KOLAR Document ID: 1354517

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 # 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
☐ 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 #:

03/16/2017	03/22/2017	03/22/2017
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No.: 15-185-23982-00-00
Spot Description:
_ - NE - NE - NE Sec. 30 Twp. 21 S. R. 12 ☐ East ☑ West
330 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: FISCHER Well #: 1
Field Name:
Producing Formation: Arbuckle
Elevation: Ground: 1861 Kelly Bushing: 1869
Total Vertical Depth: 3659 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 658 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: 50000 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: Fischer License #: 5259
Quarter SE Sec. 29 Twp. 21 S. R. 12 ☐ East ☑ West
County: Stafford Permit #: D10295

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: 05/08/2017
☑ **Confidential Release Date:** 05/08/2019
☑ **Wireline Log Received** ☐ **Drill Stem Tests Received**
☑ **Geologist Report / Mud Logs Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** Karen Ritter **Date:** 05/09/2017

Operator Name: Mai Oil Operations, Inc. Lease Name: FISCHER Well #: 1

Sec. 30 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 *(Attach Additional Sheets)*	☑ Yes	☐ No
Samples Sent to Geological Survey	☐ Yes	☑ No
Cores Taken	☐ Yes	☑ No
Electric Log Run	☑ Yes	☐ No
Geologist Report / Mud Logs	☐ Yes	☐ No

List All E. Logs Run:

CDNL
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	658	60-40 POZ	450	2% gel, 4 % CC
Production	7.875	5.5	14	3656	60-40 POZ	160	2 % gel

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	-			
	-			

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: ☐ Flowing ☐ Pumping ☐ Gas Lift ☐ Other *(Explain)*

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

DISPOSITION OF GAS:	METHOD OF COMPLETION:	PRODUCTION INTERVAL:
☐ Vented ☐ Sold ☐ Used on Lease *(If vented, Submit ACO-18.)*	☐ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*	Top / Bottom

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record *(Amount and Kind of Material Used)*

TUBING RECORD: Size: Set At: Packer At:

Mail to: KCC - Conservation Division, 266 N. Main, Suite 220, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Mai Oil Operations, Inc.
Well Name	FISCHER 1
Doc ID	1354517

Tops

Name	Top	Datum
Anhydrite	679	+1190
Heebner	3116	-1247
Toronto	3135	-1266
Brown Lime	3246	-1377
Lansing	3260	-1391
Base Kansas City	3279	-1610
Viola	3483	-1614
Arbuckle	3553	-1683

Form	ACO1 - Well Completion
Operator	Mai Oil Operations, Inc.
Well Name	FISCHER 1
Doc ID	1354517

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	23	658	60-40 POZ	450	2% gel, 4 % CC
Production	7.875	5.5	14	3656	60-40 POZ	160	2 % gel

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
Fischer #1
NE-NE-NE (330'FNL & 330')FEL
Section 30-21s-12w
Stafford County, Kansas

5 1/2" Production Casing Set

.Contractor: Southwind Drilling Co. (rig #3)

Commenced: March 16, 2017

Completed: March 22, 2017

Elevation: 1869' K.B., 1867' D.F., 1861' G.L.

Casing program: Surface; 8 5/8" @ 658'
Production, 5 ½" @ 3656'

Sample: Samples saved and examined 2800' to the Rotary Total Depth.

Drilling time: One (1) foot drilling time recorded and kept 2800' to the Rotary Total Depth.

Measurements: All depths measured from the Kelly Bushing.

Drill Stem Tests: There were three (3) Drill Stem Tests ran by Trilobite Testing Co.

Electric Log: By Eli Wireline Services, Dual Induction, Compensated Density/Neutron and Micro Log.

Formation	Log Depth	Sub-Sea Datum
Anhydrite	679	+1190
Base Anhydrite	701	+1168
Heebner	3116	-1247
Toronto	3135	-1266
Douglas	3151	-1282
Brown Lime	3246	-1377
Lansing	3260	-1391
Base Kansas City	3279	-1610
Viola	3483	-1614
Simpson Shale	3500	-1631
Arbuckle	3553	-1683
Rotary Total Depth	3660	-1791
Log Total Depth	3659	-1790

(All tops and zones corrected to Electric Log Measurement)

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

TOPEKA SECTION

2843-3115'	No shows of oil and/or gas was noted in the drilling of the Topeka Section (see attached Geologist Report/Sample Log)

TORONTO SECTION

3135-3143'	Limestone, tan, cream, finely crystalline, poor visible porosity, chalky, light black spotty stain, no shows of oil and no odor in fresh samples.

