

TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Prepared For: **Trich Production, In**

P.O. Box 1408
Longview, TX 75606

ATTN: Ken Fletcher

28-13-20 Ellis co KS

Peter Karlin #28-1

Start Date: 2000.11.18 @ 02:24:00

End Date: 2000.11.18 @ 07:39:00

Job Ticket #: 13933 DST #: 1

Trilobite Testing, L.L.C.
PO Box 362 Hays KS 67601
PH: 785-625-4778 FAX: 785-625-5620

15-051-25,057 0000

DRILL STEM TESTS

NO	INTERVAL	IFP/TIME	ISIP/TIME	FFP/TIME	FSIP/TIME	IHP/FHP	RECOVERY
1	LKc A-C 3503- 3556'	43# 248# 30"	997# 45"	259# 486# 45"	996# 60"	1690# 1687#	712' GIP 154' M,C,G,Oil 248' Sl,O,C,M,Wtr 682' M,Wtr
2	LKc D-G 3574- 3615'	67# 291# 30"	965# 45"	315# 530# 45"	958# 60"	1751# 1716#	GTS FSI 1366' C,G,Oil gr.36 60' Wtr
3	Reagan 3931- 3970'	637# 1211# 30"	1211# 30"	1197# 1225# 30"	1227# 30"	1982# 1962#	2530' Wtr.
4							
5							
6							
7							
8							

MUD RECORD

CHK	DEPTH	WT	VIS	FIL	CHL	YP	
1	3150'						
2	3230'	45	8.8	9.6	2.5k	14	Displace
3	3290'	46	8.9				LCM tr.
4	3360'	45	9.0				
5	3401'	44	9.0	8.8	2k	14	LCM tr.
6	3530'	46	9.1				
7	3556'	44	9.0	8.8	2.5k	15	LCM tr.
8	3650'	43	8.9	10.4	7k	14	LCM tr.
9	3780'	49	9.3				
10	3870'	47	9.4				
11	3970'	48	9.4	9.6	5k	17	LCM ½#

BIT RECORD

NO	SIZE	MAKE	TYPE	DEPTHOUT	FEET	HOURS
1	12 ¼"	HTC	GT1	224'	224'	2 3/4
2	7 7/8"	HTC	GT 20C	3970'	3746'	97 ½
3						
4						
5						
6						
7						

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC

Trich Production, In

P.O. Box 1408
Longview , TX 75606

ATTN: Ken Fletcher

Peter Karlin #28-1

28-13-20 Ellis co KS

Job Ticket: 13933 **DST#: 1**

Test Start: 2000.11.18 @ 02:24:00

GENERAL INFORMATION:

Formation: **A-C LKC**
Deviated: No Whipstock: ft (CF)
Time Tool Opened: 04:35:12
Time Test Ended: 07:39:00

Test Type: Conventional Bottom Hole
Tester: Dan Bangle
Unit No: 11

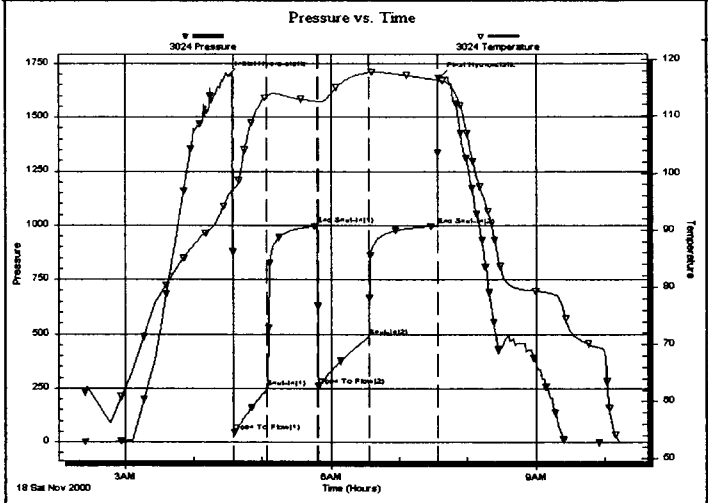
Interval: 3503.00 ft (CF) To 3556.00 ft (CF) (TVD)
Total Depth: 3556.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations:
2243.00 ft (CF)
KB to GR/CF:

Serial #: 3024 Inside
Press@RunDepth: 486.33 psig @ 3515.01 ft (CF)
Start Date: 2000.11.18 End Date: 2000.11.18
Start Time: 02:24:13 End Time: 10:13:12

Capacity: 7000.00 psig
Last Calib.: 2000.11.17
Time On Btm: 2000.11.18 @ 04:31:12
Time Off Btm: 2000.11.18 @ 07:36:12

TEST COMMENT: IF-Strong-B.O.B in 2 min
FF-Strong B.O.B. in 3 min



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
127	1690.16	96.20	Initial Hydro-static
131	43.88	97.28	Open To Flow (1)
160	248.10	113.49	Shut-In(1)
204	997.42	112.63	End Shut-In(1)
205	259.80	112.64	Open To Flow (2)
249	486.33	117.74	Shut-In(2)
310	996.68	116.43	End Shut-In(2)
312	1687.34	116.39	Final Hydro-static

Recovery

Length (m)	Description	Volume (m³)
154.00	Slightly mud cut gassy oil 20%g 75%o 5%m	2.16
248.00	Slightly oil cut muddy water 5%o 20%m 7	3.48
682.00	Muddy water 80%w 20%m	9.57

Gas Rates

	Choke (mm)	Pressure (kPaa)	Gas Rate (m³/d)

