



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1229714  
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: \_\_\_\_\_

1229714

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> _____
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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	Weber 1-20
Doc ID	1229714

All Electric Logs Run

Neutron
Induction
Micro
Sonic



810 E 7<sup>TH</sup>  
 PO Box 92  
 EUREKA, KS 67045  
 (620) 583-5561

**Elite**

**Cementing & Acidizing  
 of Kansas, LLC**



**Cement or Acid Field Report**

Ticket No. **1537**

Foreman Steve Mead

Camp Eureka

API 15-191-22759

Date	Cust. ID #	Lease & Well Number	Section	Township	Range	County	State	
7-26-14	10916	Weber # 1-20	20	32S	1E	Sumner	KS	
Customer			Unit #		Driver		Unit #	Driver
O'Brien Energy Resources Corp			102		Dave G			
Mailing Address			113		Allen G.			
18 Congress ST Ste 207								
City		State	Zip Code					
Portsmouth		NH	03801					

Job Type Surface Hole Depth 313' Slurry Vol. \_\_\_\_\_ Tubing \_\_\_\_\_  
 Casing Depth 303 GL Hole Size \_\_\_\_\_ Slurry Wt. \_\_\_\_\_ Drill Pipe \_\_\_\_\_  
 Casing Size & Wt. 8 5/8 24" Cement Left in Casing 20' Water Gal/SK \_\_\_\_\_ Other \_\_\_\_\_  
 Displacement 1966ls Displacement PSI \_\_\_\_\_ Bump Plug to \_\_\_\_\_ BPM \_\_\_\_\_

Remarks: Safety Meeting. Rig up to 8 5/8 casing. Break circulation w/ fresh water. Pump 5bbls ahead. Mix 180sks Class A Cement w/ 3% CaCl<sub>2</sub> 2% Gel + 1/4" Flo Seal per/sk. Displace w/ 1966ls fresh water. Shut well in. Good cement. Returns to surface. 1800' pit. Job complete. Rig down.

*Thank you*

Code	Qty or Units	Description of Product or Services	Unit Price	Total
C101	1	Pump Charge	840.00	840.00
C107	80	Mileage	3.95	316.00
C200	180sks	Class A Cement	15.00	2700.00
C205	500#	Calcium Chloride 3%	.60	300.00
C206	335#	Gel 2%	.20	67.00
C209	50#	Flo-Seal 1/4" per/sk	2.25	112.50
C108-B	846	Tan mileage bulk Trucks	1.35	913.68
			Subtotal	5249.18
			Sales Tax 6.65%	211.14
Authorization <u>Dave Coulter</u> Title _____			Total	5460.62

**COMPLETED**

I agree to the payment terms and conditions of services provided on the back of this job ticket. Any amendments to payment terms must be in writing on the front of this job ticket or in the Customer's records at ELITE's office.

810 E 7<sup>TH</sup>  
 PO Box 92  
 EUREKA, KS 67045  
 (620) 583-5561

**Elite**

**Cementing & Acidizing  
 of Kansas, LLC**



**Cement or Acid Field Report**

Ticket No. **1544**

Foreman Steve Mead

Camp Eureka

AP# 15-191-22759

Date	Cust. ID #	Lease & Well Number	Section	Township	Range	County	State
8-2-14	1096	Weber #1-20	20	32S	1E	Sumner	Ks
Customer			Unit #	Driver	Unit #	Driver	
O'Brien Energy Resources Corp			104	Alan M			
Mailing Address			112	Chris M			
18 Congress St Ste 207			141	Rudy			
City		State	Zip Code				
PARTSMOUTH		KM	63801				

Job Type <u>4/5</u>	Hole Depth <u>4050</u>	Slurry Vol. _____	Tubing _____
Casing Depth <u>4044.66</u>	Hole Size <u>7 7/8</u>	Slurry Wt. _____	Drill Pipe _____
Casing Size & Wt. <u>5 1/2 15.5#</u>	Cement Left in Casing <u>20'</u>	Water Gal/SK _____	Other _____
Displacement <u>98 bbls</u>	Displacement PSI <u>500#</u>	Bump Plug to <u>1000#</u>	BPM _____

Remarks: Safety Meeting: Rig up to 5 1/2 casing. Break circulation w/ fresh water. Pump 10 bbl ahead pump 100# caustic soda & 5 bbls water spacer. Mix 25 sks Thickset cement w/ 5# Kol-seal & 1# phenoseal perisk. Wash out pump & lines. shut down Release latch down plug. Displace w/ 98 bbls fresh water. Final pumping pressure 500# Bump plug 1000# wait 2 min. Release pressure Plug held. Good circulation during job.  
Job complete Rig down  
Thank you

