



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1084318  
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: \_\_\_\_\_

1084318

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 <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
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:				

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> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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Form	ACO1 - Well Completion
Operator	Mai Oil Operations, Inc.
Well Name	Schmitt-Flegler Unit 2
Doc ID	1084318

Tops

Name	Top	Datum
Anhydrite	762	+1009
Tarkio Lime	2403	-632
Topeka	2673	-902
Heebner	2900	-1129
Toronto	2918	-1147
Lansing	2962	-1191
Base Kansas City	3166	-1395
Arbuckle	3235	-1464

Conservation Division  
Finney State Office Building  
130 S. Market, Rm. 2078  
Wichita, KS 67202-3802



Phone: 316-337-6200  
Fax: 316-337-6211  
<http://kcc.ks.gov/>

Mark Sievers, Chairman  
Ward Loyd, Commissioner  
Thomas E. Wright, Commissioner

Sam Brownback, Governor

June 13, 2012

Allen Bangert  
Mai Oil Operations, Inc.  
8411 PRESTON RD STE 800  
DALLAS, TX 75225-5520

Re: ACO1  
API 15-167-23785-00-00  
Schmitt-Flegler Unit 2  
SE/4 Sec.04-15S-14W  
Russell County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,  
Allen Bangert



**JAMES C. MUSGROVE**

Petroleum Geologist  
212 Main Street  
P.O. Box 215  
Claflin, KS 67525

Office (620) 588-4250

Res. Claflin (620) 587-3444

Mai Oil Operations  
Schmitt-Flegler Unit #2  
SE-NE-SE-SE (820' FSL & 88' FEL)  
Section 4-15s-14w  
Russell County, Kansas  
Page 1

**5 1/2" Production Casing Set**

**Contractor:** Southwind Drilling Co. (Rig #3)  
**Commenced:** March 27, 2012  
**Completed:** April 4, 2012  
**Elevation:** 1771' K.B; 1769' D.F; 1763' G.L.  
**Casing program:** Surface; 8 5/8" @ 336'  
Disposal; 5 1/2" @ 3297'  
**Sample:** Samples saved and examined 2200' to the Rotary Total Depth.  
**Drilling time:** One (1) foot drilling time recorded and kept 2200 ft to the Rotary Total Depth.  
**Measurements:** All depths measured from the Kelly Bushing.  
**Drill Stem Tests:** There were six (6) Drill Stem Tests ran by Trilobite Testing.  
**Electric Log:** By Superior Well Services; Dual Induction, Compensated Density/Neutron & Micro Log.

<u>Formation</u>	<u>Log Depth</u>	<u>Sub-Sea Datum</u>
Anhydrite	762	+1009
Base Anhydrite	798	+973
Grand Haven	2332	-561
1 <sup>st</sup> Tarkio Sand	2346	-575
Dover	2357	-586
2 <sup>nd</sup> Tarkio Sand	2366	-595
Tarkio Lime	2403	-632
Willard Shale	2423	-652
3 <sup>rd</sup> Tarkio Sand	2439	-668
Elmont	2465	-694
Howard	2605	-834
Topeka	2673	-902
Heebner	2900	-1129
Toronto	2918	-1147
Lansing	2962	-1191
Base Kansas City (area)	3166	-1395
Conglomerate	3213	-1442
Arbuckle	3235	-1464
Rotary Total Depth	3298	-1527
Log Total Depth	3298	-1527

(All tops and zones corrected to Electric Log measurements).  
**SAMPLE ANALYSIS, SHOWS OF OIL, TESTING DATA, ETC.**

### 1<sup>ST</sup> TARKIO SECTION

2346-2352' Sand; gray, very fine grained, micaceous, calcareous, poor visible porosity, no shows.

### 2<sup>ND</sup> TARKIO SECTION

2366-2376' Sand; gray, tan, very fine grained, micaceous, shaley, friable, scattered porosity, brown stain, show of free oil, trace gas bubbles and fair odor in fresh samples.

