Confidentiality Requested:
☑ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1235089

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 # 5259
Name: Mai Oil Operations, Inc.
Address 1: 8411 PRESTON RD STE 800
Address 2:
City: DALLAS State: TX Zip: 75225 + 5520
Contact Person: Allen Bangert
Phone: (214) 219-8883
CONTRACTOR: License # 33350
Name: Southwind Drilling, Inc.
Wellsite Geologist: Jim Musgrove
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 #:

08/12/2014	08/20/2014	08/20/2014
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-185-23893-00-00
Spot Description:
S2 - NW - SW - SW Sec. 22 Twp. 21 S. R. 12 ☐ East ☑ West
765 Feet from ☐ North / ☑ South Line of Section
330 Feet from ☐ East / ☑ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☐ NE ☐ NW ☐ SE ☑ SW
GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Stafford
Lease Name: Hammeke "M" Well #: 8
Field Name:
Producing Formation: Arbuckle
Elevation: Ground: 1841 Kelly Bushing: 1849
Total Vertical Depth: 3898 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 600 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: 91000 ppm Fluid volume: 80 bbls
Dewatering method used: Hauled to Disposal
Location of fluid disposal if hauled offsite:
Operator Name: Mai Oil Operations, Inc.
Lease Name: Taylor License #: 5259
Quarter NE Sec. 22 Twp. 21 S. R. 12 ☐ East ☑ West
County: Stafford Permit #: D06710

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: 12/12/2014
☐ **Confidential Release Date:**
☑ **Wireline Log Received**
☑ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** NAOMI JAMES **Date:** 12/15/2014

1235089

Operator Name: Mai Oil Operations, Inc. Lease Name: Hammeke "M" Well #: 8

Sec. 22 Twp. 21 S. R. 12 ☐ East ☑ West County: Stafford

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 ☑ Yes ☐ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☑ Yes ☐ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

List All E. Logs Run:

CNDL
DIL
MICRO

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name: Attached Top: Attached Datum: Attached

CASING RECORD ☑ New ☐ 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
Surface	12.25	8.625	23	600	60-40 POZ	400	2%gel,, 3% CC
Prooduction	7.875	5.5	14	3694	60-40 POZ	160	

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
___ Perforate ___ Protect Casing ___ Plug Back TD ___ 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 *(Amount and Kind of Material Used)*	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

DISPOSITION OF GAS: ☐ Vented ☐ Sold ☐ Used on Lease
(If vented, Submit ACO-18.)

METHOD OF COMPLETION: ☐ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)* ☐ Other *(Specify)*

PRODUCTION INTERVAL:

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Mai Oil Operations, Inc.
Well Name	Hammeke "M" 8
Doc ID	1235089

Tops

Name	Top	Datum
Anhydrite	641	+1208
Topeka	2823	-974
Heebner	3106	-1257
Toronto	3125	-1276
Brown Lime	3240	-1391
Lansing	3247	-1398
Base Kansas City	3477	-1628
Viola	3487	-1638
Arbuckle	3570	-1721

JAMES C. MUSGROVE
Petroleum Geologist, LLC
212 Main Street
P.O. Box 215
Claflin, KS 67525

Office (620) 588-4250 Res. Claflin (620) 587-3444

Mai Oil Operations
Hammeke 'M' #8
S/2-NW-SW-SW (765' FSL & 330' FWL)
Section 22-21s-12w
Stafford County, Kansas

5 1/2" Production Casing Set

Contractor: Southwind Drilling Co. (rig #3)

Commenced: August 12, 2014

Completed: August 20, 2014

Elevation: 1849' K.B., 1847' D.F., 1841' G.L.

Casing program: Surface; 8 5/8" @ 600'
Production, 5 ½ @ 3699'

Sample: Samples saved and examined 1900' to the Rotary Total Depth.

Drilling time: One (1) foot drilling time recorded and kept 1900 ft. to the Rotary Total Depth.

Measurements: All depths measured from the Kelly Bushing.

Drill Stem Tests: There were eight (8) Drill Stem Tests ran by Diamond Testing Co.

Electric Log: By Nabors; Dual Induction, Compensated Density/Neutron; Sonic and Micro.

Formation	Log Depth	Sub-Sea Datum
Anhydrite	641	-1208
Base Anhydrite	662	+1187
Red Eagle	2234	-385
Tarkio Lime	2390	-541
Topeka	2823	-974
Heebner	3106	-1257
Toronto	3125	-1276
Douglas	3141	-1292
Brown Lime	3240	-1391
Lansing	3247	-1398
Base Kansas City	3477	-1628
Viola	3487	-1638
Simpson Shale	3519	-1670
Arbuckle	3570	-1721
Rotary Total Depth	3700	-1851
Log Total Depth	3698	-1849

All tops and zones corrected to Electric Log Measurement.

SAMPLE ANALYSIS, SHOWS OF OIL, TESTING DATA, ETC.

RED EAGLE SECTION

2234-2247' Limestone, cream, finely crystalline, fossiliferous, scattered porosity, no stain, no free oil, no gas bubbles; no odor (7 unit gas kick).

TOPEKA SECTION

2900-3106' No shows of oil and/or gas was noted in the Topeka section.

TORONTO SECTION

3125-3133' Limestone, cream, tan, finely crystalline, poor visible porosity, no shows.

