



DRILL STEM TEST REPORT

Prepared For: **Comanche Res. Co.**

9520 N May Ave #370
Oklahoma City OK 73120

ATTN: Dennis Dye

6-31S-19W Comanche

Lohrding #4

Start Date: 2001.05.07 @ 19:43:00

End Date: 2001.05.08 @ 00:10:00

Job Ticket #: 14088 DST #: 1

Trilobite Testing, Inc
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ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Comanche Res. Co.
9520 N May Ave #370
Oklahoma City OK 73120
ATTN: Dennis Dye

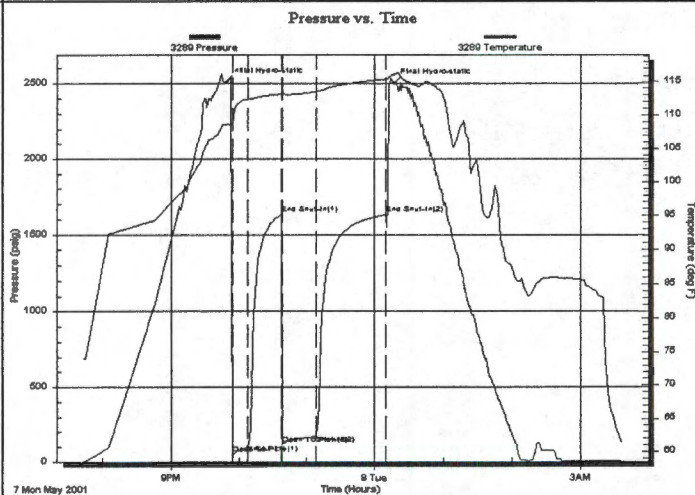
Lohrding #4
6-31S-19W Comanche
Job Ticket: 14088 **DST#: 1**
Test Start: 2001.05.07 @ 19:43:00

GENERAL INFORMATION:

Formation: **Mississippi**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 21:54:01
Time Test Ended: 00:10:00
Interval: **5100.00 ft (KB) To 5180.00 ft (KB) (TVD)**
Total Depth: **5180.00 ft (KB) (TVD)**
Hole Diameter: **7.88 inches** Hole Condition: Fair
Reference Elevations: **2163.00 ft (KB)**
2158.00 ft (CF)
KB to GR/CF: **5.00 ft**

Serial #: 3289 Inside
Press@RunDepth: **169.67 psig @ 5101.00 ft (KB)**
Start Date: **2001.05.07 End Date: 2001.05.08**
Start Time: **19:43:21 End Time: 03:36:45**
Capacity: **7000.00 psig**
Last Calib.: **2001.01.10**
Time On Btm: **2001.05.07 @ 21:47:46**
Time Off Btm: **2001.05.08 @ 00:16:31**

TEST COMMENT: IF: 1" built to strong bob ;in 6 min.
IS: No blow back.
FF: 1/4" built to strong bob in 26 min
FSI: No blow back



PRESSURE SUMMARY

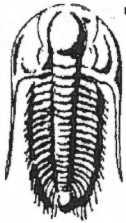
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2506.59	108.68	Initial Hydro-static
7	47.09	108.67	Open To Flow (1)
21	103.22	112.42	Shut-in(1)
51	1634.37	113.19	End Shut-in(1)
51	114.22	113.16	Open To Flow (2)
81	169.67	113.56	Shut-in(2)
142	1633.29	115.45	End Shut-in(2)
149	2502.05	116.18	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	100 Ft. GIP	0.00
165.00	Gassy w ter cut mud 3%g 42%w 55% m	0.81
120.00	Sli Gas cut Mud w /scum Oil 4%G 96% M	1.14
20.00	Mud 100% m	0.28
0.00	RW of Rec Wtr 0.43 at 54 F 20,500 PPM	0.00

Gas Rates

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



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TOOL DIAGRAM

Comanche Res. Co.
9520 N May Ave #370
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ATTN: Dennis Dye

Lohrding #4
6-31S-19W Comanche
Job Ticket: 14088 **DST#: 1**
Test Start: 2001.05.07 @ 19:43:00

Tool Information

Drill Pipe:	Length: 4875.00 ft	Diameter: 3.80 inches	Volume: 68.38 bbl	Tool Weight: 2600.00 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: 225.00 ft	Diameter: 2.25 inches	Volume: 1.11 bbl	Weight to Pull Loose: 19000.00 lb
		Total Volume:	69.49 bbl	Tool Chased ft
Drill Pipe Above KB:	35.00 ft			String Weight: Initial 80000.00 lb
Depth to Top Packer:	5095.00 ft			Final 81000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	80.00 ft			
Tool Length:	110.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:
1" built to strong OBB in 6 min. I.F.P.
No blow-back. I.S.I.P.