#### Drill Stem Test #1 2338-2400'

Times: 45-45-45-45

Blow: Strong

Recovery: 1494' gas in pipe  
15' mud, scum of oil  
60' slightly oil and gas cut mud  
(10% gas, 10% oil, 80% mud)  
61' oil and gas cut watery mud  
(20% gas, 20% oil, 10% water, 40% mud)

Pressures: ISIP 601 psi  
FSIP 588 psi  
IFP 40-76 psi  
FFP 8-88 psi  
HSH 1138-1101 psi

### 3<sup>RD</sup> TARKIO SECTION

2439-2450' Sand; gray, very fine grained, micaceous, shaley, scattered porosity, few friable, trace stain, trace of free oil and no odor.

### TOPEKA SECTION

2849-2876' Limestone; tan, brown, fine and medium crystalline, slightly oolitic, trace poor brown stain, no show of free oil and questionable odor in fresh samples, plus trace sub oomoldic, limestone, scattered porosity, brown and dark brown stain, trace of free oil.

### TORONTO SECTION

2917-2930' Limestone; white, gray, chalky, poor visible porosity, trace poor brown stain, no free oil and no odor in fresh samples.

### LANSING SECTION

2963-2972' Limestone; tan, fossiliferous, chalky, scattered porosity, brown and dark brown stain, trace of free oil and faint odor in fresh samples.

2985-2991' Limestone; gray, white, fossiliferous in part, chalky, no shows.



2998-3008' Limestone; cream, oolitic, oomoldic, fair oomoldic porosity, brown stain, show of free oil and questionable odor in fresh samples.

**Drill Stem Test #2 2965-3016'**

**Times: 45-45-45-45**

**Blow: Strong**

**Recovery: 78' gas in pipe  
 46' oil and gas cut muddy water  
 (30% gas, 10% oil, 30% water, 30% mud)  
 63' very slightly oil cut muddy water  
 (8% gas, 2% oil, 25% water, 65% mud)  
 126' very slightly oil cut muddy water  
 (2% oil, 8% gas, 65% water, 25% mud)**

**Pressures: ISIP 691 psi  
 FSIP 612 psi  
 IFP 41-107 psi  
 FFP 100-143 psi  
 HSH 1506-1479 psi**

3038-3043' Limestone; gray, tan, oolitic, fossiliferous, chalky, trace gray and brown stain, show of free oil and odor in fresh samples.

3048-3054' Limestone; white/cream, oolitic, chalky, trace brown stain, show of free oil and questionable odor in fresh samples.

**Drill Stem Test #3 3020-3060'**

**Times: 30-30-30-45**

**Blow: Weak**

**Recovery: 10' mud, scum of oil**

**Pressures: ISIP 46 psi  
 FSIP 43 psi  
 IFP 20-24 psi  
 FFP 26-24 psi  
 HSH 1503-1483 psi**

3061-3070' Limestone; cream, white, oomoldic, good oomoldic porosity, chalky, no shows.

3110-3115' Limestone; white, gray, oolitic, chalky, trace gray and black stain, trace of free oil and faint odor in fresh samples.

3128-3138' Limestone; cream, gray, fossiliferous, oolitic, chalky, golden brown stain, weak show and fair odor in fresh samples.

3145-3156' Limestone; cream, white, medium crystalline, oolitic, chalky, brown stain, weak show of free oil and questionable odor in fresh samples.

Drill Stem Test #4 3115-3164'

Blow: Strong

Recovery: 5' muddy oil, trace water  
63' heavy oil cut watery mud  
(45% oil, 10% water, 45% mud)  
126' very slightly oil cut muddy water  
(2% oil, 68% mud, 30% mud)

Pressures: ISIP 888 psi  
FSIP 870 psi  
IFP 26-68 psi  
FFP 70-110 psi  
HSH 1551-1537 psi

CONGLOMERATE SECTION

- 3213-3225' Chert; white, gray, boney, trace white, clean chert and quartz, no shows.
- 3225-3234' Chert; as above, gray, opaque, boney.

ARBUCKLE SECTION

- 3235-3241' Dolomite; white, cream, tan, fine and medium crystalline, brown stain and saturation, show of free oil and faint odor in fresh samples.

Drill Stem Test #6 3191-3241'

Times: 30-30-30-30

Blow: Weak

Recovery: 10' mud, scum of oil

Pressures: ISIP 908 psi  
FSIP 879 psi  
IFP 22-27 psi  
FFP 27-30 psi  
HSH 1584-1569 psi

- 3241-3248' Dolomite; white, gray, medium crystalline, fair intercrystalline porosity, brown stain, show of free oil and faint to fair odor in fresh samples.