LANSING SECTION

3250-3265' Limestone, cream, tan, finely crystalline, chalky, poor scattered porosity, brown stain, trace of free oil and faint odor in fresh samples.

3272-3278' Limestone, cream, tan, finely crystalline, chalky in part, poorly developed porosity, light brown to black stain; show of free oil and questionable odor in fresh samples.

3288-3292' Limestone, tan, buff, finely crystalline, poor to fair inter-crystalline type porosity, good stain and saturation, good show of free oil and faint odor in fresh samples.

Drill Stem Test #1 **3256-3290**

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

Blow: **Strong**

Recovery: **63' oil and gas muddy water**
(15% gas; 20% oil; 60% water; 5% mud)
63' Heavy oil cut muddy water
(25% oil; 15%; gas; 50% water; 10% mud)
63' oil and gas cut muddy water
(10% gas; 20% oil; 50% water; 10% mud)
63' slightly oil and gas cut muddy water
(10% gas; 5% oil; 35% water; 50% mud)
63' slightly oil and gas cut muddy water
(5% gas; 2.5% oil; 90% water; 2.5% mud)

Pressures:

ISIP	**360**	**psi**
FSIP	**416**	**psi**
IFP	**84-93**	**psi**
FFP	**96-147**	**psi**
HSH	**1532-1482**	**psi**

3310-3314' Limestone, tan, cream, finely crystalline, poor visible porosity, trace black/brown stain, no free oil and no odor in fresh samples.

3319-3328' Limestone, tan, cream, finely crystalline, slightly chalky, poorly developed porosity, light brown stain, show of free oil and faint odor in fresh samples.

Drill Stem Test #2 **3299-3340**

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

Blow: **Strong**

Recovery: **40' very slightly oil and gas cut muddy water (2.5% gas; 2.5% oil; 30% water; 65% mud)**
63' oil and gas cut muddy water (15% gas; 10% oil; 45% water; 30% mud)
63' oil and gas cut muddy water (15% gas; 15% oil; 65% water; 15% mud)
63' slightly oil and gas cut muddy water (5% gas; 5% oil; 75% water; 15% mud)
63' slightly oil and gas cut muddy water (10% gas; 5% oil; 80% water; 5% mud)

Pressures:

ISIP	**750**	**psi**
FSIP	**733**	**psi**
IFP	**83-122**	**psi**
FFP	**136-206**	**psi**
HSH	**1632-1599**	**psi**

3346-3360' Limestone, cream, tan, finely crystalline, poor scattered porosity, black stain, no free oil and no odor.

3380-3386' Limestone, cream, oomoldic, fair vuggy porosity, trace poor stain, no free oil and questionable odor.

3396-3406' Limestone, cream, white, finely crystalline, oolitic, chalky; poorly developed porosity, trace stain, show of free oil and questionable odor.

3413-3420' Limestone, cream, tan, finely crystalline, poor visible porosity, no shows.

Drill Stem Test #3 **3372-3440**

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

Blow: **Strong**

Recovery: **30' clean oil**
63' oil and gas cut water
(40% gas; 10% oil; 10% water; 40% mud)
63' Heavy oil and gas cut water
(50% oil; 30%; water; 20% mud)
63' oil and gas cut muddy water
(5% gas; 5% oil; 50% water; 10% mud)
63' slightly oil and gas cut muddy water
(10% gas; 5% oil; 60% water; 30% mud)
63' muddy water

Pressures:

ISIP	**750**	**psi**
FSIP	**733**	**psi**
IFP	**83-122**	**psi**
FFP	**136-206**	**psi**
HSH	**1632-1599**	**psi**

3436-3450' Limestone, cream, gray, finely crystalline, poorly developed porosity, no shows.

3456-3470' Limestone, cream, gray, finely crystalline, cherty, poor scattered porosity, trace black stain, light brown stain, show of free oil and no odor.

VIOLA SECTION

3486-3500' Chert, tan, brown, opaque, few semi-tripolitic, black stain, golden brown stain, show of free oil and no odor.

3500-3520' Chert, white, boney, tan, brown, black/brown stain, race of free oil and no odor.

Drill Stem Test #4 **3460-3535**

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

Blow: **Strong**

Recovery: **126' oil and gas cut mud**
(70% gas; 15% oil; 15% mud)
126' heavy oil and gas cut mud
(45% gas; 40% oil; 15% mud)
63' muddy gassy oil
(15% gas; 70% oil; 15% mud)
63' muddy gassy oil
(20% gas; 50% oil; 30% mud)
20' mud

Pressures:

ISIP	**1104**	**psi**
FSIP	**1085**	**psi**
IFP	**72-129**	**psi**
FFP	**145-206**	**psi**
HSH	**1671-1639**	**psi**

ARBUCKLE SECTION

3570-3580' Dolomite, white, tan, finely crystalline, sucrosic, scattered porosity, trace brown stain, trace of free oil and faint odor.

3580-3597' Dolomite, white/tan, fine and medium crystalline, sucrosic, fair to poor vuggy type porosity, brown stain, show of free oil and strong odor in fresh samples.