DRILL STEM TEST REPORT

TOOL DIAGRAM

Trich Production, In

P.O. Box 1408
Longview , TX 75606

ATTN: Ken Fletcher

Peter Karlin #28-1

28-13-20 Ellis co KS

Job Ticket: 13933 **DST#: 1**

Test Start: 2000.11.18 @ 02:24:00

Tool Information

Drill Pipe:	Length:	3511.00 ft	Diameter:	3.80 inches	Volume:	49.25 bbl	Tool Weight:		1800.00 lb
Drill Collar:	Length:	0.01 ft	Diameter:	0.01 inches	Volume:	0.00 bbl	Weight set on Packer:		30000.00 lb
Heavy Wt. Pipe:	Length:	0.01 ft	Diameter:	0.01 inches	Volume:	0.00 bbl	Weight to Pull Loose:		lb
Drill Pipe Above KB:		24.02 ft					Tool Chased		0.01 ft
Depth to Top Packer:		3503.00 ft					String Weight:	Initial	44000.00 lb
Depth to Bottom Packer:		ft						Final	lb
Interval betw een Packers:		ft							
Tool Length:		74.02 ft							
Number of Packers:		2	Diameter:	6.75 inches					

Tool Comments

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
C.O. Sub	1.00			3488.00		
S.I. Tool	5.00			3493.00		
HYD S.I. Tool	5.00			3498.00		
Packer	5.00			3503.00	16.00	Bottom Of Top Packer
Packer	5.00			3508.00		
Stubb	1.00			3509.00		
Perforations	5.00			3514.00		
C.O. Sub	1.00			3515.00		
Recorder	0.01	3024	Inside	3515.01		
Blank Spacing	30.00			3545.01		
C.O. Sub	1.00			3546.01		
Recorder	0.01	13254	Outside	3546.02		
Perforations	10.00			3556.02		
Bullnose	5.00			3561.02	58.02	Bottom Packers & Anchor
Total Tool Length:	**74.02**					

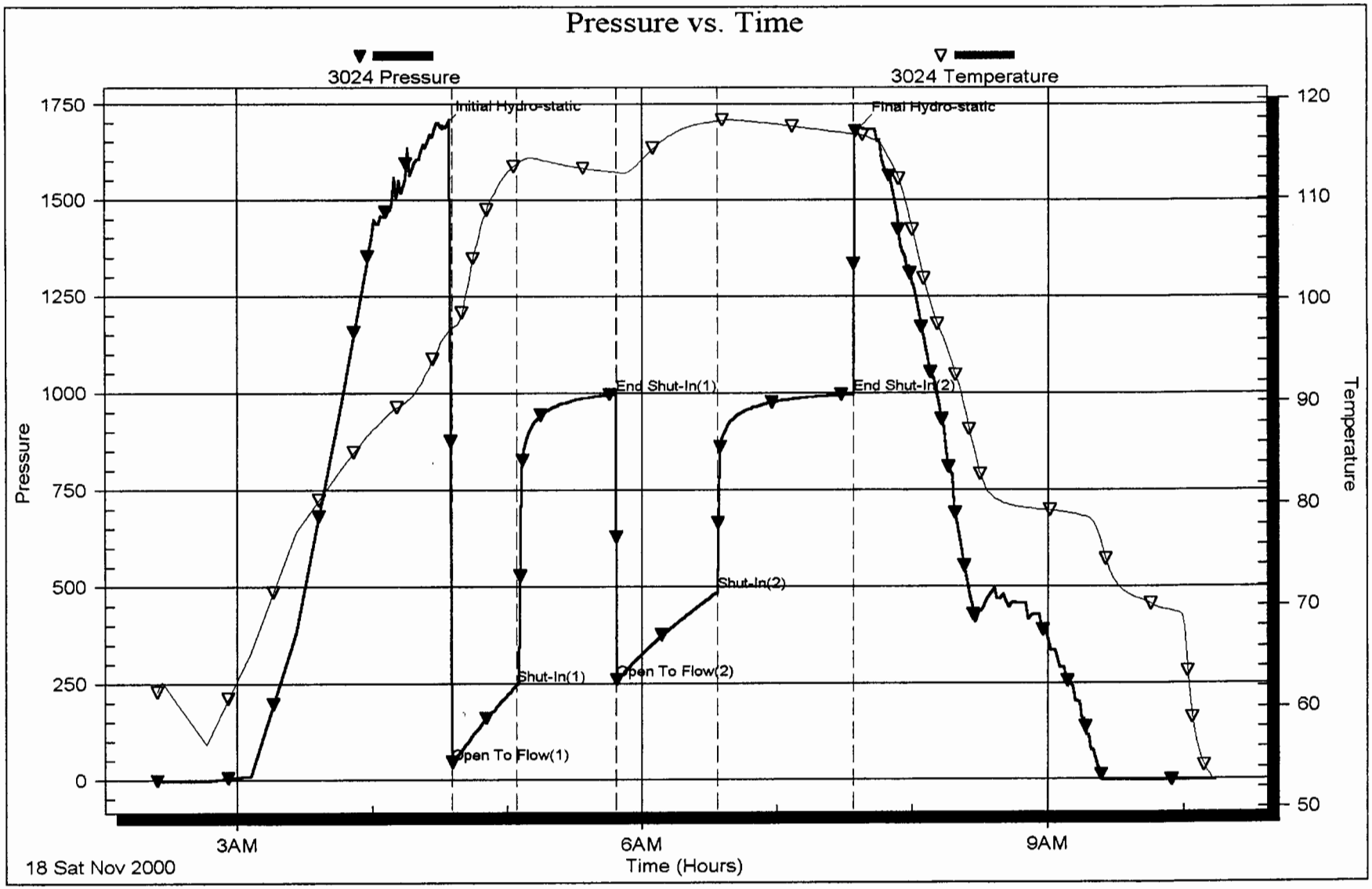
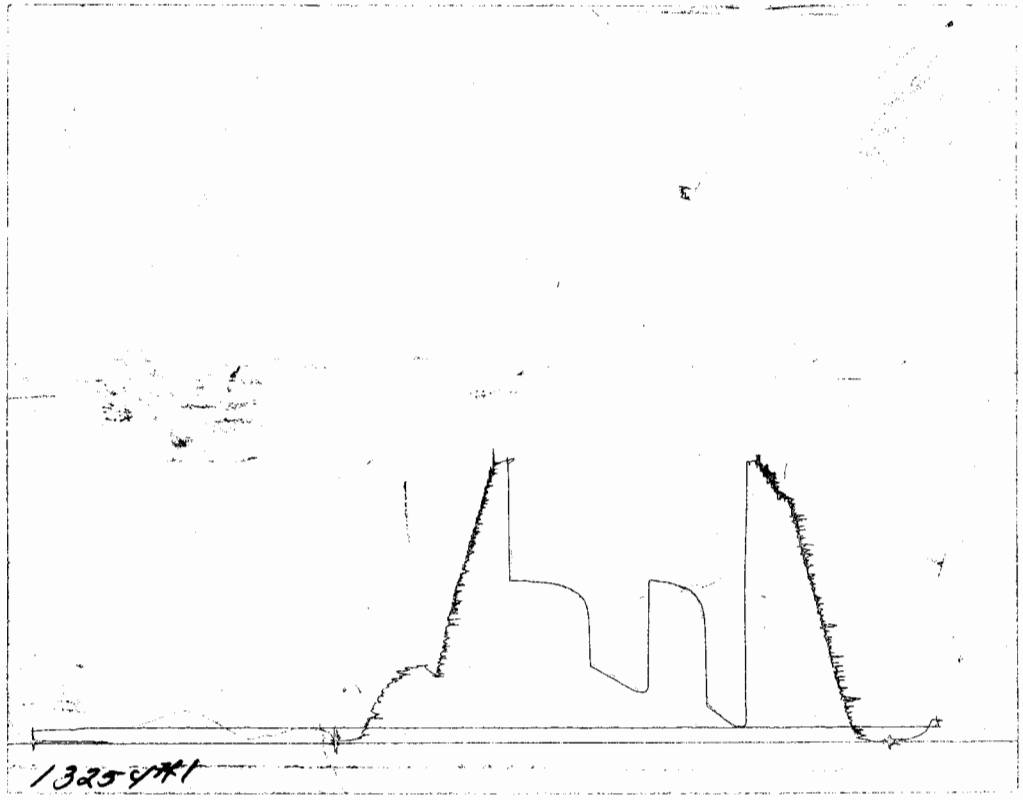

