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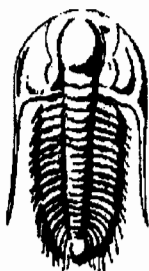
6-31-33W

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**TRILOBITE
TESTING, INC.**

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DRILL STEM TEST REPORT

Prepared For: **Oxy U.S.A. Inc.**

P.O. Box 2528
Liberal, KS 67905

ATTN: Oxy U.S.A. Inc.

6-31s-33w Seward, Ks

Conover G #1

Start Date: 2001.12.04 @ 18:47:21

End Date: 2001.12.05 @ 04:07:50

Job Ticket #: 14564

DST #: 1

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Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Oxy U.S.A. Inc.

Conover G #1

6-31s-33w Seward, Ks

DST # 1

Kansas City 'H'

2001.12.04



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Oxy U.S.A. Inc.

P.O. Box 2528
Liberal, KS 67905

ATTN: Oxy U.S.A. Inc.

Conover G #1

6-31s-33w Seward, Ks

Job Ticket: 14564

DST#: 1

Test Start: 2001.12.04 @ 18:47:21

GENERAL INFORMATION:

Formation: **Kansas City 'H'**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:37:34

Time Test Ended: 04:07:50

Test Type: Conventional Bottom Hole

Tester: Jakki Krekiau

Unit No:

Interval: **4410.00 ft (KB) To 4449.00 ft (KB) (TVD)**

Total Depth: 4449.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2947.00 ft (KB)

2935.00 ft (CF)

KB to GR/CF: 12.00 ft

Serial #: 2341

Inside

Press@RunDepth: 228.28 psig @ 4411.00 ft (KB)

Start Date: 2001.12.04

End Date:

2001.12.05

Capacity: 5000.00 psig

Last Calib.: 1899.12.30

Start Time: 18:47:21

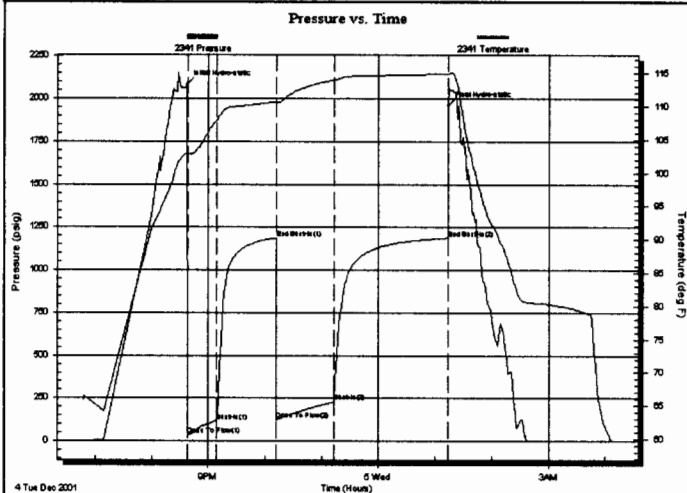
End Time:

04:07:50

Time On Btm: 2001.12.04 @ 20:37:20

Time Off Btm: 2001.12.05 @ 01:13:34

TEST COMMENT: IF: Fair blow BOB 16 min into open
FF: Fair blow built to 10 1/2" through open



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2083.82	102.84	Initial Hydro-static
1	35.44	102.86	Open To Flow (1)
32	115.03	107.91	Shut-In(1)
95	1187.27	110.64	End Shut-In(1)
95	122.08	110.64	Open To Flow(2)
156	228.28	113.98	Shut-In(2)
276	1184.16	114.93	End Shut-In(2)
277	1962.00	114.93	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
279.00	SI oil cut gas sw mud 15%g5%w 80%	1.37
93.00	SI oil & gas cut sw mud 8%g2%o16%w	70.461
28.00	SI oil cut gas sw mud 15%g5%w 80%w	0.14

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Oxy U.S.A. Inc.

