

# FLOPETROL JO

Denne rapport  
tilhører



L&U DOK. SENTER

L. NR. 20084500007

KODE Well 31/2-15 nr.12

Returneres etter bruk

## SDP/TPT PRESSURE AND TEMPERATURE SURVEY

SHELL.

NORWAY.

TROLL.

31/2-15, GRADIENT RUN NO. 2

UPPER JURASIC, OXFORDIAN.

WELLS 84.92.

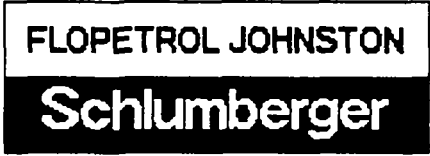
NWB.

SDP 84222 / 84186

FLOPETROL JOHNSTON

Schlumberger

\*\*\*\*\*  
Well DATA acquisition system-Well DATA acquisition system-Well DATA acquisition  
\*\*\*\*\*



SIP/TPT PRESSURE AND TEMPERATURE SURVEY

company	: SHELL.
country	: NORWAY.
field	: TROLL.
well	: 31/2-15, GRADIENT RUN NO. 2
tested zone	: UPPER JURASIC, OXFORDIAN.
report nbr.	: ELS 84.92.
base	: NWB.
gauge	: SDP 84222 / 84186

---

### GENERAL INFORMATION

---

1.1	service	:SDP/TPT PRESSURE AND TEMPERATURE SURVAY.
1.2	company	:SHELL.
1.3	well	:31/2-15
1.4	field	:TROLL.
1.6	country	:NORWAY.
1.7	tested zone	:UPPER JURASIC, OXFORDIAN.
1.8	lat.,long.	:60deg 55' 25,58" N-03deg 34' 02,50" S.

---

### OPERATION DATA

---

2.1	date of test	:4-5 NOV.84
2.2	report nbr.	:ELS 84.92.
2.3	base	:NWB.
2.5	recorded by	:GEIR-OLE EIKEMO.
2.6	witnessed by	:LES JHONSTONE.

---

### WELL DATA

---

3.1	state before test	:CASED HOLE.
3.2	well type	:APPRAISAL.
3.3	fluid type	:BRINE/WATER.
3.5	completion type	:DST-CASED HOLE.
3.6	min. restriction	:1.875" (F-NIPPEL).
3.8	vert. depth	:1677mRKB.
3.9	hole size	:9 5/8".
3.10	Csg size/shoe	:9 5/8".
3.11	tbq. shoe at	:1554mRKB.
3.12	perf. shot density	:12 SHOTS/FT.
3.13	perf. gun type	:BAKER DEEP PENETRATOR.
3.14	perf. conditions	:UNDER BALANCE.
3.15	perf. interval(s)	:1564-1567mRKB.
3.17	static W.H.P.	:1820PSI.
3.20	gas gravity	:0.601.

---

### DEPTH INFORMATION

---

5.1	depth unit	:METER.
5.2	depth reference	:RKB.
5.3	log ref.,elevation	:RKB.
5.4	total depth drlg.	:1677mRKB.
5.5	total depth FLO.	:1564.63mRKB.
5.8	gauge M.P. set at	:1564.42mRKB.

---

### DOWNHOLE EQUIPMENT

---

6.1	cable type	:SLICK-LINE.
6.2	gauge	:SDP/TPT # 84222.
6.3	recorder	:RM # 84186.
6.5	length	:2.52 M.
6.6	max O.D	:1 11/16".

