

CONFIDENTIAL

ORIGINAL

15-075-26778



**TRILOBITE
TESTING, INC.**

RECEIVED

DEC 18 2001

KCC WICHITA

RELEASED

JAN 04 2005

DRILL STEM TEST REPORT

FROM CONFIDENTIAL

Prepared For: **OXY USA Inc.**

P O Box 2528
Liberal KS. 67905

KCC

DEC 17 2001

CONFIDENTIAL

ATTN: Cal Wylie

4-23S-43W Hamilton K

Slease #A-1

Start Date: 2001.10.28 @ 19:40:33

End Date: 2001.10.29 @ 04:02:18

Job Ticket #: 14888

DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

OXY USA Inc.

Slease #A-1

4-23S-43W Hamilton K

DST # 1

Shawnee

2001.10.28



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

OXY USA Inc.

P O Box 2528
Liberal KS. 67905

ATTN: Cal Wylie

Slease #A-1

4-23S-43W Hamilton K

Job Ticket: 14888

DST#: 1

Test Start: 2001.10.28 @ 19:40:33

GENERAL INFORMATION:

Formation: **Shawnee**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 21:12:33

Time Test Ended: 04:02:18

Test Type: **Conventional Bottom Hole**

Tester: **Rod Steinbrink**

Unit No: **22**

Interval: **3329.00 ft (KB) To 3342.00 ft (KB) (TVD)**

Total Depth: **3371.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **3277.00 ft (KB)**

3266.00 ft (CF)

KB to GR/CF: **11.00 ft**

Serial #: 3030

Inside

Press@RunDepth: **367.20 psig @ 3330.00 ft (KB)**

Start Date: **2001.10.28**

End Date:

2001.10.29

Capacity: **7000.00 psig**

Last Calib.: **1899.12.30**

Start Time: **19:40:38**

End Time:

04:02:17

Time On Btm: **2001.10.28 @ 21:02:33**

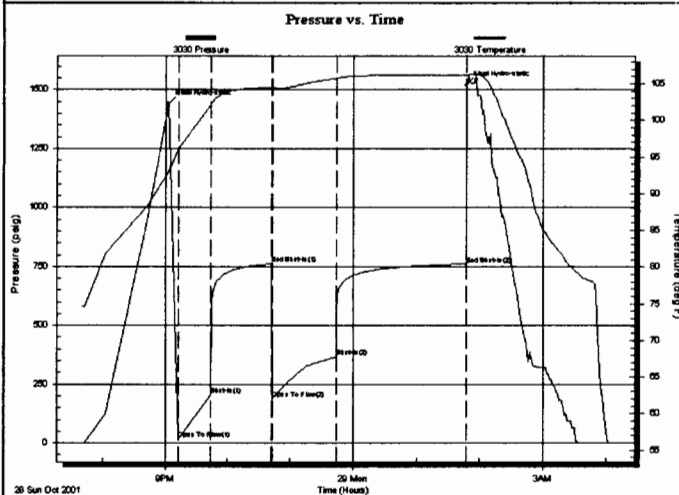
Time Off Btm: **2001.10.29 @ 01:47:17**

TEST COMMENT: **IF; Weak to fair blow off btm in 15 mins**

IS; No return

FF; Weak building blow built to 3"

FS; No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1440.54	92.99	Initial Hydro-static
10	18.21	96.17	Open To Flow (1)
41	203.96	102.09	Shut-In (1)
100	761.42	104.48	End Shut-In (1)
101	187.30	104.48	Open To Flow (2)
162	367.20	105.75	Shut-In (2)
285	759.37	106.17	End Shut-In (2)
285	1520.03	106.18	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
750.00	Salt Wtr w/ trc of oil @ top	4.36

Gas Rates

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

ORIGINAL


TRILOBITE
TESTING, INC.
DRILL STEM TEST REPORT
TOOL DIAGRAM

OXY USA Inc.

