

Well Name:
Company:
Location-
County:
Date:

WERTH #15-33
L. B. INDUSTRIES
Sec: 15 Twp: 10S
SHERIDAN State: KS
12/2/95

Rge: 26W

TRILOBITE TESTING L.L.C.

OPERATOR : L. B. Industries Inc.
 WELL NAME: Werth #15-33
 LOCATION : 15-10S-26W
 INTERVAL : 3878.00 To 3897.00 ft

DATE 11-29-95
 KB 2580.00 ft
 GR 2575.00 ft
 TD 3897.00 ft

TICKET NO: 8460 DST #1
 FORMATION: Lansing/KC 35'zn.
 TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins	Field	1	2	3	4
PF 30 Rec.	13339	13339	2351		
SI 45 Range(Psi)	4025.0	4025.0	4995.0	0.0	0.0
SF 45 Clock(hrs)	AK-1	AK-1	Alpin		
FS 60 Depth(ft)	3892.0	3892.0	3880.0	0.0	0.0

TIME DATA-----

PF Fr. 0529 to 0559 hr
 IS Fr. 0559 to 0644 hr
 SF Fr. 0644 to 0729 hr
 FS Fr. 0729 to 0829 hr

	Field	1	2	3	4
A. Init Hydro	1882.0	1886.0	1846.0	0.0	0.0
B. First Flow	31.0	39.0	28.0	0.0	0.0
B1. Final Flow	31.0	39.0	28.0	0.0	0.0
C. In Shut-in	31.0	39.0	32.0	0.0	0.0
D. Init Flow	31.0	39.0	27.0	0.0	0.0
E. Final Flow	31.0	39.0	27.0	0.0	0.0
F. Fl Shut-in	31.0	39.0	31.0	0.0	0.0
G. Final Hydro	1862.0	1826.0	1828.0	0.0	0.0
Inside/Outside	O	O	I		

T STARTED 0313 hr
 T ON BOTM 0525 hr
 T OPEN 0529 hr
 T PULLED 0829 hr
 T OUT 1015 hr

TOOL DATA-----

Tool Wt. 1800.00 lbs
 Wt Set On Packer 20000.00 lbs
 Wt Pulled Loose 70000.00 lbs
 Initial Str Wt 45000.00 lbs
 Unseated Str Wt 45000.00 lbs
 Bot Choke 0.75 in
 Hole Size 7.88 in
 D Col. ID 0.00 in
 D. Pipe ID 3.80 in
 D.C. Length 0.00 ft
 D.P. Length 3857.00 ft

RECOVERY

Tot Fluid 1.00 ft of 0.00 ft in DC and 1.00 ft in DP
 1.00 ft of Drilling mud in sampler w/ spots of oil

SALINITY 1500.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow -
 .25" blow decreased & died at 30 min

Final Flow -
 No return blow

MUD DATA-----

Mud Type Chemical
 Weight 8.80 lb/c
 Vis. 46.00 S/L
 W.L. 8.60 in3
 F.C. 0.00 in
 Mud Drop N

Amt. of fill 0.00 ft
 Btm. H. Temp. 112.00 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 Rod Steinbrink
 Co. Rep. Dan Fredlund
 Contr. White & Ellis
 Rig # #9
 Unit #
 Pump T.

SAMPLES:
 SENT TO:

Test Successful: Y

TEST HISTORY

8460 DST #1 Werth #15-33 L.B. Industries Inc.

Flag Points

t (Min.) P (PSig)

A:	0.00	1846.40
B:	0.00	27.52
C:	30.00	28.11
D:	45.00	31.63
E:	0.00	27.27
F:	46.00	27.02
G:	58.00	31.04
Q:	0.00	1827.77

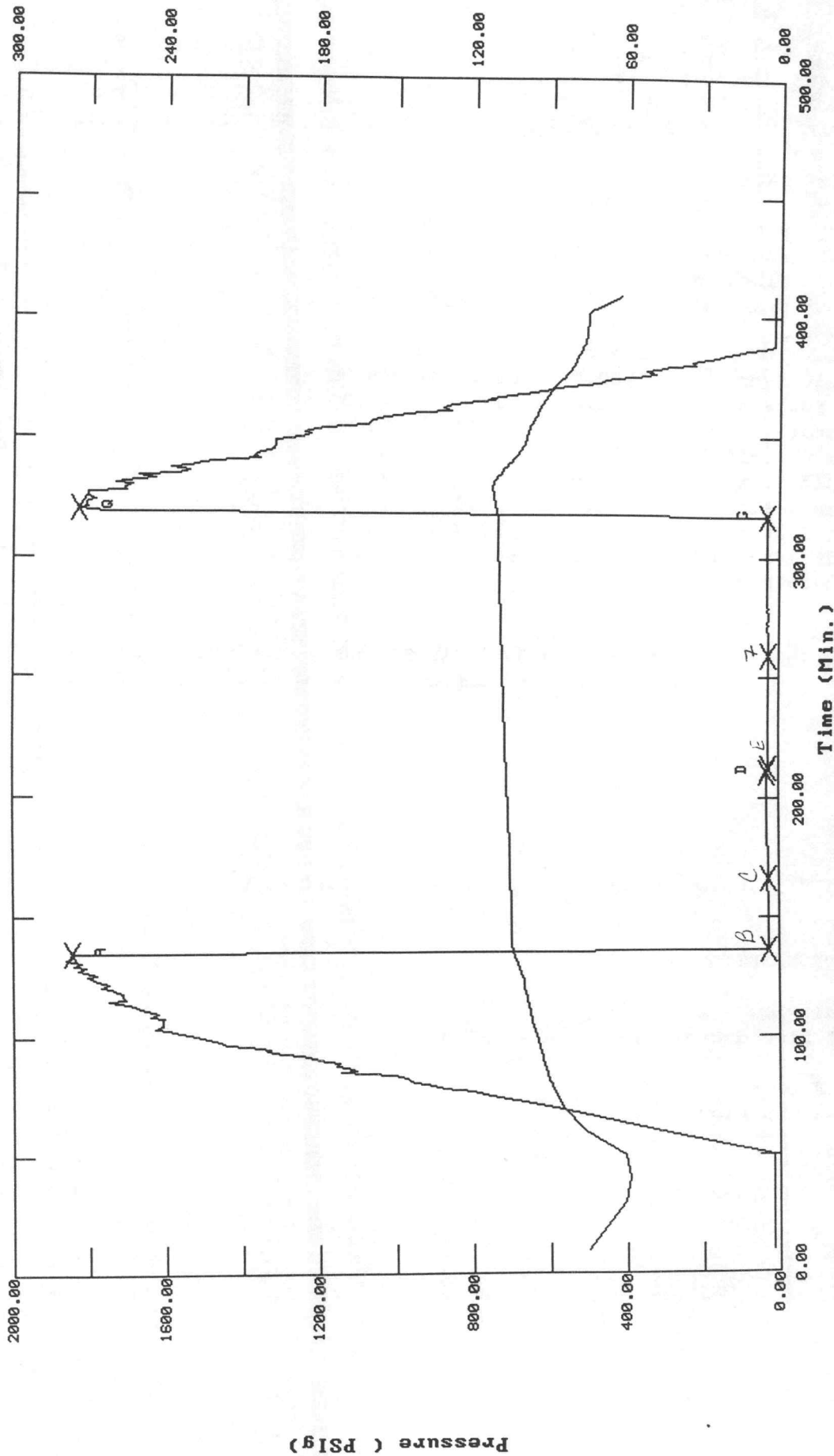
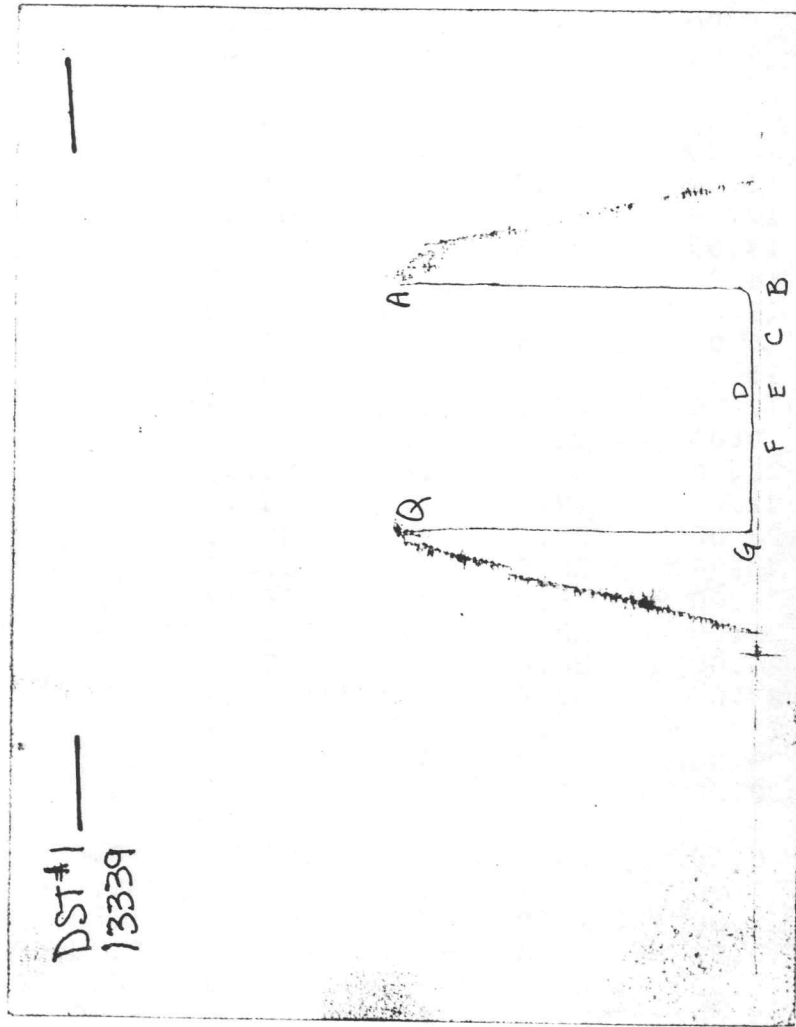


CHART PAGE



This is an actual photograph of recorder chart

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 8460 DST #1 Werth #15-33 L.B.Industries Inc.