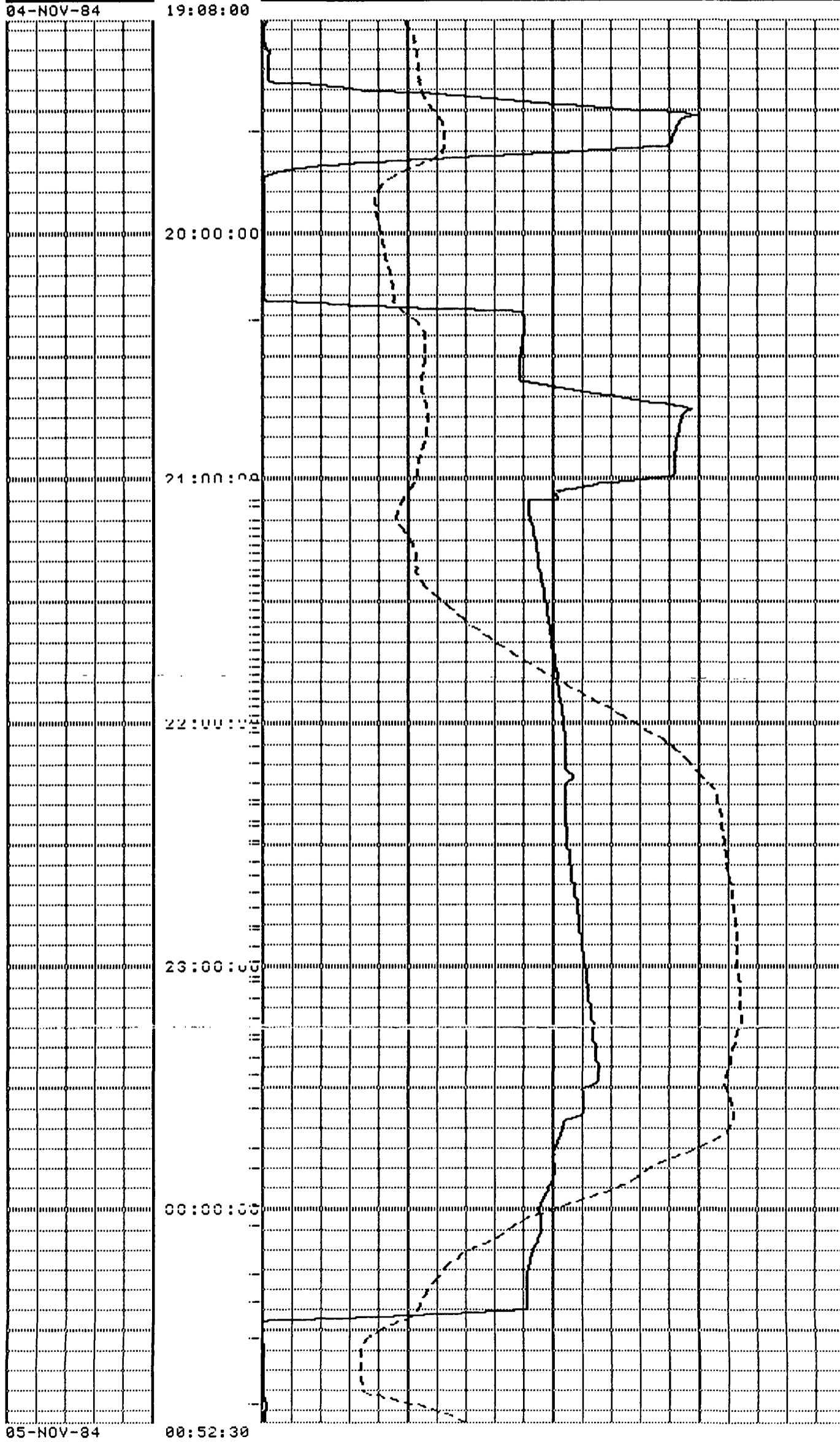
SEQUENCE OF EVENTS

04-NOV-84 18:38:00	!POWER ON SDP# 84222, RM# 84178.
04-NOV-84 18:52:00	!TOOLS IN LUB.
04-NOV-84 19:02:00	!LUB. CONNECTED.
04-NOV-84 19:05:00	!PRESSURE TEST TO 3000 PSI.
04-NOV-84 19:35:00	!LEAK IN LUB. SECTION .
04-NOV-84 20:21:00	!PRESSURE TEST TO 3000 PSI.
04-NOV-84 21:00:00	!BLEED OFF TO 2000 PSI.
04-NOV-84 21:05:00	!GRADIENT STOP IN LUB.
04-NOV-84 21:07:00	!R. I. H.
04-NOV-84 21:10:00	!GRADIENT STOP @ 104.6mRKB.
04-NOV-84 21:12:00	!R. I. H.
04-NOV-84 21:14:00	!GRADIENT STOP @ 204.6mRKB.
04-NOV-84 21:16:00	!R. I. H.
04-NOV-84 21:18:00	!GRADIENT STOP @ 304.6mRKB.
04-NOV-84 21:20:00	!R. I. H.
04-NOV-84 21:22:00	!GRADIENT STOP @ 404.6mRKB.
04-NOV-84 21:24:00	!R. I. H.
04-NOV-84 21:26:00	!GRADIENT STOP @ 504.6mRKB.
04-NOV-84 21:28:00	!R. I. H.
04-NOV-84 21:30:00	!GRADIENT STOP @ 604.6mRKB.
04-NOV-84 21:32:00	!R. I. H.
04-NOV-84 21:34:00	!GRADIENT STOP @ 704.6mRKB.
04-NOV-84 21:36:00	!R. I. H.
04-NOV-84 21:38:00	!GRADIENT STOP @ 804.6mRKB.
04-NOV-84 21:40:00	!R. I. H.
04-NOV-84 21:42:00	!GRADIENT STOP @ 904.6mRKB.
04-NOV-84 21:44:00	!R. I. H.
04-NOV-84 21:46:00	!GRADIENT STOP @ 1004.6mRKB.
04-NOV-84 21:48:00	!R. I. H.
04-NOV-84 21:50:00	!GRADIENT STOP @ 1104.6mRKB.
04-NOV-84 21:52:00	!R. I. H.
04-NOV-84 21:54:00	!GRADIENT STOP @ 1204.6mRKB.
04-NOV-84 21:56:00	!R. I. H.
04-NOV-84 21:58:00	!GRADIENT STOP @ 1304.6mRKB.
04-NOV-84 22:00:00	!R. I. H.
04-NOV-84 22:02:00	!GRADIENT STOP @ 1354.6mRKB.
04-NOV-84 22:05:00	!R. I. H.
04-NOV-84 22:06:00	!GRADIENT STOP @ 1404.6mRKB.
04-NOV-84 22:10:00	!R. I. H. TO FAR, P.O.O.H. TO THE CORRECT GRADIENT DEP TH.
04-NOV-84 22:10:00	!R. I. H.
04-NOV-84 22:15:00	!GRADIENT STOP @ 1414.6mRKB.
04-NOV-84 22:19:00	!R. I. H.
04-NOV-84 22:20:00	!GRADIENT STOP @ 1424.6mRKB.
04-NOV-84 22:24:00	!R. I. H.
04-NOV-84 22:25:00	!GRADIENT STOP @ 1434.6mRKB.
04-NOV-84 22:29:00	!R. I. H.
04-NOV-84 22:30:00	!GRADIENT STOP @ 1444.6mRKB.
04-NOV-84 22:34:00	!R. I. H.
04-NOV-84 22:34:00	!GRADIENT STOP @ 1454.6mRKB.
04-NOV-84 22:38:00	!R. I. H.
04-NOV-84 22:38:00	!GRADIENT STOP @ 1464.6mRKB.
04-NOV-84 22:42:00	!R. I. H.
04-NOV-84 22:42:00	!GRADIENT STOP @ 1474.6mRKB.
04-NOV-84 22:46:00	!R. I. H.
04-NOV-84 22:46:00	!GRADIENT STOP @ 1484.6mRKB.
04-NOV-84 22:50:00	!R. I. H.
04-NOV-84 22:51:00	!GRADIENT STOP @ 1494.6mRKB.
04-NOV-84 22:55:00	!R. I. H.
04-NOV-84 22:55:00	!GRADIENT STOP @ 1504.6mRKB.
04-NOV-84 22:59:00	!R. I. H.
04-NOV-84 22:59:00	!GRADIENT STOP @ 1514.6mRKB.
04-NOV-84 23:03:00	!R. I. H.
04-NOV-84 23:04:00	!GRADIENT STOP @ 1524.6mRKB.
04-NOV-84 23:08:00	!R. I. H.

04-NOV-84 23:08:00  
04-NOV-84 23:12:00  
04-NOV-84 23:13:00  
04-NOV-84 23:17:00  
04-NOV-84 23:18:00  
04-NOV-84 23:22:00  
04-NOV-84 23:23:00  
04-NOV-84 23:27:00  
04-NOV-84 23:30:00  
04-NOV-84 23:35:00  
04-NOV-84 23:45:00  
04-NOV-84 23:50:00  
04-NOV-84 23:59:00  
05-NOV-84 00:04:00  
05-NOV-84 00:16:00  
05-NOV-84 00:23:00  
05-NOV-84 00:32:00  
05-NOV-84 00:48:00  
05-NOV-84 00:56:00

!GRADIENT STOP @ 1534.6mRKB.  
!R.I.H.  
!GRADIENT STOP @ 1544.6mRKB.  
!R.I.H.  
!GRADIENT STOP @ 1554.6mRKB.  
!R.I.H.  
!GRADIENT STOP @ 1564.6mRKB.  
!P.O.O.H.  
!GRADIENT STOP @ 1504.6mRKB.  
!P.O.O.H.  
!GRADIENT STOP @ 1004.6mRKB.  
!P.O.O.H.  
!GRADIENT STOP @ 504.6mRKB.  
!P.O.O.H.  
!IN LUB.  
!CLOSE LUB. VALVE.  
!LUB. DISCONNECTED.  
!TOOLS OFF STRING.  
!POWER OFF SDP# 84222.