P.O. Box 2528
Liberal, KS 67905

ATTN: Oxy U.S.A. Inc.

Conover G #1

6-31s-33w Seward, Ks

Job Ticket: 14564

DST#: 1

Test Start: 2001.12.04 @ 18:47:21

Tool Information

Drill Pipe:	Length: 3775.00 ft	Diameter: 3.80 inches	Volume: 52.95 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: 634.00 ft	Diameter: 2.25 inches	Volume: 3.12 bbl	Weight to Pull Loose: 115000.0 lb
		Total Volume: 56.07 bbl		Tool Chased ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 88000.00 lb
Depth to Top Packer:	4410.00 ft			Final 92000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	44.00 ft			
Tool Length:	76.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
C.O. Sub	1.00			4379.00	
S.I. Tool	5.00			4384.00	
Sampler	4.00			4388.00	
HMV	5.00			4393.00	
Jars	5.00			4398.00	
Safety Joint	2.00			4400.00	
Packer	5.00			4405.00	32.00 Bottom Of Top Packer
Packer	5.00			4410.00	
Stubb	1.00			4411.00	
Recorder	0.00	2341	Inside	4411.00	
Perforations	38.00			4449.00	
Recorder	0.00	5495	Outside	4449.00	
Bullnose	5.00			4454.00	44.00 Bottom Packers & Anchor

Total Tool Length: 76.00

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DRILL STEM TEST REPORT

FLUID SUMMARY

Oxy U.S.A. Inc.

Conover G #1

P.O. Box 2528
Liberal, KS 67905

6-31s-33w Seward, Ks

Job Ticket: 14564

DST#: 1

ATTN: Oxy U.S.A. Inc.

Test Start: 2001.12.04 @ 18:47:21

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:

85000 ppm

Viscosity: 48.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.98 in³

Gas Cushion Type:

Resistivity: 0.13 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1800.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
279.00	SI oil cut gas sw mud 15%g5%w 80%	1.372
93.00	SI oil & gas cut sw mud 8%g2%o16%w 74%r	0.457
28.00	SI oil cut gas sw mud 15%g5%w 80%r	0.138

Total Length: 400.00 ft

Total Volume:

1.967 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Sampler Recovery

.4 Cubic Ft. Gas

Serial #: 2341

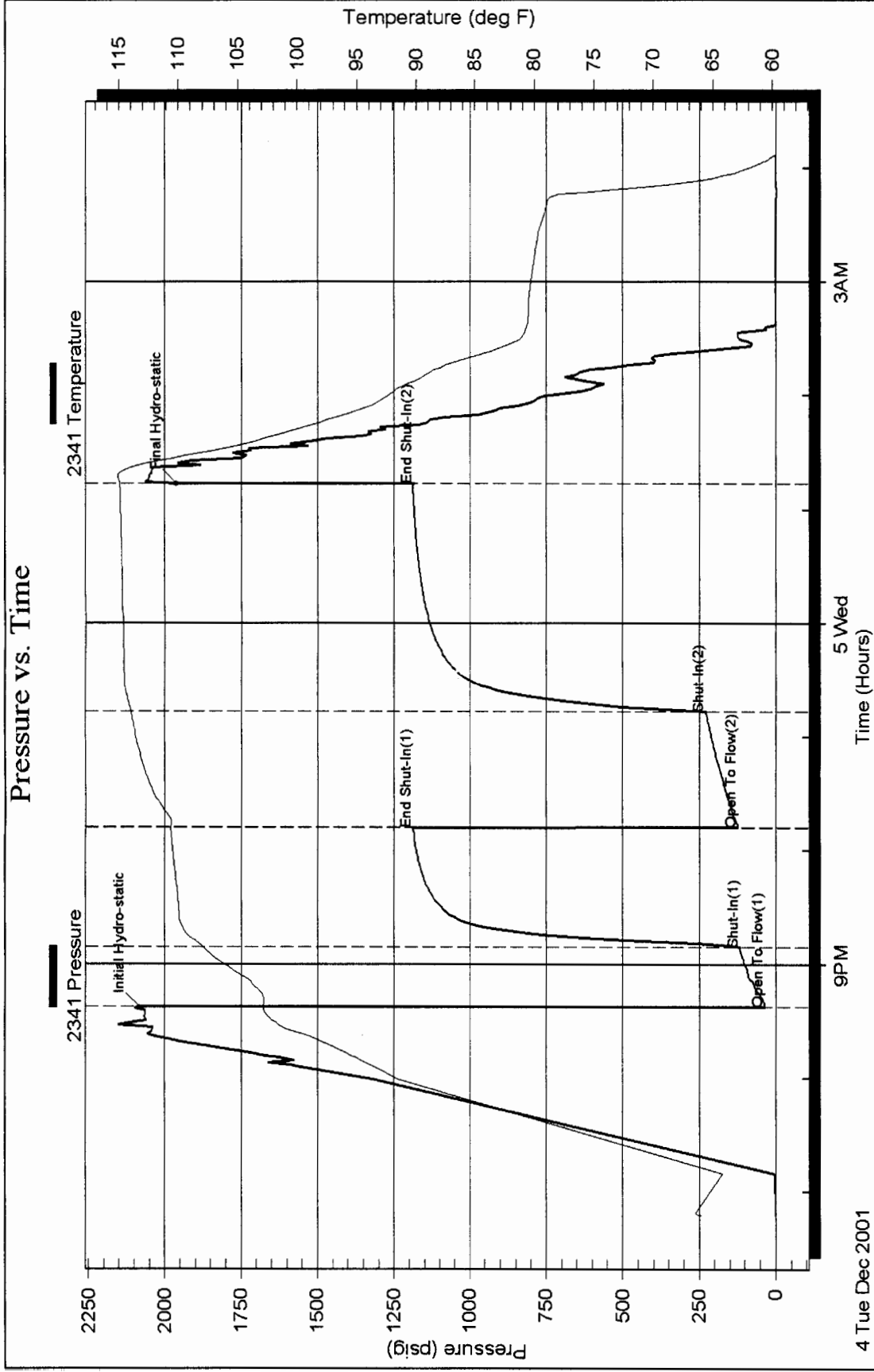
Inside

Oxy U.S.A. Inc.

6-31s-33w Sew ard,Ks

DST Test Number: 1

Pressure vs. Time

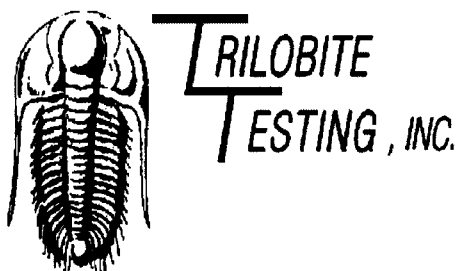


Trilobite Testing, Inc

Ref. No: 14564

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Printed: 2001.12.12 @ 15:15:22 Page 5



DRILL STEM TEST REPORT

Prepared For: **Oxy U.S.A. Inc.**

P.O. Box 2528
Liberal ,KS 67905

ATTN: Oxy U.S.A. Inc.

6-31s-33w Seward,Ks

Conover G #1

Start Date: 2001.12.06 @ 07:08:15

End Date: 2001.12.06 @ 15:55:14

Job Ticket #: 15010

DST #: 2

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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 U.S.A. Inc.

P.O. Box 2528
Liberal, KS 67905

ATTN: Oxy U.S.A. Inc.

