

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 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](mailto: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) (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	M G Oil Inc
Well Name	LAWRENCE 15
Doc ID	1581787

All Electric Logs Run

DIL
CDN
SONIC
MICRO

Form	ACO1 - Well Completion
Operator	M G Oil Inc
Well Name	LAWRENCE 15
Doc ID	1581787

Tops

Name	Top	Datum
Stone Coral	2000	598
Topeka	3487	-890
Heebner	3772	-1174
Lansing	3808	-1210
BKC	4130	-1532
Marmaton	4156	-1558
Pawnee	4272	-1674
Ft Scott	4308	-1710
Cherokee Lm	4335	-1731
Mississippian	4411	-1813





## DRILL STEM TEST REPORT

Prepared For: **MG Oil Inc**

PO Box 162  
Russell, KS 67665

ATTN: Chad Counts

### **Lawrence #15**

#### **15-16s-28w Lane,KS**

Start Date: 2021.06.14 @ 14:15:00

End Date: 2021.06.14 @ 20:51:30

Job Ticket #: 67088                      DST #: 1

Trilobite Testing, Inc  
PO Box 362 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2021.06.18 @ 10:06:55



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

MG Oil Inc  
 PO Box 162  
 Russell, KS 67665  
 ATTN: Chad Counts

**15-16s-28w Lane, KS**  
**Lawrence #15**  
 Job Ticket: 67088 **DST#: 1**  
 Test Start: 2021.06.14 @ 14:15:00

## GENERAL INFORMATION:

Formation:

Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 16:21:20  
 Time Test Ended: 20:51:30

Test Type: Conventional Bottom Hole (Initial)  
 Tester: Martine Salinas  
 Unit No: 82

**Interval: 4058.00 ft (KB) To 4081.00 ft (KB) (TVD)**  
 Total Depth: 4081.00 ft (KB) (TVD)  
 Hole Diameter: 6.75 inches Hole Condition: Good

Reference Elevations: 2598.00 ft (KB)  
 2591.00 ft (CF)  
 KB to GR/CF: 7.00 ft

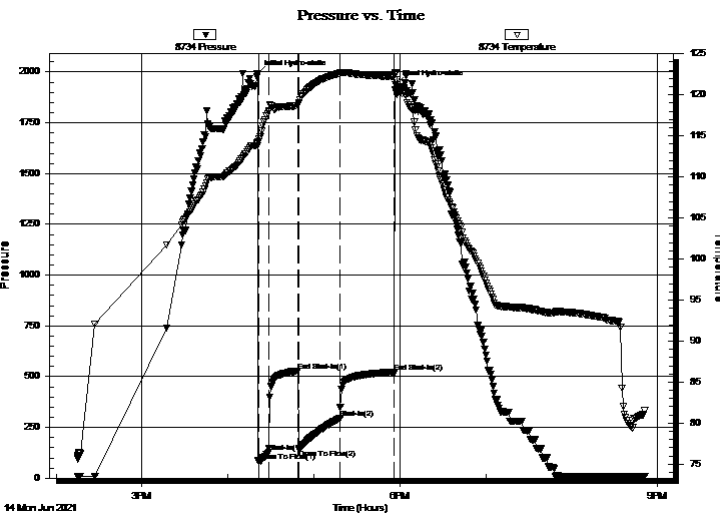
**Serial #: 8734**

**Outside**

Press@RunDepth: 295.04 psig @ 4059.00 ft (KB)  
 Start Date: 2021.06.14 End Date: 2021.06.14  
 Start Time: 14:15:01 End Time: 20:51:30

Capacity: 8000.00 psig  
 Last Calib.: 2021.06.14  
 Time On Btm: 2021.06.14 @ 16:20:30  
 Time Off Btm: 2021.06.14 @ 17:57:00

**TEST COMMENT:** 5-IF-B.O.B (11 inches) @ 2 mins  
 20-ISI-Return blow built to 1 3/4"  
 30-FF-B.O.B (11 inches) @ 6 mins  
 35-FSI-Return blow built to B.O.B (11 inches) @ 15 mins



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1989.95	114.11	Initial Hydro-static
1	82.53	114.32	Open To Flow (1)
8	127.22	117.98	Shut-In(1)
29	527.36	118.66	End Shut-In(1)
29	142.24	119.08	Open To Flow (2)
58	295.04	122.63	Shut-In(2)
96	522.44	122.26	End Shut-In(2)
97	1940.00	122.60	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
120.00	GSOMW 12%G,3%O,11%M,74W	1.68
180.00	GOCM 40%G, 25%O, 35%M	2.52
400.00	CGO 15%G, 85%O	5.61
0.00	1390' GIP	0.00

## Gas Rates

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







**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

MG Oil Inc  
PO Box 162  
Russell, KS 67665  
ATTN: Chad Counts

**15-16s-28w Lane,KS**  
**Lawrence #15**  
Job Ticket: 67088 **DST#: 1**  
Test Start: 2021.06.14 @ 14:15:00

**Tool Information**

Drill Pipe:	Length: 4032.00 ft	Diameter: 3.80 inches	Volume: 56.56 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 56.56 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	4058.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	23.00 ft			
Tool Length:	55.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

<b>Tool Description</b>	<b>Length (ft)</b>	<b>Serial No.</b>	<b>Position</b>	<b>Depth (ft)</b>	<b>Accum. Lengths</b>
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Change Over Sub	1.00			4027.00	
Shut In Tool	5.00			4032.00	
Hydraulic tool	5.00	1113		4037.00	
Jars	5.00	01-07		4042.00	
EM Tool	4.00			4046.00	
Safety Joint	3.00	-001		4049.00	
Packer	5.00			4054.00	32.00 Bottom Of Top Packer
Packer	4.00			4058.00	
Stubb	1.00			4059.00	
Recorder	0.00	8959	Inside	4059.00	
Recorder	0.00	8734	Outside	4059.00	
Perforations	19.00			4078.00	
Bullnose	3.00			4081.00	23.00 Bottom Packers & Anchor

**Total Tool Length: 55.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

MG Oil Inc

**15-16s-28w Lane,KS**

PO Box 162  
Russell, KS 67665

**Lawrence #15**

Job Ticket: 67088

**DST#: 1**

ATTN: Chad Counts

Test Start: 2021.06.14 @ 14:15:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

36.2 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

34000 ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.98 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2200.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	GSOMW 12%G,3%O,11%M,74W	1.683
180.00	GOCM 40%G, 25%O, 35%M	2.525
400.00	CGO 15%G, 85%O	5.611
0.00	1390' GIP	0.000

Total Length: 700.00 ft      Total Volume: 9.819 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

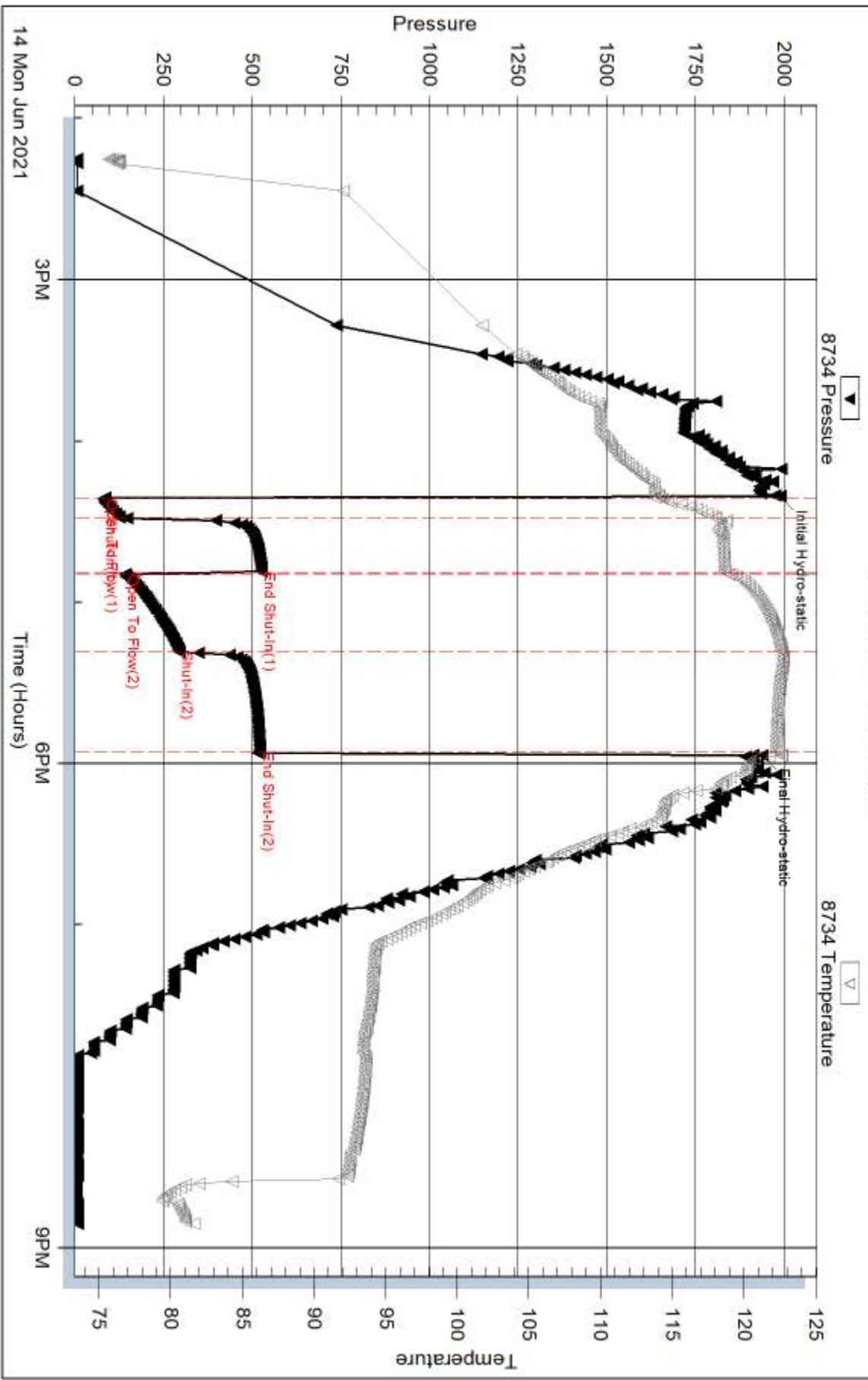
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Gravity of oil = 39.2 @ 90 degs corrected to 36.2 @ 60 degs  
RW= .17 @ 88 degs = 34,000 PPM

### Pressure vs. Time



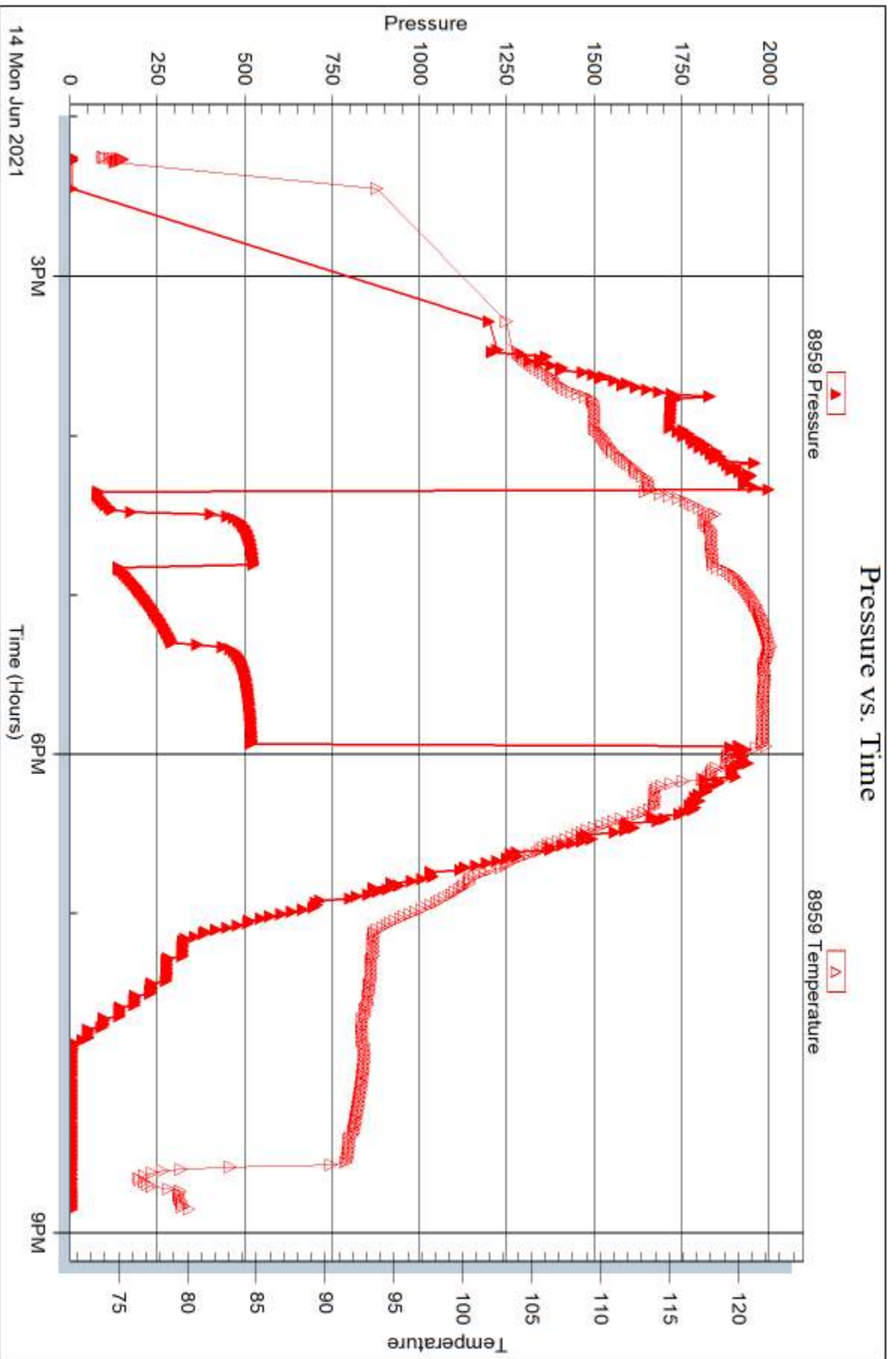
Serial #: 8959

Inside

MG Oil Inc

Lawrence #15

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 67088

Printed: 2021.06.18 @ 10:07:17



## DRILL STEM TEST REPORT

Prepared For: **MG Oil Inc**

PO Box 162  
Russell, KS 67665

ATTN: Chad Counts

### **Lawrence #15**

#### **15-16s-28w Lane,KS**

Start Date: 2021.06.15 @ 20:05:00

End Date: 2021.06.16 @ 01:26:50

Job Ticket #: 67089                      DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2021.06.18 @ 10:06:21



