



DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration, Inc.**

PO Box 783188
Wichita, KS 67278

ATTN: Adam Eldani

Baker #2-13 CD

13-17s-35w Wichita,KS

Start Date: 2013.11.08 @ 14:40:00

End Date: 2013.11.08 @ 21:25:39

Job Ticket #: 55545 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.11.19 @ 10:06:17

Ritchie Exploration, Inc.

13-17s-35w Wichita,KS

Baker #2-13 CD

DST # 1

Toronto - LKC 'A'

2013.11.08



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Ritchie Exploration, Inc.

13-17s-35w Wichita, KS

PO Box 783188
Wichita, KS 67278

Baker #2-13 CD

Job Ticket: 55545

DST#: 1

ATTN: Adam Eldani

Test Start: 2013.11.08 @ 14:40:00

GENERAL INFORMATION:

Formation: **Toronto - LKC 'A'**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:21:50

Time Test Ended: 21:25:39

Test Type: Conventional Bottom Hole (Initial)

Tester: Chuck Smith

Unit No: 62

Interval: 3989.00 ft (KB) To 4084.00 ft (KB) (TVD)

Total Depth: 4084.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3149.00 ft (KB)

3144.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6741 Inside

Press@RunDepth: 350.75 psig @ 4016.00 ft (KB)

Start Date: 2013.11.08

End Date:

2013.11.08

Start Time: 14:40:02

End Time:

21:25:40

Capacity: 8000.00 psig

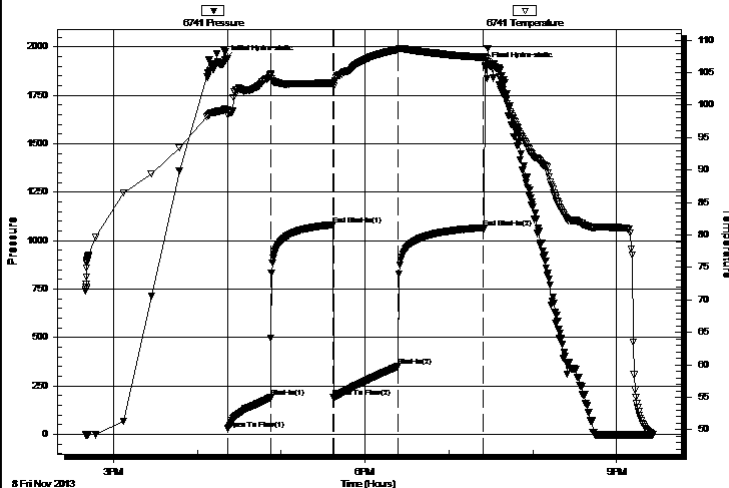
Last Calib.: 2013.11.08

Time On Btm: 2013.11.08 @ 16:19:50

Time Off Btm: 2013.11.08 @ 19:25:40

TEST COMMENT: B.O.B. @ 10 min.
No return.
B.O.B. @ 14 min.
No return.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1933.03	99.37	Initial Hydro-static
2	28.02	98.44	Open To Flow (1)
33	189.38	104.61	Shut-In(1)
78	1082.28	103.38	End Shut-In(1)
78	189.66	102.93	Open To Flow (2)
124	350.75	108.55	Shut-In(2)
185	1067.17	107.36	End Shut-In(2)
186	1900.21	107.53	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
183.00	MW 10m 90w	1.46
186.00	MW 35m 65w	2.61
231.00	WM 35w 65m	3.24

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Ritchie Exploration, Inc.

13-17s-35w Wichita, KS

PO Box 783188
Wichita, KS 67278

Baker #2-13 CD

Job Ticket: 55545

DST#: 1

ATTN: Adam Eldani

Test Start: 2013.11.08 @ 14:40:00

GENERAL INFORMATION:

Formation: **Toronto - LKC 'A'**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:21:50

Time Test Ended: 21:25:39

Test Type: Conventional Bottom Hole (Initial)

Tester: Chuck Smith

Unit No: 62

Interval: 3989.00 ft (KB) To 4084.00 ft (KB) (TVD)

Total Depth: 4084.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3149.00 ft (KB)

3144.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6751 Outside

Press@RunDepth: psig @ 4016.00 ft (KB)

Start Date: 2013.11.08

End Date:

2013.11.08

Start Time: 14:40:02

End Time:

21:25:40

Capacity: 8000.00 psig

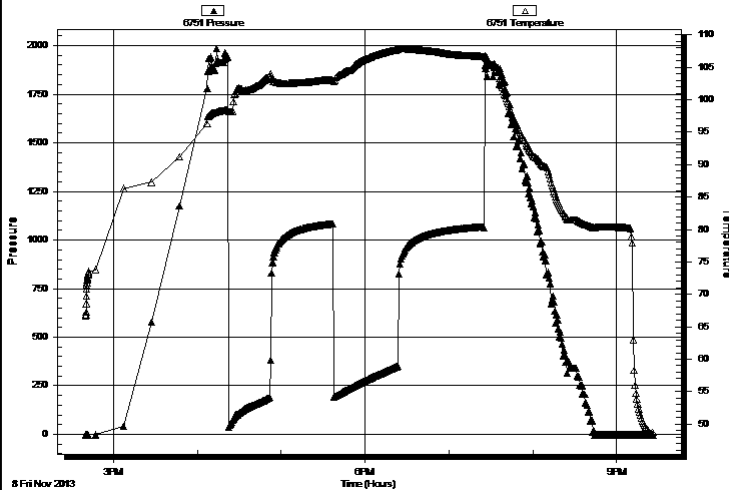
Last Calib.: 2013.11.08

Time On Btm:

Time Off Btm:

TEST COMMENT: B.O.B. @ 10 min.
No return.
B.O.B. @ 14 min.
No return.

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
183.00	MW 10m 90w	1.46
186.00	MW 35m 65w	2.61
231.00	WM 35w 65m	3.24

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration, Inc.

13-17s-35w Wichita, KS

PO Box 783188
Wichita, KS 67278

Baker #2-13 CD

Job Ticket: 55545

DST#: 1

ATTN: Adam Eldani

Test Start: 2013.11.08 @ 14:40:00

Tool Information

Drill Pipe:	Length: 3848.00 ft	Diameter: 3.80 inches	Volume: 53.98 bbl	Tool Weight: 2300.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: inches	Volume: 0.00 bbl	Weight set on Packer: 22000.00 lb
Drill Collar:	Length: 121.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 80000.00 lb
		Total Volume:	54.58 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.50 ft			String Weight: Initial 54000.00 lb
Depth to Top Packer:	3989.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	95.00 ft			
Tool Length:	122.50 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			3962.50	
Shut In Tool	5.00			3967.50	
Hydraulic tool	5.00			3972.50	
Jars	5.00			3977.50	
Safety Joint	2.50			3980.00	
Packer	5.00			3985.00	27.50 Bottom Of Top Packer
Packer	4.00			3989.00	
Stubb	1.00			3990.00	
Perforations	26.00			4016.00	
Recorder	0.00	6741	Inside	4016.00	
Recorder	0.00	6751	Outside	4016.00	
Change Over Sub	1.00			4017.00	
Drill Pipe	63.00			4080.00	
Change Over Sub	1.00			4081.00	
Bullnose	3.00			4084.00	95.00 Bottom Packers & Anchor

Total Tool Length: 122.50



TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration, Inc.

13-17s-35w Wichita,KS

PO Box 783188
Wichita, KS 67278

Baker #2-13 CD

Job Ticket: 55545

DST#: 1

ATTN: Adam Eldani

Test Start: 2013.11.08 @ 14:40:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 54.00 sec/qt

Water Loss: 7.17 in³

Resistivity: ohm.m

Salinity: 3200.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity: 86000 ppm

deg API

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
183.00	MW 10m 90w	1.465
186.00	MW 35m 65w	2.609
231.00	WM 35w 65m	3.240

Total Length: 600.00 ft Total Volume: 7.314 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW: .142 @ 45 Degrees F = 86000 PPM

Serial #: 6741

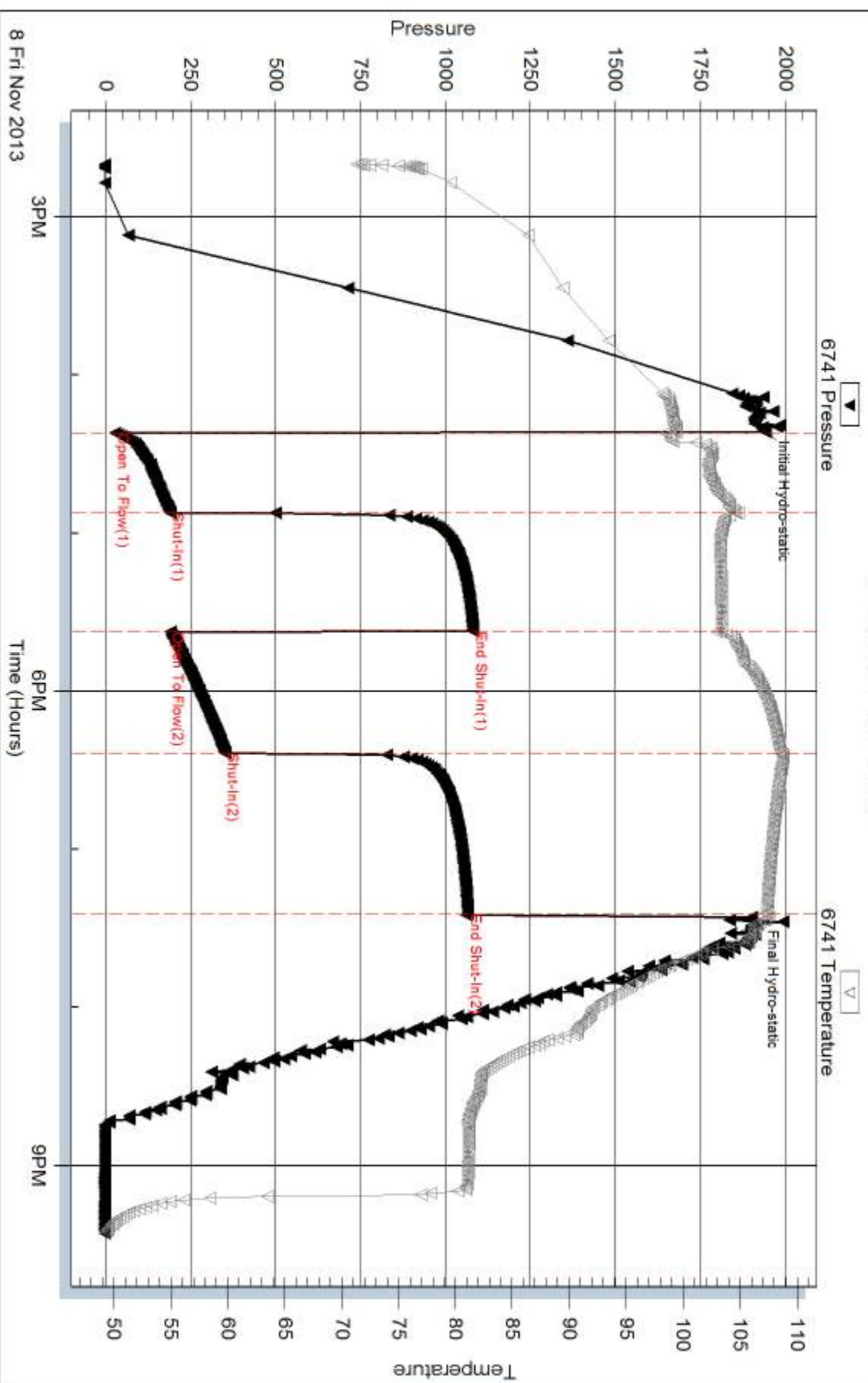
Inside

Ritchie Exploration, Inc.

Baker #2-13 CD

DST Test Number: 1

Pressure vs. Time

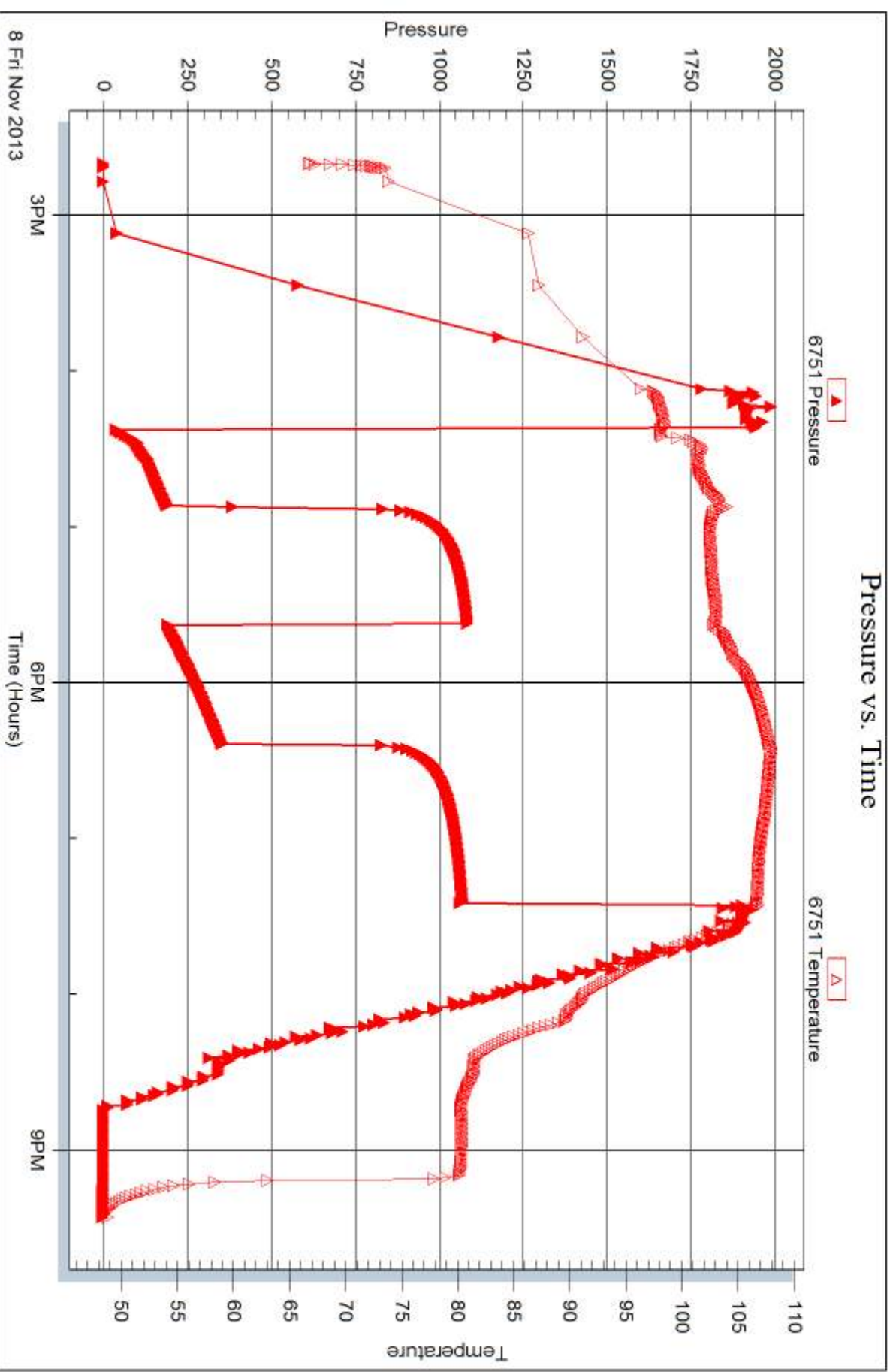


Serial #: 6751

Outside Ritchie Exploration, Inc.

Baker #2-13 CD

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration, Inc.**

PO Box 783188
Wichita, KS 67278

ATTN: Adam Eldani

Baker #2-13 CD

13-17s-35w Wichita,KS

Start Date: 2013.11.09 @ 11:16:00

End Date: 2013.11.09 @ 18:20:39

Job Ticket #: 55546 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.11.19 @ 10:05:50

Ritchie Exploration, Inc.

13-17s-35w Wichita,KS

Baker #2-13 CD

DST # 2

LKC 'C,D,E,F'

2013.11.09



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Ritchie Exploration, Inc.

13-17s-35w Wichita, KS

PO Box 783188
Wichita, KS 67278

Baker #2-13 CD

Job Ticket: 55546

DST#: 2

ATTN: Adam Eldani

Test Start: 2013.11.09 @ 11:16:00

GENERAL INFORMATION:

Formation: **LKC 'C,D,E,F'**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:21:40

Time Test Ended: 18:20:39

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Smith

Unit No: 62

Interval: 4077.00 ft (KB) To 4163.00 ft (KB) (TVD)

Total Depth: 4163.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3149.00 ft (KB)

3144.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6741 Inside

Press@RunDepth: 268.64 psig @ 4095.00 ft (KB)

Start Date: 2013.11.09

End Date:

2013.11.09

Start Time: 11:16:02

End Time:

18:20:40

Capacity: 8000.00 psig

Last Calib.: 2013.11.09

Time On Btm: 2013.11.09 @ 13:20:00

Time Off Btm: 2013.11.09 @ 16:24:09

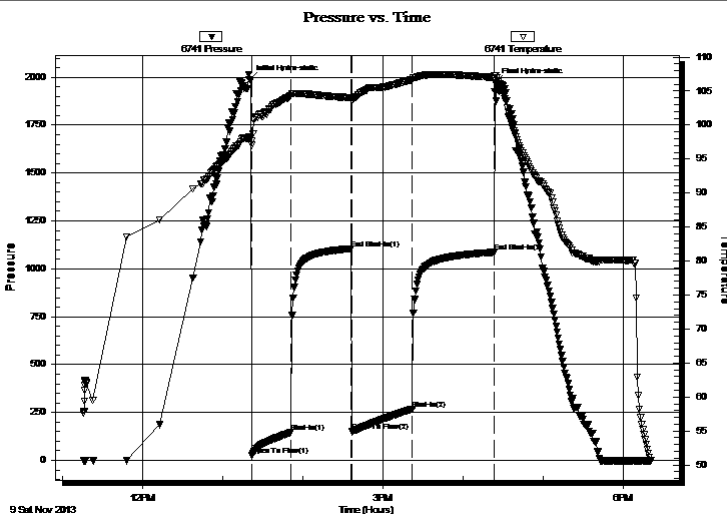
TEST COMMENT: B.O.B. @ 14 1/2 min.

No return.

B.O.B. @ 19 min.

No return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1988.91	98.20	Initial Hydro-static
2	23.85	97.02	Open To Flow (1)
32	146.53	104.37	Shut-In(1)
77	1105.03	104.04	End Shut-In(1)
77	149.85	103.61	Open To Flow (2)
122	268.64	106.69	Shut-In(2)
183	1086.41	107.02	End Shut-In(2)
185	1970.81	107.23	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
216.00	OSMW 10m 90w	1.93
218.00	OSMW 40m 60w	3.06
109.00	OCWM 5o 10w 85m	1.53
15.00	O 100o	0.21

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.