DATE: 11/29/95 TIME: 03:13:18

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
***** Initial Hydro.	135.00	1846.4	0.0	104.10		
***** Start Flow 1	0.00	27.5	0.0	104.26		
	1.00	27.7	0.2	104.48		
	2.00	28.2	0.7	104.65		
	3.00	28.3	0.8	104.78		
	4.00	27.8	0.3	104.88		
	5.00	27.9	0.3	104.96		
	6.00	27.9	0.3	105.02		
	7.00	28.4	0.8	105.06		
	8.00	27.9	0.4	105.09		
	9.00	28.4	0.8	105.11		
	10.00	27.9	0.3	105.12		
	11.00	28.3	0.8	105.12		
	12.00	27.9	0.3	105.13		
	13.00	28.3	0.8	105.13		
	14.00	27.9	0.3	105.13		
	15.00	27.9	0.3	105.14		
	16.00	27.9	0.3	105.13		
	17.00	27.9	0.3	105.13		
	18.00	27.9	0.3	105.13		
	19.00	28.3	0.8	105.13		
	20.00	27.9	0.3	105.14		
	21.00	27.9	0.3	105.14		
	22.00	28.4	0.8	105.15		
	23.00	28.3	0.8	105.16		
	24.00	28.2	0.7	105.17		
	25.00	28.5	1.0	105.18		
	26.00	28.4	0.9	105.20		
	27.00	28.4	0.9	105.20		
	28.00	28.0	0.5	105.23		
	29.00	27.9	0.4	105.25		
***** End Flow 1	30.00	28.1	0.6	105.26		
***** Start Shutin 1	0.00	28.1	0.0	105.26	0.0000	0.001
	1.00	27.7	-0.4	105.29	31.0000	0.001
	2.00	27.8	-0.3	105.30	16.0000	0.001
	3.00	27.8	-0.3	105.32	11.0000	0.001
	4.00	27.8	-0.3	105.36	8.5000	0.001
	5.00	27.4	-0.7	105.37	7.0000	0.001
	6.00	27.4	-0.7	105.40	6.0000	0.001
	7.00	27.9	-0.3	105.43	5.2857	0.001
	8.00	27.9	-0.2	105.46	4.7500	0.001
	9.00	28.0	-0.1	105.47	4.3333	0.001
	10.00	28.2	0.1	105.49	4.0000	0.001
	11.00	27.9	-0.3	105.52	3.7273	0.001
	12.00	28.4	0.3	105.56	3.5000	0.001
	13.00	28.0	-0.1	105.58	3.3077	0.001
	14.00	28.4	0.3	105.61	3.1429	0.001
	15.00	28.7	0.6	105.64	3.0000	0.001
	16.00	29.0	0.9	105.69	2.8750	0.001
	17.00	29.1	1.0	105.72	2.7647	0.001
	18.00	28.7	0.6	105.75	2.6667	0.001

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 8460 DST #1 Werth #15-33 L.B.Industries Inc.

DATE: 11/29/95

TIME: 03:13:18

	Time	Pressure PSI _g	delta P PSI _g	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	19.00	29.2	1.1	105.80	2.5789	0.001
	20.00	28.8	0.7	105.82	2.5000	0.001
	21.00	29.3	1.2	105.86	2.4286	0.001
	22.00	29.2	1.1	105.90	2.3636	0.001
	23.00	29.4	1.3	105.93	2.3043	0.001
	24.00	28.9	0.8	105.95	2.2500	0.001
	25.00	28.9	0.8	106.03	2.2000	0.001
	26.00	29.0	0.9	106.06	2.1538	0.001
	27.00	29.1	1.0	106.09	2.1111	0.001
	28.00	29.5	1.4	106.13	2.0714	0.001
	29.00	29.5	1.4	106.17	2.0345	0.001
	30.00	29.2	1.1	106.22	2.0000	0.001
	31.00	29.5	1.4	106.26	1.9677	0.001
	32.00	29.3	1.2	106.29	1.9375	0.001
	33.00	29.3	1.2	106.35	1.9091	0.001
	34.00	29.4	1.3	106.38	1.8824	0.001
	35.00	29.8	1.7	106.42	1.8571	0.001
	36.00	29.9	1.8	106.45	1.8333	0.001
	37.00	30.0	1.8	106.49	1.8108	0.001
	38.00	29.7	1.6	106.53	1.7895	0.001
	39.00	29.8	1.7	106.57	1.7692	0.001
	40.00	30.2	2.1	106.61	1.7500	0.001
	41.00	30.0	1.8	106.64	1.7317	0.001
	42.00	30.5	2.4	106.69	1.7143	0.001
	43.00	31.0	2.9	106.74	1.6977	0.001
	44.00	31.1	3.0	106.78	1.6818	0.001
***** End Shut-in 1	45.00	31.6	3.5	106.82	1.6667	0.001
***** Start Flow 2	0.00	27.3	0.0	106.88		
	1.00	28.0	0.8	106.93		
	2.00	27.4	0.2	106.97		
	3.00	27.9	0.6	107.01		
	4.00	27.9	0.7	107.06		
	5.00	28.0	0.8	107.10		
	6.00	27.7	0.4	107.15		
	7.00	28.0	0.8	107.20		
	8.00	27.9	0.7	107.26		
	9.00	27.8	0.5	107.29		
	10.00	27.4	0.1	107.30		
	11.00	27.6	0.3	107.30		
	12.00	27.6	0.3	107.31		
	13.00	27.2	-0.1	107.32		
	14.00	27.6	0.3	107.37		
	15.00	27.5	0.3	107.42		
	16.00	27.2	-0.1	107.47		
	17.00	27.5	0.3	107.53		
	18.00	27.6	0.3	107.56		
	19.00	27.1	-0.2	107.60		
	20.00	27.3	0.0	107.65		
	21.00	27.6	0.3	107.69		
	22.00	27.8	0.5	107.73		
	23.00	28.2	0.9	107.77		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 8460 DST #1 Werth #15-33 L.B.Industries Inc.

DATE: 11/29/95 TIME: 03:13:18

	Time	Pressure PSI _g	delta P PSI _g	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	24.00	28.2	0.9	107.82		
	25.00	27.8	0.5	107.85		
	26.00	27.8	0.5	107.89		
	27.00	28.2	0.9	107.93		
	28.00	28.2	0.9	107.98		
	29.00	28.1	0.8	108.01		
	30.00	27.6	0.3	108.05		
	31.00	27.6	0.3	108.09		
	32.00	27.6	0.3	108.13		
	33.00	27.5	0.3	108.17		
	34.00	27.5	0.3	108.21		
	35.00	27.9	0.7	108.25		
	36.00	27.9	0.6	108.30		
	37.00	27.8	0.5	108.34		
	38.00	27.9	0.7	108.35		
	39.00	27.8	0.5	108.36		
	40.00	27.8	0.5	108.42		
	41.00	27.8	0.5	108.46		
	42.00	27.4	0.2	108.49		
	43.00	27.4	0.2	108.54		
	44.00	27.9	0.6	108.57		
	45.00	27.4	0.1	108.61		
*****	End Flow 2	46.00	27.0	-0.3	108.65	
*****	Start Shutin 2	0.00	27.0	0.0	108.65	0.0000
		1.00	27.5	0.5	108.69	77.0000
		2.00	27.1	0.1	108.73	39.0000
		3.00	27.8	0.8	108.76	26.3333
		4.00	27.9	0.9	108.79	20.0000
		5.00	28.1	1.1	108.83	16.2000
		6.00	27.7	0.7	108.87	13.6667
		7.00	27.8	0.8	108.91	11.8571
		8.00	27.9	0.8	108.94	10.5000
		9.00	28.2	1.2	108.98	9.4444
		10.00	28.3	1.3	109.01	8.6000
		11.00	28.4	1.4	109.06	7.9091
		12.00	28.4	1.4	109.08	7.3333
		13.00	28.1	1.1	109.12	6.8462
		14.00	28.6	1.6	109.14	6.4286
		15.00	28.1	1.1	109.17	6.0667
		16.00	28.3	1.3	109.20	5.7500
		17.00	28.3	1.3	109.22	5.4706
		18.00	28.4	1.3	109.27	5.2222
		19.00	28.7	1.7	109.30	5.0000
		20.00	28.4	1.3	109.33	4.8000
		21.00	28.4	1.4	109.37	4.6190
		22.00	28.4	1.4	109.42	4.4545
		23.00	28.5	1.5	109.45	4.3043
		24.00	29.0	2.0	109.48	4.1667
		25.00	28.6	1.6	109.52	4.0400
		26.00	29.3	2.3	109.55	3.9231
		27.00	29.4	2.4	109.60	3.8148

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 8460 DST #1 Werth #15-33 L.B.Industries Inc.