LANSING SECTION

3260-3270'	Limestone, cream, white, finely crystalline, poor visible porosity, no shows.
3276-3283'	Limestone, white/cream, tan, scattered pinpoint type porosity, few chalky, trace brown and black stain, trace of free oil and questionable odor in fresh samples.
3293-3303'	Limestone, tan, cream, oomoldic, scattered vuggy and oomoldic type porosity, black stain, show of free oil (dead appearing) and faint odor in fresh samples.
3316-3321'	Limestone, cream/white, finely crystalline, poor developed pinpoint porosity, trace spotty brown stain.
3328-3333'	Limestone, cream, gray, finely crystalline, poor visible porosity, no show of free oil and no odor in fresh samples.
3344-3352'	Limestone; white/cream, finely crystalline, scattered visible porosity, trace brown stain, weak show of free oil and faint odor in fresh samples.
3382-3390'	Limestone, tan, oomoldic, good oomoldic to vuggy type porosity, brown spotty stain, show of free oil and faint odor.
3400-3408'	Limestone, tan, buff, finely crystalline, poor visible porosity, no shows.
3418-3426'	Limestone; tan, cream, finely crystalline, poor visible porosity, golden brown stain.
3442-3450'	Limestone, white, cream, granular, fossiliferous, poor visible porosity, chalky; no shows.

3463-3470' Limestone, cream, white, finely crystalline, chalky; few oolitic, trace brown stain, show of free oil and faint odor in fresh samples.

Drill Stem Test #1 **3369-3485**

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

Blow: **Strong; Gas to surface 5 mins.**
Gas gauged as follows:

Initial Flow	
5 mins	**Gas to Surface**
10 mins	**10,260 cfgpd**
20 mins	**18,490 cfgpd**
30 mins	**20,360 cfgpd**
Final Flow	
10 mins	**16,620 cfgpd**
22 mins	**22,230 cfgpd**
30 mins	**24,100 cfgpd**

Recovery: **217' oil cut gassy muddy water**
(20% gas; 10% oil; 35% water; 35% mud)

Pressures:			
	ISIP	**736**	**psi**
	FSIP	**694**	**psi**
	IFP	**84-103**	**psi**
	FFP	**102-120**	**psi**
	HSH	**1666-1643**	**psi**

VIOLA SECTION

3483-3500' Chert, white, opaque, yellow, few orange; poor to fair vuggy type porosity, light brown stain, show of free oil and faint odor in fresh samples.

ARBUCKLE SECTION

3552-3556' Dolomite, tan, brown, oomoldic, fair vuggy to oomoldic porosity, good brown stain and saturation, show free oil and strong odor in fresh samples.

Drill Stem Test #2 **3495-3556**

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

Blow: **Strong**

Recovery: **1726' gas in pipe**
134' mud cut gassy oil
(10% gas; 60% oil; 30% mud)
62' gassy oil
124' oil cut muddy water
(5% oil; 85% water; 10% mud)

Pressures:			
	ISIP	**1209**	**psi**
	FSIP	**1209**	**psi**
	IFP	**38-85**	**psi**
	FFP	**73-154**	**psi**
	HSH	**1736-1693**	**psi**

3556-3570' Dolomite, tan; brown, finely crystalline, sucrosic; good pinpoint inter-crystalline porosity, good stain and saturation; show of free oil and strong odor in fresh samples.

Drill Stem Test #3 3564-3570

Times: 15-15-30-30

Blow: Strong

Recovery: 155' gas in pipe
217' oil cut muddy water
(10% oil; 60%water; 30% mud)

Pressures:

ISIP	**1244**	**psi**
FSIP	**1245**	**psi**
IFP	**72-101**	**psi**
FFP	**107-111**	**psi**
HSH	**1751-1727**	**psi**

3581-3590' Dolomite, white, finely crystalline, sucrosic, fair inter-crystalline to vuggy porosity, trace stain, trace of free oil and strong odor in fresh samples.

35901-3600' Dolomite, white, finely crystalline, poor to fair inter-crystalline porosity, trace brown stain, trace of free oil and strong odor in fresh samples.

3600-3620' Dolomite, tan, medium crystalline, sucrosic, poor to fair inter-crystalline to vuggy type porosity, few dense, trace brown stain, show of free oil and strong odor in fresh samples, plus iron pyrite.

3620-3640' Dolomite, white, cream, poor to fair vuggy to inter-crystalline type porosity, black stain, no free oil and strong odor.

3640-3660' Dolomite, white, finely crystalline, poor inter-crystalline porosity, no stain, no show of oil and strong odor in fresh sample.

Rotary Total Depth 3660 (-1791)
Log Total Depth 3659 (-1790)

Recommendations:

The 5 ½" production casing was set and cemented on Mai Oil Operations Inc., Fischer #1

Respectfully yours,

Wyatt Urban
Petroleum Geologist

DRILL STEM TEST REPORT

Mai Oil Operations Inc

8411 Preston Rd Suite 800
Dallas TX 75225+5520

ATTN: Wyatt Urban

30-21S-12W Stafford,KS

Fischer #1

Job Ticket: 64810 **DST#: 1**

Test Start: 2017.03.20 @ 13:58:00

GENERAL INFORMATION:

Formation: **Lower Kansas City**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 15:32:30
Time Test Ended: 19:20:30

