

MOONIE OIL N.L.

EAST MEREENIE # 4

13th FEBRUARY 1986

* STATIC GRADIENT *



M0780638

ONSHORE

NORTHERN TERRITORY
GEOLOGICAL SURVEY



GEARHART AUSTRALIA

I - N - D - E - X

STATIC GRADIENT SURVEY

(1) OPERATIONS SCHEDULE

(2) LUBRICATOR TOOL CALIBRATION STOP

[13/02/86]

(3) STATIC GRADIENT PLOTS & DATA



GEARHART PTY. LTD
1/17-19 MUSGRAVE AVE.,
WELLAND, S.A. 5007.

MOONIE OIL N.L.

EAST MEREENIE # 4

OPERATIONS SCHEDULE

HOURS

REMARKS

13th. February 1986

To run static gradient survey.

Continue monitoring bottom hole pressure with H/P pressure probe # 631 and temperature tool # 74 for 72 hour build-up test .
Record tubing & casing pressures .

End of 72 hour build-up test ,commence static gradient survey .

1030 hrs.	R.I.H to 4700 ft. TVD; 4700.00 ft. measured depth. Tubing pressure 690 Psig ; Casing pressure 690 Psig .
1032 hrs.	Hang HP tool at 4700 ft. TVD; 4700.00 ft. measured depth.
1045 hrs.	P.O.O.H to 4609 ft. TVD; 4609.00 ft. measured depth. Tubing pressure 690 Psig ; Casing pressure 690 Psig .
1047 hrs.	Hang HP tool at 4609 ft. TVD; 4609.00 ft. measured depth.
1051 hrs.	P.O.O.H to 4400 ft. TVD; 4400.00 ft. measured depth. Tubing pressure 690 Psig ; Casing pressure 690 Psig .
1056 hrs.	Hang HP tool at 4400 ft. TVD; 4400.00 ft. measured depth.
1111 hrs.	P.O.O.H to 4200 ft. TVD; 4200.00 ft. measured depth. Tubing pressure 690 Psig ; Casing pressure 690 Psig .
1114 hrs.	Hang HP tool at 4200 ft. TVD; 4200.00 ft. measured depth.
1130 hrs.	P.O.O.H to 4000 ft. TVD; 4000.00 ft. measured depth. Tubing pressure 690 Psig ; Casing pressure 690 Psig .
1132 hrs.	Hang HP tool at 4000 ft. TVD; 4000.00 ft. measured depth.



GEARHART PTY. LTD
1/17-19 MUSGRAVE AVE.,
WELLAND, S.A. 5007.

MOONIE OIL N.L.

EAST MEREENIE # 4

OPERATIONS SCHEDULE

HOURS

REMARKS

13th. February 1986

To run static gradient survey.

1200 hrs.	P.O.O.H to 3000 ft. TVD; 3000.00 ft. measured depth. Tubing pressure 690 Psig ; Casing pressure 690 Psig .
1208 hrs.	Hang HP tool at 3000 ft. TVD; 3000.00 ft. measured depth.
1251 hrs.	P.O.O.H to 2000 ft. TVD; 2000.00 ft. measured depth. Tubing pressure 690 Psig ; Casing pressure 690 Psig .
1258 hrs.	Hang HP tool at 2000 ft. TVD; 2000.00 ft. measured depth.
1350 hrs.	P.O.O.H to 1000 ft. TVD; 1000.00 ft. measured depth. Tubing pressure 690 Psig ; Casing pressure 690 Psig .
1358 hrs.	Hang HP tool at 1000 ft. TVD; 1000.00 ft. measured depth.
1435 hrs.	P.O.O.H to lubricator . Tubing pressure 690 Psig ; Casing pressure 690 Psig .
1443 hrs.	Hang HP tool in lubricator for tool calibration stop .
	End of static gradient survey.
1601 hrs.	Depressurize lubricator .
1605 hrs.	Commence rig down from wellhead .
1715 hrs.	Rig down completed Gearhart off lease .

Gearhart Operator :
B.Eustis :



GEARHART PTY. LTD
1/17-19 MUSGRAVE AVE.,
WELLAND, S.A. 5007.

MOONIE OIL N.L.

EAST MEREENIE # 4

WELL HEAD PRESSURES

13th February 1986

Lubricator tool calibration stop .

