

**Well Name:** GRABBE #1-3  
**Company :** LIBOC, INC  
**Location - Sec:** 3  
**County:** RUSH  
**Date:** 11/17/95

**Twp:** 16S      **Rge:** 18W  
**State:** KS

TRILOBITE TESTING L.L.C.

OPERATOR : LIBOC, Inc  
 WELL NAME: Grabbe #1-3  
 LOCATION : 3-16S-18W, Rush Cty KS  
 INTERVAL : 1853.00 To 1960.00 ft

DATE 11-17-95  
 KB 1938.00 ft  
 GR 1929.00 ft  
 TD 1960.00 ft

TICKET NO: 8773  
 FORMATION: KRIDER/WINFIELD  
 TEST TYPE: CONVENTIONAL

DST #1

RECORDER DATA

Mins		Field	1	2	3	4	TIME DATA-----
PF	30	Rec.	13754	13754	2342		PF Fr. 0810 to 0840 hr
SI	30	Range(Psi )	4000.0	4000.0	4995.0	0.0	0.0 IS Fr. 0840 to 0910 hr
SF	45	Clock(hrs)	AK-1	AK-1	Alpin		SF Fr. 0910 to 0955 hr
FS	60	Depth(ft )	1957.0	1957.0	1856.0	0.0	0.0 FS Fr. 0955 to 1055 hr

	Field	1	2	3	4	
A. Init Hydro	986.0	1002.0	996.0	0.0	0.0	T STARTED 0700 hr
B. First Flow	78.0	90.0	61.0	0.0	0.0	T ON BOTM 0805 hr
B1. Final Flow	88.0	95.0	80.0	0.0	0.0	T OPEN 0810 hr
C. In Shut-in	245.0	244.0	249.0	0.0	0.0	T PULLED 1055 hr
D. Init Flow	98.0	108.0	80.0	0.0	0.0	T OUT 1155 hr
E. Final Flow	98.0	113.0	99.0	0.0	0.0	
F. Fl Shut-in	590.0	607.0	597.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	976.0	998.0	976.0	0.0	0.0	Tool Wt. 2000.00 lbs
Inside/Outside	0	0	I			Wt Set On Packer 20000.00 lbs

RECOVERY

Tot Fluid 120.00 ft of 30.00 ft in DC and 90.00 ft in DP  
 120.00 ft of Gassy mud (no odor)

Unseated Str Wt 40000.00 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 30.00 ft  
 D.P. Length 1825.00 ft

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

BLOW DESCRIPTION

Initial Blow -  
 Strong, bottom of bucket in 1 min,  
 no blow back

Final Blow -  
 Strong, bottom of bucket in 1 min,  
 no blow back

MUD DATA-----  
 Mud Type  
 Weight 9.00 lb/c  
 Vis. 40.00 S/L  
 W.L. 0.00 in3  
 F.C. 0.00 in  
 Mud Drop  
 Amt. of fill 0.00 ft  
 Btm. H. Temp. 98.00 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. JEFF ZOLLER  
 Contr. DUKE  
 Rig # 4  
 Unit #  
 Pump T.

SAMPLES:  
 SENT TO:

Test Successful: Y

# TEST HISTORY

TICKET #8773 GRABBE # 1-3 LIBOC, INC.

## Flag Points

t (Min.)	PK	PSig
A:	0.00	996.05
B:	0.00	60.50
C:	27.00	80.14
D:	28.00	249.42
E:	0.00	80.06
F:	45.00	98.77
G:	60.00	596.55
Q:	0.00	976.24

