

15-051-25054

28-115-18w


**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Kenmark Corporation

P.O. Box 572
Hays, Ks 67601

ATTN: Mark Kilian

Fisher #4

Sec28-11-18-Ellis-Ks

Job Ticket: 13299

DST#: 1

Test Start: 2000.09.10 @ 15:55:00

GENERAL INFORMATION:

Formation: "B" LKC

Deviated: No Whipstock: ft (CF)

Time Tool Opened: 17:49:15

Time Test Ended: 20:55:00

Interval: 3312.00 ft (CF) To 3380.00 ft (CF) (TVD)

Total Depth: 3380.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 11

Reference Elevations:

2084.00 ft (CF)

KB to GR/CF:

Serial #: 3024 Inside

Press@RunDepth: 334.36 kPag @ 3349.01 ft (CF)

Start Date: 2000.09.10

End Date:

2000.09.10

Capacity: 49000.00 kPag

Last Calib.: 2000.09.13

Start Time: 15:49:16

End Time:

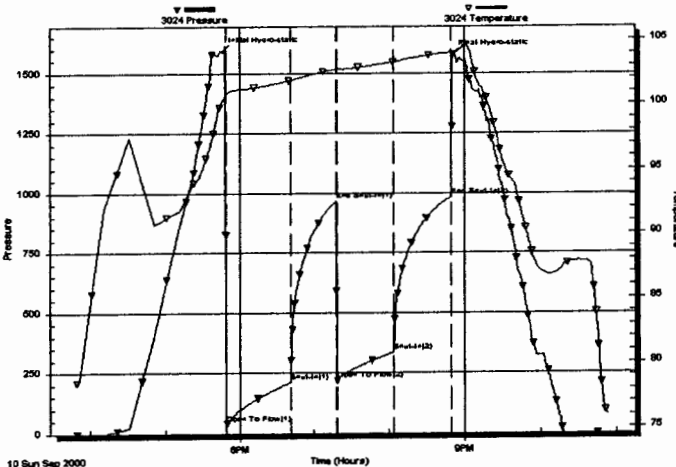
22:53:45

Time On Btm: 2000.09.10 @ 17:46:15

Time Off Btm: 2000.09.10 @ 20:50:15

TEST COMMENT: IF-BOB in 20 min
FF-BOB in 35 min

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (kPag)	Temp (deg F)	Annotation
117	1588.42	100.26	Initial Hydro-static
120	39.34	100.71	Open To Flow (1)
172	211.51	101.81	Shut-In (1)
209	965.50	102.65	End Shut-In (1)
210	218.46	102.68	Open To Flow (2)
255	334.36	103.22	Shut-In (2)
301	984.34	103.97	End Shut-In (2)
301	1572.24	103.99	Final Hydro-static

Recovery

Length (m)	Description	Volume (m³)
682.00	Water	9.57

Gas Rates

	Choke (mm)	Pressure (kPa)	Gas Rate (m³/d)
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**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Kenmark Corporation

Fisher #4

P.O. Box 572
Hays, Ks 67601

Sec28-11-18-Ellis-Ks

Job Ticket: 13299

DST#: 1

ATTN: Mark Kilian

Test Start: 2000.09.10 @ 15:55:00

Tool Information

Drill Pipe:	Length: 2555.00 ft	Diameter: 3.80 inches	Volume: 35.84 bbl	Tool Weight: 1600.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Heavy Wt. Pipe:	Length: 745.00 ft	Diameter: 3.80 inches	Volume: 10.45 bbl	Weight to Pull Loose: 45000.00 lb
Drill Pipe Above KB:	8.00 ft			Tool Chased 0.00 ft
Depth to Top Packer:	3307.00 ft			String Weight: Initial 35000.00 lb
Depth to Bottom Packer:	ft			Final 37000.00 lb
Interval between Packers:	ft			
Tool Length:	88.01 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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S.I. Tool	5.00			3297.00	
HYD S.I. Tool	5.00			3302.00	
Packer	5.00			3307.00	15.00 Bottom Of Top Packer
Packer	5.00			3312.00	
Stubb	1.00			3313.00	
Perforations	5.00			3318.00	
Blank Spacing	31.00			3349.00	
Recorder	0.01	3024	Inside	3349.01	
Perforations	26.00			3375.01	
Bullnose	5.00			3380.01	73.01 Bottom Packers & Anchor
Total Tool Length:	88.01				

Serial #: 3024

Inside

Kenmark Corporation

Sec28-11-18-Elis-Ks

Pressure vs. Time

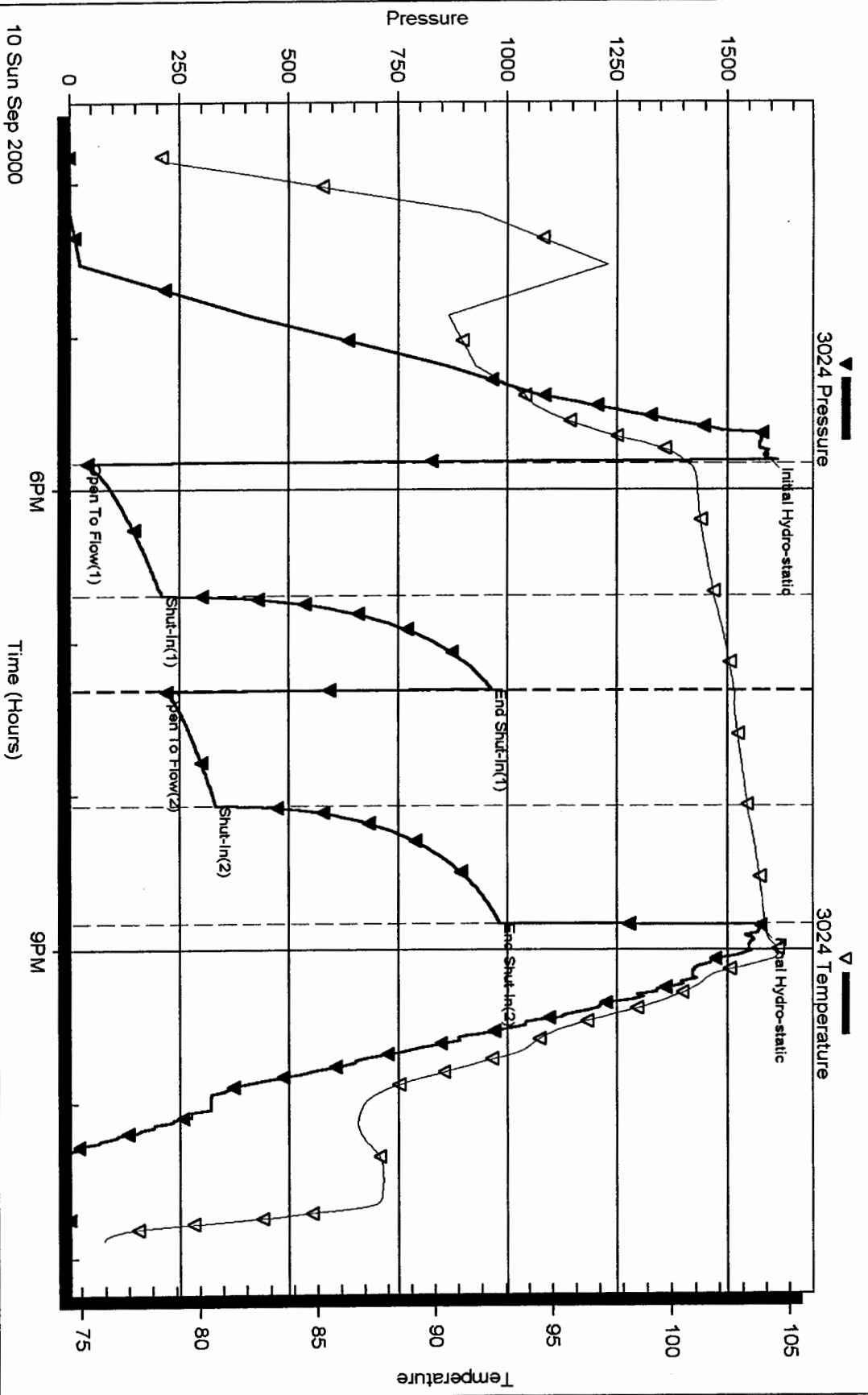
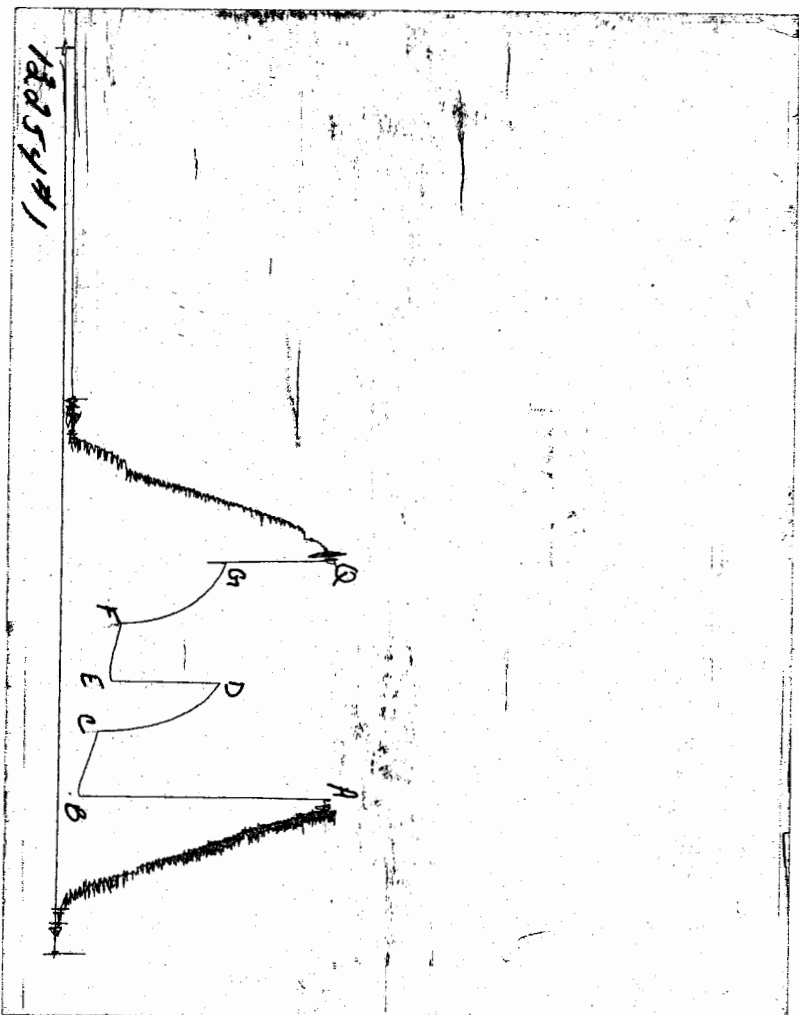