Time hrs.	Tubing psig	Casing psig	H/P Tool psia
1521	690	690	701.88
1525	690	690	703.25
1530	690	690	704.53
1535	690	690	705.63
1540	690	690	705.95
1545	690	690	705.49
1550	690	690	705.13
1555	690	690	704.82
1600	690	690	704.94

Completion of lubricator tool calibration stop .



STATIC GRADIENT

Company : MOONIE OIL N.L.

Eq. Type: H.P.

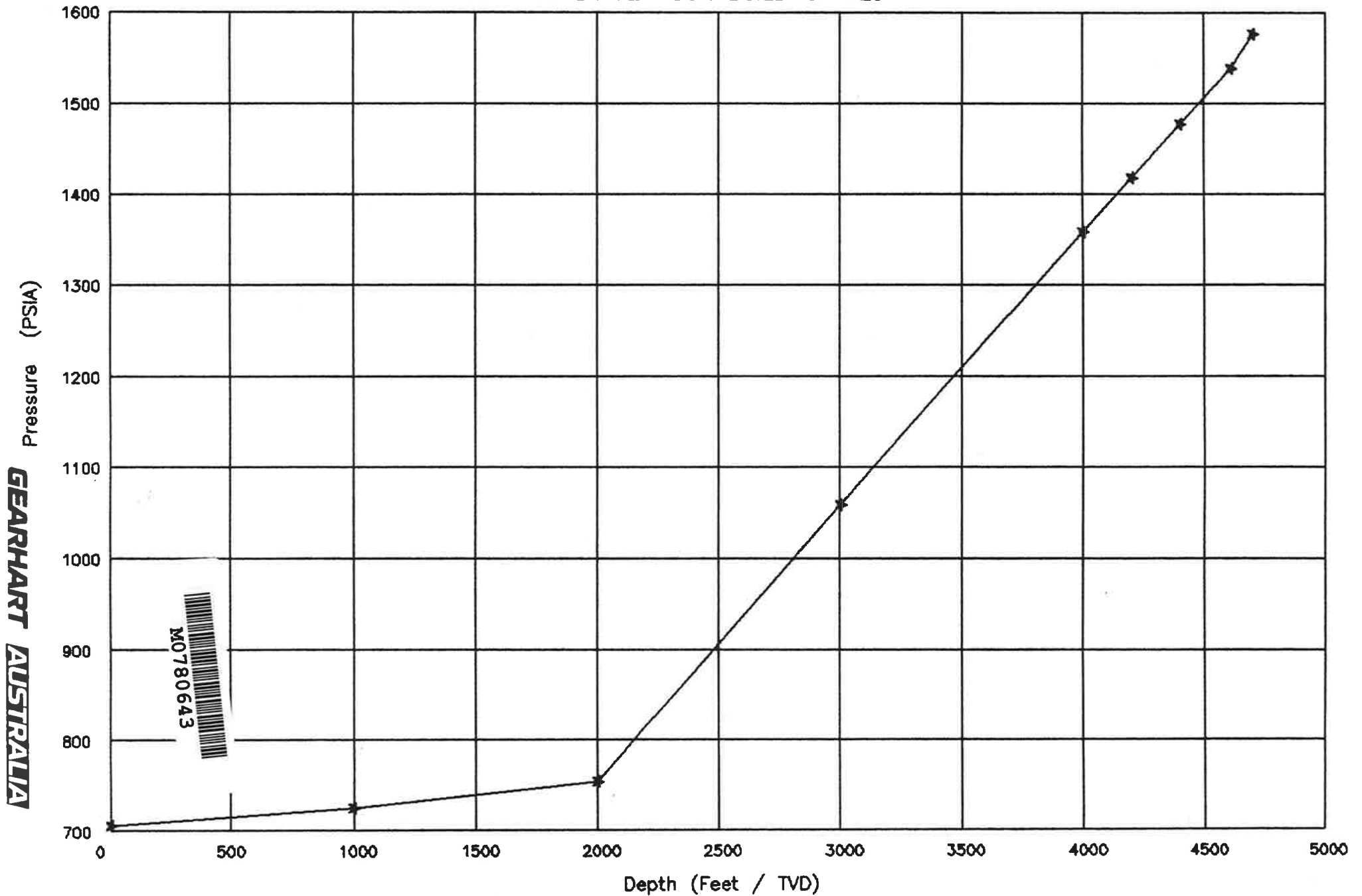
From : 10:45:00 13/02/86

Well : EAST MEREENIE # 4

Gauge No: 631

To : 16:00:00 13/02/86

Comments : STATIC GRADIENT SURVEY AFTER 72 HOUR BUILD-UP TEST



STATIC GRADIENT - PLOT DATA

COMPANY : MOONIE OIL N.L.
WELL : EAST MEREENIE # 4

Eq. Type : H.P.
Gauge # : 631
Depth : TVD

Comments : STATIC GRADIENT SURVEY AFTER 72 HOUR BUILD-UP TEST

Seq.#	Date	Time	Temp (Deg.F)	Depth (Feet)	Pressure (PSIA)	Gradient (PSIA/Feet)
1	13/02/86	10:45:00	+148.40	4,700.0	1,575.76	0.000
2	13/02/86	10:50:00	+147.10	4,609.0	1,538.64	0.408
3	13/02/86	11:11:00	+145.90	4,400.0	1,476.73	0.296
4	13/02/86	11:30:00	+143.70	4,200.0	1,417.59	0.296
5	13/02/86	12:00:00	+140.80	4,000.0	1,358.21	0.297
6	13/02/86	12:51:00	+121.20	3,000.0	1,059.24	0.299
7	13/02/86	13:50:00	+100.00	2,000.0	753.39	0.306
8	13/02/86	14:35:00	+89.40	1,000.0	724.83	0.029
9	13/02/86	16:00:00	+116.80	0.0	704.94	0.020



PRESSURE vs TIME - (LINEAR)

Company : MOONIE OIL N.L.

Eq. Type: H.P.