13-17s-35w Wichita, KS

PO Box 783188
Wichita, KS 67278

Baker #2-13 CD

Job Ticket: 55546

DST#: 2

ATTN: Adam Eldani

Test Start: 2013.11.09 @ 11:16:00

GENERAL INFORMATION:

Formation: **LKC 'C,D,E,F'**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:21:40

Time Test Ended: 18:20:39

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Smith

Unit No: 62

Interval: 4077.00 ft (KB) To 4163.00 ft (KB) (TVD)

Total Depth: 4163.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3149.00 ft (KB)

3144.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6751 Outside

Press@RunDepth: psig @ 4095.00 ft (KB)

Start Date: 2013.11.09

End Date:

2013.11.09

Start Time: 11:15:52

End Time:

18:20:39

Capacity: 8000.00 psig

Last Calib.: 2013.11.09

Time On Btm:

Time Off Btm:

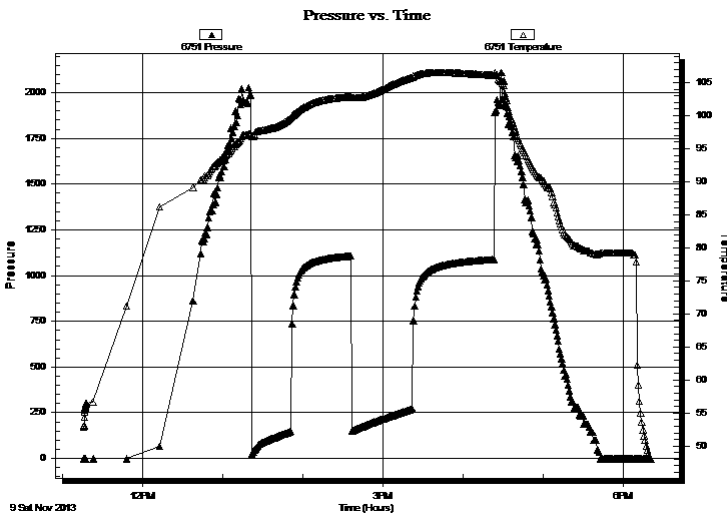
TEST COMMENT: B.O.B. @ 14 1/2 min.

No return.

B.O.B. @ 19 min.

No return.

PRESSURE SUMMARY



Time
(Min.)

Pressure
(psig)

Temp
(deg F)

Annotation

Recovery

Length (ft)	Description	Volume (bbl)
216.00	OSMW 10m 90w	1.93
218.00	OSMW 40m 60w	3.06
109.00	OCWM 5o 10w 85m	1.53
15.00	O 100o	0.21

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.

13-17s-35w Wichita, KS

PO Box 783188
Wichita, KS 67278

Baker #2-13 CD

Job Ticket: 55546

DST#: 2

ATTN: Adam Eldani

Test Start: 2013.11.09 @ 11:16:00

Tool Information

Drill Pipe:	Length:	3943.00 ft	Diameter:	3.80 inches	Volume:	55.31 bbl	Tool Weight:	2100.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	inches	Volume:	0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length:	121.00 ft	Diameter:	2.25 inches	Volume:	0.60 bbl	Weight to Pull Loose:	75000.00 lb
					Total Volume:	55.91 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		9.50 ft					String Weight: Initial	60000.00 lb
Depth to Top Packer:		4077.00 ft					Final	62000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		86.00 ft						
Tool Length:		108.50 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			4055.50	
Shut In Tool	5.00			4060.50	
Hydraulic tool	5.00			4065.50	
Safety Joint	2.50			4068.00	
Packer	5.00			4073.00	22.50 Bottom Of Top Packer
Packer	4.00			4077.00	
Stubb	1.00			4078.00	
Perforations	17.00			4095.00	
Recorder	0.00	6741	Inside	4095.00	
Recorder	0.00	6751	Outside	4095.00	
Change Over Sub	1.00			4096.00	
Drill Pipe	63.00			4159.00	
Change Over Sub	1.00			4160.00	
Bullnose	3.00			4163.00	86.00 Bottom Packers & Anchor

Total Tool Length: 108.50



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration, Inc.

13-17s-35w Wichita,KS

PO Box 783188
Wichita, KS 67278

Baker #2-13 CD

Job Ticket: 55546

DST#: 2

ATTN: Adam Eldani

Test Start: 2013.11.09 @ 11:16:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 59.00 sec/qt

Water Loss: 9.56 in³

Resistivity: ohm.m

Salinity: 5400.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

29 deg API

70000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
216.00	OSMW 10m 90w	1.928
218.00	OSMW 40m 60w	3.058
109.00	OCWM 5o 10w 85m	1.529
15.00	O 100o	0.210

Total Length: 558.00 ft

Total Volume: 6.725 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: API: 29 @ 60 Degrees F = 29. RW: . 165 @ 47 Degrees F = 70000 PPM

Serial #: 6741

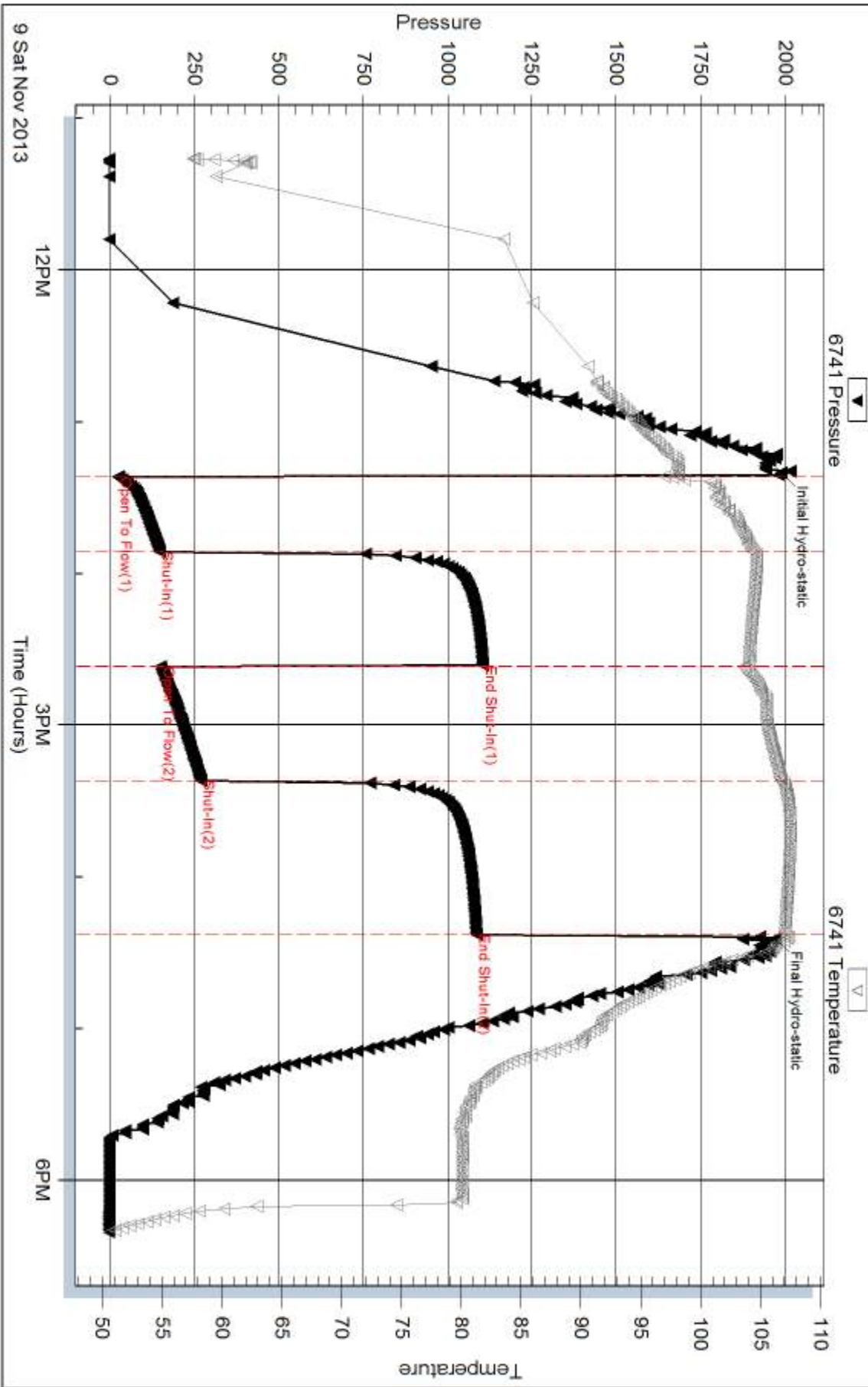
Inside

Ritchie Exploration, Inc.

Baker #2-13 CD

DST Test Number: 2

Pressure vs. Time

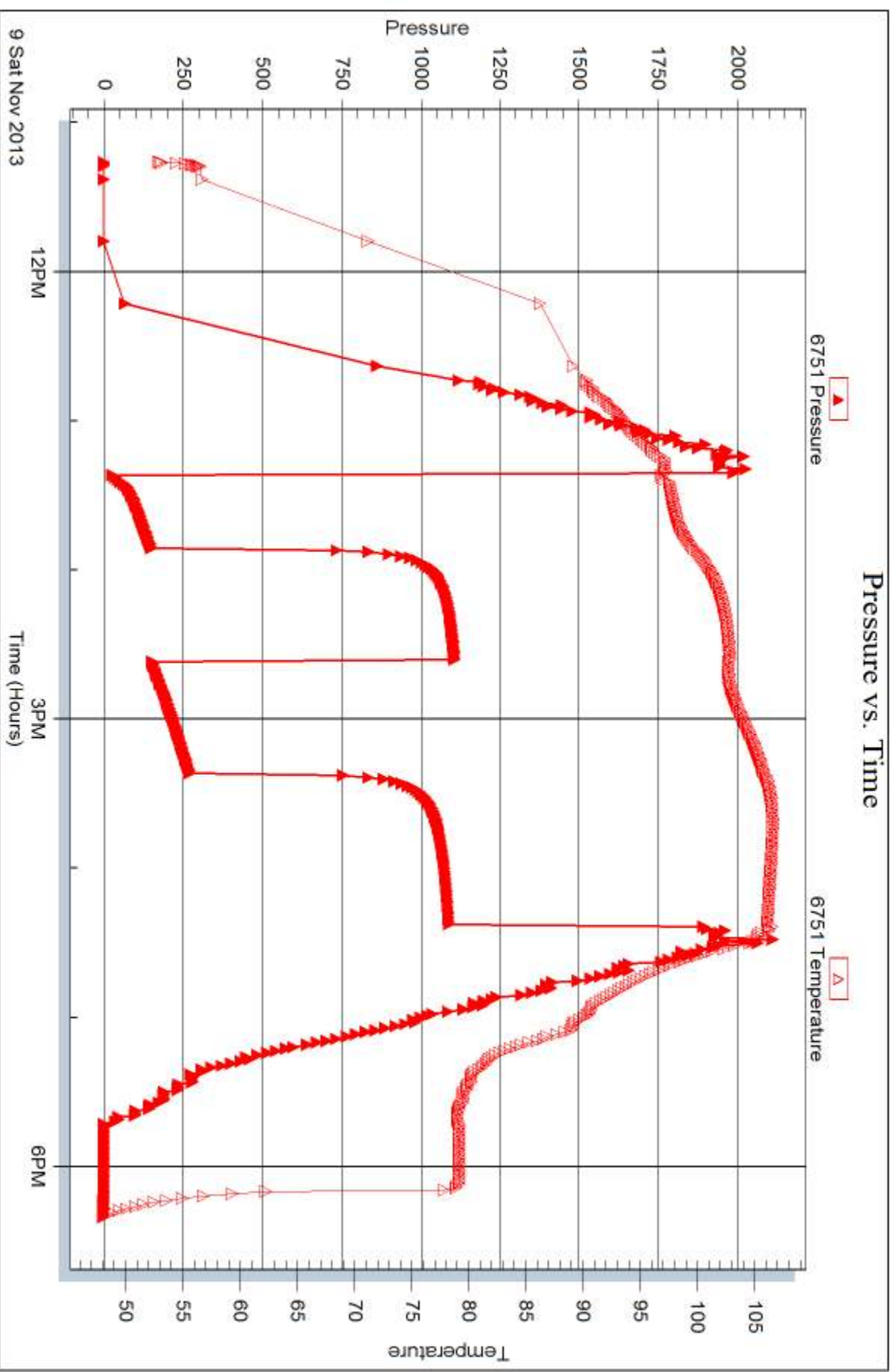


Serial #: 6751

Outside Ritchie Exploration, Inc.

Baker #2-13 CD

DST Test Number: 2





DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration, Inc.**

PO Box 783188
Wichita, KS 67278

ATTN: Adam Eldani

Baker #2-13 CD

13-17s-35w Wichita,KS

Start Date: 2013.11.10 @ 03:26:00

End Date: 2013.11.10 @ 10:36:30

Job Ticket #: 55547 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.11.19 @ 10:05:25



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Ritchie Exploration, Inc.

13-17s-35w Wichita, KS

PO Box 783188
Wichita, KS 67278

Baker #2-13 CD

Job Ticket: 55547

DST#: 3

ATTN: Adam Eldani

Test Start: 2013.11.10 @ 03:26:00

GENERAL INFORMATION:

Formation: **LKC 'G'**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:28:10

Time Test Ended: 10:36:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Smith

Unit No: 62

Interval: 4166.00 ft (KB) To 4210.00 ft (KB) (TVD)

Total Depth: 4210.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3149.00 ft (KB)

3144.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6741 Inside

Press@RunDepth: 379.42 psig @ 4173.00 ft (KB)

Start Date: 2013.11.10

End Date:

2013.11.10

Start Time: 03:26:02

End Time:

10:36:30

Capacity: 8000.00 psig

Last Calib.: 2013.11.10

Time On Btm: 2013.11.10 @ 05:26:40

Time Off Btm: 2013.11.10 @ 08:30:20

TEST COMMENT: B.O.B. @ 10 1/2 min.

No return.

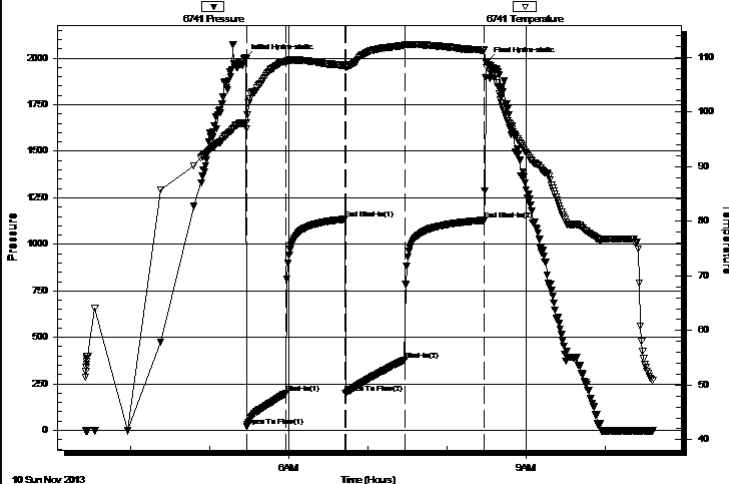
B.O.B. @ 12 min.

No return.

PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1997.79	97.91	Initial Hydro-static
2	22.85	96.94	Open To Flow (1)
32	198.13	109.11	Shut-In(1)
77	1135.45	108.55	End Shut-In(1)
77	199.68	108.04	Open To Flow (2)
122	379.42	112.14	Shut-In(2)
182	1129.70	111.29	End Shut-In(2)
184	1979.58	108.11	Final Hydro-static

Pressure vs. Time



Recovery

Length (ft)	Description	Volume (bbl)
370.00	W 100w Oil spots in tool.	4.09
312.00	MW 10m 90w	4.38
124.00	WM 15w 85m	1.74
5.00	OSM	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.

13-17s-35w Wichita, KS

PO Box 783188
Wichita, KS 67278

Baker #2-13 CD

Job Ticket: 55547

DST#: 3

ATTN: Adam Eldani

Test Start: 2013.11.10 @ 03:26:00

GENERAL INFORMATION:

Formation: **LKC 'G'**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:28:10

Time Test Ended: 10:36:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Smith

Unit No: 62

Interval: 4166.00 ft (KB) To 4210.00 ft (KB) (TVD)

Total Depth: 4210.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3149.00 ft (KB)

3144.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6751 Outside

Press@RunDepth: psig @ 4173.00 ft (KB)

Start Date: 2013.11.10

End Date:

2013.11.10

Start Time: 03:25:54

End Time:

10:36:22

Capacity: 8000.00 psig

Last Calib.: 2013.11.10

Time On Btm:

Time Off Btm:

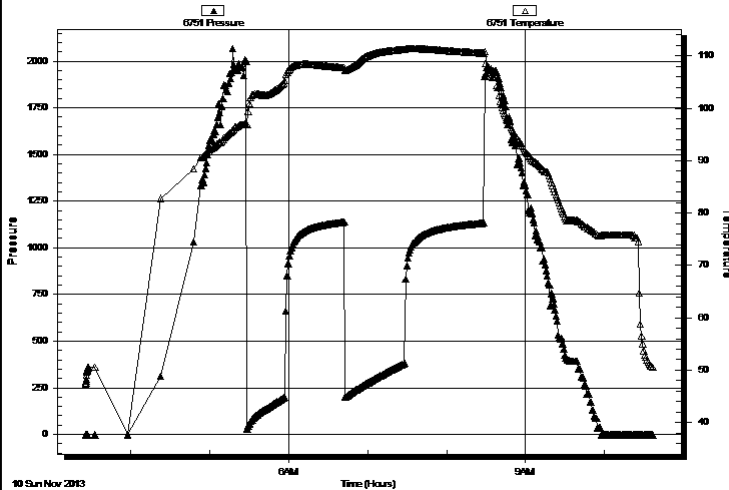
TEST COMMENT: B.O.B. @ 10 1/2 min.

No return.

B.O.B. @ 12 min.

No return.

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
370.00	W 100w Oil spots in tool.	4.09
312.00	MW 10m 90w	4.38
124.00	WM 15w 85m	1.74
5.00	OSM	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.

13-17s-35w Wichita, KS

PO Box 783188
Wichita, KS 67278

Baker #2-13 CD

Job Ticket: 55547

DST#: 3

ATTN: Adam Eldani

Test Start: 2013.11.10 @ 03:26:00

Tool Information

Drill Pipe:	Length: 4032.00 ft	Diameter: 3.80 inches	Volume: 56.56 bbl	Tool Weight: 2300.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 121.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 70000.00 lb
		Total Volume: 57.16 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	9.50 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4166.00 ft			Final 64000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	44.00 ft			
Tool Length:	66.50 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			4144.50	
Shut In Tool	5.00			4149.50	
Hydraulic tool	5.00			4154.50	
Safety Joint	2.50			4157.00	
Packer	5.00			4162.00	22.50 Bottom Of Top Packer
Packer	4.00			4166.00	
Stubb	1.00			4167.00	
Perforations	6.00			4173.00	
Recorder	0.00	6741	Inside	4173.00	
Recorder	0.00	6751	Outside	4173.00	
Change Over Sub	1.00			4174.00	
Drill Pipe	32.00			4206.00	
Change Over Sub	1.00			4207.00	
Bullnose	3.00			4210.00	44.00 Bottom Packers & Anchor

Total Tool Length: 66.50



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration, Inc.