CHART PAGE



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

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Nº 13299

Test Ticket

Well Name & No.	<u>Fisher #4</u>	Test No.	<u>1</u>	Date	<u>9-10-00</u>
Company	<u>Kenmark Corp.</u>	Zone Tested	<u>"B" LKC</u>		
Address	<u>P.O. Box 572 Hays, Ks. 67601</u>	Elevation	<u>2089</u>	KB	<u>2084</u> GL
Co. Rep / Geo.	<u>Mark Kilian</u>	Cont.	<u>A+A Drlg.</u>	Est. Ft. of Pay	<u> </u> Por. <u> </u> %
Location: Sec.	<u>28</u>	Twp.	<u>11</u>	Rge.	<u>18</u>
		Co.	<u>Ellis</u>	State	<u>Ks</u>
No. of Copies	<u> </u>	Distribution Sheet (Y, N)	<u> </u>	Turnkey (Y, N)	<u> </u>
		Evaluation (Y, N)	<u> </u>		

Interval Tested	<u>3312 - 3380</u>	Initial Str Wt./Lbs.	<u>35,000</u>	Unseated Str Wt./Lbs.	<u>37,000</u>
Anchor Length	<u>68</u>	Wt. Set Lbs.	<u>30,000</u>	Wt. Pulled Loose/Lbs.	<u>45,000</u>
Top Packer Depth	<u>3307</u>	Tool Weight	<u>1600</u>		
Bottom Packer Depth	<u>3312</u>	Hole Size — 7 7/8"	<u> </u>	Rubber Size — 6 3/4"	<u> </u>
Total Depth	<u>3380</u>	Wt. Pipe Run	<u>745</u>	Drill Collar Run	<u> </u>
Mud Wt.	<u>9.2</u> LCM	Vis.	<u>43</u>	WL	<u>8.4</u>
Blow Description	<u>I.F. Strong - B.O.B. in 20 min.</u>				

E.F. Strong - B.O.B. in 35 min.

Recovery — Total Feet	<u>682</u>	GIP	<u> </u>	Ft. in DC	<u> </u>	Ft. in DP	<u>682</u>
Rec.	<u>682</u>	Feet Of	<u>WTR.</u>	%gas	%oil	%water	%mud
Rec.	<u> </u>	Feet Of	<u> </u>	%gas	%oil	%water	%mud
Rec.	<u> </u>	Feet Of	<u> </u>	%gas	%oil	%water	%mud
Rec.	<u> </u>	Feet Of	<u> </u>	%gas	%oil	%water	%mud
Rec.	<u> </u>	Feet Of	<u> </u>	%gas	%oil	%water	%mud
BHT	<u>104</u>	°F Gravity	<u> </u>	°API D@	<u> </u>	°F Corrected Gravity	<u> </u>
RW	<u>1.07</u>	@	<u>82.2</u>	°F Chlorides	<u>100,000</u>	ppm Recovery	<u> </u>
				Chlorides	<u>5000</u>	ppm System	<u> </u>

	AK-1	Alpine					
(A) Initial Hydrostatic Mud	<u>1670</u>	<u>1588</u>	PSI	Recorder No.	<u>3024</u>	T-On Location	<u>14:30</u>
(B) First Initial Flow Pressure	<u>118</u>	<u>39</u>	PSI	(depth)	<u>3349</u>	T-Started	<u>15:55</u>
(C) First Final Flow Pressure	<u>237</u>	<u>211</u>	PSI	Recorder No.	<u>13254</u>	T-Open	<u>17:55</u>
(D) Initial Shut-In Pressure	<u>981</u>	<u>965</u>	PSI	(depth)	<u>3378</u>	T-Pulled	<u>20:55</u>
(E) Second Initial Flow Pressure	<u>108</u>	<u>218</u>	PSI	Recorder No.	<u> </u>	T-Out	<u>23:00</u>
(F) Second Final Flow Pressure	<u>367</u>	<u>334</u>	PSI	(depth)	<u> </u>	T-Off Location	<u>23:30</u>
(G) Final Shut-in Pressure	<u>992</u>	<u>984</u>	PSI	Initial Opening	<u>45</u>	Test	<u>650</u>
(Q) Final Hydrostatic Mud	<u>1647</u>	<u>1572</u>	PSI	Initial Shut-in	<u>45</u>	Jars	<u> </u>
				Final Flow	<u>45</u>	Safety Joint	<u> </u>
				Final Shut-in	<u>45</u>	Straddle	<u> </u>
						Circ. Sub	<u> </u>
						Sampler	<u> </u>
						Extra Packer	<u> </u>
						Elec. Rec.	<u>X</u> <u>150</u>
						Mileage	<u>15.15</u>
						Other	<u> </u>
						TOTAL PRICE \$	<u>815</u>

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Approved By Mark Kilian

Our Representative Dan Bange

11:25
7:05
8:30



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Kenmark Corporation

P.O. Box 572
Hays, Ks 67601

ATTN: Mark Kilian

Fisher #4

Sec28-11-18-Ellis-Ks

Job Ticket: 13300

DST#: 2

Test Start: 2000.09.11 @ 08:45:00

GENERAL INFORMATION:

Formation: D-G LKC

Deviated: No Whipstock: ft (CF)