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

MG Oil Inc  
 PO Box 162  
 Russell, KS 67665  
 ATTN: Chad Counts

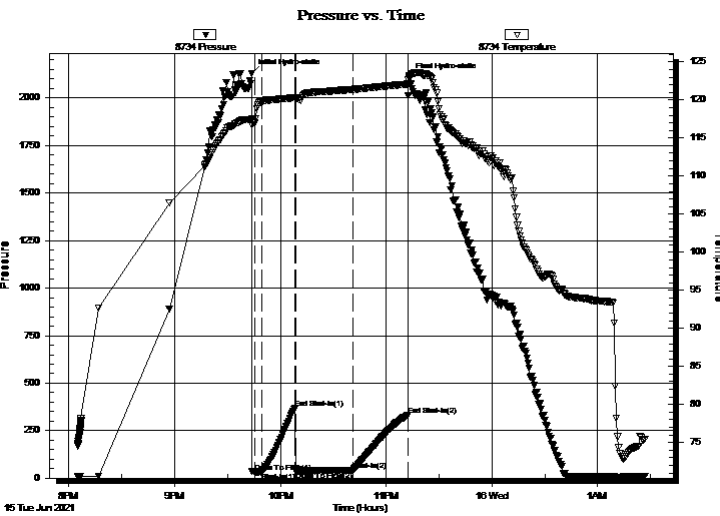
**15-16s-28w Lane, KS**  
**Lawrence #15**  
 Job Ticket: 67089 **DST#: 2**  
 Test Start: 2021.06.15 @ 20:05:00

## GENERAL INFORMATION:

Formation: **Pawnee**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 21:45:30  
 Time Test Ended: 01:26:50  
 Interval: **4258.00 ft (KB) To 4298.00 ft (KB) (TVD)**  
 Total Depth: 4298.00 ft (KB) (TVD)  
 Hole Diameter: 6.75 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Martine Salinas  
 Unit No: 82  
 Reference Elevations: 2598.00 ft (KB)  
 2591.00 ft (CF)  
 KB to GR/CF: 7.00 ft

**Serial #: 8734 Outside**  
 Press@RunDepth: 42.69 psig @ 4262.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2021.06.15 End Date: 2021.06.16 Last Calib.: 2021.06.16  
 Start Time: 20:05:01 End Time: 01:26:50 Time On Btm: 2021.06.15 @ 21:43:40  
 Time Off Btm: 2021.06.15 @ 23:13:10

**TEST COMMENT:** 5-IF-Blow built to 6 1/4"  
 20-ISI-No return  
 30-FF-B.O.B (11 inches) @ 5 mins (blow increased to 24 3/4")  
 30-FSI-No return



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2127.49	117.47	Initial Hydro-static
2	32.33	116.94	Open To Flow (1)
6	33.10	119.81	Shut-In(1)
25	369.54	120.30	End Shut-In(1)
26	36.30	120.18	Open To Flow (2)
58	42.69	121.37	Shut-In(2)
89	329.11	122.08	End Shut-In(2)
90	2105.40	123.04	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
50.00	GHOCM 20%G, 30%O, 50%M	0.70
0.00	370' GIP	0.00

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

MG Oil Inc  
PO Box 162  
Russell, KS 67665  
ATTN: Chad Counts

**15-16s-28w Lane,KS**  
**Lawrence #15**  
Job Ticket: 67089 **DST#: 2**  
Test Start: 2021.06.15 @ 20:05:00

## Tool Information

Drill Pipe:	Length: 4254.00 ft	Diameter: 3.80 inches	Volume: 59.67 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 59.67 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial 54000.00 lb
Depth to Top Packer:	4258.00 ft			Final 55000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	40.00 ft			
Tool Length:	72.00 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			4231.00	
Hydraulic tool	5.00	1113		4236.00	
Jars	5.00	01-07		4241.00	
EM Tool	4.00			4245.00	
Safety Joint	3.00	-001		4248.00	
Packer	5.00			4253.00	32.00 Bottom Of Top Packer
Packer	5.00			4258.00	
Stubb	1.00			4259.00	
Perforations	2.00			4261.00	
Change Over Sub	1.00			4262.00	
Recorder	0.00	8959	Inside	4262.00	
Recorder	0.00	8734	Outside	4262.00	
Drill Pipe	31.00			4293.00	
Change Over Sub	1.00			4294.00	
Perforations	1.00			4295.00	
Bullnose	3.00			4298.00	40.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>72.00</b>				





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

MG Oil Inc

**15-16s-28w Lane,KS**

PO Box 162  
Russell, KS 67665

**Lawrence #15**

Job Ticket: 67089

**DST#: 2**

ATTN: Chad Counts

Test Start: 2021.06.15 @ 20:05:00

### 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:

ppm

Viscosity: 48.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in<sup>3</sup>

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
50.00	GHOCM 20%G, 30%O, 50%M	0.701
0.00	370' GIP	0.000

Total Length: 50.00 ft      Total Volume: 0.701 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Not enough oil to catch gravity

