

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1

January 2018

Form must be Typed

Form must be Signed

All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

New Well Re-Entry Workover

Oil WSW SWD

Gas DH EOR

OG GSW

CM (Coal Bed Methane)

Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

Deepening Re-perf. Conv. to EOR Conv. to SWD

Plug Back Liner Conv. to GSW Conv. to Producer

Commingled Permit #: _____

Dual Completion Permit #: _____

SWD Permit #: _____

EOR Permit #: _____

GSW Permit #: _____

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

Confidentiality Requested

Date: _____

Confidential Release Date: _____

Wireline Log Received Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT I II III Approved by: _____ Date: _____

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

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

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

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

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

1. Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*
3. Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

Date of first Production/Injection or Resumed Production/Injection:	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____			
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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Form	ACO1 - Well Completion
Operator	Mai Oil Operations, Inc.
Well Name	HAMMEKE "B" 8
Doc ID	1328937

Tops

Name	Top	Datum
Anhydrite	650	+1202
Heebner	3111	-1259
Toronto	3130	-1278
Douglas	3144	-1292
Brown Lime	3244	-1392
Lansing	3251	-1399
Base Kansas City	3482	-1630
Viola	3492	-1640
Simpson Shale	3524	-1672
Arbuckle	3574	-1722

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 'B' #8
NE-SW-SE-SE (636' FNL & 841' FEL)
Section 21-21s-12w
Stafford County, Kansas

Page 1

5 1/2" Production Casing Set

Contractor: Southwind Drilling Co. (rig #3)
Commenced: December 14, 2016
Completed: December 20, 2016
Elevation: 1852' K.B., 1850' D.F., 1844' G.L.
Casing program: Surface; 8 5/8" @ 656'
Production, 5 1/2" @ 3698'
Sample: Samples saved and examined 3000' to the Rotary Total Depth.
Drilling time: One (1) foot drilling time recorded and kept 3000' to the Rotary Total Depth.
Measurements: All depths measured from the Kelly Bushing.
Drill Stem Tests: There were two (2) Drill Stem Tests ran by Trilobite Testing Co.
Electric Log: By Eli Wireline Services, Dual Induction, Compensated Density/Neutron Log and Micro Log

<u>Formation</u>	<u>Log Depth</u>	<u>Sub-Sea Datum</u>
Anhydrite	650	+1202
Base Anhydrite	668	+1184
Heebner	3111	-1259
Toronto	3130	-1278
Douglas	3144	-1292
Brown Lime	3244	-1392
Lansing	3251	-1399
Base Kansas City	3482	-1630
Viola	3492	-1640
Simpson Shale	3524	-1672
Arbuckle	3574	-1722
Rotary Total Depth	3700	-1848
Log Total Depth	3701	-1849

(All tops and zones corrected to Electric Log Measurement)

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

TOPEKA SECTION

3000-3110' No shows of oil and/or gas was noted. (See attached Geologist report/Sample Log).

TORONTO SECTION

3130-3138' Limestone, white, cream, finely crystalline, chalky in part, no shows.

LANSING SECTION

3251-3260' Limestone, gray, tan, finely crystalline, few fossiliferous, chalky, increasingly cherty, poor porosity, no shows.

3262-3269' Limestone, as above.

3274-3282' Limestone, white, gray, cream, finely crystalline, fossiliferous in part, chalky, trace brown and gray stain, no show of free oil and no odor in fresh samples.

3291-3296' Limestone, white, fossiliferous/oolitic, chalky, scattered pinpoint porosity, trace brown/gray stain, no show of free oil.

3320-3330' Limestone, gray, white, oolitic, chalky, poor visible porosity, black and brown stain and saturation, no show of free oil and no odor in fresh samples.

3339-3352' Limestone, tan, gray, medium crystalline, fossiliferous, fair porosity, few sub-oomoldic, brown stain and saturation, trace of free oil and questionable odor in fresh samples.

3380-3388' Limestone, gray, white, oolitic, few sub-oomoldic scattered vuggy type porosity; brown stain, trace of free oil and no odor in fresh samples.

3398-3408' Limestone, white, gray, oolitic, fair to good porosity, fair stain and saturation, fair show of free oil and fair odor in fresh samples.