Pressure vs. Time
3024 Pressure
3024 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Shut-In(1)
Shut-In(2)
Open To Flow(1)
Open To Flow(2)
Pressure
Temperature
1750
1500
1250
1000
750
500
250
0
120
110
100
90
80
70
60
50
3AM
6AM
9AM
Time (Hours)
18 Sat Nov 2000

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 № 13933

Test Ticket

Well Name & No. Peter Karlin #28-1 Test No. 1 Date 11-18-00

Company Trich Production, Inc Zone Tested A-C LKC

Address P.O. Box 1408 Longview, Tex 75606 Elevation 2248 KB 2243 GL

Co. Rep / Geo. Randy Kilian Cont. Murfin #16 Est. Ft. of Pay ____ Por. ____ %

Location: Sec. 28 Twp. 13 Rge. 20 Co. Ellis State Ks

No. of Copies ____ Distribution Sheet (Y, N) ____ Turnkey (Y, N) ____ Evaluation (Y, N) ____

Interval Tested 3503 - 3556 Initial Str Wt./Lbs. 44,000 Unseated Str Wt./Lbs. 46,000

Anchor Length 53 Wt. Set Lbs. 30,000 Wt. Pulled Loose/Lbs. 55,000

Top Packer Depth 3498 Tool Weight 1800

Bottom Packer Depth 3503 Hole Size — 7 7/8" ____ Rubber Size — 6 3/4" ____

Total Depth 3556 Wt. Pipe Run ____ Drill Collar Run [redacted]

Mud Wt. 9 LCM ____ Vis. 44 WL 8.8 Drill Pipe Size 4.5 XH Ft. Run [redacted]3511

Blow Description I.F. Strong - B.O.B. in 2 min.

F.F. Strong - B.O.B. in 3 min.

Recovery — Total Feet 1084 GIP 712 Ft. in DC ____ Ft. in DP 1084

Rec. 154 Feet Of Slty MCGsy O 20 %gas 75 %oil %water 5 %mud

Rec. 248 Feet Of Slty OCMdy WTR %gas 5 %oil 75 %water 20 %mud

Rec. 682 Feet Of Mdy WTR %gas %oil 80 %water 20 %mud

Rec. ____ Feet Of ____ %gas %oil %water %mud

Rec. ____ Feet Of ____ %gas %oil %water %mud

BHT 109 °F Gravity ____ °API D@ ____ °F Corrected Gravity ____ °API

RW ____ @ ____ °F Chlorides ____ ppm Recovery Chlorides 2,000 ppm System

	AK-1	Alpine				
(A) Initial Hydrostatic Mud		1690	PSI	Recorder No.	3024	T-On Location 01:00
(B) First Initial Flow Pressure		43	PSI	(depth)	3510	T-Started 02:24
(C) First Final Flow Pressure		248	PSI	Recorder No.	13254	T-Open 04:41
(D) Initial Shut-In Pressure		997	PSI	(depth)	3541	T-Pulled 07:41
(E) Second Initial Flow Pressure		259	PSI	Recorder No.		T-Out 10:20
(F) Second Final Flow Pressure		486	PSI	(depth)		T-Off Location 11:00
(G) Final Shut-in Pressure		996	PSI	Initial Opening	30	Test 650
(Q) Final Hydrostatic Mud		1687	PSI	Initial Shut-in	45	Jars ____
				Final Flow	45	Safety Joint ____
				Final Shut-in	60	Straddle ____
						Circ. Sub ____
						Sampler ____
						Extra Packer ____
						Elec. Rec. X 150
						Mileage 18 18
						Other 1.5 hrs 45
						TOTAL PRICE $ 863

