

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	JOE DRISCOLL 9
Doc ID	1607489

Tops

Name	Top	Datum
Anhydrite	691	1153
Topeka	2616	-772
Heebner	2896	-1052
Toronto	2914	-1070
Douglas	2928	-1084
Brown Lime	2986	-1142
Lansing	2999	-1155
Base KC	3265	-1421
Arbuckle	3302	-1458



QUALITY OILWELL CEMENTING, INC.

PO Box 32 - 740 West Wichita Ave, Russell KS 67665
 Phone:785-324-1041 fax:785-483-1087
 Email: cementing@ruraltel.net

Date: 10/19/2021
Invoice # 2474

P.O.#:

Due Date: 11/18/2021

Division: Russell

Invoice

Contact:
 Mai Oil Operations
Address/Job Location:

8411 Preston Rd. Ste 800
 Dallas TX 75225-5520

Reference:
 JOE DRISCOL 9 SEC 31-15-11

Description of Work:
 LONG SURFACE JOB

Services / Items Included:	Quantity	Price	Taxable	Item	Quantity	Price	Taxable
Labor		\$ 684.02	No				
Common-Class A	165	\$ 2,605.90	Yes				
POZ Mix-Standard	110	\$ 590.33	Yes				
Calcium Chloride	12	\$ 515.20	Yes				
Bulk Truck Matl-Material Service Charge	292	\$ 223.87	No				
Premium Gel (Bentonite)	5	\$ 111.17	Yes				
8 5/8" Top Rubber Plug	1	\$ 93.53	Yes				
Pump Truck Mileage-Job to Nearest Camp	27	\$ 93.15	No				
Bulk Truck Mileage-Job to Nearest Bulk Plant	27	\$ 72.45	No				

Invoice Terms:

Net 30

SubTotal: \$ 4,989.62
 Discount Available ONLY if Invoice is Paid & Received
 within listed terms of invoice: \$ (124.74)

SubTotal for Taxable Items: \$ 3,818.23
 SubTotal for Non-Taxable Items: \$ 1,046.65

8.50% Russell County Sales Tax

Total: \$ 4,864.88
 Tax: \$ 324.55
Amount Due: \$ 5,189.43
Applied Payments:
Balance Due: \$ 5,189.43

Thank You For Your Business!

Past Due Invoices are subject to a service charge (annual rate of 24%)
 This does not include any applicable taxes unless it is listed.
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QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-1071
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. **2474**

Date	10/19/21	Sec.	31	Twp.	15	Range	11	County	Russell	State	Kansas	On Location	Finish	8:30am
Location								Russell 105 to Michaelis Rd 12E Sinto						

Lease	Joe Driscoll	Well No.	9	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.
Contractor	Southwind				
Type Job	Surface				
Hole Size	12 1/4	T.D.	706	Charge To	Mat 0.1
Csg.	8 5/8	Depth	706	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.	27'	Shoe Joint	23'	Cement Amount Ordered	275 @ 4% DC 2% gel
Meas Line		Displace	43 1/4		

EQUIPMENT

Pumptrk	18	No.	Cementer	Dave	Common	165
			Helper		Poz. Mix	110
Bulktrk	9	No.	Driver	Doug	Gel.	5
			Driver		Calcium	12
Bulktrk	14	No.	Driver	David		

JOB SERVICES & REMARKS

Remarks:		Hulls	
Rat Hole		Salt	
Mouse Hole		Flowseal	
Centralizers		Kol-Seal	
Baskets		Mud CLR 48	
D/V or Port Collar		CFL-117 or CD110 CAF 38	
		Sand	

Ran 8 5/8 and est. circulation Handling 292

Cemented with 275 sks and displaced

Cement Did Circulate

FLOAT EQUIPMENT

	Guide Shoe
	Centralizer
	Baskets
	AFU Inserts
	Float Shoe
	Latch Down
	Rubber plug

Pumptrk Charge Long Surface
Mileage 27

Signature: *Frank J. Row* Thanks
Tax Discount
Total Charge



QUALITY OILWELL CEMENTING, INC.
 PO Box 32 - 740 West Wichita Ave, Russell KS 67665
 Phone:785-324-1041 fax:785-483-1087
 Email: cementing@ruraltel.net

Date: 10/24/2021
Invoice # 2575

P.O.#:
Due Date: 11/23/2021
Division: Russell

Invoice

Contact:
 Mai Oil Operations
Address/Job Location:

8411 Preston Rd. Ste 800
 Dallas TX 75225-5520

Reference:
 JOE DRISCOLL 9 SEC31-15-11

Description of Work:
 PROD STRING

Services / Items Included:	Quantity	Price	Taxable	Item	Quantity	Price	Taxable
Labor		\$ 684.02	No	Bulk Truck Mileage-Job to Nearest Bulk Plant	27	\$72.45	No
Common-Class A	96	\$ 1,516.16	Yes	Premium Gel (Bentonite)	3	\$66.70	Yes
Mud Clear	1000	\$ 1,119.33	Yes				
5 1/2" Turbolizer	11	\$ 607.20	Yes				
POZ Mix-Standard	64	\$ 343.47	Yes				
Auto Fill Float Shoe, 5 1/2"	1	\$ 257.60	Yes				
5 1/2" Basket	1	\$ 214.67	Yes				
Latch Down Plug & Baffle, 5 1/2"	1	\$ 203.93	Yes				
Salt (Fine)	13	\$ 130.56	Yes				
Bulk Truck Matl-Material Service Charge	176	\$ 134.93	No				
Pump Truck Mileage-Job to Nearest Camp	27	\$ 93.15	No				

SubTotal: \$ 5,444.18

Discount Available ONLY if Invoice is Paid & Received within listed terms of invoice: \$ (136.10)

SubTotal for Taxable Items: \$ 4,348.13

SubTotal for Non-Taxable Items: \$ 959.94

Total: \$ 5,308.08

Tax: \$ 369.59

8.50% Russell County Sales Tax

Amount Due: \$ 5,677.67

Applied Payments:

Balance Due: \$ 5,677.67

Thank You For Your Business!

