



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Prepared For: **Oxy USA**

P O Box 2528
Liberal, KS 67905

ATTN: Tom Heflin

32-27S-34W Haskell

Taton A #1

Start Date: 2001.02.16 @ 04:51:00

End Date: 2001.02.16 @ 13:35:00

Job Ticket #: 13343 DST #: 1

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

Oxy USA

Taton A #1

32-27S-34W Haskell

DST #: 1

L/KC Denis

2001.02.16



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Oxy USA
 P O Box 2528
 Liberal, KS 67905
 ATTN: Tom Heflin

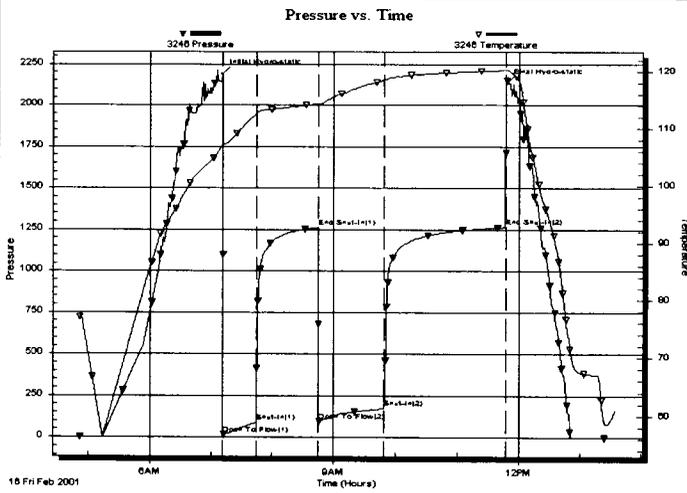
Taton A #1
32-27S-34W Haskell
 Job Ticket: 13343 **DST#: 1**
 Test Start: 2001.02.16 @ 04:51:00

GENERAL INFORMATION:

Formation: **L/KC Denis**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 07:11:53
 Time Test Ended: 13:35:00
 Interval: ft (KB) To **4523.00 ft (KB) (TVD)**
 Total Depth: **4523.00 ft (KB)**
 Hole Diameter: **7.88 inches** Hole Condition: Fair
 Test Type: Conventional Bottom Hole
 Tester: Rod Steinbrink
 Unit No: 12
 Reference Elevations: **3062.00 ft (KB)**
3049.00 ft (CF)
 KB to GR/CF: **13.00 ft**

Serial #: 3246 Inside
 Press@RunDepth: 174.92 psig @ 4513.00 ft (KB) Capacity: 7000.00 psig
 Start Date: 2001.02.16 End Date: 2001.02.16 Last Calib.: 2001.02.15
 Start Time: 04:51:55 End Time: 13:35:53 Time On Btm: 2001.02.16 @ 07:11:23
 Time Off Btm: 2001.02.16 @ 11:48:08

TEST COMMENT: IF; Weak surface blow built slowly to 3"
 IS; No return blow
 FF; Weak surface return in 10 mins steady throughout
 FS; No return blow Sampler Data



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
140	2189.94	107.21	Initial Hydro-static
140	12.46	107.28	Open To Flow (1)
173	88.98	112.60	Shut-In(1)
233	1262.56	114.35	End Shut-In(1)
234	94.33	114.34	Open To Flow (2)
298	174.92	118.55	Shut-In(2)
415	1263.70	120.26	End Shut-In(2)
417	2135.79	120.31	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
335.00	Salt Water	2.19

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Oxy USA
P O Box 2528
Liberal, KS 67905
ATTN: Tom Heflin

Taton A #1
32-27S-34W Haskell
Job Ticket: 13343 **DST#: 1**
Test Start: 2001.02.16 @ 04:51:00

