



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1233027  
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: \_\_\_\_\_

1233027

Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

**INSTRUCTIONS:** Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No  Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No  List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?  Yes  No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD:      Size: \_\_\_\_\_ Set At: \_\_\_\_\_ Packer At: \_\_\_\_\_ Liner Run:  Yes  No

Date of First, Resumed Production, SWD or ENHR. \_\_\_\_\_ Producing Method:  
 Flowing  Pumping  Gas Lift  Other *(Explain)* \_\_\_\_\_

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

<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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Form	ACO1 - Well Completion
Operator	O'Brien Energy Resources Corp.
Well Name	Mohler 1-34
Doc ID	1233027

All Electric Logs Run

Neutron
Induction
Micro
Sonic

Form	ACO1 - Well Completion
Operator	O'Brien Energy Resources Corp.
Well Name	Mohler 1-34
Doc ID	1233027

Tops

Name	Top	Datum
Heebner	4381'	-1875
Toronto	4412'	-1906
Lansing	4482'	-1976
Marmaton	5190'	-2684
Cherokee	5386'	-2880
Atoka	5584'	-3078
Morrow	5713'	-3207
Morrow "A" SS	5740'	-3234
Morrow "B" SS	5752'	-3246
Mississippi Chester	5815'	-3309
Ste. Genevieve	6148'	-3642
St. Louis	6251'	-3745









### Cement Report

Customer	Orion Energy		Lease No.			Date	8/24 - 8/28		
Lease	Mohler		Well #	1-34		Service Receipt	1717-06131A		
Casing	4 1/2" 10.5#	Depth	6447		County	Meade		State	KS
Job Type	Production		Formation			Legal Description	34/33/29		

Pipe Data		Perforating Data		Cement Data	
Casing size	4 1/2" 10 1/2#	Tubing Size			
Depth	6447	Depth	From	To	
Volume	101.8	Volume	From	To	
Max Press	3000 psi	Max Press	From	To	
Well Connection	PC	Annulus Vol.	From	To	
Plug Depth	6405	Packer Depth	From	To	
				Lead	2755 KAAZ @ 14.8
				1.51ft <sup>3</sup>	6.64 gal
				Tail in	

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
8:00					On location
9:30					Spot in Safety mtg
8/24 9:45					Rig up
8/28 10:10					Safety mtg w/ Rig crew
11:15					Pressure Test 3000 psi
11:30	340		12 BBL	3 BPM	Start Pumping Mud Flush
11:45	120		8 BBL	2.6 BPM	Start Cementing Rat - Mouse hole
11:57	180			3 BPM	Start Downhole Pumping Cement
2:30					Drop plug washup to pit
2:35					Start Displacement
	110		10	5	
	240		20	5.5	
	240		30	5.5	
	240		40	5.5	
	240		50	5.5	
	180		60	5.8	
	220		70	5.6	
	500		80	5.6	
	690		90	5.6	
	700		92	2.2	Reduce Rate
	900		102	0	
3:15	1500				Pressure up on plug
3:20					Release Back Plug Held Job complete

Service Units	86543	38114/19919	14355/37925		
Driver Names	Tommy M.	Daniel B.	Victor V.		

Roger Pearson Customer Representative     
 Jerry Bennett Station Manager     
 Tommy Marcellus Cementer



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

O'Brien Energy Resources, Co.

**S34-33s-29w Meade, KS**

18 Congress St.  
Suite 207  
Portsmouth, NH 03801-4091  
ATTN: Roger Pearson / Pete

**Mohler 1-34**

Job Ticket: 57379

**DST#: 1**

Test Start: 2014.08.24 @ 13:46:00

## GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:30:30

Time Test Ended: 02:17:49

Test Type: Conventional Bottom Hole (Initial)

Tester: Chuck Smith

Unit No: 61

**Interval: 5248.00 ft (KB) To 5265.00 ft (KB) (TVD)**

Reference Elevations: 2506.00 ft (KB)

Total Depth: 5265.00 ft (KB) (TVD)

2493.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 13.00 ft

**Serial #: 8357 Inside**

Press @ Run Depth: 258.32 psig @ 5252.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.08.24

End Date:

2014.08.25

Last Calib.:

2014.08.25

Start Time: 13:46:02

End Time:

02:17:49

Time On Btm:

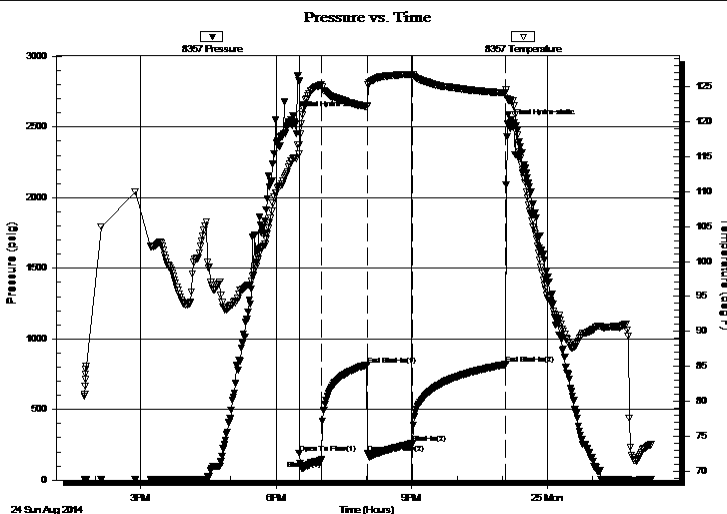
2014.08.24 @ 18:22:30

Time Off Btm:

2014.08.24 @ 23:06:40

**TEST COMMENT:** 30- B.O.B. @ 45 sec. GTS @ 24 min.  
60- 11" Return.  
60- B.O.B. @ 1 3/4 min. Pressure TSTM  
120- B.O.B. @ 3 min.

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2580.41	114.71	Initial Hydro-static
8	189.00	115.41	Open To Flow (1)
38	143.16	125.28	Shut-In(1)
99	816.55	122.21	End Shut-In(1)
99	188.18	122.31	Open To Flow (2)
159	258.32	126.79	Shut-In(2)
282	819.27	124.14	End Shut-In(2)
285	2521.46	123.22	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	RW: .080 @ 68 Degrees F = 100000 PPM	0.00
366.00	MW 5m 95w	3.49
124.00	GMW emulsion 10g 15m 35w 40 emulsio	1.74
45.00	GMW emulsion 30g 15m 20w 35 emulsio	0.63
0.00	4703' GIP	0.00

## Gas Rates

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





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

O'Brien Energy Resources, Co.

**S34-33s-29w Meade, KS**

18 Congress St.  
Suite 207  
Portsmouth, NH 03801-4091  
ATTN: Roger Pearson / Pete

**Mohler 1-34**

Job Ticket: 57379

**DST#: 1**

Test Start: 2014.08.24 @ 13:46:00

## Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 48.00 sec/qt  
Water Loss: 9.18 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 4800.00 ppm  
Filter Cake: 1.00 inches

Cushion Type:  
Cushion Length: ft  
Cushion Volume: bbl  
Gas Cushion Type:  
Gas Cushion Pressure: psig

