15-179-21085

32-8s-29w

WELL NAME: Koster #6
COMPANY: R.L. Investment
LOCATION: 32-8S-29W
Sheridan County Kansas
DATE: 08/23/96

TRILOBITE TESTING L.L.C.

OPERATOR : R.L. Investment — DATE 08/23/96
WELL NAME: Koster #6 — KB 0.00 ft — TICKET NO: 9507 — DST #1
LOCATION : 32-8S-29W Sheridan Cty KS — GR 0.00 ft — FORMATION: Lansing "B"
INTERVAL : 3918.00 To 3940.00 ft — TD 3940.00 ft — TEST TYPE: CONV

RECORDER DATA

Mins		Field	1	2	3	4
PF 30	Rec.	13249	13249	13754		
SI 30	Range(Psi)	4500.0	4500.0	4000.0	0.0	0.0
SF 30	Clock(hrs)	12	12	12		
FS 30	Depth(ft)	3937.0	3937.0	3920.0	0.0	0.0

TIME DATA----------
PF Fr. 2130 to 2200 hr
IS Fr. 2200 to 2230 hr
SF Fr. 2230 to 2300 hr
FS Fr. 2300 to 2330 hr

	Field	1	2	3	4
A. Init Hydro	2095.0	2075.0	0.0	0.0	0.0
B. First Flow	79.0	70.0	0.0	0.0	0.0
B1. Final Flow	79.0	70.0	0.0	0.0	0.0
C. In Shut-in	79.0	70.0	0.0	0.0	0.0
D. Init Flow	79.0	50.0	0.0	0.0	0.0
E. Final Flow	79.0	50.0	0.0	0.0	0.0
F. Fl Shut-in	79.0	50.0	0.0	0.0	0.0
G. Final Hydro	1970.0	1979.0	0.0	0.0	0.0
Inside/Outside	O	O	I		

T STARTED 2015 hr
T ON BOTM 2128 hr
T OPEN 2130 hr
T PULLED 2330 hr
T OUT 0110 hr

RECOVERY
Tot Fluid 2.00 ft of 2.00 ft in DC and 0.00 ft in DP
2.00 ft of Drilling mud

TOOL DATA----------

Tool Wt.	1500.00 lbs
Wt Set On Packer	20000.00 lbs
Wt Pulled Loose	65000.00 lbs
Initial Str Wt	58000.00 lbs
Unseated Str Wt	58000.00 lbs
Bot Choke	0.75 in
Hole Size	7.88 in
D Col. ID	2.25 in
D. Pipe ID	3.80 in
D.C. Length	248.00 ft
D.P. Length	3664.00 ft

SALINITY 0.00 P.P.M. A.P.I. Gravity 0.00

MUD DATA----------

Mud Type	Chemical
Weight	9.10 lb/c
Vis.	45.00 S/L
W.L.	7.00 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	120.00 F
Hole Condition	
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	
Tool Chased	
Tester	Dan Bangle
Co. Rep.	Pat Deenihan
Contr.	Mallard
Rig #	2
Unit #	
Pump T.	

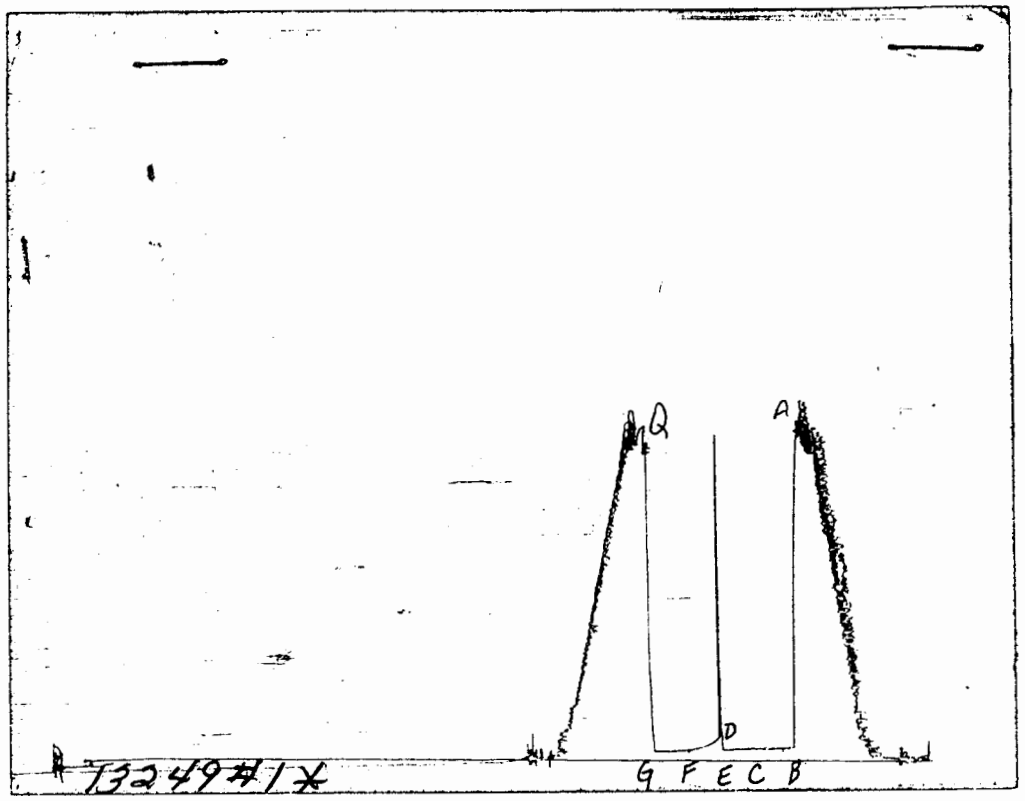
BLOW DESCRIPTION
Initial Flow -
Weak, died in 12 min

Final Flow -
No blow, flushed tool, no blow

SAMPLES:
SENT TO:

Test Successful: Y

CHART PAGE



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

*** TOOL DIAGRAM *** CONV

WELL NAME: Koster #6

LOCATION : 32-8S-29W Sheridan Cty KS

TICKET No. 9507 D.S.T. No. 1 DATE 08/23/96

TOTAL TOOL TO BOTTOM OF TOP PACKERS 20

INTERVAL TOOL .....

BOTTOM PACKERS AND ANCHOR 22

TOTAL TOOL 42

DRILL COLLAR ANCHOR IN INTERVAL .....