Tool Information

Drill Pipe:	Length: 4235.00 ft	Diameter: 3.80 inches	Volume: 59.41 bbl	Tool Weight: 1800.00 lb
Drill Collar:	Length: 275.00 ft	Diameter: 2.25 inches	Volume: 1.35 bbl	Weight set on Packer: 30000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 100000.0 lb
Drill Pipe Above KB:	28.00 ft			Tool Chased 0.00 ft
Depth to Top Packer:	4507.00 ft			String Weight: Initial 70000.00 lb
Depth to Bottom Packer:	ft			Final 70000.00 lb
Interval between Packers:	ft			
Tool Length:	41.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
S.I. Tool	5.00			4487.00	
Sampler	3.00			4490.00	
HMV	5.00			4495.00	
Jars	5.00			4500.00	
Safety Joint	2.00			4502.00	
Packer	5.00			4507.00	25.00 Bottom Of Top Packer
Packer	5.00			4512.00	
Stubb	1.00			4513.00	
Recorder	0.00	3246	inside	4513.00	
Perforations	5.00			4518.00	
Recorder	0.00	13339	Outside	4518.00	
Bullnose	5.00			4523.00	16.00 Bottom Packers & Anchor

Total Tool Length: 41.00

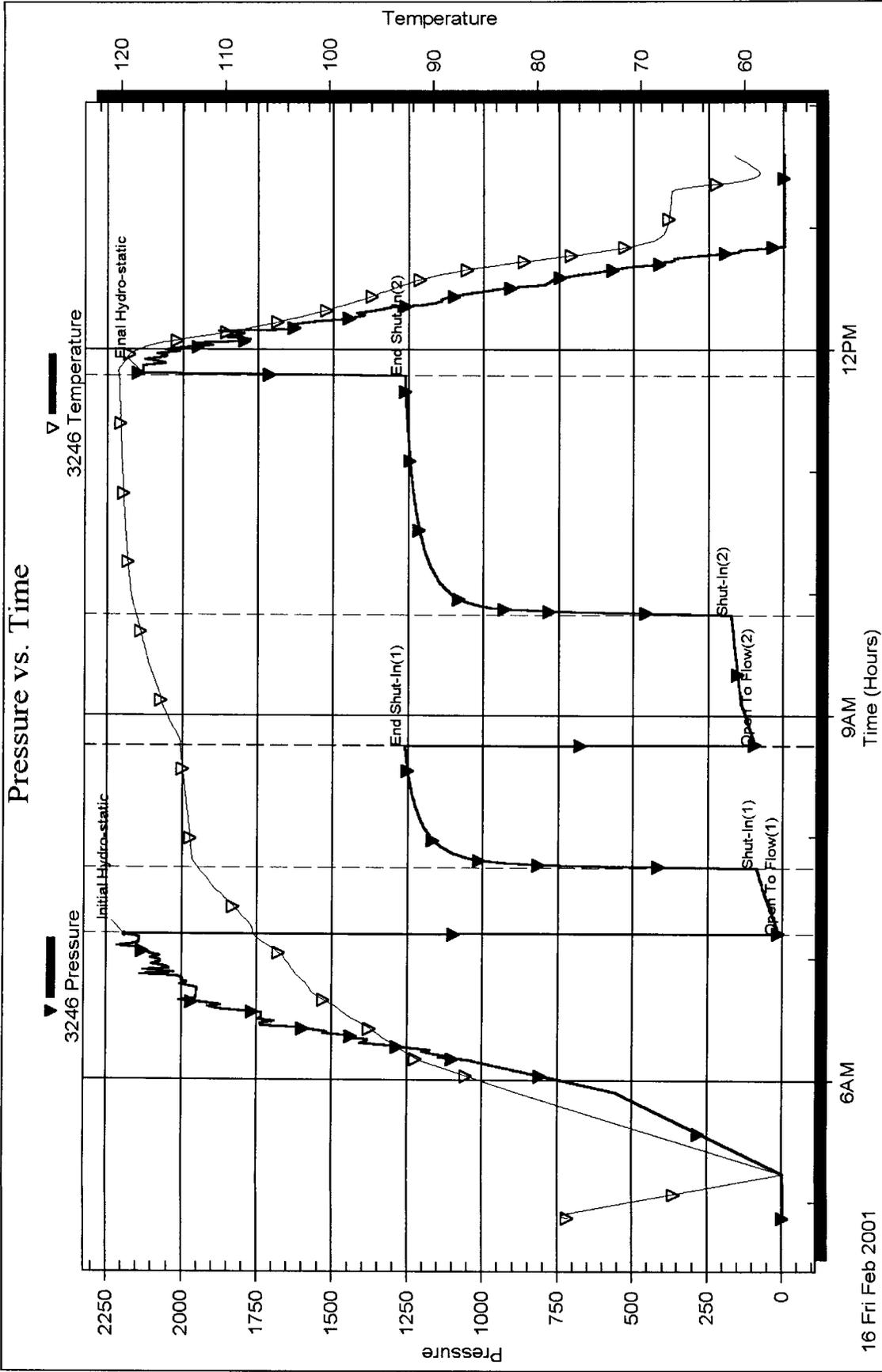
Serial #: 3246

Inside

Oxy USA

32-27S-34W Haskell

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Oxy USA**

P O Box 2528
Liberal, KS 67905

ATTN: Tom Heflin

32-27S-34W Haskell

Taton A #1

Start Date: 2001.02.16 @ 04:51:00

End Date: 2001.02.17 @ 13:36:00

Job Ticket #: 13344 DST #: 2

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
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ATTN: Tom Heflin