		SDP (psia)	4000.
		0.	[45.873]
		SDT (degF)	160.
		0.	[39.105]



SHELL, WELL:31/2-15, DST#2, TROLLFIELD, SDP#84222, GRADIENT RUN.

START TIME:04-NOV-84 18:38:00

page 1

18:38:00 POWER ON SDP# 84222, RM# 84178.  
 18:52:00 TOOLS IN LUB.  
 19:02:00 LUB. CONNECTED.  
 19:05:00 PRESSURE TEST TO 3000 PSI.

04-NOV-84	SDT degF	SDP psia
19:08:00	39.10	45.87
19:08:10	39.41	38.31
19:08:15	39.41	35.17
19:08:20	39.41	32.43
19:08:30	39.56	27.88
19:08:40	39.71	24.27
19:08:50	39.71	21.41
19:09:00	39.71	19.02
19:09:10	39.86	17.07
19:09:30	40.17	14.09
19:09:50	40.32	12.09
19:10:10	40.47	10.64
19:10:50	40.93	8.84
19:11:30	41.23	7.83
19:12:10	41.53	7.20
19:12:20	41.53	7.09
19:12:25	41.53	7.04
19:12:35	41.68	7.63
19:12:40	41.68	7.00
19:13:00	41.84	6.81
19:13:05	41.84	6.97
19:13:10	41.99	7.43
19:13:15	41.84	8.98
19:13:20	41.84	11.01
19:13:25	41.99	13.68
19:13:30	41.84	16.94
19:13:35	41.99	19.44
19:13:40	41.99	21.27
19:13:45	41.99	22.22
19:13:55	42.14	22.40
19:14:05	41.99	22.32
19:14:15	42.14	23.08
19:14:25	42.14	24.72
19:14:30	42.29	25.63
19:14:40	42.29	26.70
19:14:50	42.29	26.77
19:14:55	42.29	27.66
19:15:00	42.29	30.61
19:15:10	42.29	39.96
19:15:15	42.29	43.30
19:15:20	42.29	46.04
19:15:30	42.44	52.44
19:15:35	42.44	54.25
19:15:40	42.44	55.05
19:15:45	42.44	54.83
19:15:55	42.44	53.81
19:16:15	42.44	49.93
19:16:25	42.59	48.20
19:16:35	42.59	46.81
19:16:55	42.59	44.86
19:17:15	42.59	43.37
19:17:25	42.74	42.76
19:17:35	42.59	42.70
19:17:45	42.74	43.35
19:18:05	42.74	43.15
19:18:45	42.90	42.14

04-NOV-84	SDT degF	SDP psia
19:18:55	42.90	42.45
19:19:15	42.90	42.33
19:20:35	43.05	41.02
19:20:55	43.05	40.82
19:21:15	43.05	41.82
19:21:25	43.20	42.05
19:21:35	43.20	44.03
19:21:45	43.05	45.00
19:22:05	43.05	45.32
19:22:25	43.05	45.22
19:22:35	43.20	45.17
19:22:40	43.20	45.13
19:22:45	43.20	45.40
19:22:50	43.05	51.51
19:22:55	43.20	75.22
19:23:00	43.20	106.60
19:23:05	43.20	137.40
19:23:15	43.20	198.02
19:23:35	43.20	318.31
19:23:55	43.35	438.02
19:24:15	43.50	556.81
19:24:25	43.35	615.26
19:24:35	43.50	674.50
19:25:15	43.65	910.26
19:25:55	43.96	1145.86
19:27:15	44.71	1615.27
19:27:35	45.02	1732.14
19:28:15	45.47	1966.78
19:28:20	45.47	1996.57
19:28:25	45.62	2027.36
19:28:45	45.92	2152.25
19:29:25	46.38	2401.50
19:29:45	46.83	2526.89
19:30:25	47.43	2779.15
19:30:45	47.74	2905.57
19:30:50	47.89	2937.19
19:30:55	47.89	2966.18
19:31:00	48.04	2976.58
19:31:05	48.04	2968.44
19:31:10	48.19	2956.69
19:31:15	48.19	2946.13
19:31:20	48.34	2936.83
19:31:25	48.49	2928.77
19:31:30	48.49	2921.99
19:31:35	48.64	2915.94
19:31:40	48.64	2910.36
19:31:45	48.64	2905.38
19:31:50	48.79	2900.86
19:31:55	48.79	2896.85
19:32:05	48.95	2889.84
19:32:10	48.95	2886.74
19:32:20	49.10	2881.25
19:32:30	49.25	2876.51
19:32:40	49.40	2872.28
19:32:50	49.40	2868.52
19:33:10	49.70	2862.07
19:33:30	49.70	2856.55
19:33:50	49.70	2851.72
19:34:10	50.00	2847.28
19:34:50	50.00	2839.83
19:35:00	LEAK IN LUB. SECTION .	
19:36:10	50.15	2826.19



04-NOV-84	SDT degF	SDP psia
19:37:30	50.15	2813.44
19:37:40	50.15	2811.84
19:37:45	50.15	2811.05
19:37:50	50.00	2809.56
19:38:10	50.00	2800.41
19:38:20	50.00	2795.98
19:38:25	50.00	2790.76
19:38:30	50.00	2776.20
19:38:35	50.00	2755.06
19:38:40	49.85	2719.58
19:38:45	49.85	2677.07
19:38:50	50.00	2624.08
19:38:55	50.00	2569.77
19:39:00	50.00	2520.83
19:39:05	49.85	2476.34
19:39:10	49.85	2432.58
19:39:15	49.85	2390.51
19:39:20	49.70	2353.49
19:39:25	49.70	2318.45
19:39:30	49.55	2284.63
19:39:35	49.70	2252.00
19:39:40	49.55	2220.45
19:39:45	49.40	2189.57
19:39:50	49.40	2156.62
19:39:55	49.40	2118.71
19:40:00	49.40	2075.55
19:40:05	49.25	2028.69
19:40:10	49.25	1977.14
19:40:15	49.10	1921.74
19:40:20	48.95	1866.82
19:40:25	48.95	1813.77
19:40:30	48.79	1764.11
19:40:35	48.79	1716.50
19:40:40	48.64	1669.28
19:40:50	48.34	1570.70
19:40:55	48.19	1522.34
19:41:00	48.19	1474.87
19:41:05	48.04	1428.93
19:41:10	47.74	1383.47
19:41:15	47.59	1338.77
19:41:20	47.43	1292.86
19:41:25	47.28	1245.68
19:41:30	47.13	1196.52
19:41:35	46.98	1149.02
19:41:40	46.83	1104.79
19:41:45	46.53	1061.53
19:41:50	46.23	1018.79
19:41:55	46.07	977.70
19:42:00	45.77	935.84
19:42:05	45.62	893.28
19:42:10	45.47	851.65
19:42:15	45.17	810.84
19:42:20	44.86	771.78
19:42:25	44.71	734.71
19:42:30	44.41	700.21
19:42:40	44.11	635.03
19:42:45	43.80	601.68
19:42:50	43.50	567.92
19:42:55	43.20	533.38
19:43:00	43.05	500.41
19:43:05	42.74	469.73
19:43:10	42.44	441.00