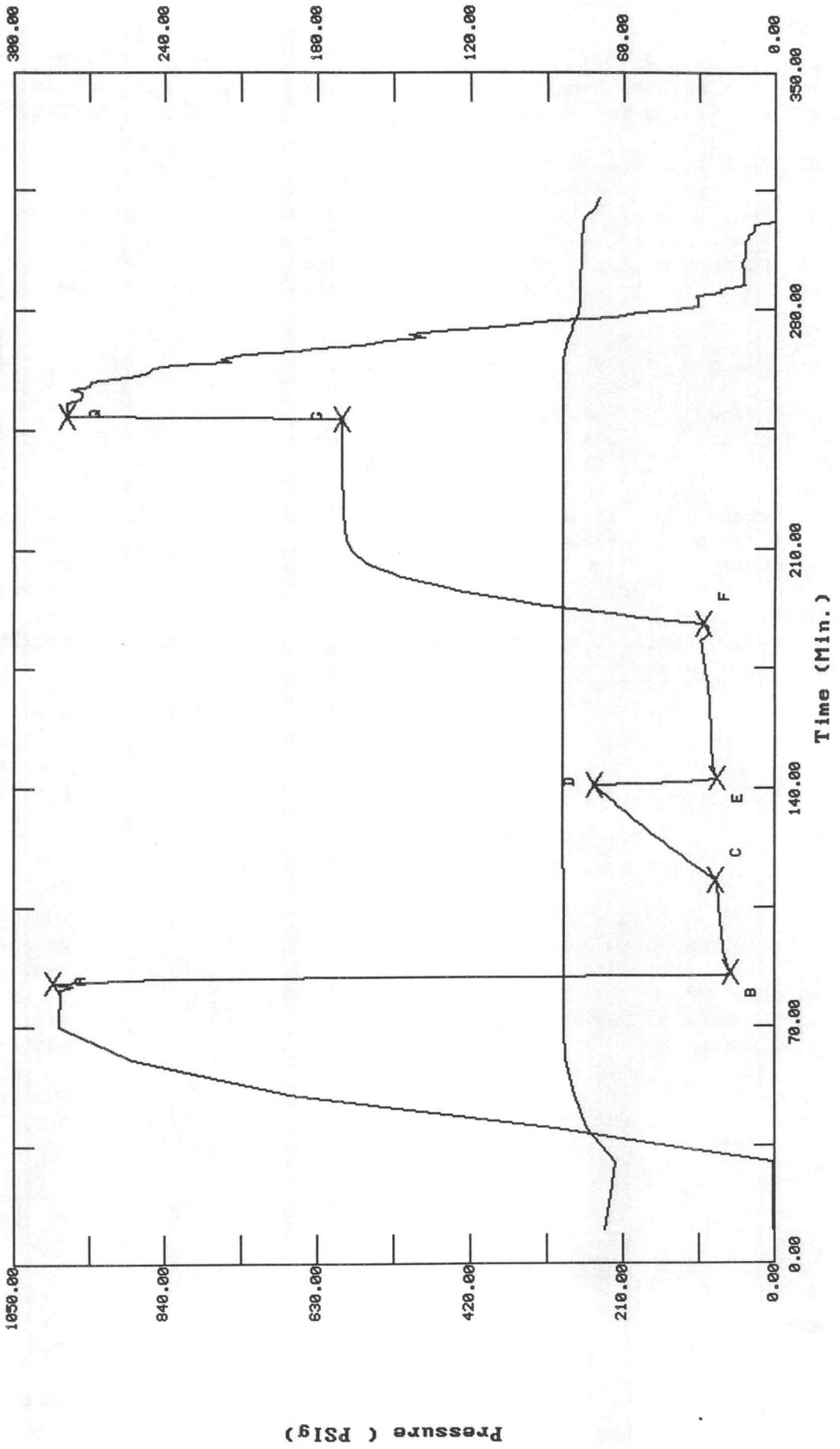
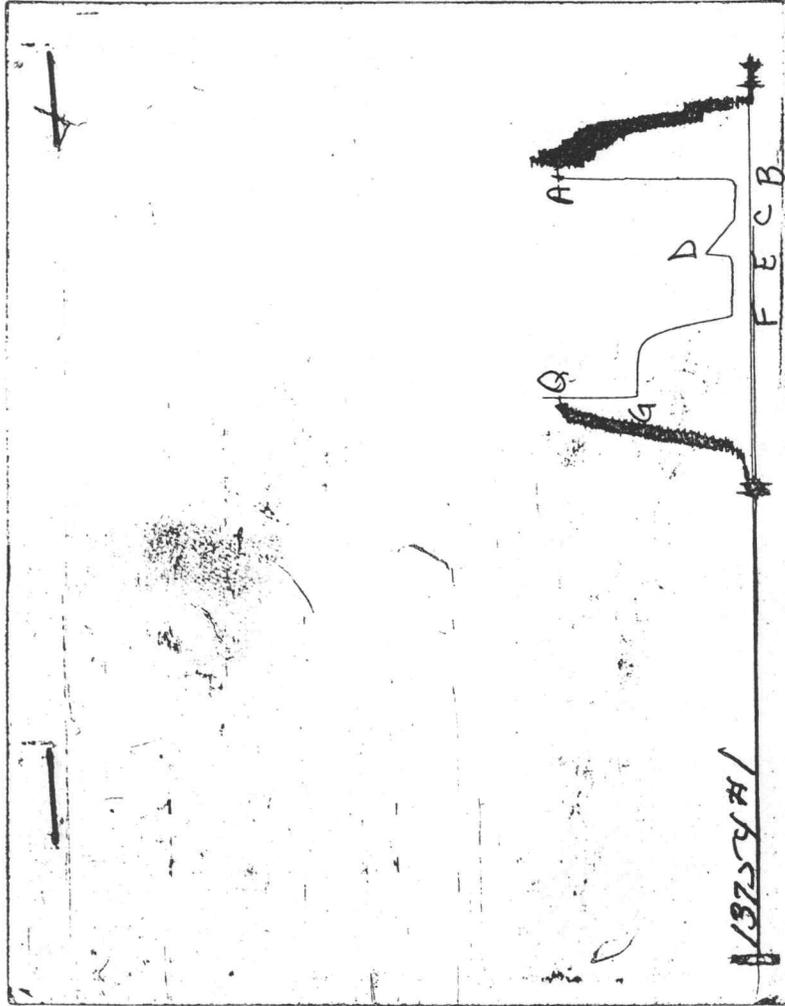


CHART PAGE



This is an actual photograph of recorder chart

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: TICKET #8773 GRABBE # 1-3 LIBOC ,INC.

DATE: 11/16/95

TIME: 19:47:00

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P <sup>2</sup> /10 <sup>6</sup>
***** Initial Hydro.	83.00	996.0	0.0	83.53		
***** Start Flow 1	0.00	60.5	0.0	83.46		
	1.00	63.4	2.9	83.44		
	2.00	65.4	4.9	83.43		
	3.00	66.4	5.9	83.42		
	4.00	67.5	7.0	83.42		
	5.00	68.5	8.0	83.43		
	6.00	69.7	9.1	83.44		
	7.00	70.2	9.7	83.44		
	8.00	71.1	10.6	83.45		
	9.00	71.2	10.7	83.46		
	10.00	72.5	12.0	83.47		
	11.00	72.6	12.1	83.48		
	12.00	73.6	13.1	83.48		
	13.00	73.8	13.3	83.50		
	14.00	73.9	13.4	83.50		
	15.00	74.5	14.0	83.51		
	16.00	74.8	14.3	83.51		
	17.00	75.4	14.9	83.52		
	18.00	76.1	15.6	83.52		
	19.00	76.4	15.9	83.54		
	20.00	76.9	16.4	83.53		
	21.00	77.5	17.0	83.54		
	22.00	77.5	17.0	83.54		
	23.00	78.0	17.5	83.55		
	24.00	78.7	18.2	83.55		
	25.00	78.9	18.4	83.55		
	26.00	79.2	18.7	83.56		
***** End Flow 1	27.00	80.1	19.6	83.56		
***** Start Shutin 1	0.00	80.1	0.0	83.56	0.0000	0.006
	1.00	87.4	7.3	83.57	28.0000	0.008
	2.00	94.5	14.4	83.57	14.5000	0.009
	3.00	101.5	21.3	83.57	10.0000	0.010
	4.00	108.3	28.2	83.58	7.7500	0.012
	5.00	114.8	34.7	83.57	6.4000	0.013
	6.00	121.4	41.3	83.58	5.5000	0.015
	7.00	127.8	47.7	83.58	4.8571	0.016
	8.00	134.4	54.2	83.59	4.3750	0.018
	9.00	140.9	60.8	83.60	4.0000	0.020
	10.00	147.0	66.9	83.60	3.7000	0.022
	11.00	153.1	72.9	83.60	3.4545	0.023
	12.00	159.2	79.1	83.61	3.2500	0.025
	13.00	165.4	85.3	83.61	3.0769	0.027
	14.00	171.5	91.3	83.62	2.9286	0.029
	15.00	177.4	97.3	83.62	2.8000	0.031
	16.00	183.1	103.0	83.62	2.6875	0.034
	17.00	188.9	108.8	83.62	2.5882	0.036
	18.00	194.6	114.5	83.63	2.5000	0.038
	19.00	200.4	120.3	83.63	2.4211	0.040
	20.00	206.0	125.9	83.64	2.3500	0.042
	21.00	211.7	131.5	83.64	2.2857	0.045

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 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: TICKET #8773 GRABBE # 1-3 LIBOC ,INC.

