

1823 Ranger North Liard P-66A
Pressure Data

RANGER OIL LIMITED

RANGER FORT LIARD P-66-A

- 1. SURFACE READ-OUT - SINGLE POINT FLOW & BUILD-UP DATA**
- 2. SURFACE READ-OUT - SINGLE POINT FLOW & BUILD-UP PLOTS**
- 3. SURFACE READ-OUT - TRANSIENT DATA**
- 4. GENTRONIC METZLINE QUARTZ - BOTTOM DATA**
- 5. GENTRONIC METZLINE QUARTZ - BOTTOM PLOTS**
- 6. GENTRONIC METZLINE QUARTZ - TOP PLOTS**
- 7. COMPARISON PLOT**
- 8. GENTRONIC METZLINE QUARTZ - BOTTOM TRANSIENT DATA**

Date: July 11 - 14, 1998
Report By: Pat Mulgrew

**MICROFILMED
SUR MICROFILM:**

MICROFILMED
SUR MICROFILM:

(403) 250-3800

GENCO Pressure Control Limited

CALGARY, AB.

SUBSURFACE PRESSURE MEASUREMENTS

Basic Data:

Company Ranger Oil Limited

Address #1600, 321 - 6Th. Ave. S.W.

Calgary, AB.

T2P 3H3

Gentronics Electronic Gauge

c/w SRO System

S/N: GMQ-9812

Well Name Ranger Fort Liard

Field & Pool Liard / Nihanni

Well Identifier P-66-A

Type of Test Single Point Flow & B.U.

Status Shut in Gas

Date of Test July 11 - 14, 1998

DWG Tubing Pressure N/A kPa

DWG Casing Pressure N/A kPa

Tubing 88.9 mm @ 3082.4 m KB

Casing 177.8 mm @ 3499.0 m KB

Producing Interval 3115 - 3334 m KB

Producing Through Tubing

Elevation 449.54 m CF, 459.89 m KB

MPP Interval 3214.2 m CF

Datum Depth of Well _____ m CF

Run Depth 3071 m CF

Temperature at Run Depth 150.8 °C

Pool Datum _____ m (subsea)

Pressure at Run Depth 26483 kPaG

Gradient at Run Depth _____ kPa/m

MPP Pressure _____ kPaG

Datum Depth Pressure _____ kPaG

Final Buildup Pressure 26467.0 kPaG

Date on Bottom July 11, 1998

Date off Bottom July 14, 1998

Shut in Date July 12, 1998

Summary:

Single LMR Quartz SRO recorder ran
within
specifications.

Preparation Data:

Tested By GENCO Computed By P. Mulgrew Report Date Aug 05, 1998

SRO Recorder

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

OPERATIONS SUMMARY

Company: Ranger Oil Limited
Ranger Fort Liard

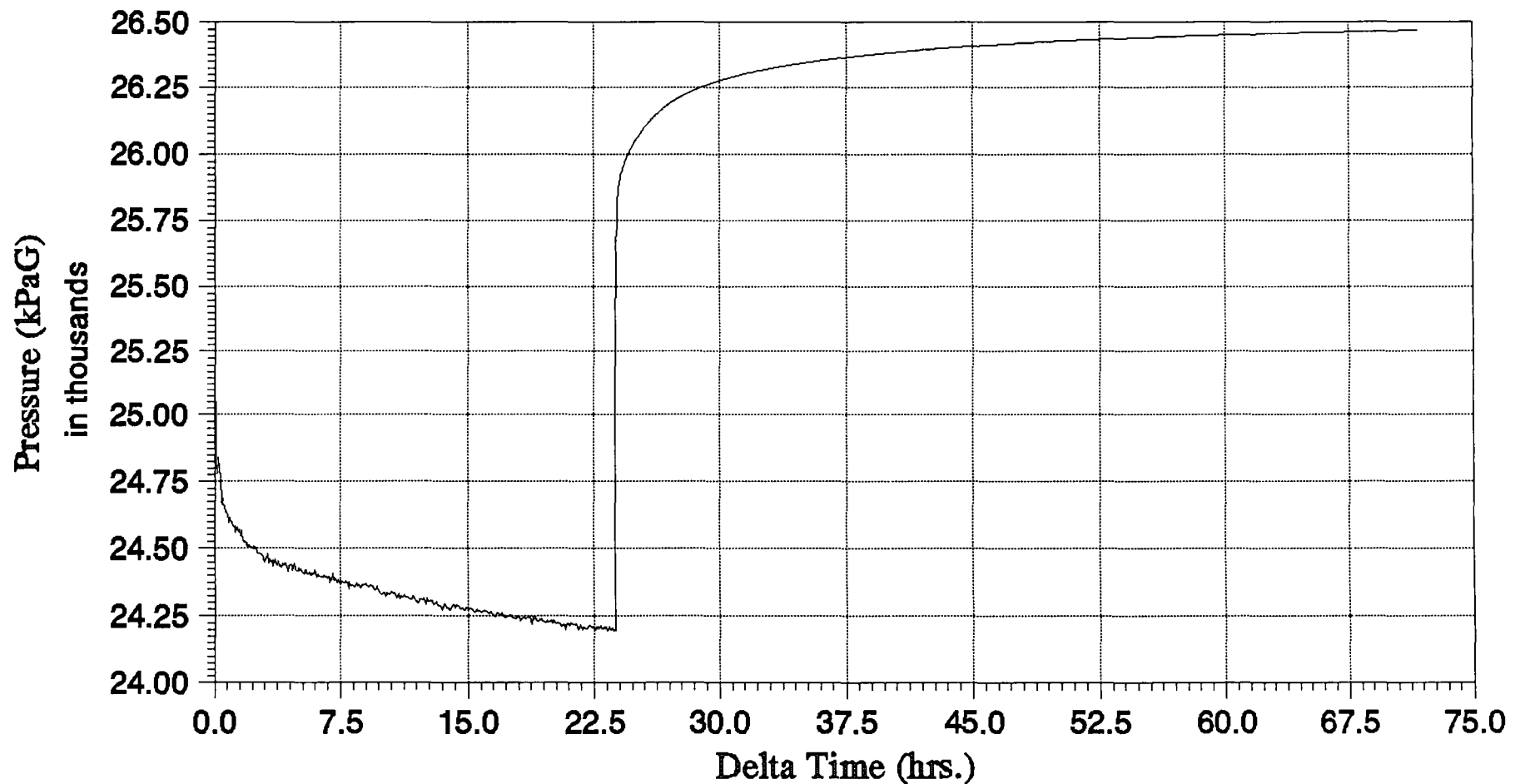
LSD: P-66-A

Bottom Gauge

Date	Time	dt(hrs)	P (kpaG)	T(°C)	Pt. #	Remarks
1998/07/11	08:45:18	0.0000	24815.0	153.8	1:	Begin Data Acquisition
	08:45:58	0.0111	24804.2	153.9	3:	Note: Powered up SRO
					:	recorder at 05:30 Hours
					:	but lost first 3 hours
					:	of data due to software
					:	error.
	08:48:18	0.0500	24993.1	154.1	10:	SRO recorder On Bottom
					:	at 07:13 Hrs. at
					:	3071 m CF.
	08:49:55	0.0769	25048.8	154.2	15:	Well Open to Flow at
					:	07:30 Hrs. Choke
					:	adjustments were made
					:	and 24 hour Single Point
					:	Test was started at
					:	08:30 Hrs. July 11, 1998
1998/07/12	08:30:18	23.7500	24203.6	154.1	3556:	Well Shut in for B.U.
1998/07/14	08:28:59	71.7281	26467.0	151.3	10107:	SRO recorder shut down
					:	and pulled Off Bottom.
	08:30:29	71.7531	26466.9	151.3	10110:	End Data Acquisition

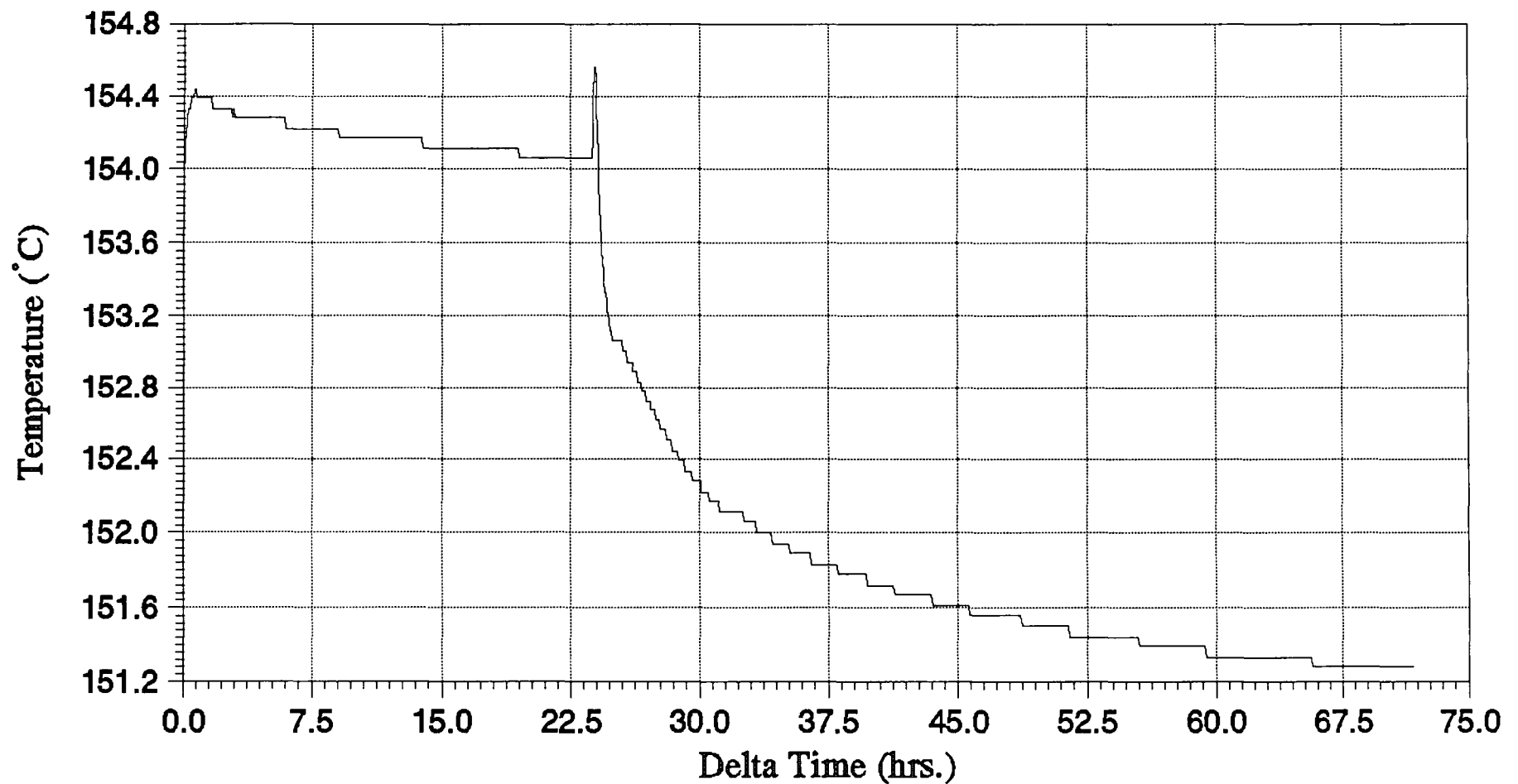
Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.

Ranger Oil Limited
P-66-A
Gentronics Quartz Bottom Gauge Pressures



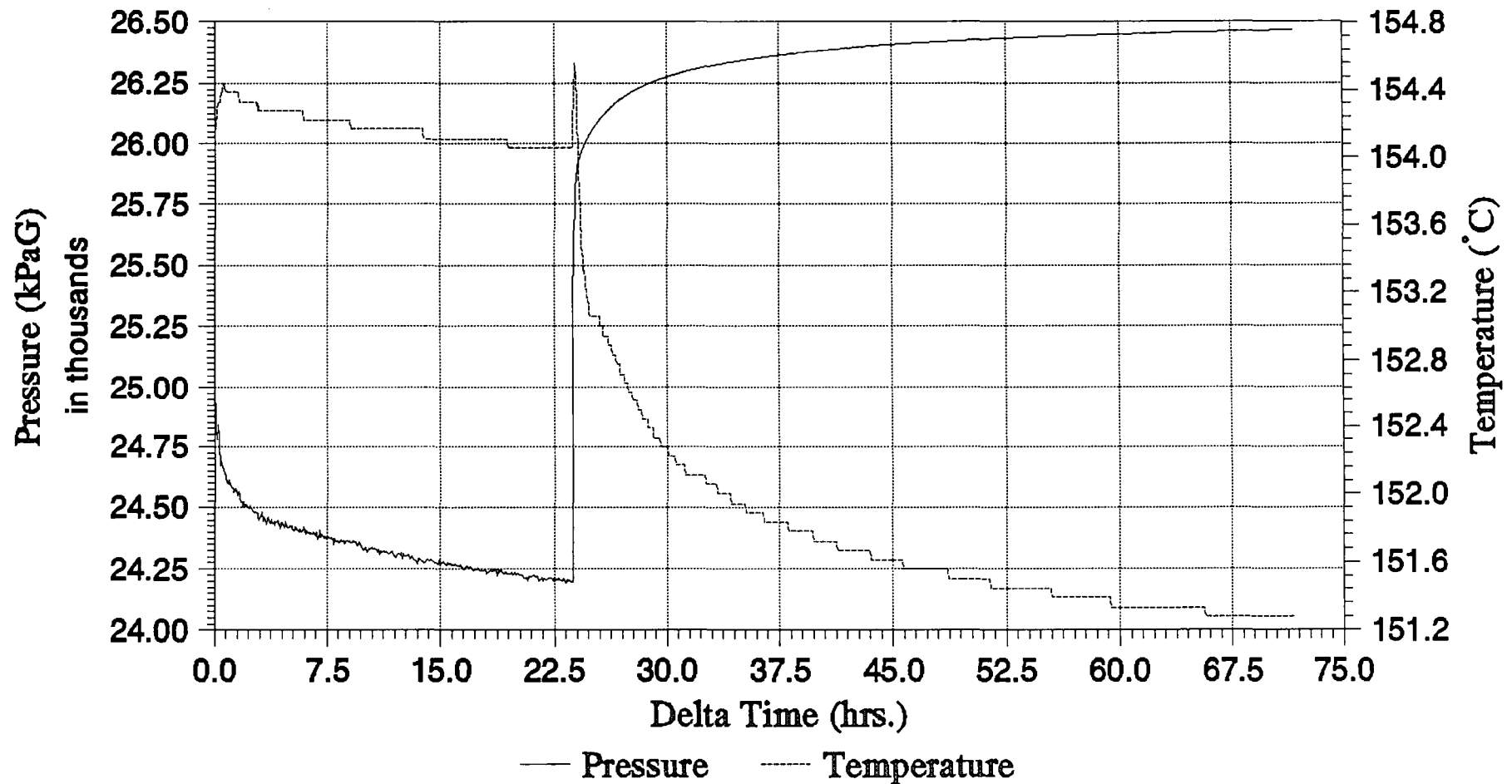
GENCO PRESSURE CONTROL LTD (403)250-3800
Start Aquisition: 1998/07/11 06:30:18
End Aquisition: 1998/07/14 06:15:29

Ranger Oil Limited
P-66-A
Gentronics Quartz Bottom Gauge Temp.



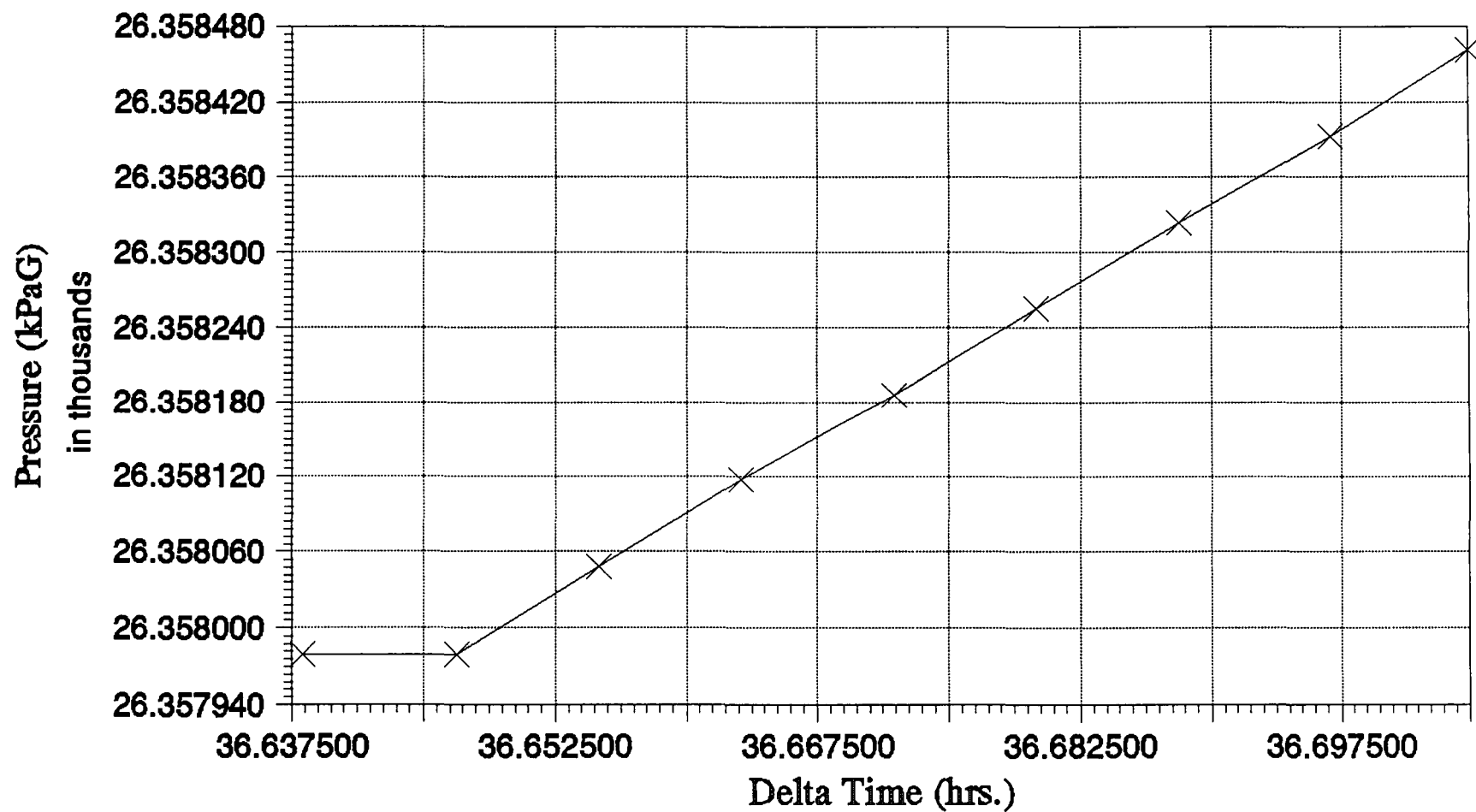
GENCO PRESSURE CONTROL LTD (403)250-3800
Start Aquisition: 1998/07/11 06:30:18
End Aquisition: 1998/07/14 06:15:29

Ranger Oil Limited
P-66-A
Gentronics Quartz Bottom Pressure/Temp



GENCO PRESSURE CONTROL LTD (403)250-3800
Start Aquisition: 1998/07/11 06:30:18
End Aquisition: 1998/07/14 06:15:29

Ranger Oil Limited
P-66-A
Bottom Gauge Apparent Resolution



GENCO PRESSURE CONTROL LTD (403)250-3800
Start Aquisition: 1998/07/11 06:30:18
End Aquisition: 1998/07/14 06:15:29

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: Ranger Oil Limited
Ranger Fort Liard

LSD: P-66-A

Bottom Gauge

Date	Time	dt(hrs)	P(kPaG)	dP	T(°C)	dT	Pt. #
Begin Data Acquisition:							
1998/07/11	08:45:18	0.0000	24815.0	24815.0	153.8	153.8	0:
	08:48:36	0.0550	25021.4	206.4	154.1	0.3	11:
	08:52:12	0.1150	24819.4	-202.0	154.2	0.1	22:
	08:55:48	0.1750	24779.6	-39.8	154.3	0.1	33:
	08:59:24	0.2350	24828.0	48.4	154.3	0.1	44:
	09:03:00	0.2950	24788.9	-39.2	154.3	0.0	55:
	09:06:36	0.3550	24707.6	-81.3	154.3	0.0	66:
	09:10:12	0.4150	24687.0	-20.5	154.4	0.1	77:
	09:13:48	0.4750	24665.2	-21.9	154.4	0.0	88:
	09:17:24	0.5350	24665.3	0.1	154.4	0.0	99:
	09:21:00	0.5950	24650.4	-14.9	154.4	0.0	110:
	09:24:36	0.6550	24626.4	-23.9	154.4	0.1	121:
	09:28:12	0.7150	24634.0	7.5	154.4	-0.1	132:
	09:31:48	0.7750	24630.4	-3.5	154.4	0.0	143:
	09:35:24	0.8350	24619.6	-10.8	154.4	0.0	154:
	09:39:00	0.8950	24610.4	-9.2	154.4	0.0	165:
	09:42:36	0.9550	24614.2	3.8	154.4	0.0	176:
	09:46:12	1.0150	24595.1	-19.2	154.4	0.0	187:
	09:49:48	1.0750	24605.5	10.5	154.4	0.0	198:
	09:53:24	1.1350	24576.9	-28.6	154.4	0.0	209:
	09:57:00	1.1950	24588.7	11.8	154.4	0.0	220:
	10:00:36	1.2550	24577.5	-11.2	154.4	0.0	231:
	10:04:12	1.3150	24570.7	-6.8	154.4	0.0	242:
	10:07:48	1.3750	24557.2	-13.5	154.4	0.0	253:
	10:11:24	1.4350	24566.0	8.8	154.4	0.0	264:
	10:15:00	1.4950	24553.9	-12.1	154.4	0.0	275:
	10:18:36	1.5550	24556.5	2.6	154.4	0.0	286:
	10:22:12	1.6150	24526.7	-29.8	154.3	-0.1	297:
	10:25:48	1.6750	24543.0	16.3	154.3	0.0	308:
	10:29:24	1.7350	24537.7	-5.3	154.3	0.0	319:
	10:33:00	1.7950	24549.3	11.6	154.3	0.0	330:
	10:36:36	1.8550	24510.0	-39.3	154.3	0.0	341:
	10:40:12	1.9150	24502.7	-7.2	154.3	0.0	352:
	10:43:48	1.9750	24528.0	25.3	154.3	0.0	363:
	10:47:24	2.0350	24522.3	-5.7	154.3	0.0	374:
	10:51:00	2.0950	24518.0	-4.3	154.3	0.0	385:
	10:54:36	2.1550	24511.6	-6.3	154.3	0.0	396:
	10:58:12	2.2150	24491.2	-20.4	154.3	0.0	407:
	11:01:48	2.2750	24511.7	20.5	154.3	0.0	418:
	11:05:24	2.3350	24499.4	-12.3	154.3	0.0	429:
	11:09:00	2.3950	24486.8	-12.6	154.3	0.0	440:
	11:12:36	2.4550	24503.4	16.6	154.3	0.0	451:
	11:16:12	2.5150	24487.8	-15.7	154.3	0.0	462:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 11 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: Ranger Oil Limited
Ranger Fort Liard

LSD: P-66-A

Bottom Gauge

Date	Time	dt(hrs)	P(kPaG)	dP	T(°C)	dT	Pt. #
	11:19:48	2.5750	24480.5	-7.3	154.3	0.0	473:
	11:23:24	2.6350	24472.5	-8.0	154.3	0.0	484:
	11:27:00	2.6950	24476.5	4.1	154.3	0.0	495:
	11:30:36	2.7550	24476.2	-0.3	154.3	0.0	506:
	11:34:12	2.8150	24480.3	4.1	154.3	-0.1	517:
	11:37:48	2.8750	24464.6	-15.7	154.3	0.0	528:
	11:41:24	2.9350	24470.9	6.3	154.3	0.0	539:
	11:45:00	2.9950	24477.0	6.1	154.3	0.0	550:
	11:48:36	3.0550	24473.8	-3.2	154.3	0.0	561:
	11:52:12	3.1150	24465.6	-8.2	154.3	0.0	572:
	11:55:48	3.1750	24445.2	-20.4	154.3	0.0	583:
	11:59:24	3.2350	24455.5	10.3	154.3	0.0	594:
	12:03:00	3.2950	24454.9	-0.6	154.3	0.0	605:
	12:06:36	3.3550	24469.1	14.2	154.3	0.0	616:
	12:10:12	3.4150	24439.3	-29.8	154.3	0.0	627:
	12:13:48	3.4750	24458.3	19.0	154.3	0.0	638:
	12:17:24	3.5350	24463.2	4.8	154.3	0.0	649:
	12:21:00	3.5950	24449.9	-13.3	154.3	0.0	660:
	12:24:36	3.6550	24433.9	-15.9	154.3	0.0	671:
	12:28:12	3.7150	24435.7	1.8	154.3	0.0	682:
	12:31:48	3.7750	24457.2	21.4	154.3	0.0	693:
	12:35:24	3.8350	24450.5	-6.7	154.3	0.0	704:
	12:39:00	3.8950	24436.8	-13.7	154.3	0.0	715:
	12:42:36	3.9550	24447.2	10.4	154.3	0.0	726:
	12:46:12	4.0150	24439.7	-7.6	154.3	0.0	737:
	12:49:48	4.0750	24439.7	0.1	154.3	0.0	748:
	12:53:24	4.1350	24426.1	-13.7	154.3	0.0	759:
	12:57:00	4.1950	24419.7	-6.4	154.3	0.0	770:
	13:00:36	4.2550	24431.0	11.3	154.3	0.0	781:
	13:04:12	4.3150	24433.1	2.1	154.3	0.0	792:
	13:07:48	4.3750	24410.0	-23.1	154.3	0.0	803:
	13:11:24	4.4350	24431.4	21.4	154.3	0.0	814:
	13:15:00	4.4950	24423.7	-7.7	154.3	0.0	825:
	13:18:36	4.5550	24413.5	-10.3	154.3	0.0	836:
	13:22:12	4.6150	24424.3	10.8	154.3	0.0	847:
	13:25:48	4.6750	24427.9	3.6	154.3	0.0	858:
	13:29:24	4.7350	24428.4	0.6	154.3	0.0	869:
	13:33:00	4.7950	24415.7	-12.8	154.3	0.0	880:
	13:36:36	4.8550	24427.2	11.6	154.3	0.0	891:
	13:40:12	4.9150	24415.7	-11.5	154.3	0.0	902:
	13:43:48	4.9750	24411.0	-4.7	154.3	0.0	913:
	13:47:24	5.0350	24422.6	11.5	154.3	0.0	924:
	13:51:00	5.0950	24418.1	-4.5	154.3	0.0	935:
	13:54:36	5.1550	24403.7	-14.4	154.3	0.0	946:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 11 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: Ranger Oil Limited
Ranger Fort Liard

LSD: P-66-A

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	13:58:12	5.2150	24409.2	5.6	154.3	0.0	957:
	14:01:48	5.2750	24403.2	-6.1	154.3	0.0	968:
	14:05:24	5.3350	24401.9	-1.2	154.3	0.0	979:
	14:09:00	5.3950	24419.2	17.2	154.3	0.0	990:
	14:12:36	5.4550	24419.2	0.0	154.3	0.0	1001:
	14:16:12	5.5150	24405.8	-13.4	154.3	0.0	1012:
	14:19:48	5.5750	24411.4	5.6	154.3	0.0	1023:
	14:23:24	5.6350	24414.8	3.4	154.3	0.0	1034:
	14:27:00	5.6950	24405.6	-9.2	154.3	0.0	1045:
	14:30:36	5.7550	24422.6	17.0	154.3	0.0	1056:
	14:34:12	5.8150	24397.4	-25.2	154.3	0.0	1067:
	14:37:48	5.8750	24401.2	3.9	154.3	0.0	1078:
	14:41:24	5.9350	24405.2	3.9	154.2	-0.1	1089:
	14:45:04	5.9961	24401.7	-3.4	154.2	0.0	1100:
	14:48:40	6.0561	24400.4	-1.3	154.2	0.0	1111:
	14:52:16	6.1161	24402.1	1.7	154.2	0.0	1122:
	14:55:52	6.1761	24405.8	3.7	154.2	0.0	1133:
	14:59:28	6.2361	24379.3	-26.5	154.2	0.0	1144:
	15:03:04	6.2961	24396.6	17.3	154.2	0.0	1155:
	15:06:40	6.3561	24396.5	-0.1	154.2	0.0	1166:
	15:10:16	6.4161	24393.2	-3.3	154.2	0.0	1177:
	15:13:52	6.4761	24376.9	-16.3	154.2	0.0	1188:
	15:17:28	6.5361	24386.0	9.1	154.2	0.0	1199:
	15:21:04	6.5961	24392.8	6.8	154.2	0.0	1210:
	15:24:40	6.6561	24377.5	-15.3	154.2	0.0	1221:
	15:28:16	6.7161	24387.6	10.1	154.2	0.0	1232:
	15:31:52	6.7761	24394.6	7.0	154.2	0.0	1243:
	15:35:28	6.8361	24374.8	-19.8	154.2	0.0	1254:
	15:39:04	6.8961	24388.8	14.0	154.2	0.0	1265:
	15:42:40	6.9561	24392.7	3.9	154.2	0.0	1276:
	15:46:16	7.0161	24397.0	4.3	154.2	0.0	1287:
	15:49:52	7.0761	24363.5	-33.6	154.2	0.0	1298:
	15:53:28	7.1361	24384.8	21.3	154.2	0.0	1309:
	15:57:04	7.1961	24380.8	-4.0	154.2	0.0	1320:
	16:00:40	7.2561	24371.0	-9.8	154.2	0.0	1331:
	16:04:16	7.3161	24371.8	0.8	154.2	0.0	1342:
	16:07:52	7.3761	24378.4	6.6	154.2	0.0	1353:
	16:11:28	7.4361	24379.5	1.1	154.2	0.0	1364:
	16:15:04	7.4961	24367.8	-11.7	154.2	0.0	1375:
	16:18:40	7.5561	24376.0	8.2	154.2	0.0	1386:
	16:22:16	7.6161	24373.5	-2.5	154.2	0.0	1397:
	16:25:52	7.6761	24367.3	-6.2	154.2	0.0	1408:
	16:29:28	7.7361	24366.2	-1.1	154.2	0.0	1419:
	16:33:04	7.7961	24379.7	13.4	154.2	0.0	1430:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 11 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: Ranger Oil Limited
Ranger Fort Liard

LSD: P-66-A

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	16:36:40	7.8561	24355.0	-24.7	154.2	0.0	1441:
	16:40:16	7.9161	24373.3	18.3	154.2	0.0	1452:
	16:43:52	7.9761	24368.4	-4.8	154.2	0.0	1463:
	16:47:28	8.0361	24374.8	6.3	154.2	0.0	1474:
	16:51:04	8.0961	24345.6	-29.2	154.2	0.0	1485:
	16:54:40	8.1561	24369.0	23.4	154.2	0.0	1496:
	16:58:16	8.2161	24368.6	-0.4	154.2	0.0	1507:
	17:01:52	8.2761	24363.7	-4.9	154.2	0.0	1518:
	17:05:28	8.3361	24367.8	4.1	154.2	0.0	1529:
	17:09:04	8.3961	24368.8	1.0	154.2	0.0	1540:
	17:12:40	8.4561	24353.7	-15.2	154.2	0.0	1551:
	17:16:16	8.5161	24358.2	4.5	154.2	0.0	1562:
	17:19:52	8.5761	24363.5	5.4	154.2	0.0	1573:
	17:23:28	8.6361	24367.6	4.1	154.2	0.0	1584:
	17:27:04	8.6961	24370.6	3.0	154.2	0.0	1595:
	17:32:20	8.7839	24366.2	-4.3	154.2	0.0	1606:
	17:37:52	8.8761	24357.0	-9.2	154.2	0.0	1617:
	17:43:23	8.9681	24345.4	-11.7	154.2	0.0	1628:
	17:48:50	9.0589	24356.1	10.7	154.2	-0.1	1639:
	17:54:22	9.1511	24350.0	-6.1	154.2	0.0	1650:
	17:59:53	9.2431	24363.0	13.0	154.2	0.0	1661:
	18:05:20	9.3339	24357.9	-5.1	154.2	0.0	1672:
	18:10:52	9.4261	24353.5	-4.4	154.2	0.0	1683:
	18:16:23	9.5181	24349.7	-3.7	154.2	0.0	1694:
	18:21:50	9.6089	24340.4	-9.4	154.2	0.0	1705:
	18:27:22	9.7011	24340.8	0.4	154.2	0.0	1716:
	18:32:53	9.7931	24332.9	-7.9	154.2	0.0	1727:
	18:38:20	9.8839	24345.7	12.8	154.2	0.0	1738:
	18:43:52	9.9761	24340.6	-5.2	154.2	0.0	1749:
	18:49:19	10.0669	24346.5	5.9	154.2	0.0	1760:
	18:54:50	10.1589	24330.4	-16.1	154.2	0.0	1771:
	19:00:22	10.2511	24335.4	5.0	154.2	0.0	1782:
	19:05:49	10.3419	24349.5	14.1	154.2	0.0	1793:
	19:11:20	10.4339	24331.6	-17.9	154.2	0.0	1804:
	19:16:52	10.5261	24346.9	15.3	154.2	0.0	1815:
	19:22:19	10.6169	24313.5	-33.4	154.2	0.0	1826:
	19:27:50	10.7089	24327.5	14.0	154.2	0.0	1837:
	19:33:22	10.8011	24323.7	-3.7	154.2	0.0	1848:
	19:38:49	10.8919	24326.7	3.0	154.2	0.0	1859:
	19:44:20	10.9839	24321.2	-5.5	154.2	0.0	1870:
	19:49:52	11.0761	24320.9	-0.3	154.2	0.0	1881:
	19:55:19	11.1669	24317.1	-3.9	154.2	0.0	1892:
	20:00:50	11.2589	24324.6	7.5	154.2	0.0	1903:
	20:06:18	11.3500	24321.1	-3.4	154.2	0.0	1914:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 11 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: Ranger Oil Limited
Ranger Fort Liard

LSD: P-66-A

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	20:11:49	11.4419	24314.9	-6.2	154.2	0.0	1925:
	20:17:20	11.5339	24299.3	-15.7	154.2	0.0	1936:
	20:22:48	11.6250	24312.9	13.6	154.2	0.0	1947:
	20:28:19	11.7169	24315.8	3.0	154.2	0.0	1958:
	20:33:50	11.8089	24325.3	9.5	154.2	0.0	1969:
	20:39:18	11.9000	24306.2	-19.1	154.2	0.0	1980:
	20:44:49	11.9919	24318.1	11.9	154.2	0.0	1991:
	20:50:20	12.0839	24294.4	-23.6	154.2	0.0	2002:
	20:55:48	12.1750	24318.2	23.7	154.2	0.0	2013:
	21:01:19	12.2669	24312.3	-5.9	154.2	0.0	2024:
	21:06:47	12.3581	24302.3	-10.0	154.2	0.0	2035:
	21:12:18	12.4500	24315.5	13.2	154.2	0.0	2046:
	21:17:49	12.5419	24297.5	-18.1	154.2	0.0	2057:
	21:23:17	12.6331	24301.8	4.3	154.2	0.0	2068:
	21:28:48	12.7250	24299.9	-1.9	154.2	0.0	2079:
	21:34:19	12.8169	24295.8	-4.1	154.2	0.0	2090:
	21:39:47	12.9081	24307.0	11.2	154.2	0.0	2101:
	21:45:18	13.0000	24289.2	-17.8	154.2	0.0	2112:
	21:50:49	13.0919	24301.2	12.0	154.2	0.0	2123:
	21:56:17	13.1831	24297.1	-4.1	154.2	0.0	2134:
	22:01:48	13.2750	24292.1	-5.0	154.2	0.0	2145:
	22:07:19	13.3669	24288.6	-3.5	154.2	0.0	2156:
	22:12:47	13.4581	24284.2	-4.4	154.2	0.0	2167:
	22:18:18	13.5500	24288.4	4.2	154.2	0.0	2178:
	22:23:46	13.6411	24284.9	-3.4	154.2	0.0	2189:
	22:29:17	13.7331	24294.9	9.9	154.2	0.0	2200:
	22:34:48	13.8250	24293.1	-1.7	154.2	0.0	2211:
	22:40:16	13.9161	24271.6	-21.6	154.1	-0.1	2222:
	22:45:47	14.0081	24294.9	23.4	154.1	0.0	2233:
	22:51:18	14.1000	24289.4	-5.5	154.1	0.0	2244:
	22:56:46	14.1911	24287.1	-2.3	154.1	0.0	2255:
	23:02:17	14.2831	24288.0	0.8	154.1	0.0	2266:
	23:07:48	14.3750	24278.0	-10.0	154.1	0.0	2277:
	23:13:16	14.4661	24288.0	10.0	154.1	0.0	2288:
	23:18:47	14.5581	24282.9	-5.0	154.1	0.0	2299:
	23:24:18	14.6500	24281.5	-1.4	154.1	0.0	2310:
	23:29:46	14.7411	24272.0	-9.5	154.1	0.0	2321:
	23:35:17	14.8331	24270.2	-1.9	154.1	0.0	2332:
	23:40:44	14.9239	24278.7	8.5	154.1	0.0	2343:
	23:46:16	15.0161	24282.2	3.5	154.1	0.0	2354:
	23:51:47	15.1081	24267.2	-15.0	154.1	0.0	2365:
	23:57:14	15.1989	24258.4	-8.8	154.1	0.0	2376:
1998/07/12	00:02:46	15.2911	24270.7	12.3	154.1	0.0	2387:
	00:08:17	15.3831	24268.9	-1.9	154.1	0.0	2398:

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Reporting on an interval of 1 in 11 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: Ranger Oil Limited
Ranger Fort Liard

LSD: P-66-A

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	00:13:44	15.4739	24273.6	4.8	154.1	0.0	2409:
	00:19:16	15.5661	24267.3	-6.3	154.1	0.0	2420:
	00:24:47	15.6581	24266.9	-0.4	154.1	0.0	2431:
	00:30:14	15.7489	24262.6	-4.3	154.1	0.0	2442:
	00:35:46	15.8411	24268.0	5.4	154.1	0.0	2453:
	00:41:13	15.9319	24266.8	-1.2	154.1	0.0	2464:
	00:46:44	16.0239	24263.3	-3.4	154.1	0.0	2475:
	00:52:16	16.1161	24267.3	3.9	154.1	0.0	2486:
	00:57:43	16.2069	24268.7	1.4	154.1	0.0	2497:
	01:03:14	16.2989	24261.8	-7.0	154.1	0.0	2508:
	01:08:46	16.3911	24267.1	5.4	154.1	0.0	2519:
	01:14:13	16.4819	24257.2	-9.9	154.1	0.0	2530:
	01:19:44	16.5739	24261.9	4.7	154.1	0.0	2541:
	01:25:16	16.6661	24259.9	-2.0	154.1	0.0	2552:
	01:30:43	16.7569	24246.9	-13.0	154.1	0.0	2563:
	01:36:14	16.8489	24262.7	15.8	154.1	0.0	2574:
	01:41:46	16.9411	24235.0	-27.6	154.1	0.0	2585:
	01:47:13	17.0319	24243.1	8.1	154.1	0.0	2596:
	01:52:44	17.1239	24259.4	16.3	154.1	0.0	2607:
	01:58:12	17.2150	24250.5	-9.0	154.1	0.0	2618:
	02:03:43	17.3069	24257.1	6.6	154.1	0.0	2629:
	02:09:14	17.3989	24243.6	-13.5	154.1	0.0	2640:
	02:14:42	17.4900	24253.9	10.3	154.1	0.0	2651:
	02:20:13	17.5819	24245.1	-8.8	154.1	0.0	2662:
	02:25:44	17.6739	24236.9	-8.1	154.1	0.0	2673:
	02:31:12	17.7650	24244.4	7.4	154.1	0.0	2684:
	02:36:43	17.8569	24243.3	-1.1	154.1	0.0	2695:
	02:42:14	17.9489	24241.4	-1.9	154.1	0.0	2706:
	02:47:42	18.0400	24246.9	5.4	154.1	0.0	2717:
	02:53:13	18.1319	24246.7	-0.1	154.1	0.0	2728:
	02:58:44	18.2239	24251.6	4.9	154.1	0.0	2739:
	03:04:12	18.3150	24243.2	-8.4	154.1	0.0	2750:
	03:09:43	18.4069	24248.7	5.4	154.1	0.0	2761:
	03:15:11	18.4981	24246.3	-2.3	154.1	0.0	2772:
	03:20:42	18.5900	24240.2	-6.1	154.1	0.0	2783:
	03:26:13	18.6819	24238.5	-1.7	154.1	0.0	2794:
	03:31:41	18.7731	24220.2	-18.3	154.1	0.0	2805:
	03:37:12	18.8650	24240.0	19.8	154.1	0.0	2816:
	03:42:43	18.9569	24238.0	-2.0	154.1	0.0	2827:
	03:48:11	19.0481	24234.9	-3.0	154.1	0.0	2838:
	03:53:42	19.1400	24224.9	-10.1	154.1	0.0	2849:
	03:59:13	19.2319	24239.7	14.8	154.1	0.0	2860:
	04:04:41	19.3231	24227.4	-12.3	154.1	0.0	2871:
	04:10:12	19.4150	24230.5	3.1	154.1	0.0	2882:

Absolute pressures are converted to gauge pressures
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Reporting on an interval of 1 in 11 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	04:15:40	19.5061	24236.3	5.8	154.1	0.0	2893:
	04:21:11	19.5981	24232.5	-3.8	154.1	-0.1	2904:
	04:26:42	19.6900	24216.5	-16.1	154.1	0.0	2915:
	04:32:10	19.7811	24236.0	19.5	154.1	0.0	2926:
	04:37:41	19.8731	24225.6	-10.4	154.1	0.0	2937:
	04:43:12	19.9650	24207.2	-18.4	154.1	0.0	2948:
	04:48:40	20.0561	24211.6	4.5	154.1	0.0	2959:
	04:54:11	20.1481	24232.5	20.8	154.1	0.0	2970:
	04:59:42	20.2400	24229.1	-3.4	154.1	0.0	2981:
	05:05:10	20.3311	24224.7	-4.4	154.1	0.0	2992:
	05:10:41	20.4231	24221.1	-3.5	154.1	0.0	3003:
	05:16:12	20.5150	24222.5	1.3	154.1	0.0	3014:
	05:21:40	20.6061	24219.7	-2.8	154.1	0.0	3025:
	05:27:11	20.6981	24226.8	7.1	154.1	0.0	3036:
	05:32:38	20.7889	24219.1	-7.7	154.1	0.0	3047:
	05:38:10	20.8811	24226.9	7.9	154.1	0.0	3058:
	05:43:41	20.9731	24224.3	-2.6	154.1	0.0	3069:
	05:49:08	21.0639	24208.7	-15.6	154.1	0.0	3080:
	05:54:40	21.1561	24217.6	8.8	154.1	0.0	3091:
	06:00:11	21.2481	24218.1	0.6	154.1	0.0	3102:
	06:05:38	21.3389	24215.2	-3.0	154.1	0.0	3113:
	06:11:10	21.4311	24208.4	-6.8	154.1	0.0	3124:
	06:16:41	21.5231	24223.6	15.2	154.1	0.0	3135:
	06:22:08	21.6139	24219.8	-3.8	154.1	0.0	3146:
	06:27:40	21.7061	24211.2	-8.7	154.1	0.0	3157:
	06:33:11	21.7981	24208.3	-2.9	154.1	0.0	3168:
	06:38:38	21.8889	24206.6	-1.7	154.1	0.0	3179:
	06:44:10	21.9811	24210.5	3.9	154.1	0.0	3190:
	06:49:37	22.0719	24199.4	-11.0	154.1	0.0	3201:
	06:55:08	22.1639	24213.7	14.3	154.1	0.0	3212:
	07:00:40	22.2561	24202.1	-11.7	154.1	0.0	3223:
	07:04:59	22.3281	24205.4	3.3	154.1	0.0	3234:
	07:07:55	22.3769	24209.3	3.9	154.1	0.0	3245:
	07:10:48	22.4250	24213.0	3.7	154.1	0.0	3256:
	07:13:44	22.4739	24210.9	-2.1	154.1	0.0	3267:
	07:16:37	22.5219	24198.5	-12.3	154.1	0.0	3278:
	07:19:34	22.5711	24202.3	3.7	154.1	0.0	3289:
	07:22:30	22.6200	24210.9	8.6	154.1	0.0	3300:
	07:25:23	22.6681	24206.1	-4.8	154.1	0.0	3311:
	07:28:19	22.7169	24211.2	5.1	154.1	0.0	3322:
	07:31:12	22.7650	24193.6	-17.7	154.1	0.0	3333:
	07:34:08	22.8139	24192.1	-1.5	154.1	0.0	3344:
	07:37:01	22.8619	24202.2	10.1	154.1	0.0	3355:
	07:39:58	22.9111	24204.7	2.6	154.1	0.0	3366:

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Reporting on an interval of 1 in 11 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	07:42:50	22.9589	24196.8	-7.9	154.1	0.0	3377:
	07:45:47	23.0081	24203.1	6.3	154.1	0.0	3388:
	07:48:43	23.0569	24203.6	0.5	154.1	0.0	3399:
	07:51:36	23.1050	24209.2	5.7	154.1	0.0	3410:
	07:54:32	23.1539	24208.1	-1.1	154.1	0.0	3421:
	07:57:25	23.2019	24208.1	0.0	154.1	0.0	3432:
	08:00:22	23.2511	24201.4	-6.8	154.1	0.0	3443:
	08:03:14	23.2989	24203.2	1.9	154.1	0.0	3454:
	08:06:11	23.3481	24197.6	-5.6	154.1	0.0	3465:
	08:09:07	23.3969	24199.2	1.6	154.1	0.0	3476:
	08:12:00	23.4450	24202.1	2.9	154.1	0.0	3487:
	08:14:56	23.4939	24200.6	-1.5	154.1	0.0	3498:
	08:17:49	23.5419	24194.1	-6.5	154.1	0.0	3509:
	08:20:46	23.5911	24202.0	7.9	154.1	0.0	3520:
	08:23:38	23.6389	24206.7	4.7	154.1	0.0	3531:
	08:26:35	23.6881	24199.2	-7.5	154.1	0.0	3542:
	08:29:31	23.7369	24204.4	5.2	154.1	0.0	3553:
	08:32:24	23.7850	25427.0	1222.6	154.2	0.2	3564:
	08:35:20	23.8339	25685.0	257.9	154.5	0.3	3575:
	08:38:13	23.8819	25773.6	88.7	154.6	0.1	3586:
	08:41:10	23.9311	25844.9	71.3	154.6	-0.1	3597:
	08:44:02	23.9789	25884.7	39.8	154.4	-0.1	3608:
	08:46:59	24.0281	25908.4	23.7	154.2	-0.2	3619:
	08:49:55	24.0769	25918.4	9.9	154.1	-0.2	3630:
	08:52:48	24.1250	25929.4	11.0	153.9	-0.1	3641:
	08:55:44	24.1739	25938.7	9.3	153.8	-0.2	3652:
	08:58:37	24.2219	25948.6	9.9	153.7	-0.1	3663:
	09:01:34	24.2711	25956.9	8.3	153.6	-0.1	3674:
	09:04:26	24.3189	25965.6	8.7	153.6	-0.1	3685:
	09:07:23	24.3681	25973.0	7.4	153.5	-0.1	3696:
	09:10:19	24.4169	25981.1	8.1	153.4	-0.1	3707:
	09:13:12	24.4650	25988.1	7.0	153.4	-0.1	3718:
	09:16:08	24.5139	25995.6	7.6	153.3	-0.1	3729:
	09:19:01	24.5619	26001.8	6.1	153.3	-0.1	3740:
	09:21:58	24.6111	26008.7	7.0	153.3	0.0	3751:
	09:24:50	24.6589	26014.0	5.2	153.2	-0.1	3762:
	09:27:47	24.7081	26019.9	5.9	153.2	-0.1	3773:
	09:30:43	24.7569	26024.9	5.0	153.2	0.0	3784:
	09:33:36	24.8050	26030.7	5.9	153.1	-0.1	3795:
	09:36:32	24.8539	26035.8	5.1	153.1	0.0	3806:
	09:39:25	24.9019	26040.7	4.8	153.1	-0.1	3817:
	09:42:22	24.9511	26048.4	7.7	153.1	0.0	3828:
	09:45:14	24.9989	26052.7	4.3	153.1	0.0	3839:
	09:48:11	25.0481	26056.4	3.7	153.1	0.0	3850:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 11 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: Ranger Oil Limited
Ranger Fort Liard

LSD: P-66-A

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	09:51:07	25.0969	26061.1	4.8	153.1	0.0	3861:
	09:54:00	25.1450	26065.1	3.9	153.1	0.0	3872:
	09:56:56	25.1939	26069.8	4.8	153.1	0.0	3883:
	09:59:49	25.2419	26073.9	4.1	153.1	0.0	3894:
	10:02:46	25.2911	26078.5	4.6	153.1	0.0	3905:
	10:05:38	25.3389	26082.5	4.0	153.1	0.0	3916:
	10:08:35	25.3881	26087.0	4.6	153.1	0.0	3927:
	10:11:31	25.4369	26090.7	3.7	153.1	0.0	3938:
	10:14:24	25.4850	26094.9	4.2	153.1	0.0	3949:
	10:17:20	25.5339	26098.4	3.5	153.1	0.0	3960:
	10:20:13	25.5819	26102.5	4.1	153.0	-0.1	3971:
	10:23:10	25.6311	26105.9	3.4	153.0	0.0	3982:
	10:26:02	25.6789	26109.8	3.9	153.0	0.0	3993:
	10:28:59	25.7281	26113.1	3.3	153.0	0.0	4004:
	10:31:55	25.7769	26116.7	3.6	152.9	-0.1	4015:
	10:34:48	25.8250	26119.9	3.2	152.9	0.0	4026:
	10:37:44	25.8739	26123.4	3.5	152.9	0.0	4037:
	10:40:37	25.9219	26126.6	3.2	152.9	0.0	4048:
	10:43:34	25.9711	26130.0	3.4	152.9	0.0	4059:
	10:46:26	26.0189	26132.8	2.8	152.9	0.0	4070:
	10:49:23	26.0681	26136.2	3.4	152.9	0.0	4081:
	10:52:19	26.1169	26139.0	2.8	152.9	-0.1	4092:
	10:55:12	26.1650	26142.2	3.2	152.9	0.0	4103:
	10:58:08	26.2139	26144.9	2.7	152.9	0.0	4114:
	11:01:01	26.2619	26148.1	3.2	152.9	0.0	4125:
	11:03:58	26.3111	26150.6	2.5	152.9	0.0	4136:
	11:06:50	26.3589	26153.6	3.0	152.8	-0.1	4147:
	11:09:47	26.4081	26156.2	2.6	152.8	0.0	4158:
	11:12:43	26.4569	26159.1	2.9	152.8	0.0	4169:
	11:15:36	26.5050	26161.5	2.4	152.8	0.0	4180:
	11:18:32	26.5539	26164.2	2.7	152.8	0.0	4191:
	11:21:25	26.6019	26166.6	2.4	152.8	0.0	4202:
	11:24:22	26.6511	26169.2	2.6	152.8	-0.1	4213:
	11:27:14	26.6989	26171.5	2.3	152.8	0.0	4224:
	11:30:11	26.7481	26174.0	2.5	152.8	0.0	4235:
	11:33:07	26.7969	26176.2	2.3	152.8	0.0	4246:
	11:36:00	26.8450	26178.6	2.4	152.8	0.0	4257:
	11:38:56	26.8939	26180.8	2.2	152.8	0.0	4268:
	11:41:49	26.9419	26183.2	2.3	152.7	-0.1	4279:
	11:44:46	26.9911	26185.3	2.1	152.7	0.0	4290:
	11:47:38	27.0389	26187.6	2.3	152.7	0.0	4301:
	11:50:35	27.0881	26189.5	1.9	152.7	0.0	4312:
	11:53:31	27.1369	26191.8	2.3	152.7	0.0	4323:
	11:56:24	27.1850	26193.8	2.0	152.7	-0.1	4334:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 11 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: Ranger Oil Limited
Ranger Fort Liard

LSD: P-66-A

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	11:59:20	27.2339	26196.0	2.2	152.7	0.0	4345:
	12:02:13	27.2819	26197.8	1.8	152.7	0.0	4356:
	12:05:10	27.3311	26199.8	2.0	152.7	0.0	4367:
	12:08:02	27.3789	26201.6	1.8	152.7	0.0	4378:
	12:10:59	27.4281	26203.6	2.0	152.6	-0.1	4389:
	12:13:55	27.4769	26205.4	1.8	152.6	0.0	4400:
	12:16:48	27.5250	26207.3	1.9	152.6	0.0	4411:
	12:19:44	27.5739	26208.9	1.7	152.6	0.0	4422:
	12:22:37	27.6219	26210.9	2.0	152.6	0.0	4433:
	12:25:34	27.6711	26212.4	1.5	152.6	0.0	4444:
	12:28:26	27.7189	26214.3	1.9	152.6	-0.1	4455:
	12:31:23	27.7681	26215.8	1.5	152.6	0.0	4466:
	12:34:19	27.8169	26217.7	1.9	152.6	0.0	4477:
	12:37:12	27.8650	26219.2	1.5	152.6	0.0	4488:
	12:40:08	27.9139	26221.0	1.9	152.6	0.0	4499:
	12:43:01	27.9619	26222.6	1.5	152.6	0.0	4510:
	12:45:58	28.0111	26224.1	1.6	152.6	0.0	4521:
	12:48:50	28.0589	26225.6	1.4	152.5	-0.1	4532:
	12:51:47	28.1081	26227.2	1.7	152.5	0.0	4543:
	12:54:43	28.1569	26228.7	1.4	152.5	0.0	4554:
	12:57:36	28.2050	26230.4	1.7	152.5	0.0	4565:
	13:00:32	28.2539	26231.7	1.3	152.5	0.0	4576:
	13:03:25	28.3019	26233.3	1.7	152.5	0.0	4587:
	13:06:22	28.3511	26234.6	1.3	152.4	-0.1	4598:
	13:09:14	28.3989	26236.1	1.5	152.4	0.0	4609:
	13:12:11	28.4481	26237.4	1.2	152.4	0.0	4620:
	13:15:07	28.4969	26239.0	1.6	152.4	0.0	4631:
	13:18:00	28.5450	26240.3	1.3	152.4	0.0	4642:
	13:20:56	28.5939	26241.8	1.5	152.4	0.0	4653:
	13:23:49	28.6419	26243.1	1.3	152.4	0.0	4664:
	13:26:46	28.6911	26244.6	1.4	152.4	0.0	4675:
	13:29:38	28.7389	26245.7	1.2	152.4	-0.1	4686:
	13:32:35	28.7881	26247.2	1.4	152.4	0.0	4697:
	13:35:31	28.8369	26248.3	1.2	152.4	0.0	4708:
	13:38:24	28.8850	26249.6	1.2	152.4	0.0	4719:
	13:41:20	28.9339	26250.8	1.2	152.4	0.0	4730:
	13:44:13	28.9819	26252.2	1.4	152.4	0.0	4741:
	13:47:10	29.0311	26253.3	1.1	152.4	0.0	4752:
	13:50:02	29.0789	26254.6	1.2	152.4	0.0	4763:
	13:52:59	29.1281	26255.8	1.2	152.3	-0.1	4774:
	13:55:55	29.1769	26257.0	1.2	152.3	0.0	4785:
	13:58:48	29.2250	26258.1	1.1	152.3	0.0	4796:
	14:01:44	29.2739	26259.3	1.2	152.3	0.0	4807:
	14:04:37	29.3219	26260.4	1.1	152.3	0.0	4818:

Absolute pressures are converted to gauge pressures
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Reporting on an interval of 1 in 11 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: Ranger Oil Limited
Ranger Fort Liard

LSD: P-66-A

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	14:07:34	29.3711	26261.6	1.2	152.3	0.0	4829:
	14:10:26	29.4189	26262.5	0.9	152.3	0.0	4840:
	14:13:23	29.4681	26263.8	1.3	152.3	0.0	4851:
	14:16:19	29.5169	26264.8	1.0	152.3	0.0	4862:
	14:19:12	29.5650	26265.9	1.2	152.3	-0.1	4873:
	14:22:08	29.6139	26266.9	1.0	152.3	0.0	4884:
	14:25:01	29.6619	26268.0	1.1	152.3	0.0	4895:
	14:27:58	29.7111	26269.0	1.0	152.3	0.0	4906:
	14:30:50	29.7589	26270.1	1.1	152.3	0.0	4917:
	14:33:47	29.8081	26271.0	0.9	152.3	0.0	4928:
	14:36:43	29.8569	26272.1	1.1	152.3	0.0	4939:
	14:39:36	29.9050	26273.0	0.8	152.3	0.0	4950:
	14:42:32	29.9539	26274.1	1.2	152.3	0.0	4961:
	14:45:25	30.0019	26275.0	0.8	152.3	0.0	4972:
	14:48:22	30.0511	26276.1	1.1	152.3	0.0	4983:
	14:51:14	30.0989	26277.0	0.9	152.2	-0.1	4994:
	14:54:11	30.1481	26278.1	1.1	152.2	0.0	5005:
	14:57:04	30.1961	26278.9	0.8	152.2	0.0	5016:
	15:00:00	30.2450	26279.9	1.0	152.2	0.0	5027:
	15:02:56	30.2939	26280.6	0.8	152.2	0.0	5038:
	15:05:49	30.3419	26281.7	1.0	152.2	0.0	5049:
	15:08:46	30.3911	26282.5	0.8	152.2	0.0	5060:
	15:11:38	30.4389	26283.5	1.0	152.2	0.0	5071:
	15:14:35	30.4881	26284.2	0.7	152.2	0.0	5082:
	15:17:28	30.5361	26285.2	1.0	152.2	0.0	5093:
	15:20:24	30.5850	26286.1	0.8	152.2	-0.1	5104:
	15:23:20	30.6339	26287.0	0.9	152.2	0.0	5115:
	15:26:13	30.6819	26287.9	0.9	152.2	0.0	5126:
	15:29:10	30.7311	26288.8	0.9	152.2	0.0	5137:
	15:32:02	30.7789	26289.5	0.8	152.2	0.0	5148:
	15:34:59	30.8281	26290.5	1.0	152.2	0.0	5159:
	15:37:52	30.8761	26291.2	0.7	152.2	0.0	5170:
	15:40:48	30.9250	26292.1	0.9	152.2	0.0	5181:
	15:43:44	30.9739	26292.8	0.8	152.2	0.0	5192:
	15:46:37	31.0219	26293.6	0.8	152.2	0.0	5203:
	15:49:34	31.0711	26294.4	0.8	152.2	0.0	5214:
	15:52:26	31.1189	26295.4	1.0	152.2	0.0	5225:
	15:55:23	31.1681	26296.1	0.8	152.1	-0.1	5236:
	15:59:42	31.2400	26297.6	1.4	152.1	0.0	5247:
	16:05:13	31.3319	26299.0	1.4	152.1	0.0	5258:
	16:10:41	31.4231	26300.4	1.4	152.1	0.0	5269:
	16:16:12	31.5150	26301.8	1.4	152.1	0.0	5280:
	16:21:43	31.6069	26303.1	1.3	152.1	0.0	5291:
	16:27:11	31.6981	26304.5	1.4	152.1	0.0	5302:

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Reporting on an interval of 1 in 11 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: Ranger Oil Limited
Ranger Fort Liard

LSD: P-66-A

Bottom Gauge

Date	Time	dt(hrs)	P (kPaG)	dP	T(°C)	dT	Pt. #
	16:32:42	31.7900	26305.8	1.3	152.1	0.0	5313:
	16:38:10	31.8811	26307.0	1.2	152.1	0.0	5324:
	16:43:41	31.9731	26308.3	1.3	152.1	0.0	5335:
	16:49:12	32.0650	26309.5	1.2	152.1	0.0	5346:
	16:54:40	32.1561	26310.8	1.3	152.1	0.0	5357:
	17:00:11	32.2481	26312.1	1.3	152.1	0.0	5368:
	17:05:42	32.3400	26313.4	1.2	152.1	0.0	5379:
	17:11:10	32.4311	26314.5	1.2	152.1	0.0	5390:
	17:16:41	32.5231	26315.8	1.2	152.1	0.0	5401:
	17:22:12	32.6150	26317.0	1.2	152.1	-0.1	5412:
	17:27:40	32.7061	26318.1	1.1	152.1	0.0	5423:
	17:33:11	32.7981	26319.3	1.2	152.1	0.0	5434:
	17:38:42	32.8900	26320.5	1.2	152.1	0.0	5445:
	17:44:10	32.9811	26321.4	1.0	152.1	0.0	5456:
	17:49:41	33.0731	26322.7	1.2	152.1	0.0	5467:
	17:55:08	33.1639	26323.7	1.0	152.1	0.0	5478:
	18:00:40	33.2561	26324.7	1.0	152.1	0.0	5489:
	18:06:11	33.3481	26325.7	1.0	152.0	-0.1	5500:
	18:11:38	33.4389	26326.7	1.0	152.0	0.0	5511:
	18:17:10	33.5311	26327.8	1.1	152.0	0.0	5522:
	18:22:41	33.6231	26328.8	1.0	152.0	0.0	5533:
	18:28:08	33.7139	26329.9	1.1	152.0	0.0	5544:
	18:33:40	33.8061	26330.9	1.0	152.0	0.0	5555:
	18:39:11	33.8981	26331.9	1.0	152.0	0.0	5566:
	18:44:38	33.9889	26332.8	0.9	152.0	0.0	5577:
	18:50:10	34.0811	26333.9	1.1	152.0	0.0	5588:
	18:55:37	34.1719	26334.9	1.0	152.0	0.0	5599:
	19:01:08	34.2639	26335.7	0.8	151.9	-0.1	5610:
	19:06:40	34.3561	26336.7	1.0	151.9	0.0	5621:
	19:12:07	34.4469	26337.7	1.0	151.9	0.0	5632:
	19:17:38	34.5389	26338.6	0.9	151.9	0.0	5643:
	19:23:10	34.6311	26339.6	1.0	151.9	0.0	5654:
	19:28:37	34.7219	26340.5	0.9	151.9	0.0	5665:
	19:34:08	34.8139	26341.4	1.0	151.9	0.0	5676:
	19:39:40	34.9061	26342.3	0.9	151.9	0.0	5687:
	19:45:07	34.9969	26343.3	1.0	151.9	0.0	5698:
	19:50:38	35.0889	26344.1	0.8	151.9	0.0	5709:
	19:56:10	35.1811	26345.0	1.0	151.9	0.0	5720:
	20:01:37	35.2719	26345.9	0.9	151.9	0.0	5731:
	20:07:08	35.3639	26346.8	0.9	151.9	-0.1	5742:
	20:12:36	35.4550	26347.6	0.8	151.9	0.0	5753:
	20:18:07	35.5469	26348.4	0.8	151.9	0.0	5764:
	20:23:38	35.6389	26349.3	0.9	151.9	0.0	5775:
	20:29:06	35.7300	26350.1	0.8	151.9	0.0	5786:

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Reporting on an interval of 1 in 11 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: Ranger Oil Limited
Ranger Fort Liard

LSD: P-66-A

Bottom Gauge

Date	Time	dt(hrs)	P(kPaG)	dP	T(°C)	dT	Pt. #
	20:34:37	35.8219	26350.8	0.7	151.9	0.0	5797:
	20:40:08	35.9139	26351.6	0.8	151.9	0.0	5808:
	20:45:36	36.0050	26352.5	0.9	151.9	0.0	5819:
	20:51:07	36.0969	26353.4	0.8	151.9	0.0	5830:
	20:56:38	36.1889	26354.1	0.8	151.9	0.0	5841:
	21:02:06	36.2800	26354.9	0.8	151.9	0.0	5852:
	21:07:37	36.3719	26355.8	0.9	151.9	0.0	5863:
	21:13:08	36.4639	26356.5	0.7	151.9	0.0	5874:
	21:18:36	36.5550	26357.2	0.8	151.8	-0.1	5885:
	21:24:07	36.6469	26358.0	0.8	151.8	0.0	5896:
	21:29:35	36.7381	26358.7	0.8	151.8	0.0	5907:
	21:35:06	36.8300	26359.5	0.8	151.8	0.0	5918:
	21:40:37	36.9219	26360.3	0.8	151.8	0.0	5929:
	21:46:05	37.0131	26361.0	0.8	151.8	0.0	5940:
	21:51:36	37.1050	26361.8	0.8	151.8	0.0	5951:
	21:57:07	37.1969	26362.5	0.8	151.8	0.0	5962:
	22:02:35	37.2881	26363.2	0.6	151.8	0.0	5973:
	22:08:06	37.3800	26363.8	0.7	151.8	0.0	5984:
	22:13:37	37.4719	26364.6	0.8	151.8	0.0	5995:
	22:19:05	37.5631	26365.3	0.7	151.8	0.0	6006:
	22:24:36	37.6550	26365.9	0.6	151.8	0.0	6017:
	22:30:04	37.7461	26366.7	0.8	151.8	0.0	6028:
	22:35:35	37.8381	26367.4	0.7	151.8	0.0	6039:
	22:41:06	37.9300	26368.0	0.6	151.8	0.0	6050:
	22:46:34	38.0211	26368.6	0.6	151.8	0.0	6061:
	22:52:05	38.1131	26369.4	0.8	151.8	-0.1	6072:
	22:57:36	38.2050	26369.9	0.6	151.8	0.0	6083:
	23:03:04	38.2961	26370.6	0.7	151.8	0.0	6094:
	23:08:35	38.3881	26371.3	0.7	151.8	0.0	6105:
	23:14:06	38.4800	26371.9	0.6	151.8	0.0	6116:
	23:19:34	38.5711	26372.5	0.6	151.8	0.0	6127:
	23:25:05	38.6631	26373.1	0.6	151.8	0.0	6138:
	23:30:36	38.7550	26373.8	0.7	151.8	0.0	6149:
	23:36:04	38.8461	26374.4	0.6	151.8	0.0	6160:
	23:41:35	38.9381	26375.0	0.6	151.8	0.0	6171:
	23:47:02	39.0289	26375.6	0.6	151.8	0.0	6182:
	23:52:34	39.1211	26376.3	0.6	151.8	0.0	6193:
	23:58:05	39.2131	26376.9	0.7	151.8	0.0	6204:
1998/07/13	00:03:32	39.3039	26377.5	0.6	151.8	0.0	6215:
	00:09:04	39.3961	26378.0	0.6	151.8	0.0	6226:
	00:14:35	39.4881	26378.7	0.6	151.8	0.0	6237:
	00:20:02	39.5789	26379.2	0.6	151.8	0.0	6248:
	00:25:34	39.6711	26379.8	0.6	151.8	0.0	6259:
	00:31:05	39.7631	26380.5	0.6	151.7	-0.1	6270:

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GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: Ranger Oil Limited
Ranger Fort Liard

LSD: P-66-A

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	00:36:32	39.8539	26380.9	0.5	151.7	0.0	6281:
	00:42:04	39.9461	26381.6	0.6	151.7	0.0	6292:
	00:47:35	40.0381	26382.1	0.6	151.7	0.0	6303:
	00:53:02	40.1289	26382.7	0.6	151.7	0.0	6314:
	00:58:34	40.2211	26383.1	0.5	151.7	0.0	6325:
	01:04:01	40.3119	26383.8	0.7	151.7	0.0	6336:
	01:09:32	40.4039	26384.3	0.5	151.7	0.0	6347:
	01:15:04	40.4961	26384.8	0.5	151.7	0.0	6358:
	01:20:31	40.5869	26385.3	0.5	151.7	0.0	6369:
	01:26:02	40.6789	26385.9	0.6	151.7	0.0	6380:
	01:31:34	40.7711	26386.4	0.5	151.7	0.0	6391:
	01:37:01	40.8619	26387.0	0.6	151.7	0.0	6402:
	01:42:32	40.9539	26387.4	0.4	151.7	0.0	6413:
	01:48:04	41.0461	26388.0	0.6	151.7	0.0	6424:
	01:53:31	41.1369	26388.5	0.5	151.7	0.0	6435:
	01:59:02	41.2289	26389.1	0.6	151.7	0.0	6446:
	02:04:30	41.3200	26389.6	0.5	151.7	-0.1	6457:
	02:10:01	41.4119	26390.0	0.4	151.7	0.0	6468:
	02:15:32	41.5039	26390.5	0.6	151.7	0.0	6479:
	02:21:00	41.5950	26391.1	0.6	151.7	0.0	6490:
	02:26:31	41.6869	26391.6	0.6	151.7	0.0	6501:
	02:32:02	41.7789	26392.1	0.5	151.7	0.0	6512:
	02:37:30	41.8700	26392.6	0.5	151.7	0.0	6523:
	02:43:01	41.9619	26393.1	0.5	151.7	0.0	6534:
	02:48:32	42.0539	26393.5	0.4	151.7	0.0	6545:
	02:54:00	42.1450	26394.0	0.5	151.7	0.0	6556:
	02:59:31	42.2369	26394.5	0.6	151.7	0.0	6567:
	03:05:02	42.3289	26395.0	0.5	151.7	0.0	6578:
	03:10:30	42.4200	26395.5	0.5	151.7	0.0	6589:
	03:16:01	42.5119	26395.9	0.4	151.7	0.0	6600:
	03:21:29	42.6031	26396.4	0.5	151.7	0.0	6611:
	03:27:00	42.6950	26396.9	0.5	151.7	0.0	6622:
	03:32:31	42.7869	26397.3	0.4	151.7	0.0	6633:
	03:37:59	42.8781	26397.8	0.5	151.7	0.0	6644:
	03:43:30	42.9700	26398.2	0.4	151.7	0.0	6655:
	03:49:01	43.0619	26398.7	0.5	151.7	0.0	6666:
	03:54:29	43.1531	26399.1	0.5	151.7	0.0	6677:
	04:00:00	43.2450	26399.6	0.5	151.7	0.0	6688:
	04:05:31	43.3369	26400.0	0.4	151.7	0.0	6699:
	04:10:59	43.4281	26400.6	0.6	151.7	0.0	6710:
	04:16:30	43.5200	26401.0	0.4	151.6	-0.1	6721:
	04:21:58	43.6111	26401.4	0.4	151.6	0.0	6732:
	04:27:29	43.7031	26401.8	0.4	151.6	0.0	6743:
	04:33:00	43.7950	26402.3	0.5	151.6	0.0	6754:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 11 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: Ranger Oil Limited
Ranger Fort Liard

LSD: P-66-A

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	04:38:28	43.8861	26402.7	0.4	151.6	0.0	6765:
	04:43:59	43.9781	26403.1	0.4	151.6	0.0	6776:
	04:49:30	44.0700	26403.6	0.4	151.6	0.0	6787:
	04:54:58	44.1611	26404.0	0.4	151.6	0.0	6798:
	05:00:29	44.2531	26404.4	0.4	151.6	0.0	6809:
	05:05:56	44.3439	26404.8	0.4	151.6	0.0	6820:
	05:11:28	44.4361	26405.2	0.4	151.6	0.0	6831:
	05:16:59	44.5281	26405.7	0.5	151.6	0.0	6842:
	05:22:26	44.6189	26406.1	0.4	151.6	0.0	6853:
	05:27:58	44.7111	26406.5	0.3	151.6	0.0	6864:
	05:33:29	44.8031	26406.9	0.4	151.6	0.0	6875:
	05:38:56	44.8939	26407.3	0.4	151.6	0.0	6886:
	05:44:28	44.9861	26407.6	0.3	151.6	0.0	6897:
	05:49:59	45.0781	26407.9	0.3	151.6	0.0	6908:
	05:55:26	45.1689	26408.0	0.1	151.6	0.0	6919:
	06:00:58	45.2611	26408.4	0.4	151.6	0.0	6930:
	06:06:29	45.3531	26408.7	0.3	151.6	0.0	6941:
	06:11:56	45.4439	26409.2	0.5	151.6	0.0	6952:
	06:17:28	45.5361	26409.6	0.3	151.6	0.0	6963:
	06:22:55	45.6269	26409.8	0.2	151.6	0.0	6974:
	06:28:26	45.7189	26410.3	0.6	151.6	-0.1	6985:
	06:33:58	45.8111	26410.6	0.3	151.6	0.0	6996:
	06:39:25	45.9019	26411.0	0.4	151.6	0.0	7007:
	06:44:56	45.9939	26411.5	0.5	151.6	0.0	7018:
	06:50:28	46.0861	26411.8	0.3	151.6	0.0	7029:
	06:55:55	46.1769	26412.0	0.3	151.6	0.0	7040:
	07:01:26	46.2689	26412.4	0.3	151.6	0.0	7051:
	07:06:58	46.3611	26412.9	0.6	151.6	0.0	7062:
	07:12:25	46.4519	26413.3	0.3	151.6	0.0	7073:
	07:17:56	46.5439	26413.6	0.3	151.6	0.0	7084:
	07:23:24	46.6350	26413.9	0.3	151.6	0.0	7095:
	07:28:55	46.7269	26414.2	0.3	151.6	0.0	7106:
	07:34:26	46.8189	26414.7	0.4	151.6	0.0	7117:
	07:39:54	46.9100	26414.9	0.3	151.6	0.0	7128:
	07:45:25	47.0019	26415.3	0.3	151.6	0.0	7139:
	07:50:56	47.0939	26415.8	0.5	151.6	0.0	7150:
	07:56:24	47.1850	26416.0	0.3	151.6	0.0	7161:
	08:01:55	47.2769	26416.3	0.3	151.6	0.0	7172:
	08:07:26	47.3689	26416.7	0.4	151.6	0.0	7183:
	08:12:54	47.4600	26417.1	0.3	151.6	0.0	7194:
	08:18:25	47.5519	26417.4	0.3	151.6	0.0	7205:
	08:23:56	47.6439	26417.7	0.3	151.6	0.0	7216:
	08:29:24	47.7350	26418.2	0.5	151.6	0.0	7227:
	08:34:55	47.8269	26418.4	0.3	151.6	0.0	7238:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 11 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: Ranger Oil Limited
Ranger Fort Liard