Conover G #1

6-31s-33w Seward, Ks

Job Ticket: 15010

DST#: 2

Test Start: 2001.12.06 @ 07:08:15

GENERAL INFORMATION:

Formation: **marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:57:14

Time Test Ended: 15:55:14

Test Type: Conventional Bottom Hole

Tester: Shane McBride

Unit No: 15

Interval: **4782.00 ft (KB) To 4812.00 ft (KB) (TVD)**

Total Depth: 4812.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 2947.00 ft (KB)

2935.00 ft (CF)

KB to GR/CF: 12.00 ft

Serial #: 3227

Inside

Press@RunDepth: 66.02 psig @ 4783.00 ft (KB)

Start Date: 2001.12.06

End Date:

2001.12.06

Start Time: 07:08:15

End Time:

15:55:14

Capacity: 7000.00 psig

Last Calib.: 1899.12.30

Time On Btm: 2001.12.06 @ 09:56:14

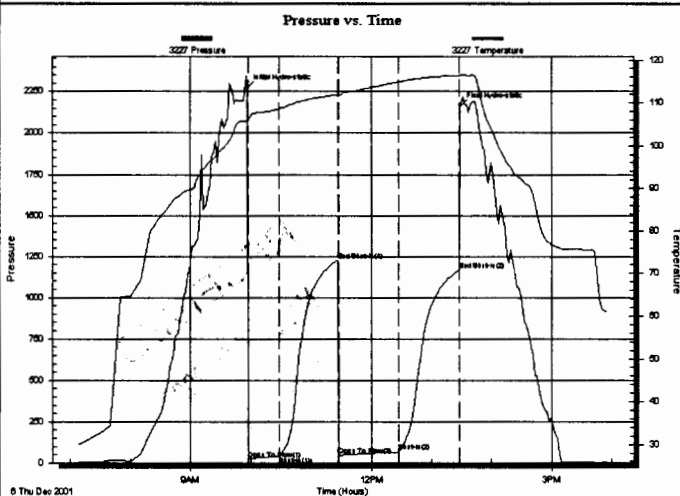
Time Off Btm: 2001.12.06 @ 13:29:14

TEST COMMENT: B.O.B. in 9 min.

No return

1/2" in @ open built to 9 1/2" in.

No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2270.74	105.82	Initial Hydro-static
1	21.12	105.81	Open To Flow (1)
32	39.69	108.61	Shut-In(1)
91	1224.24	111.91	End Shut-In(1)
92	44.19	111.83	Open To Flow (2)
151	66.02	114.91	Shut-In(2)
212	1169.16	116.38	End Shut-In(2)
213	2161.21	116.50	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
93.00	s g w c m 5%g 15%w 80%m	0.46

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Oxy U.S.A. Inc.

Conover G #1

P.O. Box 2528
Liberal, KS 67905

6-31s-33w Seward, Ks

Job Ticket: 15010

DST#: 2

ATTN: Oxy U.S.A. Inc.

Test Start: 2001.12.06 @ 07:08:15

Tool Information

Drill Pipe:	Length: 4130.00 ft	Diameter: 3.80 inches	Volume: 57.93 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: 651.00 ft	Diameter: 2.25 inches	Volume: 3.20 bbl	Weight to Pull Loose:	110000.0 lb
		Total Volume:	61.13 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial	90000.00 lb
Depth to Top Packer:	4782.00 ft			Final	95000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	30.00 ft				
Tool Length:	60.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
C.O. Sub	1.00			4753.00	
S.I. Tool	5.00			4758.00	
Sampler	3.00			4761.00	
HMV	5.00			4766.00	
Jars	5.00			4771.00	
Safety Joint	2.00			4773.00	
Packer	5.00			4778.00	30.00 Bottom Of Top Packer
Packer	4.00			4782.00	
Stubb	1.00			4783.00	
Recorder	0.00	3227	Inside	4783.00	
Perforations	24.00			4807.00	
Recorder	0.00	11057	Outside	4807.00	
Bullnose	5.00			4812.00	30.00 Bottom Packers & Anchor

Total Tool Length: 60.00

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DRILL STEM TEST REPORT

FLUID SUMMARY

Oxy U.S.A. Inc.

