

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1249013
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: _____

1249013

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

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

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

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

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

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: _____ _____
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Form	ACO1 - Well Completion
Operator	Murfin Drilling Co., Inc.
Well Name	Abell 1-24
Doc ID	1249013

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: Jeff Christian

Abell #1-24

24-12s-31w Gove,KS

Start Date: 2015.01.29 @ 19:55:00

End Date: 2015.01.30 @ 03:36:30

Job Ticket #: 61516 DST #: 1

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

Printed: 2015.02.03 @ 11:51:42

Murfin Drilling Co. 24-12s-31w Gove,KS Abell #1-24 DST # 1 Toronto - LKC "D" 2015.01.29



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co.

24-12s-31w Gove,KS

250 N Water STE 300
Wichita KS 67202

Abell #1-24

Job Ticket: 61516

DST#: 1

ATTN: Jeff Christian

Test Start: 2015.01.29 @ 19:55:00

GENERAL INFORMATION:

Formation: **Totonto - LKC "D"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 21:41:30
 Time Test Ended: 03:36:30
 Interval: **3854.00 ft (KB) To 3966.00 ft (KB) (TVD)**
 Total Depth: 3966.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Poor
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Justin Harris
 Unit No: 71
 Reference Elevations: 2836.00 ft (KB)
 2827.00 ft (CF)
 KB to GR/CF: 9.00 ft

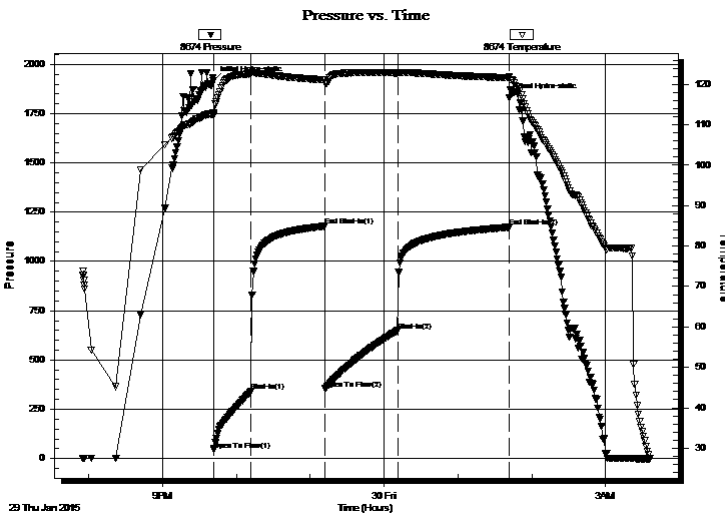
Serial #: 8674

Inside

Press@RunDepth: 649.34 psig @ 3855.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2015.01.29 End Date: 2015.01.30 Last Calib.: 2015.01.30
 Start Time: 19:55:05 End Time: 03:36:29 Time On Btm: 2015.01.29 @ 21:41:15
 Time Off Btm: 2015.01.30 @ 01:41:45

TEST COMMENT: 30: B.O.B in 3 1/2 Mins.
 60: No Return.
 60: B.O.B in 5 1/2 Mins.
 90: No Return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1916.37	112.91	Initial Hydro-static
1	43.73	112.20	Open To Flow (1)
31	341.33	122.59	Shut-In(1)
91	1179.00	121.09	End Shut-In(1)
91	354.03	120.49	Open To Flow (2)
150	649.34	122.81	Shut-In(2)
241	1173.29	121.63	End Shut-In(2)
241	1829.23	121.95	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
276.00	mcw 10m 90w	1.36
504.00	mcw 5m 95w	7.07
441.00	mcw 10m 90w	6.19

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co.

24-12s-31w Gove,KS

250 N Water STE 300
Wichita KS 67202

Abell #1-24

Job Ticket: 61516

DST#: 1

ATTN: Jeff Christian

Test Start: 2015.01.29 @ 19:55:00

Tool Information

Drill Pipe:	Length: 3576.00 ft	Diameter: 3.80 inches	Volume: 50.16 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 276.00 ft	Diameter: 2.25 inches	Volume: 1.36 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 51.52 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 68000.00 lb
Depth to Top Packer:	3854.00 ft			Final 72000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	112.00 ft			
Tool Length:	139.00 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			3828.00	
Shut In Tool	5.00			3833.00	
Hydraulic tool	5.00			3838.00	
Jars	5.00			3843.00	
Safety Joint	2.00			3845.00	
Packer	5.00			3850.00	27.00 Bottom Of Top Packer
Packer	4.00			3854.00	
Stubb	1.00			3855.00	
Recorder	0.00	8355	Outside	3855.00	
Recorder	0.00	8674	Inside	3855.00	
Perforations	10.00			3865.00	
Change Over Sub	1.00			3866.00	
Drill Pipe	94.00			3960.00	
Change Over Sub	1.00			3961.00	
Bullnose	5.00			3966.00	112.00 Bottom Packers & Anchor

Total Tool Length: 139.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co.

24-12s-31w Gove,KS

250 N Water STE 300
Wichita KS 67202

Abell #1-24

Job Ticket: 61516

DST#: 1

ATTN: Jeff Christian

Test Start: 2015.01.29 @ 19:55:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

30000 ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.59 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
276.00	mcw 10m 90w	1.357
504.00	mcw 5m 95w	7.070
441.00	mcw 10m 90w	6.186

Total Length: 1221.00 ft Total Volume: 14.613 bbl

Num Fluid Samples: 0

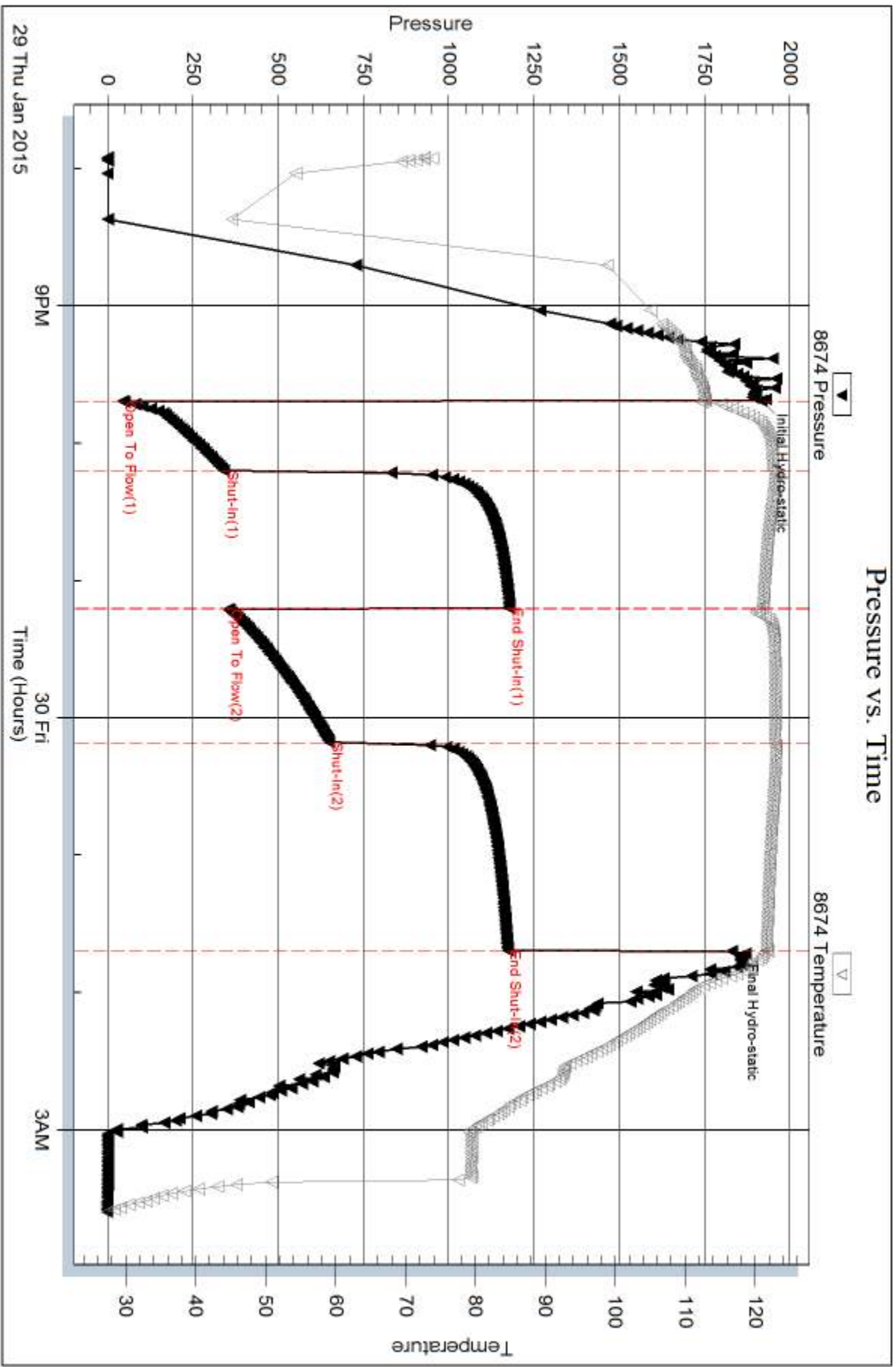
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: API RW .41 @ 37F - 30000 Chlorides

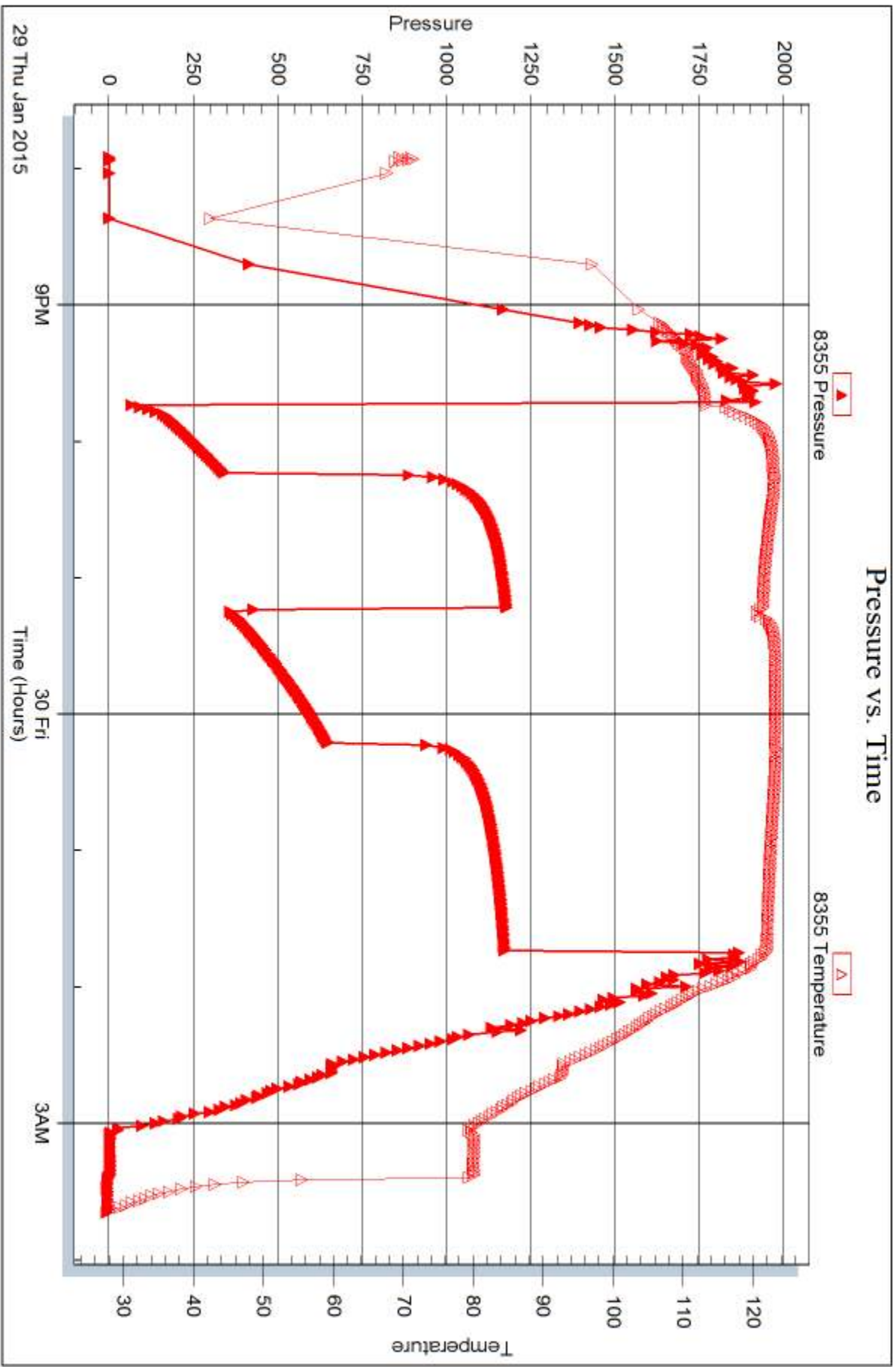


Serial #: 8355

Outside Murfin Drilling Co.

Abell #1-24

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co.**

250 N Water STE 300
Wichita KS 67202

ATTN: Jeff Christian

Abell #1-24

24-12s-31w Gove,KS

Start Date: 2015.01.30 @ 09:40:00

End Date: 2015.01.30 @ 16:55:30

Job Ticket #: 61517 DST #: 2

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

Printed: 2015.02.03 @ 11:51:22



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co.

24-12s-31w Gove,KS

250 N Water STE 300
Wichita KS 67202

Abell #1-24

Job Ticket: 61517

DST#: 2

ATTN: Jeff Christian

Test Start: 2015.01.30 @ 09:40:00

GENERAL INFORMATION:

Formation: **LKC "E, F"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 11:07:30
 Time Test Ended: 16:55:30
 Interval: **3967.00 ft (KB) To 3996.00 ft (KB) (TVD)**
 Total Depth: 3996.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Poor
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Justin Harris
 Unit No: 71
 Reference Elevations: 2836.00 ft (KB)
 2827.00 ft (CF)
 KB to GR/CF: 9.00 ft

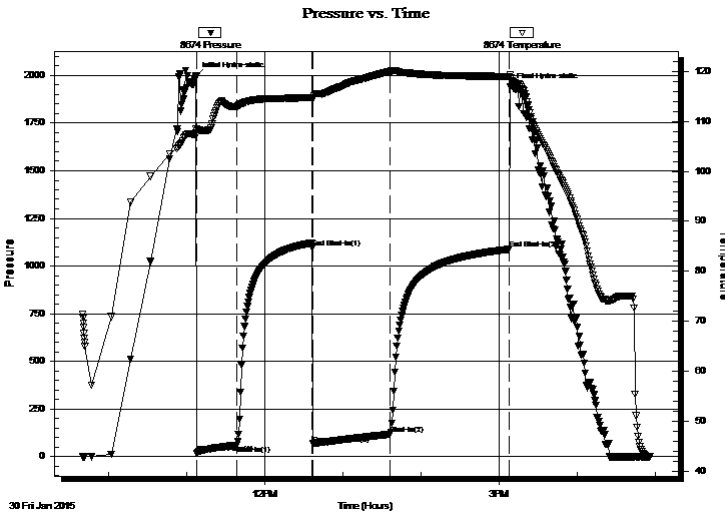
Serial #: 8674

Inside

Press@RunDepth: 117.88 psig @ 3968.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2015.01.30 End Date: 2015.01.30 Last Calib.: 2015.01.30
 Start Time: 09:40:05 End Time: 16:55:29 Time On Btm: 2015.01.30 @ 11:07:15
 Time Off Btm: 2015.01.30 @ 15:08:15

TEST COMMENT: 30: Weak surface blow build to 3 1/4 ".
 60: No Return.
 60: Weak surface blow to 1/2 ".
 90: No Return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1992.31	108.60	Initial Hydro-static
1	19.19	107.37	Open To Flow (1)
32	62.01	113.01	Shut-In(1)
89	1097.37	114.75	End Shut-In(1)
90	67.32	114.44	Open To Flow (2)
149	117.88	120.02	Shut-In(2)
241	1088.51	119.02	End Shut-In(2)
241	1938.66	119.28	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
189.00	ow cm 20o 30w 50m	0.93
2.00	Clean oil	0.01

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co.