Test Type: Conventional Bottom Hole (Initial)
Tester: Ken Swinney
Unit No: 72

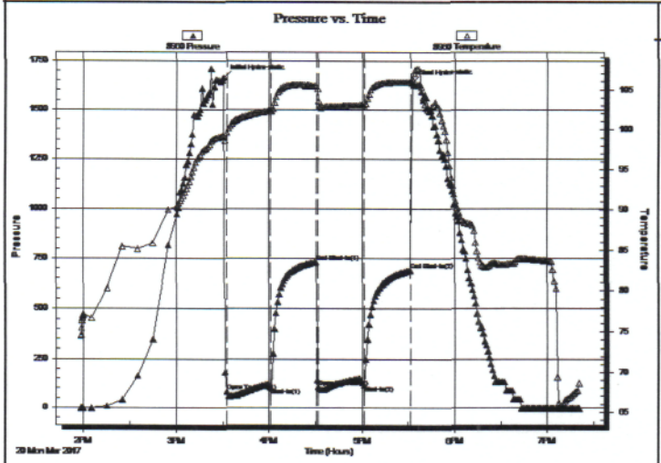
Interval: 3369.00 ft (KB) To 3485.00 ft (KB) (TVD)
Total Depth: 3485.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1869.00 ft (KB)
1861.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8960 **Outside**
Press@RunDepth: 690.36 psig @ 3482.20 ft (KB)
Start Date: 2017.03.20 End Date: 2017.03.20
Start Time: 13:58:05 End Time: 19:20:29

Capacity: 8000.00 psig
Last Calib.: 2017.03.20
Time On Btm: 2017.03.20 @ 15:30:30
Time Off Btm: 2017.03.20 @ 17:32:30

TEST COMMENT: IFP 30 Minutes BOB in 18 seconds Gas to surface in 5 minutes
ISI 30 Minutes No blow back
FFP 30 Minutes Blow at BOB at open
FSI 30 Minutes No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1662.53	99.14	Initial Hydro-static
2	83.63	99.60	Open To Flow (1)
31	103.89	102.29	Shut-In(1)
60	731.78	105.40	End Shut-In(1)
62	105.89	103.57	Open To Flow (2)
91	117.37	103.01	Shut-In(2)
121	690.36	105.92	End Shut-In(2)
122	1639.35	106.40	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
217.00	GOCMW Oil 10% Gas 20% Mud 35% Wa3.04 5%	

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	13.00	10.26
Last Gas Rate	0.13	50.00	24.10
Max. Gas Rate	0.13	50.00	24.10

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mai Oil Operations Inc

8411 Preston Rd Suite 800
Dallas TX 75225+5520

ATTN: Wyatt Urban

30-21S-12W Stafford,KS

Fischer #1

Job Ticket: 64810 **DST#: 1**

Test Start: 2017.03.20 @ 13:58:00

Tool Information

Drill Pipe:	Length:	3361.00 ft	Diameter:	3.80 inches	Volume:	47.15 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:		55000.00 lb
					Total Volume:	47.15 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		20.00 ft					String Weight:	Initial	44000.00 lb
Depth to Top Packer:		3369.00 ft						Final	44000.00 lb
Depth to Bottom Packer:		ft							
Interval betw een Packers:		116.20 ft							
Tool Length:		144.20 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			3346.00		
Hydraulic tool	5.00			3351.00		
Jars	6.00			3357.00		
Safety Joint	2.00			3359.00		
Top Packer	5.00			3364.00		
Packer	5.00			3369.00	28.00	Bottom Of Top Packer
Anchor	14.00			3383.00		
Change Over Sub	1.00			3384.00		
Drill Pipe	95.20			3479.20		
Change Over Sub	1.00			3480.20		
Recorder	1.00	8648	Inside	3481.20		
Recorder	1.00	8960	Outside	3482.20		
Bullnose	3.00			3485.20	116.20	Anchor Tool
Total Tool Length:	**144.20**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Mai Oil Operations Inc

8411 Preston Rd Suite 800
Dallas TX 75225+5520

ATTN: Wyatt Urban

30-21S-12W Stafford,KS

Fischer #1

Job Ticket: 64810 **DST#: 1**

Test Start: 2017.03.20 @ 13:58:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	26000 ppm
Viscosity:	48.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.79 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	2800.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
217.00	GOCMW Oil 10% Gas 20% Mud 35% Water 3	3.044

Total Length: 217.00 ft Total Volume: 3.044 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: Recovery Resistivity .280 ohms @ 72 deg