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 42

D.C. ABOVE TOOLS.Stands3 Single 1 Total 248

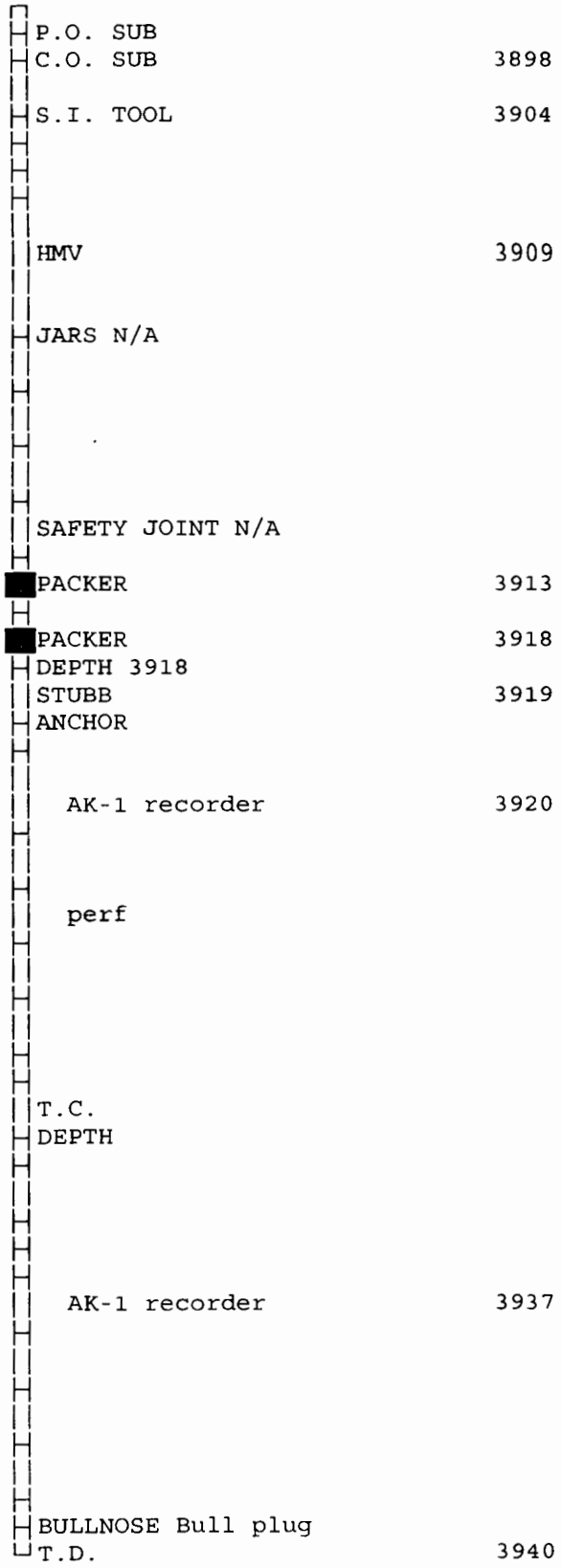
D.P. ABOVE TOOLS.Stands59 Single Total 3664

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 3954

TOTAL DEPTH 3940

TOTAL DRILL PIPE ABOVE K.B. 14

REMARKS:



TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 9507

Well Name & No. Koster #6 Test No. 1 Date 8-23-96

Company RL Investment Zone Tested 'B' Lansing

Address HCR-01, Box 63, Morland, Ks. 67650 Elevation _____ KB _____ GL

Co. Rep / Geo. Pat Deenihan Cont. Mallard #2 Est. Ft. of Pay _____ Por. _____ %

Location: Sec. 32 Twp. 8 Rge. 29 Co. Sheridan State Ks.

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

Interval Tested 3918 - 3940 Initial Str Wt./Lbs. 58,000 Unseated Str Wt./Lbs. 58,000

Anchor Length 22 Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 65,000

Top Packer Depth 3913 Tool Weight 1500

Bottom Packer Depth 3918 Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____

Total Depth 3940 Wt. Pipe Run _____ Drill Collar Run 248

Mud Wt. 9.1 LCM _____ Vis. 45 WL 7 Drill Pipe Size 4.5 XH Ft. Run 3664

Blow Description I.F. Weak - Died in 12 min.

F.F. No blow - flushed tool - No blow.

Recovery — Total Feet 2 GIP _____ Ft. in DC 2 Ft. in DP _____

Rec. 2 Feet Of D.M. %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 120 °F Gravity _____ °API D@ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 3,000 ppm System

(A) Initial Hydrostatic Mud	2095 PSI	Recorder No.	13754	T-Started	20:15
(B) First Initial Flow Pressure	79 PSI	(depth)	3920	T-Open	21:30
(C) First Final Flow Pressure	79 PSI	Recorder No.	13249	T-Pulled	23:30
(D) Initial Shut-in Pressure	79 PSI	(depth)	3937	T-Out	01:10
(E) Second Initial Flow Pressure	79 PSI	Recorder No.			
(F) Second Final Flow Pressure	79 PSI	(depth)			
(G) Final Shut-in Pressure	79 PSI	Initial Opening	30	Test	600
(H) Final Hydrostatic Mud	1970 PSI	Initial Shut-in	30	Jars	
		Final Flow	30	Safety Joint	
		Final Shut-in	30	Straddle	
				Circ. Sub	
		6271 Stds		Sampler	
				Extra Packer	
				Elect. Rec.	
				Other	
				TOTAL PRICE $	600

Approved By _____

Our Representative Dan Rangle

TRILOBITE TESTING L.L.C.

OPERATOR : R.L. Investment — DATE 8-24-96
WELL NAME: Koster #6 — KB 2810.00 ft — TICKET NO: 9508 — DST #2
LOCATION : 32-8S-29W Sheridan Cty KS — GR 2805.00 ft — FORMATION: "H" — LKC
INTERVAL : 4012.00 To 4045.00 ft — TD 4045.00 ft — TEST TYPE: CONV

RECORDER DATA

Mins		Field	1	2	3	4
PF 30	Rec.	13249	13249	2342		
SI 45	Range(Psi)	4500.0	4500.0	4995.0	0.0	0.0
SF 30	Clock(hrs)	12	12	Alpin		
FS 30	Depth(ft)	4042.0	4042.0	4015.0	0.0	0.0

TIME DATA----------
PF Fr. 1740 to 1810 hr
IS Fr. 1810 to 1855 hr
SF Fr. 1855 to 1925 hr
FS Fr. 1925 to 1955 hr

	Field	1	2	3	4
A. Init Hydro	2209.0	2064.0	2044.0	0.0	0.0
B. First Flow	90.0	88.0	17.0	0.0	0.0
B1. Final Flow	90.0	93.0	56.0	0.0	0.0
C. In Shut-in	1240.0	1227.0	1228.0	0.0	0.0
D. Init Flow	124.0	113.0	61.0	0.0	0.0
E. Final Flow	158.0	143.0	93.0	0.0	0.0
F. Fl Shut-in	1129.0	1126.0	1141.0	0.0	0.0
G. Final Hydro	2072.0	1986.0	1947.0	0.0	0.0
Inside/Outside	O	O	I		

T STARTED 1607 hr
T ON BOTM 1738 hr
T OPEN 1740 hr
T PULLED 1955 hr
T OUT 2130 hr

RECOVERY
Tot Fluid 135.00 ft of 135.00 ft in DC and 0.00 ft in DP
135.00 ft of Drilling mud w/ oil spots on top

TOOL DATA----------

Tool Wt.	1600.00 lbs
Wt Set On Packer	20000.00 lbs
Wt Pulled Loose	80000.00 lbs
Initial Str Wt	60000.00 lbs
Unseated Str Wt	60000.00 lbs
Bot Choke	0.75 in
Hole Size	7.88 in
D Col. ID	2.25 in
D. Pipe ID	3.80 in
D.C. Length	248.00 ft
D.P. Length	3749.00 ft

SALINITY 0.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION
Initial Flow -
Weak, building to 1.5"

Final Flow -
No blow, flushed tool, no blow

MUD DATA----------

Mud Type	Chemical
Weight	9.20 lb/c
Vis.	47.00 S/L
W.L.	7.00 in3
F.C.	0.00 in
Mud Drop	N
Amt. of fill	0.00 ft
Btm. H. Temp.	126.00 F
Hole Condition	Good
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	N
Tool Chased	N
Tester	Dan Bangle
Co. Rep.	Pat Deenihan
Contr.	Mallard
Rig #	2
Unit #	
Pump T.	