Past Due Invoices are subject to a service charge (annual rate of 24%)
 This does not include any applicable taxes unless it is listed.
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QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-1071
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 2575

Date	10-24-21	Sec.	31	Twp.	15	Range	11	County	Russell	State	Ks	On Location		Finish	11:30pm
								Location	Russell 10S 14E						

Lease	Joe Driscoll	Well No.	9	Owner	To Quality Oilwell Cementing, Inc.
Contractor	Southwind	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	Charge To	MAI OIL
Hole Size	7 7/8	T.D.	3397

Csg.	5 1/2 14"	Depth		Street	
Tbg. Size		Depth		City	State

Tool		Depth		The above was done to satisfaction and supervision of owner agent or contractor.	
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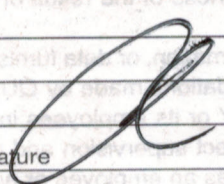
Cement Left in Csg.	28.4'	Shoe Joint	28.4'	Cement Amount Ordered	160# 6/40 10% 50#
Meas Line		Displace	81.89	500 GSI Flush	2% bel 1/4" # F10 seal

EQUIPMENT			Common	96
Pumptrk	18	No.	Cementer	Bill
			Helper	Dave
Bulktrk		No.	Driver	
			Driver	
Bulktrk	14	No.	Driver	Jordan
			Driver	
			Poz. Mix	64
			Gel.	3
			Calcium	

JOB SERVICES & REMARKS

Remarks:		Hulls	
Rat Hole	30	Salt	13
Mouse Hole	15	Flowseal	50#
Centralizers		Kol-Seal	
Baskets		Mud CLR 48	1000 gal
D/V or Port Collar		CFL-117 or CD110 CAF	38
pipe set	3384.79	Sand	
Shoe jt	28.41	Handling	176
Insert	3356.30	Mileage	

FLOAT EQUIPMENT	
pump 500gal Flush	Guide Shoe
Cent w/ 11sal	Centralizer
Pump plus w/ 81.89	Baskets
Land Plug 1200	AFU Inserts
Float did hold	Float Shoe
	Latch Down

Pumptrk Charge	prod string	Tax	
Mileage	27	Discount	
		Total Charge	
<p>Thanks</p>			



DRILL STEM TEST REPORT

Prepared For: **Mai Oil Operations, Inc.**

8411 Preston Rd Ste 800
Dallas, TX 75225

ATTN: Kim Shoemaker

Joe Driscoll #9

31-15s-11w Russell,KS

Start Date: 2021.10.22 @ 11:08:00

End Date: 2021.10.22 @ 18:38:02

Job Ticket #: 67643 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2021.10.25 @ 16:49:41



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Mai Oil Operations, Inc.

31-15s-11w Russell,KS

8411 Preston Rd Ste 800
Dallas, TX 75225

Joe Driscoll #9

Job Ticket: 67643

DST#: 1

ATTN: Kim Shoemaker

Test Start: 2021.10.22 @ 11:08:00

GENERAL INFORMATION:

Formation: **Lansing C**

Deviated: No Whipstock: 1844.00 ft (KB)

Time Tool Opened: 13:30:17

Time Test Ended: 18:38:02

Test Type: Conventional Bottom Hole (Initial)

Tester: Chris Hagman

Unit No: 69

Interval: 3014.00 ft (KB) To 3040.00 ft (KB) (TVD)

Reference Elevations: 1844.00 ft (KB)

Total Depth: 3040.00 ft (KB) (TVD)

1832.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 12.00 ft

Serial #: 8672 Inside

Press@RunDepth: 122.49 psig @ 3017.00 ft (KB)

Capacity: psig

Start Date: 2021.10.22

End Date: 2021.10.22

Last Calib.: 1899.12.30

Start Time: 11:08:01

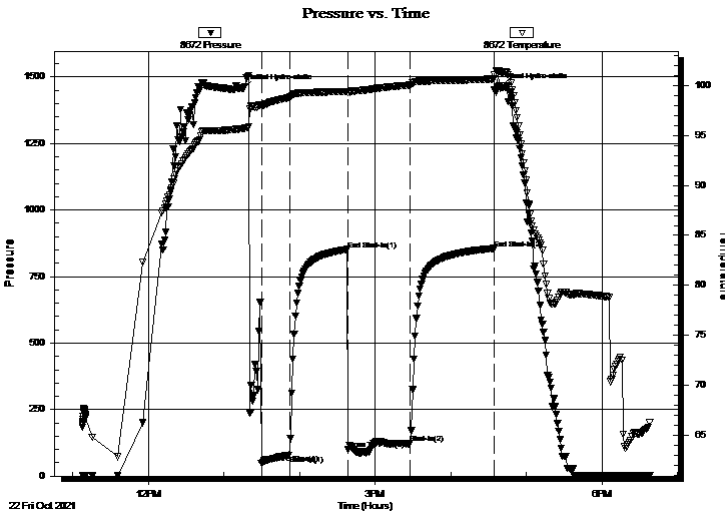
End Time: 18:38:02

Time On Btm: 2021.10.22 @ 13:16:02

Time Off Btm: 2021.10.22 @ 16:39:17

TEST COMMENT: IF: 30 min., BOB ASAO, strong building blow, 700 inches
IS: 45 min., No blow back, GTS when vented
FF: 45 min., BOB GTS ASAO, strong building blow
FS: 60 min., No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1455.26	95.71	Initial Hydro-static
15	48.83	97.99	Open To Flow (1)
36	78.02	98.81	Shut-In(1)
82	851.51	99.40	End Shut-In(1)
83	99.48	99.29	Open To Flow (2)
132	122.49	100.06	Shut-In(2)
199	855.58	100.71	End Shut-In(2)
204	1458.46	101.36	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
175.00	gassy watery mud 5%G,15%W,80%M	2.45
0.00	2837' GIP	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (MMcf/d)
First Gas Rate	0.13	21.00	0.01
Last Gas Rate	0.13	27.00	0.02
Max. Gas Rate	0.13	27.00	0.02



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Mai Oil Operations, Inc.
8411 Preston Rd Ste 800
Dallas, TX 75225
ATTN: Kim Shoemaker

