

DRILL STEM TEST REPORT

Prepared For: **EOG Resources**

3817 NW Expressway Ste 500
Oklahoma City OK 73112

ATTN: EOG Resources

8 31 37 Stevens KS

River Bend #8-1

Start Date: 2006.08.08 @ 00:38:52

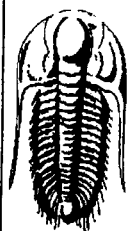
End Date: 2006.08.08 @ 13:25:17

Job Ticket #: 24693 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

EOG Resources

3817 NW Expressway Ste 500
Oklahoma City OK 73112

ATTN: EOG Resources

River Bend #8-1

8 31 37 Stevens KS

Job Ticket: 24693

DST#: 1

Test Start: 2006.08.08 @ 00:38:52

GENERAL INFORMATION:

Formation: **morrow**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:36:17

Time Test Ended: 13:25:17

Test Type: Conventional Bottom Hole

Tester: Shane McBride

Unit No: 8

Interval: **5387.00 ft (KB) To 5445.00 ft (KB) (TVD)**

Total Depth: 5445.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 3121.00 ft (KB)

3109.00 ft (CF)

KB to GR/CF: 12.00 ft

Serial #: 6667 Inside

Press@RunDepth: 626.19 psig @ 5388.00 ft (KB)

Start Date: 2006.08.08

End Date:

2006.08.08

Start Time: 00:38:52

End Time:

13:00:17

Capacity: 7000.00 psig

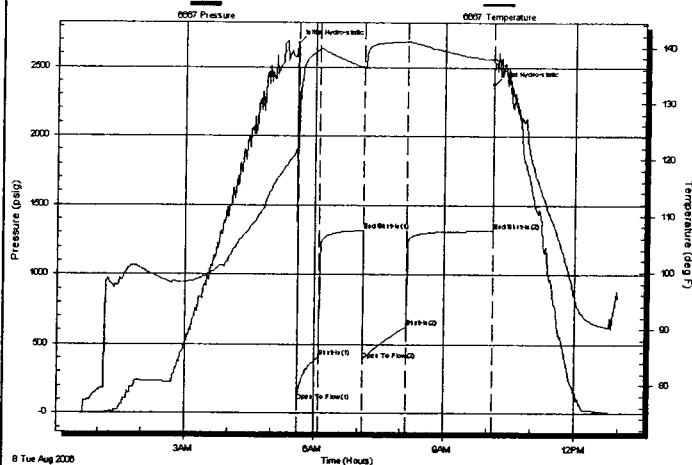
Last Calib.: 2006.08.08

Time On Btm: 2006.08.08 @ 05:36:02

Time Off Btm: 2006.08.08 @ 10:07:17

TEST COMMENT: BOB in 8 1/2 min fair blow
Bled off for 1 min no return blow
BOB in 16 min fair blow
Bled off for 1 min no return blow

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2674.31	121.92	Initial Hydro-static
1	88.17	121.24	Open To Flow (1)
32	409.86	139.62	Shut-In(1)
91	1315.31	136.43	End Shut-In(1)
92	385.16	136.22	Open To Flow (2)
152	626.19	141.04	Shut-In(2)
271	1314.92	137.78	End Shut-In(2)
272	2373.14	138.21	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
186.00	MCW 40%M 60%W	0.91
1023.00	Salt Water 100%W	12.73