SAMPLES:
SENT TO:

Test Successful: Y

TEST HISTORY

Tk#9508 DST #2 Koster #6 RL Investment

Flag Points

	t(Min.)	P(PSIg)
A:	0.00	2043.80
B:	0.00	16.61
C:	29.00	55.97
D:	46.00	1228.11
E:	0.00	61.01
F:	30.00	92.56
G:	28.00	1141.24
Q:	0.00	1946.53

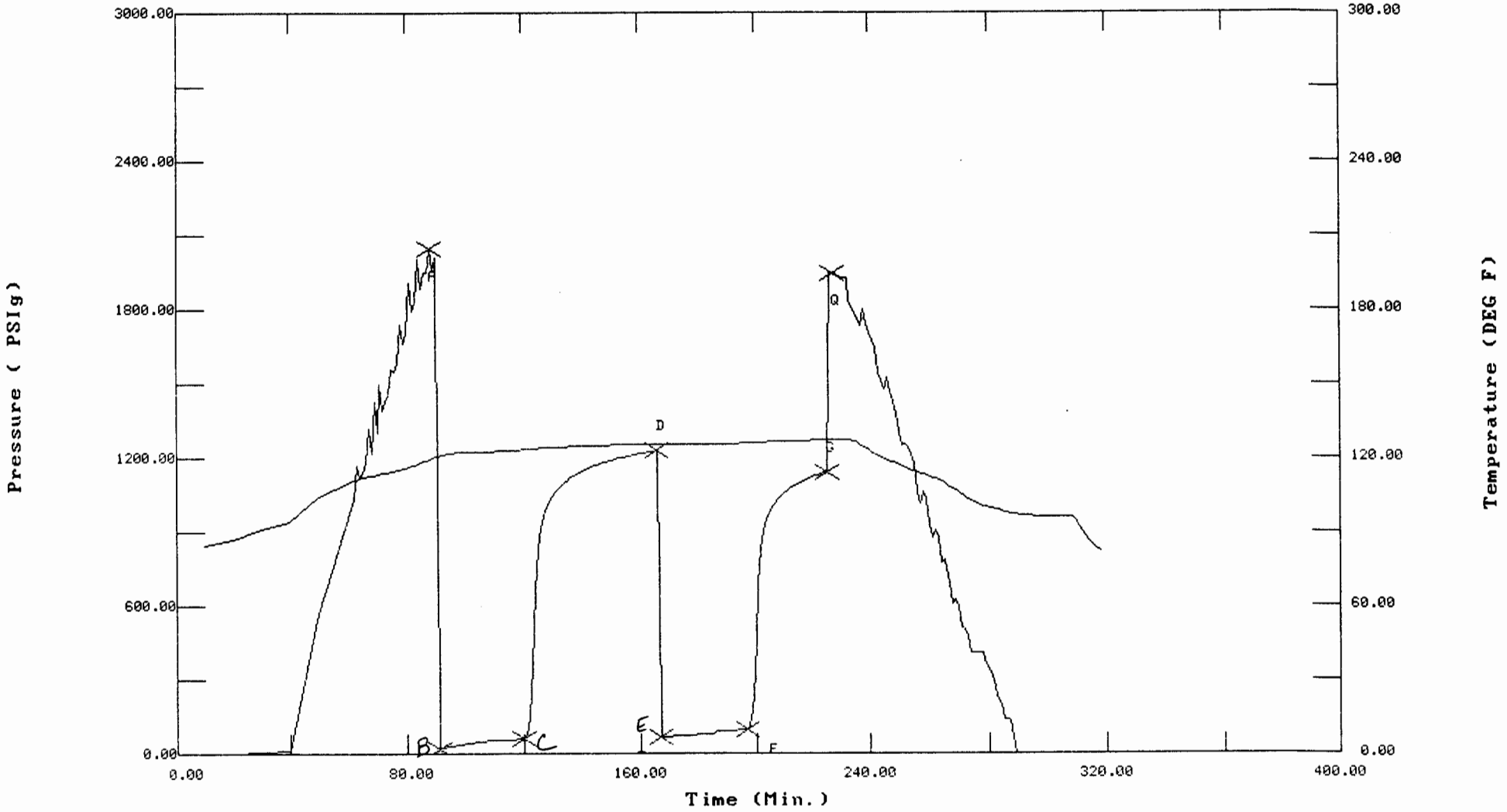
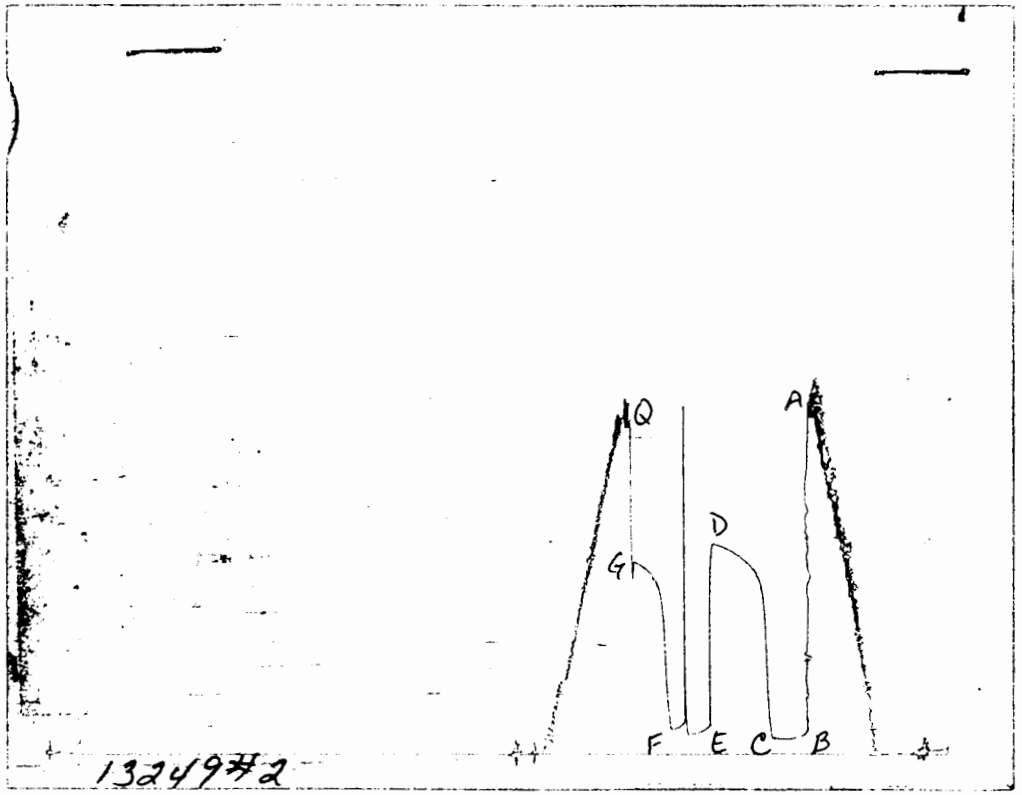


CHART PAGE



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

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Tk#9508 DST #2 Koster #6 RL Investment