Drill Stem Test #5 **3523-3597**

Times: **30-45-45-60**

Blow: **Fair to good**

Recovery: **232' gas in pipe**
20' slightly oil cut mud
(5% oil; 95% mud)
63' oil and gas cut mud
(50% gas; 10% oil; 40% mud)

Pressures:

ISIP	**243**	**psi**
FSIP	**294**	**psi**
IFP	**56-114**	**psi**
FFP	**66-79**	**psi**
HSH	**1716-1669**	**psi**

3598-3615' Dolomite, tan, finely crystalline, fair inter-crystalline and vuggy type porosity, black/brown stain, show of free oil and strong odor in fresh samples

Drill Stem Test #6 **3601-3615**

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

Blow: **Strong**

Recovery: **461' clean gassy oil**

Pressures:

ISIP	**1054**	**psi**
FSIP	**1042**	**psi**
IFP	**35-72**	**psi**
FFP	**78-144**	**psi**
HSH	**1714-1691**	**psi**

3616-3635' Dolomite, tan, finely crystalline, fair vuggy porosity, golden brown stain, show of free oil and fair odor in fresh samples.

Drill Stem Test #7 **3616-3635**

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

Blow: **Strong**

Recovery: **420' clean gassy oil**

Pressures:

ISIP	**1165**	**psi**
FSIP	**1162**	**psi**
IFP	**42-84**	**psi**
FFP	**92-172**	**psi**
HSH	**1735-1676**	**psi**

3641-3647' Dolomite, tan, finely crystalline, poor to fair porosity, light brown and black stain, show of free oil and fain odor in fresh samples.

Drill Stem Test #8 **3633-3648**

Times: **30-45-45-60**

Blow: **Strong**

Recovery: **6' clean gassy oil**
150' muddy water

Pressures:

ISIP	**1190**	**psi**
FSIP	**1185**	**psi**
IFP	**23-58**	**psi**
FFP	**64-119**	**psi**
HSH	**1748-1689**	**psi**

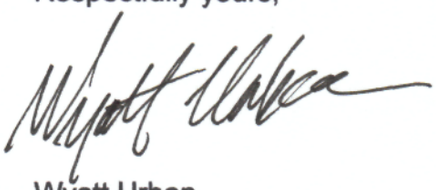
3650-3660'	Dolomite, tan, finely crystalline, poor visible porosity, brown/black spotty stain, trace of oil and faint odor in fresh samples.
3660-3680'	Dolomite, tan, fine and medium crystalline, poor to fair vuggy porosity (barren).
3680-3700'	Dolomite tan, white, fine and medium crystalline, poor to fair vuggy porosity, no shows.

Rotary Total Depth **3700**
Log Total Depth **3698**

Recommendations:

5 ½" production casing set and cemented on the Mai Oil Operations Inc., Hammeke 'M' #8.

Respectfully yours,



Wyatt Urban
Petroleum Geologist

DRILL STEM TEST REPORT

Mai Oil Operations, Inc.

8411 Preston Rd, STE 800
Dallas TX 75225-5520

ATTN: Wyatt Urban

22-21s-12w Stafford,KS

Hammeke "M" #8

Job Ticket: 60335 **DST#: 1**

Test Start: 2014.08.15 @ 21:30:00

GENERAL INFORMATION:

Formation: **LKC "A-C"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 23:28:30
Time Test Ended: 04:04:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Shane Konzem
Unit No: S3

Interval: 3256.00 ft (KB) To 3290.00 ft (KB) (TVD)
Total Depth: 3290.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Poor

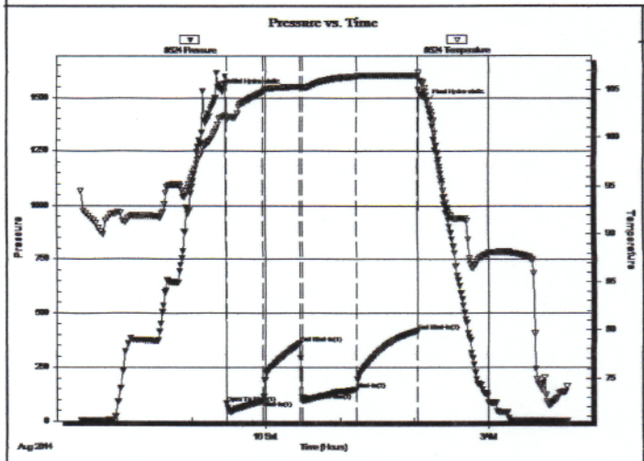
Reference Elevations: 1849.00 ft (KB)
1841.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8524 **Inside**

Press@RunDepth: 147.46 psig @ 3286.00 ft (KB)
Start Date: 2014.08.15 End Date: 2014.08.16
Start Time: 21:31:00 End Time: 04:04:00

Capacity: 8000.00 psig
Last Calib.: 2014.08.16
Time On Btm: 2014.08.15 @ 23:24:30
Time Off Btm: 2014.08.16 @ 02:10:30

TEST COMMENT: IFP 30 - Strong blow built to bottom of bucket in 34 seconds. Gas to surface in 10 min
ISI 30 - Weak surface blow back.
FFP 45 - Strong blow built to bottom of bucket in 10 seconds.
FSI 45 - Blow back built to 2"