DATE: 11/16/95 TIME: 19:47:00  
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	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
	22.00	217.2	137.1	83.65	2.2273	0.047
	23.00	222.6	142.4	83.65	2.1739	0.050
	24.00	227.9	147.8	83.65	2.1250	0.052
	25.00	233.3	153.2	83.66	2.0800	0.054
	26.00	238.7	158.5	83.67	2.0385	0.057
	27.00	244.1	164.0	83.67	2.0000	0.060
***** End Shut-in 1	28.00	249.4	169.3	83.67	1.9643	0.062
***** Start Flow 2	0.00	80.1	0.0	83.67		
	1.00	80.9	0.8	83.67		
	2.00	82.3	2.3	83.67		
	3.00	84.1	4.0	83.67		
	4.00	84.9	4.9	83.67		
	5.00	85.2	5.1	83.67		
	6.00	85.4	5.4	83.67		
	7.00	86.4	6.3	83.67		
	8.00	86.5	6.5	83.67		
	9.00	86.9	6.8	83.67		
	10.00	87.9	7.8	83.67		
	11.00	87.7	7.6	83.67		
	12.00	87.9	7.8	83.67		
	13.00	88.5	8.4	83.67		
	14.00	87.4	7.4	83.67		
	15.00	88.3	8.2	83.67		
	16.00	88.2	8.1	83.67		
	17.00	88.0	8.0	83.67		
	18.00	88.7	8.6	83.67		
	19.00	88.9	8.8	83.68		
	20.00	89.5	9.4	83.68		
	21.00	89.2	9.1	83.68		
	22.00	89.8	9.7	83.68		
	23.00	90.1	10.1	83.68		
	24.00	90.5	10.4	83.68		
	25.00	91.8	11.7	83.69		
	26.00	91.4	11.3	83.68		
	27.00	91.5	11.4	83.69		
	28.00	92.1	12.1	83.69		
	29.00	92.8	12.8	83.69		
	30.00	93.9	13.8	83.70		
	31.00	95.2	15.2	83.69		
	32.00	95.8	15.8	83.70		
	33.00	96.5	16.4	83.70		
	34.00	97.4	17.4	83.71		
	35.00	97.8	17.7	83.71		
	36.00	98.3	18.2	83.71		
	37.00	99.2	19.1	83.71		
	38.00	99.4	19.3	83.72		
	39.00	100.5	20.5	83.72		
	40.00	101.5	21.5	83.72		
	41.00	96.3	16.2	83.72		
	42.00	90.7	10.7	83.72		
	43.00	91.1	11.1	83.72		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: TICKET #8773 GRABBE # 1-3 LIBOC ,INC.

DATE: 11/16/95

TIME: 19:47:00

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P <sup>2</sup> /10 <sup>6</sup>
***** End Flow 2	44.00	91.5	11.4	83.73		
	45.00	98.8	18.7	83.73		
***** Start Shutin 2	0.00	98.8	0.0	83.73	0.0000	0.01
	1.00	144.4	45.7	83.73	73.0000	0.021
	2.00	186.2	87.5	83.73	37.0000	0.035
	3.00	226.0	127.2	83.74	25.0000	0.051
	4.00	263.4	164.7	83.75	19.0000	0.069
	5.00	298.9	200.1	83.76	15.4000	0.089
	6.00	331.7	232.9	83.76	13.0000	0.110
	7.00	362.0	263.2	83.78	11.2857	0.131
	8.00	389.8	291.1	83.79	10.0000	0.152
	9.00	415.4	316.7	83.80	9.0000	0.173
	10.00	438.9	340.1	83.81	8.2000	0.193
	11.00	460.2	361.4	83.82	7.5455	0.212
	12.00	479.6	380.8	83.83	7.0000	0.230
	13.00	497.3	398.6	83.85	6.5385	0.247
	14.00	513.6	414.9	83.85	6.1429	0.264
	15.00	528.1	429.4	83.87	5.8000	0.279
	16.00	541.2	442.4	83.88	5.5000	0.293
	17.00	552.5	453.7	83.89	5.2353	0.305
	18.00	562.1	463.3	83.90	5.0000	0.316
	19.00	569.7	470.9	83.92	4.7895	0.325
	20.00	575.7	476.9	83.93	4.6000	0.331
	21.00	580.2	481.4	83.93	4.4286	0.337
	22.00	583.5	484.8	83.95	4.2727	0.341
	23.00	586.1	487.4	83.96	4.1304	0.344
	24.00	588.0	489.2	83.96	4.0000	0.346
	25.00	589.4	490.6	83.96	3.8800	0.347
	26.00	590.5	491.7	83.97	3.7692	0.349
	27.00	591.4	492.7	83.98	3.6667	0.350
	28.00	592.1	493.3	83.98	3.5714	0.351
	29.00	592.7	493.9	83.99	3.4828	0.351
	30.00	593.2	494.4	83.99	3.4000	0.352
	31.00	593.6	494.8	83.99	3.3226	0.352
	32.00	593.9	495.2	84.00	3.2500	0.353
	33.00	594.3	495.5	83.99	3.1818	0.353
	34.00	594.5	495.8	84.01	3.1176	0.353
	35.00	594.6	495.8	84.00	3.0571	0.354
	36.00	594.9	496.1	84.01	3.0000	0.354
	37.00	595.0	496.2	84.01	2.9459	0.354
	38.00	595.1	496.3	84.01	2.8947	0.354
	39.00	595.2	496.4	84.01	2.8462	0.354
	40.00	595.5	496.7	84.01	2.8000	0.355
	41.00	595.6	496.8	84.02	2.7561	0.355
	42.00	595.6	496.8	84.02	2.7143	0.355
	43.00	595.6	496.9	84.02	2.6744	0.355
	44.00	595.8	497.0	84.02	2.6364	0.355
	45.00	595.9	497.1	84.02	2.6000	0.355
	46.00	596.0	497.3	84.02	2.5652	0.355
	47.00	596.1	497.3	84.03	2.5319	0.355
	48.00	596.1	497.3	84.03	2.5000	0.355

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 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: TICKET #8773 GRABBE # 1-3 LIBOC ,INC.