DATE: 08/24/96 TIME: 00:20:26

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
***** Initial Hydro.	88.00	2043.8	0.0	119.38		
***** Start Flow 1	0.00	16.6	0.0	120.57		
	1.00	20.6	4.0	120.95		
	2.00	22.9	6.3	121.29		
	3.00	24.9	8.3	121.57		
	4.00	27.3	10.7	121.78		
	5.00	29.9	13.3	121.94		
	6.00	32.2	15.6	122.07		
	7.00	33.4	16.8	122.16		
	8.00	35.4	18.8	122.23		
	9.00	36.9	20.3	122.29		
	10.00	38.6	22.0	122.32		
	11.00	40.8	24.2	122.35		
	12.00	42.3	25.7	122.36		
	13.00	43.9	27.3	122.38		
	14.00	45.6	29.0	122.39		
	15.00	46.7	30.1	122.39		
	16.00	47.7	31.1	122.41		
	17.00	49.2	32.6	122.46		
	18.00	50.1	33.5	122.52		
	19.00	51.4	34.7	122.59		
	20.00	52.6	36.0	122.66		
	21.00	53.6	37.0	122.70		
	22.00	53.4	36.8	122.74		
	23.00	52.1	35.5	122.79		
	24.00	52.7	36.1	122.85		
	25.00	53.2	36.6	122.90		
	26.00	54.1	37.5	122.95		
	27.00	54.9	38.3	123.02		
	28.00	55.3	38.7	123.11		
****** End Flow 1	29.00	56.0	39.4	123.22		
****** Start Shutin 1	0.00	56.0	0.0	123.22	0.0000	0.003
	1.00	74.6	18.6	123.35	30.0000	0.006
	2.00	145.4	89.4	123.49	15.5000	0.021
	3.00	354.1	298.1	123.61	10.6667	0.125
	4.00	664.4	608.5	123.72	8.2500	0.441
	5.00	835.1	779.1	123.80	6.8000	0.697
	6.00	918.4	862.4	123.89	5.8333	0.843
	7.00	966.9	911.0	123.96	5.1429	0.935
	8.00	999.7	943.8	124.04	4.6250	0.999
	9.00	1024.1	968.1	124.12	4.2222	1.049
	10.00	1043.2	987.2	124.20	3.9000	1.088
	11.00	1059.1	1003.1	124.25	3.6364	1.122
	12.00	1072.8	1016.8	124.30	3.4167	1.151
	13.00	1084.4	1028.5	124.35	3.2308	1.176
	14.00	1094.8	1038.9	124.37	3.0714	1.199
	15.00	1104.2	1048.3	124.41	2.9333	1.219
	16.00	1112.7	1056.7	124.46	2.8125	1.238
	17.00	1120.5	1064.5	124.49	2.7059	1.256
	18.00	1127.8	1071.8	124.54	2.6111	1.272
	19.00	1134.5	1078.6	124.56	2.5263	1.287

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Tk#9508 DST #2 Koster #6 RL Investment

DATE: 08/24/96 TIME: 00:20:26

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	20.00	1140.8	1084.9	124.63	2.4500	1.301
	21.00	1146.5	1090.6	124.67	2.3810	1.315
	22.00	1152.1	1096.1	124.72	2.3182	1.327
	23.00	1157.2	1101.2	124.76	2.2609	1.339
	24.00	1162.1	1106.1	124.81	2.2083	1.350
	25.00	1166.6	1110.6	124.85	2.1600	1.361
	26.00	1170.9	1114.9	124.92	2.1154	1.371
	27.00	1175.1	1119.1	124.93	2.0741	1.381
	28.00	1179.1	1123.1	124.96	2.0357	1.390
	29.00	1182.8	1126.8	124.98	2.0000	1.399
	30.00	1186.4	1130.4	125.01	1.9667	1.408
	31.00	1189.8	1133.9	125.05	1.9355	1.416
	32.00	1193.0	1137.1	125.07	1.9062	1.423
	33.00	1196.2	1140.2	125.12	1.8788	1.431
	34.00	1199.2	1143.3	125.13	1.8529	1.438
	35.00	1202.0	1146.0	125.16	1.8286	1.445
	36.00	1204.9	1148.9	125.19	1.8056	1.452
	37.00	1207.7	1151.7	125.22	1.7838	1.459
	38.00	1210.1	1154.2	125.25	1.7632	1.464
	39.00	1212.7	1156.8	125.28	1.7436	1.471
	40.00	1215.2	1159.2	125.31	1.7250	1.477
	41.00	1217.5	1161.6	125.34	1.7073	1.482
	42.00	1219.8	1163.8	125.37	1.6905	1.488
	43.00	1221.9	1165.9	125.40	1.6744	1.493
	44.00	1224.0	1168.0	125.42	1.6591	1.498
	45.00	1226.0	1170.0	125.45	1.6444	1.503
****** End Shut-in 1	46.00	1228.1	1172.1	125.48	1.6304	1.508
****** Start Flow 2	0.00	61.0	0.0	125.45		
	1.00	61.8	0.8	125.42		
	2.00	63.1	2.1	125.36		
	3.00	64.6	3.6	125.28		
	4.00	66.1	5.1	125.20		
	5.00	67.3	6.3	125.13		
	6.00	68.3	7.3	125.07		
	7.00	69.1	8.1	125.05		
	8.00	69.7	8.7	125.04		
	9.00	70.2	9.1	125.04		
	10.00	71.1	10.1	125.04		
	11.00	71.8	10.8	125.05		
	12.00	72.5	11.5	125.07		
	13.00	73.2	12.2	125.10		
	14.00	73.9	12.9	125.12		
	15.00	74.6	13.6	125.15		
	16.00	75.3	14.3	125.18		
	17.00	76.3	15.3	125.22		
	18.00	77.3	16.3	125.25		
	19.00	88.5	27.5	125.30		
	20.00	86.1	25.1	125.35		
	21.00	86.1	25.1	125.38		
	22.00	87.1	26.1	125.42		
	23.00	88.1	27.1	125.45		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Tk#9508 DST #2 Koster #6 RL Investment

DATE: 08/24/96 TIME: 00:20:26

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	24.00	88.9	27.9	125.49		
	25.00	89.5	28.5	125.53		
	26.00	90.3	29.3	125.57		
	27.00	90.8	29.8	125.62		
	28.00	91.4	30.4	125.65		
	29.00	92.0	31.0	125.70		
***** End Flow 2	30.00	92.6	31.6	125.74		
***** Start Shutin 2	0.00	92.6	0.0	125.74	0.0000	0.009
	1.00	133.8	41.2	125.79	60.0000	0.018
	2.00	233.7	141.2	125.84	30.5000	0.055
	3.00	445.5	352.9	125.88	20.6667	0.198
	4.00	687.9	595.4	125.95	15.7500	0.473
	5.00	829.6	737.1	126.01	12.8000	0.688
	6.00	903.5	810.9	126.09	10.8333	0.816
	7.00	947.0	854.5	126.16	9.4286	0.897
	8.00	976.3	883.8	126.23	8.3750	0.953
	9.00	998.0	905.4	126.30	7.5556	0.996
	10.00	1015.2	922.6	126.35	6.9000	1.031
	11.00	1029.5	937.0	126.42	6.3636	1.060
	12.00	1041.9	949.3	126.46	5.9167	1.085
	13.00	1052.7	960.1	126.51	5.5385	1.108
	14.00	1062.2	969.6	126.56	5.2143	1.128
	15.00	1070.8	978.3	126.60	4.9333	1.147
	16.00	1078.7	986.2	126.63	4.6875	1.164
	17.00	1085.9	993.4	126.67	4.4706	1.179
	18.00	1092.6	1000.0	126.70	4.2778	1.194
	19.00	1098.8	1006.2	126.73	4.1053	1.207
	20.00	1104.6	1012.0	126.76	3.9500	1.220
	21.00	1110.1	1017.5	126.79	3.8095	1.232
	22.00	1115.3	1022.7	126.82	3.6818	1.244
	23.00	1120.1	1027.5	126.85	3.5652	1.255
	24.00	1124.8	1032.2	126.87	3.4583	1.265
	25.00	1129.2	1036.6	126.90	3.3600	1.275
	26.00	1133.3	1040.7	126.93	3.2692	1.284
	27.00	1137.4	1044.8	126.94	3.1852	1.294
***** End Shut-in 2	28.00	1141.2	1048.7	126.98	3.1071	1.302
***** Final Hydro.	227.00	1946.5	0.0	127.06		

*** TOOL DIAGRAM *** CONV

WELL NAME: Koster #6

LOCATION : 32-8S-29W Sheridan Cty KS

TICKET No. 9508 D.S.T. No. 2 DATE 8-24-96

TOTAL TOOL TO BOTTOM OF TOP PACKERS 20

INTERVAL TOOL .....