Slease #A-1

 P O Box 2528
 Liberal KS. 67905

CONFIDENTIAL
4-23S-43W Hamilton K

Job Ticket: 14888

DST#:1

ATTN: Cal Wylie

Test Start: 2001.10.28 @ 19:40:33

Tool Information

Drill Pipe:	Length: 2633.00 ft	Diameter: 3.80 inches	Volume: 36.93 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: 676.00 ft	Diameter: 2.25 inches	Volume: 3.32 bbl	Weight to Pull Loose: 70000.00 lb
			Total Volume: 40.25 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial 65000.00 lb
Depth to Top Packer:	3329.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	47.00 ft			
Tool Length:	78.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		
Tool Comments:				

RECEIVED
DEC 18 2001
KCC WICHITA

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

C.O. Sub	1.00			3299.00	
S.I. Tool	5.00			3304.00	
Sampler	3.00			3307.00	
HMV	5.00			3312.00	
Jars	5.00			3317.00	
Safety Joint	2.00			3319.00	
Packer	5.00			3324.00	31.00 Bottom Of Top Packer
Packer	5.00			3329.00	
Stubb	1.00			3330.00	
Recorder	0.00	3030	Inside	3330.00	
Perforations	11.00			3341.00	
Blank Off Sub	1.00			3342.00	47.00 Tool Interval
Packer	5.00			3347.00	
Stubb	1.00			3348.00	
Perforations	23.00			3371.00	
Recorder	0.00	13576	Outside	3371.00	
Bullnose	5.00			3376.00	1000077.00 Bottom Packers & Anchor

Total Tool Length: 78.00
KCC
DEC 17 2001
CONFIDENTIAL
RELEASED
JAN 04 2005
FROM CONFIDENTIAL



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

OXY USA Inc.

Slease #A-1

P O Box 2528
Liberal KS. 67905

4-23S-43W Hamilton K

Job Ticket: 14888

DST#: 1

ATTN: Cal Wylie

Test Start: 2001.10.28 @ 19:40:33

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:

30000 ppm

Viscosity: 46.00 sec/qt

Cushion Volume:

bbl

Water Loss: 10.38 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3700.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
750.00	Salt Wtr w / trc of oil @ top	4.362

Total Length: 750.00 ft

Total Volume: 4.362 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .21 @ 80 deg =