Centralizer 1-3-5 Basket TOP #6

Code	Qty or Units	Description of Product or Services	Unit Price	Total
C102	1	Pump Charge	1500.00	1500.00
C107	80	Mileage	3.95	316.00
C201	75 sks	Thickset Cement	19.50	1462.50
C207	375 #	5# Kol-seal perisk	.45	168.75
C208	75 #	1# Phenoseal perisk	1.25	93.75
C108	4.13	Ton mileage	1.35	446.04
C217	100 #	Caustic Soda Pre-Flush	1.60	160.00
C113	7 hrs	80 bbl Uac Truck	85.00	595.00
C224	3000 gal.	City water	10.00/1000	30.00
C681	1	5 1/2 Float Collar	225.00	225.00
C703	1	5 1/2 AFU Flopper Valve Insert	145.00	145.00
C504	3	5 1/2 Centralizer	48.00	144.00
C604	1	5 1/2 Cement Basket	225.00	225.00
C421	1	5 1/2 Latch Down Plug	230.00	230.00
			SubTotal	5741.04
			Sales Tax 6.65%	194.79
Authorization <u>Duke Coulter</u> Title _____			Total	5932.83

I agree to the payment terms and conditions of services provided on the back of this job ticket. Any amendments to payment terms must be in writing on the front of this job ticket or in the Customer's records at ELITE's office.

**O'Brien Energy Resources, Inc.**  
**Weber No. 1-20**  
**Section 20, T32S, R1E**  
**Sumner Co., Kansas**  
**August, 2014**

**Well Summary**

The O'Brien Energy Resources, Weber No. 1-20 was drill to a total depth of 4050' with no problems. The closest offset was the Weber "A" No. 1, approximately 1200' to the North. The Kansas City ran 8' low relative to this offset. Structure was gained as the Pawnee, Mississippi and Kinderhook ran 12', 6' and 17' high respectively. The Simpson Sandstone came in 15' high.

The Kansas City and Pawnee came in 8' and 16' low relative to the Weber No. 1-20, 1320' to the northeast and oil productive from the Simpson Sandstone. Thinning occurred in the Mississippi and the Kinderhook and Simpson Sandstone came in 12' and 14' high.

An excellent show occurred in the Simpson Sandstone(3989'-4006') and consists of a Sandstone – Light to medium brown with oil staining, friable, fine upper to fine lower, well sorted, subround to round grains, siliceous cement, clean, excellent intergranular porosity, bright light yellow to pale blue and occasional goldbrown hydrocarbon fluorescence in most of the sandstone, excellent fast streaming cut, even brown matrix oil staining and live oil, excellent oil odor, trace solid residual black oil, show dissipates when dried.

This interval was drillstem tested and recovered gas to surface in 30 minutes, 139' of highly gas cut oil and 2910' clean gassy oil and with a bottom hole pressure of 1327 PSI and flowing pressures of 436 to 834 PSI. The sample chamber contained 750 PSI, 4.8 cubic feet of gas and 1500 ml of oil with a gravity of 42.6 API at 60 deg. F. No water was noted in the recovery but the mud pit chlorides went up from 1600 to 5000.

5 ½" production casing was run to TD on the Weber No. 1-20.

Appreciation to the C&G Drilling rig hands.

Respectfully Submitted,

Peter Debenham

## WELL DATA

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

Well: Weber No. 1, wildcat

API No.: 15-191-22759

Location: 1390'FSL & 430'FWL, Sec. 20, 32S, 1E, Sumner Co., KS

Elevation: Ground Level 2356', Kelly Bushing 2368'

Contractor: C&G Drilling Inc. Type: Double stand, double jackknife, T.P. and Company  
man Duke Coulter, Drillers Mike Hatfield, Robert Curmtl

Spud Date: 7/26/14

Total Depth: 8/1/14, Driller 4050', Logger 4052', Simpson

Casing Program: 8 5/8" surface casing set at 303', 5 1/2" production casing to TD.

Mud Program: Twister Mud Company, Engineer Charlie Coulter, Type: LSND, mud up 2541'.

Wellsite Consultant: Peter Debenham with mudlogging trailer, Call depth 2500', Box 350, Drake,  
CO 80515, 720/220-4860.

Samples: 10' - 3500' to TD.