DRILL STEM TEST REPORT

GAS RATES

Mai Oil Operations Inc

8411 Preston Rd Suite 800
Dallas TX 75225+5520

ATTN: Wyatt Urban

30-21S-12W Stafford,KS

Fischer #1

Job Ticket: 64810 **DST#: 1**

Test Start: 2017.03.20 @ 13:58:00

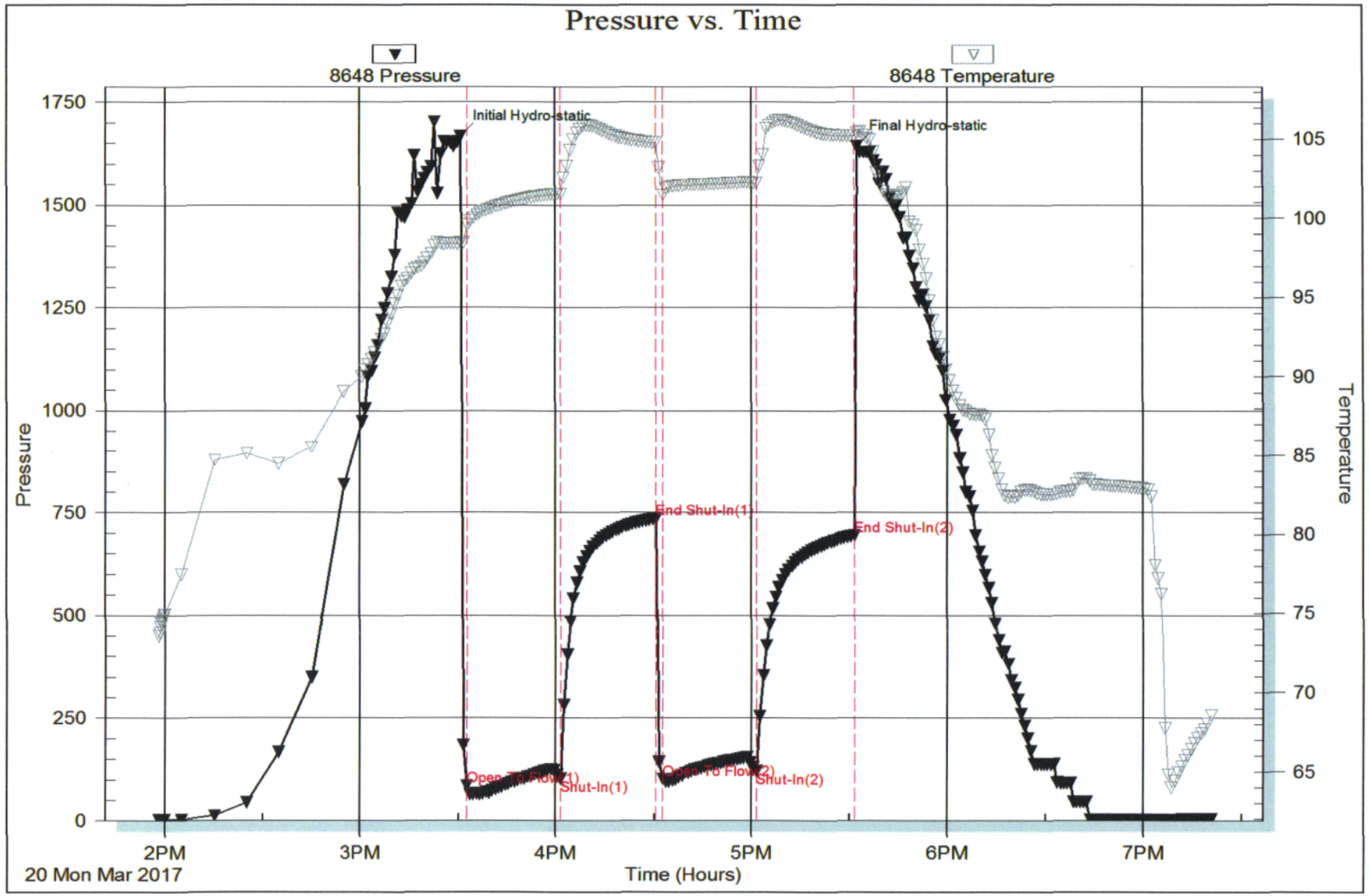
Gas Rates Information

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)
1	10	0.13	13.00	10.26
1	20	0.13	35.00	18.49
1	30	0.13	40.00	20.36
2	10	0.13	30.00	16.62
2	20	0.13	45.00	22.23
2	30	0.13	50.00	24.10

Serial #: 8648 **Inside** Mai Oil Operations Inc Fischer #1 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 64810 Printed: 2017.03.22 @ 13:33:41

DRILL STEM TEST REPORT

Mai Oil Operations Inc

8411 Preston Rd Suite 800
Dallas TX 75225+5520

ATTN: Wyatt Urban

30-21S-12W Stafford,KS

Fischer #1

Job Ticket: 64811 **DST#: 2**

Test Start: 2017.03.21 @ 04:40:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 05:52:30
Time Test Ended: 09:57:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Ken Swinney
Unit No: 72

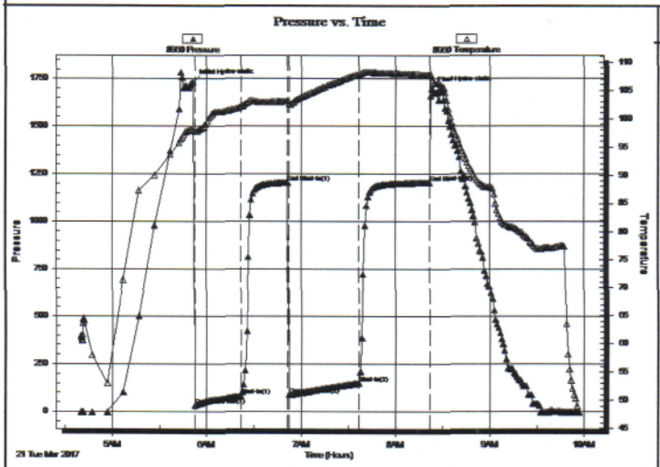
Interval: 3495.00 ft (KB) To 3556.00 ft (KB) (TVD)
Total Depth: 3556.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1869.00 ft (KB)
1861.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8960 **Outside**
Press@RunDepth: 1205.46 psig @ 3553.25 ft (KB)
Start Date: 2017.03.21 End Date: 2017.03.21
Start Time: 04:40:05 End Time: 09:56:59