04-NOV-84	SDT degF	SDP psia
19:43:15	42.29	413.93
19:43:20	42.14	388.42
19:43:25	41.84	364.22
19:43:30	41.53	341.71
19:43:35	41.38	320.49
19:43:40	41.08	300.54
19:43:45	40.93	281.75
19:43:50	40.62	264.09
19:43:55	40.47	247.40
19:44:00	40.17	231.74
19:44:05	39.86	216.97
19:44:15	39.56	186.34
19:44:20	39.26	172.49
19:44:25	39.10	159.58
19:44:30	38.80	147.56
19:44:35	38.80	136.24
19:44:40	38.50	125.78
19:44:45	38.19	116.01
19:44:50	38.04	106.94
19:44:55	37.89	98.54
19:45:00	37.74	90.69
19:45:05	37.59	83.34
19:45:10	37.43	76.56
19:45:15	37.13	70.30
19:45:25	36.83	58.19
19:45:30	36.67	52.00
19:45:35	36.52	46.57
19:45:40	36.22	41.64
19:45:45	36.07	37.06
19:45:50	35.91	32.87
19:45:55	35.91	29.08
19:46:00	35.76	25.70
19:46:05	35.61	22.73
19:46:10	35.46	20.23
19:46:15	35.15	18.11
19:46:25	35.00	14.46
19:46:35	34.85	11.15
19:46:45	34.54	8.62
19:46:55	34.24	6.69
19:47:05	34.09	5.38
19:47:15	33.78	4.65
19:47:25	33.63	4.24
19:47:45	33.17	4.37
19:50:25	31.34	8.07
19:53:05	31.04	10.44
19:55:45	31.19	11.79
20:01:05	32.56	12.60
20:06:25	33.94	12.62
20:07:45	34.24	12.61
20:08:05	34.39	12.57
20:08:15	34.39	12.96
20:08:25	34.54	14.88
20:08:30	34.39	15.21
20:09:50	34.85	14.98
20:09:55	34.85	14.95
20:10:05	34.85	14.02
20:10:25	35.00	13.87
20:10:45	35.15	13.30
20:16:05	36.07	13.40
20:16:10	36.07	16.66
20:16:15	36.07	42.28
20:16:20	35.91	87.56

04-NOV-84	SDT degF	SDP psia
20:16:25	35.91	134.00
20:16:35	36.22	226.22
20:16:40	36.22	272.36
20:16:45	36.22	317.88
20:16:50	36.22	362.91
20:17:00	36.37	452.33
20:17:05	36.37	497.18
20:17:10	36.37	541.73
20:17:15	36.52	585.96
20:17:25	36.67	673.65
20:17:35	36.67	760.44
20:17:45	36.98	846.37
20:17:50	36.98	893.02
20:17:55	36.98	968.32
20:18:00	37.13	1061.05
20:18:05	37.13	1149.42
20:18:10	37.28	1233.75
20:18:15	37.28	1313.85
20:18:20	37.59	1389.68
20:18:25	37.74	1460.79
20:18:30	37.74	1526.38
20:18:35	37.89	1585.25
20:18:40	38.04	1636.40
20:18:45	38.19	1679.28
20:18:50	38.19	1713.79
20:18:55	38.50	1739.75
20:19:00	38.65	1758.99
20:19:05	38.65	1772.56
20:19:10	38.80	1780.12
20:19:15	38.95	1783.95
20:19:25	39.10	1789.59
20:19:30	39.41	1792.04
20:19:40	39.56	1795.12
20:19:50	39.86	1797.63
20:20:00	40.17	1799.62
20:20:20	40.77	1802.52
20:20:40	41.08	1804.44
20:21:00	PRESSURE TEST TO 3000 PSI.	
20:21:00	41.68	1805.53
20:21:20	42.14	1806.13
20:21:40	42.44	1806.31
20:22:20	43.05	1805.73
20:23:00	43.65	1804.52
20:23:40	44.11	1802.65
20:25:00	44.56	1798.10
20:30:20	44.71	1779.29
20:31:40	44.71	1775.25
20:34:20	44.26	1769.05
20:35:40	43.96	1766.52
20:35:45	43.96	1766.64
20:35:50	44.11	1772.27
20:35:55	43.96	1785.57
20:36:00	43.96	1800.94
20:36:10	43.96	1832.48
20:36:15	43.80	1847.97
20:36:20	43.96	1862.99
20:36:25	43.96	1877.63
20:36:30	43.80	1891.97
20:36:35	43.96	1905.85
20:36:45	43.96	1932.79
20:36:55	43.80	1958.80
20:37:05	43.80	1984.12