Drill Stem Test #7 3191-3241'

Times: 45-45-45-45

Blow: Strong

Recovery: 31' mud scum of oil  
63' water mud  
126' thin watery mud  
(5% gas, 5% water, 90% mud)  
189' muddy water, scum of oil  
(85% water, 15% mud)

Pressures: ISIP 1126 psi  
FSIP 1133 psi  
IFP 41-132 psi  
FFP 140-219 psi  
HSH 1604-1580 psi

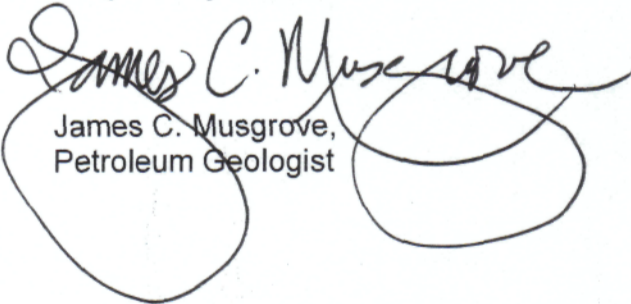
- 3248-3260' Dolomite; white, gray, finely crystalline, sandy, fair porosity, no shows.
- 3260-3280' Dolomite; as above, plus pink finely crystalline, dense, dolomite, trace pyrite, no shows.
- 3280-3298' Dolomite; gray, tan, finely crystalline, sandy, fair to good porosity (barren).

Rotary Total Depth 3298 (-1527)  
Log Total Depth 3298 (-1527)

**Remarks:**

5 1/2' production casing was set and cemented.

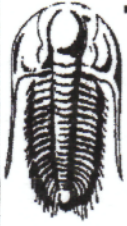
Respectfully submitted;

  
James C. Musgrove,  
Petroleum Geologist









**TRILOBITE TESTING, INC.**

**DRILL STEM TEST REPORT**

Mai Oil Operations Inc  
 8411 Preston Rd Ste 800  
 Dallas Tx 75225 + 5520  
 ATTN: Allen Bangert

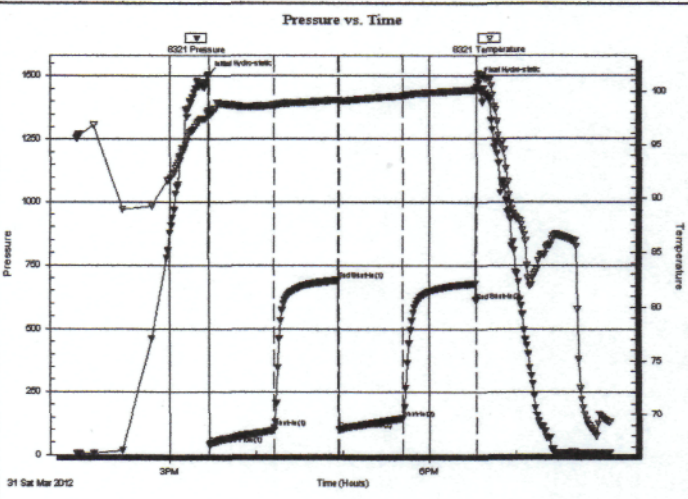
**4-15s-14w**  
**Flegler Unit #2**  
 Job Ticket: 44816 **DST#: 2**  
 Test Start: 2012.03.31 @ 13:55:23

**GENERAL INFORMATION:**

Formation: **Lansing -A-C**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 15:27:23  
 Time Test Ended: 20:05:23  
 Interval: **2965.00 ft (KB) To 3016.00 ft (KB) (TVD)**  
 Total Depth: 3016.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Jeff Brown  
 Unit No: 44  
 Reference Elevations: 1771.00 ft (KB)  
 1763.00 ft (CF)  
 KB to GRV/CF: 8.00 ft

**Serial #: 8321 Inside**  
 Press@RunDepth: 143.39 psig @ 3003.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2012.03.31 End Date: 2012.03.31 Last Calib.: 2012.03.31  
 Start Time: 13:55:24 End Time: 20:05:23 Time On Btm: 2012.03.31 @ 15:26:53  
 Time Off Btm: 2012.03.31 @ 18:33:23