DATE: 11/16/95 TIME: 19:47:00  
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	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P <sup>2</sup> /10 <sup>6</sup>
	49.00	596.2	497.4	84.03	2.4694	0.355
	50.00	596.2	497.4	84.03	2.4400	0.355
	51.00	596.3	497.5	84.03	2.4118	0.356
	52.00	596.3	497.5	84.04	2.3846	0.356
	53.00	596.4	497.6	84.03	2.3585	0.356
	54.00	596.4	497.6	84.03	2.3333	0.356
	55.00	596.4	497.6	84.03	2.3091	0.356
	56.00	596.5	497.8	84.04	2.2857	0.356
	57.00	596.5	497.8	84.04	2.2632	0.356
	58.00	596.5	497.8	84.04	2.2414	0.356
	59.00	596.4	497.7	84.05	2.2203	0.356
***** End Shut-in 2	60.00	596.6	497.8	84.04	2.2000	0.356
***** Final Hydro.	249.00	976.2	0.0	84.05		



TRILOBITE TESTING L.L.C.

OPERATOR : LIBOC, INC. DATE 11-20-95  
 WELL NAME: GRABBE #1-3 KB 1938.00 ft TICKET NO: 8774 DST #2  
 LOCATION : 3-16S-18W, Rush Cty KS GR 1929.00 ft FORMATION: SAND  
 INTERVAL : 3433.00 To 3493.00 ft TD 3493.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins		Field	1	2	3	4	TIME DATA-----
PF 15	Rec.	13754	13754	2342			PF Fr. 1940 to 1955 hr
SI 30	Range(Psi )	4000.0	4000.0	4995.0	0.0	0.0	IS Fr. 1955 to 2025 hr
SF 20	Clock(hrs)	AK-1	AK-1	Alpin			SF Fr. 2025 to 2045 hr
FS 45	Depth(ft )	3490.0	3490.0	3436.0	0.0	0.0	FS Fr. 2045 to 2130 hr

	Field	1	2	3	4	
A. Init Hydro	1726.0	1706.0	1726.0	0.0	0.0	T STARTED 1830 hr
B. First Flow	847.0	850.0	852.0	0.0	0.0	T ON BOTM 1935 hr
Bl. Final Flow	857.0	864.0	887.0	0.0	0.0	T OPEN 1940 hr
C. In Shut-in	1156.0	1153.0	1173.0	0.0	0.0	T PULLED 2130 hr
D. Init Flow	828.0	826.0	823.0	0.0	0.0	T OUT 2300 hr
E. Final Flow	887.0	896.0	900.0	0.0	0.0	
F. Fl Shut-in	1156.0	1153.0	1173.0	0.0	0.0	
G. Final Hydro	1696.0	1699.0	1723.0	0.0	0.0	
Inside/Outside	O	O	I			

TOOL DATA-----

Tool Wt.	2000.00 lbs
Wt Set On Packer	20000.00 lbs
Wt Pulled Loose	50000.00 lbs
Initial Str Wt	49000.00 lbs
Unseated Str Wt	49000.00 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	30.00 ft
D.P. Length	3407.00 ft

RECOVERY

Tot Fluid 140.00 ft of 30.00 ft in DC and 110.00 ft in DP  
 140.00 ft of Gassy mud w/ oil spots

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

BLOW DESCRIPTION

Initial Blow -  
 Strong, bottom of bucket in 30 sec;  
 Gas to surface in 1 - 1.5 min; gauged  
 and sample taken.

Final Blow -  
 Strong, bottom of bucket as soon as  
 tool opened, sample taken, mist of mud  
 to surface

SAMPLES: 2-IN GLASS BOTTLES  
 SENT TO:TEX

MUD DATA-----

Mud Type	Chemical
Weight	9.40 lb/c
Vis.	46.00 S/L
W.L.	6.80 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	111.00 F
Hole Condition	GOOD
% Porosity	19.00
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.	JEFF ZOLLER
Contr.	DUKE
Rig #	4
Unit #	
Pump T.	

Test Successful: Y

GAS RECOVERY  
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COMPANY: LIBOC, INC.

DATE: 11-20-95

WELL NAME: GRABBE #1-3

KB Elev: 1938.00 ft TICKET #8774 DST #2

WELL LOCATION: 3-16S-18W, Rush Cty KS

GR Elev: 1929.00 ft FORMATION: SAND

INTERVAL Fr.: 3433.00 To 3493.00 T.D.: 3493.00 ft TEST TYPE: CONVENTIONAL

GAS RECOVERY MEASURED WITH MERLA

\*\*\*\*\* GAS RATES FOR FLOW #1

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
5	1.50	20	0	1949000.0
10	1.50	40	0	3155000.0
15	1.50	45	0	3454000.0

\*\*\*\*\* GAS RATES FOR FLOW #2

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
5	1.50	40	0	3155000.0
10	1.50	50	0	3752000.0
15	1.50	55	0	4051000.0
20	1.50	55	0	4051000.0

**TICKET #8774 DST #2 GRABBE #1-3 LIBOC**

**TEST HISTORY**

Flag Points	
t (Min.)	P (PSig)
A:	0.00 1726.05
B:	0.00 851.86
C:	14.00 886.86
D:	32.00 1173.17
E:	0.00 823.07
F:	19.00 899.70
G:	45.00 1173.30
Q:	0.00 1722.61