31-15s-11w Russell,KS

Joe Driscoll #9

Job Ticket: 67643

DST#: 1

Test Start: 2021.10.22 @ 11:08:00

GENERAL INFORMATION:

Formation: **Lansing C**

Deviated: No Whipstock: 1844.00 ft (KB)

Time Tool Opened: 13:30:17

Time Test Ended: 18:38:02

Test Type: Conventional Bottom Hole (Initial)

Tester: Chris Hagman

Unit No: 69

Interval: **3014.00 ft (KB) To 3040.00 ft (KB) (TVD)**

Total Depth: 3040.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 1844.00 ft (KB)

1832.00 ft (CF)

KB to GR/CF: 12.00 ft

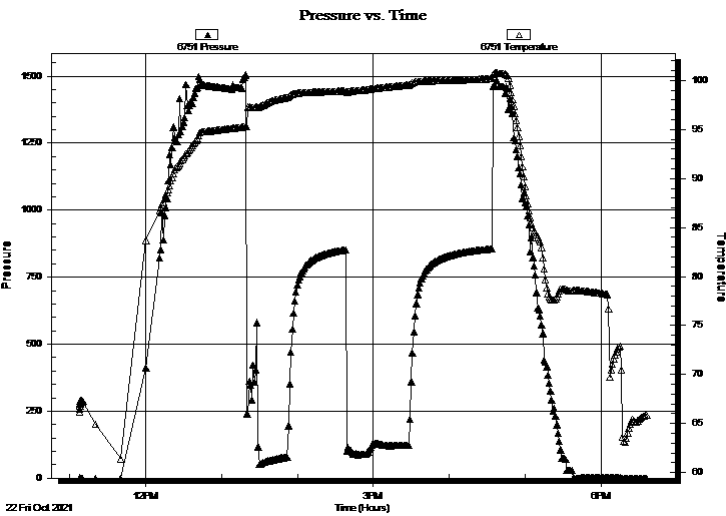
Serial #: 6751

Press@RunDepth: psig @ ft (KB)

Start Date: 2021.10.22 End Date: 2021.10.22 Capacity: psig
Last Calib.: 1899.12.30

Start Time: 11:08:01 End Time: 18:36:02 Time On Btm:
Time Off Btm:

TEST COMMENT: IF: 30 min., BOB ASAO, strong building blow , 700 inches
IS: 45 min., No blow back, GTS when vented
FF: 45 min., BOB GTS ASAO, strong building blow
FS: 60 min., No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
175.00	gassy watery mud 5%G,15%W,80%M	2.45
0.00	2837' GIP	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (MMcf/d)
First Gas Rate	0.13	21.00	0.01
Last Gas Rate	0.13	27.00	0.02
Max. Gas Rate	0.13	27.00	0.02



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mai Oil Operations, Inc.

31-15s-11w Russell,KS

8411 Preston Rd Ste 800
Dallas, TX 75225

Joe Driscoll #9

Job Ticket: 67643

DST#: 1

ATTN: Kim Shoemaker

Test Start: 2021.10.22 @ 11:08:00

Tool Information

Drill Pipe:	Length: 3012.00 ft	Diameter: 3.80 inches	Volume: 42.25 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: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 42.25 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	3014.00 ft			Final 45000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	26.00 ft			
Tool Length:	55.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			2990.00	
Hydraulic tool	5.00			2995.00	
EM tool	3.00			2998.00	
Jars	5.00			3003.00	
Safety Joint	2.00			3005.00	
Packer	5.00			3010.00	29.00 Bottom Of Top Packer
Packer	4.00			3014.00	
Stubb	1.00			3015.00	
Perforations	2.00			3017.00	
Recorder	0.00	8672	Inside	3017.00	
Recorder	0.00	6751	Outside	3017.00	
Perforations	20.00			3037.00	
Bullnose	3.00			3040.00	26.00 Bottom Packers & Anchor

Total Tool Length: 55.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Mai Oil Operations, Inc.

31-15s-11w Russell,KS

8411 Preston Rd Ste 800
Dallas, TX 75225

Joe Driscoll #9

Job Ticket: 67643

DST#: 1

ATTN: Kim Shoemaker

Test Start: 2021.10.22 @ 11:08:00

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:

28000 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
175.00	gassy watery mud 5%G,15%W,80%M	2.455
0.00	2837' GIP	0.000