3411-3418' Limestone, white, cream oolitic, scattered porosity, brown stain, weak show of free oil and no odor in fresh samples.

3420-3427' Limestone, gray, white, oolitic, poor visible porosity, spotty stain, no free oil and no odor in fresh samples.

3438-3456' Limestone, tan, oolitic, sub-oomoldic, chalky, poorly developed porosity, fair stain and saturation show of free oil and faint odor in fresh samples.

3461-3470' Poor samples – samples 100% "Junk"

VIOLA SECTION

3492-3500' Poor samples – samples 100% "Junk"

3500-3524' (Sample Improving) chert; white/gray, few weathered; semi-tripolitic, scattered porosity, brown and black stain, trace of free oil and faint odor.

SIMPSON SECTION

3542-3555' Sand, white and gray, very fine grained; dolomitic in part; poor development; trace black stain, no free oil and no odor in fresh samples.

ARBUCKLE SECTION

3574-3584' Dolomite, tan, gray, medium crystalline; sucrosic, fair inter-crystalline and pinpoint porosity, good golden brown stain, show of free oil and good odor in fresh in fresh samples.

3586-3600' Dolomite; as above, fair stain and saturation, show of free oil and good odor, plus white chalk and white chert.

Drill Stem Test #1 **3506-3600**

Times: 30-30-45-60

Blow: Strong

Recovery: 744' gas in pipe
434' oil and gas cut mud
(55% gas; 20% oil; 25% mud)

Pressures: ISIP 256 psi
FSIP 291 psi
IFP 85-152 psi
FFP 160-197 psi
HSH 1882-1830 psi

3600-3614' Dolomite, as above, sandy in part, fair stain, show of free oil and good odor in fresh samples.

3614-3625' Dolomite, white, gray, medium to coarse crystalline, good inter-crystalline and vuggy type porosity, fair stain and saturation, fair to good show of free oil and good odor.

Drill Stem Test #2 **3598-3625**

Times: 30-30-30-45

Blow: Strong

Recovery: 279' gassy oil
124' oil and gas cut mud
(40% gas; 5% oil; 55% mud)

Pressures: ISIP 439 psi
FSIP 448 psi
IFP 55-106 psi
FFP 119-165 psi
HSH 1890-1829 psi

Mai Oil Operations
Hammeke 'B' #8
NE-SW-SE-SE (636' FNL & 841' FEL)
Section 21-21s-12w
Stafford County, Kansas

Page 4

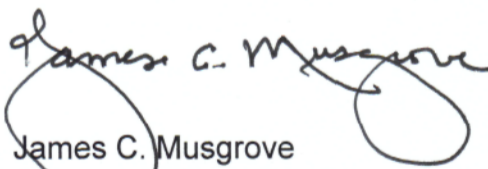
- 3625-3645' Dolomite, gray, white, finely crystalline, scattered porosity, scattered porosity, trace brown stain and saturation, trace of free oil and odor in fresh samples.
- 3645-3660' Dolomite, white, tan, gray, fine to medium crystalline, sucrosic in part, fair porosity, brown and gray to black stain; trace of free oil and faint odor in fresh samples.
- 3660-3680' Dolomite, tan, gray, fine and medium crystalline, fair porosity, brown and golden brown stain, trace of free oil and faint odor in fresh samples, plus abundant white chalk.
- 3680-3700' Dolomite, white, cream, finely crystalline, slightly cherty, poor visible porosity, plus white chert and iron pyrite, no shows.

Rotary Total Depth **3700 (-1848)**
Log Total Depth **3701 (-1849)**

Recommendations:

The 5 ½" production casing was set and cemented on Mai Oil Operations Inc., Hammeke 'B' #8.