9:20

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 Bandy

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC

Trich Production, In

P.O. Box 1408
Longview , TX 75606

ATTN: Ken Fletcher

Peter Karlin #28-1

28-13-20 Ellis co KS

Job Ticket: 13934 **DST#: 2**

Test Start: 2000.11.19 @ 21:56:00

GENERAL INFORMATION:

Formation: D-G LKC
Deviated: No Whipstock: ft (CF)
Time Tool Opened: 00:07:00
Time Test Ended: 03:07:00

Test Type: Conventional Bottom Hole
Tester: Dan Bangle
Unit No: 11

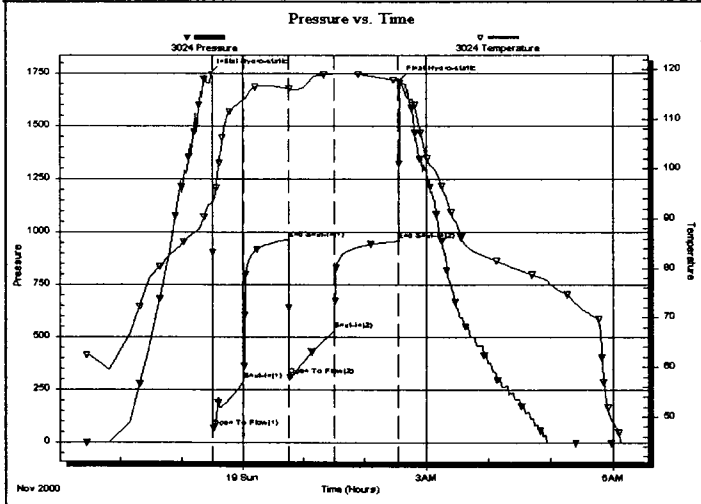
Interval: 3574.00 ft (CF) To 3615.00 ft (CF) (TVD)
Total Depth: 3615.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations:
2243.00 ft (CF)
KB to GR/CF:

Serial #: 3024 Inside
Press@RunDepth: 530.71 psig @ 3578.01 ft (CF)
Start Date: 2000.11.18 End Date: 2000.11.19
Start Time: 21:26:31 End Time: 06:07:30

Capacity: 7000.00 psig
Last Calib.: 2000.11.19
Time On Btm: 2000.11.18 @ 23:28:30
Time Off Btm: 2000.11.19 @ 02:35:00

TEST COMMENT: IF- Strong B.O.B. in 2 min
FF Strong B.O.B.in 3 min



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
122	1751.33	93.16	Initial Hydro-static
125	67.42	93.65	Open To Flow (1)
155	291.40	113.94	Shut-In(1)
199	965.50	116.10	End Shut-In(1)
199	315.99	116.06	Open To Flow (2)
244	530.71	119.14	Shut-In(2)
307	958.45	117.80	End Shut-In(2)
309	1716.74	117.69	Final Hydro-static

Recovery

Length (m)	Description	Volume (m^3)
1366.00	Clean gassy oil 20%g 80%o 36 Gravity	19.16
60.00	Water Rw.23 @ 80=27000	0.84

Gas Rates

	Choke (mm)	Pressure (kPaa)	Gas Rate (m^3/d)

DRILL STEM TEST REPORT

TOOL DIAGRAM

Trich Production, In

P.O. Box 1408
Longview , TX 75606

ATTN: Ken Fletcher

Peter Karlin #28-1

28-13-20 Ellis co KS

Job Ticket: 13934 **DST#: 2**

Test Start: 2000.11.19 @ 21:56:00

Tool Information

Drill Pipe:	Length:	3572.00 ft	Diameter:	3.80 inches	Volume:	50.11 bbl	Tool Weight:		2200.00 lb
Drill Collar:	Length:	0.01 ft	Diameter:	0.01 inches	Volume:	0.00 bbl	Weight set on Packer:		30000.00 lb
Heavy Wt. Pipe:	Length:	0.01 ft	Diameter:	0.01 inches	Volume:	0.00 bbl	Weight to Pull Loose:		50000.00 lb
Drill Pipe Above KB:		19.02 ft					Tool Chased		0.01 ft
Depth to Top Packer:		3569.00 ft					String Weight:	Initial	44000.00 lb
Depth to Bottom Packer:		ft						Final	47000.00 lb
Interval betw een Packers:		ft							
Tool Length:		62.02 ft							
Number of Packers:		2	Diameter:	6.75 inches					

Tool Comments

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
C.O. Sub	1.00			3554.00		
S.I. Tool	5.00			3559.00		
HYD S.I. Tool	5.00			3564.00		
Packer	5.00			3569.00	16.00	Bottom Of Top Packer
Packer	5.00			3574.00		
Stubb	1.00			3575.00		
Perforations	2.00			3577.00		
C.O. Sub	1.00			3578.00		
Recorder	0.01	3024	Inside	3578.01		
Blank Spacing	31.00			3609.01		
C.O. Sub	1.00			3610.01		
Recorder	0.01	13254	Outside	3610.02		
Bullnose	5.00			3615.02	46.02	Bottom Packers & Anchor
Total Tool Length:	**62.02**					

