Confidentiality Requested:
☑ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1268260

Form ACO-1
November 2016
Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 5144
Name: Mull Drilling Company, Inc.
Address 1: 1700 N WATERFRONT PKWY
Address 2: BLDG 1200
City: WICHITA State: KS Zip: 67206 + 6637
Contact Person: Mark Shreve
Phone: (316) 264-6366
CONTRACTOR: License # 5929
Name: Duke Drilling Co., Inc.
Wellsite Geologist: Phil Askey
Purchaser: N/A

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 #:

08/25/2015 Spud Date or Recompletion Date
09/03/2015 Date Reached TD
09/05/2015 Completion Date or Recompletion Date

API No.: 15-075-20895-00-00
Spot Description:
NE - SE - NW - NE Sec. 9 Twp. 25 S. R. 42 ☐ East ☑ West
862 Feet from ☑ North / ☐ South Line of Section
1471 Feet from ☑ East / ☐ West Line of Section

Footages Calculated from Nearest Outside Section Corner:
☑ NE ☐ NW ☐ SE ☐ SW

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

Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84

County: Hamilton
Lease Name: Guffey Trust Well #: 1-9
Field Name:
Producing Formation: N/A
Elevation: Ground: 3582 Kelly Bushing: 3595
Total Vertical Depth: 5682 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 368 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: 24500 ppm Fluid volume: 900 bbls
Dewatering method used: Evaporated

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: 11/13/2015
☑ **Confidential Release Date:** 11/12/2017
☑ **Wireline Log Received** ☐ **Drill Stem Tests Received**
☑ **Geologist Report / Mud Logs Received**
☐ **UIC Distribution**
ALT ☐ I ☑ II ☐ III **Approved by:** NAOMI JAMES **Date:** 11/16/2015

[redacted]

1268260

Operator Name: Mull Drilling Company, Inc. Lease Name: Guffey Trust Well #: 1-9

Sec. 9 Twp. 25 S. R. 42 ☐ East ☑ West County: Hamilton

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

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

Drill Stem Tests Taken ☑ Yes ☐ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☑ Yes ☐ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

Geolgist Report / Mud Logs ☐ Yes ☐ No

List All E. Logs Run:

CDL/CNL/PE
DIL

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

Name: Attached Top: Attached Datum: Attached

CASING RECORD ☑ New ☐ Used
Report all strings set-conductor, surface, intermediate, production, etc.

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	17.250	13.375	48	368	Standard	310	3% cc, 2% gel

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
___ Perforate ___ Protect Casing ___ Plug Back TD ___ Plug Off Zone	-			
	-			

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

Date of first Production/Injection or Resumed Production/ Injection:	Producing Method: ☐ Flowing ☐ Pumping ☐ Gas Lift ☐ Other *(Explain)*

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

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

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

TUBING RECORD: Size: Set At: Packer At:

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

Form	ACO1 - Well Completion
Operator	Mull Drilling Company, Inc.
Well Name	Guffey Trust 1-9
Doc ID	1268260

Tops

Name	Top	Datum
Anhydrite	1959	+1636
B/Anhydrite	1976	+1619
Heebner	3820	- 225
Lansing	3874	- 279
Stark	4220	- 625
Marmaton	4387	- 792
Ft. Scott	4523	- 928
Cherokee	4560	- 965
Atoka	4698	- 1103
Morrow	5034	- 1439
Upper Morrow Sand	5054	- 1459
LTD	5256	- 1661

Form	ACO1 - Well Completion
Operator	Mull Drilling Company, Inc.
Well Name	Guffey Trust 1-9
Doc ID	1268260

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	17.250	13.375	48	368	Standard	310	3% cc, 2% gel

SWIFT Services, Inc.

CHARGE TO: Mull Drilling
ADDRESS
CITY, STATE, ZIP CODE

TICKET 28667

PAGE 1 OF 1

SERVICE LOCATIONS	WELL/PROJECT NO.	LEASE	COUNTY/PARISH	STATE	CITY	DATE	OWNER
1. New City KS	1-9	Goffey Trust	Hamilton	KS	Syracuse	25 AUG 15	
2.	TICKET TYPE ☐ SERVICE ☐ SALES	CONTRACTOR DUKE	RIG NAME/NO. 9	SHIPPED VIA CT	DELIVERED TO location	ORDER NO.	
3.	WELL TYPE oil	WELL CATEGORY Development	JOB PURPOSE cement surface pipe		WELL PERMIT NO.	WELL LOCATION 9-25-42	
4. REFERRAL LOCATION	INVOICE INSTRUCTIONS						

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING LOC	ACCT	DF	DESCRIPTION	QTY.	U/M	QTY.	U/M	UNIT
575		1			MILEAGE TRK 110	150	mi			
5765		1			Pump Charge	1	ea			
325		1			STANDARD cement	310	sk			
278		1			calcium chloride	700	lb	14	sk	
279		1			Bentonite gel	600	lb	6	sk	
290		1			D-Air	2	gal			
581		1			Service charge	310	sk			
583		1			Drayage	30440	lb	1522	TM	

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, **PAYMENT, RELEASE, INDEMNITY,** and **LIMITED WARRANTY** provisions.

MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS

X

DATE SIGNED 8-25-15 TIME SIGNED ☐ A.M. ☐ P.M.

REMIT PAYMENT TO:

SWIFT SERVICES, INC.
P.O. BOX 466
NESS CITY, KS 67560
785-798-2300

SURVEY	AGREE	UN-DECIDED	DIS-AGREE
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?			
WE UNDERSTOOD AND MET YOUR NEEDS?			
OUR SERVICE WAS PERFORMED WITHOUT DELAY?			
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?			

ARE YOU SATISFIED WITH OUR SERVICE? ☐ YES ☐ NO

☐ CUSTOMER DID NOT WISH TO RESPOND

PAGE TOTAL

Hamilton TAX 7.5%

TOTAL

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.

SWIFT OPERATOR TAB Cybell APPROVAL

Thank You

JOB LOG — **SWIFT Services, Inc.** — DATE 25 AUG 15 — PAGE NO. 1

CUSTOMER: Mull Drilling | WELL NO.: 1-9 | LEASE: Guffey TRUST | JOB TYPE: cement surface pipe | TICKET NO.: 28667

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS T	PUMPS C	PRESSURE (PSI) TUBING	PRESSURE (PSI) CASING	DESCRIPTION OF OPERATION AND MATERIALS
								310 sk STANDARD Cement 2% gel 3% CC
								TD = 370' 9 jts 13 3/8 x 48# casing
								352' - 13 3/8 + 17' - 8 5/8 17 1/2" bit
	2200							on loc TRK 110
26 AUG	0130							start 13 3/8 x 48# casing in well
	0320							circulate well
	0350	3 3/4	7.5				200	mix STD 2%3% cement 310 sk @ 14.7ppg
	0414	6					200	Displace cement
		6	20				300	
		6	47				350	cement to surface
	0430	6	52				350	Kickout
	0432							shut in 13 3/8
	0435							wash truck
								Rack up
	0500							job complete

(20 sacks to pit)

Thanks
Flint, Blaine & ROB

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Co., Inc.**

1700 N Waterfront Pkwy
Bldg 12000
Wichita, KS 67206

ATTN: Phil Askey

Guffey Trust #1-9

S9-25s-42w Hamilton,KS

Start Date: 2015.08.31 @ 00:48:00

End Date: 2015.08.31 @ 07:59:00

Job Ticket #: 61710 DST #: 1

Trilobite Testing, Inc

1515 Commerce Parkway Hays, KS 67601

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

Printed: 2015.09.03 @ 14:37:03

DRILL STEM TEST REPORT

Mull Drilling Co., Inc.