04-NOV-84	SDT degF	SDP psia
20:37:15	43.96	2008.68
20:37:25	43.80	2032.74
20:37:35	43.96	2056.39
20:37:40	43.96	2068.41
20:37:45	43.96	2081.38
20:37:55	43.80	2108.65
20:38:05	43.96	2135.39
20:38:25	43.96	2187.87
20:38:45	43.96	2239.56
20:38:50	43.96	2252.68
20:38:55	44.11	2266.96
20:39:15	44.11	2327.67
20:39:25	44.11	2357.73
20:39:45	44.26	2417.10
20:41:05	44.56	2652.17
20:41:45	44.86	2769.60
20:42:25	45.02	2886.77
20:42:35	45.17	2915.65
20:42:40	45.17	2930.30
20:42:45	45.17	2944.33
20:42:50	45.32	2949.56
20:42:55	45.32	2944.36
20:43:00	45.17	2938.03
20:43:05	45.32	2932.29
20:43:10	45.32	2927.27
20:43:15	45.32	2922.82
20:43:20	45.32	2918.94
20:43:25	45.47	2915.40
20:43:35	45.47	2909.41
20:43:45	45.47	2904.55
20:43:55	45.47	2900.36
20:44:05	45.47	2896.87
20:44:15	45.62	2893.83
20:44:35	45.62	2888.81
20:44:55	45.62	2884.73
20:45:15	45.62	2881.33
20:45:55	45.47	2875.80
20:46:35	45.62	2870.94
20:47:15	45.47	2866.84
20:48:35	45.17	2859.83
20:49:55	45.02	2853.74
20:51:15	44.56	2848.38
20:52:35	44.26	2843.64
20:53:15	43.96	2841.80
20:58:35	42.59	2830.38
20:58:55	42.44	2828.55
20:59:00	42.59	2827.75
20:59:05	42.59	2825.59
20:59:10	42.44	2820.55
20:59:15	42.29	2813.62
20:59:20	42.44	2802.72
20:59:25	42.44	2786.31
20:59:30	42.44	2768.99
20:59:35	42.44	2747.86
20:59:40	42.29	2724.07
20:59:45	42.29	2701.66
20:59:50	42.29	2680.60
20:59:55	42.29	2660.54
21:00:00	BLEED OFF TO 2000 PSI.	
21:00:00	42.14	2641.44
21:00:05	42.14	2623.05
21:00:10	42.14	2603.69

04-NOV-84	SDT degF	SDP psia
21:00:15	42.14	2581.82
21:00:20	41.99	2558.50
21:00:25	42.14	2533.65
21:00:35	41.99	2481.56
21:00:40	41.99	2456.00
21:00:45	41.84	2432.01
21:00:50	41.84	2410.22
21:00:55	41.68	2391.30
21:01:00	41.68	2375.03
21:01:20	41.53	2312.27
21:01:30	41.23	2281.52
21:01:40	41.23	2251.32
21:01:50	41.08	2221.52
21:02:00	40.93	2192.25
21:02:10	40.77	2163.56
21:02:20	40.77	2135.31
21:02:25	40.62	2120.62
21:02:30	40.47	2098.86
21:02:35	40.47	2079.52
21:02:40	40.47	2068.17
21:02:50	40.32	2046.25
21:02:55	40.17	2035.10
21:03:00	40.02	2028.15
21:03:05	40.02	2031.28
21:03:10	39.86	2035.52
21:03:15	39.86	2036.72
21:03:20	39.71	2034.88
21:03:25	39.71	2031.09
21:03:30	39.56	2025.74
21:03:35	39.56	2020.08
21:03:40	39.56	2020.22
21:03:45	39.41	2022.56
21:03:50	39.41	2022.61
21:03:55	39.41	2020.07
21:04:00	39.26	2019.49
21:04:10	39.10	2023.71
21:04:20	38.95	2026.65
21:04:30	38.80	2029.06
21:04:50	38.65	2032.61
21:05:00	GRADIENT STOP IN LUB.	
21:05:00	38.50	2033.88
21:05:05	38.50	1989.36
21:05:10	38.50	1858.73
21:05:15	38.50	1830.47
21:05:20	38.35	1832.35
21:05:25	38.35	1833.29
21:05:30	38.35	1833.32
21:05:35	38.19	1834.47
21:05:45	38.19	1834.86
21:05:50	38.19	1835.17
21:05:55	38.04	1835.20
21:06:00	37.89	1835.59
21:06:40	37.74	1836.22
21:07:00	R. I. H.	
21:08:00	36.98	1836.72
21:08:40	36.98	1836.88
21:08:50	36.83	1836.96
21:09:10	36.67	1838.09
21:09:30	36.83	1839.63
21:09:50	36.67	1841.64
21:10:00	GRADIENT STOP @ 104.6mRKB.	
21:10:00	36.67	1842.74

04-NOV-84	SDT degF	SDP psia
21:10:10	36.83	1843.30
21:10:30	36.98	1846.76
21:10:40	36.98	1848.57
21:10:50	37.13	1850.68
21:11:10	37.43	1855.83
21:11:20	37.59	1858.36
21:11:25	37.59	1859.54
21:11:30	37.74	1860.04
21:12:00	R. I. H.	
21:12:50	38.95	1862.28
21:13:30	39.41	1863.04
21:13:35	39.56	1863.39
21:14:00	GRADIENT STOP @ 204.6mRKB.	
21:14:15	40.02	1870.39
21:14:55	40.62	1879.25
21:15:05	40.62	1881.30
21:15:10	40.77	1881.76
21:16:00	R. I. H.	
21:16:30	41.38	1881.27
21:17:10	41.68	1880.83
21:17:20	41.68	1880.92
21:17:40	41.84	1883.78
21:18:00	GRADIENT STOP @ 304.6mRKB.	
21:19:00	42.14	1898.05
21:19:05	42.29	1898.48
21:20:00	R. I. H.	
21:20:25	42.29	1897.59
21:21:05	42.44	1897.16
21:21:25	42.29	1897.03
21:21:30	42.29	1897.32
21:21:50	42.44	1900.44
21:22:00	GRADIENT STOP @ 404.6mRKB.	
21:22:30	42.29	1907.60
21:22:50	42.14	1911.03
21:23:10	42.29	1914.03
21:23:20	42.44	1914.96
21:24:00	R. I. H.	
21:24:00	42.74	1915.19
21:24:40	43.20	1915.81
21:25:00	43.50	1916.11
21:25:10	43.65	1916.27
21:25:20	43.80	1916.80
21:26:00	GRADIENT STOP @ 504.6mRKB.	
21:26:00	44.26	1922.77
21:26:20	44.71	1925.91
21:27:00	45.47	1933.14
21:27:10	45.77	1934.97
21:27:20	46.07	1936.47
21:28:00	R. I. H.	
21:28:00	46.83	1937.48
21:29:20	48.79	1938.66
21:30:00	GRADIENT STOP @ 604.6mRKB.	
21:30:00	49.55	1944.39
21:30:20	50.00	1947.53
21:31:00	50.91	1954.53
21:31:10	51.06	1956.18
21:31:15	51.36	1956.68
21:32:00	R. I. H.	
21:32:35	53.17	1956.94
21:33:15	53.92	1956.93
21:33:25	54.07	1957.90
21:34:00	GRADIENT STOP @ 704.6mRKB.	

