments: Sample Data: 2 Cu Ft Gas
 300 ML Mud @ 22PSI



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

GAS RATES

O'Brien Energy

33-33S-29W Meade

18 Congress St Ste 207
Portsmouth, NH 03801

Clayton 5-33

Job Ticket: 59936

DST#: 1

ATTN: Keith Clumsky

Test Start: 2017.04.18 @ 01:41:18

Gas Rates Information

Temperature: 59 (deg F)

Relative Density: 0.65

Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
2	10	0.25	20.00	54.57
2	20	0.25	26.00	64.09
2	30	0.25	38.00	83.13
2	40	0.25	40.00	86.30
2	50	0.25	42.00	89.47
2	60	0.25	42.00	89.47

