

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1248982
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

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 SIOW
- Gas D&A ENHR SIGW
- OG GSW Temp. Abd.
- 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 ENHR Conv. to SWD
- Plug Back Conv. to GSW Conv. to Producer
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - _____

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
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____

1248982

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

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

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

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

Drill Stem Tests Taken <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Electric Log Run	<input type="checkbox"/> Yes <input type="checkbox"/> No			
List All E. Logs Run:				

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				

Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 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)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or ENHR: _____ 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: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
--	--	---

Form	ACO1 - Well Completion
Operator	Murfin Drilling Co., Inc.
Well Name	James 'B' 1-23
Doc ID	1248982

All Electric Logs Run

DIL
DUCP
MEL
BHCS



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co.**

250 N. Water Ste 300
Wichita KS 67202

ATTN: Paul Gunzelman

James "B" #1-23

23-10s-34w Thomas,KS

Start Date: 2015.01.12 @ 17:24:00

End Date: 2015.01.13 @ 01:45:54

Job Ticket #: 58692 DST #: 1

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

Printed: 2015.01.19 @ 13:45:41



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co.

23-10s-34w Thomas,KS

250 N. Water Ste 300
Wichita KS 67202

James "B" #1-23

Job Ticket: 58692

DST#: 1

ATTN: Paul Gunzelman

Test Start: 2015.01.12 @ 17:24:00

GENERAL INFORMATION:

Formation: **LKC "A - B"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:31:40

Time Test Ended: 01:45:54

Test Type: Conventional Bottom Hole (Initial)

Tester: Will MacLean

Unit No: 71

Interval: 4122.00 ft (KB) To 4183.00 ft (KB) (TVD)

Reference Elevations: 3206.00 ft (KB)

Total Depth: 4183.00 ft (KB) (TVD)

3195.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8674

Inside

Press@RunDepth: 231.04 psig @ 4124.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.01.12

End Date:

2015.01.13

Last Calib.:

2015.01.13

Start Time: 17:24:00

End Time:

01:45:54

Time On Btm:

2015.01.12 @ 19:31:25

Time Off Btm:

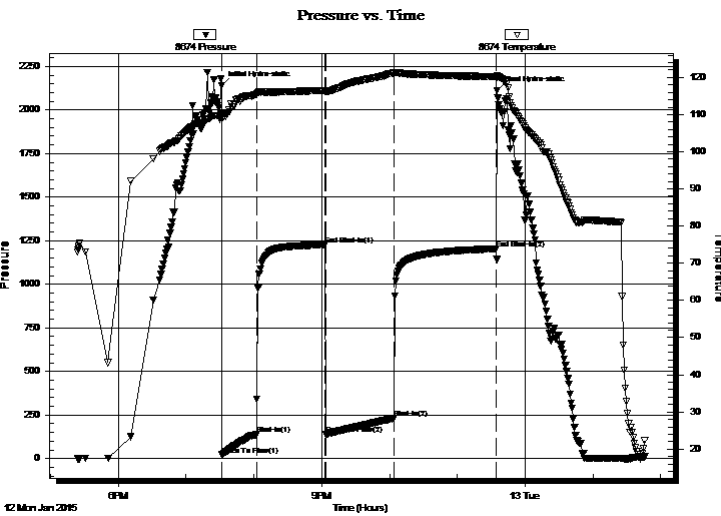
2015.01.12 @ 23:35:09

TEST COMMENT: IF- Weak Surface Blow Built to 7 1/2"

IS- No Blow

FF- Weak Surface Blow Built to 3"

FS- No Blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2140.03	109.97	Initial Hydro-static
1	21.41	109.15	Open To Flow (1)
31	137.47	115.50	Shut-In(1)
92	1226.39	116.53	End Shut-In(1)
92	140.77	116.14	Open To Flow (2)
153	231.04	121.15	Shut-In(2)
243	1203.76	120.22	End Shut-In(2)
244	2110.24	120.51	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
175.00	MCW 12%m 88%w	0.86
122.00	MCW 28%m 72%w	1.17
126.00	WCM 47%w 53%m	1.77
40.00	WCM 24%w 76%m	0.56

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co.

23-10s-34w Thomas,KS

250 N. Water Ste 300
Wichita KS 67202

James "B" #1-23

Job Ticket: 58692

DST#: 1

ATTN: Paul Gunzelman

Test Start: 2015.01.12 @ 17:24:00

GENERAL INFORMATION:

Formation: **LKC "A - B"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:31:40

Time Test Ended: 01:45:54

Test Type: Conventional Bottom Hole (Initial)

Tester: Will MacLean

Unit No: 71

Interval: 4122.00 ft (KB) To 4183.00 ft (KB) (TVD)

Reference Elevations: 3206.00 ft (KB)

Total Depth: 4183.00 ft (KB) (TVD)

3195.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8355 Outside

Press@RunDepth: psig @ 4124.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.01.12

End Date:

2015.01.13

Last Calib.:

2015.01.13

Start Time:

17:24:05

End Time:

01:47:29

Time On Btm:

Time Off Btm:

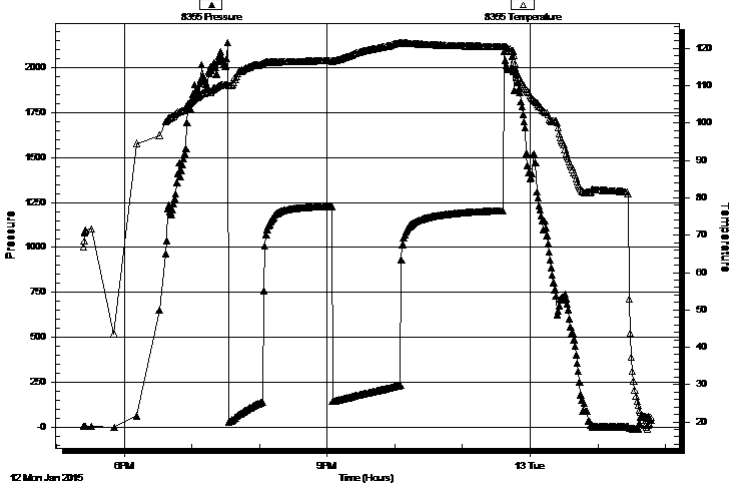
TEST COMMENT: IF- Weak Surface Blow Built to 7 1/2"

IS- No Blow

FF- Weak Surface Blow Built to 3"

FS- No Blow

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
175.00	MCW 12%m 88%w	0.86
122.00	MCW 28%m 72%w	1.17
126.00	WCM 47%w 53%m	1.77
40.00	WCM 24%w 76%m	0.56

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co.

23-10s-34w Thomas,KS

250 N. Water Ste 300
Wichita KS 67202

James "B" #1-23

Job Ticket: 58692

DST#: 1

ATTN: Paul Gunzelman

Test Start: 2015.01.12 @ 17:24:00

Tool Information

Drill Pipe:	Length: 3881.00 ft	Diameter: 3.80 inches	Volume: 54.44 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 234.00 ft	Diameter: 2.25 inches	Volume: 1.15 bbl	Weight to Pull Loose: 12000.00 lb
			<u>Total Volume: 55.59 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 68000.00 lb
Depth to Top Packer:	4122.00 ft			Final 68000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	61.00 ft			
Tool Length:	88.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4096.00	
Shut In Tool	5.00			4101.00	
Hydraulic tool	5.00			4106.00	
Jars	5.00			4111.00	
Safety Joint	2.00			4113.00	
Packer	5.00			4118.00	27.00 Bottom Of Top Packer
Packer	4.00			4122.00	
Stubb	1.00			4123.00	
Perforations	1.00			4124.00	
Recorder	0.00	8355	Outside	4124.00	
Recorder	0.00	8674	Inside	4124.00	
Perforations	20.00			4144.00	
Change Over Sub	1.00			4145.00	
Drill Pipe	32.00			4177.00	
Change Over Sub	1.00			4178.00	
Bullnose	5.00			4183.00	61.00 Bottom Packers & Anchor
Total Tool Length:	88.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co.

23-10s-34w Thomas,KS

250 N. Water Ste 300
Wichita KS 67202

James "B" #1-23

Job Ticket: 58692

DST#: 1

ATTN: Paul Gunzelman

Test Start: 2015.01.12 @ 17:24:00

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:

62000 ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.36 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 8900.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
175.00	MCW 12%m 88%w	0.861
122.00	MCW 28%m 72%w	1.174
126.00	WCM 47%w 53%m	1.767
40.00	WCM 24%w 76%m	0.561