**TEST COMMENT:** IFP-Good blow BOB in 24 min  
 ISI-Dead no blow back  
 FFP-Good blow BOB in 33 1/2 in  
 FSI-Dead no blow back



**PRESSURE SUMMARY**

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1506.38	98.20	Initial Hydro-static
1	40.76	97.96	Open To Flow (1)
46	107.44	98.69	Shut-In(1)
90	691.34	99.19	End Shut-In(1)
91	99.72	99.07	Open To Flow (2)
135	143.39	99.55	Shut-In(2)
186	612.24	100.07	End Shut-In(2)
187	1479.04	101.50	Final Hydro-static

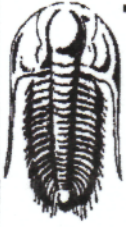
**Recovery**

Length (ft)	Description	Volume (bbl)
126.00	VSOQMW 8%G 2%O 25%M 65%W	1.77
63.00	VSOQWM 8%G 2%O 25%W 65%M	0.88
46.00	OCQWM 10%O 30%G 30%W 30%M	0.65
0.00	78 GIP	0.00

\* Recovery from multiple tests

**Gas Rates**

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



**TRILLOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Mai Oil Operations Inc  
8411 Preston Rd Ste 800  
Dallas Tx 75225 + 5520  
ATTN: Allen Bangert

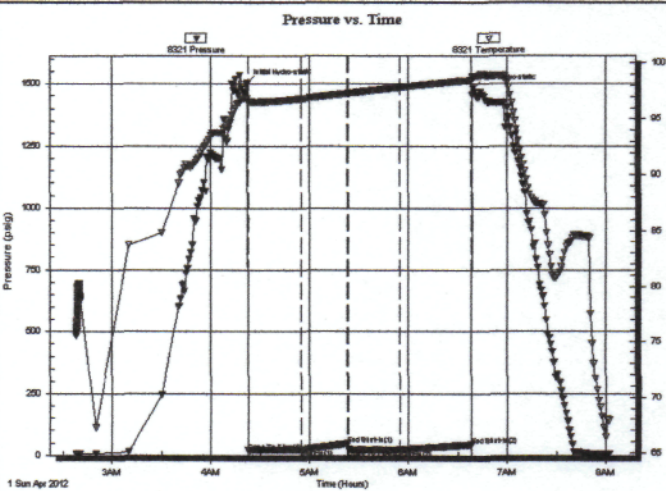
**4-15s-14w**  
**Flegler Unit #2**  
Job Ticket: 44817      **DST#: 3**  
Test Start: 2012.04.01 @ 02:38:19

### GENERAL INFORMATION:

Formation: **Lansing-E-F**  
Deviated: No Whipstock:                      ft (KB)  
Time Tool Opened: 04:22:49  
Time Test Ended: 08:03:19  
Interval: **3020.00 ft (KB) To 3060.00 ft (KB) (TVD)**  
Total Depth: 3060.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Good  
Test Type: Conventional Bottom Hole (Reset)  
Tester: Jeff Brown  
Unit No: 44  
Reference Elevations: 1771.00 ft (KB)  
1763.00 ft (CF)  
KB to GR/CF: 8.00 ft

**Serial #: 8321**      **Inside**  
Press@RunDepth: 23.62 psig @ 3025.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2012.04.01      End Date: 2012.04.01      Last Calib.: 2012.04.01  
Start Time: 02:38:20      End Time: 08:02:19      Time On Btm: 2012.04.01 @ 04:22:19  
Time Off Btm: 2012.04.01 @ 06:39:19

**TEST COMMENT:** IFP-Weak blow built to 1 in  
ISI-Dead no blow back  
FFP-Weak blow built to 1/8 in  
FSI-Dead no blow back



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1503.01	96.81	Initial Hydro-static
1	20.08	96.45	Open To Flow (1)
33	24.32	96.77	Shut-In(1)
61	46.45	97.26	End Shut-In(1)
61	25.61	97.26	Open To Flow (2)
93	23.62	97.80	Shut-In(2)
136	42.75	98.46	End Shut-In(2)
137	1482.83	98.72	Final Hydro-static