BOTTOM PACKERS AND ANCHOR 33

TOTAL TOOL 53

DRILL COLLAR ANCHOR IN INTERVAL .....

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 53

D.C. ABOVE TOOLS.Stands4 Single Total 248

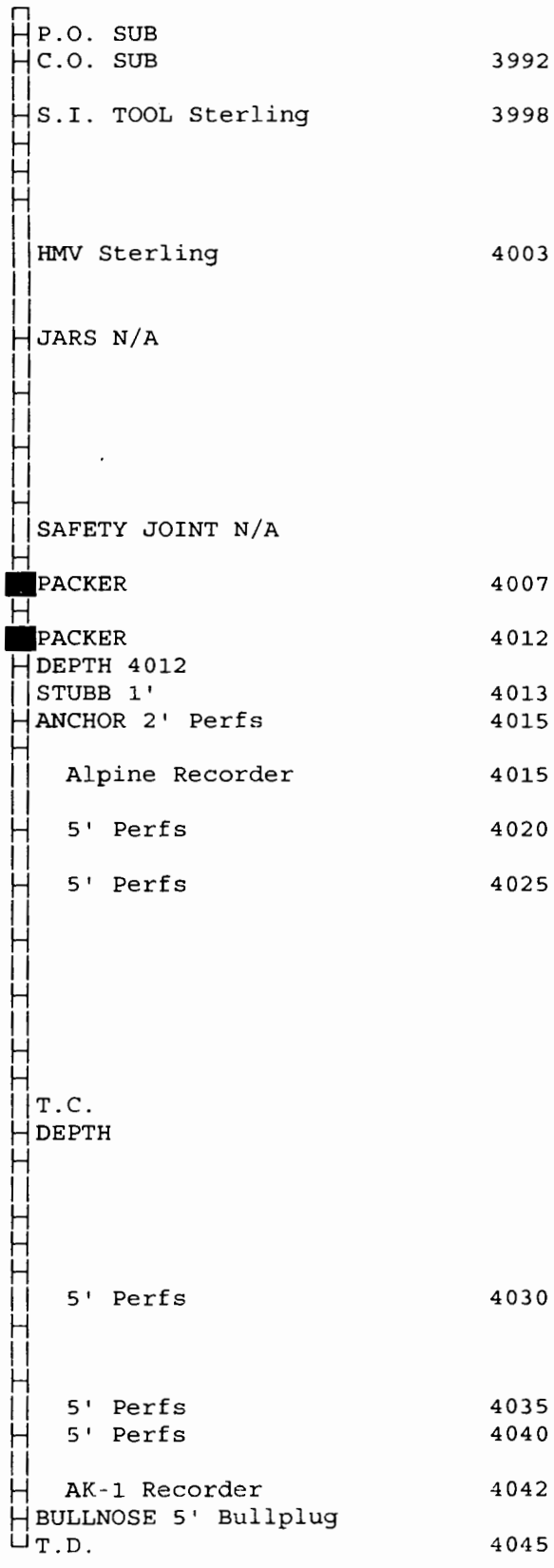
D.P. ABOVE TOOLS.Stands60 Single Total 3749

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4050

TOTAL DEPTH 4045

TOTAL DRILL PIPE ABOVE K.B. 5

REMARKS:
* Flushed tool on second open, good surge,
No help



TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 9508

Well Name & No. Koster #6 Test No. 2 Date 8-24-96

Company RL Investment Zone Tested "H" LKC

Address _____ Elevation 2810 KB 2805 GL

Co. Rep / Geo. Pat Deenihan Cont. Mallard #2 Est. Ft. of Pay ____ Por. ____ %

Location: Sec. 32 Twp. 8 Rge. 29 Co. Sheridan State Ks.

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

Interval Tested 4012 - 4045 Initial Str Wt./Lbs. 60,000 Unseated Str Wt./Lbs. 60,000

Anchor Length 33 Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 80,000

Top Packer Depth 4007 Tool Weight 1600

Bottom Packer Depth 4012 Hole Size — 7 7/8" ____ Rubber Size — 6 3/4" ____

Total Depth 4045 Wt. Pipe Run ____ Drill Collar Run 248

Mud Wt. 9.2 LCM ____ Vis. 47 WL 7 Drill Pipe Size 4.5 XH Ft. Run 3749

Blow Description I.F. Weak - building to 1½"

F.F. No blow - flushed tool - No blow

Recovery — Total Feet 135' GIP ____ Ft. in DC 135' Ft. in DP ____

Rec. 135' Feet Of D.M. w/oil spots on Top ‰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 126 °F Gravity ____ °API D@ ____ °F Corrected Gravity ____ °API

RW ____ @ ____ °F Chlorides ____ ppm Recovery Chlorides 3000 ppm System

(A) Initial Hydrostatic Mud	2209	2044	PSI	Recorder No.	2342	T-Started	16:07
(B) First Initial Flow Pressure	90	17	PSI	(depth)	4015	T-Open	17:40
(C) First Final Flow Pressure	90	56	PSI	Recorder No.	13249	T-Pulled	19:55
(D) Initial Shut-in Pressure	1240	1228	PSI	(depth)	4042	T-Out	21:30
(E) Second Initial Flow Pressure	124	61	PSI	Recorder No.			
(F) Second Final Flow Pressure	158	93	PSI	(depth)			
(G) Final Shut-in Pressure	1129	1141	PSI	Initial Opening	30	Test	600
(H) Final Hydrostatic Mud	2072	1947	PSI	Initial Shut-in	45	Jars	
	AK-1	Alpine		Final Flow	30	Safety Joint	
				Final Shut-in	30	Straddle	
						Circ. Sub	
				64 Strds		Sampler	
						Extra Packer	
						Elect. Rec. X	150
						Other	
						TOTAL PRICE $	750

Approved By ____

Our Representative Don Bangle

TRILOBITE TESTING L.L.C.