ORIGINAL

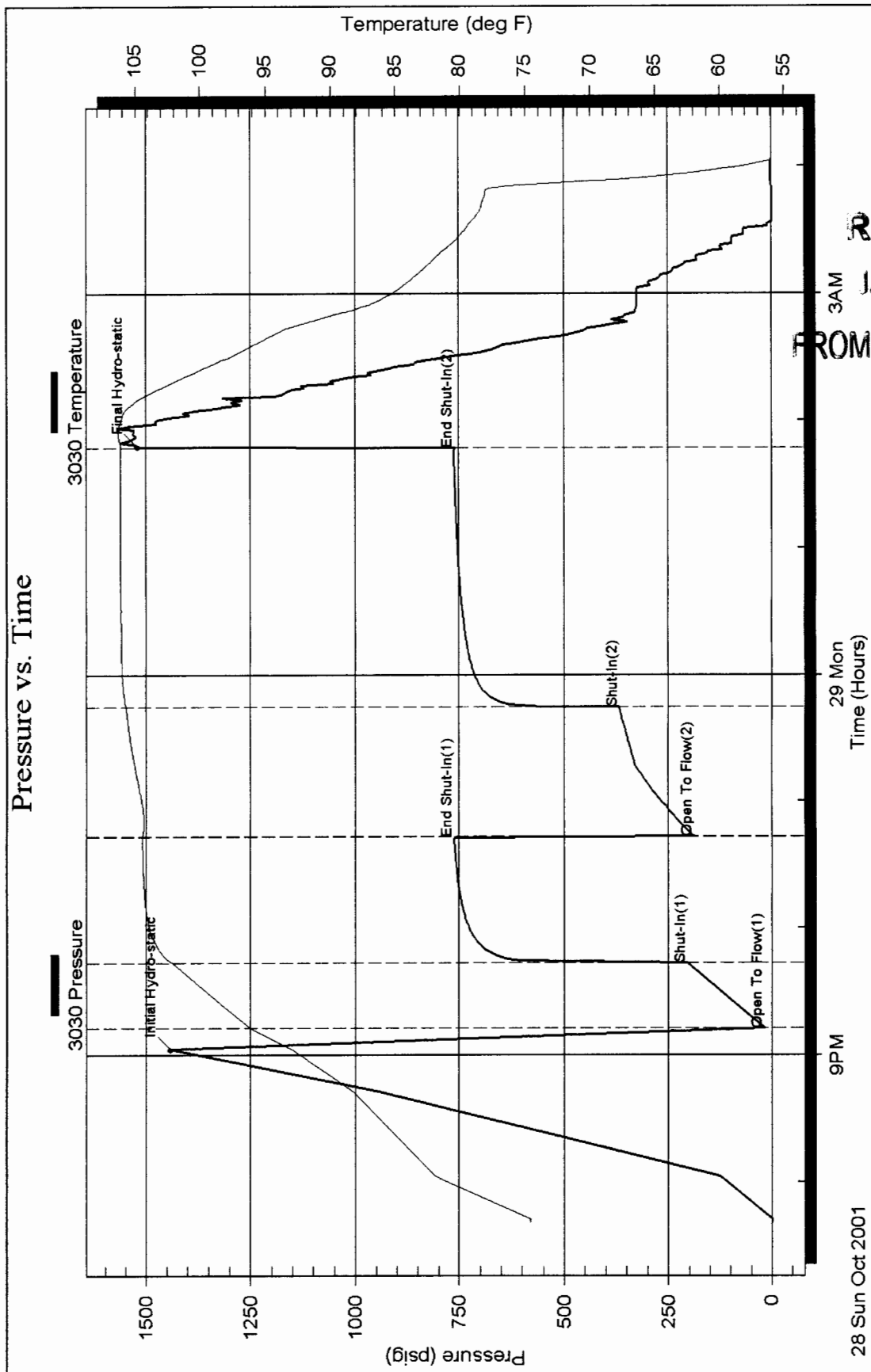
Page 5

DST Test Number: 1

4-23S-43W Hamilton K

Inside OXY USA Inc.

Serial #: 3030



RELEASED

JAN 04 2005

FROM CONFIDENTIAL

RECEIVED
DEC 18 2001
WICHITA

KCC

DEC 17 2001

CONFIDENTIAL

Ref. No: 14888

Trilobite Testing, Inc

CONFIDENTIAL



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

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

P.O. Box 2528
Liberal, KS 67901

ATTN: Oxy U.S.A. Inc.

4-23-43 Hamilton, KS

Slease A #1

Start Date: 2001.11.03 @ 13:42:22

End Date: 2001.11.03 @ 21:20:16

Job Ticket #: 15001 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

ORIGINAL
RELEASED

JAN 04 2005

FROM CONFIDENTIAL

RECEIVED

DEC 18 2001

KCC WICHITA

RELEASED

JAN 18 2005

FROM CONFIDENTIAL

KCC

DEC 17 2001

CONFIDENTIAL

Oxy U.S.A. Inc.

Slease A #1

4-23-43 Hamilton, KS

DST # 2

morrow

2001.11.03



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Oxy U.S.A. Inc.

P.O. Box 2528
Liberal, KS 67901

ATTN: Oxy U.S.A. Inc.

Slease A #1

4-23-43 Hamilton, KS

Job Ticket: 15001

DST#: 2

Test Start: 2001.11.03 @ 13:42:22

GENERAL INFORMATION:

Formation: **morrow**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 15:56:17

Time Test Ended: 21:20:16

Test Type: **Conventional Straddle**

Tester: **Shane McBride**

Unit No: **15**

Interval: **4935.00 ft (KB) To 4962.00 ft (KB) (TVD)**

Total Depth: **5379.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Fair**

Reference Elevations: **3477.00 ft (KB)**

3466.00 ft (CF)

KB to GR/CF: **11.00 ft**

Serial #: 2346

Press@RunDepth: **49.59 psig @ 4936.00 ft (KB)**

Start Date: **2001.11.03**

End Date:

2001.11.03

Start Time: **13:42:22**

End Time:

21:20:16

Capacity: **7000.00 psig**

Last Calib.: **1899.12.30**

Time On Btm: **2001.11.03 @ 15:55:17**

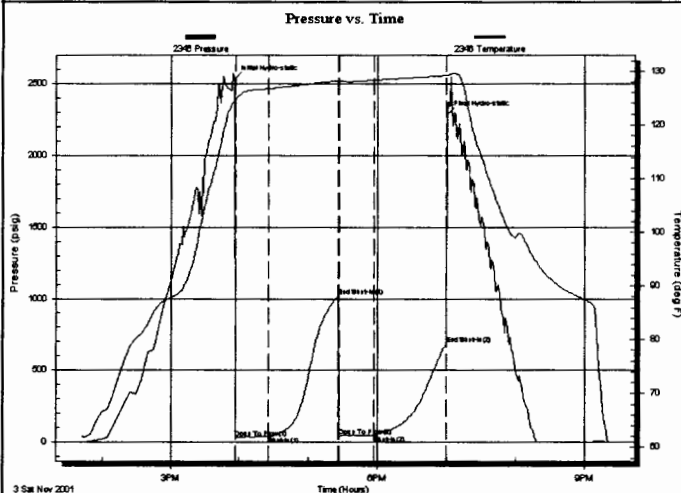
Time Off Btm: **2001.11.03 @ 19:00:16**

TEST COMMENT: **3/4" in. blow, died back to 1/2" in.**

No return

Bubble to open tool, no blow

No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2534.81	124.27	Initial Hydro-static
1	28.16	124.55	Open To Flow (1)
30	42.12	126.74	Shut-In (1)
91	1014.88	128.21	End Shut-In (1)
92	41.40	128.21	Open To Flow (2)
122	49.59	128.37	Shut-In (2)
184	685.04	129.21	End Shut-In (2)
185	2287.26	129.23	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	mud 100% mud	0.30

Gas Rates

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

CONFIDENTIAL

ORIGINAL


TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Oxy U.S.A. Inc.

Slease A #1

 P.O. Box 2528
 Liberal, KS 67901

4-23-43 Hamilton, KS

Job Ticket: 15001

DST#: 2

ATTN: Oxy U.S.A. Inc.

Test Start: 2001.11.03 @ 13:42:22

Tool Information

Drill Pipe:	Length: 4235.00 ft	Diameter: 3.80 inches	Volume: 59.41 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: 676.00 ft	Diameter: 2.25 inches	Volume: 3.32 bbl	Weight to Pull Loose: 95000.00 lb
		Total Volume:	62.73 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 78000.00 lb
Depth to Top Packer:	4935.00 ft			Final 78000.00 lb
Depth to Bottom Packer:	4962.00 ft			
Interval between Packers:	27.00 ft			
Tool Length:	474.00 ft			
Number of Packers:	3	Diameter:	6.75 inches	
Tool Comments:				

RECEIVED

DEC 18 2001

KCC WICHITA
RELEASED

JAN 04 2005

FROM CONFIDENTIAL

KCC

DEC 17 2001

CONFIDENTIAL

Tool Interval

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
C.O. Sub	1.00			4906.00	
S.I. Tool	5.00			4911.00	
Sampler	3.00			4914.00	
HMV	5.00			4919.00	
Jars	5.00			4924.00	
Safety Joint	2.00			4926.00	
Packer	5.00			4931.00	30.00 Bottom Of Top Packer
Packer	4.00			4935.00	
Stubb	1.00			4936.00	
Recorder	0.00	2346		4936.00	
Perforations	22.00			4958.00	
Blank Off Sub	1.00			4959.00	
top of s.packer	3.00			4962.00	27.00 Tool Interval
Packer	0.00			4962.00	
Stubb	1.00			4963.00	
Perforations	7.00			4970.00	
C.O. Sub	1.00			4971.00	
drill pipe	402.00			5373.00	
C.O. Sub	1.00			5374.00	
Recorder	0.00	11057		5374.00	
Bullnose	5.00			5379.00	417.00 Bottom Packers & Anchor

Total Tool Length: 474.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Oxy U.S.A. Inc.

Slease A #1

P.O. Box 2528
Liberal, KS 67901

4-23-43 Hamilton, KS

Job Ticket: 15001

DST#: 2

ATTN: Oxy U.S.A. Inc.