13-17s-35w Wichita, KS

PO Box 783188
Wichita, KS 67278

Baker #2-13 CD

Job Ticket: 55547

DST#: 3

ATTN: Adam Eldani

Test Start: 2013.11.10 @ 03:26:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 52.00 sec/qt

Water Loss: 9.56 in³

Resistivity: ohm.m

Salinity: 5400.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity: 60000 ppm

deg API

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
370.00	W 100w Oil spots in tool.	4.088
312.00	MW 10m 90w	4.377
124.00	WM 15w 85m	1.739
5.00	OSM	0.070

Total Length: 811.00 ft Total Volume: 10.274 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW: .213 @ 43 Degrees F = 60000 PPM

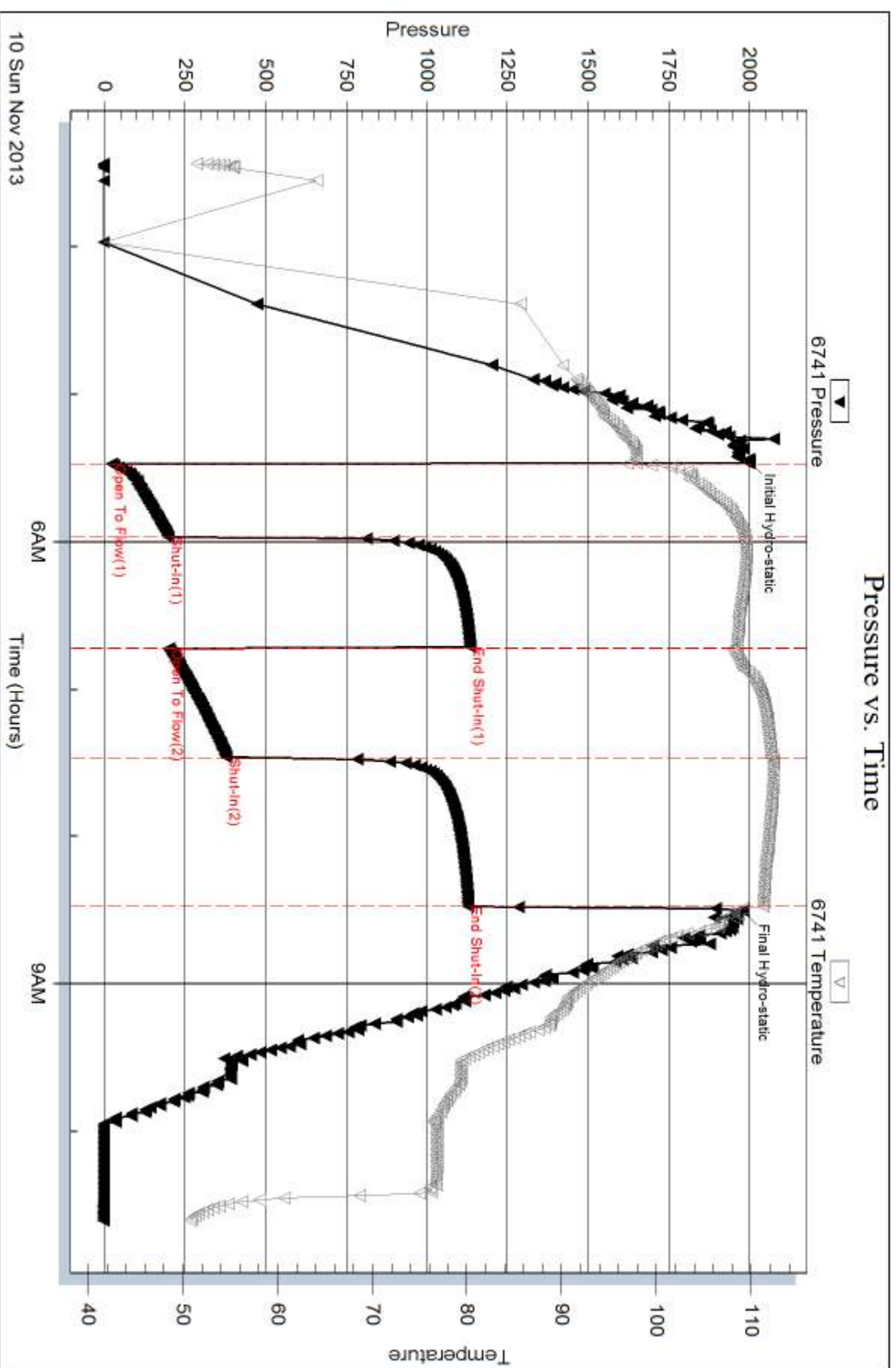
Serial #: 6741

Inside

Ritchie Exploration, Inc.

Baker #2-13 OD

DST Test Number: 3

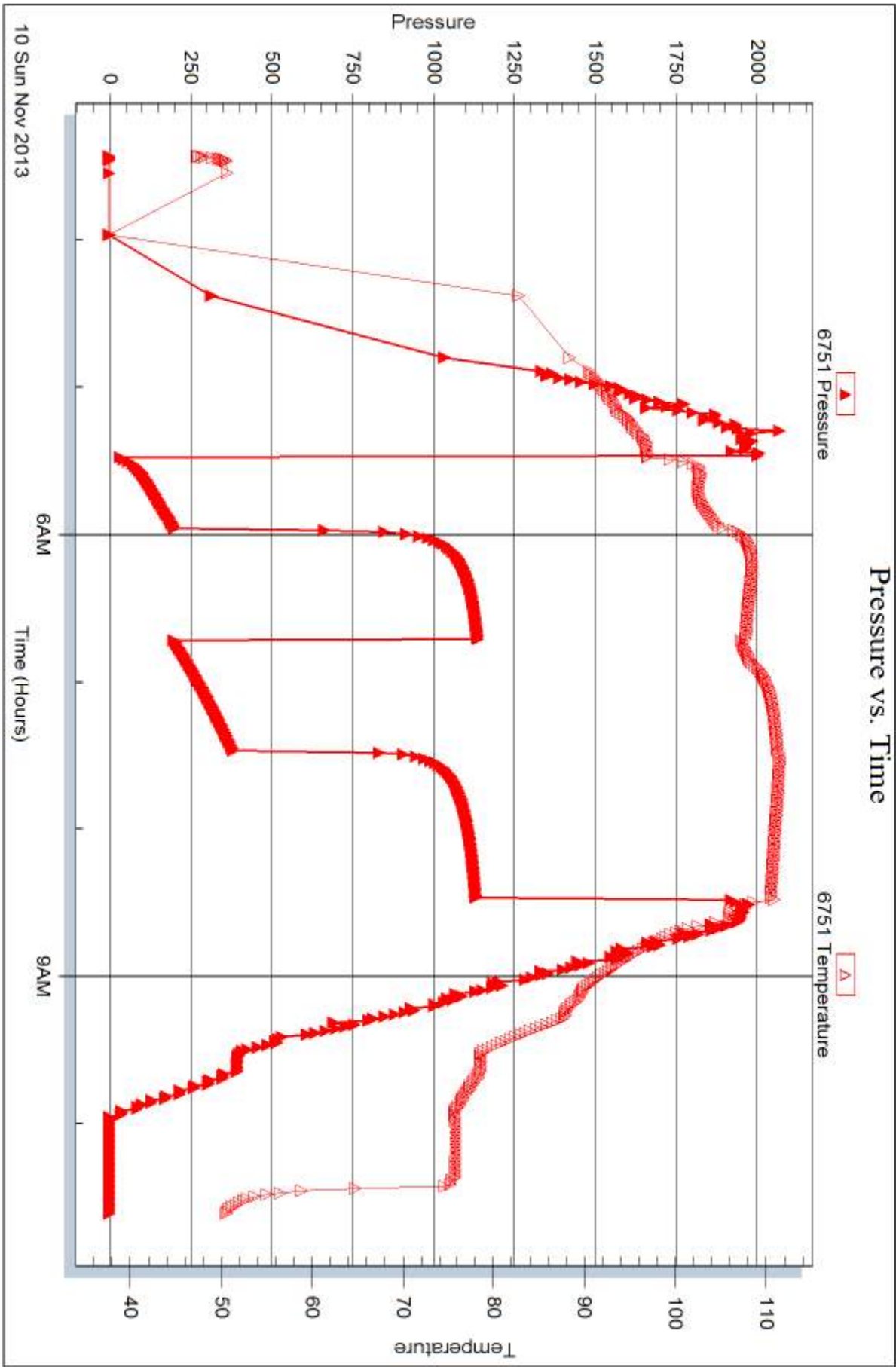


Serial #: 6751

Outside Ritchie Exploration, Inc.

Baker #2-13 CD

DST Test Number: 3





DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration, Inc.**

PO Box 783188
Wichita, KS 67278

ATTN: Adam Eldani

Baker #2-13 CD

13-17s-35w Wichita,KS

Start Date: 2013.11.10 @ 19:55:00

End Date: 2013.11.11 @ 02:04:30

Job Ticket #: 55548 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.11.19 @ 10:04:53



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Ritchie Exploration, Inc.

13-17s-35w Wichita, KS

PO Box 783188
Wichita, KS 67278

Baker #2-13 CD

Job Ticket: 55548

DST#: 4

ATTN: Adam Eldani

Test Start: 2013.11.10 @ 19:55:00

GENERAL INFORMATION:

Formation: **LKC**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:55:00

Time Test Ended: 02:04:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Smith

Unit No: 62

Interval: 4230.00 ft (KB) To 4272.00 ft (KB) (TVD)

Total Depth: 4272.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3149.00 ft (KB)

3144.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6741 Inside

Press@RunDepth: 22.73 psig @ 4236.00 ft (KB)

Start Date: 2013.11.10

End Date:

2013.11.11

Start Time: 19:55:02

End Time:

02:04:30

Capacity: 8000.00 psig

Last Calib.: 2013.11.11

Time On Btm: 2013.11.10 @ 21:53:20

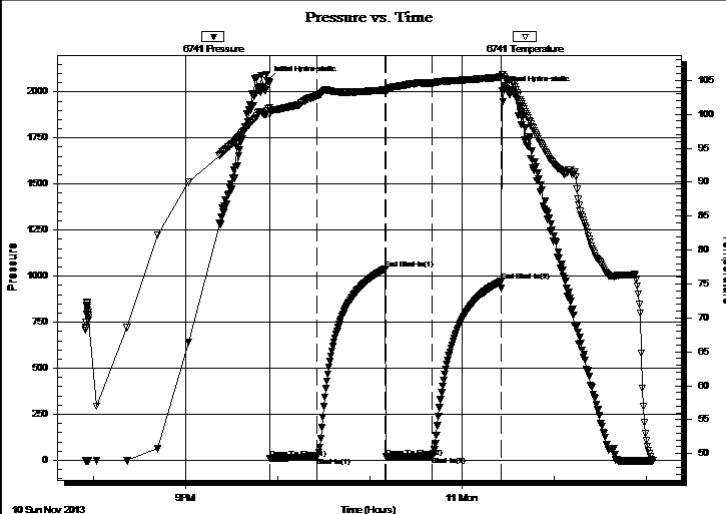
Time Off Btm: 2013.11.11 @ 00:26:00

TEST COMMENT: 3/4" Blow died @ 25 min.

No return.

No blow.

No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2059.59	100.54	Initial Hydro-static
2	12.40	99.95	Open To Flow (1)
32	17.28	102.71	Shut-In(1)
77	1039.20	103.59	End Shut-In(1)
78	18.70	103.15	Open To Flow (2)
107	22.73	104.62	Shut-In(2)
152	972.40	105.48	End Shut-In(2)
153	2005.24	105.88	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	M 100m Oil spots in tool.	0.05

Gas Rates

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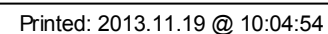
* Recovery from multiple tests



Test Start: 2013.11.10 @ 19:55:00

KB to GR/CF: 5.00 ft

No return.





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration, Inc.

13-17s-35w Wichita, KS

PO Box 783188
Wichita, KS 67278

Baker #2-13 CD

Job Ticket: 55548

DST#: 4

ATTN: Adam Eldani

Test Start: 2013.11.10 @ 19:55:00

Tool Information

Drill Pipe:	Length: 4098.00 ft	Diameter: 3.80 inches	Volume: 57.48 bbl	Tool Weight: 2300.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 121.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 70000.00 lb
		Total Volume: 58.08 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	11.50 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4230.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	42.00 ft			
Tool Length:	64.50 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			4208.50	
Shut In Tool	5.00			4213.50	
Hydraulic tool	5.00			4218.50	
Safety Joint	2.50			4221.00	
Packer	5.00			4226.00	22.50 Bottom Of Top Packer
Packer	4.00			4230.00	
Stubb	1.00			4231.00	
Perforations	5.00			4236.00	
Recorder	0.00	6741	Inside	4236.00	
Recorder	0.00	6751	Outside	4236.00	
Change Over Sub	1.00			4237.00	
Drill Pipe	31.00			4268.00	
Change Over Sub	1.00			4269.00	
Bullnose	3.00			4272.00	42.00 Bottom Packers & Anchor

Total Tool Length: 64.50



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration, Inc.

13-17s-35w Wichita, KS

PO Box 783188
Wichita, KS 67278

Baker #2-13 CD

Job Ticket: 55548

DST#: 4

ATTN: Adam Eldani

Test Start: 2013.11.10 @ 19:55:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 54.00 sec/qt

Water Loss: 6.38 in³

Resistivity: ohm.m

Salinity: 6000.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	M 100m Oil spots in tool.	0.049

Total Length: 10.00 ft

Total Volume: 0.049 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6741

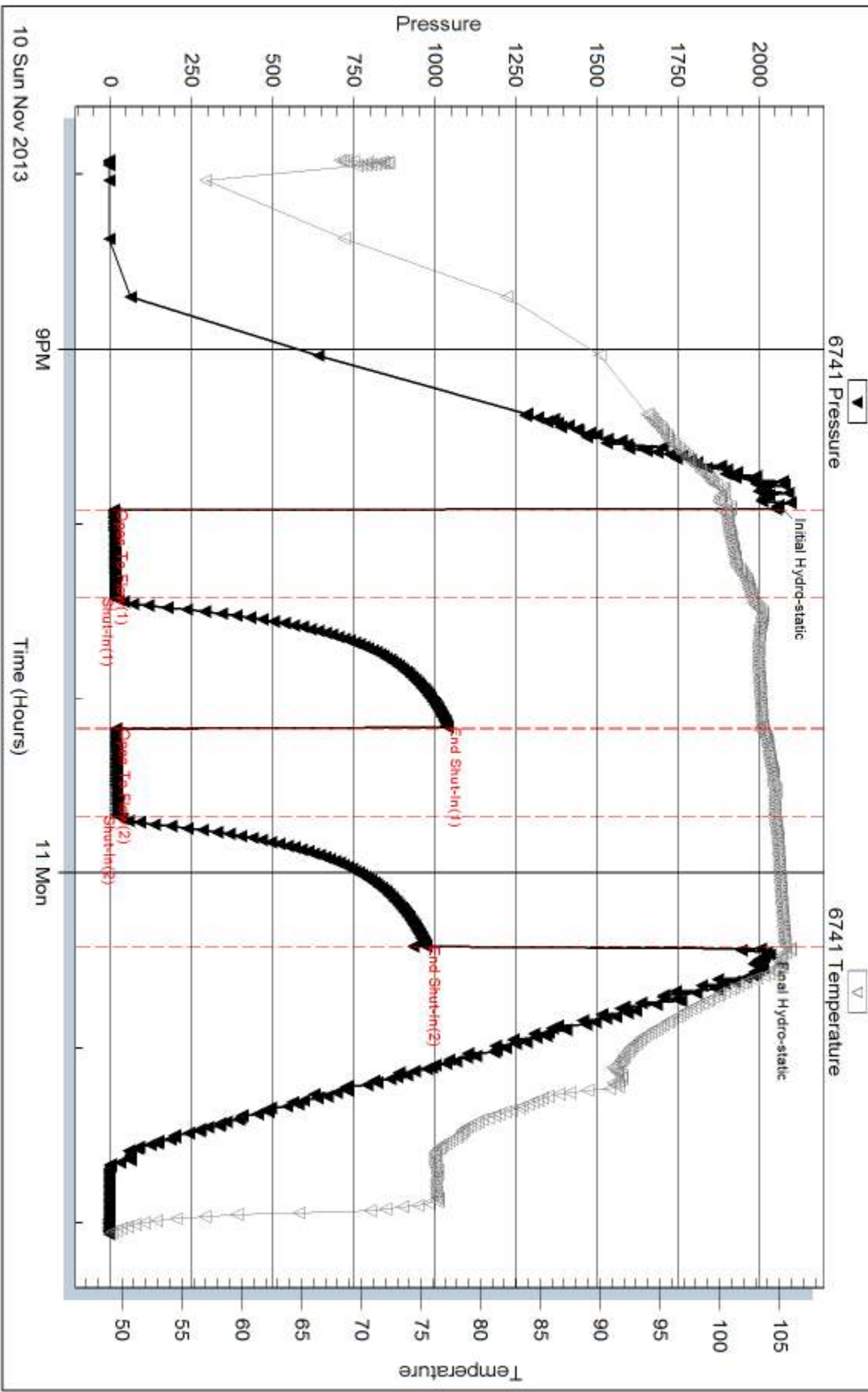
Inside

Ritchie Exploration, Inc.

Baker #2-13 CD

DST Test Number: 4

Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 55548

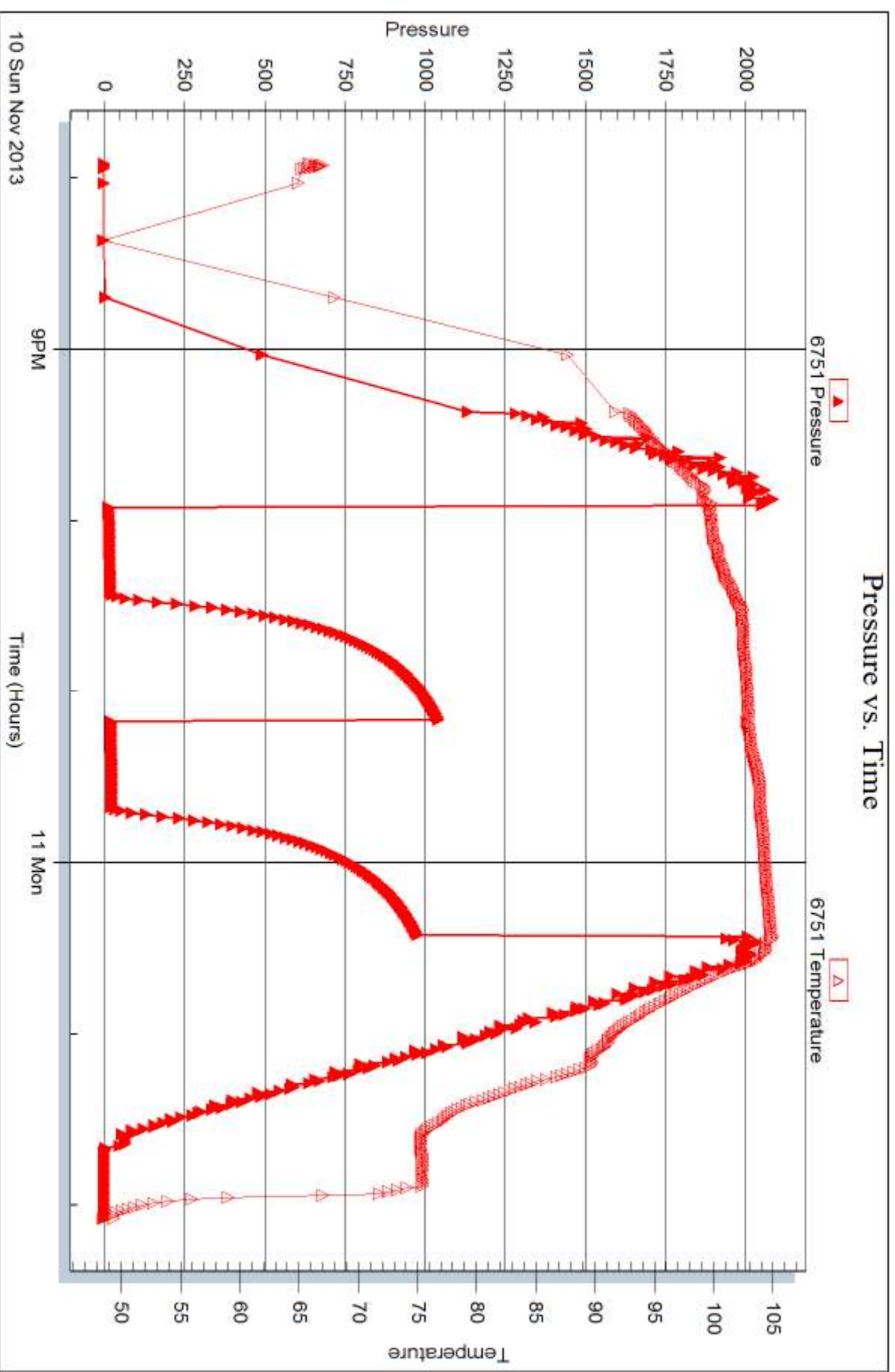
Printed: 2013.11.19 @ 10:04:55

Serial #: 6751

Outside Ritchie Exploration, Inc.

