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MARMATON



**TRILOBITE
TESTING, INC.**

KCC

JUN 28 2002

DRILL STEM TEST REPORT

CONFIDENTIAL

Prepared For: **OXY USA, INC.**

PO Box 2528
Liberal KS 67905

RELEASED

AUG 11 2003

ATTN:

FROM CONFIDENTIAL

18 27S 33W

Frey I-1

Start Date: 2002.04.02 @ 20:11:00

End Date: 2002.04.03 @ 06:48:15

Job Ticket #: 14186 DST #: 1

OXY USA, INC.

Frey I-1

18 27S 33W

DST # 1

Marmaton


2002.04.02

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

11111100

	DRILL STEM TEST REPORT	
	OXY USA, INC. PO Box 2528 Liberal KS 67905 ATTN:	Frey I-1 18 27S 33W Job Ticket: 14186 DST#: 1 Test Start: 2002.04.02 @ 20:11:00

GENERAL INFORMATION:

Formation: **Marmaton**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 22:45:15
 Time Test Ended: 06:48:15

Interval: **4636.00 ft (KB) To 4658.00 ft (KB) (TVD)**
 Total Depth: **4658.00 ft (KB) (TVD)**
 Hole Diameter: **7.78 inches** Hole Condition: Fair

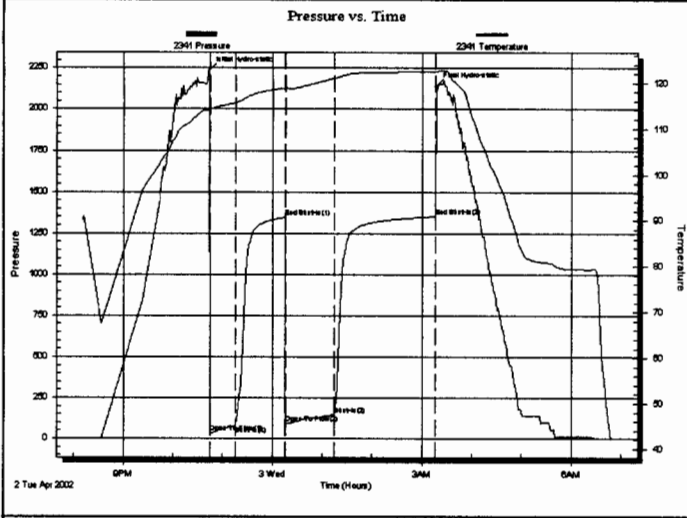
Test Type: Conventional Bottom Hole
 Tester: Jakki Kreklau
 Unit No: 17
 Reference Elevations: 2974.00 ft (KB)
 2962.00 ft (CF)
 KB to GR/CF: 12.00 ft

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Serial #: 2341 Inside

Press@RunDepth: 145.53 psig @ 4637.00 ft (KB)	Capacity: 7000.00 psig
Start Date: 2002.04.02 End Date: 2002.04.03	Last Calib.: 1899.12.30
Start Time: 20:11:01 End Time: 06:48:15	Time On Btm: 2002.04.02 @ 22:44:00
	Time Off Btm: 2002.04.03 @ 03:16:45

TEST COMMENT: IF- Fair surface blow BOB 4 mins thru opening
 IS- blow back built to 2 1/2 in in bucket
 FF- fair blow BOB 4 mins thru opening
 FS- blow back built to 3 in in bucket



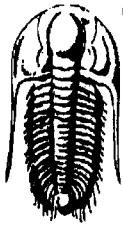
PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2235.79	113.99	Initial Hydro-static
2	34.42	114.03	Open To Flow (1)
31	76.98	115.57	Shut-in(1)
91	1346.58	118.80	End Shut-in(1)
92	93.00	118.79	Open To Flow (2)
151	145.53	120.98	Shut-in(2)
273	1351.37	122.47	End Shut-in(2)
273	2141.62	122.47	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
75.00	GCM 20%gas 80% oil	0.37
75.00	GCM w/ traces of oil 40% gas 60% mud	0.37
75.00	GCOCM 45% gas 30% oil 25% mud	0.37
75.00	w ater 100%	0.37

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.