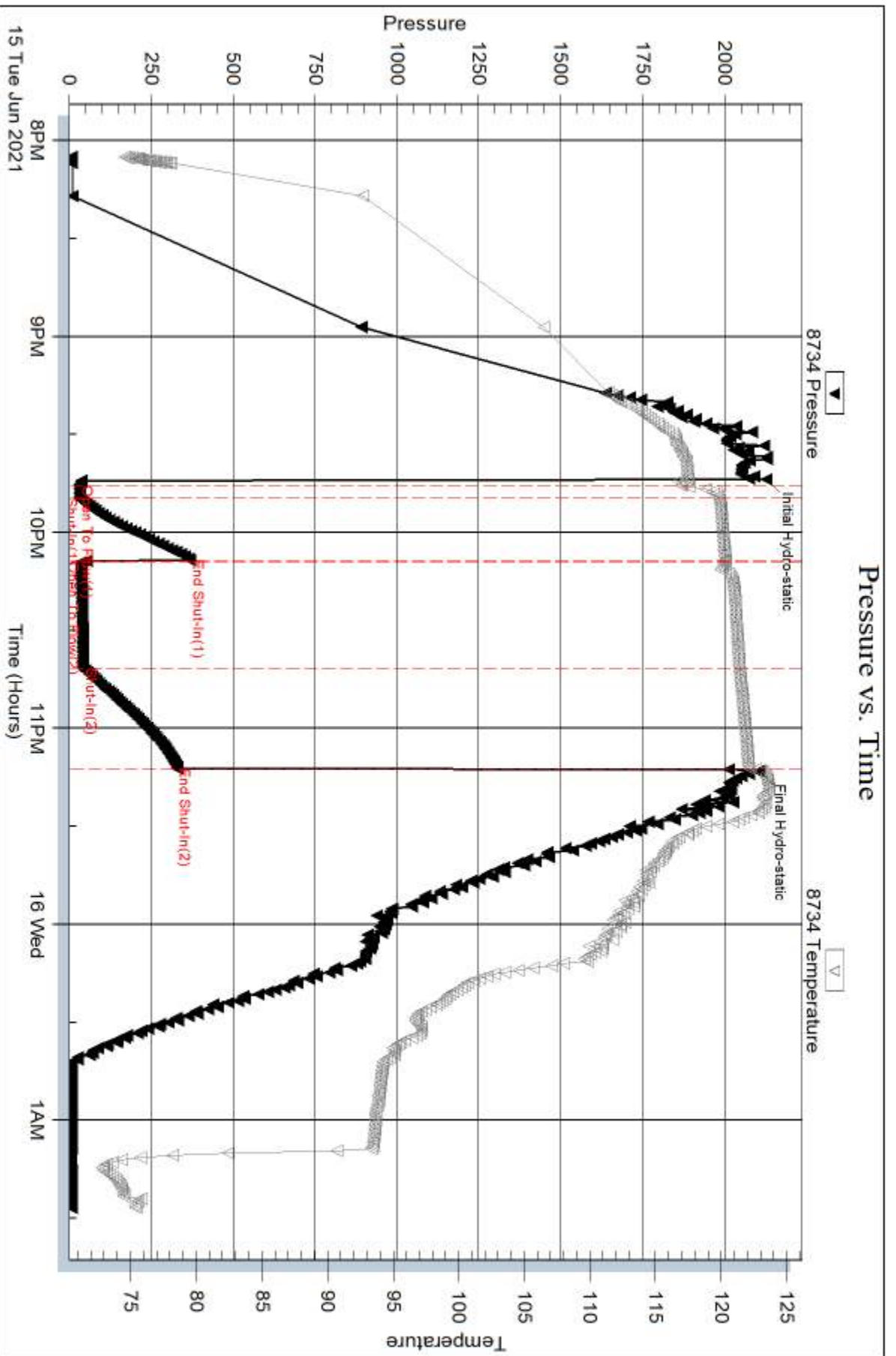
Serial #: 8734

Outside MG Oil Inc

Lawrence #15

DST Test Number: 2

### Pressure vs. Time



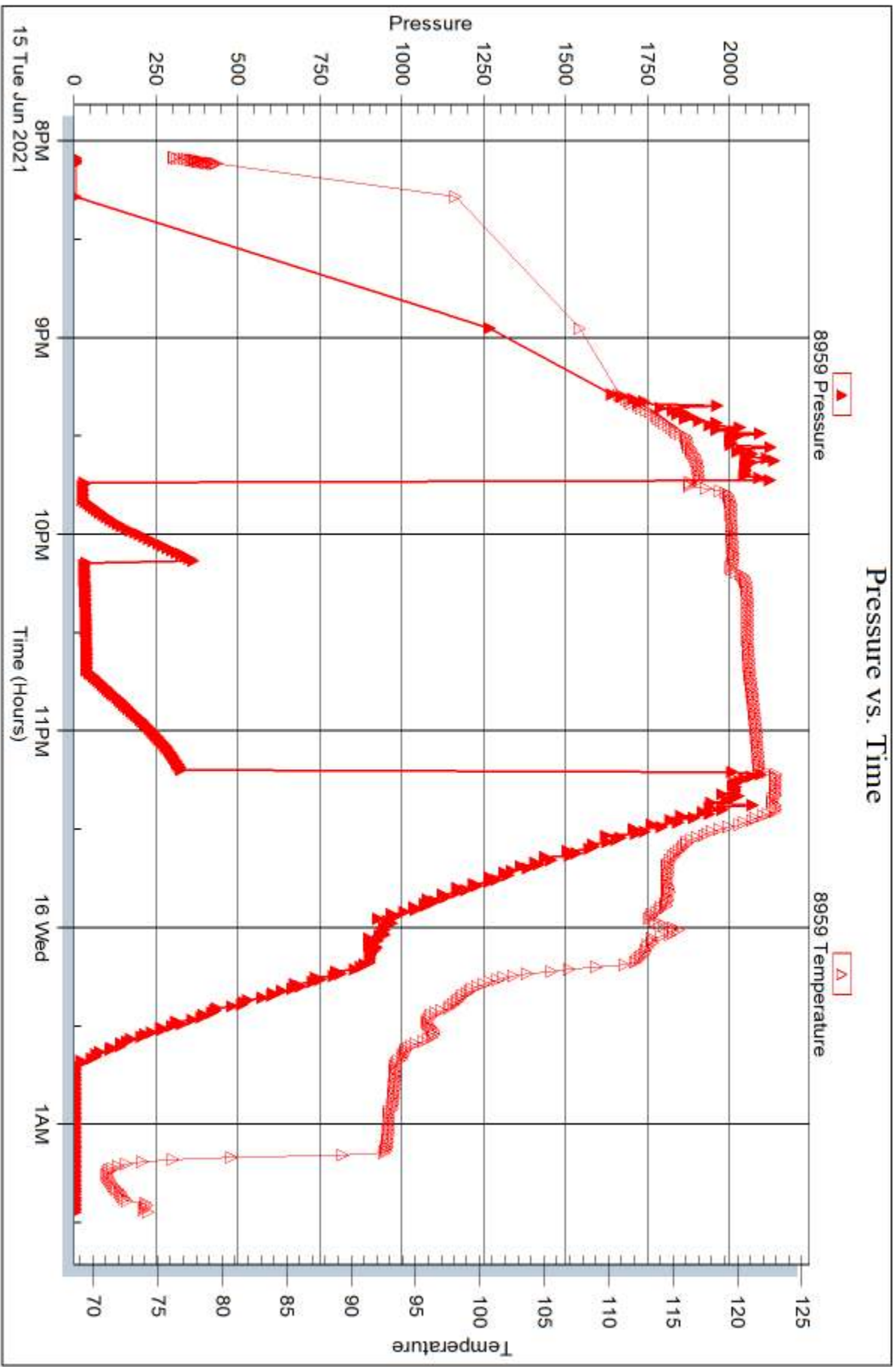
Serial #: 8959

Inside

MG Oil Inc

Lawrence #15

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 67089

Printed: 2021.06.18 @ 10:06:22



## DRILL STEM TEST REPORT

Prepared For: **MG Oil Inc**

PO Box 162  
Russell, KS 67665

ATTN: Chad Counts

### **Lawrence #15**

#### **15-16s-28w Lane,KS**

Start Date: 2021.06.16 @ 13:00:00

End Date: 2021.06.16 @ 19:29:20

Job Ticket #: 67090                      DST #: 3

Trilobite Testing, Inc  
PO Box 362 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2021.06.18 @ 10:04:50



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

MG Oil Inc  
PO Box 162  
Russell, KS 67665  
ATTN: Chad Counts

**15-16s-28w Lane, KS**  
**Lawrence #15**  
Job Ticket: 67090 **DST#: 3**  
Test Start: 2021.06.16 @ 13:00:00

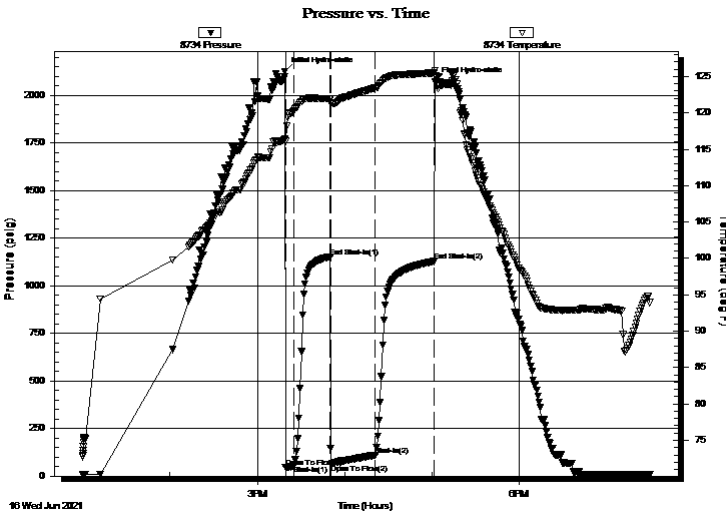
## GENERAL INFORMATION:

Formation: **Ft. Scott**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 15:19:20  
Time Test Ended: 19:29:20  
Interval: **4292.00 ft (KB) To 4339.00 ft (KB) (TVD)**  
Total Depth: 4339.00 ft (KB) (TVD)  
Hole Diameter: 6.75 inches Hole Condition: Good  
Test Type: Conventional Bottom Hole (Reset)  
Tester: Martine Salinas  
Unit No: 82  
Reference Elevations: 2598.00 ft (KB)  
2591.00 ft (CF)  
KB to GR/CF: 7.00 ft

**Serial #: 8734 Outside**  
Press@RunDepth: 110.18 psig @ 4293.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2021.06.16 End Date: 2021.06.16 Last Calib.: 2021.06.16  
Start Time: 13:00:01 End Time: 19:29:20 Time On Btm: 2021.06.16 @ 15:19:00  
Time Off Btm: 2021.06.16 @ 17:01:50

**TEST COMMENT:** 5-IF-B.O.B (11 inches) @ 4 mins (blow increased to 15")  
20-ISI-No return  
30-FF-B.O.B @ 2 mins (blow increased to 72 1/2")  
30-FSI-Return blow built to 7 1/2"

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2125.66	116.43	Initial Hydro-static
1	44.71	116.10	Open To Flow (1)
6	54.31	120.22	Shut-In(1)
31	1152.53	121.94	End Shut-In(1)
32	61.21	121.33	Open To Flow (2)
62	110.18	123.47	Shut-In(2)
103	1127.42	125.46	End Shut-In(2)
103	2071.66	125.83	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
120.00	GOCM 38%G, 22%O, 40%O	1.68
90.00	CGO 15%G, 85%O	1.26
0.00	1350' GIP	0.00

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

MG Oil Inc  
PO Box 162  
Russell, KS 67665  
ATTN: Chad Counts

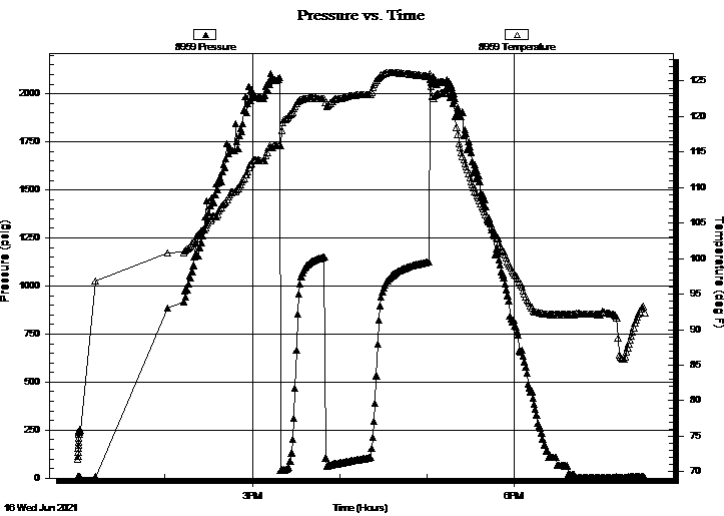
**15-16s-28w Lane, KS**  
**Lawrence #15**  
Job Ticket: 67090      **DST#: 3**  
Test Start: 2021.06.16 @ 13:00:00

## GENERAL INFORMATION:

Formation: **Ft. Scott**  
Deviated: No Whipstock:                      ft (KB)  
Time Tool Opened: 15:19:20  
Time Test Ended: 19:29:20  
Interval: **4292.00 ft (KB) To 4339.00 ft (KB) (TVD)**  
Total Depth: 4339.00 ft (KB) (TVD)  
Hole Diameter: 6.75 inches Hole Condition: Good  
Reference Elevations: 2598.00 ft (KB)  
2591.00 ft (CF)  
KB to GR/CF: 7.00 ft  
Test Type: Conventional Bottom Hole (Reset)  
Tester: Martine Salinas  
Unit No: 82

**Serial #: 8959      Inside**  
Press@RunDepth:                      psig @ 4293.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2021.06.16      End Date: 2021.06.16      Last Calib.: 2021.06.16  
Start Time: 13:00:01      End Time: 19:29:20      Time On Btm:  
Time Off Btm:

**TEST COMMENT:** 5-IF-B.O.B (11 inches) @ 4 mins (blow increased to 15")  
20-ISI-No return  
30-FF-B.O.B @ 2 mins (blow increased to 72 1/2")  
30-FSI-Return blow built to 7 1/2"



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
120.00	GOCM 38%G, 22%O, 40%O	1.68
90.00	CGO 15%G, 85%O	1.26
0.00	1350' GIP	0.00

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

MG Oil Inc  
PO Box 162  
Russell, KS 67665  
ATTN: Chad Counts

**15-16s-28w Lane,KS**  
**Lawrence #15**  
Job Ticket: 67090 **DST#: 3**  
Test Start: 2021.06.16 @ 13:00:00

## Tool Information

Drill Pipe:	Length: 4285.00 ft	Diameter: 3.80 inches	Volume: 60.11 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 78000.00 lb
			<u>Total Volume: 60.11 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4292.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	47.00 ft			
Tool Length:	79.00 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			4265.00	
Hydraulic tool	5.00	1113		4270.00	
Jars	5.00	01-07		4275.00	
EM Tool	4.00			4279.00	
Safety Joint	3.00	-001		4282.00	
Packer	5.00			4287.00	32.00 Bottom Of Top Packer
Packer	5.00			4292.00	
Stubb	1.00			4293.00	
Recorder	0.00	8959	Inside	4293.00	
Recorder	0.00	8734	Outside	4293.00	
Perforations	8.00			4301.00	
Change Over Sub	1.00			4302.00	
Drill Pipe	32.00			4334.00	
Change Over Sub	1.00			4335.00	
Perforations	1.00			4336.00	
Bullnose	3.00			4339.00	47.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>79.00</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

MG Oil Inc

**15-16s-28w Lane,KS**

PO Box 162  
Russell, KS 67665

**Lawrence #15**

Job Ticket: 67090

**DST#: 3**

ATTN: Chad Counts

Test Start: 2021.06.16 @ 13:00:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

34.8 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 47.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.59 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	GOCM 38%G, 22%O, 40%O	1.683
90.00	CGO 15%G, 85%O	1.262
0.00	1350' GIP	0.000

Total Length: 210.00 ft      Total Volume: 2.945 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

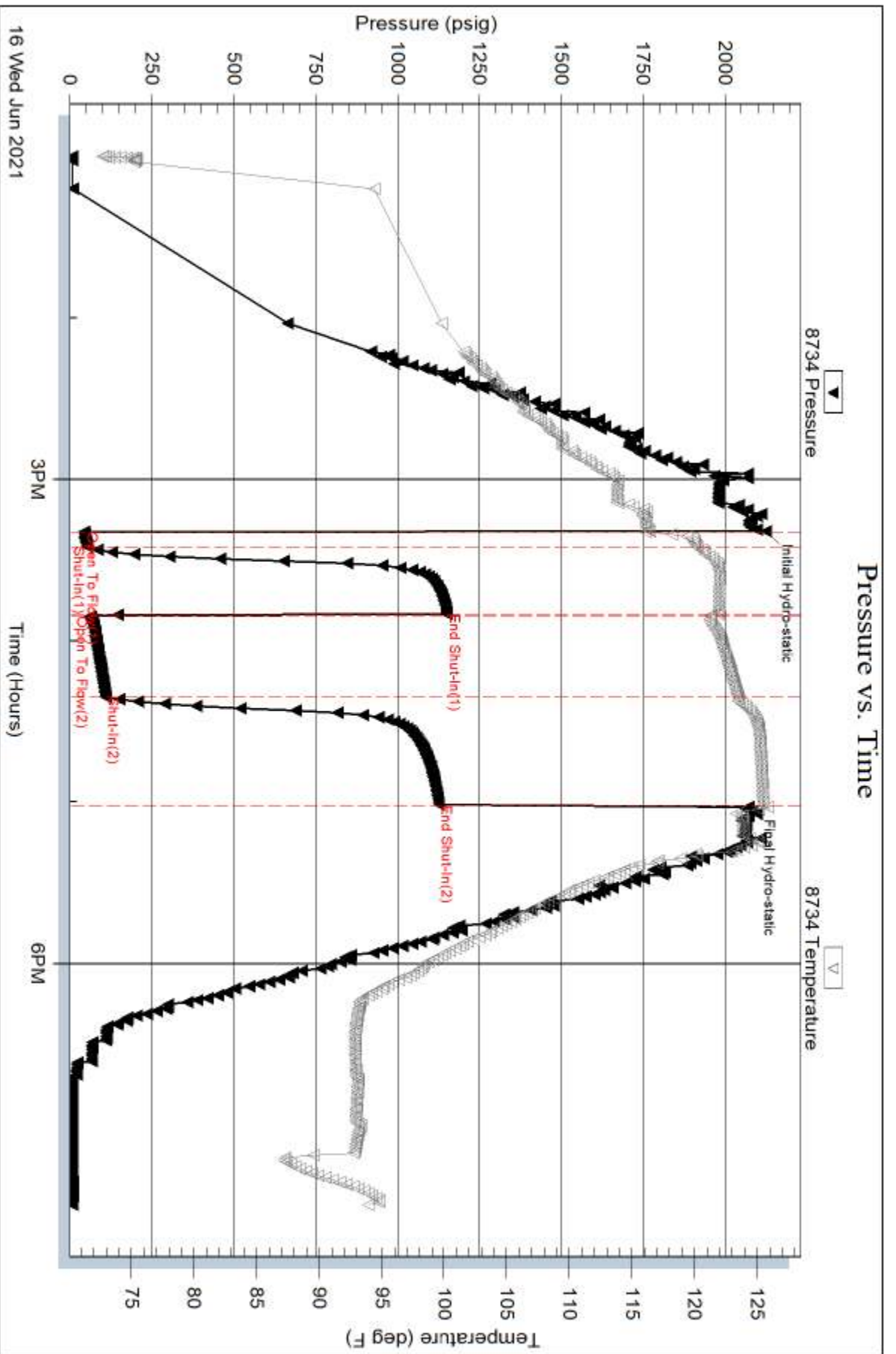
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Gravity of oil = 39 @ 102 degs corrected to 34.8 @ 60degs