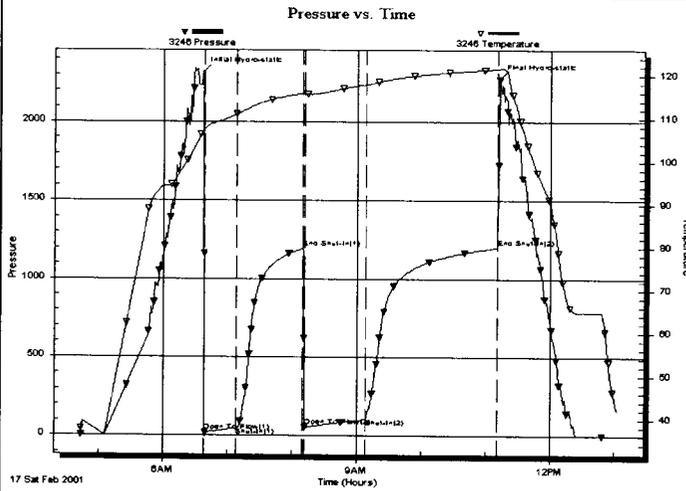
Taton A #1
32-27S-34W Haskell
Job Ticket: 13344 **DST#: 2**
Test Start: 2001.02.16 @ 04:51:00

GENERAL INFORMATION:

Formation: **Marmaton**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 06:37:51
Time Test Ended: 13:36:00
Interval: **4686.00 ft (KB) To 4716.00 ft (KB) (TVD)**
Total Depth: 4523.00 ft (KB)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole
Tester: Rod Steinbrink
Unit No: 12
Reference Elevations: 3062.00 ft (KB)
3049.00 ft (CF)
KB to GR/CF: 13.00 ft

Serial #: **3246** Inside
Press@RunDepth: 104.31 psig @ 4692.00 ft (KB) Capacity: 7000.00 psig
Start Date: 2001.02.17 End Date: 2001.02.17 Last Calib.: 2001.02.15
Start Time: 04:42:53 End Time: 13:03:51 Time On Btm: 2001.02.17 @ 06:36:51
Time Off Btm: 2001.02.17 @ 11:12:21

TEST COMMENT: Sampler Data; Gas; 1500 ml Oil;
Wtr; 2000 ml Mud; 500 ml
Total Volume; 4000 ml
Pressure; 250# psi IF; Fair to strong surging blow off bttm in 3 mins.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
114	2313.85	107.24	Initial Hydro-static
115	18.15	107.61	Open To Flow (1)
145	45.93	111.02	Shut-In(1)
207	1191.40	115.93	End Shut-In(1)
208	56.78	115.93	Open To Flow (2)
265	104.31	117.95	Shut-In(2)
388	1199.58	121.53	End Shut-In(2)
390	2274.00	121.66	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	465' gas in pipe	0.00
40.00	GOWCM 30%gas 10%oil 25%wtr 35% mud	0.20
150.00	GMCW 20%gas 60%wtr 20%mu	0.74