Baker #2-13 CD

DST Test Number: 4





DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration, Inc.**

PO Box 783188
Wichita, KS 67278

ATTN: Adam Eldani

Baker #2-13 CD

13-17s-35w Wichita,KS

Start Date: 2013.11.11 @ 12:16:00

End Date: 2013.11.11 @ 19:41:00

Job Ticket #: 55549 DST #: 5

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.11.19 @ 10:04:21



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Ritchie Exploration, Inc.

13-17s-35w Wichita, KS

PO Box 783188
Wichita, KS 67278

Baker #2-13 CD

Job Ticket: 55549

DST#: 5

ATTN: Adam Eldani

Test Start: 2013.11.11 @ 12:16:00

GENERAL INFORMATION:

Formation: **LKC**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:20:40

Time Test Ended: 19:41:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Smith

Unit No: 62

Interval: 4274.00 ft (KB) To 4337.00 ft (KB) (TVD)

Total Depth: 4337.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3149.00 ft (KB)

3144.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6741 Inside

Press@RunDepth: 680.76 psig @ 4276.00 ft (KB)

Start Date: 2013.11.11

End Date:

2013.11.11

Start Time: 12:16:02

End Time:

19:41:00

Capacity: 8000.00 psig

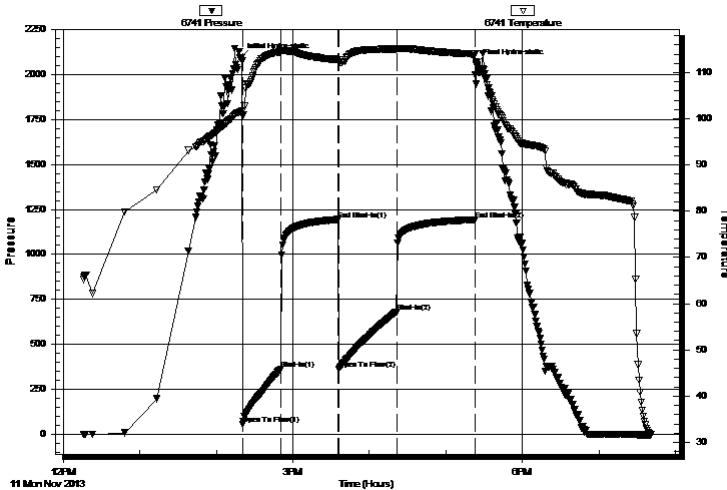
Last Calib.: 2013.11.11

Time On Btm: 2013.11.11 @ 14:19:10

Time Off Btm: 2013.11.11 @ 17:23:20

TEST COMMENT: B.O.B. @ 5 min.
No return.
B.O.B. @ 6 min.
No return.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2096.01	101.58	Initial Hydro-static
2	56.43	100.74	Open To Flow (1)
32	363.05	114.46	Shut-In(1)
77	1194.05	112.83	End Shut-In(1)
77	363.23	112.44	Open To Flow (2)
122	680.76	115.07	Shut-In(2)
184	1193.15	113.99	End Shut-In(2)
185	2063.03	112.44	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
989.00	OSMW 10m 90w	12.77
434.00	OSMW 35m 65w	6.09
107.00	OSWM 30w 70m	1.50

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.

13-17s-35w Wichita, KS

PO Box 783188
Wichita, KS 67278

Baker #2-13 CD

Job Ticket: 55549

DST#: 5

ATTN: Adam Eldani

Test Start: 2013.11.11 @ 12:16:00

GENERAL INFORMATION:

Formation: **LKC**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:20:40

Time Test Ended: 19:41:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Smith

Unit No: 62

Interval: 4274.00 ft (KB) To 4337.00 ft (KB) (TVD)

Total Depth: 4337.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3149.00 ft (KB)

3144.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6751 Outside

Press@RunDepth: psig @ 4276.00 ft (KB)

Start Date: 2013.11.11

End Date:

2013.11.11

Start Time: 12:15:52

End Time:

19:41:00

Capacity: 8000.00 psig

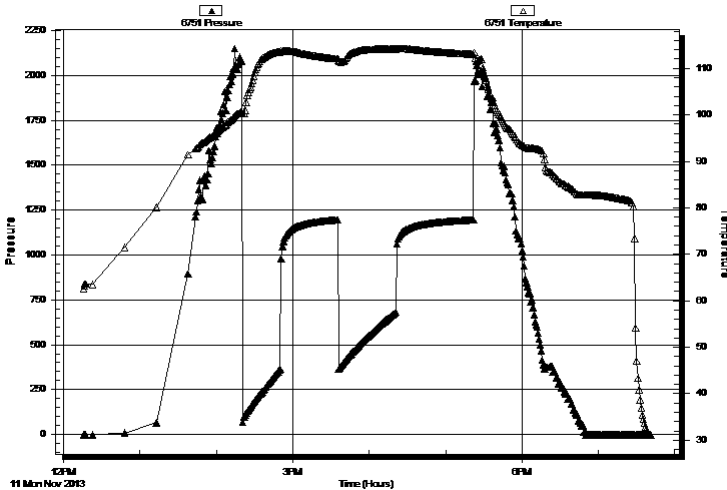
Last Calib.: 2013.11.11

Time On Btm:

Time Off Btm:

TEST COMMENT: B.O.B. @ 5 min.
No return.
B.O.B. @ 6 min.
No return.

Pressure vs. Time



PRESSURE SUMMARY

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

Length (ft)	Description	Volume (bbl)
989.00	OSMW 10m 90w	12.77
434.00	OSMW 35m 65w	6.09
107.00	OSWM 30w 70m	1.50

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.

13-17s-35w Wichita, KS

PO Box 783188
Wichita, KS 67278

Baker #2-13 CD

Job Ticket: 55549

DST#: 5

ATTN: Adam Eldani

Test Start: 2013.11.11 @ 12:16:00

Tool Information

Drill Pipe:	Length: 4134.00 ft	Diameter: 3.80 inches	Volume: 57.99 bbl	Tool Weight: 2300.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 121.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 75000.00 lb
		Total Volume: 58.59 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	3.50 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	4274.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	63.00 ft			
Tool Length:	85.50 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			4252.50	
Shut In Tool	5.00			4257.50	
Hydraulic tool	5.00			4262.50	
Safety Joint	2.50			4265.00	
Packer	5.00			4270.00	22.50 Bottom Of Top Packer
Packer	4.00			4274.00	
Stubb	1.00			4275.00	
Perforations	1.00			4276.00	
Recorder	0.00	6741	Inside	4276.00	
Recorder	0.00	6751	Outside	4276.00	
Perforations	25.00			4301.00	
Change Over Sub	1.00			4302.00	
Drill Pipe	31.00			4333.00	
Change Over Sub	1.00			4334.00	
Bullnose	3.00			4337.00	63.00 Bottom Packers & Anchor

Total Tool Length: 85.50



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration, Inc.

13-17s-35w Wichita,KS

PO Box 783188
Wichita, KS 67278

Baker #2-13 CD

Job Ticket: 55549

DST#: 5

ATTN: Adam Eldani

Test Start: 2013.11.11 @ 12:16:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 55.00 sec/qt

Water Loss: 6.78 in³

Resistivity: ohm.m

Salinity: 5500.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity: 52000 ppm

deg API

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
989.00	OSMW 10m 90w	12.771
434.00	OSMW 35m 65w	6.088
107.00	OSWM 30w 70m	1.501

Total Length: 1530.00 ft Total Volume: 20.360 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW: .210 @ 49 Degrees F = 52000 PPM

Serial #: 6741

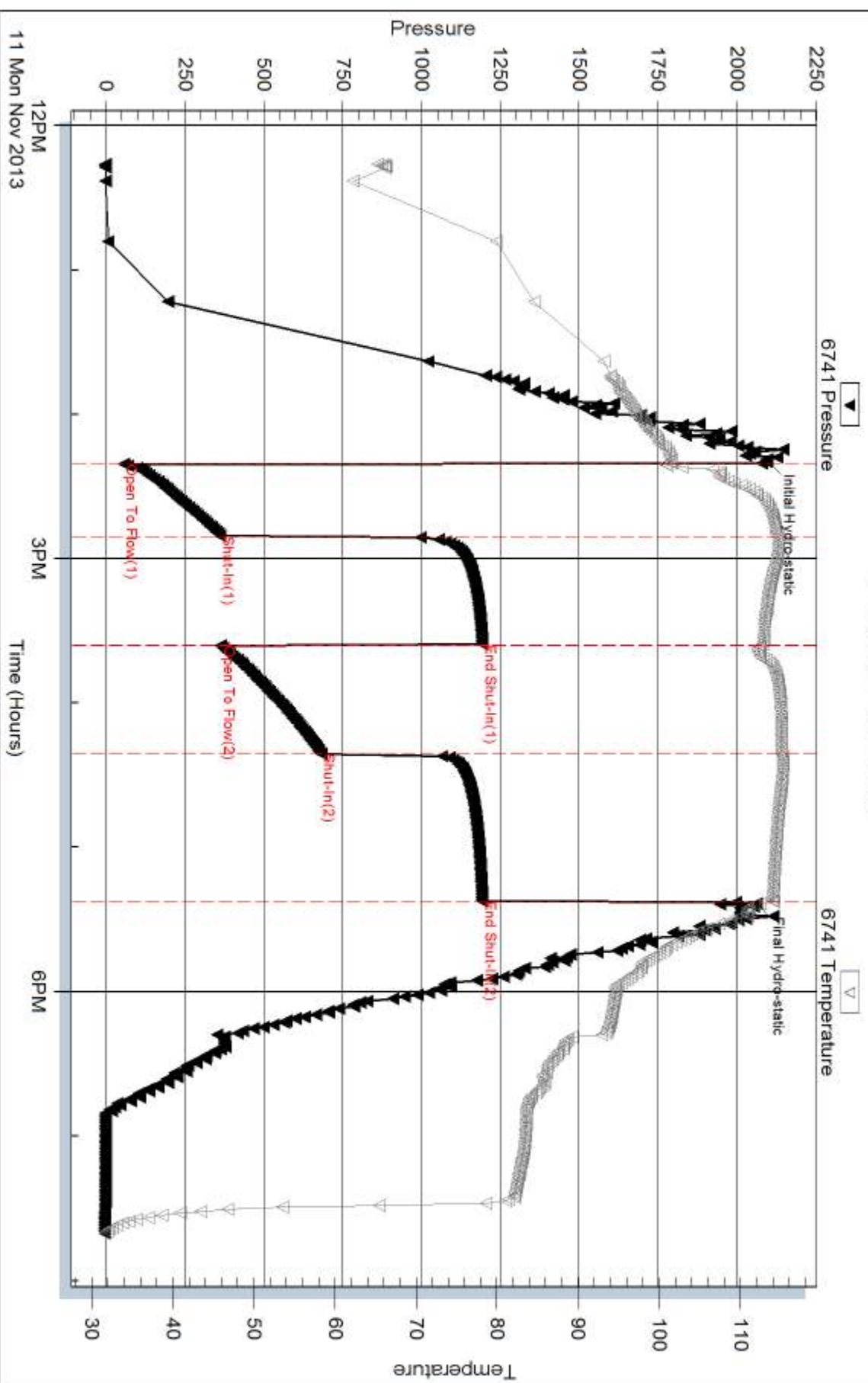
Inside

Ritchie Exploration, Inc.

Baker #2-13 CD

DST Test Number: 5

Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 55549

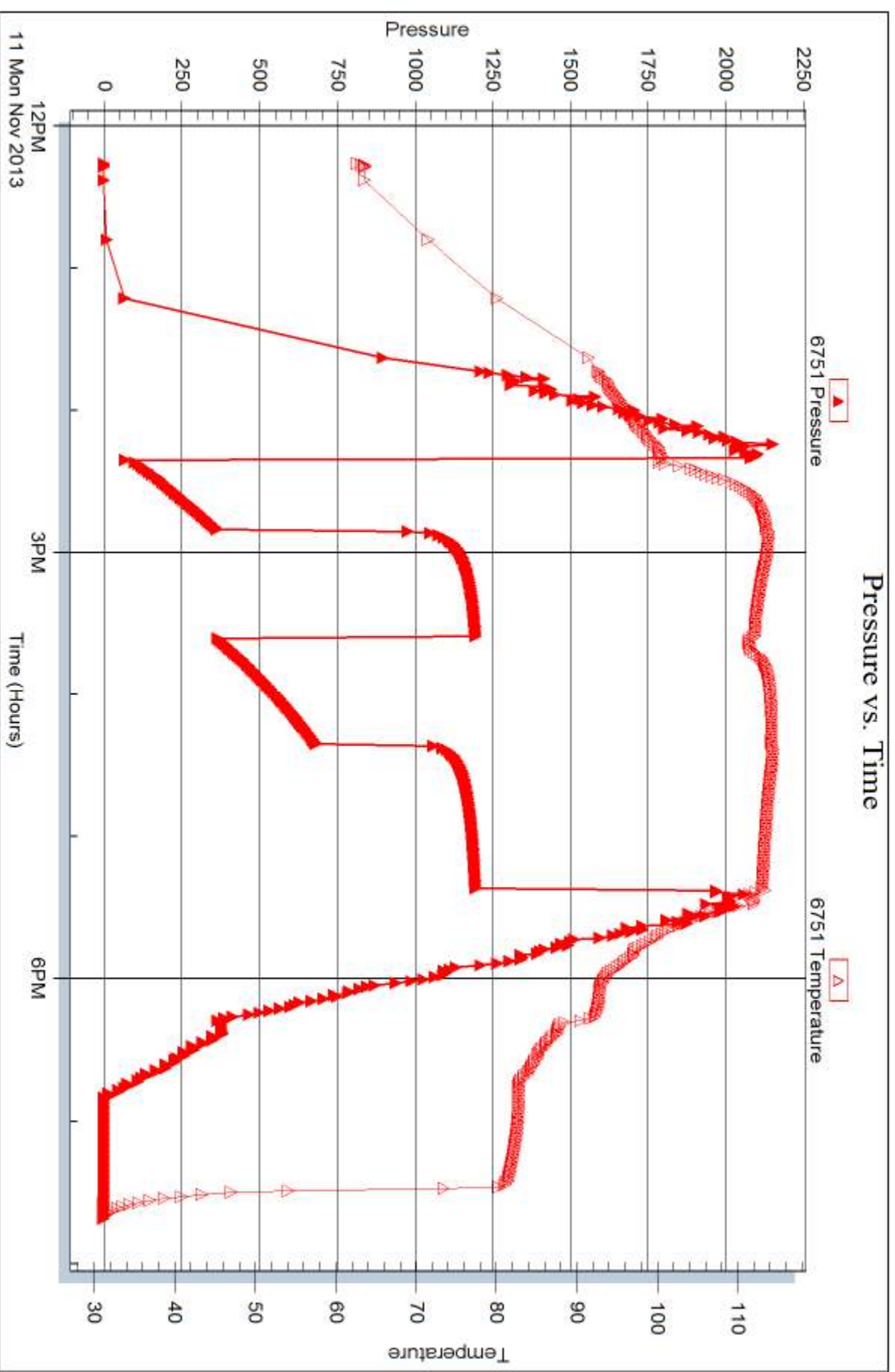
Printed: 2013.11.19 @ 10:04:23

Serial #: 6751

Outside Ritchie Exploration, Inc.

Baker #2-13 CD

DST Test Number: 5





DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration, Inc.**

PO Box 783188
Wichita, KS 67278

ATTN: Adam Eldani

Baker #2-13 CD

13-17s-35w Wichita,KS

Start Date: 2013.11.12 @ 04:15:00

End Date: 2013.11.12 @ 11:54:30

Job Ticket #: 55550 DST #: 6

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.11.19 @ 10:03:52



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Ritchie Exploration, Inc.

13-17s-35w Wichita, KS

PO Box 783188
Wichita, KS 67278

Baker #2-13 CD

Job Ticket: 55550

DST#: 6

ATTN: Adam Eldani

Test Start: 2013.11.12 @ 04:15:00

GENERAL INFORMATION:

Formation: **LKC**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:34:10

Time Test Ended: 11:54:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Smith

Unit No: 62

Interval: 4339.00 ft (KB) To 4387.00 ft (KB) (TVD)

Total Depth: 4387.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3149.00 ft (KB)

3144.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6741 Inside

Press@RunDepth: 353.02 psig @ 4341.00 ft (KB)

Start Date: 2013.11.12

End Date:

2013.11.12

Start Time: 04:15:02

End Time:

11:54:30

Capacity: 8000.00 psig

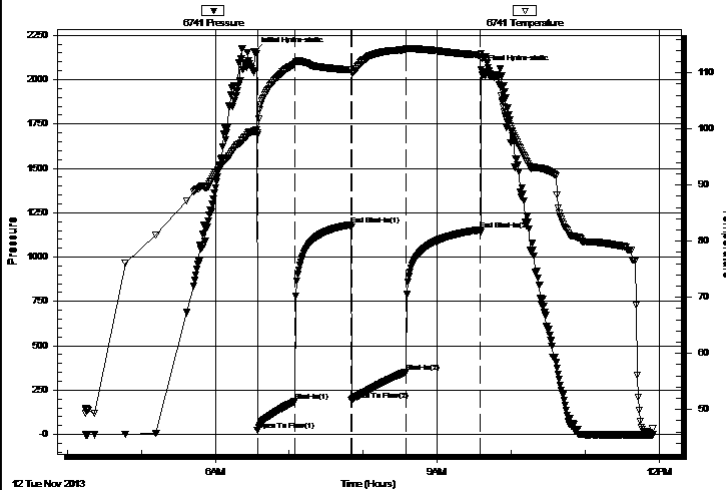
Last Calib.: 2013.11.12

Time On Btm: 2013.11.12 @ 06:31:40

Time Off Btm: 2013.11.12 @ 09:35:30

TEST COMMENT: B.O.B. @ 11 min.
No return.
B.O.B. @ 14 min.
No return.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2157.16	99.61	Initial Hydro-static
3	21.42	99.02	Open To Flow (1)
33	188.10	111.71	Shut-In (1)
79	1182.70	110.53	End Shut-In (1)
79	193.25	110.02	Open To Flow (2)
123	353.02	114.13	Shut-In (2)
184	1153.94	113.18	End Shut-In (2)
184	2055.59	113.44	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
431.00	MW 10m 90w	4.94
248.00	OSMW 20m 80w	3.48
72.00	OSMW 50m 50w	1.01

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.

13-17s-35w Wichita, KS

PO Box 783188
Wichita, KS 67278

Baker #2-13 CD

Job Ticket: 55550

DST#: 6

ATTN: Adam Eldani

Test Start: 2013.11.12 @ 04:15:00

GENERAL INFORMATION:

Formation: **LKC**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:34:10

Time Test Ended: 11:54:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Smith

Unit No: 62

Interval: 4339.00 ft (KB) To 4387.00 ft (KB) (TVD)

Reference Elevations: 3149.00 ft (KB)

Total Depth: 4387.00 ft (KB) (TVD)

3144.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 6751 Outside

Press@RunDepth: psig @ 4341.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.11.12

End Date:

2013.11.12

Last Calib.:

2013.11.12

Start Time: 04:12:12

End Time:

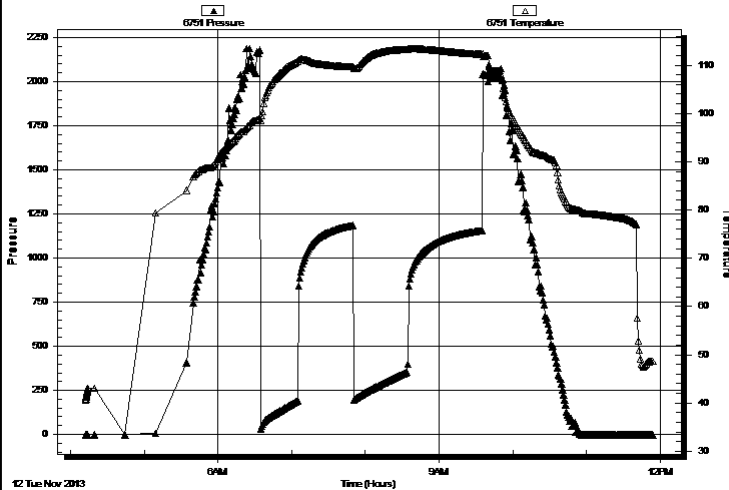
11:54:29

Time On Btm:

Time Off Btm:

TEST COMMENT: B.O.B. @ 11 min.
No return.
B.O.B. @ 14 min.
No return.