24-12s-31w Gove,KS

250 N Water STE 300
Wichita KS 67202

Abell #1-24

Job Ticket: 61517

DST#: 2

ATTN: Jeff Christian

Test Start: 2015.01.30 @ 09:40:00

Tool Information

Drill Pipe:	Length: 3675.00 ft	Diameter: 3.80 inches	Volume: 51.55 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 276.00 ft	Diameter: 2.25 inches	Volume: 1.36 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 52.91 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial 66000.00 lb
Depth to Top Packer:	3967.00 ft			Final 67000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	29.00 ft			
Tool Length:	56.00 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			3941.00	
Shut In Tool	5.00			3946.00	
Hydraulic tool	5.00			3951.00	
Jars	5.00			3956.00	
Safety Joint	2.00			3958.00	
Packer	5.00			3963.00	27.00 Bottom Of Top Packer
Packer	4.00			3967.00	
Stubb	1.00			3968.00	
Recorder	0.00	8355	Outside	3968.00	
Recorder	0.00	8674	Inside	3968.00	
Perforations	23.00			3991.00	
Bullnose	5.00			3996.00	29.00 Bottom Packers & Anchor

Total Tool Length: 56.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co.

24-12s-31w Gove,KS

250 N Water STE 300
Wichita KS 67202

Abell #1-24

Job Ticket: 61517

DST#: 2

ATTN: Jeff Christian

Test Start: 2015.01.30 @ 09:40:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbf

Water Loss: 5.59 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
189.00	ow cm 20o 30w 50m	0.929
2.00	Clean oil	0.010

Total Length: 191.00 ft Total Volume: 0.939 bbf

Num Fluid Samples: 0

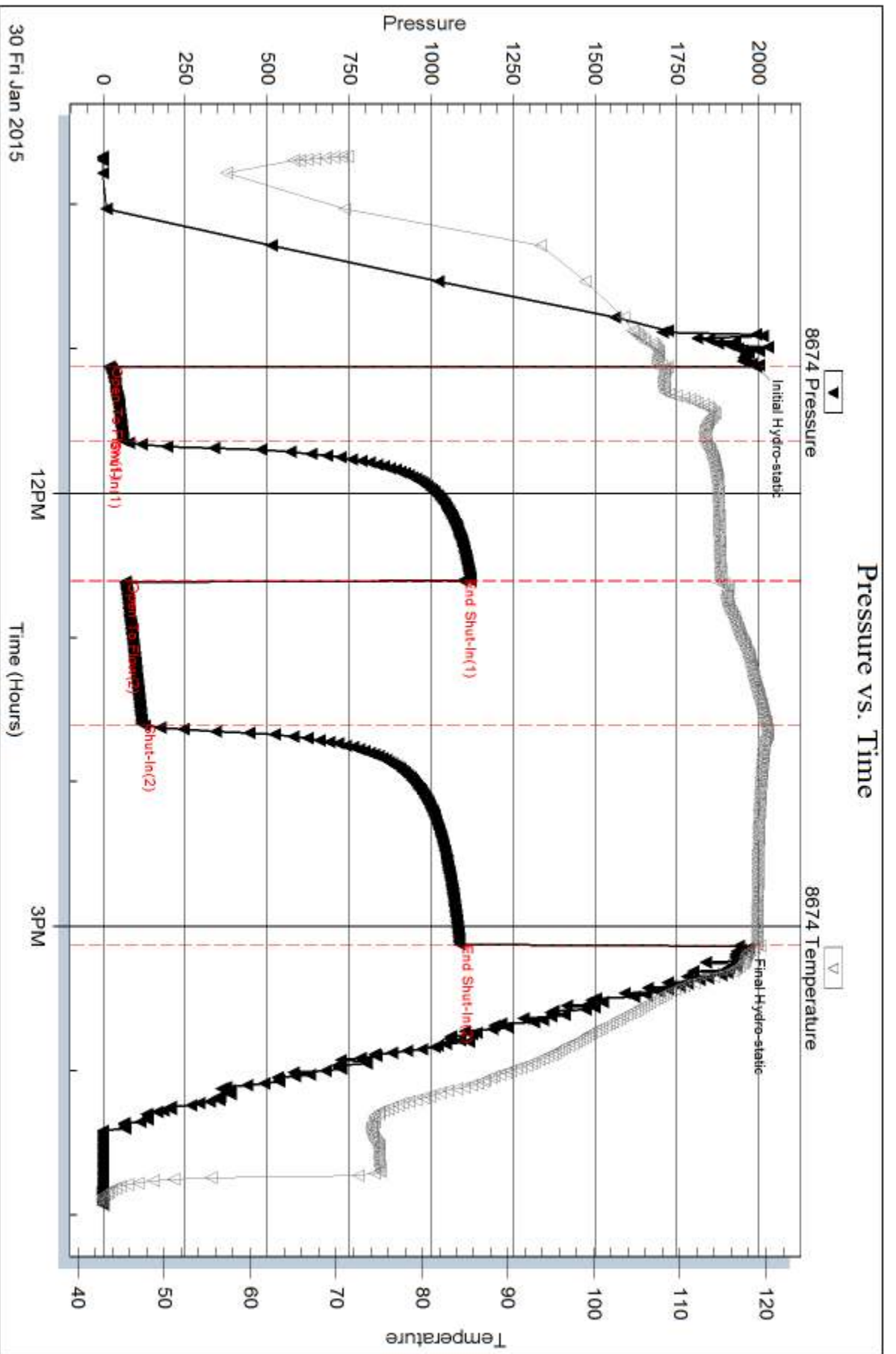
Num Gas Bombs: 0

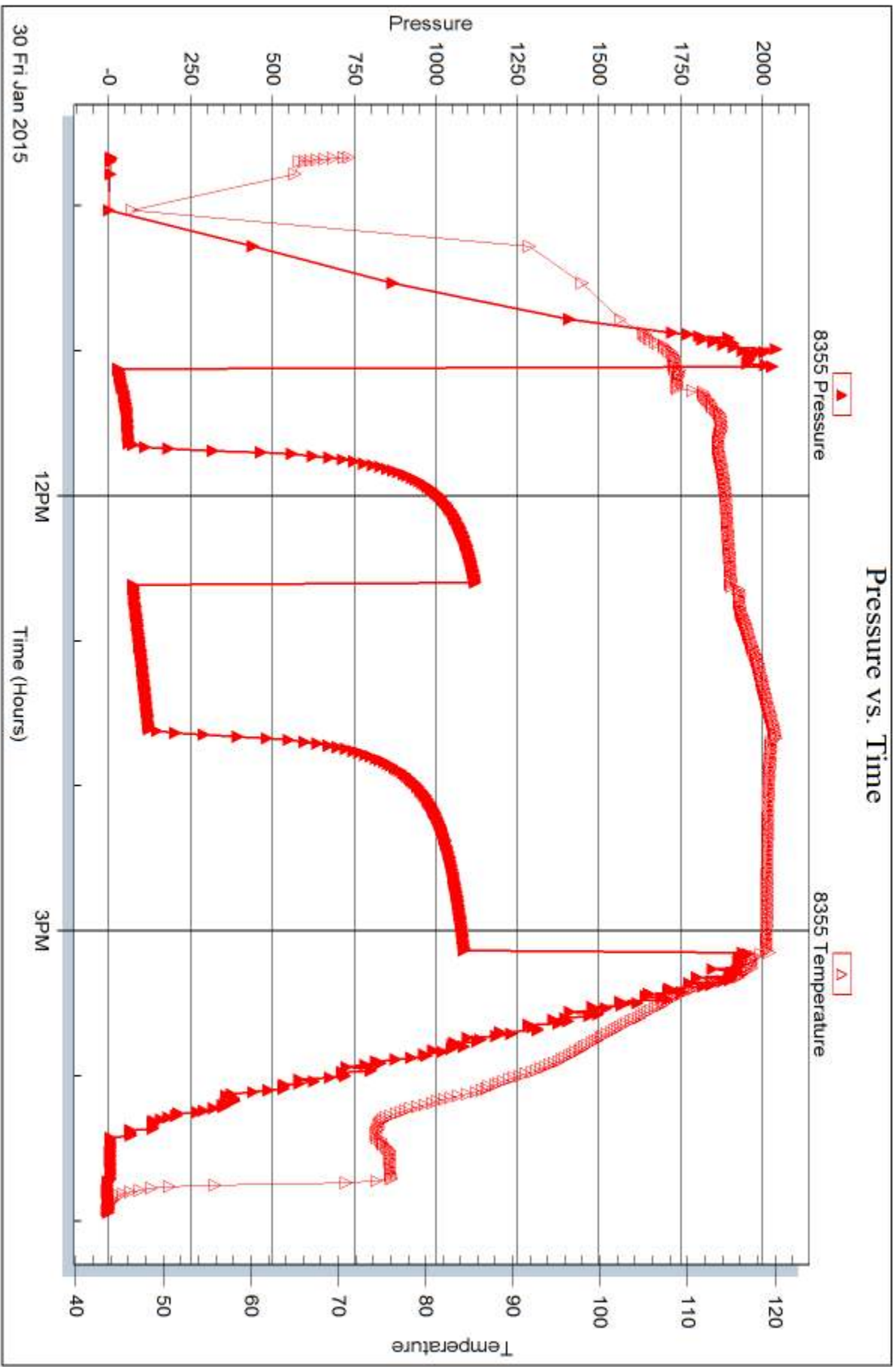
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co.**

250 N Water STE 300
Wichita KS 67202

ATTN: Jeff Christian

Abell #1-24

24-12s-31w Gove,KS

Start Date: 2015.01.31 @ 08:00:00

End Date: 2015.01.31 @ 15:24:15

Job Ticket #: 61518 DST #: 3

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

Printed: 2015.02.03 @ 11:51:01

Murfin Drilling Co. 24-12s-31w Gove,KS Abell #1-24 DST # 3 LKC "J - K" 2015.01.31



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co.

24-12s-31w Gove,KS

250 N Water STE 300
Wichita KS 67202

Abell #1-24

Job Ticket: 61518

DST#: 3

ATTN: Jeff Christian

Test Start: 2015.01.31 @ 08:00:00

GENERAL INFORMATION:

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

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:37:45

Time Test Ended: 15:24:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Justin Harris

Unit No: 71

Interval: 4093.00 ft (KB) To 4152.00 ft (KB) (TVD)

Reference Elevations: 2836.00 ft (KB)

Total Depth: 4152.00 ft (KB) (TVD)

2827.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 9.00 ft

Serial #: 8674

Inside

Press@RunDepth: 298.95 psig @ 4094.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.01.31

End Date:

2015.01.31

Last Calib.:

2015.01.31

Start Time: 08:00:05

End Time:

15:24:14

Time On Btm:

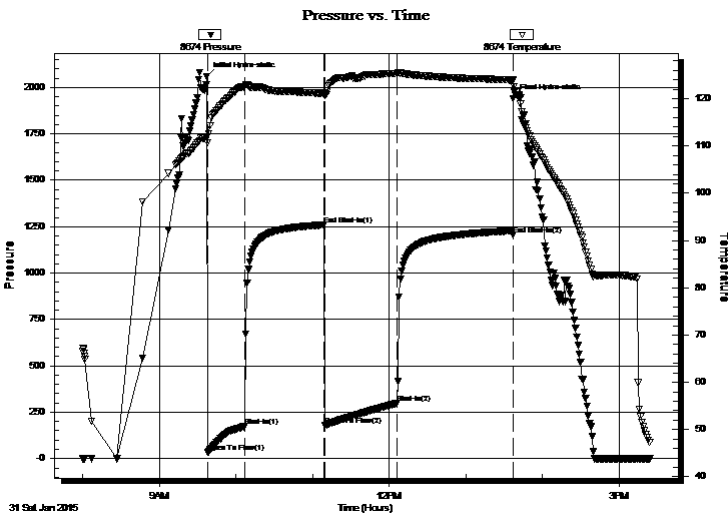
2015.01.31 @ 09:37:15

Time Off Btm:

2015.01.31 @ 13:37:00

TEST COMMENT: 30: B.O.B in 12 mins.
60: No Return.
60: B.O.B in 21 mins.
90: No Return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2058.71	112.02	Initial Hydro-static
1	35.00	110.75	Open To Flow (1)
30	174.45	122.63	Shut-In(1)
92	1259.73	121.15	End Shut-In(1)
93	178.47	120.68	Open To Flow (2)
149	298.95	125.35	Shut-In(2)
240	1205.31	123.89	End Shut-In(2)
240	1940.77	124.07	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
276.00	mcw 50m 50w	1.36
333.00	mcw oil spot 1o 9m 90w	4.67

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co.

24-12s-31w Gove,KS

250 N Water STE 300
Wichita KS 67202

Abell #1-24

Job Ticket: 61518

DST#: 3

ATTN: Jeff Christian

Test Start: 2015.01.31 @ 08:00:00

GENERAL INFORMATION:

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

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:37:45

Time Test Ended: 15:24:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Justin Harris

Unit No: 71

Interval: 4093.00 ft (KB) To 4152.00 ft (KB) (TVD)

Reference Elevations: 2836.00 ft (KB)

Total Depth: 4152.00 ft (KB) (TVD)

2827.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 9.00 ft

Serial #: 8355 Outside

Press@RunDepth: 1228.23 psig @ 4094.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.01.31

End Date:

2015.01.31

Last Calib.:

2015.01.31

Start Time: 08:00:05

End Time:

15:25:14

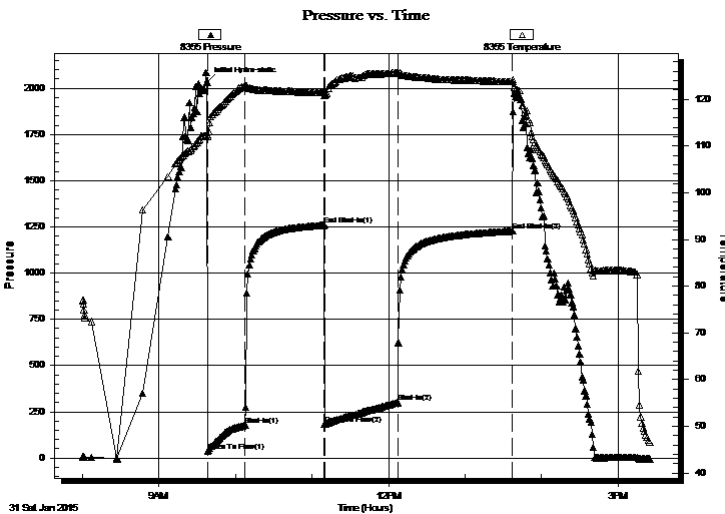
Time On Btm:

2015.01.31 @ 09:38:00

Time Off Btm:

TEST COMMENT: 30: B.O.B in 12 mins.
60: No Return.
60: B.O.B in 21 mins.
90: No Return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2035.07	112.48	Initial Hydro-static
1	36.76	112.09	Open To Flow (1)
30	179.04	122.83	Shut-In(1)
92	1259.25	121.36	End Shut-In(1)
92	184.03	121.09	Open To Flow (2)
150	300.44	125.65	Shut-In(2)
240	1228.23	123.75	End Shut-In(2)

Recovery

Length (ft)	Description	Volume (bbl)
276.00	mcw 50m 50w	1.36
333.00	mcw oil spot 1o 9m 90w	4.67

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co.

24-12s-31w Gove,KS

250 N Water STE 300
Wichita KS 67202

Abell #1-24

Job Ticket: 61518

DST#: 3

ATTN: Jeff Christian

Test Start: 2015.01.31 @ 08:00:00

Tool Information

Drill Pipe:	Length: 3801.00 ft	Diameter: 3.80 inches	Volume: 53.32 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 276.00 ft	Diameter: 2.25 inches	Volume: 1.36 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 54.68 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	4093.00 ft			Final 72000.00 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			4067.00	
Shut In Tool	5.00			4072.00	
Hydraulic tool	5.00			4077.00	
Jars	5.00			4082.00	
Safety Joint	2.00			4084.00	
Packer	5.00			4089.00	27.00 Bottom Of Top Packer
Packer	4.00			4093.00	
Stubb	1.00			4094.00	
Recorder	0.00	8355	Outside	4094.00	
Recorder	0.00	8674	Inside	4094.00	
Perforations	20.00			4114.00	
Change Over Sub	1.00			4115.00	
Drill Pipe	31.00			4146.00	
Change Over Sub	1.00			4147.00	
Bullnose	5.00			4152.00	59.00 Bottom Packers & Anchor

Total Tool Length: 86.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co.