### Recovery

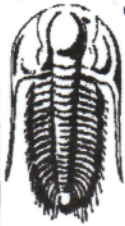
Length (ft)	Description	Volume (bbl)
10.00	Mud w with a scum of oil	0.14

\* Recovery from multiple tests

### Gas Rates

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





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Mai Oil Operations Inc  
 8411 Preston Rd Ste 800  
 Dallas Tx 75225 + 5520  
 ATTN: Allen Bangert

**4-15s-14w**  
**Flegler Unit #2**  
 Job Ticket: 44818      **DST#: 4**  
 Test Start: 2012.04.01 @ 17:17:43

**GENERAL INFORMATION:**

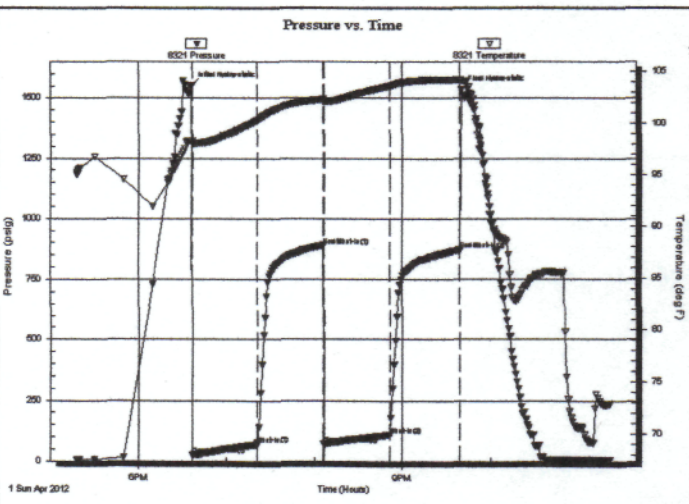
Formation: **LKC-H-J**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 18:36:43  
 Time Test Ended: 23:21:13  
 Interval: **3115.00 ft (KB) To 3164.00 ft (KB) (TVD)**  
 Total Depth: 3164.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Jeff Brown  
 Unit No: 44  
 Reference Elevations: 1771.00 ft (KB)  
 1763.00 ft (CF)  
 KB to GRV/CF: 8.00 ft

**Serial #: 8321**

Inside

Press@RunDepth: 109.51 psig @ 3123.00 ft (KB)  
 Start Date: 2012.04.01 End Date: 2012.04.01  
 Start Time: 17:17:44 End Time: 23:21:13  
 Capacity: 8000.00 psig  
 Last Calib.: 2012.04.01  
 Time On Btm: 2012.04.01 @ 18:36:13  
 Time Off Btm: 2012.04.01 @ 21:40:13

**TEST COMMENT:** IFP-Good blow BOB in 11 1/2 min  
 ISI-Weak surface blow back died out in 20 min  
 FFP-Good blow BOB in 23 min  
 FSI-Weak blow back built to 1 1/4 in



**PRESSURE SUMMARY**

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1551.61	98.30	Initial Hydro-static
1	24.96	98.03	Open To Flow (1)
45	67.83	100.25	Shut-in(1)
90	888.14	102.33	End Shut-in(1)
90	70.36	102.01	Open To Flow (2)
135	109.51	103.55	Shut-in(2)
183	869.89	104.20	End Shut-in(2)
184	1537.25	104.08	Final Hydro-static

**Recovery**

Length (ft)	Description	Volume (bbl)
126.00	VSOCWM 2%O 30%M 68%W	1.77
63.00	HOCWM 10%W 45%M 45%O	0.88
5.00	WMCO 5%W 35%M 60%O	0.07
0.00	409 GIP	0.00

\* Recovery from multiple tests

**Gas Rates**

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



**TRILOBITE TESTING, INC.**

**DRILL STEM TEST REPORT**

Mai Oil Operations Inc  
 8411 Preston Rd Ste 800  
 Dallas Tx 75225 + 5520  
 ATTN: Allen Bangert