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Oxy USA

Taton A #1

P O Box 2528
Liberal, KS 67905

32-27S-34W Haskell

Job Ticket: 13344

DST#: 2

ATTN: Tom Heflin

Test Start: 2001.02.16 @ 04:51:00

Tool Information

Drill Pipe:	Length: 4393.00 ft	Diameter: 3.80 inches	Volume: 61.62 bbl	Tool Weight: 1800.00 lb
Drill Collar:	Length: 275.00 ft	Diameter: 2.25 inches	Volume: 1.35 bbl	Weight set on Packer: 30000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 90000.00 lb
Drill Pipe Above KB:	7.00 ft			Tool Chased 0.00 ft
Depth to Top Packer:	4686.00 ft			String Weight: Initial 70000.00 lb
Depth to Bottom Packer:	ft			Final 73000.00 lb
Interval between Packers:	ft			
Tool Length:	55.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
S.I. Tool	5.00			4666.00	
Sampler	3.00			4669.00	
HMV	5.00			4674.00	
Jars	5.00			4679.00	
Safety Joint	2.00			4681.00	
Packer	5.00			4686.00	25.00 Bottom Of Top Packer
Packer	5.00			4691.00	
Stubb	1.00			4692.00	
Recorder	0.00	3246	Inside	4692.00	
Perforations	19.00			4711.00	
Recorder	0.00	13339	Outside	4711.00	
Bullnose	5.00			4716.00	30.00 Bottom Packers & Anchor