Electric Logs: Nabors Completion and Production Services Co., Engineer Jason Cappellucci,  
1) Dual Induction, 2) Compensated Density/Neutron, 3) Microlog, 4) Sonic

Status: 5 1/2" production casing set a TD on 8/2/14 for Simpson Sandstone oil  
production.



**WELL CHRONOLOGY**

<b>8 PM</b>	<b><u>DATE</u></b>	<b><u>DEPTH</u></b>	<b><u>FOOTAGE</u></b>	<b><u>RIG ACTIVITY</u></b>
	7/25			Move to location and rig up rotary tools. Change out kelly bushings. Drill rathole.
	7/26	781'	781'	Service rig and work on pump. Spud in 12 ¼" surface to 314' and circulate. Trip out and run and cement 8 5/8" surface casing set at 303'. Plug down 3:40 PM. Work on pump. Drill mouse hole and jet pits. Drill 7 7/8" to 781'. Under surface 1:30 AM.
	7/27	2510'	2196'	Service rig and jet pits. Survey(.75 deg.) and work on pump.
	7/28	3573'	63'	Jet pits and mud up at 2541'. To 3573' and trip for Bit No. 3 – button bit.
	7/29	3655'	82'	To 3655'. Surveys(.5 - .75 deg.).
	7/30	3858'	203'	Service and jet.
	7/31	4003'	145'	Circulate for samples at 4003'. Short trip and circulate and condition mud. Trip for DST No. 1(3993'-4003'), Simpson SS and run test. Tool on bottom 4:37 PM.
	8/1	4050'TD	47'	Run test – gas to surface in 30 minutes. Trip out and break down tool. Trip in with Bit No. 3 and drill to 4050'TD and circulate and condition mud. Trip out for logs and run Elogs. Casing on location.
	8/2	TD		Run and cement 5 ½" 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>
1A	RBI	1661RR	12 ¼"	313'	313'	1.25
1	Force	N61660	7 7/8"	3573'	3260'	40.75
2	HTCO	6X286	7 7/8"	4003'	430'	44.25
3	Dttel	Z228	7 7/8"	4050'	47'	4.75
Total Rotating Hours:						91
Average:						44.5 Ft/hr

**DEVIATION RECORD - degree**

313' ¼, 812' ¼, 1251' ½, 1785' ½, 2352' ¾, 2761' 7/8, 3351' 7/8, 3573' 7/8, 4004' 1

**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>
7/27	843'	8.4	Water					2.5K	--
7/28	2470'	9.2	Water					4.7K	3
7/29	3573'	9.4	38	11	6	10.5	13.3	1.75	4
7/30	3830'	9.4	41	11	9	9.5	13	1.9K	1.5
7/31	4003'	9.2	48	16	12	9.5	11.8	1.6K	1.5
8/1 11am	4050'	9.0	49	9	13	9.5	17.4	6K	2.5
8/1 2pm	4050'	9.0	58	17	14	10.4	10.4	5K	2.5

**DRILL STEM DATA**

DST NO.1: (3993'-4003'), Simpson Sandstone

Type: Conventional Bottom Hole Test Times: 30-45-60-60

<u>PERIOD</u>	<u>TIME</u>	<u>PSI</u>
IH		1904
IF	30	1325 - 1330
ISI	60	1327
FF	45	436 - 834
FSI	60	1314
FH		1900

BHT 123 deg. F.

BLOWS: IF & ISI: Weak to no blow – Tool failed to open. FF: Strong blow, bottom of bucket in 30 Seconds, gas to surface in 30 minutes, gauged at 41.88 Mcf/d. FSI: Bled off and remained strong and off the BOB throughout.

RECOVERY: Gas to surface in 30 minutes, 139' gassy oil cut mud, 2910' of clean gassy oil.

Sample Chamber: 750 PSI, 4.8 cfg, 1500ml oil – Oil Gravity 42.6 API at 60 deg. F.

Note: No pressures or recovery for the IF & ISI as the tool did not cycle open.

**ELECTRIC LOG FORMATION TOPS- KB Elev. 1217'**

<u>FORMATION</u>	<u>DEPTH</u>	<u>DATUM</u>	<u>*Weber "A" No. 1</u>	
			<u>DATUM</u>	<u>POSITION</u>
Surface casing	304'			
Kansas City	2976'	-1759'	-1755'	-8'
Base Kansas City	3222'	-2005	-2004'	-1'
Pawnee	3304'	-2086'	-2099'	+12'
Mississippi	3608'	-2391'	-2397'	+6'
Kinderhook	3922'	-2705'	-2722'	+17'
Simpson SS	3989'	-2772'	-2787'	+15'
Base Simpson SS	4006'	-2798'	-2802'	+13'
TD	4052'			

\*Cities Services Oil and Gas, Weber "A" No. 1, approximately 1200' to the North, K.B. Elev. 1228'.