Total Length: 175.00 ft Total Volume: 2.455 bbl

Num Fluid Samples: 1

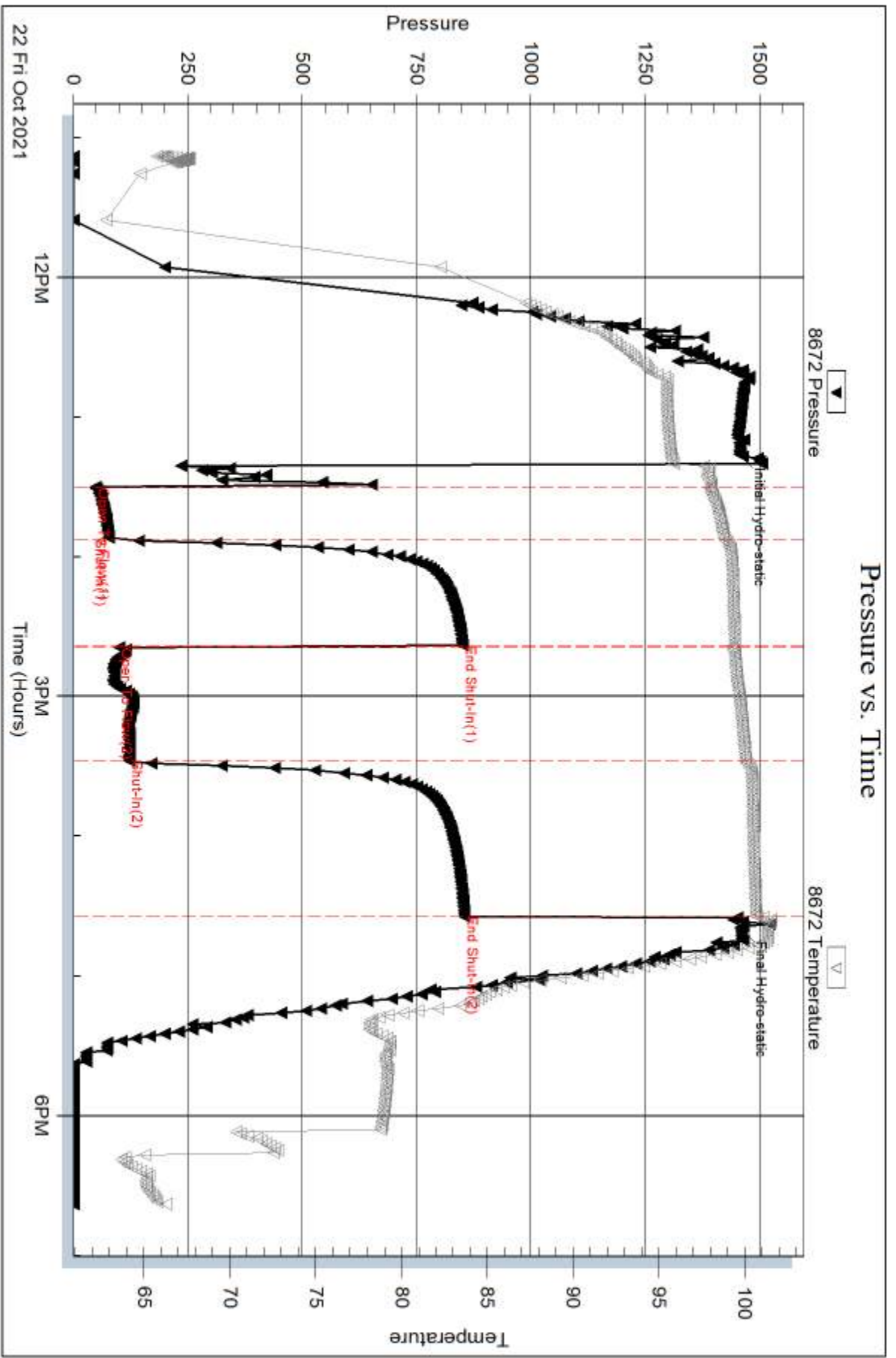
Num Gas Bombs: 1

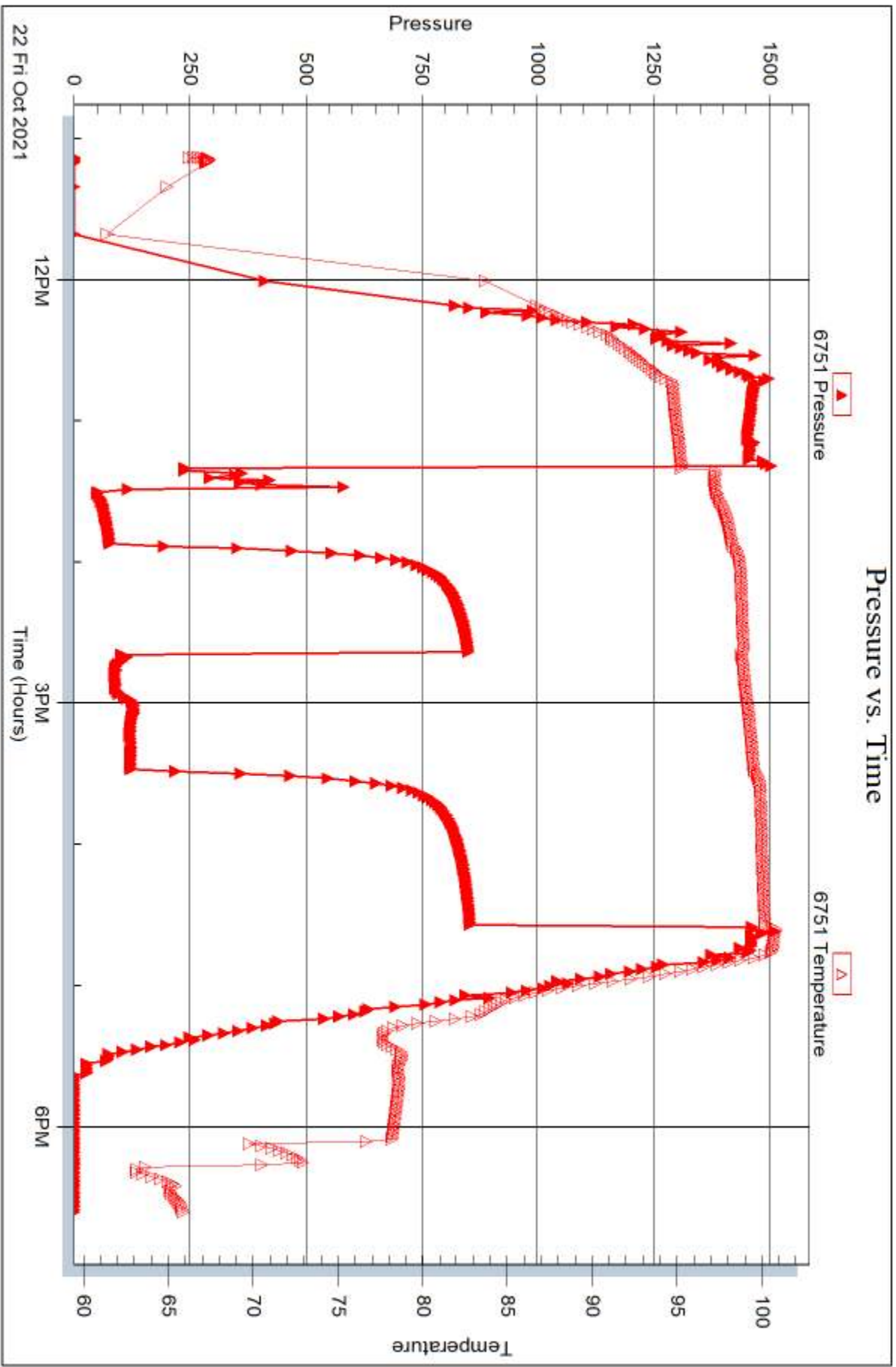
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW= .222@72F=28000ppm







DRILL STEM TEST REPORT

Prepared For: **Mai Oil Operations, Inc.**

8411 Preston Rd Ste 800
Dallas, TX 75225

ATTN: Kim Shoemaker

Joe Driscoll #9

31-15s-11w Russell,KS

Start Date: 2021.10.24 @ 16:33:00

End Date: 2021.10.25 @ 00:23:02

Job Ticket #: 67644 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2021.10.25 @ 16:43:22



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Mai Oil Operations, Inc.