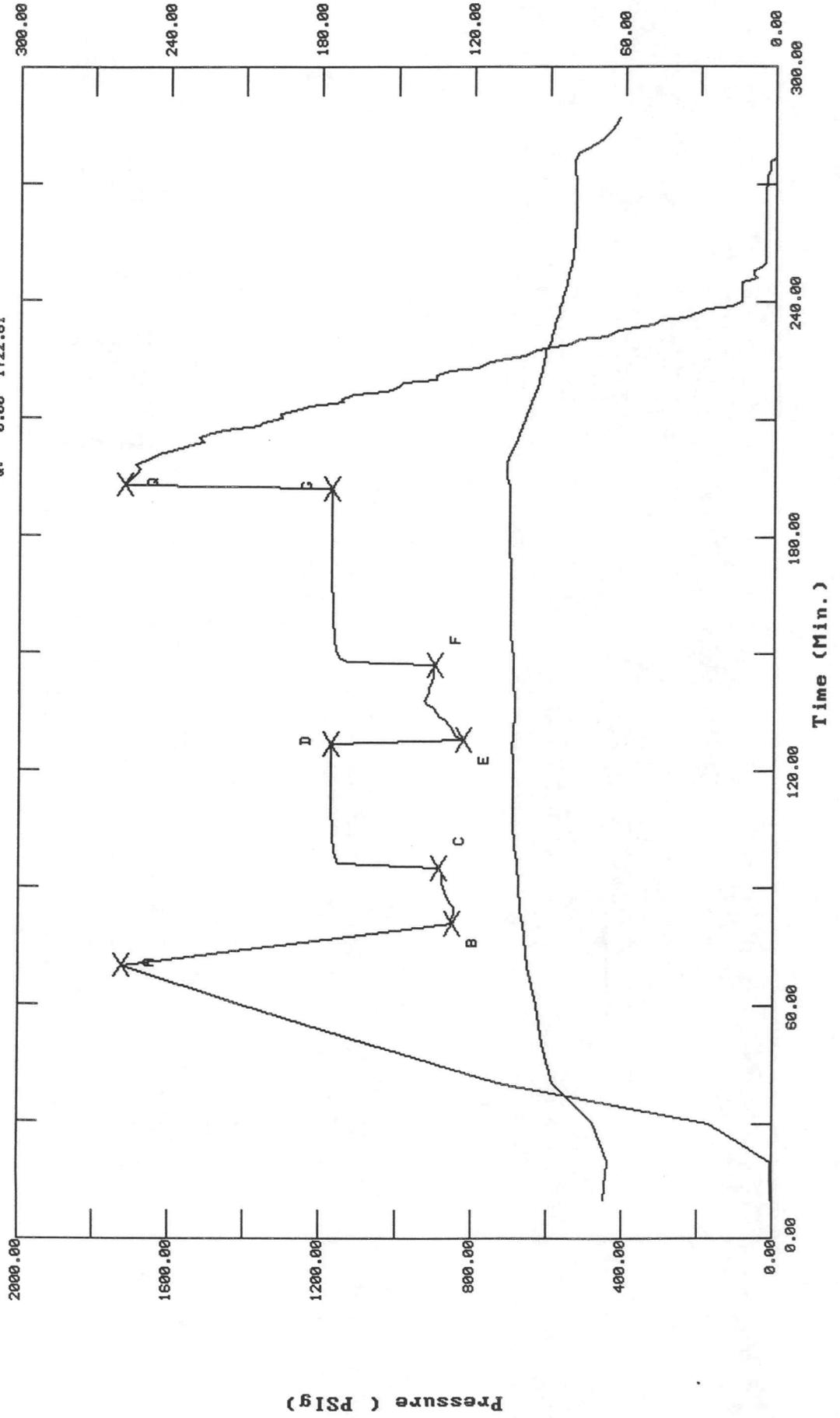
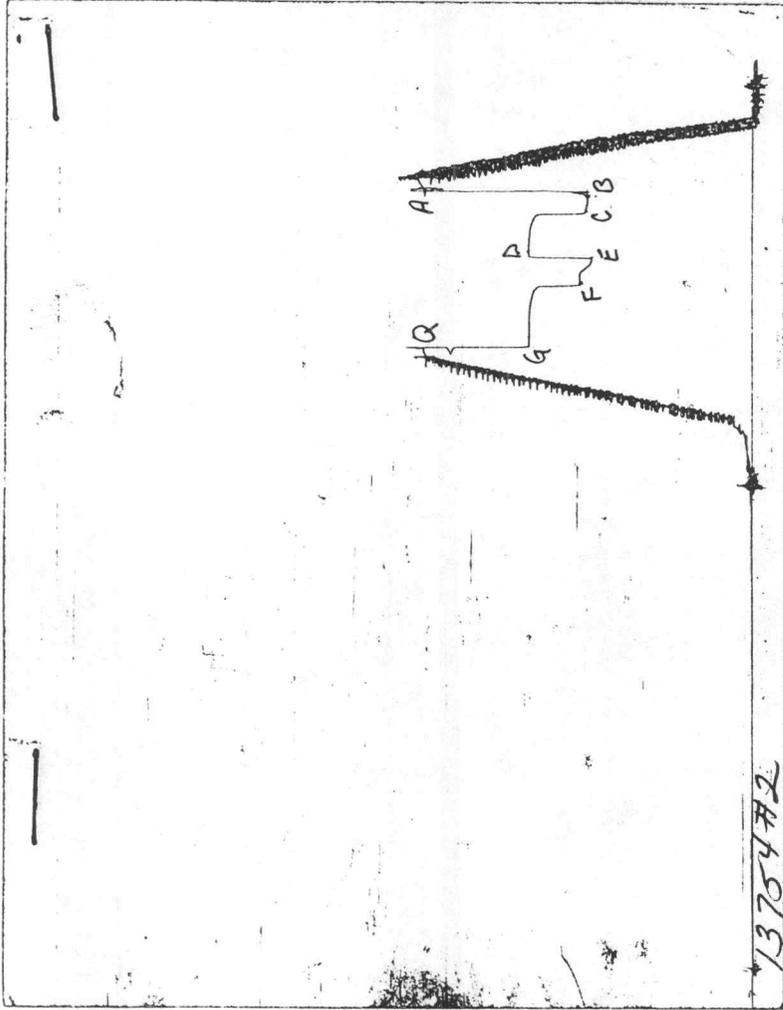


CHART PAGE



This is an actual photograph of recorder chart

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: TICKET #8774 DST #2 GRABBE #1-3 LIBOC