LSD: P-66-A

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	08:40:23	47.9181	26418.7	0.3	151.6	0.0	7249:
	08:45:54	48.0100	26418.9	0.2	151.6	0.0	7260:
	08:51:25	48.1019	26419.4	0.5	151.6	0.0	7271:
	08:56:53	48.1931	26419.8	0.3	151.6	0.0	7282:
	09:02:24	48.2850	26420.0	0.3	151.6	0.0	7293:
	09:07:55	48.3769	26420.3	0.3	151.6	0.0	7304:
	09:13:23	48.4681	26420.7	0.3	151.6	0.0	7315:
	09:18:54	48.5600	26420.9	0.3	151.6	0.0	7326:
	09:24:25	48.6519	26421.3	0.3	151.5	-0.1	7337:
	09:29:53	48.7431	26421.6	0.3	151.5	0.0	7348:
	09:35:24	48.8350	26422.0	0.4	151.5	0.0	7359:
	09:40:55	48.9269	26422.2	0.3	151.5	0.0	7370:
	09:46:23	49.0181	26422.6	0.3	151.5	0.0	7381:
	09:51:54	49.1100	26422.9	0.3	151.5	0.0	7392:
	09:57:22	49.2011	26423.2	0.3	151.5	0.0	7403:
	10:02:53	49.2931	26423.5	0.3	151.5	0.0	7414:
	10:08:24	49.3850	26423.8	0.3	151.5	0.0	7425:
	10:13:52	49.4761	26424.0	0.2	151.5	0.0	7436:
	10:19:23	49.5681	26424.4	0.3	151.5	0.0	7447:
	10:24:54	49.6600	26424.7	0.3	151.5	0.0	7458:
	10:30:22	49.7511	26425.0	0.3	151.5	0.0	7469:
	10:35:53	49.8431	26425.3	0.3	151.5	0.0	7480:
	10:41:24	49.9350	26425.5	0.2	151.5	0.0	7491:
	10:46:52	50.0261	26425.8	0.3	151.5	0.0	7502:
	10:52:23	50.1181	26426.1	0.3	151.5	0.0	7513:
	10:57:50	50.2089	26426.3	0.2	151.5	0.0	7524:
	11:03:22	50.3011	26426.7	0.4	151.5	0.0	7535:
	11:08:53	50.3931	26427.0	0.3	151.5	0.0	7546:
	11:14:20	50.4839	26427.3	0.3	151.5	0.0	7557:
	11:19:52	50.5761	26427.5	0.1	151.5	0.0	7568:
	11:25:23	50.6681	26427.8	0.3	151.5	0.0	7579:
	11:30:50	50.7589	26428.1	0.3	151.5	0.0	7590:
	11:36:22	50.8511	26428.3	0.2	151.5	0.0	7601:
	11:41:53	50.9431	26428.6	0.3	151.5	0.0	7612:
	11:47:20	51.0339	26428.9	0.3	151.5	0.0	7623:
	11:52:52	51.1261	26429.2	0.3	151.5	0.0	7634:
	11:58:23	51.2181	26429.5	0.3	151.5	0.0	7645:
	12:03:50	51.3089	26429.7	0.2	151.5	0.0	7656:
	12:09:22	51.4011	26430.0	0.3	151.4	-0.1	7667:
	12:14:49	51.4919	26430.2	0.2	151.4	0.0	7678:
	12:20:20	51.5839	26430.5	0.3	151.4	0.0	7689:
	12:25:52	51.6761	26430.7	0.2	151.4	0.0	7700:
	12:31:19	51.7669	26431.0	0.3	151.4	0.0	7711:
	12:36:50	51.8589	26431.4	0.4	151.4	0.0	7722:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 11 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: Ranger Oil Limited
Ranger Fort Liard

LSD: P-66-A

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	12:42:22	51.9511	26431.6	0.2	151.4	0.0	7733:
	12:47:49	52.0419	26431.8	0.2	151.4	0.0	7744:
	12:53:20	52.1339	26432.2	0.3	151.4	0.0	7755:
	12:58:52	52.2261	26432.3	0.1	151.4	0.0	7766:
	13:04:19	52.3169	26432.7	0.3	151.4	0.0	7777:
	13:09:50	52.4089	26432.8	0.1	151.4	0.0	7788:
	13:15:22	52.5011	26433.1	0.3	151.4	0.0	7799:
	13:20:49	52.5919	26433.4	0.3	151.4	0.0	7810:
	13:26:20	52.6839	26433.5	0.1	151.4	0.0	7821:
	13:31:48	52.7750	26433.9	0.3	151.4	0.0	7832:
	13:37:19	52.8669	26434.2	0.3	151.4	0.0	7843:
	13:42:50	52.9589	26434.3	0.1	151.4	0.0	7854:
	13:48:18	53.0500	26434.6	0.3	151.4	0.0	7865:
	13:53:49	53.1419	26434.8	0.2	151.4	0.0	7876:
	13:59:20	53.2339	26435.1	0.3	151.4	0.0	7887:
	14:04:48	53.3250	26435.3	0.1	151.4	0.0	7898:
	14:10:19	53.4169	26435.5	0.3	151.4	0.0	7909:
	14:15:50	53.5089	26435.8	0.3	151.4	0.0	7920:
	14:21:18	53.6000	26436.0	0.1	151.4	0.0	7931:
	14:26:49	53.6919	26436.3	0.3	151.4	0.0	7942:
	14:32:17	53.7831	26436.6	0.3	151.4	0.0	7953:
	14:37:48	53.8750	26436.8	0.2	151.4	0.0	7964:
	14:43:19	53.9669	26437.1	0.3	151.4	0.0	7975:
	14:48:47	54.0581	26437.2	0.1	151.4	0.0	7986:
	14:54:18	54.1500	26437.4	0.2	151.4	0.0	7997:
	14:59:49	54.2419	26437.6	0.2	151.4	0.0	8008:
	15:05:17	54.3331	26438.0	0.3	151.4	0.0	8019:
	15:10:48	54.4250	26438.1	0.1	151.4	0.0	8030:
	15:16:19	54.5169	26438.4	0.3	151.4	0.0	8041:
	15:21:47	54.6081	26438.7	0.3	151.4	0.0	8052:
	15:27:18	54.7000	26438.8	0.1	151.4	0.0	8063:
	15:32:49	54.7919	26439.0	0.2	151.4	0.0	8074:
	15:38:17	54.8831	26439.3	0.3	151.4	0.0	8085:
	15:43:48	54.9750	26439.5	0.1	151.4	0.0	8096:
	15:49:16	55.0661	26439.6	0.1	151.4	0.0	8107:
	15:54:47	55.1581	26440.0	0.3	151.4	0.0	8118:
	16:00:18	55.2500	26440.2	0.2	151.4	0.0	8129:
	16:05:46	55.3411	26440.4	0.2	151.4	0.0	8140:
	16:11:17	55.4331	26440.6	0.3	151.4	0.0	8151:
	16:16:44	55.5239	26440.8	0.1	151.4	-0.1	8162:
	16:22:16	55.6161	26441.0	0.2	151.4	0.0	8173:
	16:27:47	55.7081	26441.2	0.2	151.4	0.0	8184:
	16:33:14	55.7989	26441.5	0.3	151.4	0.0	8195:
	16:38:46	55.8911	26441.7	0.2	151.4	0.0	8206:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 11 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt(hrs)	P(kPaG)	dP	T(°C)	dT	Pt. #
	16:44:13	55.9819	26442.0	0.3	151.4	0.0	8217:
	16:49:44	56.0739	26442.0	0.1	151.4	0.0	8228:
	16:55:16	56.1661	26442.2	0.2	151.4	0.0	8239:
	17:00:43	56.2569	26442.4	0.2	151.4	0.0	8250:
	17:06:14	56.3489	26442.7	0.3	151.4	0.0	8261:
	17:11:46	56.4411	26442.9	0.1	151.4	0.0	8272:
	17:17:13	56.5319	26443.2	0.3	151.4	0.0	8283:
	17:22:44	56.6239	26443.3	0.1	151.4	0.0	8294:
	17:28:16	56.7161	26443.5	0.2	151.4	0.0	8305:
	17:33:43	56.8069	26443.7	0.1	151.4	0.0	8316:
	17:39:14	56.8989	26444.0	0.3	151.4	0.0	8327:
	17:44:46	56.9911	26444.1	0.1	151.4	0.0	8338:
	17:50:13	57.0819	26444.3	0.2	151.4	0.0	8349:
	17:55:44	57.1739	26444.6	0.3	151.4	0.0	8360:
	18:01:12	57.2650	26444.7	0.1	151.4	0.0	8371:
	18:06:43	57.3569	26444.9	0.2	151.4	0.0	8382:
	18:12:14	57.4489	26445.1	0.1	151.4	0.0	8393:
	18:17:42	57.5400	26445.4	0.3	151.4	0.0	8404:
	18:23:13	57.6319	26445.5	0.1	151.4	0.0	8415:
	18:28:44	57.7239	26445.7	0.2	151.4	0.0	8426:
	18:34:12	57.8150	26445.8	0.1	151.4	0.0	8437:
	18:39:43	57.9069	26446.1	0.3	151.4	0.0	8448:
	18:45:14	57.9989	26446.3	0.2	151.4	0.0	8459:
	18:50:42	58.0900	26446.4	0.1	151.4	0.0	8470:
	18:56:13	58.1819	26446.6	0.1	151.4	0.0	8481:
	19:01:41	58.2731	26446.8	0.2	151.4	0.0	8492:
	19:07:12	58.3650	26446.9	0.1	151.4	0.0	8503:
	19:12:43	58.4569	26447.1	0.1	151.4	0.0	8514:
	19:18:11	58.5481	26447.3	0.3	151.4	0.0	8525:
	19:23:42	58.6400	26447.5	0.1	151.4	0.0	8536:
	19:29:13	58.7319	26447.8	0.3	151.4	0.0	8547:
	19:34:41	58.8231	26448.0	0.2	151.4	0.0	8558:
	19:40:12	58.9150	26448.0	0.0	151.4	0.0	8569:
	19:45:43	59.0069	26448.3	0.3	151.4	0.0	8580:
	19:51:11	59.0981	26448.4	0.1	151.4	0.0	8591:
	19:56:42	59.1900	26448.6	0.2	151.4	0.0	8602:
	20:02:13	59.2819	26448.9	0.3	151.4	0.0	8613:
	20:07:41	59.3731	26449.0	0.1	151.4	0.0	8624:
	20:13:12	59.4650	26449.2	0.2	151.3	-0.1	8635:
	20:18:40	59.5561	26449.4	0.2	151.3	0.0	8646:
	20:24:11	59.6481	26449.4	0.0	151.3	0.0	8657:
	20:29:42	59.7400	26449.7	0.3	151.3	0.0	8668:
	20:35:10	59.8311	26449.8	0.1	151.3	0.0	8679:
	20:40:41	59.9231	26450.0	0.2	151.3	0.0	8690:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 11 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	20:46:12	60.0150	26450.1	0.1	151.3	0.0	8701:
	20:51:40	60.1061	26450.3	0.2	151.3	0.0	8712:
	20:57:11	60.1981	26450.5	0.2	151.3	0.0	8723:
	21:02:42	60.2900	26450.6	0.1	151.3	0.0	8734:
	21:08:10	60.3811	26450.9	0.2	151.3	0.0	8745:
	21:13:41	60.4731	26451.1	0.2	151.3	0.0	8756:
	21:19:12	60.5650	26451.1	0.1	151.3	0.0	8767:
	21:24:40	60.6561	26451.3	0.2	151.3	0.0	8778:
	21:30:11	60.7481	26451.5	0.1	151.3	0.0	8789:
	21:35:38	60.8389	26451.7	0.2	151.3	0.0	8800:
	21:41:10	60.9311	26451.9	0.2	151.3	0.0	8811:
	21:46:41	61.0231	26452.0	0.1	151.3	0.0	8822:
	21:52:08	61.1139	26452.1	0.1	151.3	0.0	8833:
	21:57:40	61.2061	26452.2	0.1	151.3	0.0	8844:
	22:03:11	61.2981	26452.4	0.2	151.3	0.0	8855:
	22:08:38	61.3889	26452.5	0.1	151.3	0.0	8866:
	22:14:10	61.4811	26452.8	0.3	151.3	0.0	8877:
	22:19:41	61.5731	26453.0	0.2	151.3	0.0	8888:
	22:25:08	61.6639	26453.1	0.1	151.3	0.0	8899:
	22:30:40	61.7561	26453.3	0.1	151.3	0.0	8910:
	22:36:07	61.8469	26453.4	0.1	151.3	0.0	8921:
	22:41:38	61.9389	26453.7	0.3	151.3	0.0	8932:
	22:47:10	62.0311	26453.7	0.0	151.3	0.0	8943:
	22:52:37	62.1219	26453.8	0.1	151.3	0.0	8954:
	22:58:08	62.2139	26454.0	0.2	151.3	0.0	8965:
	23:03:40	62.3061	26454.2	0.2	151.3	0.0	8976:
	23:09:07	62.3969	26454.4	0.2	151.3	0.0	8987:
	23:14:38	62.4889	26454.5	0.1	151.3	0.0	8998:
	23:20:10	62.5811	26454.8	0.3	151.3	0.0	9009:
	23:25:37	62.6719	26454.9	0.1	151.3	0.0	9020:
	23:31:08	62.7639	26455.0	0.1	151.3	0.0	9031:
	23:36:40	62.8561	26455.1	0.1	151.3	0.0	9042:
	23:42:07	62.9469	26455.3	0.1	151.3	0.0	9053:
	23:47:38	63.0389	26455.4	0.1	151.3	0.0	9064:
	23:53:06	63.1300	26455.5	0.1	151.3	0.0	9075:
	23:58:37	63.2219	26455.7	0.2	151.3	0.0	9086:
1998/07/14	00:04:08	63.3139	26455.9	0.2	151.3	0.0	9097:
	00:09:36	63.4050	26456.0	0.1	151.3	0.0	9108:
	00:15:07	63.4969	26456.2	0.1	151.3	0.0	9119:
	00:20:38	63.5889	26456.2	0.1	151.3	0.0	9130:
	00:26:06	63.6800	26456.4	0.2	151.3	0.0	9141:
	00:31:37	63.7719	26456.6	0.1	151.3	0.0	9152:
	00:37:08	63.8639	26456.6	0.1	151.3	0.0	9163:
	00:42:36	63.9550	26456.8	0.1	151.3	0.0	9174:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 11 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: Ranger Oil Limited
Ranger Fort Liard

LSD: P-66-A

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	00:48:07	64.0469	26456.9	0.1	151.3	0.0	9185:
	00:53:38	64.1389	26457.2	0.3	151.3	0.0	9196:
	00:59:06	64.2300	26457.3	0.1	151.3	0.0	9207:
	01:04:37	64.3219	26457.5	0.2	151.3	0.0	9218:
	01:10:05	64.4131	26457.5	0.0	151.3	0.0	9229:
	01:15:36	64.5050	26457.7	0.2	151.3	0.0	9240:
	01:21:07	64.5969	26457.7	0.1	151.3	0.0	9251:
	01:26:35	64.6881	26457.9	0.1	151.3	0.0	9262:
	01:32:06	64.7800	26458.1	0.2	151.3	0.0	9273:
	01:37:37	64.8719	26458.3	0.2	151.3	0.0	9284:
	01:43:05	64.9631	26458.3	0.0	151.3	0.0	9295:
	01:48:36	65.0550	26458.5	0.2	151.3	0.0	9306:
	01:54:07	65.1469	26458.6	0.1	151.3	0.0	9317:
	01:59:35	65.2381	26458.8	0.2	151.3	0.0	9328:
	02:05:06	65.3300	26459.0	0.2	151.3	0.0	9339:
	02:10:34	65.4211	26459.0	0.0	151.3	0.0	9350:
	02:16:05	65.5131	26459.1	0.1	151.3	0.0	9361:
	02:21:36	65.6050	26459.3	0.1	151.3	0.0	9372:
	02:27:04	65.6961	26459.4	0.1	151.3	-0.1	9383:
	02:32:35	65.7881	26459.5	0.1	151.3	0.0	9394:
	02:38:06	65.8800	26459.7	0.2	151.3	0.0	9405:
	02:43:34	65.9711	26459.8	0.1	151.3	0.0	9416:
	02:49:05	66.0631	26459.9	0.1	151.3	0.0	9427:
	02:54:36	66.1550	26460.1	0.2	151.3	0.0	9438:
	03:00:04	66.2461	26460.2	0.1	151.3	0.0	9449:
	03:05:35	66.3381	26460.3	0.1	151.3	0.0	9460:
	03:11:06	66.4300	26460.4	0.1	151.3	0.0	9471:
	03:16:34	66.5211	26460.6	0.1	151.3	0.0	9482:
	03:22:05	66.6131	26460.6	0.0	151.3	0.0	9493:
	03:27:32	66.7039	26460.9	0.3	151.3	0.0	9504:
	03:33:04	66.7961	26460.9	0.0	151.3	0.0	9515:
	03:38:35	66.8881	26461.1	0.2	151.3	0.0	9526:
	03:44:02	66.9789	26461.2	0.1	151.3	0.0	9537:
	03:49:34	67.0711	26461.3	0.1	151.3	0.0	9548:
	03:55:05	67.1631	26461.4	0.1	151.3	0.0	9559:
	04:00:32	67.2539	26461.6	0.2	151.3	0.0	9570:
	04:06:04	67.3461	26461.7	0.1	151.3	0.0	9581:
	04:11:35	67.4381	26461.7	0.1	151.3	0.0	9592:
	04:17:02	67.5289	26462.0	0.2	151.3	0.0	9603:
	04:22:34	67.6211	26462.0	0.1	151.3	0.0	9614:
	04:28:05	67.7131	26462.0	0.0	151.3	0.0	9625:
	04:33:32	67.8039	26462.3	0.3	151.3	0.0	9636:
	04:39:04	67.8961	26462.4	0.1	151.3	0.0	9647:
	04:44:31	67.9869	26462.6	0.2	151.3	0.0	9658:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 11 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: Ranger Oil Limited
Ranger Fort Liard

LSD: P-66-A

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	04:50:02	68.0789	26462.6	0.1	151.3	0.0	9669:
	04:55:34	68.1711	26462.7	0.1	151.3	0.0	9680:
	05:01:01	68.2619	26462.9	0.1	151.3	0.0	9691:
	05:06:32	68.3539	26463.1	0.2	151.3	0.0	9702:
	05:12:04	68.4461	26463.1	0.0	151.3	0.0	9713:
	05:17:31	68.5369	26463.2	0.1	151.3	0.0	9724:
	05:23:02	68.6289	26463.3	0.1	151.3	0.0	9735:
	05:28:34	68.7211	26463.4	0.1	151.3	0.0	9746:
	05:34:01	68.8119	26463.5	0.1	151.3	0.0	9757:
	05:39:32	68.9039	26463.7	0.1	151.3	0.0	9768:
	05:45:00	68.9950	26463.7	0.1	151.3	0.0	9779:
	05:50:31	69.0869	26463.8	0.1	151.3	0.0	9790:
	05:56:02	69.1789	26463.9	0.1	151.3	0.0	9801:
	06:01:30	69.2700	26464.1	0.2	151.3	0.0	9812:
	06:07:01	69.3619	26464.2	0.1	151.3	0.0	9823:
	06:12:32	69.4539	26464.3	0.1	151.3	0.0	9834:
	06:18:00	69.5450	26464.4	0.1	151.3	0.0	9845:
	06:23:31	69.6369	26464.5	0.1	151.3	0.0	9856:
	06:29:02	69.7289	26464.7	0.2	151.3	0.0	9867:
	06:34:30	69.8200	26464.7	0.0	151.3	0.0	9878:
	06:40:01	69.9119	26464.9	0.2	151.3	0.0	9889:
	06:45:32	70.0039	26465.0	0.1	151.3	0.0	9900:
	06:51:00	70.0950	26465.0	0.0	151.3	0.0	9911:
	06:56:31	70.1869	26465.2	0.2	151.3	0.0	9922:
	07:01:59	70.2781	26465.3	0.1	151.3	0.0	9933:
	07:07:30	70.3700	26465.3	0.1	151.3	0.0	9944:
	07:13:01	70.4619	26465.5	0.2	151.3	0.0	9955:
	07:18:29	70.5531	26465.7	0.2	151.3	0.0	9966:
	07:24:00	70.6450	26465.7	0.0	151.3	0.0	9977:
	07:29:31	70.7369	26465.8	0.1	151.3	0.0	9988:
	07:34:59	70.8281	26466.0	0.2	151.3	0.0	9999:
	07:40:30	70.9200	26466.0	0.0	151.3	0.0	10010:
	07:46:01	71.0119	26466.2	0.1	151.3	0.0	10021:
	07:51:29	71.1031	26466.2	0.1	151.3	0.0	10032:
	07:57:00	71.1950	26466.3	0.1	151.3	0.0	10043:
	08:02:31	71.2869	26466.4	0.1	151.3	0.0	10054:
	08:07:59	71.3781	26466.4	0.1	151.3	0.0	10065:
	08:13:30	71.4700	26466.6	0.1	151.3	0.0	10076:
	08:18:58	71.5611	26466.8	0.2	151.3	0.0	10087:
	08:24:29	71.6531	26466.8	0.0	151.3	0.0	10098:
	08:30:00	71.7450	26466.9	0.1	151.3	0.0	10109:
1998/07/14	08:30:29	71.7531	26466.9	0.0	151.3	0.0	10110:

End Data Acquisition:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 11 data points.

(403) 250-3800

GENCO Pressure Control Limited

SUBSURFACE PRESSURE MEASUREMENTS

CALGARY, AB.

Basic Data:

Company Ranger Oil Limited

Address #1600, 321 - 6Th. Ave. S.W.

Calgary, AB.

T2P 3H3

Gentronics Electronic Gauge

c/w Memory Recorder

S/N: GMQ-9804

Well Name Ranger Fort Liard

Field & Pool Liard / Nihanni

Well Identifier P-66-A

Type of Test Single Point Flow & B.U.

Status Shut in Gas

Date of Test Jul 11 - 14, 1998

DWG Tubing Pressure N/A kPa

DWG Casing Pressure N/A kPa

Tubing 88.9 mm @ 3082.4 m KB

Casing 177.8 mm @ 3499.0 m KB

Producing Interval 3115 - 3334 m KB

Producing Through Tubing

Elevation 449.54 m CF, 459.89 m KB

MPP Interval 3214.2 m CF

Datum Depth of Well _____ m CF

Run Depth 3072 m CF

Temperature at Run Depth 150.9 °C

Pool Datum _____ m (subsea)

Pressure at Run Depth 26483 kPaG

Gradient at Run Depth N/A kPa/m

MPP Pressure _____ kPaG

Datum Depth Pressure _____ kPaG

Final Buildup Pressure 26485 kPaG

Date on Bottom July 11, 1998

Date off Bottom July 14, 1998

Shut in Date July 12, 1998

Summary:

Tandem LMR Quartz Recorders ran within specifications.

Recorders hung below RN Lock.

Preparation Data:

Tested By GENCO Computed By P. Mulgrew Report Date Jul 31, 1998

BOTTOM GAUGE

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

OPERATIONS SUMMARY

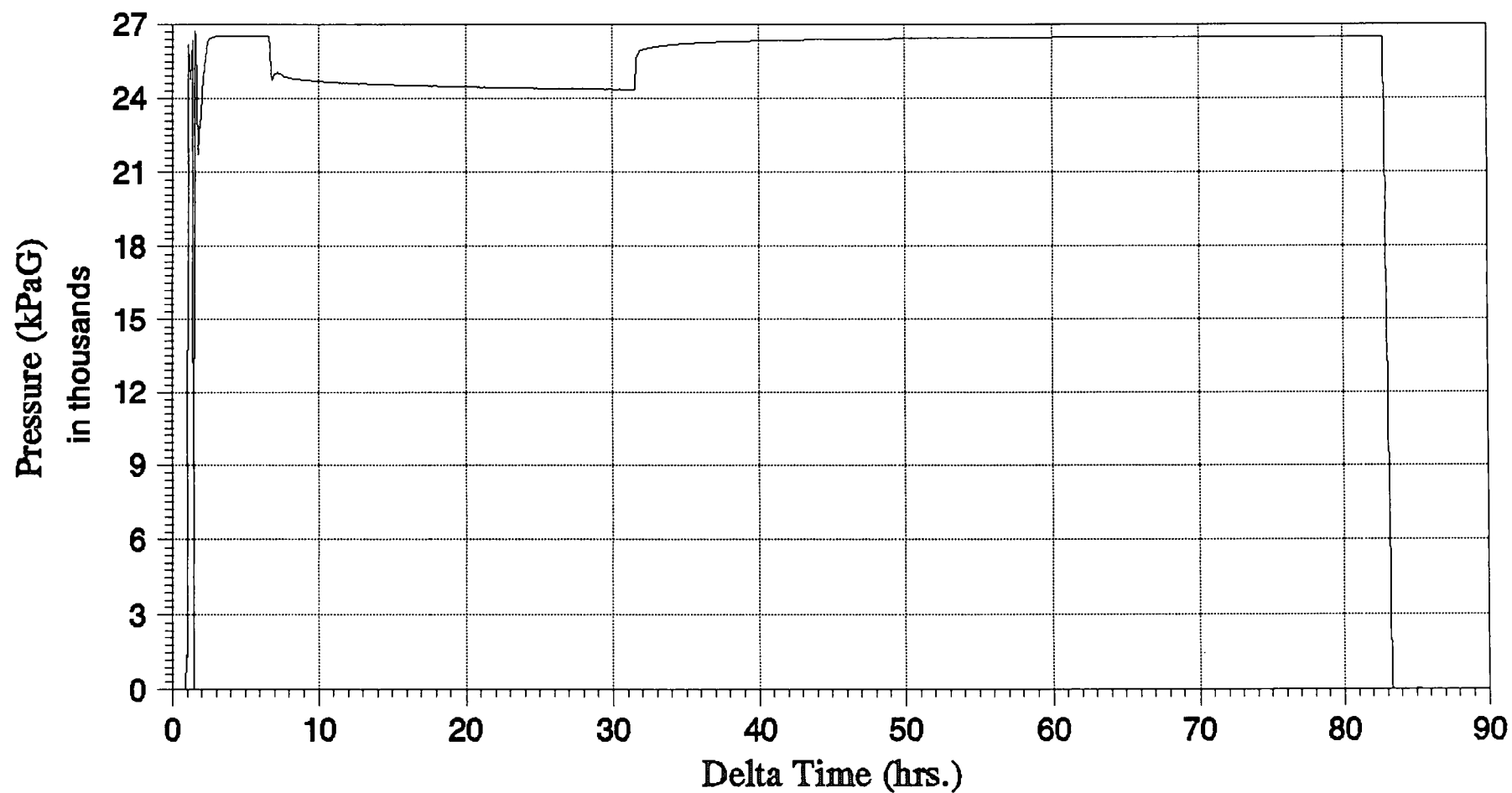
Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt(hrs)	P(kpaG)	T(°C)	Pt. #	Remarks
1998/07/11	00:53:01	0.0000	14.9	22.4	1 :	Begin Data Acquisition
	01:49:00	0.9331	1388.8	17.6	638 :	Pressure Test Lubricator
	03:40:00	2.7831	26483.6	150.9	743 :	Recorders on Bottom at : 3072 m CF.
	07:30:00	6.6164	26514.8	151.5	973 :	Well Open to Flow.
	08:30:00	7.6164	24937.3	154.4	1033 :	Start 24 Hour Flow Rate.
1998/07/12	08:30:00	31.6164	25230.6	154.2	2473 :	Well Shut In.
1998/07/14	11:46:00	82.8831	26485.0	151.3	5549 :	Recorders Off Bottom.
	14:15:00	85.3664	24.4	19.8	5696 :	End Data Acquisition

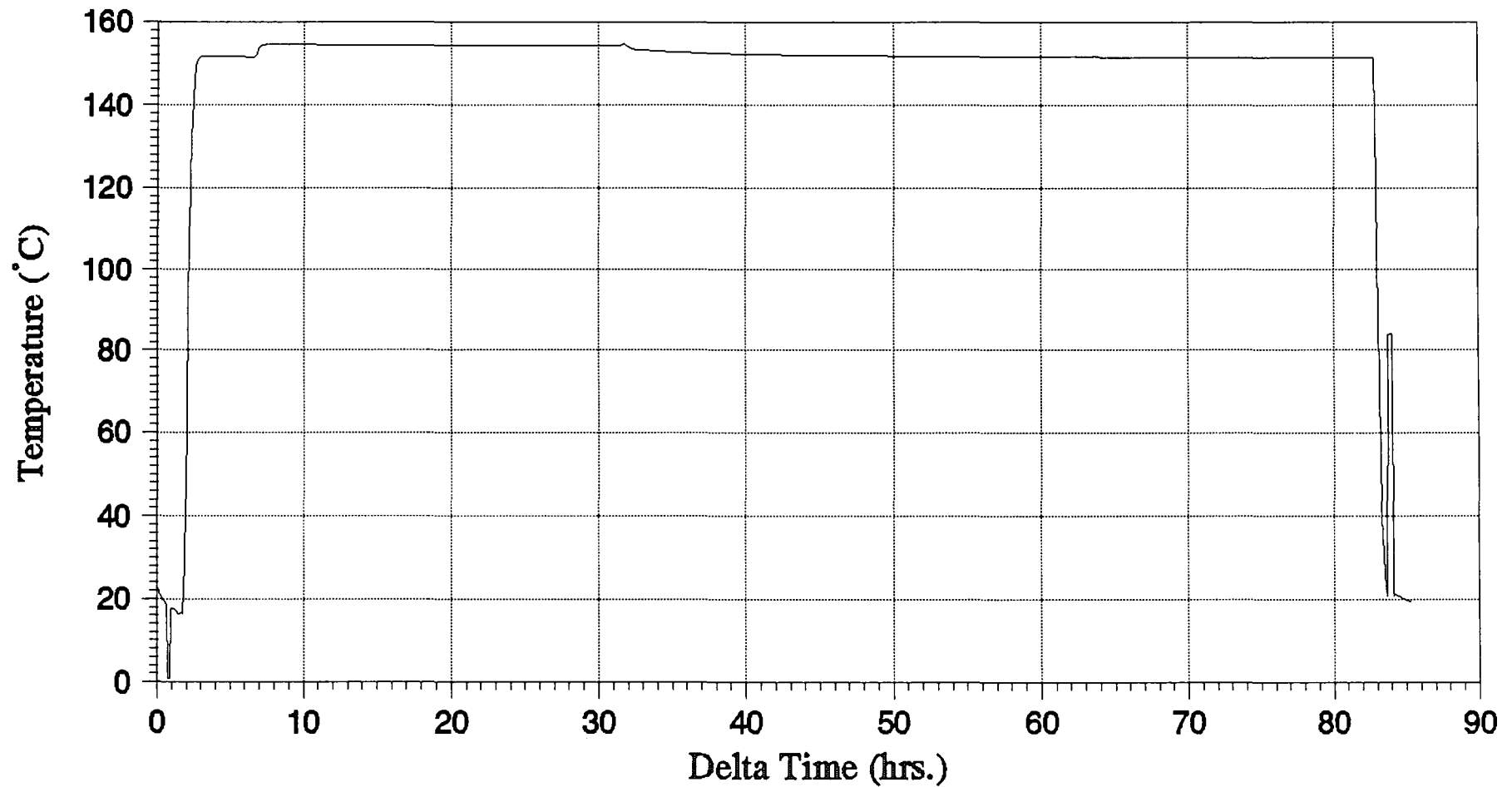
Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.

Ranger Oil Limited
P-66-A
Gentronics Quartz Bottom Gauge Pressures



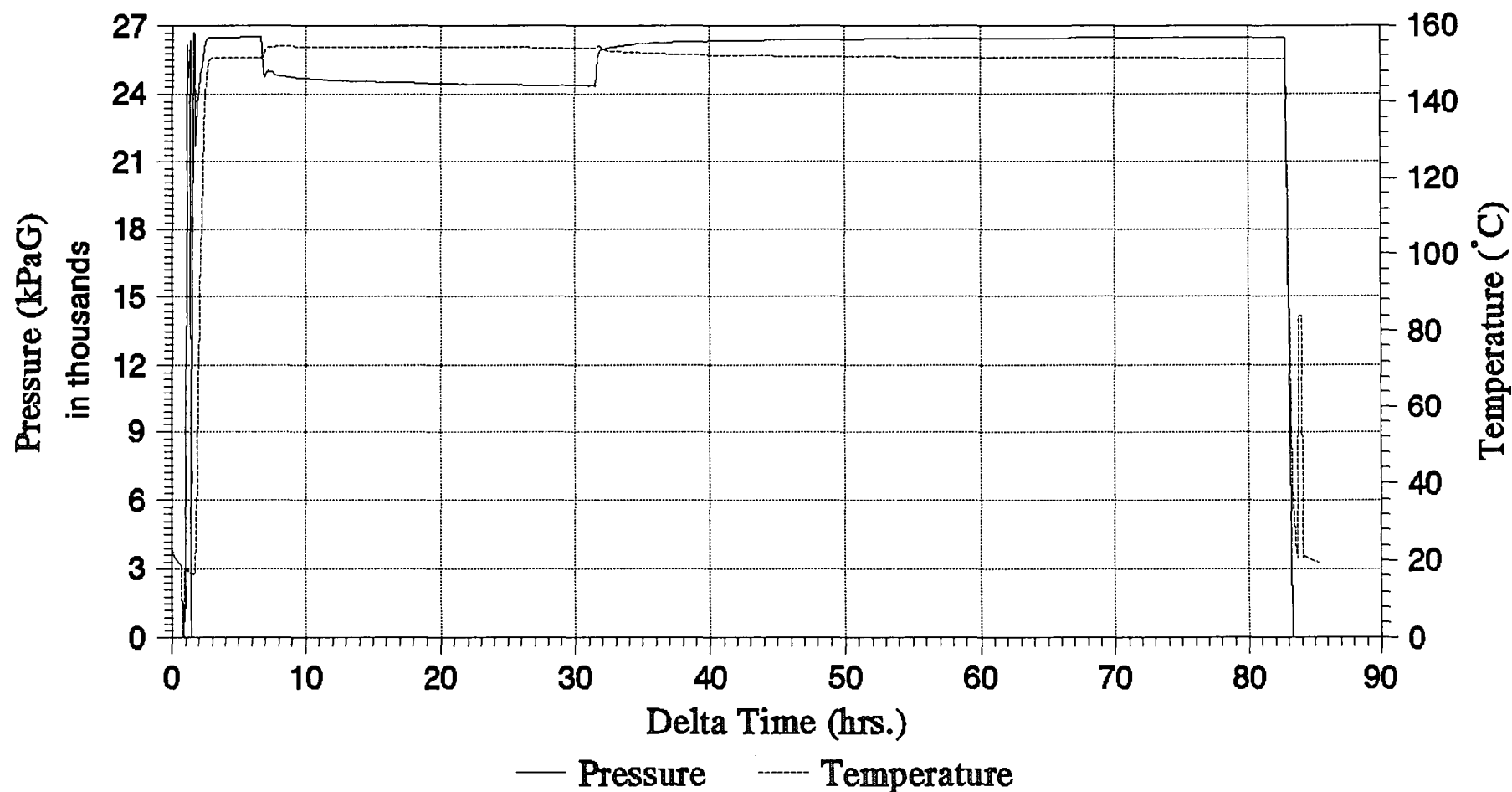
GENCO PRESSURE CONTROL LTD (403)250-3800
Start Aquisition: 1998/07/11 00:53:01
End Aquisition: 1998/07/14 14:15:00

Ranger Oil Limited
P-66-A
Gentronics Quartz Bottom Gauge Temp.