DATE: 11/29/95

TIME: 03:13:18

Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶	
28.00	29.1	2.1	109.63	3.7143	0.001	
29.00	29.2	2.2	109.68	3.6207	0.001	
30.00	29.3	2.3	109.70	3.5333	0.001	
31.00	29.7	2.7	109.74	3.4516	0.001	
32.00	29.7	2.7	109.75	3.3750	0.001	
33.00	29.8	2.8	109.76	3.3030	0.001	
34.00	29.4	2.3	109.81	3.2353	0.001	
35.00	29.4	2.4	109.84	3.1714	0.001	
36.00	29.4	2.4	109.88	3.1111	0.001	
37.00	30.0	2.9	109.92	3.0541	0.001	
38.00	29.6	2.6	109.95	3.0000	0.001	
39.00	29.5	2.5	109.98	2.9487	0.001	
40.00	30.1	3.1	110.03	2.9000	0.001	
41.00	30.0	3.0	110.05	2.8537	0.001	
42.00	29.6	2.6	110.07	2.8095	0.001	
43.00	30.1	3.1	110.12	2.7674	0.001	
44.00	29.8	2.8	110.14	2.7273	0.001	
45.00	29.8	2.8	110.19	2.6889	0.001	
46.00	29.9	2.9	110.21	2.6522	0.001	
47.00	30.4	3.4	110.25	2.6170	0.001	
48.00	30.0	3.0	110.28	2.5833	0.001	
49.00	30.5	3.4	110.31	2.5510	0.001	
50.00	30.1	3.1	110.34	2.5200	0.001	
51.00	30.5	3.4	110.38	2.4902	0.001	
52.00	30.2	3.2	110.41	2.4615	0.001	
53.00	30.7	3.7	110.44	2.4340	0.001	
54.00	30.4	3.4	110.47	2.4074	0.001	
55.00	30.4	3.4	110.50	2.3818	0.001	
56.00	30.8	3.8	110.53	2.3571	0.001	
57.00	30.6	3.6	110.56	2.3333	0.001	
***** End Shut-in 2	58.00	31.0	4.0	110.59	2.3103	0.001
***** Final Hydro.	320.00	1827.8	0.0	110.98		

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Werth #15-33

LOCATION : 15-10S-26W,

TICKET No. 8460 D.S.T. No. 1 DATE 11-29-95

TOTAL TOOL TO BOTTOM OF TOP PACKERS 30

INTERVAL TOOL 19

BOTTOM PACKERS AND ANCHOR

TOTAL TOOL 49

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 49

D.C. ABOVE TOOLS.Stands Single Total

D.P. ABOVE TOOLS.Stands62 Single Total 3857

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 3906

TOTAL DEPTH 3897

TOTAL DRILL PIPE ABOVE K.B. 9

REMARKS:

FLUID SAMPLER DATA

SAMPLER RECOVERY -
Oil trace, Mud 1000 ml, Pressure 0 PSI,
Total 1000 ml

SAMPLER ANALYSIS -
Resistivity 3.3 ohms @ 80 F;
Chlorides 1500 ppm

PIT MUD ANALYSIS -
Chlorides 1500 ppm, Resist 3.3 ohms @ 80 F;
Viscosity 46

P.O. SUB 120' above DP.	3728
C.O. SUB 1'	3848
S.I. TOOL 5'	3854
3' Sampler	3857
HMV 5'	3862
JARS 5'	3867
SAFETY JOINT 2'	3869
PACKER 5'	3873
PACKER 5'	3878
DEPTH 3878	
STUBB 1'	3879
ANCHOR	
Alpine Recorder	3880
13' perf	3892
T.C. DEPTH	
AK-1 recorder	3892
BULLNOSE 5' perf	
T.D.	3897

TRILOBITE TESTING L.L.C.

OPERATOR : L.B.Industries

DATE 11-29-95

WELL NAME: Werth #15-33

KB 2580.00 ft

TICKET NO: 8461

DST #2

LOCATION : 15-10S-26W, Sheridan KS

GR 2575.00 ft

FORMATION: Lansing/KC 50'zn

INTERVAL : 3898.00 To 3924.00 ft

TD 3924.00 ft

TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	13339	13339	2351			PF Fr. 1945 to 2015 hr
SI 45 Range(Psi)	4025.0	4025.0	4995.0	0.0	0.0	IS Fr. 2015 to 2100 hr
SF 30 Clock(hrs)	AK-1	AK-1	Alpin			SF Fr. 2100 to 2130 hr
FS 45 Depth(ft)	3919.0	3919.0	3900.0	0.0	0.0	FS Fr. 3130 to 2215 hr

	Field	1	2	3	4	
A. Init Hydro	0.0	1879.0	1848.0	0.0	0.0	T STARTED 1802 hr
B. First Flow	0.0	45.0	29.0	0.0	0.0	T ON BOTM 1935 hr
Bl. Final Flow	0.0	45.0	30.0	0.0	0.0	T OPEN 1945 hr
C. In Shut-in	0.0	45.0	37.0	0.0	0.0	T PULLED 2215 hr
D. Init Flow	0.0	45.0	29.0	0.0	0.0	T OUT 2400 hr
E. Final Flow	0.0	45.0	29.0	0.0	0.0	
F. Fl Shut-in	0.0	45.0	35.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	0.0	1827.0	1837.0	0.0	0.0	Tool Wt. 1800.00 lbs
Inside/Outside	0	I				Wt Set On Packer 20000.00 lbs
						Wt Pulled Loose 75000.00 lbs
						Initial Str Wt 45000.00 lbs
						Unseated Str Wt 45000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.88 in
						D Col. ID 0.00 in
						D. Pipe ID 3.70 in
						D.C. Length 0.00 ft
						D.P. Length 3890.00 ft

RECOVERY

Tot Fluid 1.00 ft of 0.00 ft in DC and 0.00 ft in DP
 1.00 ft of Drilling mud w/ oil spots in Sampler

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

BLOW DESCRIPTION

Initial Flow -
 Weak surface blow died in 10 mins.

Final Flow -
 No return blow

SAMPLES:

SENT TO:

MUD DATA-----

Mud Type	Chemical
Weight	9.00 lb/c
Vis.	46.00 S/L
W.L.	8.00 in ³
F.C.	0.00 in
Mud Drop N	
Amt. of fill	0.00 ft
Btm. H. Temp.	111.00 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	Rod Steinbrink
Co. Rep.	Dan Fredlund
Contr.	White & Ellis
Rig #	#9
Unit #	
Pump T.	

Test Successful: Y

TEST HISTORY

8461 DST #2 Werth #15-33 L.B. Industries

Flag Points

t (Min.) P (PSig)

A:	0.00	1848.17
B:	0.00	29.45
C:	30.00	30.29
D:	46.00	37.17
E:	0.00	29.37
F:	31.00	28.53
G:	44.00	35.24
Q:	0.00	1837.00

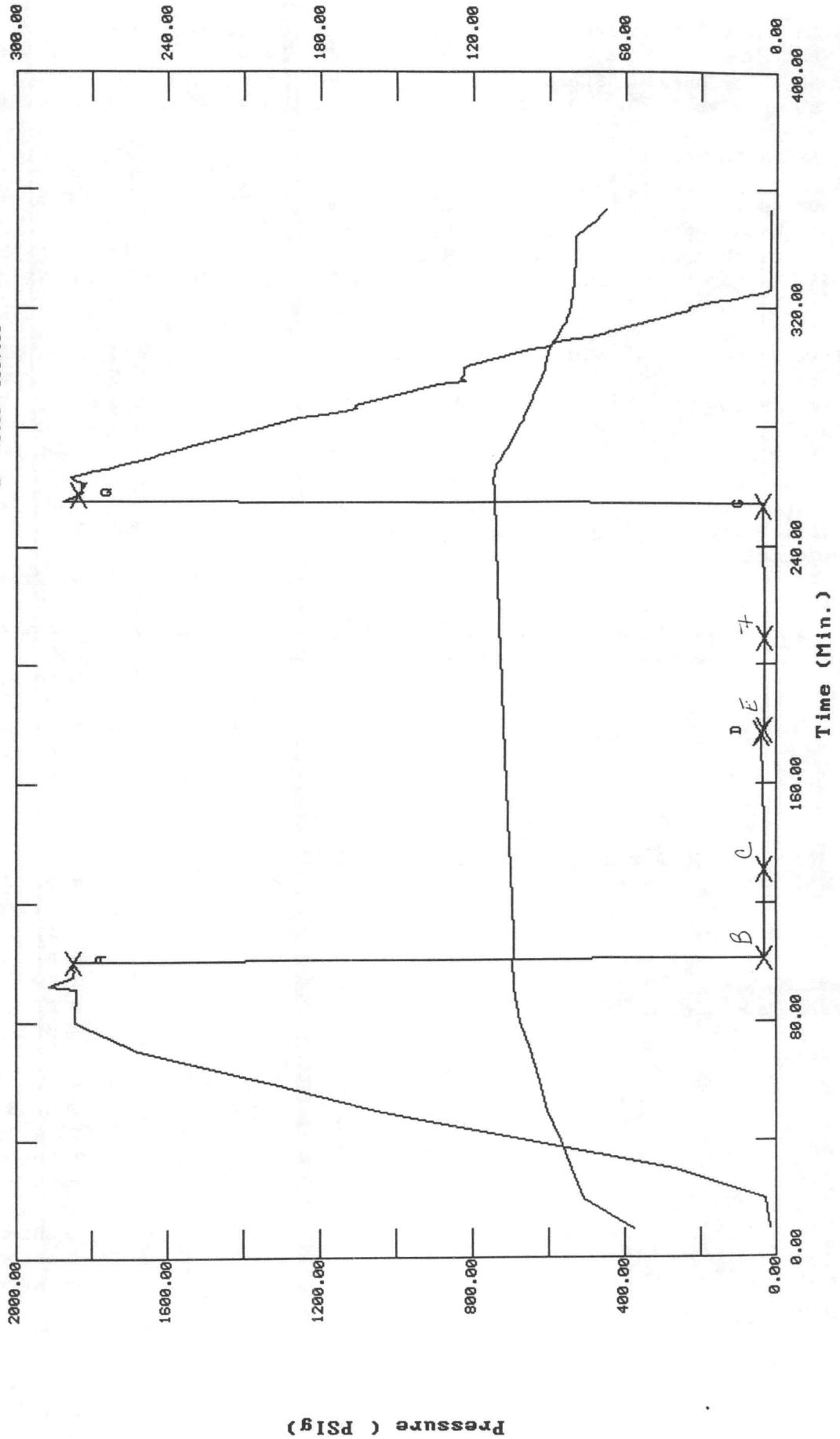
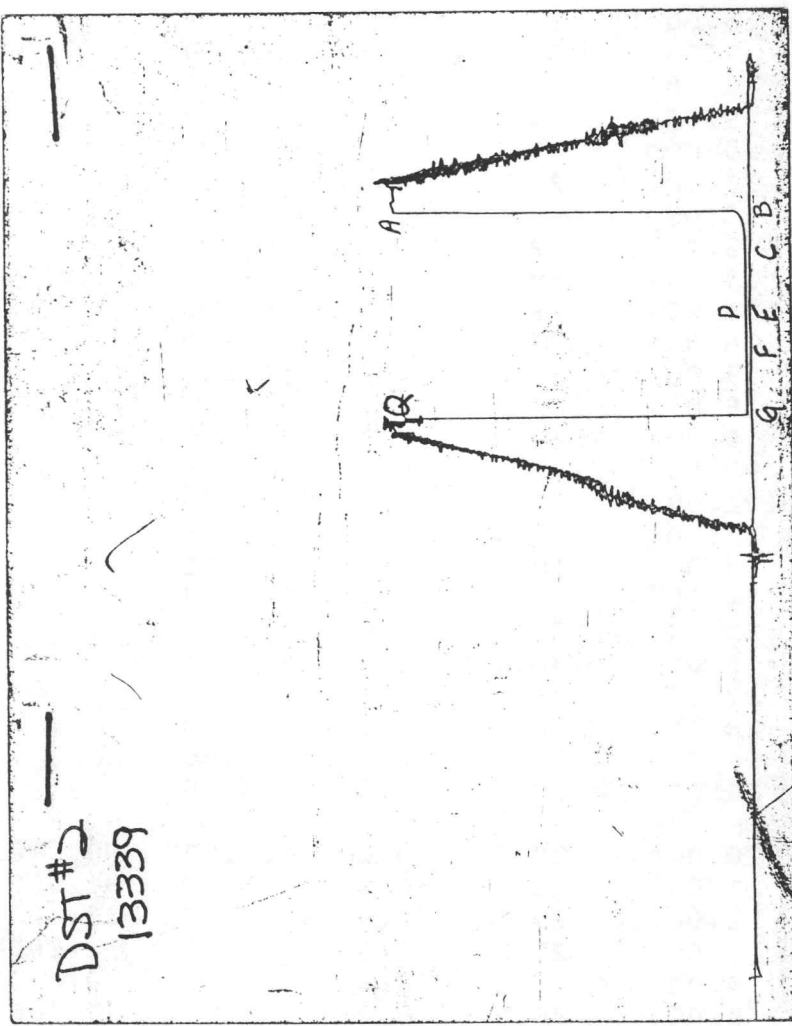