31-15s-11w Russell,KS

8411 Preston Rd Ste 800
Dallas, TX 75225

Joe Driscoll #9

Job Ticket: 67644

DST#: 2

ATTN: Kim Shoemaker

Test Start: 2021.10.24 @ 16:33:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: 1844.00 ft (KB)

Time Tool Opened: 18:09:32

Time Test Ended: 00:23:02

Test Type: Conventional Bottom Hole (Initial)

Tester: Chris Hagman

Unit No: 69

Interval: 3263.00 ft (KB) To 3315.00 ft (KB) (TVD)

Reference Elevations: 1844.00 ft (KB)

Total Depth: 3315.00 ft (KB) (TVD)

1832.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 12.00 ft

Serial #: 8672 Inside

Press@RunDepth: 557.85 psig @ 3265.00 ft (KB)

Capacity: psig

Start Date: 2021.10.24

End Date:

2021.10.25

Last Calib.:

2021.10.25

Start Time: 16:33:01

End Time:

00:23:02

Time On Btm:

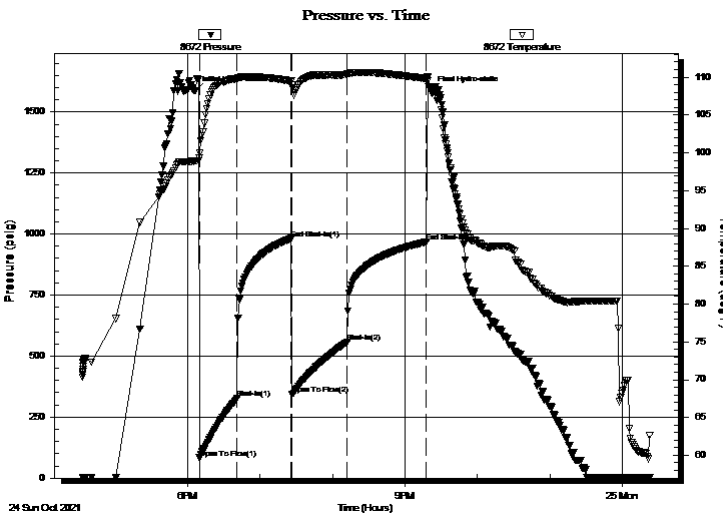
2021.10.24 @ 18:06:17

Time Off Btm:

2021.10.24 @ 21:21:17

TEST COMMENT: IF: 30 min., BOB 1 min., strong building blow , 132"
IS: 45 min., No blow back
FF: 45 min., BOB 3 min., strong building blow , 127"
FS: 60 min., No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1588.16	98.91	Initial Hydro-static
4	83.10	99.34	Open To Flow (1)
35	327.70	109.82	Shut-In(1)
80	981.21	109.47	End Shut-In(1)
81	342.61	109.01	Open To Flow (2)
126	557.85	110.40	Shut-In(2)
192	967.55	109.80	End Shut-In(2)
195	1585.46	108.45	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1480.00	gassy oil 5%G, 95%O	20.76
63.00	100% GIP	0.88

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mai Oil Operations, Inc.

31-15s-11w Russell,KS

8411 Preston Rd Ste 800
Dallas, TX 75225

Joe Driscoll #9

Job Ticket: 67644

DST#: 2

ATTN: Kim Shoemaker

Test Start: 2021.10.24 @ 16:33:00

Tool Information

Drill Pipe:	Length: 3266.00 ft	Diameter: 3.80 inches	Volume: 45.81 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: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 45.81 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	32.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	3263.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	52.00 ft			
Tool Length:	81.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3239.00	
Hydraulic tool	5.00			3244.00	
EM Isolator	3.00			3247.00	
Jars	5.00			3252.00	
Safety Joint	2.00			3254.00	
Packer	5.00			3259.00	29.00 Bottom Of Top Packer
Packer	4.00			3263.00	
Stubb	1.00			3264.00	
Perforations	1.00			3265.00	
Recorder	0.00	8672	Inside	3265.00	
Recorder	0.00	6751	Outside	3265.00	
Perforations	13.00			3278.00	
Change Over Sub	1.00			3279.00	
Drill Pipe	32.00			3311.00	
Change Over Sub	1.00			3312.00	
Bullnose	3.00			3315.00	52.00 Bottom Packers & Anchor
Total Tool Length:	81.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Mai Oil Operations, Inc.

31-15s-11w Russell,KS

8411 Preston Rd Ste 800
Dallas, TX 75225

Joe Driscoll #9

Job Ticket: 67644

DST#: 2

ATTN: Kim Shoemaker

Test Start: 2021.10.24 @ 16:33:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

35 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 62.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.19 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
1480.00	gassy oil 5%G, 95%O	20.761
63.00	100% GIP	0.884