24-12s-31w Gove,KS

250 N Water STE 300
Wichita KS 67202

Abell #1-24

Job Ticket: 61518

DST#: 3

ATTN: Jeff Christian

Test Start: 2015.01.31 @ 08:00:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

90000 ppm

Viscosity: 70.00 sec/qt

Cushion Volume:

bbf

Water Loss: 5.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2300.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
276.00	mcw 50m 50w	1.357
333.00	mcw oil spot 1o 9m 90w	4.671

Total Length: 609.00 ft Total Volume: 6.028 bbf

Num Fluid Samples: 0

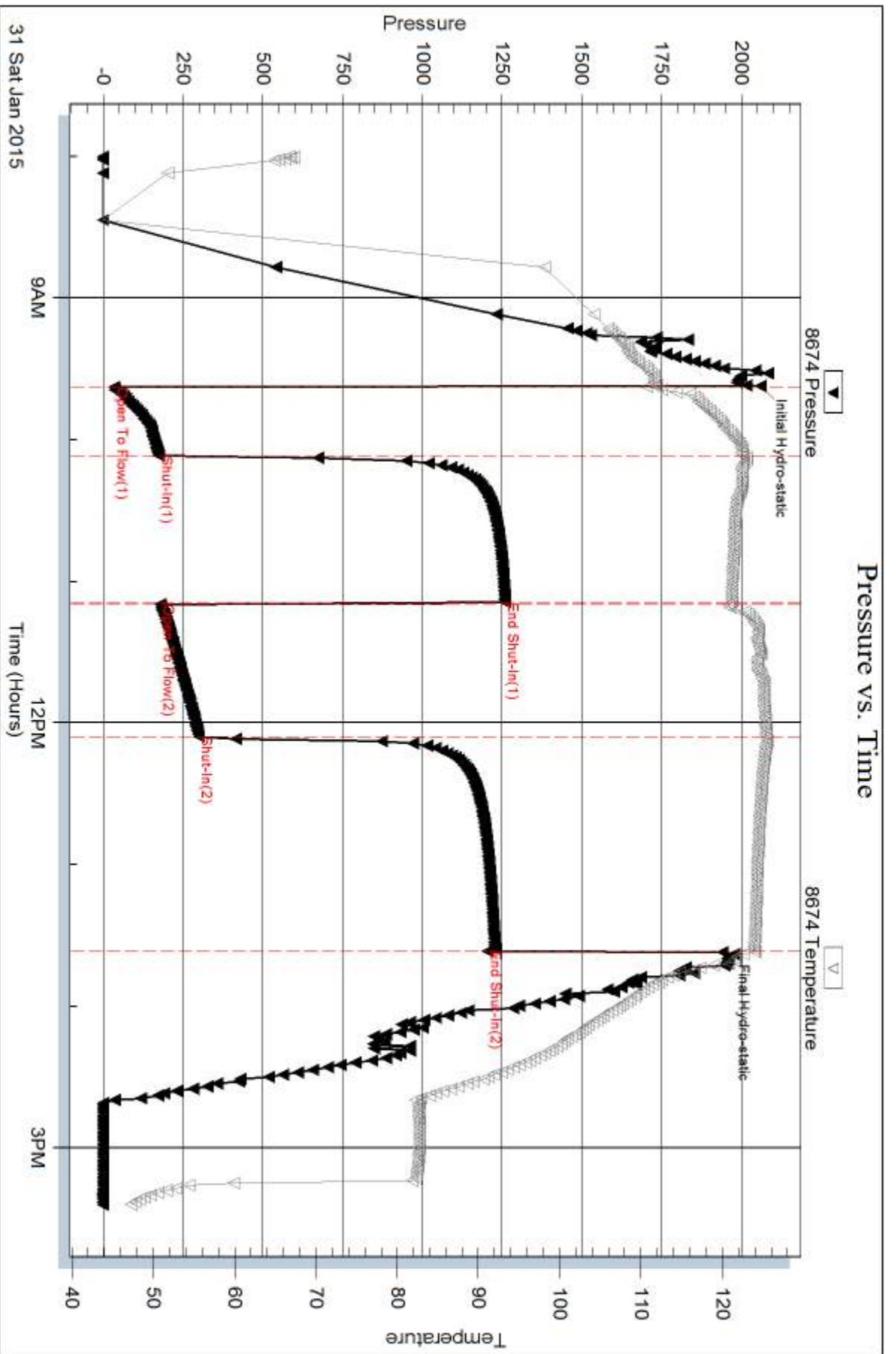
Num Gas Bombs: 0

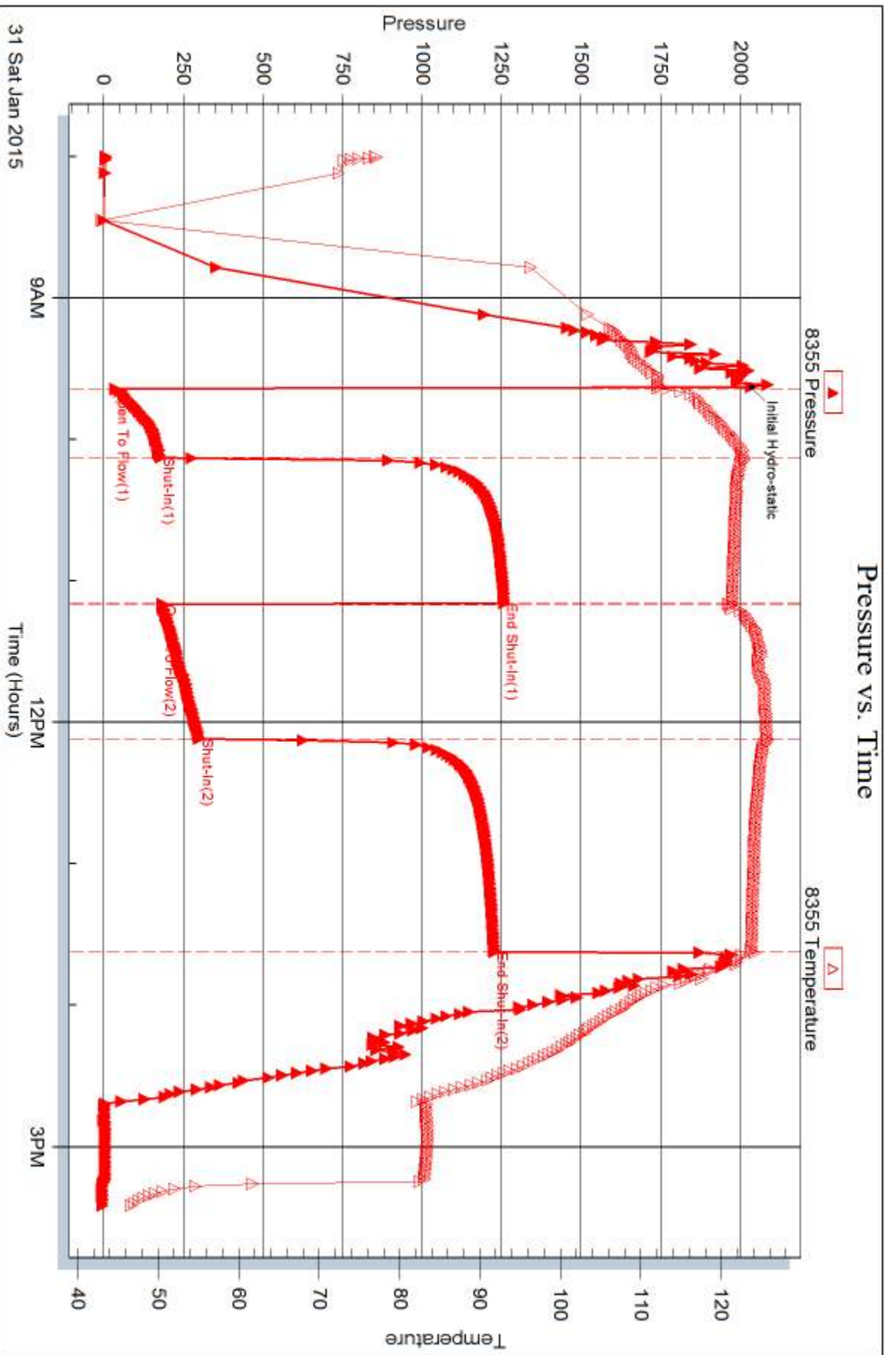
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: API RW .13 @ 46F = 90000 Chlorides







DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co.**

250 N Water STE 300
Wichita KS 67202

ATTN: Jeff Christian

Abell #1-24

24-12s-31w Gove,KS

Start Date: 2015.02.01 @ 14:35:00

End Date: 2015.02.02 @ 00:31:30

Job Ticket #: 61519 DST #: 4

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

Printed: 2015.02.03 @ 11:50:27



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drilling Co.

24-12s-31w Gove,KS

250 N Water STE 300
Wichita KS 67202

Abell #1-24

Job Ticket: 61519

DST#: 4

ATTN: Jeff Christian

Test Start: 2015.02.01 @ 14:35:00

GENERAL INFORMATION:

Formation: **Lower Pawnee - Johns**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:51:45

Time Test Ended: 00:31:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Justin Harris

Unit No: 71

Interval: 4332.00 ft (KB) To 4458.00 ft (KB) (TVD)

Reference Elevations: 2836.00 ft (KB)

Total Depth: 4458.00 ft (KB) (TVD)

2827.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 9.00 ft

Serial #: 8674

Inside

Press@RunDepth: 377.97 psig @ 4333.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.02.01

End Date:

2015.02.02

Last Calib.:

2015.02.02

Start Time: 14:35:05

End Time:

00:31:30

Time On Btm:

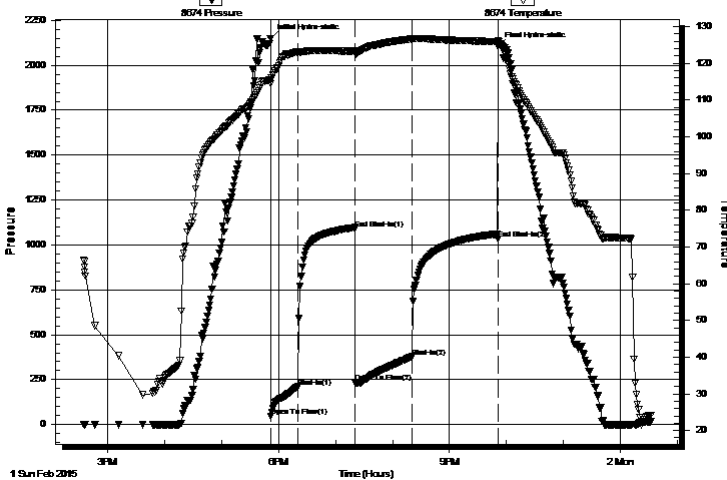
2015.02.01 @ 17:51:30

Time Off Btm:

2015.02.01 @ 21:51:00

TEST COMMENT: 30: B.O.B in 5 mins.
60: B.O.B in 10 mins.
60: B.O.B in 5 mins.
90: B.O.B in 8 mins.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2149.29	115.35	Initial Hydro-static
1	45.72	114.47	Open To Flow (1)
29	210.90	123.10	Shut-In(1)
89	1088.70	123.29	End Shut-In(1)
90	234.85	122.82	Open To Flow (2)
149	377.97	126.60	Shut-In(2)
239	1031.28	125.88	End Shut-In(2)
240	2104.72	126.27	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
276.00	gmcw 5g 15m 80w	1.36
346.00	gocm 10g 20o 70m	4.85
325.00	clean oil 5g 95o	4.56

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.

24-12s-31w Gove,KS

250 N Water STE 300
Wichita KS 67202

Abell #1-24

Job Ticket: 61519

DST#: 4

ATTN: Jeff Christian

Test Start: 2015.02.01 @ 14:35:00

Tool Information

Drill Pipe:	Length: 4052.00 ft	Diameter: 3.80 inches	Volume: 56.84 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 276.00 ft	Diameter: 2.25 inches	Volume: 1.36 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 58.20 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 72000.00 lb
Depth to Top Packer:	4332.00 ft			Final 75000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	126.00 ft			
Tool Length:	153.00 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			4306.00	
Shut In Tool	5.00			4311.00	
Hydraulic tool	5.00			4316.00	
Jars	5.00			4321.00	
Safety Joint	2.00			4323.00	
Packer	5.00			4328.00	27.00 Bottom Of Top Packer
Packer	4.00			4332.00	
Stubb	1.00			4333.00	
Recorder	0.00	8355	Outside	4333.00	
Recorder	0.00	8674	Inside	4333.00	
Perforations	24.00			4357.00	
Change Over Sub	1.00			4358.00	
Drill Pipe	94.00			4452.00	
Change Over Sub	1.00			4453.00	
Bullnose	5.00			4458.00	126.00 Bottom Packers & Anchor

Total Tool Length: 153.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co.

24-12s-31w Gove,KS

250 N Water STE 300
Wichita KS 67202

Abell #1-24

Job Ticket: 61519

DST#: 4

ATTN: Jeff Christian

Test Start: 2015.02.01 @ 14:35:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

32 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

150000 ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.00 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2300.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
276.00	gmcw 5g 15m 80w	1.357
346.00	gocm 10g 20o 70m	4.853
325.00	clean oil 5g 95o	4.559

Total Length: 947.00 ft Total Volume: 10.769 bbl

Num Fluid Samples: 0

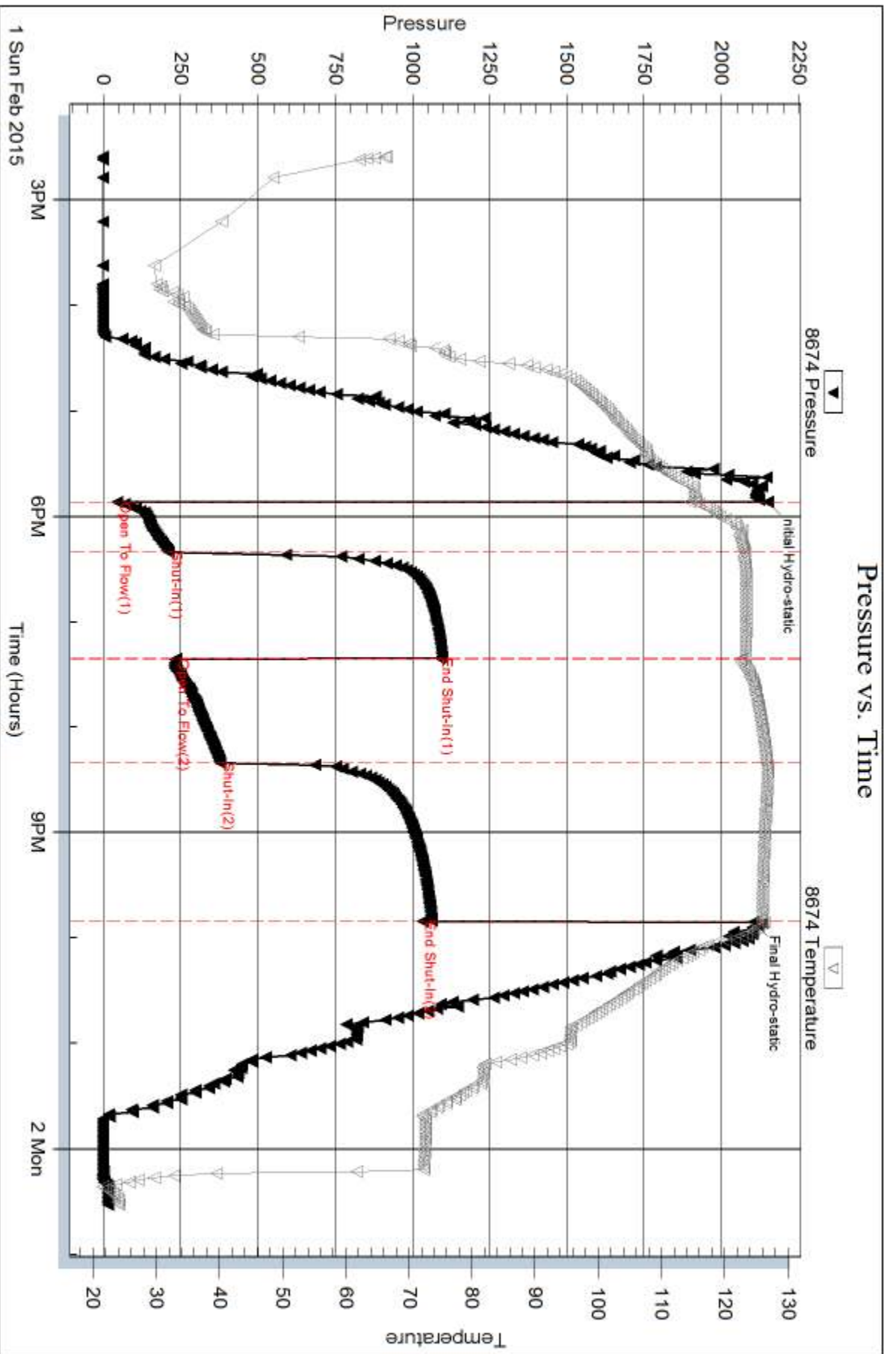
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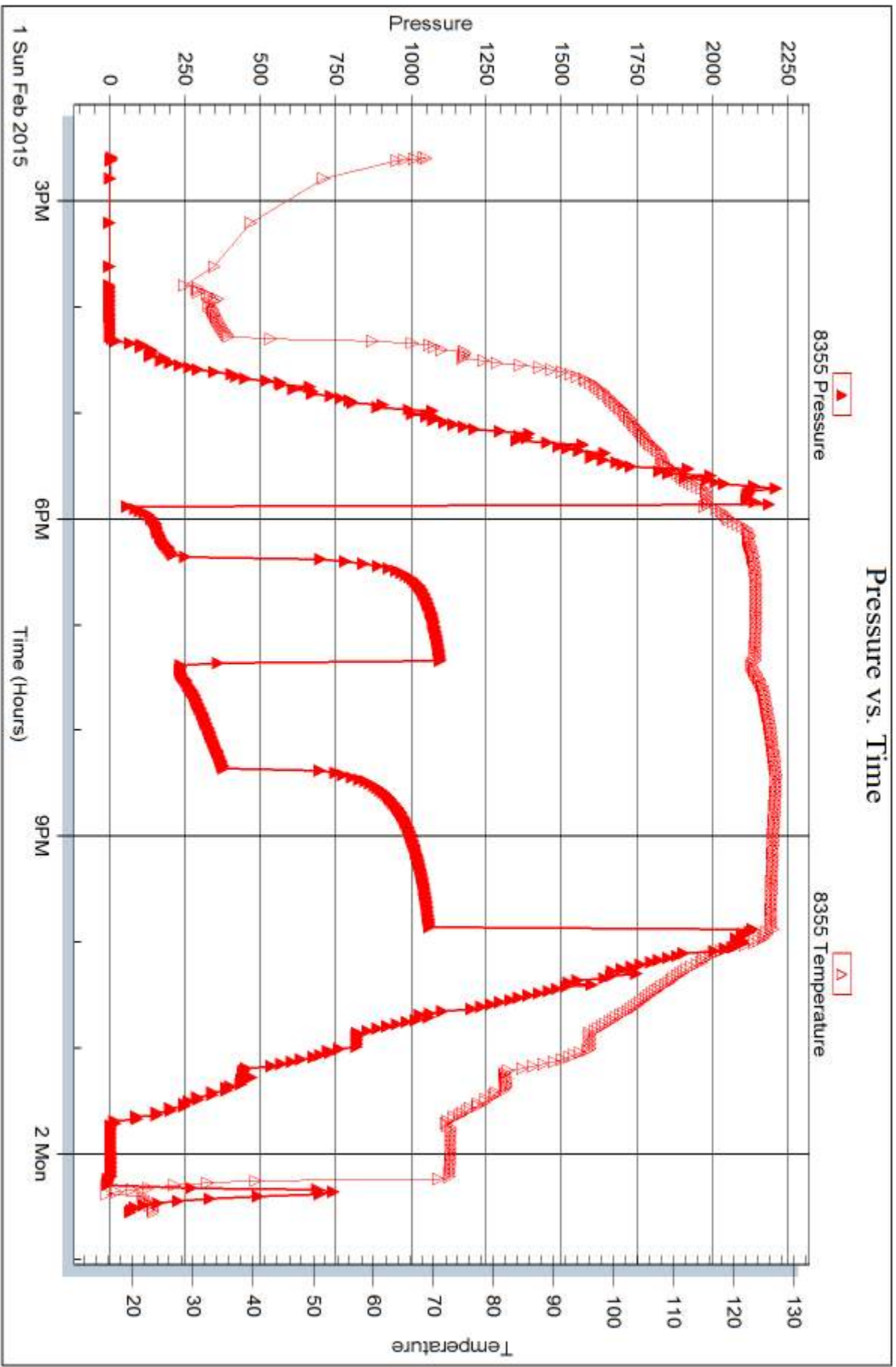
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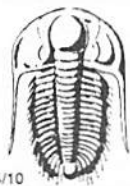
Laboratory Name:

Laboratory Location:

Recovery Comments: RW .25 @ 13F = 150000 Chlorides







TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 61516

Well Name & No. ABell # 1-24 Test No. 1 Date 1/29 1/30
 Company Murfin Drilling Co, Inc Elevation 2834 KB 2827 GL
 Address 250 N Water STE 300 Wichita KS 67202
 Co. Rep / Geo. Jeff Christian Rig Murfin 21
 Location: Sec. 24 Twp. 12S Rge. 31W Co. Osage State KS

Interval Tested 3854 3946 Zone Tested Toronto - Linc 1/2" zone
 Anchor Length 112 Drill Pipe Run 3574 Mud Wt. 9.1
 Top Packer Depth 3850 Drill Collars Run 276 Vis 52
 Bottom Packer Depth 3854 Wt. Pipe Run Ø WL 5.4
 Total Depth 3946 Chlorides 2000 ppm System LCM 3
 Blow Description 30 B.O.B in 3 1/2 min
40 No Return
60 B.O.B in 5 1/2 min
90 No Return

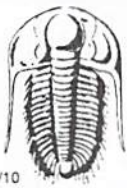
Rec	Feet of	%gas	%oil	%water	%mud
<u>276</u>	<u>mcw</u>			<u>80</u>	<u>20</u>
<u>504</u>	<u>mcw</u>			<u>95</u>	<u>5</u>
<u>444</u>	<u>mcw</u>			<u>90</u>	<u>10</u>

Rec Total 1221 BHT 122 Gravity — API RW .41 @ 37 °F Chlorides 30000 ppm
 (A) Initial Hydrostatic 1914 Test 1050 T-On Location 19:00
 (B) First Initial Flow 44 Jars 250 T-Started 19:55
 (C) First Final Flow 341 Safety Joint 75 T-Open 21:41
 (D) Initial Shut-In 1179 Circ Sub N/R T-Pulled 1:41
 (E) Second Initial Flow 354 Hourly Standby _____ T-Out 3:37
 (F) Second Final Flow 649 Mileage 94 RT 94 Comments _____
 (G) Final Shut-In 1173 Sampler _____
 (H) Final Hydrostatic 1829 Straddle _____
 Shale Packer _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____
 Sub Total 1469

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

Sub Total 0
 Total 1469
 MP/DST Disc't _____

Approved By Jeff Christian Our Representative [Signature]
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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 61517

Well Name & No. A Bell # 1-24 Test No. 2 Date 1/30
 Company Murfin Drilling Co, Inc Elevation 2834 KB 2827 GL
 Address 250 N water STE 300 Wichita KS 67202
 Co. Rep / Geo. Teff Christian Rig Murfin 21
 Location: Sec. 24 Twp. 12S Rge. 31W Co. Gove State KS

Interval Tested 3947 3994 Zone Tested LKC "E,F"
 Anchor Length 29 Drill Pipe Run 3675 Mud Wt. 9.1
 Top Packer Depth 3943 Drill Collars Run 276 Vis 52
 Bottom Packer Depth 3947 Wt. Pipe Run Ø WL 5.6
 Total Depth 3994 Chlorides 2000 ppm System LCM 3

Blow Description 30 weak surface blow to 3 1/4"
60 No Return
40 weak surface blow to 1/2"
90 No Return

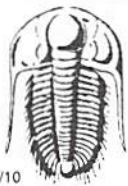
Rec	Feet of	%gas	%oil	%water	%mud
<u>2</u>	<u>clean oil</u>				
<u>189</u>	<u>owcm</u>	<u>20</u>		<u>30</u>	<u>50</u>

Rec Total 191 BHT 119 Gravity - API RW - @ - °F Chlorides - ppm
 (A) Initial Hydrostatic 1992 Test 1050 T-On Location 9:20
 (B) First Initial Flow 19 Jars 250 T-Started 9:40
 (C) First Final Flow 42 Safety Joint 75 T-Open 11:10
 (D) Initial Shut-In 1097 Circ Sub N/C T-Pulled 15:10
 (E) Second Initial Flow 47 Hourly Standby _____ T-Out 16:56
 (F) Second Final Flow 118 Mileage 94 RT 94 Comments _____
 (G) Final Shut-In 1089 Sampler _____
 (H) Final Hydrostatic 1939 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____

Initial Open 30
 Initial Shut-In 60
 Final Flow 60
 Final Shut-In 90
 Sub Total 1469
 Total 1469
 MP/DST Disc't _____

Approved By Teff Christian Our Representative [Signature]

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 61518

4/10

Well Name & No. ABell # 1-24 Test No. 3 Date 1/31
 Company Murfin Drilling Co, Inc. Elevation 2834 KB 2827 GL
 Address 250 N water STE 300 wichita ks, 67202
 Co. Rep / Geo. Jeff Christian Rig Murfin 21
 Location: Sec. 24 Twp. 12S Rge. 3/W Co. Gove State KS

Interval Tested 4093 4162 Zone Tested LKC "J-K"
 Anchor Length 59 Drill Pipe Run 3801 Mud Wt. 9.2
 Top Packer Depth 4089 Drill Collars Run 276 Vis 70
 Bottom Packer Depth 4093 Wt. Pipe Run Ø WL 5.2
 Total Depth 4162 Chlorides 2300 ppm System LCM 4
 Blow Description 30 B.O.B in 12 mins.
60 No Return
60 B.O.B in 21 mins
90 No Return

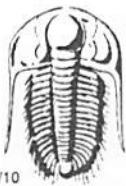
Rec	Feet of	%gas	%oil	%water	%mud
<u>276</u>	<u>new</u>			<u>50</u>	<u>50</u>
<u>333</u>	<u>new oil spots</u>		<u>1</u>	<u>90</u>	<u>9</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 609 BHT 124 Gravity — API RW .13 @ 46 °F Chlorides 90000 ppm

(A) Initial Hydrostatic <u>2059</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>7:35</u>
(B) First Initial Flow <u>35</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>8:00</u>
(C) First Final Flow <u>174</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>9:38</u>
(D) Initial Shut-In <u>1240</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>13 38</u>
(E) Second Initial Flow <u>178</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>15 24</u>
(F) Second Final Flow <u>299</u>	<input checked="" type="checkbox"/> Mileage <u>94 RT 94</u>	Comments
(G) Final Shut-In <u>1205</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1941</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Final Flow <u>60</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Shut-In <u>90</u>	<input type="checkbox"/> Day Standby	Total <u>1569</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1569</u>	

Approved By _____ Our Representative [Signature]

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO.

61519

Well Name & No. A Bell # 1-24 Test No. 4 Date 2-1-15
 Company Murfin Drilling Co, Inc. Elevation 2836 KB 2827 GL
 Address 250 N Water STE 300 Wichita KS 67202
 Co. Rep / Geo. Jeff Christian Rig Murfin 21
 Location: Sec. 24 Twp. 12S Rge. 31W Co. Gove State Ks

Interval Tested 4332 4458 Zone Tested lower Pawnee - Johnson
 Anchor Length 126' Drill Pipe Run 4052 Mud Wt. 9.3
 Top Packer Depth 4328 Drill Collars Run 276 Vis 55
 Bottom Packer Depth 4332 Wt. Pipe Run Ø WL 6.0
 Total Depth 4458 Chlorides 2300 ppm System LCM 6

Blow Description 30 B.O.B in 5 min
60 B.O.B in 10 min
60 B.O.B in 5 min
90 B.O.B in 8 min

Rec	Feet of	%gas	%oil	%water	%mud
325	clean oil	5	95		
346	gocm	10	20		70
276	gmcw oil spots	5		80	15

Rec Total 9 47 BHT 124 Gravity 32 API RW .25 @ 13 °F Chlorides 150,000 ppm
 (A) Initial Hydrostatic 2149 Test 1150 T-On Location 14:15
 (B) First Initial Flow 44 Jars 250 T-Started 14:35
 (C) First Final Flow 211 Safety Joint 75 T-Open 17:50
 (D) Initial Shut-In 1089 Circ Sub N/C T-Pulled 21:50
 (E) Second Initial Flow 235 Hourly Standby _____ T-Out 00:31
 (F) Second Final Flow 376 Mileage 94 RT 94 Comments _____
 (G) Final Shut-In 1031 Sampler _____
 (H) Final Hydrostatic 2105 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1569
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1569

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

Approved By _____ Our Representative Justin Her

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Jeff Christian

PETROLEUM GEOLOGIST
Wichita, Kansas

GEOLOGISTS REPORT

DRILLING TIME AND SAMPLE LOG

OPERATOR: MURKIN DRILLING COMPANY
LEASE: ABELL # 1-24
LOCATION: 3351 FSL & 1650' FEL

SECTION: 24 TWP: 12 S RANG: 31 W
COUNTY: GOVE STATE: KANSAS
FIELD: WILD CAT

API: 15-065-22243
CONTRACTOR: COMPANY TOOLS
DRILLING STARTED: 02/20/2015
MUD DISPLACED: 3200' COMPLETION: 02/20/2015

DRILLING TIME: 3300' TO R/TD
DRIILING TIME: 3300' TO R/TD
SAMPLES SHAVED FROM: 3330' TO R/TD
SAMPLES EXAMINED FROM: 3330' TO R/TD
GEOLOGICAL SUPERVISION FROM: 3360' TO R/TD

MEASUREMENTS FROM: KB
CASINO RECORD
CONVENTION: NONE
SURFACE: 8.8' @ 222'
W/170' SX
FRAGMENTS: 3.1' @ 456'

ELEVATIONS
HB: 2833'
CL: 2825'

FORMATION NAME LOG LOG TOP DATUM TOP DATUM

ANHYDRITE 2328' (-508)
TOPEKA 3629' (-793)
HEFEBNER 3856' (-1020)
TORONTO 3878' (-1038)
LANSTING 3899' (-1063)
MARMATON 4242' (-1406)
PAWNEE 4306' (-1470)
FT. SCOTT 4372' (-1536)
CHEROKEE 4400' (-1564)
MISSISSIPPIAN 4567' (-1625)
TOTAL DEPTH: 4967' (-1727)

