

DRILL STEM TEST REPORT

Prepared For: **IAOC**

900 N. Tyler Road
Wichita, KS. 67212

ATTN: Randy Kilian

29-12s-16w-Ellis

Mary # 29-1

Start Date: 2004.03.16 @ 23:19:09

End Date: 2004.03.17 @ 05:18:24

Job Ticket #: 18616 DST #: 1

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



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TESTING, INC.

DRILL STEM TEST REPORT

IAOC

900 N. Tyler Road
Wichita, KS. 67212

ATTN: Randy Kilian

Mary # 29-1

29-12s-16w-Ellis

Job Ticket: 18616

DST#: 1

Test Start: 2004.03.16 @ 23:19:09

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:48:09

Time Test Ended: 05:18:24

Test Type: Conventional Bottom Hole

Tester: Jason McLemore

Unit No: 24

Interval: **3529.00 ft (KB) To 3549.00 ft (KB) (TVD)**

Total Depth: 3549.00 ft (KB) (TVD)

Hole Diameter: 7.80 inches Hole Condition: Good

Reference Elevations: 2063.00 ft (KB)

2058.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 6627

Inside

Press@RunDepth: 96.58 psig @ 3531.00 ft (KB)

Start Date: 2004.03.16

End Date:

2004.03.17

Start Time: 23:19:11

End Time:

05:18:24

Capacity: 7000.00 psig

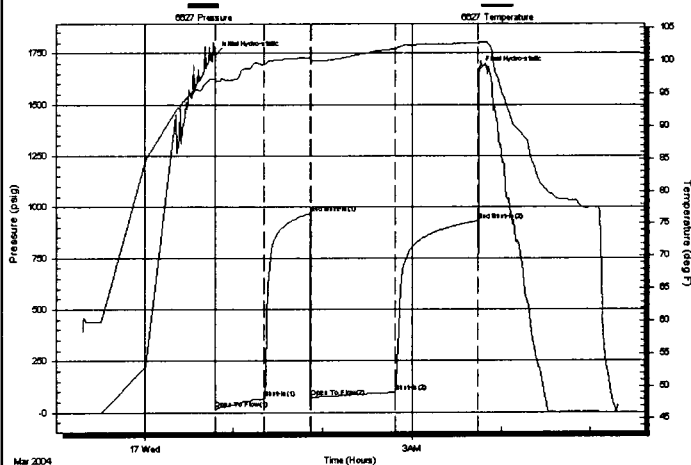
Last Calib.: 1899.12.30

Time On Btm: 2004.03.17 @ 00:47:39

Time Off Btm: 2004.03.17 @ 03:45:09

TEST COMMENT: IFF-Weak Blow, Built to 4", No Blow back
FFP- Weak Blow, Built to 1/2", No Blow back

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1742.86	97.15	Initial Hydro-static
1	16.35	96.75	Open To Flow (1)
34	66.03	99.47	Shut-In(1)
65	968.11	100.49	End Shut-In(1)
65	74.39	100.09	Open To Flow (2)
121	96.58	101.81	Shut-In(2)
177	931.76	102.69	End Shut-In(2)
178	1668.85	102.81	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
175.00	Muddy Water	1.33
15.00	Frothy Oil	0.21

Gas Rates

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

IAOC

900 N. Tyler Road
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ATTN: Randy Kilian

Mary # 29-1

29-12s-16w-Ellis

Job Ticket: 18616

DST#: 1

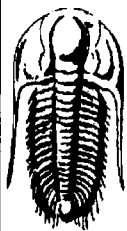
Test Start: 2004.03.16 @ 23:19:09

Tool Information

Drill Pipe:	Length: 3391.00 ft	Diameter: 3.80 inches	Volume: 47.57 bbl	Tool Weight: 1800.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 124.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 64000.00 lb
			<u>Total Volume: 48.18 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	3529.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	20.00 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
Change Over Sub	1.00			3509.00	
Shut In Tool	5.00			3514.00	
Hydraulic tool	5.00			3519.00	
Packer	5.00			3524.00	21.00 Bottom Of Top Packer
Packer	5.00			3529.00	
Stubb	1.00			3530.00	
Perforations	1.00			3531.00	
Recorder	0.00	6627	Inside	3531.00	
Perforations	15.00			3546.00	
Recorder	0.00	13252	Outside	3546.00	
Bullnose	3.00			3549.00	20.00 Bottom Packers & Anchor