Total Length: 463.00 ft

Total Volume: 4.363 bbl

Num Fluid Samples: 0

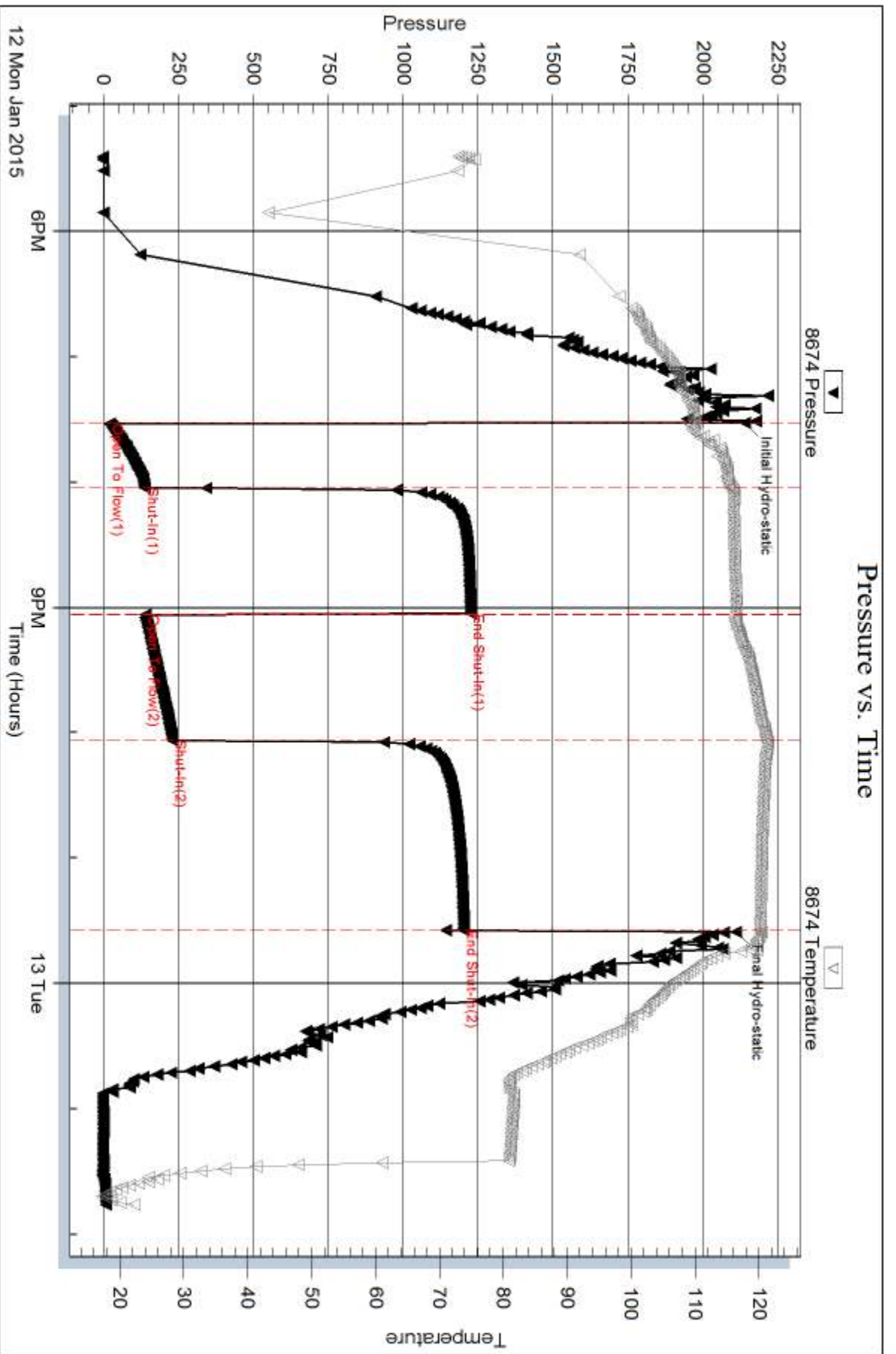
Num Gas Bombs: 0

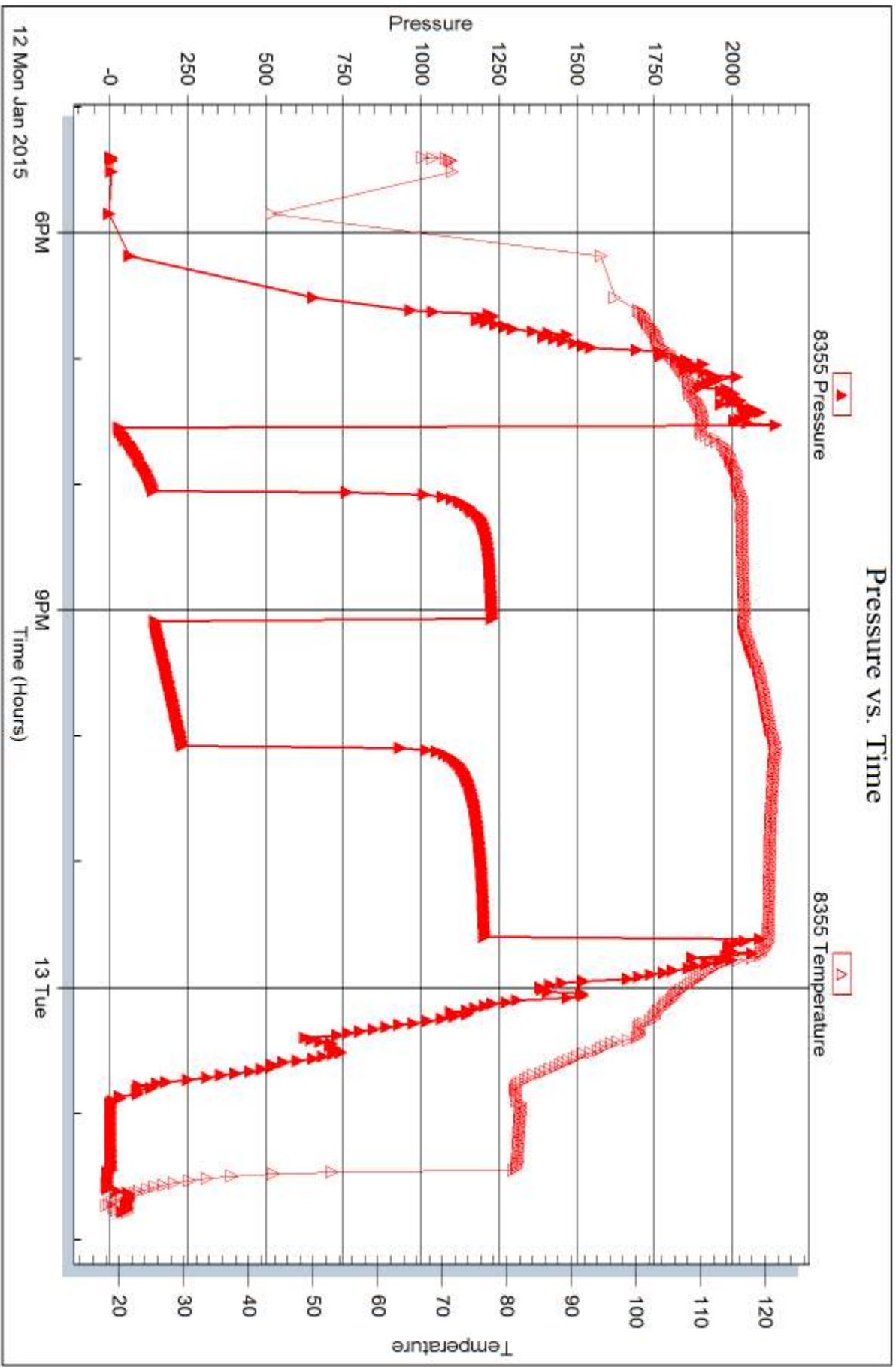
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW is .381 @ 22f = 62000







DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co.**

250 N. Water Ste 300
Wichita KS 67202

ATTN: Paul Gunzelman

James "B" #1-23

23-10s-34w Thomas,KS

Start Date: 2015.01.13 @ 18:56:00

End Date: 2015.01.14 @ 03:19:09

Job Ticket #: 58693 DST #: 2

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

Printed: 2015.01.19 @ 13:45:13



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Co.

23-10s-34w Thomas,KS

250 N. Water Ste 300
Wichita KS 67202

James "B" #1-23

Job Ticket: 58693

DST#: 2

ATTN: Paul Gunzelman

Test Start: 2015.01.13 @ 18:56:00

GENERAL INFORMATION:

Formation: **LKC "H-1"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:00:25

Time Test Ended: 03:19:09

Test Type: Conventional Bottom Hole (Reset)

Tester: Will MacLean

Unit No: 71

Interval: 4270.00 ft (KB) To 4331.00 ft (KB) (TVD)

Reference Elevations: 3206.00 ft (KB)

Total Depth: 4331.00 ft (KB) (TVD)

3195.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8674

Inside

Press@RunDepth: 259.78 psig @ 4272.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.01.13

End Date:

2015.01.14

Last Calib.:

2015.01.14

Start Time: 18:56:00

End Time:

03:19:09

Time On Btm:

2015.01.13 @ 21:00:10

Time Off Btm:

2015.01.14 @ 01:03:24

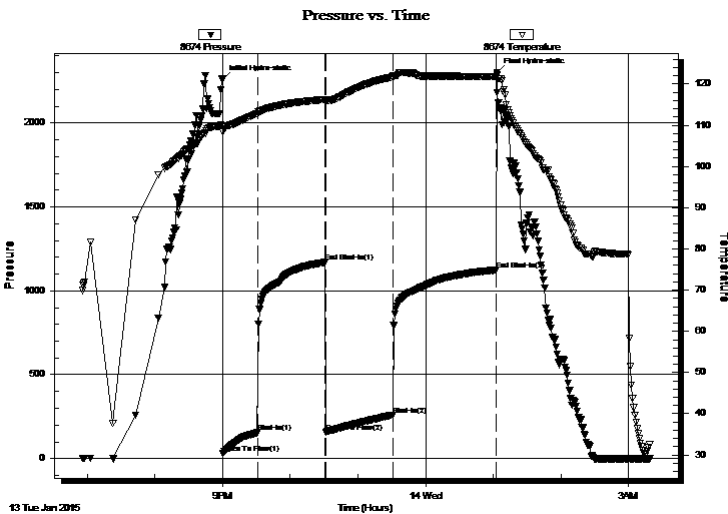
TEST COMMENT: IF- Weak Surface Blow Built to BOB in 29 min

IS- No Blow

FF- Weak Surface Blow Built to 9 3/4"

FS- No Blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2259.39	109.83	Initial Hydro-static
1	32.05	108.50	Open To Flow (1)
31	153.88	112.89	Shut-In(1)
91	1169.37	116.22	End Shut-In(1)
92	157.69	115.92	Open To Flow (2)
151	259.78	121.70	Shut-In(2)
243	1124.50	121.83	End Shut-In(2)
244	2301.77	122.27	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
234.00	MCW 39%w 61%w	1.15
189.00	WCM 33%w 67%w with Oil Spots	2.65
108.00	WCM 6%w 94%w with Oil Spots	1.51

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co.

23-10s-34w Thomas,KS

250 N. Water Ste 300
Wichita KS 67202

James "B" #1-23

ATTN: Paul Gunzelman

Job Ticket: 58693

DST#: 2

Test Start: 2015.01.13 @ 18:56:00

GENERAL INFORMATION:

Formation: **LKC "H-1"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:00:25

Time Test Ended: 03:19:09

Test Type: Conventional Bottom Hole (Reset)

Tester: Will MacLean

Unit No: 71

Interval: **4270.00 ft (KB) To 4331.00 ft (KB) (TVD)**

Reference Elevations: 3206.00 ft (KB)

Total Depth: 4331.00 ft (KB) (TVD)

3195.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8355 Outside

Press@RunDepth: psig @ 4272.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.01.13 End Date: 2015.01.14

Last Calib.: 2015.01.14

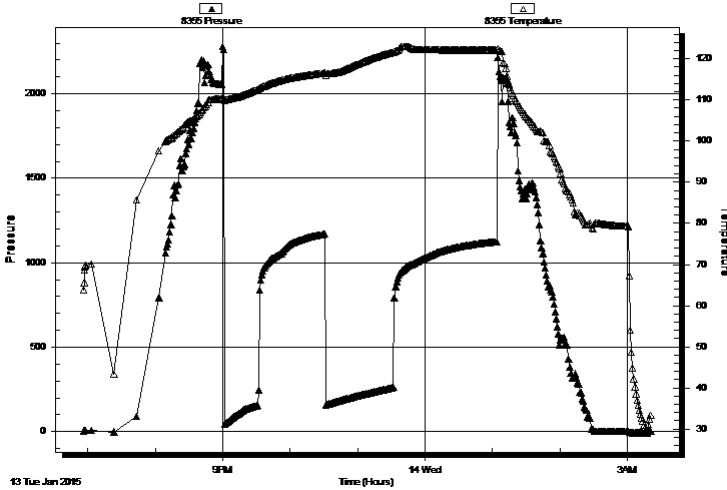
Start Time: 18:56:05 End Time: 03:20:44

Time On Btm:

Time Off Btm:

TEST COMMENT: IF- Weak Surface Blow Built to BOB in 29 min
IS- No Blow
FF- Weak Surface Blow Built to 9 3/4"
FS- No Blow

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
234.00	MCW 39%w 61%w	1.15
189.00	WCM 33%w 67%w with Oil Spots	2.65
108.00	WCM 6%w 94%w with Oil Spots	1.51

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co.

23-10s-34w Thomas,KS

250 N. Water Ste 300
Wichita KS 67202

James "B" #1-23

Job Ticket: 58693

DST#: 2

ATTN: Paul Gunzelman

Test Start: 2015.01.13 @ 18:56:00

Tool Information

Drill Pipe:	Length: 4037.00 ft	Diameter: 3.80 inches	Volume: 56.63 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 28000.00 lb
Drill Collar:	Length: 234.00 ft	Diameter: 2.25 inches	Volume: 1.15 bbl	Weight to Pull Loose: 10000.00 lb
			<u>Total Volume: 57.78 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial 68000.00 lb
Depth to Top Packer:	4270.00 ft			Final 68000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	61.00 ft			
Tool Length:	88.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4244.00	
Shut In Tool	5.00			4249.00	
Hydraulic tool	5.00			4254.00	
Jars	5.00			4259.00	
Safety Joint	2.00			4261.00	
Packer	5.00			4266.00	27.00 Bottom Of Top Packer
Packer	4.00			4270.00	
Stubb	1.00			4271.00	
Perforations	1.00			4272.00	
Recorder	0.00	8355	Outside	4272.00	
Recorder	0.00	8674	Inside	4272.00	
Perforations	20.00			4292.00	
Change Over Sub	1.00			4293.00	
Drill Pipe	32.00			4325.00	
Change Over Sub	1.00			4326.00	
Bullnose	5.00			4331.00	61.00 Bottom Packers & Anchor
Total Tool Length:	88.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co.

23-10s-34w Thomas,KS

250 N. Water Ste 300
Wichita KS 67202

James "B" #1-23

Job Ticket: 58693

DST#: 2

ATTN: Paul Gunzelman

Test Start: 2015.01.13 @ 18:56:00

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:

80000 ppm

Viscosity: 62.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.77 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 9900.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
234.00	MCW 39%m 61%w	1.151
189.00	WCM 33%w 67%m with Oil Spots	2.651
108.00	WCM 6%w 94%m with Oil Spots	1.515