Capacity: 8000.00 psig
Last Calib.: 2017.03.21
Time On Btm: 2017.03.21 @ 05:51:30
Time Off Btm: 2017.03.21 @ 08:23:00

TEST COMMENT: IFP 30 Minutes BOB in 2 minutes
ISI 30 Minutes Blow back built to 3"
FFP 30 Minutes BOB in 5 1/2 minutes
FSI 30 Minutes Blow back built to BOB



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1731.98	98.12	Initial Hydro-static
1	32.81	97.76	Open To Flow (1)
30	81.72	102.10	Shut-In(1)
60	1205.76	103.05	End Shut-In(1)
61	89.26	102.68	Open To Flow (2)
105	150.53	107.88	Shut-In(2)
151	1205.46	107.76	End Shut-In(2)
152	1694.56	107.65	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
124.00	SOCMW Oil 5% Mud 10% Water 85%	1.74
62.00	EOG Emulsified Oil 30% Gas 70%	0.87
134.00	GMCO Gas 10% Mud 30% Oil 60%	1.88
0.00	1726' GIP	0.00

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mai Oil Operations Inc

8411 Preston Rd Suite 800
Dallas TX 75225+5520

ATTN: Wyatt Urban

30-21S-12W Stafford,KS

Fischer #1

Job Ticket: 64811 **DST#: 2**

Test Start: 2017.03.21 @ 04:40:00

Tool Information

Drill Pipe:	Length:	3488.00 ft	Diameter:	3.80	inches	Volume:	48.93	bbl	
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00	inches	Volume:	0.00	bbl	
Drill Collar:	Length:	0.00 ft	Diameter:	0.00	inches	Volume:	0.00	bbl	
						Total Volume:	48.93	bbl	

Drill Pipe Above KB:	21.00 ft
Depth to Top Packer:	3495.00 ft
Depth to Bottom Packer:	ft
Interval betw een Packers:	61.25 ft
Tool Length:	89.25 ft
Number of Packers:	2
Diameter:	6.75 inches

Tool Weight:	2000.00 lb
Weight set on Packer:	20000.00 lb
Weight to Pull Loose:	44000.00 lb
Tool Chased	0.00 ft
String Weight: Initial	40000.00 lb
Final	42000.00 lb

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Shut-In Tool	5.00			3472.00		
Hydraulic tool	5.00			3477.00		
Jars	6.00			3483.00		
Safety Joint	2.00			3485.00		
Top Packer	5.00			3490.00		
Packer	5.00			3495.00	28.00	Bottom Of Top Packer
Anchor	23.00			3518.00		
Change Over Sub	1.00			3519.00		
Drill Pipe	31.25			3550.25		
Change Over Sub	1.00			3551.25		
Recorder	1.00	8648	Inside	3552.25		
Recorder	1.00	8960	Outside	3553.25		
Bullnose	3.00			3556.25	61.25	Anchor Tool
Total Tool Length:	**89.25**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Mai Oil Operations Inc

8411 Preston Rd Suite 800
Dallas TX 75225+5520

ATTN: Wyatt Urban

30-21S-12W Stafford,KS

Fischer #1

Job Ticket: 64811 **DST#: 2**

Test Start: 2017.03.21 @ 04:40:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	22000 ppm
Viscosity:	48.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.78 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	2800.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
124.00	SOCMW Oil 5% Mud 10% Water 85%	1.739
62.00	EOG Emulsified Oil 30% Gas 70%	0.870
134.00	GMCO Gas 10% Mud 30% Oil 60%	1.880
0.00	1726' GIP	0.000