Total Tool Length: 41.00



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FLUID SUMMARY

IAOC

Mary # 29-1

900 N. Tyler Road
Wichita, KS. 67212

29-12s-16w-Ellis

Job Ticket: 18616

DST#: 1

ATTN: Randy Kilian

Test Start: 2004.03.16 @ 23:19:09

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

19 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

22000 ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4500.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
175.00	Muddy Water	1.325
15.00	Frothy Oil	0.210

Total Length: 190.00 ft

Total Volume: 1.535 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

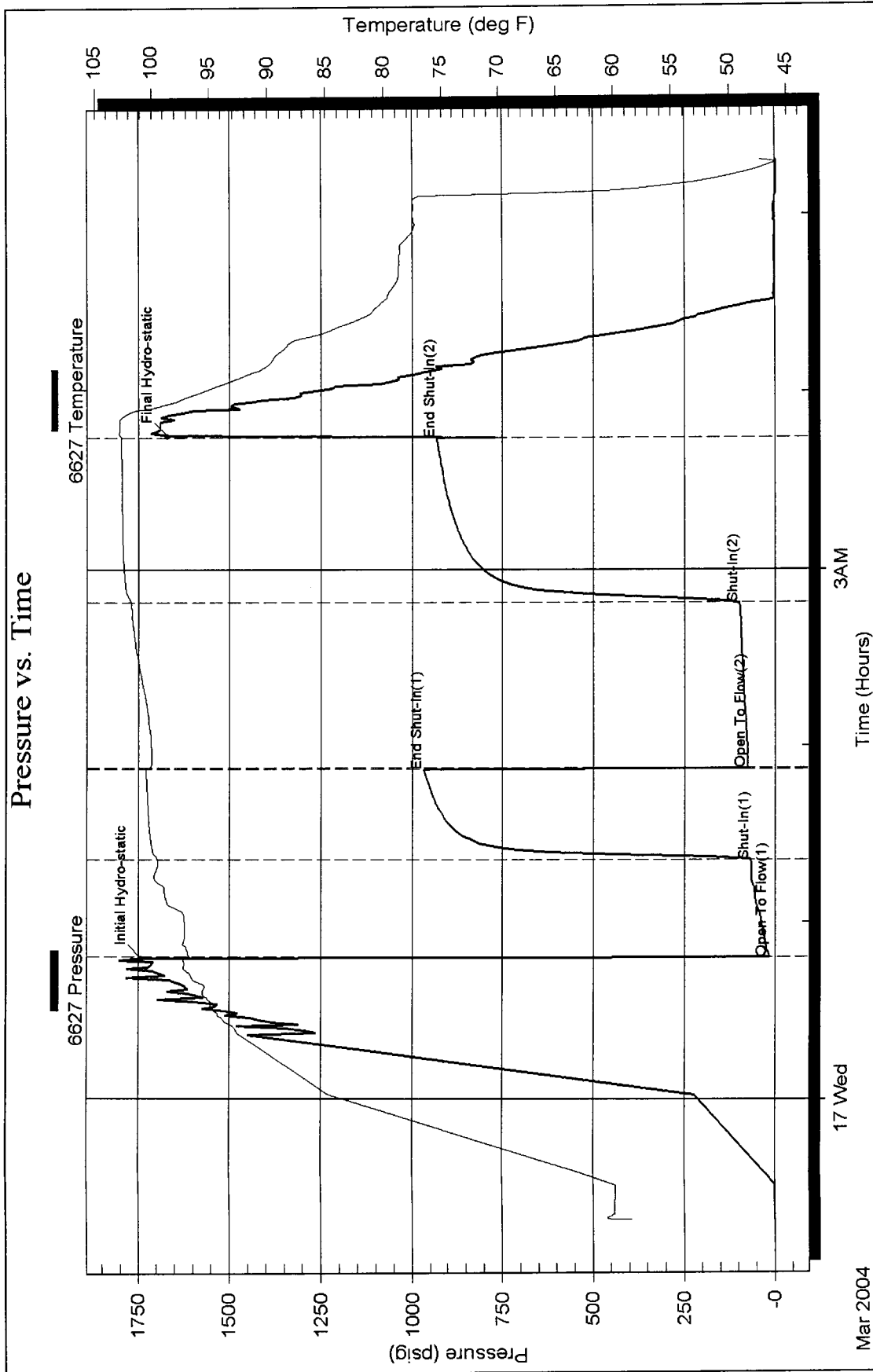
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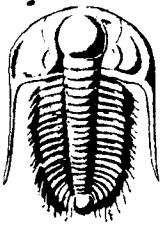
Serial #: 6627