OPERATOR : R.L. Investment
WELL NAME: Koster #6
LOCATION : 32-8S-29W Sheridan Cty KS
INTERVAL : 4072.00 To 4094.00 ft

DATE 8-25-96
KB 2810.00 ft TICKET NO: 9509 DST #3
GR 2805.00 ft FORMATION: "J" LKC
TD 4094.00 ft TEST TYPE: CONV

RECORDER DATA

Mins			Field	1	2	3	4
PF	30	Rec.	13249	13249	2342		
SI	30	Range(Psi)	4500.0	4500.0	4995.0	0.0	0.0
SF	30	Clock(hrs)	12	12	Alpin		
FS	30	Depth(ft)	4091.0	4091.0	4074.0	0.0	0.0

	Field	1	2	3	4
A. Init Hydro	2288.0	2191.0	1997.0	0.0	0.0
B. First Flow	67.0	52.0	25.0	0.0	0.0
B1. Final Flow	67.0	52.0	23.0	0.0	0.0
C. In Shut-in	67.0	54.0	35.0	0.0	0.0
D. Init Flow	67.0	45.0	26.0	0.0	0.0
E. Final Flow	90.0	57.0	25.0	0.0	0.0
F. Fl Shut-in	79.0	50.0	35.0	0.0	0.0
G. Final Hydro	2152.0	2145.0	1995.0	0.0	0.0
Inside/Outside	O	O	I		

TIME DATA----------
PF Fr. 0755 to 0825 hr
IS Fr. 0825 to 0855 hr
SF Fr. 0855 to 0925 hr
FS Fr. 0925 to 0955 hr

T STARTED 0630 hr
T ON BOTM 0754 hr
T OPEN 0755 hr
T PULLED 0955 hr
T OUT 1125 hr

RECOVERY
Tot Fluid 15.00 ft of 15.00 ft in DC and 0.00 ft in DP
15.00 ft of Drilling mud

TOOL DATA----------

Tool Wt.	1500.00 lbs
Wt Set On Packer	20000.00 lbs
Wt Pulled Loose	70000.00 lbs
Initial Str Wt	60000.00 lbs
Unseated Str Wt	60000.00 lbs
Bot Choke	0.75 in
Hole Size	7.88 in
D Col. ID	2.25 in
D. Pipe ID	3.80 in
D.C. Length	248.00 ft
D.P. Length	3822.00 ft

SALINITY 0.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION
Initial Flow -
Weak, died in 7 min

Final Flow -
No blow, flushed tool, no blow

MUD DATA----------

Mud Type	Chemical
Weight	9.20 lb/cf
Vis.	47.00 S/L
W.L.	7.00 in3
F.C.	0.00 in
Mud Drop Y	0.0 ft
Amt. of fill	2.00 ft
Btm. H. Temp.	124.00 F
Hole Condition	Good
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	N
Tool Chased	N
Tester	Dan Bangle
Co. Rep.	Pat Deenihan
Contr.	Mallard
Rig #	2
Unit #	
Pump T.	

SAMPLES:
SENT TO:

Test Successful: Y

TEST HISTORY

Tk #9509 DST#3 Koster #6 RL Investment

Flag Points

	t(Min.)	P(PSIg)
A:	0.00	1997.31
B:	0.00	25.42
C:	23.00	23.41
D:	29.00	34.57
E:	0.00	26.18
F:	28.00	25.25
G:	30.00	35.16
Q:	0.00	1994.79

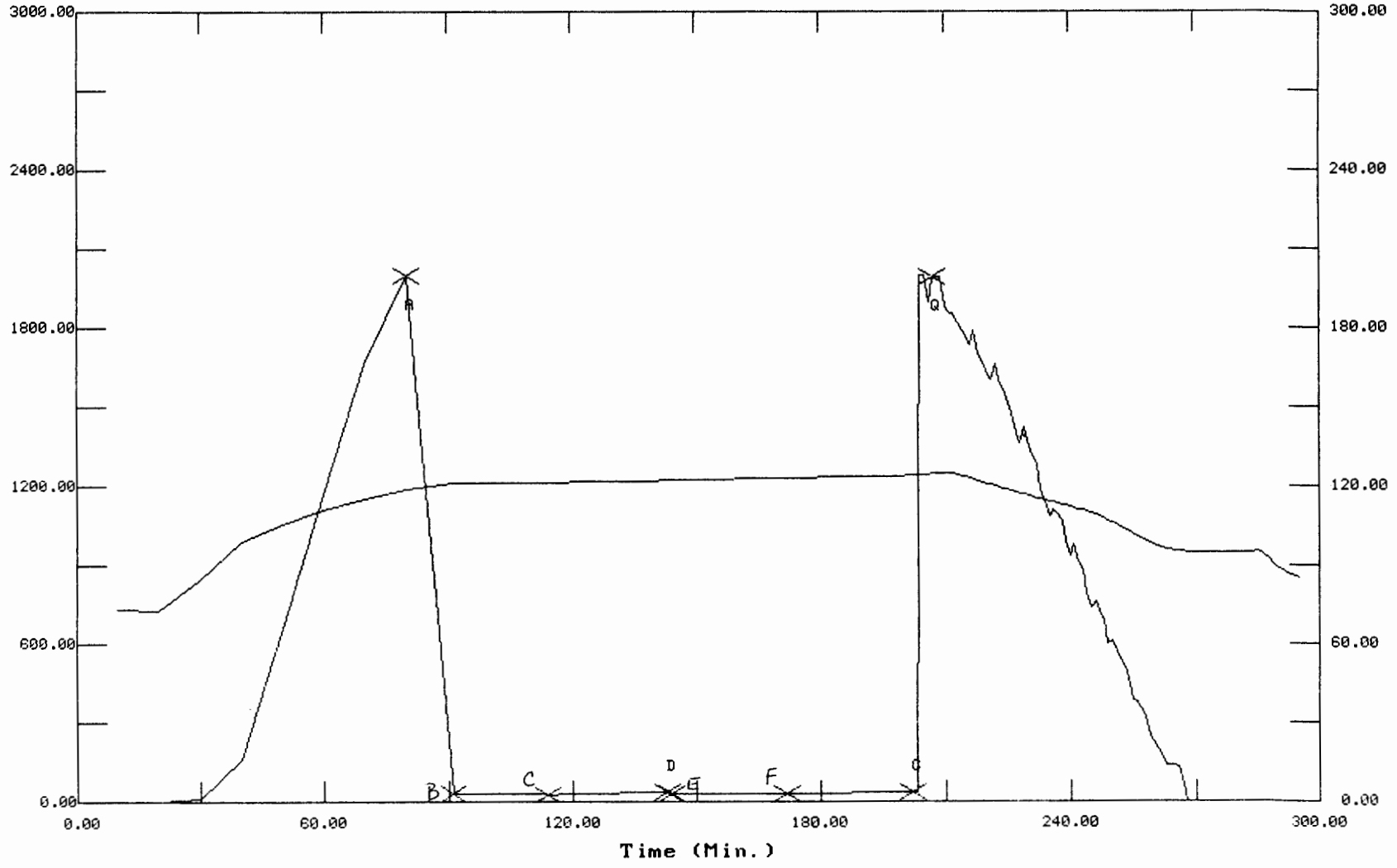
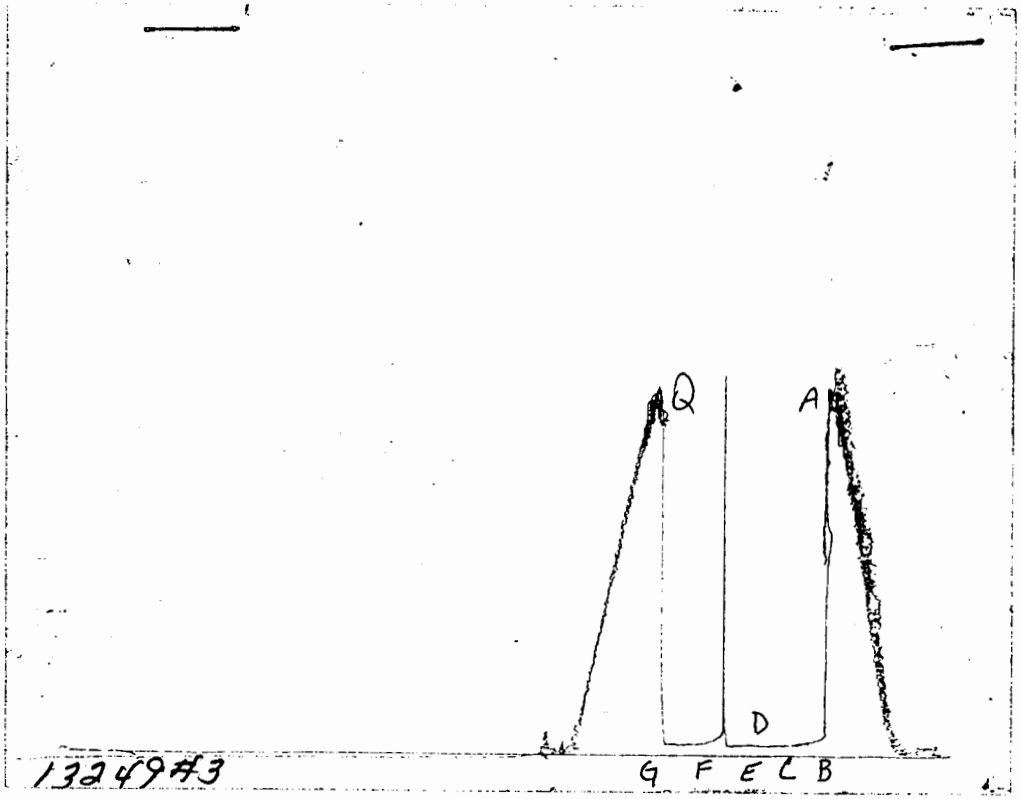