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

EOG Resources

3817 NW Expressway Ste 500
Oklahoma City OK 73112

ATTN: EOG Resources

River Bend #8-1

8 31 37 Stevens KS

Job Ticket: 24693

DST#: 1

Test Start: 2006.08.08 @ 00:38:52

Tool Information

Drill Pipe:	Length: 5012.00 ft	Diameter: 3.80 inches	Volume: 70.31 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: 30000.00 lb
Drill Collar:	Length: 364.00 ft	Diameter: 2.25 inches	Volume: 1.79 bbl	Weight to Pull Loose: 120000.0 lb
			Total Volume: 72.10 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial 83000.00 lb
Depth to Top Packer:	5387.00 ft			Final 89000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	58.00 ft			
Tool Length:	87.00 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			5359.00		
Shut In Tool	5.00			5364.00		
Sampler	2.00			5366.00		
Hydraulic tool	5.00			5371.00		
Jars	5.00			5376.00		
Safety Joint	2.00			5378.00		
Packer	5.00		Fluid	5383.00	29.00	Bottom Of Top Packer
Packer	4.00			5387.00		
Stubb	1.00			5388.00		
Recorder	0.00	6667	Inside	5388.00		
Perforations	19.00			5407.00		
Change Over Sub	1.00			5408.00		
Drill Pipe	31.00			5439.00		
Change Over Sub	1.00			5440.00		
Recorder	0.00	11058	Inside	5440.00		
Bullnose	5.00			5445.00	58.00	Bottom Packers & Anchor
Total Tool Length:		87.00				



TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

EOG Resources

River Bend #8-1

3817 NW Expressway Ste 500
Oklahoma City OK 73112

8 31 37 Stevens KS

Job Ticket: 24693

DST#: 1

ATTN: EOG Resources

Test Start: 2006.08.08 @ 00:38:52

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:

72500 ppm

Viscosity: 48.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.36 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1800.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
186.00	MCW 40%M 60%W	0.915
1023.00	Salt Water 100%W	12.729

Total Length: 1209.00 ft

Total Volume: 13.644 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

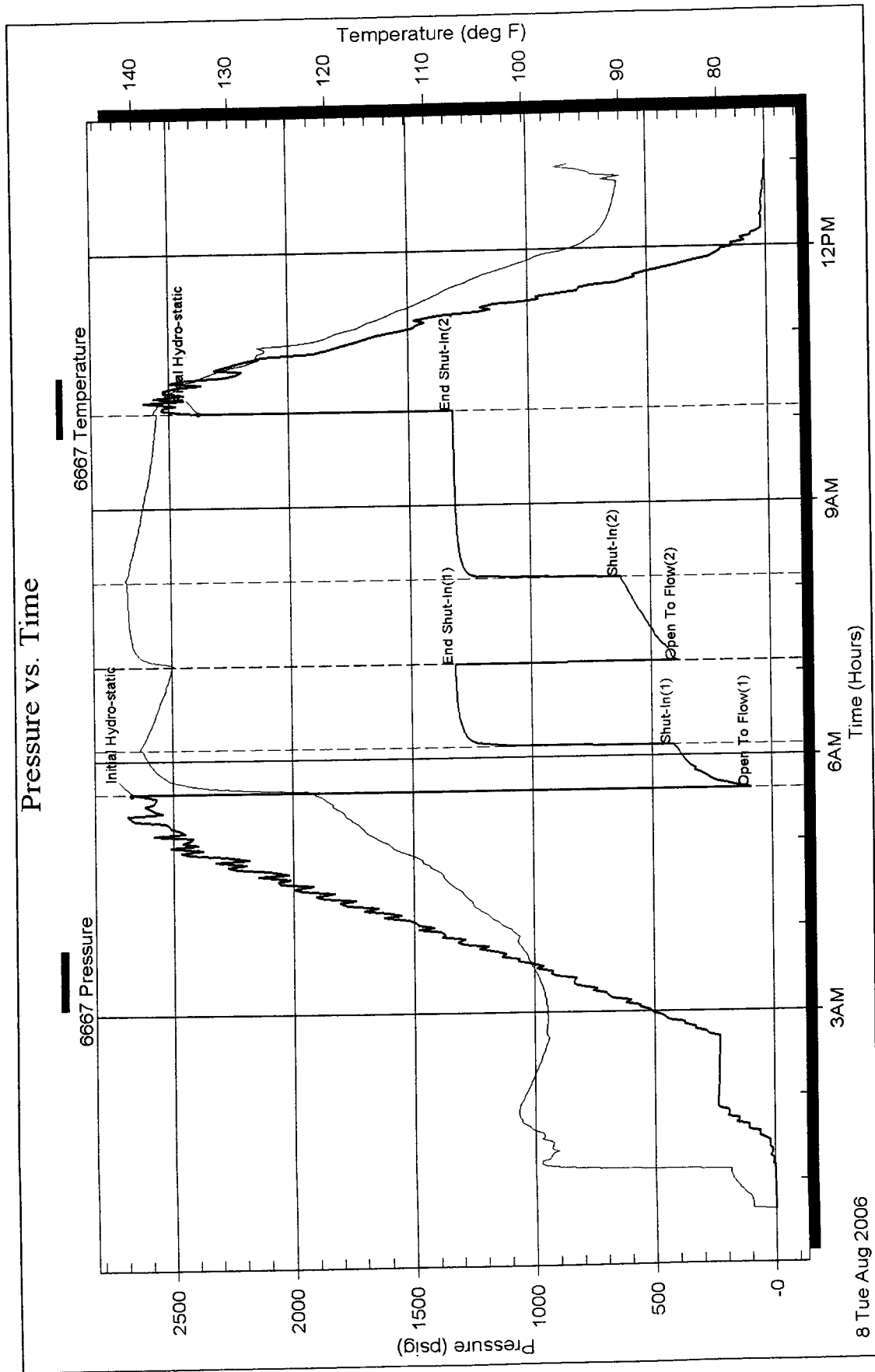
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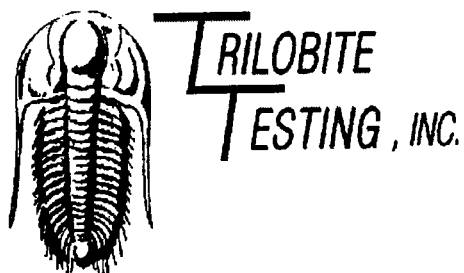
Laboratory Name:

Laboratory Location:

Recovery Comments: sampler 550psi 2000ml water
rw .070 @103°F = 72,500 chlorides

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **EOG Resources Inc**

3817 NW Expressway Ste 500
Oklahoma City OK 73112

ATTN: Dale Passing

8 31 37 Stevens KS

Riverbend 8#1

Start Date: 2006.08.09 @ 22:30:46

End Date: 2006.08.10 @ 10:14:31

Job Ticket #: 24505 DST #: 2

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

EOG Resources Inc

3817 NW Expressway Ste 500
Oklahoma City OK 73112

ATTN: Dale Passing

Riverbend 8#1

8 31 37 Stevens KS

Job Ticket: 24505

DST#: 2

Test Start: 2006.08.09 @ 22:30:46

GENERAL INFORMATION:

Formation: **Morrow**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:22:31

Time Test Ended: 10:14:31

Test Type: Conventional Bottom Hole

Tester: Harley Davidson

Unit No: 33

Interval: **5573.00 ft (KB) To 5700.00 ft (KB) (TVD)**

Total Depth: 5700.00 ft (KB) (TVD)

Hole Diameter: 7.78 inches Hole Condition: Fair

Reference Elevations: 3121.00 ft (KB)

3109.00 ft (CF)

KB to GR/CF: 12.00 ft

Serial #: 6751

Inside

Press@RunDepth: 1054.84 psig @ 5575.00 ft (KB)