Inside IAO

29-12s-16w-Elis

DST Test Number: 1





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

Nº 18616

05/03

Test Ticket

Well Name & No. Mary 29-1 Test No. 1 Date 3-16-04
 Company I.A. Operating, Inc Zone Tested Arbuckle
 Address 900 N Tyler Road Wichita, KS, 67212 Elevation 2063 KB 2058 GL
 Co. Rep / Geo. Randy Killian Cont. Murfin 16 Est. Ft. of Pay _____ Por. _____ %
 Location: Sec. 29 Twp. 12s Rge. 16w Co. Ellis State KS
 No. of Copies Reg Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 3529 - 3549 Initial Str Wt./Lbs. 62,000 Unseated Str Wt./Lbs. 62,000
 Anchor Length 20' Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 64,000
 Top Packer Depth 3524 Tool Weight 1800
 Bottom Packer Depth 3529 Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓
 Total Depth 3549 Wt. Pipe Run 0 Drill Collar Run 124
 Mud Wt. 9.4 LCM 2# Vis. 55 WL 7.2 Drill Pipe Size 4 1/2 X 11 Ft. Run 3391
 Blow Description IFP - Weak Blow, Built to 4", No Blowback
IFP - Weak Blow, Built to 1/2", No Blowback

Recovery - Total Feet 190 GIP _____ Ft. in DC _____ Ft. in DP _____
 Rec. 15 Feet of Frothy Oil %gas _____ %oil _____ %water _____ %mud _____
 Rec. 175 Feet of Muddy Water %gas _____ %oil _____ %water _____ %mud _____
 Rec. _____ Feet of _____ %gas _____ %oil _____ %water _____ %mud _____
 Rec. _____ Feet of _____ %gas _____ %oil _____ %water _____ %mud _____
 Rec. _____ Feet of _____ %gas _____ %oil _____ %water _____ %mud _____
 BHT _____ °F Gravity 20 °API D @ 50 °F Corrected Gravity 19 °API
 RW 395 @ 47 °F Chlorides 22,000 ppm Recovery _____ Chlorides 4,500 ppm System

AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud	<u>1743</u> PSI	<u>6627</u>	<u>700</u>
(B) First Initial Flow Pressure	<u>16</u> PSI	(depth) <u>3531</u>	Elec. Rec. <u>150</u>
(C) First Final Flow Pressure	<u>66</u> PSI	Recorder No. <u>13252</u>	Jars _____
(D) Initial Shut-In Pressure	<u>968</u> PSI	(depth) <u>3546</u>	Safety Jt. _____
(E) Second Initial Flow Pressure	<u>74</u> PSI	Recorder No. _____	Circ Sub _____
(F) Second Final Flow Pressure	<u>97</u> PSI	(depth) _____	Sampler _____
(G) Final Shut-In Pressure	<u>932</u> PSI	Initial Opening <u>30</u>	Straddle _____
(Q) Final Hydrostatic Mud	<u>1669</u> PSI	Initial Shut-In <u>30</u>	Ext. Packer _____
		Final Flow <u>60</u>	Shale Packer _____
		Final Shut-In <u>60</u>	Mileage <u>18(36) 30.60</u>
		T-On Location <u>21:45</u>	Sub Total: <u>880.60</u>
		T-Started <u>23:19</u>	Std. By _____
		T-Open <u>00:50</u>	Other <u>18 extra Copies</u>
		T-Pulled <u>3:50</u>	Total: _____
		T-Out <u>5:15</u>	

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Approved By [Signature]
 Our Representative Jason Mc Lennan
 Lemore

ST SAME AS CUSAN #6-1

CHART PAGE

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

TAOC

May 29-1

DST #1

18616