1700 N Waterfront Pkwy
Bldg 12000
Wichita, KS 67206
ATTN: Phil Askey

S9-25s-42w Hamilton,KS

Guffey Trust #1-9

Job Ticket: 61710 **DST#: 1**

Test Start: 2015.08.31 @ 00:48:00

GENERAL INFORMATION:

Formation: **Upper Morrow.**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 03:33:20
Time Test Ended: 07:59:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Chuck Smith
Unit No: 61

Interval: 5007.00 ft (KB) To 5080.00 ft (KB) (TVD)
Total Depth: 5080.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

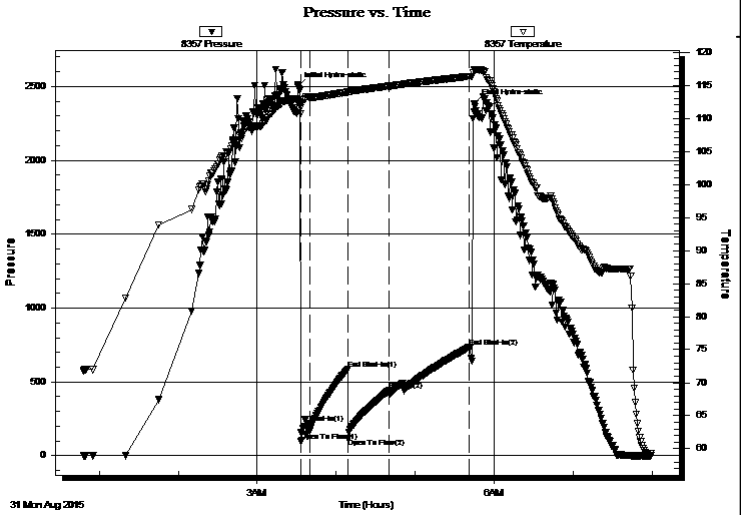
Reference Elevations: 3595.00 ft (KB)
3582.00 ft (CF)
KB to GR/CF: 13.00 ft

Serial #: 8357 **Inside**

Press@RunDepth: 442.97 psig @ 5008.00 ft (KB)
Start Date: 2015.08.31 End Date: 2015.08.31
Start Time: 00:48:02 End Time: 07:59:00

Capacity: 8000.00 psig
Last Calib.: 2015.08.31
Time On Btm: 2015.08.31 @ 03:30:50
Time Off Btm: 2015.08.31 @ 05:45:09

TEST COMMENT: 5- Surface blow throughout.
30- No return.
30- No blow.
60- No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2498.68	112.68	Initial Hydro-static
3	100.27	111.64	Open To Flow (1)
9	219.22	113.17	Shut-In(1)
38	586.72	113.97	End Shut-In(1)
39	115.60	113.91	Open To Flow (2)
70	442.97	114.86	Shut-In(2)
131	734.84	116.35	End Shut-In(2)
135	2381.36	117.40	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
45.00	M 100m with a couple oil spots.	0.22

Gas Rates

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

DRILL STEM TEST REPORT

Mull Drilling Co., Inc.

1700 N Waterfront Pkwy
Bldg 12000
Wichita, KS 67206
ATTN: Phil Askey

S9-25s-42w Hamilton,KS

Guffey Trust #1-9

Job Ticket: 61710 **DST#: 1**

Test Start: 2015.08.31 @ 00:48:00

GENERAL INFORMATION:

Formation: **Upper Morrow.**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 03:33:20
Time Test Ended: 07:59:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Chuck Smith
Unit No: 61

Interval: 5007.00 ft (KB) To 5080.00 ft (KB) (TVD)
Total Depth: 5080.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

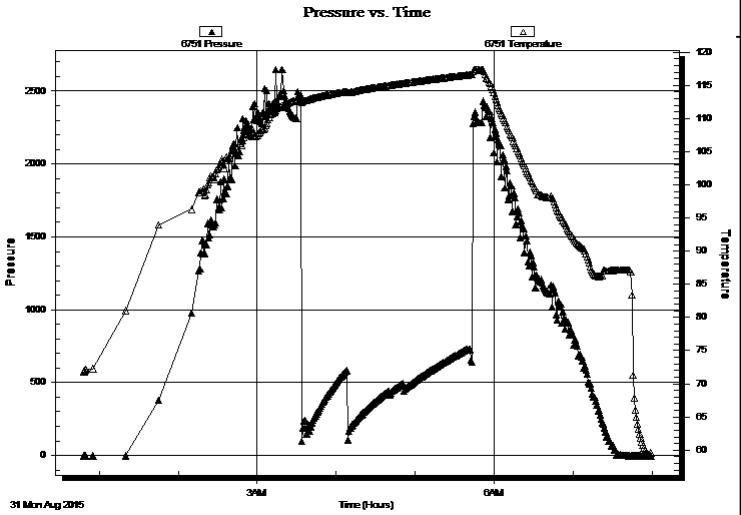
Reference Elevations: 3595.00 ft (KB)
3582.00 ft (CF)
KB to GR/CF: 13.00 ft

Serial #: 6751 **Outside**

Press@RunDepth: psig @ 5008.00 ft (KB)
Start Date: 2015.08.31 End Date: 2015.08.31
Start Time: 00:48:02 End Time: 07:59:00

Capacity: 8000.00 psig
Last Calib.: 2015.08.31
Time On Btm:
Time Off Btm:

TEST COMMENT: 5- Surface blow throughout.
30- No return.
30- No blow.
60- No return.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
45.00	M 100m with a couple oil spots.	0.22

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Co., Inc.

1700 N Waterfront Pkwy
Bldg 12000
Wichita, KS 67206
ATTN: Phil Askey

S9-25s-42w Hamilton,KS

Guffey Trust #1-9

Job Ticket: 61710 **DST#: 1**

Test Start: 2015.08.31 @ 00:48:00

Tool Information

Drill Pipe:	Length:	4829.00 ft	Diameter:	3.82 inches	Volume:	68.45 bbl	
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	2.25 inches	Volume:	0.00 bbl	
Drill Collar:	Length:	182.00 ft	Diameter:	2.25 inches	Volume:	0.90 bbl	
					Total Volume:	69.35 bbl	

Drill Pipe Above KB:	31.50 ft
Depth to Top Packer:	5007.00 ft
Depth to Bottom Packer:	ft
Interval between Packers:	73.00 ft
Tool Length:	100.50 ft
Number of Packers:	2 Diameter: 6.75 inches

Tool Weight:	2300.00 lb
Weight set on Packer:	22000.00 lb
Weight to Pull Loose:	95000.00 lb
Tool Chased	0.00 ft
String Weight: Initial	75000.00 lb
Final	75000.00 lb

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			4980.50		
Shut In Tool	5.00			4985.50		
Hydraulic tool	5.00			4990.50		
Jars	5.00			4995.50		
Safety Joint	2.50			4998.00		
Packer	5.00			5003.00	27.50	Bottom Of Top Packer
Packer	4.00			5007.00		
Stubb	1.00			5008.00		
Recorder	0.00	8357	Inside	5008.00		
Recorder	0.00	6751	Outside	5008.00		
Perforations	35.00			5043.00		
Change Over Sub	1.00			5044.00		
Drill Pipe	32.00			5076.00		
Change Over Sub	1.00			5077.00		
Bullnose	3.00			5080.00	73.00	Bottom Packers & Anchor
Total Tool Length:	**100.50**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Mull Drilling Co., Inc.