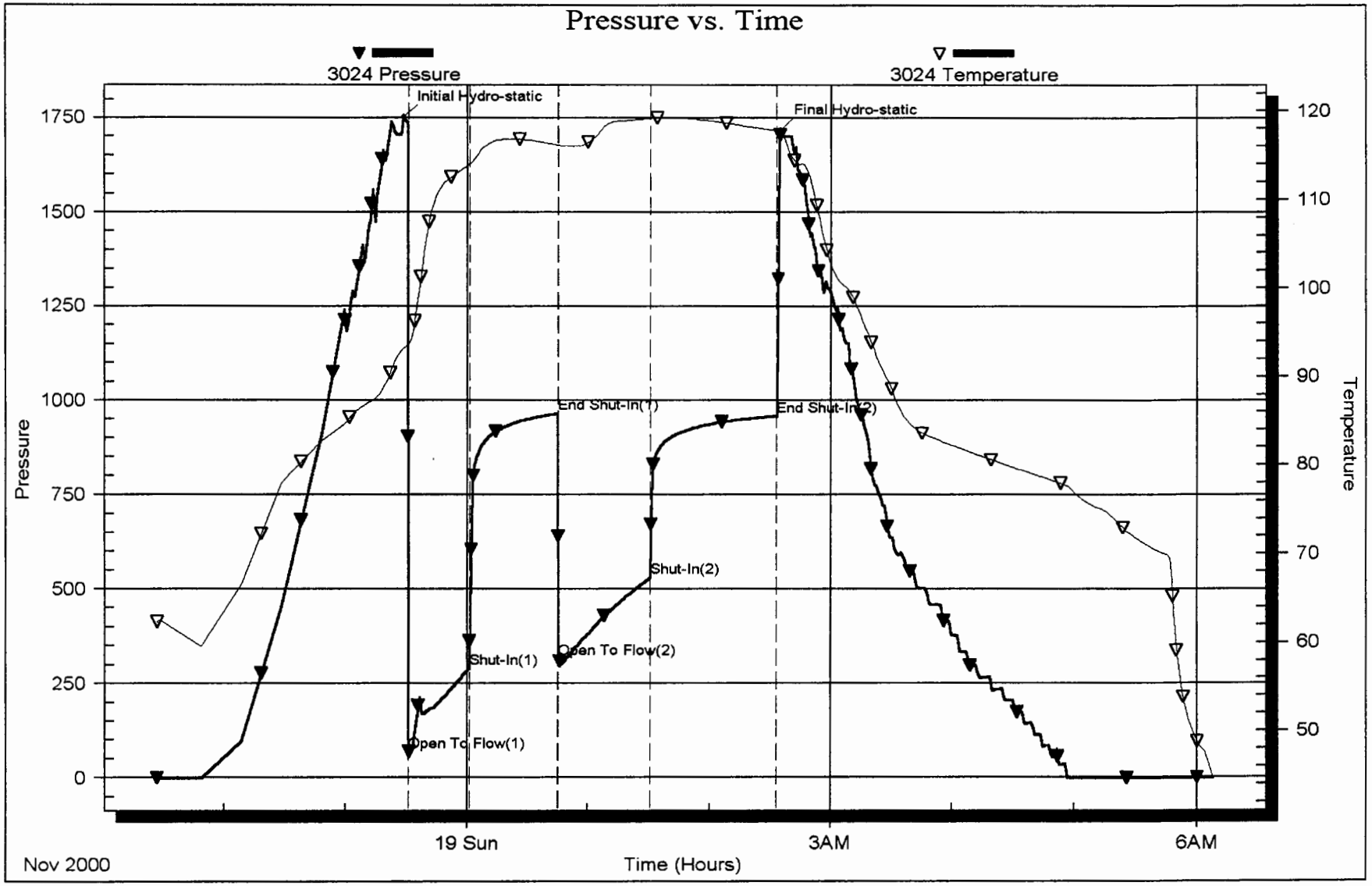
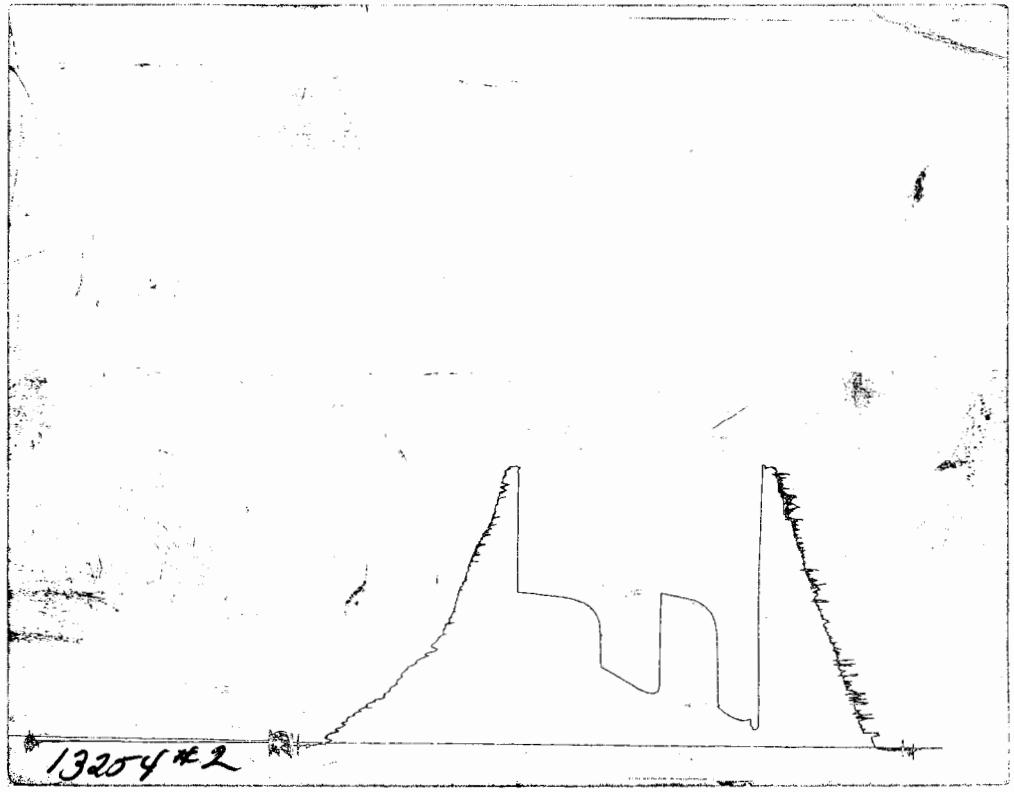