Total Length: 1543.00 ft Total Volume: 21.645 bbl

Num Fluid Samples: 0

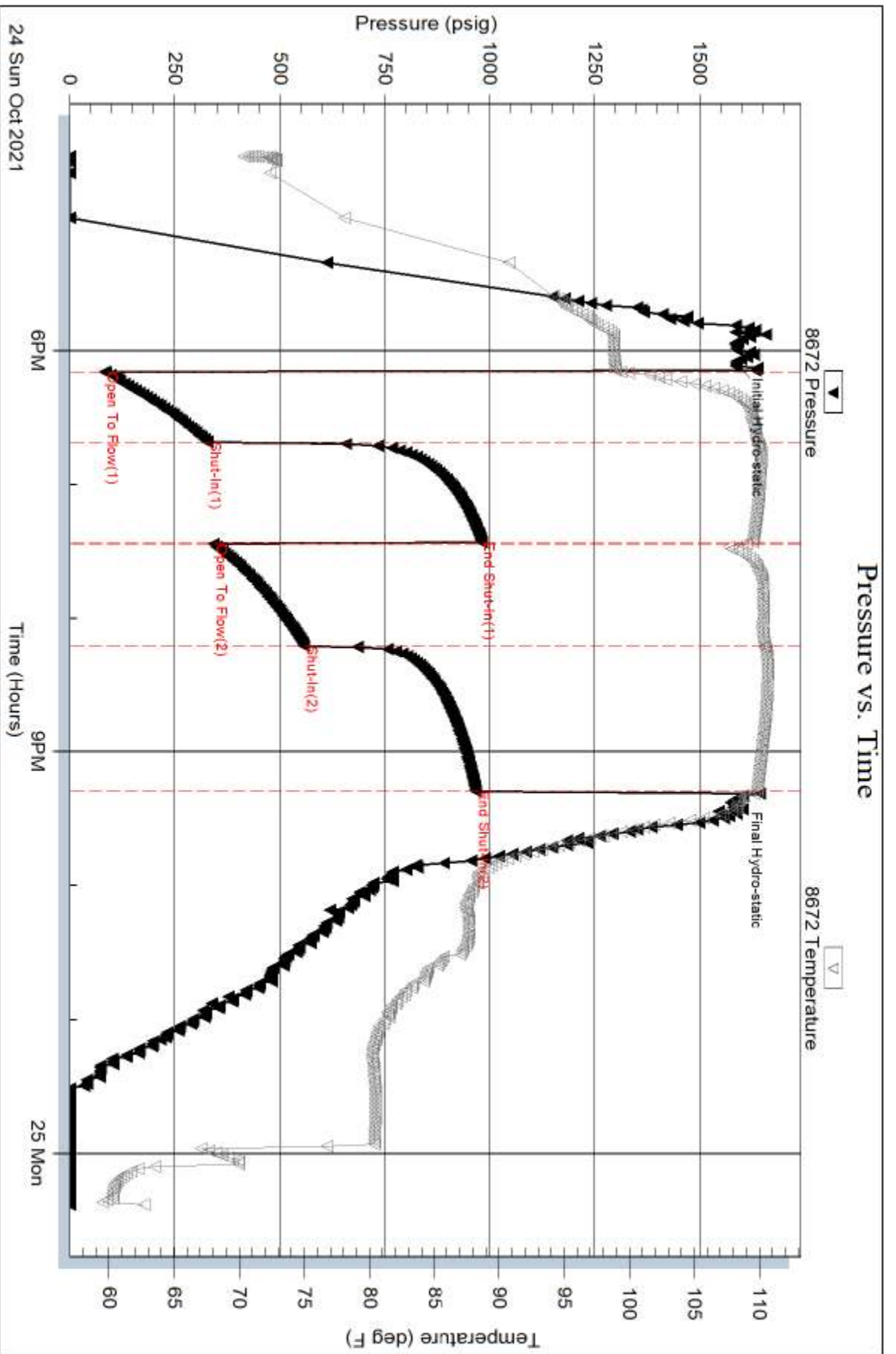
Num Gas Bombs: 0

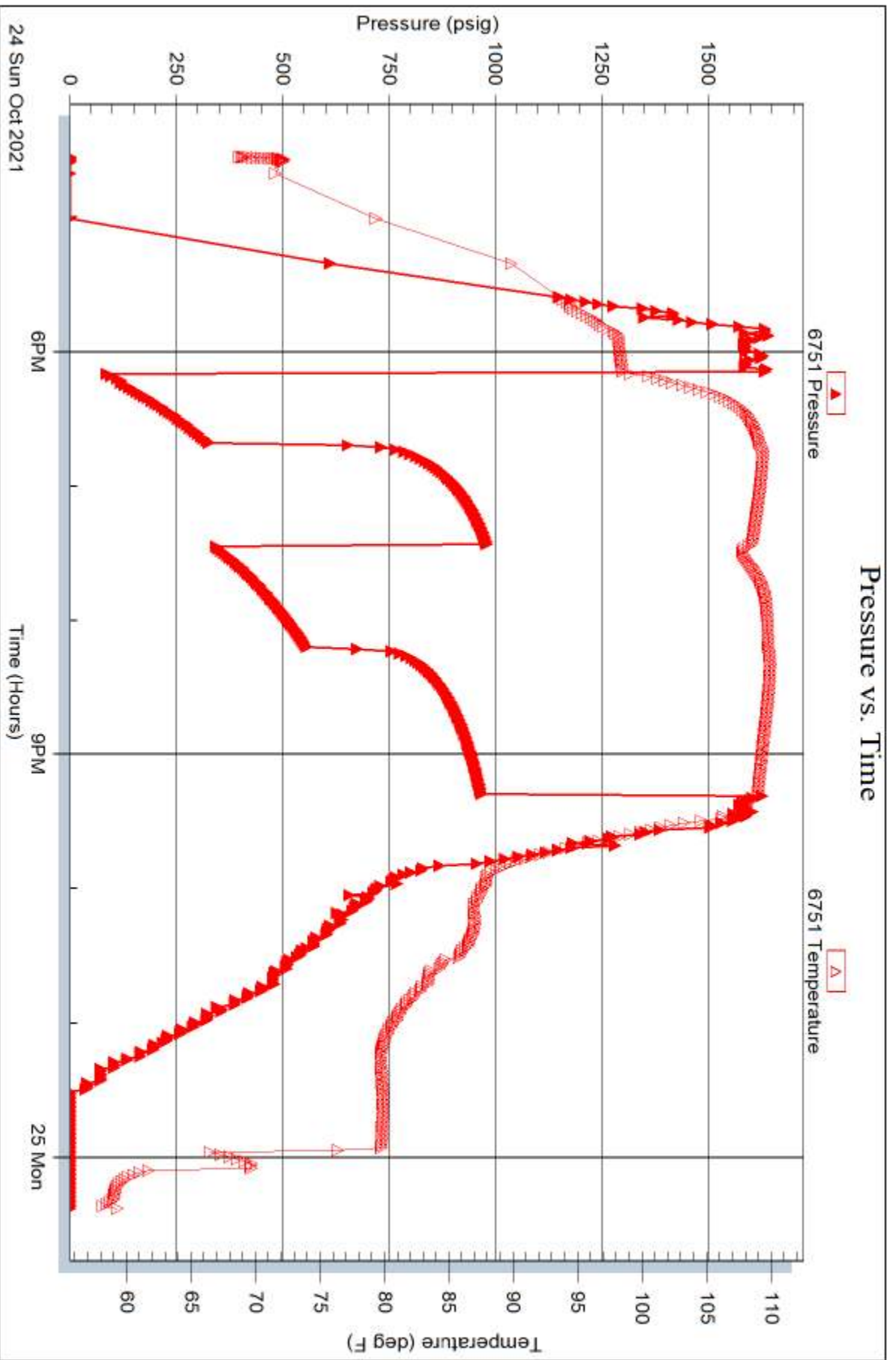
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: API=35@62F=35







TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **67643**

Well Name & No. Joe Driscoll #9 Test No. 1 Date 10-22-21
 Company Mai Oil Operations, Inc. Elevation 1844 KB 1832 GL
 Address 8411 Preston Rd STE 800 Dallas, TX 75275
 Co. Rep / Geo. Kim Shoemaker Rig Southwind #1
 Location: Sec. 31 Twp 15 Rge. 11 Co. Russell State KS

Interval Tested ~~3014-3040~~ 3014-3040 Zone Tested Lansing C
 Anchor Length 26' Drill Pipe Run 3012 Mud Wt. 9.2
 Top Packer Depth 3009 Drill Collars Run 0 Vis 51
 Bottom Packer Depth 3014 Wt. Pipe Run N.A. WL 8.8
 Total Depth 3040 Chlorides 2000 ppm System LCM 1#

Blow Description IF: 30 min., BOB ASAO, strong building blow, 700 inches
TSI: 45 min., No blow back, GTS when vented
FF: 45 min., BOB GTS ASAO, strong building blow
EST: 60 min., No blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>175</u>	<u>gassy water mud</u>	<u>5</u>		<u>15</u>	<u>80</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 175 BHT 100 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic <u>1455</u>	<input checked="" type="checkbox"/> Test <u>CONV.</u> 1300	T-On Location <u>1000</u>
(B) First Initial Flow <u>49</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>1115</u>
(C) First Final Flow <u>78</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>1320</u>
(D) Initial Shut-In <u>852</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>1630</u>
(E) Second Initial Flow <u>99</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>1830</u>
(F) Second Final Flow <u>122</u>	<input checked="" type="checkbox"/> Mileage <u>X 100</u> 125	Comments <u>Rt @ 1108</u>
(G) Final Shut-In <u>856</u>	<input type="checkbox"/> Sampler _____	<u>EM @ 1025</u>
(H) Final Hydrostatic <u>1458</u>	<input type="checkbox"/> Straddle _____	<input checked="" type="checkbox"/> EM Tool <u>350</u>
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Ruined Shale Packer _____
Initial Shut-In <u>45</u>	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Ruined Packer _____
Final Flow <u>45</u>	<input type="checkbox"/> Extra Recorder _____	<input type="checkbox"/> Extra Copies _____
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby _____	Sub Total <u>350</u>
	<input type="checkbox"/> Accessibility _____	Total <u>2100</u>
	Sub Total <u>1750</u>	MP/DST Disc't _____

Approved By _____ Our Representative Chris Hayton

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRIBOLITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 67644

Well Name & No. Joe Driscoll #19 Test No. 2 Date 10-23-21
 Company Man Oil Operations, Inc. Elevation 1844 KB 1832 GL
 Address 8411 Preston Rd. STE 800 Dallas, Tx 75225
 Co. Rep / Gen. Kim Shoemaker Rig Southwind #1
 Location: Sec. 31 Twp 15 Rge. 11 Co. Russell State KS

Interval Tested 3263-3315 Zone Tested Arbuckle
 Anchor Length 52 Drill Pipe Run 3266 Mud Wt. 9.4
 Top Packer Depth 3258 Drill Collars Run Ø Vis 6.2
 Bottom Packer Depth 3263 Wt. Pipe Run N.A. WL 9.2
 Total Depth 3315 Chlorides 3000 ppm System LCM 2.2

Blow Description IF: 30 min, BOB 1 min, strong building blow, 132 inches
IS: 45 min, No blow back
FP: 45 min, BOB 3 min, strong building blow, 127 inches
FS: 60 min, No blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>1480</u>	<u>gassy oil</u>	<u>5</u>	<u>95</u>		
<u>63</u>	<u>gas</u>	<u>100</u>			

Rec Total 1480 BHT 110 Gravity 35 API RW Ø @ Ø F Chlorides Ø ppm

(A) Initial Hydrostatic 1588 Test CONV. 1300 T-On Location 1600
 (B) First Initial Flow 83 Jars 250 T-Started 1630
 (C) First Final Flow 328 Safety Joint 75 T-Open 1810
 (D) Initial Shut-In 981 Circ Sub _____ T-Pulled 2110
 (E) Second Initial Flow 343 Hourly Standby _____ T-Out 2400
 (F) Second Final Flow 558 Mileage X 100 125 Comments bats on @ 1633
 (G) Final Shut-In 968 Sampler _____ EM Tool = 1635
 (H) Final Hydrostatic 1585 Straddle _____

Initial Open 30 Shale Packer _____ EM Tool 350
 Initial Shut-In 45 Extra Packer _____ Ruined Shale Packer _____
 Final Flow 45 Extra Recorder _____ Ruined Packer _____
 Final Shut-In 60 Day Standby _____ Sub Total 350
 Accessibility _____ Total 2100
 Sub Total 1750 MP/DST Disc't _____

Approved By _____ Our Representative Chris Ingram

Tribolite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

JAMES C. MUSGROVE

Petroleum Geologist, LLC

212 Main Street

P.O. Box 215

Clafin, KS 67525

Office (620) 588-4250

Res. Clafin (620) 786-0839

Mai Oil Operations, Inc.
Joe Driscoll #9
NE-NW-SW-NW (1640' FNL & 645'FWL)
Section 31-15s-11w
Russell County, Kansas