Oil API: deg API  
Water Salinity: 100000 ppm

## Recovery Information

Recovery Table

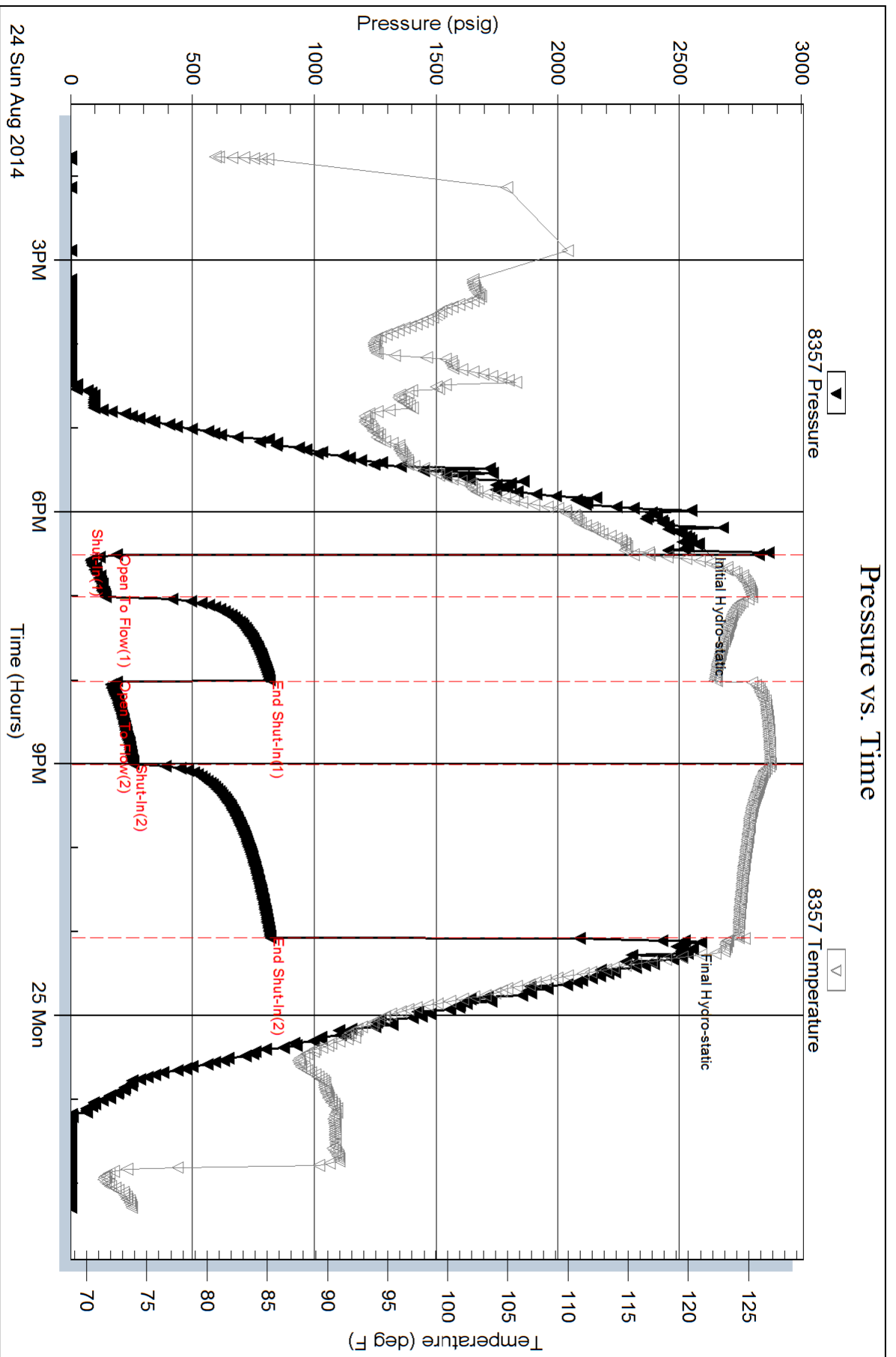
Length ft	Description	Volume bbl
0.00	RW: .080 @ 68 Degrees F = 100000 PPM	0.000
366.00	MW 5m 95w	3.494
124.00	GMW emulsion 10g 15m 35w 40 emulsion	1.739
45.00	GMW emulsion 30g 15m 20w 35 emulsion	0.631
0.00	4703' GIP	0.000

Total Length: 535.00 ft      Total Volume: 5.864 bbl

Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:

Laboratory Name:      Laboratory Location:

Recovery Comments: Sampler: 680 psi, 33 CUft, 100ml condensate, 1900ml gas



# **O'Brien Energy Resources, Inc.**

**Mohler No. 1-34**

**Section 34, T33S, R29W**

Meade County, Kansas

August, 2014

## **Well Summary**

The O'Brien Energy Resources, Mohler No. 1-34 was drilled to a total depth of 6453' in the St. Louis Formation with no problems and in a record rotating time of 74 <sup>3</sup>/<sub>4</sub> hours for an average of 86.3' per hour. Appreciation to Duke Rig 9 hands.

Formation tops ran 2' low to 5' high from the Heebner to Morrow relative to the Getty Oil, Mohler No. 4, approximately 1320' to the Northeast. The Chester came in 8' low. The Marmaton "C" Zone came in 9' high.

Several quality hydrocarbon shows were documented during the drilling of the test. One of the primary objectives was the Marmaton "C" Zone(5254'-5262') and consists of a very fossiliferous Limestone: Light brown to buff, white, moderate to coarsely crystalline in part, brittle, clean, subchalky, fossiliferous and oolitic with excellent interparticle and occasional moldic porosity, trace intercrystalline and vuggy porosity, bright light yellow hydrocarbon fluorescence in 5% of the samples, good streaming cut, gas bubbles when crushed, trace light brown oil stain, excellent oil odor. A 180 Unit gas kick was documented.

This interval was drilled stem tested and recovered gas to surface in 24 minutes, 366' of muddy water, 169' of gassy mud and water cut emulsion. The sample chamber contained 680 PSI, 32 cubic feet of gas and 100 ml of condensate. No water was recovered, and with shut in pressures of 819 PSI.