Total Tool Length: 55.00

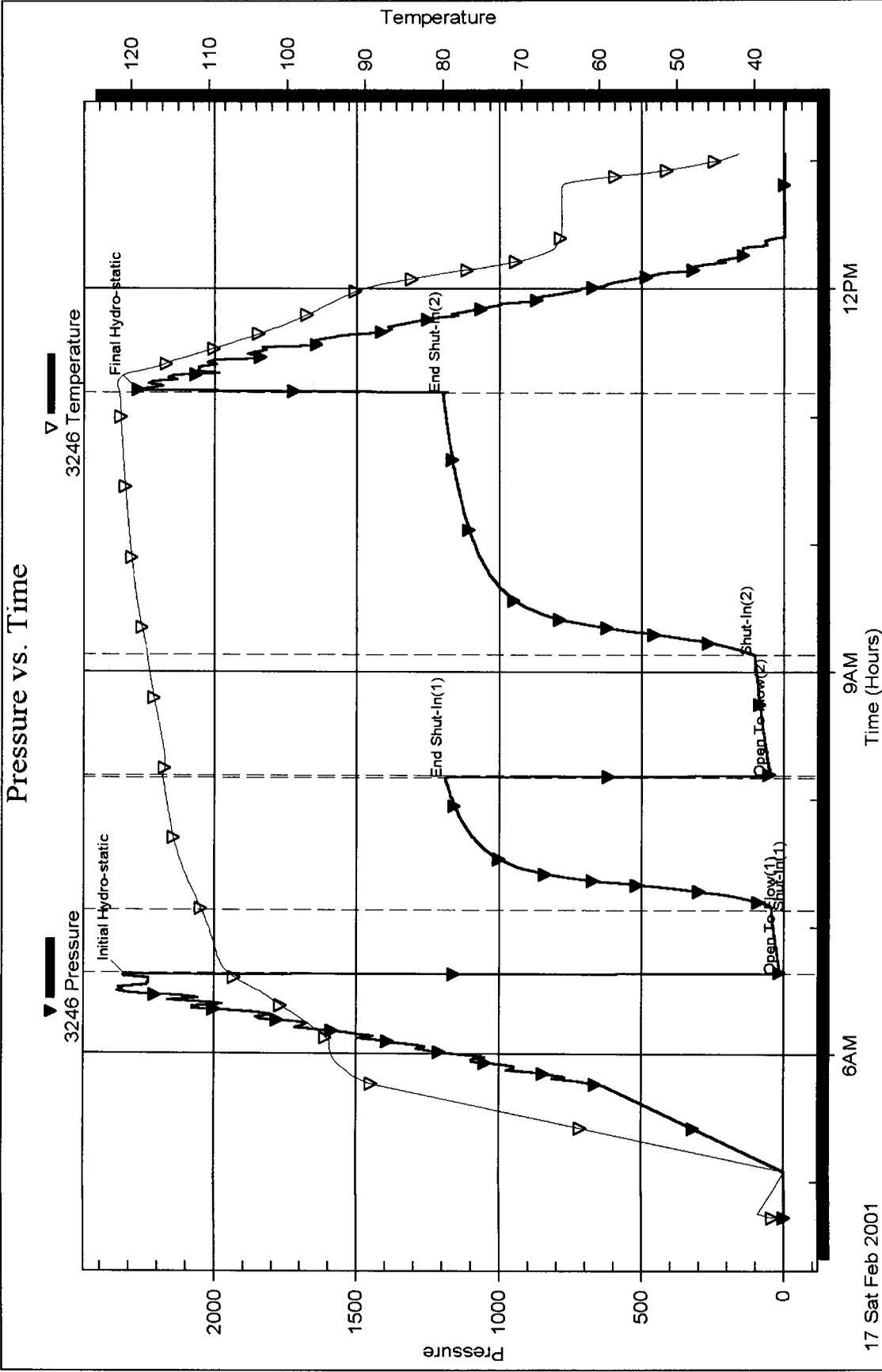
Serial #: 3246

Inside

Oxy USA

32-27S-34W Haskell

Pressure vs. Time



17 Sat Feb 2001

6AM

9AM

12PM

Time (Hours)



DRILL STEM TEST REPORT

Prepared For: **Oxy USA**

P O Box 2528
Liberal, KS 67905

ATTN: Tom Heflin

32-27S-34W Haskell

Taton A #1

Start Date: 2001.02.17 @ 14:30:47

End Date: 2001.02.17 @ 22:30:45

Job Ticket #: 13345 DST #: 3

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

Oxy USA

Taton A #1

32-27S-34W Haskell

DST #: 3

Dennis D

2001.02.17



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TESTING, INC**

DRILL STEM TEST REPORT

Oxy USA
P O Box 2528
Liberal, KS 67905
ATTN: Tom Heflin

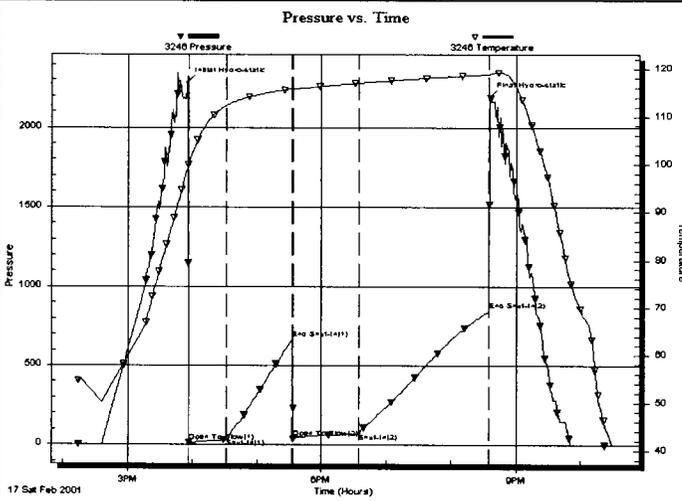
Taton A #1
32-27S-34W Haskell
Job Ticket: 13345 **DST#: 3**
Test Start: 2001.02.17 @ 14:30:47

GENERAL INFORMATION:

Formation: **Dennis D**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 15:30:15
Time Test Ended: 22:30:45
Interval: **4570.00 ft (KB) To 4716.00 ft (KB) (TVD)**
Total Depth: 4523.00 ft (KB)
Hole Diameter: 7.88 inches Hole Condition: Fair
Reference Elevations: 3062.00 ft (KB)
3049.00 ft (CF)
KB to GR/CF: 13.00 ft