Page 1

5 1/2" Production Casing Set

Contractor: Southwind Drilling Co. (rig #1)
Commenced: October 18, 2021
Completed: October 24, 2021
Elevation: 1844' K.B., 1842' D.F., 1834' G.L.
Casing program: Surface; 8 5/8" @ 706'
Production, 5 1/2" @ 3395
Sample: Samples saved and examined 2550' to the Rotary Total Depth.
Drilling time: One (1) foot drilling time recorded and kept 2550' 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; Dual Induction, Compensated Density/Neutron Log, and Micro Log

<u>Formation</u>	<u>Log Depth</u>	<u>Sub-Sea Datum</u>
Anhydrite	691	+1153
Base Anhydrite	719	+1125
Topeka	2616	-772
Heebner	2896	-1052
Toronto	2914	-1070
Douglas	2928	-1084
Brown Lime	2986	-1142
Lansing	2999	-1155
Base Kansas City	3265	-1421
Arbuckle	3302	-1458
Rotary Total Depth	3397	-1553
Log Total Depth	3397	-1553

(All tops and zone(s) corrected to Electric Log Measurements)

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

TOPEKA SECTION

2824-2832' Limestone, gray, slightly fossiliferous, poor visible porosity, spotty light brown stain, very slight show of free oil and no odor.

2841-2850' Limestone, tan, white, slightly oolitic, fossiliferous, fair vuggy porosity; black dead stain, very slight show of free oil, trace gas, very faint odor.

TORONTO SECTION

2904-2911' Limestone, white, slightly fossiliferous, slightly cherty, poor visible porosity, trace brown spotted stain, trace of free oil and no fluorescence, no odor.

LANSING SECTION

3001-3006' Limestone, white, tan, slightly fossiliferous, slightly cherty, poor visible porosity, spotted light brown stain, very slight show of free oil and very faint odor.

3024-3038' Limestone, tan, light brown, oolitic, oomoldic, good oomoldic porosity, brown spotted stain and saturation, slight show of free oil, dull fluorescence, and fair odor.

Drill Stem Test #1

3014-3040'

Times: 30-45-45-60

Blow: Strong; BOB immediately gas to surface, into 1st shut in

2nd Opening: gas to surface as follow:

10 mins	1,000	cfgpd
20 mins	2,000	cfgpd
30 mins	2,000	cfgpd
40 mins	2,000	cfgpd

Recovery: 2837' gas in pipe
175' gassy watery mud
(5% gas; 15% water; 80% mud)

Pressures: ISIP 851 psi
FSIP 856 psi
IFP 49-78 psi
FFP 99-122 psi
HSH 1455-1459 psi

3051-3080' Limestone, brown and gray; oolitic/fossiliferous, poor visible porosity, scatter brown stain, trace of free oil; no flur, no odor.

3090-3100' Limestone, tan, white; oomoldic, good oomoldic porosity; spotted brown stain; very slight show of free oil; very slight show of gas, dull flur; faint odor.

3100-3120' Limestone, white, tan; oomoldic (barren)

3140-3150' Limestone, white, slightly fossiliferous, slightly fossiliferous, slightly chalky.

3162-3166' Limestone, white, oolitic; very slightly chalky, poor visible porosity, brown scattered to dead stain, very slight show of free oil, dull flur; no odor.

- 3172-3178' Limestone, tan, oolitic, slightly cherty.
- 3181-3192' Limestone, tan, slightly fossiliferous, slightly cherty; very slightly calcitic.
- 3200-3210' Limestone, light gray, oolitic; no visible porosity, light brown spotted stain, trace of free oil, dull flur; no odor.
- 3220-3230' Limestone, white, slightly oolitic; poor visible porosity, brown to black (dead) stain, very slight show of free oil and faint odor.
- 3250-3266' Limestone, gray, slightly fossiliferous.

ARBUCKLE SECTION

- 3302-3305' Dolomite, light gray; medium crystalline, no shows.
- 3305-3315' Dolomite, white; light gray, medium to coarse crystalline, fair inter-crystalline porosity, light brown spotted stain and saturation; very slight show of free oil; fair flur; fair to good odor.

Drill Stem Test #2

3263-3315'

Times: 30-45-45-60

Blow: Strong; (BOB 1 min)

2nd Opening: Strong; (BOB 3 min)

**Recovery: 63' gas in pipe
1480' gassy oil**

**Pressures: ISIP 981 psi
FSIP 968 psi
IFP 83-328 psi
FFP 343-558 psi
HSH 1588-1586 psi**

- 3315-3322' Dolomite, white, gray, coarse crystalline, poor inter-crystalline porosity, spotted brown stain and saturation, very slight show of free oil, fair flur; faint odor.
- 3322-3331' Dolomite, light gray, white, coarse crystalline, fair inter-crystalline porosity, black stain, very slight show of free oil; dull flur; faint odor.
- 3331-3350' Dolomite, light gray, coarse crystalline, no shows.
- 3350-3360' Dolomite, light gray, coarse crystalline, slightly cherty, trace glauconitic.
- 3360-3370' Dolomite, gray, coarse crystalline.
- 3370-3390' Dolomite, gray, light gray, coarse crystalline with glauconitic.
- 3390-3397' Dolomite, white, coarse crystalline, slightly cherty; with glauconitic.

Mai Oil Operations, Inc.
Joe Driscoll #9
NE-NW-SW-NW (1640' FNL & 645'FWL)
Section 31-15s-11w
Russell County, Kansas

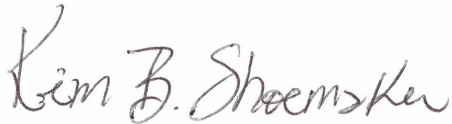
Page 4

Rotary Total Depth: 3397 (-1553)
Log Total Depth: 3397 (-1553)

Recommendations:

5 ½" production casing was set and cemented on the Mai Operations Oil Inc., Joe Driscoll #9.

Respectfully yours,



Kim B. Shoemaker
Petroleum Geologist