**4-15s-14w**  
**Flegler Unit #2**  
 Job Ticket: 44819      **DST#: 5**  
 Test Start: 2012.04.02 @ 10:59:06

**GENERAL INFORMATION:**

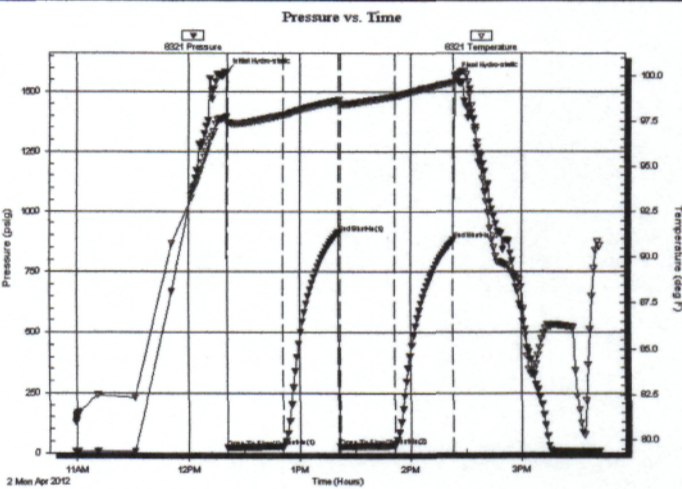
Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 12:21:06  
 Time Test Ended: 15:42:06  
 Interval: **3191.00 ft (KB) To 3241.00 ft (KB) (TVD)**  
 Total Depth: 3241.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Jeff Brown  
 Unit No: 44  
 Reference Elevations: 1771.00 ft (KB)  
 1763.00 ft (CF)  
 KB to GR/CF: 8.00 ft

**Serial #: 8321**

Inside

Press@RunDepth: 30.24 psig @ 3232.00 ft (KB)  
 Start Date: 2012.04.02 End Date: 2012.04.02  
 Start Time: 10:59:07 End Time: 15:42:06  
 Capacity: 8000.00 psig  
 Last Calib.: 2012.04.02  
 Time On Btm: 2012.04.02 @ 12:20:36  
 Time Off Btm: 2012.04.02 @ 14:23:36

**TEST COMMENT:** IFP-Weak blow built to 1/4 in  
 ISI-Dead no blow back  
 FFP-Dead no blow  
 FSI-Dead no blow back



**PRESSURE SUMMARY**

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1584.09	97.70	Initial Hydro-static
1	22.42	97.37	Open To Flow (1)
31	27.00	97.82	Shut-In(1)
61	908.20	98.63	End Shut-In(1)
61	26.75	98.46	Open To Flow (2)
91	30.24	98.85	Shut-In(2)
122	879.35	99.65	End Shut-In(2)
123	1569.06	100.01	Final Hydro-static

**Recovery**

Length (ft)	Description	Volume (bbl)
15.00	Mud w with a scum of oil	0.21

\* Recovery from multiple tests

**Gas Rates**

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





**TRILOBITE TESTING, INC.**

## DRILL STEM TEST REPORT

Mai Oil Operations Inc  
 8411 Preston Rd Ste 800  
 Dallas Tx 75225 + 5520  
 ATTN: Allen Bangert

**4-15s-14w**  
**Flegler Unit #2**  
 Job Ticket: 44820 **DST#: 6**  
 Test Start: 2012.04.02 @ 20:17:45

### GENERAL INFORMATION:

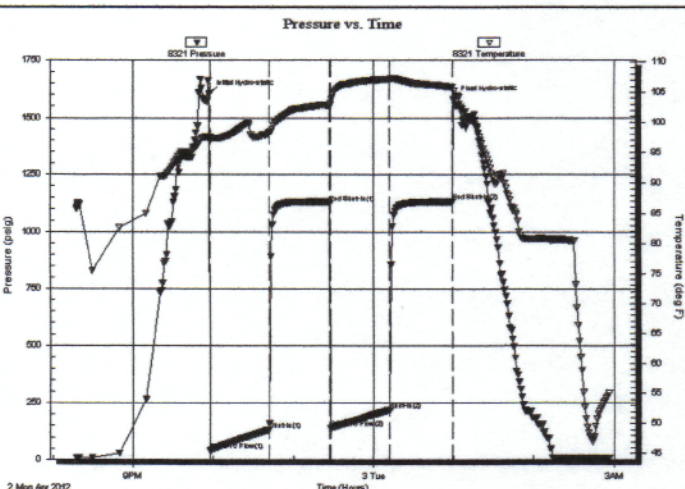
Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 21:57:45  
 Time Test Ended: 02:56:15  
 Interval: **3192.00 ft (KB) To 3248.00 ft (KB) (TVD)**  
 Total Depth: 3248.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Jeff Brown  
 Unit No: 44  
 Reference Elevations: 1771.00 ft (KB)  
 1763.00 ft (CF)  
 KB to GR/CF: 8.00 ft