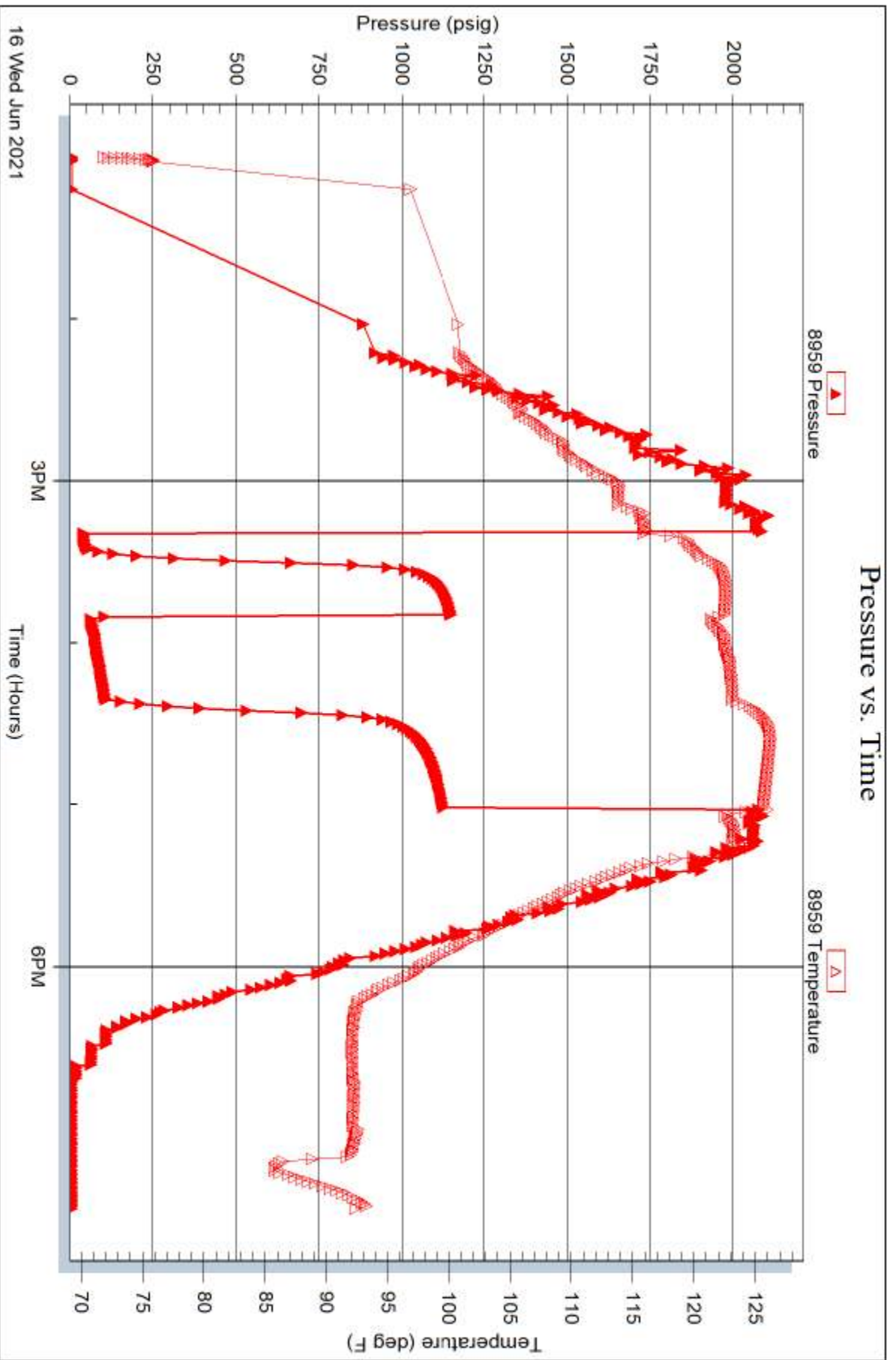
Serial #: 8959

Inside

MG Oil Inc

Lawrence #15

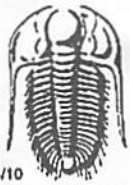
DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 67090

Printed: 2021.06.18 @ 10:04:51



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 67088

Well Name & No. Lawrence #15 Test No. 1 Date 6-14-21  
 Company MG Oil Inc. Elevation 2598 KB 2591 GL  
 Address P.O. Box 162 Russell, KS 67665.  
 Co. Rep / Geo. Chad Counts Rig Pickrell #10  
 Location: Sec. 15 Twp 16 Rge. 28 Co. Lane. State KS

Interval Tested 4053 - 4081 Zone Tested LKC "K"  
 Anchor Length 23 Drill Pipe Run 4032 Mud Wt. 9.2  
 Top Packer Depth 4053 Drill Collars Run --- Vis 53  
 Bottom Packer Depth 4058 Wt. Pipe Run --- WL 8.0  
 Total Depth 4081 Chlorides 2200 ppm System LCM 24

Blow Description IF - B.O.B (11 inches) @ 2 mins  
IST - Return blow built to 1 3/4"  
FF - B.O.B (11 inches) @ 6 mins  
FSI - Return blow built to B.O.B (11 inches) @ 15 mins

Rec	Feet of	%gas	%oil	%water	%mud
<u>120</u>	<u>G.SOMW</u>	<u>12</u>	<u>3</u>	<u>94</u>	<u>11</u>
<u>180</u>	<u>G.O.S.M</u>	<u>40</u>	<u>25</u>	<u>35</u>	<u>---</u>
<u>400</u>	<u>C.G.O</u>	<u>15</u>	<u>85</u>	<u>---</u>	<u>---</u>
<u>0</u>	<u>1390' GIP</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>
<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>

Rec Total 760 BHT 123 Gravity 36.2 API RW 117 @ 88 °F Chlorides 34,000 ppm

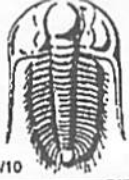
(A) Initial Hydrostatic 1990  Test 1300 T-On Location 13:00  
 (B) First Initial Flow 83  Jars 250 T-Started 14:15  
 (C) First Final Flow 127  Safety Joint 75 T-Open 16:22  
 (D) Initial Shut-In 527  Circ Sub --- T-Pulled 17:52  
 (E) Second Initial Flow 142  Hourly Standby --- T-Out 20:52  
 (F) Second Final Flow 295  Mileage BIRT. 101.25 Comments ---  
 (G) Final Shut-In 522  Sampler ---  
 (H) Final Hydrostatic 1940  Straddle ---  EM Tool 350  
 Ruined Shale Packer ---  
 Ruined Packer ---  
 Extra Copies ---  
 Initial Open 5  Extra Packer ---  
 Initial Shut-In 20  Extra Recorder ---  
 Final Flow 30  Day Standby --- Sub Total 350  
 Final Shut-In 35  Accessibility --- Total 2076.25  
 Sub Total 1726.25 MP/DST Disc't ---

Approved By \_\_\_\_\_

Our Representative Robert Salinas

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.





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 67089

Well Name & No. Lawrence #15 Test No. 2 Date 6-15-21  
 Company MG Oil Inc Elevation 2598 KB 2591 GL  
 Address P.O. Box 162 Russell, KS 67665  
 Co. Rep / Geo. Chad Counts Rig Picknell #10  
 Location: Sec. 15 Twp 16 Rge. 28 Co. Lane State KS

Interval Tested 4258 - 4298 Zone Tested Pawnee  
 Anchor Length 40' Drill Pipe Run 4254 Mud Wt. 9.1  
 Top Packer Depth 4253 Drill Collars Run — Vis 48  
 Bottom Packer Depth 4258 Wt. Pipe Run — WL 8.8  
 Total Depth 4298 Chlorides 2800 ppm System LCM 2#  
 Blow Description IF - S. blow built to 6' 1/4"  
ISI - No return  
FF - B.O.B. (11 inches) @ 5 mins (blow increased to 24 3/4")  
FSI - No return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>50</u>	<u>GHOCM</u>	<u>20</u>	<u>30</u>	<u>50</u>	
<u>0</u>	<u>320' GIP</u>				

Rec Total 50 BHT 123 Gravity — API RW — @ — F Chlorides — ppm

(A) Initial Hydrostatic 2127  Test 1300 T-On Location 19:45  
 (B) First Initial Flow 32  Jars 250 T-Started 20:05  
 (C) First Final Flow 33  Safety Joint 75 T-Open 21:43  
 (D) Initial Shut-In 370  Circ Sub \_\_\_\_\_ T-Pulled 23:08  
 (E) Second Initial Flow 36  Hourly Standby \_\_\_\_\_ T-Out 01:27  
 (F) Second Final Flow 43  Mileage 81RT 101.25 Comments \_\_\_\_\_  
 (G) Final Shut-In 329  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2105  Straddle \_\_\_\_\_  EM Tool 350  
 Ruined Shale Packer \_\_\_\_\_  
 Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_  
 Day Standby \_\_\_\_\_  
 Accessibility \_\_\_\_\_  
 Sub Total 1726.25 Sub Total 350  
 Total 2076.25 MP/DST Disc't \_\_\_\_\_

Approved By \_\_\_\_\_ Our Representative Matt Johnson

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.



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 67090

Well Name & No. Lawrence #15. Test No. 3 Date 6-16-21  
 Company MG Oil Inc. Elevation 2598 KB 2591 GL  
 Address P.O. Box 162 Russell, KS. 67665.  
 Co. Rep / Geo. Chad Counts. Rig Pickrell #10  
 Location: Sec. 15 Twp 16 Rge. 28 Co. Lane. State KS.

Interval Tested 4292-4339 Zone Tested Ft. Scott  
 Anchor Length 47' Drill Pipe Run 4285. Mud Wt. 9.2  
 Top Packer Depth 4287 Drill Collars Run — Vis 47  
 Bottom Packer Depth 4292 Wt. Pipe Run — WL 9.6  
 Total Depth 4339 Chlorides 3000 ppm System LCM 2#

Blow Description IF - B.O.B (11 inches) @ 4 mins (blow increased to 15")  
ISI - No return.  
FF - B.O.B @ 2 mins (blow increased to 7 1/2")  
FSI - Return blow built to

Rec	Feet of	%gas	%oil	%water	%mud
<u>120</u>	<u>90cm</u>	<u>38</u>	<u>22</u>	<u>40</u>	
<u>90</u>	<u>CGO</u>	<u>15</u>	<u>85</u>		
<u>0</u>	<u>1350' GIP.</u>				

Rec Total 210 BHT 126 Gravity 34.8 API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 2126  Test 1300 T-On Location 11:00  
 (B) First Initial Flow 45  Jars 250 T-Started 13:00  
 (C) First Final Flow 54  Safety Joint 75 T-Open 15:30  
 (D) Initial Shut-In 1153  Circ Sub — T-Pulled 17:00  
 (E) Second Initial Flow 61  Hourly Standby — T-Out 19:30  
 (F) Second Final Flow 110  Mileage 81 RTX2 101.25+101.25 Comments Tools loaded @  
 (G) Final Shut-In 1127  Sampler — 20:30 6-17-21  
 (H) Final Hydrostatic 2072.  Straddle —  EM Tool 350  
 Ruined Shale Packer —  
 Ruined Packer —  
 Extra Packer —  
 Extra Recorder —  
 Day Standby —  
 Accessibility —

Initial Open 5  
 Initial Shut-In 25.  
 Final Flow 30  
 Final Shut-In 40  
 Sub Total 1827.50  
 Sub Total 350  
 Total 2177.50  
 MP/DST Disc't —

Approved By \_\_\_\_\_ Our Representative Martin Spahn

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.



Scale 1:240 (5"=100') Imperial  
Measured Depth Log

Well Name: Lawrence 15  
Well Id: 15-101-22652  
Location: SW NE NW SE Sec 15 T16S R28W  
License Number: 31385  
Spud Date: 6/8/21  
Surface Coordinates:

Region:  
Drilling Completed: 6/17/21

Bottom Hole  
Coordinates:  
Ground Elevation (ft): 2591                      K.B. Elevation (ft): 2598  
Logged Interval (ft): 3600                      To: 4498                      Total Depth (ft): 4498  
Formation: LKC-Mississippian  
Type of Drilling Fluid: Chemical based mud

Printed by MudLog from WellSight Systems 1-800-447-1534 [www.WellSight.com](http://www.WellSight.com)

**OPERATOR**

Company: MG Oil Inc.  
Address: 1256 W Hwy 40  
Russell, Ks 67665

**GEOLOGIST**

Name: Chad Counts  
Company: MG Oil Inc.  
Address: P.O. Box 162  
Russell, Ks 67665

**Comments**

The Lawrence 15 was drilled with Pickrell Drilling tools beginning 6-8-2021 and completed 6-17-2021.