Pressure vs. Time



PRESSURE SUMMARY

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

Length (ft)	Description	Volume (bbl)
431.00	MW 10m 90w	4.94
248.00	OSMW 20m 80w	3.48
72.00	OSMW 50m 50w	1.01

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.

13-17s-35w Wichita, KS

PO Box 783188
Wichita, KS 67278

Baker #2-13 CD

Job Ticket: 55550

DST#: 6

ATTN: Adam Eldani

Test Start: 2013.11.12 @ 04:15:00

Tool Information

Drill Pipe:	Length:	4229.00 ft	Diameter:	3.80 inches	Volume:	59.32 bbl	Tool Weight:	2300.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	inches	Volume:	0.00 bbl	Weight set on Packer:	22000.00 lb
Drill Collar:	Length:	121.00 ft	Diameter:	2.25 inches	Volume:	0.60 bbl	Weight to Pull Loose:	70000.00 lb
					Total Volume:	59.92 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		33.50 ft					String Weight: Initial	62000.00 lb
Depth to Top Packer:		4339.00 ft					Final	65000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		48.00 ft						
Tool Length:		70.50 ft						
Number of Packers:		2	Diameter:	6.75 inches				
Tool Comments:								

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			4317.50	
Shut In Tool	5.00			4322.50	
Hydraulic tool	5.00			4327.50	
Safety Joint	2.50			4330.00	
Packer	5.00			4335.00	22.50 Bottom Of Top Packer
Packer	4.00			4339.00	
Stubb	1.00			4340.00	
Perforations	1.00			4341.00	
Recorder	0.00	6741	Inside	4341.00	
Recorder	0.00	6751	Outside	4341.00	
Perforations	10.00			4351.00	
Change Over Sub	1.00			4352.00	
Drill Pipe	31.00			4383.00	
Change Over Sub	1.00			4384.00	
Bullnose	3.00			4387.00	48.00 Bottom Packers & Anchor

Total Tool Length: 70.50



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration, Inc.

13-17s-35w Wichita,KS

PO Box 783188
Wichita, KS 67278

Baker #2-13 CD

Job Ticket: 55550

DST#: 6

ATTN: Adam Eldani

Test Start: 2013.11.12 @ 04:15:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 58.00 sec/qt

Water Loss: 6.79 in³

Resistivity: ohm.m

Salinity: 5500.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity: 65000 ppm

deg API

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
431.00	MW 10m 90w	4.944
248.00	OSMW 20m 80w	3.479
72.00	OSMW 50m 50w	1.010

Total Length: 751.00 ft Total Volume: 9.433 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW: .210 @ 39 Degrees F = 65000 PPM

Serial #: 6741

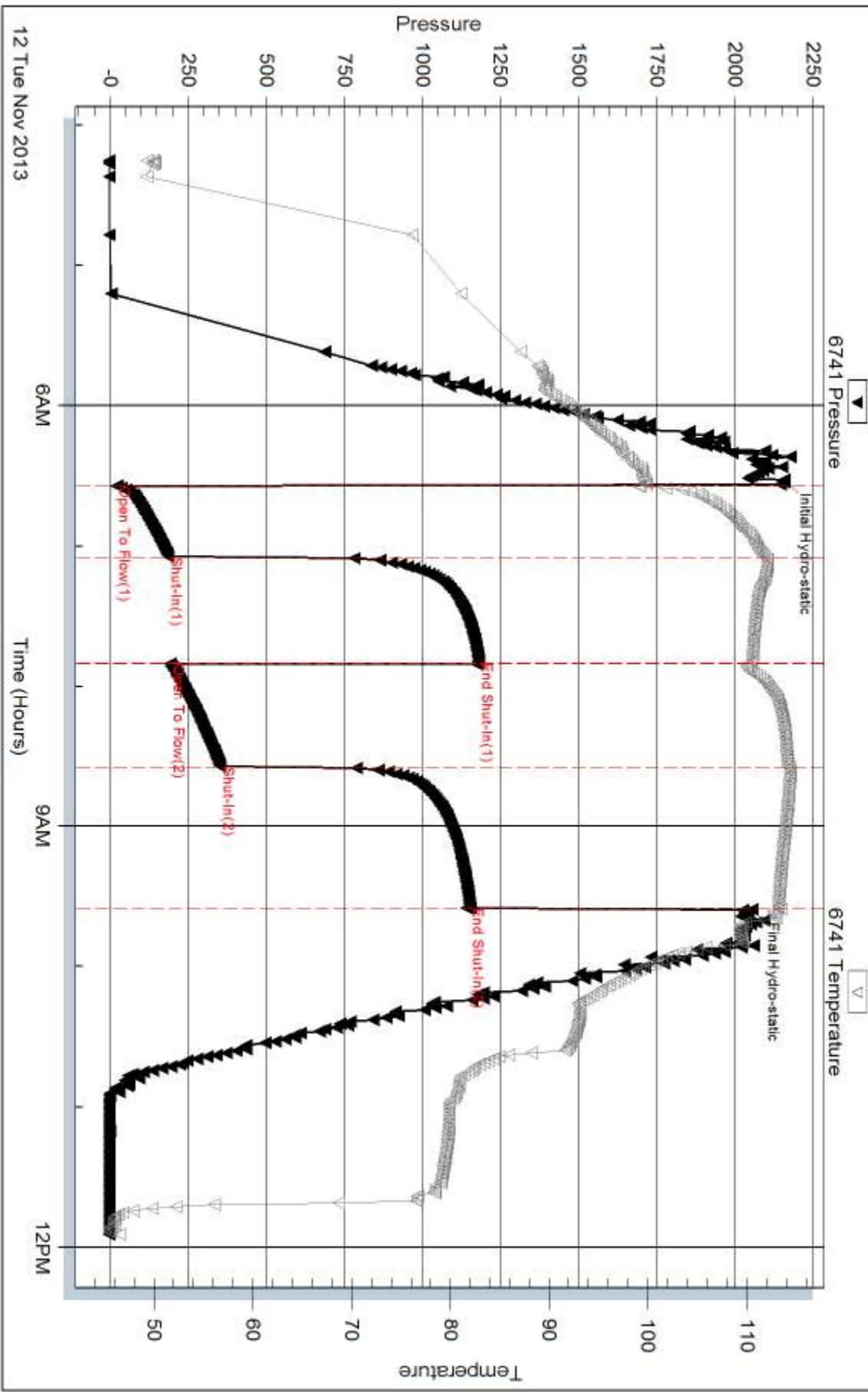
Inside

Ritchie Exploration, Inc.

Baker #2-13 CD

DST Test Number: 6

Pressure vs. Time

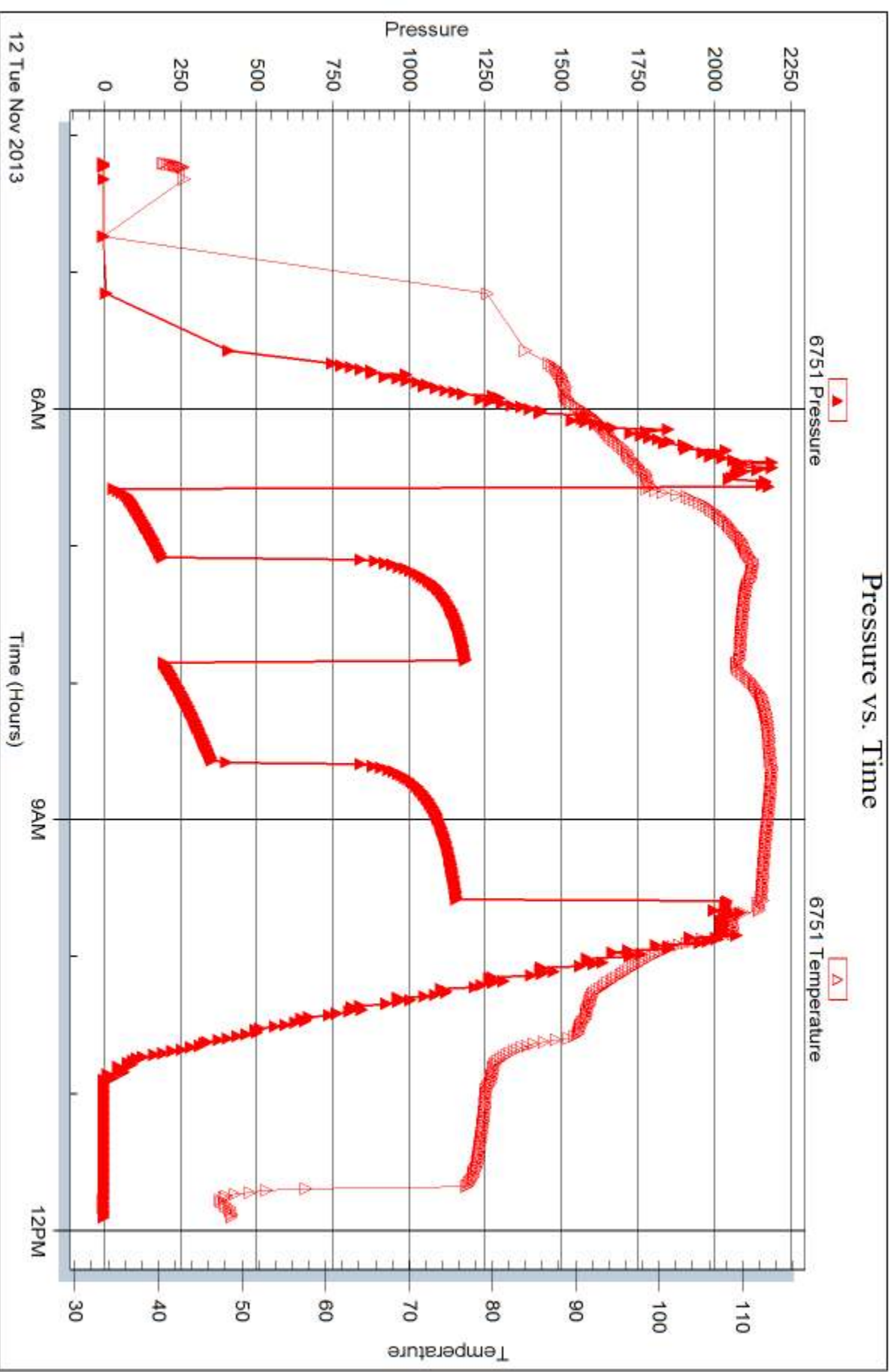


Serial #: 6751

Outside Ritchie Exploration, Inc.

Baker #2-13 CD

DST Test Number: 6





DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration, Inc.**

PO Box 783188
Wichita, KS 67278

ATTN: Adam Eldani

Baker #2-13 CD

13-17s-35w Wichita,KS

Start Date: 2013.11.13 @ 01:02:00

End Date: 2013.11.13 @ 08:11:00

Job Ticket #: 55551 DST #: 7

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.11.19 @ 10:02:52



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Ritchie Exploration, Inc.

13-17s-35w Wichita, KS

PO Box 783188
Wichita, KS 67278

Baker #2-13 CD

Job Ticket: 55551

DST#: 7

ATTN: Adam Eldani

Test Start: 2013.11.13 @ 01:02:00

GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:44:30

Time Test Ended: 08:11:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Smith

Unit No: 62

Interval: 4415.00 ft (KB) To 4494.00 ft (KB) (TVD)

Reference Elevations: 3149.00 ft (KB)

Total Depth: 4494.00 ft (KB) (TVD)

3144.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 6741 Inside

Press@RunDepth: 35.10 psig @ 4416.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.11.13

End Date:

2013.11.13

Last Calib.: 2013.11.13

Start Time: 01:02:02

End Time:

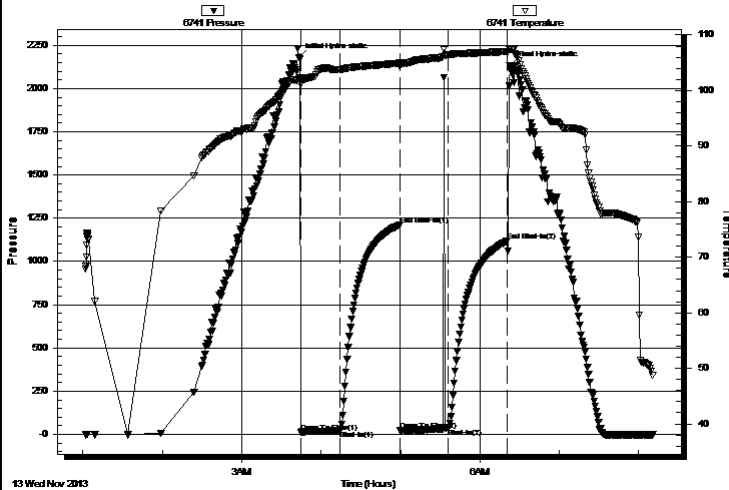
08:11:00

Time On Btm: 2013.11.13 @ 03:43:00

Time Off Btm: 2013.11.13 @ 06:22:30

TEST COMMENT: 3/4" Blow .
No return.
No blow , flushed tool, no blow .
No return.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2179.52	102.16	Initial Hydro-static
2	12.88	101.12	Open To Flow (1)
31	20.96	103.79	Shut-In(1)
77	1211.60	104.93	End Shut-In(1)
77	23.87	104.33	Open To Flow (2)
113	35.10	106.39	Shut-In(2)
158	1119.83	107.03	End Shut-In(2)
160	2133.66	107.58	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	OSM 100m	0.15

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.

13-17s-35w Wichita, KS

PO Box 783188
Wichita, KS 67278

Baker #2-13 CD

Job Ticket: 55551

DST#: 7

ATTN: Adam Eldani

Test Start: 2013.11.13 @ 01:02:00

GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:44:30

Time Test Ended: 08:11:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Smith

Unit No: 62

Interval: 4415.00 ft (KB) To 4494.00 ft (KB) (TVD)

Total Depth: 4494.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3149.00 ft (KB)

3144.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6751 Outside

Press@RunDepth: psig @ 4416.00 ft (KB)

Start Date: 2013.11.13

End Date:

2013.11.13

Start Time: 01:01:53

End Time:

08:11:10

Capacity: 8000.00 psig

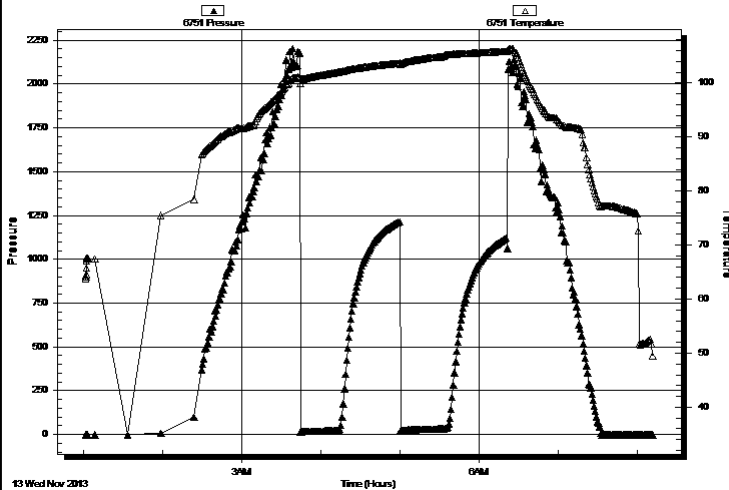
Last Calib.: 2013.11.13

Time On Btm:

Time Off Btm:

TEST COMMENT: 3/4" Blow .
No return.
No blow , flushed tool, no blow .
No return.

Pressure vs. Time



PRESSURE SUMMARY

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

Length (ft)	Description	Volume (bbl)
30.00	OSM 100m	0.15

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.

13-17s-35w Wichita, KS

PO Box 783188
Wichita, KS 67278

Baker #2-13 CD

Job Ticket: 55551

DST#: 7

ATTN: Adam Eldani

Test Start: 2013.11.13 @ 01:02:00

Tool Information

Drill Pipe:	Length:	4293.00 ft	Diameter:	3.80 inches	Volume:	60.22 bbl	Tool Weight:	2300.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	inches	Volume:	0.00 bbl	Weight set on Packer:	22000.00 lb
Drill Collar:	Length:	121.00 ft	Diameter:	2.25 inches	Volume:	0.60 bbl	Weight to Pull Loose:	75000.00 lb
					Total Volume:	60.82 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		21.50 ft					String Weight: Initial	63000.00 lb
Depth to Top Packer:		4415.00 ft					Final	63000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		79.00 ft						
Tool Length:		101.50 ft						
Number of Packers:		2	Diameter:	6.75 inches				
Tool Comments:								

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			4393.50	
Shut In Tool	5.00			4398.50	
Hydraulic tool	5.00			4403.50	
Safety Joint	2.50			4406.00	
Packer	5.00			4411.00	22.50 Bottom Of Top Packer
Packer	4.00			4415.00	
Stubb	1.00			4416.00	
Recorder	0.00	6741	Inside	4416.00	
Recorder	0.00	6751	Outside	4416.00	
Perforations	10.00			4426.00	
Change Over Sub	1.00			4427.00	
Drill Pipe	63.00			4490.00	
Change Over Sub	1.00			4491.00	
Bullnose	3.00			4494.00	79.00 Bottom Packers & Anchor

Total Tool Length: 101.50



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration, Inc.

13-17s-35w Wichita, KS

PO Box 783188
Wichita, KS 67278

Baker #2-13 CD

Job Ticket: 55551

DST#: 7

ATTN: Adam Eldani

Test Start: 2013.11.13 @ 01:02:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 49.00 sec/qt

Water Loss: 9.58 in³

Resistivity: ohm.m

Salinity: 6000.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	OSM 100m	0.148

Total Length: 30.00 ft

Total Volume: 0.148 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6741

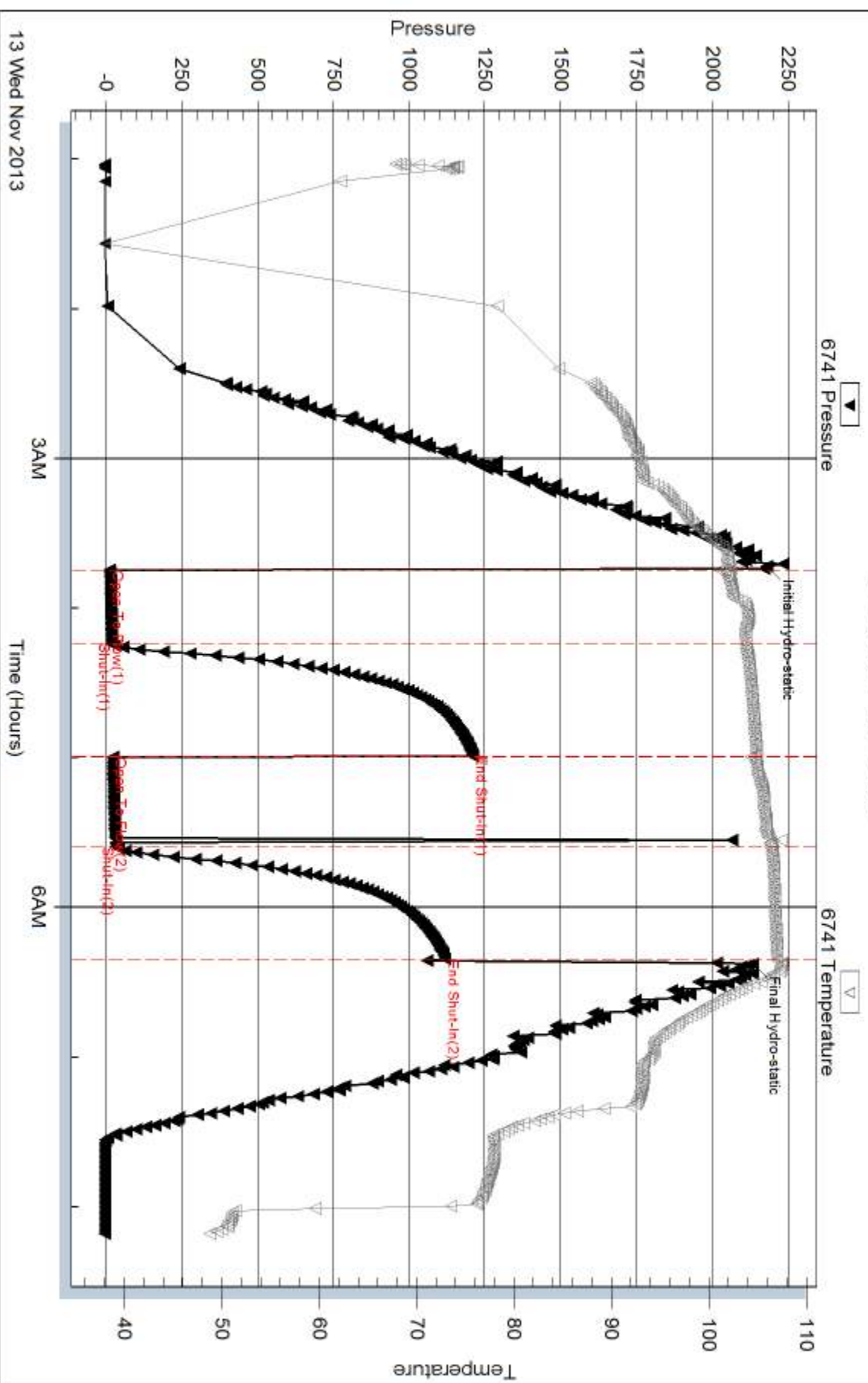
Inside

Ritchie Exploration, Inc.