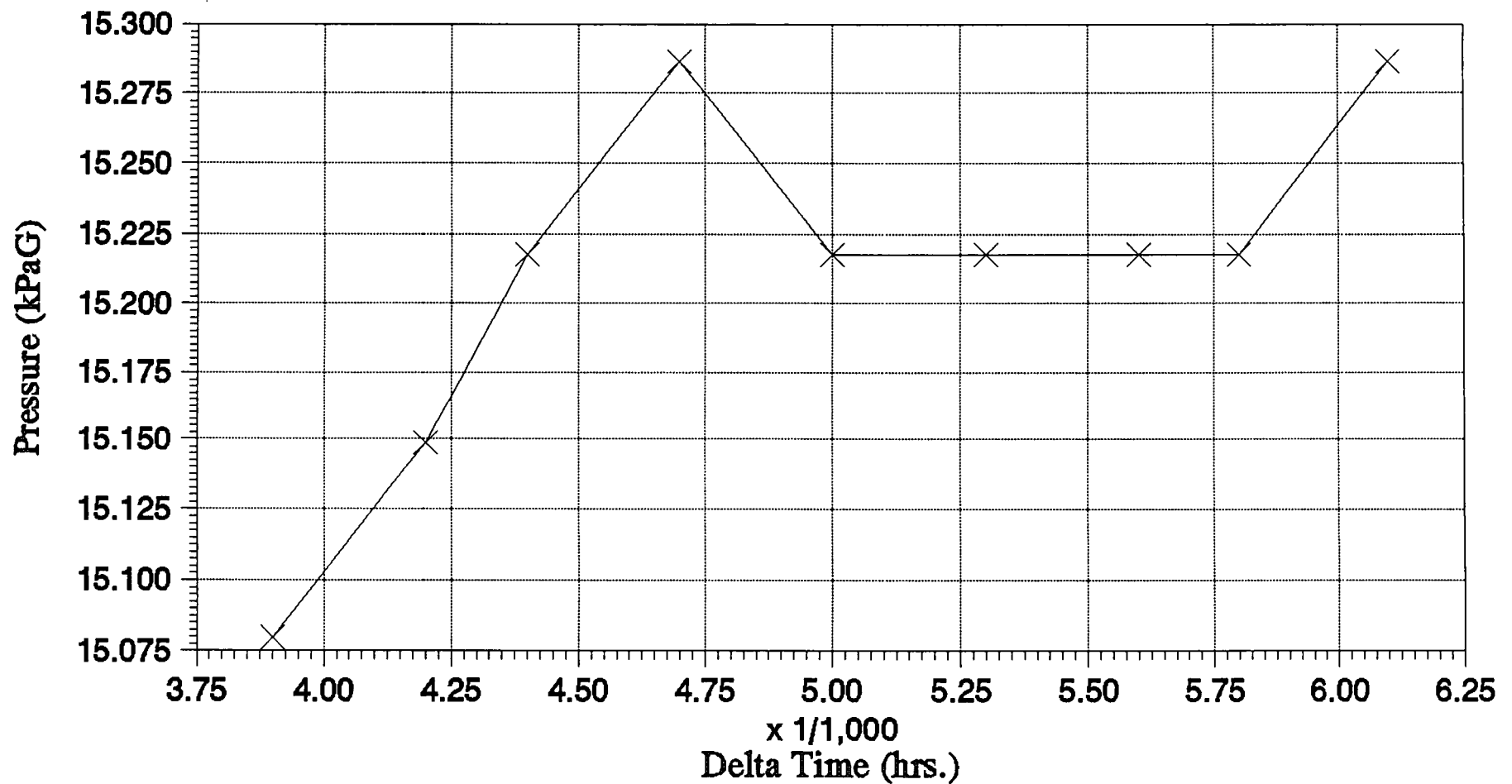
GENCO PRESSURE CONTROL LTD (403)250-3800
Start Aquisition: 1998/07/11 00:53:01
End Aquisition: 1998/07/14 14:15:00

Ranger Oil Limited
P-66-A
Gentronics Quartz Bottom Pressure/Temp



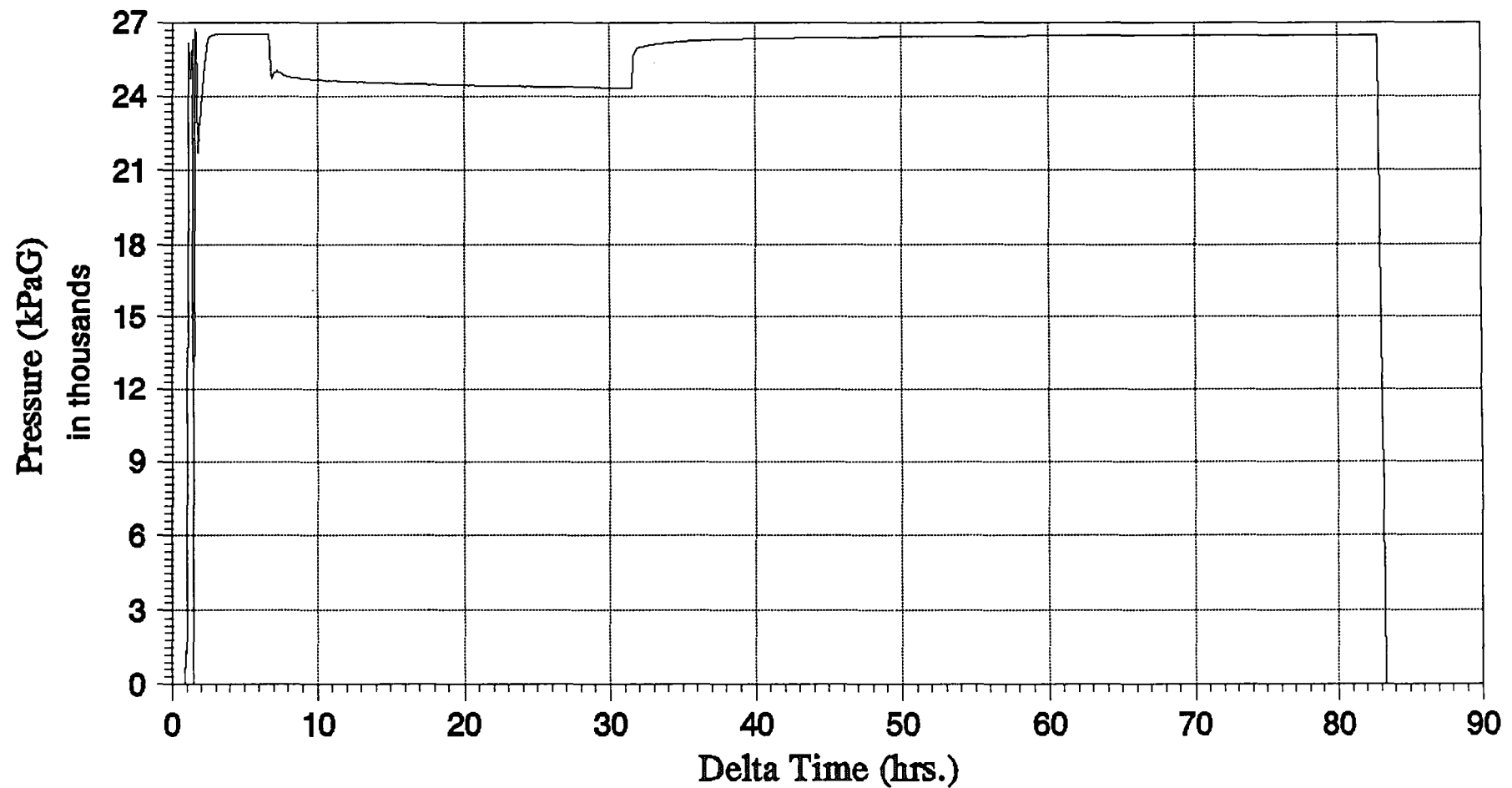
GENCO PRESSURE CONTROL LTD (403)250-3800
Start Aquisition: 1998/07/11 00:53:01
End Aquisition: 1998/07/14 14:15:00

Ranger Oil Limited
P-66-A
Bottom Gauge Apparent Resolution



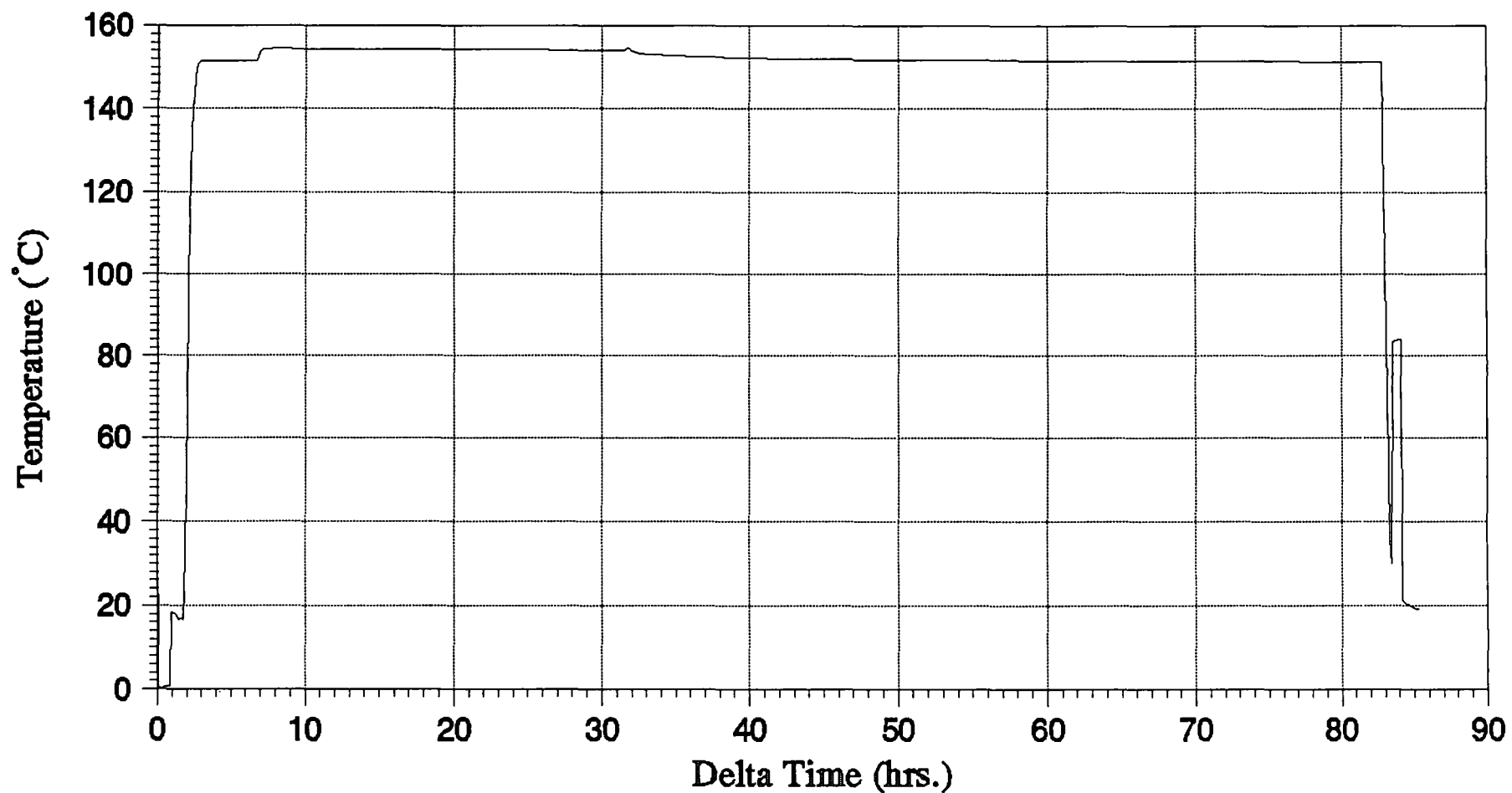
GENCO PRESSURE CONTROL LTD (403)250-3800
Start Acquisition: 1998/07/11 00:53:01
End Acquisition: 1998/07/14 14:15:00

Ranger Oil Limited
P-66-A
Gentronics Quartz Top Gauge Pressures



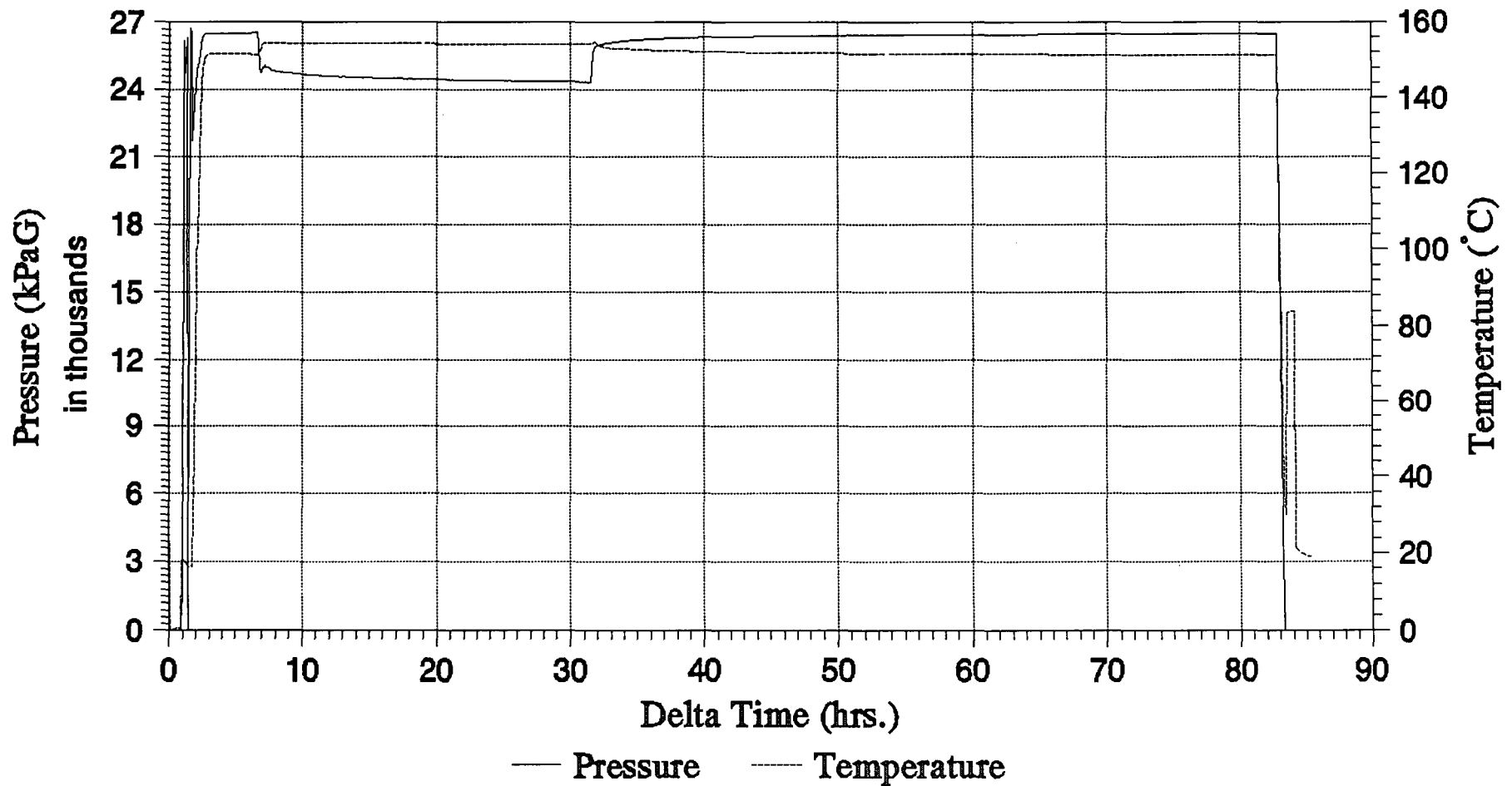
GENCO PRESSURE CONTROL LTD (403)250-3800
Start Aquisition: 1998/07/11 00:53:01
End Aquisition: 1998/07/14 14:13:00

Ranger Oil Limited
P-66-A
Gentronics Quartz Top Gauge Temp.



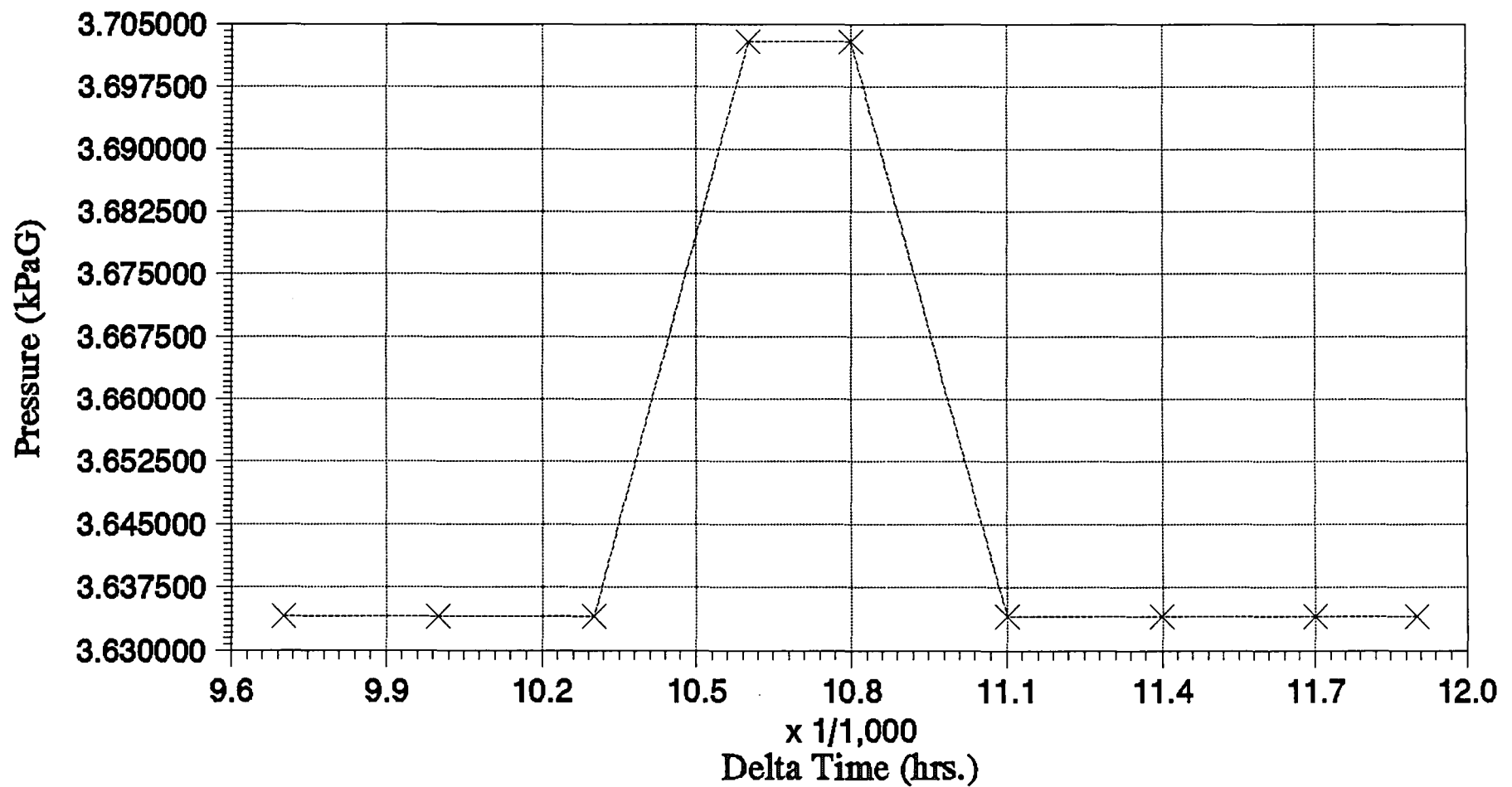
GENCO PRESSURE CONTROL LTD (403)250-3800
Start Aquisition: 1998/07/11 00:53:01
End Aquisition: 1998/07/14 14:13:00

Ranger Oil Limited
P-66-A
Gentronic Quartz Top Pressure/Temp



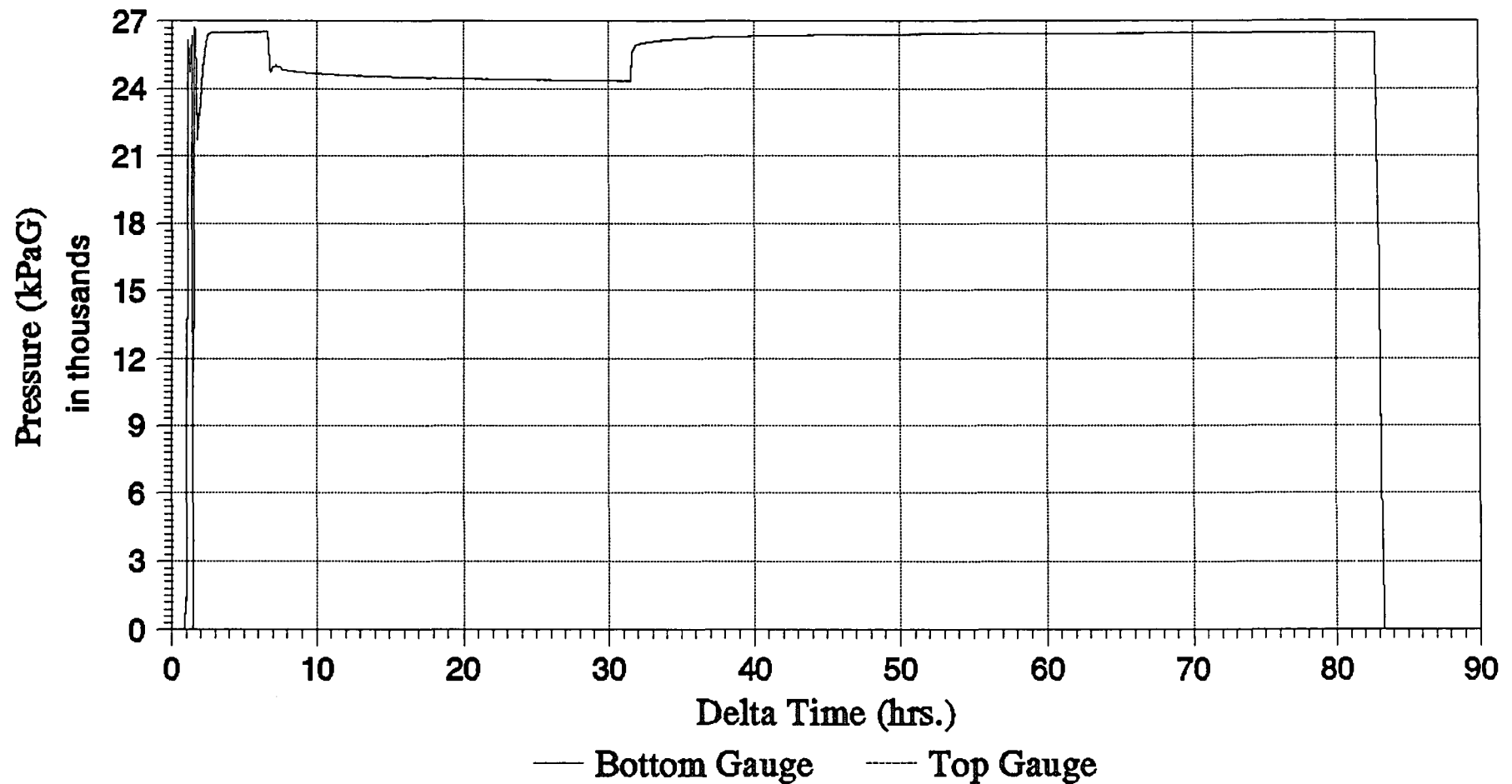
GENCO PRESSURE CONTROL LTD (403)250-3800
Start Aquisition: 1998/07/11 00:53:01
End Aquisition: 1998/07/14 14:13:00

Ranger Oil Limited
P-66-A
Top Gauge Apparent Resolution



GENCO PRESSURE CONTROL LTD (403)250-3800
Start Aquisition: 1998/07/11 00:53:01
End Aquisition: 1998/07/14 14:13:00

Ranger Oil Limited
P-66-A
Gentronics Quartz Gauge Press. Tracking



GENCO PRESSURE CONTROL LTD (403)250-3800
Start Aquisition: 1998/07/11 00:53:01
End Aquisition: 1998/07/14 14:13:00

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt(hrs)	P(kPaG)	dP	T(°C)	dT	Pt. #
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Begin Data Acquisition:

1998/07/11	00:53:01	0.0000	14.9	14.9	22.4	22.4	0:
	00:53:06	0.0014	15.0	0.1	22.4	0.0	6:
	00:53:12	0.0031	14.9	-0.1	22.4	0.0	12:
	00:53:18	0.0047	15.3	0.3	22.4	-0.0	18:
	00:53:24	0.0064	15.2	-0.1	22.4	0.0	24:
	00:53:30	0.0081	15.2	0.0	22.4	0.0	30:
	00:53:36	0.0097	15.2	0.0	22.4	-0.0	36:
	00:53:42	0.0114	15.2	0.0	22.4	0.0	42:
	00:53:48	0.0131	15.2	0.0	22.4	0.0	48:
	00:53:54	0.0147	15.2	0.0	22.4	-0.0	54:
	00:54:00	0.0164	15.2	0.0	22.4	0.0	60:
	00:54:06	0.0181	15.2	0.0	22.4	-0.0	66:
	00:54:12	0.0197	15.3	0.1	22.4	0.0	72:
	00:54:18	0.0214	15.3	0.0	22.4	0.0	78:
	00:54:24	0.0231	15.3	0.0	22.4	-0.0	84:
	00:54:30	0.0247	15.3	0.0	22.4	0.0	90:
	00:54:36	0.0264	15.2	-0.1	22.4	0.0	96:
	00:54:42	0.0281	15.2	0.0	22.4	-0.0	102:
	00:54:48	0.0297	15.3	0.1	22.4	0.0	108:
	00:54:54	0.0314	15.2	-0.1	22.4	0.0	114:
	00:55:00	0.0331	15.2	0.0	22.4	-0.0	120:
	00:55:06	0.0347	15.2	0.0	22.4	0.0	126:
	00:55:12	0.0364	15.2	0.0	22.4	0.0	132:
	00:55:18	0.0381	15.2	0.0	22.4	-0.0	138:
	00:55:24	0.0397	15.2	0.0	22.4	0.0	144:
	00:55:30	0.0414	15.2	0.0	22.4	0.0	150:
	00:55:36	0.0431	15.1	-0.1	22.4	-0.0	156:
	00:55:42	0.0447	15.2	0.1	22.4	0.0	162:
	00:55:48	0.0464	15.3	0.1	22.3	-0.0	168:
	00:55:54	0.0481	15.1	-0.1	22.3	0.0	174:
	00:56:00	0.0497	15.0	-0.1	22.3	0.0	180:
	00:56:06	0.0514	14.8	-0.2	22.3	-0.0	186:
	00:56:13	0.0533	16.3	1.4	22.3	0.0	192:
	00:56:19	0.0550	16.2	-0.1	22.3	-0.0	198:
	00:56:25	0.0567	16.3	0.1	22.3	0.0	204:
	00:56:31	0.0583	15.8	-0.6	22.3	-0.0	210:
	00:56:37	0.0600	15.1	-0.7	22.3	0.0	216:
	00:56:43	0.0617	14.9	-0.1	22.3	-0.0	222:
	00:56:49	0.0633	14.9	0.0	22.3	-0.0	228:
	00:56:55	0.0650	14.9	-0.1	22.3	-0.0	234:
	00:57:01	0.0667	14.9	0.1	22.3	-0.0	240:
	00:57:07	0.0683	15.0	0.1	22.3	-0.0	246:
	00:57:13	0.0700	15.1	0.1	22.3	-0.0	252:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 6 data points.

DATA - 1

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt(hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	00:57:19	0.0717	15.1	0.0	22.2	-0.0	258:
	00:57:25	0.0733	15.1	0.1	22.2	-0.0	264:
	00:57:31	0.0750	15.2	0.1	22.2	-0.0	270:
	00:57:37	0.0767	15.2	0.0	22.2	-0.0	276:
	00:57:43	0.0783	15.3	0.1	22.2	-0.0	282:
	00:57:49	0.0800	15.3	0.0	22.2	-0.0	288:
	00:57:55	0.0817	15.4	0.1	22.2	-0.0	294:
	00:58:01	0.0833	15.3	-0.1	22.2	-0.0	300:
	00:58:07	0.0850	15.4	0.1	22.2	-0.0	306:
	00:58:13	0.0867	15.5	0.1	22.1	-0.0	312:
	00:58:19	0.0883	15.4	-0.1	22.1	-0.0	318:
	00:58:25	0.0900	14.6	-0.8	22.1	-0.0	324:
	00:58:31	0.0917	12.6	-2.0	22.1	-0.0	330:
	00:58:37	0.0933	10.9	-1.7	22.1	-0.0	336:
	00:58:43	0.0950	9.6	-1.3	22.1	-0.0	342:
	00:58:49	0.0967	8.4	-1.2	22.0	-0.0	348:
	00:58:55	0.0983	7.6	-0.8	22.0	-0.0	354:
	00:59:01	0.1000	6.7	-0.8	22.0	-0.0	360:
	00:59:07	0.1017	6.2	-0.6	22.0	-0.0	366:
	00:59:13	0.1033	5.6	-0.6	22.0	-0.0	372:
	00:59:19	0.1050	5.3	-0.3	22.0	-0.0	378:
	00:59:25	0.1067	4.9	-0.3	22.0	-0.0	384:
	00:59:31	0.1083	4.6	-0.3	21.9	-0.0	390:
	00:59:37	0.1100	4.3	-0.3	21.9	-0.0	396:
	00:59:43	0.1117	4.2	-0.1	21.9	-0.0	402:
	00:59:49	0.1133	4.0	-0.2	21.9	-0.0	408:
	00:59:55	0.1150	3.8	-0.1	21.9	-0.0	414:
	01:00:01	0.1167	3.6	-0.2	21.9	-0.0	420:
	01:00:07	0.1183	3.6	0.0	21.8	-0.0	426:
	01:00:13	0.1200	3.5	-0.1	21.8	-0.0	432:
	01:00:19	0.1217	3.4	-0.1	21.8	-0.0	438:
	01:00:25	0.1233	3.3	-0.1	21.8	-0.0	444:
	01:00:31	0.1250	3.2	-0.1	21.8	-0.0	450:
	01:00:37	0.1267	3.1	-0.1	21.8	-0.0	456:
	01:00:43	0.1283	3.1	0.0	21.7	-0.0	462:
	01:00:49	0.1300	3.1	0.0	21.7	-0.0	468:
	01:00:55	0.1317	3.0	-0.1	21.7	-0.0	474:
	01:01:01	0.1333	2.9	-0.1	21.7	-0.0	480:
	01:01:07	0.1350	2.9	-0.1	21.7	-0.0	486:
	01:01:13	0.1367	2.9	0.0	21.7	-0.0	492:
	01:01:19	0.1383	2.9	0.0	21.6	-0.0	498:
	01:01:25	0.1400	2.9	0.0	21.6	-0.0	504:
	01:01:31	0.1417	2.8	-0.1	21.6	-0.0	510:
	01:01:37	0.1433	2.7	-0.1	21.6	-0.0	516:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 6 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	01:01:43	0.1450	2.7	0.0	21.6	-0.0	522:
	01:01:49	0.1467	2.7	0.0	21.6	-0.0	528:
	01:01:55	0.1483	2.7	-0.1	21.6	-0.0	534:
	01:02:01	0.1500	2.7	0.0	21.5	-0.0	540:
	01:02:07	0.1517	2.7	0.0	21.5	-0.0	546:
	01:02:13	0.1533	2.6	-0.1	21.5	-0.0	552:
	01:02:19	0.1550	2.6	0.0	21.5	-0.0	558:
	01:02:25	0.1567	2.5	-0.1	21.5	-0.0	564:
	01:02:31	0.1583	2.6	0.1	21.5	-0.0	570:
	01:02:37	0.1600	2.5	-0.1	21.5	-0.0	576:
	01:02:43	0.1617	2.5	0.0	21.4	-0.0	582:
	01:02:49	0.1633	2.5	0.0	21.4	-0.0	588:
	01:02:55	0.1650	2.5	0.0	21.4	-0.0	594:
	01:05:00	0.1997	2.2	-0.3	21.1	-0.3	600:
	01:12:00	0.3164	1.4	-0.8	20.3	-0.8	606:
	01:20:00	0.4497	0.9	-0.5	19.6	-0.7	612:
	01:29:00	0.5997	0.4	-0.6	18.8	-0.8	618:
	01:35:00	0.6997	0.0	-0.4	18.4	-0.4	624:
	01:41:00	0.7997	0.0	0.0	0.8	-17.6	630:
	01:47:00	0.8997	40.0	40.0	17.6	16.8	636:
	01:53:00	0.9997	1298.2	1258.1	17.6	-0.1	642:
	02:00:00	1.1164	26174.1	24875.9	17.5	-0.1	648:
	02:06:00	1.2164	23991.4	-2182.7	17.3	-0.2	654:
	02:14:00	1.3497	26331.0	2339.6	16.8	-0.4	660:
	02:21:00	1.4664	254.0	-26077.0	16.1	-0.7	666:
	02:27:00	1.5664	26690.5	26436.5	16.4	0.3	672:
	02:34:00	1.6831	22264.8	-4425.8	16.4	-0.0	678:
	02:41:00	1.7997	22181.2	-83.6	22.0	5.6	684:
	02:47:00	1.8997	23040.3	859.1	37.2	15.1	690:
	02:53:00	1.9997	24015.3	975.0	60.4	23.3	696:
	02:59:00	2.0997	24853.6	838.3	90.0	29.6	702:
	03:05:00	2.1997	25332.6	479.0	111.6	21.6	708:
	03:11:00	2.2997	25766.7	434.1	125.8	14.3	714:
	03:17:00	2.3997	26193.7	427.0	137.8	12.0	720:
	03:23:00	2.4997	26379.8	186.1	145.8	7.9	726:
	03:29:00	2.5997	26432.9	53.1	149.1	3.3	732:
	03:35:00	2.6997	26472.9	40.0	150.4	1.3	738:
	03:41:00	2.7997	26482.0	9.1	151.1	0.6	744:
	03:47:00	2.8997	26493.1	11.0	151.4	0.3	750:
	03:53:00	2.9997	26496.8	3.8	151.6	0.2	756:
	03:59:00	3.0997	26500.0	3.2	151.6	0.0	762:
	04:05:00	3.1997	26500.6	0.6	151.6	0.0	768:
	04:11:00	3.2997	26501.2	0.6	151.6	0.0	774:
	04:17:00	3.3997	26501.7	0.6	151.6	0.0	780:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 6 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	04:23:00	3.4997	26502.4	0.7	151.6	0.0	786:
	04:29:00	3.5997	26502.9	0.5	151.6	0.1	792:
	04:35:00	3.6997	26503.5	0.6	151.6	0.0	798:
	04:41:00	3.7997	26504.1	0.6	151.6	0.0	804:
	04:47:00	3.8997	26504.5	0.4	151.6	0.0	810:
	04:53:00	3.9997	26505.1	0.6	151.6	0.0	816:
	04:59:00	4.0997	26505.5	0.3	151.6	0.0	822:
	05:05:00	4.1997	26505.9	0.5	151.6	0.0	828:
	05:11:00	4.2997	26506.4	0.5	151.6	0.0	834:
	05:17:00	4.3997	26506.8	0.4	151.6	0.0	840:
	05:23:00	4.4997	26507.3	0.5	151.6	0.0	846:
	05:29:00	4.5997	26507.7	0.4	151.6	-0.1	852:
	05:35:00	4.6997	26508.2	0.4	151.6	0.0	858:
	05:41:00	4.7997	26508.6	0.4	151.6	0.0	864:
	05:47:00	4.8997	26508.9	0.3	151.6	0.0	870:
	05:53:00	4.9997	26509.3	0.3	151.6	0.0	876:
	05:59:00	5.0997	26509.7	0.5	151.6	0.0	882:
	06:05:00	5.1997	26510.1	0.3	151.6	0.0	888:
	06:11:00	5.2997	26510.5	0.4	151.6	0.0	894:
	06:17:00	5.3997	26510.7	0.2	151.6	0.0	900:
	06:23:00	5.4997	26511.1	0.4	151.6	0.0	906:
	06:29:00	5.5997	26511.6	0.5	151.6	0.0	912:
	06:35:00	5.6997	26512.1	0.5	151.6	0.0	918:
	06:41:00	5.7997	26512.5	0.4	151.6	0.0	924:
	06:47:00	5.8997	26512.7	0.2	151.6	0.0	930:
	06:53:00	5.9997	26513.0	0.3	151.5	-0.1	936:
	06:59:00	6.0997	26513.4	0.3	151.5	0.0	942:
	07:05:00	6.1997	26513.7	0.3	151.5	0.0	948:
	07:11:00	6.2997	26513.9	0.3	151.5	0.0	954:
	07:17:00	6.3997	26514.3	0.3	151.5	0.0	960:
	07:23:00	6.4997	26514.6	0.3	151.5	0.0	966:
	07:29:00	6.5997	26515.0	0.3	151.5	0.0	972:
	07:35:00	6.6997	25750.9	-764.1	151.6	0.1	978:
	07:41:00	6.7997	24725.4	-1025.5	152.1	0.5	984:
	07:47:00	6.8997	24771.9	46.5	153.1	0.9	990:
	07:53:00	6.9997	24968.8	197.0	153.9	0.9	996:
	07:59:00	7.0997	24992.1	23.2	154.2	0.3	1002:
	08:05:00	7.1997	25005.3	13.2	154.3	0.1	1008:
	08:11:00	7.2997	24953.2	-52.1	154.4	0.1	1014:
	08:17:00	7.3997	24986.6	33.4	154.4	0.1	1020:
	08:23:00	7.4997	24964.8	-21.9	154.4	0.0	1026:
	08:29:00	7.5997	24941.7	-23.0	154.4	0.0	1032:
	08:35:00	7.6997	24847.5	-94.3	154.4	0.0	1038:
	08:41:00	7.7997	24843.4	-4.1	154.5	0.1	1044:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 6 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	08:47:00	7.8997	24823.7	-19.7	154.5	0.0	1050:
	08:53:00	7.9997	24811.0	-12.7	154.5	0.0	1056:
	08:59:00	8.0997	24806.1	-4.9	154.5	0.0	1062:
	09:05:00	8.1997	24797.0	-9.1	154.5	0.0	1068:
	09:11:00	8.2997	24783.0	-14.0	154.5	0.0	1074:
	09:17:00	8.3997	24772.3	-10.8	154.5	0.0	1080:
	09:23:00	8.4997	24771.6	-0.7	154.5	0.0	1086:
	09:29:00	8.5997	24762.9	-8.7	154.5	0.0	1092:
	09:35:00	8.6997	24756.7	-6.2	154.5	0.0	1098:
	09:41:00	8.7997	24744.5	-12.1	154.5	0.0	1104:
	09:47:00	8.8997	24741.7	-2.8	154.5	0.0	1110:
	09:53:00	8.9997	24741.4	-0.3	154.5	0.0	1116:
	09:59:00	9.0997	24736.5	-4.9	154.5	0.0	1122:
	10:05:00	9.1997	24726.3	-10.1	154.4	-0.1	1128:
	10:11:00	9.2997	24716.1	-10.3	154.4	0.0	1134:
	10:17:00	9.3997	24711.3	-4.8	154.4	0.0	1140:
	10:23:00	9.4997	24716.3	5.0	154.4	0.0	1146:
	10:29:00	9.5997	24699.7	-16.7	154.4	0.0	1152:
	10:35:00	9.6997	24695.6	-4.1	154.4	0.0	1158:
	10:41:00	9.7997	24686.8	-8.8	154.4	0.0	1164:
	10:47:00	9.8997	24692.1	5.3	154.4	0.0	1170:
	10:53:00	9.9997	24683.0	-9.2	154.4	0.0	1176:
	10:59:00	10.0997	24693.9	11.0	154.4	0.0	1182:
	11:05:00	10.1997	24664.8	-29.2	154.4	0.0	1188:
	11:11:00	10.2997	24663.9	-0.9	154.4	0.0	1194:
	11:17:00	10.3997	24664.2	0.3	154.4	0.0	1200:
	11:23:00	10.4997	24647.4	-16.8	154.4	0.0	1206:
	11:29:00	10.5997	24652.8	5.4	154.4	0.0	1212:
	11:35:00	10.6997	24651.9	-0.9	154.4	0.0	1218:
	11:41:00	10.7997	24632.0	-19.9	154.4	0.0	1224:
	11:47:00	10.8997	24653.0	21.0	154.4	0.0	1230:
	11:53:00	10.9997	24633.9	-19.1	154.4	-0.1	1236:
	11:59:00	11.0997	24639.7	5.8	154.4	0.0	1242:
	12:05:00	11.1997	24632.8	-6.8	154.4	0.0	1248:
	12:11:00	11.2997	24636.9	4.1	154.4	0.0	1254:
	12:17:00	11.3997	24625.7	-11.2	154.4	0.0	1260:
	12:23:00	11.4997	24629.4	3.7	154.4	0.0	1266:
	12:29:00	11.5997	24606.9	-22.5	154.4	0.0	1272:
	12:35:00	11.6997	24607.9	1.0	154.4	0.0	1278:
	12:41:00	11.7997	24603.5	-4.3	154.4	0.0	1284:
	12:47:00	11.8997	24608.0	4.4	154.4	0.0	1290:
	12:53:00	11.9997	24610.6	2.7	154.4	0.0	1296:
	12:59:00	12.0997	24601.1	-9.6	154.4	0.0	1302:
	13:05:00	12.1997	24606.0	5.0	154.4	0.0	1308:

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.
 Reporting on an interval of 1 in 6 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: **P-66-A**

Bottom Gauge

Date	Time	dt(hrs)	P(kPaG)	dP	T(°C)	dT	Pt. #
	13:11:00	12.2997	24604.9	-1.2	154.4	0.0	1314:
	13:17:00	12.3997	24593.1	-11.7	154.4	0.0	1320:
	13:23:00	12.4997	24594.1	1.0	154.4	0.0	1326:
	13:29:00	12.5997	24607.3	13.2	154.4	0.0	1332:
	13:35:00	12.6997	24592.5	-14.8	154.4	0.0	1338:
	13:41:00	12.7997	24586.8	-5.7	154.4	0.0	1344:
	13:47:00	12.8997	24570.5	-16.3	154.4	0.0	1350:
	13:53:00	12.9997	24575.5	5.0	154.4	0.0	1356:
	13:59:00	13.0997	24584.3	8.8	154.3	-0.1	1362:
	14:05:00	13.1997	24574.9	-9.4	154.3	0.0	1368:
	14:11:00	13.2997	24569.6	-5.2	154.3	0.0	1374:
	14:17:00	13.3997	24559.6	-10.1	154.3	0.0	1380:
	14:23:00	13.4997	24565.0	5.4	154.3	0.0	1386:
	14:29:00	13.5997	24564.0	-1.0	154.3	0.0	1392:
	14:35:00	13.6997	24556.7	-7.3	154.3	0.0	1398:
	14:41:00	13.7997	24560.3	3.7	154.3	0.0	1404:
	14:47:00	13.8997	24551.1	-9.2	154.3	0.0	1410:
	14:53:00	13.9997	24547.6	-3.6	154.3	0.0	1416:
	14:59:00	14.0997	24550.4	2.8	154.3	0.0	1422:
	15:05:00	14.1997	24540.7	-9.7	154.3	0.0	1428:
	15:11:00	14.2997	24542.2	1.5	154.3	0.0	1434:
	15:17:00	14.3997	24555.3	13.1	154.3	0.0	1440:
	15:23:00	14.4997	24549.3	-6.0	154.3	0.0	1446:
	15:29:00	14.5997	24540.5	-8.8	154.3	0.0	1452:
	15:35:00	14.6997	24545.3	4.8	154.3	0.0	1458:
	15:41:00	14.7997	24547.7	2.4	154.3	0.0	1464:
	15:47:00	14.8997	24533.3	-14.4	154.3	0.0	1470:
	15:53:00	14.9997	24542.0	8.7	154.3	0.0	1476:
	15:59:00	15.0997	24529.1	-12.8	154.3	0.0	1482:
	16:05:00	15.1997	24519.7	-9.4	154.3	0.0	1488:
	16:11:00	15.2997	24529.9	10.2	154.3	0.0	1494:
	16:17:00	15.3997	24521.8	-8.1	154.3	0.0	1500:
	16:23:00	15.4997	24525.3	3.5	154.3	0.0	1506:
	16:29:00	15.5997	24514.0	-11.3	154.3	0.0	1512:
	16:35:00	15.6997	24512.9	-1.1	154.3	0.0	1518:
	16:41:00	15.7997	24504.6	-8.3	154.3	0.0	1524:
	16:47:00	15.8997	24510.7	6.1	154.3	0.0	1530:
	16:53:00	15.9997	24504.8	-5.9	154.3	0.0	1536:
	16:59:00	16.0997	24519.9	15.1	154.3	0.0	1542:
	17:05:00	16.1997	24514.3	-5.6	154.3	0.0	1548:
	17:11:00	16.2997	24514.7	0.4	154.3	-0.1	1554:
	17:17:00	16.3997	24513.5	-1.2	154.3	0.0	1560:
	17:23:00	16.4997	24506.5	-7.0	154.3	0.0	1566:
	17:29:00	16.5997	24511.2	4.7	154.3	0.0	1572:

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.
 Reporting on an interval of 1 in 6 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt(hrs)	P(kPaG)	dP	T(°C)	dT	Pt. #
	17:35:00	16.6997	24505.2	-6.0	154.3	0.0	1578:
	17:41:00	16.7997	24497.8	-7.3	154.3	0.0	1584:
	17:47:00	16.8997	24502.4	4.6	154.3	0.0	1590:
	17:53:00	16.9997	24498.5	-3.9	154.3	0.0	1596:
	17:59:00	17.0997	24490.6	-7.9	154.3	0.0	1602:
	18:05:00	17.1997	24499.4	8.8	154.3	0.0	1608:
	18:11:00	17.2997	24487.8	-11.7	154.3	0.0	1614:
	18:17:00	17.3997	24490.9	3.1	154.3	0.0	1620:
	18:23:00	17.4997	24488.3	-2.6	154.3	0.0	1626:
	18:29:00	17.5997	24491.1	2.8	154.3	0.0	1632:
	18:35:00	17.6997	24479.7	-11.4	154.3	0.0	1638:
	18:41:00	17.7997	24479.0	-0.8	154.3	0.0	1644:
	18:47:00	17.8997	24485.6	6.7	154.3	0.0	1650:
	18:53:00	17.9997	24480.1	-5.5	154.3	0.0	1656:
	18:59:00	18.0997	24480.7	0.6	154.3	0.0	1662:
	19:05:00	18.1997	24477.9	-2.9	154.3	0.0	1668:
	19:11:00	18.2997	24476.7	-1.2	154.3	0.0	1674:
	19:17:00	18.3997	24470.7	-6.0	154.3	0.0	1680:
	19:23:00	18.4997	24470.7	0.0	154.3	0.0	1686:
	19:29:00	18.5997	24469.0	-1.7	154.3	0.0	1692:
	19:35:00	18.6997	24469.4	0.4	154.3	0.0	1698:
	19:41:00	18.7997	24463.1	-6.3	154.3	0.0	1704:
	19:47:00	18.8997	24470.8	7.7	154.3	0.0	1710:
	19:53:00	18.9997	24463.8	-7.0	154.3	0.0	1716:
	19:59:00	19.0997	24466.1	2.3	154.3	0.0	1722:
	20:05:00	19.1997	24461.0	-5.1	154.3	0.0	1728:
	20:11:00	19.2997	24464.6	3.6	154.3	0.0	1734:
	20:17:00	19.3997	24463.2	-1.4	154.3	0.0	1740:
	20:23:00	19.4997	24462.3	-0.8	154.3	0.0	1746:
	20:29:00	19.5997	24459.9	-2.5	154.3	0.0	1752:
	20:35:00	19.6997	24456.1	-3.8	154.3	0.0	1758:
	20:41:00	19.7997	24455.0	-1.1	154.3	0.0	1764:
	20:47:00	19.8997	24455.0	0.1	154.3	0.0	1770:
	20:53:00	19.9997	24447.8	-7.2	154.3	0.0	1776:
	20:59:00	20.0997	24452.9	5.1	154.3	0.0	1782:
	21:05:00	20.1997	24444.1	-8.8	154.3	0.0	1788:
	21:11:00	20.2997	24448.5	4.4	154.3	0.0	1794:
	21:17:00	20.3997	24441.9	-6.6	154.3	0.0	1800:
	21:23:00	20.4997	24445.8	3.9	154.3	0.0	1806:
	21:29:00	20.5997	24442.8	-3.0	154.3	0.0	1812:
	21:35:00	20.6997	24446.8	4.0	154.3	0.0	1818:
	21:41:00	20.7997	24446.3	-0.5	154.3	0.0	1824:
	21:47:00	20.8997	24438.5	-7.7	154.3	0.0	1830:
	21:53:00	20.9997	24440.3	1.8	154.2	-0.1	1836:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 6 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: Ranger Oil Limited
Ranger Fort Liard

LSD: P-66-A

Bottom Gauge

Date	Time	dt(hrs)	P(kPaG)	dP	T(°C)	dT	Pt. #
	21:59:00	21.0997	24438.5	-1.9	154.2	0.0	1842:
	22:05:00	21.1997	24439.6	1.1	154.2	0.0	1848:
	22:11:00	21.2997	24438.1	-1.5	154.2	0.0	1854:
	22:17:00	21.3997	24435.4	-2.7	154.2	0.0	1860:
	22:23:00	21.4997	24440.3	4.9	154.2	0.0	1866:
	22:29:00	21.5997	24435.4	-4.8	154.2	0.0	1872:
	22:35:00	21.6997	24436.1	0.7	154.2	0.0	1878:
	22:41:00	21.7997	24427.9	-8.2	154.2	0.0	1884:
	22:47:00	21.8997	24426.0	-1.9	154.2	0.0	1890:
	22:53:00	21.9997	24425.7	-0.3	154.2	0.0	1896:
	22:59:00	22.0997	24424.0	-1.7	154.2	0.0	1902:
	23:05:00	22.1997	24426.3	2.3	154.2	0.0	1908:
	23:11:00	22.2997	24429.2	2.8	154.2	0.0	1914:
	23:17:00	22.3997	24423.2	-6.0	154.2	0.0	1920:
	23:23:00	22.4997	24422.8	-0.3	154.2	0.0	1926:
	23:29:00	22.5997	24416.0	-6.8	154.2	0.0	1932:
	23:35:00	22.6997	24417.0	1.0	154.2	0.0	1938:
	23:41:00	22.7997	24414.6	-2.4	154.2	0.0	1944:
	23:47:00	22.8997	24416.0	1.4	154.2	0.0	1950:
	23:53:00	22.9997	24412.2	-3.8	154.2	0.0	1956:
	23:59:00	23.0997	24412.8	0.6	154.2	0.0	1962:
1998/07/12	00:05:00	23.1997	24408.8	-3.9	154.2	0.0	1968:
	00:11:00	23.2997	24411.4	2.6	154.2	0.0	1974:
	00:17:00	23.3997	24410.7	-0.7	154.2	0.0	1980:
	00:23:00	23.4997	24408.3	-2.4	154.2	0.0	1986:
	00:29:00	23.5997	24413.4	5.1	154.2	0.0	1992:
	00:35:00	23.6997	24406.6	-6.8	154.2	0.0	1998:
	00:41:00	23.7997	24409.9	3.3	154.2	0.0	2004:
	00:47:00	23.8997	24403.0	-6.8	154.2	0.0	2010:
	00:53:00	23.9997	24404.8	1.7	154.2	0.0	2016:
	00:59:00	24.0997	24400.4	-4.3	154.2	0.0	2022:
	01:05:00	24.1997	24400.8	0.4	154.2	0.0	2028:
	01:11:00	24.2997	24408.1	7.3	154.2	0.0	2034:
	01:17:00	24.3997	24402.5	-5.7	154.2	0.0	2040:
	01:23:00	24.4997	24400.1	-2.3	154.2	0.0	2046:
	01:29:00	24.5997	24400.4	0.3	154.2	0.0	2052:
	01:35:00	24.6997	24394.8	-5.7	154.2	0.0	2058:
	01:41:00	24.7997	24405.0	10.3	154.2	0.0	2064:
	01:47:00	24.8997	24400.0	-5.0	154.2	0.0	2070:
	01:53:00	24.9997	24396.7	-3.3	154.2	0.0	2076:
	01:59:00	25.0997	24390.6	-6.1	154.2	0.0	2082:
	02:05:00	25.1997	24393.9	3.3	154.2	0.0	2088:
	02:11:00	25.2997	24392.2	-1.7	154.2	0.0	2094:
	02:17:00	25.3997	24389.8	-2.4	154.2	0.0	2100:

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GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: Ranger Oil Limited
Ranger Fort Liard

LSD: P-66-A

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	02:23:00	25.4997	24391.2	1.4	154.2	0.0	2106:
	02:29:00	25.5997	24391.6	0.4	154.2	0.0	2112:
	02:35:00	25.6997	24388.2	-3.4	154.2	0.0	2118:
	02:41:00	25.7997	24386.6	-1.6	154.2	0.0	2124:
	02:47:00	25.8997	24380.5	-6.1	154.2	0.0	2130:
	02:53:00	25.9997	24388.8	8.3	154.2	0.0	2136:
	02:59:00	26.0997	24386.8	-2.1	154.2	0.0	2142:
	03:05:00	26.1997	24380.8	-5.9	154.2	0.0	2148:
	03:11:00	26.2997	24379.4	-1.4	154.2	0.0	2154:
	03:17:00	26.3997	24375.7	-3.7	154.2	0.0	2160:
	03:23:00	26.4997	24382.5	6.8	154.2	0.0	2166:
	03:29:00	26.5997	24376.4	-6.1	154.2	0.0	2172:
	03:35:00	26.6997	24382.7	6.3	154.2	0.0	2178:
	03:41:00	26.7997	24375.7	-7.0	154.2	-0.1	2184:
	03:47:00	26.8997	24375.9	0.3	154.2	0.0	2190:
	03:53:00	26.9997	24371.3	-4.6	154.2	0.0	2196:
	03:59:00	27.0997	24372.1	0.8	154.2	0.0	2202:
	04:05:00	27.1997	24375.6	3.5	154.2	0.0	2208:
	04:11:00	27.2997	24370.6	-5.0	154.2	0.0	2214:
	04:17:00	27.3997	24367.3	-3.4	154.2	0.0	2220:
	04:23:00	27.4997	24366.2	-1.0	154.2	0.0	2226:
	04:29:00	27.5997	24371.1	4.9	154.2	0.0	2232:
	04:35:00	27.6997	24370.7	-0.4	154.2	0.0	2238:
	04:41:00	27.7997	24370.8	0.1	154.2	0.0	2244:
	04:47:00	27.8997	24365.7	-5.2	154.2	0.0	2250:
	04:53:00	27.9997	24367.9	2.3	154.2	0.0	2256:
	04:59:00	28.0997	24362.4	-5.6	154.2	0.0	2262:
	05:05:00	28.1997	24366.3	3.9	154.2	0.0	2268:
	05:11:00	28.2997	24363.0	-3.2	154.2	0.0	2274:
	05:17:00	28.3997	24366.1	3.0	154.2	0.0	2280:
	05:23:00	28.4997	24359.3	-6.8	154.2	0.0	2286:
	05:29:00	28.5997	24359.4	0.1	154.2	0.0	2292:
	05:35:00	28.6997	24361.0	1.6	154.2	0.0	2298:
	05:41:00	28.7997	24363.2	2.2	154.2	0.0	2304:
	05:47:00	28.8997	24360.6	-2.6	154.2	0.0	2310:
	05:53:00	28.9997	24361.2	0.6	154.2	0.0	2316:
	05:59:00	29.0997	24360.1	-1.1	154.2	0.0	2322:
	06:05:00	29.1997	24358.0	-2.1	154.2	0.0	2328:
	06:11:00	29.2997	24352.0	-6.0	154.2	0.0	2334:
	06:17:00	29.3997	24361.5	9.5	154.2	0.0	2340:
	06:23:00	29.4997	24353.7	-7.9	154.2	0.0	2346:
	06:29:00	29.5997	24357.9	4.2	154.2	0.0	2352:
	06:35:00	29.6997	24357.9	0.0	154.2	0.0	2358:
	06:41:00	29.7997	24350.4	-7.4	154.2	0.0	2364:

Absolute pressures are converted to gauge pressures
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Reporting on an interval of 1 in 6 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	06:47:00	29.8997	24356.3	5.9	154.2	0.0	2370:
	06:53:00	29.9997	24351.4	-4.9	154.2	0.0	2376:
	06:59:00	30.0997	24348.2	-3.2	154.2	0.0	2382:
	07:05:00	30.1997	24354.1	5.9	154.2	0.0	2388:
	07:11:00	30.2997	24347.7	-6.3	154.2	0.0	2394:
	07:17:00	30.3997	24354.4	6.7	154.2	0.0	2400:
	07:23:00	30.4997	24348.7	-5.7	154.2	0.0	2406:
	07:29:00	30.5997	24348.1	-0.6	154.2	0.0	2412:
	07:35:00	30.6997	24344.1	-4.0	154.2	0.0	2418:
	07:41:00	30.7997	24342.8	-1.2	154.2	0.0	2424:
	07:47:00	30.8997	24345.5	2.7	154.2	0.0	2430:
	07:53:00	30.9997	24343.8	-1.7	154.2	0.0	2436:
	07:59:00	31.0997	24340.2	-3.7	154.2	0.0	2442:
	08:05:00	31.1997	24341.4	1.2	154.2	0.0	2448:
	08:11:00	31.2997	24343.5	2.1	154.2	0.0	2454:
	08:17:00	31.3997	24340.1	-3.4	154.2	0.0	2460:
	08:23:00	31.4997	24344.1	4.0	154.2	0.0	2466:
	08:29:00	31.5997	24551.8	207.7	154.2	0.0	2472:
	08:35:00	31.6997	25739.5	1187.7	154.6	0.4	2478:
	08:41:00	31.7997	25878.4	138.9	154.6	0.0	2484:
	08:47:00	31.8997	25926.8	48.5	154.3	-0.3	2490:
	08:53:00	31.9997	25949.3	22.5	154.1	-0.3	2496:
	08:59:00	32.0997	25968.1	18.8	153.8	-0.2	2502:
	09:05:00	32.1997	25984.8	16.7	153.7	-0.2	2508:
	09:11:00	32.2997	25999.8	15.0	153.6	-0.1	2514:
	09:17:00	32.3997	26014.1	14.3	153.4	-0.1	2520:
	09:23:00	32.4997	26026.5	12.5	153.3	-0.1	2526:
	09:29:00	32.5997	26037.7	11.2	153.3	-0.1	2532:
	09:35:00	32.6997	26048.6	10.9	153.2	-0.1	2538:
	09:41:00	32.7997	26061.6	13.0	153.2	-0.1	2544:
	09:47:00	32.8997	26070.0	8.4	153.2	0.0	2550:
	09:53:00	32.9997	26078.9	8.9	153.2	0.0	2556:
	09:59:00	33.0997	26087.8	8.8	153.1	-0.1	2562:
	10:05:00	33.1997	26096.4	8.6	153.1	0.0	2568:
	10:11:00	33.2997	26104.6	8.2	153.1	0.0	2574:
	10:17:00	33.3997	26112.5	7.9	153.1	0.0	2580:
	10:23:00	33.4997	26120.2	7.7	153.1	-0.1	2586:
	10:29:00	33.5997	26127.4	7.2	153.1	0.0	2592:
	10:35:00	33.6997	26134.5	7.1	153.1	0.0	2598:
	10:41:00	33.7997	26141.1	6.6	153.0	-0.1	2604:
	10:47:00	33.8997	26147.6	6.5	153.0	0.0	2610:
	10:53:00	33.9997	26153.9	6.3	153.0	0.0	2616:
	10:59:00	34.0997	26160.0	6.1	152.9	-0.1	2622:
	11:05:00	34.1997	26165.7	5.7	152.9	0.0	2628:

Absolute pressures are converted to gauge pressures
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GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: Ranger Oil Limited
Ranger Fort Liard

LSD: P-66-A

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	11:11:00	34.2997	26171.2	5.5	152.9	0.0	2634:
	11:17:00	34.3997	26176.6	5.4	152.9	-0.1	2640:
	11:23:00	34.4997	26181.7	5.2	152.9	0.0	2646:
	11:29:00	34.5997	26186.7	5.0	152.8	-0.1	2652:
	11:35:00	34.6997	26191.5	4.8	152.8	0.0	2658:
	11:41:00	34.7997	26196.1	4.6	152.8	0.0	2664:
	11:47:00	34.8997	26200.6	4.5	152.8	-0.1	2670:
	11:53:00	34.9997	26204.9	4.3	152.8	0.0	2676:
	11:59:00	35.0997	26209.2	4.3	152.8	0.0	2682:
	12:05:00	35.1997	26213.2	4.0	152.8	0.0	2688:
	12:11:00	35.2997	26217.0	3.8	152.7	-0.1	2694:
	12:17:00	35.3997	26220.8	3.8	152.7	0.0	2700:
	12:23:00	35.4997	26224.4	3.6	152.7	0.0	2706:
	12:29:00	35.5997	26227.9	3.5	152.7	-0.1	2712:
	12:35:00	35.6997	26231.4	3.5	152.7	0.0	2718:
	12:41:00	35.7997	26234.8	3.4	152.7	0.0	2724:
	12:47:00	35.8997	26237.9	3.2	152.7	0.0	2730:
	12:53:00	35.9997	26241.1	3.2	152.6	-0.1	2736:
	12:59:00	36.0997	26244.3	3.2	152.6	0.0	2742:
	13:05:00	36.1997	26247.3	3.0	152.6	0.0	2748:
	13:11:00	36.2997	26250.2	2.9	152.6	-0.1	2754:
	13:17:00	36.3997	26253.1	2.9	152.6	0.0	2760:
	13:23:00	36.4997	26255.9	2.8	152.6	0.0	2766:
	13:29:00	36.5997	26258.7	2.8	152.6	0.0	2772:
	13:35:00	36.6997	26261.4	2.7	152.6	0.0	2778:
	13:41:00	36.7997	26263.9	2.5	152.5	-0.1	2784:
	13:47:00	36.8997	26266.3	2.5	152.5	0.0	2790:
	13:53:00	36.9997	26268.9	2.6	152.5	0.0	2796:
	13:59:00	37.0997	26271.3	2.4	152.5	0.0	2802:
	14:05:00	37.1997	26273.5	2.2	152.5	0.0	2808:
	14:11:00	37.2997	26275.9	2.4	152.4	-0.1	2814:
	14:17:00	37.3997	26278.1	2.1	152.4	0.0	2820:
	14:23:00	37.4997	26280.3	2.2	152.4	0.0	2826:
	14:29:00	37.5997	26282.3	2.1	152.4	0.0	2832:
	14:35:00	37.6997	26284.5	2.2	152.4	0.0	2838:
	14:41:00	37.7997	26286.4	1.9	152.4	0.0	2844:
	14:47:00	37.8997	26288.5	2.1	152.4	-0.1	2850:
	14:53:00	37.9997	26290.5	1.9	152.4	0.0	2856:
	14:59:00	38.0997	26292.4	1.9	152.4	0.0	2862:
	15:05:00	38.1997	26294.3	1.9	152.4	0.0	2868:
	15:11:00	38.2997	26296.3	2.0	152.4	0.0	2874:
	15:17:00	38.3997	26298.1	1.7	152.3	-0.1	2880:
	15:23:00	38.4997	26299.9	1.8	152.3	0.0	2886:
	15:29:00	38.5997	26301.6	1.7	152.3	0.0	2892:

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Reporting on an interval of 1 in 6 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	15:35:00	38.6997	26303.4	1.8	152.3	0.0	2898:
	15:41:00	38.7997	26305.0	1.6	152.3	0.0	2904:
	15:47:00	38.8997	26306.6	1.7	152.3	0.0	2910:
	15:53:00	38.9997	26308.3	1.7	152.3	0.0	2916:
	15:59:00	39.0997	26310.0	1.7	152.3	-0.1	2922:
	16:05:00	39.1997	26311.5	1.5	152.3	0.0	2928:
	16:11:00	39.2997	26313.0	1.4	152.3	0.0	2934:
	16:17:00	39.3997	26314.5	1.6	152.3	0.0	2940:
	16:23:00	39.4997	26316.1	1.6	152.3	0.0	2946:
	16:29:00	39.5997	26317.5	1.4	152.3	0.0	2952:
	16:35:00	39.6997	26319.0	1.4	152.3	0.0	2958:
	16:41:00	39.7997	26320.5	1.5	152.3	0.0	2964:
	16:47:00	39.8997	26321.8	1.4	152.2	-0.1	2970:
	16:53:00	39.9997	26323.2	1.3	152.2	0.0	2976:
	16:59:00	40.0997	26324.6	1.4	152.2	0.0	2982:
	17:05:00	40.1997	26325.8	1.2	152.2	0.0	2988:
	17:11:00	40.2997	26327.2	1.4	152.2	0.0	2994:
	17:17:00	40.3997	26328.5	1.3	152.2	0.0	3000:
	17:23:00	40.4997	26329.8	1.3	152.2	0.0	3006:
	17:29:00	40.5997	26331.2	1.4	152.2	0.0	3012:
	17:35:00	40.6997	26332.4	1.2	152.2	-0.1	3018:
	17:41:00	40.7997	26333.7	1.3	152.2	0.0	3024:
	17:47:00	40.8997	26334.9	1.2	152.2	0.0	3030:
	17:53:00	40.9997	26336.1	1.2	152.2	0.0	3036:
	17:59:00	41.0997	26337.3	1.2	152.2	0.0	3042:
	18:05:00	41.1997	26338.5	1.2	152.2	0.0	3048:
	18:11:00	41.2997	26339.6	1.1	152.2	0.0	3054:
	18:17:00	41.3997	26340.7	1.2	152.2	0.0	3060:
	18:23:00	41.4997	26341.8	1.1	152.2	0.0	3066:
	18:29:00	41.5997	26342.9	1.0	152.1	-0.1	3072:
	18:35:00	41.6997	26344.1	1.2	152.1	0.0	3078:
	18:41:00	41.7997	26345.1	1.0	152.1	0.0	3084:
	18:47:00	41.8997	26346.3	1.2	152.1	0.0	3090:
	18:53:00	41.9997	26347.4	1.0	152.1	0.0	3096:
	18:59:00	42.0997	26348.5	1.1	152.1	0.0	3102:
	19:05:00	42.1997	26349.5	1.0	152.1	0.0	3108:
	19:11:00	42.2997	26350.5	1.0	152.1	0.0	3114:
	19:17:00	42.3997	26351.5	1.0	152.1	0.0	3120:
	19:23:00	42.4997	26352.5	1.0	152.1	-0.1	3126:
	19:29:00	42.5997	26353.6	1.0	152.1	0.0	3132:
	19:35:00	42.6997	26354.6	1.0	152.1	0.0	3138:
	19:41:00	42.7997	26355.6	1.0	152.1	0.0	3144:
	19:47:00	42.8997	26356.6	1.0	152.1	0.0	3150:
	19:53:00	42.9997	26357.6	1.0	152.1	0.0	3156:

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.
 Reporting on an interval of 1 in 6 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	19:59:00	43.0997	26358.5	1.0	152.1	0.0	3162:
	20:05:00	43.1997	26359.6	1.0	152.1	0.0	3168:
	20:11:00	43.2997	26360.5	0.9	152.1	0.0	3174:
	20:17:00	43.3997	26361.3	0.8	152.1	0.0	3180:
	20:23:00	43.4997	26362.3	1.0	152.1	0.0	3186:
	20:29:00	43.5997	26363.2	0.8	152.0	-0.1	3192:
	20:35:00	43.6997	26364.0	0.9	152.0	0.0	3198:
	20:41:00	43.7997	26364.9	0.9	152.0	0.0	3204:
	20:47:00	43.8997	26365.9	1.0	152.0	0.0	3210:
	20:53:00	43.9997	26366.7	0.8	152.0	0.0	3216:
	20:59:00	44.0997	26367.7	1.0	152.0	0.0	3222:
	21:05:00	44.1997	26368.5	0.8	152.0	0.0	3228:
	21:11:00	44.2997	26369.4	0.8	152.0	0.0	3234:
	21:17:00	44.3997	26370.3	0.9	152.0	0.0	3240:
	21:23:00	44.4997	26371.1	0.8	152.0	0.0	3246:
	21:29:00	44.5997	26371.8	0.8	152.0	0.0	3252:
	21:35:00	44.6997	26372.7	0.8	152.0	0.0	3258:
	21:41:00	44.7997	26373.6	0.9	151.9	-0.1	3264:
	21:47:00	44.8997	26374.3	0.8	151.9	0.0	3270:
	21:53:00	44.9997	26375.1	0.8	151.9	0.0	3276:
	21:59:00	45.0997	26375.8	0.7	151.9	0.0	3282:
	22:05:00	45.1997	26376.7	0.9	151.9	0.0	3288:
	22:11:00	45.2997	26377.4	0.7	151.9	0.0	3294:
	22:17:00	45.3997	26378.3	0.8	151.9	0.0	3300:
	22:23:00	45.4997	26378.9	0.7	151.9	0.0	3306:
	22:29:00	45.5997	26379.8	0.8	151.9	0.0	3312:
	22:35:00	45.6997	26380.5	0.7	151.9	0.0	3318:
	22:41:00	45.7997	26381.3	0.8	151.9	0.0	3324:
	22:47:00	45.8997	26382.0	0.7	151.9	0.0	3330:
	22:53:00	45.9997	26382.7	0.8	151.9	0.0	3336:
	22:59:00	46.0997	26383.5	0.8	151.9	0.0	3342:
	23:05:00	46.1997	26384.2	0.8	151.9	-0.1	3348:
	23:11:00	46.2997	26384.9	0.6	151.9	0.0	3354:
	23:17:00	46.3997	26385.5	0.6	151.9	0.0	3360:
	23:23:00	46.4997	26386.3	0.8	151.9	0.0	3366:
	23:29:00	46.5997	26386.9	0.6	151.9	0.0	3372:
	23:35:00	46.6997	26387.6	0.7	151.9	0.0	3378:
	23:41:00	46.7997	26388.2	0.6	151.9	0.0	3384:
	23:47:00	46.8997	26389.1	0.9	151.9	0.0	3390:
	23:53:00	46.9997	26389.7	0.6	151.9	0.0	3396:
	23:59:00	47.0997	26390.2	0.5	151.9	0.0	3402:
1998/07/13	00:05:00	47.1997	26390.9	0.8	151.9	0.0	3408:
	00:11:00	47.2997	26391.5	0.6	151.9	0.0	3414:
	00:17:00	47.3997	26392.2	0.8	151.9	0.0	3420:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 6 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	00:23:00	47.4997	26392.9	0.6	151.9	0.0	3426:
	00:29:00	47.5997	26393.6	0.7	151.9	0.0	3432:
	00:35:00	47.6997	26394.2	0.6	151.8	-0.1	3438:
	00:41:00	47.7997	26394.7	0.5	151.8	0.0	3444:
	00:47:00	47.8997	26395.4	0.8	151.8	0.0	3450:
	00:53:00	47.9997	26396.0	0.6	151.8	0.0	3456:
	00:59:00	48.0997	26396.7	0.7	151.8	0.0	3462:
	01:05:00	48.1997	26397.3	0.6	151.8	0.0	3468:
	01:11:00	48.2997	26397.8	0.6	151.8	0.0	3474:
	01:17:00	48.3997	26398.5	0.6	151.8	0.0	3480:
	01:23:00	48.4997	26399.1	0.6	151.8	0.0	3486:
	01:29:00	48.5997	26399.7	0.6	151.8	0.0	3492:
	01:35:00	48.6997	26400.2	0.5	151.8	0.0	3498:
	01:41:00	48.7997	26400.7	0.6	151.8	0.0	3504:
	01:47:00	48.8997	26401.3	0.6	151.8	0.0	3510:
	01:53:00	48.9997	26401.9	0.6	151.8	0.0	3516:
	01:59:00	49.0997	26402.4	0.5	151.8	0.0	3522:
	02:05:00	49.1997	26403.1	0.7	151.8	0.0	3528:
	02:11:00	49.2997	26403.6	0.6	151.8	0.0	3534:
	02:17:00	49.3997	26404.2	0.6	151.8	0.0	3540:
	02:23:00	49.4997	26404.7	0.5	151.8	0.0	3546:
	02:29:00	49.5997	26405.3	0.6	151.8	-0.1	3552:
	02:35:00	49.6997	26405.8	0.6	151.8	0.0	3558:
	02:41:00	49.7997	26406.5	0.6	151.8	0.0	3564:
	02:47:00	49.8997	26406.9	0.4	151.8	0.0	3570:
	02:53:00	49.9997	26407.4	0.6	151.8	0.0	3576:
	02:59:00	50.0997	26408.0	0.6	151.8	0.0	3582:
	03:05:00	50.1997	26408.5	0.4	151.8	0.0	3588:
	03:11:00	50.2997	26409.0	0.6	151.8	0.0	3594:
	03:17:00	50.3997	26409.6	0.6	151.8	0.0	3600:
	03:23:00	50.4997	26410.0	0.4	151.8	0.0	3606:
	03:29:00	50.5997	26410.6	0.6	151.8	0.0	3612:
	03:35:00	50.6997	26411.1	0.5	151.8	0.0	3618:
	03:41:00	50.7997	26411.6	0.6	151.8	0.0	3624:
	03:47:00	50.8997	26412.0	0.3	151.8	0.0	3630:
	03:53:00	50.9997	26412.6	0.6	151.8	0.0	3636:
	03:59:00	51.0997	26413.1	0.6	151.8	0.0	3642:
	04:05:00	51.1997	26413.5	0.3	151.8	0.0	3648:
	04:11:00	51.2997	26414.1	0.6	151.8	0.0	3654:
	04:17:00	51.3997	26414.4	0.3	151.8	0.0	3660:
	04:23:00	51.4997	26415.1	0.6	151.8	0.0	3666:
	04:29:00	51.5997	26415.5	0.4	151.8	0.0	3672:
	04:35:00	51.6997	26415.9	0.4	151.8	0.0	3678:
	04:41:00	51.7997	26416.4	0.5	151.7	-0.1	3684:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 6 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	04:47:00	51.8997	26416.9	0.6	151.7	0.0	3690:
	04:53:00	51.9997	26417.3	0.4	151.7	0.0	3696:
	04:59:00	52.0997	26417.8	0.5	151.7	0.0	3702:
	05:05:00	52.1997	26418.3	0.5	151.7	0.0	3708:
	05:11:00	52.2997	26418.7	0.4	151.7	0.0	3714:
	05:17:00	52.3997	26419.2	0.5	151.7	0.0	3720:
	05:23:00	52.4997	26419.6	0.4	151.7	0.0	3726:
	05:29:00	52.5997	26420.1	0.5	151.7	0.0	3732:
	05:35:00	52.6997	26420.6	0.5	151.7	0.0	3738:
	05:41:00	52.7997	26420.9	0.3	151.7	0.0	3744:
	05:47:00	52.8997	26421.3	0.4	151.7	0.0	3750:
	05:53:00	52.9997	26421.8	0.5	151.7	0.0	3756:
	05:59:00	53.0997	26422.2	0.4	151.7	0.0	3762:
	06:05:00	53.1997	26422.7	0.4	151.7	0.0	3768:
	06:11:00	53.2997	26423.1	0.4	151.7	0.0	3774:
	06:17:00	53.3997	26423.5	0.4	151.7	0.0	3780:
	06:23:00	53.4997	26424.0	0.5	151.7	0.0	3786:
	06:29:00	53.5997	26424.3	0.3	151.7	0.0	3792:
	06:35:00	53.6997	26424.7	0.4	151.7	0.0	3798:
	06:41:00	53.7997	26425.1	0.3	151.7	0.0	3804:
	06:47:00	53.8997	26425.5	0.5	151.7	-0.1	3810:
	06:53:00	53.9997	26426.0	0.4	151.7	0.0	3816:
	06:59:00	54.0997	26426.4	0.4	151.7	0.0	3822:
	07:05:00	54.1997	26426.7	0.3	151.7	0.0	3828:
	07:11:00	54.2997	26427.1	0.4	151.7	0.0	3834:
	07:17:00	54.3997	26427.6	0.5	151.7	0.0	3840:
	07:23:00	54.4997	26428.0	0.3	151.7	0.0	3846:
	07:29:00	54.5997	26428.4	0.4	151.7	0.0	3852:
	07:35:00	54.6997	26428.7	0.3	151.7	0.0	3858:
	07:41:00	54.7997	26429.1	0.3	151.7	0.0	3864:
	07:47:00	54.8997	26429.5	0.5	151.7	0.0	3870:
	07:53:00	54.9997	26430.0	0.4	151.7	0.0	3876:
	07:59:00	55.0997	26430.3	0.3	151.7	0.0	3882:
	08:05:00	55.1997	26430.7	0.4	151.7	0.0	3888:
	08:11:00	55.2997	26431.1	0.3	151.7	0.0	3894:
	08:17:00	55.3997	26431.3	0.3	151.7	0.0	3900:
	08:23:00	55.4997	26431.8	0.4	151.7	0.0	3906:
	08:29:00	55.5997	26432.1	0.3	151.7	0.0	3912:
	08:35:00	55.6997	26432.4	0.3	151.7	0.0	3918:
	08:41:00	55.7997	26432.9	0.5	151.7	0.0	3924:
	08:47:00	55.8997	26433.1	0.2	151.7	0.0	3930:
	08:53:00	55.9997	26433.5	0.4	151.7	0.0	3936:
	08:59:00	56.0997	26434.0	0.4	151.7	0.0	3942:
	09:05:00	56.1997	26434.3	0.3	151.7	0.0	3948:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 6 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt(hrs)	P (kPaG)	dP	T(°C)	dT	Pt. #
	09:11:00	56.2997	26434.7	0.3	151.7	0.0	3954:
	09:17:00	56.3997	26434.9	0.3	151.7	0.0	3960:
	09:23:00	56.4997	26435.4	0.5	151.7	0.0	3966:
	09:29:00	56.5997	26435.6	0.2	151.7	0.0	3972:
	09:35:00	56.6997	26436.0	0.4	151.7	0.0	3978:
	09:41:00	56.7997	26436.3	0.3	151.7	0.0	3984:
	09:47:00	56.8997	26436.7	0.3	151.7	0.0	3990:
	09:53:00	56.9997	26437.1	0.4	151.6	-0.1	3996:
	09:59:00	57.0997	26437.5	0.4	151.6	0.0	4002:
	10:05:00	57.1997	26437.6	0.1	151.6	0.0	4008:
	10:11:00	57.2997	26438.1	0.5	151.6	0.0	4014:
	10:17:00	57.3997	26438.4	0.3	151.6	0.0	4020:
	10:23:00	57.4997	26438.7	0.3	151.6	0.0	4026:
	10:29:00	57.5997	26439.0	0.3	151.6	0.0	4032:
	10:35:00	57.6997	26439.4	0.4	151.6	0.0	4038:
	10:41:00	57.7997	26439.6	0.2	151.6	0.0	4044:
	10:47:00	57.8997	26440.0	0.3	151.6	0.0	4050:
	10:53:00	57.9997	26440.4	0.4	151.6	0.0	4056:
	10:59:00	58.0997	26440.6	0.2	151.6	0.0	4062:
	11:05:00	58.1997	26441.0	0.4	151.6	0.0	4068:
	11:11:00	58.2997	26441.3	0.3	151.6	0.0	4074:
	11:17:00	58.3997	26441.7	0.4	151.6	0.0	4080:
	11:23:00	58.4997	26441.8	0.1	151.6	0.0	4086:
	11:29:00	58.5997	26442.2	0.4	151.6	0.0	4092:
	11:35:00	58.6997	26442.5	0.3	151.6	0.0	4098:
	11:41:00	58.7997	26442.9	0.3	151.6	0.0	4104:
	11:47:00	58.8997	26443.0	0.1	151.6	0.0	4110:
	11:53:00	58.9997	26443.5	0.5	151.6	0.0	4116:
	11:59:00	59.0997	26443.8	0.3	151.6	0.0	4122:
	12:05:00	59.1997	26444.0	0.2	151.6	0.0	4128:
	12:11:00	59.2997	26444.4	0.4	151.6	0.0	4134:
	12:17:00	59.3997	26444.6	0.2	151.6	0.0	4140:
	12:23:00	59.4997	26445.0	0.4	151.6	0.0	4146:
	12:29:00	59.5997	26445.1	0.1	151.6	0.0	4152:
	12:35:00	59.6997	26445.4	0.3	151.6	0.0	4158:
	12:41:00	59.7997	26445.8	0.3	151.6	-0.1	4164:
	12:47:00	59.8997	26446.0	0.3	151.6	0.0	4170:
	12:53:00	59.9997	26446.3	0.3	151.6	0.0	4176:
	12:59:00	60.0997	26446.6	0.3	151.6	0.0	4182:
	13:05:00	60.1997	26446.9	0.2	151.6	0.0	4188:
	13:11:00	60.2997	26447.1	0.3	151.6	0.0	4194:
	13:17:00	60.3997	26447.4	0.3	151.6	0.0	4200:
	13:23:00	60.4997	26447.7	0.3	151.6	0.0	4206:
	13:29:00	60.5997	26448.1	0.4	151.6	0.0	4212:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 6 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	13:35:00	60.6997	26448.3	0.2	151.6	0.0	4218:
	13:41:00	60.7997	26448.5	0.2	151.6	0.0	4224:
	13:47:00	60.8997	26448.7	0.2	151.6	0.0	4230:
	13:53:00	60.9997	26449.0	0.3	151.6	0.0	4236:
	13:59:00	61.0997	26449.3	0.3	151.6	0.0	4242:
	14:05:00	61.1997	26449.6	0.3	151.6	0.0	4248:
	14:11:00	61.2997	26449.8	0.1	151.6	0.0	4254:
	14:17:00	61.3997	26450.2	0.4	151.6	0.0	4260:
	14:23:00	61.4997	26450.4	0.3	151.6	0.0	4266:
	14:29:00	61.5997	26450.6	0.2	151.6	0.0	4272:
	14:35:00	61.6997	26451.0	0.3	151.6	0.0	4278:
	14:41:00	61.7997	26451.1	0.1	151.6	0.0	4284:
	14:47:00	61.8997	26451.4	0.3	151.6	0.0	4290:
	14:53:00	61.9997	26451.8	0.3	151.6	0.0	4296:
	14:59:00	62.0997	26451.8	0.1	151.6	0.0	4302:
	15:05:00	62.1997	26452.0	0.2	151.6	0.0	4308:
	15:11:00	62.2997	26452.5	0.5	151.6	0.0	4314:
	15:17:00	62.3997	26452.6	0.1	151.6	0.0	4320:
	15:23:00	62.4997	26452.9	0.3	151.6	0.0	4326:
	15:29:00	62.5997	26453.1	0.2	151.6	0.0	4332:
	15:35:00	62.6997	26453.3	0.2	151.6	0.0	4338:
	15:41:00	62.7997	26453.6	0.3	151.6	0.0	4344:
	15:47:00	62.8997	26453.9	0.3	151.6	0.0	4350:
	15:53:00	62.9997	26454.1	0.2	151.6	0.0	4356:
	15:59:00	63.0997	26454.4	0.3	151.6	0.0	4362:
	16:05:00	63.1997	26454.6	0.2	151.6	0.0	4368:
	16:11:00	63.2997	26454.9	0.3	151.6	0.0	4374:
	16:17:00	63.3997	26455.1	0.3	151.6	0.0	4380:
	16:23:00	63.4997	26455.3	0.2	151.6	0.0	4386:
	16:29:00	63.5997	26455.5	0.2	151.6	0.0	4392:
	16:35:00	63.6997	26455.8	0.2	151.6	0.0	4398:
	16:41:00	63.7997	26456.0	0.2	151.6	0.0	4404:
	16:47:00	63.8997	26456.2	0.3	151.6	0.0	4410:
	16:53:00	63.9997	26456.4	0.2	151.5	-0.1	4416:
	16:59:00	64.0997	26456.6	0.2	151.5	0.0	4422:
	17:05:00	64.1997	26456.9	0.2	151.5	0.0	4428:
	17:11:00	64.2997	26457.1	0.2	151.5	0.0	4434:
	17:17:00	64.3997	26457.4	0.3	151.5	0.0	4440:
	17:23:00	64.4997	26457.7	0.3	151.5	0.0	4446:
	17:29:00	64.5997	26457.8	0.1	151.5	0.0	4452:
	17:35:00	64.6997	26458.1	0.3	151.5	0.0	4458:
	17:41:00	64.7997	26458.2	0.1	151.5	0.0	4464:
	17:47:00	64.8997	26458.4	0.2	151.5	0.0	4470:
	17:53:00	64.9997	26458.6	0.2	151.5	0.0	4476:

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.
 Reporting on an interval of 1 in 6 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	17:59:00	65.0997	26458.9	0.3	151.5	0.0	4482:
	18:05:00	65.1997	26459.1	0.2	151.5	0.0	4488:
	18:11:00	65.2997	26459.3	0.1	151.5	0.0	4494:
	18:17:00	65.3997	26459.5	0.3	151.5	0.0	4500:
	18:23:00	65.4997	26459.7	0.2	151.5	0.0	4506:
	18:29:00	65.5997	26460.0	0.2	151.5	0.0	4512:
	18:35:00	65.6997	26460.2	0.2	151.5	0.0	4518:
	18:41:00	65.7997	26460.3	0.1	151.5	0.0	4524:
	18:47:00	65.8997	26460.6	0.3	151.5	0.0	4530:
	18:53:00	65.9997	26460.8	0.2	151.5	0.0	4536:
	18:59:00	66.0997	26461.0	0.2	151.5	0.0	4542:
	19:05:00	66.1997	26461.2	0.2	151.5	0.0	4548:
	19:11:00	66.2997	26461.4	0.2	151.5	0.0	4554:
	19:17:00	66.3997	26461.6	0.2	151.5	0.0	4560:
	19:23:00	66.4997	26461.8	0.2	151.5	0.0	4566:
	19:29:00	66.5997	26462.0	0.2	151.5	0.0	4572:
	19:35:00	66.6997	26462.3	0.3	151.5	0.0	4578:
	19:41:00	66.7997	26462.4	0.1	151.5	0.0	4584:
	19:47:00	66.8997	26462.6	0.2	151.5	0.0	4590:
	19:53:00	66.9997	26462.8	0.1	151.5	0.0	4596:
	19:59:00	67.0997	26463.1	0.3	151.5	0.0	4602:
	20:05:00	67.1997	26463.2	0.1	151.5	0.0	4608:
	20:11:00	67.2997	26463.3	0.1	151.5	0.0	4614:
	20:17:00	67.3997	26463.5	0.2	151.5	0.0	4620:
	20:23:00	67.4997	26463.9	0.4	151.5	0.0	4626:
	20:29:00	67.5997	26464.0	0.1	151.5	0.0	4632:
	20:35:00	67.6997	26464.2	0.2	151.5	0.0	4638:
	20:41:00	67.7997	26464.4	0.1	151.5	0.0	4644:
	20:47:00	67.8997	26464.5	0.1	151.5	0.0	4650:
	20:53:00	67.9997	26464.7	0.2	151.5	0.0	4656:
	20:59:00	68.0997	26464.9	0.2	151.5	0.0	4662:
	21:05:00	68.1997	26465.1	0.1	151.5	0.0	4668:
	21:11:00	68.2997	26465.1	0.1	151.5	0.0	4674:
	21:17:00	68.3997	26465.4	0.3	151.5	0.0	4680:
	21:23:00	68.4997	26465.7	0.3	151.4	-0.1	4686:
	21:29:00	68.5997	26465.9	0.2	151.4	0.0	4692:
	21:35:00	68.6997	26466.0	0.1	151.4	0.0	4698:
	21:41:00	68.7997	26466.2	0.2	151.4	0.0	4704:
	21:47:00	68.8997	26466.3	0.1	151.4	0.0	4710:
	21:53:00	68.9997	26466.4	0.1	151.4	0.0	4716:
	21:59:00	69.0997	26466.6	0.1	151.4	0.0	4722:
	22:05:00	69.1997	26466.9	0.3	151.4	0.0	4728:
	22:11:00	69.2997	26467.1	0.2	151.4	0.0	4734:
	22:17:00	69.3997	26467.2	0.1	151.4	0.0	4740:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 6 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	22:23:00	69.4997	26467.4	0.2	151.4	0.0	4746:
	22:29:00	69.5997	26467.6	0.2	151.4	0.0	4752:
	22:35:00	69.6997	26467.8	0.2	151.4	0.0	4758:
	22:41:00	69.7997	26468.0	0.1	151.4	0.0	4764:
	22:47:00	69.8997	26468.1	0.1	151.4	0.0	4770:
	22:53:00	69.9997	26468.2	0.1	151.4	0.0	4776:
	22:59:00	70.0997	26468.4	0.1	151.4	0.0	4782:
	23:05:00	70.1997	26468.6	0.3	151.4	0.0	4788:
	23:11:00	70.2997	26468.8	0.1	151.4	0.0	4794:
	23:17:00	70.3997	26469.0	0.2	151.4	0.0	4800:
	23:23:00	70.4997	26469.2	0.2	151.4	0.0	4806:
	23:29:00	70.5997	26469.3	0.1	151.4	0.0	4812:
	23:35:00	70.6997	26469.5	0.2	151.4	0.0	4818:
	23:41:00	70.7997	26469.6	0.1	151.4	0.0	4824:
	23:47:00	70.8997	26469.8	0.2	151.4	0.0	4830:
	23:53:00	70.9997	26470.0	0.1	151.4	0.0	4836:
	23:59:00	71.0997	26470.1	0.1	151.4	0.0	4842:
1998/07/14	00:05:00	71.1997	26470.3	0.2	151.4	0.0	4848:
	00:11:00	71.2997	26470.4	0.1	151.4	0.0	4854:
	00:17:00	71.3997	26470.6	0.1	151.4	0.0	4860:
	00:23:00	71.4997	26470.8	0.2	151.4	0.0	4866:
	00:29:00	71.5997	26470.9	0.1	151.4	0.0	4872:
	00:35:00	71.6997	26471.0	0.1	151.4	0.0	4878:
	00:41:00	71.7997	26471.2	0.2	151.4	0.0	4884:
	00:47:00	71.8997	26471.4	0.2	151.4	0.0	4890:
	00:53:00	71.9997	26471.5	0.1	151.4	0.0	4896:
	00:59:00	72.0997	26471.7	0.2	151.4	0.0	4902:
	01:05:00	72.1997	26471.8	0.1	151.4	0.0	4908:
	01:11:00	72.2997	26471.9	0.1	151.4	0.0	4914:
	01:17:00	72.3997	26472.0	0.1	151.4	0.0	4920:
	01:23:00	72.4997	26472.4	0.3	151.4	0.0	4926:
	01:29:00	72.5997	26472.4	0.0	151.4	0.0	4932:
	01:35:00	72.6997	26472.6	0.2	151.4	0.0	4938:
	01:41:00	72.7997	26472.7	0.1	151.4	0.0	4944:
	01:47:00	72.8997	26472.8	0.1	151.4	0.0	4950:
	01:53:00	72.9997	26472.9	0.1	151.4	0.0	4956:
	01:59:00	73.0997	26473.2	0.3	151.4	0.0	4962:
	02:05:00	73.1997	26473.3	0.1	151.4	0.0	4968:
	02:11:00	73.2997	26473.3	0.0	151.4	0.0	4974:
	02:17:00	73.3997	26473.5	0.2	151.4	0.0	4980:
	02:23:00	73.4997	26473.7	0.2	151.4	0.0	4986:
	02:29:00	73.5997	26474.0	0.2	151.4	0.0	4992:
	02:35:00	73.6997	26474.0	0.1	151.4	0.0	4998:
	02:41:00	73.7997	26474.2	0.2	151.4	0.0	5004:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 6 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	02:47:00	73.8997	26474.4	0.1	151.4	0.0	5010:
	02:53:00	73.9997	26474.4	0.0	151.4	0.0	5016:
	02:59:00	74.0997	26474.6	0.3	151.4	0.0	5022:
	03:05:00	74.1997	26474.8	0.1	151.4	0.0	5028:
	03:11:00	74.2997	26474.8	0.0	151.4	0.0	5034:
	03:17:00	74.3997	26475.0	0.2	151.4	0.0	5040:
	03:23:00	74.4997	26475.2	0.2	151.4	0.0	5046:
	03:29:00	74.5997	26475.3	0.1	151.4	0.0	5052:
	03:35:00	74.6997	26475.5	0.3	151.4	0.0	5058:
	03:41:00	74.7997	26475.6	0.1	151.4	0.0	5064:
	03:47:00	74.8997	26475.7	0.1	151.4	-0.1	5070:
	03:53:00	74.9997	26475.8	0.1	151.4	0.0	5076:
	03:59:00	75.0997	26476.0	0.1	151.4	0.0	5082:
	04:05:00	75.1997	26476.2	0.2	151.4	0.0	5088:
	04:11:00	75.2997	26476.2	0.1	151.4	0.0	5094:
	04:17:00	75.3997	26476.4	0.2	151.4	0.0	5100:
	04:23:00	75.4997	26476.6	0.1	151.4	0.0	5106:
	04:29:00	75.5997	26476.6	0.1	151.4	0.0	5112:
	04:35:00	75.6997	26476.7	0.1	151.4	0.0	5118:
	04:41:00	75.7997	26476.8	0.1	151.4	0.0	5124:
	04:47:00	75.8997	26477.1	0.2	151.4	0.0	5130:
	04:53:00	75.9997	26477.3	0.2	151.4	0.0	5136:
	04:59:00	76.0997	26477.3	0.0	151.4	0.0	5142:
	05:05:00	76.1997	26477.5	0.2	151.4	0.0	5148:
	05:11:00	76.2997	26477.6	0.1	151.4	0.0	5154:
	05:17:00	76.3997	26477.7	0.1	151.4	0.0	5160:
	05:23:00	76.4997	26477.8	0.1	151.4	0.0	5166:
	05:29:00	76.5997	26478.0	0.1	151.4	0.0	5172:
	05:35:00	76.6997	26478.1	0.1	151.4	0.0	5178:
	05:41:00	76.7997	26478.2	0.1	151.4	0.0	5184:
	05:47:00	76.8997	26478.2	0.1	151.4	0.0	5190:
	05:53:00	76.9997	26478.5	0.3	151.4	0.0	5196:
	05:59:00	77.0997	26478.5	0.0	151.4	0.0	5202:
	06:05:00	77.1997	26478.8	0.3	151.4	0.0	5208:
	06:11:00	77.2997	26478.8	0.0	151.4	0.0	5214:
	06:17:00	77.3997	26479.0	0.2	151.4	0.0	5220:
	06:23:00	77.4997	26479.1	0.1	151.4	0.0	5226:
	06:29:00	77.5997	26479.3	0.1	151.4	0.0	5232:
	06:35:00	77.6997	26479.3	0.0	151.4	0.0	5238:
	06:41:00	77.7997	26479.5	0.2	151.4	0.0	5244:
	06:47:00	77.8997	26479.5	0.1	151.4	0.0	5250:
	06:53:00	77.9997	26479.6	0.1	151.4	0.0	5256:
	06:59:00	78.0997	26479.8	0.2	151.4	0.0	5262:
	07:05:00	78.1997	26479.9	0.1	151.4	0.0	5268:

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.
 Reporting on an interval of 1 in 6 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: **P-66-A**

Bottom Gauge

Date	Time	dt(hrs)	P (kPaG)	dP	T(°C)	dT	Pt. #
	07:11:00	78.2997	26479.9	0.0	151.4	0.0	5274:
	07:17:00	78.3997	26480.2	0.3	151.4	0.0	5280:
	07:23:00	78.4997	26480.2	0.0	151.4	0.0	5286:
	07:29:00	78.5997	26480.3	0.1	151.4	0.0	5292:
	07:35:00	78.6997	26480.4	0.1	151.4	0.0	5298:
	07:41:00	78.7997	26480.6	0.1	151.4	0.0	5304:
	07:47:00	78.8997	26480.7	0.1	151.4	0.0	5310:
	07:53:00	78.9997	26480.8	0.1	151.4	0.0	5316:
	07:59:00	79.0997	26480.9	0.1	151.4	0.0	5322:
	08:05:00	79.1997	26481.1	0.2	151.4	0.0	5328:
	08:11:00	79.2997	26481.1	0.0	151.4	0.0	5334:
	08:17:00	79.3997	26481.2	0.1	151.4	0.0	5340:
	08:23:00	79.4997	26481.3	0.1	151.4	0.0	5346:
	08:29:00	79.5997	26481.5	0.2	151.4	0.0	5352:
	08:35:00	79.6997	26481.5	0.0	151.4	0.0	5358:
	08:41:00	79.7997	26481.5	0.0	151.4	0.0	5364:
	08:47:00	79.8997	26481.6	0.1	151.4	0.0	5370:
	08:53:00	79.9997	26481.7	0.1	151.4	0.0	5376:
	08:59:00	80.0997	26481.8	0.1	151.4	0.0	5382:
	09:05:00	80.1997	26482.0	0.2	151.4	0.0	5388:
	09:11:00	80.2997	26482.1	0.1	151.4	0.0	5394:
	09:17:00	80.3997	26482.2	0.1	151.4	0.0	5400:
	09:23:00	80.4997	26482.4	0.2	151.4	0.0	5406:
	09:29:00	80.5997	26482.4	0.0	151.4	0.0	5412:
	09:35:00	80.6997	26482.6	0.1	151.4	0.0	5418:
	09:41:00	80.7997	26482.7	0.1	151.4	0.0	5424:
	09:47:00	80.8997	26482.8	0.1	151.4	0.0	5430:
	09:53:00	80.9997	26482.9	0.1	151.4	0.0	5436:
	09:59:00	81.0997	26483.0	0.1	151.4	0.0	5442:
	10:05:00	81.1997	26483.1	0.1	151.4	0.0	5448:
	10:11:00	81.2997	26483.3	0.1	151.4	0.0	5454:
	10:17:00	81.3997	26483.5	0.2	151.4	0.0	5460:
	10:23:00	81.4997	26483.4	-0.1	151.4	0.0	5466:
	10:29:00	81.5997	26483.5	0.1	151.4	0.0	5472:
	10:35:00	81.6997	26483.6	0.1	151.4	0.0	5478:
	10:41:00	81.7997	26483.8	0.2	151.4	0.0	5484:
	10:47:00	81.8997	26483.9	0.1	151.4	0.0	5490:
	10:53:00	81.9997	26484.1	0.2	151.3	-0.1	5496:
	10:59:00	82.0997	26484.2	0.1	151.3	0.0	5502:
	11:05:00	82.1997	26484.2	0.1	151.3	0.0	5508:
	11:11:00	82.2997	26484.2	0.0	151.3	0.0	5514:
	11:17:00	82.3997	26484.4	0.1	151.3	0.0	5520:
	11:23:00	82.4997	26484.6	0.2	151.3	0.0	5526:
	11:29:00	82.5997	26484.6	0.1	151.3	0.0	5532:

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.
 Reporting on an interval of 1 in 6 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	11:35:00	82.6997	26484.8	0.1	151.3	0.0	5538:
	11:41:00	82.7997	26484.8	0.1	151.3	0.0	5544:
	11:47:00	82.8997	26440.1	-44.7	151.3	0.0	5550:
	11:53:00	82.9997	25838.7	-601.4	144.2	-7.2	5556:
	11:59:00	83.0997	24330.2	-1508.6	122.8	-21.3	5562:
	12:06:00	83.2164	21725.2	-2604.9	74.8	-48.0	5568:
	12:12:00	83.3164	71.9	-21653.3	42.8	-32.1	5574:
	12:18:00	83.4164	23.0	-48.9	30.8	-12.0	5580:
	12:24:00	83.5164	10.7	-12.3	25.2	-5.6	5586:
	12:30:00	83.6164	4.8	-5.9	21.7	-3.5	5592:
	12:36:00	83.7164	0.9	-3.9	19.7	-2.0	5598:
	12:42:00	83.8164	0.0	-0.9	83.8	64.1	5604:
	12:48:00	83.9164	0.0	0.0	83.9	0.1	5610:
	12:54:00	84.0164	0.0	0.0	84.0	0.1	5616:
	13:00:00	84.1164	0.0	0.0	84.1	0.1	5622:
	13:06:00	84.2164	3.8	3.8	21.1	-63.0	5628:
	13:13:00	84.3331	9.4	5.5	20.9	-0.2	5634:
	13:19:00	84.4331	12.1	2.8	20.7	-0.2	5640:
	13:25:00	84.5331	14.5	2.4	20.5	-0.2	5646:
	13:31:00	84.6331	16.7	2.1	20.4	-0.2	5652:
	13:37:00	84.7331	18.2	1.5	20.2	-0.1	5658:
	13:43:00	84.8331	19.6	1.4	20.2	-0.1	5664:
	13:49:00	84.9331	21.0	1.4	19.9	-0.3	5670:
	13:55:00	85.0331	22.5	1.4	19.7	-0.2	5676:
	14:01:00	85.1331	23.7	1.2	19.6	-0.1	5682:
	14:07:00	85.2331	24.6	0.9	19.5	-0.1	5688:
	14:13:00	85.3331	24.5	-0.1	19.8	0.3	5694:
1998/07/14	14:15:00	85.3664	24.4	-0.1	19.8	0.1	5696:

End Data Acquisition:

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.
 Reporting on an interval of 1 in 6 data points.

RANGER OIL LIMITED

RANGER FORT LIARD P-66-A

- 1. GENTRONIC METZLINE QUARTZ - FLOWING GRADIENT & BUILD-UP DATA**
- 2. GENTRONIC METZLINE QUARTZ - FLOWING GRADIENT & BUILD-UP PLOTS**
- 3. GENTRONIC METZLINE QUARTZ - TRANSIENT DATA**

**Date: July 15 - 21, 1998
Report By: Pat Mulgrew**

**MICROFILMED
SUR MICROFILM:**

MICROFILMED
SUR MICROFILM:

(403) 250-3800

GENCO Pressure Control Limited

SUBSURFACE PRESSURE MEASUREMENTS

CALGARY, AB.

Basic Data:

Company <u>Ranger Oil Limited</u>	Gentronics Electronic Gauge
Address <u>#1600, 321 - 6Th. Ave. S.W.</u>	c/w Memory Recorder
<u>Calgary, AB.</u>	S/N: <u>GMQ-9804</u>
<u>T2P 3H3</u>	
Well Name <u>Ranger Fort Liard</u>	Field & Pool <u>Liard / Nihanni</u>
Well Identifier <u>P-66-A</u>	Type of Test <u>Fl. Grd. & Build Up</u>
Status <u>Shut in Gas</u>	Date of Test <u>Jul 15 - 21, 1998</u>
DWG Tubing Pressure <u>N/A</u> kPa	DWG Casing Pressure <u>N/A</u> kPa
Tubing <u>88.9</u> mm @ <u>3082.4</u> m KB	Casing <u>177.8</u> mm @ <u>3499.0</u> m KB
Producing Interval <u>3115 - 3334 m KB</u>	Producing Through <u>Tubing</u>
Elevation <u>449.54</u> m CF, <u>459.89</u> m KB	MPP Interval <u>3214.2</u> m CF
Datum Depth of Well _____ m CF	Run Depth <u>3347</u> m CF
Temperature at Run Depth <u>158.2</u> °C	Pool Datum _____ m (subsea)
Pressure at Run Depth <u>27296</u> kPaG	Gradient at Run Depth _____ kPa/m
MPP Pressure _____ kPaG	Datum Depth Pressure _____ kPaG
Final Buildup Pressure <u>27299</u> kPaG	Date on Bottom <u>July 15, 1998</u>
Date off Bottom <u>July 20, 1998</u>	Shut in Date <u>July 16, 1998</u>

Summary:

Single LMR Quartz Memory Recorder ran within specifications.

Parted wireline near surface while attempting to pull tools off bottom on July 16, 1998.

Preparation Data:

Tested By <u>GENCO</u>	Computed By <u>P. Mulgrew</u>	Report Date <u>Aug 04, 1998</u>
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BOTTOM GAUGE

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

OPERATIONS SUMMARY

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: **P-66-A**

Bottom Gauge

Date	Time	dt(hrs)	P(kpaG)	T(°C)	Pt. #	Remarks
1998/07/15	20:35:01	0.0000	24000.9	59.4	1 :	Begin Data Acquisition
	21:51:00	1.2664	27293.8	157.7	732:	Recorders on Bottom at
					:	3347 m CF.
	22:29:00	1.8997	27295.9	158.2	808:	Well Open to Flow.
1998/07/16	02:21:00	5.7664	26061.0	158.2	1272:	@ 3347 mCF
	02:32:00	5.9497	26023.9	158.2	1294:	@ 3340 mCF
	02:43:00	6.1331	25942.9	158.3	1316:	@ 3330 mCF
	02:53:30	6.3081	25852.5	157.8	1337:	@ 3320 mCF
	03:04:30	6.4914	25758.0	157.7	1359:	@ 3310 mCF
	03:15:30	6.6747	25669.9	157.7	1381:	@ 3300 mCF
	03:26:00	6.8497	25579.5	157.6	1402:	@ 3290 mCF
	03:37:00	7.0331	25495.1	157.4	1424:	@ 3280 mCF
	03:48:30	7.2247	25403.8	156.7	1447:	@ 3270 mCF
	03:59:30	7.4081	25319.2	156.5	1469:	@ 3260 mCF
	04:10:30	7.5914	25238.3	156.5	1491:	@ 3250 mCF
	04:21:00	7.7664	25160.2	156.4	1512:	@ 3240 mCF
	04:32:00	7.9497	25082.3	156.4	1534:	@ 3230 mCF
	04:43:00	8.1331	25004.1	156.4	1556:	@ 3220 mCF
	04:55:00	8.3331	24926.5	156.4	1580:	@ 3210 mCF
	05:05:30	8.5081	24849.3	156.3	1601:	@ 3200 mCF
	05:16:30	8.6914	24770.1	156.3	1623:	@ 3190 mCF
	05:27:30	8.8747	24694.6	156.3	1645:	@ 3180 mCF
	05:38:30	9.0581	24614.0	156.2	1667:	@ 3170 mCF

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

OPERATIONS SUMMARY

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: **P-66-A**

Bottom Gauge

Date	Time	dt(hrs)	P(kpaG)	T(°C)	Pt. #	Remarks
1998/07/16	05:49:30	9.2414	24536.3	156.2	1689:	@ 3160 mCF
	06:00:00	9.4164	24484.6	156.1	1710:	@ 3150 mCF
	06:11:00	9.5997	24446.8	155.6	1732:	@ 3140 mCF
	06:22:00	9.7831	24411.0	155.3	1754:	@ 3130 mCF
	06:33:00	9.9664	24384.4	154.7	1776:	@ 3120 mCF
	06:44:00	10.1497	24354.5	154.4	1798:	@ 3110 mCF
	06:55:00	10.3331	24330.8	154.3	1820:	@ 3100 mCF
	07:17:00	10.6997	24339.3	154.3	1864:	@ 3110 mCF
	07:28:00	10.8831	24354.2	154.3	1886:	@ 3120 mCF
	07:38:30	11.0581	24375.0	154.3	1907:	@ 3130 mCF
	07:48:30	11.2247	24394.3	154.4	1927:	@ 3140 mCF
	07:58:30	11.3914	24423.9	154.9	1947:	@ 3150 mCF
	08:10:30	11.5914	24472.1	155.4	1971:	@ 3160 mCF
	08:20:30	11.7581	24540.0	155.8	1991:	@ 3170 mCF
	08:32:00	11.9497	24606.9	156.2	2014:	@ 3180 mCF
	08:43:00	12.1331	24678.5	156.2	2036:	@ 3190 mCF
	08:54:00	12.3164	24750.4	156.3	2058:	@ 3200 mCF
	09:04:30	12.4914	24823.8	156.3	2079:	@ 3210 mCF
	09:16:00	12.6831	24894.2	156.3	2102:	@ 3220 mCF
	09:27:00	12.8664	24967.3	156.4	2124:	@ 3230 mCF
	09:38:00	13.0497	25043.7	156.4	2146:	@ 3240 mCF
	09:49:00	13.2331	25115.4	156.4	2168:	@ 3250 mCF
	10:10:30	13.5914	24298.0	156.0	2211:	@ 3100 mCF

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

OPERATIONS SUMMARY

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: **P-66-A**

Bottom Gauge

Date	Time	dt(hrs)	P(kpaG)	T(°C)	Pt. #	Remarks
1998/07/16	10:24:00	13.8164	24290.9	154.4	2238:	@ 3110 mCF
	10:35:00	13.9997	24302.0	154.3	2260:	@ 3120 mCF
	10:45:30	14.1747	24323.3	154.3	2281:	@ 3130 mCF
	10:56:30	14.3581	24340.2	154.4	2303:	@ 3140 mCF
	11:07:00	14.5331	24374.5	155.0	2324:	@ 3150 mCF
	11:18:00	14.7164	24427.0	155.4	2346:	@ 3160 mCF
	11:28:30	14.8914	24497.9	156.0	2367:	@ 3170 mCF
	11:39:00	15.0664	24574.5	156.2	2388:	@ 3180 mCF
	11:50:00	15.2497	24647.5	156.3	2410:	@ 3190 mCF
	12:00:30	15.4247	24719.3	156.3	2431:	@ 3200 mCF
	12:11:00	15.5997	24791.2	156.3	2452:	@ 3210 mCF
	12:23:00	15.7997	24862.1	156.4	2476:	@ 3220 mCF
	12:33:00	15.9664	24941.2	156.4	2496:	@ 3230 mCF
	12:44:00	16.1497	25013.9	156.4	2518:	@ 3240 mCF
	13:07:00	16.5331	25090.5	156.5	2564:	@ 3250 mCF
	13:16:30	16.6914	25168.3	156.5	2583:	@ 3260 mCF
	13:27:00	16.8664	25250.9	156.6	2604:	@ 3270 mCF
	13:38:00	17.0497	25330.6	156.6	2626:	@ 3280 mCF
	13:49:00	17.2331	25414.9	156.6	2648:	@ 3290 mCF
	14:02:00	17.4497	25495.9	157.3	2674:	@ 3300 mCF
	14:12:30	17.6247	25580.6	157.5	2695:	@ 3310 mCF
	14:23:00	17.7997	25664.6	157.6	2716:	@ 3320 mCF
	14:33:30	17.9747	25744.2	157.7	2737:	@ 3330 mCF

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.

Calgary, AB.