### Serial #: 8321

Inside

Press@RunDepth: 219.27 psig @ 3230.00 ft (KB)  
 Start Date: 2012.04.02 End Date: 2012.04.03  
 Start Time: 20:17:46 End Time: 02:56:15  
 Capacity: 8000.00 psig  
 Last Calib.: 2012.04.03  
 Time On Btm: 2012.04.02 @ 21:57:15  
 Time Off Btm: 2012.04.03 @ 01:00:15

TEST COMMENT: IFP-Good blow BOB in 17 min  
 ISI-Dead no blow back  
 FFP-Good blow BOB in 24 1/2 min  
 FSI-Dead no blow back



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1604.49	97.64	Initial Hydro-static
1	41.49	96.86	Open To Flow (1)
45	131.76	98.24	Shut-In (1)
90	1126.08	102.87	End Shut-In (1)
91	139.88	103.24	Open To Flow (2)
135	219.27	107.20	Shut-In (2)
182	1133.33	105.91	End Shut-In (2)
183	1579.58	105.34	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
189.00	MW with oil spots 15%M 85%W	2.65
126.00	GWM with a scum of oil 5%G 5%W 90%M	11.77
63.00	WM with a scum of oil 2%W 98%M	0.88
31.00	Mud with a scum of oil	0.43

\* Recovery from multiple tests

### Gas Rates

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



# 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. 363

Date	Sec.	Twp.	Range	County	State	On Location	Finish
4-3-12	4	15	14	RUSSELL	KANSAS		
Lease SCHMITT-FIEGIER		Well No. # 2		Location 2815 TO WALTERS LN. - 1 MI. WEST - 1 MI. SOUTH-W. JOSTO			
Contractor SOUTHWIND DRILLING #3				Owner MAT OIL OPERATIONS			
Type Job PRODUCTION STRING				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 1/8		T.D. 3,298 FT.		Charge To MAT OIL OPERATIONS			
Csg. 5 1/2 14LB.		Depth 3,295		Street 8411 PRESTON RD. SUITE 800			
Tbg. Size		Depth		City DALLAS State TEXAS			
Tool		Depth		The above was done to satisfaction and supervision of owner agent or contractor.			
Cement Left in Csg.		Shoe Joint 21 FT		Cement Amount Ordered 150 SKS 6% 40 18% 5 SALT 2% GEL 4 LB FLO-SEAL			
Meas Line		Displace 80 BLS		100 SKS 6% 40-10% 5 SALT-2% GEL-4 LB FLO-SEAL			
<b>EQUIPMENT</b>							
Pumptrk #9 No.	Cementer Helper PAUL			Common			
Bulktrk #8 No.	Driver NICK #14 CODY			Poz. Mix			
<del>Bulktrk</del> P/U No.	Driver CISCO			Gel.			
<b>JOB SERVICES &amp; REMARKS</b>							
Remarks:				Calcium			
Rat Hole 30 SKS.				Hulls			
Mouse Hole				Salt			
Centralizers 1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 15, 21				Flowseal			
Baskets 11				Kol-Seal			
D/V or Port Collar				Mud CLR 48 1,000 GALLONS			
				CFL-117 or CD110 CAF 38			
				Sand			
ESTABLISHED CIRC. 45 MIN.				Handling			
PUMPED 1,000 GAL MUD CLEAR 48				Mileage			
PLUGGED RAT HOLE				<b>FLOAT EQUIPMENT</b>			
MIXED 120 SKS 18% - MIXED 100 SKS 10%				Guide Shoe			
DISPLACED				Centralizer 12-5 1/2" TURBOS CENTRALIZERS			
LANDED PLUG				Baskets 1-5 1/2" WEATHERFOOD BASKET			
FLOAT HOLD				AFU Inserts			
				Float Shoe 1-5 1/2"			
				Latch Down 1-5 1/2" W/PLUG			
				Pumptrk Charge			
				Mileage			
Signature <i>Allen Barquist</i>				Tax			
				Discount			
				Total Charge			