DATE: 11/20/95 TIME: 07:17:11

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
***** Initial Hydro.	70.00	1726.1	0.0	97.49		
***** Start Flow 1	0.00	851.9	0.0	99.54		
	1.00	856.3	4.4	99.89		
	2.00	849.3	-2.6	100.18		
	3.00	845.9	-6.0	100.39		
	4.00	848.9	-2.9	100.58		
	5.00	857.3	5.5	100.74		
	6.00	863.0	11.2	100.89		
	7.00	869.3	17.5	101.03		
	8.00	873.4	21.6	101.15		
	9.00	876.1	24.3	101.27		
	10.00	878.6	26.8	101.37		
	11.00	879.0	27.1	101.46		
	12.00	881.1	29.3	101.55		
	13.00	881.1	29.2	101.64		
***** End Flow 1	14.00	886.9	35.0	101.73		
***** Start Shutin 1	0.00	886.9	0.0	101.73	0.0000	0.787
	1.00	1150.0	263.1	101.86	15.0000	1.322
	2.00	1156.7	269.8	102.13	8.0000	1.338
	3.00	1160.2	273.4	102.44	5.6667	1.346
	4.00	1162.6	275.7	102.71	4.5000	1.352
	5.00	1164.4	277.5	102.94	3.8000	1.356
	6.00	1165.7	278.9	103.12	3.3333	1.359
	7.00	1166.7	279.8	103.24	3.0000	1.361
	8.00	1167.5	280.7	103.36	2.7500	1.363
	9.00	1168.1	281.2	103.45	2.5556	1.364
	10.00	1168.7	281.8	103.53	2.4000	1.366
	11.00	1169.2	282.3	103.59	2.2727	1.367
	12.00	1169.8	282.9	103.64	2.1667	1.368
	13.00	1170.0	283.2	103.69	2.0769	1.369
	14.00	1170.4	283.5	103.73	2.0000	1.370
	15.00	1170.8	283.9	103.77	1.9333	1.371
	16.00	1171.0	284.1	103.80	1.8750	1.371
	17.00	1171.3	284.4	103.83	1.8235	1.372
	18.00	1171.5	284.7	103.85	1.7778	1.373
	19.00	1171.7	284.9	103.87	1.7368	1.373
	20.00	1172.0	285.1	103.88	1.7000	1.373
	21.00	1172.1	285.3	103.90	1.6667	1.374
	22.00	1172.4	285.5	103.92	1.6364	1.374
	23.00	1172.4	285.5	103.93	1.6087	1.374
	24.00	1172.5	285.7	103.94	1.5833	1.375
	25.00	1172.7	285.9	103.96	1.5600	1.375
	26.00	1172.8	285.9	103.97	1.5385	1.375
	27.00	1173.0	286.1	103.99	1.5185	1.376
	28.00	1173.1	286.2	103.99	1.5000	1.376
	29.00	1173.1	286.2	103.99	1.4828	1.376
	30.00	1173.2	286.3	104.00	1.4667	1.376
	31.00	1173.2	286.3	104.01	1.4516	1.376
***** End Shut-in 1	32.00	1173.2	286.3	104.02	1.4375	1.376
***** Start Flow 2	0.00	823.1	0.0	103.98		
	1.00	842.6	19.6	103.86		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: TICKET #8774 DST #2 GRABBE #1-3 LIBOC

DATE: 11/20/95 TIME: 07:17:11

	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P <sup>2</sup> /10 <sup>6</sup>
	2.00	852.9	29.9	103.72		
	3.00	857.4	34.3	103.57		
	4.00	863.0	39.9	103.41		
	5.00	872.3	49.3	103.28		
	6.00	888.0	65.0	103.19		
	7.00	895.9	72.8	103.13		
	8.00	905.0	81.9	103.12		
	9.00	917.8	94.8	103.16		
	10.00	927.1	104.0	103.23		
	11.00	921.1	98.0	103.31		
	12.00	916.4	93.3	103.38		
	13.00	915.1	92.1	103.44		
	14.00	912.0	88.9	103.49		
	15.00	908.9	85.9	103.53		
	16.00	905.5	82.4	103.57		
	17.00	904.4	81.3	103.61		
	18.00	903.2	80.2	103.65		
***** End Flow 2	19.00	899.7	76.6	103.68		
***** Start Shutin 2	0.00	899.7	0.0	103.68	0.0000	0.809
	1.00	1132.2	232.5	103.72	34.0000	1.282
	2.00	1150.9	251.2	103.82	17.5000	1.325
	3.00	1155.8	256.1	103.99	12.0000	1.336
	4.00	1159.0	259.3	104.17	9.2500	1.343
	5.00	1160.9	261.2	104.34	7.6000	1.348
	6.00	1162.5	262.8	104.48	6.5000	1.351
	7.00	1163.7	264.0	104.61	5.7143	1.354
	8.00	1164.7	265.0	104.70	5.1250	1.356
	9.00	1165.5	265.8	104.78	4.6667	1.358
	10.00	1166.3	266.6	104.85	4.3000	1.360
	11.00	1166.9	267.2	104.91	4.0000	1.362
	12.00	1167.4	267.7	104.94	3.7500	1.363
	13.00	1168.0	268.3	104.99	3.5385	1.364
	14.00	1168.4	268.7	105.02	3.3571	1.365
	15.00	1168.8	269.1	105.05	3.2000	1.366
	16.00	1169.2	269.5	105.06	3.0625	1.367
	17.00	1169.5	269.8	105.09	2.9412	1.368
	18.00	1169.7	270.0	105.11	2.8333	1.368
	19.00	1170.0	270.3	105.12	2.7368	1.369
	20.00	1170.4	270.7	105.14	2.6500	1.370
	21.00	1170.5	270.8	105.16	2.5714	1.370
	22.00	1170.8	271.1	105.16	2.5000	1.371
	23.00	1171.0	271.3	105.17	2.4348	1.371
	24.00	1171.1	271.4	105.18	2.3750	1.372
	25.00	1171.4	271.7	105.18	2.3200	1.372
	26.00	1171.5	271.8	105.19	2.2692	1.373
	27.00	1171.6	271.9	105.20	2.2222	1.373
	28.00	1171.9	272.2	105.20	2.1786	1.373
	29.00	1172.0	272.3	105.21	2.1379	1.373
	30.00	1172.0	272.3	105.21	2.1000	1.374
	31.00	1172.1	272.4	105.22	2.0645	1.374
	32.00	1172.3	272.6	105.22	2.0312	1.374

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 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: TICKET #8774 DST #2 GRABBE #1-3 LIBOC