Respectfully yours,


James C. Musgrove
Petroleum Geologist





TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Mai Oil Operations Inc.
 8411 Preston Road Suite 800
 Dallas TX 75225+5520
 ATTN: Jim Musgrove

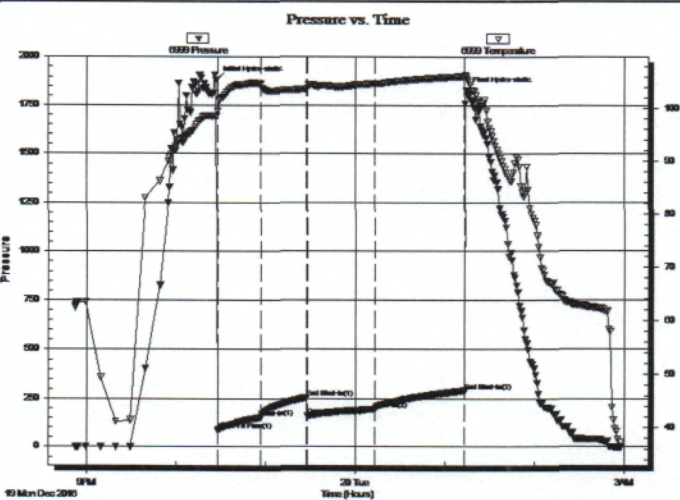
21-21S-12 Stafford,KS
Hammeke B #8
 Job Ticket: 63690 **DST#: 1**
 Test Start: 2016.12.19 @ 20:52:00

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 22:27:30
 Time Test Ended: 02:57:30
 Interval: **3506.00 ft (KB) To 3600.00 ft (KB) (TVD)**
 Total Depth: 3600.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Poor
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Ken Swinney
 Unit No: 72
 Reference Elevations: 1852.00 ft (KB)
 1844.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 6999 **Inside**
 Press@RunDepth: 197.05 psig @ 3596.26 ft (KB) Capacity: 8000.00 psig
 Start Date: 2016.12.19 End Date: 2016.12.20 Last Calib.: 2016.12.20
 Start Time: 20:52:05 End Time: 02:57:29 Time On Btm: 2016.12.19 @ 22:26:30
 Time Off Btm: 2016.12.20 @ 01:14:00

TEST COMMENT: IFP 30 minutes BOB in 3 minutes
 ISI 30 minutes Blow back built to 6"
 FFP 45 minutes BOB in 5 minutes
 FSI 60 minutes Blow back built to 4"



PRESSURE SUMMARY

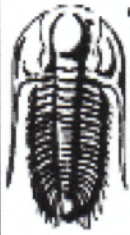
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1882.19	98.45	Initial Hydro-static
1	85.11	99.44	Open To Flow (1)
30	152.86	104.62	Shut-In(1)
61	256.26	103.61	End Shut-In(1)
61	160.67	103.82	Open To Flow (2)
107	197.05	104.68	Shut-In(2)
167	291.38	106.05	End Shut-In(2)
168	1830.12	106.02	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
434.00	VGOM Oil 20% Mud 25% Gas 55%	6.09
0.00	744' GIP	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mai Oil Operations Inc.
8411 Preston Road Suite 800
Dallas TX 75225+5520
ATTN: Jim Musgrove

21-21S-12 Stafford,KS
Hammeke B #8
Job Ticket: 63690 **DST#: 1**
Test Start: 2016.12.19 @ 20:52:00

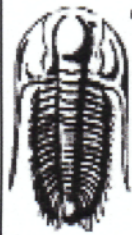
Tool Information

Drill Pipe:	Length: 3519.00 ft	Diameter: 3.80 inches	Volume: 49.36 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 48000.00 lb
			<u>Total Volume: 49.36 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	33.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3506.00 ft			Final 45000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	94.26 ft			
Tool Length:	114.26 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-In Tool	5.00			3491.00	
Hydraulic tool	5.00			3496.00	
Top Packer	5.00			3501.00	
Packer	5.00			3506.00	20.00 Bottom Of Top Packer
Anchor	5.00			3511.00	
Change Over Sub	1.00			3512.00	
Drill Pipe	62.26			3574.26	
Change Over Sub	1.00			3575.26	
Anchor	20.00			3595.26	
Recorder	1.00	6999	Inside	3596.26	
Recorder	1.00	8960	Outside	3597.26	
Bullnose	3.00			3600.26	94.26 Anchor Tool

Total Tool Length: 114.26



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Mai Oil Operations Inc.

