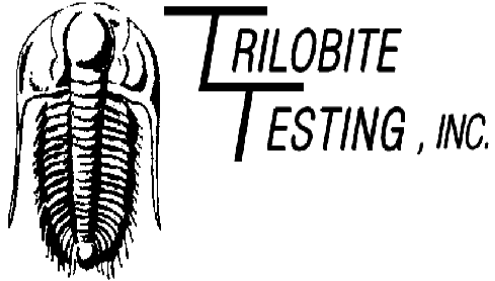


Form	ACO1 - Well Completion
Operator	Ritchie Exploration, Inc.
Well Name	BEATON 6D 1
Doc ID	1405492

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.63	23	220	Common	165	3% cc, 2% gel



DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc.**

8100 E. 22nd. St N #700
Box 783188
Wichita KS 67278

ATTN: Max Lovely

Beaton 6D #1

6-20s-30w Lane,KS

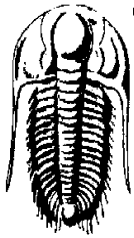
Start Date: 2018.01.11 @ 03:03:15

End Date: 2018.01.11 @ 09:58:00

Job Ticket #: 64409 DST #: 1

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

Printed: 2018.01.16 @ 10:27:47



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Ritchie Exploration Inc.

6-20s-30w Lane, KS

8100 E. 22nd. St N #700
Box 783188
Wichita KS 67278
ATTN: Max Lovely

Beaton 6D #1

Job Ticket: 64409

DST#: 1

Test Start: 2018.01.11 @ 03:03:15

GENERAL INFORMATION:

Formation: **Altamont A**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:58:15

Time Test Ended: 09:58:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Mike Roberts

Unit No: 81

Interval: 4380.00 ft (KB) To 4438.00 ft (KB) (TVD)

Total Depth: 4438.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 2009.00 ft (KB)

2004.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8672 Inside

Press@RunDepth: 79.69 psig @ 4433.00 ft (KB)

Start Date: 2018.01.11

End Date:

2018.01.11

Start Time: 03:03:15

End Time:

09:58:00

Capacity: 8000.00 psig

Last Calib.: 2018.01.12

Time On Btm: 2018.01.11 @ 05:57:45

Time Off Btm: 2018.01.11 @ 07:58:15

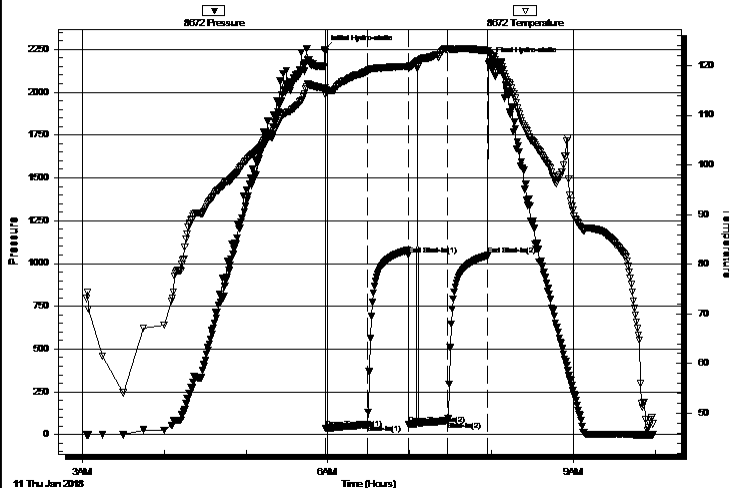
TEST COMMENT: IF:Weak surface blow died in 2 min.

IS:No return blow

FF:No blow --flushed tool--no blow

FS:No return blow

Pressure vs. Time



PRESSURE SUMMARY

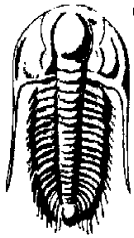
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2247.47	115.57	Initial Hydro-static
1	36.09	114.15	Open To Flow (1)
32	59.85	118.84	Shut-In(1)
61	1048.68	119.81	End Shut-In(1)
62	61.52	119.49	Open To Flow (2)
90	79.69	123.08	Shut-In(2)
120	1046.60	123.02	End Shut-In(2)
121	2176.11	122.32	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
72.00	mud w ith oil spots	0.35

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Ritchie Exploration Inc.

6-20s-30w Lane, KS

8100 E. 22nd. St N #700
Box 783188
Wichita KS 67278
ATTN: Max Lovely

Beaton 6D #1

Job Ticket: 64409

DST#: 1

Test Start: 2018.01.11 @ 03:03:15

GENERAL INFORMATION:

Formation: **Altamont A**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:58:15

Time Test Ended: 09:58:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Mike Roberts

Unit No: 81

Interval: **4380.00 ft (KB) To 4438.00 ft (KB) (TVD)**

Total Depth: 4438.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 2009.00 ft (KB)

2004.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: **8374** Outside

Press@RunDepth: psig @ 4433.00 ft (KB)

Start Date: 2018.01.11

End Date:

2018.01.11

Start Time: 03:03:15

End Time:

09:58:00

Capacity: 8000.00 psig

Last Calib.: 2018.01.12

Time On Btm:

Time Off Btm:

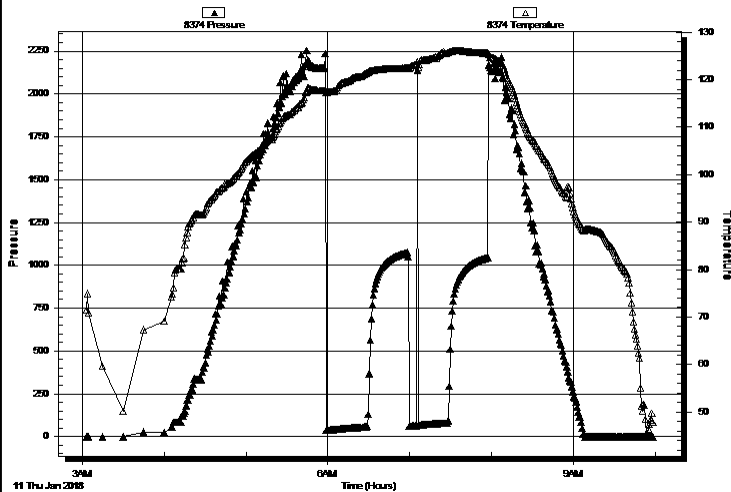
TEST COMMENT: IF:Weak surface blow died in 2 min.

IS:No return blow

FF:No blow --flushed tool--no blow

FS:No return blow

Pressure vs. Time



PRESSURE SUMMARY

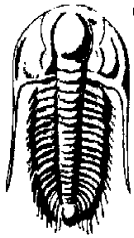
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
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Recovery

Length (ft)	Description	Volume (bbl)
72.00	mud w ith oil spots	0.35

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Inc.

6-20s-30w Lane,KS

8100 E. 22nd. St N #700
Box 783188
Wichita KS 67278
ATTN: Max Lovely

Beaton 6D #1

Job Ticket: 64409

DST#: 1

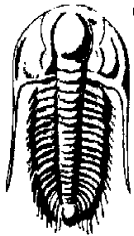
Test Start: 2018.01.11 @ 03:03:15

Tool Information

Drill Pipe:	Length:	4243.00 ft	Diameter:	3.80 inches	Volume:	59.52 bbl	Tool Weight:	1500.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length:	120.00 ft	Diameter:	2.25 inches	Volume:	0.59 bbl	Weight to Pull Loose:	70000.00 lb
					Total Volume:	60.11 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	11.00 ft					String Weight: Initial	57000.00 lb	
Depth to Top Packer:	4380.00 ft					Final	57000.00 lb	
Depth to Bottom Packer:	ft							
Interval between Packers:	58.00 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			4353.00	
Shut In Tool	5.00			4358.00	
Hydraulic tool	5.00			4363.00	
Jars	5.00			4368.00	
Safety Joint	3.00			4371.00	
Packer	5.00			4376.00	28.00 Bottom Of Top Packer
Packer	4.00			4380.00	
Stubb	1.00			4381.00	
Perforations	4.00			4385.00	
Change Over Sub	1.00			4386.00	
Drill Pipe	31.00			4417.00	
Change Over Sub	1.00			4418.00	
Perforations	15.00			4433.00	
Recorder	0.00	8672	Inside	4433.00	
Recorder	0.00	8374	Outside	4433.00	
Bullnose	5.00			4438.00	58.00 Bottom Packers & Anchor
Total Tool Length:	86.00				



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Inc.

6-20s-30w Lane,KS

8100 E. 22nd. St N #700

Beaton 6D #1

Box 783188

Job Ticket: 64409

DST#: 1

Wichita KS 67278

Test Start: 2018.01.11 @ 03:03:15

ATTN: Max Lovely

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: 56.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.36 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2800.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
72.00	mud w ith oil spots	0.354