Total Length: 531.00 ft Total Volume: 5.317 bbl

Num Fluid Samples: 0

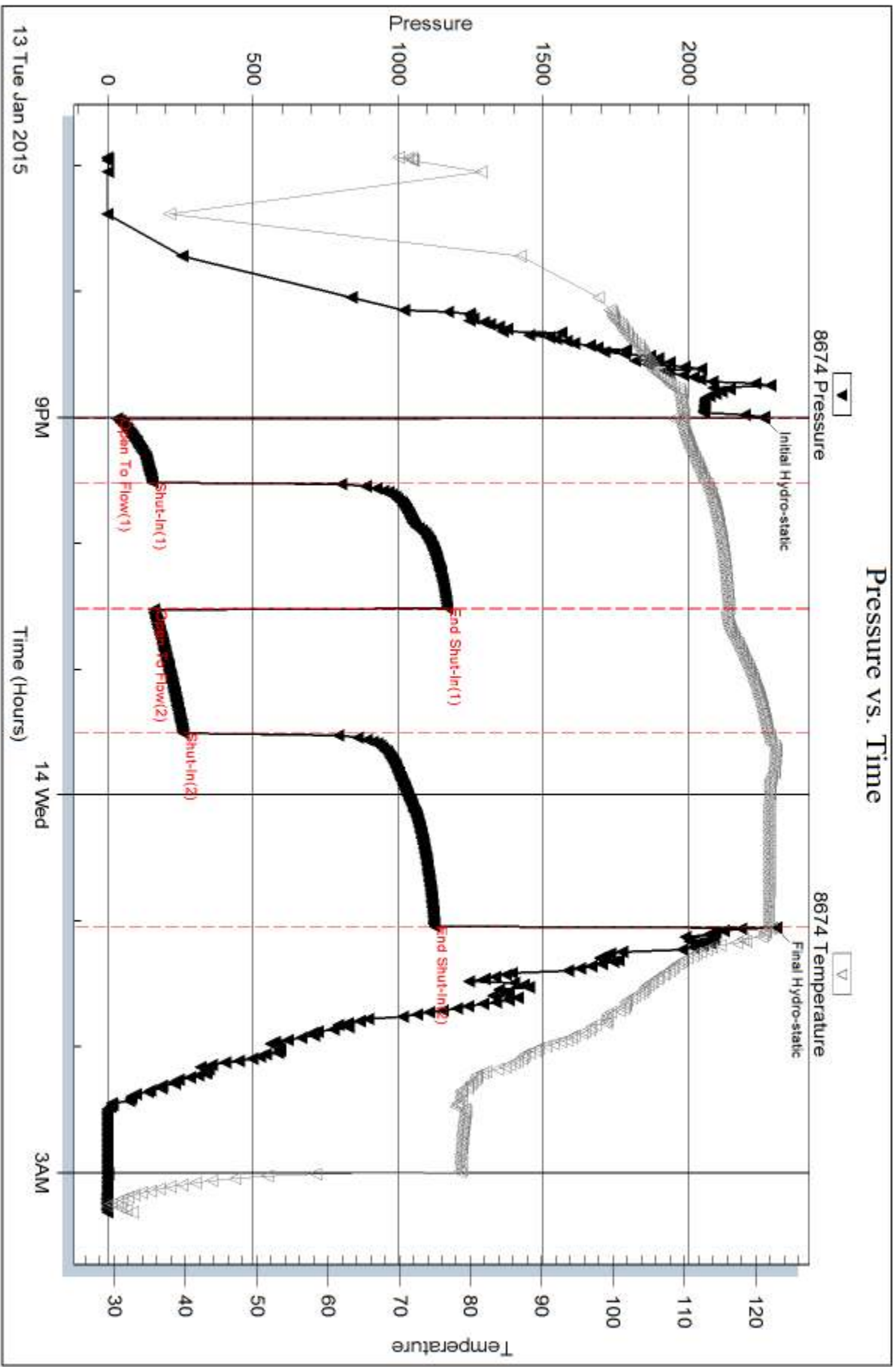
Num Gas Bombs: 0

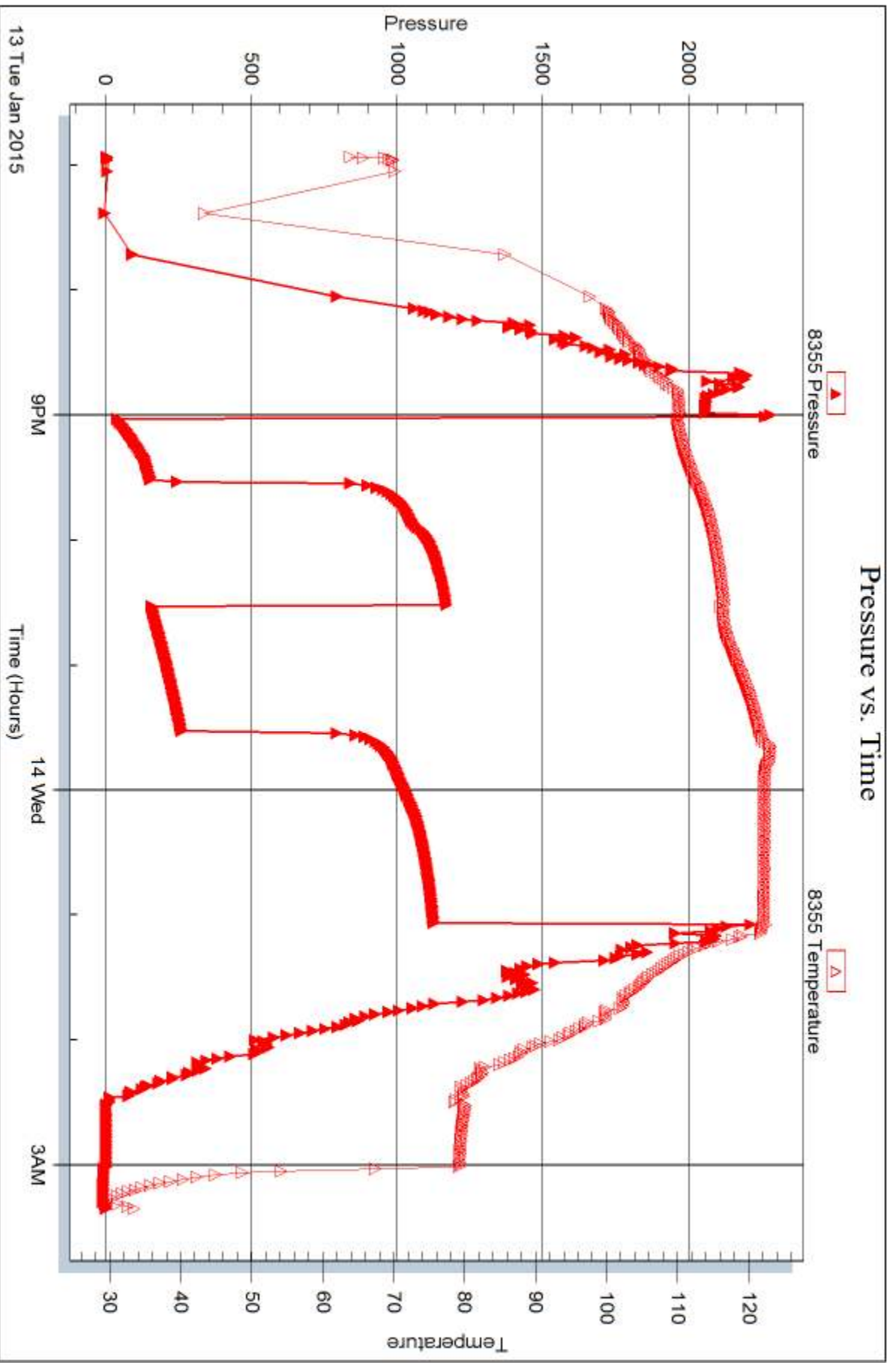
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW is .221 @ 80f = 80000







DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co.**

250 N. Water Ste 300
Wichita KS 67202

ATTN: Paul Gunzelman

James "B" #1-23

23-10s-34w Thomas,KS

Start Date: 2015.01.14 @ 13:54:00

End Date: 2015.01.14 @ 22:17:54

Job Ticket #: 58694 DST #: 3

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

Printed: 2015.01.19 @ 13:43:53



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Co.

23-10s-34w Thomas,KS

250 N. Water Ste 300
Wichita KS 67202

James "B" #1-23

Job Ticket: 58694

DST#: 3

ATTN: Paul Gunzelman

Test Start: 2015.01.14 @ 13:54:00

GENERAL INFORMATION:

Formation: **LKC "J - K"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:47:25

Time Test Ended: 22:17:54

Test Type: Conventional Bottom Hole (Reset)

Tester: Will MacLean

Unit No: 71

Interval: 4331.00 ft (KB) To 4390.00 ft (KB) (TVD)

Reference Elevations: 3206.00 ft (KB)

Total Depth: 4390.00 ft (KB) (TVD)

3195.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8674 Inside

Press@RunDepth: 134.45 psig @ 4332.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.01.14

End Date:

2015.01.14

Last Calib.:

2015.01.14

Start Time: 13:54:00

End Time:

22:17:54

Time On Btm:

2015.01.14 @ 15:46:55

Time Off Btm:

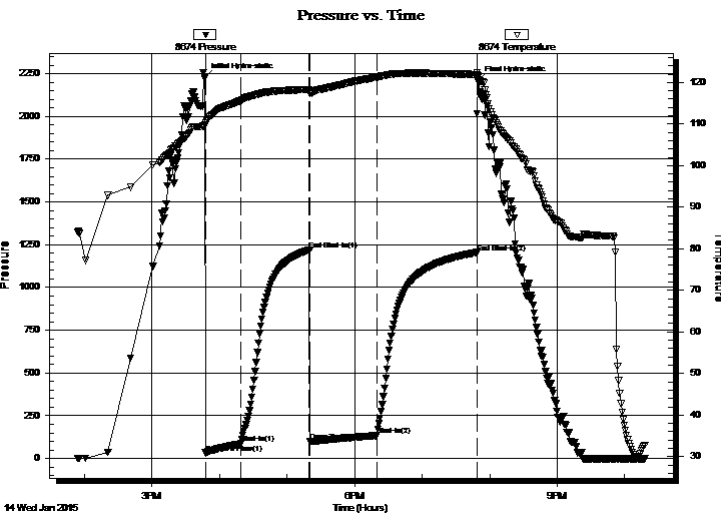
2015.01.14 @ 19:49:24

TEST COMMENT: IF- Weak Surface Blow Built to 9 3/4"

IS- No Blow

FF- Weak Surface Blow Built to 5"

FS- No Blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2225.33	109.75	Initial Hydro-static
1	32.72	109.81	Open To Flow (1)
32	86.52	115.62	Shut-In(1)
93	1219.74	118.22	End Shut-In(1)
94	98.99	117.44	Open To Flow (2)
153	134.45	121.21	Shut-In(2)
242	1204.79	121.89	End Shut-In(2)
243	2207.29	121.53	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
59.00	WOGCM 7%w 15%oil 19%g 59%m	0.29
177.00	MGCO 9%m 22%g 69%oil	0.89
112.00	GO 3%g 97%oil	1.57
0.00	264' of GIP	0.00

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co.
250 N. Water Ste 300
Wichita KS 67202
ATTN: Paul Gunzelman

23-10s-34w Thomas,KS

James "B" #1-23

Job Ticket: 58694

DST#: 3

Test Start: 2015.01.14 @ 13:54:00

GENERAL INFORMATION:

Formation: **LKC "J - K"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:47:25

Time Test Ended: 22:17:54

Test Type: Conventional Bottom Hole (Reset)

Tester: Will MacLean

Unit No: 71

Interval: 4331.00 ft (KB) To 4390.00 ft (KB) (TVD)

Reference Elevations: 3206.00 ft (KB)

Total Depth: 4390.00 ft (KB) (TVD)

3195.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8355

Outside

Press@RunDepth: psig @ 4332.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.01.14

End Date: 2015.01.14

Last Calib.: 2015.01.14

Start Time: 13:54:05

End Time: 22:19:29

Time On Btm:

Time Off Btm:

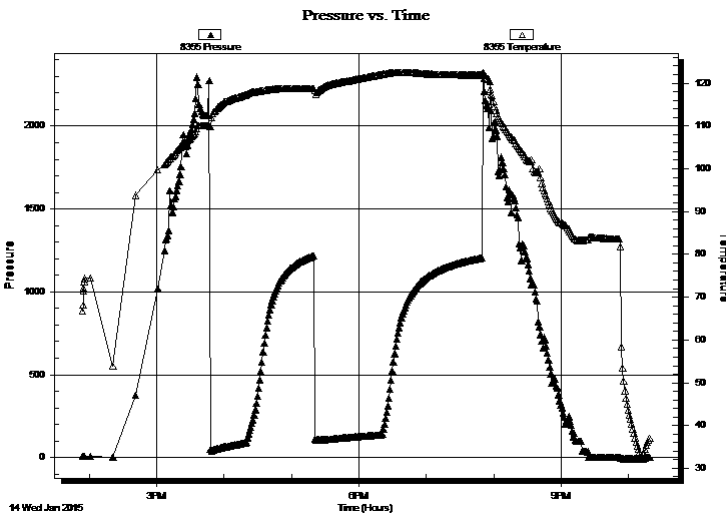
TEST COMMENT: IF- Weak Surface Blow Built to 9 3/4"

IS- No Blow

FF- Weak Surface Blow Built to 5"

FS- No Blow

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
59.00	WOGCM 7%w 15%oil 19%g 59%m	0.29
177.00	MGCO 9%m 22%g 69%oil	0.89
112.00	GO 3%g 97%oil	1.57
0.00	264' of GIP	0.00

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co.

23-10s-34w Thomas,KS

250 N. Water Ste 300
Wichita KS 67202

James "B" #1-23

Job Ticket: 58694

DST#: 3

ATTN: Paul Gunzelman

Test Start: 2015.01.14 @ 13:54:00

Tool Information

Drill Pipe:	Length: 4100.00 ft	Diameter: 3.80 inches	Volume: 57.51 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 234.00 ft	Diameter: 2.25 inches	Volume: 1.15 bbl	Weight to Pull Loose: 8000.00 lb
			<u>Total Volume: 58.66 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	4331.00 ft			Final 70000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	59.00 ft			
Tool Length:	86.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4305.00	
Shut In Tool	5.00			4310.00	
Hydraulic tool	5.00			4315.00	
Jars	5.00			4320.00	
Safety Joint	2.00			4322.00	
Packer	5.00			4327.00	27.00 Bottom Of Top Packer
Packer	4.00			4331.00	
Stubb	1.00			4332.00	
Recorder	0.00	8355	Outside	4332.00	
Recorder	0.00	8674	Inside	4332.00	
Perforations	20.00			4352.00	
Change Over Sub	1.00			4353.00	
Drill Pipe	31.00			4384.00	
Change Over Sub	1.00			4385.00	
Bullnose	5.00			4390.00	59.00 Bottom Packers & Anchor

Total Tool Length: 86.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co.