Conover G #1

P.O. Box 2528
Liberal ,KS 67905

6-31s-33w Seward,Ks

Job Ticket: 15010

DST#: 2

ATTN: Oxy U.S.A. Inc.

Test Start: 2001.12.06 @ 07:08:15

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:

24000 ppm

Viscosity: 47.00 sec/qt

Cushion Volume:

bbl

Water Loss: 10.74 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
93.00	s g w c m 5%g 15%w 80%m	0.457

Total Length: 93.00 ft

Total Volume:

0.457 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

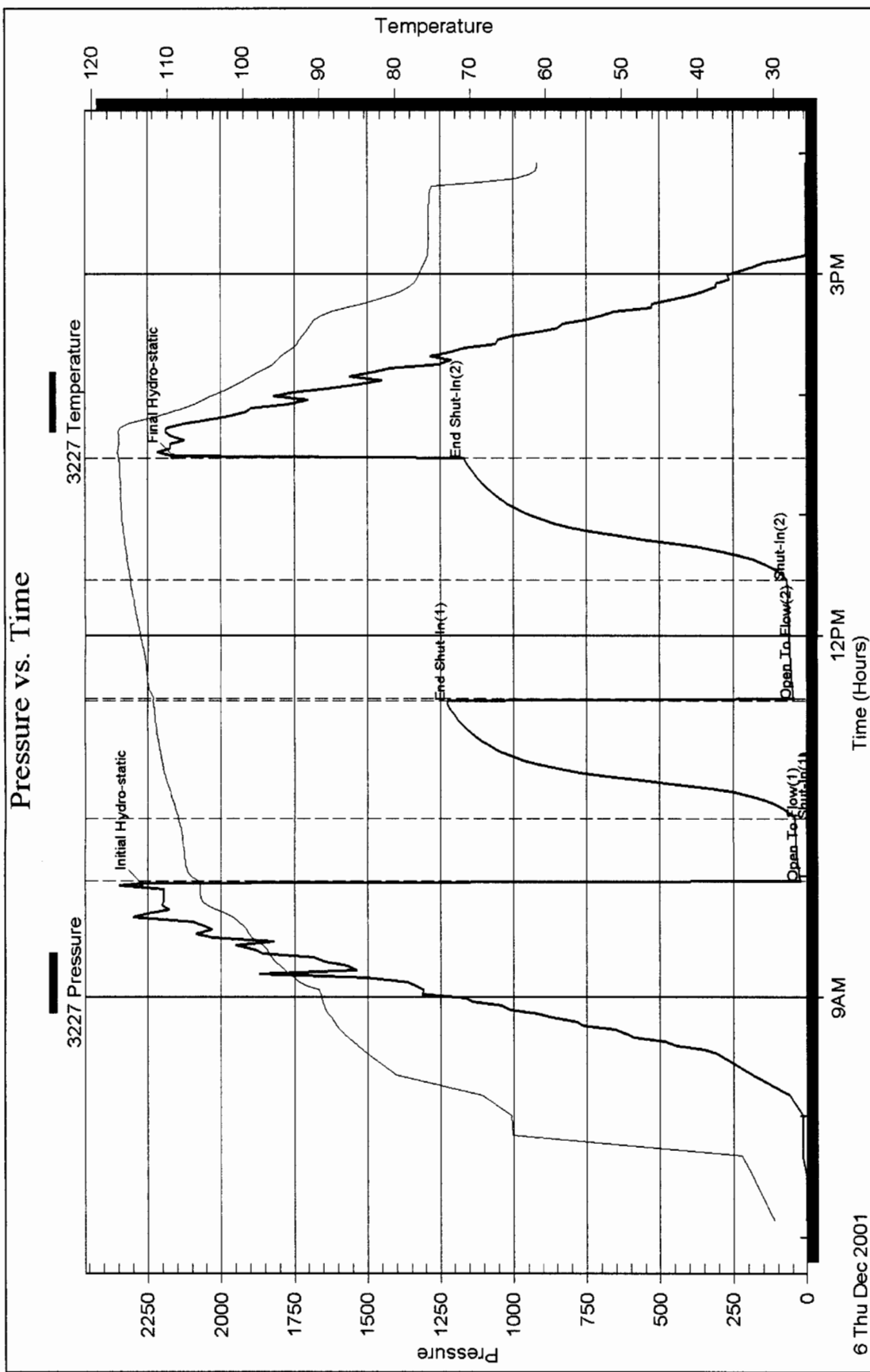
Laboratory Name:

Laboratory Location:

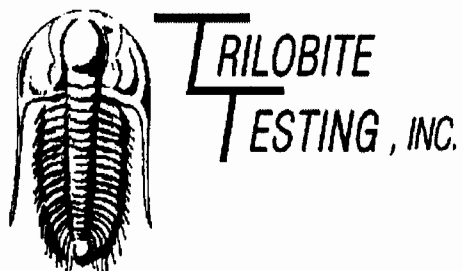
Recovery Comments: sampler RW .278@68F

.2 cu Ft gas

Pressure vs. Time



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DRILL STEM TEST REPORT

Prepared For: **Oxy U.S.A. Inc.**

P.O. Box 2528
Liberal ,KS 67905

ATTN: Oxy U.S.A. Inc.

6-31s-33w Seward,Ks

Conover G #1

Start Date: 2001.12.08 @ 21:21:05

End Date: 2001.12.09 @ 07:19:05

Job Ticket #: 14735 DST #: 3

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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 U.S.A. Inc.

P.O. Box 2528
Liberal, KS 67905

ATTN: Oxy U.S.A. Inc.

Conover G #1

6-31s-33w Seward, Ks

Job Ticket: 14735

DST#: 3

Test Start: 2001.12.08 @ 21:21:05

GENERAL INFORMATION:

Formation: **St Louis**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:28:05

Time Test Ended: 07:19:05

Test Type: Conventional Bottom Hole

Tester: Blake Wallace

Unit No: 20

Interval: **5468.00 ft (KB) To 5497.00 ft (KB) (TVD)**

Total Depth: 5497.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2947.00 ft (KB)

2935.00 ft (CF)

KB to GR/CF: 12.00 ft

Serial #: 3027

Inside

Press@RunDepth: 79.17 psig @ 5470.00 ft (KB)

Start Date: 2001.12.08

End Date:

2001.12.09

Capacity: 7000.00 psig

Last Calib.: 1899.12.30

Start Time: 21:21:07

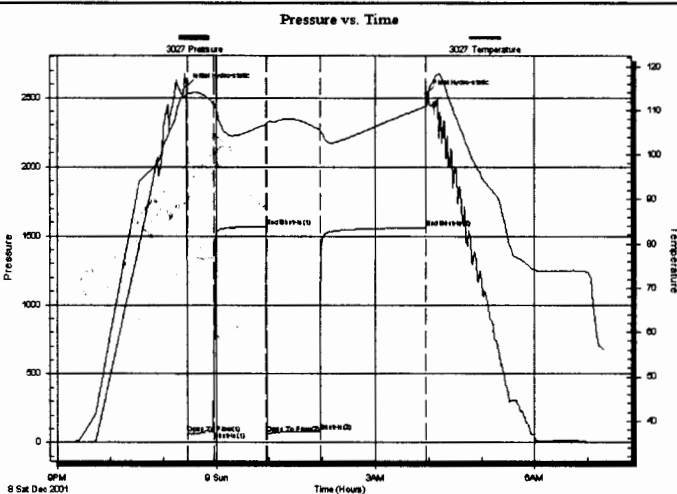
End Time:

07:19:05

Time On Btm: 2001.12.08 @ 23:26:50

Time Off Btm: 2001.12.09 @ 03:57:35

TEST COMMENT: IF-strong blow BOB 15 sec GTS 3 min
IS-no blow back
FF-strong blow BOB as soon as open
FSI-surface blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2580.01	113.63	Initial Hydro-static
2	68.46	113.86	Open To Flow (1)
31	81.66	111.46	Shut-In (1)
90	1569.30	106.81	End Shut-In (1)
91	66.58	106.92	Open To Flow (2)
151	79.17	105.54	Shut-In (2)
270	1560.57	110.85	End Shut-In (2)
271	2530.19	110.96	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.75	10.00	381.12
Last Gas Rate	0.25	42.00	89.47
Max. Gas Rate	0.25	42.00	89.47



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Oxy U.S.A. Inc.

P.O. Box 2528
Liberal, KS 67905

ATTN: Oxy U.S.A. Inc.

Conover G #1

6-31s-33w Seward, Ks

Job Ticket: 14735

DST#: 3

Test Start: 2001.12.08 @ 21:21:05

Tool Information

Drill Pipe:	Length: 4830.00 ft	Diameter: 3.80 inches	Volume: 67.75 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: 634.00 ft	Diameter: 2.25 inches	Volume: 3.12 bbl	Weight to Pull Loose: 130000.0 lb
			<u>Total Volume: 70.87 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	26.00 ft			String Weight: Initial 95000.00 lb
Depth to Top Packer:	5468.00 ft			Final 98000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	29.00 ft			
Tool Length:	59.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description

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

C.O. Sub	1.00			5439.00	
S.I. Tool	5.00			5444.00	
Sampler	3.00			5447.00	
HMV	5.00			5452.00	
Jars	5.00			5457.00	
Safety Joint	2.00			5459.00	
Packer	5.00			5464.00	30.00 Bottom Of Top Packer
Packer	4.00			5468.00	
Stubb	1.00			5469.00	
Perforations	1.00			5470.00	
Recorder	0.00	3027	Inside	5470.00	
Perforations	25.00			5495.00	
Recorder	0.00	11019	Outside	5495.00	
Bullnose	2.00			5497.00	29.00 Bottom Packers & Anchor

Total Tool Length: 59.00

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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Oxy U.S.A. Inc.

Conover G #1

P.O. Box 2528
Liberal, KS 67905

6-31s-33w Seward, Ks

Job Ticket: 14735

DST#: 3

ATTN: Oxy U.S.A. Inc.

Test Start: 2001.12.08 @ 21:21:05

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: 62.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.76 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl

Total Length:

ft

Total Volume:

bbl

Num Fluid Samples: 1

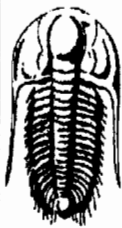
Num Gas Bombs: 0

Serial #:

Laboratory Name: Caraway

Laboratory Location: Liberal, KS

Recovery Comments: 15.8 cubic ft gas @ 1150 PSI 4000 ML gas



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

GAS RATES

Oxy U.S.A. Inc.

Conover G #1

P.O. Box 2528
Liberal, KS 67905

6-31s-33w Seward, Ks

Job Ticket: 14735

DST#: 3

ATTN: Oxy U.S.A. Inc.

Test Start: 2001.12.08 @ 21:21:05

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)
1	5	0.75	10.00	381.12
1	5	0.75	10.00	381.12
1	5	0.75	10.00	381.12
1	10	0.75	10.00	381.12
1	20	0.25	30.00	70.44
1	30	0.25	32.00	73.61
2	10	0.25	40.00	86.30
2	20	0.25	41.00	87.89
2	30	0.25	42.00	89.47
2	40	0.25	42.00	89.47
2	50	0.25	42.00	89.47

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Serial #: 3027

Inside

Oxy U.S.A. Inc.

6-31s-33w Sew ard,Ks

DST Test Number: 3

Pressure vs. Time