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
C.O. Sub	1.00			5066.00	
S.I. Tool	5.00			5071.00	
Sampler	3.00			5074.00	
HMV	5.00			5079.00	
Jars	5.00			5084.00	
Safety Joint	2.00			5086.00	
Packer	4.00			5090.00	30.00 Bottom Of Top Packer
Packer	5.00			5095.00	
Stubb	1.00			5096.00	
Perforations	4.00			5100.00	
C.O. Sub	1.00			5101.00	
Recorder	0.00	3289	Inside	5101.00	
Blank Spacing	61.00			5162.00	
C.O. Sub	1.00			5163.00	
Perforations	10.00			5173.00	
Recorder	0.00	10242	Inside	5173.00	
Bullnose	2.00			5175.00	80.00 Bottom Packers & Anchor
Total Tool Length:	110.00				



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Lohrding #4
6-31S-19W Comanche
Job Ticket: 14088 **DST#: 1**
Test Start: 2001.05.07 @ 19:43:00

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length:	Water Salinity:	20500 ppm
Viscosity: 50.00 sec/qt	Cushion Volume:		
Water Loss: 9.44 in ³	Gas Cushion Type:		
Resistivity: 3.10 ohm.m	Gas Cushion Pressure:		
Salinity: 2100.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	100 Ft. GIP	0.000
165.00	Gassy w ter cut mud 3%g 42%w 55%m	0.811
120.00	Sli Gas cut Mud w /scum Oil 4%G 96%M	1.137
20.00	Mud 100%m	0.281
0.00	RW of Rec Wtr 0.43 at 54 F 20,500 PPM	0.000

Total Length: 305.00 ft Total Volume: 2.229 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:

Recovery Comments: Sampler Data Chamber = 4000 ML. Total Rec.=3400 ML. Oil=100 Mud=1100
Wtr=2200 Psi=960 RW 0.43 at 54 F. 20,500 PPM. Gas=2.4 CF.