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1532.21	102.08	Initial Hydro-static
4	84.26	102.01	Open To Flow (1)
34	93.18	104.77	Shut-In(1)
64	360.03	105.28	End Shut-In(1)
66	96.60	105.20	Open To Flow (2)
109	147.46	106.38	Shut-In(2)
158	416.65	106.42	End Shut-In(2)
166	1482.38	103.93	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
63.00	GCOMW 15% G, 20% O, 5% M, 60% W	0.88
63.00	GOCMW 15% G, 10% M, 25% O, 50% W	0.88
63.00	GOCMW 10% G, 20% O, 20% M, 50% W	0.88
63.00	GOCWM 5% O, 10% G, 35% W, 50% M	0.88
63.00	GOCMW 2.5% O, 5% G, 2.5% M, 90% W	0.88

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	0.00	22.84
Last Gas Rate	0.25	5.00	30.78
Max. Gas Rate	0.25	8.00	35.54

DRILL STEM TEST REPORT

Mai Oil Operations, Inc.

8411 Preston Rd, STE 800
Dallas TX 75225-5520

ATTN: Wyatt Urban

22-21s-12w Stafford,KS

Hammeke "M" #8

Job Ticket: 60336 **DST#: 2**

Test Start: 2014.08.16 @ 10:45:00

GENERAL INFORMATION:

Formation: **LKC "D-F"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 11:55:00
Time Test Ended: 16:08:30

Test Type: Conventional Bottom Hole (Initial)
Tester: Shane Konzem
Unit No: S3

Interval: 3299.00 ft (KB) To 3340.00 ft (KB) (TVD)
Total Depth: 3340.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Poor

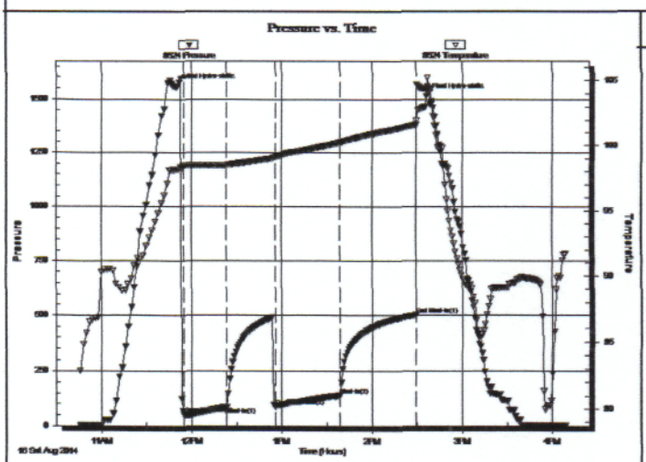
Reference Elevations: 1849.00 ft (KB)
1841.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8524 **Inside**

Press@RunDepth: 85.66 psig @ 3336.00 ft (KB)
Start Date: 2014.08.16 End Date: 2014.08.16
Start Time: 10:46:00 End Time: 16:08:30

Capacity: 8000.00 psig
Last Calib.: 2014.08.16
Time On Btm: 2014.08.16 @ 11:49:30
Time Off Btm: 2014.08.16 @ 14:36:00

TEST COMMENT: IFP - 30 - Strong blow built to bottom of bucket in 30 seconds. Gas to surface in 15 min
ISI - 30 - No blow back.
FFP - 45 - Strong blow built to bottom of 5 gallon bucket in 10 seconds.
FSI - 45 - Weak surface blow back.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1555.89	98.11	Initial Hydro-static
6	54.07	98.42	Open To Flow (1)
34	85.66	98.47	Shut-In(1)
66	88.54	99.10	Open To Flow (2)
109	139.48	100.22	Shut-In(2)
160	502.39	101.56	End Shut-In(1)
167	1515.32	103.83	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
40.00	GOCWM 2.5% G, 2.5% O, 30% W, 65% M	0.56
63.00	GOCMW 15% G, 10% O, 30% M, 45% W	0.88
63.00	GOCMW 15% G, 15% O, 15% M, 65% W	0.88
63.00	GOCMW 5% G, 5% O, 15% M, 75% W	0.88
63.00	GOCMW 10% G, 5% O 5%M 80%W	0.88

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	0.00	5.39
Last Gas Rate	0.13	5.00	7.26
Max. Gas Rate	0.13	5.00	7.26

DRILL STEM TEST REPORT

Mai Oil Operations, Inc.

8411 Preston Rd, STE 800
Dallas TX 75225-5520

ATTN: Wyatt Urban

22-21s-12w Stafford,KS

Hammeke "M" #8

Job Ticket: 60337 **DST#: 3**

Test Start: 2014.08.17 @ 00:55:00

GENERAL INFORMATION:

Formation: **LKC "H-J"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 02:38:00
Time Test Ended: 08:43:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Shane Konzem
Unit No: S3