23-10s-34w Thomas,KS

250 N. Water Ste 300
Wichita KS 67202

James "B" #1-23

Job Ticket: 58694

DST#: 3

ATTN: Paul Gunzelman

Test Start: 2015.01.14 @ 13:54:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 74.00 sec/qt
Water Loss: 8.35 in³
Resistivity: ohm.m
Salinity: 12300.00 ppm
Filter Cake: 2.00 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig

Oil API: 27 deg API
Water Salinity: ppm

Recovery Information

Recovery Table

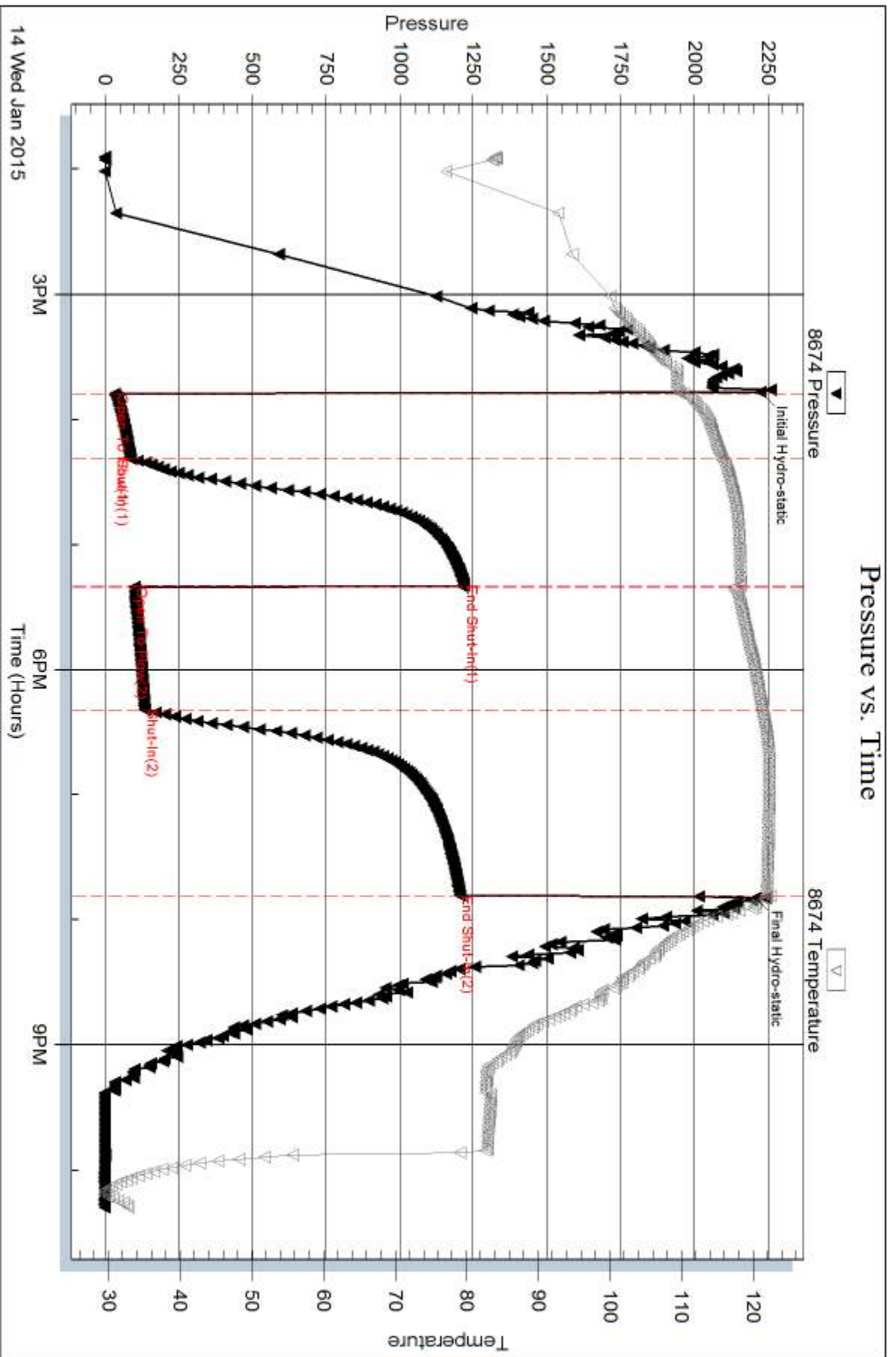
Length ft	Description	Volume bbl
59.00	WOGCM 7%w 15%oil 19%g 59%m	0.290
177.00	MGCO 9%m 22%g 69%oil	0.889
112.00	GO 3%g 97%oil	1.571
0.00	264' of GIP	0.000

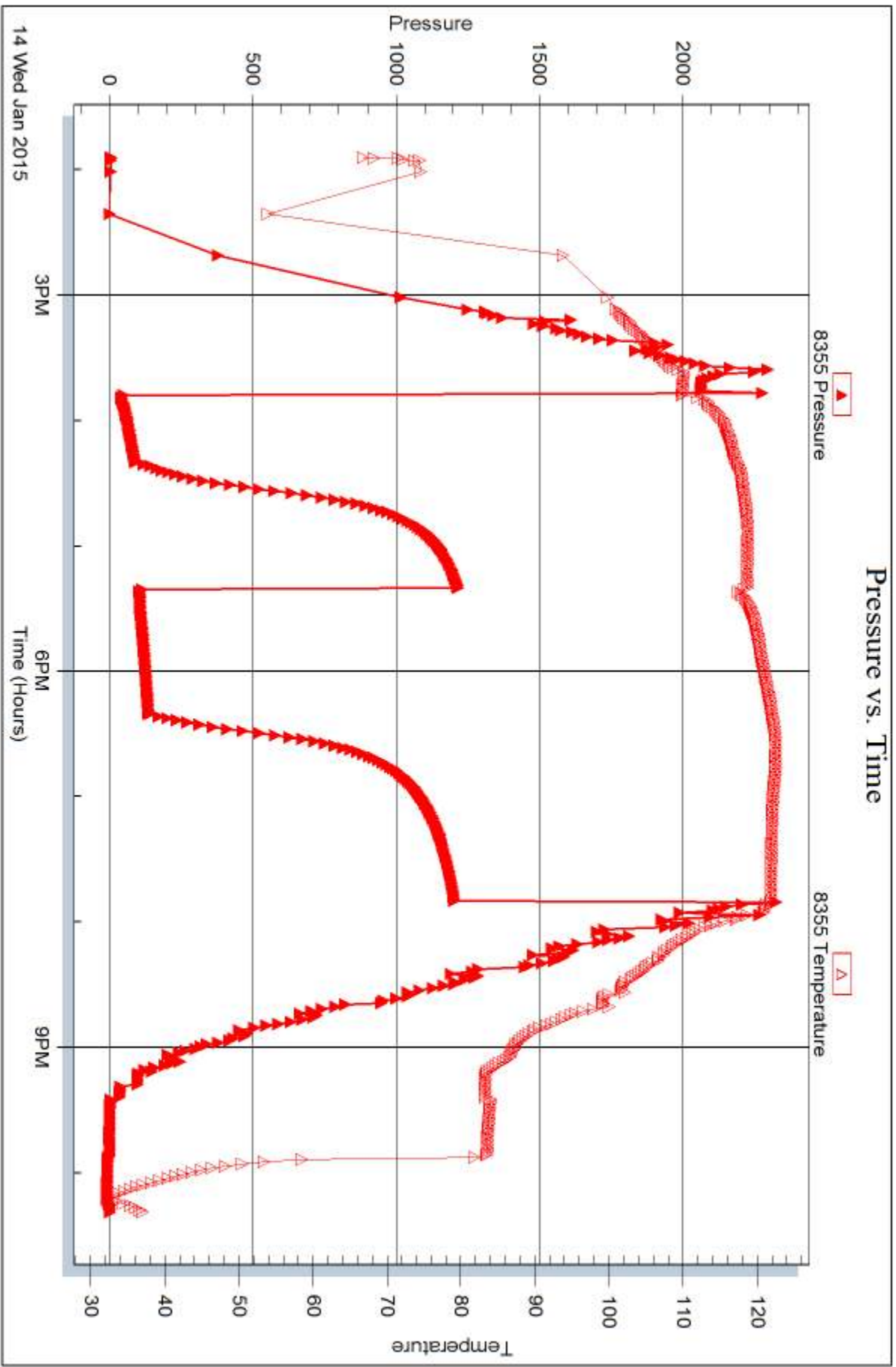
Total Length: 348.00 ft Total Volume: 2.750 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: API is 24 @ 30f = 27







DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co.**

250 N. Water Ste 300
Wichita KS 67202

ATTN: Paul Gunzelman

James "B" #1-23

23-10s-34w Thomas,KS

Start Date: 2015.01.15 @ 23:00:00

End Date: 2015.01.16 @ 07:59:10

Job Ticket #: 58695 DST #: 4

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

Printed: 2015.01.19 @ 13:43:29



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co.

23-10s-34w Thomas,KS

250 N. Water Ste 300
Wichita KS 67202

James "B" #1-23

Job Ticket: 58695

DST#: 4

ATTN: Paul Gunzelman

Test Start: 2015.01.15 @ 23:00:00

GENERAL INFORMATION:

Formation: **Lower Pawnee / Ft Sc**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:28:25

Time Test Ended: 07:59:10

Test Type: Conventional Bottom Hole (Reset)

Tester: Will MacLean

Unit No: 71

Interval: 4570.00 ft (KB) To 4628.00 ft (KB) (TVD)

Reference Elevations: 3206.00 ft (KB)

Total Depth: 4628.00 ft (KB) (TVD)

3195.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8674

Inside

Press@RunDepth: 71.06 psig @ 4571.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.01.15

End Date:

2015.01.16

Last Calib.:

2015.01.16

Start Time: 23:00:00

End Time:

07:59:10

Time On Btm:

2015.01.16 @ 01:28:10

Time Off Btm:

2015.01.16 @ 05:33:54

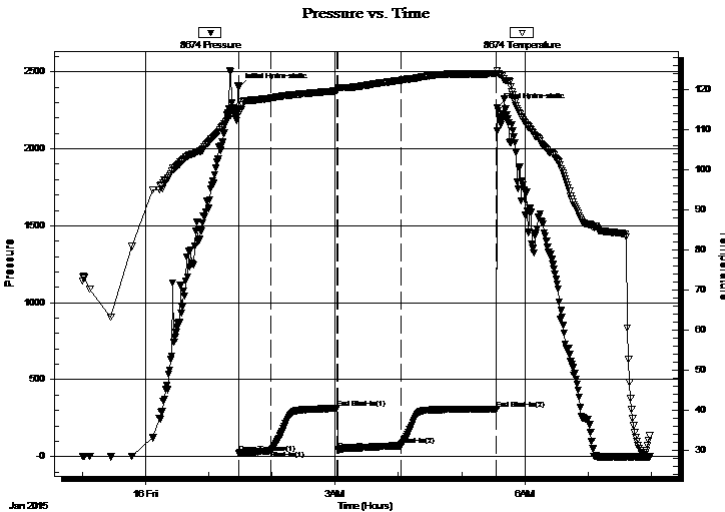
TEST COMMENT: IF- Weak Surface Blow Built to 8"

IS- No Blow

FF- Weak Surface Blow Built to 3 1/4"

FS- No Blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2400.50	115.23	Initial Hydro-static
1	20.23	114.16	Open To Flow (1)
31	39.02	117.93	Shut-In(1)
94	315.05	119.74	End Shut-In(1)
95	43.80	120.05	Open To Flow (2)
154	71.06	122.37	Shut-In(2)
245	308.99	124.05	End Shut-In(2)
246	2264.57	124.83	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
59.00	WOGCM 3%w 9%oil 11%g 77%m	0.29
59.00	GOCM 4%g 7%oil 89%m	0.29
2.00	GO 3%g 97%oil	0.01
0.00	305' of GIP	0.00

Gas Rates

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

* Recovery from multiple tests



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co.
 250 N. Water Ste 300
 Wichita KS 67202
 ATTN: Paul Gunzelman

23-10s-34w Thomas,KS

James "B" #1-23

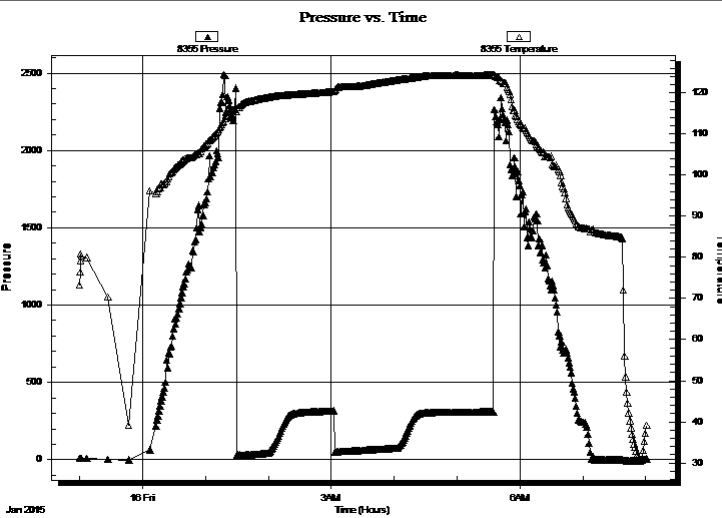
Job Ticket: 58695 **DST#: 4**
 Test Start: 2015.01.15 @ 23:00:00

GENERAL INFORMATION:

Formation: **Lower Pawnee / Ft Sc**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 01:28:25
 Time Test Ended: 07:59:10
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Will MacLean
 Unit No: 71
 Interval: **4570.00 ft (KB) To 4628.00 ft (KB) (TVD)**
 Total Depth: 4628.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches
 Hole Condition: Good
 Reference Elevations: 3206.00 ft (KB)
 3195.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 8355 **Outside**
 Press@RunDepth: psig @ 4571.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2015.01.15 End Date: 2015.01.16 Last Calib.: 2015.01.16
 Start Time: 23:00:05 End Time: 08:00:45 Time On Btm:
 Time Off Btm:

TEST COMMENT: IF- Weak Surface Blow Built to 8"
 IS- No Blow
 FF- Weak Surface Blow Built to 3 1/4"
 FS- No Blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
59.00	WOGCM 3%w 9%oil 11%g 77%m	0.29
59.00	GOCM 4%g 7%oil 89%m	0.29
2.00	GO 3%g 97%oil	0.01
0.00	305' of GIP	0.00

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co.