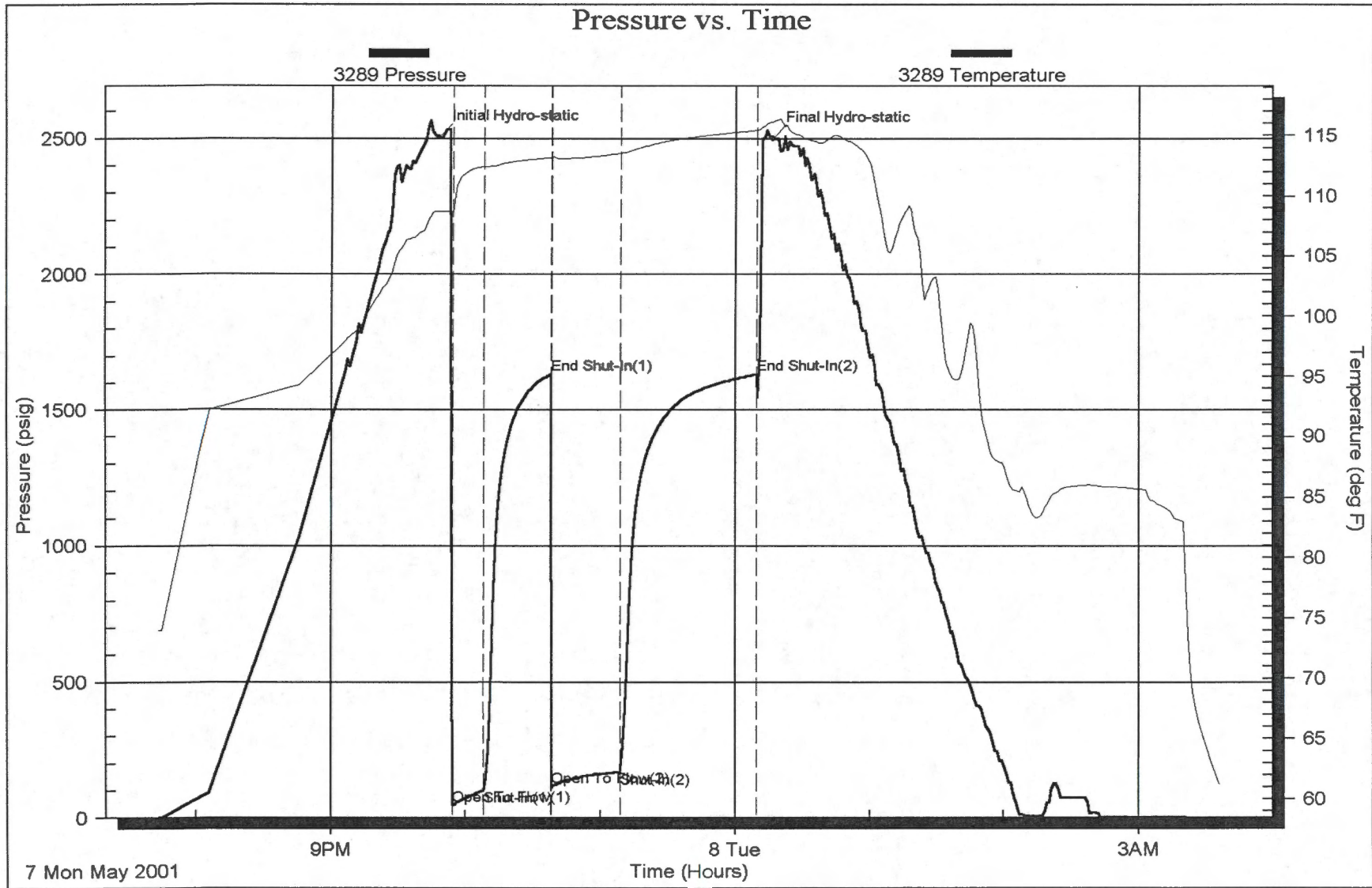
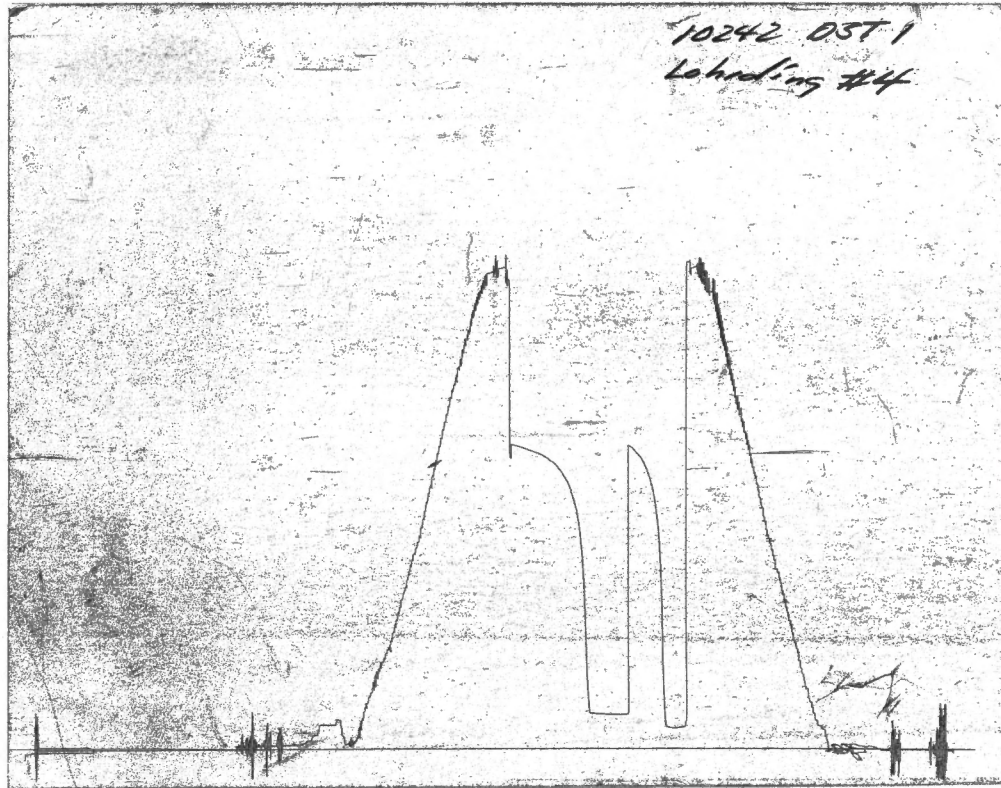


CHART PAGE

This is a photocopy of the actual AK-1 recorder chart



TRILOBITE TESTING L.L.C.

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 14088 Date 5-7-2001

Company Name Comanche Res.

Lease Leasing #4 Test No. 1

County Comanche KS Sec. 6 Twp. 31S Rng. 19W

SAMPLER RECOVERY

Gas 2.4 GE #

Oil 100 ML

Mud 1100 ML

Water 2200 ML

Other — ML

Pressure 960 PSI

Total Vol. Rec. = 3400 ML

Total Vol. of chamber = 4000 ML.