OPERATIONS SUMMARY

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: P-66-A

Bottom Gauge

Date	Time	dt(hrs)	P(kpaG)	T(°C)	Pt. #	Remarks
1998/07/16	14:44:30	18.1581	25831.3	157.7	2759:	@ 3340 mCF
	14:55:00	18.3331	25883.7	157.8	2780:	@ 3347 mCF
	16:01:30	19.4414	26242.6	158.1	2913:	Choke Size Reduced.
	17:44:00	21.1497	26500.6	158.2	3118:	Well Shut In.
1998/07/20	21:40:30	121.0914	27298.9	158.2	15111:	Recorders Off Bottom.
1998/07/21	05:00:00	128.4164	21587.5	26.6	15990 :	Tools in Lubricator.
	05:20:00	128.7497	0.0	10.5	16029 :	End Data Acquisition

Absolute pressures are converted to gauge pressures assuming a barometric pressure of 90 kPa.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

STATIC GRADIENT SURVEY

Company: Ranger Oil Limited
Ranger Fort Liard

LSD: P-66-A

Bottom Gauge

Depth (meters)	Pressure (kPaG)	Gradient (kPa/m)	Temp (°C)	Gradient (°C/m)
At Surface: 1998/07/16 14:55:00 (Running Out)				
3290	25580	8.44	157.6	0.020
3300	25670	9.04	157.7	0.010
3310	25758	8.81	157.7	-----
3320	25853	9.45	157.8	0.010
3330	25943	9.04	158.3	0.050
3340	26024	8.10	158.2	-----
3347	26061	5.30	158.2	-----

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

STATIC GRADIENT SURVEY

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: **P-66-A**

Bottom Gauge

Depth (meters)	Pressure (kPaG)	Gradient (kPa/m)	Temp (°C)	Gradient (°C/m)
At Surface: 1998/07/16 14:55:00 (Running Out)				
3110	24339	1.49	154.3	-----
3100	24331	0.85	154.3	-----
3110	24355	2.37	154.4	0.010
3120	24384	2.99	154.7	0.030
3130	24411	2.66	155.3	0.060
3140	24447	3.58	155.6	0.030
3150	24485	3.78	156.1	0.050
3160	24536	5.17	156.2	0.010
3170	24614	7.77	156.2	-----
3180	24695	8.06	156.3	0.010
3190	24770	7.55	156.3	-----
3200	24849	7.92	156.3	-----
3210	24927	7.72	156.4	0.010
3220	25004	7.76	156.4	-----
3230	25082	7.82	156.4	-----
3240	25160	7.79	156.4	-----
3250	25238	7.81	156.5	0.010
3260	25319	8.09	156.5	-----
3270	25404	8.46	156.7	0.020
3280	25495	9.13	157.4	0.070

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

STATIC GRADIENT SURVEY

Company: Ranger Oil Limited
Ranger Fort Liard

LSD: P-66-A

Bottom Gauge

Depth (meters)	Pressure (kPaG)	Gradient (kPa/m)	Temp (°C)	Gradient (°C/m)
At Surface: 1998/07/16 14:55:00 (Running Out)				
3150	24375	5.25	155.0	0.040
3140	24340	3.43	154.4	0.060
3130	24323	1.69	154.3	0.010
3120	24302	2.13	154.3	-----
3110	24291	1.11	154.4	-----
3100	24298	-----	156.0	-----
3250	25115	5.45	156.4	0.003
3240	25044	7.17	156.4	-----
3230	24967	7.64	156.4	-----
3220	24894	7.31	156.3	0.010
3210	24824	7.04	156.3	-----
3200	24750	7.34	156.3	-----
3190	24679	7.19	156.2	0.010
3180	24607	7.16	156.2	-----
3170	24540	6.69	155.8	0.040
3160	24472	6.79	155.4	0.040
3150	24424	4.82	154.9	0.050
3140	24394	2.96	154.4	0.050
3130	24375	1.93	154.3	0.010
3120	24354	2.08	154.3	-----

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

STATIC GRADIENT SURVEY

Company: Ranger Oil Limited
Ranger Fort Liard

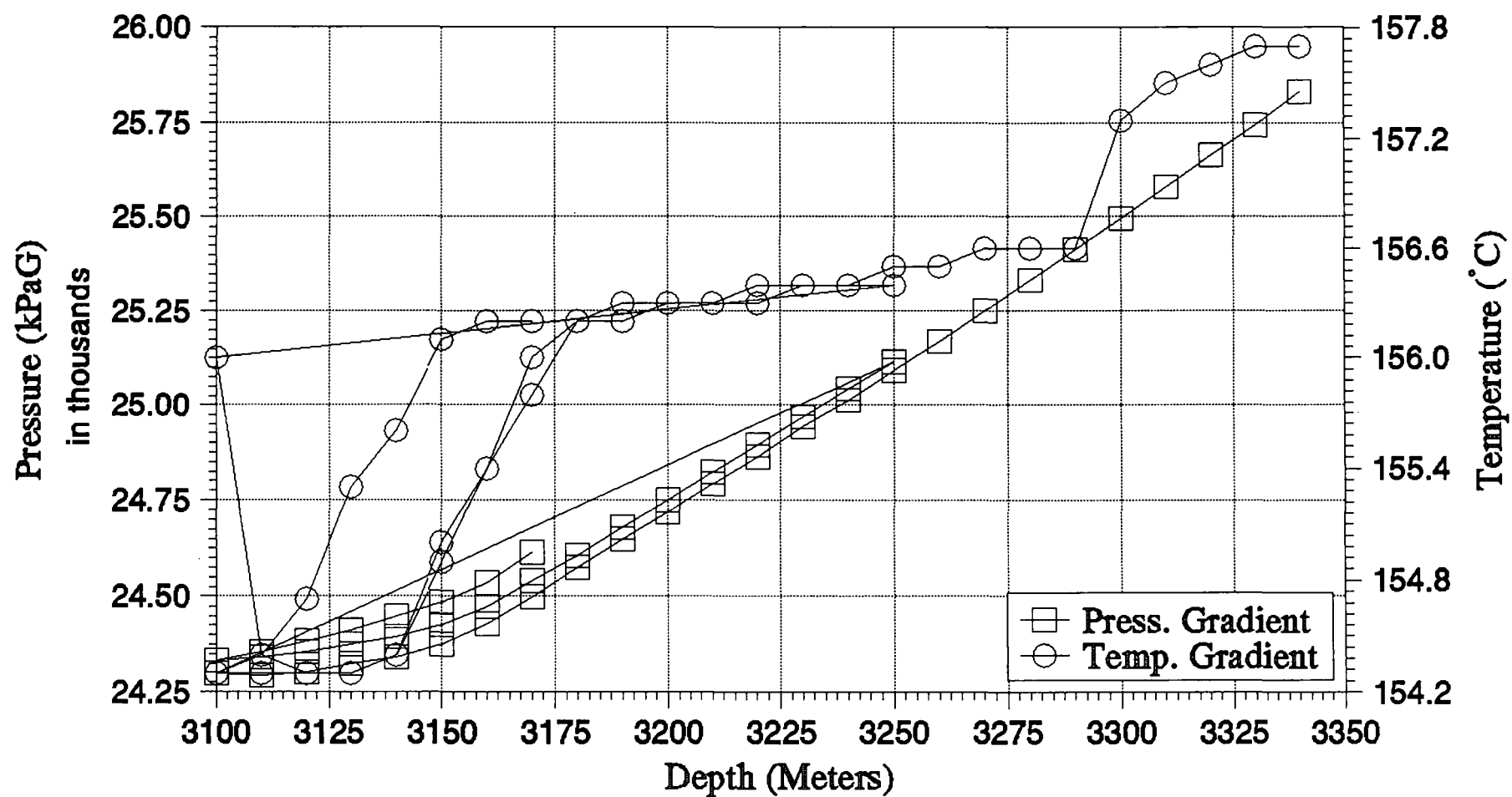
LSD: P-66-A

Bottom Gauge

Depth (meters)	Pressure (kPaG)	Gradient (kPa/m)	Temp (°C)	Gradient (°C/m)
At Surface: 1998/07/16 14:55:00 (Running Out)				
3347	25884	-----	157.8	-----
3340	25831	7.49	157.7	0.014
3330	25744	8.71	157.7	-----
3320	25665	7.96	157.6	0.010
3310	25581	8.40	157.5	0.010
3300	25496	8.47	157.3	0.020
3290	25415	8.10	156.6	0.070
3280	25331	8.43	156.6	-----
3270	25251	7.97	156.6	-----
3260	25168	8.26	156.5	0.010
3250	25091	7.78	156.5	-----
3240	25014	7.66	156.4	0.010
3230	24941	7.27	156.4	-----
3220	24862	7.91	156.4	-----
3210	24791	7.09	156.3	0.010
3200	24719	7.19	156.3	-----
3190	24648	7.18	156.3	-----
3180	24575	7.30	156.2	0.010
3170	24498	7.66	156.0	0.020
3160	24427	7.09	155.4	0.060

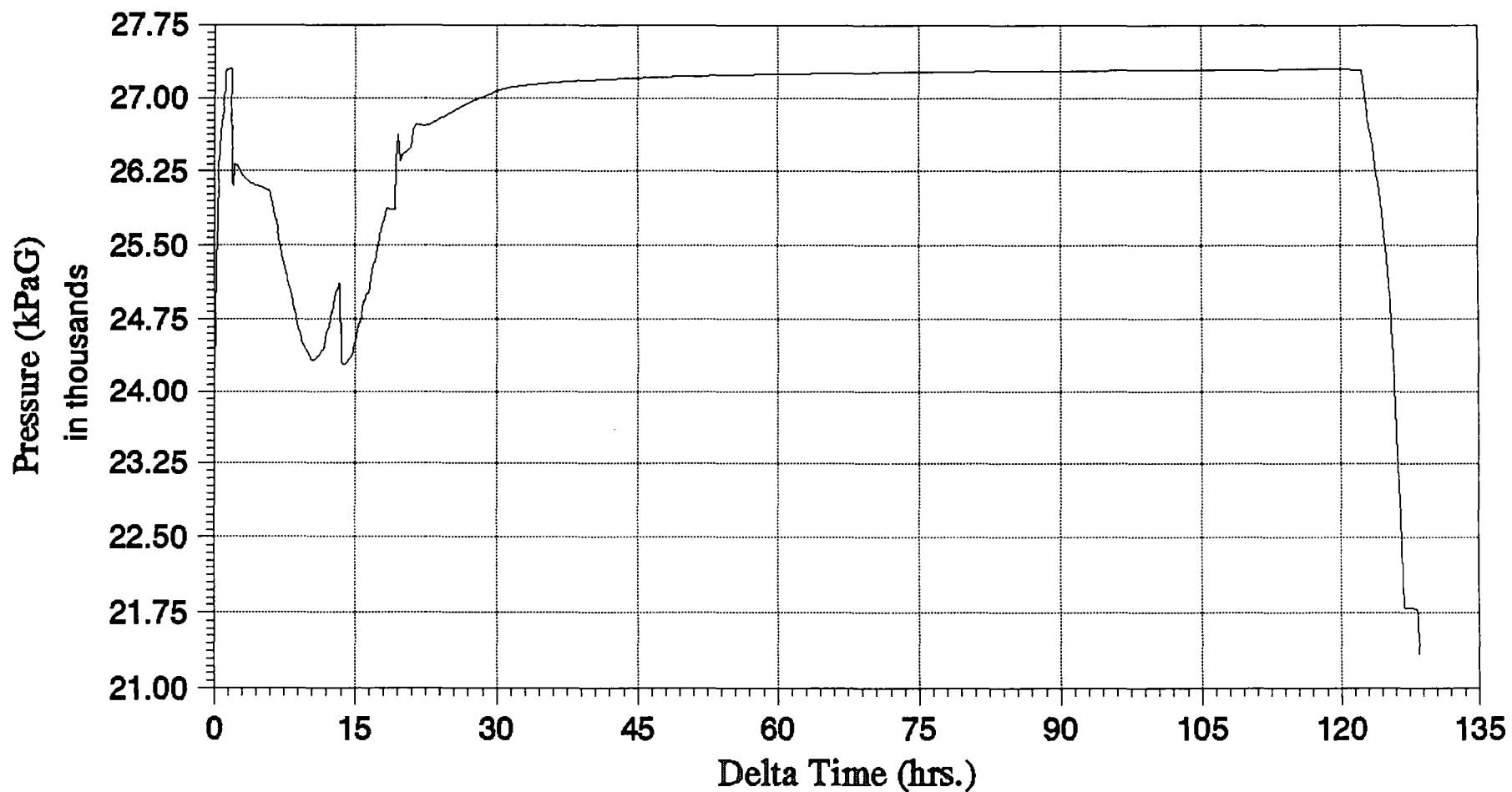
Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.

Ranger Oil Limited
P-66-A
Gentronics Quartz Static Gradient Survey



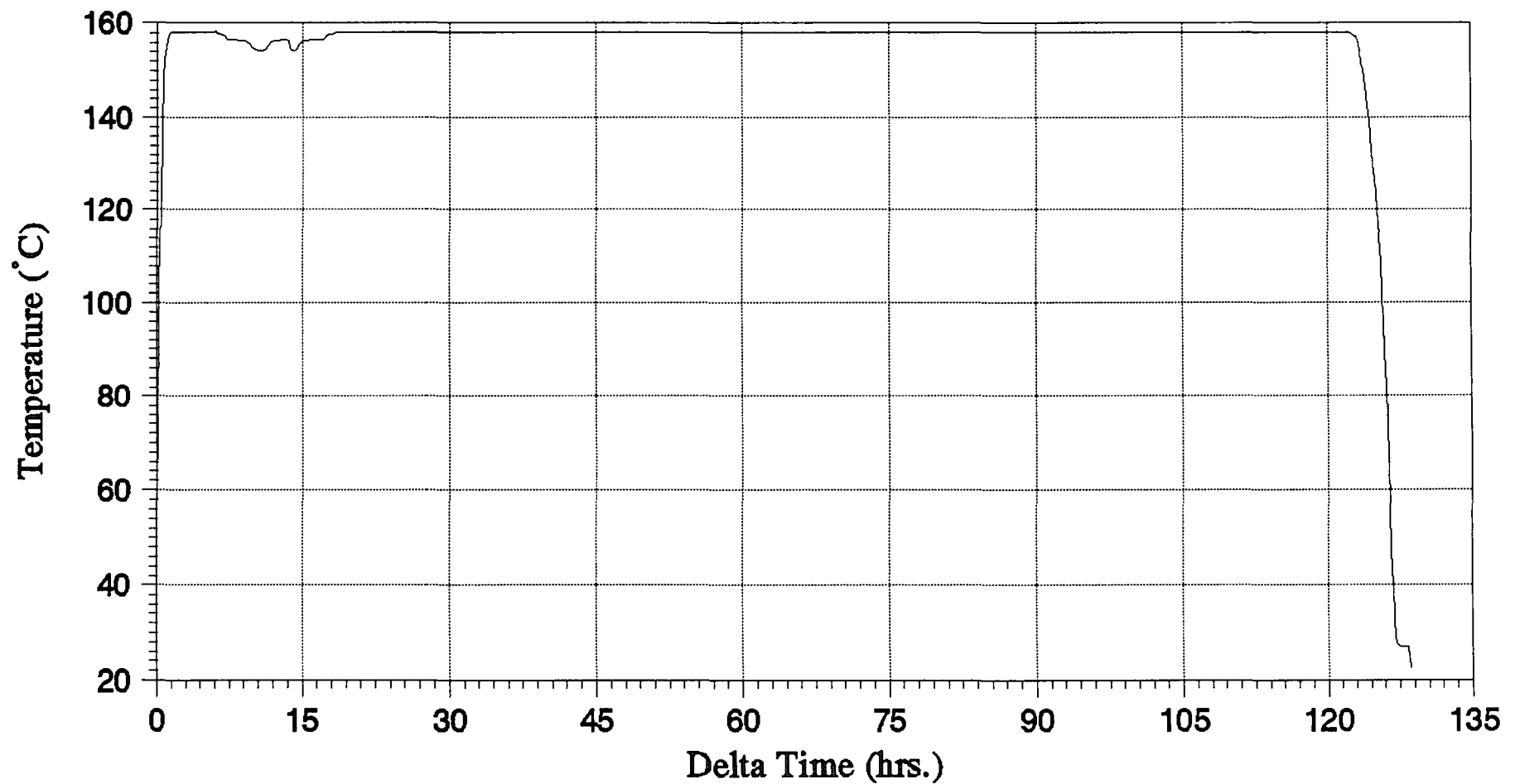
GENCO PRESSURE CONTROL LTD (403)250-3800
Start Aquisition: 1998/07/15 20:35:01
End Aquisition: 1998/07/21 05:20:00

Ranger Oil Limited
P-66-A
Gentronics Quartz Bottom Gauge Pressures



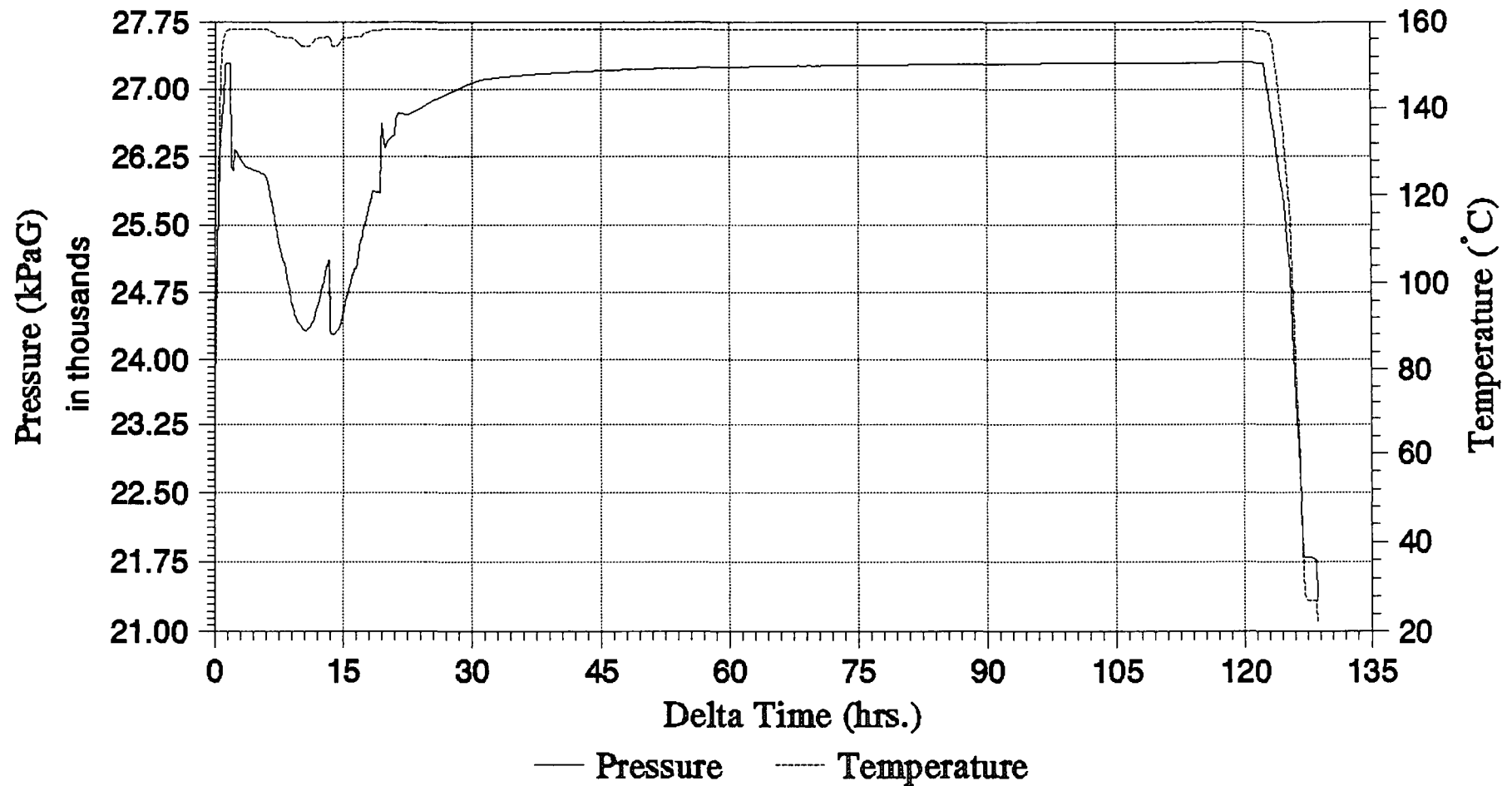
GENCO PRESSURE CONTROL LTD (403)250-3800
Start Aquisition: 1998/07/15 20:35:01
End Aquisition: 1998/07/21 05:20:00

Ranger Oil Limited
P-66-A
Gentronics Quartz Bottom Gauge Temp.



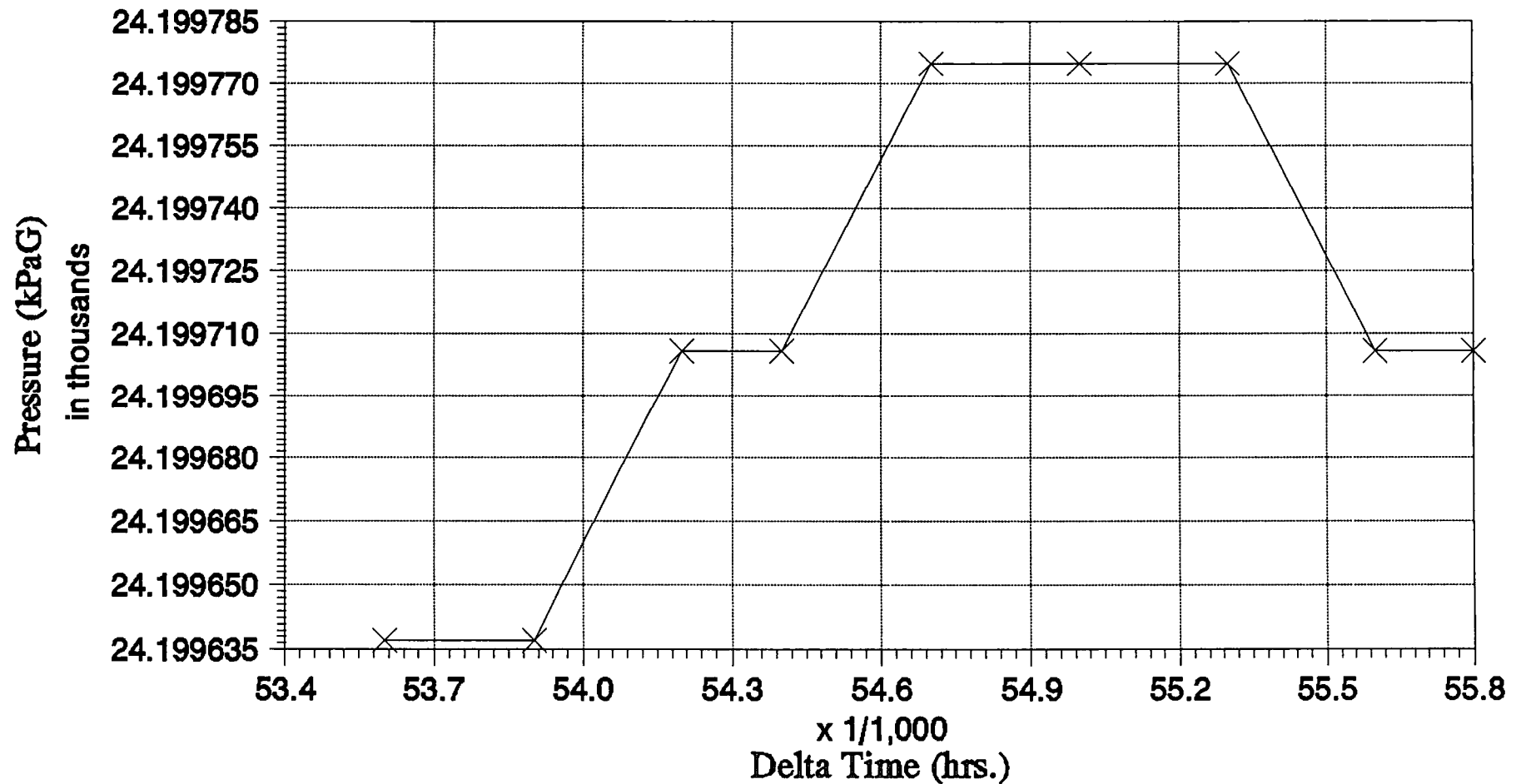
GENCO PRESSURE CONTROL LTD (403)250-3800
Start Aquisition: 1998/07/15 20:35:01
End Aquisition: 1998/07/21 05:20:00

Ranger Oil Limited
P-66-A
Gentronics Quartz Bottom Pressure/Temp



GENCO PRESSURE CONTROL LTD (403)250-3800
Start Aquisition: 1998/07/15 20:35:01
End Aquisition: 1998/07/21 05:20:00

Ranger Oil Limited
P-66-A
Bottom Gauge Apparent Resolution



GENCO PRESSURE CONTROL LTD (403)250-3800
Start Aquisition: 1998/07/15 20:35:01
End Aquisition: 1998/07/21 05:20:00

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
Begin Data Acquisition:							
1998/07/15	20:35:01	0.0000	24000.9	24000.9	59.4	59.4	0:
	20:35:17	0.0044	24028.6	27.8	60.4	1.0	17:
	20:35:34	0.0092	24033.8	5.2	61.4	1.1	34:
	20:35:51	0.0139	24035.9	2.1	62.5	1.1	51:
	20:36:08	0.0186	24057.5	21.7	63.4	0.9	68:
	20:36:25	0.0233	24084.5	27.0	64.4	1.0	85:
	20:36:42	0.0281	24113.4	28.9	65.4	1.0	102:
	20:36:59	0.0328	24142.5	29.2	66.4	1.0	119:
	20:37:16	0.0375	24173.3	30.8	67.4	1.0	136:
	20:37:33	0.0422	24199.4	26.1	68.4	0.9	153:
	20:37:50	0.0469	24200.7	1.4	69.4	1.0	170:
	20:38:07	0.0517	24200.0	-0.8	70.3	0.9	187:
	20:38:24	0.0564	24199.7	-0.3	71.2	0.9	204:
	20:38:41	0.0611	24199.6	-0.1	72.1	0.8	221:
	20:38:58	0.0658	24199.6	0.0	72.8	0.8	238:
	20:39:15	0.0706	24224.7	25.2	73.6	0.8	255:
	20:39:32	0.0753	24256.9	32.2	74.4	0.8	272:
	20:39:49	0.0800	24288.9	32.0	75.3	0.9	289:
	20:40:06	0.0847	24321.7	32.8	76.2	0.8	306:
	20:40:23	0.0894	24355.4	33.6	77.1	0.9	323:
	20:40:40	0.0942	24389.4	34.0	77.9	0.8	340:
	20:40:57	0.0989	24423.0	33.6	78.8	0.9	357:
	20:41:14	0.1036	24457.0	34.1	79.6	0.8	374:
	20:41:31	0.1083	24491.0	33.9	80.4	0.8	391:
	20:41:48	0.1131	24524.7	33.7	81.3	0.8	408:
	20:42:05	0.1178	24557.8	33.1	82.1	0.8	425:
	20:42:22	0.1225	24591.8	34.0	82.9	0.8	442:
	20:42:39	0.1272	24624.2	32.5	83.7	0.8	459:
	20:42:56	0.1319	24656.3	32.1	84.6	0.9	476:
	20:43:13	0.1367	24687.3	31.0	85.4	0.8	493:
	20:43:30	0.1414	24717.9	30.6	86.2	0.8	510:
	20:43:47	0.1461	24748.2	30.3	87.1	0.8	527:
	20:44:04	0.1508	24779.0	30.8	87.9	0.8	544:
	20:44:21	0.1556	24808.5	29.4	88.7	0.8	561:
	20:44:38	0.1603	24837.2	28.8	89.6	0.8	578:
	20:44:55	0.1650	24864.7	27.5	90.3	0.8	595:
	20:51:00	0.2664	25262.1	397.4	105.7	15.3	612:
	20:59:30	0.4081	25813.6	551.5	123.7	18.0	629:
	21:08:00	0.5497	26329.0	515.3	141.3	17.7	646:
	21:16:30	0.6914	26526.1	197.2	149.8	8.4	663:
	21:25:00	0.8331	26684.4	158.2	153.6	3.8	680:
	21:33:30	0.9747	26831.9	147.5	155.8	2.3	697:
	21:42:00	1.1164	27149.0	317.1	156.7	0.9	714:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt(hrs)	P(kPaG)	dP	T(°C)	dT	Pt. #
	21:50:30	1.2581	27243.1	94.1	157.7	0.9	731:
	21:59:00	1.3997	27292.5	49.4	158.0	0.3	748:
	22:07:30	1.5414	27294.7	2.2	158.1	0.1	765:
	22:16:00	1.6831	27295.5	0.8	158.2	0.1	782:
	22:24:30	1.8247	27288.9	-6.6	158.2	0.0	799:
	22:33:00	1.9664	26388.5	-900.5	158.2	0.0	816:
	22:41:30	2.1081	26074.8	-313.7	158.2	0.0	833:
	22:50:00	2.2497	26321.3	246.5	158.2	0.0	850:
	22:58:30	2.3914	26318.6	-2.7	158.2	0.0	867:
	23:07:00	2.5331	26307.8	-10.8	158.2	0.0	884:
	23:15:30	2.6747	26286.0	-21.8	158.2	0.0	901:
	23:24:00	2.8164	26261.4	-24.5	158.2	0.0	918:
	23:32:30	2.9581	26236.6	-24.9	158.2	0.0	935:
	23:41:00	3.0997	26210.7	-25.9	158.2	0.0	952:
	23:49:30	3.2414	26194.6	-16.1	158.2	0.0	969:
	23:58:00	3.3831	26174.4	-20.2	158.2	0.0	986:
1998/07/16	00:06:30	3.5247	26159.5	-14.9	158.2	0.0	1003:
	00:15:00	3.6664	26147.2	-12.3	158.2	0.0	1020:
	00:23:30	3.8081	26137.3	-9.9	158.2	0.0	1037:
	00:32:00	3.9497	26131.3	-5.9	158.2	0.0	1054:
	00:40:30	4.0914	26122.7	-8.7	158.2	0.0	1071:
	00:49:00	4.2331	26113.0	-9.7	158.2	0.0	1088:
	00:57:30	4.3747	26106.4	-6.6	158.2	0.0	1105:
	01:06:00	4.5164	26103.1	-3.4	158.2	0.0	1122:
	01:14:30	4.6581	26098.0	-5.0	158.2	0.0	1139:
	01:23:00	4.7997	26096.7	-1.3	158.2	0.0	1156:
	01:31:30	4.9414	26092.8	-3.9	158.2	0.0	1173:
	01:40:00	5.0831	26086.5	-6.3	158.2	0.0	1190:
	01:48:30	5.2247	26081.1	-5.3	158.2	0.0	1207:
	01:57:00	5.3664	26073.6	-7.6	158.2	0.0	1224:
	02:05:30	5.5081	26071.6	-1.9	158.2	0.0	1241:
	02:14:00	5.6497	26064.6	-7.0	158.2	0.0	1258:
	02:22:30	5.7914	26058.3	-6.3	158.2	0.0	1275:
	02:31:00	5.9331	26055.5	-2.8	158.2	0.0	1292:
	02:39:30	6.0747	26027.1	-28.4	158.3	0.2	1309:
	02:48:00	6.2164	25940.5	-86.6	158.0	-0.3	1326:
	02:56:30	6.3581	25848.6	-91.8	157.8	-0.2	1343:
	03:05:00	6.4997	25756.9	-91.7	157.7	-0.1	1360:
	03:13:30	6.6414	25754.3	-2.7	157.7	-0.1	1377:
	03:22:00	6.7831	25667.2	-87.1	157.6	-0.1	1394:
	03:30:30	6.9247	25579.3	-87.8	157.5	-0.1	1411:
	03:39:00	7.0664	25501.3	-78.1	157.2	-0.3	1428:
	03:47:30	7.2081	25450.5	-50.7	156.7	-0.4	1445:
	03:56:00	7.3497	25401.8	-48.7	156.6	-0.2	1462:

Absolute pressures are converted to gauge pressures
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Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt(hrs)	P(kPaG)	dP	T(°C)	dT	Pt. #
	04:04:30	7.4914	25316.4	-85.4	156.5	-0.1	1479:
	04:13:00	7.6331	25238.1	-78.3	156.4	-0.1	1496:
	04:21:30	7.7747	25164.2	-73.9	156.4	0.0	1513:
	04:30:00	7.9164	25162.9	-1.2	156.4	0.0	1530:
	04:38:30	8.0581	25082.7	-80.2	156.4	-0.1	1547:
	04:47:00	8.1997	25002.6	-80.1	156.4	0.0	1564:
	04:55:30	8.3414	24925.1	-77.6	156.4	0.0	1581:
	05:04:00	8.4831	24921.5	-3.5	156.3	-0.1	1598:
	05:12:30	8.6247	24844.3	-77.2	156.3	0.0	1615:
	05:21:00	8.7664	24769.4	-74.9	156.3	-0.1	1632:
	05:29:30	8.9081	24693.0	-76.3	156.3	0.0	1649:
	05:38:00	9.0497	24618.2	-74.8	156.2	-0.1	1666:
	05:46:30	9.1914	24611.3	-7.0	156.2	-0.1	1683:
	05:55:00	9.3331	24535.8	-75.5	156.1	-0.1	1700:
	06:03:30	9.4747	24491.0	-44.7	155.8	-0.3	1717:
	06:12:00	9.6164	24447.2	-43.8	155.6	-0.3	1734:
	06:20:30	9.7581	24441.6	-5.7	155.3	-0.2	1751:
	06:29:00	9.8997	24413.9	-27.7	154.8	-0.5	1768:
	06:37:30	10.0414	24382.8	-31.1	154.6	-0.3	1785:
	06:46:00	10.1831	24354.7	-28.1	154.4	-0.2	1802:
	06:54:30	10.3247	24336.7	-18.0	154.3	-0.1	1819:
	07:03:00	10.4664	24325.1	-11.6	154.3	0.0	1836:
	07:11:30	10.6081	24323.2	-1.9	154.3	-0.1	1853:
	07:20:00	10.7497	24333.6	10.4	154.3	0.0	1870:
	07:28:30	10.8914	24353.1	19.5	154.3	0.1	1887:
	07:37:00	11.0331	24351.3	-1.8	154.3	0.0	1904:
	07:45:30	11.1747	24369.9	18.6	154.4	0.1	1921:
	07:54:00	11.3164	24387.2	17.2	154.8	0.4	1938:
	08:02:30	11.4581	24420.6	33.4	155.2	0.4	1955:
	08:11:00	11.5997	24463.5	43.0	155.4	0.2	1972:
	08:19:30	11.7414	24463.8	0.3	155.8	0.3	1989:
	08:28:00	11.8831	24540.0	76.3	156.1	0.3	2006:
	08:36:30	12.0247	24606.1	66.1	156.2	0.1	2023:
	08:45:00	12.1664	24676.5	70.4	156.2	0.1	2040:
	08:53:30	12.3081	24732.5	56.0	156.3	0.1	2057:
	09:02:00	12.4497	24749.7	17.2	156.3	0.1	2074:
	09:10:30	12.5914	24821.9	72.2	156.3	0.0	2091:
	09:19:00	12.7331	24893.3	71.4	156.4	0.1	2108:
	09:27:30	12.8747	24967.3	74.0	156.4	0.0	2125:
	09:36:00	13.0164	24965.6	-1.7	156.4	0.1	2142:
	09:44:30	13.1581	25042.1	76.5	156.4	0.0	2159:
	09:53:00	13.2997	25115.5	73.4	156.4	0.0	2176:
	10:01:30	13.4414	25112.3	-3.2	156.5	0.1	2193:
	10:10:00	13.5831	24321.5	-790.7	156.2	-0.3	2210:

Absolute pressures are converted to gauge pressures
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Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	10:18:30	13.7247	24284.8	-36.8	154.7	-1.5	2227:
	10:27:00	13.8664	24285.1	0.3	154.4	-0.3	2244:
	10:35:30	14.0081	24302.8	17.7	154.3	-0.1	2261:
	10:44:00	14.1497	24298.6	-4.1	154.3	0.0	2278:
	10:52:30	14.2914	24319.1	20.4	154.3	0.0	2295:
	11:01:00	14.4331	24338.9	19.9	154.8	0.4	2312:
	11:09:30	14.5747	24373.3	34.3	155.2	0.4	2329:
	11:18:00	14.7164	24427.0	53.8	155.4	0.2	2346:
	11:26:30	14.8581	24425.8	-1.2	155.9	0.6	2363:
	11:35:00	14.9997	24497.9	72.1	156.2	0.2	2380:
	11:43:30	15.1414	24571.1	73.2	156.2	0.1	2397:
	11:52:00	15.2831	24645.4	74.3	156.3	0.1	2414:
	12:00:30	15.4247	24719.3	73.9	156.3	0.0	2431:
	12:09:00	15.5664	24719.0	-0.3	156.3	0.1	2448:
	12:17:30	15.7081	24789.4	70.3	156.4	0.1	2465:
	12:26:00	15.8497	24865.7	76.3	156.4	0.0	2482:
	12:34:30	15.9914	24937.7	72.0	156.4	0.1	2499:
	12:43:00	16.1331	24940.6	3.0	156.4	0.0	2516:
	12:51:30	16.2747	25014.7	74.1	156.5	0.1	2533:
	13:00:00	16.4164	25011.9	-2.8	156.5	0.0	2550:
	13:08:30	16.5581	25089.6	77.8	156.5	0.0	2567:
	13:17:00	16.6997	25167.8	78.1	156.5	0.0	2584:
	13:25:30	16.8414	25166.5	-1.2	156.6	0.1	2601:
	13:34:00	16.9831	25245.5	78.9	156.6	0.0	2618:
	13:42:30	17.1247	25334.2	88.7	156.6	0.0	2635:
	13:51:00	17.2664	25404.3	70.1	156.8	0.3	2652:
	13:59:30	17.4081	25412.6	8.3	157.3	0.4	2669:
	14:08:00	17.5497	25494.9	82.3	157.4	0.2	2686:
	14:16:30	17.6914	25584.1	89.2	157.6	0.1	2703:
	14:25:00	17.8331	25665.4	81.3	157.6	0.1	2720:
	14:33:30	17.9747	25744.2	78.8	157.7	0.1	2737:
	14:42:00	18.1164	25748.1	3.9	157.7	0.1	2754:
	14:50:30	18.2581	25828.0	79.9	157.8	0.1	2771:
	14:59:00	18.3997	25872.1	44.1	157.9	0.1	2788:
	15:07:30	18.5414	25869.8	-2.3	158.1	0.1	2805:
	15:16:00	18.6831	25869.3	-0.6	158.1	0.0	2822:
	15:24:30	18.8247	25865.0	-4.3	158.1	0.1	2839:
	15:33:00	18.9664	25863.3	-1.7	158.1	0.0	2856:
	15:41:30	19.1081	25861.2	-2.1	158.1	0.0	2873:
	15:50:00	19.2497	25860.1	-1.1	158.1	0.0	2890:
	15:58:30	19.3914	25858.3	-1.8	158.1	0.0	2907:
	16:07:00	19.5331	26714.5	856.2	158.2	0.1	2924:
	16:15:30	19.6747	26530.4	-184.1	158.2	0.0	2941:
	16:24:00	19.8164	26352.8	-177.6	158.2	0.0	2958:

Absolute pressures are converted to gauge pressures
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Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: **P-66-A**