23-10s-34w Thomas,KS

250 N. Water Ste 300
Wichita KS 67202

James "B" #1-23

Job Ticket: 58695

DST#: 4

ATTN: Paul Gunzelman

Test Start: 2015.01.15 @ 23:00:00

Tool Information

Drill Pipe:	Length: 4321.00 ft	Diameter: 3.80 inches	Volume: 60.61 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 234.00 ft	Diameter: 2.25 inches	Volume: 1.15 bbl	Weight to Pull Loose: 16000.00 lb
			<u>Total Volume: 61.76 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 72000.00 lb
Depth to Top Packer:	4570.00 ft			Final 72000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	58.00 ft			
Tool Length:	85.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Length (ft) Serial No. Position Depth (ft) Accum. Lengths

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4544.00	
Shut In Tool	5.00			4549.00	
Hydraulic tool	5.00			4554.00	
Jars	5.00			4559.00	
Safety Joint	2.00			4561.00	
Packer	5.00			4566.00	27.00 Bottom Of Top Packer
Packer	4.00			4570.00	
Stubb	1.00			4571.00	
Recorder	0.00	8355	Outside	4571.00	
Recorder	0.00	8674	Inside	4571.00	
Perforations	19.00			4590.00	
Change Over Sub	1.00			4591.00	
Drill Pipe	31.00			4622.00	
Change Over Sub	1.00			4623.00	
Bullnose	5.00			4628.00	58.00 Bottom Packers & Anchor

Total Tool Length: 85.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co.

23-10s-34w Thomas,KS

250 N. Water Ste 300
Wichita KS 67202

James "B" #1-23

Job Ticket: 58695

DST#: 4

ATTN: Paul Gunzelman

Test Start: 2015.01.15 @ 23:00:00

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: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.59 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 10100.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
59.00	WOGCM 3%w 9%oil 11%g 77%m	0.290
59.00	GOCM 4%g 7%oil 89%m	0.290
2.00	GO 3%g 97%oil	0.010
0.00	305' of GIP	0.000

Total Length: 120.00 ft

Total Volume: 0.590 bbl

Num Fluid Samples: 0

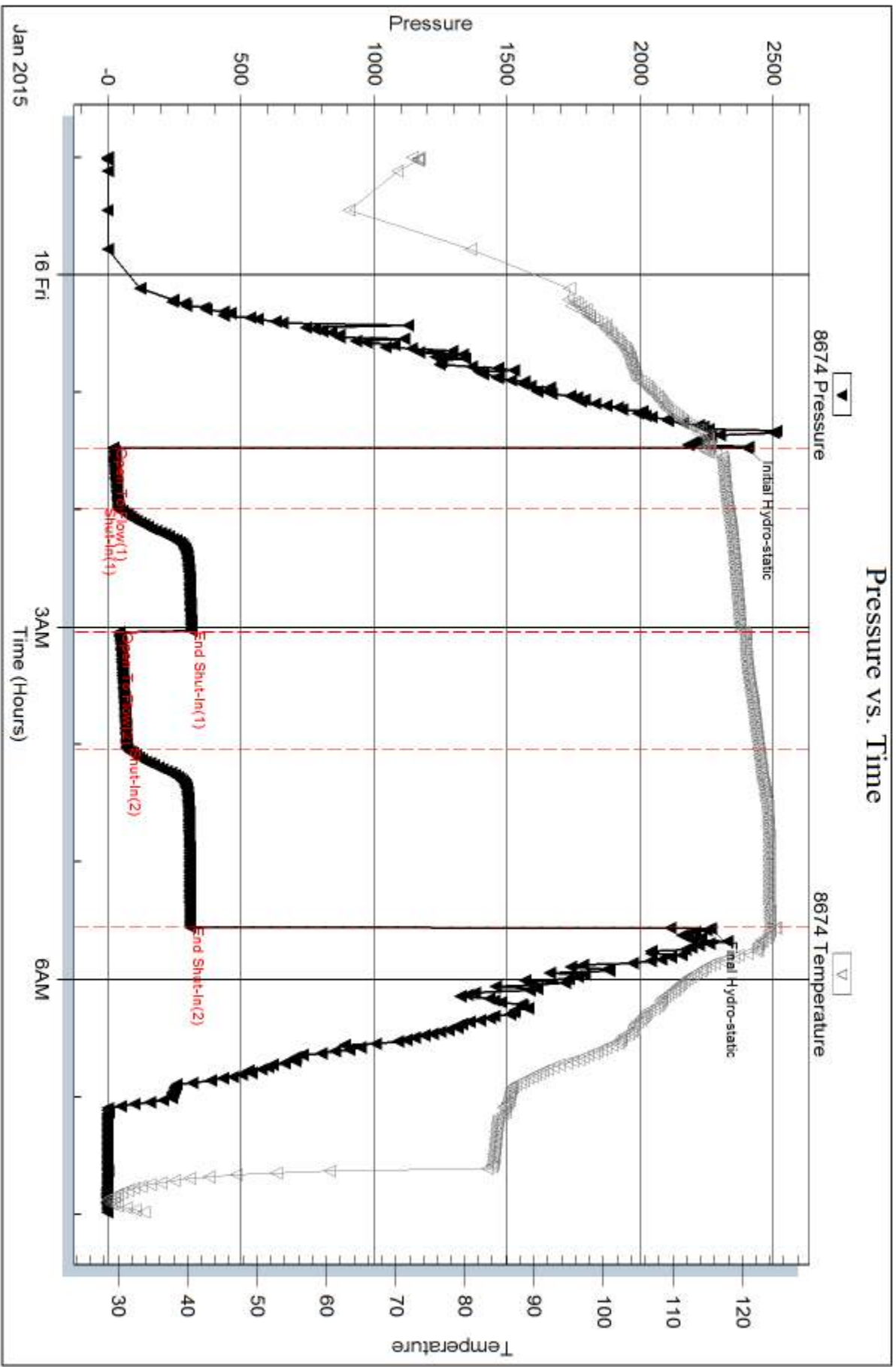
Num Gas Bombs: 0

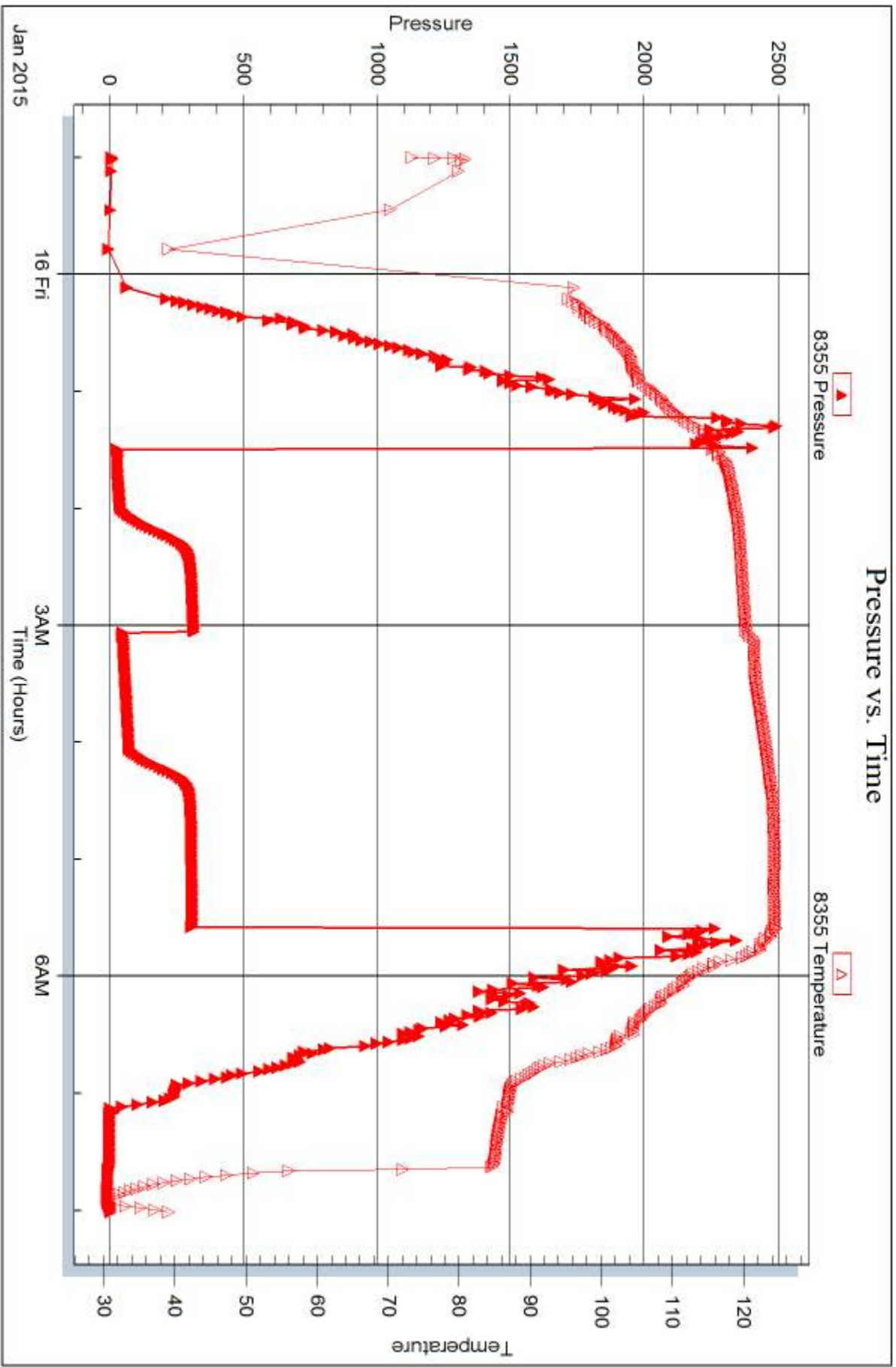
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co.**

250 N. Water Ste 300
Wichita KS 67202

ATTN: Paul Gunzelman

James "B" #1-23

23-10s-34w Thomas,KS

Start Date: 2015.01.16 @ 23:56:00

End Date: 2015.01.17 @ 07:33:54

Job Ticket #: 58696 DST #: 5

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

Printed: 2015.01.19 @ 13:42:48

Murfin Drilling Co. 23-10s-34w Thomas,KS James "B" #1-23 DST # 5 Johnson 2015.01.16



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co.

23-10s-34w Thomas,KS

250 N. Water Ste 300
Wichita KS 67202

James "B" #1-23

Job Ticket: 58696

DST#: 5

ATTN: Paul Gunzelman

Test Start: 2015.01.16 @ 23:56:00

GENERAL INFORMATION:

Formation: **Johnson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:05:40

Time Test Ended: 07:33:54

Test Type: Conventional Bottom Hole (Reset)

Tester: Will MacLean

Unit No: 71

Interval: 4660.00 ft (KB) To 4718.00 ft (KB) (TVD)

Reference Elevations: 3206.00 ft (KB)

Total Depth: 4718.00 ft (KB) (TVD)

3195.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8674 Inside

Press@RunDepth: 40.72 psig @ 4661.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.01.16

End Date: 2015.01.17

Last Calib.: 2015.01.17

Start Time: 23:56:00

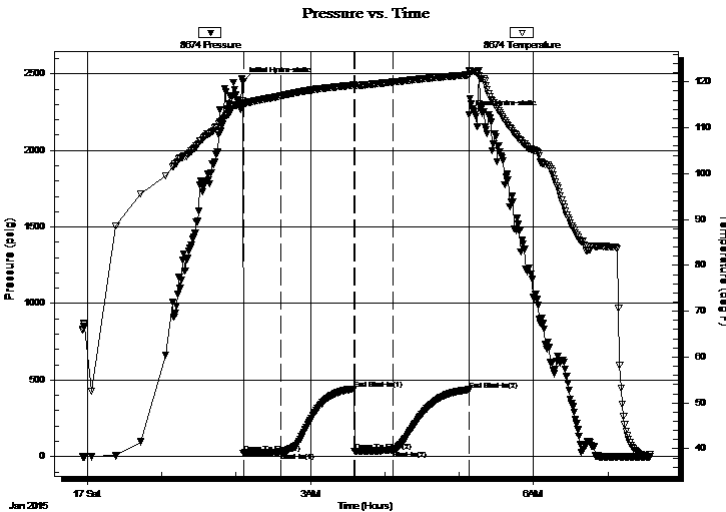
End Time: 07:33:54

Time On Btm: 2015.01.17 @ 02:05:25

Time Off Btm: 2015.01.17 @ 05:07:54

TEST COMMENT: IF- Weak Surface Blow
IS- No Blow
FF- No Blow
FS- No Blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2448.16	115.89	Initial Hydro-static
1	23.78	114.91	Open To Flow (1)
31	26.62	116.91	Shut-In(1)
90	442.67	119.28	End Shut-In(1)
90	35.09	119.07	Open To Flow (2)
121	40.72	119.94	Shut-In(2)
183	436.26	121.52	End Shut-In(2)
183	2233.77	122.51	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	100% m with Oil Spots in the Tool	0.30

Gas Rates

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

* Recovery from multiple tests



DRILL STEM TEST REPORT

Murfin Drilling Co.