<u>FORMATION</u>	<u>DEPTH</u>	<u>DATUM</u>	<u>*Weber No. 1-20</u>	
			<u>DATUM</u>	<u>POSITION</u>
Kansas City	2976'	-1759'	-1751'	-8'
Base Kansas City	3222'	-2005	-2008'	-3'
Pawnee	3304'	-2087'	-2103'	-16'
Mississippi	3608'	-2391'	-2390'	-1'
Kinderhook	3922'	-2705'	-2712'	+12'
Simpson SS	3989'	-2772'	-2786'	+14'
Base Simpson SS	4006'	-2798'	NDE	
TD	4052'			

\*Eagle Creek Corp., Weber No. 1-20, approximately 1320' to the NE, K.B. Elevation 1216'.

# LITHOLOGY STRIP LOG

## WellSight Systems

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

Well Name: O'Brien Energy, Weber No. 1  
Location: 1390'FSL & 430'FWL, Sec. 20, 32S, 1E, Sumner Co., KS  
Licence Number: API: 15-119-21366 Region: Hougaton  
Spud Date: 7/26/14 Drilling Completed: 8/1/14  
Surface Coordinates: 1390'FSL & 430'FWL, Sec. 20, 32S, 1E, Sumner Co., KS

Bottom Hole Coordinates: 1390'FSL & 430'FWL, Sec. 20, 32S, 1E, Sumner Co., KS  
Ground Elevation (ft): 1208' K.B. Elevation (ft): 1217'  
Logged Interval (ft): 3500' To: TD Total Depth (ft): 4050'  
Formation: Mississippi, Simpson  
Type of Drilling Fluid: LSND, mud 2541'

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

### OPERATOR

Company: O'Brien Energy Resources, Corp.  
Address: 18 Congress St., Suite 207  
Portsmouth, NH 03801  
President/Owner John Forma, Geologist Paul Wiemann

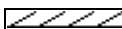
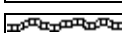
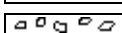
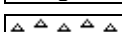
### GEOLOGIST

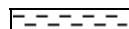

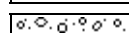
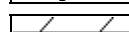
Name: Wellsite: Peter Debenham  
Company: Petrolific Consulting Services  
Address: P.O. Box 350  
Drake, CO 80515  
720/220-4860, Petrolific@gmail.com

### Comments

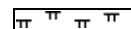
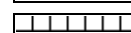
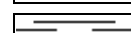
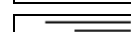
C&G Drilling Inc. Type: Double stand, double jackknife, T.P. and Company hand Duke Coulter, Drillers Mike Hatfield, Robert Curmtl, Mud Co.: Twister Mud Co. engineer Charlie Coulter, Nobors Services Co., engineer Jason Cappellucci, Trilobite Testing enineer Matt Smith. 5 1/2" production casing set to TD 8/2/14.



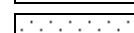
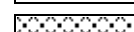
### ROCK TYPES

 Anhy  
 Bent  
 Brec  
 Cht

 Clyst  
 Coal  
 Congl  
 Dol

 Gyp  
 Igne  
 Lmst  
 Meta

 Mrlst  
 Salt  
 Shale  
 Shcol

 Shgy  
 Sltst  
 Ss  
 Till

### ACCESSORIES

#### FOSSIL

- Algae
- Amph
- Belm
- Bioclst
- Brach
- Bryozoa
- Cephal
- Coral
- Crin
- Echin
- Fish
- Foram
- Fossil
- Gastro
- Oolite

- Ostra
- Pelec
- Pellet
- Pisolite
- Plant
- Strom

#### MINERAL

- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Breclrag
- Calc
- Carb

- Chtdk
- Chtlt
- Dol
- Feldspar
- Ferrpel
- Ferr
- Glau
- Gyp
- Hvymin
- Kaol
- Marl
- Minxl
- Nodule
- Phos
- Pyr
- Salt