DATE: 11/20/95 TIME: 07:17:11  
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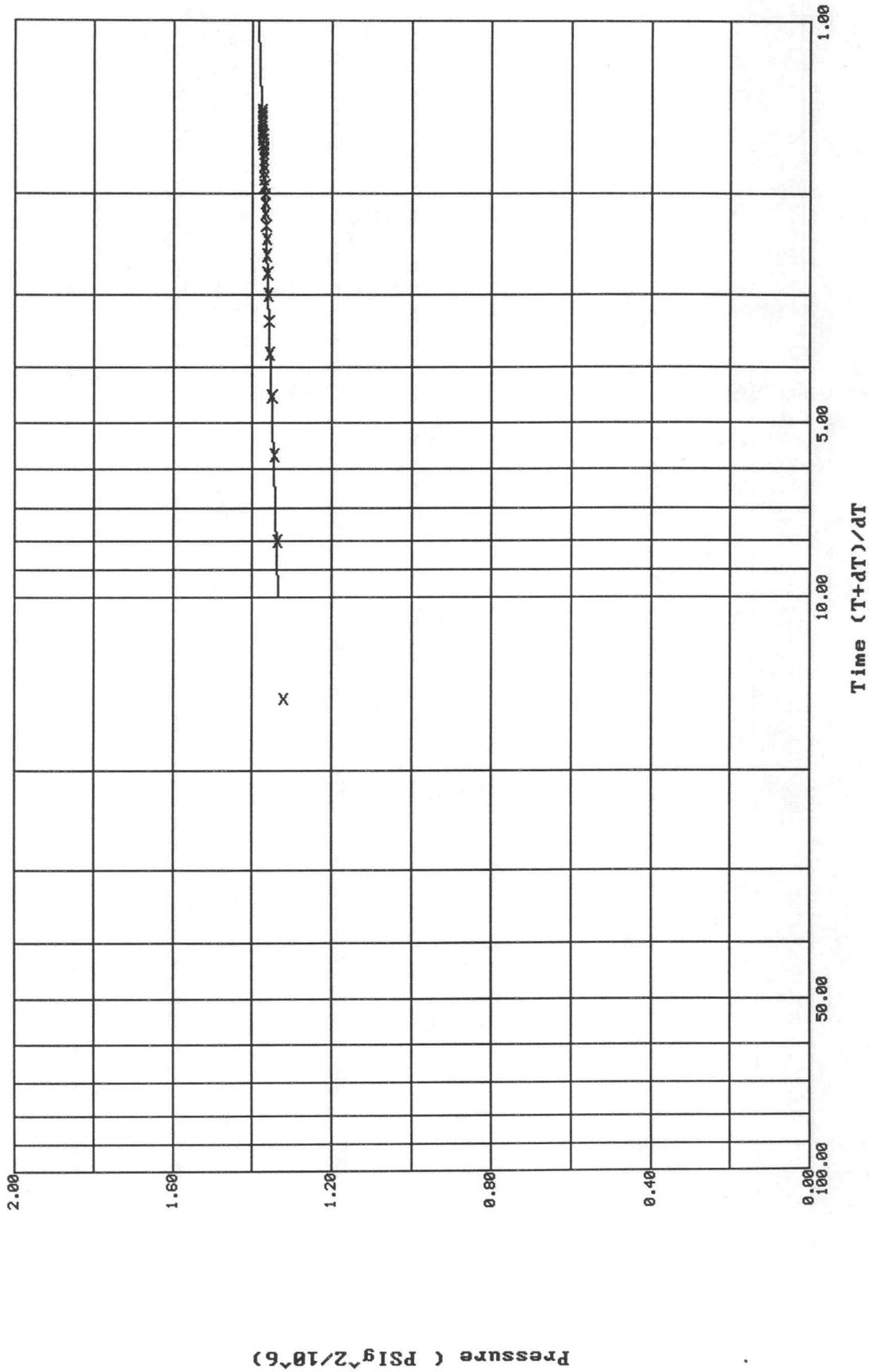
	Time	Pressure PSIg	delta P PSIg	Temp. DEG F	(T+dT)/dT	P <sup>2</sup> /10 <sup>6</sup>
	33.00	1172.3	272.6	105.23	2.0000	1.374
	34.00	1172.4	272.7	105.23	1.9706	1.375
	35.00	1172.5	272.8	105.23	1.9429	1.375
	36.00	1172.7	273.0	105.24	1.9167	1.375
	37.00	1172.8	273.1	105.24	1.8919	1.375
	38.00	1172.8	273.1	105.25	1.8684	1.375
	39.00	1172.9	273.2	105.25	1.8462	1.376
	40.00	1173.0	273.3	105.26	1.8250	1.376
	41.00	1173.0	273.3	105.26	1.8049	1.376
	42.00	1173.0	273.3	105.27	1.7857	1.376
	43.00	1173.1	273.4	105.27	1.7674	1.376
	44.00	1173.1	273.4	105.27	1.7500	1.376
***** End Shut-in 2	45.00	1173.3	273.6	105.28	1.7333	1.377
***** Final Hydro.	193.00	1722.6	0.0	105.54		