Time Tool Opened: 11:08:48

Time Test Ended: 12:10:00

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 11

Interval: 3393.00 ft (CF) To 3450.00 ft (CF) (TVD)

Total Depth: 3450.00 ft (CF)

Reference Elevations:

2084.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF:

Serial #: 3024 Inside

Press@RunDepth: 33.31 kPag @ 3430.01 ft (CF)

Start Date: 2000.09.11

End Date:

2000.09.11

Capacity:

49000.00 kPag

Start Time: 08:44:19

End Time:

14:09:18

Last Calib.:

2000.09.13

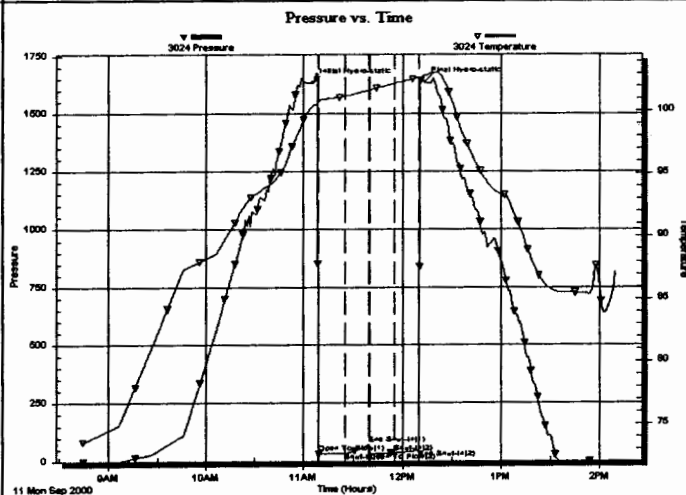
Time On Btm:

2000.09.11 @ 11:05:18

Time Off Btm:

2000.09.11 @ 12:13:18

TEST COMMENT: IF-Weak died in 15 min
FF-No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (kPag)	Temp (deg F)	Annotation
141	1632.68	100.34	Initial Hydro-static
145	30.39	100.66	Open To Flow (1)
161	32.61	101.16	Shut-In (1)
175	70.40	101.63	End Shut-In (1)
176	32.73	101.65	Open To Flow (2)
191	33.31	102.16	Shut-In (2)
206	45.59	102.66	End Shut-In (2)
209	1635.69	102.81	Final Hydro-static

Recovery

Length (m)	Description	Volume (m³)
10.00	Drilling mud	0.14

Gas Rates

	Choke (mm)	Pressure (kPaa)	Gas Rate (m³/d)
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**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Kenmark Corporation

Fisher #4

P.O. Box 572
Hays, Ks 67601

Sec28-11-18-Ellis-Ks

Job Ticket: 13300

DST#: 2

ATTN: Mark Kilian

Test Start: 2000.09.11 @ 08:45:00

Tool Information

Drill Pipe:	Length: 2650.00 ft	Diameter: 3.80 inches	Volume: 37.17 bbl	Tool Weight: 1600.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Heavy Wt. Pipe:	Length: 745.00 ft	Diameter: 3.80 inches	Volume: 10.45 bbl	Weight to Pull Loose: 40000.00 lb
Drill Pipe Above KB:	22.00 ft			Tool Chased 0.00 ft
Depth to Top Packer:	3388.00 ft			String Weight: Initial 35000.00 lb
Depth to Bottom Packer:	ft			Final 35000.00 lb
Interval between Packers:	ft			
Tool Length:	77.01 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			3378.00	
HYD S.I. Tool	5.00			3383.00	
Packer	5.00			3388.00	15.00 Bottom Of Top Packer
Packer	5.00			3393.00	
Stubb	1.00			3394.00	
Perforations	5.00			3399.00	
Anchor	31.00			3430.00	
Recorder	0.01	3024	Inside	3430.01	
Perforations	15.00			3445.01	
Recorder	0.00	13254	Outside	3445.01	
Bullnose	5.00			3450.01	62.01 Bottom Packers & Anchor

Total Tool Length: 77.01

Serial #: 3024

Inside

Kenmark Corporation

Sec28-11-18-Elis-Ks

Pressure vs. Time

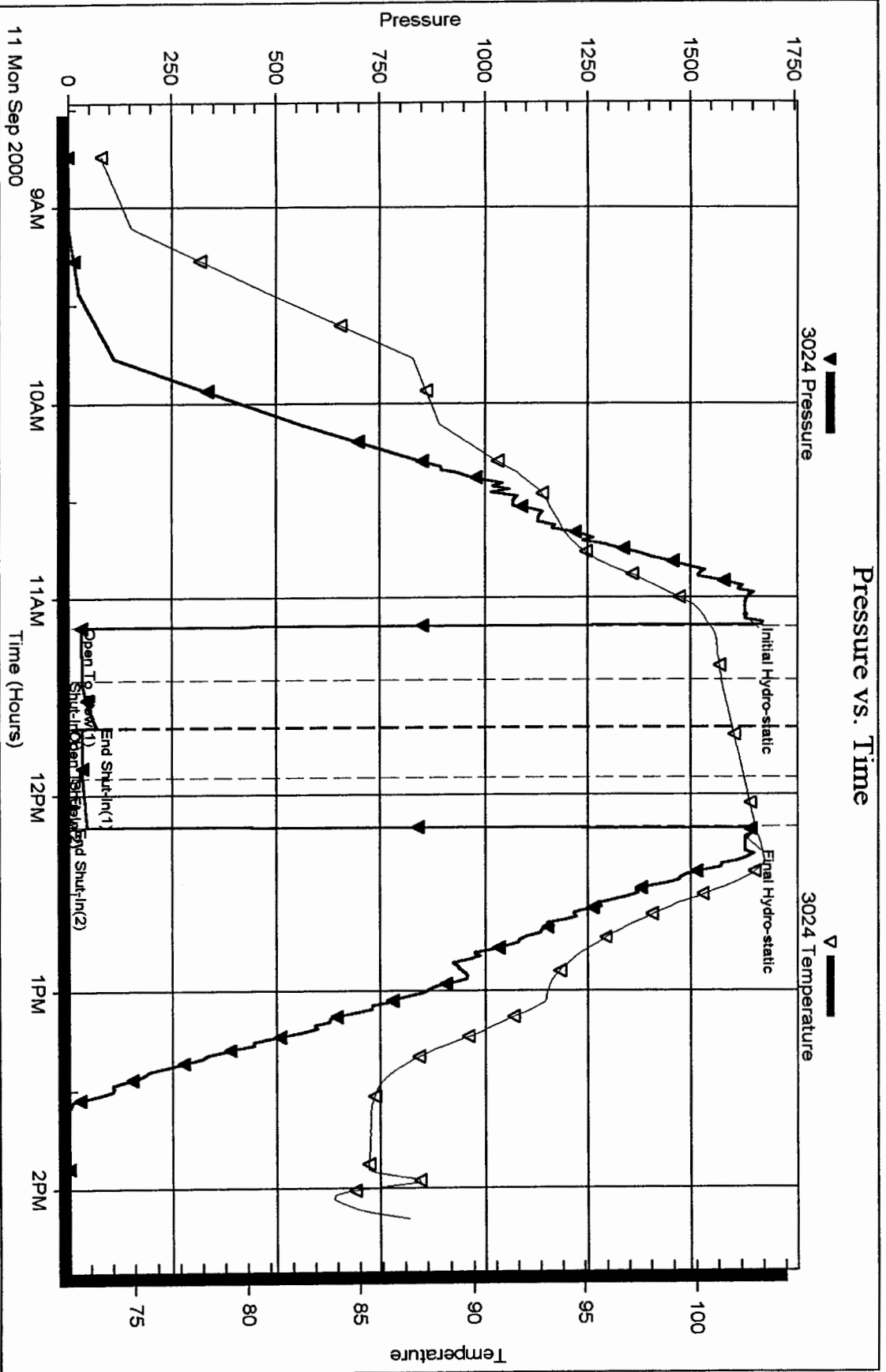
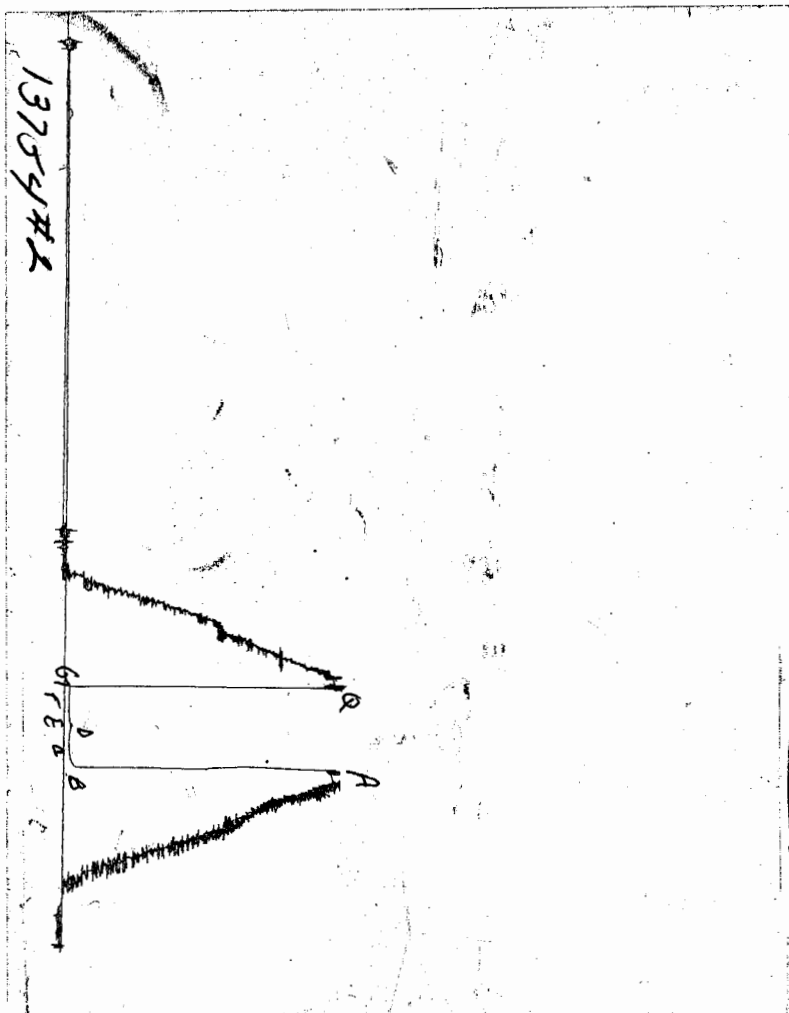