Total Length: 72.00 ft

Total Volume: 0.354 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

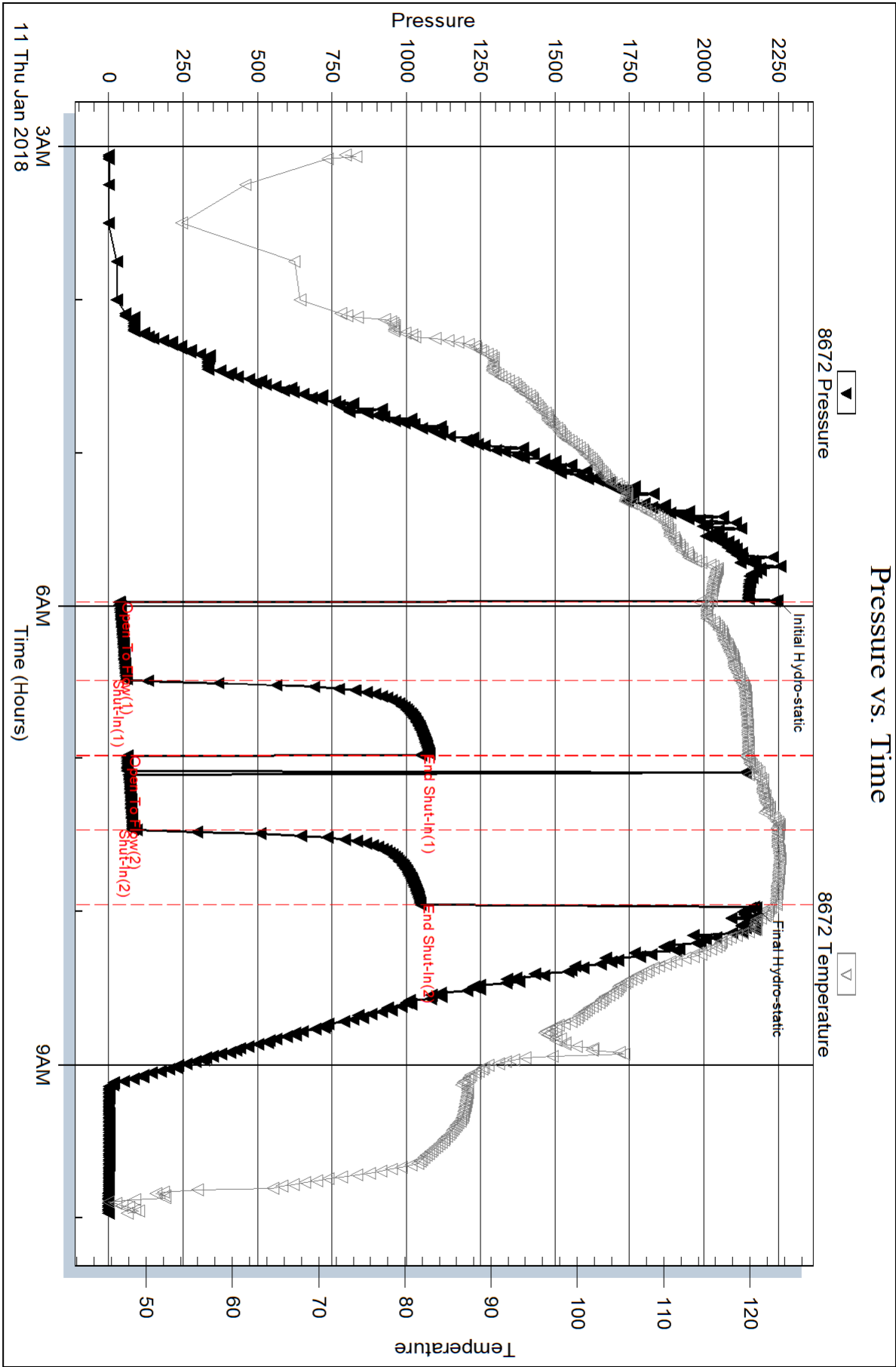
Serial #: 8672

Inside

Ritchie Exploration Inc.

Beaton 6D #1

DST Test Number: 1

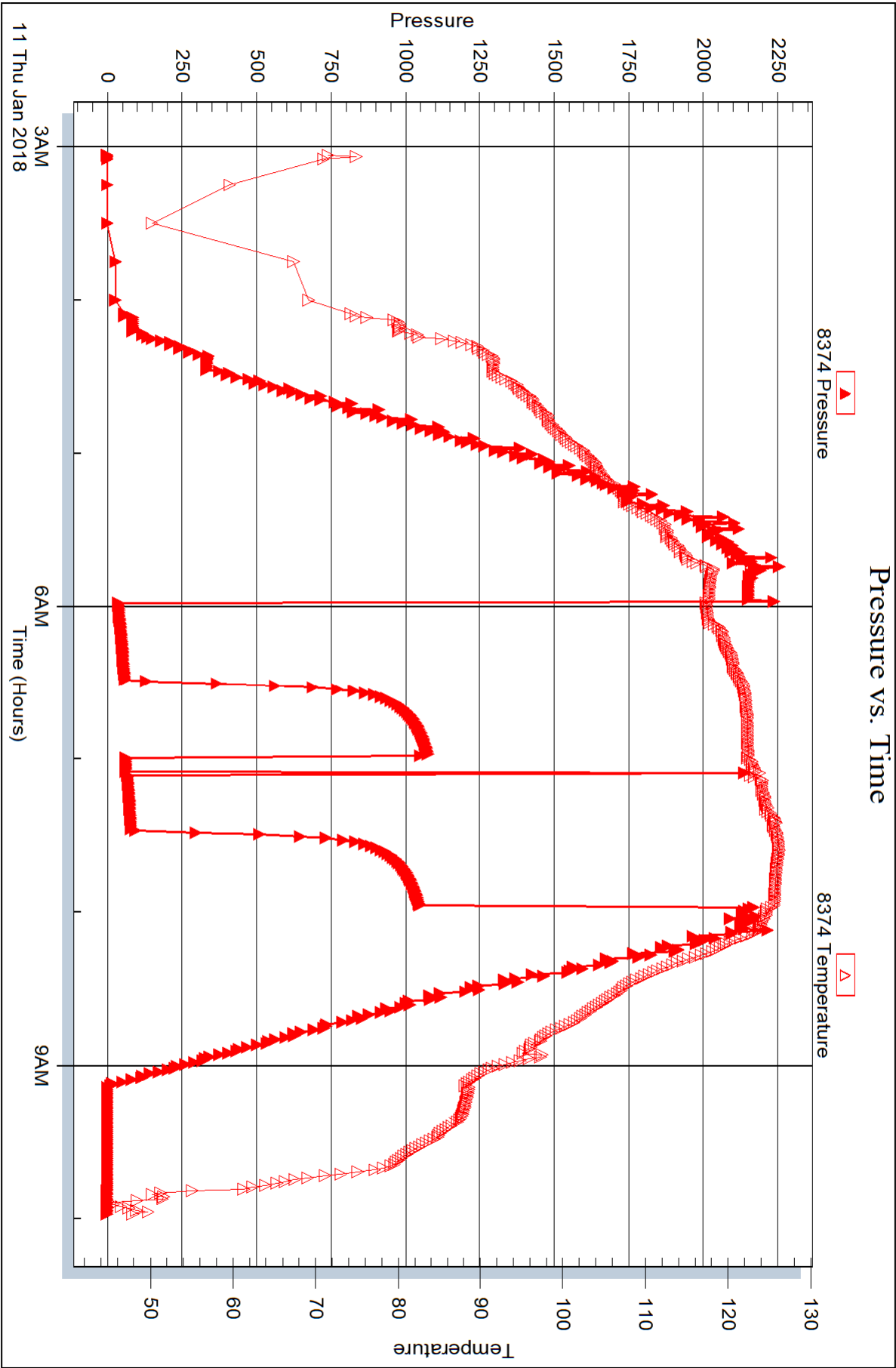


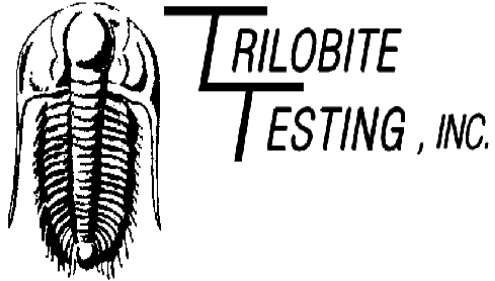
Serial #: 8374

Outside Ritchie Exploration Inc.

Beaton 6D #1

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc.**

8100 E. 22nd. St N #700
Box 783188
Wichita KS 67278

ATTN: Max Lovely

Beaton 6D #1

6-20s-30w Lane,KS

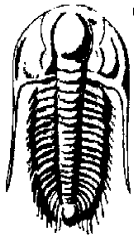
Start Date: 2018.01.12 @ 19:13:15

End Date: 2018.01.13 @ 02:50:15

Job Ticket #: 64410 DST #: 2

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

Printed: 2018.01.16 @ 10:27:21



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Ritchie Exploration Inc.

6-20s-30w Lane, KS

8100 E. 22nd. St N #700
Box 783188
Wichita KS 67278
ATTN: Max Lovely

Beaton 6D #1

Job Ticket: 64410

DST#: 2

Test Start: 2018.01.12 @ 19:13:15

GENERAL INFORMATION:

Formation: **Atamont B**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:32:45

Time Test Ended: 02:50:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Mike Roberts

Unit No: 81

Interval: 4436.00 ft (KB) To 4450.00 ft (KB) (TVD)

Reference Elevations: 2009.00 ft (KB)

Total Depth: 4450.00 ft (KB) (TVD)

2004.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 5.00 ft

Serial #: 8672 Inside

Press@RunDepth: 18.93 psig @ 4437.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2018.01.12

End Date:

2018.01.13

Last Calib.: 2018.01.13

Start Time: 19:13:15

End Time:

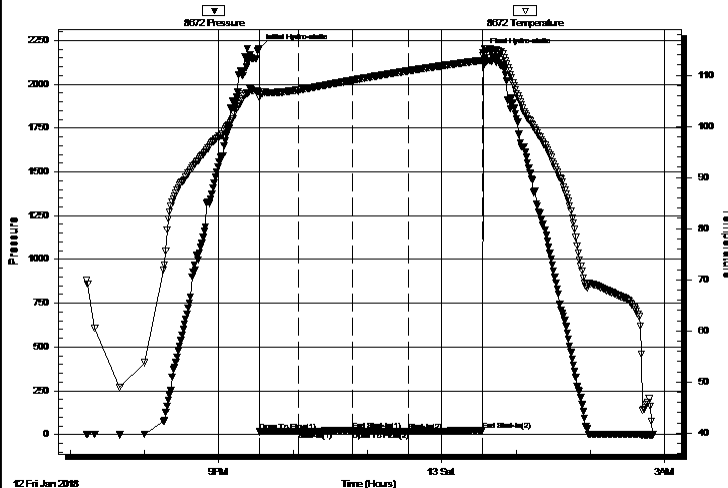
02:50:15

Time On Btm: 2018.01.12 @ 21:32:30

Time Off Btm: 2018.01.13 @ 00:33:15

TEST COMMENT: IF: Built to 1" blow (Diesel)
IS: Weak surface blow
FF: Built to 1/8" blow (Diesel)
FS: No return blow

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2204.40	106.82	Initial Hydro-static
1	16.57	105.56	Open To Flow (1)
32	17.85	107.10	Shut-In(1)
75	25.29	108.99	End Shut-In(1)
76	16.64	108.99	Open To Flow (2)
121	18.93	110.83	Shut-In(2)
181	23.36	112.90	End Shut-In(2)
181	2180.34	113.71	Final Hydro-static

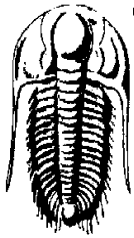
Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud w ith trace of oil	0.02

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Ritchie Exploration Inc.