Structurally, this well ran higher than seismic prognosis. Owing to positive structural position, sample shows, and DST recoveries, it was agreed by all parties to further test the well through 5 1/2" casing.

Respectfully,

Chad Counts



**TRILOBITE TESTING, INC**

**DRILL STEM TEST REPORT**

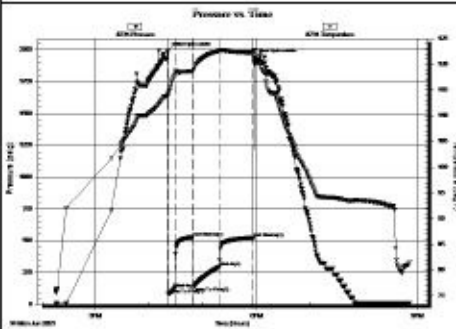
MG OF INC 15-16-28  
 Lawrence # 15  
 P.O. Box 162 Russell, KS 67665 Job Ticket: 67088 DST#: 1  
 ATTN: Chad Counts Test Start: 2021.06.14 @ 14:15:00

**GENERAL INFORMATION:**

Formation:  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 16:21:20  
 Time Test Ended: 20:51:30  
 Interval: 4068.00 ft (KB) To 4081.00 ft (KB) (TVD)  
 Total Depth: 4081.00 ft (KB) (TVD)  
 Hole Diameter: 6.75 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Martine Galinas  
 Unit No: 82  
 Reference Elevations: 2596.00 ft (KB)  
 2591.00 ft (CF)  
 KB to GRUCP: 7.00 ft

Serial #: 8734 Outside  
 Press @ Run Depth: 295.04 psig @ 4059.00 ft (KB)  
 Start Date: 2021.06.14 End Date: 2021.06.14  
 Start Time: 14:15:01 End Time: 20:51:30  
 Capacity: 8000.00 psig  
 Last Calib.: 2021.06.14  
 Time On Btm: 2021.06.14 @ 16:20:30  
 Time Off Btm: 2021.06.14 @ 17:57:00

TEST COMMENT: 5-IF-B.O.B (11 inches) @ 2 mins  
 20-OF-Return blow built to 1 3/4"  
 30-FF-B.O.B (11 inches) @ 6 mins  
 35-FSH-Return blow built to B.O.B (11 inches) @ 15 mins



**PRESSURE SUMMARY**

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1989.95	114.11	Initial Hydro-static
1	82.53	114.32	Open To Flow (1)
6	127.22	117.98	Shut-In (1)
29	527.36	118.66	End Shut-In (1)
29	142.24	119.08	Open To Flow (2)
58	295.04	122.63	Shut-In (2)
96	522.44	122.26	End Shut-In (2)
97	1940.00	122.60	Final Hydro-static

**Recovery**

Length (ft)	Description	Volume (bbt)
120.00	GOOMV 12%G,3%O,11%M,74W	1.68
180.00	GOOM 40%G, 25%O, 35MM	2.52
400.00	OGO 15%G, 85%O	5.61
0.00	1390' GP	0.00

**Gas Rates**

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



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

MG OF INC

15-16-28

P.O. Box 162  
Russell, KD 67665

Lawrence # 15

Job Ticket: 67089

DST#:2

ATTN: Chad Counts

Test Start: 2021.06.15 @ 20:05:00

**GENERAL INFORMATION:**

Formation: **Pawnee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:45:30

Time Test Ended: 01:26:50

Test Type: Conventional Bottom Hole (Reset)

Tester: Martine Galinas

Unit No: 82

Interval: 4268.00 ft (KB) To 4288.00 ft (KB) (TVD)

Reference Elevations: 2598.00 ft (KB)

Total Depth: 4298.00 ft (KB) (TVD)

2591.00 ft (CF)

Hole Diameter: 6.75 inches hole Condition: Good

KB to GRVCF: 7.00 ft

Serial #: 8734 Outside

Press@RunDepth: 42.69 psig @ 4262.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2021.06.15

End Date:

2021.06.16

Last Calib.: 2021.06.16

Start Time:

2005:01

End Time:

01:26:50

Time On Blmt:

2021.06.15 @ 21:43:40

Time Off Blmt:

2021.06.15 @ 23:13:10

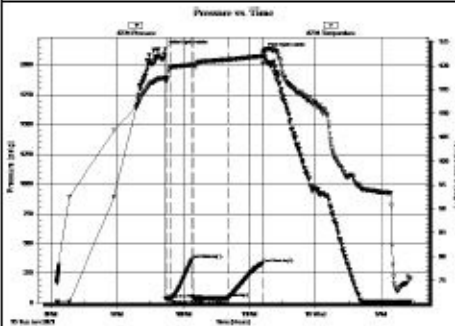
**TEST COMMENT:**

5-F-Blow built to 6 1/4"

20-GF-No return

30-FF-B.O.B (11 inches) @ 5 mins (blow increased to 24 3/4"

30-FSI-No return



**PRESSURE SUMMARY**

Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	2127.49	117.47	Initial Hydro-static
2	32.33	116.94	Open To Flow (1)
6	33.10	119.81	Shut-In(1)
25	369.54	120.30	End Shut-In(1)
26	36.30	120.18	Open To Flow (2)
58	42.69	121.37	Shut-In(2)
89	329.11	122.08	End Shut-In(2)
90	2105.40	123.04	Final Hydro-static


**Recovery**

Length (ft)	Description	Volume (bb)
50.00	GHOCM 20%G, 30%O, 50%M	0.70
0.00	370' GP	0.00

**Gas Rates**

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





**TRILOBITE TESTING, INC.**

### DRILL STEM TEST REPORT

---

MG Oil Inc  
P.O. Box 162  
Russell, MO 67565  
ATTN: Chad Counts

15-16-28  
Lawrence # 15  
Job Ticket: 67090    DST#: 8  
Test Start: 2021.06.16 @ 13:00:00

---

**GENERAL INFORMATION:**

Formation: **Fl. Scott**  
Deviated: No Whipstock:                      ft (KB)  
Time Tool Opened: 15:19:20  
Time Test Ended: 19:29:20

Interval: **4282.00 ft (KB) To 4388.00 ft (KB) (TVD)**  
Total Depth: 4339.00 ft (KB) (TVD)  
Hole Diameter: 6.75 Inches - Hole Condition: Good

Test Type: Conventional Bottom Hole (Reset)  
Tester: Martine Galinas  
Unit No: 82

Reference Elevations: 2598.00 ft (KB)  
2591.00 ft (CF)  
KB to GRICP: 7.00 ft

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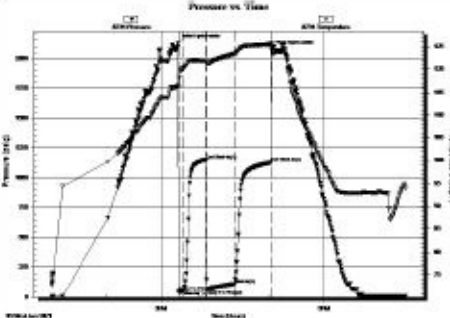
Serial #: 8734    Outside  
Press@RunDepth: 110.18 psig @ 4293.00 ft (KB)  
Start Date: 2021.06.16    End Date: 2021.06.16  
Start Time: 13:00:01    End Time: 19:29:20

Capacity: 8000.00 psig  
Last Call: 2021.06.16  
Time On Blm: 2021.06.16 @ 15:19:00  
Time Off Blm: 2021.06.16 @ 17:01:50

---

**TEST COMMENT:** 5-IFB-O.B (11 inches) @ 4 mins (blow increased to 15")  
20-IG-No return  
30-FF-B.O.B @ 2 mins (blow increased to 72 1/2")  
30-FBI-Return blow built to 7 1/2"

---



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2125.66	116.43	Initial Hydro-static
1	44.71	116.10	Open To Flow (1)
6	54.31	120.22	Shut-In(1)
31	1152.53	121.94	End Shut-In(1)
32	61.21	121.33	Open To Flow (2)
62	110.18	123.47	Shut-In(2)
103	1127.42	125.46	End Shut-In(2)
103	2071.66	125.83	Final Hydro-static

---

Length (ft)	Description	Volume (bbl)
120.00	GOOM 38%G, 22%O, 40%O	1.68
90.00	OGO 15%G, 85%O	1.26
0.00	1350' GP	0.00