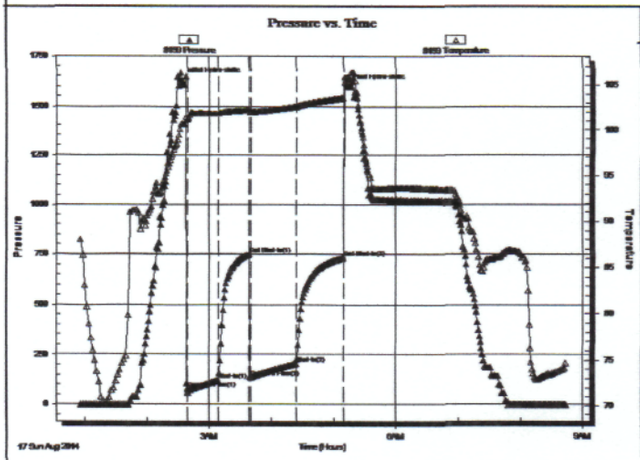
Interval: 3370.00 ft (KB) To 3440.00 ft (KB) (TVD)
Total Depth: 3440.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 1849.00 ft (KB)
1841.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8159 **Outside**
Press@RunDepth: 732.60 psig @ 3437.26 ft (KB)
Start Date: 2014.08.17 End Date: 2014.08.17
Start Time: 00:56:00 End Time: 08:44:00

Capacity: 8000.00 psig
Last Calib.: 2014.08.17
Time On Btm: 2014.08.17 @ 02:33:30
Time Off Btm: 2014.08.17 @ 05:13:00

TEST COMMENT: IFP - 30 - Good blow built to bottom of bucket in 1 1/2 min
ISI - 30 - Weak surface blow back.
FFP - 45 - Good blow built to bottom of bucket in 4 min
FSI - 45 - Weak surface blow back.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1630.47	100.69	Initial Hydro-static
6	79.73	101.31	Open To Flow (1)
35	121.42	101.85	Shut-In(1)
65	749.11	102.25	End Shut-In(1)
67	135.64	102.07	Open To Flow (2)
111	204.98	102.65	Shut-In(2)
156	732.60	103.61	End Shut-In(2)
160	1597.95	105.85	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	100% Clean gassy oil.	0.42
63.00	GOCWM 40% Gas, 10% Oil, 10% Water,	0.88 M
63.00	MWCO 30% water, 20% Mud, 50% Oil	0.88
63.00	GOCMW 5% Gas, 5% Oil, 60% water,	300.88ud
63.00	OCMW 5% Oil, 20% Mud, 75% Water	0.88
63.00	WM 30% Water, 70% Mud	0.88

Gas Rates

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

DRILL STEM TEST REPORT

Mai Oil Operations, Inc.

8411 Preston Rd, STE 800
Dallas TX 75225-5520

ATTN: Wyatt Urban

22-21s-12w Stafford,KS

Hammeke "M" #8

Job Ticket: 60338 **DST#: 4**

Test Start: 2014.08.17 @ 17:40:00

GENERAL INFORMATION:

Formation: **Viola**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 19:20:00
Time Test Ended: 23:55:30

Test Type: Conventional Bottom Hole (Initial)
Tester: Shane Konzem
Unit No: S3/40/Great Bend

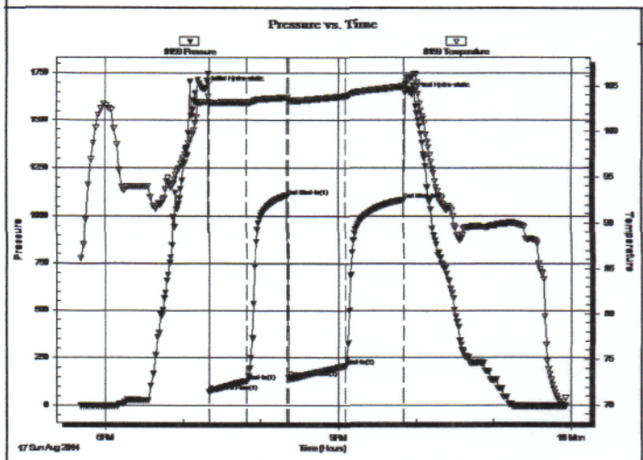
Interval: 3460.00 ft (KB) To 3535.00 ft (KB) (TVD)
Total Depth: 3535.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 1849.00 ft (KB)
1841.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8159 **Outside**
Press@RunDepth: 206.97 psig @ 3537.24 ft (KB)
Start Date: 2014.08.17 End Date: 2014.08.17
Start Time: 17:41:00 End Time: 23:55:30

Capacity: 8000.00 psig
Last Calib.: 2014.08.18
Time On Btm: 2014.08.17 @ 19:17:30
Time Off Btm: 2014.08.17 @ 21:57:00

TEST COMMENT: IFP - 30 - Good blow built to bottom of bucket in 2 min and 40 sec
ISI - 30 - No blow back.
IFP - 45 - Good blow built to bottom of bucket in 2 min and 40 sec
FSI - 45 - Blow back built to 3" into water and died back to 1 1/2" GTS at 20 minutes into shut in.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1671.41	103.26	Initial Hydro-static
3	72.62	103.28	Open To Flow (1)
32	129.48	103.22	Shut-In(1)
63	1104.29	103.74	End Shut-In(1)
64	145.22	103.45	Open To Flow (2)
108	206.97	103.91	Shut-In(2)
153	1085.43	104.96	End Shut-In(2)
160	1639.51	105.93	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	100% Mud	0.28
126.00	GOCM 70% Gas, 15% Oil, 15% Mud	1.77
126.00	GOCM 45% Gas, 40% Oil, 15% Mud	1.77
63.00	GOCM 15% Gas, 70% Oil, 15% Mud	0.88
63.00	GOCM 20% Gas, 50% Oil, 30% Mud	0.88

Gas Rates

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

DRILL STEM TEST REPORT

Mai Oil Operations, Inc.