6-20s-30w Lane, KS

8100 E. 22nd. St N #700
Box 783188
Wichita KS 67278
ATTN: Max Lovely

Beaton 6D #1

Job Ticket: 64410

DST#: 2

Test Start: 2018.01.12 @ 19:13:15

GENERAL INFORMATION:

Formation: **Atamont B**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:32:45

Time Test Ended: 02:50:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Mike Roberts

Unit No: 81

Interval: 4436.00 ft (KB) To 4450.00 ft (KB) (TVD)

Total Depth: 4450.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 2009.00 ft (KB)

2004.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8374 Outside

Press@RunDepth: psig @ 4437.00 ft (KB)

Start Date: 2018.01.12

End Date:

2018.01.13

Start Time: 19:13:15

End Time:

02:50:30

Capacity: 8000.00 psig

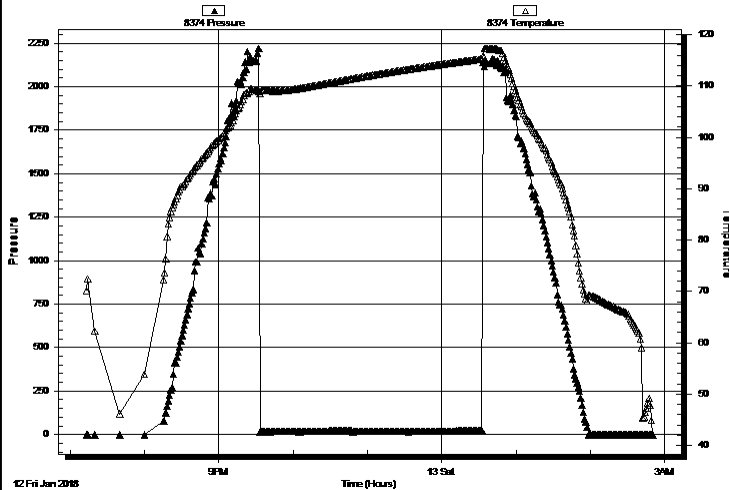
Last Calib.: 2018.01.13

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: Built to 1" blow (Diesel)
IS: Weak surface blow
FF: Built to 1/8" blow (Diesel)
FS: No return blow

Pressure vs. Time



PRESSURE SUMMARY

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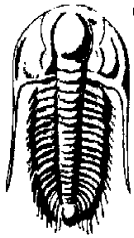
Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud w with trace of oil	0.02

Gas Rates

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

* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Inc.

6-20s-30w Lane,KS

8100 E. 22nd. St N #700
Box 783188
Wichita KS 67278
ATTN: Max Lovely

Beaton 6D #1

Job Ticket: 64410

DST#: 2

Test Start: 2018.01.12 @ 19:13:15

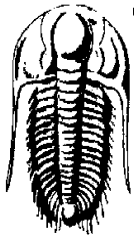
Tool Information

Drill Pipe:	Length:	4295.00 ft	Diameter:	3.80 inches	Volume:	60.25 bbl	Tool Weight:	1500.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length:	120.00 ft	Diameter:	2.25 inches	Volume:	0.59 bbl	Weight to Pull Loose:	80000.00 lb
					Total Volume:	60.84 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		7.00 ft					String Weight: Initial	50000.00 lb
Depth to Top Packer:		4436.00 ft					Final	51000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		16.00 ft						
Tool Length:		44.00 ft						
Number of Packers:		2	Diameter:	6.75 inches				
Tool Comments:								

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Change Over Sub	1.00			4409.00	
Shut In Tool	5.00			4414.00	
Hydraulic tool	5.00			4419.00	
Jars	5.00			4424.00	
Safety Joint	3.00			4427.00	
Packer	5.00			4432.00	28.00 Bottom Of Top Packer
Packer	4.00			4436.00	
Stubb	1.00			4437.00	
Recorder	0.00	8672	Inside	4437.00	
Recorder	0.00	8374	Outside	4437.00	
Perforations	10.00			4447.00	
Bullnose	5.00			4452.00	16.00 Bottom Packers & Anchor

Total Tool Length: 44.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Inc.

6-20s-30w Lane,KS

8100 E. 22nd. St N #700

Beaton 6D #1

Box 783188

Job Ticket: 64410

DST#: 2

Wichita KS 67278

Test Start: 2018.01.12 @ 19:13:15

ATTN: Max Lovely

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: 55.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.36 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	mud w ith trace of oil	0.025

Total Length: 5.00 ft

Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

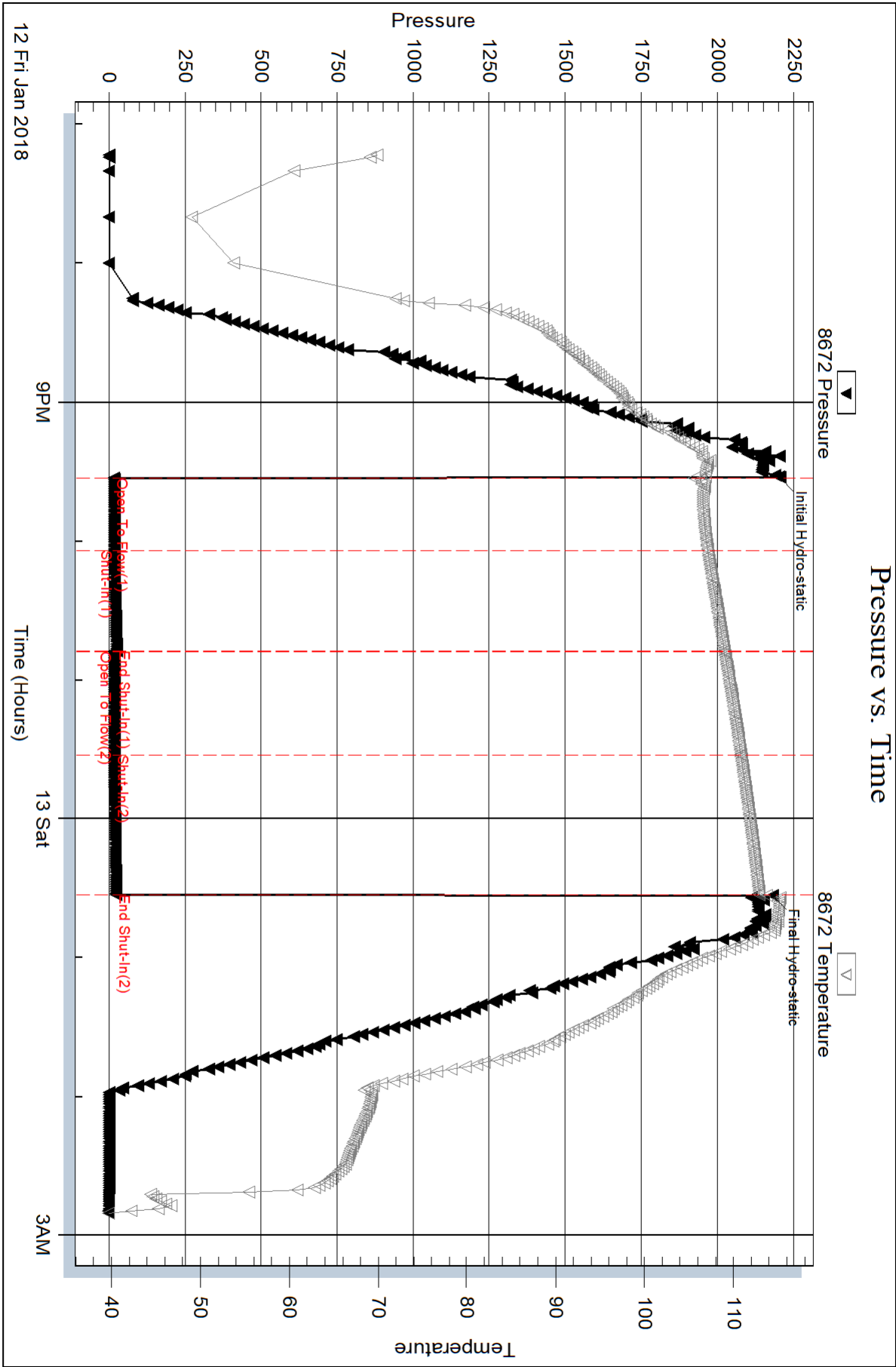
Serial #: 8672

Inside

Ritchie Exploration Inc.

