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KCC

JAN 28 2003

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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Oxy USA Inc**

PO Box 2528
Liberal KS 67905

15-067-21495

ATTN: Tom Heflin

13-27-35

Ladner F-2

Start Date: 2002.10.12 @ 23:25:12

End Date: 2002.10.13 @ 15:05:12

Job Ticket #: 14510 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

ORIGINAL

RECEIVED

JAN 29 2003

KCC WICHITA

RELEASED

MAR 15 2004

FROM CONFIDENTIAL

Oxy USA Inc

Ladner F-2

13-27-35

DST # 1

Morrow

2002.10.12

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Test Start: 2002.10.12 @ 23:25:12

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GENERAL INFORMATION:

Formation: **Morrow**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:09:57

Time Test Ended: 15:05:12

Interval: **5023.00 ft (KB) To 5180.00 ft (KB) (TVD)**

Total Depth: 5180.00 ft (KB) (TVD)

Hole Diameter: 7.78 inches Hole Condition: Fair

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Test Type: Conventional Bottom Hole

Tester: Blake Wallace

Unit No: 20

Reference Elevations: 3006.00 ft (KB)

2994.00 ft (CF)

KB to GR/CF: 12.00 ft

Serial #: **3026**

Inside

Press@RunDepth: 1479.58 psig @ 5027.00 ft (KB)

Start Date: 2002.10.12

End Date:

2002.10.13

Start Time: 23:25:14

End Time:

15:05:12

Capacity: 7000.00 psig

Last Calib.: 1899.12.30

Time On Btm: 2002.10.13 @ 03:09:12

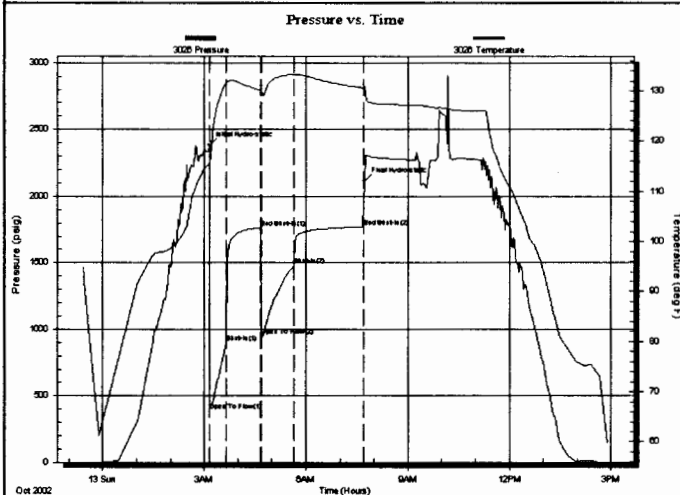
Time Off Btm: 2002.10.13 @ 07:42:27

TEST COMMENT: IF-strong blow BOB 1 min GTS 25 min (gauged 2 inches of water)

ISI-blow back blew thru out

FF-strong blow BOB 30 sec

FSI-blow back blew thru out



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2380.21	115.68	Initial Hydro-static
1	385.53	115.79	Open To Flow (1)
31	896.13	131.66	Shut-In (1)
91	1764.27	130.12	End Shut-In (1)
93	950.06	130.01	Open To Flow (2)
150	1479.58	133.22	Shut-In (2)
273	1770.00	130.65	End Shut-In (2)
274	2116.55	130.89	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
4789.00	30% Gas 70% Oil	64.67

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE TESTING, INC.		DRILL STEM TEST REPORT		TOOL DIAGRAM																																																																																																																			
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Tool Information																																																																																																																							
Drill Pipe:	Length: 4734.00 ft	Diameter: 3.80 inches	Volume: 66.41 bbl	Tool Weight:	1800.00 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: 275.00 ft	Diameter: 2.25 inches	Volume: 1.35 bbl	Weight to Pull Loose:	100000.0 lb																																																																																																																		
			Total Volume:	67.76 bbl	Tool Chased																																																																																																																		
Drill Pipe Above KB:	16.00 ft			String Weight: Initial	72000.00 lb																																																																																																																		
Depth to Top Packer:	5023.00 ft			Final	86000.00 lb																																																																																																																		
Depth to Bottom Packer:	ft																																																																																																																						
Interval between Packers:	157.00 ft																																																																																																																						
Tool Length:	187.00 ft																																																																																																																						
Number of Packers:	2	Diameter:	6.75 inches																																																																																																																				
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FLUID SUMMARY

Oxy USA Inc

Ladner F-2

PO Box 2528
Liberal KS 67905

13-27-35

Job Ticket: 14510

DST#: 1

ATTN: Tom Heflin

Test Start: 2002.10.12 @ 23:25:12

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

27 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 48.00 sec/qt

Cushion Volume:

bbl

Water Loss: 5.89 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1200.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
4789.00	30% Gas 70% Oil	64.672

Total Length: 4789.00 ft

Total Volume: 64.672 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: 2500 ml oil 1500 ml gas @ 200 psi 15.4 cubic ft gas

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Pressure vs. Time