CHART PAGE



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

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Nº 13300

Test Ticket

Well Name & No.	<u>Fisher #4</u>	Test No.	<u>2</u>	Date	<u>9-11-00</u>
Company	<u>Kenmark Corp</u>	Zone Tested	<u>D-G</u>	<u>LKC</u>	
Address		Elevation	<u>2089</u>	KB	<u>2084</u> GL
Co. Rep / Geo.	<u>Mark Kilian</u>	Cont.	<u>A+A Drlg.</u>	Est. Ft. of Pay	Por. %
Location: Sec.	<u>28</u>	Twp.	<u>11</u>	Rge.	<u>18</u>
		Co.	<u>Ellis</u>	State	<u>Ks</u>
No. of Copies		Distribution Sheet (Y, N)		Turnkey (Y, N)	Evaluation (Y, N)

Interval Tested	<u>3393-3450</u>	Initial Str Wt./Lbs.	<u>35,000</u>	Unseated Str Wt./Lbs.	<u>35,000</u>
Anchor Length	<u>57</u>	Wt. Set Lbs.	<u>30,000</u>	Wt. Pulled Loose/Lbs.	<u>40,000</u>
Top Packer Depth	<u>3388</u>	Tool Weight	<u>1600</u>		
Bottom Packer Depth	<u>3393</u>	Hole Size — 7 7/8"		Rubber Size — 6 3/4"	
Total Depth	<u>3450</u>	Wt. Pipe Run	<u>745</u>	Drill Collar Run	
Mud Wt.	<u>9.2</u> LCM	Vis.	<u>48</u>	WL	<u>8.8</u>
Drill Pipe Size		<u>4.5 FH</u>	Ft. Run	<u>3395</u>	
Blow Description	<u>I.F. Weak. Died in 15 min.</u>				

F.F. No blow

Recovery — Total Feet	<u>10</u>	GIP		Ft. in DC		Ft. in DP	<u>10</u>
Rec.	<u>10</u>	Feet Of	<u>D.M.</u>	%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
Rec.		Feet Of		%gas	%oil	%water	%mud
BHT	<u>102</u>	°F Gravity		°API D@		°F Corrected Gravity	°API
RW		@		°F Chlorides		ppm Recovery	Chlorides <u>5,000</u> ppm System

(A) Initial Hydrostatic Mud	<u>1647</u>	AK-1	<u>1632</u>	Alpine	PSI	Recorder No.	<u>3024</u>	T-On Location	<u>07:45</u>
(B) First Initial Flow Pressure	<u>35</u>		<u>30</u>		PSI	(depth)	<u>3430</u>	T-Started	<u>08:45</u>
(C) First Final Flow Pressure	<u>35</u>		<u>32</u>		PSI	Recorder No.	<u>13254</u>	T-Open	<u>11:10</u>
(D) Initial Shut-In Pressure	<u>47</u>		<u>70</u>		PSI	(depth)	<u>3448</u>	T-Pulled	<u>12:10</u>
(E) Second Initial Flow Pressure	<u>35</u>		<u>32</u>		PSI	Recorder No.		T-Out	<u>14:10</u>
(F) Second Final Flow Pressure	<u>35</u>		<u>33</u>		PSI	(depth)		T-Off Location	<u>14:30</u>
(G) Final Shut-in Pressure	<u>35</u>		<u>45</u>		PSI	Initial Opening	<u>15</u>	Test	<u>650</u>
(Q) Final Hydrostatic Mud	<u>1635</u>		<u>1635</u>		PSI	Initial Shut-in	<u>15</u>	Jars	
						Final Flow	<u>15</u>	Safety Joint	
						Final Shut-in	<u>15</u>	Straddle	

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Approved By _____

Our Representative Dan Bunge

Extra Packer _____
Elec. Rec. X 150
Mileage 15.15
Other _____
TOTAL PRICE \$ 815



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Kenmark Corporation

P.O. Box 572
Hays, Ks 67601

ATTN: Mark Kilian

Fisher #4

Sec28-11-18-Ellis-Ks

Job Ticket: 13851 DST#: 3

Test Start: 2000.09.12 @ 10:55:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (CF)

Time Tool Opened: 11:16:07

Time Test Ended: 02:02:00

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 11

Interval: 3605.00 ft (CF) To 3630.00 ft (CF) (TVD)

Total Depth: 3630.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations:

2084.00 ft (CF)

KB to GR/CF:

Serial #: 3024 Inside

Press@RunDepth: 103.48 kPag @ 3611.01 ft (CF)

Start Date: 2000.09.12

End Date:

2000.09.12

Start Time: 08:55:38

End Time:

16:07:07

Capacity: 49000.00 kPag

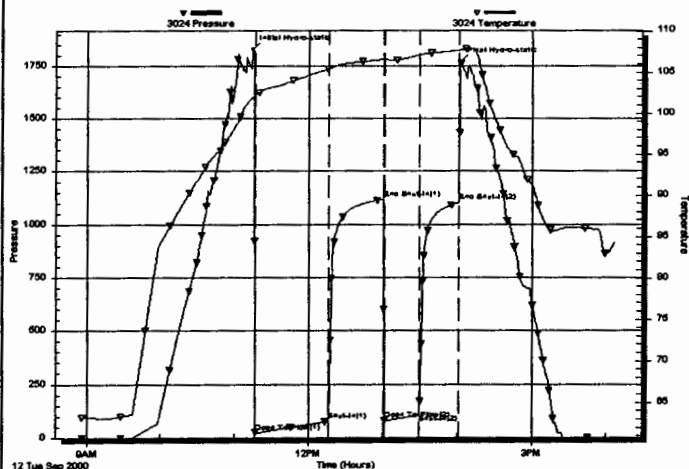
Last Calib.: 2000.09.13

Time On Btm: 2000.09.12 @ 11:14:07

Time Off Btm: 2000.09.12 @ 14:02:37

TEST COMMENT: IF-Weak-built to 8"
FF-Weak-built to

Pressure vs. Time



PRESSURE SUMMARY

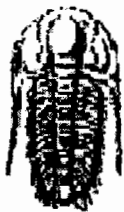
Time (Min.)	Pressure (kPag)	Temp (deg F)	Annotation
139	1827.79	101.95	Initial Hydro-static
141	20.07	102.20	Open To Flow (1)
200	75.37	105.43	Shut-In(1)
245	1117.08	106.57	End Shut-In(1)
246	79.01	106.60	Open To Flow (2)
274	103.48	107.10	Shut-In(2)
306	1100.82	107.68	End Shut-In(2)
307	1766.95	107.69	Final Hydro-static