Beaton 6D #1

DST Test Number: 2

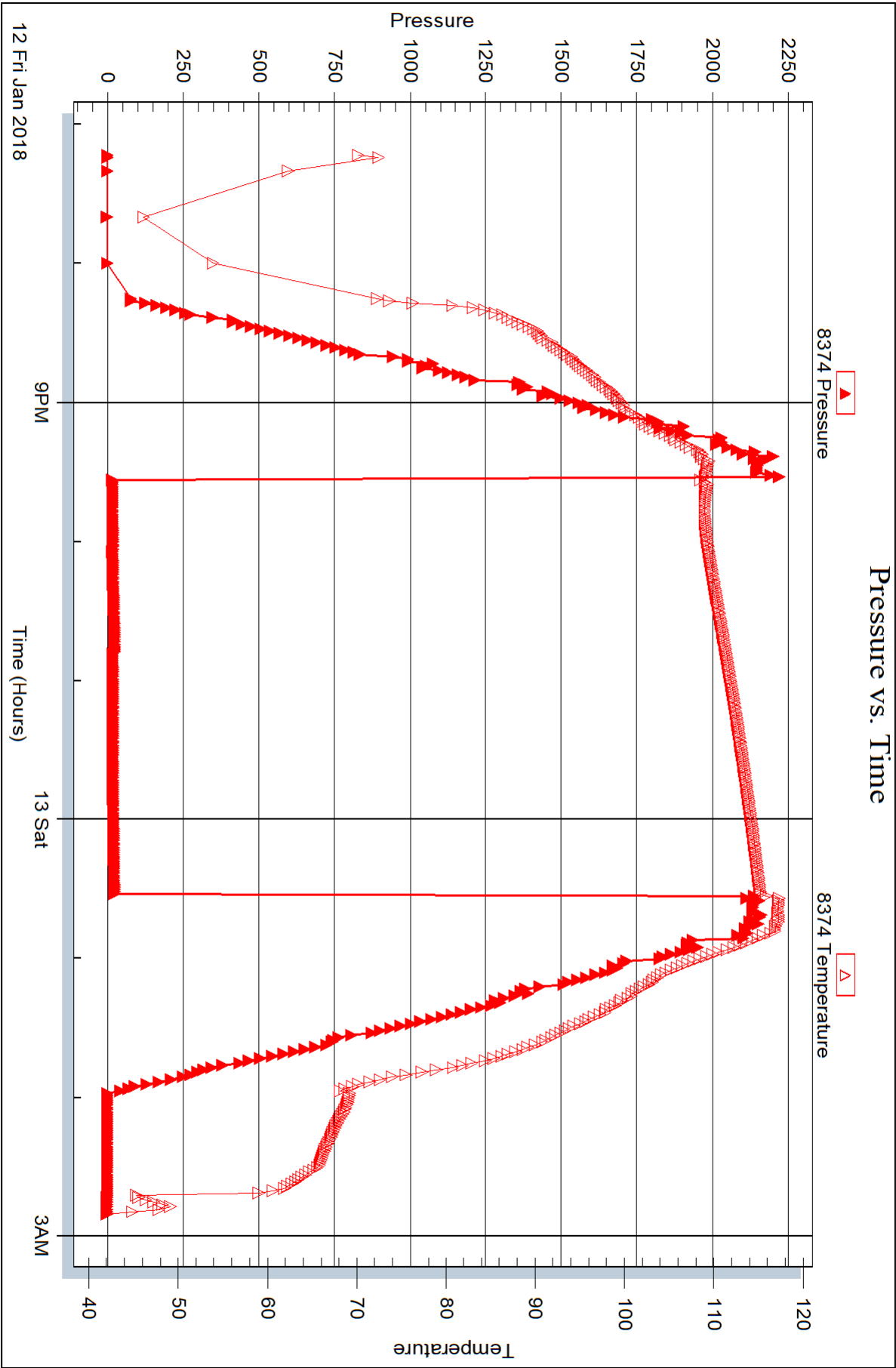


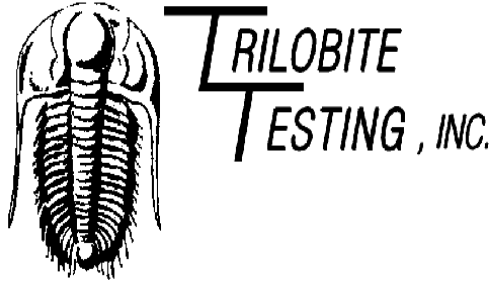
Serial #: 8374

Outside Ritchie Exploration Inc.

Beaton 6D #1

DST Test Number: 2





DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc.**

8100 E. 22nd. St N #700
Box 783188
Wichita KS 67278

ATTN: Max Lovely

Beaton 6D #1

6-20s-30w Lane,KS

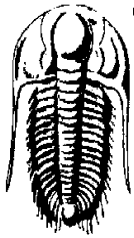
Start Date: 2018.01.13 @ 16:21:15

End Date: 2018.01.13 @ 22:49:30

Job Ticket #: 64411 DST #: 3

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

Printed: 2018.01.16 @ 10:26:44



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Ritchie Exploration Inc.

8100 E. 22nd. St N #700
Box 783188
Wichita KS 67278
ATTN: Max Lovely

6-20s-30w Lane, KS

Beaton 6D #1

Job Ticket: 64411

DST#: 3

Test Start: 2018.01.13 @ 16:21:15

GENERAL INFORMATION:

Formation: **Altamont C- Pawnee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:24:15

Time Test Ended: 22:49:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Mike Roberts

Unit No: 81

Interval: **4448.00 ft (KB) To 4506.00 ft (KB) (TVD)**

Total Depth: 4506.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 2009.00 ft (KB)

2004.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8672 **Inside**

Press@RunDepth: 237.40 psig @ 4501.00 ft (KB)

Start Date: 2018.01.13

End Date:

2018.01.13

Start Time: 16:21:15

End Time:

22:49:30

Capacity: 8000.00 psig

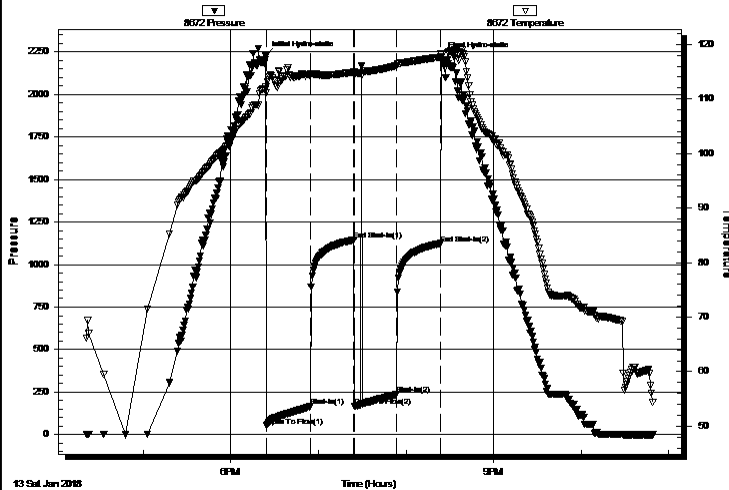
Last Calib.: 2018.01.13

Time On Btm: 2018.01.13 @ 18:24:00

Time Off Btm: 2018.01.13 @ 20:24:00

TEST COMMENT: IF:Weak surface blow died in 3 min.
IS:No return blow
FF:No blow ----flushed tool---no blow
FS:No return blow

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2224.76	112.23	Initial Hydro-static
1	52.67	111.13	Open To Flow (1)
31	165.53	114.45	Shut-In (1)
61	1144.54	114.90	End Shut-In (1)
61	166.07	114.41	Open To Flow (2)
90	237.40	116.13	Shut-In (2)
120	1123.72	117.66	End Shut-In (2)
120	2222.21	118.25	Final Hydro-static

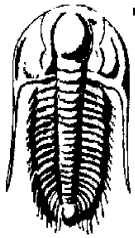
Recovery

Length (ft)	Description	Volume (bbl)
60.00	mcw 5% m 95% w	0.30
184.00	m 100% m	2.03

Gas Rates

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

* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Ritchie Exploration Inc.

8100 E. 22nd. St N #700
Box 783188
Wichita KS 67278
ATTN: Max Lovely

6-20s-30w Lane,KS

Beaton 6D #1

Job Ticket: 64411

DST#: 3

Test Start: 2018.01.13 @ 16:21:15

GENERAL INFORMATION:

Formation: **Altamont C- Pawnee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:24:15

Time Test Ended: 22:49:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Mike Roberts

Unit No: 81

Interval: 4448.00 ft (KB) To 4506.00 ft (KB) (TVD)

Total Depth: 4506.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 2009.00 ft (KB)

2004.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8374 Outside

Press@RunDepth: psig @ 4501.00 ft (KB)

Start Date: 2018.01.13

End Date:

2018.01.13

Start Time: 16:21:15

End Time:

22:49:30

Capacity: 8000.00 psig

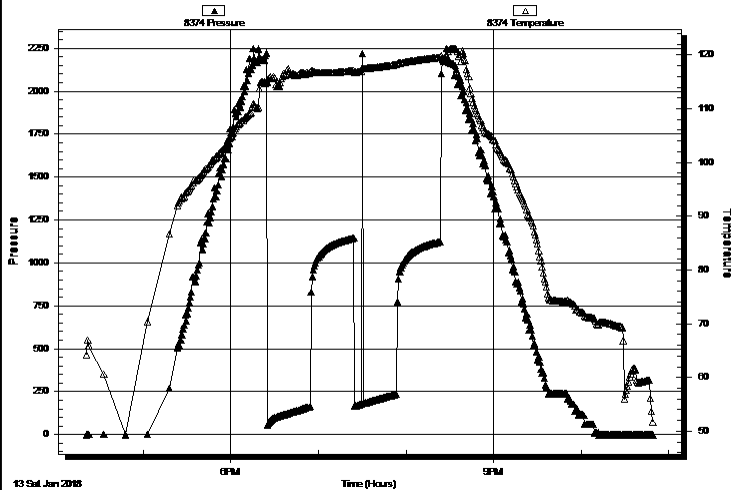
Last Calib.: 1899.12.30

Time On Btm:

Time Off Btm:

TEST COMMENT: IF:Weak surface blow died in 3 min.
IS:No return blow
FF:No blow ----flushed tool---no blow
FS:No return blow

Pressure vs. Time



PRESSURE SUMMARY

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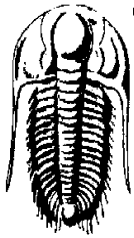
Recovery

Length (ft)	Description	Volume (bbl)
60.00	mcw 5% m 95% w	0.30
184.00	m 100% m	2.03

Gas Rates

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

* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Inc.

6-20s-30w Lane,KS

8100 E. 22nd. St N #700
Box 783188
Wichita KS 67278
ATTN: Max Lovely

Beaton 6D #1

Job Ticket: 64411

DST#: 3

Test Start: 2018.01.13 @ 16:21:15

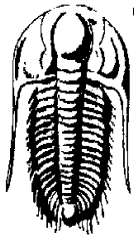
Tool Information

Drill Pipe:	Length:	4323.00 ft	Diameter:	3.80 inches	Volume:	60.64 bbl	Tool Weight:	1500.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length:	120.00 ft	Diameter:	2.25 inches	Volume:	0.59 bbl	Weight to Pull Loose:	80000.00 lb
					Total Volume:	61.23 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		23.00 ft					String Weight: Initial	56000.00 lb
Depth to Top Packer:		4448.00 ft					Final	57000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		58.00 ft						
Tool Length:		86.00 ft						
Number of Packers:		2	Diameter:	6.75 inches				
Tool Comments:								

Tool Description

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

Change Over Sub	1.00			4421.00		
Shut In Tool	5.00			4426.00		
Hydraulic tool	5.00			4431.00		
Jars	5.00			4436.00		
Safety Joint	3.00			4439.00		
Packer	5.00			4444.00	28.00	Bottom Of Top Packer
Packer	4.00			4448.00		
Stubb	1.00			4449.00		
Perforations	4.00			4453.00		
Change Over Sub	1.00			4454.00		
Drill Pipe	32.00			4486.00		
Change Over Sub	1.00			4487.00		
Perforations	14.00			4501.00		
Recorder	0.00	8672	Inside	4501.00		
Recorder	0.00	8374	Outside	4501.00		
Bullnose	5.00			4506.00	58.00	Bottom Packers & Anchor
Total Tool Length:	86.00					



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Inc.