Start Date: 2006.08.09

End Date: 2006.08.10

Start Time: 22:30:47

End Time: 10:14:31

Capacity: 7000.00 psig

Last Calib.: 1899.12.30

Time On Btm: 2006.08.10 @ 02:21:16

Time Off Btm: 2006.08.10 @ 07:08:31

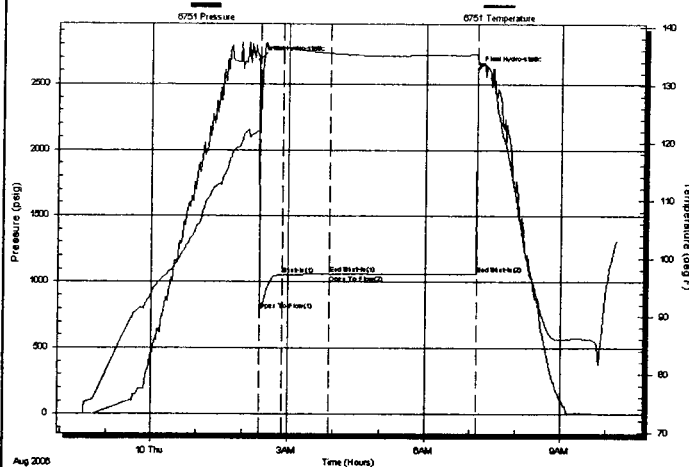
TEST COMMENT: IF BOB ASAO Weak blow off bottom

ISI No blow back

FF No blow

FSI No blow back

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2680.94	122.18	Initial Hydro-static
2	783.85	124.57	Open To Flow (1)
31	1054.84	136.48	Shut-In (1)
94	1059.82	135.50	End Shut-In (1)
94	1057.55	135.50	Open To Flow (2)
287	1060.74	135.32	End Shut-In (2)
288	2611.24	134.34	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2200.00	75%W 25%M	27.82

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
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DRILL STEM TEST REPORT

TOOL DIAGRAM

EOG Resources Inc

Riverbend 8#1

3817 NW Expressway Ste 500
Oklahoma City OK 73112

8 31 37 Stevens KS

Job Ticket: 24505

DST#: 2

ATTN: Dale Passing

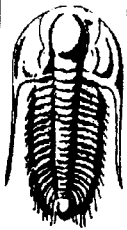
Test Start: 2006.08.09 @ 22:30:46

Tool Information

Drill Pipe:	Length: 5232.00 ft	Diameter: 3.80 inches	Volume: 73.39 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: 25000.00 lb
Drill Collar:	Length: 334.00 ft	Diameter: 2.25 inches	Volume: 1.64 bbl	Weight to Pull Loose: 125000.0 lb
		Total Volume:	75.03 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial 91000.00 lb
Depth to Top Packer:	5573.00 ft			Final 101000.0 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	126.00 ft			
Tool Length:	157.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				
Tool plugged after first shut in.				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	2.00			5544.00	
Shut In Tool	5.00			5549.00	
Sampler	3.00			5552.00	
Hydraulic tool	5.00			5557.00	
Jars	5.00			5562.00	
Safety Joint	2.00			5564.00	
Packer	5.00			5569.00	31.00 Bottom Of Top Packer
Packer	4.00			5573.00	
Stubb	1.00			5574.00	
Perforations	1.00			5575.00	
Recorder	0.00	6751	Inside	5575.00	
Perforations	23.00			5598.00	
Change Over Sub	1.00			5599.00	
Drill Pipe	93.00			5692.00	
Change Over Sub	1.00			5693.00	
Perforations	2.00			5695.00	
Recorder	0.00	11018	Outside	5695.00	
Bullnose	4.00			5699.00	126.00 Bottom Packers & Anchor

Total Tool Length: 157.00



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Riverbend 8#1

3817 NW Expressway Ste 500
Oklahoma City OK 73112

8 31 37 Stevens KS

Job Ticket: 24505

DST#: 2

ATTN: Dale Passing

Test Start: 2006.08.09 @ 22:30:46

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:

4000 ppm

Viscosity: 45.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.38 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2400.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2200.00	75%W 25%M	27.818

Total Length: 2200.00 ft Total Volume: 27.818 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