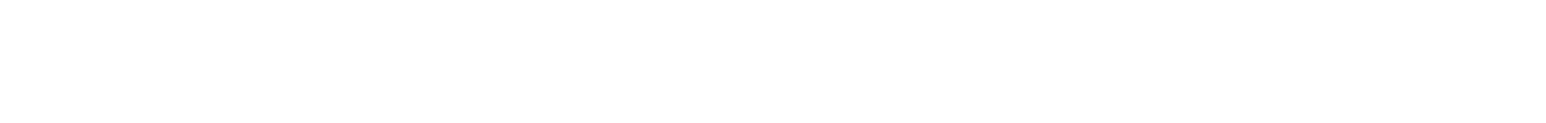
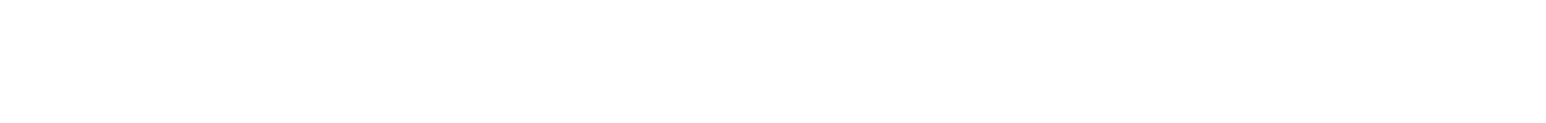
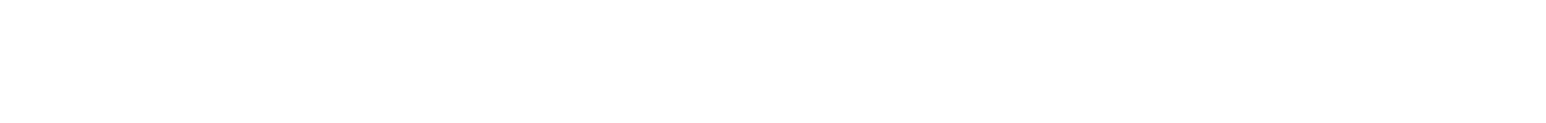
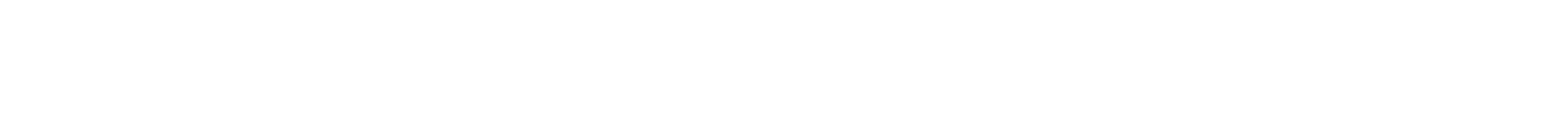
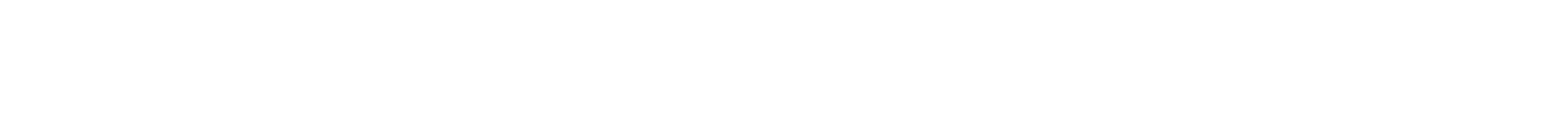
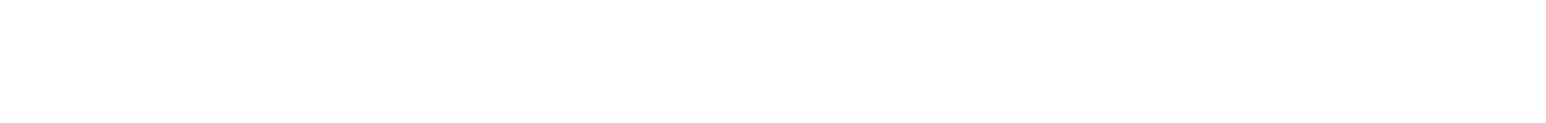
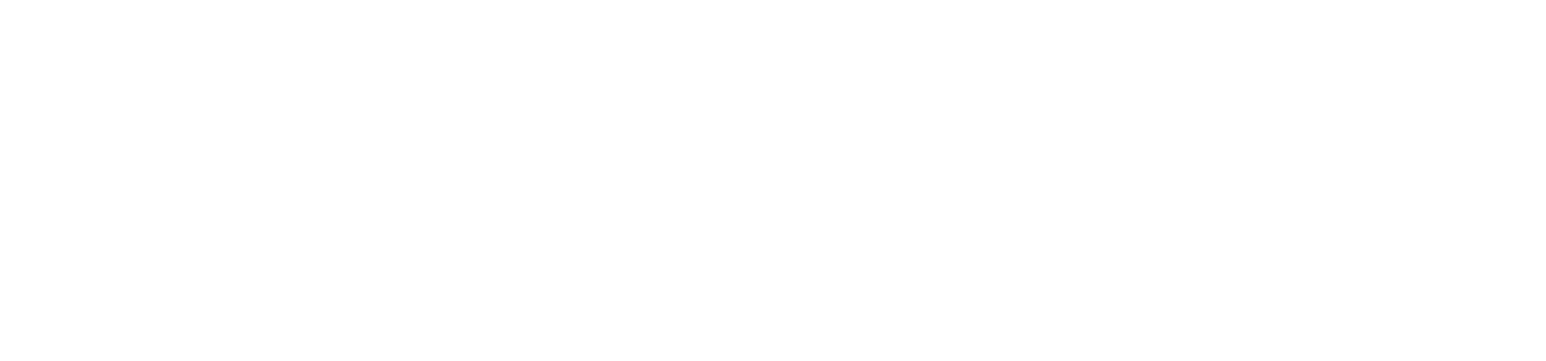
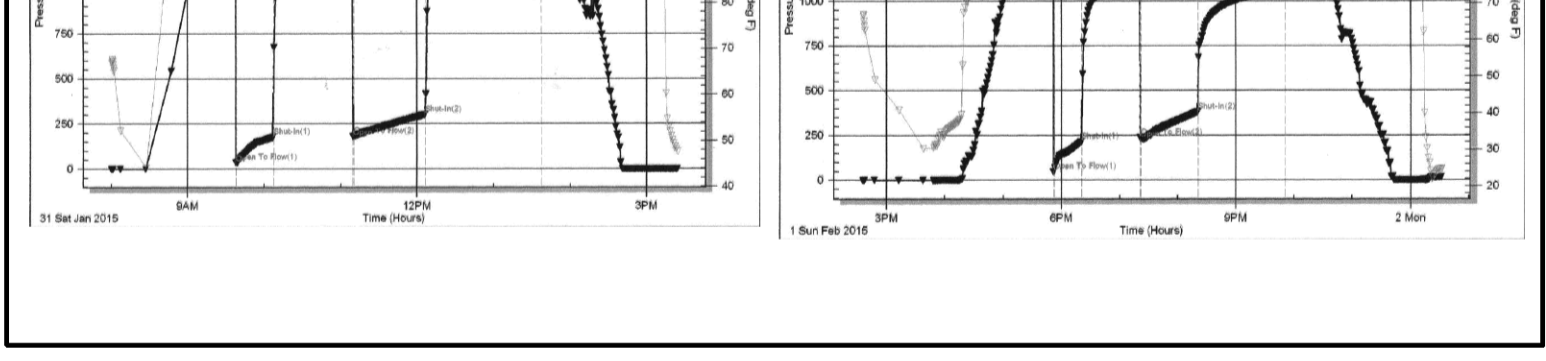
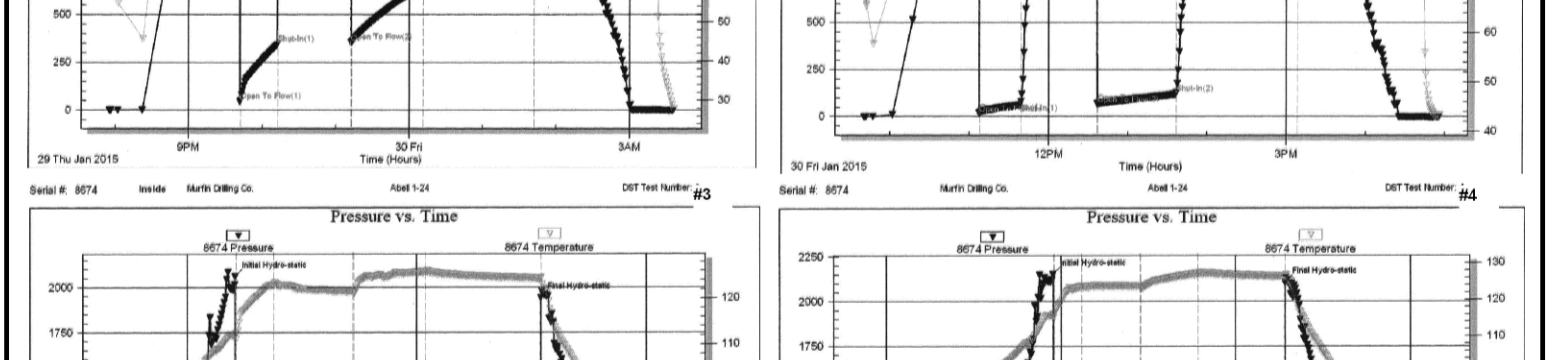
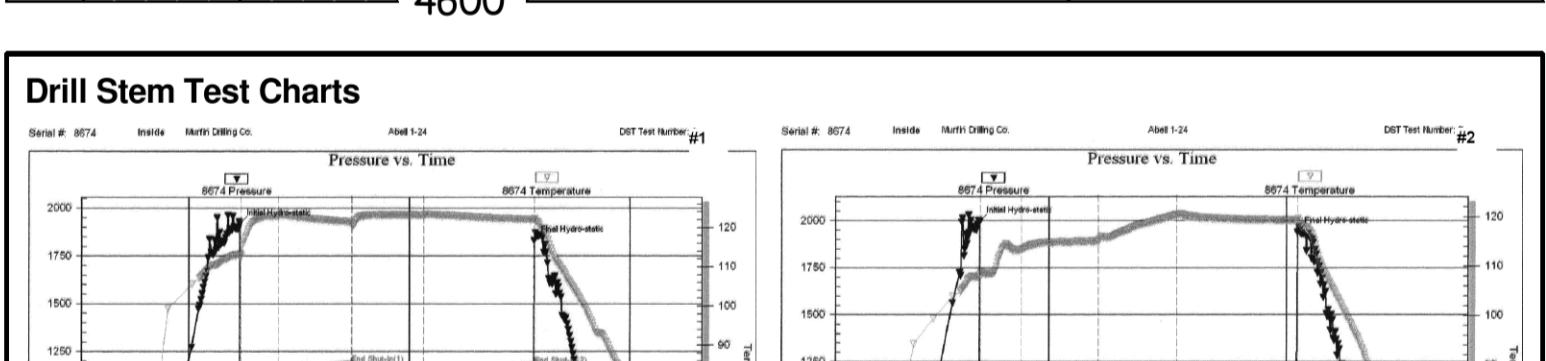
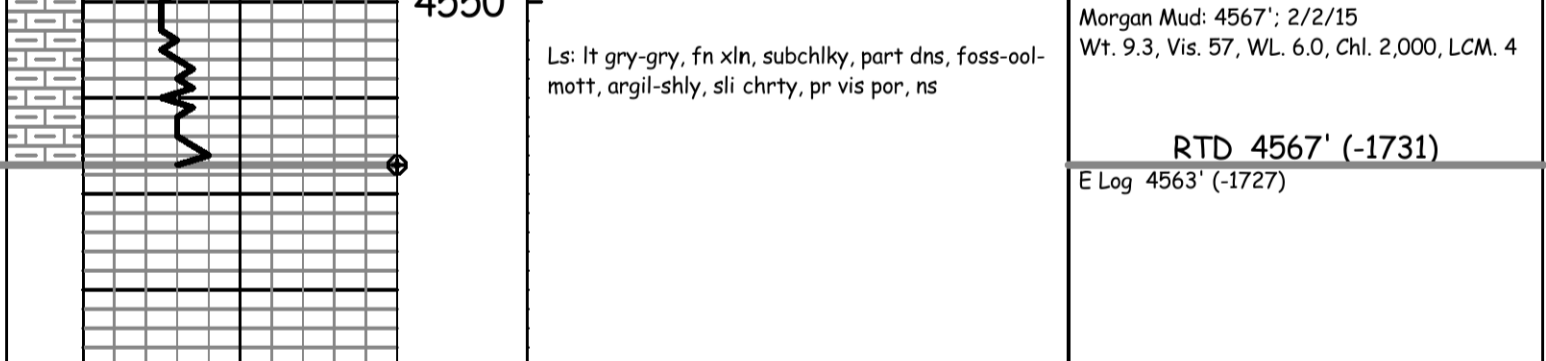