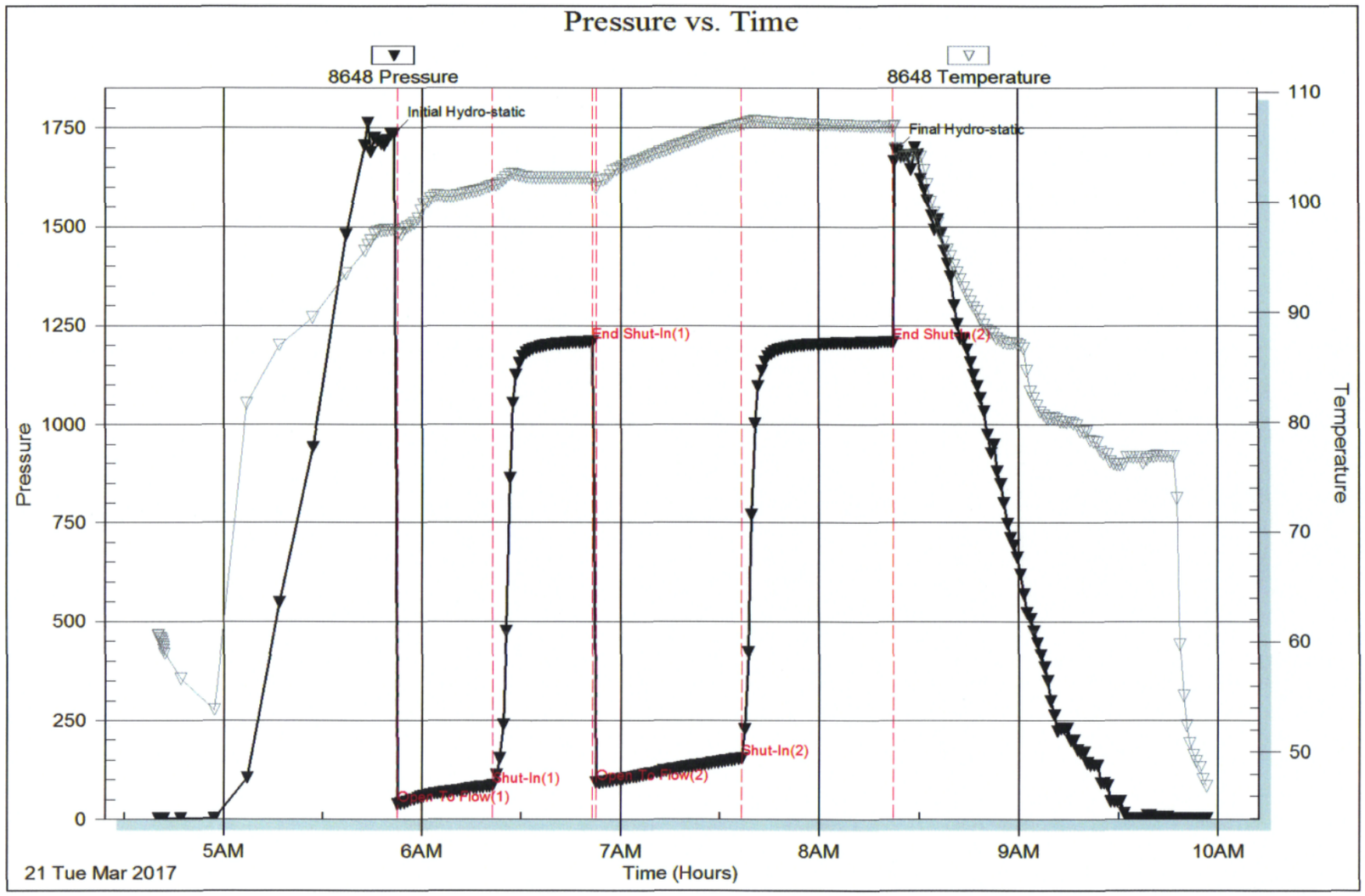
Total Length: 320.00 ft Total Volume: 4.489 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: Recovery Reisistivity .38 ohms @ 54 deg

Serial #: 8648 **Inside** Mai Oil Operations Inc Fischer #1 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 64811 Printed: 2017.03.22 @ 13:44:14

DRILL STEM TEST REPORT

Mai Oil Operations Inc

8411 Preston Rd Suite 800
Dallas TX 75225+5520

ATTN: Wyatt Urban

30-21S-12W Stafford,KS

Fischer #1

Job Ticket: 64812 **DST#: 3**

Test Start: 2017.03.21 @ 16:16:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 17:35:00
Time Test Ended: 21:00:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Ken Swinney
Unit No: 72

Interval: 3564.00 ft (KB) To 3570.00 ft (KB) (TVD)
Total Depth: 3570.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Poor

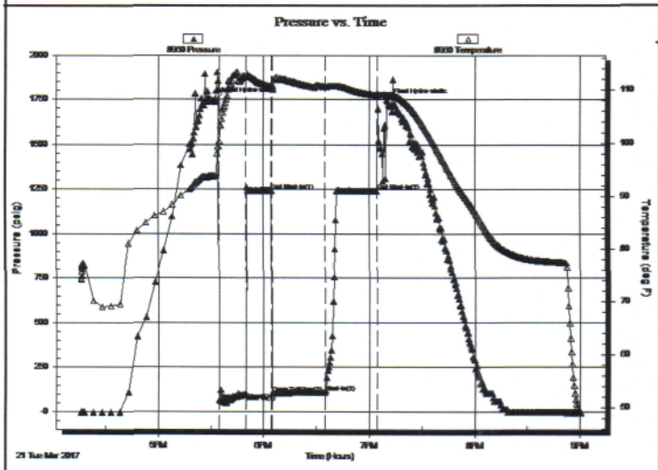
Reference Elevations: 1869.00 ft (KB)
1861.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8960 **Outside**

Press@RunDepth: 1241.93 psig @ 3567.00 ft (KB)
Start Date: 2017.03.21 End Date: 2017.03.21
Start Time: 16:16:05 End Time: 20:59:59

Capacity: 8000.00 psig
Last Calib.: 2017.03.21
Time On Btm: 2017.03.21 @ 17:32:30
Time Off Btm: 2017.03.21 @ 19:10:30