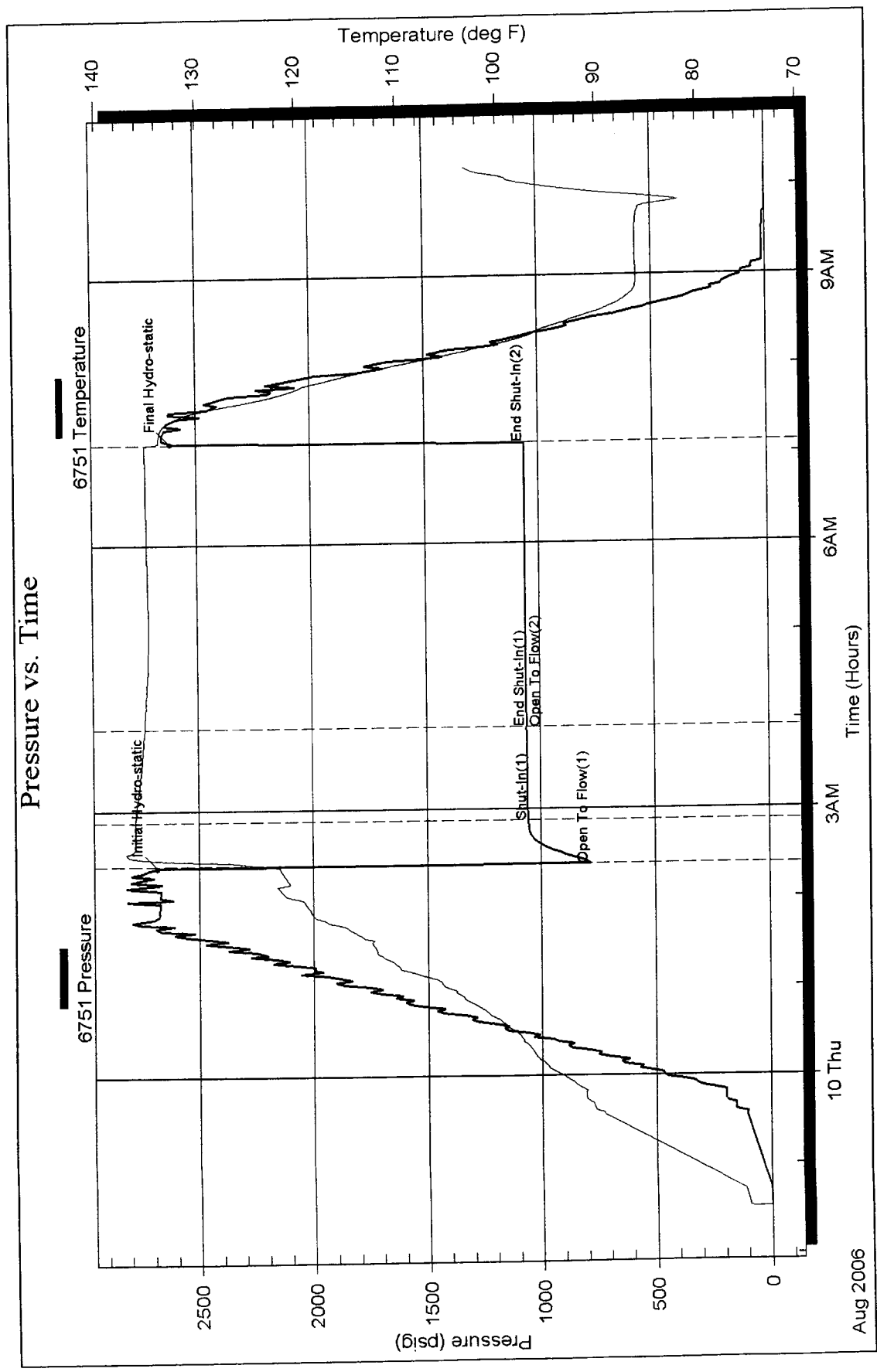
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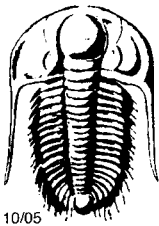
Laboratory Name:

Laboratory Location:

Recovery Comments: Sampler Data- 200 ML water @ 4000 CHL. NO GAS.

