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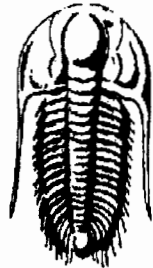
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15-189-22375

ORIGINAL



TRILOBITE
TESTING, INC.

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AUG 30 2001

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DRILL STEM TEST REPORT

Prepared For: **Oxy USA Inc**

P.O Box 2528 Liberal Ks 67905

ATTN: Tom Heflin

31-34S-34W 35W

Central A-1

Start Date: 2001.06.02 @ 01:30:38

End Date: 2001.06.02 @ 11:56:37

Job Ticket #: 14544

DST #: 1

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

Oxy USA Inc

Central A-1

31-34S-34W
35W

DST # 1

Morrow

2001.06.02



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Oxy USA Inc
P.O Box 2528 Liberal Ks 67905
ATTN: Tom Heflin

Central A-1
31-34S-34W
Job Ticket: 14544 **DST#: 1**
Test Start: 2001.06.02 @ 01:30:38

GENERAL INFORMATION:

Formation: **Morrow**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 04:15:52
Time Test Ended: 11:56:37

Test Type: Conventional Bottom Hole
Tester: Blake Wallace
Unit No: 20

Interval: **5941.00 ft (KB) To 5963.00 ft (KB) (TVD)**
Total Depth: 5963.00 ft (KB) (TVD)
Hole Diameter: 7.78 inches Hole Condition: Fair

Reference Elevations: 3029.00 ft (KB)
3018.00 ft (CF)
KB to GR/CF: 11.00 ft

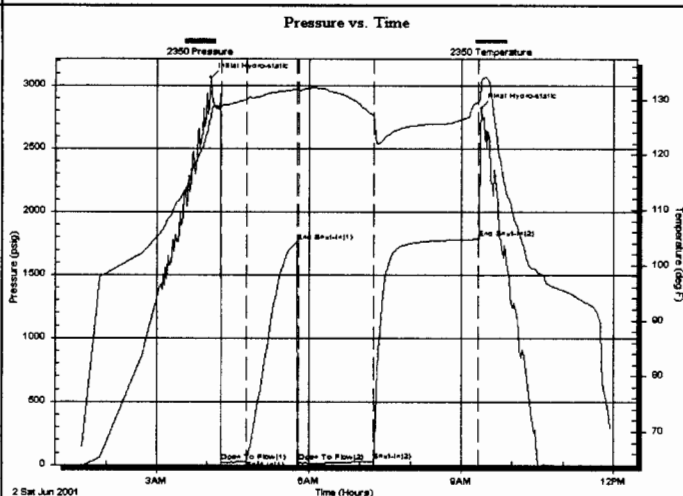
Serial #: 2350

Inside

Press@RunDepth: 30.46 psig @ 5943.00 ft (KB)
Start Date: 2001.06.02 End Date: 2001.06.02
Start Time: 01:30:38 End Time: 11:56:37

Capacity: 7000.00 psig
Last Calib.: 2001.01.04
Time On Btm: 2001.06.02 @ 04:03:37
Time Off Btm: 2001.06.02 @ 09:23:52

TEST COMMENT: IF-strong blow BOB in 30 sec
ISI- no blow back
FF-strong blow BOB as soon as open gas to surface in 20 min
FSI-no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	3062.43	126.78	Initial Hydro-static
13	20.25	128.66	Open To Flow (1)
43	25.86	130.00	Shut-In(1)
103	1759.72	131.88	End Shut-In(1)
105	20.11	131.63	Open To Flow (2)
193	30.46	126.97	Shut-In(2)
317	1783.83	129.63	End Shut-In(2)
321	2824.26	133.33	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	100% mud	0.10

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	2.00	6.14
Last Gas Rate	0.13	11.00	9.51
Max. Gas Rate	0.13	11.00	9.51



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DRILL STEM TEST REPORT

TOOL DIAGRAM

Oxy USA Inc

Central A-1

P.O Box 2528 Liberal Ks 67905

31-34S-34W

Job Ticket: 14544

DST#: 1

ATTN: Tom Heflin

Test Start: 2001.06.02 @ 01:30:38

Tool Information

Drill Pipe: Length: 5306.00 ft Diameter: 3.80 inches Volume: 74.43 bbl
Heavy Wt. Pipe: Length: 0.00 ft Diameter: 0.00 inches Volume: 0.00 bbl
Drill Collar: Length: 614.00 ft Diameter: 2.25 inches Volume: 3.02 bbl
Total Volume: 77.45 bbl
Drill Pipe Above KB: 9.00 ft
Depth to Top Packer: 5941.00 ft
Depth to Bottom Packer: ft
Interval between Packers: 22.00 ft
Tool Length: 52.00 ft
Number of Packers: 2 Diameter: 6.75 inches
Tool Comments:

Tool Weight: 1800.00 lb
Weight set on Packer: 30000.00 lb
Weight to Pull Loose: 140000.0 lb
Tool Chased 0.00 ft
String Weight: Initial 90000.00 lb
Final 92000.00 lb

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Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
C.O. Sub	1.00			5912.00	
S.I. Tool	5.00			5917.00	
Sampler	3.00			5920.00	
HMV	5.00			5925.00	
Jars	5.00			5930.00	
Safety Joint	2.00			5932.00	
Packer	5.00			5937.00	30.00 Bottom Of Top Packer
Packer	4.00			5941.00	
Stubb	1.00			5942.00	
Perforations	1.00			5943.00	
Recorder	0.00	2350	Inside	5943.00	
Perforations	18.00			5961.00	
Recorder	0.00	13277	Outside	5961.00	
Bullnose	2.00			5963.00	22.00 Bottom Packers & Anchor

Total Tool Length: 52.00

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DRILL STEM TEST REPORT

FLUID SUMMARY

Oxy USA Inc

Central A-1

P.O Box 2528 Liberal Ks 67905

31-34S-34W

Job Ticket: 14544

DST#: 1

ATTN: Tom Heflin

Test Start: 2001.06.02 @ 01:30:38

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: 50.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.37 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	100% mud	0.098

Total Length: 20.00 ft Total Volume: 0.098 bbl

Num Fluid Samples: 1

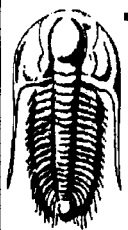
Num Gas Bombs: 0

Serial #:

Laboratory Name: Caraway

Laboratory Location: Liberal KS

Recovery Comments: 8.9 cubic ft of gas @ 1050 psi



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DRILL STEM TEST REPORT

GAS RATES

Oxy USA Inc

Central A-1

P.O Box 2528 Liberal Ks 67905

31-34S-34W

Job Ticket: 14544

DST#: 1

ATTN: Tom Heflin

Test Start: 2001.06.02 @ 01:30:38

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	25	0.13	2.00	6.14
2	25	0.13	2.00	6.14
2	30	0.13	3.00	6.51
2	40	0.13	4.00	6.89
2	50	0.13	5.50	7.45
2	60	0.13	7.00	8.01
2	70	0.13	9.00	8.76
2	80	0.13	11.00	9.51

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31-34S-34W

Oxy USA Inc

Inside

Serial #: 2350

Pressure vs. Time