CHART PAGE



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

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Tk #9509 DST#3 Koster #6 RL Investment

DATE: 08/25/96 TIME: 06:31:29

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
***** Initial Hydro.	80.00	1997.3	0.0	118.89		
***** Start Flow 1	0.00	25.4	0.0	120.92		
	1.00	25.5	0.1	120.96		
	2.00	25.5	0.1	120.99		
	3.00	25.5	0.1	121.01		
	4.00	25.6	0.2	121.03		
	5.00	25.6	0.2	121.04		
	6.00	25.7	0.3	121.05		
	7.00	25.7	0.3	121.07		
	8.00	25.7	0.3	121.09		
	9.00	25.8	0.4	121.09		
	10.00	25.8	0.4	121.10		
	11.00	25.8	0.3	121.11		
	12.00	25.9	0.5	121.13		
	13.00	25.9	0.5	121.14		
	14.00	25.9	0.5	121.15		
	15.00	25.9	0.5	121.16		
	16.00	25.9	0.5	121.18		
	17.00	25.9	0.5	121.19		
	18.00	25.9	0.5	121.21		
	19.00	26.0	0.6	121.23		
	20.00	26.0	0.6	121.24		
	21.00	26.0	0.6	121.26		
	22.00	25.0	-0.4	121.28		
***** End Flow 1	23.00	23.4	-2.0	121.30		
***** Start Shutin 1	0.00	23.4	0.0	121.30	0.0000	0.001
	1.00	24.0	0.6	121.30	24.0000	0.001
	2.00	24.5	1.1	121.34	12.5000	0.001
	3.00	24.8	1.4	121.36	8.6667	0.001
	4.00	25.3	1.9	121.38	6.7500	0.001
	5.00	25.8	2.3	121.41	5.6000	0.001
	6.00	26.1	2.7	121.43	4.8333	0.001
	7.00	26.5	3.1	121.46	4.2857	0.001
	8.00	26.9	3.5	121.48	3.8750	0.001
	9.00	27.4	3.9	121.51	3.5556	0.001
	10.00	27.7	4.3	121.53	3.3000	0.001
	11.00	28.1	4.7	121.56	3.0909	0.001
	12.00	28.4	5.0	121.58	2.9167	0.001
	13.00	28.9	5.5	121.61	2.7692	0.001
	14.00	29.2	5.8	121.64	2.6429	0.001
	15.00	29.6	6.2	121.67	2.5333	0.001
	16.00	30.0	6.6	121.69	2.4375	0.001
	17.00	30.4	7.0	121.72	2.3529	0.001
	18.00	30.7	7.3	121.75	2.2778	0.001
	19.00	31.0	7.6	121.78	2.2105	0.001
	20.00	31.4	8.0	121.81	2.1500	0.001
	21.00	31.8	8.4	121.84	2.0952	0.001
	22.00	32.2	8.8	121.87	2.0455	0.001
	23.00	32.6	9.1	121.90	2.0000	0.001
	24.00	33.0	9.6	121.93	1.9583	0.001
	25.00	33.2	9.8	121.96	1.9200	0.001

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Tk #9509 DST#3 Koster #6 RL Investment

DATE: 08/25/96 TIME: 06:31:29

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	26.00	33.6	10.2	122.00	1.8846	0.001
	27.00	34.0	10.6	122.02	1.8519	0.001
	28.00	34.3	10.9	122.06	1.8214	0.001
****** End Shut-in 1	29.00	34.6	11.2	122.09	1.7931	0.001
****** Start Flow 2	0.00	26.2	0.0	122.12		
	1.00	26.2	0.0	122.14		
	2.00	26.2	0.0	122.18		
	3.00	26.2	0.0	122.21		
	4.00	26.2	0.0	122.24		
	5.00	26.2	0.0	122.27		
	6.00	26.3	0.1	122.30		
	7.00	26.3	0.1	122.33		
	8.00	26.3	0.2	122.36		
	9.00	26.3	0.2	122.40		
	10.00	26.3	0.2	122.43		
	11.00	26.4	0.3	122.47		
	12.00	26.4	0.3	122.50		
	13.00	26.5	0.3	122.53		
	14.00	25.8	-0.3	122.56		
	15.00	27.1	0.9	122.60		
	16.00	27.2	1.0	122.64		
	17.00	27.3	1.1	122.66		
	18.00	27.3	1.1	122.69		
	19.00	27.3	1.1	122.71		
	20.00	27.4	1.2	122.75		
	21.00	27.4	1.3	122.77		
	22.00	27.4	1.3	122.80		
	23.00	27.4	1.3	122.83		
	24.00	27.4	1.3	122.86		
	25.00	27.5	1.3	122.89		
	26.00	27.5	1.3	122.93		
	27.00	27.5	1.3	122.96		
****** End Flow 2	28.00	25.3	-0.9	122.99		
****** Start Shutin 2	0.00	25.3	0.0	122.99	0.0000	0.001
	1.00	25.9	0.7	123.02	52.0000	0.001
	2.00	26.3	1.1	123.05	26.5000	0.001
	3.00	26.6	1.3	123.09	18.0000	0.001
	4.00	27.0	1.8	123.12	13.7500	0.001
	5.00	27.4	2.1	123.15	11.2000	0.001
	6.00	27.6	2.4	123.18	9.5000	0.001
	7.00	27.9	2.7	123.21	8.2857	0.001
	8.00	28.4	3.1	123.24	7.3750	0.001
	9.00	28.7	3.4	123.27	6.6667	0.001
	10.00	28.9	3.7	123.30	6.1000	0.001
	11.00	29.4	4.1	123.33	5.6364	0.001
	12.00	29.7	4.4	123.36	5.2500	0.001
	13.00	30.1	4.9	123.39	4.9231	0.001
	14.00	30.3	5.0	123.42	4.6429	0.001
	15.00	30.5	5.3	123.45	4.4000	0.001
	16.00	30.9	5.6	123.48	4.1875	0.001
	17.00	31.3	6.0	123.51	4.0000	0.001