Serial #: **3246** Inside
Press@RunDepth: 69.68 psig @ 4576.00 ft (KB) Capacity: 7000.00 psig
Start Date: 2001.02.17 End Date: 2001.02.17 Last Calib.: 2001.02.15
Start Time: 14:13:47 End Time: 22:30:45 Time On Btm: 2001.02.17 @ 15:55:15
Time Off Btm: 2001.02.17 @ 20:35:45

TEST COMMENT: Sampler Data; Gas 500 ml Mud 500 ml Wtr 3000 ml
Total Volume 4000 ml
Pressure 100#psi IF; Stong blow off bttm in 30 secs.
IS; Surface return built to 1/2"



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
102	2281.27	99.60	Initial Hydro-static
103	12.34	100.34	Open To Flow (1)
138	30.95	112.35	Shut-In(1)
199	667.75	115.82	End Shut-In(1)
200	37.03	115.82	Open To Flow (2)
261	69.68	117.01	Shut-In(2)
381	844.39	118.81	End Shut-In(2)
382	2190.60	118.85	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
530.00	GIP	4.93
40.00	Mud	0.56
60.00	MCW 90%wtr 10%mud	0.84

Gas Rates

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



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DRILL STEM TEST REPORT

TOOL DIAGRAM

Oxy USA

Taton A #1

P O Box 2528
Liberal, KS 67905

32-27S-34W Haskell

Job Ticket: 13345

DST#: 3

ATTN: Tom Heflin

Test Start: 2001.02.17 @ 14:30:47

Tool Information

Drill Pipe:	Length: 4290.00 ft	Diameter: 3.80 inches	Volume: 60.18 bbl	Tool Weight: 1800.00 lb
Drill Collar:	Length: 275.00 ft	Diameter: 2.25 inches	Volume: 1.35 bbl	Weight set on Packer: 30000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 95000.00 lb
Drill Pipe Above KB:	20.00 ft			Tool Chased 0.00 ft
Depth to Top Packer:	4570.00 ft			String Weight: Initial 70000.00 lb
Depth to Bottom Packer:	4585.00 ft			Final 74000.00 lb
Interval between Packers:	15.00 ft			
Tool Length:	172.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
S.I. Tool	5.00			4550.00	
Sampler	3.00			4553.00	
HMV	5.00			4558.00	
Jars	5.00			4563.00	
Safety Joint	2.00			4565.00	
Packer	5.00			4570.00	25.00 Bottom Of Top Packer
Packer	5.00			4575.00	
Stubb	1.00			4576.00	
Recorder	0.00	3246	Inside	4576.00	
Perforations	8.00			4584.00	
Blank Off Sub	1.00			4585.00	15.00 Tool Interval
Packer	5.00			4590.00	
Stubb	1.00			4591.00	
Perforations	26.00			4617.00	
Recorder	0.00	13339	Below	4617.00	
C.O. Sub	1.00			4618.00	
Anchor	93.00			4711.00	
C.O. Sub	1.00			4712.00	
Bullnose	5.00			4717.00	132.00 Bottom Packers & Anchor