23-10s-34w Thomas,KS

250 N. Water Ste 300
Wichita KS 67202

James "B" #1-23

Job Ticket: 58696

DST#: 5

ATTN: Paul Gunzelman

Test Start: 2015.01.16 @ 23:56:00

GENERAL INFORMATION:

Formation: **Johnson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:05:40

Time Test Ended: 07:33:54

Test Type: Conventional Bottom Hole (Reset)

Tester: Will MacLean

Unit No: 71

Interval: 4660.00 ft (KB) To 4718.00 ft (KB) (TVD)

Total Depth: 4718.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3206.00 ft (KB)

3195.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 8355

Outside

Press@RunDepth: psig @ 4661.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.01.16

End Date:

2015.01.17

Last Calib.:

2015.01.17

Start Time: 23:56:05

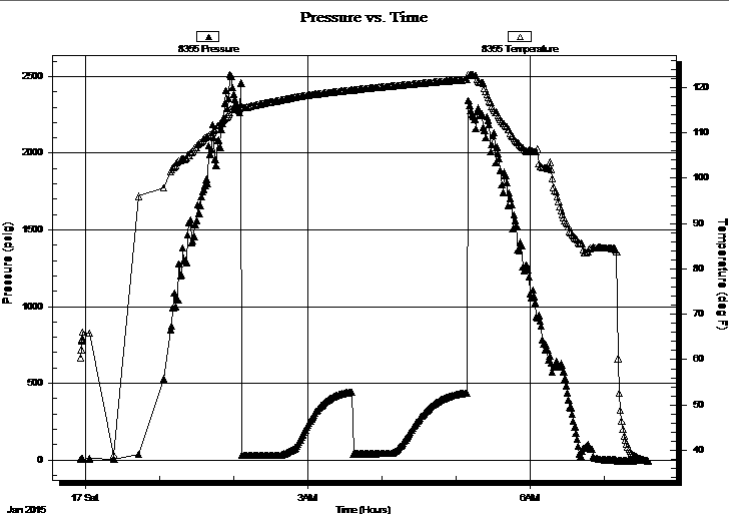
End Time:

07:35:29

Time On Btm:

Time Off Btm:

TEST COMMENT: IF- Weak Surface Blow
IS- No Blow
FF- No Blow
FS- No Blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
60.00	100% m with Oil Spots in the Tool	0.30

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co.

23-10s-34w Thomas,KS

250 N. Water Ste 300
Wichita KS 67202

James "B" #1-23

Job Ticket: 58696

DST#: 5

ATTN: Paul Gunzelman

Test Start: 2015.01.16 @ 23:56:00

Tool Information

Drill Pipe:	Length: 4415.00 ft	Diameter: 3.80 inches	Volume: 61.93 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	32000.00 lb
Drill Collar:	Length: 234.00 ft	Diameter: 2.25 inches	Volume: 1.15 bbl	Weight to Pull Loose:	10000.00 lb
			<u>Total Volume: 63.08 bbl</u>	Tool Chased	ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial	72000.00 lb
Depth to Top Packer:	4660.00 ft			Final	72000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	58.00 ft				
Tool Length:	85.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		
Tool Comments:					

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4634.00	
Shut In Tool	5.00			4639.00	
Hydraulic tool	5.00			4644.00	
Jars	5.00			4649.00	
Safety Joint	2.00			4651.00	
Packer	5.00			4656.00	27.00 Bottom Of Top Packer
Packer	4.00			4660.00	
Stubb	1.00			4661.00	
Recorder	0.00	8355	Outside	4661.00	
Recorder	0.00	8674	Inside	4661.00	
Perforations	19.00			4680.00	
Change Over Sub	1.00			4681.00	
Drill Pipe	31.00			4712.00	
Change Over Sub	1.00			4713.00	
Bullnose	5.00			4718.00	58.00 Bottom Packers & Anchor

Total Tool Length: 85.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co.

23-10s-34w Thomas,KS

250 N. Water Ste 300
Wichita KS 67202

James "B" #1-23

Job Ticket: 58696

DST#: 5

ATTN: Paul Gunzelman

Test Start: 2015.01.16 @ 23:56:00

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: 64.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 9000.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
60.00	100% m with Oil Spots in the Tool	0.295

Total Length: 60.00 ft Total Volume: 0.295 bbl

Num Fluid Samples: 0

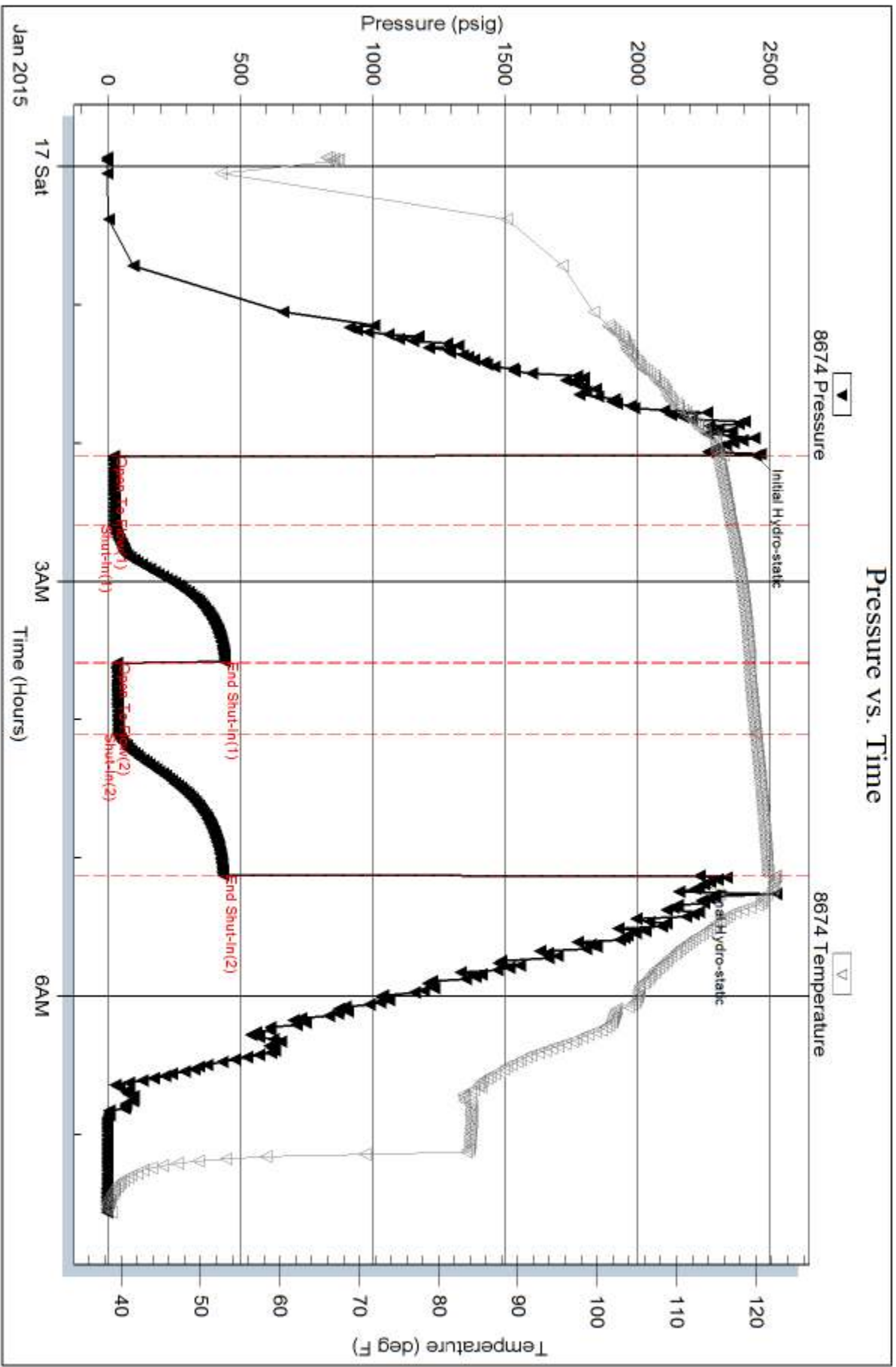
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

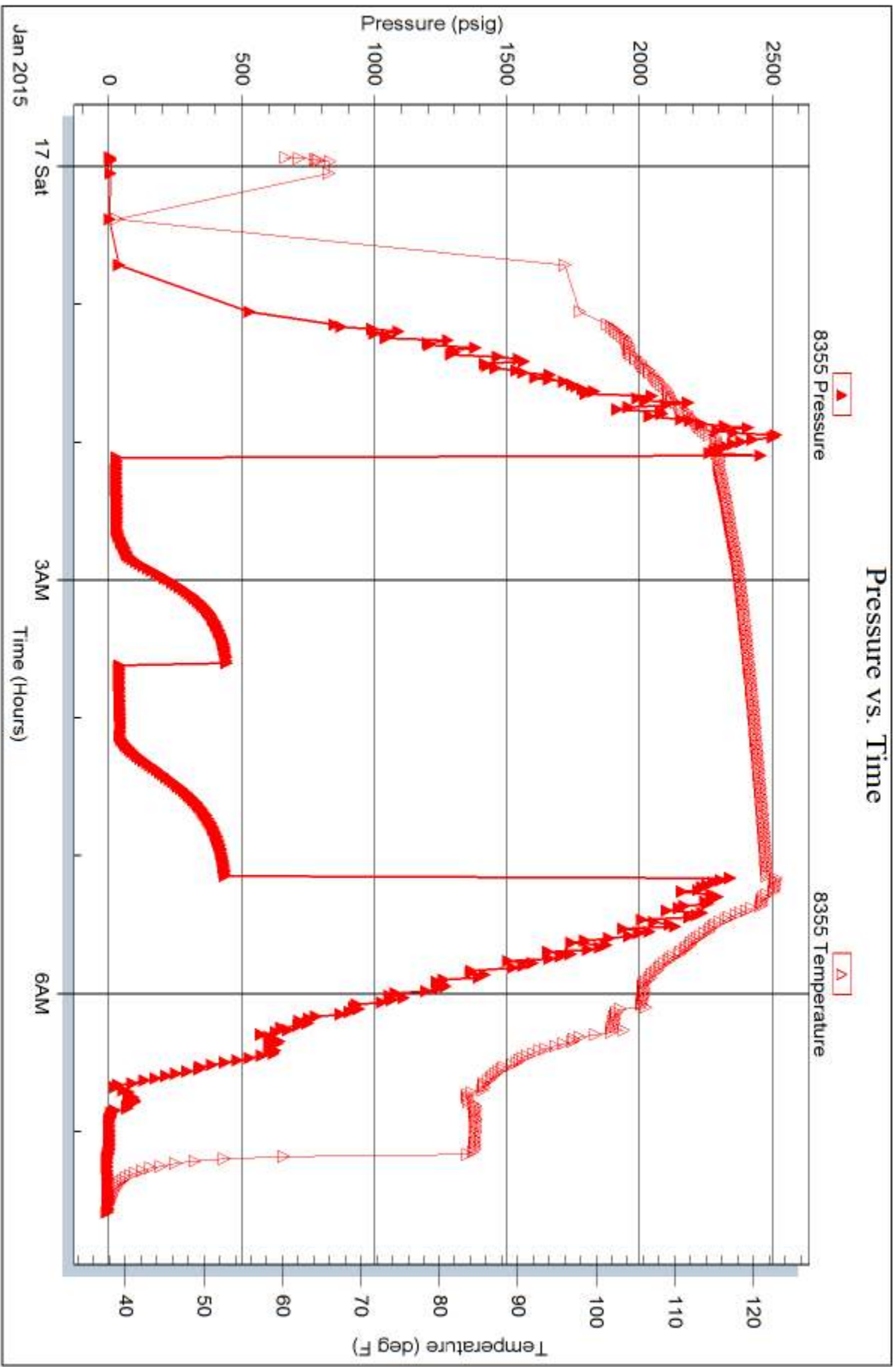


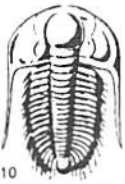
Serial #: 8355

Outside Murfin Drilling Co.