CHART PAGE



This is an actual photograph of recorder chart

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 8461 DST #2 Werth #15-33 L.B. Industries

DATE: 11/29/95

TIME: 18:02:43

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
***** Initial Hydro.	100.00	1848.2	0.0	104.09		
***** Start Flow 1	0.00	29.5	0.0	103.99		
	1.00	29.6	0.2	103.97		
	2.00	29.6	0.2	103.92		
	3.00	29.7	0.3	103.88		
	4.00	29.7	0.3	103.83		
	5.00	29.3	-0.2	103.80		
	6.00	29.3	-0.2	103.78		
	7.00	29.7	0.3	103.81		
	8.00	29.2	-0.3	103.83		
	9.00	29.7	0.3	103.82		
	10.00	29.5	0.1	103.85		
	11.00	29.5	0.1	103.88		
	12.00	29.5	0.1	103.93		
	13.00	29.5	0.1	103.96		
	14.00	29.1	-0.3	104.02		
	15.00	29.3	-0.2	104.08		
	16.00	29.7	0.3	104.10		
	17.00	29.3	-0.2	104.17		
	18.00	29.8	0.3	104.22		
	19.00	29.9	0.4	104.27		
	20.00	29.4	-0.1	104.34		
	21.00	29.5	0.1	104.39		
	22.00	29.6	0.2	104.46		
	23.00	30.0	0.5	104.51		
	24.00	29.5	0.1	104.57		
	25.00	30.0	0.6	104.64		
	26.00	30.3	0.8	104.71		
	27.00	30.4	0.9	104.77		
	28.00	30.0	0.5	104.83		
	29.00	29.9	0.4	104.88		
***** End Flow 1	30.00	30.3	0.8	104.95		
***** Start Shutin 1	0.00	30.3	0.0	104.95	0.0000	0.001
	1.00	29.8	-0.5	105.02	31.0000	0.001
	2.00	29.4	-0.9	105.07	16.0000	0.001
	3.00	29.3	-1.0	105.12	11.0000	0.001
	4.00	29.5	-0.8	105.20	8.5000	0.001
	5.00	30.1	-0.2	105.27	7.0000	0.001
	6.00	30.3	0.0	105.33	6.0000	0.001
	7.00	30.0	-0.3	105.39	5.2857	0.001
	8.00	30.5	0.3	105.45	4.7500	0.001
	9.00	30.4	0.1	105.49	4.3333	0.001
	10.00	30.5	0.3	105.56	4.0000	0.001
	11.00	30.7	0.4	105.62	3.7273	0.001
	12.00	31.3	1.0	105.70	3.5000	0.001
	13.00	31.5	1.2	105.75	3.3077	0.001
	14.00	31.1	0.8	105.82	3.1429	0.001
	15.00	31.6	1.3	105.89	3.0000	0.001
	16.00	31.5	1.2	105.94	2.8750	0.001
	17.00	31.7	1.4	106.00	2.7647	0.001
	18.00	31.8	1.5	106.06	2.6667	0.001

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 8461 DST #2 Werth #15-33 L.B. Industries

DATE: 11/29/95

TIME: 18:02:43

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	19.00	32.1	1.8	106.13	2.5789	0.001
	20.00	32.3	2.0	106.20	2.5000	0.001
	21.00	32.4	2.1	106.26	2.4286	0.001
	22.00	33.1	2.8	106.31	2.3636	0.001
	23.00	33.1	2.9	106.38	2.3043	0.001
	24.00	33.3	3.0	106.44	2.2500	0.001
	25.00	33.5	3.2	106.49	2.2000	0.001
	26.00	33.2	2.9	106.56	2.1538	0.001
	27.00	33.6	3.3	106.62	2.1111	0.001
	28.00	34.2	3.9	106.67	2.0714	0.001
	29.00	33.9	3.6	106.74	2.0345	0.001
	30.00	34.5	4.2	106.81	2.0000	0.001
	31.00	34.7	4.4	106.85	1.9677	0.001
	32.00	34.4	4.1	106.91	1.9375	0.001
	33.00	35.1	4.8	106.98	1.9091	0.001
	34.00	34.9	4.6	107.04	1.8824	0.001
	35.00	35.6	5.3	107.11	1.8571	0.001
	36.00	36.2	5.9	107.17	1.8333	0.001
	37.00	36.7	6.4	107.24	1.8108	0.001
	38.00	36.9	6.6	107.29	1.7895	0.001
	39.00	37.1	6.8	107.30	1.7692	0.001
	40.00	37.1	6.8	107.31	1.7500	0.001
	41.00	36.9	6.6	107.35	1.7317	0.001
	42.00	37.6	7.3	107.41	1.7143	0.001
	43.00	37.8	7.5	107.50	1.6977	0.001
	44.00	37.8	7.5	107.55	1.6818	0.001
	45.00	37.8	7.5	107.62	1.6667	0.001
***** End Shut-in 1	46.00	37.2	6.9	107.69	1.6522	0.001
***** Start Flow 2	0.00	29.4	0.0	107.74		
	1.00	29.8	0.4	107.80		
	2.00	29.4	0.0	107.86		
	3.00	29.6	0.3	107.92		
	4.00	29.5	0.2	107.98		
	5.00	29.1	-0.3	108.04		
	6.00	28.9	-0.4	108.09		
	7.00	29.4	0.0	108.15		
	8.00	28.9	-0.5	108.20		
	9.00	29.3	-0.1	108.26		
	10.00	29.1	-0.3	108.33		
	11.00	28.8	-0.6	108.35		
	12.00	28.8	-0.6	108.39		
	13.00	28.7	-0.7	108.46		
	14.00	28.7	-0.7	108.51		
	15.00	29.3	-0.1	108.57		
	16.00	29.2	-0.2	108.62		
	17.00	29.5	0.2	108.67		
	18.00	29.8	0.4	108.71		
	19.00	29.1	-0.3	108.77		
	20.00	29.1	-0.3	108.80		
	21.00	29.8	0.4	108.88		
	22.00	29.3	-0.1	108.93		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 8461 DST #2 Werth #15-33 L.B. Industries