1700 N Waterfront Pkwy
Bldg 12000
Wichita, KS 67206
ATTN: Phil Askey

S9-25s-42w Hamilton,KS

Guffey Trust #1-9

Job Ticket: 61710 **DST#: 1**

Test Start: 2015.08.31 @ 00:48:00

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:	53.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	11.16 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	6200.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

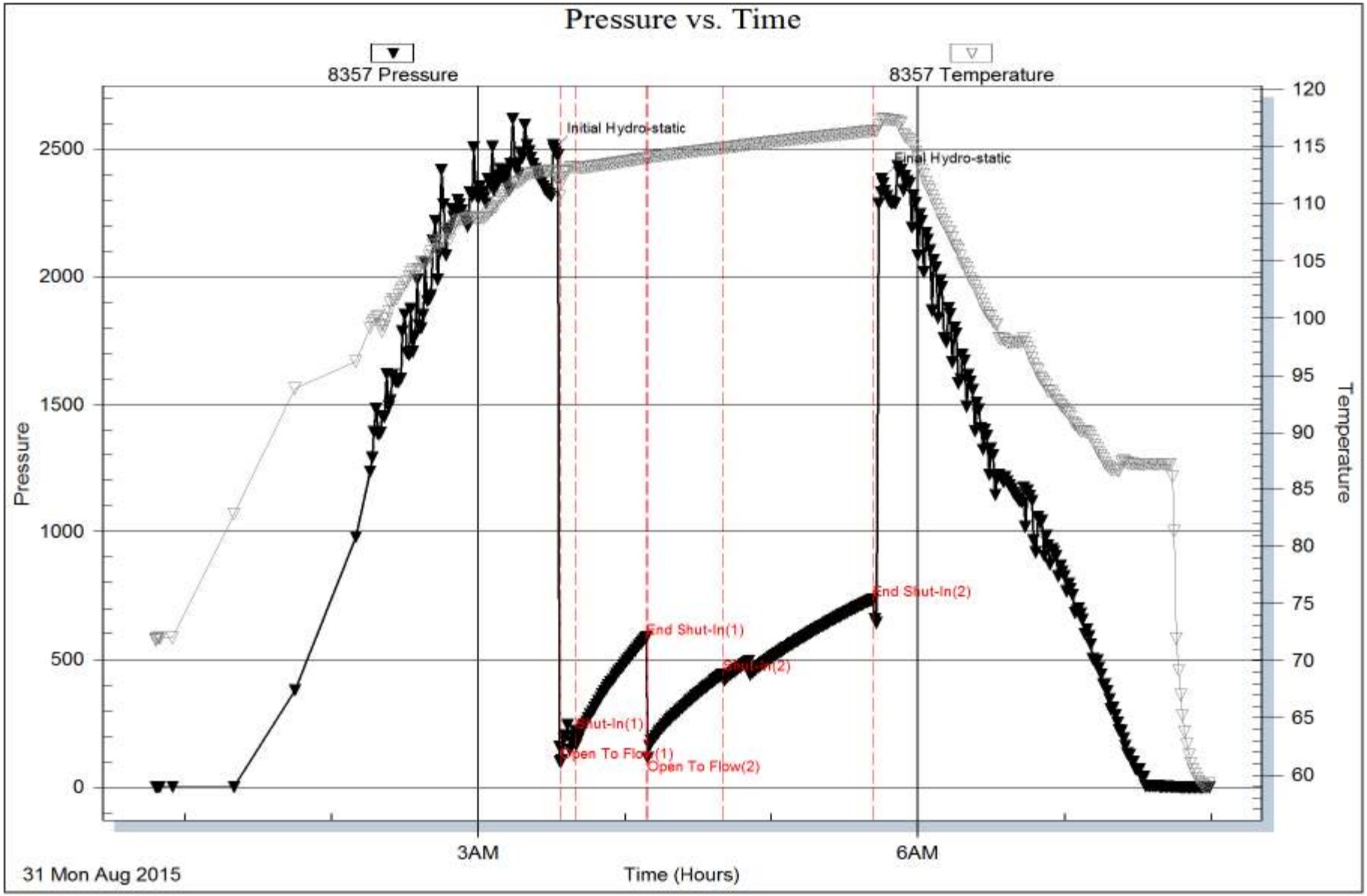
Recovery Table

Length ft	Description	Volume bbl
45.00	M 100m with a couple oil spots.	0.221

Total Length: 45.00 ft Total Volume: 0.221 bbl

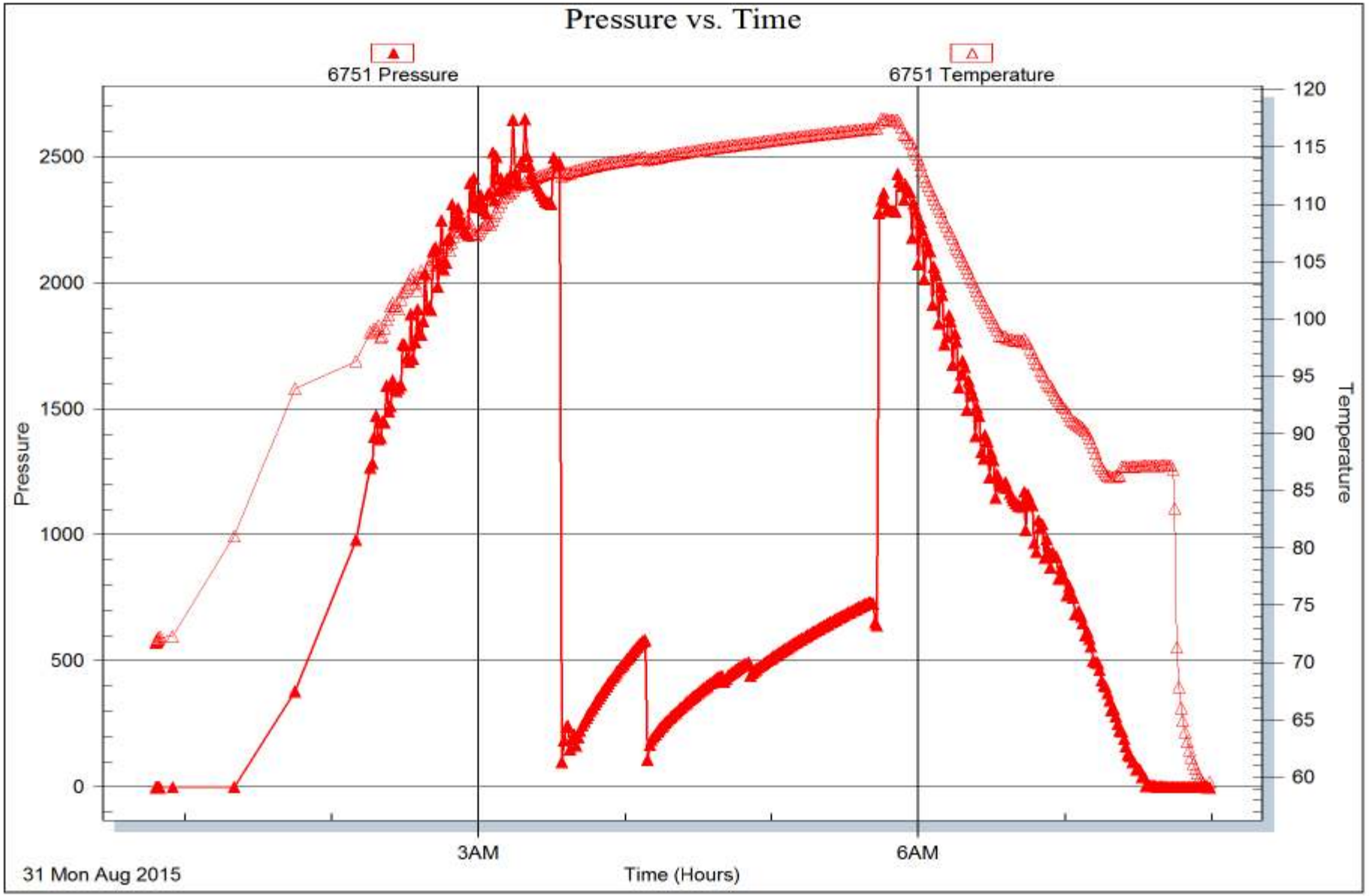
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8357 **Inside** Mull Drilling Co., Inc. Guffey Trust #1-9 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 61710 Printed: 2015.09.03 @ 14:37:05

Serial #: 6751 **Outside** Mull Drilling Co., Inc. Guffey Trust #1-9 DST Test Number: 1



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Co., Inc.**

1700 N Waterfront Pkwy
Bldg 12000
Wichita, KS 67206

ATTN: Phil Askey

Guffey Trust #1-9

S9-25s-42w Hamilton,KS

Start Date: 2015.09.01 @ 04:32:00

End Date: 2015.09.01 @ 11:33:39

Job Ticket #: 61711 DST #: 2

Trilobite Testing, Inc

1515 Commerce Parkway Hays, KS 67601

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

Printed: 2015.09.03 @ 14:36:24

DRILL STEM TEST REPORT

Mull Drilling Co., Inc.