Pressure vs. Time
3024 Pressure
3024 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Shut-In(1)
Shut-In(2)
Open To Flow(1)
Open To Flow(2)
Pressure
Temperature
1750
1500
1250
1000
750
500
250
0
120
110
100
90
80
70
60
50
19 Sun
3AM
6AM
Nov 2000
Time (Hours)

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 № 13934

Test Ticket

Well Name & No. Peter Karlin #28-1 Test No. 2 Date 11-19-00

Company Trich Production, Inc Zone Tested D-G LKC

Address _____ Elevation 2248 KB 2243 GL

Co. Rep / Geo. Randy Kilian Cont. Murfin #16 Est. Ft. of Pay ____ Por. ____ %

Location: Sec. 28 Twp. 13 Rge. 20 Co. Ellis State Ks

No. of Copies _____ Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 3574 - 3615 Initial Str Wt./Lbs. 44,000 Unseated Str Wt./Lbs. 47,000

Anchor Length 41 Wt. Set Lbs. 30,000 Wt. Pulled Loose/Lbs. 50,000

Top Packer Depth 3569 Tool Weight 2200

Bottom Packer Depth 3574 Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____

Total Depth 3615 Wt. Pipe Run _____ Drill Collar Run _____

Mud Wt. 9 LCM _____ Vis. 44 WL 8.8 Drill Pipe Size 4.5 XH Ft. Run 3572

Blow Description I.F. Strong - B.O.B. in 2min

F.F. Strong - B.O.B. in 3min

GTS on FSI

Recovery — Total Feet 1426 GIP GTS FSI Ft. in DC _____ Ft. in DP 1426

Rec. 1366	Feet Of Clean Gsy O	20 %gas	80 %oil	%water	%mud
Rec. 60	Feet Of WTR	%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 117 °F Gravity _____ °API D@ _____ °F Corrected Gravity 36 °API

RW .23 @ 80 °F Chlorides 27,000 ppm Recovery Chlorides 25000 ppm System

	AK-1	Alpine					
(A) Initital Hydrostatic Mud		1751	PSI	Recorder No.	3024	T-On Location	21:00
(B) First Initial Flow Pressure		67	PSI	(depth)	3578	T-Started	21:56
(C) First Final Flow Pressure		291	PSI	Recorder No.	13254	T-Open	00:07 (10:30)
(D) Initial Shut-In Pressure		965	PSI	(depth)	3610	T-Pulled	03:07
(E) Second Initial Flow Pressure		315	PSI	Recorder No.	_____	T-Out	07:30
(F) Second Final Flow Pressure		530	PSI	(depth)	_____	T-Off Location	08:00
(G) Final Shut-in Pressure		958	PSI	Initial Opening	30	Test	650
(Q) Final Hydrostatic Mud		1716	PSI	Initial Shut-in	45	Jars	_____
				Final Flow	45	Safety Joint	_____
				Final Shut-in	60	Straddle	_____
				_____		Circ. Sub	_____
				_____		Sampler	_____
						Extra Packer	_____
						Elec. Rec.	X 150
						Mileage	18 18
						Other	2.5 75
						TOTAL PRICE $	893

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 Dan Bangle

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC

Trich Production Inc

PO Box 1408
Longview , TX 75606

ATTN: Randy Killian

Karlin #28-1

28-13s-20w Ellis KS

Job Ticket: 13935 DST#: 3

Test Start: 2000.11.20 @ 11:01:00

GENERAL INFORMATION:

Formation: **Reagan Sd**
Deviated: No Whipstock: ft (CF)
Time Tool Opened: 13:16:56
Time Test Ended: 15:16:00

Test Type: Conventional Bottom Hole
Tester: Ray Schw ager
Unit No: 16

Interval: 3931.00 ft (CF) To 3970.00 ft (CF) (TVD)
Total Depth: 3970.00 ft (CF)
Hole Diameter: 7.85 inches Hole Condition: Fair

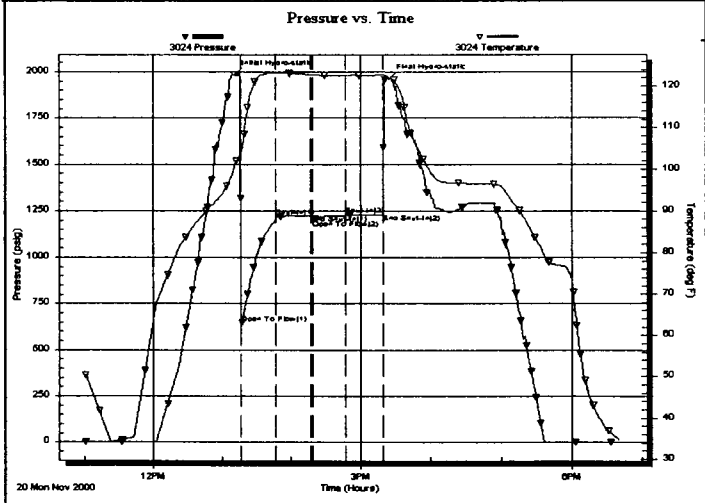
Reference Elevations:
2243.00 ft (CF)
KB to GR/CF:

Serial #: 3024 Inside

Press@RunDepth: 1225.91 psig @ 3932.01 ft (CF)
Start Date: 2000.11.20 End Date: 2000.11.20
Start Time: 11:00:57 End Time: 18:41:26

Capacity: 7000.00 psig
Last Calib.: 2000.11.20
Time On Btm: 2000.11.20 @ 13:11:56
Time Off Btm: 2000.11.20 @ 15:24:56

TEST COMMENT: IFPstrong blow throughout
FFP-very w eak blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
131	1982.82	101.49	Initial Hydro-static
136	637.55	103.94	Open To Flow (1)
166	1211.79	123.31	Shut-In(1)
196	1224.99	122.87	End Shut-In(1)
197	1197.33	122.87	Open To Flow (2)
226	1225.91	122.68	Shut-In(2)
258	1227.13	122.73	End Shut-In(2)
264	1962.95	121.99	Final Hydro-static