04-NOV-84	SDT degF	SDP psia
21:34:05	54.97	1963.68
21:34:25	55.42	1966.64
21:35:05	56.33	1973.24
21:35:10	56.48	1973.88
21:36:00	R. I. H.	
21:36:30	58.58	1974.42
21:37:10	59.48	1974.43
21:37:15	59.48	1974.52
21:37:25	59.78	1975.44
21:37:45	60.23	1977.82
21:38:00	GRADIENT STOP @ 804.6mRKB.	
21:38:05	60.68	1980.54
21:38:45	61.88	1986.68
21:39:05	62.48	1989.48
21:39:15	62.78	1990.88
21:39:20	62.93	1991.55
21:40:00	R. I. H.	
21:40:40	65.32	1992.42
21:41:00	65.77	1992.48
21:41:10	66.07	1992.50
21:41:20	66.52	1992.98
21:42:00	GRADIENT STOP @ 904.6mRKB.	
21:42:00	67.56	1998.10
21:42:40	68.76	2003.74
21:43:20	70.10	2009.06
21:43:30	70.40	2009.46
21:44:00	R. I. H.	
21:44:50	72.93	2009.79
21:45:10	73.38	2009.74
21:45:20	73.68	2009.87
21:46:00	GRADIENT STOP @ 1004.6mRKB.	
21:46:00	74.72	2015.25
21:46:20	75.31	2017.91
21:47:00	76.65	2024.33
21:47:10	77.24	2025.69
21:47:20	77.39	2026.08
21:48:00	R. I. H.	
21:48:40	80.06	2026.45
21:49:20	81.25	2026.57
21:49:40	81.84	2028.57
21:50:00	GRADIENT STOP @ 1104.6mRKB.	
21:50:00	82.43	2030.90
21:50:40	83.76	2036.42
21:51:00	84.36	2039.48
21:51:20	85.09	2042.05
21:52:00	R. I. H.	
21:52:40	88.05	2042.77
21:53:00	88.49	2042.86
21:53:10	88.93	2042.84
21:53:15	89.08	2042.83
21:53:20	89.23	2043.17
21:54:00	GRADIENT STOP @ 1204.6mRKB.	
21:54:00	90.55	2048.76
21:54:20	91.29	2050.93
21:54:30	91.58	2051.86
21:55:10	93.06	2057.23
21:55:20	93.35	2058.47
21:56:00	R. I. H.	
21:56:00	94.97	2058.98
21:57:20	97.61	2059.03
21:57:30	97.90	2059.65
21:58:00	GRADIENT STOP @ 1304.6mRKB.	

04-NOV-84	SDT degF	SDP psia
21:58:10	99.08	2064.16
21:58:50	100.54	2068.34
21:59:10	101.13	2070.81
21:59:30	101.71	2073.66
21:59:35	102.00	2074.14
22:00:00	R. I. H.	
22:00:55	104.49	2074.33
22:01:15	105.07	2074.29
22:01:25	105.51	2074.21
22:01:30	105.51	2074.35
22:02:00	GRADIENT STOP @ 1354.6mRKB.	
22:02:10	106.82	2079.05
22:02:30	107.41	2081.46
22:02:40	107.70	2081.72
22:04:00	110.03	2081.46
22:05:00	R. I. H.	
22:06:00	GRADIENT STOP @ 1404.6mRKB.	
22:06:40	113.52	2079.93
22:06:45	113.66	2080.09
22:07:25	114.39	2084.98
22:07:35	114.68	2086.36
22:07:40	114.82	2086.91
22:08:00	115.26	2087.11
22:10:00	R. I. H. TO FAR, P.O.O.H. TO THE CORRECT GRADIENT DEPTH.	
22:10:00	R. I. H.	
22:10:40	118.16	2086.47
22:11:00	118.59	2086.34
22:11:10	118.74	2086.24
22:11:15	118.74	2086.64
22:11:25	119.03	2088.27
22:11:30	119.03	2088.37
22:11:35	119.17	2089.10
22:11:45	119.32	2091.84
22:11:50	119.46	2093.72
22:11:55	119.46	2096.34
22:12:00	119.61	2100.02
22:12:10	119.75	2110.09
22:12:15	119.90	2116.05
22:12:20	119.90	2121.13
22:12:30	120.19	2127.71
22:12:35	120.33	2131.09
22:12:40	120.47	2132.84
22:12:50	120.62	2133.29
22:13:30	121.49	2133.41
22:13:35	121.49	2133.36
22:13:40	121.63	2131.73
22:13:45	121.63	2127.97
22:14:05	122.21	2110.22
22:14:15	122.21	2100.75
22:14:20	122.35	2097.31
22:14:30	122.50	2091.46
22:14:35	122.64	2089.83
22:15:00	GRADIENT STOP @ 1414.6mRKB.	
22:15:15	123.22	2087.01
22:15:20	123.22	2086.69
22:15:40	123.51	2087.57
22:18:20	124.81	2085.88
22:19:00	R. I. H.	
22:19:40	125.10	2085.22
22:20:00	GRADIENT STOP @ 1424.6mRKB.	
22:20:20	125.38	2084.95
22:20:30	125.38	2085.07



04-NOV-84	SDT degF	SDP psia
22:20:50	125.38	2086.22
22:23:30	126.10	2085.75
22:24:00	R. I. H.	
22:24:50	126.10	2085.56
22:25:00	GRADIENT STOP @ 1434.6mRKB.	
22:25:10	126.25	2085.49
22:25:20	126.25	2085.65
22:25:25	126.25	2086.97
22:25:35	126.25	2093.51
22:25:40	126.39	2094.92
22:28:20	126.82	2094.83
22:29:00	R. I. H.	
22:29:40	126.97	2094.76
22:30:00	GRADIENT STOP @ 1444.6mRKB.	
22:30:20	126.97	2094.73
22:30:40	126.97	2094.70
22:30:50	126.97	2094.78
22:30:55	127.11	2096.19
22:31:00	127.11	2100.50
22:31:05	126.97	2105.56
22:31:10	127.11	2110.20
22:31:15	127.11	2112.40
22:33:55	127.54	2112.53
22:34:00	R. I. H.	
22:34:00	GRADIENT STOP @ 1454.6mRKB.	
22:34:35	127.69	2112.45
22:34:55	127.69	2112.47
22:35:05	127.69	2112.45
22:35:10	127.69	2112.64
22:35:15	127.83	2115.15
22:35:25	127.69	2124.62
22:35:30	127.69	2128.33
22:35:35	127.69	2129.27
22:38:00	R. I. H.	
22:38:00	GRADIENT STOP @ 1464.6mRKB.	
22:38:15	128.26	2129.07
22:38:55	128.41	2129.02
22:39:05	128.41	2128.97
22:39:10	128.41	2129.04
22:39:15	128.55	2130.72
22:39:20	128.55	2135.05
22:39:25	128.55	2140.10
22:39:30	128.55	2144.20
22:39:35	128.55	2145.59
22:42:00	R. I. H.	
22:42:00	GRADIENT STOP @ 1474.6mRKB.	
22:42:15	128.98	2145.52
22:42:55	129.13	2145.44
22:43:05	129.13	2145.42
22:43:10	129.13	2145.56
22:43:15	129.13	2147.60
22:43:20	129.13	2152.31
22:43:25	129.13	2158.09
22:43:30	129.27	2161.58
22:43:35	129.27	2161.92
22:46:00	R. I. H.	
22:46:00	GRADIENT STOP @ 1484.6mRKB.	
22:46:15	129.56	2161.75
22:46:55	129.70	2161.68
22:47:05	129.85	2161.69
22:47:10	129.70	2162.30
22:47:15	129.85	2166.22

