



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

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

CONFIDENTIAL
1001 W Expressway,
STE 1300
OCT 20 2009
Oklahoma City OK 73118

ATTN: ~~KCC~~ Reeves

23 32 32 Seward KS

McBride 5-23

Start Date: 2009.08.14 @ 11:42:13

End Date: 2009.08.14 @ 22:43:01

Job Ticket #: 30872 DST #: 1

Trilobite Testing, Inc
PO Box 1733 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Raydon Exploration, Inc.

McBride 5-23

23 32 32 Seward KS

DST # 1

Lansing A

2009.08.14



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Raydon Exploration, Inc.

McBride 5-23

1601 NW Expressway,
STE 1300
Oklahoma City OK 73118
ATTN: Ed Grieves

23 32 32 Seward KS

Job Ticket: 30872

DST#: 1

Test Start: 2009.08.14 @ 11:42:13

GENERAL INFORMATION:

Formation: **Lansing A**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:16:42

Time Test Ended: 22:43:01

Test Type: Conventional Bottom Hole

Tester: Chris Hagman

Unit No: 34

Interval: **4349.00 ft (KB) To 4360.00 ft (KB) (TVD)**

Total Depth: 4360.00 ft (KB) (TVD)

Hole Diameter: 7.78 inches Hole Condition: Good

Reference Elevations: 2834.00 ft (KB)

2822.00 ft (CF)

KB to GR/CF: 12.00 ft

Serial #: 6753

Inside

Press@RunDepth: 185.12 psig @ 4352.00 ft (KB)

Start Date: 2009.08.14

End Date:

2009.08.14

Capacity:

7000.00 psig

Start Time: 11:42:13

End Time:

22:43:01

Last Calib.:

2009.08.14

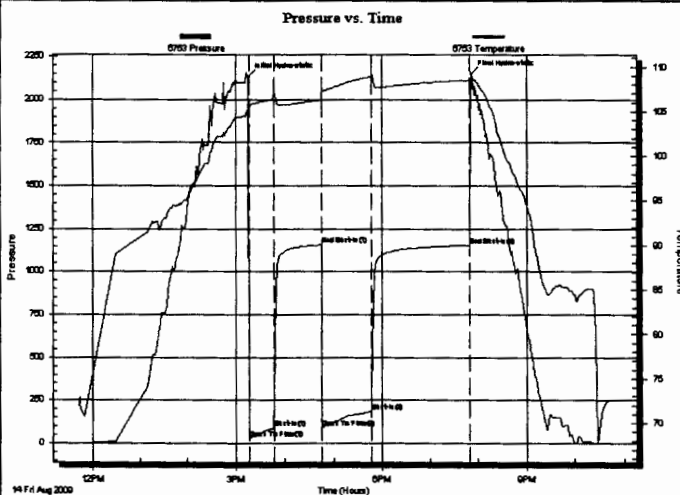
Time On Btrr:

2009.08.14 @ 15:15:22

Time Off Btrr:

2009.08.14 @ 19:51:32

TEST COMMENT: IF: 9 inches in 30 min., fair building blow
IS: No blow back
FF: 11 inches in 60 min., strong building blow
FS: No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2131.77	105.10	Initial Hydro-static
2	25.29	105.52	Open To Flow (1)
31	86.69	106.40	Shut-in(1)
90	1157.05	106.26	End Shut-in(1)
91	91.66	107.35	Open To Flow (2)
152	185.12	108.91	Shut-in(2)
275	1154.17	108.50	End Shut-in(2)
277	2151.25	109.10	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
354.00	100%W	2.31

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Raydon Exploration, Inc.