DATE: 11/29/95 TIME: 18:02:43

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	23.00	30.0	0.7	108.98		
	24.00	30.1	0.8	109.03		
	25.00	29.3	-0.1	109.08		
	26.00	29.2	-0.2	109.12		
	27.00	29.7	0.3	109.16		
	28.00	29.2	-0.2	109.20		
	29.00	29.0	-0.3	109.25		
	30.00	28.9	-0.5	109.30		
*****	End Flow 2	31.00	28.5	-0.8	109.35	
*****	Start Shutin 2	0.00	28.5	0.0	109.35	0.0000
	1.00	29.0	0.5	109.44	62.0000	0.001
	2.00	29.0	0.5	109.49	31.5000	0.001
	3.00	29.1	0.6	109.54	21.3333	0.001
	4.00	29.4	0.8	109.58	16.2500	0.001
	5.00	29.5	0.9	109.63	13.2000	0.001
	6.00	30.1	1.6	109.69	11.1667	0.001
	7.00	29.9	1.3	109.74	9.7143	0.001
	8.00	30.5	1.9	109.75	8.6250	0.001
	9.00	30.0	1.5	109.80	7.7778	0.001
	10.00	30.5	2.0	109.86	7.1000	0.001
	11.00	30.4	1.8	109.90	6.5455	0.001
	12.00	31.0	2.4	109.96	6.0833	0.001
	13.00	30.5	2.0	110.00	5.6923	0.001
	14.00	30.8	2.3	110.04	5.3571	0.001
	15.00	31.0	2.4	110.09	5.0667	0.001
	16.00	31.2	2.7	110.14	4.8125	0.001
	17.00	31.5	3.0	110.18	4.5882	0.001
	18.00	31.5	2.9	110.23	4.3889	0.001
	19.00	31.6	3.1	110.27	4.2105	0.001
	20.00	31.5	3.0	110.32	4.0500	0.001
	21.00	32.1	3.5	110.36	3.9048	0.001
	22.00	32.2	3.7	110.40	3.7727	0.001
	23.00	32.3	3.8	110.45	3.6522	0.001
	24.00	32.1	3.5	110.49	3.5417	0.001
	25.00	32.7	4.2	110.53	3.4400	0.001
	26.00	32.7	4.2	110.58	3.3462	0.001
	27.00	32.6	4.0	110.63	3.2593	0.001
	28.00	32.7	4.2	110.67	3.1786	0.001
	29.00	33.2	4.7	110.72	3.1034	0.001
	30.00	33.3	4.8	110.76	3.0333	0.001
	31.00	32.9	4.4	110.81	2.9677	0.001
	32.00	33.2	4.7	110.85	2.9062	0.001
	33.00	33.9	5.4	110.89	2.8485	0.001
	34.00	33.5	5.0	110.95	2.7941	0.001
	35.00	33.6	5.1	110.97	2.7429	0.001
	36.00	34.1	5.5	110.98	2.6944	0.001
	37.00	34.3	5.8	110.99	2.6486	0.001
	38.00	34.2	5.6	111.05	2.6053	0.001
	39.00	34.7	6.1	111.09	2.5641	0.001
	40.00	34.7	6.2	111.13	2.5250	0.001
	41.00	34.6	6.0	111.18	2.4878	0.001

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 8461 DST #2 Werth #15-33 L.B. Industries

DATE: 11/29/95

TIME: 18:02:43

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	42.00	35.1	6.5	111.23	2.4524	0.001
	43.00	35.2	6.6	111.27	2.4186	0.001
***** End Shut-in 2	44.00	35.2	6.7	111.31	2.3864	0.001
***** Final Hydro.	257.00	1837.0	0.0	111.71		

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Werth #15-33

LOCATION : 15-10S-26W, Sheridan KS

TICKET No. 8461 D.S.T. No. 2 DATE 11-29-95

TOTAL TOOL TO BOTTOM OF TOP PACKERS 30

INTERVAL TOOL 26

BOTTOM PACKERS AND ANCHOR

TOTAL TOOL 56

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 56

D.C. ABOVE TOOLS.Stands Single Total

D.P. ABOVE TOOLS.Stands62 Single 1 Total 3887

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 3943

TOTAL DEPTH 3924

TOTAL DRILL PIPE ABOVE K.B. 19

REMARKS:

FLUID SAMPLER DATA

SAMPLER RECOVERY -

Oil trace, Mud 1000 ml, Pressure 0 PSI,
Total 1000 ml

SAMPLER ANALYSIS -

Resistivity 2.7 ohms @ 80 F;
Chlorides 1800 ppm

PIT MUD ANALYSIS -

Chlorides 1800 ppm, Resist 2.7 ohms @ 80 F;
Viscosity 46, Mud Wt 9, Filtrate 8

P.O. SUB 120' above DP	3748
C.O. SUB 1'	3868
S.I. TOOL 5'	3874
3' Sampler	3877
HMV 5'	3882
JARS 5'	3887
SAFETY JOINT 2'	3889
PACKER 5'	3893
PACKER 5'	3898
DEPTH 3898	
STUBB 1'	3899
ANCHOR	
Alpine Recorder	3900
20' perf	3919
T.C. DEPTH	
AK-1 recorder	3919
BULLNOSE 5' perf	
T.D.	3924

TRILOBITE TESTING L.L.C.

OPERATOR : L.B. Industries

DATE 11-30-95

WELL NAME: Werth #15-33

KB 2580.00 ft

TICKET NO: 8462

DST #3

LOCATION : 15-10S-26W, Sheridan KS

GR 2575.00 ft

FORMATION:

INTERVAL : 3980.00 To 4035.00 ft

TD 4035.00 ft

TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins		Field	1	2	3	4	TIME DATA-----	
PF	30	Rec.	13339	13339	2351		PF Fr. 1408 to 1438 hr	
SI	45	Range(Psi)	4025.0	4025.0	4995.0	0.0	0.0	IS Fr. 1438 to 1523 hr
SF	30	Clock(hrs)	AK-1	AK-1	Alpin			SF Fr. 1523 to 1553 hr
FS	45	Depth(ft)	3995.0	3995.0	3982.0	0.0	0.0	FS Fr. 1553 to 1638 hr

	Field	1	2	3	4	
A. Init Hydro	1922.0	1985.0	1928.0	0.0	0.0	T STARTED 1230 hr
B. First Flow	20.0	56.0	30.0	0.0	0.0	T ON BOTM 1405 hr
B1. Final Flow	20.0	58.0	33.0	0.0	0.0	T OPEN 1408 hr
C. In Shut-in	819.0	858.0	888.0	0.0	0.0	T PULLED 1638 hr
D. Init Flow	20.0	52.0	33.0	0.0	0.0	T OUT 1830 hr
E. Final Flow	20.0	54.0	34.0	0.0	0.0	
F. Fl Shut-in	719.0	763.0	793.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	1882.0	1961.0	1826.0	0.0	0.0	Tool Wt. 1800.00 lbs
Inside/Outside	0	0	I			Wt Set On Packer 20000.00 lbs
						Wt Pulled Loose 55000.00 lbs
						Initial Str Wt 48000.00 lbs
						Unseated Str Wt 48000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.88 in
						D Col. ID 0.00 in
						D. Pipe ID 3.70 in
						D.C. Length 0.00 ft
						D.P. Length 3978.00 ft

RECOVERY

Tot Fluid 5.00 ft of 0.00 ft in DC and 5.00 ft in DP
 5.00 ft of Drilling mud w/ spots of oil

SALINITY 2000.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow -
 Weak surface blow died in 20 mins.

Final Flow -
 Surge at open, no return blow

SAMPLES:
 SENT TO:

MUD DATA-----

Mud Type	Chemical
Weight	9.00 lb/cf
Vis.	51.00 S/L
W.L.	8.80 in3
F.C.	0.00 in
Mud Drop N	
Amt. of fill	0.00 ft
Btm. H. Temp.	112.00 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	Rod Steinbrink
Co. Rep.	Dan Fredlund
Contr.	White & Ellis
Rig #	#9
Unit #	
Pump T.	

Test Successful: Y

TEST HISTORY

8462 DST #3 Werth #15-33 L.B. Industries

Flag Points

t (Min.) P (PSig)

A:	0.00	1928.07
B:	0.00	30.46
C:	30.00	33.14
D:	48.00	688.28
E:	0.00	33.31
F:	28.00	34.15
G:	47.00	793.61
Q:	0.00	1826.26