Pressure vs. Time





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

Well ☒ BCP ☐ ACP ☐ FAC ☐ LOE ☐ Oth AFE
 Name: River Bend 8 #1
 50-314
 Dale Passig
 Cell # 806-773-2865
 Approval: DP

No 24693

9/10/06

Test Ticket

Well Name & No. River Bend #8-1 Test No. #1 Date 8/8/06
 Company EOG Resources Zone Tested marrow
 Address 3817 NW Expressway, Suite 500 Oklahoma City, OK 73112 Elevation 3121 KB 3109 GL
 Co. Rep / Geo. _____ Rig Abercrombie #8
 Location: Sec. 8 Twp. 31S Rge. 37W Co. Stevens State Ks
 Comment: _____ Release date / time: _____

Interval Tested 5387 5445 Initial Str Wt./Lbs. 83,000 Unseated Str Wt./Lbs. 89,000
 Anchor Length _____ 58 Wt. Set Lbs. 30,000 Wt. Pulled Loose/Lbs. 120,000
 Top Packer Depth _____ 5382 Tool Weight 1500
 Bottom Packer Depth _____ 5387 Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓
 Total Depth _____ 5445 Wt. Pipe Run _____ Drill Collar Run 364' XH
 Mud Wt. 9.3 LCM #10 Vis. 48 WL 8.4 Drill Pipe Size 4 1/2 XH Ft. Run 5012'
 Blow Description B.O.B. in 8 1/2 min (Fair blow)
Bled off for 1 min, No return blow
B.O.B. in 16 min (Fair blow)
Bled off for 1 min, No return blow
 Recovery - Total Feet 1209 GIP _____ Ft. in DC 364' Ft. in DP 845'
 Rec. 186' Feet of MCW %gas _____ %oil 40 %water 40 %mud _____
 Rec. 1023' Feet of Salt Water %gas _____ %oil 100 %water _____ %mud _____
 Rec. _____ Feet of _____ %gas _____ %oil _____ %water _____ %mud _____
 Rec. _____ Feet of _____ %gas _____ %oil _____ %water _____ %mud _____
 Rec. _____ Feet of _____ %gas _____ %oil _____ %water _____ %mud _____
 BHT 138° °F Gravity _____ °API D @ _____ °F Corrected Gravity _____ °API
 RW .070 @ 103° °F Chlorides 72,500 ppm Recovery 72,500 Chlorides 1800 ppm System

AK-1	Alpine	Recorder No.	Test #
(A) Initial Hydrostatic Mud	<u>2674</u> PSI	<u>6667</u>	<u>\$1200.00</u>
(B) First Initial Flow Pressure	<u>88</u> PSI	(depth) <u>5388</u>	Jars <u>\$250.00</u>
(C) First Final Flow Pressure	<u>409</u> PSI	Recorder No. <u>11058</u>	Safety Jt. <u>\$75.00</u>
(D) Initial Shut-In Pressure	<u>1315</u> PSI	(depth) <u>5440'</u>	Circ Sub <u>N/C</u>
(E) Second Initial Flow Pressure	<u>385</u> PSI	Recorder No. _____	Sampler <u>\$250.00</u>
(F) Second Final Flow Pressure	<u>626</u> PSI	(depth) _____	Straddle _____
(G) Final Shut-In Pressure	<u>1314</u> PSI	Initial Opening <u>30</u>	Ext. Packer _____
(Q) Final Hydrostatic Mud	<u>2536</u> PSI	Initial Shut-In <u>60</u>	Shale Packer <u>\$200.00</u>
		Final Flow <u>60</u>	Ruined Packer _____
		Final Shut-In <u>120</u>	Mileage <u>30</u> <u>37.50</u>
		T-On Location <u>00:00 A.M.</u>	Sub Total: <u>\$2012.50</u>
		T-Started <u>00:40 A.M.</u>	Std. By <u>3 1/2 hrs</u> <u>\$175.00</u>
		T-Open <u>05:42 A.M.</u>	Acc. Chg. <u>\$150.00</u>
		T-Pulled <u>10:12 A.M.</u>	Other: _____
		T-Out <u>01:3:25 p.m.</u>	Total: <u>\$2337.50</u>

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.

Approved By Dale Passig

Our Representative [Signature]



TRILOBITE TESTING, INC.