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Frey I-1

PO Box 2528
Liberal KS 67905

JUL 11 2003

18 27S 33W

Job Ticket: 14186

DST#: 1

ATTN:

Test Start: 2002.04.02 @ 20:11:00

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Tool Information

Drill Pipe: Length: 4254.00 ft Diameter: 3.80 inches Volume: 59.67 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: 30000.00 lb
 Drill Collar: Length: 356.00 ft Diameter: 2.25 inches Volume: 1.75 bbl Weight to Pull Loose: 72000.00 lb
 Total Volume: 61.42 bbl Tool Chased 0.00 ft
 Drill Pipe Above KB: 4.00 ft String Weight: Initial 66000.00 lb
 Depth to Top Packer: 4636.00 ft Final 69000.00 lb
 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:
 Sampler Data
 0.3 cu ft gas

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Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
C.O. Sub	1.00			4607.00	
S.I. Tool	5.00			4612.00	
Sampler	3.00			4615.00	
HMV	5.00			4620.00	
Jars	5.00			4625.00	
Safety Joint	2.00			4627.00	
Packer	5.00			4632.00	30.00 Bottom Of Top Packer
Packer	4.00			4636.00	
Stubb	1.00			4637.00	
Recorder	0.00	2341	Inside	4637.00	
Perforations	18.00			4655.00	
Recorder	0.00	13423	Inside	4655.00	
Bullnose	3.00			4658.00	22.00 Bottom Packers & Anchor

Total Tool Length: 52.00

DATE: 04/08/02



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

OXY USA, INC.
PO Box 2528
Liberal KS 67905
ATTN:

Frey I-1
18 27S 33W
Job Ticket: 14186 **DST#: 1**
Test Start: 2002.04.02 @ 20:11:00

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 33 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 80000 ppm
Viscosity: 51.00 sec/qt	Cushion Volume: bbl	
Water Loss: 8.75 in ³	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 1600.00 ppm		
Filter Cake: inches		

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
75.00	GCM 20% gas 80% oil	0.369
75.00	GCM w / traces of oil 40% gas 60% mud	0.369
75.00	GCOCM 45% gas 30% oil 25% mud	0.369
75.00	water 100%	0.369

Total Length: 300.00 ft Total Volume: 1.476 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: Gravity 30 API D@ 32 Corrected Gravity 33 API
RW .09@76F