James "B" #1-23

DST Test Number: 5





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 58692

Well Name & No. James "B" #1-23 Test No. DST #1 Date 1-12-15
 Company Murkin Drilling Co. Elevation 3206 KB _____ GL _____
 Address 250 N. Water Ste 300 Wichita KS 67202
 Co. Rep / Geo. Paul Brunzelman Rig Murkin 22
 Location: Sec. 23 Twp. 10S Rge. 34W Co. Thomas State KS

Interval Tested 4122-4183 Zone Tested LRC "A-B"
 Anchor Length 61 Drill Pipe Run 3881 Mud Wt. 9.2
 Top Packer Depth 4118 Drill Collars Run 234 Vis 55
 Bottom Packer Depth 4122 Wt. Pipe Run 0 WL 64
 Total Depth 4183 Chlorides 8900 ppm System LCM 515
 Blow Description IF-Weak Surface Blow Built to 7 1/2"
IST- No Blow
FF-Weak Surface Blow Built to 3"
FST- No Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>40</u>	<u>DUCM</u>		<u>24</u>	<u>76</u>	
<u>126</u>	<u>WCM</u>		<u>47</u>	<u>53</u>	
<u>122</u>	<u>MCW</u>		<u>72</u>	<u>28</u>	
<u>175</u>	<u>MCW</u>		<u>88</u>	<u>12</u>	
Rec _____	Feet of _____	%gas _____	%oil _____	%water _____	%mud _____

Rec Total 463 BHT 121 Gravity _____ API RW 381 @ 22 °F Chlorides 62000 ppm
 Test 1150 T-On Location 15:56
 Jars 250 T-Started 17:24
 Safety Joint 75 T-Open 19:31
 Circ Sub N/C T-Pulled 23:35
 Hourly Standby _____ T-Out 1:45
 Mileage 128 RIT 128 Comments _____
 Sampler _____
 Straddle _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____
 Sub Total 1603

Initial Open 30
 Initial Shut-In 60
 Final Flow 60
 Final Shut-In 90

Sub Total 0
 Total 1603
 MP/DST Disc't _____

Approved By _____

Our Representative Jar

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. 58693

Well Name & No. James "B" #1-23 Test No. DST #2 Date 1-13-15
 Company Murkin Drilling Co. Elevation 3206 KB 3195 GL
 Address 250 N. Water Ste 300 Wichita KS 67202
 Co. Rep / Geo. Paul Gunzelman Rig Murkin 22
 Location: Sec. 23 Twp. 10S Rge. 34W Co. Thomas State KS

Interval Tested 4270 - 4331 Zone Tested LRC "H-I"
 Anchor Length 61 Drill Pipe Run 4037 Mud Wt. 9.2
 Top Packer Depth 4266 Drill Collars Run 234 Vis 6.2
 Bottom Packer Depth 4270 Wt. Pipe Run 0 WL 6.8
 Total Depth 4331 Chlorides 9900 ppm System LCM 6/6

Blow Description IF - Weak Surface Blow Built to BOB in 29min
ISI - No Blow
FF - Weak Surface Blow Built to 934
FSI - No Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>108</u>	<u>WCM w/ oil spots</u>			<u>6%</u>	<u>94%</u>
<u>189</u>	<u>WCM w/ oil spots</u>			<u>33%</u>	<u>67%</u>
<u>234</u>	<u>MCW</u>			<u>61%</u>	<u>39%</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 531 BHT 122 Gravity _____ API RW 221 @ 30 °F Chlorides 80000 ppm

(A) Initial Hydrostatic 2259 Test 1150 T-On Location 17:48
 (B) First Initial Flow 32 Jars 250 T-Started 18:56
 (C) First Final Flow 153 Safety Joint 75 T-Open 21:00
 (D) Initial Shut-In 1169 Circ Sub NIC T-Pulled _____
 (E) Second Initial Flow 157 Hourly Standby _____ T-Out 3:19
 (F) Second Final Flow 259 Mileage 128 KIT 128 Comments _____
 (G) Final Shut-In 1124 Sampler _____
 (H) Final Hydrostatic 2301 Straddle _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____

Initial Open 30
 Initial Shut-In 60
 Final Flow 60
 Final Shut-In 90

Sub Total 0
 Total 1603
 MP/DST Disc't _____

Sub Total 1603

Approved By _____ Our Representative PAW

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 58694

Well Name & No. James "B" #1-23 Test No. DST #3 Date 1-14-15
 Company Martin Drilling Co Elevation 3206 KB 3195 GL
 Address 250 N. Water Stc 300 Wichita KS 67202
 Co. Rep / Geo. Paul Gunzelman Rig Martin 22
 Location: Sec. 23 Twp. 109 Rge. 34W Co. Thomas State KS

Interval Tested 4331-4390 Zone Tested LRC "J+K"
 Anchor Length 59 Drill Pipe Run 4100 Mud Wt. 9.3
 Top Packer Depth 4327 Drill Collars Run 234 Vis 74
 Bottom Packer Depth 4331 Wt. Pipe Run 0 WL 8.4
 Total Depth 4390 Chlorides 12,300 ppm System LCM 416

Blow Description IF- Weak Surface Blow Built 939"
FSI- No Blow
FF- Weak Surface Blow Built to 5"
FSJ- No Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>112</u>	<u>60</u>	<u>3</u>	<u>97</u>		
<u>177</u>	<u>MGOO</u>	<u>22</u>	<u>69</u>		<u>9</u>
<u>59</u>	<u>WOGCM</u>	<u>19</u>	<u>15</u>	<u>7</u>	<u>59</u>
<u>264'</u>	<u>of GIP</u>				

Rec Total 348 BHT 121 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

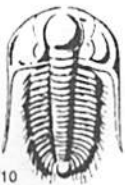
(A) Initial Hydrostatic 2225 Test 1150 T-On Location 13:02
 (B) First Initial Flow 32 Jars 250 T-Started 13:54
 (C) First Final Flow 86 Safety Joint 75 T-Open 15:47
 (D) Initial Shut-In 1219 Circ Sub NIC T-Pulled 19:49
 (E) Second Initial Flow 98 Hourly Standby _____ T-Out 22:17
 (F) Second Final Flow 134 Mileage 128 R/T 128 Comments API 15 24e30t = 27
 (G) Final Shut-In 1204 Sampler _____
 (H) Final Hydrostatic 2207 Straddle _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____

Initial Open 30
 Initial Shut-In 60
 Final Flow 60
 Final Shut-In 90

Sub Total 1603
 Total 1603
 MP/DST Disc't _____

Approved By _____ Our Representative [Signature]

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 58695

4/10

Well Name & No. James "B" #1-23 Test No. DST #4 Date 1-15-15
 Company Murkin Drilling Co. Elevation 3206 KB 3195 GL
 Address 250 N. Water St 300 Wichita KS 67202
 Co. Rep / Geo. Paul Grunzelman Rig Murkin 22
 Location: Sec. 23 Twp. 10S Rge. 34E Co. Thomas State KS

Interval Tested 4570-4628 Zone Tested Lower Pawnee / Ft. Scott
 Anchor Length 58 Drill Pipe Run 4321 Mud Wt. 9.3
 Top Packer Depth 4566 Drill Collars Run 234 Vis 58
 Bottom Packer Depth 4570 Wt. Pipe Run 0 WL 7.6
 Total Depth 4628 Chlorides 10,100 ppm System LCM 416

Blow Description IF-Weak Surface Blow Built to 8"
ISI-No Blow
FF-Weak Surface Blow Built to 3 1/4"
FSI-No Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>2</u>	<u>G-O</u>	<u>3</u>	<u>97</u>		
<u>59</u>	<u>G-OCM</u>	<u>4</u>	<u>7</u>		<u>89</u>
<u>59</u>	<u>WOG-CM</u>	<u>11</u>	<u>9</u>	<u>3</u>	<u>77</u>
	<u>305' Weak GIP</u>				

Rec Total 120 BHT 124 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

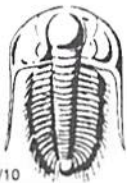
(A) Initial Hydrostatic 2400 Test 1150 T-On Location 21:54
 (B) First Initial Flow 20 Jars 250 T-Started 23:00
 (C) First Final Flow 39 Safety Joint 75 T-Open 1:28
 (D) Initial Shut-In 31.5 Circ Sub MC T-Pulled 5:33
 (E) Second Initial Flow 43 Hourly Standby _____ T-Out 7:59
 (F) Second Final Flow 71 Mileage 125 RIT 128 Comments _____
 (G) Final Shut-In 308 Sampler _____
 (H) Final Hydrostatic 2264 Straddle _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____
 Sub Total 1603

Initial Open 30 Ruined Shale Packer _____
 Initial Shut-In 60 Ruined Packer _____
 Final Flow 60 Extra Copies _____
 Final Shut-In 90 Sub Total 0
 Total 1603
 MP/DST Disc't _____

Approved By _____

Our Representative [Signature]

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 58696

Well Name & No. James "B" #1-23 Test No. DST #5 Date 1-16-15
 Company Murkin Drilling Co Elevation 3206 KB 3195 GL
 Address 250 N. Water St. 300 Wichita KS 67202
 Co. Rep / Geo. Paul Gunzelman Rig Murkin 22
 Location: Sec. 23 Twp. 10S Rge. 34W Co. Thomas State KS

Interval Tested 4660-4718 Zone Tested Johnson
 Anchor Length 58 Drill Pipe Run 4415 Mud Wt. 9.1
 Top Packer Depth 4656 Drill Collars Run 234 Vis 64
 Bottom Packer Depth 4660 Wt. Pipe Run 0 WL 7.2
 Total Depth 4718 Chlorides 9000 ppm System LCM 666

Blow Description IF-Weak Surface Blow
ISD - No Blow
FF - No Blow
FSI - No Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>60</u>	<u>Mud Oil Spots in Test</u>			<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 60 BHT 122 Gravity 1150 API RW @ °F Chlorides ppm
 (A) Initial Hydrostatic 2448 Test 1150 T-On Location 22:50
 (B) First Initial Flow 23 Jars 250 T-Started 23:56
 (C) First Final Flow 26 Safety Joint 75 T-Open 205
 (D) Initial Shut-In 442 Circ Sub NIC T-Pulled 5:07
 (E) Second Initial Flow 35 Hourly Standby _____ T-Out 7:33
 (F) Second Final Flow 40 Mileage 128 RIT 128 Comments _____
 (G) Final Shut-In 436 Sampler _____
 (H) Final Hydrostatic 2233 Straddle _____ Ruined Shale Packer _____
 Initial Open 30 Shale Packer _____ Ruined Packer _____
 Initial Shut-In 60 Extra Packer _____ Extra Copies _____
 Final Flow 30 Extra Recorder _____ Sub Total 0
 Final Shut-In 60 Day Standby _____ Total 1603
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1603

Approved By _____ Our Representative Rim

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GEOLOGISTS' REPORT

OPERATOR: **MURFIN DRILLING COMPANY, INC.**
LEASE: **JAMES 'B' # 1-23**

ELEVATIONS
KB 3206 Ft.

GL 3195 Ft.

ALL MEASUREMENTS FROM N.B.

LOCATION: **1320 FNL & 2310 FWL**

SEC. **23** TWPSP **10S** RGE **34W**

COUNTY: **THOMAS** STATE: **KANSAS**

FIELD: **JIMMY**

CONTRACTOR: **Murfin Drilling Company** REG. NO. **22**

COMMENCED: **8 January 2015** COMPLETED: **18 January 2015**

WIND DIRECTION: **3201** MUD TYPE: **Chemical**

DRILLING TIME: **3700** TO: **4845**

SAMPLES EXAMINED FROM: **3770 TO 4845**

GEOLOGICAL SUPERVISION FROM: **3765 TO 4845**

GEOLOGIST ON WELL: **Paul Guzman**

FORMATION NAME: **Paul Guzman**

LOG DATE: **2715** SAMPLE DATE: **+491**

Stone Corral 4738 +488 2740 +466

Basal Anhydrite 3876 -670 3874 -688

Topoka 4093 -887 4089 -883

Heebner Shale 4134 -928 4127 -921

Lansing 4384 -1188 4389 -1183

Stark Shale 4586 -1350 -4550 -1344

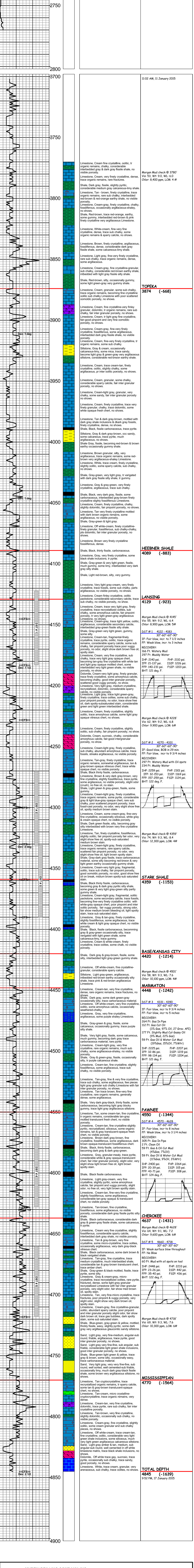
Pamree 4642 -1438 4637 -1431

Cherokee 4773 -1587 4766 -1580

Mississippian 4851 -1645 4845 -1639



REMARKS
API 15-193-20945-00-00
Drilling Fluids: Morgan Mud, Inc. (David Lines, engineer)
Drill Stem Testing: Tribolite Testing, Inc. (Will MacClean, tester)
Gas Trailer: No Gas Trailer
Reserve Pit Chlorides: 29,800 PPM.