6-20s-30w Lane,KS

8100 E. 22nd. St N #700

Beaton 6D #1

Box 783188

Job Ticket: 64411

DST#: 3

Wichita KS 67278

Test Start: 2018.01.13 @ 16:21:15

ATTN: Max Lovely

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:

23000 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.38 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	mcw 5%m 95%w	0.295
184.00	m 100%m	2.034

Total Length: 244.00 ft

Total Volume: 2.329 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW= .474@45.7= 23,000 ppm

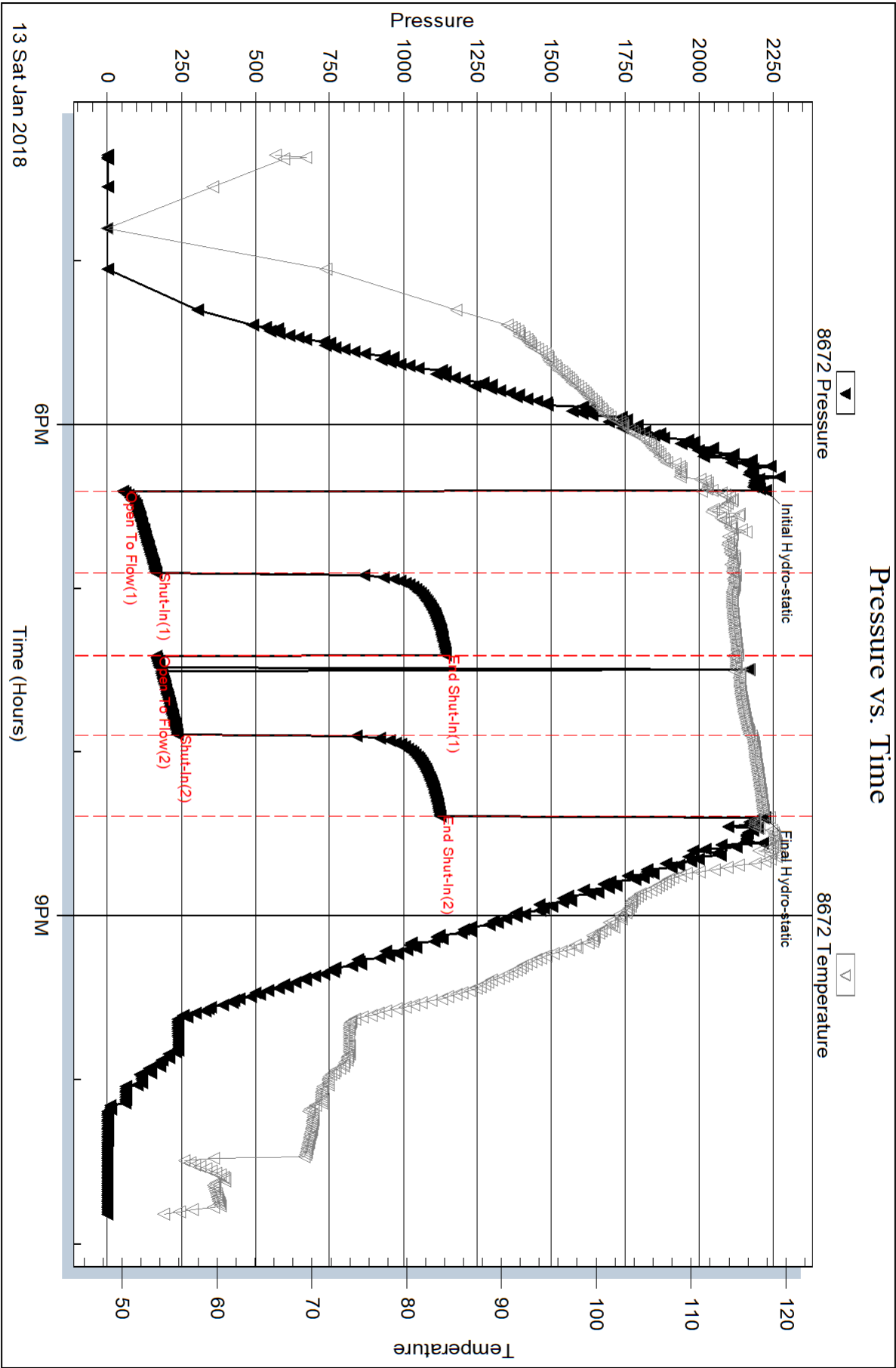
Serial #: 8672

Inside

Ritchie Exploration Inc.

Beaton 6D #1

DST Test Number: 3

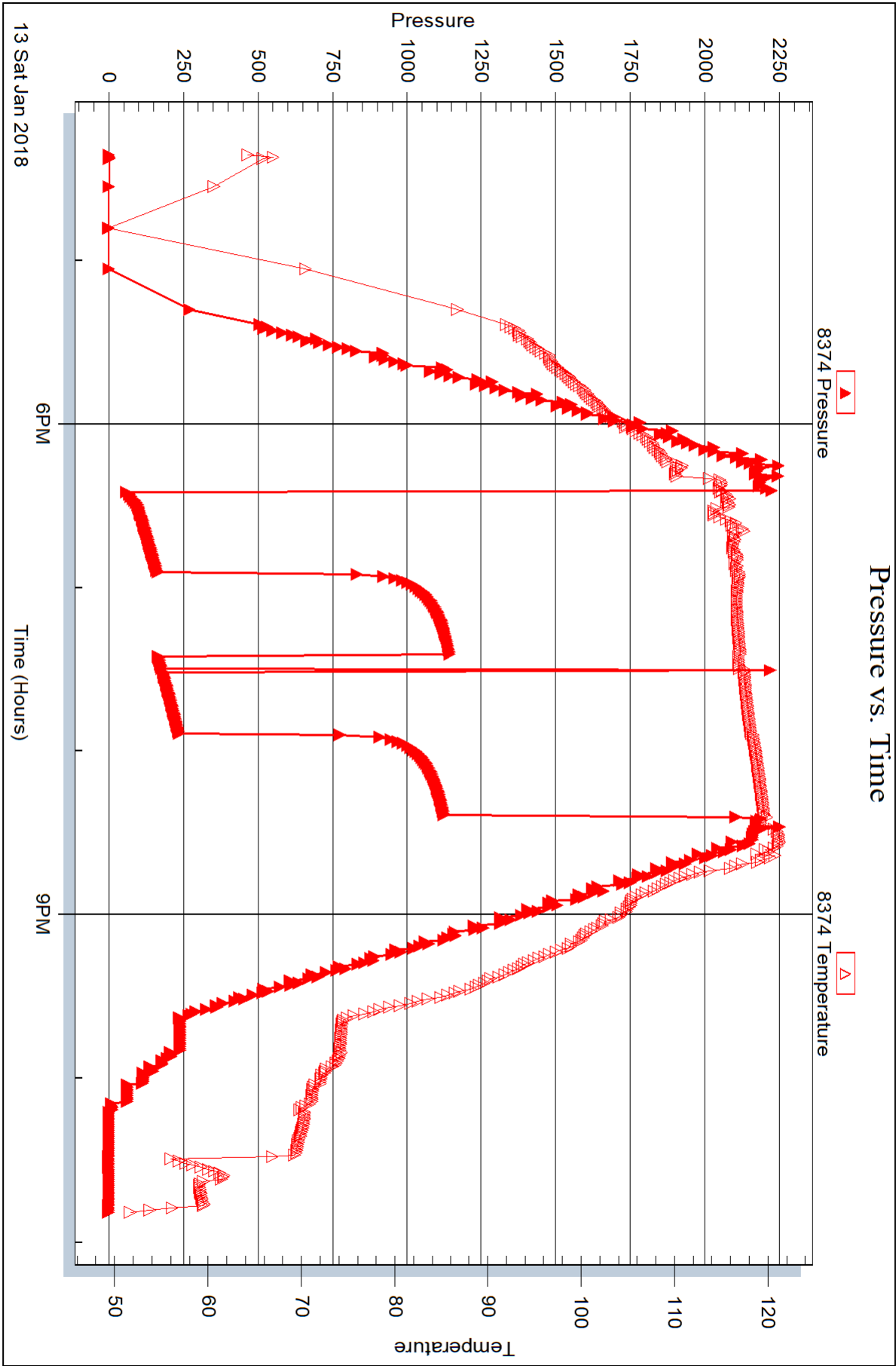


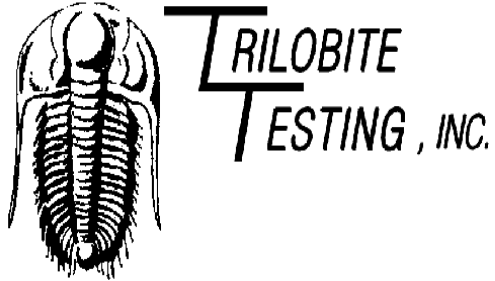
Serial #: 8374

Outside Ritchie Exploration Inc.

Beaton 6D #1

DST Test Number: 3





DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration Inc.**

8100 E. 22nd. St N #700
Box 783188
Wichita KS 67278

ATTN: Max Lovely

Beaton 6D #1

6-20s-30w Lane,KS

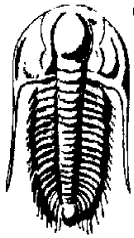
Start Date: 2018.01.14 @ 09:19:15

End Date: 2018.01.14 @ 16:40:30

Job Ticket #: 64412 DST #: 4

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

Printed: 2018.01.16 @ 10:25:58



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Ritchie Exploration Inc.

8100 E. 22nd. St N #700
Box 783188
Wichita KS 67278
ATTN: Max Lovely

6-20s-30w Lane, KS

Beaton 6D #1

Job Ticket: 64412

DST#: 4

Test Start: 2018.01.14 @ 09:19:15

GENERAL INFORMATION:

Formation: **Myric - Ft. Scott**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:47:00

Time Test Ended: 16:40:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Mike Roberts

Unit No: 81

Interval: 4500.00 ft (KB) To 4545.00 ft (KB) (TVD)

Total Depth: 4545.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 2009.00 ft (KB)

2004.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8672 Inside

Press@RunDepth: 21.98 psig @ 4540.00 ft (KB)

Start Date: 2018.01.14

End Date:

2018.01.14

Start Time: 09:19:15

End Time:

16:40:30

Capacity: 8000.00 psig

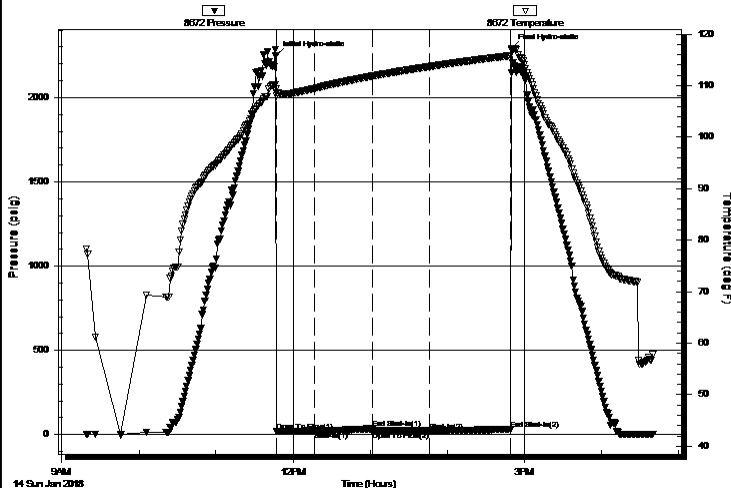
Last Calib.: 2018.01.14

Time On Btm: 2018.01.14 @ 11:46:45

Time Off Btm: 2018.01.14 @ 14:50:30

TEST COMMENT: IF: Built to 1/8" blow (Diesel)
IS: Very weak surface blow died in 20 min.
FF: No blow
FS: No return blow

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2250.35	109.41	Initial Hydro-static
1	20.07	107.96	Open To Flow (1)
30	21.40	109.45	Shut-In(1)
75	34.94	111.84	End Shut-In(1)
76	20.73	111.84	Open To Flow (2)
120	21.98	113.70	Shut-In(2)
183	28.91	115.80	End Shut-In(2)
184	2292.06	116.95	Final Hydro-static

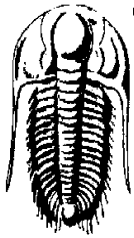
Recovery

Length (ft)	Description	Volume (bbl)
15.00	mud with oil spots	0.07

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Ritchie Exploration Inc.