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Tk #9509 DST#3 Koster #6 RL Investment

DATE: 08/25/96 TIME: 06:31:29

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	18.00	31.6	6.4	123.54	3.8333	0.001
	19.00	32.0	6.7	123.56	3.6842	0.001
	20.00	32.3	7.0	123.59	3.5500	0.001
	21.00	32.6	7.3	123.63	3.4286	0.001
	22.00	32.9	7.6	123.65	3.3182	0.001
	23.00	33.1	7.9	123.68	3.2174	0.001
	24.00	33.5	8.2	123.71	3.1250	0.001
	25.00	33.8	8.6	123.74	3.0400	0.001
	26.00	34.2	8.9	123.77	2.9615	0.001
	27.00	34.2	9.0	123.80	2.8889	0.001
	28.00	34.6	9.3	123.82	2.8214	0.001
	29.00	34.7	9.5	123.86	2.7586	0.001
***** End Shut-in 2	30.00	35.2	9.9	123.88	2.7000	0.001
***** Final Hydro.	207.00	1994.8	0.0	124.43		

*** TOOL DIAGRAM *** CONV

WELL NAME: Koster #6

LOCATION : 32-8S-29W Sheridan Cty KS

TICKET No. 9509 D.S.T. No. 3 DATE 8-25-96

TOTAL TOOL TO BOTTOM OF TOP PACKERS 20

INTERVAL TOOL .....

BOTTOM PACKERS AND ANCHOR 22

TOTAL TOOL 42

DRILL COLLAR ANCHOR IN INTERVAL .....

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 42

D.C. ABOVE TOOLS.Stands4 Single Total 248

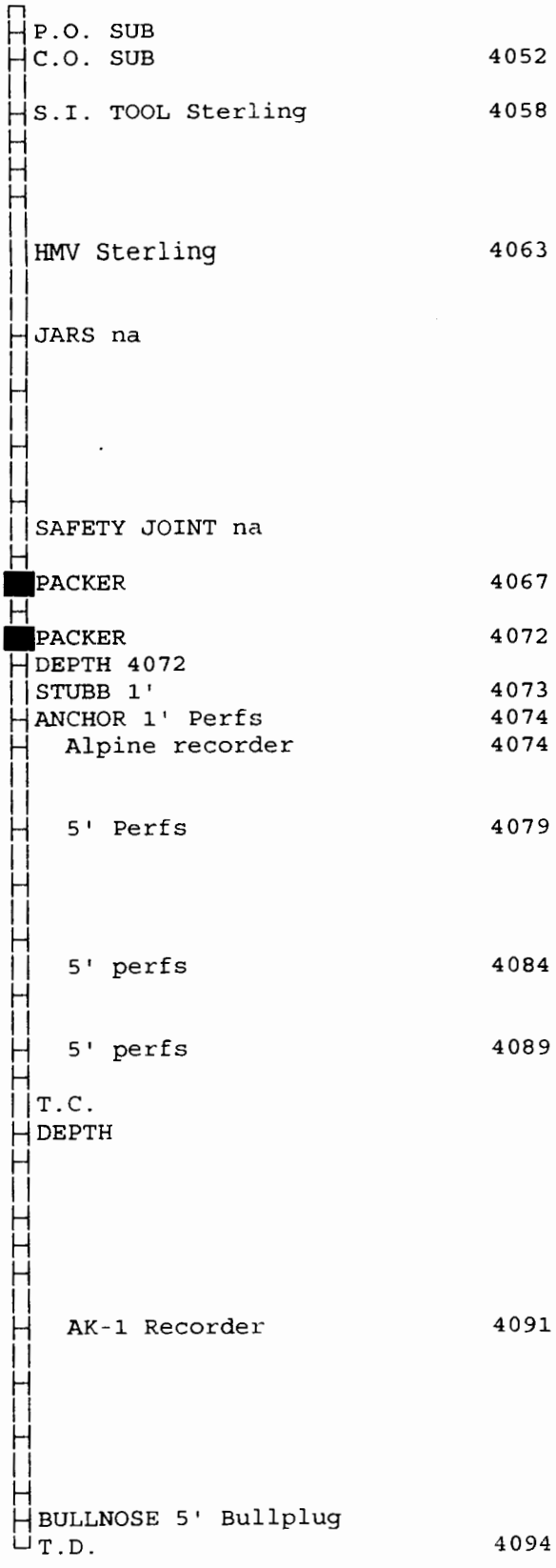
D.P. ABOVE TOOLS.Stands61 Single Total 3822

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4112

TOTAL DEPTH 4094

TOTAL DRILL PIPE ABOVE K.B. 18

REMARKS:
* Flushed tool on second open.



TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

№ 9509

Well Name & No. Koster #6 Test No. 3 Date 8-25-96

Company R L Investment Zone Tested "I" LKC

Address _____ Elevation 2810 KB 2805 GL

Co. Rep / Geo. Pat Deenihan Cont. Mallard #2 Est. Ft. of Pay ____ Por. ____ %

Location: Sec. 32 Twp. 8 Rge. 29 Co. Sheridan State Ks

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

Interval Tested 4072 - 4094 Initial Str Wt./Lbs. 60,000 Unseated Str Wt./Lbs. 60,000

Anchor Length 22 Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 70,000

Top Packer Depth 4067 Tool Weight 1500

Bottom Packer Depth 4072 Hole Size — 7 7/8" ____ Rubber Size — 6 3/4" ____

Total Depth 4094 Wt. Pipe Run ____ Drill Collar Run 248

Mud Wt. 9.2 LCM ____ Vis. 47 WL 7 Drill Pipe Size 4.5 XH Ft. Run 3822

Blow Description Slid Tool 2' to bottom - Weak blow - Died in 2min.

F.F. No blow - flushed Tool - No blow

Recovery — Total Feet 15 GIP ____ Ft. in DC 15 Ft. in DP ____

Rec. 15 Feet Of D.M. %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 124 °F Gravity ____ °API D@ ____ °F Corrected Gravity ____ °API

RW ____ @ ____ °F Chlorides ____ ppm Recovery Chlorides 3,000 ppm System

(A) Initial Hydrostatic Mud	2288	1997	PSI	Recorder No.	2342	T-Started	06:30
(B) First Initial Flow Pressure	67	25	PSI	(depth)	4074	T-Open	07:55
(C) First Final Flow Pressure	67	26	PSI	Recorder No.	13249	T-Pulled	09:55
(D) Initial Shut-in Pressure	67	35	PSI	(depth)	4091	T-Out	11:25
(E) Second Initial Flow Pressure	67	26	PSI	Recorder No.	____		
(F) Second Final Flow Pressure	90	28	PSI	(depth)	____		
(G) Final Shut-in Pressure	79	39	PSI	Initial Opening	30	Test	600
(H) Final Hydrostatic Mud	2152	200	PSI	Initial Shut-in	30	Jars	____
	AK-1	Alpine		Final Flow	30	Safety Joint	____
				Final Shut-in	30	Straddle	____
						Circ. Sub	____
				65 stds		Sampler	____
						Extra Packer	____
						Elect. Rec. X	150
						Other	____
						TOTAL PRICE $	750

S

D

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 Rample