# P<sup>2</sup> Horner Plot: shut-in #1

TICKET #8774 DST #2 GRABBE #1-3 LIBOC

Slope: 0.0481 PSig<sup>2</sup>/10<sup>6</sup>/cycle

Ext. Pressure: 1176.6136 PSig

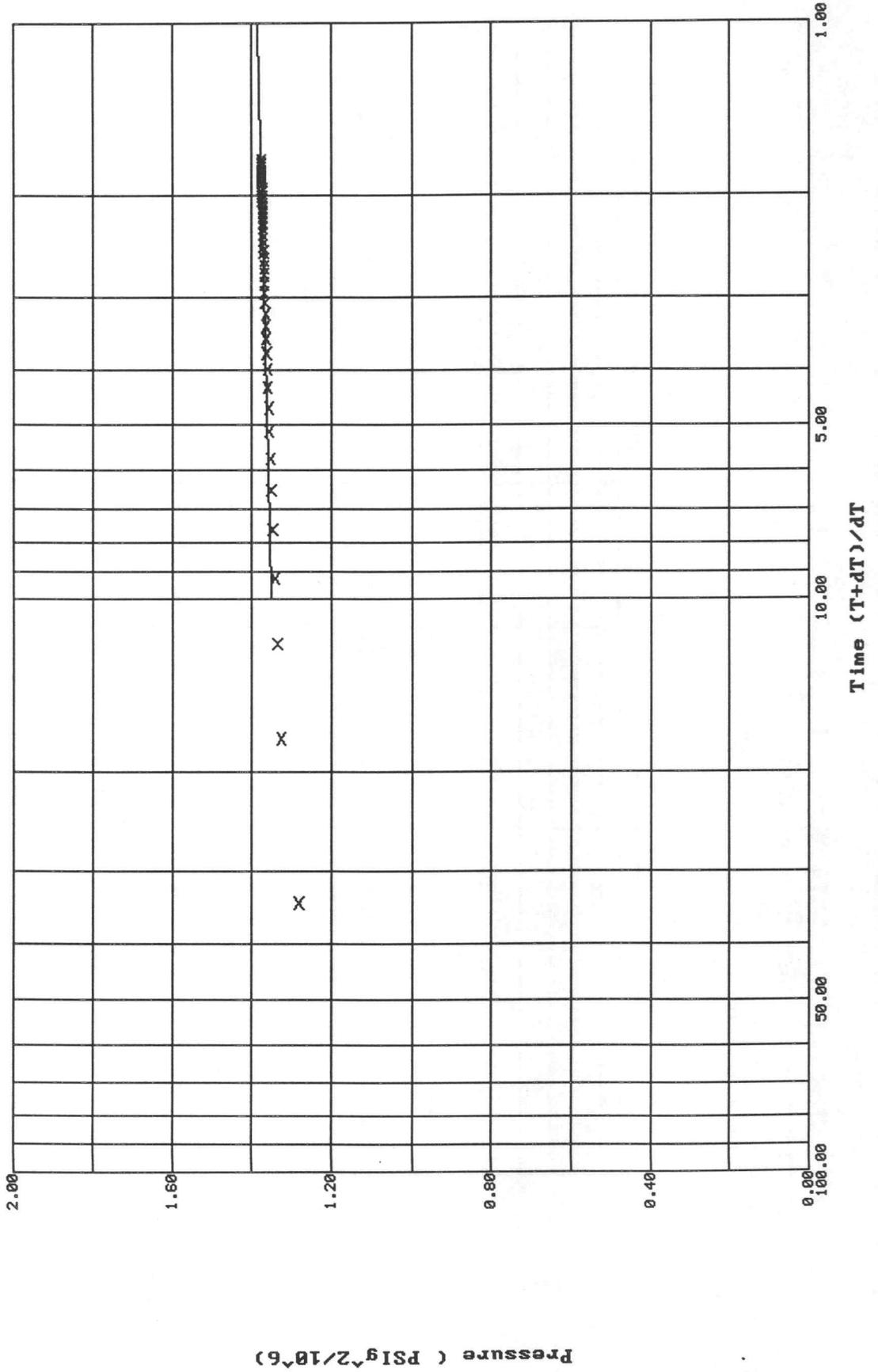


# P<sup>2</sup> Horner Plot: shut-in #2

TICKET #8774 DST #2 GRABBE #1-3 LIBOC

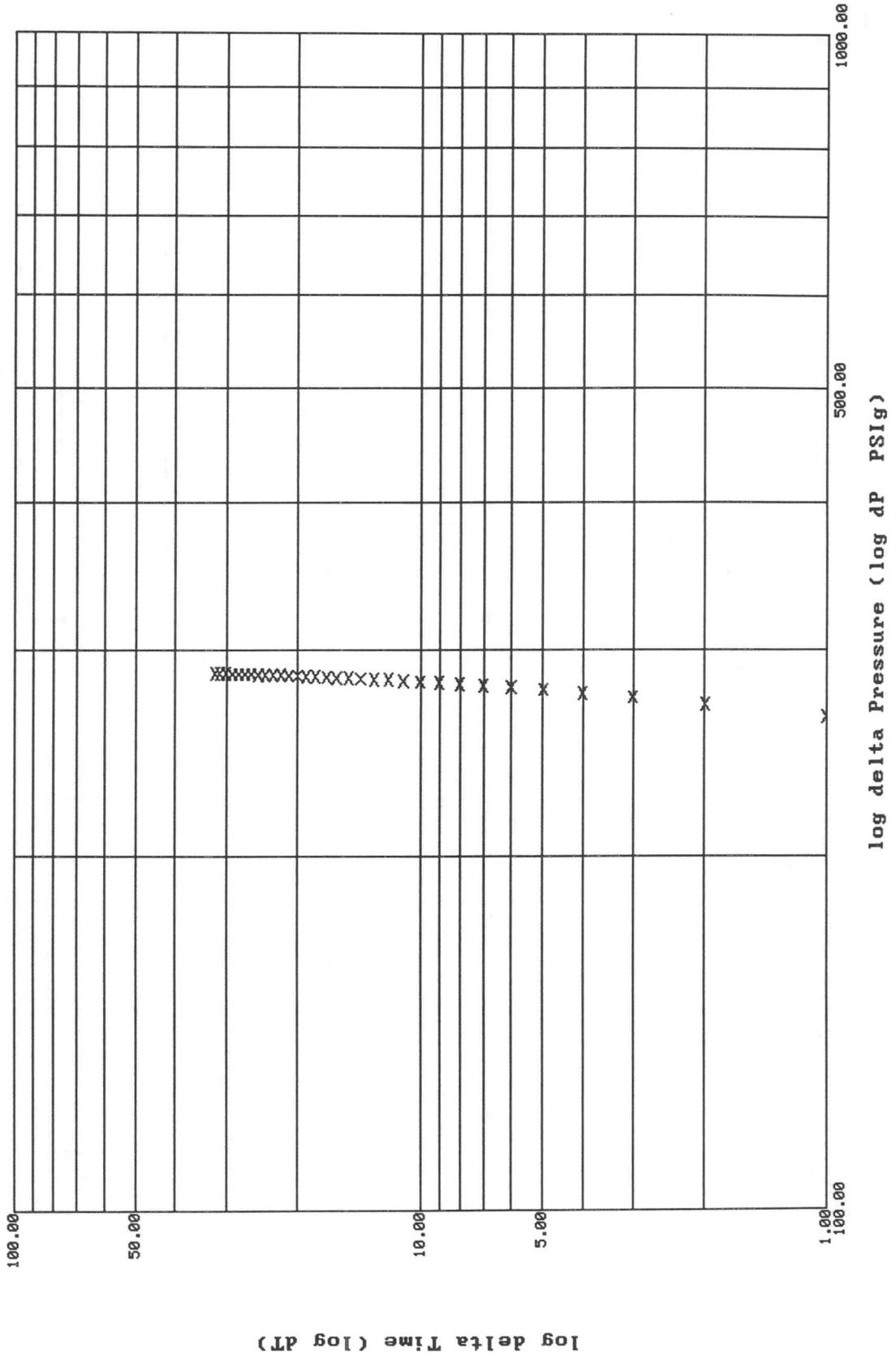
Slope: 0.0345 PSig<sup>2</sup>/10<sup>6</sup>/cycle

Ext. Pressure: 1176.7712 PSig



# McKinley Plot: shut-in #1

TICKET #8774 DST #2 GRABBE #1-3 LIBOC



**McKinley Plot: shut-in #2**  
TICKET #8774 DST #2 GRABBE #1-3 LIBOC