04-NOV-84	SDT degF	SDP psia
22:47:20	129.85	2171.59
22:47:25	129.85	2176.39
22:47:30	129.85	2178.45
22:50:00	R. I. H.	
22:50:10	130.13	2178.30
22:51:00	GRADIENT STOP @ 1494.6mRKB.	
22:51:30	130.28	2178.15
22:51:35	130.28	2178.14
22:51:40	130.28	2180.01
22:51:50	130.28	2188.44
22:51:55	130.28	2192.39
22:52:00	130.28	2194.71
22:52:05	130.28	2195.07
22:54:45	130.28	2194.74
22:55:00	R. I. H.	
22:55:00	GRADIENT STOP @ 1504.6mRKB.	
22:56:05	130.42	2194.73
22:56:15	130.28	2194.71
22:56:20	130.57	2195.13
22:56:25	130.42	2198.03
22:56:35	130.42	2208.33
22:56:40	130.42	2210.87
22:59:00	R. I. H.	
22:59:00	GRADIENT STOP @ 1514.6mRKB.	
22:59:20	130.57	2210.89
23:00:00	130.57	2210.86
23:00:10	130.57	2210.88
23:00:15	130.57	2211.20
23:00:20	130.57	2214.14
23:00:30	130.57	2224.77
23:00:35	130.57	2227.60
23:00:55	130.71	2227.88
23:03:00	R. I. H.	
23:03:35	131.00	2228.00
23:04:00	GRADIENT STOP @ 1524.6mRKB.	
23:04:15	131.14	2228.26
23:04:20	131.14	2230.70
23:04:25	131.00	2235.50
23:04:30	131.14	2240.68
23:04:35	131.14	2244.03
23:04:40	131.14	2244.65
23:07:20	131.14	2244.47
23:08:00	R. I. H.	
23:08:00	GRADIENT STOP @ 1534.6mRKB.	
23:08:40	131.14	2244.32
23:08:45	131.14	2244.92
23:08:50	131.14	2247.67
23:09:00	131.14	2255.05
23:09:05	131.14	2258.83
23:09:10	131.14	2260.83
23:09:15	131.14	2261.10
23:11:55	131.43	2261.20
23:12:00	R. I. H.	
23:13:00	GRADIENT STOP @ 1544.6mRKB.	
23:13:15	131.57	2261.27
23:13:20	131.71	2263.48
23:13:25	131.57	2267.51
23:13:30	131.57	2271.18
23:13:35	131.71	2273.87
23:13:40	131.57	2275.94
23:13:45	131.57	2277.16
23:14:25	131.28	2277.12

23:17:00	R. I. H.	
	SDT	SDP
04-NOV-84	degF	psia
23:17:05	130.57	2276.02
23:18:00	GRADIENT STOP @ 1554.6mRKB.	
23:18:25	129.99	2275.89
23:18:45	129.99	2275.86
23:18:50	129.85	2277.83
23:18:55	129.85	2281.57
23:19:00	129.85	2285.03
23:19:10	129.85	2291.00
23:19:15	129.70	2292.11
23:21:55	129.13	2292.09
23:22:00	R. I. H.	
23:23:00	GRADIENT STOP @ 1564.6mRKB.	
23:23:15	128.84	2292.15
23:23:20	128.84	2292.29
23:23:25	128.84	2293.80
23:23:30	128.84	2296.34
23:23:40	128.70	2303.58
23:23:45	128.70	2306.64
23:23:50	128.70	2308.86
23:23:55	128.70	2309.39
23:26:35	127.83	2309.18
23:27:00	P. O. O. H.	
23:27:55	127.54	2309.14
23:28:15	127.54	2309.16
23:28:20	127.40	2308.10
23:28:25	127.54	2306.22
23:28:35	127.40	2300.03
23:28:40	127.26	2297.09
23:28:45	127.40	2295.58
23:28:50	127.40	2293.25
23:29:00	127.40	2284.98
23:29:05	127.40	2280.52
23:29:10	127.40	2276.43
23:29:15	127.40	2271.57
23:29:20	127.26	2265.48
23:29:25	127.40	2258.24
23:29:30	127.54	2250.59
23:29:35	127.40	2244.61
23:29:45	127.54	2233.88
23:29:50	127.69	2227.84
23:29:55	127.69	2220.54
23:30:00	GRADIENT STOP @ 1504.6mRKB.	
23:30:00	127.54	2213.56
23:30:05	127.69	2207.08
23:30:10	127.69	2201.75
23:30:15	127.69	2201.32
23:30:20	127.69	2205.10
23:30:25	127.83	2209.45
23:30:30	127.83	2213.49
23:30:35	127.83	2213.38
23:30:40	127.98	2210.28
23:30:45	127.83	2209.31
23:32:05	128.41	2209.99
23:34:45	129.27	2210.05
23:35:00	P. O. O. H.	
23:36:05	129.42	2209.75
23:36:15	129.56	2209.74
23:36:20	129.70	2208.39
23:36:25	129.56	2204.77
23:36:30	129.56	2200.33
23:36:35	129.56	2194.47