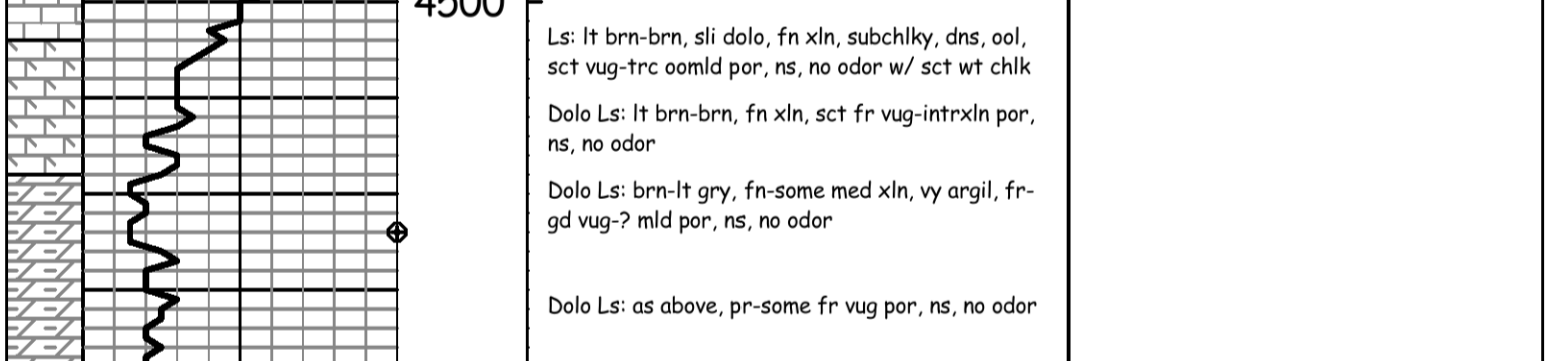
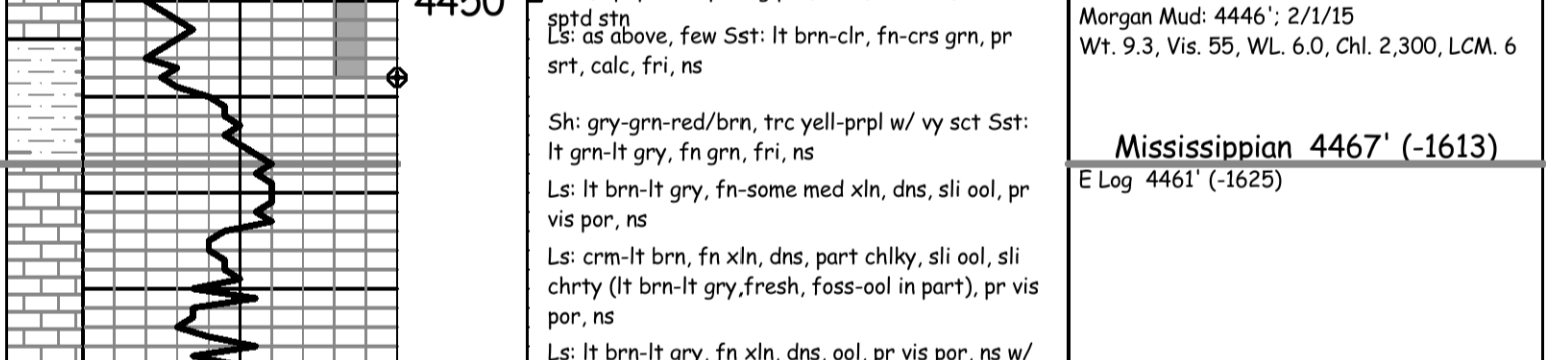
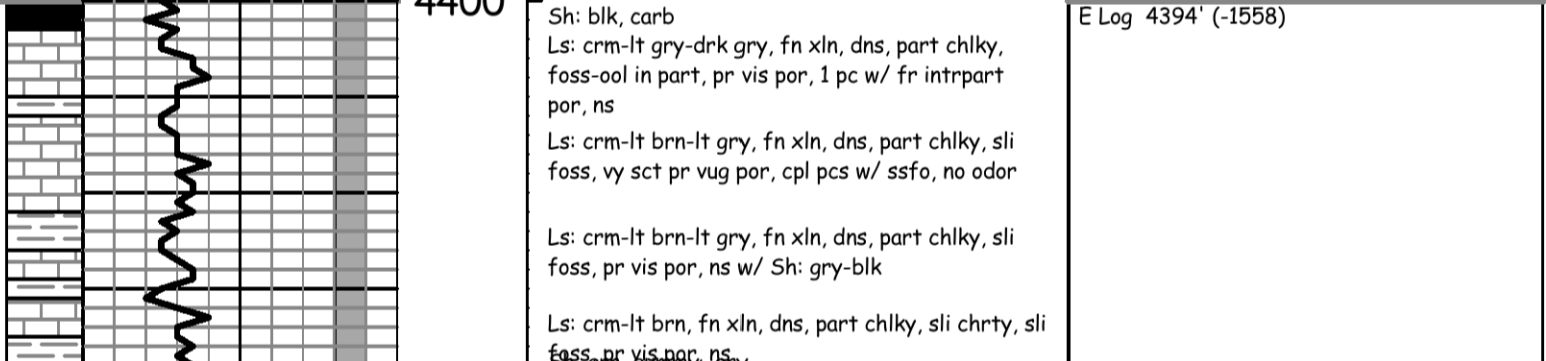
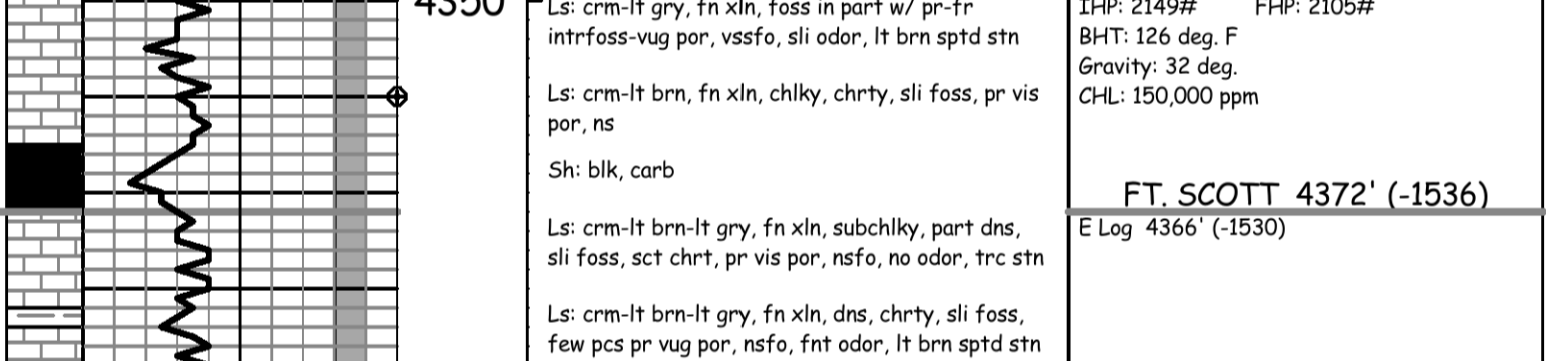
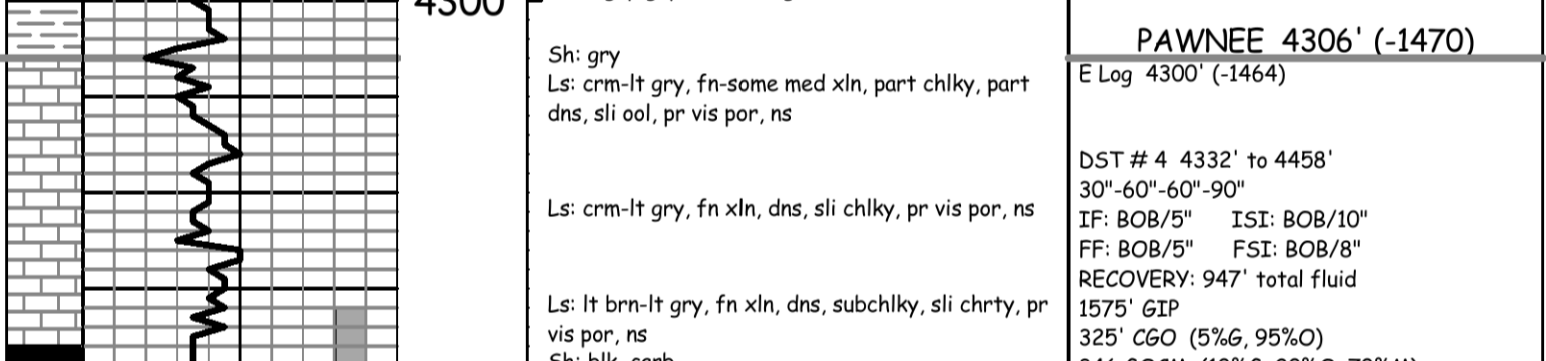
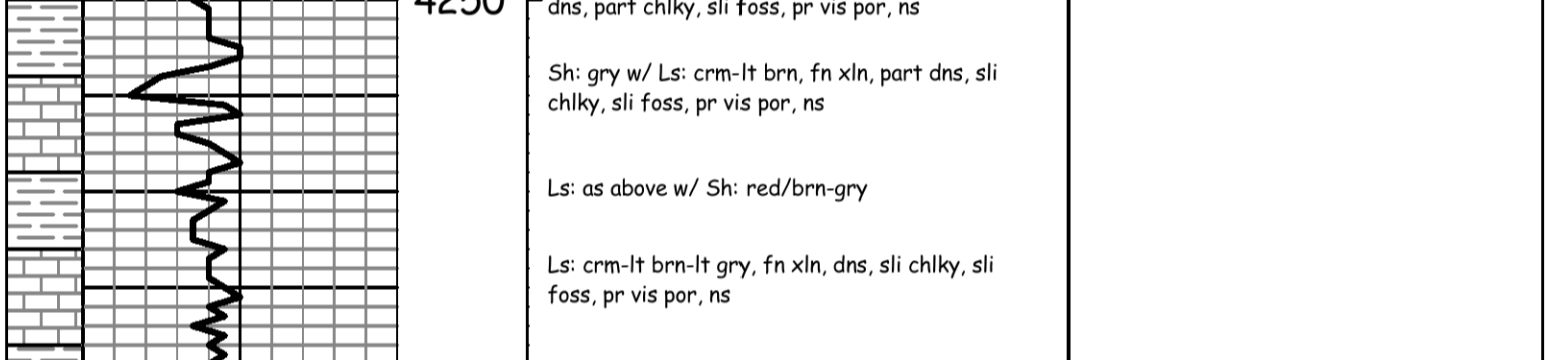
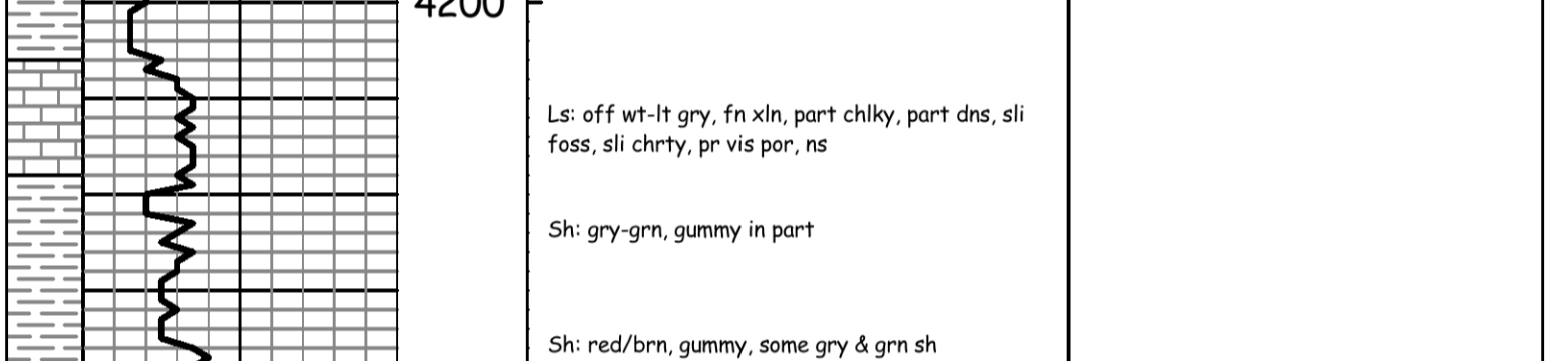
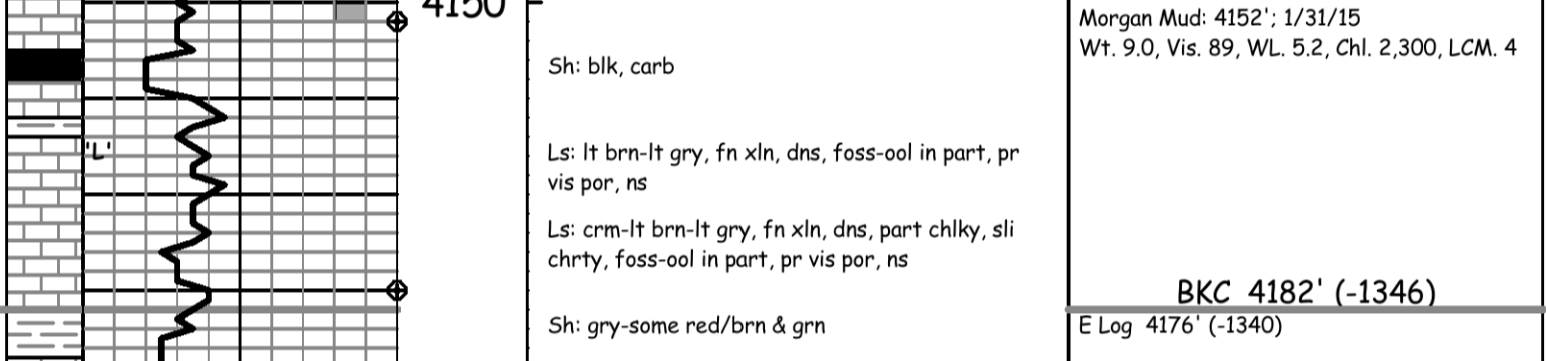
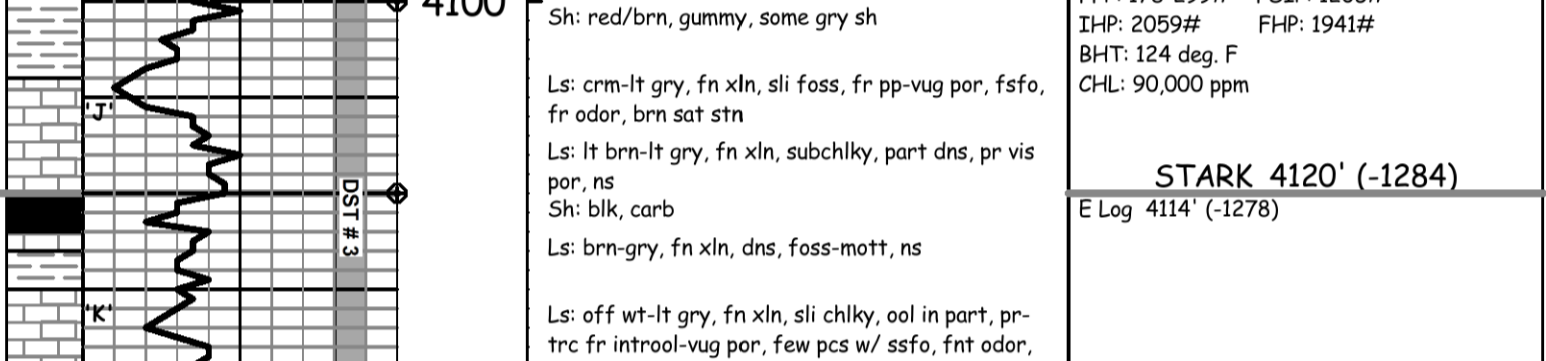
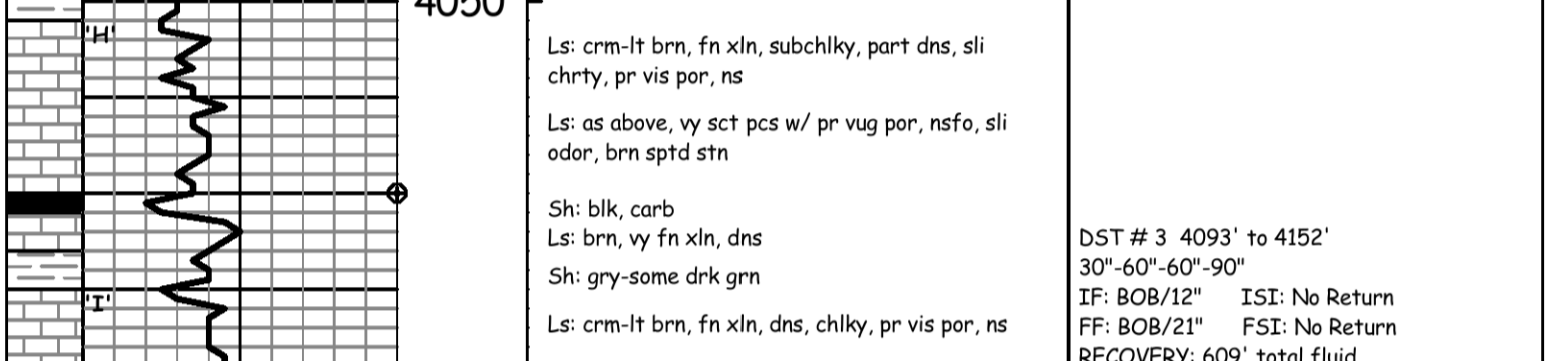