McBride 5-23

1601 NW Expressway,
STE 1300
Oklahoma City OK 73118
ATTN: Ed Grieves

23 32 32 Seward KS

Job Ticket: 30872 **DST#: 1**

Test Start: 2009.08.14 @ 11:42:13

Tool Information

Drill Pipe:	Length: 4037.00 ft	Diameter: 3.80 inches	Volume: 56.63 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length: 292.00 ft	Diameter: 2.25 inches	Volume: 1.44 bbl	Weight to Pull Loose:	75000.00 lb
			<u>Total Volume: 58.07 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial	64000.00 lb
Depth to Top Packer:	4349.00 ft			Final	64000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	11.00 ft				
Tool Length:	39.00 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			4322.00	
Shut In Tool	5.00			4327.00	
Hydraulic tool	5.00			4332.00	
Jars	5.00			4337.00	
Safety Joint	3.00			4340.00	
Packer - Shale	5.00			4345.00	
Packer	4.00			4349.00	28.00 Bottom Of Top Packer
Stubb	1.00			4350.00	
Perforations	2.00			4352.00	
Recorder	0.00	8374	Inside	4352.00	
Recorder	0.00	6753	Inside	4352.00	
Perforations	5.00			4357.00	
Bullnose	3.00			4360.00	11.00 Anchor Tool

Total Tool Length: 39.00



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FLUID SUMMARY

Raydon Exploration, Inc.

McBride 5-23

1601 NW Expressway,
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Oklahoma City OK 73118
ATTN: Ed Grieves

23 32 32 Seward KS

Job Ticket: 30872

DST#: 1

Test Start: 2009.08.14 @ 11:42:13

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

150000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbl

Water Loss: 5.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3200.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
354.00	100%W	2.306

Total Length: 354.00 ft Total Volume: 2.306 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

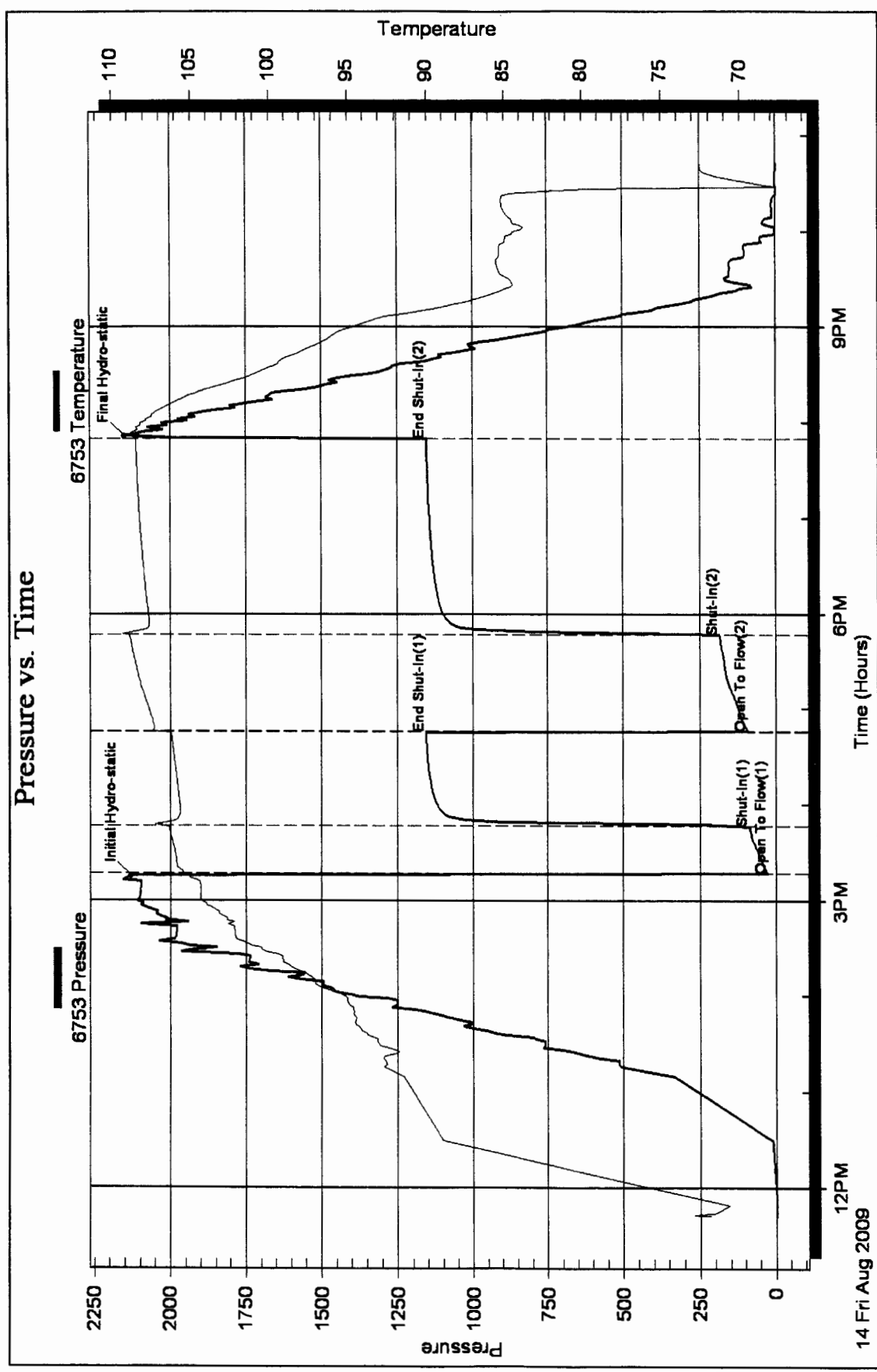
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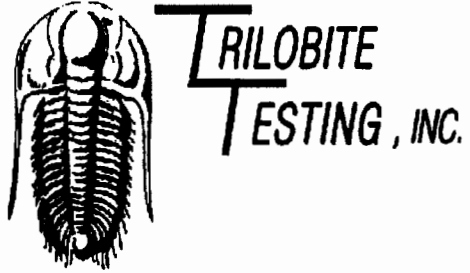
Laboratory Name:

Laboratory Location:

Recovery Comments: RW=.048@84F=150,000ppm

Pressure vs. Time





DRILL STEM TEST REPORT

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

1601 NW Expressway,
STE 1300
Oklahoma City OK 73118

ATTN: Ed Grieves

23 32 32 Seward KS

McBride 5-23

Start Date: 2009.08.15 @ 14:41:26

End Date: 2009.08.16 @ 02:10:35

Job Ticket #: 30873 DST #: 2

Trilobite Testing, Inc

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

Raydon Exploration, Inc.

McBride 5-23

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DST # 2

Lansing B

2009.08.15



**TRILOBITE
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DRILL STEM TEST REPORT

Raydon Exploration, Inc.

McBride 5-23

1601 NW Expressway,
STE 1300
Oklahoma City OK 73118
ATTN: Ed Grieves

23 32 32 Seward KS

Job Ticket: 30873 **DST#: 2**

Test Start: 2009.08.15 @ 14:41:26

GENERAL INFORMATION:

Formation: **Lansing B**

Deviated: **No** Whipstock: ft (KB)

Time Tool Opened: 17:30:45

Time Test Ended: 02:10:35

Test Type: **Conventional Bottom Hole**

Tester: **Chris Hagman**

Unit No: **34**

Interval: **4388.00 ft (KB) To 4398.00 ft (KB) (TVD)**

Total Depth: **4398.00 ft (KB) (TVD)**

Hole Diameter: **7.78 inches** Hole Condition: **Good**

Reference Elevations: **2834.00 ft (KB)**

2822.00 ft (CF)

KB to GRVCF: **12.00 ft**

Serial #: 6753

Inside

Press@RunDepth: **285.95 psig @ 4390.00 ft (KB)**

Start Date: **2009.08.15**

End Date:

2009.08.16

Capacity: **7000.00 psig**

Last Calib.: **2009.08.16**

Start Time: **14:41:26**

End Time:

02:10:35

Time On Btrn: **2009.08.15 @ 17:28:45**

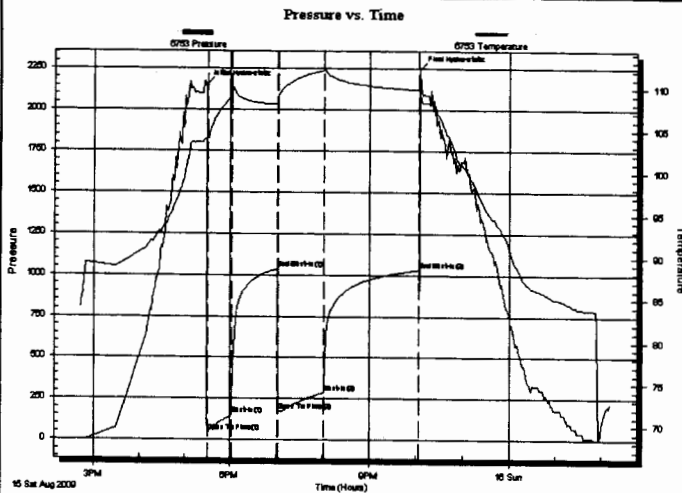
Time Off Btrn: **2009.08.15 @ 22:04:55**

TEST COMMENT: IF: BOB 20 sec., GTS 30 min., strong steady blow

ISI: Blow back 30 sec., BOB 30 min.