1700 N Waterfront Pkwy
Bldg 12000
Wichita, KS 67206
ATTN: Phil Askey

S9-25s-42w Hamilton,KS

Guffey Trust #1-9

Job Ticket: 61711 **DST#: 2**

Test Start: 2015.09.01 @ 04:32:00

GENERAL INFORMATION:

Formation: **Mid Morrow Sand**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 07:16:20
Time Test Ended: 11:33:39

Test Type: Conventional Bottom Hole (Reset)
Tester: Chuck Smith
Unit No: 61

Interval: 5302.00 ft (KB) To 5340.00 ft (KB) (TVD)
Total Depth: 5340.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

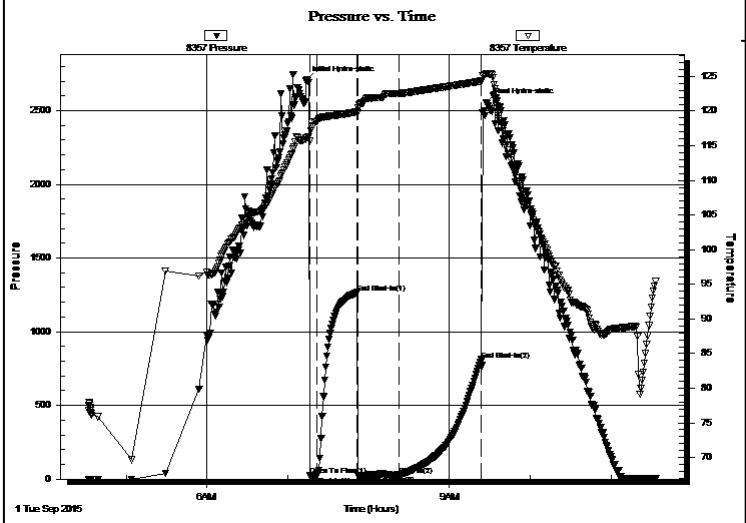
Reference Elevations: 3595.00 ft (KB)
3582.00 ft (CF)
KB to GR/CF: 13.00 ft

Serial #: 8357 **Inside**

Press@RunDepth: 27.60 psig @ 5303.00 ft (KB)
Start Date: 2015.09.01 End Date: 2015.09.01
Start Time: 04:32:02 End Time: 11:33:40

Capacity: 8000.00 psig
Last Calib.: 2015.09.01
Time On Btm: 2015.09.01 @ 07:13:30
Time Off Btm: 2015.09.01 @ 09:27:09

TEST COMMENT: 5- Surface blow throughout.
30- No return.
30- No blow .
60- No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2702.15	116.13	Initial Hydro-static
3	23.22	115.64	Open To Flow (1)
8	20.99	118.52	Shut-In(1)
38	1266.46	119.91	End Shut-In(1)
39	25.48	119.75	Open To Flow (2)
69	27.60	122.53	Shut-In(2)
131	810.03	124.34	End Shut-In(2)
134	2554.74	125.44	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
40.00	VSOCM 1o 99m	0.20

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

Mull Drilling Co., Inc.

1700 N Waterfront Pkwy
Bldg 12000
Wichita, KS 67206
ATTN: Phil Askey

S9-25s-42w Hamilton,KS

Guffey Trust #1-9

Job Ticket: 61711 **DST#: 2**

Test Start: 2015.09.01 @ 04:32:00

GENERAL INFORMATION:

Formation: **Mid Morrow Sand**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 07:16:20
Time Test Ended: 11:33:39

Test Type: Conventional Bottom Hole (Reset)
Tester: Chuck Smith
Unit No: 61

Interval: 5302.00 ft (KB) To 5340.00 ft (KB) (TVD)
Total Depth: 5340.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

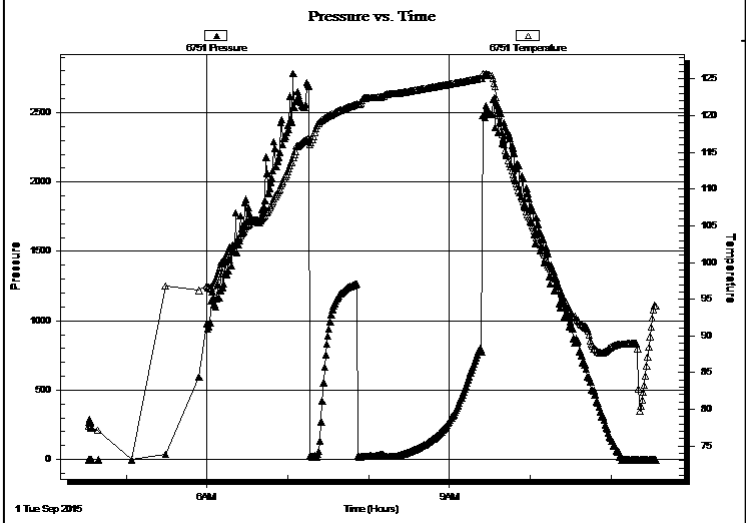
Reference Elevations: 3595.00 ft (KB)
3582.00 ft (CF)
KB to GR/CF: 13.00 ft

Serial #: 6751 **Outside**

Press@RunDepth: psig @ 5303.00 ft (KB)
Start Date: 2015.09.01 End Date: 2015.09.01
Start Time: 04:32:02 End Time: 11:33:40

Capacity: 8000.00 psig
Last Calib.: 2015.09.01
Time On Btm:
Time Off Btm:

TEST COMMENT: 5- Surface blow throughout.
30- No return.
30- No blow.
60- No return.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
40.00	VSOCM 1o 99m	0.20

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Co., Inc.

1700 N Waterfront Pkwy
Bldg 12000
Wichita, KS 67206
ATTN: Phil Askey

S9-25s-42w Hamilton,KS

Guffey Trust #1-9

Job Ticket: 61711 **DST#: 2**

Test Start: 2015.09.01 @ 04:32:00

Tool Information

Drill Pipe:	Length:	5114.00 ft	Diameter:	3.82	inches	Volume:	72.49	bbl	
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	2.25	inches	Volume:	0.00	bbl	
Drill Collar:	Length:	182.00 ft	Diameter:	2.25	inches	Volume:	0.90	bbl	
						Total Volume:	73.39	bbl	

Drill Pipe Above KB:	21.50 ft
Depth to Top Packer:	5302.00 ft
Depth to Bottom Packer:	ft
Interval between Packers:	38.00 ft
Tool Length:	65.50 ft
Number of Packers:	2 Diameter: 6.75 inches

Tool Weight:		2300.00 lb
Weight set on Packer:		25000.00 lb
Weight to Pull Loose:		90000.00 lb
Tool Chased		0.00 ft
String Weight:	Initial	76000.00 lb
	Final	76000.00 lb

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			5275.50		
Shut In Tool	5.00			5280.50		
Hydraulic tool	5.00			5285.50		
Jars	5.00			5290.50		
Safety Joint	2.50			5293.00		
Packer	5.00			5298.00	27.50	Bottom Of Top Packer
Packer	4.00			5302.00		
Stubb	1.00			5303.00		
Recorder	0.00	8357	Inside	5303.00		
Recorder	0.00	6751	Outside	5303.00		
Perforations	34.00			5337.00		
Bullnose	3.00			5340.00	38.00	Bottom Packers & Anchor
Total Tool Length:	**65.50**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Mull Drilling Co., Inc.