TEST COMMENT: IFP 15 Minutes BOB in 4 1/2 minutes with surging
ISI 15 Minutes Light surface blow back
FFP 30 Minutes Blow built to 3" in 10 minutes then occasional surge throughout
FSI 30 Minutes Light surface blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1747.81	93.84	Initial Hydro-static
3	67.05	100.35	Open To Flow (1)
18	99.44	112.55	Shut-In(1)
32	1243.65	110.67	End Shut-In(1)
33	104.54	110.10	Open To Flow (2)
63	107.85	110.52	Shut-In(2)
92	1241.93	108.93	End Shut-In(2)
98	1739.94	109.05	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
217.00	OCMW Oil 10% Mud 30% Water 60%	3.04
0.00	155' GIP	0.00

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mai Oil Operations Inc

8411 Preston Rd Suite 800
Dallas TX 75225+5520

ATTN: Wyatt Urban

30-21S-12W Stafford,KS

Fischer #1

Job Ticket: 64812 **DST#: 3**

Test Start: 2017.03.21 @ 16:16:00

Tool Information

Drill Pipe:	Length:	3552.00 ft	Diameter:	3.80 inches	Volume:	49.83 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:		85000.00 lb
					Total Volume:	49.83 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		15.00 ft					String Weight:	Initial	44000.00 lb
Depth to Top Packer:		3564.00 ft						Final	46000.00 lb
Depth to Bottom Packer:		ft							
Interval betw een Packers:		6.00 ft							
Tool Length:		33.00 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			3542.00		
Hydraulic tool	5.00			3547.00		
Jars	5.00			3552.00		
Safety Joint	2.00			3554.00		
Top Packer	5.00			3559.00		
Packer	5.00			3564.00	27.00	Bottom Of Top Packer
Anchor	1.00			3565.00		
Recorder	1.00	8648	Inside	3566.00		
Recorder	1.00	8960	Outside	3567.00		
Bullnose	3.00			3570.00	6.00	Anchor Tool
Total Tool Length:	**33.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Mai Oil Operations Inc

8411 Preston Rd Suite 800
Dallas TX 75225+5520

ATTN: Wyatt Urban

30-21S-12W Stafford,KS

Fischer #1

Job Ticket: 64812 **DST#: 3**

Test Start: 2017.03.21 @ 16:16:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	25000 ppm
Viscosity:	50.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.78 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	4000.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
217.00	OCMW Oil 10% Mud 30% Water 60%	3.044
0.00	155' GIP	0.000

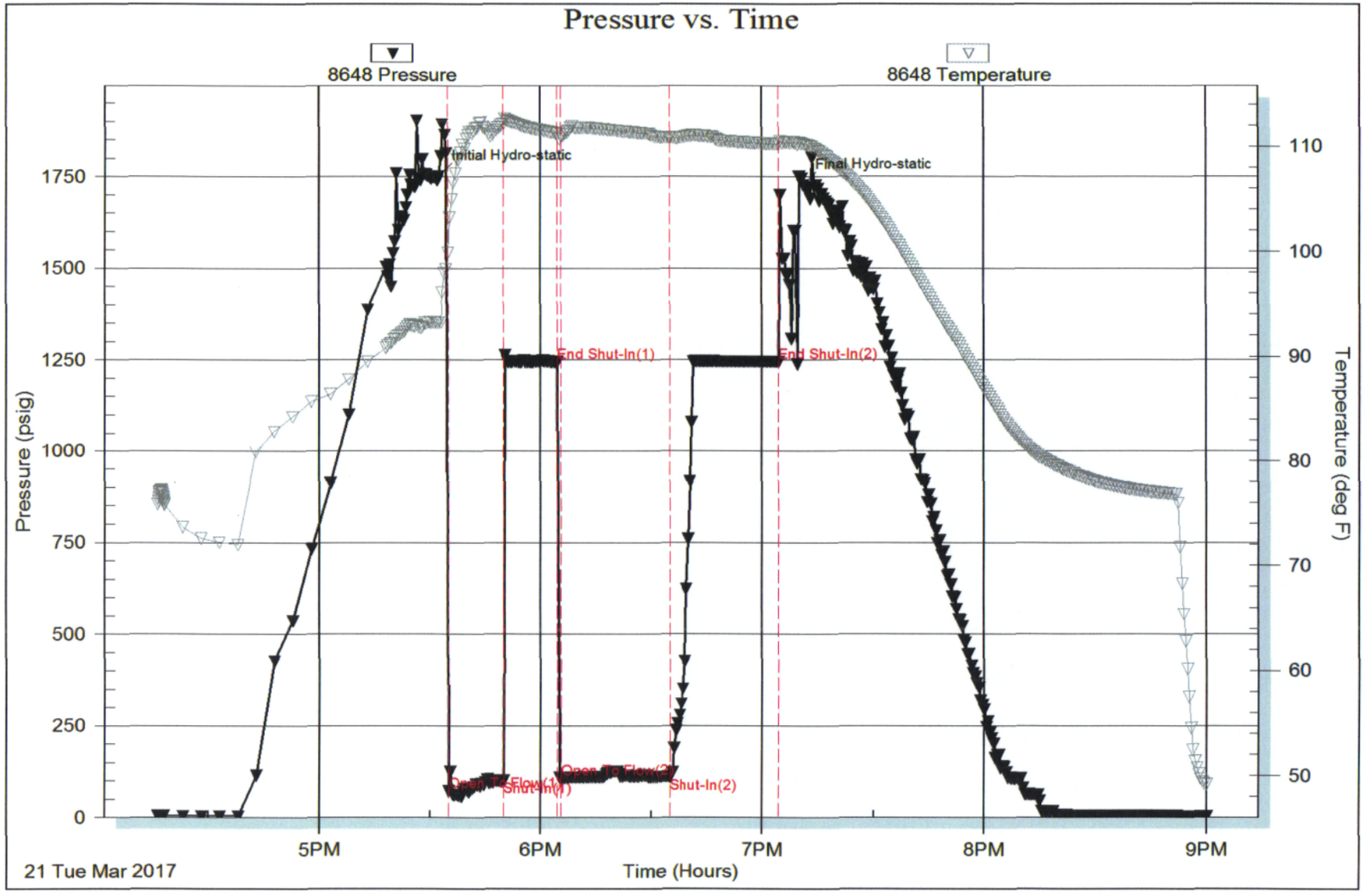
Total Length: 217.00 ft Total Volume: 3.044 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: Recovery Resistivity .343 ohms @ 53 deg