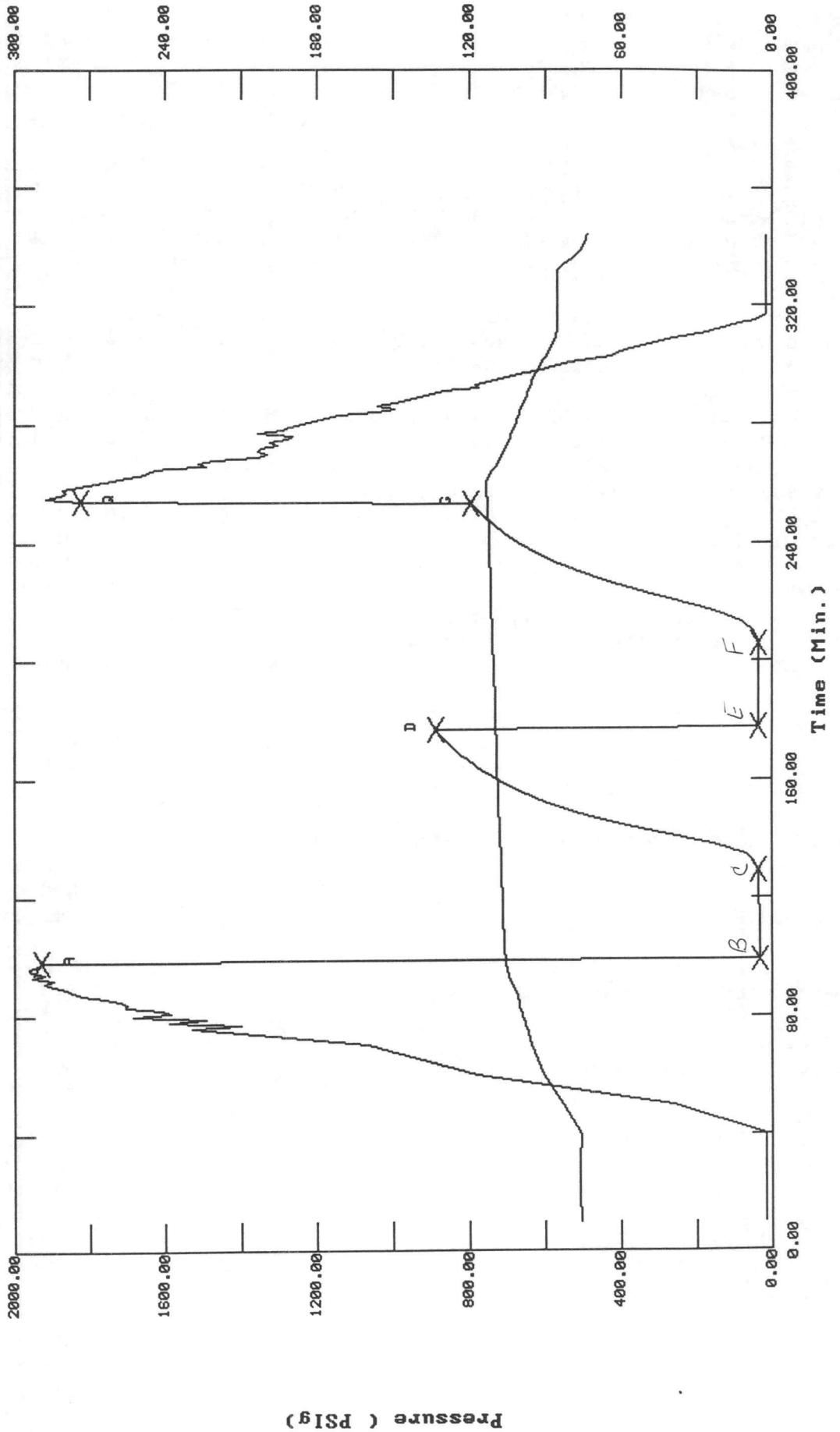
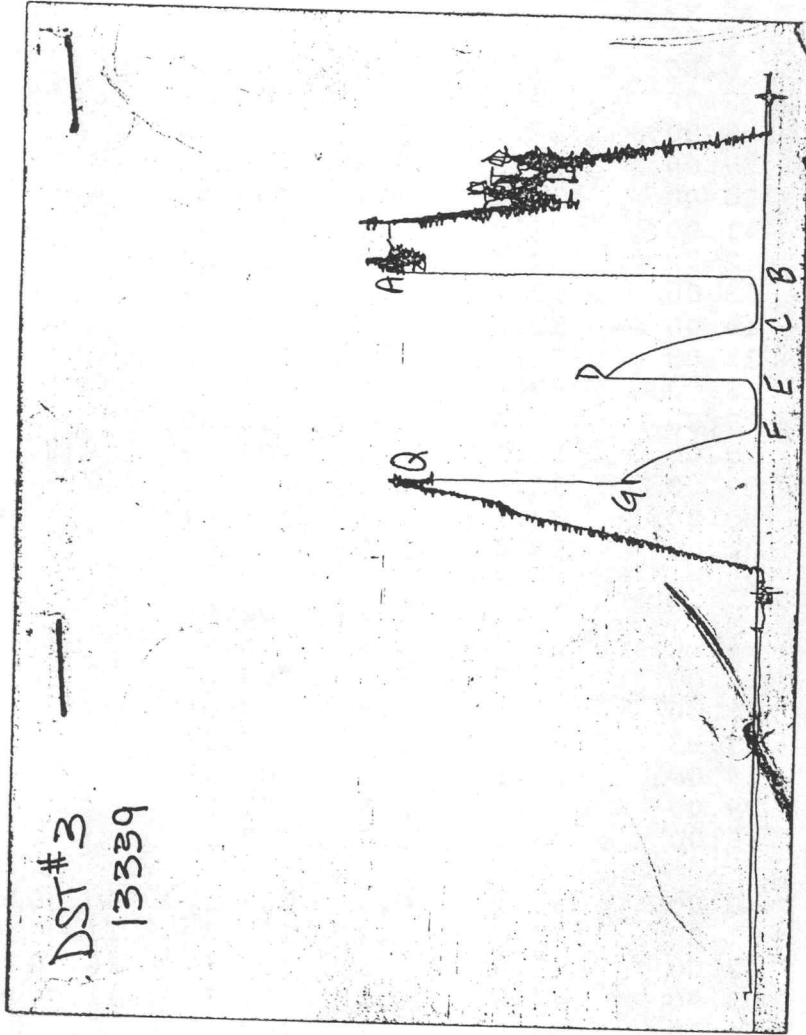


CHART PAGE



This is an actual photograph of recorder chart

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 8462 DST #3 Werth #15-33 L.B. Industries

DATE: 11/30/95 TIME: 12:30:28

	Time	Pressure PSI _g	delta P PSI _g	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
***** Initial Hydro.	98.00	1928.1	0.0	105.59		
***** Start Flow 1	0.00	30.5	0.0	105.65		
	1.00	31.7	1.3	105.78		
	2.00	32.0	1.5	105.86		
	3.00	31.8	1.3	105.95		
	4.00	31.3	0.8	106.03		
	5.00	31.3	0.8	106.11		
	6.00	31.4	0.9	106.17		
	7.00	32.0	1.5	106.24		
	8.00	32.1	1.7	106.30		
	9.00	31.8	1.3	106.35		
	10.00	32.1	1.7	106.40		
	11.00	31.8	1.3	106.45		
	12.00	32.4	1.9	106.48		
	13.00	32.2	1.8	106.52		
	14.00	32.3	1.8	106.55		
	15.00	32.3	1.8	106.60		
	16.00	32.4	1.9	106.64		
	17.00	32.4	1.9	106.69		
	18.00	32.3	1.8	106.72		
	19.00	32.6	2.2	106.77		
	20.00	32.6	2.1	106.81		
	21.00	33.0	2.5	106.84		
	22.00	32.6	2.2	106.90		
	23.00	33.1	2.7	106.94		
	24.00	33.3	2.9	106.99		
	25.00	33.3	2.9	107.02		
	26.00	33.4	2.9	107.09		
	27.00	33.4	2.9	107.15		
	28.00	33.1	2.7	107.19		
	29.00	33.0	2.5	107.26		
***** End Flow 1	30.00	33.1	2.7	107.30		
***** Start Shutin 1	0.00	33.1	0.0	107.30	0.0000	0.001
	1.00	37.3	4.2	107.30	31.0000	0.001
	2.00	42.0	8.8	107.31	16.0000	0.002
	3.00	47.2	14.1	107.32	11.0000	0.002
	4.00	54.9	21.7	107.33	8.5000	0.003
	5.00	63.9	30.7	107.38	7.0000	0.004
	6.00	76.6	43.5	107.46	6.0000	0.006
	7.00	93.2	60.0	107.52	5.2857	0.009
	8.00	115.1	82.0	107.58	4.7500	0.013
	9.00	143.3	110.1	107.62	4.3333	0.021
	10.00	176.6	143.4	107.68	4.0000	0.031
	11.00	213.0	179.9	107.75	3.7273	0.045
	12.00	250.4	217.3	107.81	3.5000	0.063
	13.00	289.8	256.7	107.87	3.3077	0.084
	14.00	326.8	293.7	107.92	3.1429	0.107
	15.00	363.1	329.9	107.99	3.0000	0.132
	16.00	398.1	364.9	108.04	2.8750	0.158
	17.00	430.5	397.3	108.11	2.7647	0.185
	18.00	461.6	428.5	108.14	2.6667	0.213

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 8462 DST #3 Werth #15-33 L.B. Industries

DATE: 11/30/95

TIME: 12:30:28

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	19.00	490.5	457.3	108.21	2.5789	0.241
	20.00	517.6	484.4	108.25	2.5000	0.268
	21.00	542.8	509.7	108.31	2.4286	0.295
	22.00	567.2	534.0	108.35	2.3636	0.322
	23.00	589.6	556.4	108.36	2.3043	0.348
	24.00	610.7	577.5	108.43	2.2500	0.373
	25.00	630.5	597.4	108.48	2.2000	0.398
	26.00	649.2	616.0	108.52	2.1538	0.421
	27.00	666.5	633.3	108.57	2.1111	0.444
	28.00	683.5	650.4	108.62	2.0714	0.467
	29.00	698.8	665.6	108.67	2.0345	0.488
	30.00	714.0	680.9	108.72	2.0000	0.510
	31.00	727.7	694.6	108.77	1.9677	0.530
	32.00	741.2	708.0	108.81	1.9375	0.549
	33.00	753.9	720.8	108.86	1.9091	0.568
	34.00	765.9	732.8	108.90	1.8824	0.587
	35.00	777.8	744.7	108.94	1.8571	0.605
	36.00	788.4	755.3	109.00	1.8333	0.622
	37.00	798.9	765.8	109.04	1.8108	0.638
	38.00	808.9	775.7	109.08	1.7895	0.654
	39.00	818.8	785.6	109.12	1.7692	0.670
	40.00	827.9	794.8	109.15	1.7500	0.685
	41.00	836.6	803.4	109.19	1.7317	0.700
	42.00	845.0	811.8	109.23	1.7143	0.714
	43.00	852.6	819.5	109.28	1.6977	0.727
	44.00	860.8	827.6	109.33	1.6818	0.741
	45.00	867.8	834.7	109.36	1.6667	0.753
	46.00	875.3	842.1	109.40	1.6522	0.766
	47.00	882.1	848.9	109.45	1.6383	0.778
***** End Shut-in 1	48.00	888.3	855.1	109.50	1.6250	0.789
***** Start Flow 2	0.00	33.3	0.0	109.48		
	1.00	33.5	0.2	109.54		
	2.00	34.0	0.7	109.55		
	3.00	33.9	0.6	109.59		
	4.00	34.1	0.8	109.62		
	5.00	34.2	0.9	109.67		
	6.00	33.9	0.6	109.71		
	7.00	34.0	0.7	109.74		
	8.00	34.5	1.2	109.75		
	9.00	34.4	1.1	109.76		
	10.00	34.2	0.9	109.80		
	11.00	33.6	0.3	109.86		
	12.00	33.8	0.5	109.91		
	13.00	33.4	0.1	109.97		
	14.00	33.6	0.3	110.03		
	15.00	34.1	0.8	110.10		
	16.00	33.6	0.3	110.16		
	17.00	33.9	0.6	110.20		
	18.00	34.3	1.0	110.25		
	19.00	34.3	1.0	110.31		
	20.00	34.4	1.1	110.36		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 8462 DST #3 Werth #15-33 L.B. Industries