P.O. Box 362 • Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. _____ Date 8/8/06
Company Name EOG Resources
Lease River Bend #8-1 Test No. #1
County Stevens, Ks Sec. 8 Twp. 31S Rng. 37W

SAMPLER RECOVERY

Gas _____ ML
Oil _____ ML
Mud _____ ML
Water 2000 ML
Other _____ ML
Pressure 550 PSI ~~ML~~
Total 2000 ML Water ML

PIT MUD ANALYSIS

Chlorides 1800 ppm.
Resistivity 2.81 ohms @ 80° F
Viscosity 48
Mud Weight 9.3
Filtrate 8.4
Other LCM #10

SAMPLER ANALYSIS

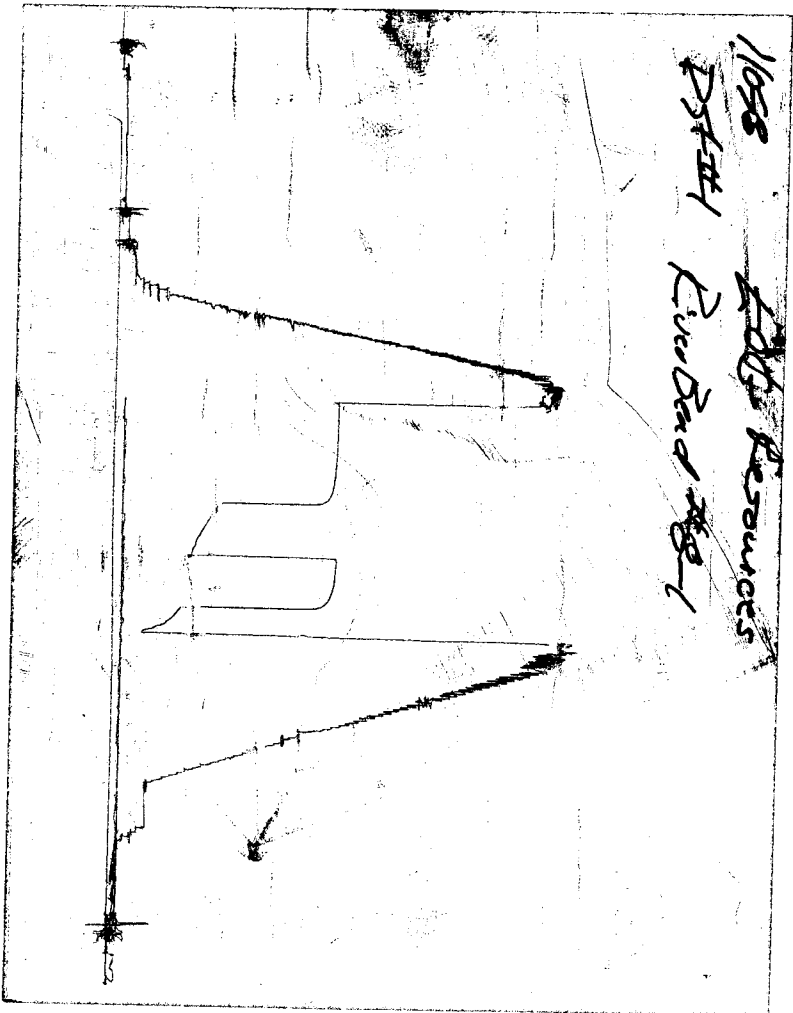
Resistivity .070 ohms @ 103° F
Chlorides 72,500 ppm.
Gravity _____ corrected @60F

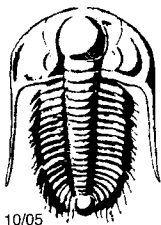
PIPE RECOVERY

TOP
Resistivity .073 ohms @ 100° F
Chlorides 72,500 ppm.
MIDDLE
Resistivity .073 ohms @ 100° F
Chlorides 72,500 ppm.
BOTTOM
Resistivity .073 ohms @ 100° F
Chlorides 72,500 ppm.

CHART PAGE

This is a photocopy of the actual AK-1 recorder chart.





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Ka.