Baker #2-13 CD

DST Test Number: 7

Pressure vs. Time

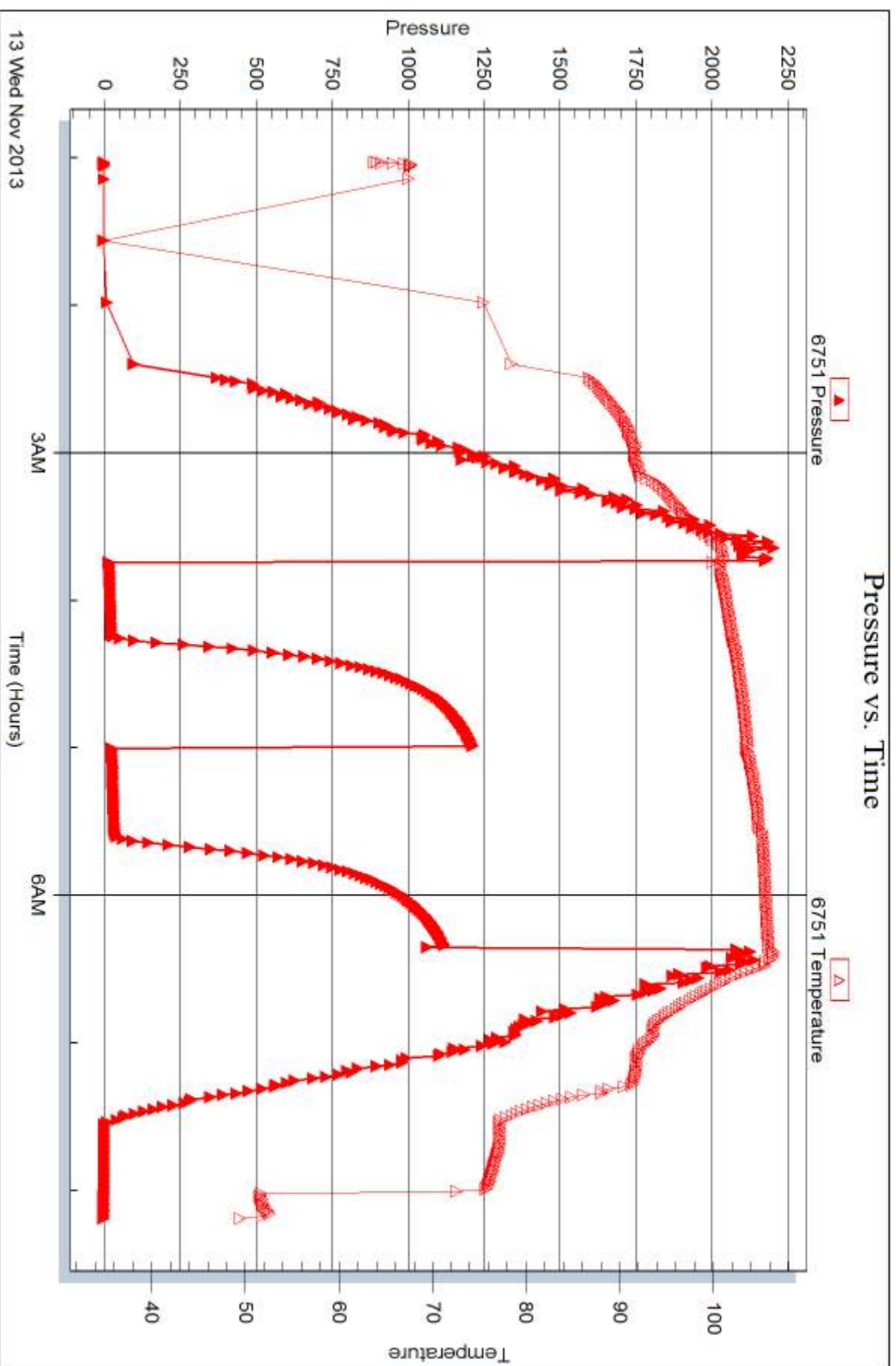


Serial #: 6751

Outside Ritchie Exploration, Inc.

Baker #2-13 CD

DST Test Number: 7





DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration, Inc.**

PO Box 783188
Wichita, KS 67278

ATTN: Adam Eldani

Baker #2-13 CD

13-17s-35w Wichita,KS

Start Date: 2013.11.13 @ 18:32:00

End Date: 2013.11.14 @ 01:14:00

Job Ticket #: 55552 DST #: 8

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.11.19 @ 10:02:09



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Ritchie Exploration, Inc.

13-17s-35w Wichita, KS

PO Box 783188
Wichita, KS 67278

Baker #2-13 CD

Job Ticket: 55552

DST#: 8

ATTN: Adam Eldani

Test Start: 2013.11.13 @ 18:32:00

GENERAL INFORMATION:

Formation:

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:12:10

Time Test Ended: 01:14:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Smith

Unit No: 62

Interval: 4469.00 ft (KB) To 4548.00 ft (KB) (TVD)

Reference Elevations: 3149.00 ft (KB)

Total Depth: 4548.00 ft (KB) (TVD)

3144.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 6741 Inside

Press@RunDepth: 104.45 psig @ 4461.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.11.13

End Date:

2013.11.14

Last Calib.: 2013.11.14

Start Time: 18:32:02

End Time:

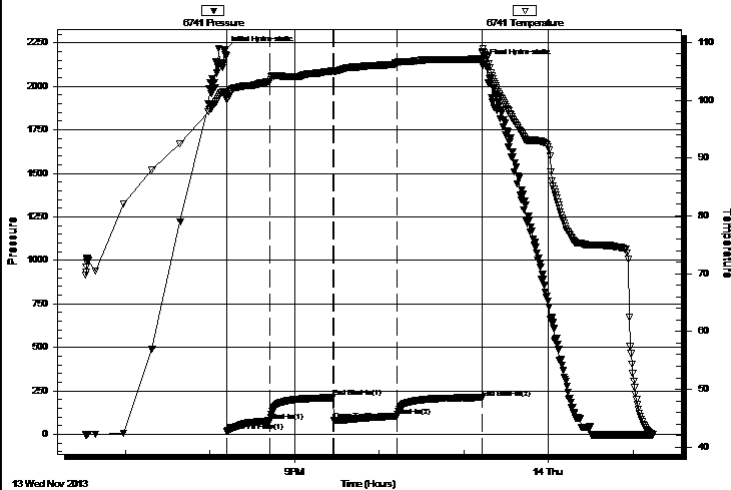
01:14:00

Time On Btm: 2013.11.13 @ 20:10:10

Time Off Btm: 2013.11.13 @ 23:13:10

TEST COMMENT: 9" Blow .
Surface return.
B.O.B. @ 41 min.
2" Return.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2207.98	101.36	Initial Hydro-static
2	15.85	100.10	Open To Flow (1)
32	78.24	103.27	Shut-In(1)
77	211.13	105.07	End Shut-In(1)
78	81.47	105.01	Open To Flow (2)
123	104.45	106.53	Shut-In(2)
183	210.12	107.16	End Shut-In(2)
183	2129.56	108.47	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
121.00	GOCM 15g 25o 60m	0.60
62.00	GMCO 20g 40m 40o	0.87
45.00	GMCO 10g 20m 70o	0.63
0.00	265' GIP	0.00

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.

13-17s-35w Wichita, KS

PO Box 783188
Wichita, KS 67278

Baker #2-13 CD

Job Ticket: 55552

DST#: 8

ATTN: Adam Eldani

Test Start: 2013.11.13 @ 18:32:00

GENERAL INFORMATION:

Formation:

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:12:10

Time Test Ended: 01:14:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Smith

Unit No: 62

Interval: 4469.00 ft (KB) To 4548.00 ft (KB) (TVD)

Total Depth: 4548.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3149.00 ft (KB)

3144.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6751 Outside

Press@RunDepth: psig @ 4461.00 ft (KB)

Start Date: 2013.11.13

End Date:

2013.11.14

Start Time: 18:31:52

End Time:

01:14:00

Capacity: 8000.00 psig

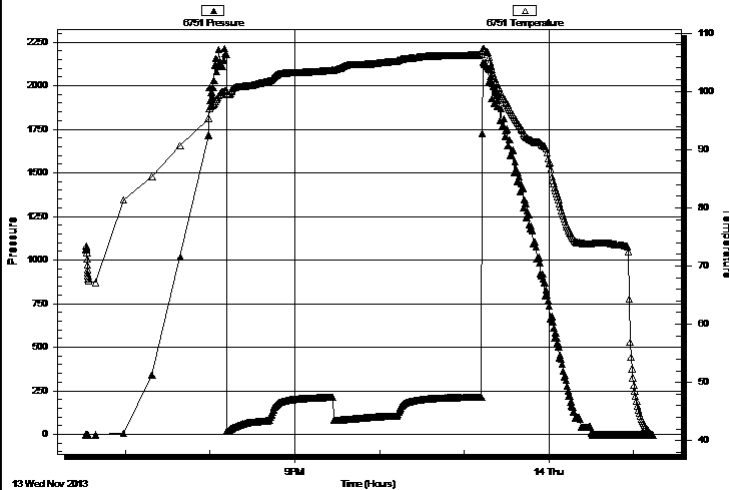
Last Calib.: 2013.11.14

Time On Btm:

Time Off Btm:

TEST COMMENT: 9" Blow .
Surface return.
B.O.B. @ 41 min.
2" Return.

Pressure vs. Time



PRESSURE SUMMARY

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

Length (ft)	Description	Volume (bbl)
121.00	GOCM 15g 25o 60m	0.60
62.00	GMCO 20g 40m 40o	0.87
45.00	GMCO 10g 20m 70o	0.63
0.00	265' GIP	0.00

Gas Rates

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

* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration, Inc.

13-17s-35w Wichita, KS

PO Box 783188
Wichita, KS 67278

Baker #2-13 CD

Job Ticket: 55552

DST#: 8

ATTN: Adam Eldani

Test Start: 2013.11.13 @ 18:32:00

Tool Information

Drill Pipe:	Length:	4327.00 ft	Diameter:	3.80 inches	Volume:	60.70 bbl	Tool Weight:	2300.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	inches	Volume:	0.00 bbl	Weight set on Packer:	22000.00 lb
Drill Collar:	Length:	121.00 ft	Diameter:	2.25 inches	Volume:	0.60 bbl	Weight to Pull Loose:	75000.00 lb
					Total Volume:	61.30 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		10.50 ft					String Weight: Initial	63000.00 lb
Depth to Top Packer:		4460.00 ft					Final	65000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		88.00 ft						
Tool Length:		110.50 ft						
Number of Packers:		2	Diameter:	6.75 inches				
Tool Comments:								

Tool Description

Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00		4438.50	
Shut In Tool	5.00		4443.50	
Hydraulic tool	5.00		4448.50	
Safety Joint	2.50		4451.00	
Packer	5.00		4456.00	22.50 Bottom Of Top Packer
Packer	4.00		4460.00	
Stubb	1.00		4461.00	
Recorder	0.00	6741 Inside	4461.00	
Recorder	0.00	6751 Outside	4461.00	
Perforations	19.00		4480.00	
Change Over Sub	1.00		4481.00	
Drill Pipe	63.00		4544.00	
Change Over Sub	1.00		4545.00	
Bullnose	3.00		4548.00	88.00 Bottom Packers & Anchor

Total Tool Length: 110.50



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration, Inc.

13-17s-35w Wichita, KS

PO Box 783188
Wichita, KS 67278

Baker #2-13 CD

Job Ticket: 55552

DST#: 8

ATTN: Adam Eldani

Test Start: 2013.11.13 @ 18:32:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 48.00 sec/qt

Water Loss: 8.79 in³

Resistivity: ohm.m

Salinity: 6500.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

29 deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
121.00	GOCM 15g 25o 60m	0.595
62.00	GMCO 20g 40m 40o	0.870
45.00	GMCO 10g 20m 70o	0.631
0.00	265' GIP	0.000

Total Length: 228.00 ft Total Volume: 2.096 bbl

Num Fluid Samples: 0

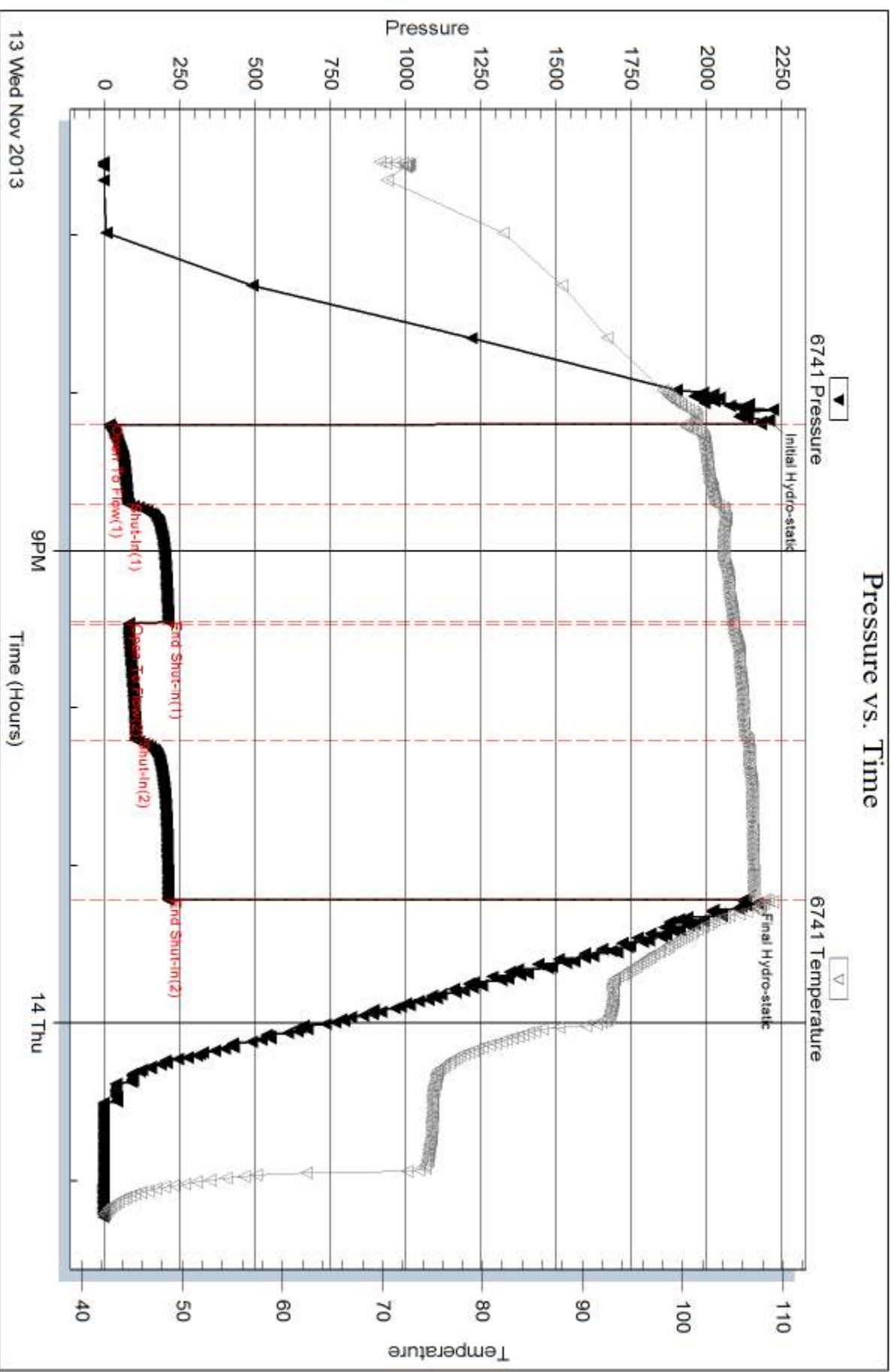
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: API: 28 @ 50 Degrees F = 29.

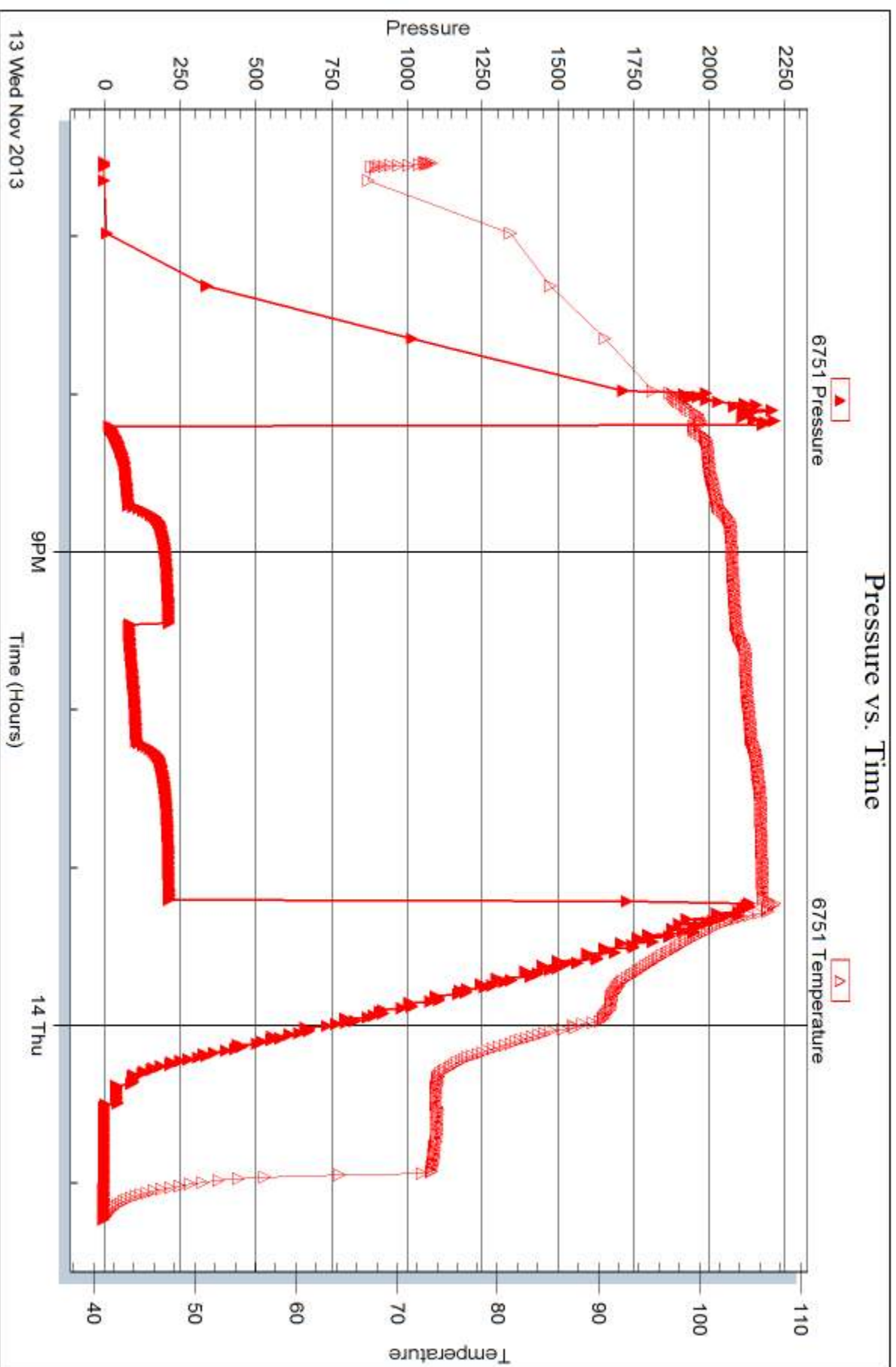


Serial #: 6751

Outside Ritchie Exploration, Inc.