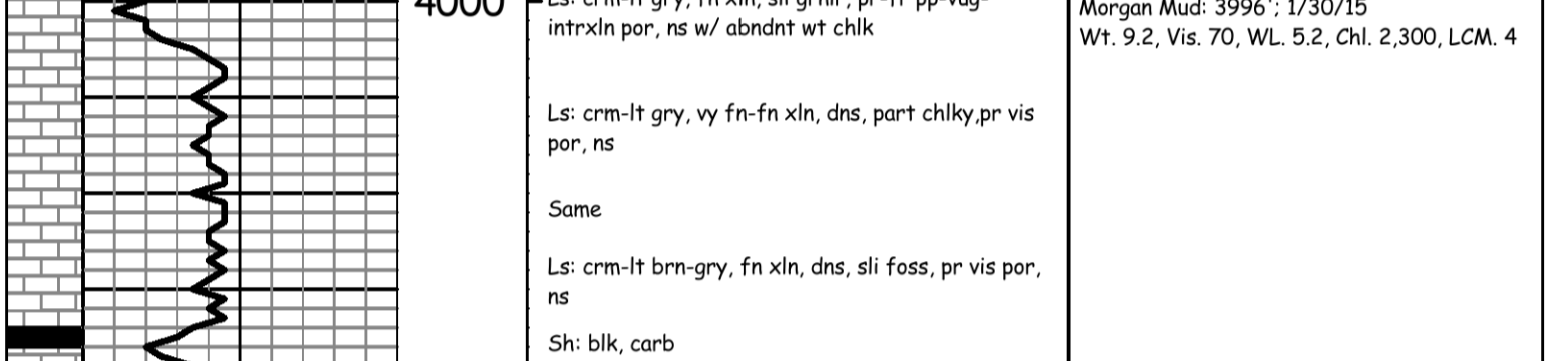
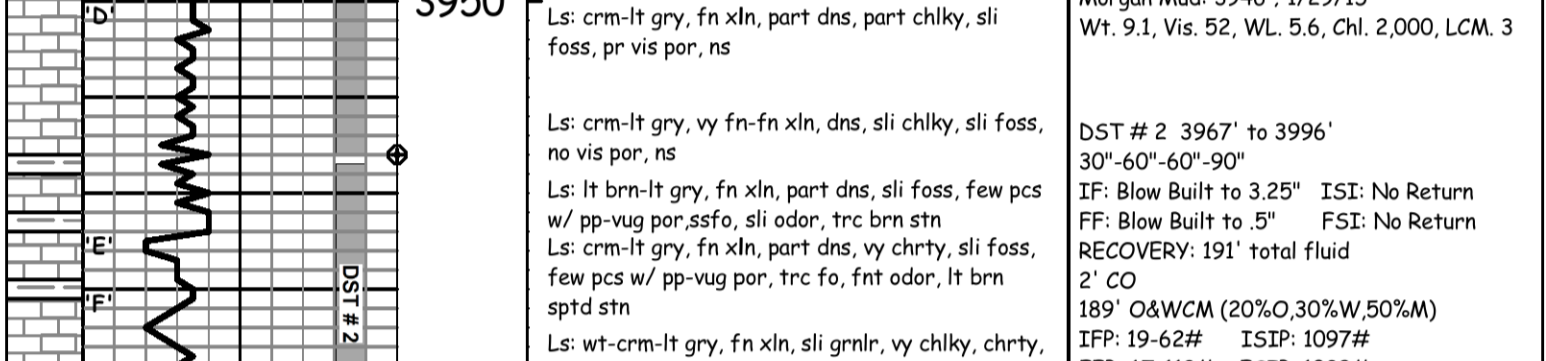
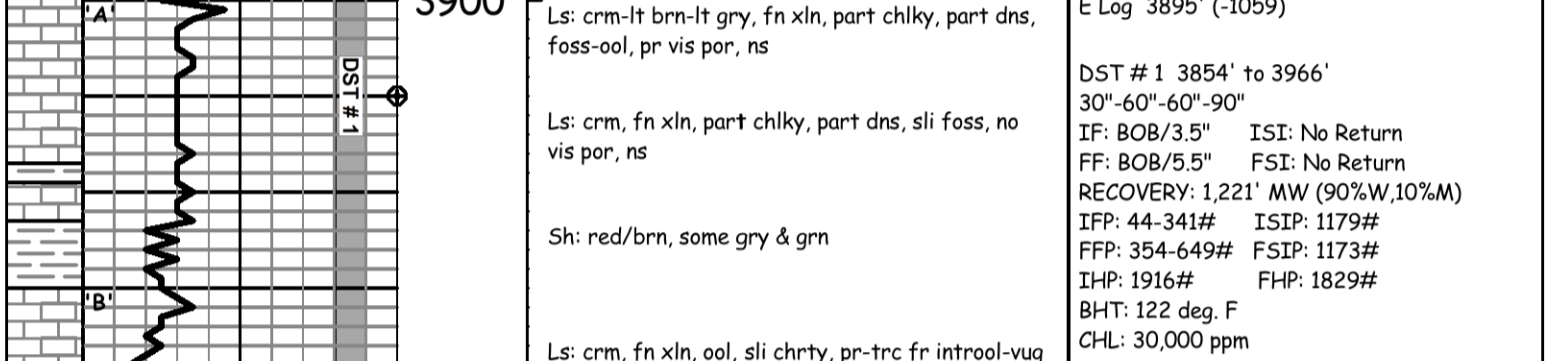
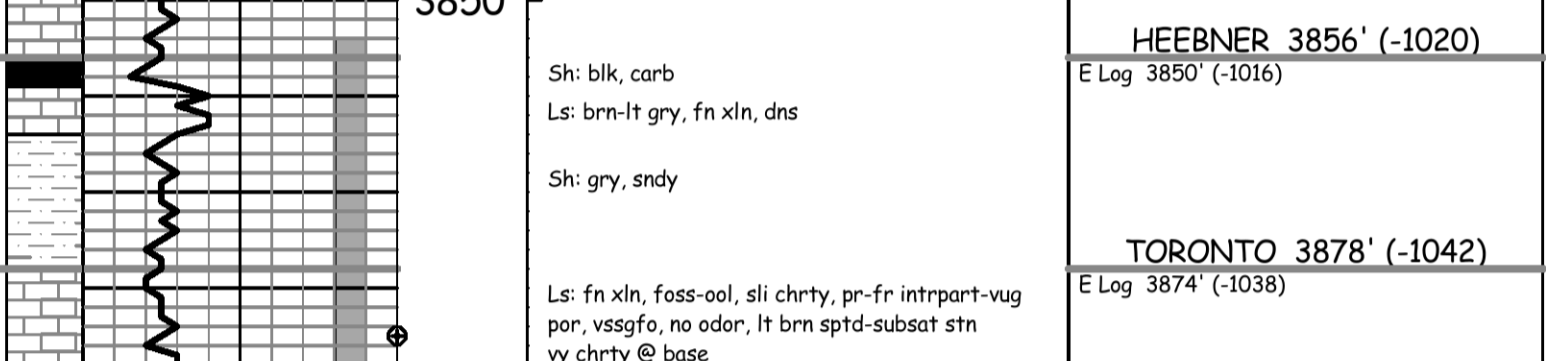
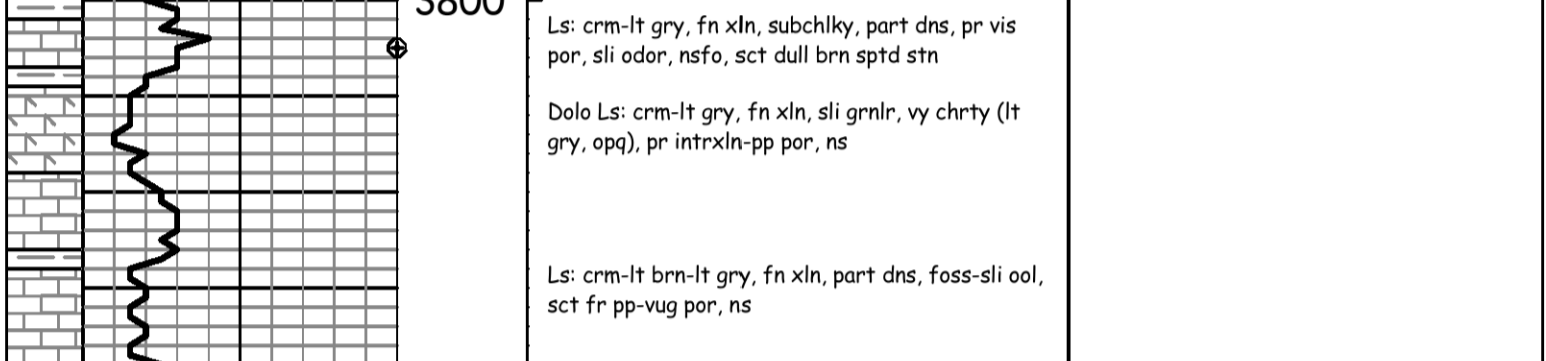
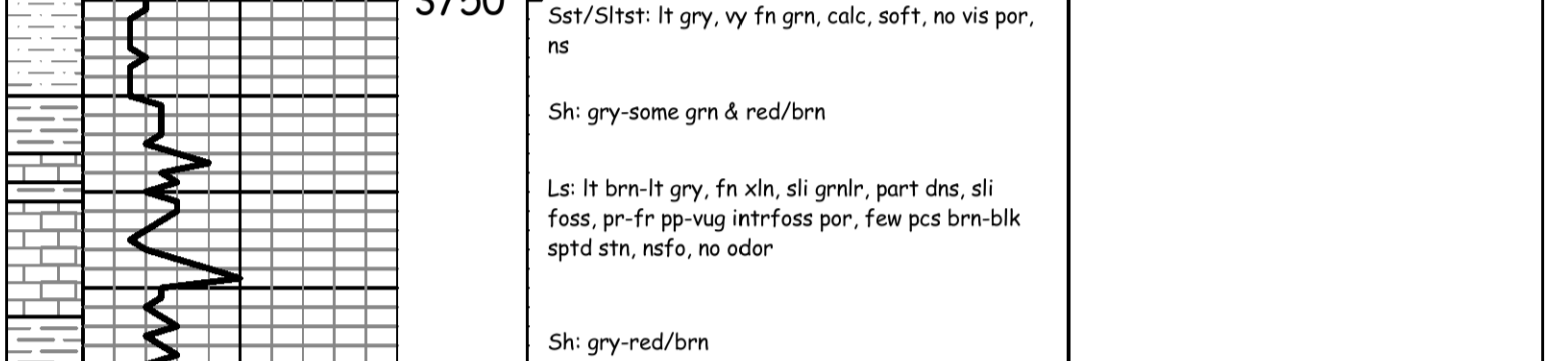
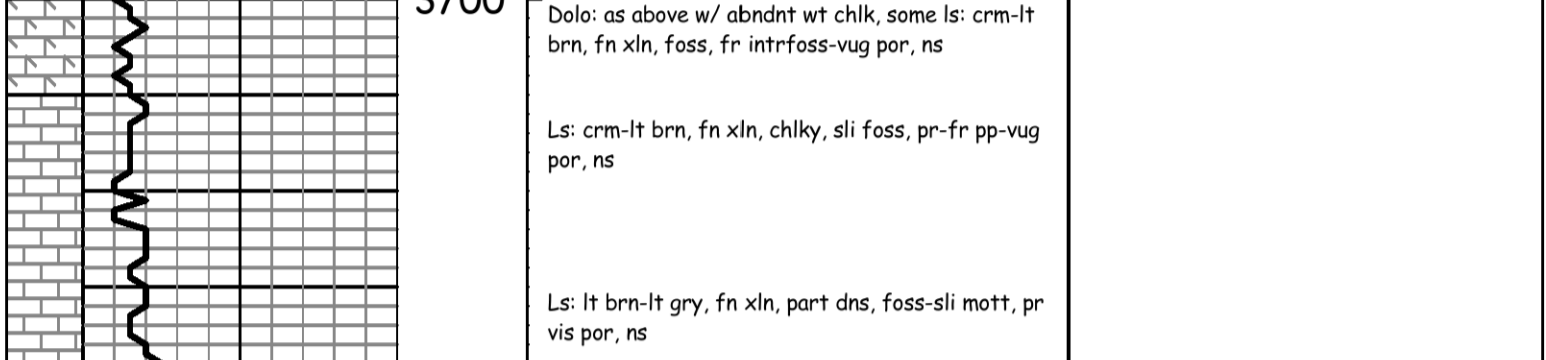
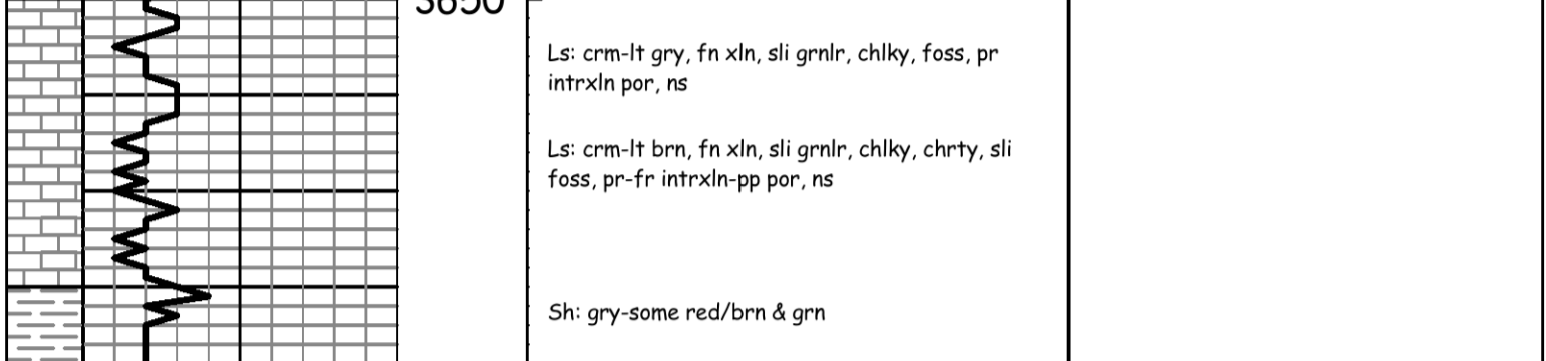
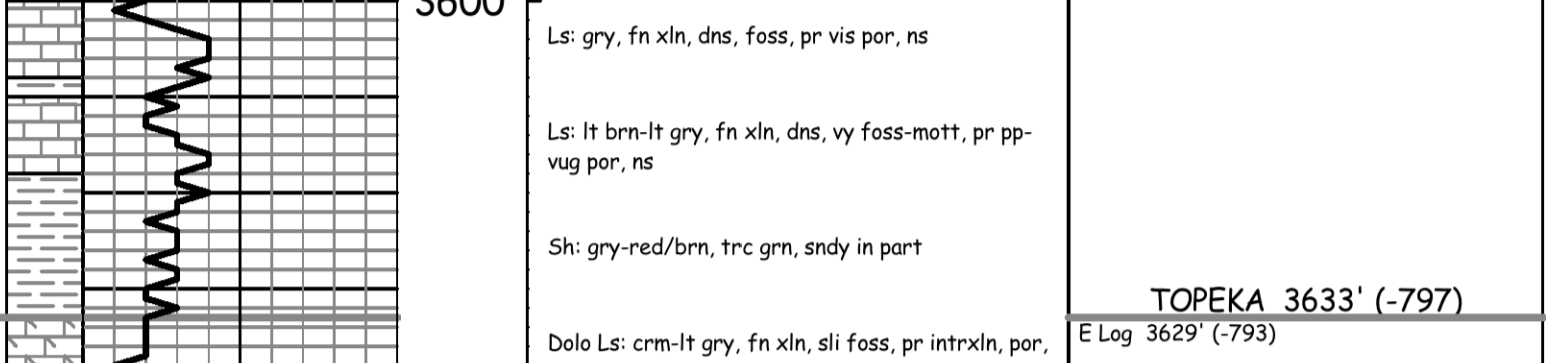
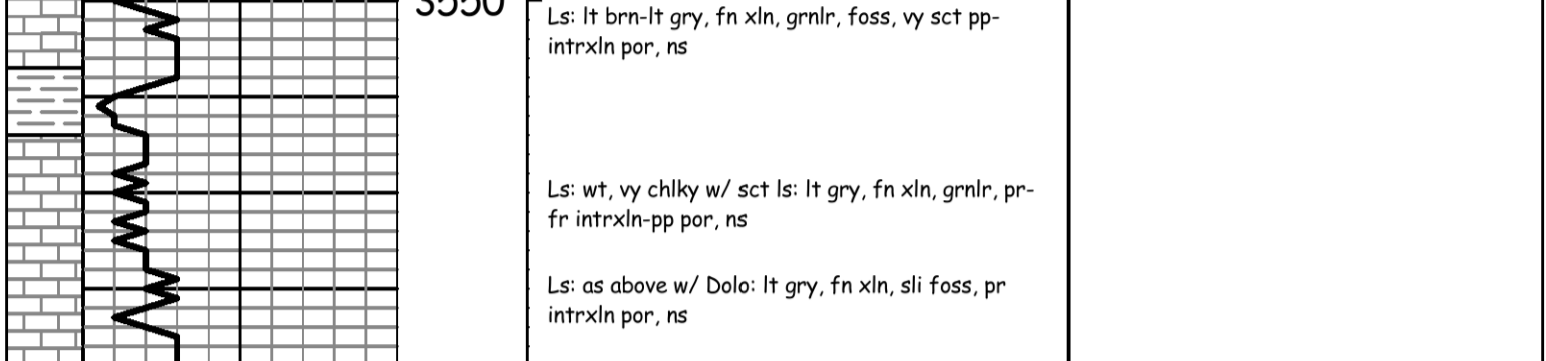
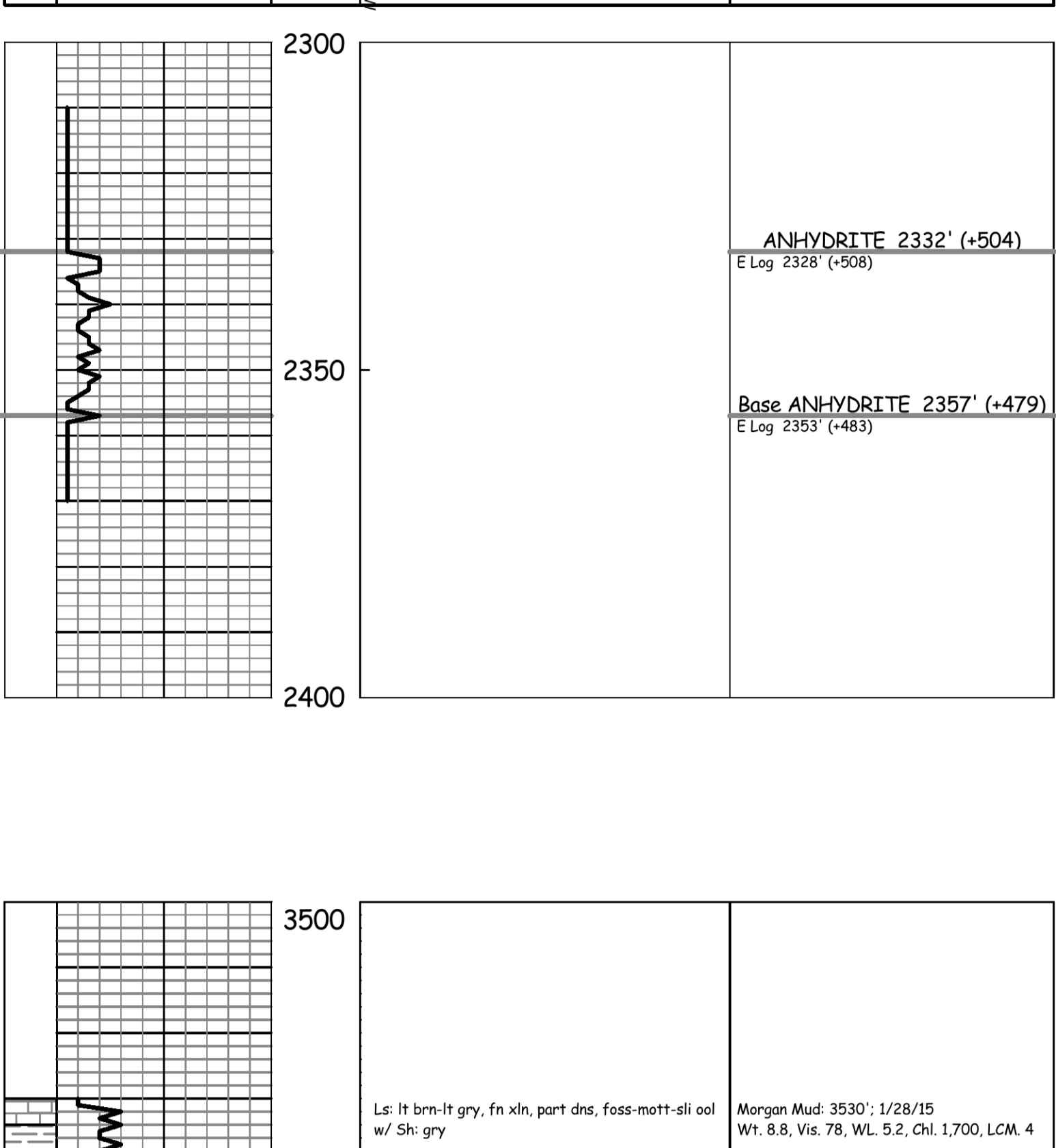
24