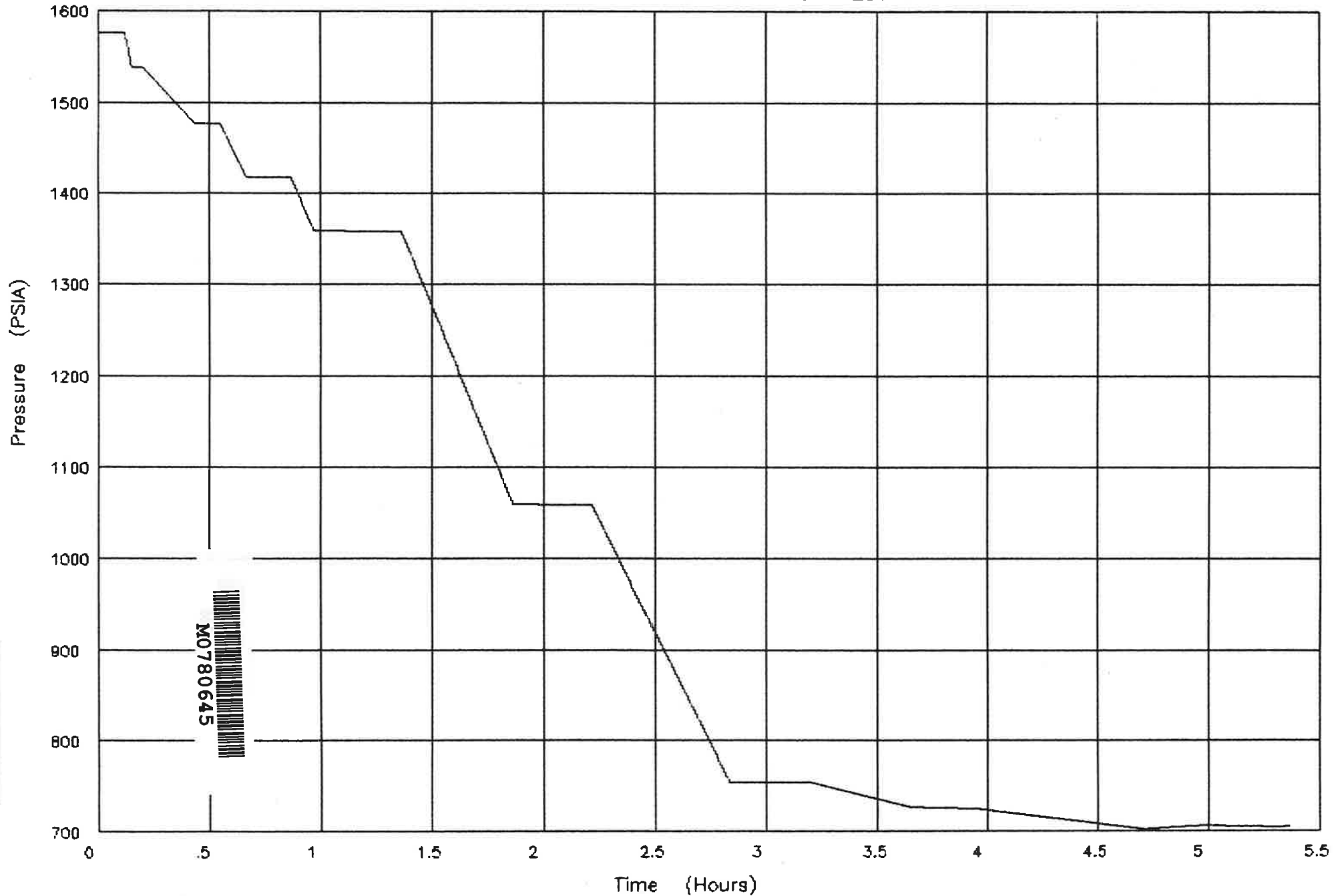
From : 10:38:00 13/02/86

Well : EAST MEREENIE # 4

Gauge No: 631

To : 16:00:00 13/02/86

Comments : STATIC GRADIENT SURVEY AFTER 72 HOUR BUILD-UP TEST .



PRESSURE vs TIME - (LINEAR) PLOT DATA

COMPANY : MOONIE OIL N.L.
 WELL : EAST MEREENIE # 4

Eq. Type : H.P.
 Gauge # : 631
 Depth : TVD



Comments : STATIC GRADIENT SURVEY AFTER 72 HOUR BUILD-UP TEST .

Seq.#	Date	Time	dt	Pressure (PSIA)	Temp (Deg.F)	Depth (Feet)
1	13/02/86	10:38:00	0.0000	1,575.75	+148.4	4700.0
2	13/02/86	10:39:00	0.0167	1,575.77	+148.4	4700.0
3	13/02/86	10:40:00	0.0333	1,575.77	+148.4	4700.0
4	13/02/86	10:41:00	0.0500	1,575.78	+148.4	4700.0
5	13/02/86	10:42:00	0.0667	1,575.78	+148.4	4700.0
6	13/02/86	10:43:00	0.0833	1,575.78	+148.4	4700.0
7	13/02/86	10:44:00	0.1000	1,575.78	+148.4	4700.0
8	13/02/86	10:45:00	0.1167	1,575.76	+148.4	4700.0
9	13/02/86	10:47:00	0.1500	1,538.63	+147.1	4609.0
10	13/02/86	10:48:00	0.1667	1,538.64	+147.1	4609.0
11	13/02/86	10:49:00	0.1833	1,538.64	+147.1	4609.0
12	13/02/86	10:50:00	0.2000	1,538.64	+147.1	4609.0
13	13/02/86	11:04:00	0.4333	1,476.75	+145.9	4400.0
14	13/02/86	11:05:00	0.4500	1,476.75	+145.9	4400.0
15	13/02/86	11:06:00	0.4667	1,476.75	+145.9	4400.0
16	13/02/86	11:07:00	0.4833	1,476.72	+145.9	4400.0
17	13/02/86	11:08:00	0.5000	1,476.74	+145.9	4400.0
18	13/02/86	11:09:00	0.5167	1,476.73	+145.9	4400.0
19	13/02/86	11:10:00	0.5333	1,476.73	+145.9	4400.0
20	13/02/86	11:11:00	0.5500	1,476.73	+145.9	4400.0
21	13/02/86	11:18:00	0.6667	1,417.89	+143.8	4200.0