21-21S-12 Stafford,KS

8411 Preston Road Suite 800
Dallas TX 75225+5520

Hammeke B #8

Job Ticket: 63690

DST#: 1

ATTN: Jim Musgrove

Test Start: 2016.12.19 @ 20:52:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 49.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
434.00	VGOM Oil 20% Mud 25% Gas 55%	6.088
0.00	744' GIP	0.000

Total Length: 434.00 ft Total Volume: 6.088 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

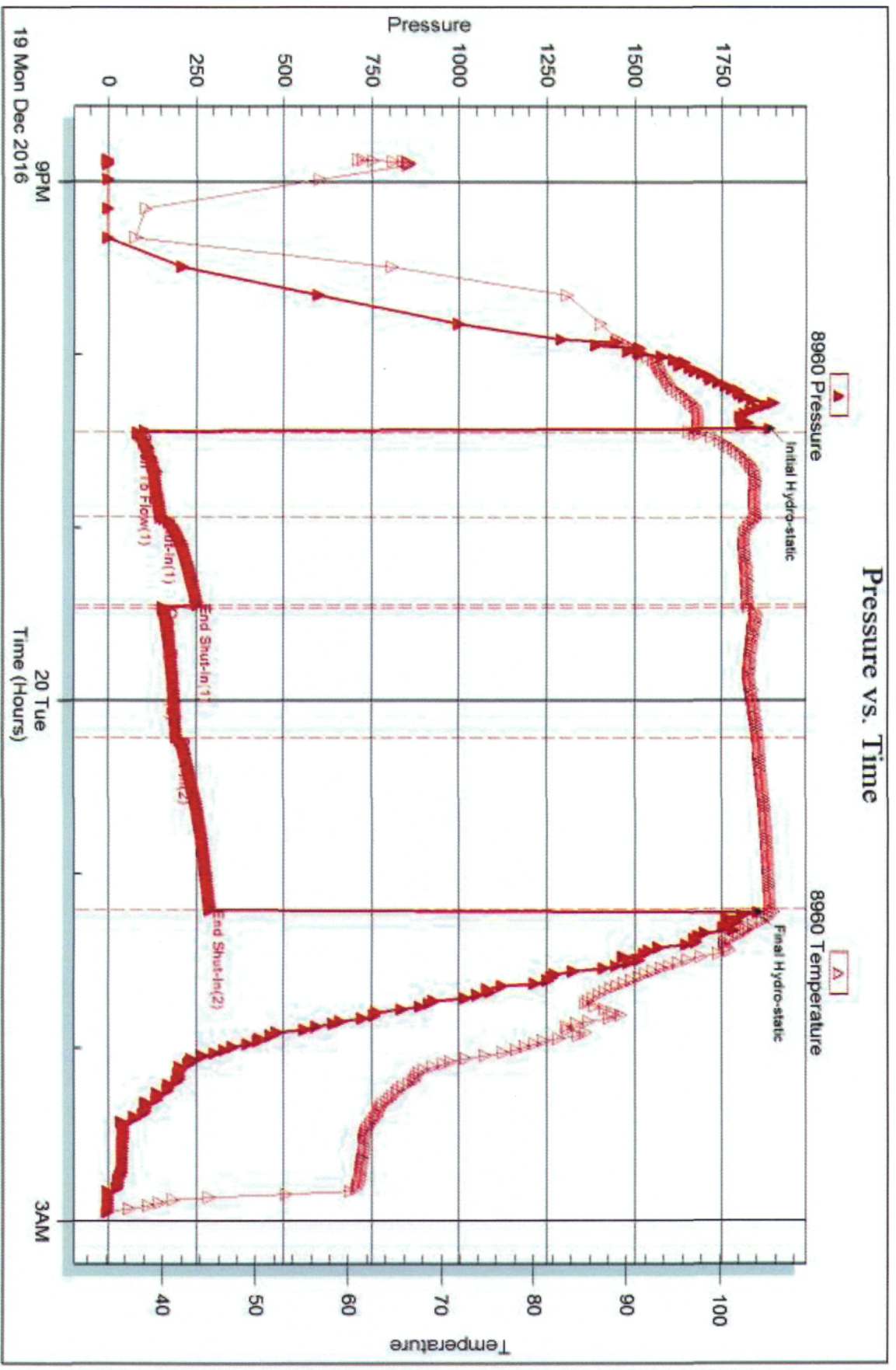
Recovery Comments:

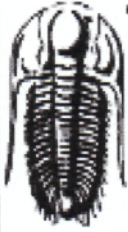
Serial #: 8960

Outside Mai Oil Operations Inc.