0

DATE	7:00 AM DEPTH	REMARKS
1/26/15	MIRT	SPUD 4:15 pm
1/27/15	582'	DRL 6 dev. 3/4 deg. @ 222'
1/28/15	3166'	DRL 6.
1/29/15	3818'	DRL 6.
1/30/15	3990'	DRL 6 dev. 3/4 deg. @ 3966
1/31/15	4152'	TOH for DST # 3
2/1/15	4371'	DRL 6.
2/2/15	4499'	DRL 6 dev. @ 4458' 1/4 deg. RTD 4567' @ 10:00 am dev. 1/4 deg. Finnish logging @ 8:30 pm

Remarks
5 1/2" production casing set to further test the Abell # 1-24.
Electric log measurements correlate 4' to 6' high compared to rotary measurements.
Samples deposited at the Kansas Geological Survey.
Respectfully Submitted,
Jeff Christian
Jeff Christian

LITH	DRILL TIME (MINFT)	DEPTH	SAMPLE DESCRIPTIONS	REMARKS
------	--------------------	-------	---------------------	---------





PO Box 93999
Southlake, TX 76092

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

*acct
prod-m6*

INVOICE

Invoice Number: 148397
Invoice Date: Jan 26, 2015
Page: 1

Federal Tax I.D.#: 20-8651475

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

Customer ID	Field Ticket #	Payment Terms	
Murfin	63825	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-01	Oakley	Jan 26, 2015	2/25/15

Quantity	Item	Description	Unit Price	Amount
1.00	WELL NAME	Abell Ranch #3-24 <i>1-24</i>		
170.00	CEMENT MATERIALS	Class A Common	17.90	3,043.00
479.00	CEMENT MATERIALS	Chloride	1.10	526.90
178.50	CEMENT SERVICE	Cubic Feet Charge	2.48	442.68
149.56	CEMENT SERVICE	Ton Mileage Charge	2.75	411.29
1.00	CEMENT SERVICE	Surface	1,512.25	1,512.25
20.00	CEMENT SERVICE	Pump Truck Mileage	7.70	154.00
20.00	CEMENT SERVICE	Light Vehicle Mileage	4.40	88.00
1.00	CEMENT SERVICE	Manifold Rental	275.00	275.00
1.00	CEMENT SUPERVISOR	Alan Ryan		
1.00	EQUIPMENT OPERATOR	Kevin Ryan		
1.00	OPERATOR ASSISTANT	George Grant		

Subtotal	6,453.12
Sales Tax	282.02
Total Invoice Amount	6,735.14
Payment/Credit Applied	
TOTAL	6,735.14

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

\$ 2,903.89

ONLY IF PAID ON OR BEFORE
Feb 25, 2015

- 2903.89

3831.25

OK JR

ALLIED OIL & GAS SERVICES, LLC 063825

Federal Tax I.D. # 20-8651475

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

SERVICE POINT: Oakley

DATE <u>11/26/15</u>	SEC. <u>24</u>	TWP. <u>12</u>	RANGE <u>31</u>	CALLED OUT	ON LOCATION	JOB START <u>8:00am</u>	JOB FINISH <u>8:30pm</u>
LEASE <u>Shell Ranch</u>	WELL # <u>3-24</u>	LOCATION <u>Oakley 115 8E 14W</u>			COUNTY <u>WORTH</u>	STATE <u>TX</u>	
OLD OR NEW (Circle one)							

CONTRACTOR <u>MacFin 21</u>	OWNER <u>Same</u>
TYPE OF JOB <u>Surface</u>	
HOLE SIZE <u>12 1/4</u>	T.D. <u>225</u>
CASING SIZE <u>8 7/8</u>	DEPTH <u>225</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>13.322</u>	

EQUIPMENT	
PUMP TRUCK # <u>495-081</u>	CEMENTER <u>Alan Ryan</u>
BULK TRUCK # <u>818</u>	HELPER <u>Alan Ryan</u>
BULK TRUCK #	DRIVER <u>George Grant</u>
BULK TRUCK #	DRIVER

CEMENT AMOUNT ORDERED <u>1206m 390 CC</u>
COMMON <u>120</u> @ <u>12.00</u> <u>304.00</u>
POZMIX @
GEL @
CHLORIDE <u>429</u> @ <u>1.20</u> <u>526.80</u>
ASC @
Material Total @ <u>3,560.90</u>
(<u>1662.40/45%</u>) @
HANDLING <u>178.00</u> @ <u>2.40</u> <u>442.80</u>
MILEAGE <u>20</u> @ <u>11.00</u> <u>220.00</u>
TOTAL

REMARKS:
More cement, Circulate, Mix cement, Displace cement
Shut in
Cement did circulate
1.500' @
Alan Ryan, George

CHARGE TO: MacFin Drilling
STREET _____
CITY _____ STATE _____ ZIP _____

SERVICE	
DEPTH OF JOB <u>225</u>	
PUMP TRUCK CHARGE <u>1512.25</u>	
EXTRA FOOTAGE @	
MILEAGE <u>20</u> @ <u>7.20</u> <u>154.00</u>	
MANIFOLD <u>20</u> @ <u>11.00</u> <u>220.00</u>	
(<u>1297.54/45%</u>) TOTAL <u>2,883.43</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 Juan Tinoco
SIGNATURE Juan Tinoco

SALES TAX (If Any) _____
TOTAL CHARGES 6,444.33
DISCOUNT 2,899.94 (45%) IF PAID IN 30 DAYS
3,544.38 Net.



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



Invoice

DATE	INVOICE #
2/3/2015	27089

BILL TO
Murfin Drilling Co Inc P. O. Box 130 Hill City, KS 67642-0130
USED FOR APPROVED

IC 103
[Signature]

- Acidizing
- Cement
- Tool Rental

TERMS	Well No.	Lease	County	Contractor	Well Type	Well Category	Job Purpose	Operator
Net 30	#1-24	Abell	Gove		Oil	Development	Cement LongStri...	Don

PRICE REF.	DESCRIPTION	QTY	UM	UNIT PRICE	AMOUNT
575D	Mileage - 1 Way	60	Miles	5.00	300.00
578D-L	Pump Charge - Long String - 4562 Feet	1	Job	1,250.00	1,250.00
221	Liquid KCL (Clayfix)	4	Gallon(s)	25.00	100.00T
280	Flocheck 21	500	Gallon(s)	3.00	1,500.00T
403-5	5 1/2" Cement Basket	1	Each	250.00	250.00T
404-5	5 1/2" Port Collar	1	Each	2,500.00	2,500.00T
406-5	5 1/2" Latch Down Plug & Baffle	1	Each	225.00	225.00T
407-5	5 1/2" Insert Float Shoe With Auto Fill	1	Each	300.00	300.00T
409-5	5 1/2" Turbolizer	10	Each	75.00	750.00T
413-5	5 1/2" Roto Wall Scratcher	20	Each	35.00	700.00T
419-5	5 1/2" Rotating Head Rental	1	Each	200.00	200.00T
290	D-Air	3	Gallon(s)	42.00	126.00T
325	Standard Cement	225	Sacks	12.25	2,756.25T
276	Flocele	57	Lb(s)	2.25	128.25T
283	Salt	1,125	Lb(s)	0.20	225.00T
284	Calseal	11	Sack(s)	30.00	330.00T
285	CFR-1	159	Lb(s)	4.50	715.50T
581D	Service Charge Cement	225	Sacks	1.50	337.50
583D	Drayage	706.47	Ton Miles	0.75	529.85
	Subtotal				13,223.35
	Sales Tax Gove County			7.90%	853.67

We Appreciate Your Business!

Total

\$14,077.02



Services, Inc.

TICKET 27089

CHARGE TO: Martin Drig. Co.
 ADDRESS: _____
 CITY, STATE, ZIP CODE: _____

PAGE 1 OF 2

1. <u>Wells, KS</u>	WELL/PROJECT NO. <u>1-24</u>	LEASE <u>Abell</u>	COUNTY/PARISH <u>Goose</u>	STATE <u>KS</u>	CITY _____	DATE <u>2-3-15</u>	OWNER _____
2. <u>Ness City, KS</u>	TICKET TYPE <input checked="" type="checkbox"/> SERVICE <input type="checkbox"/> SALES	CONTRACTOR <u>Co</u>	RIG NAME NO. <u># 21</u>	SHIPPED VIA <u>CT</u>	DELIVERED TO <u>W/Case, KS</u>	ORDER NO. _____	
3. _____	WELL TYPE <u>Oil</u>	WELL CATEGORY <u>In Field</u>	JOB PURPOSE <u>Revent Longstring</u>	WELL PERMIT NO. _____	WELL LOCATION _____		
4. _____	INVOICE INSTRUCTIONS						

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.	UM	QTY.	UM	UNIT PRICE	AMOUNT
		LOC	ACCT	DF							
575		1			MILEAGE # 113	100	mi			500	30000
578		1			Play Charge - cut longstring	1 ea		4562	ft	185000	125000
281		1			Liquid Rec	4 gal				2500	10000
280		1			Flascheck 31	500 gal				300	150000
423		1			Cement Basket	1 ea		5 1/2	in	25000	25000
424		1			Rent Cellar	1 ea		5 1/2	in	25000	25000
426		1			Latch Down Plug & Baffle	1 ea		5 1/2	in	22500	22500
427		1			Insert Float Shoe w/ Ball up	1 ea		5 1/2	in	30000	30000
428		1			Turbalizers	1 ea		5 1/2	in	75000	75000
413		1			Rate & Well Structures	2 ea		5	ft	35000	70000
419		1			Rotating Head Rental	1 ea		5	ft	20000	20000
292		1			D-Air	3 gal				12600	12600

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 2-3-15 TIME SIGNED 03:30 P.M. P.M.

Wade King

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

SURVEY

OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?	AGREE	UN-DECIDED	DIS-AGREE
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?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND			

PAGE TOTAL 8201.00

Sub total 13,223.35

Gove Tax 853.67

TOTAL 14,077.02

SWIFT OPERATOR Wade King APPROVAL _____

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
Ness City, KS 67560
Off: 785-798-2300

TICKET CONTINUATION

TICKET No. 27089

CUSTOMER
Murphy Dole Co.

WELL
1-24 Abell

DATE
2-3-15

PAGE 2 OF 2

PRICE REFERENCE	SECONDARY REFERENCE / PART NUMBER	ACCOUNTING			TIME	DESCRIPTION	WELL				DATE	UNIT PRICE	AMOUNT
		LOC	ACCT	DR			QTY	U/M	QTY	U/M			
335		2				Standard Cement	225	SKS	2150	115		12.25	2756.25
276		2				Fluocel	57	lbs				22.5	128.25
283		2				Salt	1125	lbs				20	225.00
284		2				Alcohol	1058	lbs	11	SKS		30.00	330.00
285		2				CFR-1	159	lbs				4.50	715.50
581		2										1.50	337.50
583		2										1.75	706.47

SERVICE CHARGE
MILEAGE CHARGE
TOTAL WEIGHT
LOADED MILES

CUBIC FEET
TON MILES

CEMENT
150
337.50

CONTINUATION TOTAL

5022.35

JOB LOG

SWIFT Services, Inc.

DATE 2-3-15 PAGE NO. 1

CUSTOMER *Murfin Drilling Co.* WELL NO. *1-24* LEASE *Abell* JOB TYPE *Cement Logging* TICKET NO. *27089*

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	0330					15.5 #4	5 1/2	ON Location - 1 Foot Equip
	0350							Rig hanging tools Start 5 1/2 - 15.5 #4 casing to 4562'
								Insert Foot Shoe 12' / 12' - 40 L.D. Baffle - SJ - 21' @ 4541 = (108) 886
								Cont. 1-2-3-4-5-7-9-11-13-52 Cement Basket # 53 Pin end Port Collar # 53 @ 2348'
	0450							Circ @ #60 Fill - up ball 5 Jts out
	0610							Fin run casing - Tag & Log down 5 Jts
	0630							Start circ / Rotate
	0720							Fin circ
		5	15				500	Pump 15 BBL KCL Plush
		5	12				500	Pump 500 gal Flocheck
		5	5				500	Pump 5 BBL KCL-Spacer
		4 1/2					700	Start 175 SKS FH-2 cont
			43				300 1000	Fin cont
								Wash out pump & lines
		9					450	Drop L.D. Plug
		9	80				530	Start - Disp
		7	90				800	Caught 1-PP
		6	100				1000	Slow rate
	0815		108				1150 1500	Plug Down - Hold - Release & Hold
			8 6					Plug RT - 30 SKS cont MT 20 SKS cont
	0830							Job Complete Wash up & Rack up
								<i>Frank</i> Don, Jon, Steve & Isaac



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



Invoice

DATE	INVOICE #
2/11/2015	28123

BILL TO
Murfin Drilling Co Inc P. O. Box 130 Hill City, KS 67642-0130
USED FOR
APPROVED

- Acidizing
- Cement
- Tool Rental

USED FOR IC 103
 APPROVED [Signature]

TERMS	Well No.	Lease	County	Contractor	Well Type	Well Category	Job Purpose	Operator
Net 30	#1-24	Abel/	Gove	Company Tools	Oil	Development	Cement Port Collar	Wayne
PRICE REF.	DESCRIPTION				QTY	UM	UNIT PRICE	AMOUNT
575D	Mileage - 1 Way				70	Miles	5.00	350.00
576D-D	Pump Charge - Port Collar				1	Job	1,250.00	1,250.00
330	Swift Multi-Density Standard (MIDCON II)				200	Sacks	15.75	3,150.00T
276	Flocele				75	Lb(s)	2.25	168.75T
279	Bentonite Gel				4	Sack(s)	25.00	100.00T
290	D-Air				3	Gallon(s)	42.00	126.00T
581D	Service Charge Cement				275	Sacks	1.50	412.50
583D	Drayage				977.38	Ton Miles	0.75	733.04
	Subtotal							6,290.29
	Sales Tax Gove County						7.90%	280.04
We Appreciate Your Business!							Total	\$6,570.33



CHARGE TO: MORFEL DALE Co. Inc.
 ADDRESS _____
 CITY, STATE, ZIP CODE _____

TICKET 28123

PAGE 1 OF 1

SERVICE LOCATIONS
 1. Ness City, KS

WELL/PROJECT NO. 1-24 LEASE ABEL COUNTY/PARISH GOLE STATE KS CITY Location DATE 2-11-15 OWNER same

TICKET TYPE SALES CONTRACTOR Go Tools RIG NAME/NO. _____ ORDER NO. _____

WELL TYPE Oil WELL CATEGORY Development JOB PURPOSE Cement Port Guide WELLS PERMIT NO. _____

WELL LOCATION Goole-Ks-12w, 2w, 2w

REFERRAL LOCATION _____ INVOICE INSTRUCTIONS _____

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING		DESCRIPTION	MILEAGE #	QTY.	UM	QTY.	UM	UNIT PRICE	AMOUNT
		LOC	ACCT								
575		1			112	70	MT			\$100	350.00
576b		1		Pump Grease - Port Guide		1	GBB			1250.00	1250.00
330		1		SWIFT MORT - DENSOY STANDARD		200	SUS			15.75	3150.00
276		1		Floccle		75	UBS			2.25	168.75
279		1		BENTONITE GEL (BOSSE)		4	SYS			25.00	100.00
290		1		D-ADD		3	Gal			42.00	126.00
581		1		SEALING CHARGE Cement		275	SUS			1.50	412.50
583		1		DRYAGE		27925	UBS	977.38	MT	.75	733.04

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 2-11-15 TIME SIGNED 1300

Wade King **AGENT** P.M.

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

SURVEY

OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?

WE UNDERSTOOD AND MET YOUR NEEDS?

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 6290.29

TOTAL 6570.33

GIVE TAX 7.9% 280.04

SWIFT OPERATOR Wade King APPROVAL _____

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

Thank You!

JOB LOG

SWIFT Services, Inc.

DATE 2-11-15 PAGE NO. 1

CUSTOMER MURPHY DRILG. Co. Inc.

WELL NO. 1-24

LEASE ABEL

JOB TYPE CEMENT PORT COLLAR

TICKET NO. 28123

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1300							ON LOCATION
								TUBING - 2 3/8 CASING - 5 1/2" PORT COLLAR - 2343
	1305				✓		1000	PSI TEST CASING - HELD
	1315	3	2	✓		350		OPEN PORT COLLAR - TEST RATE
	1317	3 1/2	12	✓		350		MIX 4 SKS BENTONITE GEL
	1320	3 1/2	111	✓		350		MIX 200 SKS SMD CEMENT @ 11.2 PPG
	1345	3 1/2	8	✓		600		DISPLACE CEMENT
	1355				✓		1000	CLOSE PORT COLLAR - PSI TEST - HELD
								CIRCULATED 20 SKS CEMENT TO PT
	1410	3 1/2	20		✓		450	RUN 5 JTS - CIRCULATE CLEAN
								WASH TRUCK
	1500							JOB COMPLETE

THANK YOU
WAYNE, JOHN J., CRAIG

MDCI
 Abell #1-24
 335 FSL 1650' FEL
 Sec. 24-T12S-R31W
 2836' KB

Formation	Sample tops	Datum	Ref	Log Tops	Datum	Ref
Anhydrite	2330	+506	-16	2328	+508	-14
B/Anhydrite	2357	+479	-18	2354	+482	-15
Topeka	3634	-798	-7	3629	-793	-2
Heebner	3856	-1020	-9	3852	-1016	-5
Lansing	3892	-1056	-13	3895	-1059	-16
Stark	4120	-1284	-11	4114	-1278	-5
Marmaton	4246	-1410	-10	4236	-1400	Flat
Fort Scott	4371	-1535	-11	4367	-1531	-7
Cherokee	4400	-1564	-12	4394	-1558	-6
Mississippi	4467	-1631	-13	4461	-1625	-7
RTD	4567					
LTD				4563		