22	13/02/86	11:19:00	0.6833	1,417.87	+143.8	4200.0
23	13/02/86	11:20:00	0.7000	1,417.83	+143.8	4200.0
24	13/02/86	11:21:00	0.7167	1,417.79	+143.8	4200.0
25	13/02/86	11:22:00	0.7333	1,417.75	+143.8	4200.0
26	13/02/86	11:23:00	0.7500	1,417.73	+143.8	4200.0
27	13/02/86	11:24:00	0.7667	1,417.70	+143.8	4200.0
28	13/02/86	11:25:00	0.7833	1,417.67	+143.7	4200.0
29	13/02/86	11:26:00	0.8000	1,417.63	+143.7	4200.0
30	13/02/86	11:27:00	0.8167	1,417.63	+143.7	4200.0
31	13/02/86	11:28:00	0.8333	1,417.63	+143.7	4200.0
32	13/02/86	11:29:00	0.8500	1,417.60	+143.7	4200.0
33	13/02/86	11:30:00	0.8667	1,417.59	+143.7	4200.0
34	13/02/86	11:36:00	0.9667	1,359.13	+141.0	4000.0
35	13/02/86	11:37:00	0.9833	1,358.97	+141.0	4000.0
36	13/02/86	11:38:00	1.0000	1,358.90	+141.0	4000.0
37	13/02/86	11:39:00	1.0167	1,358.79	+140.9	4000.0
38	13/02/86	11:40:00	1.0333	1,358.69	+140.9	4000.0
39	13/02/86	11:41:00	1.0500	1,358.64	+140.9	4000.0
40	13/02/86	11:42:00	1.0667	1,358.57	+140.9	4000.0
41	13/02/86	11:43:00	1.0833	1,358.51	+140.9	4000.0
42	13/02/86	11:44:00	1.1000	1,358.49	+140.9	4000.0
43	13/02/86	11:45:00	1.1167	1,358.41	+140.9	4000.0
44	13/02/86	11:46:00	1.1333	1,358.38	+140.9	4000.0
45	13/02/86	11:47:00	1.1500	1,358.35	+140.9	4000.0
46	13/02/86	11:48:00	1.1667	1,358.32	+140.9	4000.0
47	13/02/86	11:49:00	1.1833	1,358.27	+140.9	4000.0
48	13/02/86	11:50:00	1.2000	1,358.27	+140.9	4000.0
49	13/02/86	11:51:00	1.2167	1,358.25	+140.9	4000.0
50	13/02/86	11:52:00	1.2333	1,358.24	+140.9	4000.0