1700 N Waterfront Pkwy
Bldg 12000
Wichita, KS 67206
ATTN: Phil Askey

S9-25s-42w Hamilton,KS

Guffey Trust #1-9

Job Ticket: 61711 **DST#: 2**

Test Start: 2015.09.01 @ 04:32:00

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:	50.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	9.97 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	6800.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

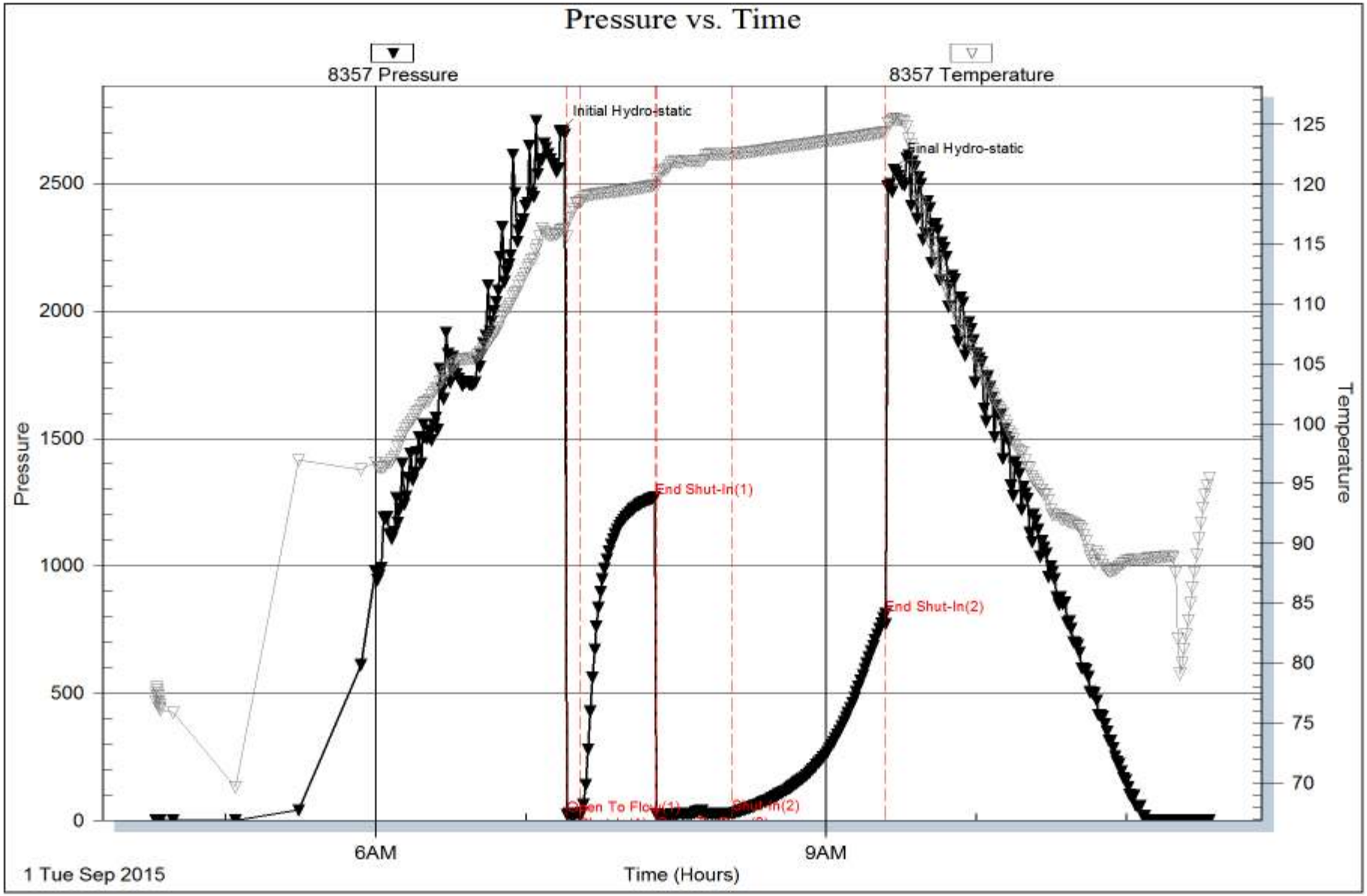
Recovery Table

Length ft	Description	Volume bbl
40.00	VSOCM 1o 99m	0.197

Total Length: 40.00 ft Total Volume: 0.197 bbl

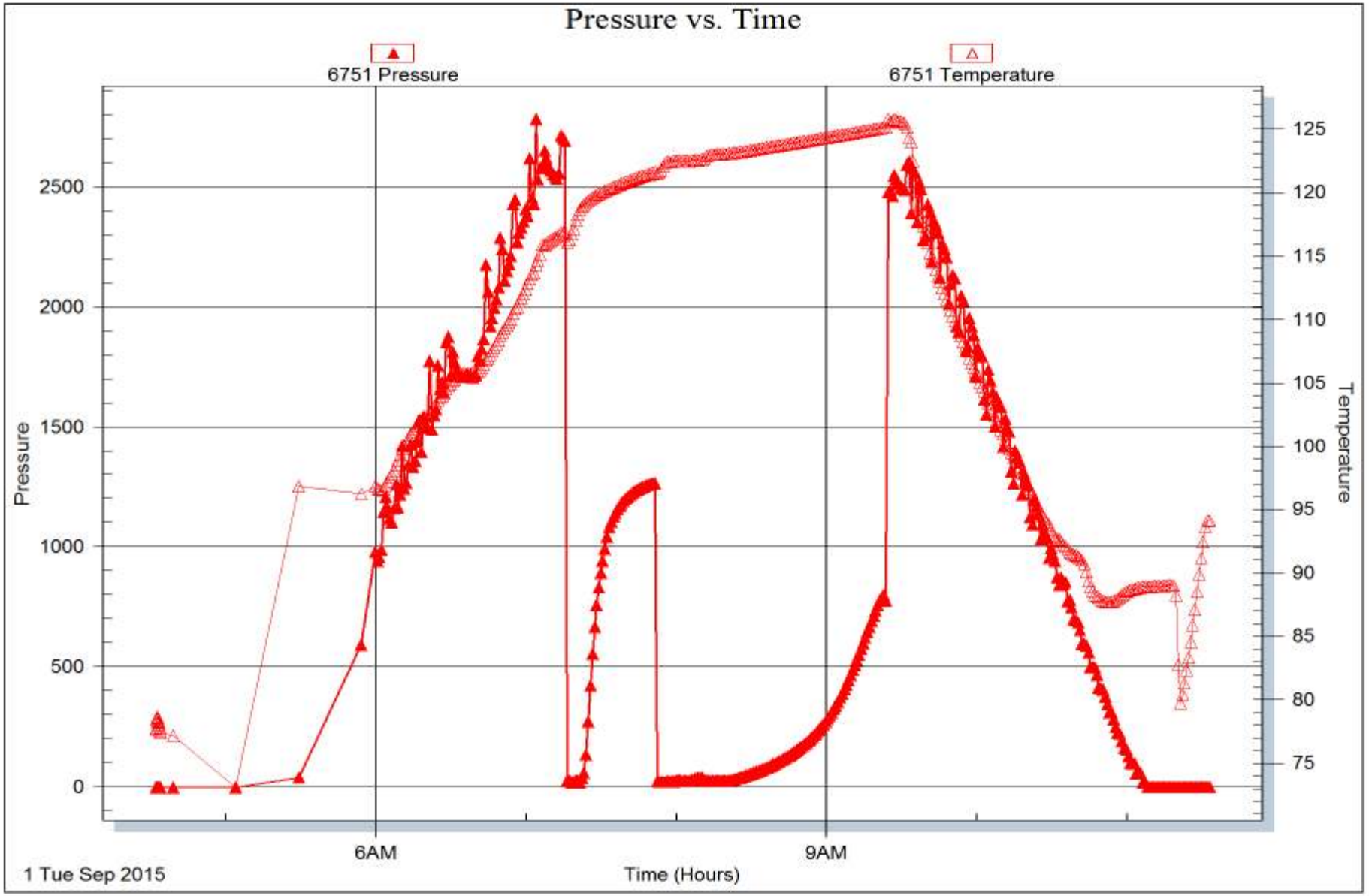
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8357 **Inside** Mull Drilling Co., Inc. Guffey Trust #1-9 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 61711 Printed: 2015.09.03 @ 14:36:26

Serial #: 6751 **Outside** Mull Drilling Co., Inc. Guffey Trust #1-9 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 61711 Printed: 2015.09.03 @ 14:36:26

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Mull Drilling Co., Inc.**

1700 N Waterfront Pkwy
Bldg 12000
Wichita, KS 67206

ATTN: Phil Askey

Guffey Trust #1-9

S9-25s-42w Hamilton,KS

Start Date: 2015.09.02 @ 11:00:02
End Date: 2015.09.02 @ 18:41:10
Job Ticket #: 61712 DST #: 3

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2015.09.03 @ 14:34:52

DRILL STEM TEST REPORT

Mull Drilling Co., Inc.