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

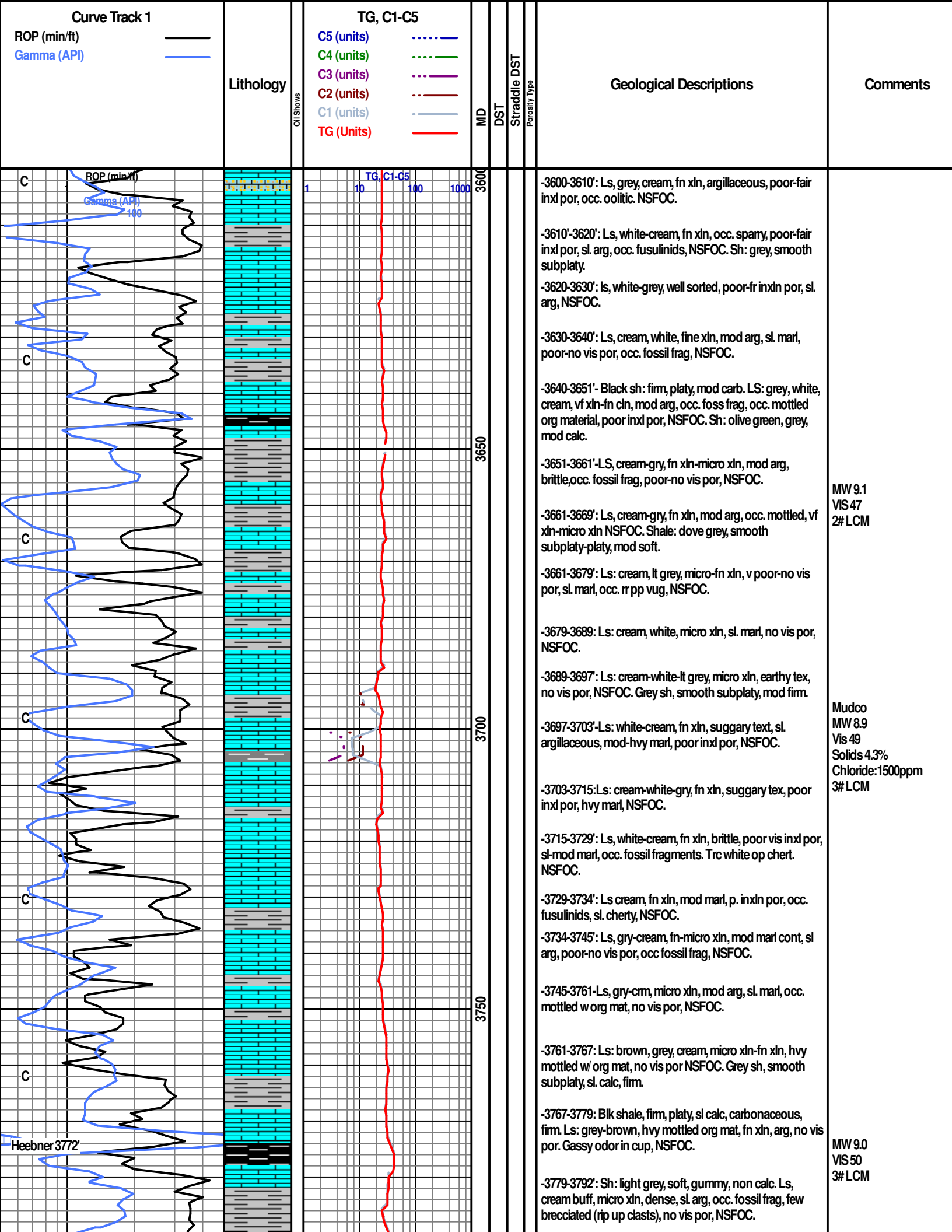
\* Recovery from multiple tests

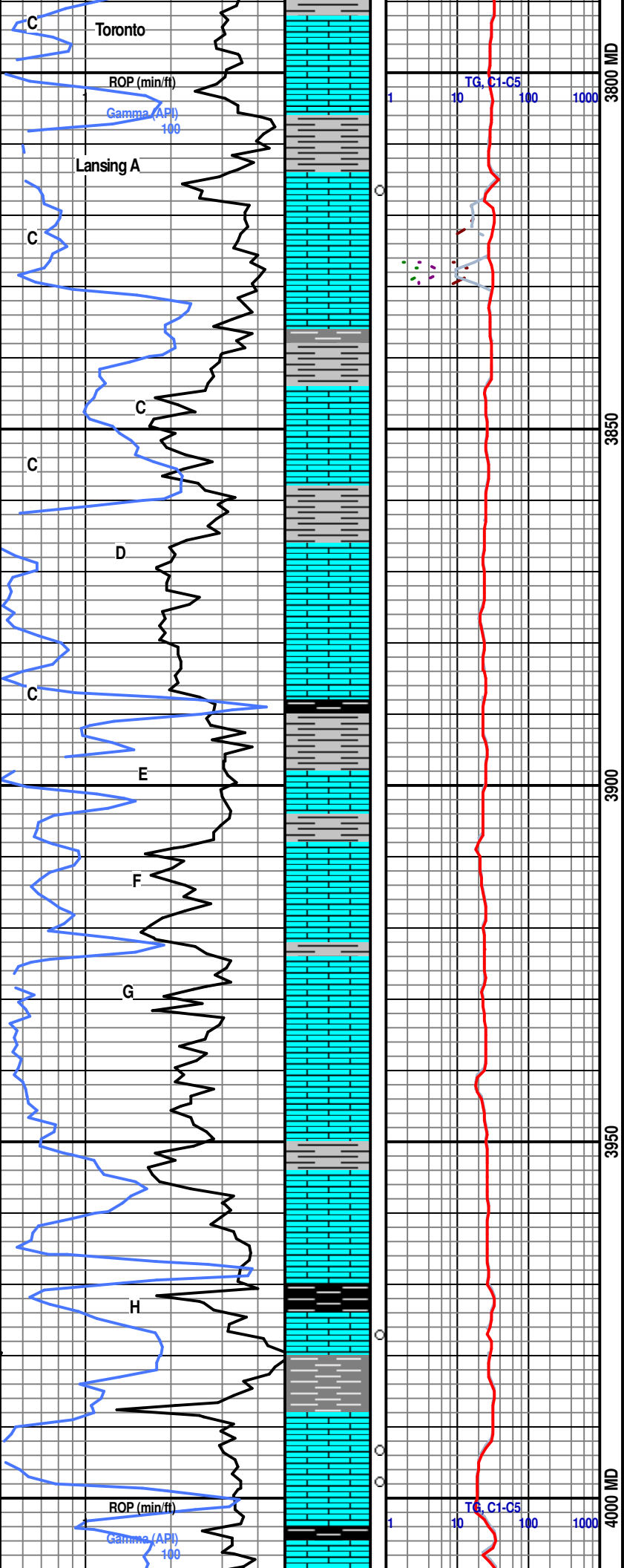
### ROCK TYPES

	Anhy		Coal		Igne		Mrlst		Shgy
	Bent		Oolitic limestone		Dark grey shale		Salt		Siltst
	Brec		Congl		Black shale		New symbol		Ss
	Cht		Dol		Lmst		Shale		Till
	Clyst		Gyp		Meta		Schol		

### OTHER SYMBOLS

<input type="checkbox"/> Vuggy	<input type="checkbox"/> Rounding	<input type="checkbox"/> Spotted	<input type="checkbox"/> EVENT
<input type="checkbox"/> Earthy	<input type="checkbox"/> Rounded	<input type="checkbox"/> Ques	<input type="checkbox"/> Rft
<input type="checkbox"/> Fenest	<input type="checkbox"/> Subrnd	<input type="checkbox"/> Dead	<input type="checkbox"/> Sidewall
<input type="checkbox"/> Fracture	<input type="checkbox"/> Subang		
<input type="checkbox"/> Inter	<input type="checkbox"/> Angular		
<input type="checkbox"/> Moldic		<input type="checkbox"/> INTERVAL	
<input type="checkbox"/> Organic	<input type="checkbox"/> OIL SHOW	<input type="checkbox"/> Core	
<input type="checkbox"/> Pinpoint	<input type="checkbox"/> Even	<input type="checkbox"/> Dst overlap	
		<input type="checkbox"/> Dst	





-3792-3801': Ls, crm-buff, micro xln, occ. r pp vug, occ fossil clast, mod marl, no vis por, NSFOC.

-3801-3810': shale, grey-green, soft, blocky, sl. calc. Ls: cream, micro xln, smooth tex, occ. fusulinids, r pp vug, no vis matrix por, NSFOC.

-3810-3822': Lansing A por: white-grey, vfxln-micro xln, very poor inxln por, rare pp vuggy porosity poorly connected, spotty scattered oil stain, no free oil or odor.

-3822-3831': Ls, white-cream, micro xln, no vis por, very dense, smooth tex, NSFOC.

-3831-3838': Ls: white-cream, micro xln, abdnt marl, no vis por, NSFOC. Shale: med grey subplaty, firm, sl calc.

-3838-3850': Sh: grey-green, non silty, sub platy, mod firm, sl. calc. Ls: cream, buff, micro chn, occ fusulinids, clams, no vis por NSFOC.

-3850-3858': Ls, white, cream, fn xln-micro xln, occ packstone, no vis por, matrix with hvy marl, no vis stain or odor. NSFOC. Sl cherty, white-transparent.

-3858-3866': Ls: white cream, vfxln-fn xln, very brittle, heavy marl content, no visible inxl por, NSFOC.

-3866-3880': Ls, white, cream, micro xln, fair scattered vuggy porosity, poor inxl por, mod marl, NSFOC. Sh. med-dk grey, very platy-blady.

-3880-3892'-Ls, white- cream, buff, micro xln, no vis por, very dense, mod marl, NSFOC.

-3892-3899': Ls, buff, cream, white, fn xln-micro xln, poor inxl por, NSFOC. Black shale, mod carbonaceous, firm, sub platy, sl calcareous. Grey shale, suplaty, firm, sl. calc.

-3899-3910' Ls white, micro xln, no vis por, sl marl, NSFOC.

-3910-3920'-Ls, grey, cream, white, sl. arg, micro xln, mod marl, no visibl inxln por, NSFOC.

-3920-3931'-Ls white, crm, vfxln-micro xln, occ. r vug, no vis matrix por, mod marl content, NSFOC. Grey shale, very platy, firm, sl. calc.

-3931-3941'-Ls, cream-white, micro xln, very dense, no vis por, occ. r pp vug, r fossil frag, sl. cherty, NSFOC.

-3941-3950': Ls, cream, micro xln, r fine xln w/suggary text, most very dense, cherty (white translucent), NSFOC.

-3950-3960'-Ls, cream, white, micro xln, sl. cherty, very dense, no vis por, NSFOC. Med gry shale platy-blocky, mod brittle/soft.

-3960-3972': Ls: grey, cream, micro xln, sl. arg, very dense, no vis por, NSFOC. Fair report black shale, hvy carbonaceous, very firm platy, sl. calc.

-3972-3982'-Ls, brown-grey, packstone, grainstone, fossil hash, very poor dissolution, minimal pp por, scattered spotty oil stain, no show free oil, faint odor.

-3982-3992': Ls buff, cream, micro xln, no vis por, occ. fossil fragments, trc chert, 1 cutting w/dead spotted edge stain, NSFOC. Questionable odor.

-3992-4002'-Ls, cream-buff micro xln-vrr vfn xln, very poor-no vis por, one cutting w/vfxln matrix and poor por, showing trc spotty stain, NSFOC, questionable odor.

-4002-4012'-Ls cream, buff, white, micro xln, mod marl, very dense, no vis por, NSFOC. Trc black shale.

WOB 38K  
RPM 70  
PUMP:800psi

MW 9.1  
Vis 45  
3# LCM

MW 9.1  
Vis 46  
2# LCM

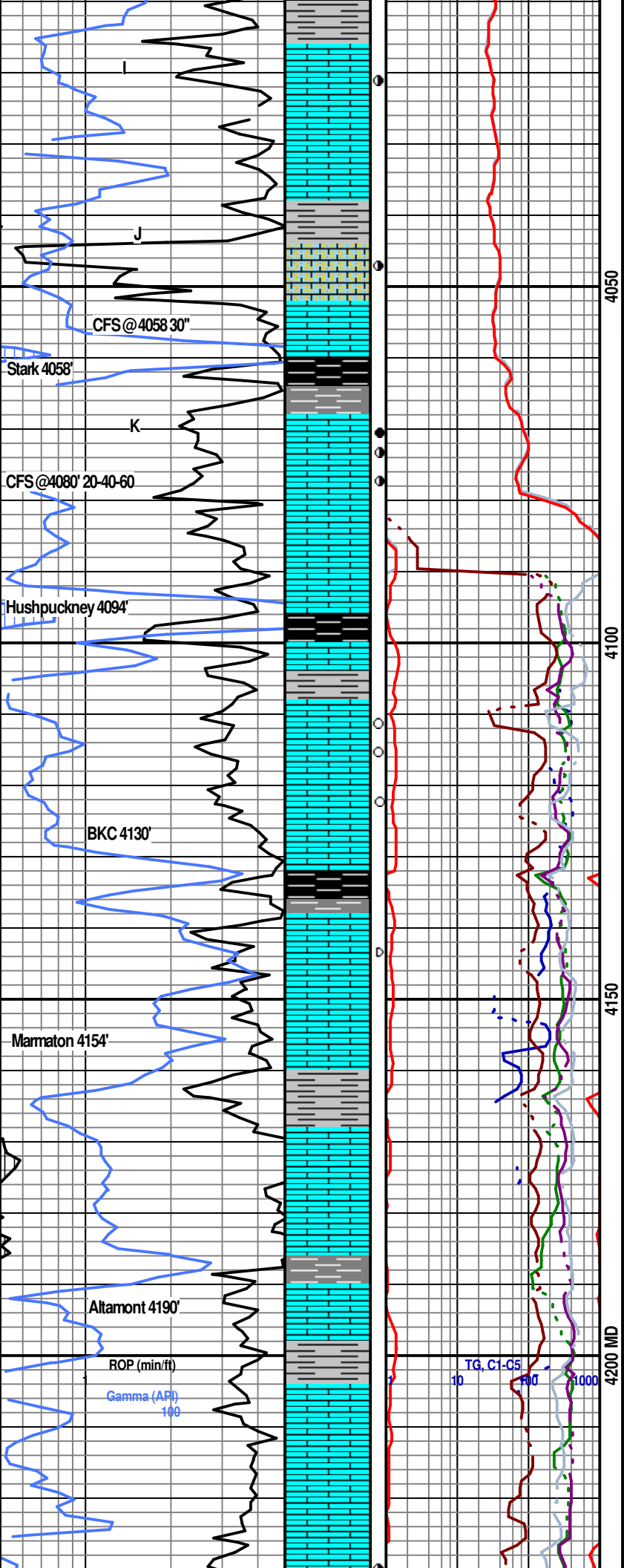
MW 9.1  
VIS 48  
1.5# LCM

MW 9.1  
VIS 4.4  
1# LCM

MW 9.1  
VIS 45  
1# LCM

WOB 38K  
RPM 65  
PUMP 850psi

MW 9.1  
VIS 65  
1# LCM



-4012-4024': Ls: cream, buff, micro xln, very dense, no vis por. Trc fine xln ls, brittle, suggary tex, hvly marl, trace spotty oil stain, two cuttings with edge stain and saturation, vssfo, questionable odor. One globule oil in tray.

4014'-4030' depth off at connection by 4'.

MW 9.2  
VIS 68  
1# LCM

-4024-4032': LS, cream, buff, micro xln, smooth text, very dense, no vis por, rr fossil fragment. NSFOC.

-4032-4040': Ls, buff, cream, micro xln-vfxln, sl. cherty, no vis por, NSFOC.  
J Porosity: oomoldic ls, honeycomb por, several cuttings w/partial dissolution, mod-well std, 500-710micron ooids, mostly barren, few cuttings w/trc stain, few oil globules in tray no odor.

DST #1  
KC K  
4058-4081'  
5-20-30-35  
IFP:82-127psi  
ISIP:527psi  
FFP:142-295psi  
FSIP:522  
Rec: 1390' GIP  
400' CGO  
180' GOCM (40%G, 25%O)  
120' GSOMW (74%W)

-4058-4066'-Black shale, firm subplaty, very carb. Ls: cream, grey, micro xln, very dense, no vis por, NSFOC.

K Porosity: Owing to Viscosity of mud climbing to a 97sec/quat very few representative cuttings were in samples. 20 and 40 min sample carried good odor, 60" samp had fair odor. 2-3 cutting overall with fn xln matrix and spotty stain, trace free oil in cup.

MW9.1  
VIS 59  
1# LCM

-4080-4089'-cream, white, micro xln, hvly marl, poorly cemented, no vis por, NSFOC.

-4089-4108'-Ls, cream, buff, micro xln, occ. fossil fragments, sl. cherty, occ. pyrite nodules, sl. cherty, white, opaque, NSFOC. Black sh, fair report, platy, mod firm, carbonaceous.

-4108-4122'-LS: buff, beige, cream, micro xln, occ rr fine xln, rare spotty oil stain and light sat, occ. pp vug, very tight, no show free oil, slight odor.

