

JAN 14 2002

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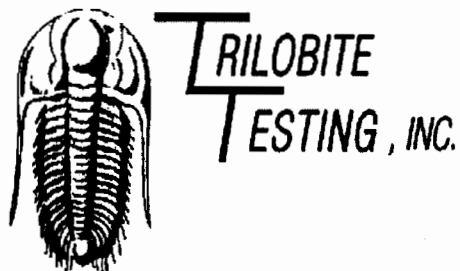
RELEASED

CONSERVATION DIVISION

MAR 07 2003

15-129-21656

FROM CONFIDENTIAL



DRILL STEM TEST REPORT

Prepared For: **Oxy USA Inc**

PO Box 2528
Liberal, KS 67905

ATTN: Tom Heflin

35-34S-41W

Engleman B #1

Start Date: 2001.12.01 @ 10:40:25

End Date: 2001.12.01 @ 21:02:10

Job Ticket #: 14732 DST #: 1

KCC

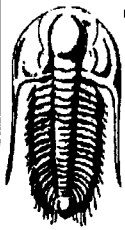
JAN 11 2002

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Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Oxy USA Inc

PO Box 2528
Liberal, KS 67905

ATTN: Tom Heflin

Engleman B #1

35-34S-41W

Job Ticket: 14732

DST#: 1

Test Start: 2001.12.01 @ 10:40:25

GENERAL INFORMATION:

Formation: **Morrow**

Deviated: No Whipstock:

ft (KB) **MAR 07 2003**

Time Tool Opened: 14:01:25

Time Test Ended: 21:02:10

Test Type: Conventional Bottom Hole

Tester: Blake Wallace

Unit No: 20

Interval: **5514.00 ft (KB) To 5546.00 ft (KB) (TVD)**

Total Depth: 5546.00 ft (KB) (TVD)

Hole Diameter: 7.78 inches Hole Condition: Fair

Reference Elevations: 3451.00 ft (KB)

3437.00 ft (CF)

KB to GR/CF: 14.00 ft

Serial #: 3027

Inside

Press@RunDepth: 24.57 psig @ 5518.00 ft (KB)

Start Date: 2001.12.01

End Date:

2001.12.01

Start Time: 10:40:27

End Time:

21:02:10

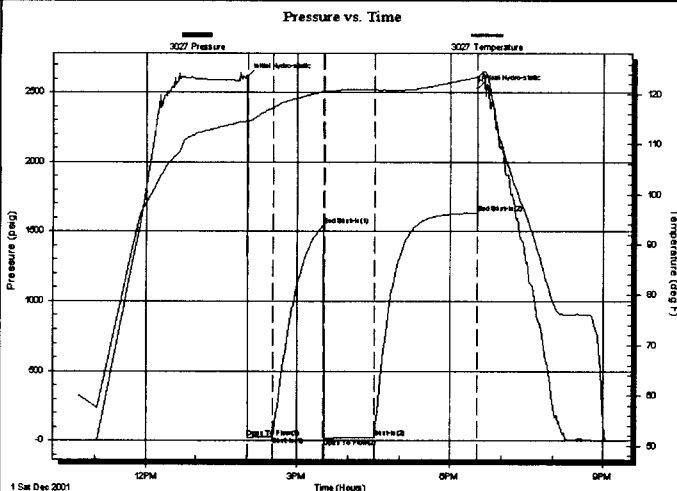
Capacity: 7000.00 psig

Last Calib.: 1899.12.30

Time On Btm: 2001.12.01 @ 14:00:25

Time Off Btm: 2001.12.01 @ 18:31:40

TEST COMMENT: IF-strong blow BOB 9 min
IS-no blow back
FF-strong blow BOB as soon as open GTS 40 min
FSI- no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2611.08	114.63	Initial Hydro-static
1	22.14	114.77	Open To Flow (1)
31	28.37	117.29	Shut-In(1)
91	1543.13	120.59	End Shut-In(1)
91	17.84	120.68	Open To Flow (2)
151	24.57	120.88	Shut-In(2)
271	1634.48	123.45	End Shut-In(2)
272	2528.09	123.43	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	100% Mud	0.15

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Oxy USA Inc

Engleman B #1

PO Box 2528
Liberal, KS 67905

35-34S-41W

Job Ticket: 14732

DST#: 1

ATTN: Tom Heflin

Test Start: 2001.12.01 @ 10:40:25

Tool Information

Drill Pipe:	Length: 5167.00 ft	Diameter: 3.80 inches	Volume: 72.48 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: 360.00 ft	Diameter: 2.25 inches	Volume: 1.77 bbl	Weight to Pull Loose: 84000.00 lb
			Total Volume: 74.25 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	43.00 ft	RELEASED MAR 07 2003 FROM CONFIDENTIAL		
Depth to Top Packer:	5514.00 ft			
Depth to Bottom Packer:	ft			
Interval between Packers:	32.00 ft			
Tool Length:	62.00 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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C.O. Sub	1.00			5485.00	
S.I. Tool	5.00			5490.00	
Sampler	3.00			5493.00	
HMV	5.00			5498.00	
Jars	5.00			5503.00	
Safety Joint	2.00			5505.00	
Packer	5.00			5510.00	30.00 Bottom Of Top Packer
Packer	4.00			5514.00	
Stubb	1.00			5515.00	
Perforations	3.00			5518.00	
Recorder	0.00	3027	Inside	5518.00	
Perforations	26.00			5544.00	
Recorder	0.00	11019	Outside	5544.00	
Bullnose	2.00			5546.00	32.00 Bottom Packers & Anchor

Total Tool Length: 62.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

Oxy USA Inc

Engleman B #1

PO Box 2528
Liberal, KS 67905

35-34S-41W

Job Ticket: 14732

DST#: 1

ATTN: Tom Heflin

Test Start: 2001.12.01 @ 10:40:25

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:

ppm

Viscosity: 61.00 sec/qt

Cushion Volume:

bbl

Water Loss: 5.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 700.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	100% Mud	0.148

Total Length: 30.00 ft

Total Volume: 0.148 bbl

Num Fluid Samples: 1

Num Gas Bombs: 0

Serial #:

Laboratory Name: Caraway

Laboratory Location: Liberal, Ks

Recovery Comments: 1.7 cubic Ft gas @ 250 PSI 3900 ML Mud



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

GAS RATES

Oxy USA Inc

Engleman B #1

PO Box 2528
Liberal, KS 67905

35-34S-41W

Job Ticket: 14732

DST#: 1

ATTN: Tom Heflin

Test Start: 2001.12.01 @ 10:40:25

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)
		0.00	0.00	0.00

Serial #: 3027

Inside

Oxy USA Inc

35-34S-41W

DST Test Number: 1