Serial #: 2341

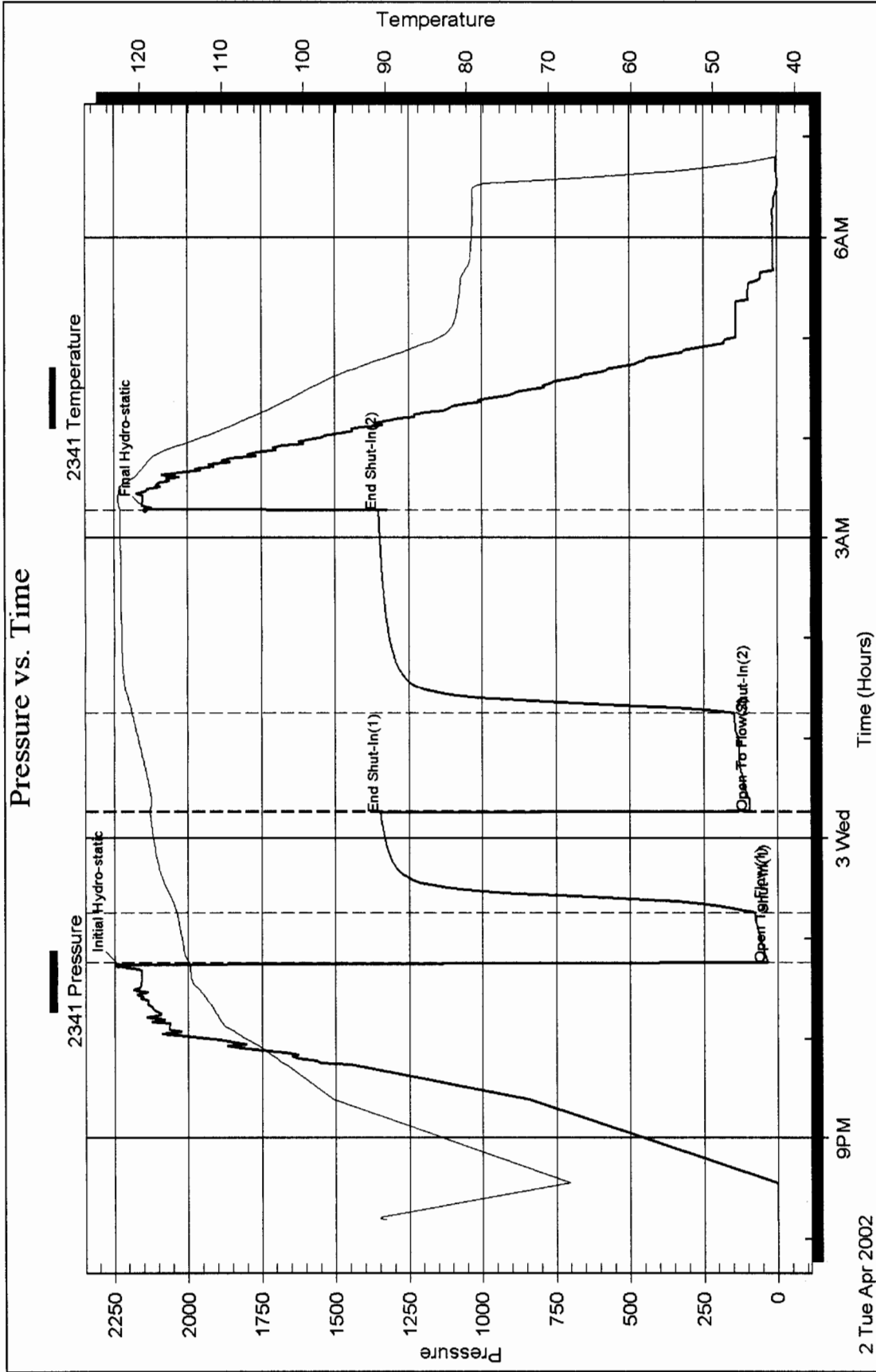
Inside

OXY USA, INC.

18 27S33W

DST Test Number: 1

Pressure vs. Time



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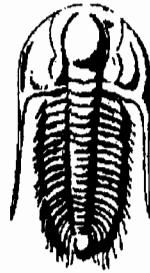
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**TRILOBITE
TESTING, INC.**

FROM CONFIDENTIAL

DRILL STEM TEST REPORT

Prepared For: **OXY USA, INC.**

PO Box 2528
Liberal KS 67905

ATTN:

18 27S 33W

Frey I-1

Start Date: 2002.04.05 @ 04:52:38

End Date: 2002.04.05 @ 09:43:53

Job Ticket #: 14758 DST #: 2

OXY USA, INC.

Frey I-1

18 27S 33W

DST # 2

Chester

2002.04.05

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

14758



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

OXY USA, INC.

Frey I-1

PO Box 2528
Liberal KS 67905

18 27S 33W

Job Ticket: 14758

DST#: 2

ATTN:

Test Start: 2002.04.05 @ 04:52:38

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GENERAL INFORMATION:

Formation: **Chester**

Deviated: No Whipstock: ft (KB)

Time Tool Opened:

Time Test Ended: 09:43:53

Test Type: Conventional Bottom Hole

Tester: Blake Wallace

Unit No: 20

Interval: **5160.00 ft (KB) To 5260.00 ft (KB) (TVD)**

Reference Elevations: 2974.00 ft (KB)

Total Depth: 5260.00 ft (KB) (TVD)

2962.00 ft (CF)

Hole Diameter: 7.78 inches Hole Condition: Fair

KB to GR/CF: 12.00 ft

Serial #: 3027

Inside

Press@RunDepth: psig @ 5162.00 ft (KB)