DATE: 11/30/95

TIME: 12:30:28

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P^2/10^6
	21.00	34.1	0.8	110.41		
	22.00	34.6	1.3	110.46		
	23.00	33.9	0.6	110.51		
	24.00	34.0	0.7	110.56		
	25.00	34.0	0.7	110.62		
	26.00	34.5	1.2	110.66		
	27.00	34.1	0.8	110.72		
***** End Flow 2	28.00	34.2	0.8	110.78		
***** Start Shutin 2	0.00	34.2	0.0	110.78	0.0000	0.001
	1.00	33.1	-1.1	110.83	59.0000	0.001
	2.00	37.7	3.5	110.88	30.0000	0.001
	3.00	42.5	8.4	110.94	20.3333	0.002
	4.00	48.3	14.2	110.96	15.5000	0.002
	5.00	55.3	21.1	110.99	12.6000	0.003
	6.00	64.8	30.6	111.04	10.6667	0.004
	7.00	76.1	42.0	111.10	9.2857	0.006
	8.00	90.5	56.4	111.16	8.2500	0.008
	9.00	108.7	74.5	111.21	7.4444	0.012
	10.00	129.7	95.6	111.26	6.8000	0.017
	11.00	154.8	120.6	111.30	6.2727	0.024
	12.00	183.0	148.8	111.35	5.8333	0.033
	13.00	212.7	178.6	111.38	5.4615	0.045
	14.00	243.6	209.4	111.43	5.1429	0.059
	15.00	274.4	240.2	111.48	4.8667	0.075
	16.00	305.5	271.3	111.52	4.6250	0.093
	17.00	335.1	301.0	111.57	4.4118	0.112
	18.00	363.8	329.7	111.62	4.2222	0.132
	19.00	391.9	357.7	111.67	4.0526	0.154
	20.00	418.1	384.0	111.71	3.9000	0.175
	21.00	443.1	409.0	111.71	3.7619	0.196
	22.00	466.5	432.4	111.71	3.6364	0.218
	23.00	489.0	454.9	111.71	3.5217	0.239
	24.00	510.7	476.5	111.73	3.4167	0.261
	25.00	530.9	496.8	111.77	3.3200	0.282
	26.00	550.1	515.9	111.85	3.2308	0.303
	27.00	567.8	533.7	111.89	3.1481	0.322
	28.00	584.8	550.7	111.93	3.0714	0.342
	29.00	601.1	566.9	111.97	3.0000	0.361
	30.00	616.5	582.4	112.01	2.9333	0.380
	31.00	631.5	597.4	112.04	2.8710	0.399
	32.00	645.1	611.0	112.08	2.8125	0.416
	33.00	658.7	624.6	112.11	2.7576	0.434
	34.00	671.0	636.8	112.15	2.7059	0.450
	35.00	683.0	648.8	112.18	2.6571	0.466
	36.00	694.9	660.8	112.22	2.6111	0.483
	37.00	705.6	671.4	112.25	2.5676	0.498
	38.00	716.1	681.9	112.28	2.5263	0.513
	39.00	726.1	692.0	112.33	2.4872	0.527
	40.00	736.1	702.0	112.35	2.4500	0.542
	41.00	745.0	710.9	112.38	2.4146	0.555
	42.00	753.8	719.7	112.41	2.3810	0.568

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: 8462 DST #3 Werth #15-33 L.B. Industries

DATE: 11/30/95

TIME: 12:30:28

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	43.00	762.4	728.2	112.45	2.3488	0.581
	44.00	770.5	736.4	112.48	2.3182	0.594
	45.00	778.4	744.3	112.51	2.2889	0.606
	46.00	786.1	751.9	112.55	2.2609	0.618
***** End Shut-in 2	47.00	793.6	759.5	112.58	2.2340	0.630
***** Final Hydro.	254.00	1826.3	0.0	112.67		

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Werth #15-33

LOCATION : 15-10S-26W, Sheridan KS

TICKET No. 8462 D.S.T. No. 3 DATE 11-30-95

TOTAL TOOL TO BOTTOM OF TOP PACKERS 30

INTERVAL TOOL 24

BOTTOM PACKERS AND ANCHOR

TOTAL TOOL 54

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single 1 Total 31

TOTAL ASSEMBLY 85

D.C. ABOVE TOOLS.Stands Single Total

D.P. ABOVE TOOLS.Stands64 Single Total 3978

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4063

TOTAL DEPTH 4035

TOTAL DRILL PIPE ABOVE K.B. 28

REMARKS:

FLUID SAMPLER DATA

SAMPLER RECOVERY -

Mud 4000 ml, Oil spots, Pressure 10 PSI,
Total 4000 ml

SAMPLER ANALYSIS -

Resistivity 2.7 ohms @ 80 F;
Chlorides 2000 ppm

PIT MUD ANALYSIS -

Chlorides 2000 ppm, Resist 2.7 ohms @ 80 F,
Viscosity 51, Mud Wt 9, Filtrate 8.8

P.O. SUB 120' above DP	3830
C.O. SUB 1'	3950
S.I. TOOL 5'	3956
3' Sampler	3959
HMV 5'	3964
JARS 5'	3969
SAFETY JOINT 2'	3971
PACKER 5'	3975
PACKER 5'	3980
DEPTH 3980	
STUBB 1'	3981
ANCHOR	
Alpine recorder	3982
17' perf	3998
AK-1 recorder	3995
T.C.	
DEPTH	
31' Drill pipe	4029
1' CO sub	4030
BULLNOSE 5' perf	
T.D.	4035

TRILOBITE TESTING L.L.C.

OPERATOR : L.B. Industries

DATE 12/1/95

WELL NAME: Werth #15-33

KB 2580.00 ft

TICKET NO: 8463

DST #4

LOCATION : 15-10S-26W, Sheridan KS

GR 2575.00 ft

FORMATION: Lansing/KC "J"

INTERVAL : 4040.00 To 4080.00 ft

TD 4080.00 ft

TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	13339	13339	13309			PF Fr. 0330 to 0400 hr
SI 45 Range(Psi)	3975.0	3975.0	4700.0	0.0	0.0	IS Fr. 0400 to 0445 hr
SF 30 Clock(hrs)	AK-1	AK-1	AK-1			SF Fr. 0445 to 0515 hr
FS 45 Depth(ft)	4070.0	4070.0	4075.0	0.0	0.0	FS Fr. 0515 to 0600 hr

	Field	1	2	3	4	
A. Init Hydro	1992.0	2044.0	0.0	0.0	0.0	T STARTED 0200 hr
B. First Flow	31.0	44.0	0.0	0.0	0.0	T ON BOTM 0325 hr
B1. Final Flow	31.0	44.0	0.0	0.0	0.0	T OPEN 0330 hr
C. In Shut-in	1271.0	1299.0	0.0	0.0	0.0	T PULLED 0600 hr
D. Init Flow	31.0	57.0	0.0	0.0	0.0	T OUT 0800 hr
E. Final Flow	31.0	57.0	0.0	0.0	0.0	
F. Fl Shut-in	1160.0	1191.0	0.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	1922.0	1955.0	0.0	0.0	0.0	Tool Wt. 0.00 lbs
Inside/Outside	I	I	O			Wt Set On Packer 20000.00 lbs
						Wt Pulled Loose 52000.00 lbs
						Initial Str Wt 48000.00 lbs
						Unseated Str Wt 48000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.88 in
						D Col. ID 0.00 in
						D. Pipe ID 3.80 in
						D.C. Length 0.00 ft
						D.P. Length 4019.00 ft

RECOVERY

Tot Fluid 15.00 ft of 0.00 ft in DC and 15.00 ft in DP
 15.00 ft of Drilling mud w/ show of oil

SALINITY 2000.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow -
 Weak .25" blow, died in 25 min

Final Flow -
 Surge at open, no return blow

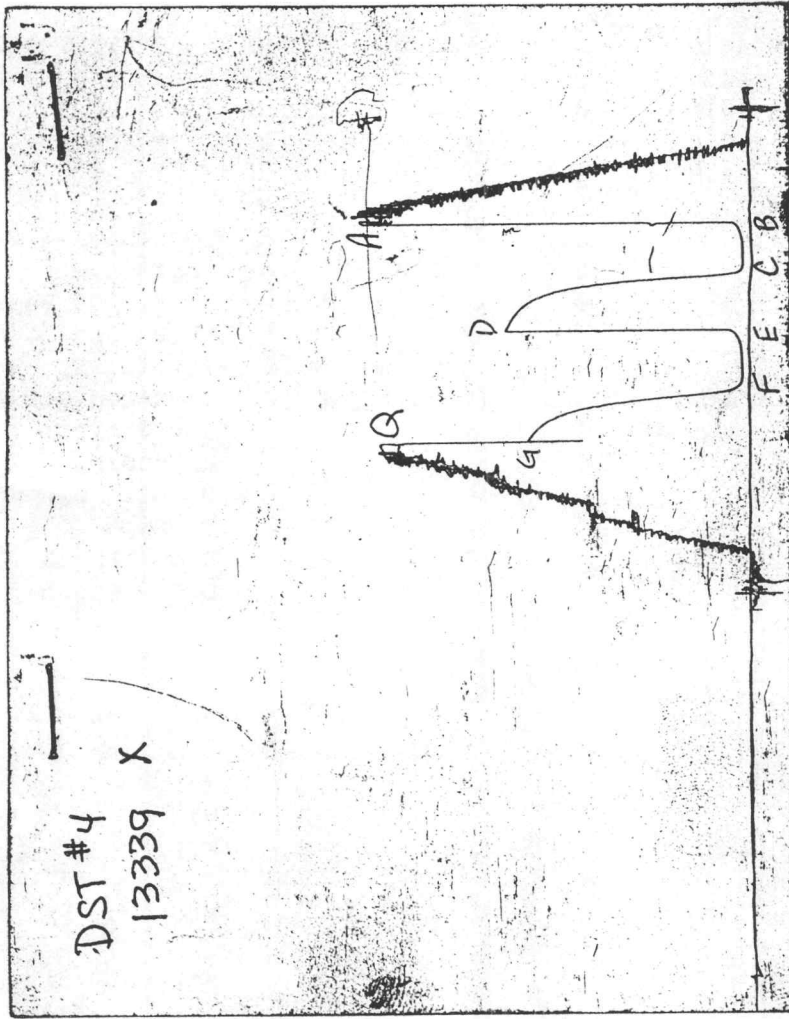
SAMPLES:
 SENT TO:

MUD DATA-----

Mud Type	Chemical
Weight	9.00 lb/cf
Vis.	51.00 S/L
W.L.	8.80 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	113.00 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	Rod Steinbrink
Co. Rep.	Dan Fredlund
Contr.	White & Ellis
Rig #	9
Unit #	
Pump T.	