-4122-4133'-LS: buff, cm, grey, micro xln, occ. patch fn xln, no vis por, very dense, sl. cherty, NSFOC.

-4133-4141': Black shale: firm, blocky-platy, carb. Light grey shale, very soft, gummy. Ls: cream, white, micro xln, occ. fossil fragments, no vis por, NSFOC.

MW 9.1  
VIS 58  
1# LCM

-4141-4151': Ls, grey, micro xln, occ mottled w/org mat, occ. rr pp vug, no matrix por, v dense, NSFOC. various shale, green, arev.

-4151-4161': Ls, cream, brown tan, micro xln, sl. arg, occ. rr fossil frag, occ pp por, one cutting with dead edge stain, NSFOC.

-4161-4173': Ls, cream, grey, brown, mod arg, micritic, rr pp cug, one cutting with dead stain, NSFOC. Sh light grey, firm, calc, sub platy.

MW 9.1  
VIS 56  
1# LCM

-4173-4182'-LS: cream, grey, brown, micro xln, very dense, occ. mottled w/red sh, argillaceous, no vis por, NSFOC.

-4182-4191': Ls: buff, cream, grey, micro xln, no vis por. Grey calc shale, very firm, well cemented, blocky-subplaty.

WOB 38K  
RPM 70  
PUMP:800psi

-4191-4197'Ls: cream, buff micro xln, as above, few vfxln containing marl, brittle, no stain or show free oil, no odor.

-4197-4204'-Sh: grey green, soft-firm, non calc and calc, subplaty-non platy. Limestone, buff, grey, micro xln, occ rdm pp vug, no vis matrix por, NSFOC.

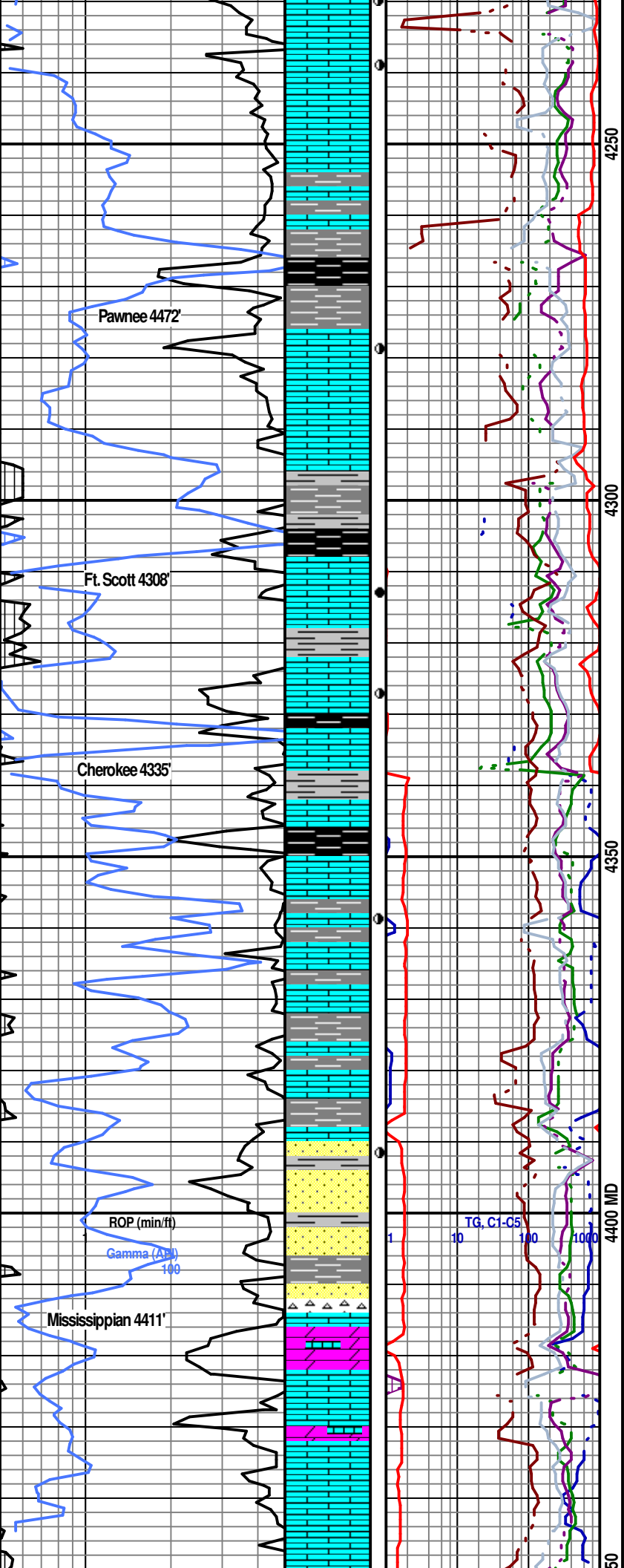
-4204-4210'- Sh a/a. Ls: white, cream, beige, grey, most micro xln, no vis inxlnm por, very dense, NSFOC.

MW 8.9  
VIS 49  
2# LCM

-4210-4219': Ls: cream, off white, micro xln, mod marl, very dense, no vis por, NSFOC.

-4219-4232': Altamont porosity, found 5 cuttings in tray, ls, micro xln-vfxln, few with rr spary calcite, sl stain and sat in mdm pp. scat vugs, appears tight. vssfo. faint odor in cup.





-4232-4241': 4236 break: ls, fn xln, scattered pp porosity, appears tight/p. connectivity, scattered stain and sl sat, no show free oil.faint odor.

-4241-4252: Ls: grey, cream, micro xln, sl. arg, occ. fossil frag, no vis por, NSFOC.

-4252-4261'-Flood dark gry-black shale, Ls: grey, cream, arg, micro xln, no vis por, NSFOC.

-4261-4270': Flood black shale, very firm, blocky-platy, carb. Trc light green shale. Limestone a/a.

-4270-4282': Pawnee porosity: Ls, light borwn, grey, fn-med xln, poor-fair inxl por, occ. packstone, fair vuggy por; very light brown oil stain, few cuttings barren (white) faint odor, ssfo, very faint odor.

-4282-4298: LS, cream, white, micro xln, very dense, NSFOC.

-4298-4306': Flood shale, med grey, grey-green, non silty,smooth, sl. calc, sub platy, blocky, brittle. Trc Ls: white, fn xln, non arg, no vis por, dense, no vis por, NSFOC.

-4306-4314': Ls: white, micro xln, very dense, no vis por, NSFOC. Trc oolitic grainstone, 500 microns, 1 cutting w/ rdm dis ooids, others no dissolution, no stain or show free oil. Flood black shale.

-4314'-4323': Ft Scott B por: Ls, packstone, sctd dissolved bioclasts, very dense micritic matrix, sparry calcite/dolomite in vugs, few larg xls,hard, fair-good sat in scattered vugs, weak-fair cut, weak-fair odor, ssfo-fsfo.

-4323-4331': Ft Scott B Porosity: Grey, lt brown, micro xln-fn xln, scattered, rdm pp vugs, spotty oil stn and sat, ssfo on cup, fair odor.

-4331-4339': Flood black shale. Ls, white, grey, micr xln-fn xln, tight, rare spotty edge stain, NSFOC. no odor.

-4339-4353': LS: grey, buff, micro xln, earthy tex, no vis por, very dense, occ. rr pp vug, NSFOC. Black shale, mod carb, platy, calc.

-4353-4363': Ls white, cream, micro xln, occ. rr pp vug, tight, very slight edge and fracture oil stain and sat, vssfo, 1 oil globule in tray, very faint odor.

-4363-4373: Ls, grey, micro xln., arg, mod marl, very rr dead oil stain, no vis por, NSFOC. Trc dark grey-black shale. Trc pyrite.

-4373-4383' Ls, buff, cream tan, micro xln, occ. glassy tex, v dense, no vis por, NSFOC. Trc med grey shale.

-4383-4393': Ls: cream, beige, micro xln, very dens, NSFOC. Trc SS, grey, white, vfg, well std, very well cons,sub md, calcite cement, no vis por, ssfo with acid and crush, faint odor.

-4393-4403: SS, white-lt grey, vfg-fg, very well cemented w/ calcite, some friable sand, poorly cons, sub md, well std, very poor por, NSFOC, few w/stain a/a in well cons ss.

-4403-4413: SS: white, fg-vfg, well cons, well std, sub md, poor ingl por, NSFOC. Trc orange, white, beige chert.

-4413-4419'- Ls-dolomitic Ls, light grey, cream, micro xln, dense, no vis por, NSFOC. Trc chert and sand A/A

-4419-4432'-Ls, cream, grey, micro xln, very hard, no vis por, occ. grainstone, no vis por, rr pp vug,dense, fossil hash, no vis por, NSOC. Trc chert.

-4432-4442: Ls: Grey brown, fn xln-micro xln, occ. rr pp vug, poor vis inxl por, sl. sucrosic, NSFOC.

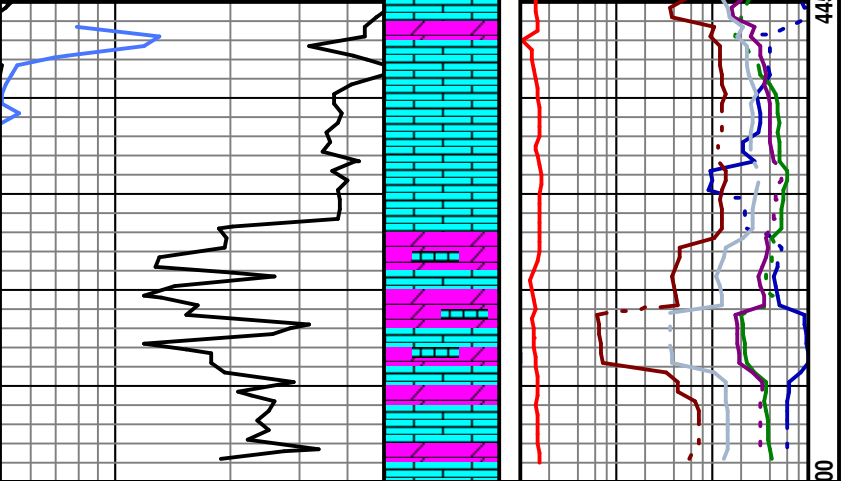
-44342-4453-Ls; Do Ls a/a, cream, grey-brown, micro xln-fn

DST #2  
Pawnee  
4258-4298'  
5-20-30-30  
IFP:32-33psi  
ISIP:369psi  
FFP:36-43psi  
FSIP:329psi  
Rec 50' HOCM  
(20%G 30%O)

MW 9.1  
VIS 48  
1# LCM

DST #3  
Ft. Scott  
4292-4339'  
5-20-30-30  
IFP:44-54  
ISIP:1152 psi  
FFP:61-110psi  
ISIP:1127 psi  
Rec:  
90'CGO  
120' GOCM (40%O,22%G)

Mudco Check:  
MW 8.9  
VIS 53  
Chlorides:2700ppm  
Solids 4.3%  
2# LCM



xln, no vis por, NSFOC.

-4453-4463'-Ls, cream, grey, fn xln, mod marl, sucrosic, no vis inxl por. Trc green shale, platy, brittle. NSFOC.

-4463-4473': Lime a/a, few oolitic (possibly ostracods) grainstones, micro xln matrix, no dissolution, very dense, no vis por, NSFOC.

-4473-4480': Ls; Dol Ls, cream, grey, micro xln-fn xln, few cuttings w/scat vuggy por, poor connectivity, NSFOC.

-4480-4490'-Ls,Dol Ls cream, fn xln, occ. scattered vuggy por, mod mark content, brittle, poor-fair inter vuggy por, NSFOC. Trc grey-green shale, subplaty-platy.

-4490-4498':Ls: cream white, micro xln-fn xln, sucrosic, occ. pp vugs, NSFOC. Trc green, marron, and grey shale.

\*Drill time is off by 3-5' from wireline logs.ROP is not shifted to match.