Capacity: 7000.00 psig

Start Date: 2002.04.05

End Date: 2002.04.05

Last Calib.: 1899.12.30

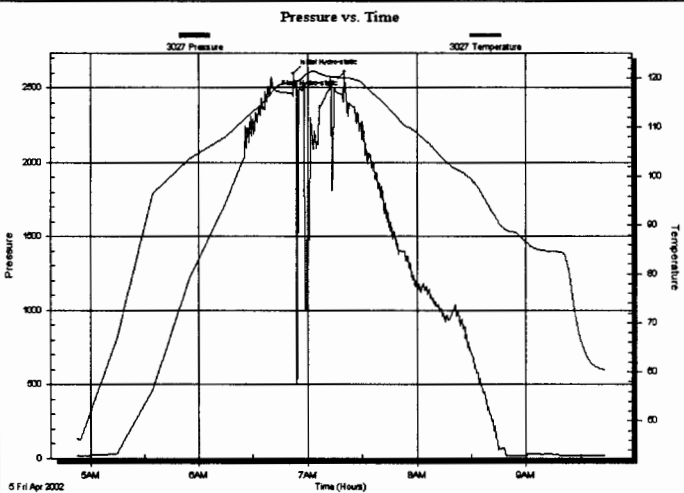
Start Time: 04:52:40

End Time: 09:43:53

Time On Btm: 2002.04.05 @ 06:52:08

Time Off Btm: 2002.04.05 @ 07:20:08

TEST COMMENT: Packer Failure (Taged bottom @ 6:40 set packers, mud fell, tried 2 more times failed each time.)



PRESSURE SUMMARY


Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2594.38	119.06	Initial Hydro-static
28	2605.69	119.98	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1800.00	100% Mud	8.85

Gas Rates

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

 <p>TRILOBITE TESTING, INC.</p>	DRILL STEM TEST REPORT		TOOL DIAGRAM
	OXY USA, INC. PO Box 2528 Liberal KS 67905 ATTN:	<p>KCC</p> <p>JUN 28 2002</p> <p>CONFIDENTIAL</p>	Frey I-1 18 27S 33W Job Ticket: 14758 Test Start: 2002.04.05 @ 04:52:38

Tool Information

Drill Pipe: Length: 356.00 ft	Diameter: 3.80 inches	Volume: 4.99 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: 4786.00 ft	Diameter: 2.25 inches	Volume: 23.54 bbl	Weight to Pull Loose: 80000.00 lb
Total Volume: 28.53 bbl			Tool Chased 0.00 ft
Drill Pipe Above KB: 12.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer: 5160.00 ft			Final 78000.00 lb
Depth to Bottom Packer: ft			
Interval between Packers: 100.00 ft			
Tool Length: 130.00 ft			
Number of Packers: 2	Diameter: 6.75 inches		
Tool Comments:			

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FROM CONFIDENTIAL

14758
 002 113 700
 11/11/03

Tool Description

Length (ft) Serial No. Position Depth (ft) Accum. Lengths

C.O. Sub	1.00			5131.00		
S.I. Tool	5.00			5136.00		
Sampler	3.00			5139.00		
HMV	5.00			5144.00		
Jars	5.00			5149.00		
Safety Joint	2.00			5151.00		
Packer	5.00			5156.00	30.00	Bottom Of Top Packer
Packer	4.00			5160.00		
Stubb	1.00			5161.00		
Perforations	1.00			5162.00		
Recorder	0.00	3027	Inside	5162.00		
Perforations	20.00			5182.00		
Change Over Sub	1.00			5183.00		
Drill Pipe	62.00			5245.00		
Change Over Sub	1.00			5246.00		
Perforations	12.00			5258.00		
Recorder	0.00	11019	Outside	5258.00		
Bullnose	2.00			5260.00	100.00	Bottom Packers & Anchor

Total Tool Length: 130.00

JAN 14 2002



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

OXY USA, INC.
PO Box 2528
Liberal KS 67905
ATTN:

Frey I-1
18 27S 33W
Job Ticket: 14758 **DST#: 2**
Test Start: 2002.04.05 @ 04:52:38

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: 58.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.99 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 1500.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1800.00	100% Mud	8.852

Total Length: 1800.00 ft Total Volume: 8.852 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: 4000ML Mud @ 75 PSI

Serial #: 3027

Inside

OXY USA, INC.

18 27S 33W

DST Test Number: 2

Pressure vs. Time