Recovery

Length (m)	Description	Volume (m³)
150.00	muddy water 15%mud 85%water	2.10
2380.00	water	33.39

Gas Rates

	Choke (mm)	Pressure (kPaa)	Gas Rate (m³/d)

TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

Trich Production Inc

PO Box 1408
Longview , TX 75606

ATTN: Randy Killian

Karlin #28-1

28-13s-20w Ellis KS

Job Ticket: 13935 **DST#:** 3

Test Start: 2000.11.20 @ 11:01:00

Tool Information

Drill Pipe:	Length:	3940.00 ft	Diameter:	3.80 inches	Volume:	55.27 bbl	Tool Weight:		2200.00 lb
Drill Collar:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:		20000.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight to Pull Loose:		62000.00 lb
Drill Pipe Above KB:		30.00 ft					Tool Chased		0.00 ft
Depth to Top Packer:		3926.00 ft					String Weight:	Initial	48000.00 lb
Depth to Bottom Packer:		ft						Final	58000.00 lb
Interval betw een Packers:		ft							
Tool Length:		60.02 ft							
Number of Packers:		2	Diameter:	6.75 inches					

Tool Comments

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
C.O. Sub	1.00			3911.00		
S.I. Tool	5.00			3916.00		
HYD S.I. Tool	5.00			3921.00		
Packer	5.00			3926.00	16.00	Bottom Of Top Packer
Packer	5.00			3931.00		
Stubb	1.00			3932.00		
Recorder	0.01	3024	Inside	3932.01		
Anchor	33.00			3965.01		
Recorder	0.01	13254	Outside	3965.02		
Bullnose	5.00			3970.02	44.02	Bottom Packers & Anchor
Total Tool Length:	**60.02**					

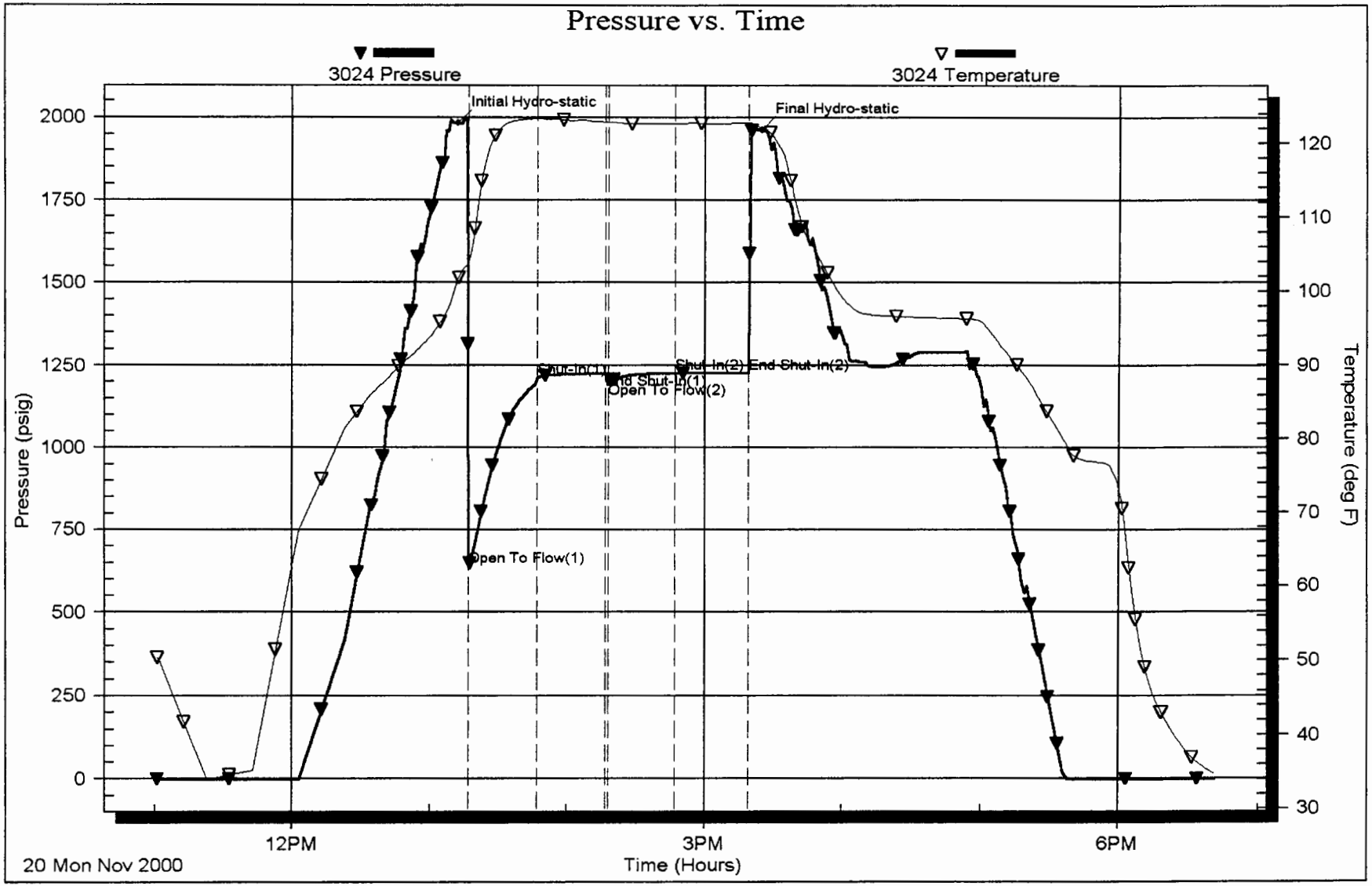
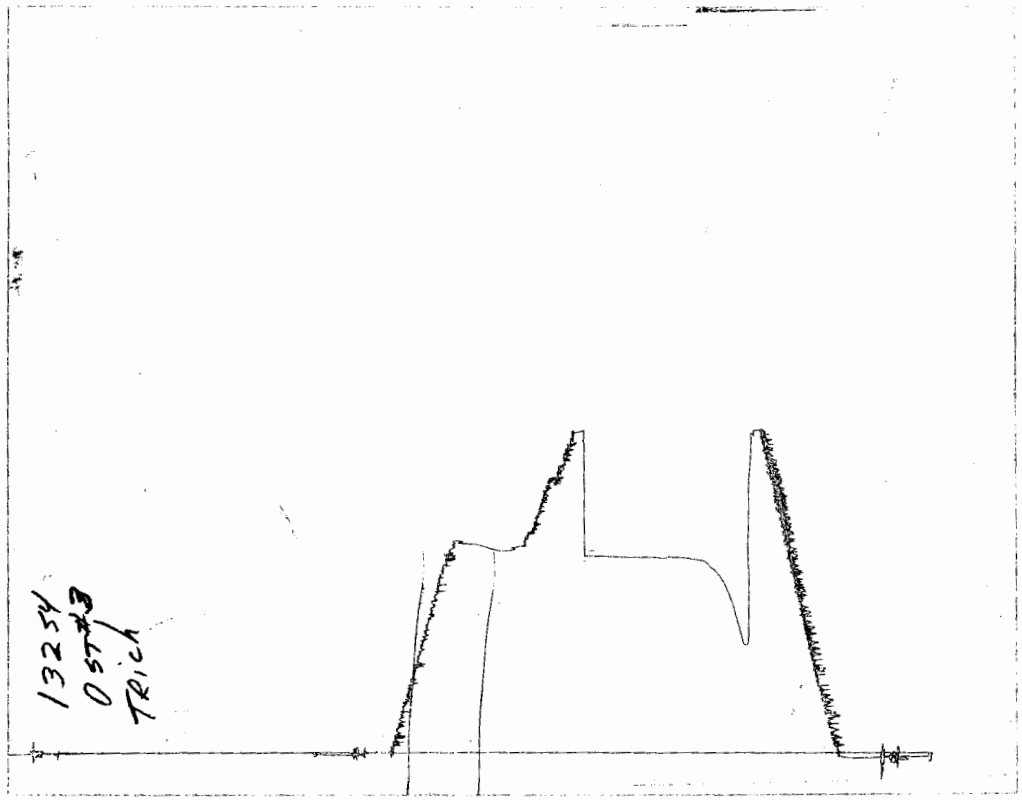