Test Successful: Y

CHART PAGE



This is an actual photograph of recorder chart

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Werth #15-33

LOCATION : 15-10S-26W, Sheridan KS

TICKET No. 8463 D.S.T. No. 4 DATE 12/1/95

TOTAL TOOL TO BOTTOM OF TOP PACKERS 30

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 40

TOTAL TOOL 70

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 70

D.C. ABOVE TOOLS.Stands Single Total

D.P. ABOVE TOOLS.Stands Single Total 4019

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4089

TOTAL DEPTH 4080

TOTAL DRILL PIPE ABOVE K.B. 19

REMARKS:

FLUID SAMPLER DATA

SAMPLER RECOVERY -

Oil trace, Mud 4000 ml, Pressure 20 PSI,
Total 4000 ml

SAMPLER ANALYSIS -

Resistivity 2.7 ohms @ 80 F;
Chlorides 2000 ppm

PIT MUD ANALYSIS -

Chlorides 2000 ppm, Resist 2.7 ohms @ 80 F;
Viscosity 51, Mud Wt 9, Filtrate 8.8

P.O. SUB	
C.O. SUB	4010
S.I. TOOL 5'	4016
Sampler 3'	4019
HMV 5'	4024
JARS 5'	4029
SAFETY JOINT 2'	4031
PACKER Top	4035
PACKER Bottom	4040
DEPTH 4040	
STUBB 1'	4041
ANCHOR	
29' perf	4070
AK-1 recorder	4070
5' perf	4075
AK-1	4075
T.C.	
DEPTH	
BULLNOSE 5' perf	
T.D.	4080

TRILOBITE TESTING L.L.C.

OPERATOR : L.B. Industries
 WELL NAME: Werth #15-33
 LOCATION : 15-10S-26W, Sheridan KS
 INTERVAL : 4300.00 To 4350.00 ft

DATE 12/2/95
 KB 2580.00 ft TICKET NO: 8464 DST #5
 GR 2575.00 ft FORMATION: Fort Scott
 TD 4350.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	13339	13309				PF Fr. 0940 to 1010 hr
SI 30 Range(Psi)	4000.0	4700.0	0.0	0.0	0.0	IS Fr. 1010 to 1040 hr
SF 30 Clock(hrs)	AK-1	AK-1				SF Fr. 1040 to 1110 hr
FS 30 Depth(ft)	4340.0	4345.0	0.0	0.0	0.0	FS Fr. 1110 to 1140 hr

	Field	1	2	3	4	
A. Init Hydro	2203.0	0.0	0.0	0.0	0.0	T STARTED 0800 hr
B. First Flow	0.0	0.0	0.0	0.0	0.0	T ON BOTM 0935 hr
Bl. Final Flow	0.0	0.0	0.0	0.0	0.0	T OPEN 0940 hr
C. In Shut-in	0.0	0.0	0.0	0.0	0.0	T PULLED 1140 hr
D. Init Flow	20.0	0.0	0.0	0.0	0.0	T OUT 1330 hr
E. Final Flow	20.0	0.0	0.0	0.0	0.0	
F. Fl Shut-in	30.0	0.0	0.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2173.0	0.0	0.0	0.0	0.0	Tool Wt. 0.00 lbs
Inside/Outside	I	O				Wt Set On Packer 20000.00 lbs
						Wt Pulled Loose 55000.00 lbs
						Initial Str Wt 48000.00 lbs
						Unseated Str Wt 48000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.88 in
						D Col. ID 0.00 in
						D. Pipe ID 3.80 in
						D.C. Length 0.00 ft
						D.P. Length 4296.00 ft

RECOVERY

Tot Fluid 1.00 ft of 0.00 ft in DC and 1.00 ft in DP
 1.00 ft of Drilling mud w/ spot

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

BLOW DESCRIPTION

Initial Flow -
 Weak surface blow died in 8 min
 Final Flow -
 No return blow

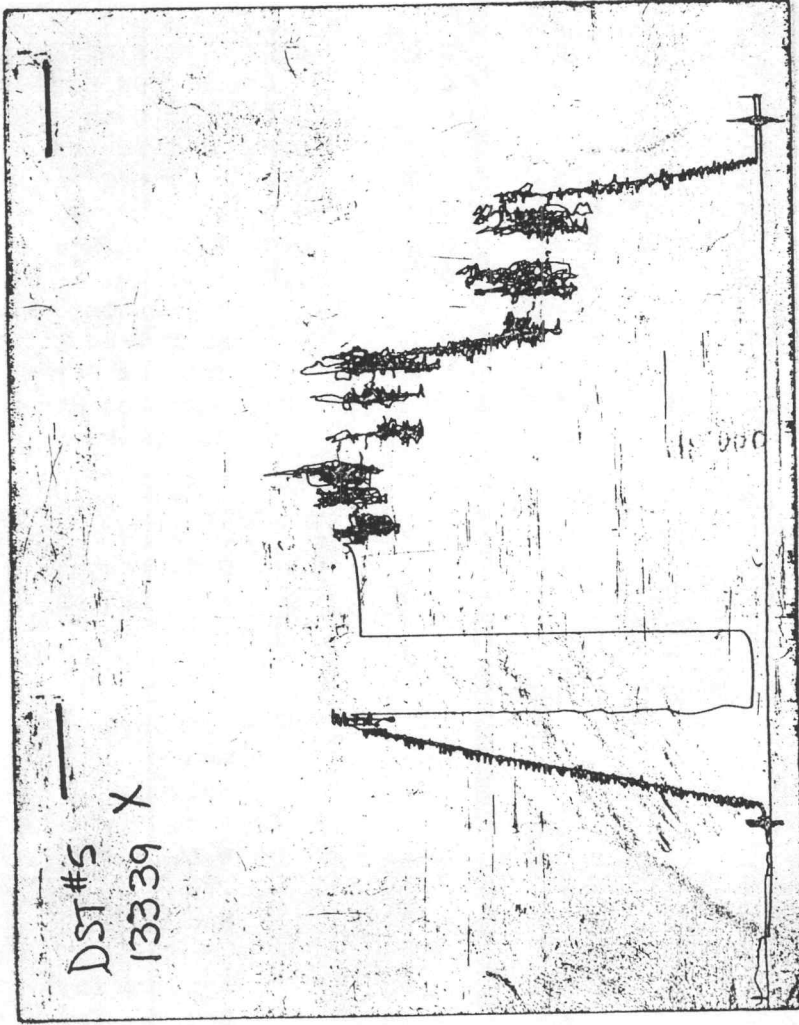
SAMPLES:
 SENT TO:

MUD DATA-----

Mud Type	Chemical
Weight	9.20 lb/cf
Vis.	49.00 S/L
W.L.	8.80 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	113.00 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	Rod Steinbrink
Co. Rep.	Dan Fredlund
Contr.	White & Ellis
Rig #	9
Unit #	
Pump T.	

Test Successful: N

CHART PAGE



This is an actual photograph of recorder chart

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Werth #15-33

LOCATION : 15-10S-26W, Sheridan KS

TICKET No. 8464 D.S.T. No. 5 DATE 12/2/95

TOTAL TOOL TO BOTTOM OF TOP PACKERS 30

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 50

TOTAL TOOL 80

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 80

D.C. ABOVE TOOLS.Stands Single Total

D.P. ABOVE TOOLS.Stands69 Single Total 4296

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4376

TOTAL DEPTH 4350

TOTAL DRILL PIPE ABOVE K.B. 26

REMARKS:

FLUID SAMPLER DATA

SAMPLER RECOVERY -
Oil trace, Mud 4000 ml, Pressure 0 PSI,
Total 4000 ml

SAMPLER ANALYSIS -
Resistivity 2.9 ohms @ 75 F;
Chlorides 1800 ppm

PIT MUD ANALYSIS -
Chlorides 1800 ppm, Resist 2.9 ohms @ 75 F;
Viscosity 49, Mud Wt 9.2, Filtrate 8.8

P.O. SUB	
C.O. SUB	4270
S.I. TOOL 5'	4276
Sampler	4279
HMV 5'	4284
JARS 5'	4289
SAFETY JOINT 2'	4291
PACKER Top	4295
PACKER Bottom	4300
DEPTH 4300	
STUBB 1'	4301
ANCHOR	
39' perf	4340
AK-1 recorder	4340
T.C. DEPTH	
5' perf	4345
AK-1 recorder	4345
BULLNOSE 5' perf	
T.D.	4350