- Sandy
- Silt
- Sil
- Sulphur
- Tuff

#### STRINGER

- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Slstgr

- Ssstrg

#### TEXTURE

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

### OTHER SYMBOLS

#### INTERVALS

- Core
- Dst

#### EVENTS

- Rft
- Sidewall

#### POROSITY TYPE

- Earthy
- Fenest
- Fracture
- Inter
- Moldic
- Organic

- Pinpoint
- Vuggy

#### SORTING

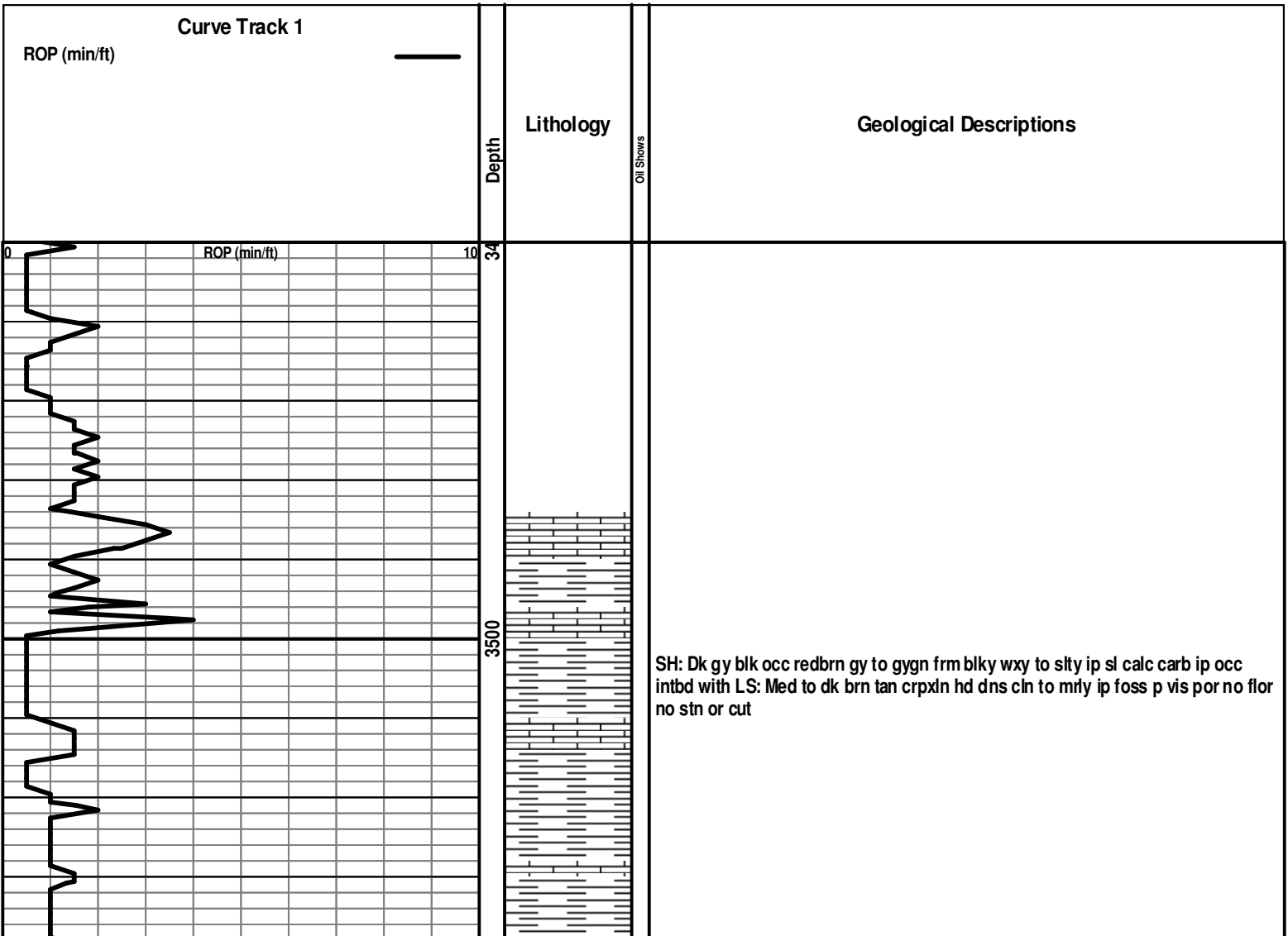
- Well
- Moderate
- Poor

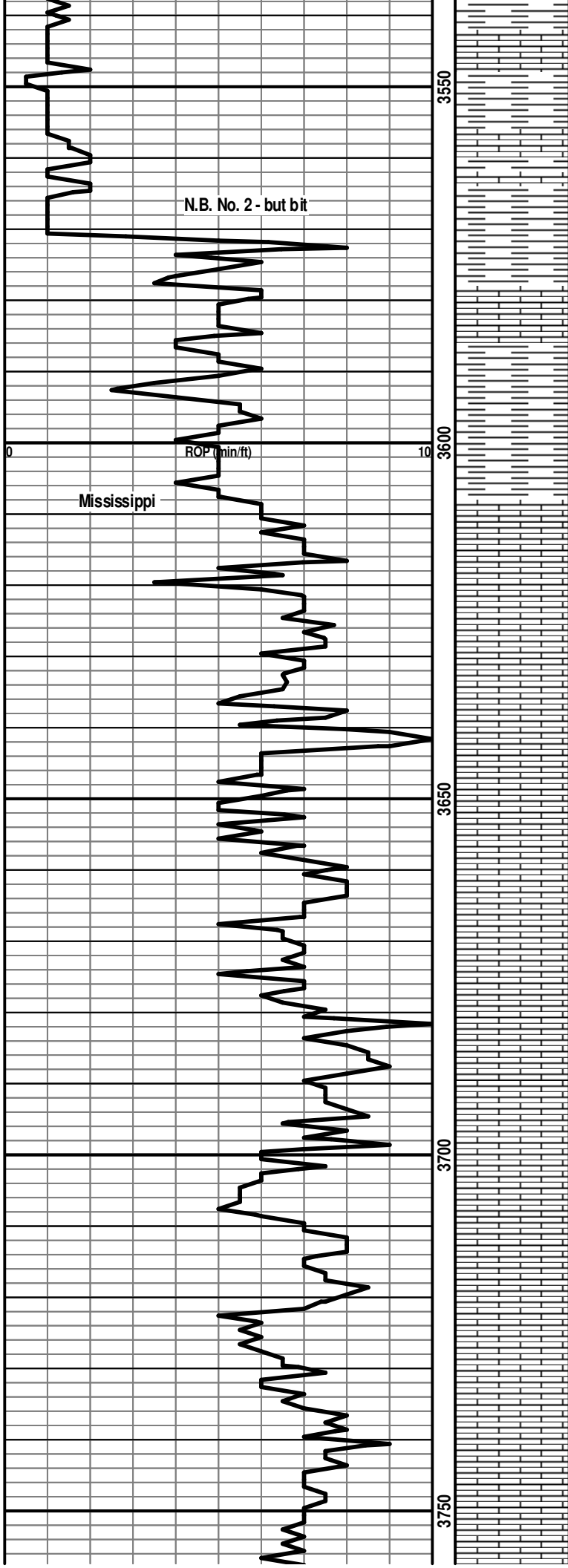
#### ROUNDING

- Rounded