8411 Preston Rd, STE 800
Dallas TX 75225-5520

ATTN: Wyatt Urban

22-21s-12w Stafford,KS

Hammeke "M" #8

Job Ticket: 60339 **DST#: 5**

Test Start: 2014.08.18 @ 08:40:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 10:05:00
Time Test Ended: 14:31:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Shane Konzem
Unit No: S3

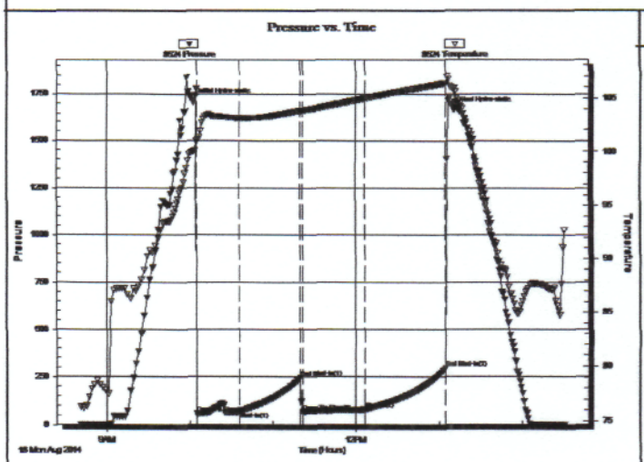
Interval: 3523.00 ft (KB) To 3597.00 ft (KB) (TVD)
Total Depth: 3597.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 1849.00 ft (KB)
1841.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8524 **Inside**
Press@RunDepth: 79.65 psig @ 3593.23 ft (KB)
Start Date: 2014.08.18 End Date: 2014.08.18
Start Time: 08:41:00 End Time: 14:31:00

Capacity: 8000.00 psig
Last Calib.: 2014.08.18
Time On Btm: 2014.08.18 @ 10:01:30
Time Off Btm: 2014.08.18 @ 13:11:00

TEST COMMENT: IFP 30 Fair blow built to 11 1/2"
FSI 45 No blow back.
FFP 45 Good blow built to bottom of bucket in 4 minutes.
FSI 60 No blow back.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1716.94	99.95	Initial Hydro-static
4	56.50	100.82	Open To Flow (1)
34	67.22	103.10	Shut-In(1)
78	243.69	103.84	End Shut-In(1)
80	66.72	103.86	Open To Flow (2)
125	79.65	104.97	Shut-In(2)
183	294.14	106.36	End Shut-In(2)
190	1669.74	105.94	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	232' GIP	0.00
20.00	SOCM 5% O 95% M	0.28
63.00	GOCM 5-%G 15%0 40%M	0.88

Gas Rates

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

DRILL STEM TEST REPORT

Mai Oil Operations, Inc.

8411 Preston Rd, STE 800
Dallas TX 75225-5520

ATTN: Wyatt Urban

22-21s-12w Stafford,KS

Hammeke "M" #8

Job Ticket: 60340 **DST#: 6**

Test Start: 2014.08.18 @ 19:35:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 20:44:00
Time Test Ended: 01:21:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Shane Konzem
Unit No: S3/40/Great Bend

Interval: 3601.00 ft (KB) To 3615.00 ft (KB) (TVD)
Total Depth: 3615.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Poor

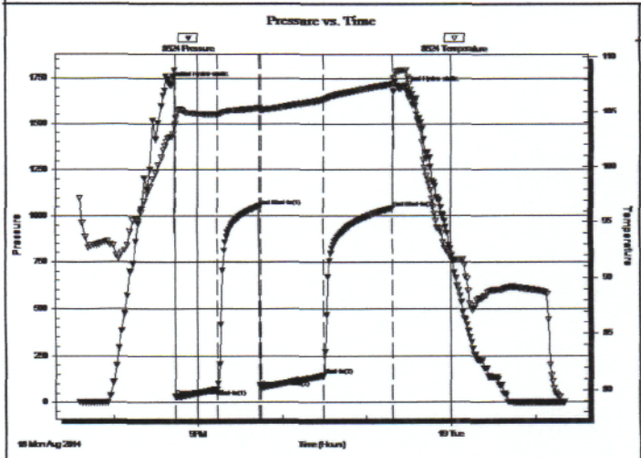
Reference Elevations: 1849.00 ft (KB)
1841.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8524 **Inside**

Press@RunDepth: 144.88 psig @ 3611.00 ft (KB)
Start Date: 2014.08.18 End Date: 2014.08.19
Start Time: 19:36:00 End Time: 01:21:00

Capacity: 8000.00 psig
Last Calib.: 2014.08.19
Time On Btm: 2014.08.18 @ 20:40:30
Time Off Btm: 2014.08.18 @ 23:24:30

TEST COMMENT: IFP 30 Good blow built to bottom of bucket in 1 1/2 min
ISI 30 Blow back built to 2"
FFP 45 Fair blow built to bottom bucket in 5 minutes.
FSI 45 Blow back built to 4" into water. Gas to surface 30 minutes into shut in.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1714.68	102.69	Initial Hydro-static
4	35.15	103.83	Open To Flow (1)
34	72.54	104.76	Shut-In(1)
64	1054.23	105.41	End Shut-In(1)
65	78.90	105.24	Open To Flow (2)
109	144.88	106.16	Shut-In(2)
158	1042.20	107.56	End Shut-In(2)
164	1691.71	108.73	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
461.00	100% Clean Gassy oil	6.47

Gas Rates

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

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC

Mai Oil Operations, Inc.