04-NOV-84	SDT degF	SDP psia
23:36:40	129.56	2187.14
23:36:45	129.70	2180.64
23:36:55	129.70	2168.14
23:37:00	129.70	2161.94
23:37:10	129.70	2148.67
23:37:20	129.70	2135.06
23:37:25	129.70	2128.19
23:37:30	129.70	2120.50
23:37:35	129.70	2112.34
23:37:45	129.56	2095.50
23:37:50	129.70	2088.98
23:37:55	129.70	2084.59
23:38:00	129.56	2083.16
23:40:40	127.83	2061.67
23:41:20	126.82	2055.96
23:42:00	125.96	2049.14
23:44:40	120.04	2020.43
23:45:00	GRADIENT STOP @ 1004.6mRKB.	
23:45:20	118.01	2012.95
23:46:00	115.99	2005.11
23:46:05	115.70	2004.30
23:46:10	115.41	2004.14
23:46:30	114.39	2005.34
23:47:50	110.61	2004.45
23:48:30	109.01	2004.63
23:50:00	P.O.O.H.	
23:51:10	104.20	2007.12
23:51:20	103.90	2007.21
23:51:30	103.76	2006.51
23:51:50	103.17	2004.19
23:52:30	102.15	1998.30
23:52:50	101.42	1995.26
23:53:30	100.10	1988.49
23:54:10	98.49	1980.83
23:54:50	96.88	1972.68
23:55:30	95.11	1964.14
23:56:50	90.70	1948.05
23:57:30	88.49	1939.40
23:58:50	83.47	1921.11
23:59:00	GRADIENT STOP @ 504.6mRKB.	
23:59:10	82.28	1916.43
23:59:30	81.10	1912.38
23:59:40	80.51	1910.33
23:59:45	80.21	1909.52
23:59:50	79.77	1909.23
00:00:00	79.32	1909.40
00:00:20	77.99	1910.64
00:00:30	77.54	1911.32
00:01:10	75.46	1911.32
00:01:50	73.53	1911.83
00:03:10	70.70	1913.79
00:04:00	P.O.O.H.	
00:04:30	68.31	1916.04
00:05:10	67.27	1917.08
00:05:20	67.12	1917.17
00:05:40	66.52	1915.53
00:06:00	66.07	1913.53
00:06:20	65.62	1911.08
00:07:00	64.57	1905.17
00:07:40	63.38	1897.99
00:08:00	62.63	1894.66
00:08:20	61.73	1890.97

05-NOV-84	SDT degF	SDP psia
00:09:40	57.98	1874.20
00:10:20	56.48	1866.02
00:10:40	55.73	1861.93
00:11:00	55.12	1858.17
00:11:10	54.82	1856.40
00:11:20	54.37	1855.84
00:11:30	54.07	1854.95
00:12:50	52.11	1844.83
00:13:30	51.21	1840.41
00:13:50	50.76	1838.29
00:14:00	50.76	1836.99
00:14:20	50.30	1835.31
00:15:00	49.85	1830.63
00:15:20	49.55	1828.80
00:15:30	49.40	1827.94
00:15:50	49.10	1827.82
00:16:00	IN LUB.	
00:16:30	48.64	1826.74
00:16:50	48.34	1826.12
00:17:00	48.34	1825.85
00:17:10	48.04	1826.42
00:19:50	45.77	1827.06
00:21:10	44.86	1827.25
00:21:30	44.71	1827.23
00:22:50	43.80	1827.69
00:23:00	CLOSE LUB. VALVE.	
00:23:30	43.50	1827.54
00:23:50	43.35	1827.37
00:23:55	43.20	1827.38
00:24:00	43.20	1826.64
00:24:05	43.35	1823.04
00:24:10	43.20	1821.58
00:24:30	43.05	1821.29
00:24:35	42.90	1820.67
00:24:40	42.90	1809.19
00:24:45	42.90	1778.80
00:24:50	42.74	1740.54
00:24:55	42.74	1705.27
00:25:00	42.59	1671.19
00:25:05	42.74	1632.40
00:25:10	42.74	1590.88
00:25:15	42.59	1543.43
00:25:20	42.44	1497.04
00:25:25	42.44	1454.84
00:25:30	42.29	1413.35
00:25:35	42.29	1370.90
00:25:40	42.14	1330.23
00:25:45	42.14	1282.06
00:25:50	41.99	1223.66
00:25:55	41.84	1164.61
00:26:00	41.84	1110.36
00:26:05	41.68	1059.30
00:26:10	41.53	1006.22
00:26:15	41.38	954.81
00:26:20	41.38	907.47
00:26:25	41.08	863.34
00:26:30	40.93	820.78
00:26:35	40.93	773.95
00:26:40	40.62	714.25
00:26:45	40.47	641.24
00:26:50	40.32	567.86
00:26:55	40.17	497.71

05-NOV-84	SDT degF	SDP psia
00:27:00	39.86	431.40
00:27:05	39.71	360.75
00:27:10	39.41	287.19
00:27:15	39.10	207.52
00:27:20	38.80	129.44
00:27:25	38.50	78.17
00:27:30	38.35	46.67
00:27:35	38.04	27.00
00:27:40	37.74	15.27
00:27:45	37.59	9.11
00:27:50	37.28	6.80
00:27:55	36.98	5.45
00:28:15	36.07	3.14
00:28:55	34.24	1.34
00:29:15	33.63	0.68
00:29:55	32.26	0.33
00:30:35	31.04	0.79
00:31:55	29.36	2.80
00:32:00	LUB. DISCONNECTED.	
00:33:15	27.99	5.13
00:34:35	27.22	6.99
00:37:15	26.92	9.10
00:39:55	26.92	10.15
00:41:15	26.92	10.47
00:41:55	26.92	10.59
00:42:15	26.92	10.64
00:42:25	27.07	10.59
00:42:35	27.07	10.15
00:45:15	27.83	10.88
00:45:35	28.60	10.77
00:45:55	30.58	11.00
00:46:15	32.11	12.13
00:46:25	33.02	13.32
00:46:45	35.00	16.51
00:46:50	35.46	17.66
00:47:00	36.07	21.30
00:47:10	36.83	24.12
00:47:15	37.13	24.61
00:47:20	37.59	24.40
00:47:30	38.35	25.94
00:47:40	38.95	27.93
00:47:50	39.86	29.28
00:48:00	TOOLS OFF STRING.	
00:48:00	40.62	30.11
00:48:10	41.38	30.57
00:48:30	42.90	30.71
00:48:50	44.26	30.23
00:49:10	45.62	29.37
00:49:50	48.04	26.97
00:51:10	51.96	21.70
00:52:30	54.82	17.29
00:56:00	POWER OFF SDP# 84222.	

# TECHNICAL DATA

## GAUGE

Type : SDP/TPT  
Transducer module : 84222  
Recorder module : 84186

## OPERATION SET UP

Delay time : 30 MIN  
Scanning rate : 5 SEC  
Averaging : 8  
Relative values : USED  
Compression algorithm : USED  
Compression level : 8

## CALIBRATION DATA CHECKS

### Before job:

Ambiant pressure : 4 PSIA  
Ambiant Temperature : 17 °C

### After job:

Ambiant pressure : 4 PSIA  
Ambiant temperature : 11 °C

Date last calibration : 05.09.84