8100 E. 22nd. St N #700
Box 783188
Wichita KS 67278
ATTN: Max Lovely

6-20s-30w Lane,KS

Beaton 6D #1

Job Ticket: 64412

DST#: 4

Test Start: 2018.01.14 @ 09:19:15

GENERAL INFORMATION:

Formation: **Myric - Ft. Scott**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:47:00

Time Test Ended: 16:40:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Mike Roberts

Unit No: 81

Interval: 4500.00 ft (KB) To 4545.00 ft (KB) (TVD)

Total Depth: 4545.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 2009.00 ft (KB)

2004.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8374 Outside

Press@RunDepth: psig @ 4540.00 ft (KB)

Start Date: 2018.01.14

End Date:

2018.01.14

Start Time: 09:19:15

End Time:

16:40:30

Capacity: 8000.00 psig

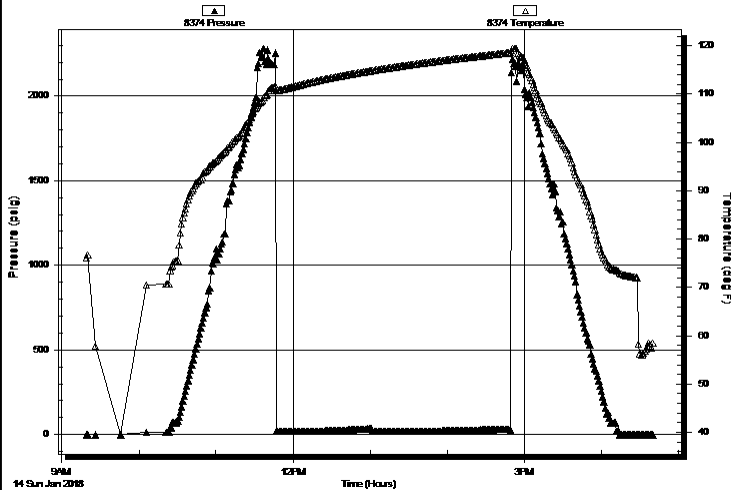
Last Calib.: 2018.01.14

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: Built to 1/8" blow (Diesel)
IS: Very weak surface blow died in 20 min.
FF: No blow
FS: No return blow

Pressure vs. Time



PRESSURE SUMMARY

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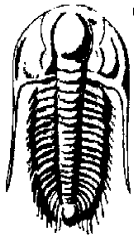
Recovery

Length (ft)	Description	Volume (bbl)
15.00	mud with oil spots	0.07

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration Inc.

6-20s-30w Lane,KS

8100 E. 22nd. St N #700
Box 783188
Wichita KS 67278
ATTN: Max Lovely

Beaton 6D #1

Job Ticket: 64412

DST#: 4

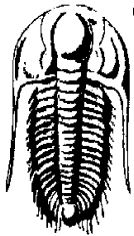
Test Start: 2018.01.14 @ 09:19:15

Tool Information

Drill Pipe:	Length: 4384.00 ft	Diameter: 3.80 inches	Volume: 61.50 bbl	Tool Weight:	1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose:	70000.00 lb
		Total Volume:	62.09 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	32.00 ft			String Weight: Initial	54000.00 lb
Depth to Top Packer:	4500.00 ft			Final	55000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	45.00 ft				
Tool Length:	73.00 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			4473.00	
Shut In Tool	5.00			4478.00	
Hydraulic tool	5.00			4483.00	
Jars	5.00			4488.00	
Safety Joint	3.00			4491.00	
Packer	5.00			4496.00	28.00 Bottom Of Top Packer
Packer	4.00			4500.00	
Stubb	1.00			4501.00	
Perforations	4.00			4505.00	
Change Over Sub	1.00			4506.00	
Drill Pipe	31.00			4537.00	
Change Over Sub	1.00			4538.00	
Perforations	2.00			4540.00	
Recorder	0.00	8672	Inside	4540.00	
Recorder	0.00	8374	Outside	4540.00	
Bullnose	5.00			4545.00	45.00 Bottom Packers & Anchor
Total Tool Length:	73.00				



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration Inc.

6-20s-30w Lane, KS

8100 E. 22nd. St N #700

Beaton 6D #1

Box 783188

Job Ticket: 64412

DST#: 4

Wichita KS 67278

Test Start: 2018.01.14 @ 09:19:15

ATTN: Max Lovely

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: 51.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.38 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	mud w ith oil spots	0.074

Total Length: 15.00 ft

Total Volume: 0.074 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

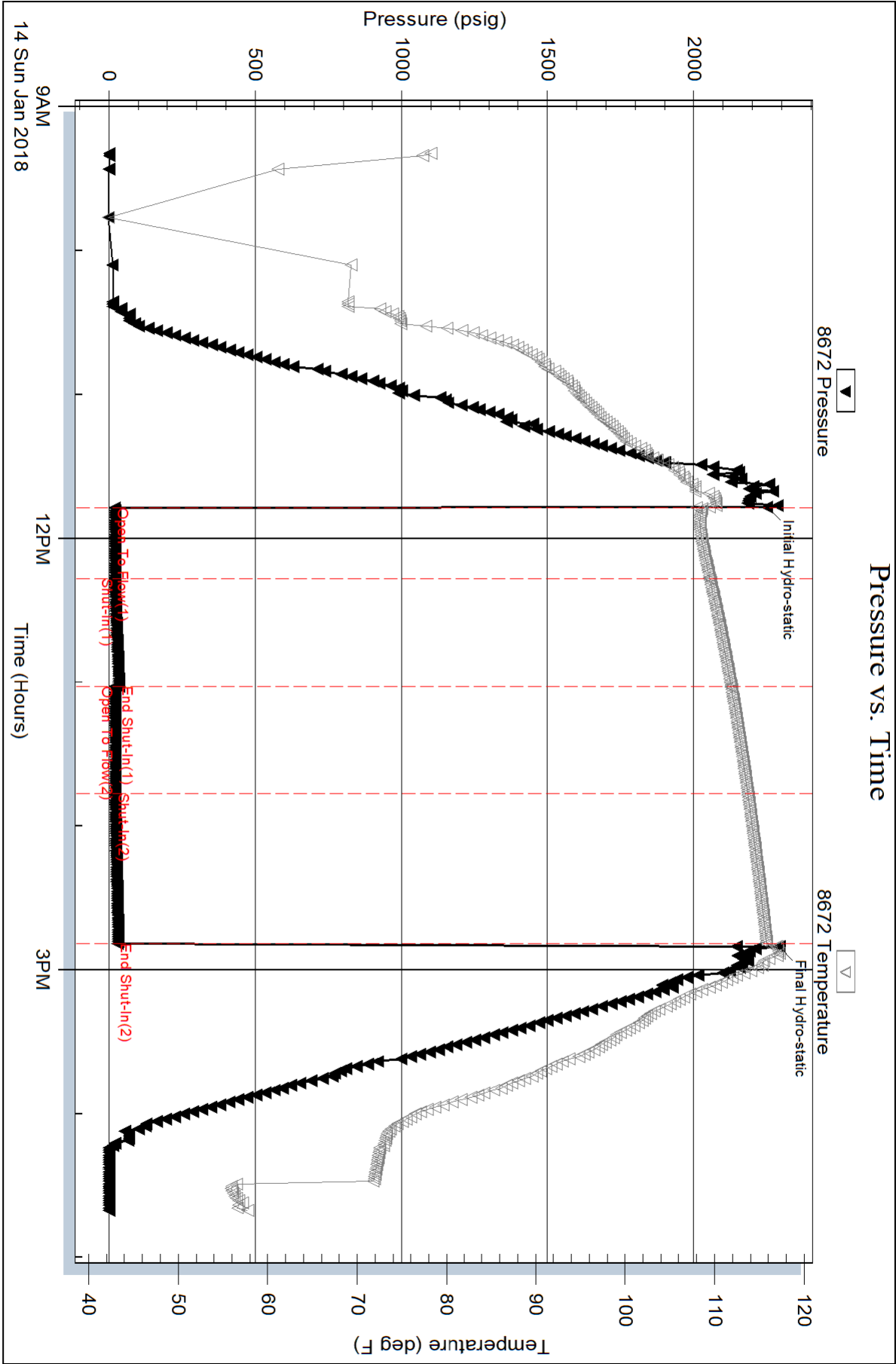
Serial #: 8672

Inside

Ritchie Exploration Inc.