- Subrnd
- Subang
- Angular

#### OIL SHOWS

- Even
- Spotted
- Ques
- Dead





SH: Dk gy blk redbrn occ gy to gn gygn frm blk y wxy to slty calc carb ip occ intbd with LS: aa

SH: Dk gy blk redbrn occ gy to gn gygn frm blk y wxy to slty calc carb ip occ intbd with LS: Med to dk brn tan crpxln hd dns cln to mrl y ip foss p vis por no flor no stn or cut

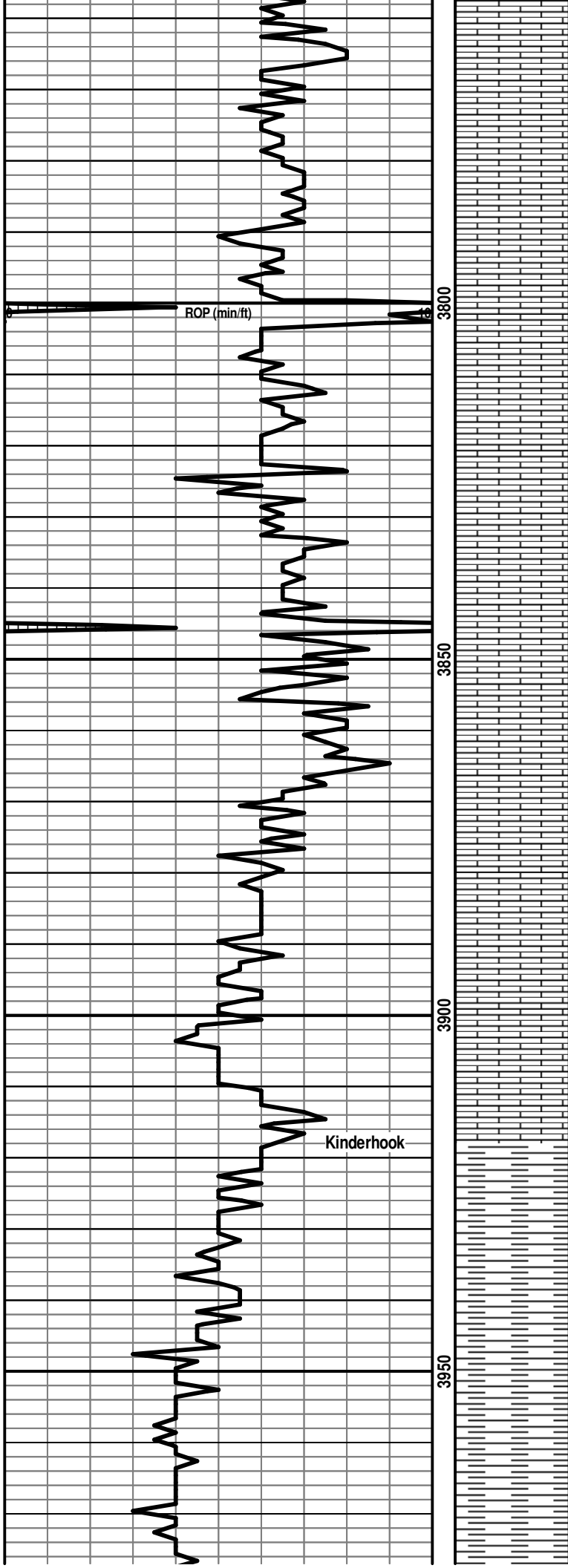
CHRT: Trnsl lt brn to gy orng hd xln LS: Lt brn tan crpxln hd dns foss occ sndy cln to arg tt no show