FF: BOB GTS ASAO, strong steady blow

FSI: Blow back 20 sec., BOB 20 min.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2153.82	103.88	Initial Hydro-static
2	46.96	104.08	Open To Flow (1)
34	149.35	109.06	Shut-In(1)
94	1036.21	108.08	End Shut-In(1)
95	177.87	109.24	Open To Flow (2)
153	285.95	112.09	Shut-In(2)
275	1031.06	109.83	End Shut-In(2)
277	2247.90	109.55	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
352.00	100%W	1.73
62.00	gassy oily water 70%G,5%O,25%W	0.87
248.00	gassy oil 30%G,70%O	3.48

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	5.00	7.26
Last Gas Rate	0.13	8.00	8.38
Max. Gas Rate	0.13	8.00	8.38



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TOOL DIAGRAM

Raydon Exploration, Inc.
1601 NW Expressway,
STE 1300
Oklahoma City OK 73118
ATTN: Ed Grieves

McBride 5-23
23 32 32 Seward KS
Job Ticket: 30873 **DST#: 2**
Test Start: 2009.08.15 @ 14:41:26

Tool Information

Drill Pipe:	Length: 4038.00 ft	Diameter: 3.80 inches	Volume: 56.64 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 352.00 ft	Diameter: 2.25 inches	Volume: 1.73 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 58.37 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 65000.00 lb
Depth to Top Packer:	4388.00 ft			Final 68000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	10.00 ft			
Tool Length:	38.00 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			4361.00	
Shut In Tool	5.00			4366.00	
Hydraulic tool	5.00			4371.00	
Jars	5.00			4376.00	
Safety Joint	3.00			4379.00	
Packer - Shale	5.00			4384.00	
Packer	4.00			4388.00	28.00 Bottom Of Top Packer
Stubb	1.00			4389.00	
Perforations	1.00			4390.00	
Recorder	0.00	8374	Inside	4390.00	
Recorder	0.00	6753	Inside	4390.00	
Perforations	5.00			4395.00	
Bullnose	3.00			4398.00	10.00 Anchor Tool

Total Tool Length: 38.00



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McBride 5-23
23 32 32 Seward KS
Job Ticket: 30873 **DST#: 2**
Test Start: 2009.08.15 @ 14:41:26

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 38 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 140000 ppm
Viscosity: 51.00 sec/qt	Cushion Volume: bbl	
Water Loss: 6.79 in ³	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 4300.00 ppm		
Filter Cake: inches		

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
352.00	100%W	1.731
62.00	gassy oily water 70%G,5%O,25%W	0.870
248.00	gassy oil 30%G,70%O	3.479

Total Length: 662.00 ft Total Volume: 6.080 bbl

Num Fluid Samples: 1 Num Gas Bombs: 1 Serial #:

Laboratory Name: Caraway Laboratory Location: Liberal, KS

Recovery Comments: API=40@80F=38
RW=.055@78F=140,000ppm



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DRILL STEM TEST REPORT

GAS RATES

Raydon Exploration, Inc.

McBride 5-23

1601 NW Expressway,
STE 1300
Oklahoma City OK 73118
ATTN: Ed Grieves

23 32 32 Seward KS

Job Ticket: 30873

DST#: 2

Test Start: 2009.08.15 @ 14:41:26

Gas Rates Information

Temperature: 59 deg C
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m ³ /d)
2	10	0.13	5.00	7.26
2	10	0.13	5.00	7.26
2	20	0.13	6.00	7.64
2	30	0.13	8.00	8.38
2	40	0.13	8.00	8.38
2	50	0.13	8.00	8.38

Serial #: 6753

Inside

Raydon Exploration, Inc.

23 32 32 Seward KS

DST Test Number: 2