☐ BCP ☒ ACP ☐ FAC ☐ LOE ☐ Oth AFE

Well Name: River Bend 8 #1

50-314

Dale Passig

Cell # 806-773-2865

DP

Approval:

No 24505

Test Ticket

Well Name & No. River Bend 8 #1 Test No. 2 Date 8/9/06
 Company EOG Resources Inc. Zone Tested Mol/110W
 Address 3817 NW Expressway Suite 500 OK city OK 73112 Elevation 3121 KB 3109 GL
 Co. Rep / Geo. Dale Passig Rig Aber 8
 Location: Sec. 8 Twp. 31 Rge. 37 Co. Stevens State Ks
 Comment: _____ Release date / time: _____

Interval Tested 5573 - 5700 Initial Str Wt./Lbs. 91K Unseated Str Wt./Lbs. 101K
 Anchor Length 127 Wt. Set Lbs. 25K Wt. Pulled Loose/Lbs. 125K
 Top Packer Depth 5568 Tool Weight 2000
 Bottom Packer Depth 5573 Hole Size 7 7/8" Rubber Size 6 3/4"
 Total Depth 5700 Wt. Pipe Run 0 Drill Collar Run 334
 Mud Wt. 9.2 LCM 8" Vis. 45 WL 8.4 Drill Pipe Size 4.5xH Ft. Run 3232
 Blow Description IF-BOB ASAC, what blow off bottom.
ISI - No blow back.
FF - No blow.
ISI - No blow back

Recovery - Total Feet 2200 GIP 0 Ft. in DC _____ Ft. in DP _____
 Rec. 2200 Feet of MCW %gas _____ %oil 75 %water 25 %mud _____
 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 _____
 BHT _____ °F Gravity _____ °API D @ _____ °F Corrected Gravity _____ °API
 RW 6.26 @ 85 °F Chlorides 4000 ppm Recovery _____ Chlorides 2400 ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud	2748	PSI	6751	1200 ⁰⁰
(B) First Initial Flow Pressure	784	PSI	(depth)	Jars - 250 ⁰⁰
(C) First Final Flow Pressure	1055	PSI	11018	Safety Jt. - 75 ⁰⁰
(D) Initial Shut-In Pressure	1060	PSI	(depth)	Circ Sub
(E) Second Initial Flow Pressure	1058	PSI	Recorder No.	Sampler - 250 ⁰⁰
(F) Second Final Flow Pressure	Tool	PSI	(depth)	Straddle
(G) Final Shut-In Pressure	Plugged	PSI	Initial Opening	Ext. Packer
(Q) Final Hydrostatic Mud	2609	PSI	Initial Shut-In	Shale Packer - 200 ⁰⁰

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Approved By Dale Passig
 Our Representative Arly D. L.

Final Flow 60
 Final Shut-In 120
 T-On Location 900 PM 21:00
 T-Started 1100 PM 23:00
 T-Open 300 AM
 T-Pulled 730 AM
 T-Out 1100 AM 11:00

Ruined Packer
 Mileage 15x2 = 37.50
 Sub Total: 2012.50
 Std. By 200⁰⁰ 200
 Acc. Chg: 150⁰⁰ 150
 Other: 2375⁰⁰
 Total: \$ 2362.50



TRILOBITE TESTING, INC.

P.O. Box 362 • Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 24505 Date 8/9/06
Company Name EOG Resources
Lease Riverbend 8 #1 Test No. #2
County Stevens Sec. 8 Twp. 31 Rng. 37

SAMPLER RECOVERY

Gas 0 ML
Oil 0 ML
Mud 25% T ML
Water 75% 200 ML ML
Other _____ ML
Pressure No Press. ML
Total Tool Plugged ML

PIT MUD ANALYSIS

Chlorides 2400 ppm.
Resistivity _____ ohms @ _____ F
Viscosity 45
Mud Weight 9.2
Filtrate 8.4
Other LCM 8#

SAMPLER ANALYSIS

Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
Gravity _____ corrected @60F

PIPE RECOVERY

TOP
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.

MIDDLE
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.

BOTTOM
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.

CHART PAGE

This is a photocopy of the actual AK-1 recorder chart.