An Upper Morrow Sandstone was documented(5740'-5745'): Clear to white, speckled green, white, friable, very fine upper, well sorted subround grains, siliceous cement, clean, good intergranular porosity, light gold hydrocarbon fluorescence, good streaming cut, oil stain and trace live oil. A 120 Unit gas increase occurred.

The Morrow "B" Sandstone(5752'-5774') contained shows as documented on the mudlog.

The Upper Chester(5829'-5846') consists of a Limestone: Medium to light mottled brown, buff, microsucrosic in part, subchalky, fossiliferous, trace intercrystalline and fine vuggy porosity, light speckled blue hydrocarbon fluorescence in 15% of the samples, slow streaming cut, light brown oil stain. Gas increases of up to 300 Units were documented.

An 80 Unit gas increase and sample show occurred from a Lower Chester Sandstone(6069'-6075'): Medium brown with oil stain, slightly friable, fine well sorted grains, trace intergranular porosity, even dull gold brown hydrocarbon fluorescence and excellent streaming cut, brown matrix oil stain and live oil.

The Basal Chester interval(6085'-6132') contained its characteristic hydrocarbon shows with gas increases of up to 640 Units.

A interesting show occurred in the St. Louis(3625'-6332') and consists of a Limestone: Mottled brown buff, biomicrite, brittle, clean, very fossiliferous with interpartical and trace intercrystalline and vuggy porosity, light yellow to orange hydrocarbon fluorescence and excellent streaming cut, brown oil stain and live oil, slight oil odor. A 80 Unit gas increase was noted.

Additional minor shows were documented(attached mudlog).

4 1/2" production casing was run on the Mohler No. 1-34 to further evaluate the above mentioned shows.

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, David Ward

Well: Mohler No. 1-34, Mohler Field

API: 15-119-21371

Location: 660' FSL & 900' FEL, Section 34, T33S, R29W, Meade County, Kansas – South of Meade.

Elevation: Ground Level 2493', Kelly Bushing 2506'

Contractor: Duke Drilling Rig No. 9, Type: Double jackknife, double stand, ToolpusherEmidgio Rojas, Drillers: Omar Garcia, Alejandro V., Fernando Jurado

Company Man: Roger Pearson – Liberal, Kansas

Spud Date: 8/20/14

Total Depth: 8/26/14, Driller 6453', Logger 6453', St. Louis Fm.

Casing Program: 35 joints of new 8 5/8", J55, 24Lbs/ft, set at 1495', 4 1/2" production casing set to TD.

Mud Program: Mud Co./Service Mud Inc., Engineer Justin Whiting, mud up 4000'.

DST: Trilobite Testing engineer Chuck Smith, (5248'-5265'), Marmaton "C"

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

Samples: 30' to 4600', 20' to 5800', 10' to TD. Dry cut sent to KGS sample log library.

Electric Logs: Weatherford, engineer Ben Weldin, 1) Array Induction, 2) Neutron Density, 3) Microlog, 4) Sonic – Hi Res. repeat.

Status: 4 1/2" production casing set to TD on 8/27/14.

**WELL CHRONOLOGY**

**6 AM**  
**DATE DEPTH**

**FOOTAGE**

**RIG ACTIVITY**

8/20 490' 490' Rig down and move to location and rig up rotary tools. Pump water and mix spud mud. Drill rat hole and mouse hole and spud in 12 1/4" surface hole to 490'.

8/21 1495' 1005' Survey(1 1/4 deg.). To 1495' and circulate and clean hole. Trip out and run and cement 35 joints of new 8 5/8" J-55 surface casing set at 1492' with 325 sacks A Con Blend and tail with 150 Premium Plus with centralizers on joints 1, 3, 5 and 7. Plug down 3PM. Wait on cement and nipple up BOP.

8/22 3230' 1735' Trip in and pressure test BOP to 300 PSI for 15 minutes. Drill plug and cement and 7 7/8" hole to 1820'.

8/23 4790' 1560' Survey(1 1/4 deg.) and service rig and clean suction.

8/24 5067' 277' To 5004' and wiper trip 40 stands. Circulate for samples at 5224' and 5265' and circulate and condition mud. Short trip 6 stands and circulate. Drop survey(1 deg.) and trip for DST No. 1(5248'-5265') and run test – gas to surface in 24 minutes.

8/25 6050' 983' Run test and pull and lay down test tool. Trip in and break circulation at 2631' and circulate on bottom and drill to 6050'. Circulate for samples at 5732' and 5744'. To 6050'.

8/26 6453'TD 403' To 6453'TD and circulate and condition hole. Wiper trip 40 stands and circulate. Drop survey(1 deg.) and trip out and run Elogs.