LS: Lt brn tan gy biomcr f xln hd dns sft & sbchky ip arg to mrl y ip foss tt no show with CHRT: aa

LS: Dk mot gy to bm micr crpxln hd dns sil foss arg to mrl y ip tt no show tr CHRT

LS: Dk to med brn crpxln hd dns sil cln to arg sndy ip foss p vis por no flor no stn or cut with CHRT: Mlky gy hd xln

LS: Dk bm to gy mot crpxln hd dns sil ip tt no show occ intbd with SH: Blk dk gy to brn avn brn to redbrn blk y carb wxy to slty with CHRT: Mnt brn mlky av hd xln



LS: Med to dk brn crpxln hd dns arg to mrly foss p vis por no flor no stn or cut  
occ intbd with SH: Brn to gy redbrn gygn to gn blk frm sbfis to blk carb ip

SH: Brn to gy redbrn gygn to gn blk frm sbfis to blk carb ip LS: Med to dk brn  
crpxln hd dns arg to mrly foss p vis por tr ca filled frac with lt yel hycd flor wk  
bdng cut no stn wk show

LS: Lt to med brn to gy f xln hd dns cln to arg ip v sndy ip tt no show

LS: Lt to med brn to gy f xln hd dns cln to arg ip v sndy ip tt no show

SH: V dk brn frm blk carb slty calc

SH: V dk brn frm blk carb slty calc

Simson SS

CO 4003' DST No.  
1(3993'-4003')

ROP (min/ft)

4050 TD

4000

4050

00

SS: Lt to med brn with oil stn fri fu/fl w srted sbrnd to rnd grs sil cmt chn gd intgran por bri lt yel to pale bl & occ goldbrn hydc flor(all SS) exc strmg cut brn mtx o stn & live oil exc odor tr blk oil resd show dissipates some when dried Tr SS: Wh f w srted grs abt clay infill with no show

SH: Brn to gy blk frm sbfis to blk yxy to sndy ip carb

SS: Gy s&p hd to sl fri fu w srted sbrnd grs v sil & hd ip chn carb incl p vis por no flor no stn or cut

SH; Dk bm to gy gygn mot gn blk y sndy ip

SS: Wh trnsl hd sl fri mu/fl mod srted sbrnd grs sil cmt chn tt no show with SH: aa

SS: Wh clr hd to sl fri m/f mod srted sbang to sbrnd grs sil cmt chn tr intgran por v dull mot pale bl hydc flor fnt bldng to resd ring cut no stn no odor wk show





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

O'Brien Energy Resources Corp.