# 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. 269

Date	3/27/12	Sec.	4	Twp.	15	Range	14	County	Russell	State	KS	On Location		Finish	11:15 PM
Lease	Schmitt - Flyler		Well No.	2		Location Russell, S to River, 1W, 1/2 S, W into									
Contractor	Southwind Drilling Rig #3							Owner							
Type Job	Surface							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	12 1/4"		T.D.	336'											
Csg.	2 5/8"		Depth	336'											
Tbg. Size			Depth												
Tool			Depth												
Cement Left in Csg.	15'		Shoe Joint												
Meas Line			Displace	21 Bbls.		Cement Amount Ordered 200 sx 60 / 403 1/2 cc 2% gel									

**EQUIPMENT**

Pumptrk	9	No.	Cementer	Paul	Common
			Helper		
Bulktrk	3	No.	Driver	Matt	Poz. Mix
			Driver		
Bulktrk	10	No.	Driver	Brain	Gel.
			Driver		

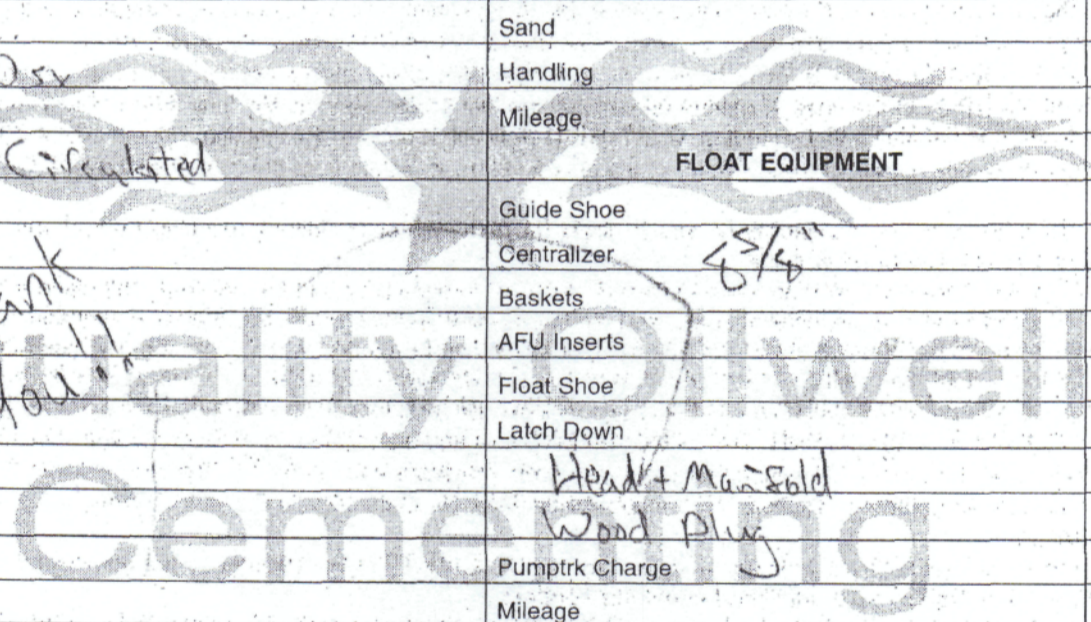
**JOB SERVICES & REMARKS**

Remarks:	Calcium
Rat Hole	Hulls
Mouse Hole	Salt
Centralizers	Flowseal
Baskets	Kol-Seal
D/V or Port Collar	Mud CLR 48
E3+ Circ.	CFL-117 or CD110 CAF 38
Mix 200 sx	Sand
Displace	Handling
Cement Circulated	Mileage

**FLOAT EQUIPMENT**

Guide Shoe	
Centralizer	6 5/8"
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	
Head + Man Sold	
Wood Plug	
Pumptrk Charge	
Mileage	

Thank You!!



X Signature	Jay Hiner	Tax	
		Discount	
		Total Charge	