8411 Preston Rd, STE 800
Dallas TX 75225-5520

ATTN: Wyatt Urban

22-21s-12w Stafford,KS

Hammeke "M" #8

Job Ticket: 60341 **DST#: 7**

Test Start: 2014.08.19 @ 10:00:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 11:25:30
Time Test Ended: 15:50:30

Test Type: Conventional Bottom Hole (Initial)
Tester: Shane Konzem
Unit No: S3

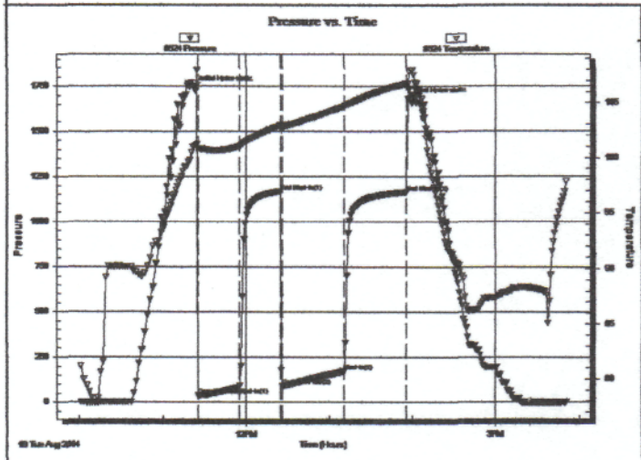
Interval: 3616.00 ft (KB) To 3635.00 ft (KB) (TVD)
Total Depth: 3635.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 1849.00 ft (KB)
1841.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8524 **Inside**
Press@RunDepth: 172.16 psig @ 3631.00 ft (KB)
Start Date: 2014.08.19 End Date: 2014.08.19
Start Time: 10:01:00 End Time: 15:50:30

Capacity: 8000.00 psig
Last Calib.: 2014.08.19
Time On Btm: 2014.08.19 @ 11:22:30
Time Off Btm: 2014.08.19 @ 13:56:30

TEST COMMENT: IFP 30 Good blow built to bottom of bucket in 2 min and 50 sec
ISI 30 Blow back built to 11"
FFP 45 Good blow built to bottom of bucket in 2 min and 50 sec
FSI 45 Blow back built to bottom of bucket in 15 min. GTS in 40 min



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1735.77	101.08	Initial Hydro-static
3	42.12	100.85	Open To Flow (1)
33	84.35	101.02	Shut-In(1)
62	1165.96	102.90	End Shut-In(1)
64	92.45	102.78	Open To Flow (2)
108	172.16	104.70	Shut-In(2)
153	1162.27	106.74	End Shut-In(2)
154	1676.34	106.73	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
420.00	100% CLean gassy oil.	5.89

Gas Rates

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

DRILL STEM TEST REPORT

Mai Oil Operations, Inc.

8411 Preston Rd, STE 800
Dallas TX 75225-5520

ATTN: Wyatt Urban

22-21s-12w Stafford,KS

Hammeke "M" #8

Job Ticket: 60342 **DST#: 8**

Test Start: 2014.08.19 @ 20:05:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 21:18:30
Time Test Ended: 01:53:30

Test Type: Conventional Bottom Hole (Initial)
Tester: Shane Konzem
Unit No: S3

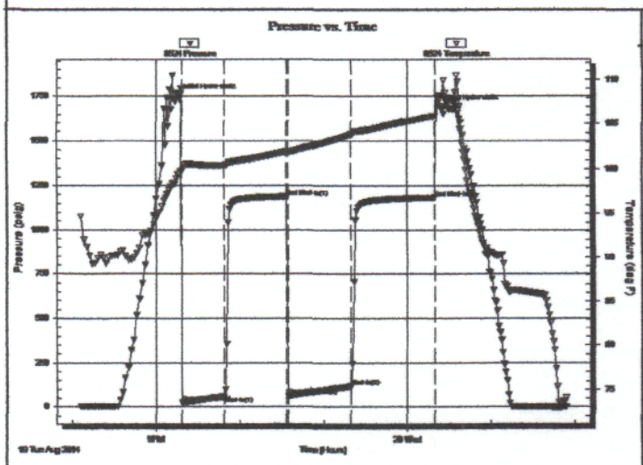
Interval: 3633.00 ft (KB) To 3648.00 ft (KB) (TVD)
Total Depth: 3648.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 1849.00 ft (KB)
1841.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8524 **Inside**
Press@RunDepth: 119.59 psig @ 3644.00 ft (KB)
Start Date: 2014.08.19 End Date: 2014.08.20
Start Time: 20:06:00 End Time: 01:53:30

Capacity: 8000.00 psig
Last Calib.: 2014.08.20
Time On Btm: 2014.08.19 @ 21:15:30
Time Off Btm: 2014.08.20 @ 00:23:30