Hammcke B #8

DST Test Number: 1





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Mai Oil Operations Inc.
 8411 Preston Road Suite 800
 Dallas TX 75225+5520
 ATTN: Jim Musgrove

21-21S-12 Stafford,KS
Hammeke B #8
 Job Ticket: 63691 **DST#: 2**
 Test Start: 2016.12.20 @ 09:18:00

GENERAL INFORMATION:

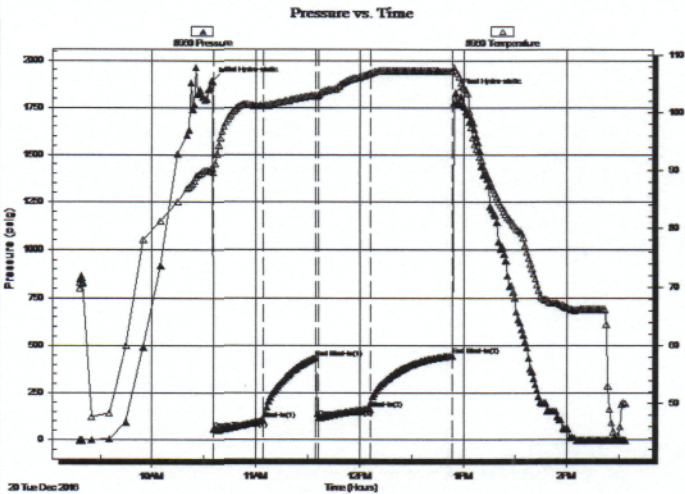
Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 10:36:00
 Time Test Ended: 14:34:00
 Interval: **3598.00 ft (KB) To 3625.00 ft (KB) (TVD)**
 Total Depth: 3625.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Ken Swinney
 Unit No: 72 Great Bend/34
 Reference Elevations: 1852.00 ft (KB)
 1844.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 8960

Outside

Press@RunDepth: 446.07 psig @ 3622.00 ft (KB)
 Start Date: 2016.12.20 End Date: 2016.12.20
 Start Time: 09:18:05 End Time: 14:33:29
 Capacity: 8000.00 psig
 Last Calib.: 2016.12.20
 Time On Btm: 2016.12.20 @ 10:35:00
 Time Off Btm: 2016.12.20 @ 12:55:30

TEST COMMENT: IFP 30 minutes BOB in 1 min 30 sec GTS in 20 min TSTM
 ISI 30 minutes BOB in 5 min.
 FFP 30 minutes BOB in 3 min 30 sec
 FSI 45 minutes BOB in 5 min.



PRESSURE SUMMARY

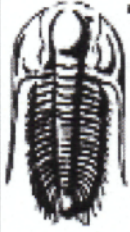
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1888.33	90.57	Initial Hydro-static
1	56.90	89.70	Open To Flow (1)
30	104.98	101.16	Shut-In(1)
60	435.38	103.07	End Shut-In(1)
61	117.47	103.03	Open To Flow (2)
91	164.81	106.83	Shut-In(2)
139	446.07	107.23	End Shut-In(2)
141	1827.64	107.38	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
124.00	VGOCM Oil 5% Gas 40% Mud 55%	1.74
279.00	VGCO Gas 50% Oil 50%	3.91

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mai Oil Operations Inc.
8411 Preston Road Suite 800
Dallas TX 75225+5520
ATTN: Jim Musgrove

21-21S-12 Stafford,KS
Hammeke B #8
Job Ticket: 63691 **DST#: 2**
Test Start: 2016.12.20 @ 09:18:00

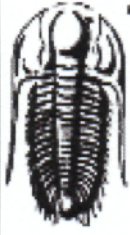
Tool Information

Drill Pipe:	Length: 3582.00 ft	Diameter: 3.80 inches	Volume: 50.25 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 48000.00 lb
			<u>Total Volume: 50.25 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3598.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	27.00 ft			
Tool Length:	47.00 ft			
Number of Packers:	1	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-In Tool	5.00			3583.00	
Hydraulic tool	5.00			3588.00	
Top Packer	5.00			3593.00	
Packer	5.00			3598.00	20.00 Bottom Of Top Packer
Anchor	22.00			3620.00	
Recorder	1.00	6999	Inside	3621.00	
Recorder	1.00	8960	Outside	3622.00	
Bullnose	3.00			3625.00	27.00 Anchor Tool

Total Tool Length: 47.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Mai Oil Operations Inc.