Total Tool Length: 172.00

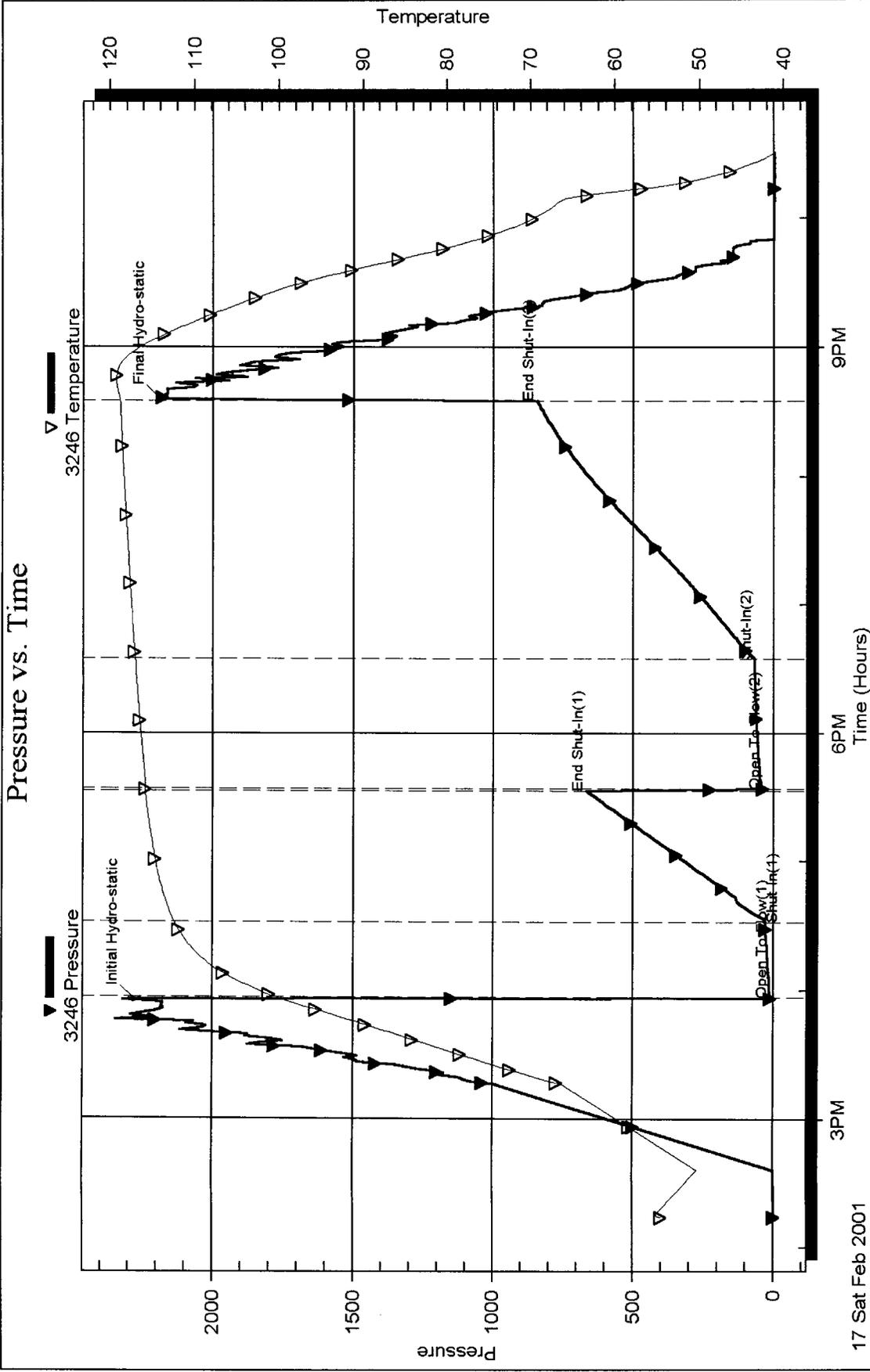
Serial #: 3246

Inside

Oxy USA

32-27S-34W Haskell

Pressure vs. Time



17 Sat Feb 2001

Trilobite Testing, Inc

Ref. No: 13345

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DRILL STEM TEST REPORT

Prepared For: **Oxy USA**

P O Box 2528
Liberal, KS 67905

ATTN: Tom Heflin

32-27S-34W Haskell

Taton A #1

Start Date: 2001.02.20 @ 04:51:00

End Date: 2001.02.20 @ 16:42:06

Job Ticket #: 13346 DST #: 4

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
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TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