Recovery

Length (m)	Description	Volume (m³)
190.00	Clean gassy oil 10%g 90%o	2.67
62.00	Mud cut oil 10%g 90%o	0.87

Gas Rates

	Choke (mm)	Pressure (kPag)	Gas Rate (m³/d)
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**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Kenmark Corporation

Fisher #4

P.O. Box 572

Hays, Ks 67601

Sec28-11-18-Ellis-Ks

Job Ticket: 13851

DST#: 3

ATTN: Mark Kilian

Test Start: 2000.09.12 @ 10:55:00

Tool Information

Drill Pipe:	Length: 2866.00 ft	Diameter: 3.80 inches	Volume: 40.20 bbl	Tool Weight: 1600.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Heavy Wt. Pipe:	Length: 745.00 ft	Diameter: 3.80 inches	Volume: 10.45 bbl	Weight to Pull Loose: 45000.00 lb
Drill Pipe Above KB:	26.00 ft			Tool Chased 0.00 ft
Depth to Top Packer:	3600.00 ft			String Weight: Initial 36000.00 lb
Depth to Bottom Packer:	ft			Final 36000.00 lb
Interval between Packers:	ft			
Tool Length:	45.01 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			3590.00	
HYD S.I. Tool	5.00			3595.00	
Packer	5.00			3600.00	15.00 Bottom Of Top Packer
Packer	5.00			3605.00	
Stubb	1.00			3606.00	
Perforations	5.00			3611.00	
Recorder	0.01	3024	Inside	3611.01	
Perforations	14.00			3625.01	
Recorder	0.00	13254		3625.01	
Bullnose	5.00			3630.01	30.01 Bottom Packers & Anchor
Total Tool Length:	45.01				

CALCULATED RECOVERY ANALYSIS

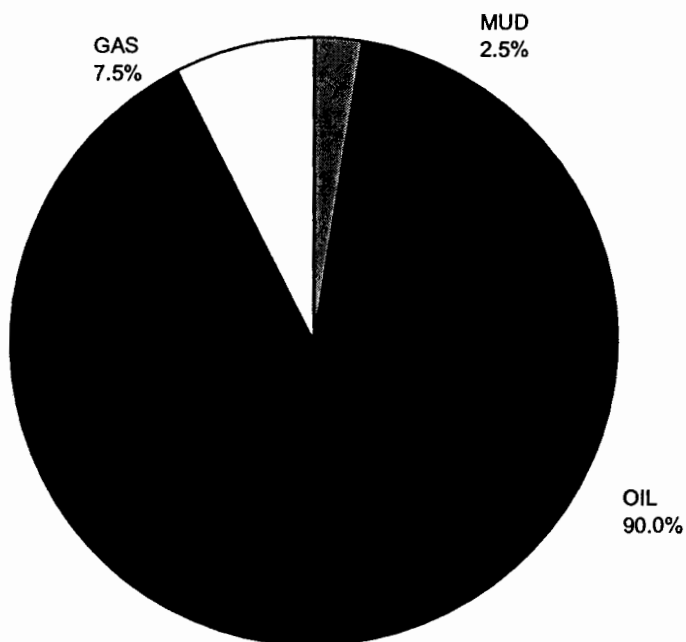
DST 3

TICKET 13851

SAMPLE #		TOTAL FEET	GAS %	FEET	OIL %	FEET	WATER %	FEET	MUD %	FEET
DRILL	1	190	10	19	90	171	0	0	0	0
PIPE	2	62	0	0	90	55.8	0	0	10	6.2
	3	0	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0
	6	0	0	0	0	0	0	0	0	0
WEIGHT	1	0	0	0	0	0	0	0	0	0
PIPE	2	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0
DRILL	1	0	0	0	0	0	0	0	0	0
COLLARS	2	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0
TOTAL		252	0	19	0	226.8	0	0	0	6.2