1700 N Waterfront Pkwy
Bldg 12000
Wichita, KS 67206
ATTN: Phil Askey

S9-25s-42w Hamilton,KS

Guffey Trust #1-9

Job Ticket: 61712 **DST#: 3**

Test Start: 2015.09.02 @ 11:00:02

GENERAL INFORMATION:

Formation: **Lower Morrow Sand**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 14:11:30
Time Test Ended: 18:41:10

Test Type: Conventional Bottom Hole (Reset)
Tester: Chuck Smith
Unit No: 61

Interval: 5404.00 ft (KB) To 5432.00 ft (KB) (TVD)
Total Depth: 5432.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

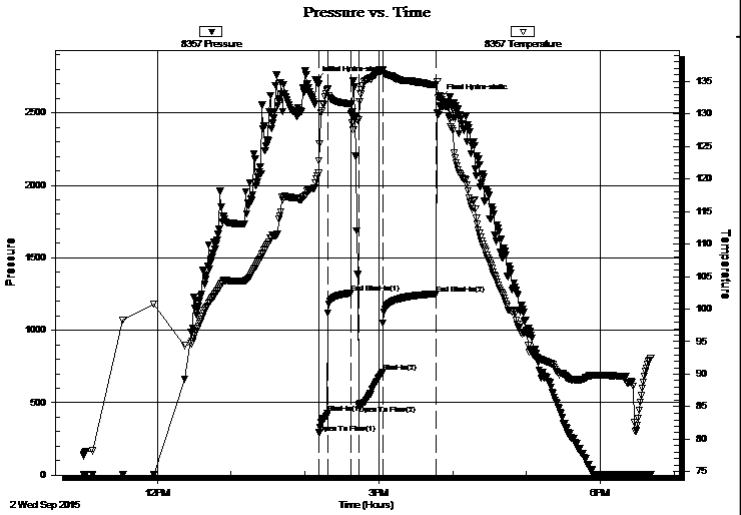
Reference Elevations: 3595.00 ft (KB)
3582.00 ft (CF)
KB to GR/CF: 13.00 ft

Serial #: 8357 **Inside**

Press@RunDepth: 712.61 psig @ 5405.00 ft (KB)
Start Date: 2015.09.02 End Date: 2015.09.02
Start Time: 11:00:02 End Time: 18:41:10

Capacity: 8000.00 psig
Last Calib.: 2015.09.02
Time On Btm: 2015.09.02 @ 14:08:30
Time Off Btm: 2015.09.02 @ 15:50:00

TEST COMMENT: 6- B.O.B. @ 2 min. Note; tool slowly slid aprox 10' after opening with about 5' mud loss in nipple.
20- Surface return. Afterwards pulled tool up 10' to verify string still free, set back on bottom and let hydraulic reopen.
20- B.O.B. @ 3 min.
40- No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2725.66	119.43	Initial Hydro-static
3	291.81	122.80	Open To Flow (1)
10	426.85	133.71	Shut-In(1)
29	1257.99	131.55	End Shut-In(1)
35	479.25	129.09	Open To Flow (2)
55	712.61	136.69	Shut-In(2)
98	1251.95	134.46	End Shut-In(2)
102	2597.78	132.71	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
864.00	GMW 5g 5m 90w Could see & smell gas	10.56
248.00	MW 15m 85w	3.52
308.00	MW 50m 50w	4.37

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

Mull Drilling Co., Inc.

1700 N Waterfront Pkwy
Bldg 12000
Wichita, KS 67206
ATTN: Phil Askey

S9-25s-42w Hamilton,KS

Guffey Trust #1-9

Job Ticket: 61712 **DST#: 3**

Test Start: 2015.09.02 @ 11:00:02

GENERAL INFORMATION:

Formation: **Lower Morrow Sand**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 14:11:30
Time Test Ended: 18:41:10

Test Type: Conventional Bottom Hole (Reset)
Tester: Chuck Smith
Unit No: 61

Interval: 5404.00 ft (KB) To 5432.00 ft (KB) (TVD)
Total Depth: 5432.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

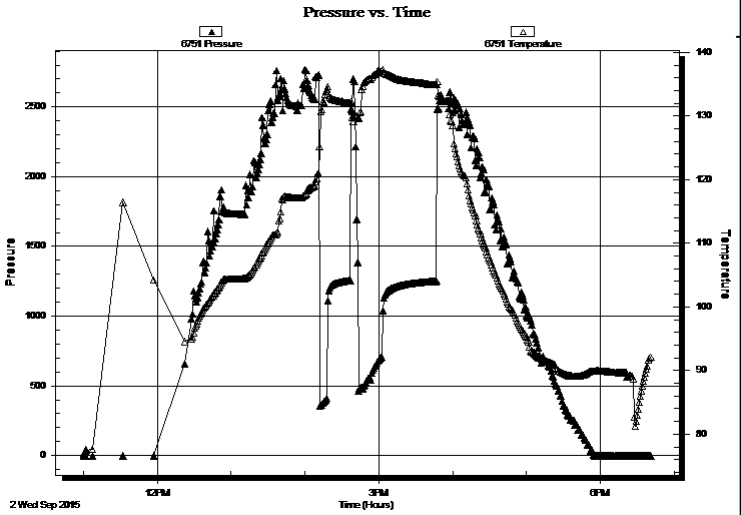
Reference Elevations: 3595.00 ft (KB)
3582.00 ft (CF)
KB to GR/CF: 13.00 ft

Serial #: 6751 **Outside**

Press@RunDepth: psig @ 5405.00 ft (KB)
Start Date: 2015.09.02 End Date: 2015.09.02
Start Time: 11:00:02 End Time: 18:41:10

Capacity: 8000.00 psig
Last Calib.: 2015.09.02
Time On Btm:
Time Off Btm:

TEST COMMENT: 6- B.O.B. @ 2 min. Note; tool slowly slid aprox 10' after opening with about 5' mud loss in nipple.
20- Surface return. Afterwards pulled tool up 10' to verify string still free, set back on bottom and let hydraulic reopen.
20- B.O.B. @ 3 min.
40- No return.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
864.00	GMW 5g 5m 90w Could see & smell gas	10.56
248.00	MW 15m 85w	3.52
308.00	MW 50m 50w	4.37

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mull Drilling Co., Inc.

1700 N Waterfront Pkwy
Bldg 12000
Wichita, KS 67206
ATTN: Phil Askey

S9-25s-42w Hamilton,KS

Guffey Trust #1-9

Job Ticket: 61712 **DST#: 3**

Test Start: 2015.09.02 @ 11:00:02

Tool Information

Drill Pipe:	Length:	5206.00 ft	Diameter:	3.82	inches	Volume:	73.80	bbl	
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	2.25	inches	Volume:	0.00	bbl	
Drill Collar:	Length:	182.00 ft	Diameter:	2.25	inches	Volume:	0.90	bbl	
						Total Volume:	74.70	bbl	

Drill Pipe Above KB:	11.50 ft
Depth to Top Packer:	5404.00 ft
Depth to Bottom Packer:	ft
Interval between Packers:	28.00 ft
Tool Length:	55.50 ft
Number of Packers:	2 Diameter: 6.75 inches

Tool Weight:		2300.00 lb
Weight set on Packer:		25000.00 lb
Weight to Pull Loose:		110000.0 lb
Tool Chased		0.00 ft
String Weight:	Initial	77000.00 lb
	Final	83000.00 lb

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			5377.50		
Shut In Tool	5.00			5382.50		
Hydraulic tool	5.00			5387.50		
Jars	5.00			5392.50		
Safety Joint	2.50			5395.00		
Packer	5.00			5400.00	27.50	Bottom Of Top Packer
Packer	4.00			5404.00		
Stubb	1.00			5405.00		
Recorder	0.00	8357	Inside	5405.00		
Recorder	0.00	6751	Outside	5405.00		
Perforations	24.00			5429.00		
Bullnose	3.00			5432.00	28.00	Bottom Packers & Anchor
Total Tool Length:	**55.50**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Mull Drilling Co., Inc.