TD Driller: 4498'  
TD Logger: 4497'





# FRANKS Oilfield Service

◆ 815 Main Street Victoria, KS 67671 ◆ 24 Hour Phone (785) 639-7269  
 ◆ Office Phone (785) 639-3949 ◆ Email: franksoilfield@yahoo.com

TICKET NUMBER 0339

LOCATION Havie

FOREMAN Butch Daily

## FIELD TICKET & TREATMENT REPORT CEMENT

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
6-18-21		Lawrence #1	15	14	28	Leone
CUSTOMER <u>MG GI Inc</u>			TRUCK #		DRIVER	
MAILING ADDRESS			101		Butch	
CITY			102		Sub T	
STATE			103		Tom W	
ZIP CODE						

JOB TYPE 2 stage HOLE SIZE 7 7/8" HOLE DEPTH 4493 CASING SIZE & WEIGHT \_\_\_\_\_  
 CASING DEPTH 4491 DRILL PIPE \_\_\_\_\_ TUBING \_\_\_\_\_ OTHER \_\_\_\_\_  
 SLURRY WEIGHT 14.8' 11.3' SLURRY VOL \_\_\_\_\_ WATER gal/sk \_\_\_\_\_ CEMENT LEFT in CASING 42.47  
 DISPLACEMENT \_\_\_\_\_ DISPLACEMENT PSI \_\_\_\_\_ MIX PSI \_\_\_\_\_ RATE \_\_\_\_\_

REMARKS: Safety meeting on Rigwell. Run 106 lbs of 5 1/2" casing on 1357, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47, 49, 51, 53, 55, 57, 59, 61, 63, 65, 67, 69, 71, 73, 75, 77, 79, 81, 83, 85, 87, 89, 91, 93, 95, 97, 99, 101, 103, 105, 107, 109, 111, 113, 115, 117, 119, 121, 123, 125, 127, 129, 131, 133, 135, 137, 139, 141, 143, 145, 147, 149, 151, 153, 155, 157, 159, 161, 163, 165, 167, 169, 171, 173, 175, 177, 179, 181, 183, 185, 187, 189, 191, 193, 195, 197, 199, 201, 203, 205, 207, 209, 211, 213, 215, 217, 219, 221, 223, 225, 227, 229, 231, 233, 235, 237, 239, 241, 243, 245, 247, 249, 251, 253, 255, 257, 259, 261, 263, 265, 267, 269, 271, 273, 275, 277, 279, 281, 283, 285, 287, 289, 291, 293, 295, 297, 299, 301, 303, 305, 307, 309, 311, 313, 315, 317, 319, 321, 323, 325, 327, 329, 331, 333, 335, 337, 339, 341, 343, 345, 347, 349, 351, 353, 355, 357, 359, 361, 363, 365, 367, 369, 371, 373, 375, 377, 379, 381, 383, 385, 387, 389, 391, 393, 395, 397, 399, 401, 403, 405, 407, 409, 411, 413, 415, 417, 419, 421, 423, 425, 427, 429, 431, 433, 435, 437, 439, 441, 443, 445, 447, 449, 451, 453, 455, 457, 459, 461, 463, 465, 467, 469, 471, 473, 475, 477, 479, 481, 483, 485, 487, 489, 491, 493, 495, 497, 499, 501, 503, 505, 507, 509, 511, 513, 515, 517, 519, 521, 523, 525, 527, 529, 531, 533, 535, 537, 539, 541, 543, 545, 547, 549, 551, 553, 555, 557, 559, 561, 563, 565, 567, 569, 571, 573, 575, 577, 579, 581, 583, 585, 587, 589, 591, 593, 595, 597, 599, 601, 603, 605, 607, 609, 611, 613, 615, 617, 619, 621, 623, 625, 627, 629, 631, 633, 635, 637, 639, 641, 643, 645, 647, 649, 651, 653, 655, 657, 659, 661, 663, 665, 667, 669, 671, 673, 675, 677, 679, 681, 683, 685, 687, 689, 691, 693, 695, 697, 699, 701, 703, 705, 707, 709, 711, 713, 715, 717, 719, 721, 723, 725, 727, 729, 731, 733, 735, 737, 739, 741, 743, 745, 747, 749, 751, 753, 755, 757, 759, 761, 763, 765, 767, 769, 771, 773, 775, 777, 779, 781, 783, 785, 787, 789, 791, 793, 795, 797, 799, 801, 803, 805, 807, 809, 811, 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1841, 1843, 1845, 1847, 1849, 1851, 1853, 1855, 1857, 1859, 1861, 1863, 1865, 1867, 1869, 1871, 1873, 1875, 1877, 1879, 1881, 1883, 1885, 1887, 1889, 1891, 1893, 1895, 1897, 1899, 1901, 1903, 1905, 1907, 1909, 1911, 1913, 1915, 1917, 1919, 1921, 1923, 1925, 1927, 1929, 1931, 1933, 1935, 1937, 1939, 1941, 1943, 1945, 1947, 1949, 1951, 1953, 1955, 1957, 1959, 1961, 1963, 1965, 1967, 1969, 1971, 1973, 1975, 1977, 1979, 1981, 1983, 1985, 1987, 1989, 1991, 1993, 1995, 1997, 1999, 2001, 2003, 2005, 2007, 2009, 2011, 2013, 2015, 2017, 2019, 2021, 2023, 2025, 2027, 2029, 2031, 2033, 2035, 2037, 2039, 2041, 2043, 2045, 2047, 2049, 2051, 2053, 2055, 2057, 2059, 2061, 2063, 2065, 2067, 2069, 2071, 2073, 2075, 2077, 2079, 2081, 2083, 2085, 2087, 2089, 2091, 2093, 2095, 2097, 2099, 2101, 2103, 2105, 2107, 2109, 2111, 2113, 2115, 2117, 2119, 2121, 2123, 2125, 2127, 2129, 2131, 2133, 2135, 2137, 2139, 2141, 2143, 2145, 2147, 2149, 2151, 2153, 2155, 2157, 2159, 2161, 2163, 2165, 2167, 2169, 2171, 2173, 2175, 2177, 2179, 2181, 2183, 2185, 2187, 2189, 2191, 2193, 2195, 2197, 2199, 2201, 2203, 2205, 2207, 2209, 2211, 2213, 2215, 2217, 2219, 2221, 2223, 2225, 2227, 2229, 2231, 2233, 2235, 2237, 2239, 2241, 2243, 2245, 2247, 2249, 2251, 2253, 2255, 2257, 2259, 2261, 2263, 2265, 2267, 2269, 2271, 2273, 2275, 2277, 2279, 2281, 2283, 2285, 2287, 2289, 2291, 2293, 2295, 2297, 2299, 2301, 2303, 2305, 2307, 2309, 2311, 2313, 2315, 2317, 2319, 2321, 2323, 2325, 2327, 2329, 2331, 2333, 2335, 2337, 2339, 2341, 2343, 2345, 2347, 2349, 2351, 2353, 2355, 2357, 2359, 2361, 2363, 2365, 2367, 2369, 2371, 2373, 2375, 2377, 2379, 2381, 2383, 2385, 2387, 2389, 2391, 2393, 2395, 2397, 2399, 2401, 2403, 2405, 2407, 2409, 2411, 2413, 2415, 2417, 2419, 2421, 2423, 2425, 2427, 2429, 2431, 2433, 2435, 2437, 2439, 2441, 2443, 2445, 2447, 2449, 2451, 2453, 2455, 2457, 2459, 2461, 2463, 2465, 2467, 2469, 2471, 2473, 2475, 2477, 2479, 2481, 2483, 2485, 2487, 2489, 2491, 2493, 2495, 2497, 2499, 2501, 2503, 2505, 2507, 2509, 2511, 2513, 2515, 2517, 2519, 2521, 2523, 2525, 2527, 2529, 2531, 2533, 2535, 2537, 2539, 2541, 2543, 2545, 2547, 2549, 2551, 2553, 2555, 2557, 2559, 2561, 2563, 2565, 2567, 2569, 2571, 2573, 2575, 2577, 2579, 2581, 2583, 2585, 2587, 2589, 2591, 2593, 2595, 2597, 2599, 2601, 2603, 2605, 2607, 2609, 2611, 2613, 2615, 2617, 2619, 2621, 2623, 2625, 2627, 2629, 2631, 2633, 2635, 2637, 2639, 2641, 2643, 2645, 2647, 2649, 2651, 2653, 2655, 2657, 2659, 2661, 2663, 2665, 2667, 2669, 2671, 2673, 2675, 2677, 2679, 2681, 2683, 2685, 2687, 2689, 2691, 2693, 2695, 2697, 2699, 2701, 2703, 2705, 2707, 2709, 2711, 2713, 2715, 2717, 2719, 2721, 2723, 2725, 2727, 2729, 2731, 2733, 2735, 2737, 2739, 2741, 2743, 2745, 2747, 2749, 2751, 2753, 2755, 2757, 2759, 2761, 2763, 2765, 2767, 2769, 2771, 2773, 2775, 2777, 2779, 2781, 2783, 2785, 2787, 2789, 2791, 2793, 2795, 2797, 2799, 2801, 2803, 2805, 2807, 2809, 2811, 2813, 2815, 2817, 2819, 2821, 2823, 2825, 2827, 2829, 2831, 2833, 2835, 2837, 2839, 2841, 2843, 2845, 2847, 2849, 2851, 2853, 2855, 2857, 2859, 2861, 2863, 2865, 2867, 2869, 2871, 2873, 2875, 2877, 2879, 2881, 2883, 2885, 2887, 2889, 2891, 2893, 2895, 2897, 2899, 2901, 2903, 2905, 2907, 2909, 2911, 2913, 2915, 2917, 2919, 2921, 2923, 2925, 2927, 2929, 2931, 2933, 2935, 2937, 2939, 2941, 2943, 2945, 2947, 2949, 2951, 2953, 2955, 2957, 2959, 2961, 2963, 2965, 2967, 2969, 2971, 2973, 2975, 2977, 2979, 2981, 2983, 2985, 2987, 2989, 2991, 2993, 2995, 2997, 2999, 3001, 3003, 3005, 3007, 3009, 3011, 3013, 3015, 3017, 3019, 3021, 3023, 3025, 3027, 3029, 3031, 3033, 3035, 3037, 3039, 3041, 3043, 3045, 3047, 3049, 3051, 3053, 3055, 3057, 3059, 3061, 3063, 3065, 3067, 3069, 3071, 3073, 3075, 3077, 3079, 3081, 3083, 3085, 3087, 3089, 3091, 3093, 3095, 3097, 3099, 3101, 3103, 3105, 3107, 3109, 3111, 3113, 3115, 3117, 3119, 3121, 3123, 3125, 3127, 3129, 3131, 3133, 3135, 3137, 3139, 3141, 3143, 3145, 3147, 3149, 3151, 3153, 3155, 3157, 3159, 3161, 3163, 3165, 3167, 3169, 3171, 3173, 3175, 3177, 3179, 3181, 3183, 3185, 3187, 3189, 3191, 3193, 3195, 3197, 3199, 3201, 3203, 3205, 3207, 3209, 3211, 3213, 3215, 3217, 3219, 3221, 3223, 3225, 3227, 3229, 3231, 3233, 3235, 3237, 3239, 3241, 3243, 3245, 3247, 3249, 3251, 3253, 3255, 3257, 3259, 3261, 3263, 3265, 3267, 3269, 3271, 3273, 3275, 3277, 3279, 3281, 3283, 3285, 3287, 3289, 3291, 3293, 3295, 3297, 3299, 3301, 3303, 3305, 3307, 3309, 3311, 3313, 3315, 3317, 3319, 3321, 3323, 3325, 3327, 3329, 3331, 3333, 3335, 3337, 3339, 3341, 3343, 3345, 3347, 3349, 3351, 3353, 3355, 3357, 3359, 3361, 3363, 3365, 3367, 3369, 3371, 3373, 3375, 3377, 3379, 3381, 3383, 3385, 3387, 3389, 3391, 3393, 3395, 3397, 3399, 3401, 3403, 3405, 3407, 3409, 3411, 3413, 3415, 3417, 3419, 3421, 3423, 3425, 3427, 3429, 3431, 3433, 3435, 3437, 3439, 3441, 3443, 3445, 3447, 3449, 3451, 3453, 3455, 3457, 3459, 3461, 3463, 3465, 3467, 3469, 3471, 3473, 3475, 3477, 3479, 3481, 3483, 3485, 3487, 3489, 3491, 3493, 3495, 3497, 3499, 3501, 3503, 3505, 3507, 3509, 3511, 3513, 3515, 3517, 3519, 3521, 3523, 3525, 3527, 3529, 3531, 3533, 3535, 3537, 3539, 3541, 3543, 3545, 3547, 3549, 3551, 3553, 3555, 3557, 3559, 3561, 3563, 3565, 3567, 3569, 3571, 3573, 3575, 3577, 3579, 3581, 3583, 3585, 3587, 3589, 3591, 3593, 3595, 3597, 3599, 3601, 3603, 3605, 3607, 3609, 3611, 3613, 3615, 3617, 3619, 3621, 3623, 3625, 3627, 3629, 3631, 3633, 3635, 3637, 3639, 3641, 3643, 3645, 3647, 3649, 3651, 3653, 3655, 3657, 3659, 3661, 3663, 3665, 3667, 3669, 3671, 3673, 3675, 3677, 3679, 3681, 3683, 3685, 3687, 3689, 3691, 3693, 3695, 3697, 3699, 3701, 3703, 3705, 3707, 3709, 3711, 3713, 3715, 3717, 3719, 3721, 3723, 3725, 3727, 3729, 3731, 3733, 3735, 3737, 3739, 3741, 3743, 3745, 3747, 3749, 3751, 3753, 3755, 3757, 3759, 3761, 3763, 3765, 3767, 3769, 3771, 3773, 3775, 3777, 3779, 3781, 3783, 3785, 3787, 3789, 3791, 3793, 3795, 3797, 3799, 3801, 3803, 3805, 3807, 3809, 3811, 3813, 3815, 3817, 3819, 3821, 3823, 3825, 3827, 3829, 3831, 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