Serial #: 8648 **Inside** Mai Oil Operations Inc Fischer #1 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 64812 Printed: 2017.03.22 @ 13:43:33

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. 1677

Date	Sec.	Twp.	Range	County	State	On Location	Finish
3-17-17	30	21	12	Stafford	Ks		5:15 AM

Location Dartmouth Elevator - 11½ S, ⅛ W

Lease Fischer Well No. 1

Owner S/Into

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 Surface

Hole Size 12¼" T.D. 658'

Charge To Mai oil operations

Csg. 8 5/8" Depth 658'

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. 15' Shoe Joint 15'

Cement Amount Ordered 450 60/40 4% cc 2% Gel

Meas Line Displace 40 3/4 BLS

1/2# Flo-seal

EQUIPMENT

Pumptrk 18 No. Cementer / Helper Travis

Bulktrk 19 No. Driver / Driver Doug

~~Bulktrk~~ P.U. No. Driver / Driver Rick

JOB SERVICES & REMARKS

Remarks: Cement did Circulate

Rat Hole

Mouse Hole

Centralizers

Baskets

D/V or Port Collar

Common	270
Poz. Mix	180
Gel.	9
Calcium	18
Hulls	
Salt	
Flowseal	225#
Kol-Seal	
Mud CLR 48	
CFL-117 or CD110 CAF 38	
Sand	
Handling	472
Mileage	

FLOAT EQUIPMENT

Guide Shoe

Centralizer

Baskets

AFU Inserts

Float Shoe

Latch Down

Pumptrk Charge Long String Surface

Mileage 15

Tax

Discount

Total Charge

X Signature Joey Travis

Quality Oilwell Cementing

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. 1682

Date	Sec.	Twp.	Range	County	State	On Location	Finish
3-22-17	30	21	12	Stafford	Ks		5:15 PM

Location: Dartmouth elevator - 11 1/2 S, 1/4 W, S...

Lease: Fischer	Well No. 1	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: Longstring			
Hole Size: 7 7/8"	T.D. 3660'	Charge To: Mai oil operations	
Csg. 5 1/2" 14# New	Depth 3656'	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. 20.85'	Shoe Joint 20.85'	Cement Amount Ordered 160 60/40 10% Salt 2% Gel 1/4# Fl...	
Meas Line	Displace 88 1/2 BBLS	1000 gal mud Clear 48	

EQUIPMENT

	No.			Item	
Pumptrk 16	No.	Cementer		Common	
		Helper	Travis	Poz. Mix	
Bulktrk 3	No.	Driver		Gel.	
		Driver	Doug	Calcium	
Bulktrk P.U.	No.	Driver		Hulls	
		Driver	Rick	Salt	

JOB SERVICES & REMARKS

Remarks		Item	
Remarks:		Salt	
Rat Hole		Flowseal	
Mouse Hole		Kol-Seal	
Centralizers	1-10	Mud CLR 48	
Baskets	pipe on bottom break Circulation	CFL-117 or CD110 CAF 38	
D/V or Port Collar	pump 1000 gal mud Clear	Sand	
	48 plug Rathole w/ 30 sx. Cement 5 1/2"	Handling	
	Casing w/ 130 sx Cement shut down	Mileage	
	wash pump + lines Released plug	**FLOAT EQUIPMENT**	
	+ Displaced w/ 88 1/2 BBLS	Guide Shoe	
		Centralizer	10
	Released + held	Baskets	
		AFU Inserts	
	Lift pressure 700 #	Float Shoe	1
		Latch Down	1
	Land plug to 1500 #		
		Pumptrk Charge	
		Mileage	
		Tax	
		Discount	
X Signature	[signature]	Total Charge	

Quality Oilwell Cementing