PIT MUD ANALYSIS

Chlorides 2,100 ppm.

Resistivity 3.1 ohms @ 63 F

Viscosity 50

Mud Weight 9.2

Filtrate 9.5

Other 5# L.C.M.

SAMPLER ANALYSIS

Resistivity 0.43 ohms @ 54 F

Chlorides 20,500 ppm.

Gravity — corrected @ 60 F

PIPE RECOVERY

TOP
Resistivity — ohms @ — F

Chlorides — ppm.

MIDDLE
Resistivity — ohms @ — F

Chlorides — ppm.

BOTTOM
Resistivity 0.43 ohms @ 54 F

Chlorides 20,500 ppm.

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Nº 14088

Test Ticket

Well Name & No. Lohrding #4 Test No. 1 Date 5-7-2001
 Company Comanche Res Co. Zone Tested Miss.
 Address OK City OK 73120 Elevation 2163 KB 2158 GL
 Co. Rep / Geo. Dennis Dye Cont. Alexcombie #8 Est. Ft. of Pay Por. %
 Location: Sec. 6 Twp. 31.5 Rge. 19W Co. Comanche State KS
 No. of Copies Req Distribution Sheet (Y, N) N Turnkey (Y, N) N Evaluation (Y, N)

Interval Tested 5100 - 5180 Initial Str Wt./Lbs. 80,000 Unseated Str Wt./Lbs. 81,000
 Anchor Length 80' Tool = 30' Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 19,000
 Top Packer Depth 5095 Tool Weight 2,600
 Bottom Packer Depth 5100 Hole Size — 7 7/8" Rubber Size — 6 3/4"
 Total Depth 5180 Wt. Pipe Run Drill Collar Run 225
 Mud Wt. 9.2 LCM 5# Vis. 50 WL 9.5 Drill Pipe Size 4 1/2 xH Ft. Run 4875 30' up
 Blow Description 1" built to string OBB in 6 min. F.F.P.
No blow-back F.S.T.P.
1 1/4" built to string OBB in 26 min. F.F.P.
No blow-back F.S.T.P.

Recovery — Total Feet 305 GIP 100 Ft. in DC 225 Ft. in DP 80
 Rec. 20 Feet Of Mud %gas %oil %water 100 %mud
 Rec. 120 Feet Of 51' gas cut mud nitrogen oil %gas %oil %water 96 %mud
 Rec. 165 Feet Of Gas cut mud %gas %oil 42 %water 55 %mud
 Rec. Feet Of %gas %oil %water %mud
 Rec. Feet Of %gas %oil %water %mud
 BHT 115 °F Gravity °API D@ °F Corrected Gravity °API
 RW 0.43 @ 54 °F Chlorides 20,500 ppm Recovery Chlorides 2,100 ppm System

	AK-1	Alpine	PSI	Recorder No.	T-On Location
(A) Initial Hydrostatic Mud	<u>2582</u>	<u>2506</u>		<u>3289 "19:43"</u>	<u>5:45 P.M.</u>
(B) First Initial Flow Pressure	<u>100</u>	<u>47</u>		(depth) <u>5106</u>	T-Started <u>7:43 P.M.</u>
(C) First Final Flow Pressure	<u>109</u>	<u>103</u>		Recorder No. <u>10242</u>	T-Open <u>9:55 P.M.</u>
(D) Initial Shut-In Pressure	<u>1645</u>	<u>1634</u>		(depth) <u>5177</u>	T-Pulled <u>12:10 P.M.</u>
(E) Second Initial Flow Pressure	<u>177</u>	<u>114</u>		Recorder No. <u> </u>	T-Out <u>3:45 A.M.</u>
(F) Second Final Flow Pressure	<u>193</u>	<u>169</u>		(depth) <u> </u>	T-Off Location <u> </u>
(G) Final Shut-in Pressure	<u>1647</u>	<u>1633</u>		Initial Opening <u>15</u>	Test <u>900</u> ✓
(Q) Final Hydrostatic Mud	<u>2569</u>	<u>2502</u>		Initial Shut-in <u>30</u>	Jars <u>200</u> ✓
	<u>50711943, 289</u>			Final Flow <u>30</u>	Safety Joint <u>150</u> ✓
				Final Shut-in <u>60</u>	Straddle <u> </u>

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Approved By [Signature]

Our Representative [Signature]

Circ. Sub
 Sampler 200 ✓
 Extra Packer
 Elec. Rec. 150 ✓
 Mileage 60 ✓
 Other
 TOTAL PRICE \$ 4,560.00