Baker #2-13 CD

DST Test Number: 8





DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration, Inc.**

PO Box 783188
Wichita, KS 67278

ATTN: Adam Eldani

Baker #2-13 CD

13-17s-35w Wichita,KS

Start Date: 2013.11.14 @ 15:22:00

End Date: 2013.11.14 @ 21:09:39

Job Ticket #: 55553 DST #: 9

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.11.19 @ 10:00:59

Ritchie Exploration, Inc.

13-17s-35w Wichita,KS

Baker #2-13 CD

DST # 9

Pawnee, Myric St., F

2013.11.14



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Ritchie Exploration, Inc.

13-17s-35w Wichita, KS

PO Box 783188
Wichita, KS 67278

Baker #2-13 CD

Job Ticket: 55553

DST#: 9

ATTN: Adam Eldani

Test Start: 2013.11.14 @ 15:22:00

GENERAL INFORMATION:

Formation: **Pawnee, Myric St., F**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:22:20

Time Test Ended: 21:09:39

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Smith

Unit No: 62

Interval: **4558.00 ft (KB) To 4644.00 ft (KB) (TVD)**

Total Depth: 4644.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3149.00 ft (KB)

3144.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6741 Inside

Press@RunDepth: 19.21 psig @ 4559.00 ft (KB)

Start Date: 2013.11.14

End Date:

2013.11.14

Start Time: 15:22:02

End Time:

21:09:40

Capacity: 8000.00 psig

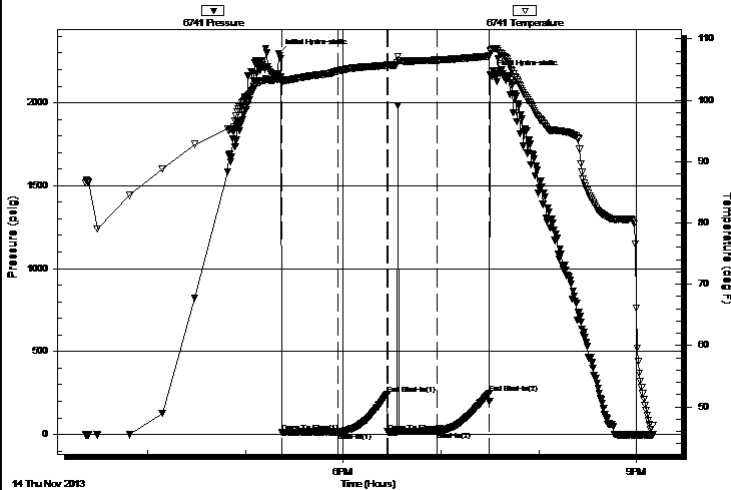
Last Calib.: 2013.11.14

Time On Btm: 2013.11.14 @ 17:20:20

Time Off Btm: 2013.11.14 @ 19:30:10

TEST COMMENT: Surface blow died at 9 min.
No return.
No blow, flushed tool, no blow.
No return.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2295.45	103.55	Initial Hydro-static
2	13.70	102.76	Open To Flow (1)
37	15.27	104.75	Shut-In(1)
67	243.97	105.71	End Shut-In(1)
67	15.41	105.58	Open To Flow (2)
97	19.21	106.54	Shut-In(2)
129	247.87	107.19	End Shut-In(2)
130	2167.97	108.13	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	M 100m Oil spots in tool.	0.05

Gas Rates

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

* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Ritchie Exploration, Inc.

13-17s-35w Wichita, KS

PO Box 783188
Wichita, KS 67278

Baker #2-13 CD

Job Ticket: 55553

DST#: 9

ATTN: Adam Eldani

Test Start: 2013.11.14 @ 15:22:00

GENERAL INFORMATION:

Formation: **Pawnee, Myric St., F**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:22:20

Time Test Ended: 21:09:39

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Smith

Unit No: 62

Interval: 4558.00 ft (KB) To 4644.00 ft (KB) (TVD)

Total Depth: 4644.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3149.00 ft (KB)

3144.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6751 Outside

Press@RunDepth: psig @ 4559.00 ft (KB)

Start Date: 2013.11.14

End Date:

2013.11.14

Capacity: 8000.00 psig

Last Calib.:

2013.11.14

Start Time: 15:21:52

End Time:

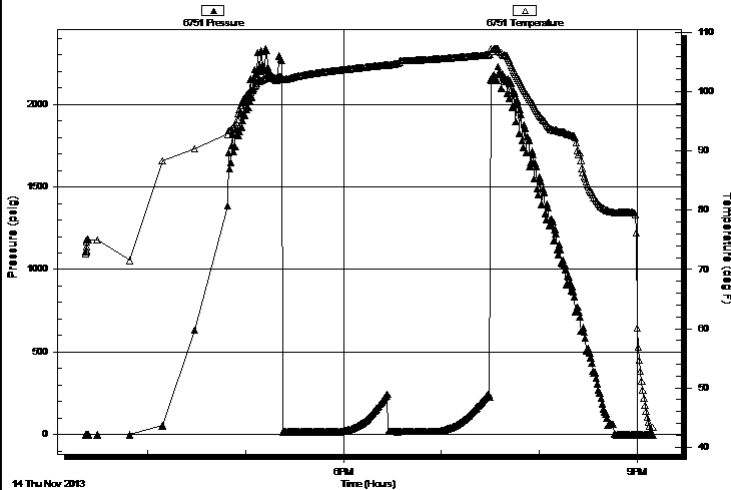
21:09:50

Time On Btm:

Time Off Btm:

TEST COMMENT: Surface blow died at 9 min.
No return.
No blow, flushed tool, no blow.
No return.

Pressure vs. Time



PRESSURE SUMMARY

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

Length (ft)	Description	Volume (bbl)
10.00	M 100m Oil spots in tool.	0.05

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.

13-17s-35w Wichita, KS

PO Box 783188
Wichita, KS 67278

Baker #2-13 CD

Job Ticket: 55553

DST#: 9

ATTN: Adam Eldani

Test Start: 2013.11.14 @ 15:22:00

Tool Information

Drill Pipe:	Length:	4446.00 ft	Diameter:	3.80 inches	Volume:	62.37 bbl	Tool Weight:	2300.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	inches	Volume:	0.00 bbl	Weight set on Packer:	30000.00 lb
Drill Collar:	Length:	121.00 ft	Diameter:	2.25 inches	Volume:	0.60 bbl	Weight to Pull Loose:	80000.00 lb
					Total Volume:	62.97 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		31.50 ft					String Weight: Initial	64000.00 lb
Depth to Top Packer:		4558.00 ft					Final	64000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		86.00 ft						
Tool Length:		108.50 ft						
Number of Packers:		2	Diameter:	6.75 inches				
Tool Comments:								

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			4536.50	
Shut In Tool	5.00			4541.50	
Hydraulic tool	5.00			4546.50	
Safety Joint	2.50			4549.00	
Packer	5.00			4554.00	22.50 Bottom Of Top Packer
Packer	4.00			4558.00	
Stubb	1.00			4559.00	
Recorder	0.00	6741	Inside	4559.00	
Recorder	0.00	6751	Outside	4559.00	
Perforations	17.00			4576.00	
Change Over Sub	1.00			4577.00	
Drill Pipe	63.00			4640.00	
Change Over Sub	1.00			4641.00	
Bullnose	3.00			4644.00	86.00 Bottom Packers & Anchor

Total Tool Length: 108.50



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration, Inc.

13-17s-35w Wichita,KS

PO Box 783188
Wichita, KS 67278

Baker #2-13 CD

Job Ticket: 55553

DST#: 9

ATTN: Adam Eldani

Test Start: 2013.11.14 @ 15:22:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 58.00 sec/qt

Water Loss: 9.19 in³

Resistivity: ohm.m

Salinity: 7000.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	M 100m Oil spots in tool.	0.049

Total Length: 10.00 ft

Total Volume: 0.049 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6741

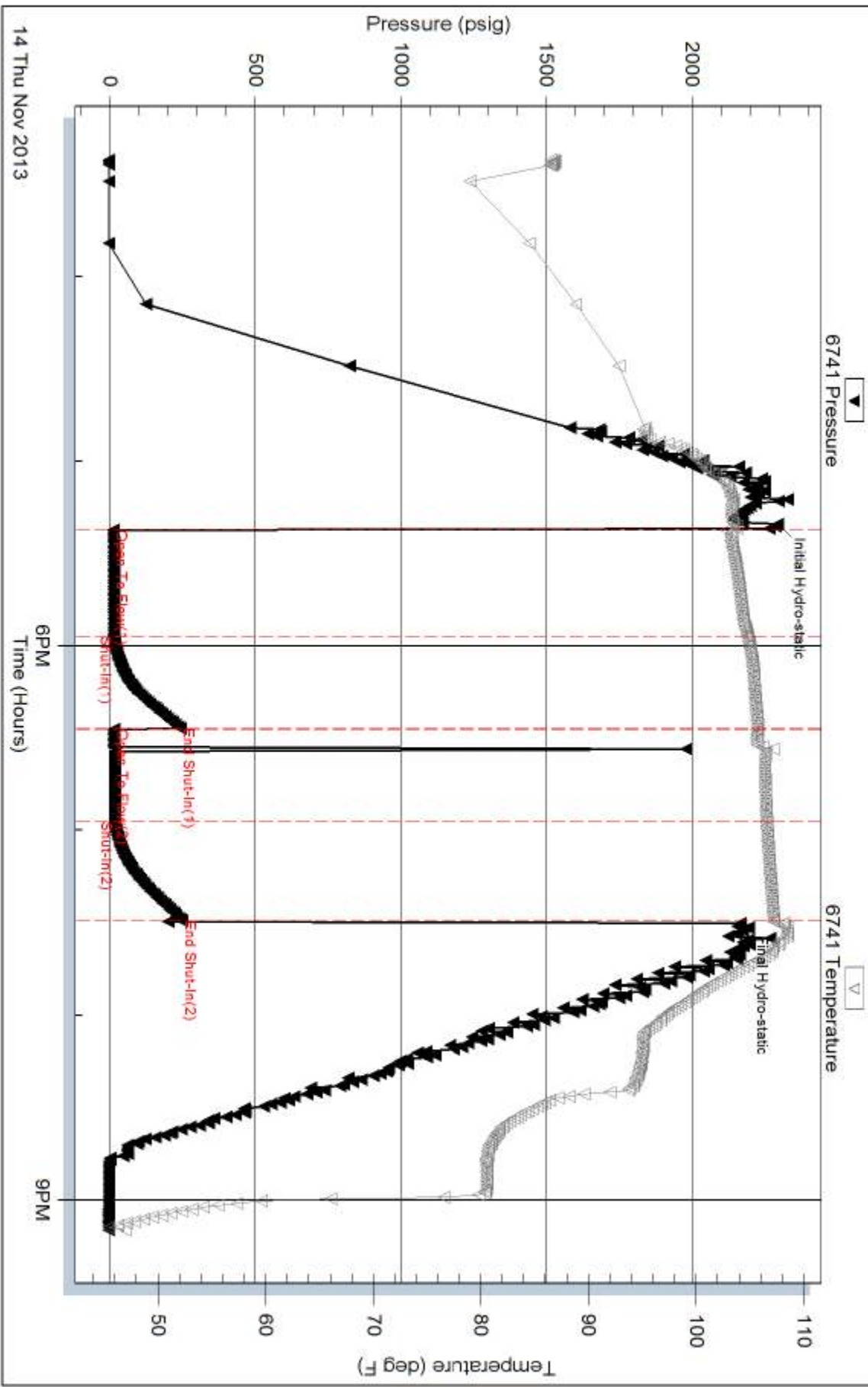
Inside

Ritchie Exploration, Inc.

Baker #2-13 CD

DST Test Number: 9

Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 55553

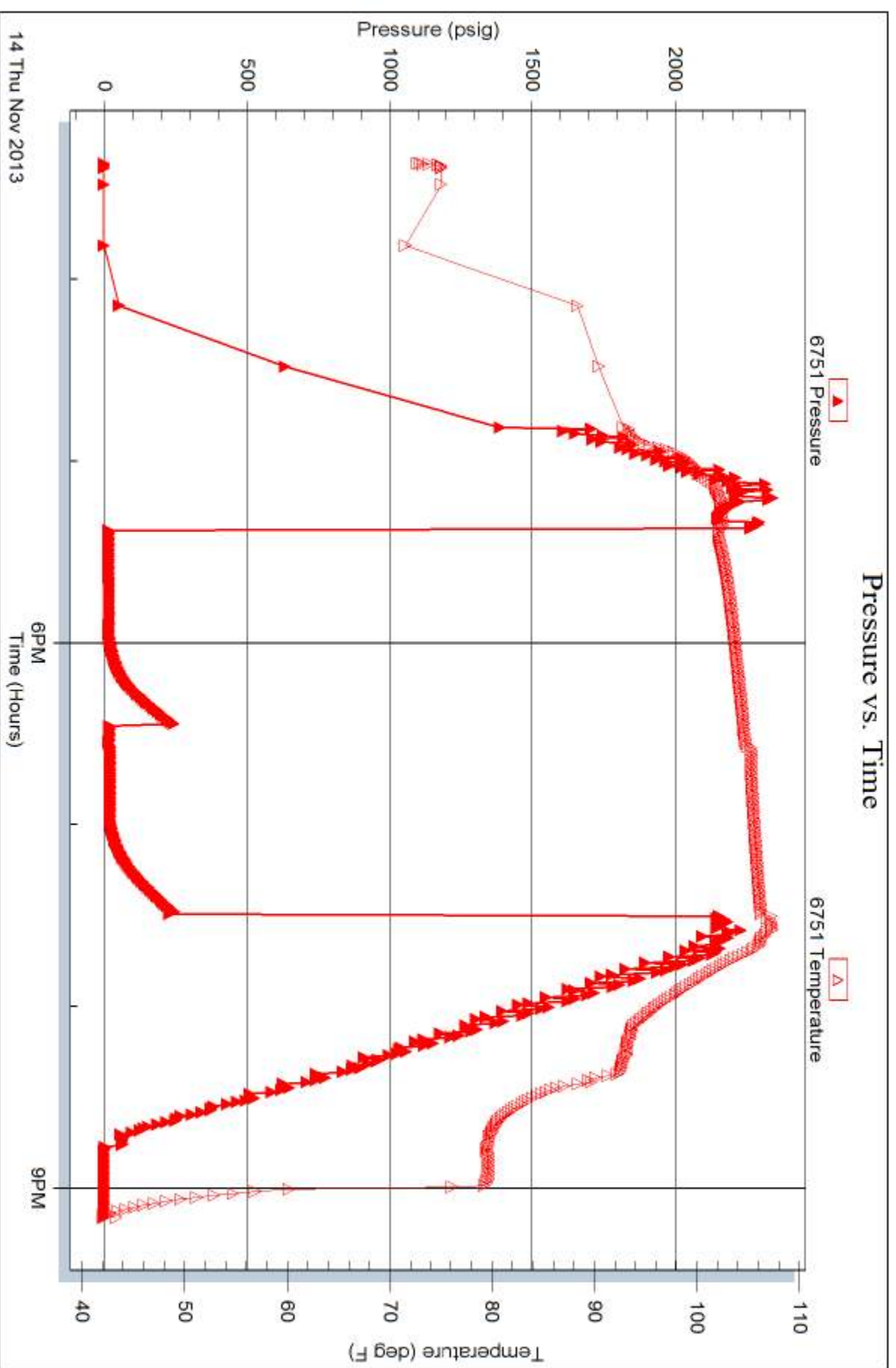
Printed: 2013.11.19 @ 10:01:02

Serial #: 6751

Outside Ritchie Exploration, Inc.