Beaton 6D #1

DST Test Number: 4



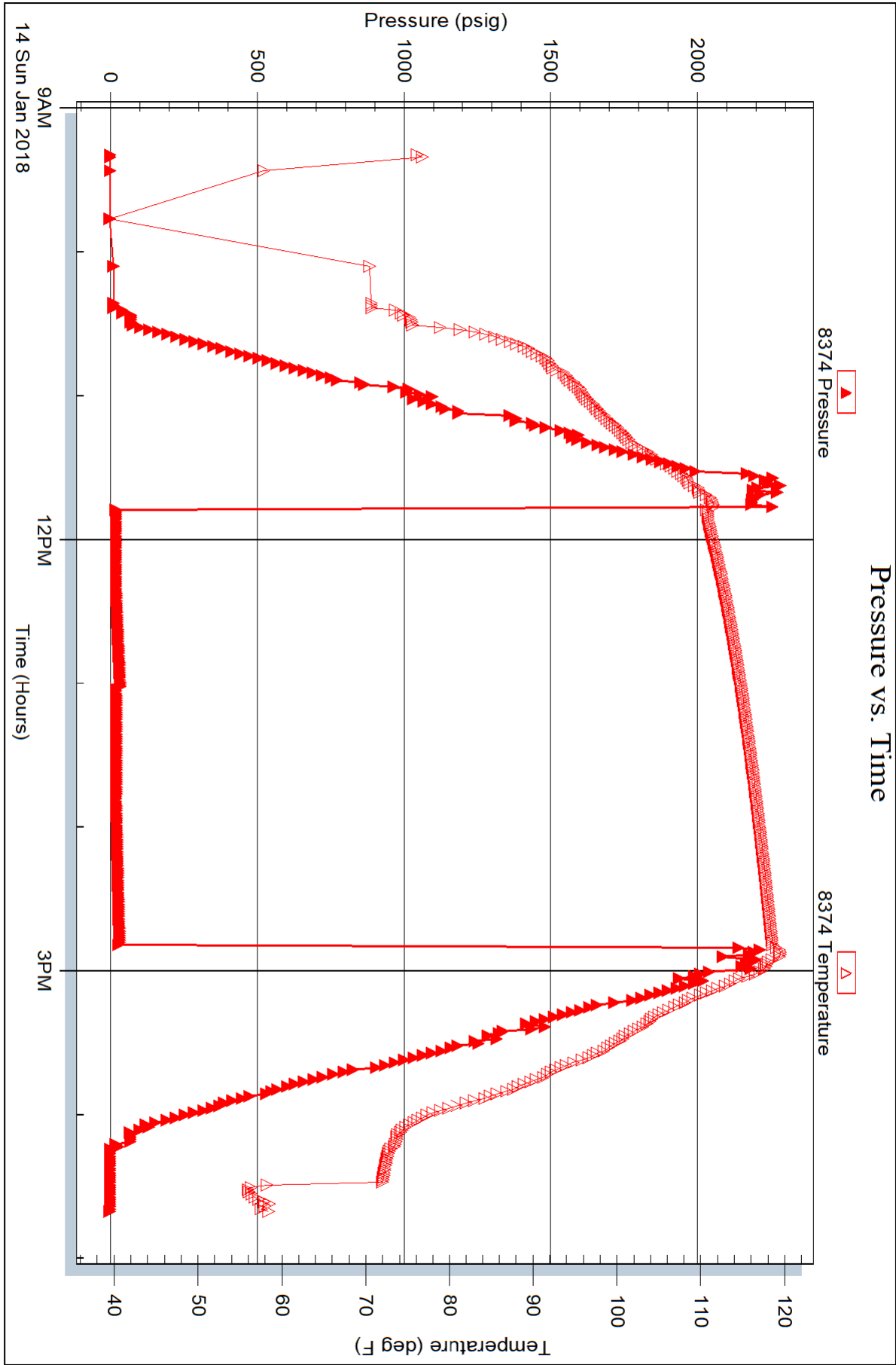
Serial #: 8374

Outside

Ritchie Exploration Inc.

Beaton 6D #1

DST Test Number: 4





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO.

64409

Well Name & No. #1 Beaton 6 D Test No. 1 Date 1-12-18
 Company Ritchie Exploration Inc Elevation 2009 KB 2004 GL
 Address 8100 E 22nd St. N. #700 Box 783188 Wichita KS 67278
 Co. Rep / Geo. MAX Lovely Rig WW12
 Location: Sec. 6 Twp. 20S Rge. 30W Co. LANE State KS

Interval Tested 4380-4438 Zone Tested Altamont A
 Anchor Length 58 Drill Pipe Run 4243 Mud Wt. 9.2
 Top Packer Depth 4375 Drill Collars Run 120 Vis 56
 Bottom Packer Depth 4380 Wt. Pipe Run Ø WL 6.4
 Total Depth 4438 Chlorides 2800 ppm System LCM 1

Blow Description IF: Weak Blow Died in 2 Min.
IS: No Return Blow
FF: No Blow -- Flushed Tool -- No Blow
FS: No Return Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>72</u>	<u>MUD with oil spots</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 72 BHT 123 Gravity — API RW — @ — F Chlorides — ppm

(A) Initial Hydrostatic <u>2247</u>	☒ Test <u>1150</u>	T-On Location <u>11:55</u>
(B) First Initial Flow <u>36</u>	☒ Jars <u>250</u>	T-Started <u>03:03</u>
(C) First Final Flow <u>59</u>	☒ Safety Joint <u>75</u>	T-Open <u>05:58</u>
(D) Initial Shut-In <u>1048</u>	☒ Circ Sub <u>NC</u>	T-Pulled <u>07:58</u>
(E) Second Initial Flow <u>61</u>	☐ Hourly Standby	T-Out <u>09:58</u>
(F) Second Final Flow <u>79</u>	☒ Mileage <u>46RT = \$34.50/-</u>	Comments
(G) Final Shut-In <u>1046</u>	☐ Sampler	
(H) Final Hydrostatic <u>2176</u>	☐ Straddle	

Initial Open <u>30</u>	☐ Shale Packer	☐ Ruined Shale Packer
Initial Shut-In <u>30</u>	☐ Extra Packer	☐ Ruined Packer
Final Flow <u>30</u>	☐ Extra Recorder	☐ Extra Copies
Final Shut-In <u>30</u>	☐ Day Standby	Sub Total <u>0</u>
	☐ Accessibility	Total <u>1509.50</u>
	Sub Total <u>1509.50</u>	MP/DST Disc't

Approved By _____ Our Representative Mike Roberts
 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. 64410

Well Name & No. #1 Beaton 6 D Test No. 2 Date 1-12-18
Company Ritchie Exploration Inc Elevation 2009 KB 2004 GL
Address 8100 E 22nd St. N #700 Box 78388 Wichita KS 67278
Co. Rep / Geo. MAX LOVELY Rig WW12
Location: Sec. 6 Twp. 20S Rge. 30W Co. Lane State KS

Interval Tested 4436-4450 Zone Tested Altamont B
Anchor Length 16 Drill Pipe Run 4295 Mud Wt. 9.4
Top Packer Depth 4431 Drill Collars Run 120 Vis 55
Bottom Packer Depth 4436 Wt. Pipe Run 0 WL 6.4
Total Depth 4450 Chlorides 3000 ppm System LCM 1

Blow Description IF: Built to 1" (Diesel)
IS: Weak surface Blow
FF: Built to 1/8" Blow (Diesel)
FS: No Return Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>mud with trace of oil</u>			<u>5</u>	

Rec Total 5 BHT 115 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic	(B) First Initial Flow	(C) First Final Flow	(D) Initial Shut-In	(E) Second Initial Flow	(F) Second Final Flow	(G) Final Shut-In	(H) Final Hydrostatic
<u>2204</u>	<u>16</u>	<u>17</u>	<u>25</u>	<u>16</u>	<u>18</u>	<u>23</u>	<u>2180</u>

☒ Test 1150
☒ Jars 250
☒ Safety Joint 75
☒ Circ Sub NC
☐ Hourly Standby
☐ Mileage 46 RT = \$34.50/-
☐ Sampler
☐ Straddle
☐ Shale Packer
☐ Extra Packer
☐ Extra Recorder
☐ Day Standby
☐ Accessibility
Sub Total 1509.50

T-On Location 15:00
T-Started 19:13
T-Open 21:33
T-Pulled 00:33
T-Out
Comments
☐ Ruined Shale Packer
☐ Ruined Packer
☐ Extra Copies
Sub Total 0
Total 1509.50
MP/DST Disc't

Initial Open 30
Initial Shut-In 45
Final Flow 45
Final Shut-In 60

Approved By [Signature]

Our Representative [Signature]

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. **64411**

Well Name & No. #1 Beaton 6 D Test No. 3 Date 1-13-18
 Company Ritchie Exploration Inc Elevation 2009 KB 2004 GL
 Address 8100 E 22nd St. N. #700 Box 783188 Wichita 67278
 Co. Rep / Geo. MAX LOVELLY Rig LW12
 Location: Sec. 6 Twp. 20S Rge. 30W Co. LANE State KS

Interval Tested 4448-4506 Zone Tested Atamont C- Pawnee
 Anchor Length 58 Drill Pipe Run 4323 Mud Wt. 9.2
 Top Packer Depth 4443 Drill Collars Run 120 Vis 51
 Bottom Packer Depth 4448 Wt. Pipe Run Ø WL 6.4
 Total Depth 4506 Chlorides 3000 ppm System LCM 2

Blow Description IF: Weak Surface Blow Died in 3 Min.
IS! No Return Blow
FF: No Blow -- Flushed Tool -- No Blow
FS! No Return Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>184</u>	<u>MUD</u>			<u>100</u>	
<u>60</u>	<u>MCW</u>			<u>95</u>	<u>5</u>

Rec Total 244 BHT 118 Gravity — API RW 474 @ 45.7°F Chlorides 23000 ppm

(A) Initial Hydrostatic 2224
 (B) First Initial Flow 52
 (C) First Final Flow 165
 (D) Initial Shut-In 1144
 (E) Second Initial Flow 167
 (F) Second Final Flow 237
 (G) Final Shut-In 1123
 (H) Final Hydrostatic 2222

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

☒ Test 1150
☒ Jars 250
☒ Safety Joint 75 NC
☒ Circ Sub
☐ Hourly Standby
☒ Mileage 46 RT = \$34.50/-
☐ Sampler
☐ Straddle
☐ Shale Packer
☐ Extra Packer
☐ Extra Recorder
☐ Day Standby
☐ Accessibility
 Sub Total 1509.50

T-On Location 14:20
 T-Started ~~15:20~~ 16:21
 T-Open 18:24
 T-Pulled 20:24
 T-Out 22:49
 Comments
☐ Ruined Shale Packer
☐ Ruined Packer
☐ Extra Copies
 Sub Total 0
 Total 1509.50
 MP/DST Disc't

Approved By Max Lovelly

Our Representative Mike Rolats

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. 64412

Well Name & No. #1 Beaton 6 D Test No. 4 Date 1-14-18
 Company Ritchie Exploration Inc. Elevation 2009 KB 2004 GL
 Address 8100 E. 22nd St. N #700 Box 783188 Wichita KS 67278
 Co. Rep / Geo. MAX LOVELY Rig WW12
 Location: Sec. 6 Twp. 20S Rge. 30W Co. LANE State KS

Interval Tested 4500-4545 Zone Tested Myrick - Ft. Scott
 Anchor Length 45 Drill Pipe Run 4384 Mud Wt. 9.2
 Top Packer Depth 4495 Drill Collars Run 120 Vis 51
 Bottom Packer Depth 4500 Wt. Pipe Run 0 WL 6.4
 Total Depth 4545 Chlorides 3000 ppm System LCM 1
 Blow Description IF: Built to 1/8" Blow (Diesel)
IS: Very weak surface Blow Died in 20 Min.
FF: No Blow
FS: No Return Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>15</u>	<u>MVD oil spots</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 15 BHT 121 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic <u>2250</u>	☒ Test <u>1150</u>	T-On Location <u>07:50</u>
(B) First Initial Flow <u>20</u>	☒ Jars <u>250</u>	T-Started <u>09:19</u>
(C) First Final Flow <u>21</u>	☒ Safety Joint <u>75</u>	T-Open <u>11:47</u>
(D) Initial Shut-In <u>34</u>	☒ Circ Sub <u>NC</u>	T-Pulled <u>14:47</u>
(E) Second Initial Flow <u>20</u>	☐ Hourly Standby	T-Out <u>16:40</u>
(F) Second Final Flow <u>21</u>	☒ Mileage <u>46.2T = #34.50/-</u> 69	Comments <u>loaded tools 1/16 8:00</u>
(G) Final Shut-In <u>28</u>	☐ Sampler	
(H) Final Hydrostatic <u>2292</u>	☐ Straddle	☐ Ruined Shale Packer

Initial Open 30
 Initial Shut-In 45
 Final Flow 45
 Final Shut-In 60

☐ Shale Packer
☐ Extra Packer
☐ Extra Recorder
☐ Day Standby 1.5d 3.25h
☐ Accessibility
 Sub Total 1544

☐ Ruined Packer
☐ Extra Copies
 Sub Total 800
 Total 2344
 MP/DST Disc't

Approved By MLP

Our Representative Mike Roberts

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.