8/27 TD Trip in and circulate and wait on orders. Trip out laying down and run and cement production casing to TD. Rig down.

**BIT RECORD**

<b><u>NO.</u></b>	<b><u>MAKE</u></b>	<b><u>TYPE</u></b>	<b><u>SIZE</u></b>	<b><u>OUT</u></b>	<b><u>FOOTAGE</u></b>	<b><u>HOURS</u></b>
1		V273	12 1/4"	1495'	1495'	11 3/4
2		228RS	7 7/8"	1820'	325'	1 1/4
3		VLT 616	7 7/8"	6453'	4633'	61 3/4
Total Rotating Hours:						74 3/4
Average:						86.3 FT

### MUD PROPERTIES

<u>DATE</u>	<u>DEPTH</u>	<u>WT</u>	<u>VIS</u>	<u>PV</u>	<u>YP</u>	<u>pH</u>	<u>WL</u>	<u>CL</u>	<u>LCM-LBS/BBL</u>
8/19	Make up water								
8/21	1496'								
8/22	2350'		9.6	33	--	--	7.0	n/c	77K 0
8/23	3972'		9.1	44	10	14	9.5	12.0	9K 2
8/24	5265'		9.4	48	16	18	9.5	9.2	4.8K 1
8/25	5502'		9.4	48	14	16	8.5	9.2	5K 2
8/26	6453'TD		9.35	50	17	17	10.0	9.2	3K 6

### DEVIATION RECORD - degree

734' ½, 1592 1 ¼, 2599' 1, 3580' 1, 4656' 1 ¼, 5265' 1, 6453' 1

### BIT RECORD

<u>NO.</u>	<u>MAKE</u>	<u>TYPE</u>	<u>SIZE</u>	<u>OUT</u>	<u>FOOTAGE</u>	<u>HOURS</u>
1		V273	12 ¼"	1495'	1495'	11 ¾
2		228RS	7 7/8"	1820'	325'	1 ¼
3		VLT 616	7 7/8"	6453'	4633'	61 ¾
Total Rotating Hours:						74 ¾
Average:						86.3 Ft/hr

### DRILL STEM DATA

DST NO.1: (5248' – 5265'), Marmaton, times 30-60-30-120

Type: Conventional Bottom Hole Test

<u>PERIOD</u>	<u>TIME</u>	<u>PSI</u>
IH		2580
IF	30	189 - 143
ISI	60	817
FF	30	188 - 258
FSI	120	819
FH		2521

BHT 123 deg. F.

BLOWS: IF – Bottom of bucket in 45 seconds, gas to surface in 24 minutes, estimated rate 70 mcf/d. ISI – 11" blowback. FF – Bottom of bucket in 1 ¾ minutes. FSI – Blowback to bottom of bucket in 3 minutes.

RECOVERY: 366' muddy water(5% mud), 124 gassy mud and water cut emulsion(10% gas, 15% mud, 35% water and 40% emulsion, 45' gassy mud and water cut emulsion(30% gas, 15% mud, 20% water and 35% emulsion) and 4703' of gas in the pipe. Water Rw .08 at 68 deg. F., 100,000 ppm cl.

Sample Chamber: 680 PSI, 100 ml condensate, 32 cf gas, no water.



**ELECTRIC LOG FORMATION TOPS- KB Elev. 2553'**

<b><u>FORMATION</u></b>	<b><u>DEPTH</u></b>	<b><u>DATUM</u></b>	<b><u>*Getty Oil Mohler No. 4 DATUM</u></b>	<b><u>POSITION</u></b>
Surface Casing	1490'			
Heebner	4381'	-1875'	-1873'	-2'
Toronto	4412'	-1906'	-1901'	-5'
Lansing	4482'	-1976'	-1971'	-5'
Marmaton	5190'	-2684'	-2889'	+5'
Marmaton "C"	5254'	-2748'	-2757'	+9'
Cherokee	5386'	-2880'	-2884'	+4'
Atoka	5584'	-3078'	-3081'	+3'
Morrow	5713'	-3207'	-3211'	+4'
Morrow "B" SS	5752'	-3246'	-3247'	+1'
Mississippi Chester	5815'	-3309'	-3301'	-8'
Ste. Genevieve	6148'	-3642'	NDE	
St. Louis	6251'	-3745'	NDE	
TD	6453'	-3579'		

\*Getty Oil, Mohler No. 4, 1650' FSL & 330' FEL, Sec. 34 – approximately 1320' to the NE, K.B. Elev. 2485' – oil productive from the Marmaton "C" Zone.