1700 N Waterfront Pkwy
Bldg 12000
Wichita, KS 67206
ATTN: Phil Askey

S9-25s-42w Hamilton,KS

Guffey Trust #1-9

Job Ticket: 61712 **DST#: 3**

Test Start: 2015.09.02 @ 11:00:02

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:	36000 ppm
Viscosity:	55.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	9.18 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	7800.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

Recovery Table

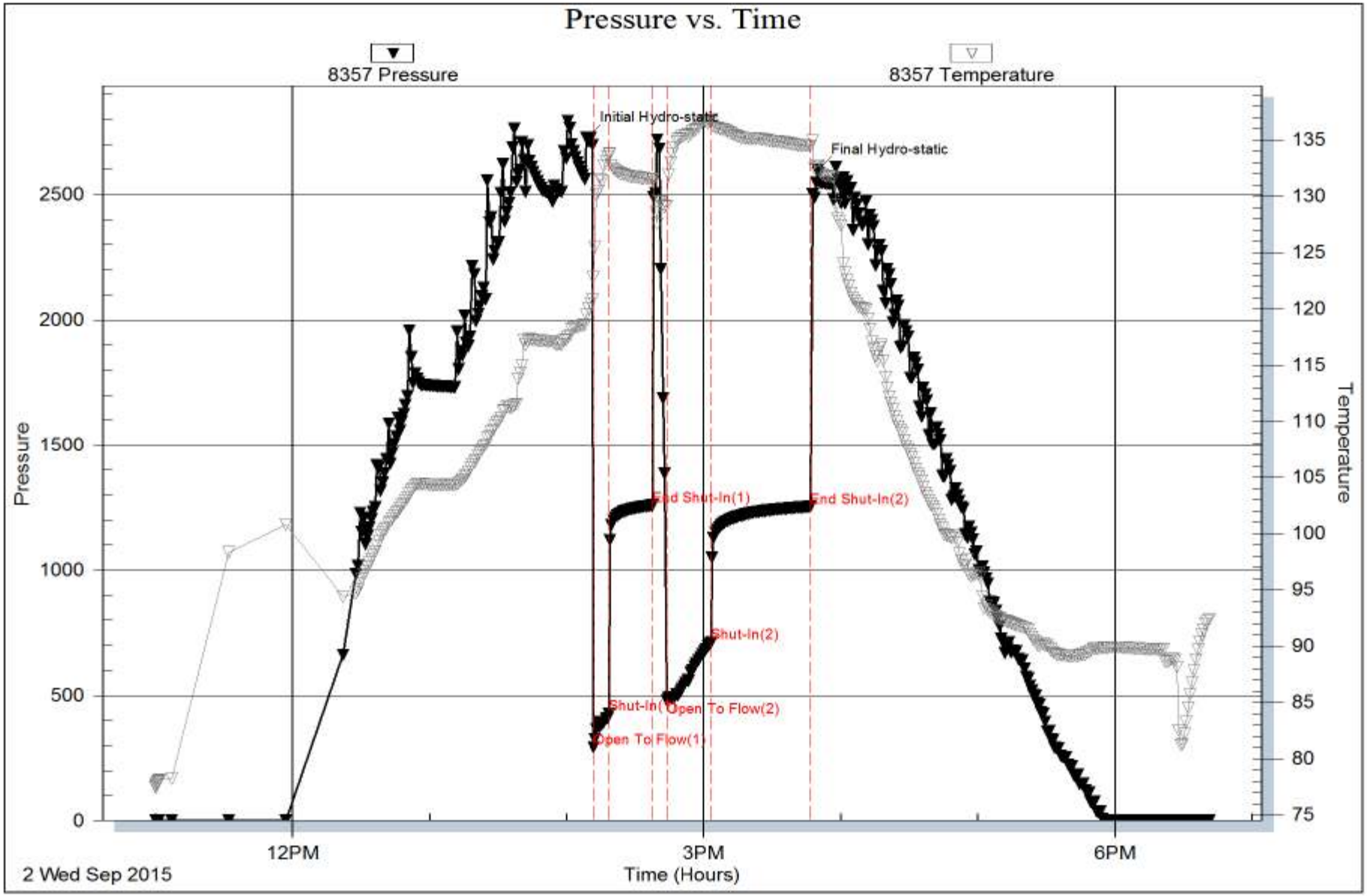
Length ft	Description	Volume bbl
864.00	GMW 5g 5m 90w Could see & smell gas	10.563
248.00	MW 15m 85w	3.516
308.00	MW 50m 50w	4.366

Total Length: 1420.00 ft Total Volume: 18.445 bbl

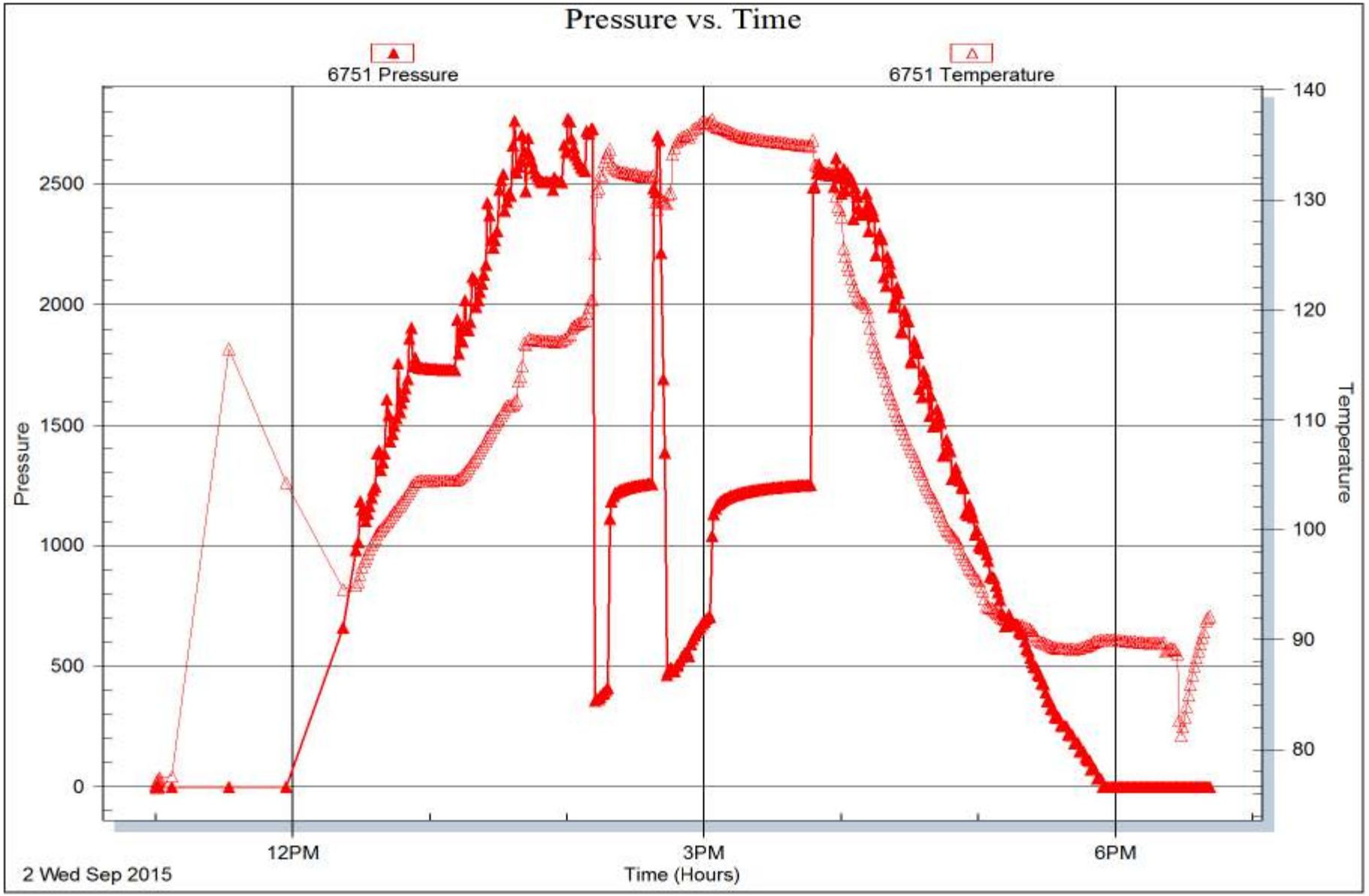
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: RW: .150 @ 92 Degrees F = 36000 PPM