21-21S-12 Stafford,KS

8411 Preston Road Suite 800
Dallas TX 75225+5520

Hammeke B #8

Job Ticket: 63691

DST#: 2

ATTN: Jim Musgrove

Test Start: 2016.12.20 @ 09:18:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

37 deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
124.00	VGOCM Oil 5% Gas 40% Mud 55%	1.739
279.00	VGCO Gas 50% Oil 50%	3.914

Total Length: 403.00 ft Total Volume: 5.653 bbl

Num Fluid Samples: 0

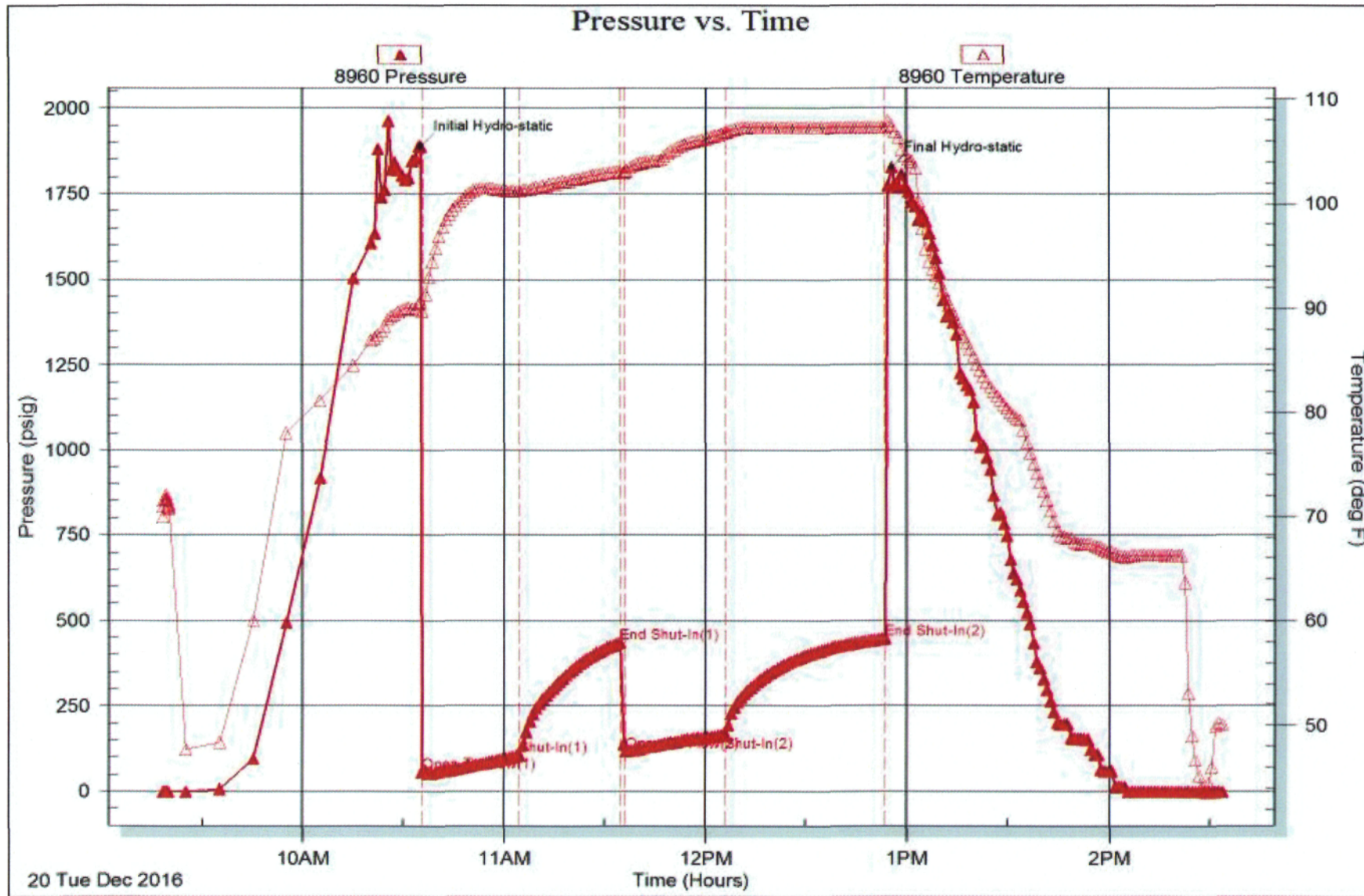
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