BBL OIL= 3.225096 *
 BBL WATER= 0 *
 BBL MUD= 0.088164
 BBL GAS = 0.27018

HRS OPEN 1.5 =
 BBL/DAY 51.601536
 = 0



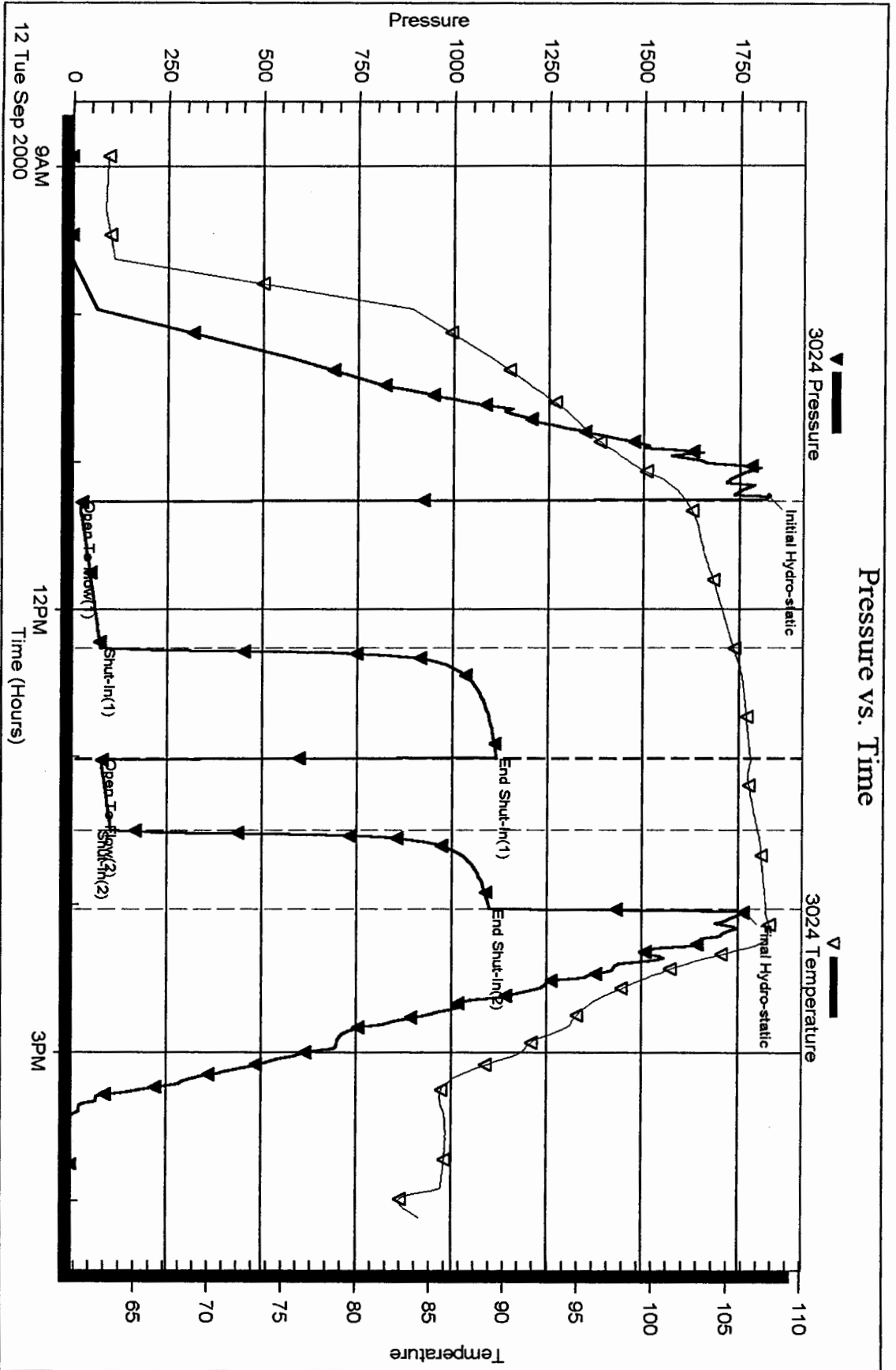
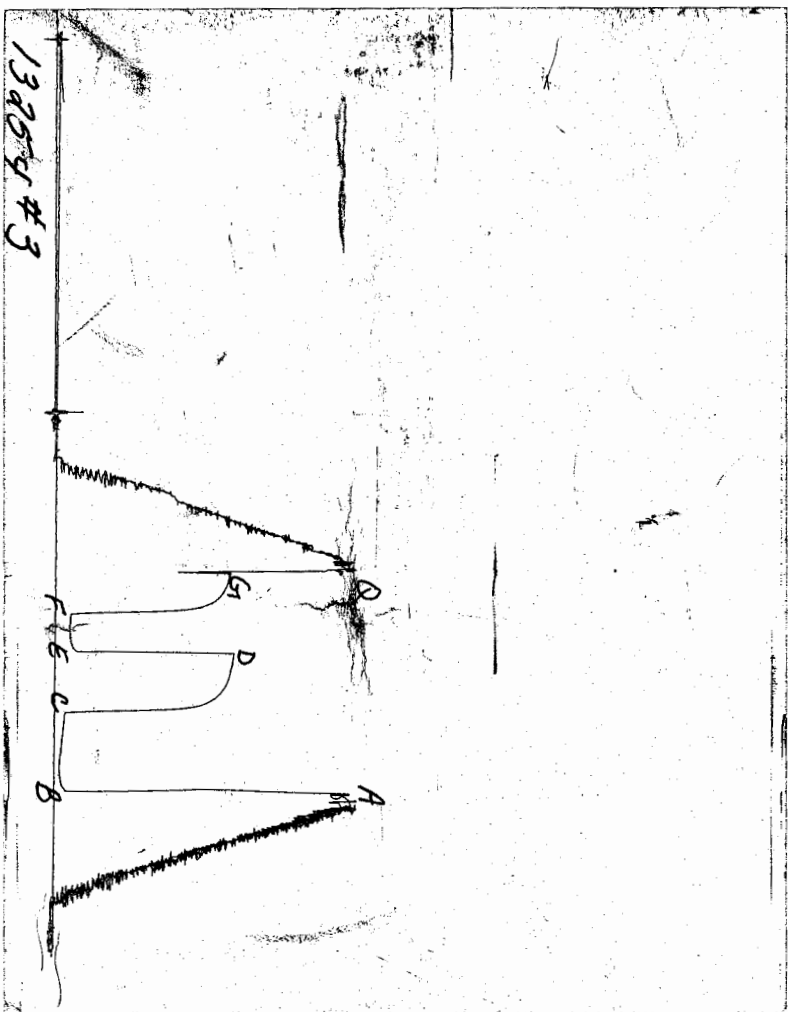


CHART PAGE



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

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Nº 13851

Test Ticket

Well Name & No.	<u>Fisher #4</u>	Test No.	<u>3</u>	Date	<u>9-12-00</u>
Company	<u>Kenmark Corp</u>	Zone Tested	<u>Arbuckle</u>		
Address		Elevation	<u>2089</u>	KB	<u>2084</u> GL
Co. Rep / Geo.	<u>Mark Kilian</u>	Cont.	<u>A+A Drilg.</u>	Est. Ft. of Pay	<u> </u> %
Location: Sec.	<u>28</u>	Twp.	<u>11</u>	Rge.	<u>18</u>
		Co.	<u>Ellis</u>	State	<u>Ks</u>
No. of Copies		Distribution Sheet (Y, N)		Turnkey (Y, N)	
		Evaluation (Y, N)			

Interval Tested	<u>3605 - 3630</u>	Initial Str Wt./Lbs.	<u>36,000</u>	Unseated Str Wt./Lbs.	<u>36,000</u>
Anchor Length	<u>25</u>	Wt. Set Lbs.	<u>30,000</u>	Wt. Pulled Loose/Lbs.	<u>45,000</u>
Top Packer Depth	<u>3600</u>	Tool Weight	<u>1000</u>		
Bottom Packer Depth	<u>3605</u>	Hole Size — 7 7/8"		Rubber Size — 6 3/4"	
Total Depth	<u>3630</u>	Wt. Pipe Run	<u>745</u>	Drill Collar Run	
Mud Wt. <u>9.3</u> LCM		Drill Pipe Size	<u>4.5 FH</u>	Ft. Run	<u>2866</u>
Vis. <u>48</u> WL <u>10.4</u>					
Blow Description	<u>I.F. Weak - building to 8" fair blow</u>				

F.E. Weak - built to 2"

Recovery — Total Feet	<u>252</u>	GIP		Ft. in DC		Ft. in DP	<u>252</u>
Rec.	<u>190</u>	Feet Of	<u>CG540</u>	10 %gas	90%oil	%water	%mud
Rec.	<u>62</u>	Feet Of	<u>MCO</u>	%gas	90%oil	%water	10 %mud
Rec.		Feet Of		%gas	%oil	%water	%mud
Rec.		Feet Of		%gas	%oil	%water	%mud
Rec.		Feet Of		%gas	%oil	%water	%mud
BHT	<u>106</u>	°F Gravity		°API D@		°F Corrected Gravity	<u>21</u> °API
RW		@		°F Chlorides		ppm Recovery	Chlorides <u>5,000</u> ppm System

(A) Initial Hydrostatic Mud	<u>1799</u>	AK-1	<u>1802</u>	Alpine	PSI	Recorder No.	<u>3024</u>	T-On Location	<u>08:45</u>
(B) First Initial Flow Pressure	<u>35</u>		<u>20</u>		PSI	(depth)	<u>3611</u>	T-Started	<u>08:55</u>
(C) First Final Flow Pressure	<u>59</u>		<u>75</u>		PSI	Recorder No.	<u>13254</u>	T-Open	<u>11:17</u>
(D) Initial Shut-In Pressure	<u>1098</u>		<u>1117</u>		PSI	(depth)	<u>3625</u>	T-Pulled	<u>08:02</u>
(E) Second Initial Flow Pressure	<u>94</u>		<u>79</u>		PSI	Recorder No.		T-Out	<u>16:15</u>
(F) Second Final Flow Pressure	<u>94</u>		<u>100</u>	<u>193</u>	PSI	(depth)		T-Off Location	<u>16:30</u>
(G) Final Shut-in Pressure	<u>1074</u>		<u>1100</u>		PSI	Initial Opening	<u>60</u>	Test	<u>1050</u>
(Q) Final Hydrostatic Mud	<u>1764</u>		<u>1766</u>		PSI	Initial Shut-in	<u>45</u>	Jars	
						Final Flow	<u>30</u>	Safety Joint	
						Final Shut-in	<u>30</u>	Straddle	
								Circ. Sub	
								Sampler	
								Extra Packer	
								Elec. Rec.	<u>X 150</u>
								Mileage	<u>15 15</u>
								Other	
								TOTAL PRICE \$	<u>815</u>

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Approved By _____

Our Representative Don Bangle



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

Kenmark Corporation

P.O. Box 572
Hays, Ks 67601

ATTN: Mark Kilian

Fisher #4

Sec28-11-18-Ellis-Ks

Job Ticket: 13852

DST#: 4

Test Start: 2000.09.12 @ 09:55:00

GENERAL INFORMATION:

Formation: **Arbuckle**

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

Time Tool Opened: 23:19:02

Time Test Ended: 01:02:00

Test Type: **Conventional Bottom Hole**

Tester: **Dan Bangle**

Unit No: **11**

Interval: **3605.00 ft (CF) To 3640.00 ft (CF) (TVD)**

Total Depth: **3640.00 ft (CF)**

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

Reference Elevations:

2084.00 ft (CF)

KB to GR/CF:

Serial #: **3024** Inside

Press@RunDepth: **97.62 kPag @ 3611.01 ft (CF)**

Start Date: **2000.09.12**

End Date:

2000.09.13

Capacity: **49000.00 kPag**

Last Calib.:

2000.09.13

Start Time: **21:05:33**

End Time:

02:59:32

Time On Btm:

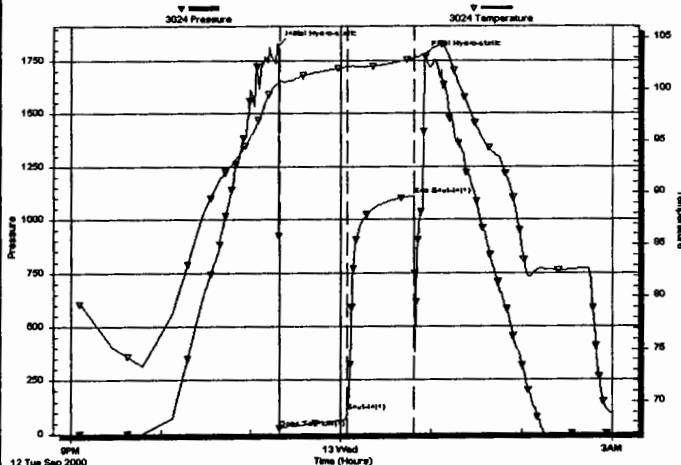
2000.09.12 @ 23:18:32

Time Off Btm:

2000.09.13 @ 00:55:32

TEST COMMENT: IF-Weak built to 6"
FF-Driller rotated tool past open

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (kPag)	Temp (deg F)	Annotation
133	1823.78	100.65	Initial Hydro-static
134	22.11	100.73	Open To Flow (1)
179	97.62	102.17	Shut-in(1)
223	1110.71	102.99	End Shut-in(1)
230	1770.97	103.41	Final Hydro-static

Recovery

Length (m)	Description	Volume (m³)
62.00	Clean gassy oil 10%g 90%o	0.87
62.00	Mud cut oil 10%w 90%o	0.87

Gas Rates

	Choke (mm)	Pressure (kPaa)	Gas Rate (m³/d)
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**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Kenmark Corporation

Fisher #4

P.O. Box 572
Hays, Ks 67601

Sec28-11-18-Ellis-Ks

Job Ticket: 13852

DST#: 4

ATTN: Mark Kilian

Test Start: 2000.09.12 @ 09:55:00

Tool Information

Drill Pipe:	Length: 2866.00 ft	Diameter: 3.80 inches	Volume: 40.20 bbl	Tool Weight: 1100.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Heavy Wt. Pipe:	Length: 745.00 ft	Diameter: 3.80 inches	Volume: 10.45 bbl	Weight to Pull Loose: 45000.00 lb
Drill Pipe Above KB:	26.00 ft			Tool Chased 0.00 ft
Depth to Top Packer:	3600.00 ft			String Weight: Initial 36000.00 lb
Depth to Bottom Packer:	ft			Final 36000.00 lb
Interval between Packers:	ft			
Tool Length:	55.01 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			3590.00	
HYD S.I. Tool	5.00			3595.00	
Packer	5.00			3600.00	15.00 Bottom Of Top Packer
Packer	5.00			3605.00	
Stubb	1.00			3606.00	
Perforations	5.00			3611.00	
Recorder	0.01	3024	Inside	3611.01	
Perforations	24.00			3635.01	
Recorder	0.00	13254	Outside	3635.01	
Bullnose	5.00			3640.01	40.01 Bottom Packers & Anchor
Total Tool Length:	55.01				

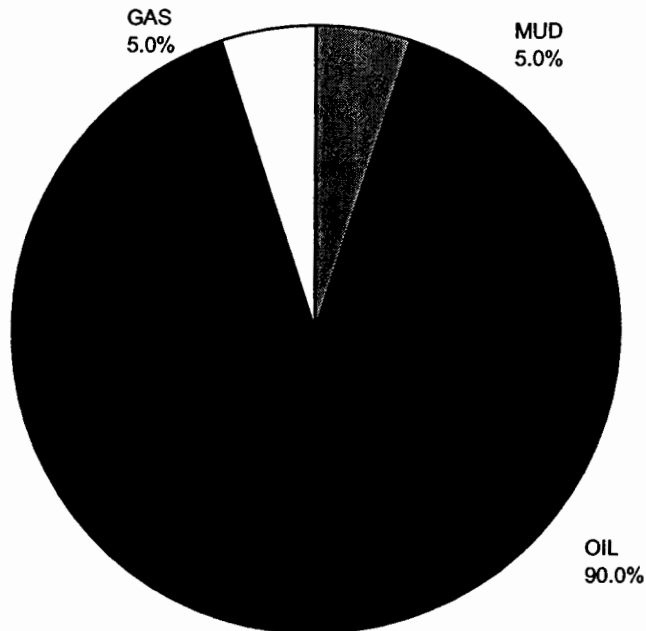
CALCULATED RECOVERY ANALYSIS

DST 4

TICKET 13852

SAMPLE #		TOTAL FEET	GAS %	FEET	OIL %	FEET	WATER %	FEET	MUD %	FEET
DRILL	1	62	10	6.2	90	55.8	0	0	0	0
PIPE	2	62	0	0	90	55.8	0	0	10	6.2
	3	0	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0
	6	0	0	0	0	0	0	0	0	0
WEIGHT	1	0	0	0	0	0	0	0	0	0
PIPE	2	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0
DRILL	1	0	0	0	0	0	0	0	0	0
COLLARS	2	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0
TOTAL		124	0	6.2	0	111.6	0	0	0	6.2