Test Start: 2001.11.03 @ 13:42:22

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: 64.00 sec/qt

Cushion Volume:

bbl

Water Loss: 5.19 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	mud 100% mud	0.295

Total Length: 60.00 ft

Total Volume: 0.295 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

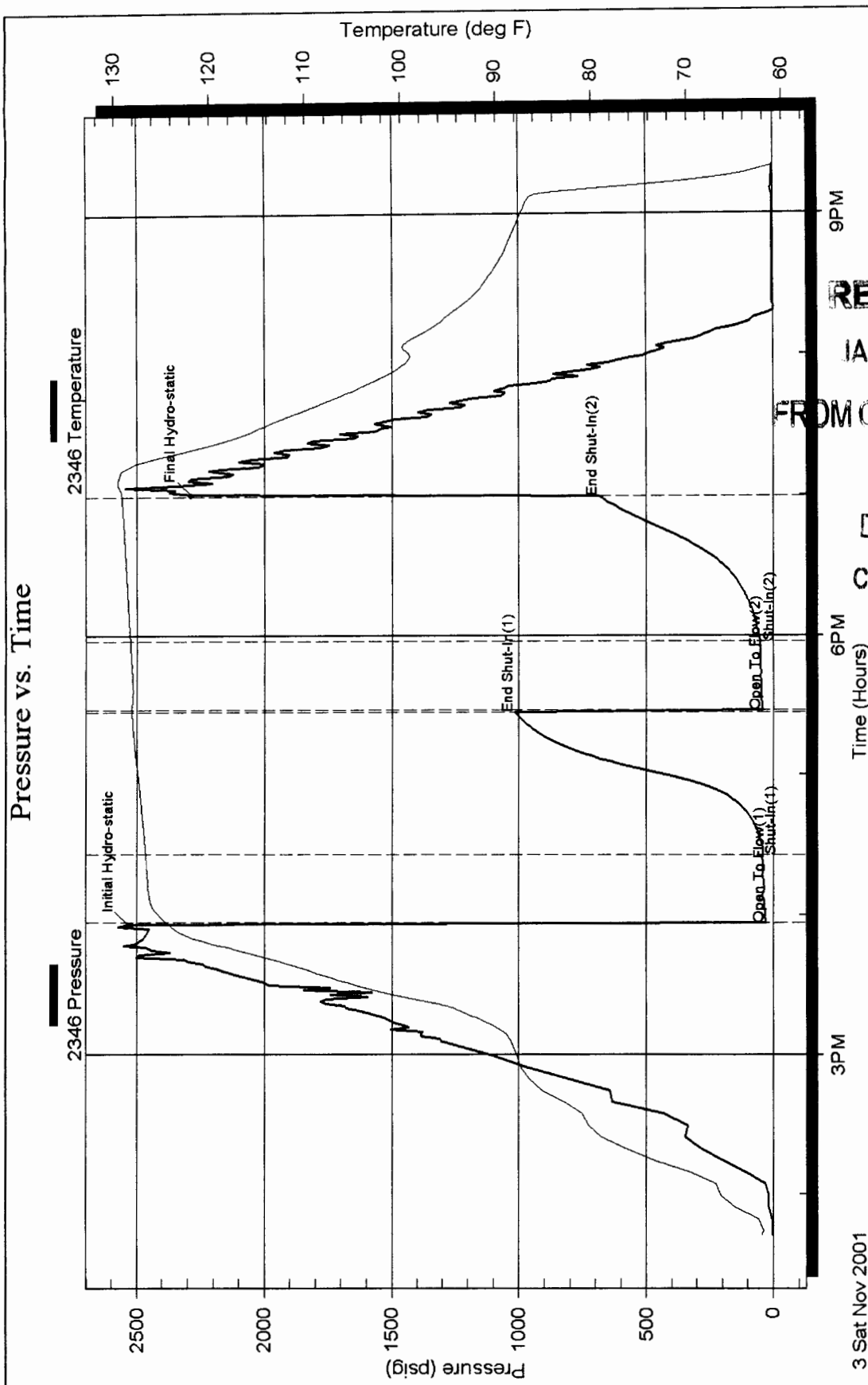
Serial #: 2346

Oxy U.S.A. Inc.

4-23-43 Hamilton, KS

DST Test Number: 2

Pressure vs. Time



RELEASED
JAN 04 2005
FROM CONFIDENTIAL
KCC
DEC 17 2001
CONFIDENTIAL
RECEIVED
DEC 18 2001
KCC WICHITA

Trilobite Testing, Inc

Ref. No: 15001

Printed: 2001.11.06 @ 14:38:21 Page 5