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. 3049

Date	12-15-16	Sec.	21	Twp.	21	Range	12	County	Stafford	State	Ks	On Location		Finish	7:45 AM
Lease								Location		Dartmouth 12 S to 170 Rd, 2E					
Hammeke B.								Well No.		8					
Contractor								Owner		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.					
Southwind								3		To 60 Rd, 1/8 N, W/S					
Type Job								Charge To		Main oil operations					
Surface															
Hole Size								T.D.		656'					
12 1/4"								656'							
Csg.								Depth		656'					
8 5/8"															
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		Cement Amount Ordered					
20'								20'		450 60/40 3% cc 2% gel					
Meas Line								Displace		1/2 #10 seal					
								40 1/2 Bcs							
EQUIPMENT															
Pumptrk								No.		Common					
20															
Cementer								Helper		Poz. Mix					
Nick															
Bulktrk								No.		Gel.					
19															
Driver								Driver		Calcium					
Doug															
Bulktrk								No.		Hulls					
pu.															
Driver								Driver		Salt					
Rick															
JOB SERVICES & REMARKS															
Remarks:								Cement did Circulate							
Rat Hole								Flowseal							
Mouse Hole								Kol-Seal							
Centralizers								Mud CLR 48							
Baskets								CFL-117 or CD110 CAF 38							
D/V or Port Collar								Sand							
								Handling							
								Mileage							
FLOAT EQUIPMENT															
								Guide Shoe		Rubber plug					
								Centralizer							
								Baskets							
								AFU Inserts							
								Float Shoe							
								Latch Down							
								Pumptrk Charge							
								Mileage							
										Tax					
										Discount					
										Total Charge					
X Signature								Jay [Signature]							

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No. 3110

Date	Sec.	Twp.	Range	County	State	On Location	Finish
12-21-16	21	21	12	Stafford	Ks		11:45 AM
Lease Hammek "B"				Location: Dartmouth - 12.5 to 170 Rd, 2E			
Contractor Southwind #3		Well No. 8		Owner 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 Longstring		T.D. 3701'		Charge To Mai oil operations			
Hole Size 5 7/8"		Depth 3693'		Street			
Tbg. Size New		Depth		City State			
Tool		Depth		The above was done to satisfaction and supervision of owner agent or contractor.			
Cement Left in Csg. 21.54'		Shoe Joint 21.54'		Cement Amount Ordered 160 60/40 10% salt 2% gel			
Meas Line		Displace 8 7/8" BCS		1/4" PL seal 1000 gal mud Clear 48			
EQUIPMENT				Common			
Pumptrk	No. 20	Cementer		Poz. Mix			
		Helper	Nick				
Bulktrk	No. 3	Driver	Stan	Gel.			
		Driver					
Bulktrk	No. 1	Driver		Calcium			
		Driver					
JOB SERVICES & REMARKS				Hulls			
Remarks:				Salt			
Rat Hole				Flowseal			
Mouse Hole				Kol-Seal			
Centralizers 1-12				Mud CLR 48			
Baskets				CFL-117 or CD110 CAF 38			
D/V or Port Collar				Sand			
Pipe on ball joint				Handling			
circulation pump 200 gal				Mileage			
48 plug handle 30' x 1 1/2"				FLOAT EQUIPMENT			
5 7/8" casing + 1300' casing				Guide Shoe			
Shut down & wash pump lines				Centralizer 12			
Displaced plug w/ 8 7/8" BCS of				Baskets			
New released + left				AFU Inserts			
Lift pressure 600 #				Float Shoe 1			
Laid plug to 1600 #				Latch Down 1			
				Pumptrk Charge			
				Mileage			
				Tax			
				Discount			
				Total Charge			
X Signature <i>[Signature]</i>							