BBL OIL= 1.586952 * HRS OPEN 0.75 = BBL/DAY 50.782464
 BBL WATER= 0 * = 0
 BBL MUD= 0.088164
 BBL GAS = 0.088164



Serial #: 3024

Inside

Kenmark Corporation

Sec28-11-18-Elis-Ks

Pressure vs. Time

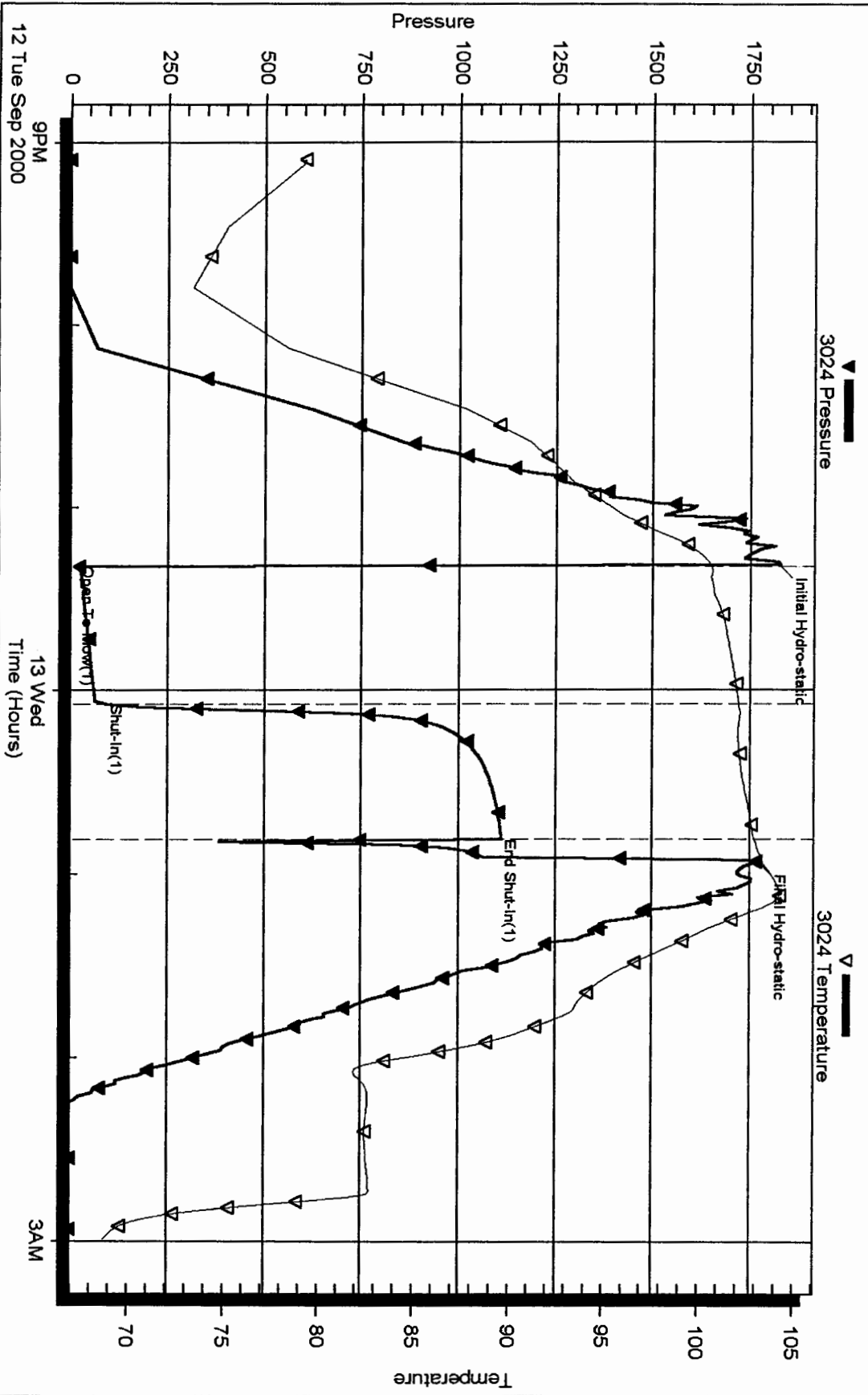
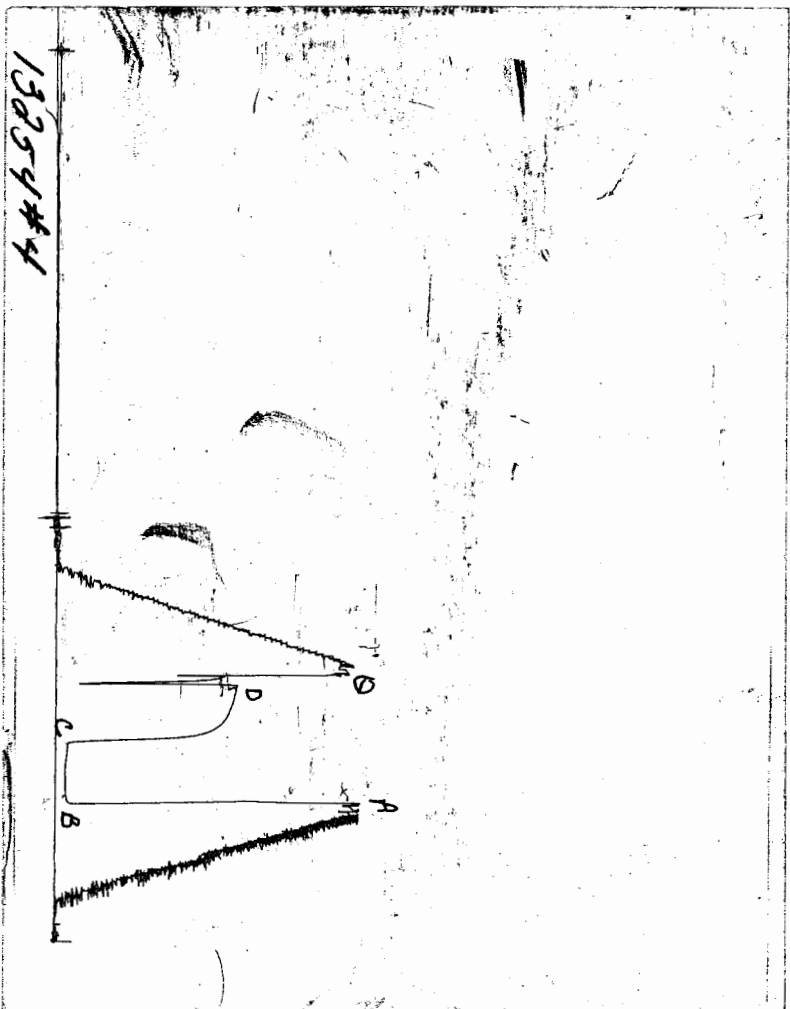


CHART PAGE



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

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Nº 13852

Test Ticket

Well Name & No. <u>Fisher #4</u>	Test No. <u>4</u>	Date <u>9-12-00</u>
Company <u>Kenmark Corp</u>	Zone Tested <u>Arbuckle</u>	
Address _____	Elevation <u>2089</u> KB <u>2084</u> GL	
Co. Rep / Geo. <u>Mark Kilian</u>	Cont. <u>A+A Drllg.</u>	Est. Ft. of Pay _____ Por. _____ %
Location: Sec. <u>28</u>	Twp. <u>11</u>	Rge. <u>18</u> Co. <u>Ellis</u> State <u>Ks</u>
No. of Copies _____	Distribution Sheet (Y, N) _____	Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 3605 - 3640 Initial Str Wt./Lbs. 36,000 Unseated Str Wt./Lbs. 36,000
Anchor Length 35 Wt. Set Lbs. 30,000 Wt. Pulled Loose/Lbs. 45,000
Top Packer Depth 3600 Tool Weight 1100
Bottom Packer Depth 3605 Hole Size — 7 7/8" Rubber Size — 6 3/4"
Total Depth 3640 Wt. Pipe Run 745 Drill Collar Run _____
Mud Wt. 9.3 LCM _____ Vis. 48 WL 10.4 Drill Pipe Size 4.5 FH Ft. Run _____
Blow Description I.F. Weak building to 6"

F.F. Driller rotated tool past open stage *

Recovery — Total Feet	GIP	Ft. in DC	Ft. in DP
Rec. <u>62</u> Feet Of <u>CG 340</u>	<u>10</u> %gas <u>90</u> %oil	%water _____ %mud _____	
Rec. <u>62</u> Feet Of <u>MC O</u>	%gas <u>90</u> %oil	%water <u>10</u> %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____	%water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____	%water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____	%water _____ %mud _____	

BHT 102 °F Gravity _____ °API D@ _____ °F Corrected Gravity 21 °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 5,000 ppm System

	AK-1	Alpine	PSI	Recorder No.	T-On Location
(A) Initial Hydrostatic Mud	<u>1857</u>	<u>1823</u>		<u>3024</u>	<u>21:00</u>
(B) First Initial Flow Pressure	<u>59</u>	<u>22</u>		(depth) <u>3611</u>	T-Started <u>21:05</u>
(C) First Final Flow Pressure	<u>71</u>	<u>1597</u>		Recorder No. <u>13254</u>	T-Open <u>23:32</u>
(D) Initial Shut-In Pressure	<u>1109</u>	<u>1110</u>		(depth) <u>3635</u>	T-Pulled <u>01:02</u>
(E) Second Initial Flow Pressure	—			Recorder No. _____	T-Out <u>03:15</u>
(F) Second Final Flow Pressure	—			(depth) _____	T-Off Location <u>03:30</u>
(G) Final Shut-in Pressure	—			Initial Opening <u>45</u>	Test <u>650</u>
(Q) Final Hydrostatic Mud	<u>1787</u>	<u>1770</u>		Initial Shut-in <u>45</u>	Jars _____
				Final Flow _____	Safety Joint _____
				Final Shut-in _____	Straddle _____

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Approved By _____

Our Representative

Dan Bangle

Extra Packer _____
Elec. Rec. X 150
Mileage 15 15
Other _____
TOTAL PRICE \$ 815