Operator: MURFIN DRILLING COMPANY, INC.
Lease: JAMES 'B' # 1-23
Location: 1320 FNL & 2310 FWL SEC. 23 TWPSP 10S RGE 34W
County: THOMAS State: KANSAS



*acct
Prod-MC*

INVOICE

PO Box 93999
Southlake, TX 76092

Invoice Number: 148075

Invoice Date: Jan 8, 2015

Voice: (817) 546-7282
Fax: (817) 246-3361

Page: 1

Federal Tax I.D.#: 20-8651475

Bill To:
Murfin Drlg. Co., Inc. 250 N. Water STE #300 Wichita, KS 67202

Customer ID	Field Ticket #	Payment Terms	
Murfin	64804	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-01	Oakley	Jan 8, 2015	2/7/15

Quantity	Item	Description	Unit Price	Amount
1.00	WELL NAME	James B #1-23		
230.00	CEMENT MATERIALS	Class A Common	17.90	4,117.00
649.00	CEMENT MATERIALS	Chloride	1.10	713.90
241.50	CEMENT SERVICE	Cubic Feet Charge	2.48	598.92
166.94	CEMENT SERVICE	Ton Mileage Charge	2.75	459.09
1.00	CEMENT SERVICE	Surface	1,512.25	1,512.25
15.00	CEMENT SERVICE	Pump Truck Mileage	7.70	115.50
1.00	CEMENT SERVICE	Swedge Manifold Rental	275.00	275.00
15.00	CEMENT SERVICE	Light Vehicle Mileage	4.40	66.00
1.00	CEMENT SUPERVISOR	Paul Beaver		

ALL PRICES ARE NET, PAYABLE
30 DAYS FOLLOWING DATE OF
INVOICE. 1 1/2% CHARGED
THEREAFTER. IF ACCOUNT IS
CURRENT, TAKE DISCOUNT OF

\$ 2,750.18

ONLY IF PAID ON OR BEFORE
Feb 7, 2015

Subtotal	7,857.66
Sales Tax	345.41
Total Invoice Amount	8,203.07
Payment/Credit Applied	
TOTAL	8,203.07

- 2750.18
5452.89

OK JR

ALLIED OIL & GAS SERVICES, LLC 064804

Federal Tax I.D. # 20-8651475

REMIT TO P.O. BOX 93999
SOUTHLAKE, TEXAS 76092

SERVICE POINT: Cockley KS

DATE <u>1-8-15</u>	SEC <u>23</u>	TWP <u>10</u>	RANGE <u>34</u>	CALLED OUT	ON LOCATION <u>9:00 a.m.</u>	JOB START <u>10:30 a.m.</u>	JOB FINISH <u>11:20 a.m.</u>
LEASE <u>James B</u>			WELL # <u>1-23</u>	LOCATION <u>Monument hwy 25 N to Rd D 1/2 W Sinto</u>	COUNTY <u>Thomas</u>	STATE <u>KS</u>	
OLD OR NEW (Circle one)							

CONTRACTOR <u>Murkin Dr</u>	OWNER <u>Same</u>
TYPE OF JOB <u>Surface</u>	
HOLE SIZE <u>12 1/4</u>	T.D. <u>269'</u>
CASING SIZE <u>8 5/8</u>	DEPTH <u>269.54'</u>
TUBING SIZE	DEPTH
DRILL PIPE	DEPTH
TOOL	DEPTH
PRES. MAX	MINIMUM
MEAS. LINE	SHOE JOINT
CEMENT LEFT IN CSG. <u>15'</u>	
PERFS.	
DISPLACEMENT <u>116 bbl H₂O</u>	

EQUIPMENT	
PUMP TRUCK # <u>422</u>	CEMENTER <u>Paul Beaver</u>
BULK TRUCK # <u>818/287</u>	HELPER <u>Paul Beaver / Juan 3</u>
BULK TRUCK #	DRIVER <u>Juan 2</u>
BULK TRUCK #	DRIVER

CEMENT AMOUNT ORDERED <u>230 sks Com</u>	
3% C.C.	
COMMON <u>230 sks @ 17.90</u>	<u>4117.00</u>
POZMIX	@
GEL	@
CHLORIDE <u>649 #</u>	@ <u>1.10</u> <u>713.90</u>
ASC	@
<u>Material Total</u>	@ <u>4,830.90</u>
<u>(1690.81/35%)</u>	@
HANDLING <u>241.50 @ 2.48</u>	<u>598.92</u>
MILEAGE <u>11.13 hrs x 15 mi x 2.75</u>	<u>459.11</u>
TOTAL	

REMARKS:
mix 230 sks Com 3% C.C.
Displace w/ water
cement did cure
(5 bbl top it)

Thank You!
Paul + Crew

CHARGE TO: Murkin Drtg Co.

STREET _____

CITY _____ STATE _____ ZIP _____

SERVICE	
DEPTH OF JOB <u>269'</u>	
PUMP TRUCK CHARGE	<u>1512.25</u>
EXTRA FOOTAGE	@
MILEAGE <u>11.13 hrs @ 15</u>	@ <u>7.70</u> <u>115.50</u>
MANIFOLD <u>Swedge</u>	@ <u>275.00</u>
<u>MLV</u>	@ <u>4.40</u> <u>66.00</u>
TOTAL	<u>3,628.70</u>

PLUG & FLOAT EQUIPMENT	
	@
	@
	@
	@
	@
TOTAL	

To: Allied Oil & Gas Services, LLC.
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME _____

SIGNATURE [Signature]

SALES TAX (If Any) _____

TOTAL CHARGES 7,457.68

DISCOUNT 2,350.18 (35%) IF PAID IN 30 DAYS

5,107.49 Net.



P. O. Box 466
Ness City, KS 67560
Off: 785-798-2300



Invoice

DATE	INVOICE #
1/18/2015	28196

BILL TO
Murfin Drilling Co Inc PO Box 661 Colby, KS 67701-0661
USED FOR <u>IC 103</u>
APPROVED <u>[Signature]</u>

- Acidizing
- Cement
- Tool Rental

TERMS	Well No.	Lease	County	Contractor	Well Type	Well Category	Job Purpose	Operator
Net 30	#1-23	James B	Thomas	Murfin Drilling Ri...	Oil	Development	5-1/2" LongString	Jason
PRICE REF.	DESCRIPTION				QTY	UM	UNIT PRICE	AMOUNT
575D	Mileage - 1 Way				80	Miles	6.00	480.00
578D-L	Pump Charge - Long String				1	Job	1,500.00	1,500.00
403-5	5 1/2" Cement Basket				2	Each	300.00	600.00T
404-5	5 1/2" Port Collar				1	Each	2,900.00	2,900.00T
406-5	5 1/2" Latch Down Plug & Baffle				1	Each	275.00	275.00T
407-5	5 1/2" Insert Float Shoe With Auto Fill				1	Each	375.00	375.00T
409-5	5 1/2" Turbolizer				15	Each	90.00	1,350.00T
419-5	5 1/2" Rotating Head Rental				1	Each	200.00	200.00T
280	Flocheck 21				500	Gallon(s)	3.00	1,500.00T
221	Liquid KCL (Clayfix)				4	Gallon(s)	25.00	100.00T
276	Flocele				60	Lb(s)	2.50	150.00T
283	Salt				1,150	Lb(s)	0.20	230.00T
284	Calseal				11	Sack(s)	35.00	385.00T
285	CFR-1				150	Lb(s)	4.50	675.00T
290	D-Air				2.5	Gallon(s)	42.00	105.00T
325	Standard Cement				225	Sacks	14.50	3,262.50T
581D	Service Charge Cement				225	Sacks	2.00	450.00
583D	Drayage				944.6	Ton Miles	1.00	944.60
	Subtotal							15,482.10
	Sales Tax Thomas County						7.15%	865.69
Thank You For Your Business In 2014! We Look Forward To Serving You In 2015!							Total	\$16,347.79



Services, Inc.

CHARGE TO: MURKIN DRILLING
 ADDRESS
 CITY, STATE, ZIP CODE

TICKET 28196

PAGE 1 OF 2

SERVICE LOCATIONS
 1. NESS (574) KS WELLPROJECT NO. _____ LEASE JAMES B-23 COUNTY/PARISH THOMAS STATE KS CITY MOVUMENT, KS DATE 8/5/15 OWNER
 2. _____ TICKET TYPE MURKIN DRILLING RIG 22 CONTRACTOR _____ RIG NAME NO. _____ SHIPPED VIA _____ DELIVERED TO _____ ORDER NO. _____
 3. _____ WELL TYPE DIL WELL CATEGORY DEVELOPMENT JOB PURPOSE SALON STRING WELL PERMIT NO. _____ WELL LOCATION 205 SN, 23 W, 5610
 4. _____ REFERRAL LOCATION _____ INVOICE INSTRUCTIONS _____

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	MILEAGE	QTY.			UNIT PRICE	AMOUNT
		LOC	ACCT	DF			QTY.	UM	QTY.		
575						115	80	mil		60	4800
578					Rump Charge		1	nos		1500	1500
4D3					Cement Baskets		2	ea		300	600
4D4					Port Collar		1	ea		290	290
4D6					Large Down Plug Barrel		1	ea		275	275
4D7					Insert Float Shoe w/ Fill		1	ea		375	375
4D9					Turbulators		1	ea		90	90
419					Rotating Head Rental		1	ea		200	200
28D					Floodcheck 21		5	ea		300	1500
221					Kilbud Rd		4	ea		250	1000

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
 DATE SIGNED 8/5/15 TIME SIGNED 2:15 A.M. P.M.
 X [Signature]

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

SURVEY	AGREE	UN-DECIDED	DIS-AGREE	PAGE TOTAL	TOTAL
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?				2	9280
WE UNDERSTOOD AND MET YOUR NEEDS?					6202
OUR SERVICE WAS PERFORMED WITHOUT DELAY?					15482
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?					10
ARE YOU SATISFIED WITH OUR SERVICE?	<input type="checkbox"/> YES	<input type="checkbox"/> NO			15482
<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND					10
TOTAL					16,347.79

SWIFT OPERATOR [Signature] APPROVAL [Signature]
 CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.
 Thank You!



PO BOX 466
Moss City, KS 67560

TICKET CONTINUATION

TICKET No. 28196

Off: 785-798-2300

CUSTOMER
MORRIS DRIVING

WEIGHT
JAMES B1-23

DATE
7/8/54

PAGE 21 OF 2

PRICE REFERENCE	SECONDARY REFERENCE / PART NUMBER	ACCOUNTING		TIME	DESCRIPTION	QTY.		U/M.		UNIT PRICE	AMOUNT
		LOC	ACCT			DF	QTY.	U/M.	QTY.		
276					FLODGE	100	1/bs			2.50	250.00
283					SAC	1150	1/bs			.20	230.00
284					CAUSEAL	11	1/5x			35.00	385.00
285					AIR-1	150	1/bs			4.75	712.50
29D					D-AIR	2 1/2	1/42			42.00	105.00
325					STANDARD EA-2					14.50	321.00
581					SERVICE CHARGE					2.00	450.00
583					MILEAGE CHARGE					1.00	944.00

TOTAL TON MILES
23615

LOADS
80

TON MILES
944,600

CONTINUATION TOTAL
60202.10

JOB LOG

SWIFT Services, Inc.

DATE 18 JAN 15 PAGE NO.

CUSTOMER MURFIN DRILLING

WELL NO.

LEASE JAMES B 1-23

JOB TYPE 5" LONG STRING

TICKET NO. 28196

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1400							ON LOCATION
	1645							START PIPE 5 1/2" - 15.5' # RTD @ 4845 SHOE JT. 18.37 CENTRALIZERS 1-14, 46 BASKETS. 47, 48 PORT COLLAR # 48 @ 2715 CIRCULATE @ # 57
	1850							DROP BALL CIRCULATE.
	1948	6	15		✓		300	Pump 15 BBL KCL
		6	12		✓		300	Pump 500 cps FLOCHECK
		6	5		✓		300	Pump 5 BBL KCL
	1955		7.5					PLUG RH-30 SX MH-20 SX
	2001	4	42		✓			MIX 175 SX EA-2
	2014							WASH OUT Pump & LINES.
	2019	6			✓			START DISPLACING PLUG
	2038		114 1/2		✓		1700	PLUG DOWN - LATCH PLUG IN
	2040				✓			RELEASE PSI - DRY
	2042							WASH TRUCK
	2115							JOB COMPLETE. THANKS # 115 JASON DAVE COLE ROB

MDCI
 James 'B' #1-23
 1320 FNL 2310 FWL
 Sec. 23-10S-34W
 3206' KB

Formation	Sample Top	Datum	Ref	Log Tops	Datum	Ref
Anhydrite	2715	+491	-4	2710	+496	+1
B/Anhydrite	2740	+466	-1	2738	+468	+1
Topeka	3874	-668	+2	3876	-670	Flat
Heebner	4089	-883	+2	4093	-887	-2
Lansing	4127	-921	+2	4134	-928	-5
Stark	4359	-1153	-3	4354	-1148	+2
Pawnee	4550	-1344	flat	4557	-1351	-7
Fort Scott	4603	-1397	-1	4611	-1405	-9
Johnson Zn	4682	-1476	-7	4686	-1480	-11
Mississippi				4775	-1569	-22
RTD	4845					
LTD				4851		