#1 Beaton 6D

2225' FSL & 2035' FEL

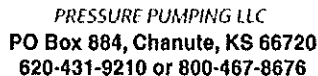
85' S & 55' W of N/2 NW SE Section 6-20S-30W

Lane County, Kansas

API# 15-101-22598-0000

Elevation: GL: 2901', KB: 2909'

Sample Tops			Ref. Well
Anhydrite	2223'	+686	-21
B/Anhydrite	2244'	+665	-25
Stotler	3536'	-627	-12
Heebner	3932'	-1023	-9
Toronto	3946'	-1037	-11
Lansing	3980'	-1071	-13
Muncie	4164'	-1255	-14
Stark	4280'	-1371	-15
Hush	4312'	-1403	-10
BKC	4345'	-1445	-11
Marmaton	4392'	-1483	-11
Altamont	4402'	-1493	-11
Pawnee	4482'	-1573	-9
Myrick	4511'	-1602	-7
Ft. Scott	4525'	-1616	-7
Cherokee	4546'	-1637	-7
Johnson	4585'	-1676	-5
Mississippian	4612'	-1703	-6
RTD	4750'	-1841	


$$\begin{array}{r} 9818 \\ \hline 9714 \end{array}$$

TICKET NUMBER 54992
LOCATION Oakley KS
FOREMAN Jerry Y

FIELD TICKET & TREATMENT REPORT CEMENT

Invoice #812189 /KS

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
1-5-18	7173	Beaton 6D #1	6	20S	30W	Lanc
CUSTOMER						
Ritchie Exp			Grigston E to 1/2 mile			
MAILING ADDRESS			TRUCK #	DRIVER	TRUCK #	DRIVER
P.O. BOX 783188			731	Cory D		
			530-T-129	PD 6		
CITY	STATE	ZIP CODE				
Wichita	KS	67278-3188				

JOB TYPE <u>surface</u>	HOLE SIZE <u>12 1/4</u>	HOLE DEPTH <u>221</u>	CASING SIZE & WEIGHT <u>8 7/8 23.8</u>
CASING DEPTH <u>221</u>	DRILL PIPE _____	TUBING _____	OTHER _____
SLURRY WEIGHT <u>15.2</u>	SLURRY VOL <u>1.24</u>	WATER gal/sk _____	CEMENT LEFT In CASING <u>20'</u>
DISPLACEMENT <u>12 1/2 bbl</u>	DISPLACEMENT PSI _____	MIX PSI _____	RATE _____
REMARKS: <u>Safety meeting drig up on W 12 circulate casing mix 165 sks com 38 CC</u> <u>2 1/2 gal wash up & displace with 12 1/2 bbl fresh water & shut in. Circulated approx</u> <u>2 bbl to pit</u>			

cement did
circulate

Thank you
Jerry & crew

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CE0471 ✓	1	PUMP CHARGE	1150.00	1150.00
CE0002 ✓	45	MILEAGE	7.15	321.75
CE0711 ✓	7.76	tow mileage delivery (min)	660.00	660.00
CC5871 ✓	165 sks	surface blend JT	24.00	3960.00
			subtotal	6091.75
			-30%	1827.5
			subtotal	4264.2
			Sales Tax	207.90
			ESTIMATED TOTAL	4472.13

Bayin 3737

AUTHORIZATION

TITLE

DATE _____

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.

PRESSURE PUMPING LLC
PO Box 884, Chanute, KS 66720
620-431-9210 or 800-467-8676

FIELD TICKET & TREATMENT REPORT

CEMENT

TICKET NUMBER 54982
LOCATION Oakley US
FOREMAN Miles Snow

Invoice #812245

DATE	CUSTOMER #	WELL NAME & NUMBER		SECTION	TOWNSHIP	RANGE	COUNTY
7/1/86 7/1/86	7173	Beaton 4D #1		6	20 S	30W	Lang
CUSTOMER Rickie Ex/Production				Scot City Eastern Arkansas Rd STARKCO W. J. Info			
MAILING ADDRESS P.O. Box 783188				TRUCK #	DRIVER	TRUCK #	DRIVER
				753	Trause W		
				566	Keith C		
CITY Wichita							
STATE KS		ZIP CODE 67278-3188					

JOB TYPE <u>PTA</u>	HOLE SIZE <u>7 7/8"</u>	HOLE DEPTH <u>4750'</u>	CASING SIZE & WEIGHT _____
CASING DEPTH _____	DRILL PIPE <u>4 1/2"</u>	TUBING _____	OTHER _____
SLURRY WEIGHT <u>14.2</u>	SLURRY VOL <u>1.4</u>	WATER gal/sk _____	CEMENT LEFT In CASING _____
DISPLACEMENT _____	DISPLACEMENT PSI _____	MIX PSI _____	RATE _____

REMARKS: Safety meeting and Rig up on W/W Drilling Rig #12 Plug 95 ordered

1st plug	50 sx @	2720'	
2nd plug	80 sx @	1470'	
3rd plug	50 sx @	720'	
4th plug	50 sx @	270'	280 sx 60 1/2" poz 48" sd 1/4" # Flt 5-rod
5th plug	20 sx @	60'	
1st	30 sx		

Thanks Mates & Crew

[illegible]

Rayin 3737

AUTHORIZATION

TITLE

DATE 1-14-18

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.

Max R. Lovely

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY **Richie Exploration**

LEASE #1 **Beaton 6D**

FIELD **Wildcat FSL 2035 FEL**

LOCATION **2225 FSL 2035 FEL**

SEC **6** TWP **20** RGE **30W**

COUNTY **Lane** STATE **KS**

CONTRACTOR **WV #12**

SPUD **1-4-18** COM **1-16-18**

RTD **4750** LTD **4749**

MUD **UP 3506** TYPE **MUD Chem**

FORMATION TOPS AND STRUCTURAL POSITION

FORMATION

Sample TOP LOG TOP DATA

ANHYDRITE 686 2218 691 707 682

Base Anhydrite 689 2234 675 690 686 677

Stotler 687 3532 623 615 616 632

Heabner 1025 3831 1022 1014 1012 1038

Stark 1071 3876 1067 1058 1058 1080

Stark 1369 4366 1359 1356 1353 1376

BKC 1483 4506 1483 1483 1483 1486

Marathon 1482 4500 1481 1482 1478 1512

Plains 1482 4500 1481 1482 1478 1512

El Scott 1573 4478 1569 1564 1548 1587

Cherokee SH 1616 4522 1613 1609 1593 1632

Johnson 1636 4543 1634 1630 1614 1653

Mississippian 1676 4580 1671 1671 1655 1726

REFERENCE WELLS FOR STRUCTURE

A Shakespear #1 Goering 1580 FNL 380 FSL 5-20-30W

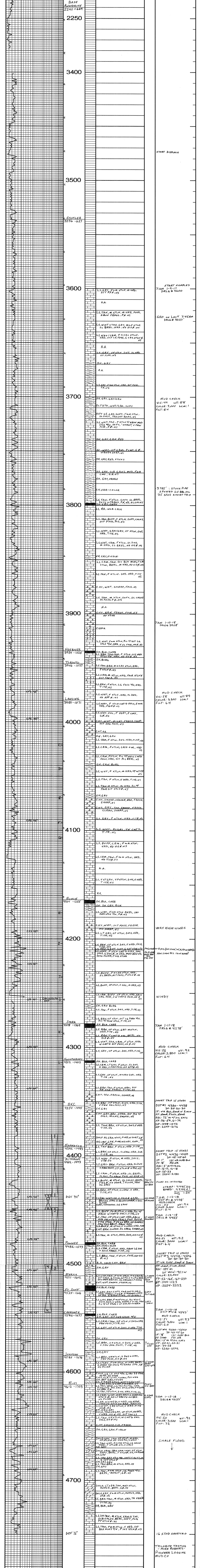
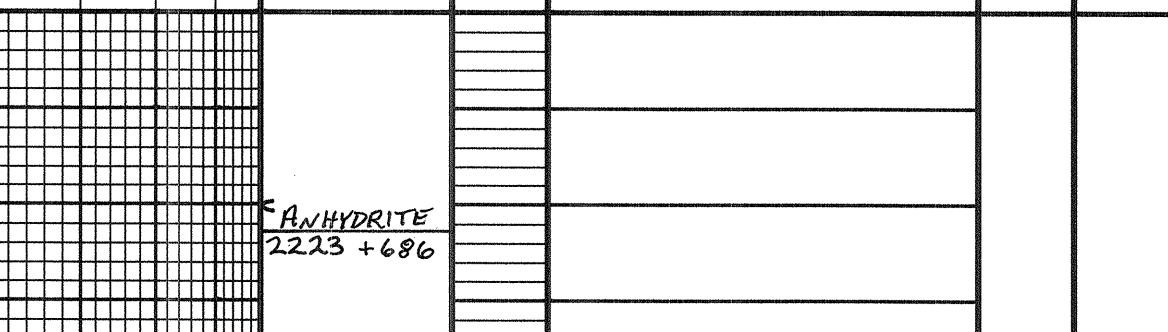
B Eicher #1 Anderton 1980 FNL 2200 FSL 32-19-30W

C Eicher #1 Beasley 1505 S of C NE SE -20-30W

REMARKS

077 007

LEGEND



START DISPLACE

START SAMPLES

START DISPLACE

START SAMPLES

START DISPLACE

START SAMPLES

START DISPLACE

START SAMPLES