Pressure vs. Time
8357 Pressure
8357 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Shut-In(2)
Shut-In(1)
Open To Flow(2)
Open To Flow(1)
Pressure
Temperature
2500
2000
1500
1000
500
0
135
130
125
120
115
110
105
100
95
90
85
80
75
12PM
3PM
6PM
2 Wed Sep 2015
Time (Hours)

Serial #: 6751 **Outside** Mull Drilling Co., Inc. Guffey Trust #1-9 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 61712 Printed: 2015.09.03 @ 14:34:54

TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

4/10

Test Ticket

NO. 61710

Well Name & No. Guffey Trust #1-9 Test No. 1 Date 8-30-15

Company Mull Drilling Co., Inc. Elevation 3595 KB 3582 GL

Address 1700 N. Waterfront Pkwy Bldg. 12000 Wichita, KS 67206

Co. Rep / Geo. Phil Askey Rig Duke #9

Location: Sec. 9 Twp. 25s Rge. 42w Co. Hamilton State KS

Interval Tested 5007 - 5080 Zone Tested Upper Morrow

Anchor Length 73 Drill Pipe Run 4829 Mud Wt. 9.2

Top Packer Depth 5003 Drill Collars Run 182 Vis 53

Bottom Packer Depth 5007 Wt. Pipe Run 0 WL 11.2

Total Depth 5080 Chlorides 6200 ppm System LCM 6#

Blow Description Surface blow throughout
No return.
No blow.
No return.

Rec	Feet of	%gas	%oil	%water	%mud
Rec 45	Feet of M with a couple oil spots	%gas	%oil	%water 100	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 45 BHT 116 Gravity — API RW ____ @ ____ °F Chlorides — ppm

(A) Initial Hydrostatic	2499	☒ Test 1050	T-On Location 23:55
(B) First Initial Flow	100	☒ Jars 250	T-Started 00:48
(C) First Final Flow	219	☒ Safety Joint 75	T-Open 3:33
(D) Initial Shut-In	587	☒ Circ Sub N/C	T-Pulled 5:41
(E) Second Initial Flow	116	☐ Hourly Standby	T-Out 7:59
(F) Second Final Flow	443	☒ Mileage 171	Comments
(G) Final Shut-In	735	☐ Sampler	
(H) Final Hydrostatic	2381	☐ Straddle	☐ Ruined Shale Packer
		☐ Shale Packer	☐ Ruined Packer
Initial Open	5	☐ Extra Packer	☐ Extra Copies
Initial Shut-In	30	☐ Extra Recorder	Sub Total 0
Final Flow	30	☐ Day Standby	Total 1546
Final Shut-In	60	☐ Accessibility	MP/DST Disc't
		Sub Total 1546	

Approved By Phil Askey Our Representative Chuck Smith

4/10

TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 61711

Well Name & No. Guffey Trust #1-9 Test No. 2 Date 9-1-15

Company Mull Drilling Co., Inc. Elevation 3595 KB 3582 GL

Address 1700 N. Waterfront Pkwy. Bldg 12000 Wichita, KS 67206

Co. Rep / Geo. Phil Askey Rig Duke #9

Location: Sec. 9 Twp. 25s Rge. 42w Co. Hamilton State KS

Interval Tested 5302-5340 Zone Tested Mid Morrow Sand

Anchor Length 38 Drill Pipe Run 5114 Mud Wt. 9.1

Top Packer Depth 5298 Drill Collars Run 182 Vis 50

Bottom Packer Depth 5302 Wt. Pipe Run 0 WL 10.0

Total Depth 5340 Chlorides 6800 ppm System LCM 5#

Blow Description Surface blow throughout.
No return.
No blow.
No return.

Rec	Feet of	%gas	%oil	%water	%mud
Rec 40	Feet of VSOCM	%gas	1 %oil	%water 99	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 40 BHT 124 Gravity — API RW ____ @ ____ °F Chlorides — ppm

(A) Initial Hydrostatic	2702	☒ Test 1250	T-On Location 4:30
(B) First Initial Flow	23	☒ Jars 250	T-Started 4:32
(C) First Final Flow	21	☒ Safety Joint 75	T-Open 7:16
(D) Initial Shut-In	1266	☒ Circ Sub N/C	T-Pulled 9:24
(E) Second Initial Flow	25	☐ Hourly Standby	T-Out 11:34
(F) Second Final Flow	28	☒ Mileage 171	Comments
(G) Final Shut-In	810	☐ Sampler	
(H) Final Hydrostatic	2555	☐ Straddle	☐ Ruined Shale Packer
		☐ Shale Packer	☐ Ruined Packer
Initial Open	5	☐ Extra Packer	☐ Extra Copies
Initial Shut-In	30	☐ Extra Recorder	Sub Total 0
Final Flow	30	☐ Day Standby	Total 1746
Final Shut-In	60	☐ Accessibility	MP/DST Disc't
		Sub Total 1746	

Approved By Phil Askey Our Representative Chuck Smith

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

4/10

Test Ticket

NO. 61712

Well Name & No. Guffey Trust #1-9 Test No. 3 Date 9-2-15

Company MullDrilling Co, Inc. Elevation 3595 KB 3582 GL

Address 1700 N. Waterfront Pkwy. Bldg. 12000 Wichita, Ks 67206

Co. Rep / Geo. Phil Askey Rig Duke #9

Location: Sec. 9 Twp. 25s Rge. 42w Co. Hamilton State Ks

Interval Tested 5404-5432 Zone Tested Lower Morrow Sand

Anchor Length 28 Drill Pipe Run 5206 Mud Wt. 9.2

Top Packer Depth 5400 Drill Collars Run 182 Vis 55

Bottom Packer Depth 5404 Wt. Pipe Run 0 WL 9.2

Total Depth 5432 Chlorides 7800 ppm System LCM 4#

Blow Description B.O.B. @ 2min. Tool slowly slid 10' after opening with about a 5' mud loss in nipple. Surface return. Afterwards pulled tool up 10' to verify string still free, set tool back on bottom and allowed hydraulic to open. B.O.B. @ 3min. No return

Rec 308	Feet of MW	%gas	%oil	50	%water	50	%mud
Rec 248	Feet of MW	%gas	%oil	85	%water	15	%mud
Rec 864	Feet of GMW Could see + smell gas	5 %gas	%oil	90	%water	5	%mud
Rec	Feet of 30' cuttings in bottom collar, oil spots	%gas	%oil		%water		%mud
Rec	Feet of in tool.	%gas	%oil		%water		%mud

Rec Total 1420 BHT 135 Gravity — API RW .150 @ 92 °F Chlorides 36000 ppm

(A) Initial Hydrostatic	2726	☒ Test	1250	T-On Location	11:00
(B) First Initial Flow	292	☒ Jars	250	T-Started	11:00
(C) First Final Flow	427	☒ Safety Joint	75	T-Open	14:09
(D) Initial Shut-In	1258	☒ Circ Sub	N/C	T-Pulled	15:50
(E) Second Initial Flow	479	☐ Hourly Standby		T-Out	18:41
(F) Second Final Flow	713	☒ Mileage	171	Comments	2 motel receipts
(G) Final Shut-In	1252	☐ Sampler			
(H) Final Hydrostatic	2599	☐ Straddle		☐ Ruined Shale Packer	
		☐ Shale Packer		☒ Ruined Packer	320
Initial Open	6	☐ Extra Packer		☐ Extra Copies	
Initial Shut-In	20	☐ Extra Recorder		Sub Total	320
Final Flow	20	☐ Day Standby		Total	2066
Final Shut-In	40	☐ Accessibility		MP/DST Disc't	
		Sub Total	1746		

Approved By Phil Askey Our Representative Chuck Smith