Baker #2-13 CD

DST Test Number: 9





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **55545**

Well Name & No. Baker 2-13 CD Test No. 1 Date 11-8-13
 Company Ritchie Exploration Inc. Elevation 3149 KB 3144 GL
 Address POB 783188 Wichita, KS 67228
 Co. Rep / Geo. Adam Eldani Rig WW#2
 Location: Sec. 13 Twp. 17s Rge. 35w Co. Wichita State KS

Interval Tested 3989-4084 Zone Tested Toronto - A
 Anchor Length 95 Drill Pipe Run 3848 Mud Wt. 9.1
 Top Packer Depth 3985 Drill Collars Run 121 Vis 54
 Bottom Packer Depth 3989 Wt. Pipe Run 0 WL 7.2
 Total Depth 4084 Chlorides 3200 ppm System LCM 1#

Blow Description B.O.B. @ 10min
No return
B.O.B. @ 14min.
No return

Rec	Feet of	%gas	%oil	%water	%mud
<u>231</u>	<u>WM</u>			<u>35</u>	<u>65</u>
<u>186</u>	<u>MW</u>			<u>70</u>	<u>30</u>
<u>183</u>	<u>MW</u>			<u>90</u>	<u>10</u>

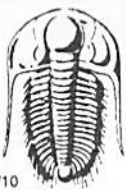
Rec Total 600 BHT 107 Gravity — API RW 142 @ 45 °F Chlorides 86,000 ppm

(A) Initial Hydrostatic <u>1933</u>	☒ Test <u>1250</u>	T-On Location <u>14:15</u>
(B) First Initial Flow <u>28</u>	☒ Jars <u>250</u>	T-Started <u>14:40</u>
(C) First Final Flow <u>189</u>	☒ Safety Joint <u>75</u>	T-Open <u>16:22</u>
(D) Initial Shut-In <u>1082</u>	☒ Circ Sub <u>N/C</u>	T-Pulled <u>19:25</u>
(E) Second Initial Flow <u>190</u>	☐ Hourly Standby	T-Out <u>21:26</u>
(F) Second Final Flow <u>351</u>	☒ Mileage <u>42RT</u> <u>65.10</u>	Comments
(G) Final Shut-In <u>1067</u>	☐ Sampler	
(H) Final Hydrostatic <u>1900</u>	☐ Straddle	

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

Approved By [Signature] Our Representative Chuck Smith
 Sub Total 1640.10
 Total 1640.10
 MP/DST Disc't

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **55546**

Well Name & No. Baker 2-13CD Test No. 2 Date 11-9-13
 Company Ritchie Exploration, Inc. Elevation 3149 KB 3144 GL
 Address POB 783188 Wichita, KS 67278
 Co. Rep / Geo. Adam Eldani Rig WW#2
 Location: Sec. 13 Twp. 17s Rge. 35W Co. Wichita State KS

Interval Tested 4077-4163 Zone Tested LKC 'C,D,E,F'
 Anchor Length 86 Drill Pipe Run 3943 Mud Wt. 9.1
 Top Packer Depth 4073 Drill Collars Run 121 Vis 59
 Bottom Packer Depth 4077 Wt. Pipe Run 0 WL 9.6
 Total Depth 4163 Chlorides 5400 ppm System LCM 2#

Blow Description B.O.B. @ 14 1/2 min.
No return.
B.O.B. @ 19 min.
No return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>15</u>	<u>0</u>	<u>100</u>			
<u>109</u>	<u>OCWM</u>	<u>5</u>	<u>10</u>	<u>85</u>	
<u>218</u>	<u>OSMW</u>		<u>60</u>	<u>40</u>	
<u>216</u>	<u>OSMW</u>		<u>10</u>	<u>90</u>	

Rec Total 558 BHT 107 Gravity 29 API RW 165 @ 47 °F Chlorides 70000 ppm

(A) Initial Hydrostatic <u>1989</u>	☒ Test <u>1250</u>	T-On Location <u>11:00</u>
(B) First Initial Flow <u>24</u>	☐ Jars	T-Started <u>11:16</u>
(C) First Final Flow <u>147</u>	☒ Safety Joint <u>75</u>	T-Open <u>13:22</u>
(D) Initial Shut-In <u>1105</u>	☒ Circ Sub <u>N/C</u>	T-Pulled <u>16:23</u>
(E) Second Initial Flow <u>150</u>	☐ Hourly Standby	T-Out <u>18:21</u>
(F) Second Final Flow <u>269</u>	☒ Mileage <u>65.10</u>	Comments
(G) Final Shut-In <u>1086</u>	☐ Sampler	
(H) Final Hydrostatic <u>1971</u>	☐ Straddle	

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

☐ Ruined Shale Packer
☐ Ruined Packer
☐ Extra Copies
 Sub Total 0
 Total 1390.10
 MP/DST Disc't

Sub Total 1390.10

Approved By [Signature] Our Representative Chuck Smith

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **55547**

Well Name & No. Baker #2-13CD Test No. 3 Date 11-10-13
 Company Ritchie Exploration Inc. Elevation 3149 KB 3144 GL
 Address P.O.B. 783188 Wichita, KS 67278
 Co. Rep / Geo. Adam Eldani Rig WW#2
 Location: Sec. 13 Twp. 17s Rge. 35W Co. Wichita State KS

Interval Tested 4166-4210 Zone Tested LKC 'G'
 Anchor Length 44 Drill Pipe Run 4032 Mud Wt. 9.0
 Top Packer Depth 4162 Drill Collars Run 121 Vis 52
 Bottom Packer Depth 4166 Wt. Pipe Run 0 WL 9.6
 Total Depth 4210 Chlorides 5400 ppm System LCM 1 1/2"

Blow Description B.O.B. @ 10 1/2 min.
No return.
B.O.B. @ 12 min.
No return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>OSM</u>			<u>100</u>	
<u>124</u>	<u>WM</u>			<u>15</u>	<u>85</u>
<u>8312</u>	<u>W MW</u>			<u>90</u>	<u>10</u>
<u>370</u>	<u>W Oil spots in tool.</u>			<u>100</u>	

Rec Total 811 BHT 111 Gravity — API RW 213 @ 43 °F Chlorides 69,000 ppm

(A) Initial Hydrostatic <u>1998</u>	☒ Test <u>1250</u>	T-On Location <u>3:</u>
(B) First Initial Flow <u>23</u>	☐ Jars	T-Started <u>3:26</u>
(C) First Final Flow <u>198</u>	☒ Safety Joint <u>75</u>	T-Open <u>5:28</u>
(D) Initial Shut-In <u>1135</u>	☒ Circ Sub <u>N/C</u>	T-Pulled <u>8:28</u>
(E) Second Initial Flow <u>200</u>	☐ Hourly Standby	T-Out <u>10:37</u>
(F) Second Final Flow <u>379</u>	☒ Mileage <u>65.10</u>	Comments
(G) Final Shut-In <u>1130</u>	☐ Sampler	
(H) Final Hydrostatic <u>1980</u>	☐ Straddle	

Initial Open <u>30</u>	☐ Shale Packer	☐ Ruined Shale Packer
Initial Shut-In <u>45</u>	☐ Extra Packer	☐ Ruined Packer
Final Flow <u>45</u>	☐ Extra Recorder	☐ Extra Copies
Final Shut-In <u>60</u>	☐ Day Standby	Sub Total <u>0</u>
	☐ Accessibility	Total <u>1390.10</u>
	Sub Total <u>1390.10</u>	MP/DST Disc't

Approved By _____ Our Representative Chuck Smith

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **55548**

Well Name & No. Baker #2-13CD Test No. 4 Date 11-10-13
 Company Ritchie Exploration, Inc. Elevation 3149 KB 3144 GL
 Address POB 783188 Wichita, KS 67278
 Co. Rep / Geo. Adam Eldani Rig WW#2
 Location: Sec. 13 Twp. 17s Rge. 35w Co. Wichita State KS

Interval Tested 4230 - 4272 Zone Tested LKC
 Anchor Length 42 Drill Pipe Run 4098 Mud Wt. 9.0
 Top Packer Depth 4226 Drill Collars Run 121 Vis 54
 Bottom Packer Depth 4230 Wt. Pipe Run 0 WL 6.4
 Total Depth 4272 Chlorides 6000 ppm System LCM 12"

Blow Description 3/4" Blow died @ 25 min.
No return.
No blow.
No return.

Rec	Feet of	%gas	%oil	%water	%mud
Rec <u>10</u>	Feet of <u>M Oil spots in tool</u>	%gas	%oil	%water <u>100</u>	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 10 BHT 106 Gravity — API RW — @ — ° F Chlorides — ppm

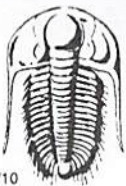
(A) Initial Hydrostatic <u>2060</u>	☒ Test <u>1250</u>	T-On Location <u>19:45</u>
(B) First Initial Flow <u>12</u>	☒ Jars <u>NO</u>	T-Started <u>19:55</u>
(C) First Final Flow <u>17</u>	☒ Safety Joint <u>75</u>	T-Open <u>21:55</u>
(D) Initial Shut-In <u>1039</u>	☒ Circ Sub <u>N/C</u>	T-Pulled <u>00:25</u>
(E) Second Initial Flow <u>19</u>	☒ Hourly Standby <u>NO</u>	T-Out <u>2:05</u>
(F) Second Final Flow <u>23</u>	☒ Mileage <u>65.10</u>	Comments
(G) Final Shut-In <u>972</u>	☐ Sampler	
(H) Final Hydrostatic <u>2005</u>	☐ Straddle	

Initial Open <u>30</u>	☐ Shale Packer	☐ Ruined Shale Packer
Initial Shut-In <u>45</u>	☐ Extra Packer	☐ Ruined Packer
Final Flow <u>30</u>	☐ Extra Recorder	Sub Total <u>0</u>
Final Shut-In <u>45</u>	☐ Day Standby	Total <u>1390.10</u>
	☐ Accessibility	MP/DST Disc't

Sub Total 1390.10

Approved By _____ Our Representative Chuck Aniel

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **55549**

Well Name & No. Baker #2-13 CD Test No. 5 Date 11-11-13
 Company Ritchie Exploration, Inc. Elevation 3149 KB 3144 GL
 Address POB 783188 Wichita, KS 67278
 Co. Rep / Geo. Adam Eldani Rig WW#2
 Location: Sec. 13 Twp. 17s Rge. 35w Co. Wichita State KS

Interval Tested 4274-4337 Zone Tested LKC
 Anchor Length 63 Drill Pipe Run 4134 Mud Wt. 9.0
 Top Packer Depth 4270 Drill Collars Run 121 Vis 55
 Bottom Packer Depth 4274 Wt. Pipe Run 0 WL 6.8
 Total Depth 4337 Chlorides 5500 ppm System LCM 1#

Blow Description B.O.B. @ 5 min.
No return.
B.O.B. @ 6 min.
No return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>107</u>	<u>OSWM</u>		<u>30</u>	<u>70</u>	
<u>434</u>	<u>OSMW</u>		<u>65</u>	<u>35</u>	
<u>989</u>	<u>OSMW</u>		<u>90</u>	<u>10</u>	

Rec Total 1530 BHT 114 Gravity — API RW .210 @ 49 °F Chlorides 52000 ppm

(A) Initial Hydrostatic <u>2096</u>	☒ Test <u>1250</u>	T-On Location <u>12:00</u>
(B) First Initial Flow <u>56</u>	☐ Jars	T-Started <u>12:16</u>
(C) First Final Flow <u>363</u>	☒ Safety Joint <u>75</u>	T-Open <u>14:21</u>
(D) Initial Shut-In <u>1194</u>	☒ Circ Sub <u>N/C</u>	T-Pulled <u>17:23</u>
(E) Second Initial Flow <u>363</u>	☐ Hourly Standby	T-Out <u>19:41</u>
(F) Second Final Flow <u>681</u>	☒ Mileage <u>65.10</u>	Comments
(G) Final Shut-In <u>1193</u>	☐ Sampler	
(H) Final Hydrostatic <u>2063</u>	☐ Straddle	

Initial Open <u>30</u>	☐ Shale Packer	☐ Ruined Shale Packer
Initial Shut-In <u>45</u>	☐ Extra Packer	☐ Ruined Packer
Final Flow <u>45</u>	☐ Extra Recorder	☐ Extra Copies
Final Shut-In <u>60</u>	☐ Day Standby	Sub Total <u>0</u>
	☐ Accessibility	Total <u>1390.10</u>
	Sub Total <u>1390.10</u>	MP/DST Disc't

Approved By [Signature] Our Representative Chuck Smith
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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **55550**

Well Name & No. Baker #2-13 CD Test No. 6 Date 11-12-13
 Company Ritchie Exploration, Inc. Elevation 3149 KB 3144 GL
 Address POB 781388 Wichita, KS 67278
 Co. Rep / Geo. Adam Eldani Rig WW#2
 Location: Sec. 13 Twp. 17 Rge. 35w Co. Wichita State KS

Interval Tested 4339 - 4387 Zone Tested LKC "K"
 Anchor Length 48 Drill Pipe Run 4229 Mud Wt. 9.1
 Top Packer Depth 4335 Drill Collars Run 121 Vis 58
 Bottom Packer Depth 4339 Wt. Pipe Run 0 WL 6.8
 Total Depth 4387 Chlorides 5500 ppm System LCM 1"

Blow Description B.O.B. @ 11 min.
No return.
B.O.B. @ 14 min.
No return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>72</u>	<u>0.5 MW</u>		<u>50</u>	<u>50</u>	
<u>248</u>	<u>0.5 MW</u>		<u>80</u>	<u>20</u>	
<u>431</u>	<u>MW</u>		<u>90</u>	<u>10</u>	

Rec Total 751 BHT 113 Gravity — API RW 210 @ 39 °F Chlorides 65000 ppm

(A) Initial Hydrostatic <u>2157</u>	☒ Test <u>1250</u>	T-On Location <u>4:15</u>
(B) First Initial Flow <u>21</u>	☐ Jars	T-Started <u>4:15</u>
(C) First Final Flow <u>188</u>	☒ Safety Joint <u>75</u>	T-Open <u>6:34</u>
(D) Initial Shut-In <u>1183</u>	☒ Circ Sub <u>N/C</u>	T-Pulled <u>9:35</u>
(E) Second Initial Flow <u>193</u>	☐ Hourly Standby	T-Out <u>11:55</u>
(F) Second Final Flow <u>353</u>	☒ Mileage <u>65.10</u>	Comments
(G) Final Shut-In <u>1154</u>	☐ Sampler	
(H) Final Hydrostatic <u>2056</u>	☐ Straddle	

Initial Open <u>30</u>	☐ Shale Packer	☐ Ruined Shale Packer
Initial Shut-In <u>45</u>	☐ Extra Packer	☐ Ruined Packer
Final Flow <u>45</u>	☐ Extra Recorder	☐ Extra Copies
Final Shut-In <u>60</u>	☐ Day Standby	Sub Total <u>0</u>
	☐ Accessibility	Total <u>1390.10</u>
	Sub Total <u>1390.10</u>	MP/DST Disc't

Approved By _____ Our Representative Chuck Smith

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 55551

Well Name & No. Baker #2-13CD Test No. 7 Date 11-13-13
Company Ritchie Exploration, Inc. Elevation 3149 KB 3144 GL
Address POB 783188 Wichita, KS 67278
Co. Rep / Geo. Adam Eldani Rig WW#2
Location: Sec. 13 Twp. 17s Rge. 3.5w Co. Wichita State KS

Interval Tested 4415-4494 Zone Tested Marmaton
Anchor Length 79 Drill Pipe Run 4283 Mud Wt. 9.1
Top Packer Depth 4411 Drill Collars Run 121 Vis 49
Bottom Packer Depth 4415 Wt. Pipe Run 0 WL 96
Total Depth 4494 Chlorides 6000 ppm System LCM 1 1/2"

Blow Description 3/4" Blow.
No return.
No blow, flushed tool, no blow.
No return.

Rec	Feet of	%gas	%oil	%water	%mud
Rec <u>30</u>	Feet of <u>OSM</u>	%gas	%oil	%water <u>100</u>	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 30 BHT 107 Gravity — API RW — @ — ° F Chlorides — ppm

(A) Initial Hydrostatic <u>2180</u>	☒ Test <u>1250</u>	T-On Location <u>00:45</u>
(B) First Initial Flow <u>13</u>	☐ Jars	T-Started <u>1:02</u>
(C) First Final Flow <u>21</u>	☒ Safety Joint <u>75</u>	T-Open <u>3:45</u>
(D) Initial Shut-In <u>1212</u>	☒ Circ Sub <u>N/C</u>	T-Pulled <u>6:21</u>
(E) Second Initial Flow <u>24</u>	☐ Hourly Standby	T-Out <u>8:11</u>
(F) Second Final Flow <u>35</u>	☒ Mileage <u>65.10</u>	Comments
(G) Final Shut-In <u>1120</u>	☐ Sampler	
(H) Final Hydrostatic <u>2134</u>	☐ Straddle	

Initial Open <u>30</u>	☐ Shale Packer	☐ Ruined Shale Packer
Initial Shut-In <u>45</u>	☐ Extra Packer	☐ Ruined Packer
Final Flow <u>36</u>	☐ Extra Recorder	Sub Total <u>0</u>
Final Shut-In <u>45</u>	☐ Day Standby	Total <u>1390.10</u>
	☐ Accessibility	MP/DST Disc't

Sub Total 1390.10

Approved By _____ Our Representative Chuck Smith

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **55552**

Well Name & No. Baker #2-13CD Test No. 8 Date 11-13-13
 Company Ritchie Exploration, Inc. Elevation 3149 KB 3144 GL
 Address POB 783188 Wichita, KS 67278
 Co. Rep / Geo. Adam Eldani Rig WW#2
 Location: Sec. 13 Twp. 17s Rge. 35w Co. Wichita State KS

Interval Tested 4460-4548 Zone Tested _____
 Anchor Length 88 Drill Pipe Run 4327 Mud Wt. 9.0
 Top Packer Depth 4454 Drill Collars Run 121 Vis 48
 Bottom Packer Depth 4460 Wt. Pipe Run 0 WL 8.8
 Total Depth 4548 Chlorides 6500 ppm System LCM 1 1/2"
 Blow Description 9" Blow

Surface return.

B.O.B. @ 41 min.

2" Return.

Rec	Feet of	%gas	%oil	%water	%mud
Rec <u>45</u>	Feet of <u>GMCO</u>	<u>10</u>	<u>70</u>	<u>20</u>	<u>0</u>
Rec <u>62</u>	Feet of <u>GMCO</u>	<u>20</u>	<u>40</u>	<u>40</u>	<u>0</u>
Rec <u>121</u>	Feet of <u>G-OCM</u>	<u>15</u>	<u>25</u>	<u>60</u>	<u>0</u>
Rec _____	Feet of <u>265' G-IP</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

Rec Total 228 BHT 107 Gravity 29 API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 2208

(B) First Initial Flow 16

(C) First Final Flow 78

(D) Initial Shut-In 211

(E) Second Initial Flow 82

(F) Second Final Flow 104

(G) Final Shut-In 210

(H) Final Hydrostatic 2130

Initial Open 30

Initial Shut-In 45

Final Flow 45

Final Shut-In 60

☒ Test 1250

☐ Jars _____

☒ Safety Joint 75

☒ Circ Sub N/C

☐ Hourly Standby _____

☒ Mileage 65.10

☐ Sampler _____

☐ Straddle _____

☐ Shale Packer _____

☐ Extra Packer _____

☐ Extra Recorder _____

☐ Day Standby _____

☐ Accessibility _____

Sub Total 1390.10

T-On Location 18:10

T-Started 18:32

T-Open 20:12

T-Pulled 23:13

T-Out 1:14

Comments _____

☐ Ruined Shale Packer _____

☐ Ruined Packer _____

☐ Extra Copies _____

Sub Total 0

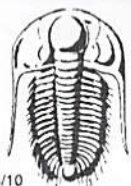
Total 1390.10

MP/DST Disc't _____

Approved By _____

Our Representative Chuck Smith

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **55553**

Well Name & No. Baker #2-13 CD Test No. 9 Date 11-14-13
 Company Ritchie Exploration, Inc. Elevation 3149 KB 3144 GL
 Address POB 783188 Wichita, KS 67278
 Co. Rep / Geo. Adam Eldani Rig WW#2
 Location: Sec. 13 Twp. 17s Rge. 35w Co. Wichita State KS

Interval Tested 4558 - 4644 Zone Tested Pawnee, Myrick, Fr. Scott
 Anchor Length 86 Drill Pipe Run 4446 Mud Wt. 9.1
 Top Packer Depth 4554 Drill Collars Run 121 Vis 58
 Bottom Packer Depth 4558 Wt. Pipe Run 0 WL 9.2
 Total Depth 4644 Chlorides 7000 ppm System LCM 1#

Blow Description Surface blow died @ 9 min.
No return.
No blow, flushed tool, no blow.
No return.

Rec	Feet of	%gas	%oil	%water	%mud
Rec <u>10</u>	Feet of <u>M Oil spots in tool</u>	%gas	%oil	%water <u>100</u>	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 10 BHT 10'7 Gravity - API RW - @ - ° F Chlorides - ppm

(A) Initial Hydrostatic <u>2295</u>	☒ Test <u>1250</u>	T-On Location <u>15:15</u>
(B) First Initial Flow <u>14</u>	☐ Jars	T-Started <u>15:22</u>
(C) First Final Flow <u>15</u>	☒ Safety Joint <u>75</u>	T-Open <u>17:22</u>
(D) Initial Shut-In <u>244</u>	☒ Circ Sub <u>N/C</u>	T-Pulled <u>19:29</u>
(E) Second Initial Flow <u>15</u>	☐ Hourly Standby	T-Out <u>21:10</u>
(F) Second Final Flow <u>19</u>	☒ Mileage <u>x2 130.20</u>	Comments <u>Picked up tool 11-16-13</u>
(G) Final Shut-In <u>248</u>	☐ Sampler	<u>12:15 am</u>
(H) Final Hydrostatic <u>2168</u>	☐ Straddle	☐ Ruined Shale Packer

Initial Open <u>35</u>	☐ Shale Packer	☐ Ruined Packer
Initial Shut-In <u>30</u>	☐ Extra Packer	☐ Extra Copies
Final Flow <u>30</u>	☐ Extra Recorder	Sub Total <u>800</u>
Final Shut-In <u>30</u>	☐ Day Standby <u>1d 3h</u>	Total <u>2255.20</u>
	☐ Accessibility	MP/DST Disc't
	Sub Total <u>1455.20</u>	

Approved By [Signature] Our Representative Charles Smith
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