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 ATTN: Tom Heflin

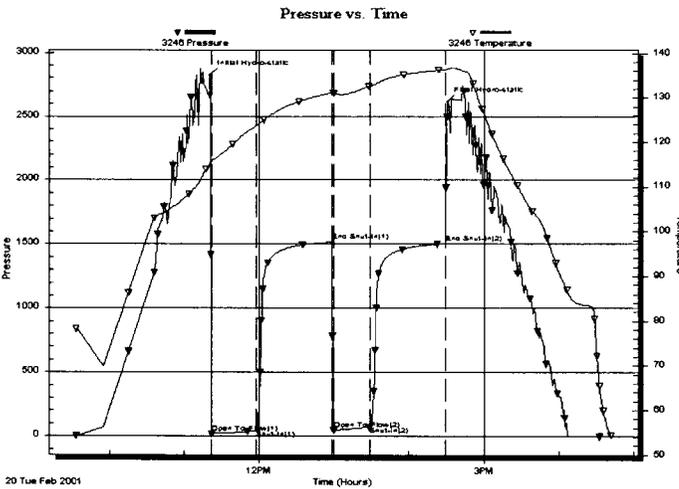
Taton A #1
32-27S-34W Haskell
 Job Ticket: 13346 **DST#: 4**
 Test Start: 2001.02.20 @ 04:51:00

GENERAL INFORMATION:

Formation: **St Louis**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 11:21:36
 Time Test Ended: 16:42:06
 Interval: **5577.00 ft (KB) To 5612.00 ft (KB) (TVD)**
 Total Depth: 4523.00 ft (KB)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole
 Tester: Rod Steinbrink
 Unit No: 12
 Reference Elevations: 3062.00 ft (KB)
 3049.00 ft (CF)
 KB to GR/CF: 13.00 ft

Serial #: 3246 Inside
 Press@RunDepth: 71.74 psig @ 5583.00 ft (KB) Capacity: 7000.00 psig
 Start Date: 2001.02.20 End Date: 2001.02.20 Last Calib.: 2001.02.15
 Start Time: 09:32:53 End Time: 16:42:06 Time On Btm: 2001.02.20 @ 11:20:51
 Time Off Btm: 2001.02.20 @ 14:30:51

TEST COMMENT: Sampler Data; 3500 ml Wtr
 500 ml Mud
 Total Volume; 4000 ml
 Pressure; 250# psi IF; Weak Surface blow steady throughout



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
108	2822.66	115.42	Initial Hydro-static
109	17.21	115.70	Open To Flow (1)
145	41.16	123.71	Shut-In (1)
206	1517.77	131.21	End Shut-In (1)
208	46.09	131.14	Open To Flow (2)
236	71.74	132.67	Shut-In (2)
297	1504.57	136.37	End Shut-In (2)
298	2615.76	136.49	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
100.00	Muddy Wtr 80%wtr 20%mud	0.49

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Oxy USA
P O Box 2528
Liberal, KS 67905

ATTN: Tom Heflin

Taton A #1
32-27S-34W Haskell
Job Ticket: 13346 **DST#: 4**
Test Start: 2001.02.20 @ 04:51:00

Tool Information

Drill Pipe:	Length: 4952.00 ft	Diameter: 3.80 inches	Volume: 69.46 bbl	Tool Weight: 1800.00 lb
Drill Collar:	Length: 625.00 ft	Diameter: 2.25 inches	Volume: 3.07 bbl	Weight set on Packer: 30000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 120000.0 lb
Drill Pipe Above KB:	25.00 ft			Tool Chased 0.00 ft
Depth to Top Packer:	5577.00 ft			String Weight: Initial 90000.00 lb
Depth to Bottom Packer:	ft			Final 90000.00 lb
Interval between Packers:	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
S.I. Tool	5.00			5557.00	
Sampler	3.00			5560.00	
HMV	5.00			5565.00	
Jars	5.00			5570.00	
Safety Joint	2.00			5572.00	
Packer	5.00			5577.00	25.00 Bottom Of Top Packer
Packer	5.00			5582.00	
Stubb	1.00			5583.00	
Recorder	0.00	3246	Inside	5583.00	
Perforations	24.00			5607.00	
Recorder	0.00	13339	Outside	5607.00	
Bullnose	5.00			5612.00	35.00 Bottom Packers & Anchor

Total Tool Length: 60.00

Serial #: 3246

Inside Oxy USA

32-27S-34W Haskell

Pressure vs. Time