TEST COMMENT: IFP 30 Fair blow built to bottom of bucket in 23 1/2 min
ISI 45 No blow back.
FFP 45 Fair blow built to bottom of bucket in 25 min
FSI 60 No blow back.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1748.44	99.35	Initial Hydro-static
3	23.79	99.77	Open To Flow (1)
33	58.91	100.40	Shut-In(1)
78	1190.26	101.94	End Shut-In(1)
79	64.14	101.79	Open To Flow (2)
124	119.59	103.82	Shut-In(2)
184	1185.16	105.92	End Shut-In(2)
188	1689.03	108.28	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
6.00	100% CGO	0.08
87.00	MW 30% Mud, 70% Water	1.22
63.00	MW 10% Mud, 90% Water	0.88

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. 537

Date	Sec.	Twp.	Range	County	State	On Location	Finish
8-12-14	22	21	12	Stafford	KS		8:30 PM

Location Great Bend 11S 6E NE Into

Lease Hammeke "M" Well No. 8

Owner

Contractor Southwind #3

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. 600

Csg. 8 5/8 Depth 600

Charge To Mai Oil

Street

Tbg. Size Depth

City State

Tool Depth

The above was done to satisfaction and supervision of owner agent or contractor.

Cement Left in Csg. 25' Shoe Joint

Cement Amount Ordered 400 60/40 3% cc 2% Gel

Meas Line Displace 36 1/2 bbl

EQUIPMENT

Pumptrk 5	No.	Cementer / Helper	David
Bulktrk 21	No.	Driver / Driver	Ryan
Bulktrk PU	No.	Driver / Driver	Brett

JOB SERVICES & REMARKS

Remarks:

Rat Hole

Mouse Hole

Centralizers

Baskets

D/V or Port Collar

Cement Circulated!!

Quality Oilwell Cementing

Common	
Poz. Mix	
Gel.	
Calcium	
Hulls	
Salt	
Flowseal	
Kol-Seal	
Mud CLR 48	
CFL-117 or CD110 CAF 38	
Sand	
Handling	
Mileage	
8 5/8 **FLOAT EQUIPMENT**	
Guide Shoe	
Centralizer	
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	
Rubber Plug 1	
Pumptrk Charge	
Mileage	
Tax	
Discount	
Total Charge	

X Signature Jay Howell

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025 Home Office P.O. Box 32 Russell, KS 67665 No. 283

Cell 785-324-1041

Date	Sec.	Twp.	Range	County	State	On Location	Finish
8-20-14	22	21	12	Stafford	KS		12:00AM

Location Great Bend, 11S, 6E, Nn 2

Lease Hammeke M Well No. 8

Owner

Contractor Southwind #3

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.

Type Job long string

Hole Size 7⅞ T.D. 3700

Charge To Mai Oil

Csg. 5½ 14# Depth 3694

Street

Tbg. Size Depth

City State

Tool Depth

The above was done to satisfaction and supervision of owner agent or contractor.

Cement Left in Csg. Shoe Joint 20,16

Cement Amount Ordered 160sx 60/40, 10% salt, 2% gel, ¼# Flow

Meas Line Displace 89.64

EQUIPMENT

Common

Pumptrk 17 No. Cementer / Helper Lonnie W.

Poz. Mix

Bulktrk 15 No. Driver / Driver Tyler

Gel.

Bulktrk PU No. Driver / Driver Travis

Calcium

JOB SERVICES & REMARKS

Hulls

Remarks:

Salt

Rat Hole 30sx

Flowseal

Mouse Hole

Kol-Seal

Centralizers 1-11,15

Mud CLR 48 1,000 gal

Baskets

CFL-117 or CD110 CAF 38

D/V or Port Collar

Sand

Pipe on bottom broke circulation pumped 1000 gal Mud CLR 48 with 10 bbl fw behind it. Plugged Rat hole. Hooked to 5½ Mixed 130 sx shut down. washed pump and lines Released plug and displaced with 89.6 bbl Plug landed and held

Handling

Mileage

FLOAT EQUIPMENT

Guide Shoe

Centralizer 12 turbos

Baskets

AFU Inserts

Float Shoe 1

Latch Down 1

Lift pressure 900 psi

Plug landed at 1500 psi

Pumptrk Charge

Mileage

Tax

Discount

Total Charge

X Signature

Conservation Division
266 N. Main St., Ste. 220
Wichita, KS 67202-1513

Kansas
Corporation Commission

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

December 15, 2014

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

Re: ACO-1
API 15-185-23893-00-00
Hammeke "M" 8
SW/4 Sec.22-21S-12W
Stafford County, Kansas

Dear Allen Bangert:

K.A.R. 82-3-107 provides for all completion information to be filed within 120 days of the spud date. Subsection(e)(2) of that regulation states "All rights to confidentiality shall be lost if the filings are not timely."

The above referenced well was spudded on 08/12/2014 and the ACO-1 was received on December 12, 2014 (not within the 120 days timely requirement).

Therefore, your request for confidential treatment of data contained within the ACO-1 filing cannot be granted at this time.

If you should have any questions, please do not hesitate to contact me at (316)337-6200.

Sincerely,

Production Department