M0780647

PRESSURE vs TIME - (LINEAR) PLOT DATA

COMPANY : MOONIE OIL N.L.
WELL : EAST MEREENIE # 4

Eq. Type : H.P.
Gauge # : 631
Depth : TVD

Comments : STATIC GRADIENT SURVEY AFTER 72 HOUR BUILD-UP TEST .

Seq.#	Date	Time	dt	Pressure (PSIA)	Temp (Deg.F)	Depth (Feet)
51	13/02/86	11:53:00	1.2500	1,358.24	+140.8	4000.0
52	13/02/86	11:54:00	1.2667	1,358.24	+140.8	4000.0
53	13/02/86	11:55:00	1.2833	1,358.22	+140.8	4000.0
54	13/02/86	11:56:00	1.3000	1,358.22	+140.8	4000.0
55	13/02/86	11:57:00	1.3167	1,358.22	+140.8	4000.0
56	13/02/86	11:58:00	1.3333	1,358.22	+140.8	4000.0
57	13/02/86	11:59:00	1.3500	1,358.21	+140.8	4000.0
58	13/02/86	12:00:00	1.3667	1,358.21	+140.8	4000.0
59	13/02/86	12:30:00	1.8667	1,059.91	+121.2	3000.0
60	13/02/86	12:31:00	1.8833	1,059.75	+121.2	3000.0
61	13/02/86	12:32:00	1.9000	1,059.64	+121.2	3000.0
62	13/02/86	12:33:00	1.9167	1,059.59	+121.2	3000.0
63	13/02/86	12:34:00	1.9333	1,059.52	+121.2	3000.0
64	13/02/86	12:35:00	1.9500	1,059.47	+121.2	3000.0
65	13/02/86	12:36:00	1.9667	1,059.37	+121.2	3000.0
66	13/02/86	12:37:00	1.9833	1,059.36	+121.2	3000.0
67	13/02/86	12:38:00	2.0000	1,059.35	+121.2	3000.0
68	13/02/86	12:39:00	2.0167	1,059.33	+121.2	3000.0
69	13/02/86	12:40:00	2.0333	1,059.29	+121.2	3000.0
70	13/02/86	12:41:00	2.0500	1,059.22	+121.2	3000.0
71	13/02/86	12:42:00	2.0667	1,059.25	+121.2	3000.0
72	13/02/86	12:43:00	2.0833	1,059.24	+121.2	3000.0
73	13/02/86	12:44:00	2.1000	1,059.24	+121.2	3000.0
74	13/02/86	12:45:00	2.1167	1,059.22	+121.2	3000.0
75	13/02/86	12:46:00	2.1333	1,059.21	+121.2	3000.0
76	13/02/86	12:47:00	2.1500	1,059.17	+121.2	3000.0
77	13/02/86	12:48:00	2.1667	1,059.21	+121.2	3000.0
78	13/02/86	12:49:00	2.1833	1,059.22	+121.2	3000.0
79	13/02/86	12:50:00	2.2000	1,059.23	+121.2	3000.0
80	13/02/86	12:51:00	2.2167	1,059.24	+121.2	3000.0
81	13/02/86	13:28:00	2.8333	753.92	+100.0	2000.0
82	13/02/86	13:29:00	2.8500	753.83	+100.0	2000.0
83	13/02/86	13:30:00	2.8667	753.76	+100.0	2000.0
84	13/02/86	13:31:00	2.8833	753.70	+100.0	2000.0
85	13/02/86	13:32:00	2.9000	753.65	+100.0	2000.0
86	13/02/86	13:33:00	2.9167	753.60	+100.0	2000.0
87	13/02/86	13:34:00	2.9333	753.56	+100.0	2000.0
88	13/02/86	13:35:00	2.9500	753.54	+100.0	2000.0
89	13/02/86	13:36:00	2.9667	753.51	+100.0	2000.0
90	13/02/86	13:37:00	2.9833	753.49	+100.0	2000.0
91	13/02/86	13:38:00	3.0000	753.47	+100.0	2000.0
92	13/02/86	13:39:00	3.0167	753.45	+100.0	2000.0
93	13/02/86	13:40:00	3.0333	753.43	+100.0	2000.0
94	13/02/86	13:41:00	3.0500	753.42	+100.0	2000.0
95	13/02/86	13:42:00	3.0667	753.41	+100.0	2000.0
96	13/02/86	13:43:00	3.0833	753.40	+100.0	2000.0
97	13/02/86	13:44:00	3.1000	753.39	+100.0	2000.0
98	13/02/86	13:45:00	3.1167	753.38	+99.9	2000.0
99	13/02/86	13:46:00	3.1333	753.38	+100.0	2000.0
100	13/02/86	13:47:00	3.1500	753.38	+100.0	2000.0



M0780648

PRESSURE vs TIME - (LINEAR) PLOT DATA

PAGE: 3

COMPANY : MOONIE OIL N.L.
 WELL : EAST MEREENIE # 4

Eq. Type : H.P.
 Gauge # : 631
 Depth : TVD

Comments : STATIC GRADIENT SURVEY AFTER 72 HOUR BUILD-UP TEST .