**20-32s-1e Sumner Co., Ks.**

18 Congress St. STE 207  
Portsmouth, NH. 03801

**Weber # 1-20**

Job Ticket: 54129

**DST#: 1**

ATTN: Pete Debenham

Test Start: 2014.07.31 @ 13:05:35

## GENERAL INFORMATION:

Formation: **Simpson Sandstone**

Deviated: No Whipstock: 0.00 ft (KB)

Time Tool Opened: 16:11:35

Time Test Ended: 03:26:50

Test Type: Conventional Bottom Hole (Initial)

Tester: Matt Smith

Unit No: 53

**Interval: 3993.00 ft (KB) To 4003.00 ft (KB) (TVD)**

Reference Elevations: 1218.00 ft (KB)

Total Depth: 4003.00 ft (KB) (TVD)

1208.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

**Serial #: 6773 Outside**

Press@RunDepth: 834.29 psig @ 3994.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.07.31

End Date:

2014.08.01

Last Calib.:

2014.08.01

Start Time: 13:05:40

End Time:

03:26:50

Time On Btm:

2014.07.31 @ 16:06:05

Time Off Btm:

2014.07.31 @ 19:37:50

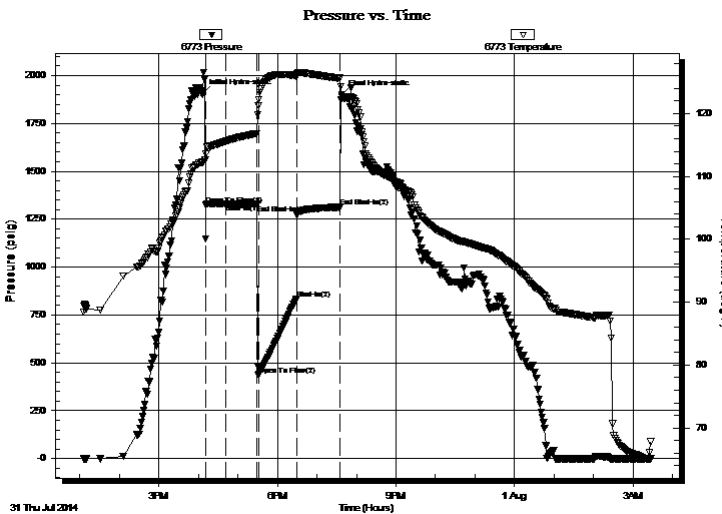
TEST COMMENT: IF: Weak blow . Surf., - 1/4". Dead in 15 mins.

IS: No blow .

FF: Strong blow . B.O.B. in 30 secs. Gauged gas. See gas report. G.T.S.

FS: Strong blow . B.O.B. Never bleed off.

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1903.78	112.25	Initial Hydro-static
6	1324.61	113.62	Open To Flow (1)
36	1329.59	115.60	Shut-In(1)
83	1327.02	116.85	End Shut-In(1)
85	436.04	121.29	Open To Flow (2)
143	834.29	125.97	Shut-In(2)
209	1312.47	125.61	End Shut-In(2)
212	1900.56	122.70	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
139.00	GOCM	0.68
2910.00	Clean GO 100%	39.90
0.00	G.T.S. G.I.P. 100%	0.00

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	12.00	41.88
Last Gas Rate	0.25	3.00	27.60
Max. Gas Rate	0.25	12.00	41.88



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

O'Brien Energy Resources Corp.

**20-32s-1e Sumner Co., Ks.**

18 Congress St. STE 207  
Portsmouth, NH. 03801

**Weber # 1-20**

Job Ticket: 54129

**DST#: 1**

ATTN: Pete Debenham

Test Start: 2014.07.31 @ 13:05:35

## Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 48.00 sec/qt  
Water Loss: 9.29 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 1600.00 ppm  
Filter Cake: 0.20 inches

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

Oil API: deg API  
Water Salinity: 1600 ppm

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
139.00	GOCM	0.684
2910.00	Clean GO 100%o	39.900
0.00	G.T.S. G.I.P. 100%g	0.000

Total Length: 3049.00 ft      Total Volume: 40.584 bbl

Num Fluid Samples: 1      Num Gas Bombs: 1      Serial #: MAS Pratt

Laboratory Name: Caraway      Laboratory Location: Liberal, KS

Recovery Comments: G.T.S Gauged gas see gas report. Sampler chamber fluid. 4.8 CF gas. 1500 ML oil. 1500 ML gas.  
Oil API corrected to 42.6 @ 60 degrees.



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**GAS RATES**

O'Brien Energy Resources Corp.

**20-32s-1e Sumner Co., Ks.**

18 Congress St. STE 207  
Portsmouth, NH. 03801

**Weber # 1-20**

Job Ticket: 54129

**DST#: 1**

ATTN: Pete Debenham

Test Start: 2014.07.31 @ 13:05:35

### 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	30	0.25	12.00	41.88
2	40	0.25	7.00	33.95
2	50	0.25	3.00	27.60
2	60	0.25	3.00	27.60