Pressure vs. Time
3024 Pressure
3024 Temperature
Initial Hydro-static
Final Hydro-static
Shut-In(1)
End Shut-In(1)
Open To Flow(2)
Shut-In(2)
End Shut-In(2)
Open To Flow(1)
Pressure (psig)
Temperature (deg F)
2000
1750
1500
1250
1000
750
500
250
0
120
110
100
90
80
70
60
50
40
30
12PM
3PM
6PM
20 Mon Nov 2000
Time (Hours)

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 № 13935

Test Ticket

Well Name & No. Peter Karlin #28-1 Test No. 3 Date 11-20-00

Company Trico Production, Inc Zone Tested Reagan Sd.

Address P.O. Box 1408 Longview, Tx. 75606 Elevation 2248 KB 2243 GL

Co. Rep / Geo. Randy Killian Cont. Murfin #16 Est. Ft. of Pay — Por. — %

Location: Sec. 28 Twp. 13 S Rge. 20 W Co. Ellis State Ks

No. of Copies Req Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 3931-3970 Initial Str Wt./Lbs. 48000 Unseated Str Wt./Lbs. 58000

Anchor Length 39 Wt. Set Lbs. 20000 Wt. Pulled Loose/Lbs. 62000

Top Packer Depth 3926 Tool Weight 2200

Bottom Packer Depth 3931 Hole Size — 7 7/8" yes Rubber Size — 6 3/4" yes

Total Depth 3970 Wt. Pipe Run — Drill Collar Run —

Mud Wt. 9.4 LCM ½# Vis. 48 WL 10.4 Drill Pipe Size 4½ XH Ft. Run 3940

Blow Description IFP - Strong Blow Throughout
FFP -

Recovery — Total Feet 2530 GIP — Ft. in DC — Ft. in DP 2530

Rec. 150	Feet Of MW	%gas	%oil	85	%water 15	%mud	
Rec. 2380	Feet Of 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 122 °F Gravity — °API D@ — °F Corrected Gravity — °API

RW .21 @ 50 °F Chlorides 50000 ppm Recovery Chlorides 7000 ppm System

	AK-1	Alpine					
(A) Initital Hydrostatic Mud		1982	PSI	Recorder No.	3024	T-On Location	1000
(B) First Initial Flow Pressure		637	PSI	(depth)	3932	T-Started	1101
(C) First Final Flow Pressure		1211	PSI	Recorder No.	13254	T-Open	1316
(D) Initial Shut-In Pressure		1224	PSI	(depth)	3965	T-Pulled	1516
(E) Second Initial Flow Pressure		1197	PSI	Recorder No.	—	T-Out	1840
(F) Second Final Flow Pressure		1225	PSI	(depth)	—	T-Off Location	1930
(G) Final Shut-in Pressure		1227	PSI	Initial Opening	30	Test ✓	650
(Q) Final Hydrostatic Mud		1962	PSI	Initial Shut-in	30	Jars	
				Final Flow	30	Safety Joint	
				Final Shut-in	30	Straddle	
						Circ. Sub ✓	35
						Sampler	
						Extra Packer	
						Elec. Rec. ✓	150
						Mileage ✓	18 18
						Other	1.5 45
						TOTAL PRICE $ ✓	898

9:30

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 Ray Schwager Thank you