Seq.#	Date	Time	dt	Pressure (PSIA)	Temp (Deg.F)	Depth (Feet)
101	13/02/86	13:48:00	3.1667	753.38	+100.0	2000.0
102	13/02/86	13:49:00	3.1833	753.38	+100.0	2000.0
103	13/02/86	13:50:00	3.2000	753.39	+100.0	2000.0
104	13/02/86	14:16:00	3.6333	726.91	+89.7	1000.0
105	13/02/86	14:17:00	3.6500	726.66	+89.7	1000.0
106	13/02/86	14:18:00	3.6667	726.45	+89.7	1000.0
107	13/02/86	14:19:00	3.6833	726.26	+89.7	1000.0
108	13/02/86	14:20:00	3.7000	726.09	+89.6	1000.0
109	13/02/86	14:21:00	3.7167	725.94	+89.6	1000.0
110	13/02/86	14:22:00	3.7333	725.80	+89.6	1000.0
111	13/02/86	14:23:00	3.7500	725.68	+89.6	1000.0
112	13/02/86	14:24:00	3.7667	725.56	+89.6	1000.0
113	13/02/86	14:25:00	3.7833	725.46	+89.6	1000.0
114	13/02/86	14:26:00	3.8000	725.37	+89.5	1000.0
115	13/02/86	14:27:00	3.8167	725.29	+89.5	1000.0
116	13/02/86	14:28:00	3.8333	725.21	+89.5	1000.0
117	13/02/86	14:29:00	3.8500	725.14	+89.5	1000.0
118	13/02/86	14:30:00	3.8667	725.08	+89.5	1000.0
119	13/02/86	14:31:00	3.8833	725.02	+89.5	1000.0
120	13/02/86	14:32:00	3.9000	724.97	+89.4	1000.0
121	13/02/86	14:33:00	3.9167	724.92	+89.4	1000.0
122	13/02/86	14:34:00	3.9333	724.87	+89.4	1000.0
123	13/02/86	14:35:00	3.9500	724.83	+89.4	1000.0
124	13/02/86	15:21:00	4.7167	701.88	+114.9	0.0
125	13/02/86	15:22:00	4.7333	702.28	+115.0	0.0
126	13/02/86	15:23:00	4.7500	702.64	+115.1	0.0
127	13/02/86	15:24:00	4.7667	702.97	+115.1	0.0
128	13/02/86	15:25:00	4.7833	703.25	+115.2	0.0
129	13/02/86	15:26:00	4.8000	703.52	+115.2	0.0
130	13/02/86	15:27:00	4.8167	703.79	+115.2	0.0
131	13/02/86	15:28:00	4.8333	704.03	+115.3	0.0
132	13/02/86	15:29:00	4.8500	704.28	+115.2	0.0
133	13/02/86	15:30:00	4.8667	704.53	+115.2	0.0
134	13/02/86	15:31:00	4.8833	704.77	+115.1	0.0
135	13/02/86	15:32:00	4.9000	704.99	+115.1	0.0
136	13/02/86	15:33:00	4.9167	705.22	+114.9	0.0
137	13/02/86	15:34:00	4.9333	705.43	+114.8	0.0
138	13/02/86	15:35:00	4.9500	705.63	+114.7	0.0
139	13/02/86	15:36:00	4.9667	705.78	+114.7	0.0
140	13/02/86	15:37:00	4.9833	705.87	+114.8	0.0
141	13/02/86	15:38:00	5.0000	705.92	+114.8	0.0
142	13/02/86	15:39:00	5.0167	705.95	+114.8	0.0
143	13/02/86	15:40:00	5.0333	705.95	+114.9	0.0
144	13/02/86	15:41:00	5.0500	705.94	+114.9	0.0
145	13/02/86	15:42:00	5.0667	705.86	+115.1	0.0
146	13/02/86	15:43:00	5.0833	705.76	+115.2	0.0
147	13/02/86	15:44:00	5.1000	705.63	+115.4	0.0
148	13/02/86	15:45:00	5.1167	705.49	+115.6	0.0
149	13/02/86	15:46:00	5.1333	705.41	+115.6	0.0
150	13/02/86	15:47:00	5.1500	705.35	+115.7	0.0

PRESSURE vs TIME - (LINEAR) PLOT DATA

COMPANY : MOONIE OIL N.L.
WELL : EAST MEREENIE # 4

Eq. Type : H.P.
Gauge # : 631
Depth : TVD

Comments : STATIC GRADIENT SURVEY AFTER 72 HOUR BUILD-UP TEST .

Seq.#	Date	Time	dt	Pressure (PSIA)	Temp (Deg.F)	Depth (Feet)
151	13/02/86	15:48:00	5.1667	705.30	+115.8	0.0
152	13/02/86	15:49:00	5.1833	705.21	+115.9	0.0
153	13/02/86	15:50:00	5.2000	705.13	+116.0	0.0
154	13/02/86	15:51:00	5.2167	705.03	+116.2	0.0
155	13/02/86	15:52:00	5.2333	704.95	+116.3	0.0
156	13/02/86	15:53:00	5.2500	704.89	+116.4	0.0
157	13/02/86	15:54:00	5.2667	704.85	+116.5	0.0
158	13/02/86	15:55:00	5.2833	704.82	+116.6	0.0
159	13/02/86	15:56:00	5.3000	704.82	+116.6	0.0
160	13/02/86	15:57:00	5.3167	704.84	+116.7	0.0
161	13/02/86	15:58:00	5.3333	704.88	+116.7	0.0
162	13/02/86	15:59:00	5.3500	704.91	+116.7	0.0
163	13/02/86	16:00:00	5.3667	704.94	+116.8	0.0