Bottom Gauge

Date	Time	dt(hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	16:32:30	19.9581	26398.5	45.7	158.2	0.0	2975:
	16:41:00	20.0997	26413.8	15.3	158.2	0.0	2992:
	16:49:30	20.2414	26426.8	13.0	158.2	0.0	3009:
	16:58:00	20.3831	26442.0	15.2	158.2	0.0	3026:
	17:06:30	20.5247	26452.9	10.8	158.2	0.0	3043:
	17:15:00	20.6664	26463.3	10.4	158.2	0.0	3060:
	17:23:30	20.8081	26473.5	10.2	158.2	0.0	3077:
	17:32:00	20.9497	26485.6	12.1	158.2	0.0	3094:
	17:40:30	21.0914	26491.7	6.1	158.2	0.0	3111:
	17:49:00	21.2331	26685.3	193.5	158.2	0.0	3128:
	17:57:30	21.3747	26712.7	27.4	158.2	0.0	3145:
	18:06:00	21.5164	26738.6	25.9	158.2	0.0	3162:
	18:14:30	21.6581	26731.1	-7.4	158.2	0.0	3179:
	18:23:00	21.7997	26723.6	-7.6	158.2	0.0	3196:
	18:31:30	21.9414	26722.7	-0.9	158.2	0.0	3213:
	18:40:00	22.0831	26718.9	-3.8	158.2	0.0	3230:
	18:48:30	22.2247	26716.0	-2.8	158.2	0.0	3247:
	18:57:00	22.3664	26715.0	-1.0	158.2	0.0	3264:
	19:05:30	22.5081	26715.8	0.8	158.2	0.0	3281:
	19:14:00	22.6497	26718.2	2.4	158.2	0.0	3298:
	19:22:30	22.7914	26721.8	3.5	158.2	0.0	3315:
	19:31:00	22.9331	26726.7	4.9	158.2	0.0	3332:
	19:39:30	23.0747	26732.3	5.7	158.2	0.0	3349:
	19:48:00	23.2164	26738.9	6.6	158.2	0.0	3366:
	19:56:30	23.3581	26746.2	7.4	158.2	0.0	3383:
	20:05:00	23.4997	26753.7	7.4	158.2	0.0	3400:
	20:13:30	23.6414	26761.5	7.9	158.2	0.0	3417:
	20:22:00	23.7831	26769.9	8.3	158.2	0.0	3434:
	20:30:30	23.9247	26778.0	8.1	158.2	0.0	3451:
	20:39:00	24.0664	26786.1	8.1	158.2	0.0	3468:
	20:47:30	24.2081	26794.2	8.1	158.2	0.0	3485:
	20:56:00	24.3497	26802.3	8.1	158.2	0.0	3502:
	21:04:30	24.4914	26810.4	8.1	158.2	0.0	3519:
	21:13:00	24.6331	26818.3	7.9	158.2	0.0	3536:
	21:21:30	24.7747	26826.0	7.7	158.2	0.0	3553:
	21:30:00	24.9164	26833.9	7.9	158.2	0.0	3570:
	21:38:30	25.0581	26841.7	7.8	158.2	0.0	3587:
	21:47:00	25.1997	26849.2	7.5	158.2	0.0	3604:
	21:55:30	25.3414	26856.8	7.7	158.2	0.0	3621:
	22:04:00	25.4831	26864.2	7.4	158.2	0.0	3638:
	22:12:30	25.6247	26871.7	7.5	158.2	0.0	3655:
	22:21:00	25.7664	26879.0	7.2	158.2	0.0	3672:
	22:29:30	25.9081	26886.3	7.4	158.2	0.0	3689:
	22:38:00	26.0497	26893.9	7.6	158.2	0.0	3706:

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.
 Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	22:46:30	26.1914	26901.1	7.2	158.2	0.0	3723:
	22:55:00	26.3331	26908.1	7.0	158.2	0.0	3740:
	23:03:30	26.4747	26915.2	7.1	158.2	0.0	3757:
	23:12:00	26.6164	26922.3	7.0	158.2	0.0	3774:
	23:20:30	26.7581	26928.7	6.5	158.2	0.0	3791:
	23:29:00	26.8997	26935.3	6.6	158.2	0.0	3808:
	23:37:30	27.0414	26941.8	6.6	158.2	0.0	3825:
	23:46:00	27.1831	26948.1	6.3	158.2	0.0	3842:
	23:54:30	27.3247	26954.4	6.3	158.2	0.0	3859:
1998/07/17	00:03:00	27.4664	26960.7	6.3	158.2	0.0	3876:
	00:11:30	27.6081	26966.8	6.1	158.2	0.0	3893:
	00:20:00	27.7497	26972.9	6.1	158.2	0.0	3910:
	00:28:30	27.8914	26978.7	5.8	158.2	0.0	3927:
	00:37:00	28.0331	26984.7	6.0	158.2	0.0	3944:
	00:45:30	28.1747	26990.8	6.1	158.2	0.0	3961:
	00:54:00	28.3164	26996.9	6.1	158.2	0.0	3978:
	01:02:30	28.4581	27002.9	6.0	158.2	0.0	3995:
	01:11:00	28.5997	27008.7	5.9	158.2	0.0	4012:
	01:19:30	28.7414	27014.7	5.9	158.2	0.0	4029:
	01:28:00	28.8831	27020.7	6.1	158.2	0.0	4046:
	01:36:30	29.0247	27026.7	5.9	158.2	0.0	4063:
	01:45:00	29.1664	27032.5	5.9	158.2	0.0	4080:
	01:53:30	29.3081	27038.6	6.1	158.2	0.0	4097:
	02:02:00	29.4497	27044.6	6.0	158.2	0.0	4114:
	02:10:30	29.5914	27050.5	5.9	158.2	0.0	4131:
	02:19:00	29.7331	27056.6	6.1	158.2	0.0	4148:
	02:27:30	29.8747	27062.4	5.8	158.2	0.0	4165:
	02:36:00	30.0164	27068.3	5.9	158.2	0.0	4182:
	02:44:30	30.1581	27074.4	6.1	158.2	0.0	4199:
	02:53:00	30.2997	27080.2	5.8	158.2	0.0	4216:
	03:01:30	30.4414	27085.5	5.3	158.2	0.0	4233:
	03:10:00	30.5831	27090.2	4.7	158.2	0.0	4250:
	03:18:30	30.7247	27094.4	4.3	158.2	0.0	4267:
	03:27:00	30.8664	27098.0	3.6	158.2	0.0	4284:
	03:35:30	31.0081	27101.2	3.2	158.2	0.0	4301:
	03:44:00	31.1497	27103.9	2.7	158.2	0.0	4318:
	03:52:30	31.2914	27106.3	2.4	158.2	0.0	4335:
	04:01:00	31.4331	27108.6	2.3	158.2	0.0	4352:
	04:09:30	31.5747	27110.8	2.2	158.2	0.0	4369:
	04:18:00	31.7164	27112.8	2.0	158.2	0.0	4386:
	04:26:30	31.8581	27114.8	1.9	158.2	0.0	4403:
	04:35:00	31.9997	27116.8	2.1	158.2	0.0	4420:
	04:43:30	32.1414	27118.7	1.9	158.2	0.0	4437:
	04:52:00	32.2831	27120.5	1.8	158.2	0.0	4454:

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.
 Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt(hrs)	P(kPaG)	dP	T(°C)	dT	Pt. #
	05:00:30	32.4247	27122.4	1.9	158.2	0.0	4471:
	05:09:00	32.5664	27124.2	1.8	158.2	0.0	4488:
	05:17:30	32.7081	27125.8	1.7	158.2	0.0	4505:
	05:26:00	32.8497	27127.5	1.7	158.2	0.0	4522:
	05:34:30	32.9914	27129.0	1.5	158.2	0.0	4539:
	05:43:00	33.1331	27130.6	1.7	158.2	0.0	4556:
	05:51:30	33.2747	27132.4	1.7	158.2	0.0	4573:
	06:00:00	33.4164	27133.9	1.5	158.2	0.0	4590:
	06:08:30	33.5581	27135.3	1.4	158.2	0.0	4607:
	06:17:00	33.6997	27136.8	1.4	158.2	0.0	4624:
	06:25:30	33.8414	27138.2	1.4	158.2	0.0	4641:
	06:34:00	33.9831	27139.7	1.4	158.2	0.0	4658:
	06:42:30	34.1247	27141.0	1.4	158.2	0.0	4675:
	06:51:00	34.2664	27142.4	1.4	158.2	0.0	4692:
	06:59:30	34.4081	27143.7	1.3	158.2	0.0	4709:
	07:08:00	34.5497	27145.1	1.4	158.2	0.0	4726:
	07:16:30	34.6914	27146.3	1.2	158.2	0.0	4743:
	07:25:00	34.8331	27147.6	1.3	158.2	0.0	4760:
	07:33:30	34.9747	27148.8	1.2	158.2	0.0	4777:
	07:42:00	35.1164	27150.1	1.2	158.2	0.0	4794:
	07:50:30	35.2581	27151.3	1.2	158.2	0.0	4811:
	07:59:00	35.3997	27152.4	1.1	158.2	0.0	4828:
	08:07:30	35.5414	27153.7	1.2	158.2	0.0	4845:
	08:16:00	35.6831	27154.8	1.2	158.2	0.0	4862:
	08:24:30	35.8247	27155.9	1.0	158.2	0.0	4879:
	08:33:00	35.9664	27157.0	1.1	158.2	0.0	4896:
	08:41:30	36.1081	27158.1	1.1	158.2	0.0	4913:
	08:50:00	36.2497	27159.2	1.1	158.2	0.0	4930:
	08:58:30	36.3914	27160.2	1.0	158.2	0.0	4947:
	09:07:00	36.5331	27161.4	1.2	158.2	0.0	4964:
	09:15:30	36.6747	27162.3	1.0	158.2	0.0	4981:
	09:24:00	36.8164	27163.3	1.0	158.2	0.0	4998:
	09:32:30	36.9581	27164.3	1.0	158.2	0.0	5015:
	09:41:00	37.0997	27165.5	1.1	158.2	0.0	5032:
	09:49:30	37.2414	27166.4	1.0	158.2	0.0	5049:
	09:58:00	37.3831	27167.2	0.8	158.2	0.0	5066:
	10:06:30	37.5247	27168.3	1.1	158.2	0.0	5083:
	10:15:00	37.6664	27169.2	0.8	158.2	0.0	5100:
	10:23:30	37.8081	27170.2	1.0	158.2	0.0	5117:
	10:32:00	37.9497	27171.2	1.0	158.2	0.0	5134:
	10:40:30	38.0914	27172.2	1.0	158.2	0.0	5151:
	10:49:00	38.2331	27173.0	0.8	158.2	0.0	5168:
	10:57:30	38.3747	27173.9	0.9	158.2	0.0	5185:
	11:06:00	38.5164	27174.9	1.0	158.2	0.0	5202:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt(hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	11:14:30	38.6581	27175.7	0.8	158.2	0.0	5219:
	11:23:00	38.7997	27176.6	0.9	158.2	0.0	5236:
	11:31:30	38.9414	27177.4	0.8	158.2	0.0	5253:
	11:40:00	39.0831	27178.2	0.8	158.2	0.0	5270:
	11:48:30	39.2247	27179.1	0.9	158.2	0.0	5287:
	11:57:00	39.3664	27179.9	0.8	158.2	0.0	5304:
	12:05:30	39.5081	27180.8	0.9	158.2	0.0	5321:
	12:14:00	39.6497	27181.4	0.7	158.2	0.0	5338:
	12:22:30	39.7914	27182.3	0.8	158.2	0.0	5355:
	12:31:00	39.9331	27183.1	0.8	158.2	0.0	5372:
	12:39:30	40.0747	27183.9	0.8	158.2	0.0	5389:
	12:48:00	40.2164	27184.6	0.7	158.2	0.0	5406:
	12:56:30	40.3581	27185.3	0.8	158.2	0.0	5423:
	13:05:00	40.4997	27186.1	0.8	158.2	0.0	5440:
	13:13:30	40.6414	27186.8	0.8	158.2	0.0	5457:
	13:22:00	40.7831	27187.5	0.7	158.2	0.0	5474:
	13:30:30	40.9247	27188.2	0.7	158.2	0.0	5491:
	13:39:00	41.0664	27189.0	0.8	158.2	0.0	5508:
	13:47:30	41.2081	27189.7	0.7	158.2	0.0	5525:
	13:56:00	41.3497	27190.5	0.8	158.2	0.0	5542:
	14:04:30	41.4914	27191.2	0.8	158.2	0.0	5559:
	14:13:00	41.6331	27191.9	0.6	158.2	0.0	5576:
	14:21:30	41.7747	27192.5	0.6	158.2	0.0	5593:
	14:30:00	41.9164	27193.2	0.7	158.2	0.0	5610:
	14:38:30	42.0581	27193.9	0.7	158.2	0.0	5627:
	14:47:00	42.1997	27194.5	0.6	158.2	0.0	5644:
	14:55:30	42.3414	27195.1	0.6	158.2	0.0	5661:
	15:04:00	42.4831	27195.8	0.7	158.2	0.0	5678:
	15:12:30	42.6247	27196.4	0.6	158.2	0.0	5695:
	15:21:00	42.7664	27197.1	0.7	158.2	0.0	5712:
	15:29:30	42.9081	27197.7	0.6	158.2	0.0	5729:
	15:38:00	43.0497	27198.3	0.6	158.2	0.0	5746:
	15:46:30	43.1914	27198.9	0.6	158.2	0.0	5763:
	15:55:00	43.3331	27199.6	0.7	158.2	0.0	5780:
	16:03:30	43.4747	27200.1	0.6	158.2	0.0	5797:
	16:12:00	43.6164	27200.7	0.6	158.2	0.0	5814:
	16:20:30	43.7581	27201.3	0.6	158.2	0.0	5831:
	16:29:00	43.8997	27202.0	0.7	158.2	0.0	5848:
	16:37:30	44.0414	27202.6	0.6	158.2	0.0	5865:
	16:46:00	44.1831	27203.1	0.5	158.2	0.0	5882:
	16:54:30	44.3247	27203.7	0.6	158.2	0.0	5899:
	17:03:00	44.4664	27204.3	0.6	158.2	0.0	5916:
	17:11:30	44.6081	27204.8	0.6	158.2	0.0	5933:
	17:20:00	44.7497	27205.3	0.5	158.2	0.0	5950:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	17:28:30	44.8914	27206.1	0.8	158.2	0.0	5967:
	17:37:00	45.0331	27206.3	0.3	158.2	0.0	5984:
	17:45:30	45.1747	27207.0	0.6	158.2	0.0	6001:
	17:54:00	45.3164	27207.6	0.6	158.2	0.0	6018:
	18:02:30	45.4581	27208.2	0.6	158.2	0.0	6035:
	18:11:00	45.5997	27208.5	0.3	158.2	0.0	6052:
	18:19:30	45.7414	27209.2	0.6	158.2	0.0	6069:
	18:28:00	45.8831	27209.6	0.4	158.2	0.0	6086:
	18:36:30	46.0247	27210.1	0.5	158.2	0.0	6103:
	18:45:00	46.1664	27210.6	0.6	158.2	0.0	6120:
	18:53:30	46.3081	27211.1	0.5	158.2	0.0	6137:
	19:02:00	46.4497	27211.6	0.5	158.2	0.0	6154:
	19:10:30	46.5914	27212.2	0.6	158.2	0.0	6171:
	19:19:00	46.7331	27212.5	0.3	158.2	0.0	6188:
	19:27:30	46.8747	27213.2	0.6	158.2	0.0	6205:
	19:36:00	47.0164	27213.6	0.4	158.2	0.0	6222:
	19:44:30	47.1581	27214.1	0.6	158.2	0.0	6239:
	19:53:00	47.2997	27214.5	0.3	158.2	0.0	6256:
	20:01:30	47.4414	27214.9	0.4	158.2	0.0	6273:
	20:10:00	47.5831	27215.4	0.5	158.2	0.0	6290:
	20:18:30	47.7247	27215.9	0.5	158.2	0.0	6307:
	20:27:00	47.8664	27216.4	0.6	158.2	0.0	6324:
	20:35:30	48.0081	27216.8	0.3	158.2	0.0	6341:
	20:44:00	48.1497	27217.4	0.6	158.2	0.0	6358:
	20:52:30	48.2914	27217.6	0.3	158.2	0.0	6375:
	21:01:00	48.4331	27218.2	0.6	158.2	0.0	6392:
	21:09:30	48.5747	27218.6	0.4	158.2	0.0	6409:
	21:18:00	48.7164	27219.0	0.3	158.2	0.0	6426:
	21:26:30	48.8581	27219.4	0.5	158.2	0.0	6443:
	21:35:00	48.9997	27219.9	0.5	158.2	0.0	6460:
	21:43:30	49.1414	27220.3	0.3	158.2	0.0	6477:
	21:52:00	49.2831	27220.9	0.6	158.2	0.0	6494:
	22:00:30	49.4247	27221.3	0.4	158.2	0.0	6511:
	22:09:00	49.5664	27221.6	0.3	158.2	0.0	6528:
	22:17:30	49.7081	27221.9	0.3	158.2	0.0	6545:
	22:26:00	49.8497	27222.5	0.6	158.2	0.0	6562:
	22:34:30	49.9914	27222.8	0.3	158.2	0.0	6579:
	22:43:00	50.1331	27223.4	0.6	158.2	0.0	6596:
	22:51:30	50.2747	27223.8	0.4	158.2	0.0	6613:
	23:00:00	50.4164	27224.1	0.3	158.2	0.0	6630:
	23:08:30	50.5581	27224.5	0.3	158.2	0.0	6647:
	23:17:00	50.6997	27224.9	0.4	158.2	0.0	6664:
	23:25:30	50.8414	27225.2	0.3	158.2	0.0	6681:
	23:34:00	50.9831	27225.6	0.3	158.2	0.0	6698:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	23:42:30	51.1247	27226.1	0.5	158.2	0.0	6715:
	23:51:00	51.2664	27226.5	0.5	158.2	0.0	6732:
	23:59:30	51.4081	27226.9	0.3	158.2	0.0	6749:
1998/07/18	00:08:00	51.5497	27227.0	0.1	158.2	0.0	6766:
	00:16:30	51.6914	27227.5	0.5	158.2	0.0	6783:
	00:25:00	51.8331	27227.9	0.4	158.2	0.0	6800:
	00:33:30	51.9747	27228.3	0.3	158.2	0.0	6817:
	00:42:00	52.1164	27228.7	0.4	158.2	0.0	6834:
	00:50:30	52.2581	27229.0	0.3	158.2	0.0	6851:
	00:59:00	52.3997	27229.4	0.4	158.2	0.0	6868:
	01:07:30	52.5414	27229.8	0.3	158.2	0.0	6885:
	01:16:00	52.6831	27230.1	0.3	158.2	0.0	6902:
	01:24:30	52.8247	27230.5	0.4	158.2	0.0	6919:
	01:33:00	52.9664	27230.7	0.2	158.2	0.0	6936:
	01:41:30	53.1081	27231.2	0.4	158.2	0.0	6953:
	01:50:00	53.2497	27231.5	0.3	158.2	0.0	6970:
	01:58:30	53.3914	27232.0	0.5	158.2	0.0	6987:
	02:07:00	53.5331	27232.2	0.2	158.2	0.0	7004:
	02:15:30	53.6747	27232.5	0.3	158.2	0.0	7021:
	02:24:00	53.8164	27232.9	0.3	158.2	0.0	7038:
	02:32:30	53.9581	27233.2	0.3	158.2	0.0	7055:
	02:41:00	54.0997	27233.6	0.3	158.2	0.0	7072:
	02:49:30	54.2414	27233.9	0.3	158.2	0.0	7089:
	02:58:00	54.3831	27234.3	0.4	158.2	0.0	7106:
	03:06:30	54.5247	27234.5	0.2	158.2	0.0	7123:
	03:15:00	54.6664	27234.7	0.2	158.2	0.0	7140:
	03:23:30	54.8081	27235.2	0.4	158.2	0.0	7157:
	03:32:00	54.9497	27235.5	0.3	158.2	0.0	7174:
	03:40:30	55.0914	27236.0	0.5	158.2	0.0	7191:
	03:49:00	55.2331	27236.2	0.2	158.2	0.0	7208:
	03:57:30	55.3747	27236.5	0.3	158.2	0.0	7225:
	04:06:00	55.5164	27236.8	0.3	158.2	0.0	7242:
	04:14:30	55.6581	27237.2	0.4	158.2	0.0	7259:
	04:23:00	55.7997	27237.5	0.3	158.2	0.0	7276:
	04:31:30	55.9414	27237.8	0.3	158.2	0.0	7293:
	04:40:00	56.0831	27238.1	0.3	158.2	0.0	7310:
	04:48:30	56.2247	27238.4	0.3	158.2	0.0	7327:
	04:57:00	56.3664	27238.7	0.3	158.2	0.0	7344:
	05:05:30	56.5081	27239.0	0.3	158.2	0.0	7361:
	05:14:00	56.6497	27239.2	0.3	158.2	0.0	7378:
	05:22:30	56.7914	27239.5	0.3	158.2	0.0	7395:
	05:31:00	56.9331	27239.9	0.4	158.2	0.0	7412:
	05:39:30	57.0747	27240.3	0.3	158.2	0.0	7429:
	05:48:00	57.2164	27240.5	0.3	158.2	0.0	7446:

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.
 Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt(hrs)	P (kPaG)	dP	T(°C)	dT	Pt. #
	05:56:30	57.3581	27240.8	0.3	158.2	0.0	7463:
	06:05:00	57.4997	27241.0	0.2	158.2	0.0	7480:
	06:13:30	57.6414	27241.3	0.3	158.2	0.0	7497:
	06:22:00	57.7831	27241.6	0.3	158.2	0.0	7514:
	06:30:30	57.9247	27241.9	0.3	158.2	0.0	7531:
	06:39:00	58.0664	27242.2	0.3	158.2	0.0	7548:
	06:47:30	58.2081	27242.5	0.3	158.2	0.0	7565:
	06:56:00	58.3497	27242.6	0.1	158.2	0.0	7582:
	07:04:30	58.4914	27243.0	0.3	158.2	0.0	7599:
	07:13:00	58.6331	27243.3	0.3	158.2	0.0	7616:
	07:21:30	58.7747	27243.6	0.3	158.2	0.0	7633:
	07:30:00	58.9164	27243.8	0.2	158.2	0.0	7650:
	07:38:30	59.0581	27244.2	0.3	158.2	0.0	7667:
	07:47:00	59.1997	27244.3	0.1	158.2	0.0	7684:
	07:55:30	59.3414	27244.6	0.3	158.2	0.0	7701:
	08:04:00	59.4831	27244.9	0.3	158.2	0.0	7718:
	08:12:30	59.6247	27245.0	0.1	158.2	0.0	7735:
	08:21:00	59.7664	27245.3	0.3	158.2	0.0	7752:
	08:29:30	59.9081	27245.6	0.3	158.2	0.0	7769:
	08:38:00	60.0497	27245.8	0.3	158.2	0.0	7786:
	08:46:30	60.1914	27246.1	0.3	158.2	0.0	7803:
	08:55:00	60.3331	27246.2	0.1	158.2	0.0	7820:
	09:03:30	60.4747	27246.6	0.4	158.2	0.0	7837:
	09:12:00	60.6164	27247.1	0.5	158.2	0.0	7854:
	09:20:30	60.7581	27247.4	0.3	158.2	0.0	7871:
	09:29:00	60.8997	27247.6	0.2	158.2	0.0	7888:
	09:37:30	61.0414	27247.8	0.2	158.2	0.0	7905:
	09:46:00	61.1831	27248.1	0.3	158.2	0.0	7922:
	09:54:30	61.3247	27248.5	0.4	158.2	0.0	7939:
	10:03:00	61.4664	27250.7	2.3	158.2	0.0	7956:
	10:11:30	61.6081	27249.8	-1.0	158.2	0.0	7973:
	10:20:00	61.7497	27249.5	-0.3	158.2	0.0	7990:
	10:28:30	61.8914	27249.5	0.0	158.2	0.0	8007:
	10:37:00	62.0331	27249.6	0.1	158.2	0.0	8024:
	10:45:30	62.1747	27249.8	0.1	158.2	0.0	8041:
	10:54:00	62.3164	27250.0	0.2	158.2	0.0	8058:
	11:02:30	62.4581	27251.7	1.7	158.2	0.0	8075:
	11:11:00	62.5997	27251.8	0.1	158.2	0.0	8092:
	11:19:30	62.7414	27251.2	-0.6	158.2	0.0	8109:
	11:28:00	62.8831	27251.2	-0.1	158.2	0.0	8126:
	11:36:30	63.0247	27251.2	0.0	158.2	0.0	8143:
	11:45:00	63.1664	27251.3	0.1	158.2	0.0	8160:
	11:53:30	63.3081	27251.5	0.2	158.2	0.0	8177:
	12:02:00	63.4497	27251.6	0.1	158.2	0.0	8194:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: Ranger Oil Limited
Ranger Fort Liard

LSD: P-66-A

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	12:10:30	63.5914	27255.4	3.9	158.2	0.0	8211:
	12:19:00	63.7331	27253.5	-1.9	158.2	0.0	8228:
	12:27:30	63.8747	27253.0	-0.5	158.2	0.0	8245:
	12:36:00	64.0164	27252.9	-0.1	158.2	0.0	8262:
	12:44:30	64.1581	27252.9	0.0	158.2	0.0	8279:
	12:53:00	64.2997	27253.2	0.2	158.2	0.0	8296:
	13:01:30	64.4414	27253.2	0.1	158.2	0.0	8313:
	13:10:00	64.5831	27253.4	0.2	158.2	0.0	8330:
	13:18:30	64.7247	27253.6	0.1	158.2	0.0	8347:
	13:27:00	64.8664	27254.1	0.5	158.2	0.0	8364:
	13:35:30	65.0081	27254.3	0.3	158.2	0.0	8381:
	13:44:00	65.1497	27254.5	0.1	158.2	0.0	8398:
	13:52:30	65.2914	27254.5	0.1	158.2	0.0	8415:
	14:01:00	65.4331	27254.7	0.1	158.2	0.0	8432:
	14:09:30	65.5747	27254.9	0.3	158.2	0.0	8449:
	14:18:00	65.7164	27255.0	0.1	158.2	0.0	8466:
	14:26:30	65.8581	27255.3	0.3	158.2	0.0	8483:
	14:35:00	65.9997	27255.6	0.3	158.2	0.0	8500:
	14:43:30	66.1414	27255.7	0.1	158.2	0.0	8517:
	14:52:00	66.2831	27255.9	0.2	158.2	0.0	8534:
	15:00:30	66.4247	27256.1	0.2	158.2	0.0	8551:
	15:09:00	66.5664	27256.4	0.3	158.2	0.0	8568:
	15:17:30	66.7081	27256.6	0.2	158.2	0.0	8585:
	15:26:00	66.8497	27256.8	0.2	158.2	0.0	8602:
	15:34:30	66.9914	27256.9	0.1	158.2	0.0	8619:
	15:43:00	67.1331	27257.4	0.4	158.2	0.0	8636:
	15:51:30	67.2747	27257.4	0.0	158.2	0.0	8653:
	16:00:00	67.4164	27257.6	0.3	158.2	0.0	8670:
	16:08:30	67.5581	27257.8	0.2	158.2	0.0	8687:
	16:17:00	67.6997	27257.9	0.1	158.2	0.0	8704:
	16:25:30	67.8414	27258.2	0.3	158.2	0.0	8721:
	16:34:00	67.9831	27262.7	4.5	158.2	0.0	8738:
	16:42:30	68.1247	27262.1	-0.6	158.2	0.0	8755:
	16:51:00	68.2664	27260.5	-1.6	158.2	0.0	8772:
	16:59:30	68.4081	27260.1	-0.3	158.2	0.0	8789:
	17:08:00	68.5497	27260.1	-0.1	158.2	0.0	8806:
	17:16:30	68.6914	27259.9	-0.1	158.2	0.0	8823:
	17:25:00	68.8331	27260.1	0.2	158.2	0.0	8840:
	17:33:30	68.9747	27260.2	0.1	158.2	0.0	8857:
	17:42:00	69.1164	27262.3	2.1	158.2	0.0	8874:
	17:50:30	69.2581	27262.3	-0.1	158.2	0.0	8891:
	17:59:00	69.3997	27262.1	-0.2	158.2	0.0	8908:
	18:07:30	69.5414	27261.6	-0.4	158.2	0.0	8925:
	18:16:00	69.6831	27261.5	-0.1	158.2	0.0	8942:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	18:24:30	69.8247	27261.4	-0.1	158.2	0.0	8959:
	18:33:00	69.9664	27261.5	0.1	158.2	0.0	8976:
	18:41:30	70.1081	27264.3	2.8	158.2	0.0	8993:
	18:50:00	70.2497	27261.1	-3.2	158.2	0.0	9010:
	18:58:30	70.3914	27263.4	2.3	158.2	0.0	9027:
	19:07:00	70.5331	27260.7	-2.7	158.2	0.0	9044:
	19:15:30	70.6747	27260.9	0.3	158.2	0.0	9061:
	19:24:00	70.8164	27264.6	3.7	158.2	0.0	9078:
	19:32:30	70.9581	27263.4	-1.2	158.2	0.0	9095:
	19:41:00	71.0997	27262.7	-0.6	158.2	0.0	9112:
	19:49:30	71.2414	27262.6	-0.1	158.2	0.0	9129:
	19:58:00	71.3831	27262.9	0.3	158.2	0.0	9146:
	20:06:30	71.5247	27262.9	0.0	158.2	0.0	9163:
	20:15:00	71.6664	27263.0	0.1	158.2	0.0	9180:
	20:23:30	71.8081	27263.3	0.3	158.2	0.0	9197:
	20:32:00	71.9497	27263.4	0.1	158.2	0.0	9214:
	20:40:30	72.0914	27263.6	0.1	158.2	0.0	9231:
	20:49:00	72.2331	27263.8	0.3	158.2	0.0	9248:
	20:57:30	72.3747	27263.8	-0.1	158.2	0.0	9265:
	21:06:00	72.5164	27266.8	3.0	158.2	0.0	9282:
	21:14:30	72.6581	27265.9	-0.9	158.2	0.0	9299:
	21:23:00	72.7997	27265.4	-0.6	158.2	0.0	9316:
	21:31:30	72.9414	27265.3	-0.1	158.2	0.0	9333:
	21:40:00	73.0831	27265.2	-0.1	158.2	0.0	9350:
	21:48:30	73.2247	27265.5	0.3	158.2	0.0	9367:
	21:57:00	73.3664	27265.6	0.1	158.2	0.0	9384:
	22:05:30	73.5081	27268.1	2.5	158.2	0.0	9401:
	22:14:00	73.6497	27266.9	-1.2	158.2	0.0	9418:
	22:22:30	73.7914	27266.7	-0.2	158.2	0.0	9435:
	22:31:00	73.9331	27266.7	0.0	158.2	0.0	9452:
	22:39:30	74.0747	27266.8	0.1	158.2	0.0	9469:
	22:48:00	74.2164	27266.9	0.1	158.2	0.0	9486:
	22:56:30	74.3581	27271.4	4.4	158.2	0.0	9503:
	23:05:00	74.4997	27269.0	-2.3	158.2	0.0	9520:
	23:13:30	74.6414	27268.2	-0.8	158.2	0.0	9537:
	23:22:00	74.7831	27268.0	-0.2	158.2	0.0	9554:
	23:30:30	74.9247	27268.0	0.0	158.2	0.0	9571:
	23:39:00	75.0664	27268.1	0.1	158.2	0.0	9588:
	23:47:30	75.2081	27267.8	-0.3	158.2	0.0	9605:
	23:56:00	75.3497	27268.0	0.1	158.2	0.0	9622:
1998/07/19	00:04:30	75.4914	27268.3	0.3	158.2	0.0	9639:
	00:13:00	75.6331	27268.4	0.1	158.2	0.0	9656:
	00:21:30	75.7747	27268.5	0.1	158.2	0.0	9673:
	00:30:00	75.9164	27268.6	0.1	158.2	0.0	9690:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt(hrs)	P (kPaG)	dP	T(°C)	dT	Pt. #
	00:38:30	76.0581	27268.7	0.1	158.2	0.0	9707:
	00:47:00	76.1997	27268.9	0.2	158.2	0.0	9724:
	00:55:30	76.3414	27269.0	0.1	158.2	0.0	9741:
	01:04:00	76.4831	27269.3	0.3	158.2	0.0	9758:
	01:12:30	76.6247	27269.3	0.0	158.2	0.0	9775:
	01:21:00	76.7664	27269.5	0.2	158.2	0.0	9792:
	01:29:30	76.9081	27269.6	0.1	158.2	0.0	9809:
	01:38:00	77.0497	27269.8	0.3	158.2	0.0	9826:
	01:46:30	77.1914	27269.8	-0.1	158.2	0.0	9843:
	01:55:00	77.3331	27270.0	0.3	158.2	0.0	9860:
	02:03:30	77.4747	27270.3	0.2	158.2	0.0	9877:
	02:12:00	77.6164	27270.9	0.7	158.2	0.0	9894:
	02:20:30	77.7581	27270.3	-0.7	158.2	0.0	9911:
	02:29:00	77.8997	27270.5	0.2	158.2	0.0	9928:
	02:37:30	78.0414	27270.5	0.1	158.2	0.0	9945:
	02:46:00	78.1831	27270.7	0.1	158.2	0.0	9962:
	02:54:30	78.3247	27270.8	0.1	158.2	0.0	9979:
	03:03:00	78.4664	27271.0	0.2	158.2	0.0	9996:
	03:11:30	78.6081	27271.1	0.1	158.2	0.0	10013:
	03:20:00	78.7497	27271.3	0.2	158.2	0.0	10030:
	03:28:30	78.8914	27271.4	0.1	158.2	0.0	10047:
	03:37:00	79.0331	27271.5	0.1	158.2	0.0	10064:
	03:45:30	79.1747	27271.6	0.1	158.2	0.0	10081:
	03:54:00	79.3164	27271.8	0.2	158.2	0.0	10098:
	04:02:30	79.4581	27272.0	0.2	158.2	0.0	10115:
	04:11:00	79.5997	27272.1	0.1	158.2	0.0	10132:
	04:19:30	79.7414	27272.3	0.1	158.2	0.0	10149:
	04:28:00	79.8831	27272.3	0.0	158.2	0.0	10166:
	04:36:30	80.0247	27272.5	0.3	158.2	0.0	10183:
	04:45:00	80.1664	27272.6	0.1	158.2	0.0	10200:
	04:53:30	80.3081	27272.7	0.1	158.2	0.0	10217:
	05:02:00	80.4497	27272.9	0.3	158.2	0.0	10234:
	05:10:30	80.5914	27273.0	0.1	158.2	0.0	10251:
	05:19:00	80.7331	27273.2	0.2	158.2	0.0	10268:
	05:27:30	80.8747	27273.4	0.2	158.2	0.0	10285:
	05:36:00	81.0164	27273.6	0.1	158.2	0.0	10302:
	05:44:30	81.1581	27273.7	0.1	158.2	0.0	10319:
	05:53:00	81.2997	27273.8	0.1	158.2	0.0	10336:
	06:01:30	81.4414	27274.0	0.1	158.2	0.0	10353:
	06:10:00	81.5831	27274.1	0.1	158.2	0.0	10370:
	06:18:30	81.7247	27274.3	0.1	158.2	0.0	10387:
	06:27:00	81.8664	27274.5	0.2	158.2	0.0	10404:
	06:35:30	82.0081	27274.5	0.0	158.2	0.0	10421:
	06:44:00	82.1497	27274.6	0.1	158.2	0.0	10438:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	06:52:30	82.2914	27274.7	0.1	158.2	0.0	10455:
	07:01:00	82.4331	27274.8	0.1	158.2	0.0	10472:
	07:09:30	82.5747	27275.0	0.2	158.2	0.0	10489:
	07:18:00	82.7164	27275.1	0.1	158.2	0.0	10506:
	07:26:30	82.8581	27275.1	0.0	158.2	0.0	10523:
	07:35:00	82.9997	27275.2	0.1	158.2	0.0	10540:
	07:43:30	83.1414	27275.4	0.2	158.2	0.0	10557:
	07:52:00	83.2831	27275.6	0.1	158.2	0.0	10574:
	08:00:30	83.4247	27275.8	0.2	158.2	0.0	10591:
	08:09:00	83.5664	27276.0	0.3	158.2	0.0	10608:
	08:17:30	83.7081	27276.1	0.1	158.2	0.0	10625:
	08:26:00	83.8497	27276.1	0.0	158.2	0.0	10642:
	08:34:30	83.9914	27276.2	0.1	158.2	0.0	10659:
	08:43:00	84.1331	27276.3	0.1	158.2	0.0	10676:
	08:51:30	84.2747	27276.5	0.1	158.2	0.0	10693:
	09:00:00	84.4164	27276.6	0.1	158.2	0.0	10710:
	09:08:30	84.5581	27276.7	0.1	158.2	0.0	10727:
	09:17:00	84.6997	27276.9	0.3	158.2	0.0	10744:
	09:25:30	84.8414	27276.9	-0.1	158.2	0.0	10761:
	09:34:00	84.9831	27276.9	0.1	158.2	0.0	10778:
	09:42:30	85.1247	27277.1	0.1	158.2	0.0	10795:
	09:51:00	85.2664	27277.3	0.2	158.2	0.0	10812:
	09:59:30	85.4081	27277.2	-0.1	158.2	0.0	10829:
	10:08:00	85.5497	27277.3	0.1	158.2	0.0	10846:
	10:16:30	85.6914	27277.7	0.4	158.2	0.0	10863:
	10:25:00	85.8331	27277.6	-0.1	158.2	0.0	10880:
	10:33:30	85.9747	27277.7	0.1	158.2	0.0	10897:
	10:42:00	86.1164	27277.8	0.1	158.2	0.0	10914:
	10:50:30	86.2581	27278.0	0.1	158.2	0.0	10931:
	10:59:00	86.3997	27278.2	0.2	158.2	0.0	10948:
	11:07:30	86.5414	27278.3	0.1	158.2	0.0	10965:
	11:16:00	86.6831	27278.5	0.1	158.2	0.0	10982:
	11:24:30	86.8247	27278.5	0.0	158.2	0.0	10999:
	11:33:00	86.9664	27278.7	0.2	158.2	0.0	11016:
	11:41:30	87.1081	27278.7	0.1	158.2	0.0	11033:
	11:50:00	87.2497	27278.9	0.2	158.2	0.0	11050:
	11:58:30	87.3914	27278.9	0.0	158.2	0.0	11067:
	12:07:00	87.5331	27279.2	0.2	158.2	0.0	11084:
	12:15:30	87.6747	27279.2	0.0	158.2	0.0	11101:
	12:24:00	87.8164	27279.4	0.2	158.2	0.0	11118:
	12:32:30	87.9581	27279.4	0.1	158.2	0.0	11135:
	12:41:00	88.0997	27279.6	0.1	158.2	0.0	11152:
	12:49:30	88.2414	27279.7	0.1	158.2	0.0	11169:
	12:58:00	88.3831	27279.7	0.0	158.2	0.0	11186:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	13:06:30	88.5247	27279.9	0.2	158.2	0.0	11203:
	13:15:00	88.6664	27280.0	0.1	158.2	0.0	11220:
	13:23:30	88.8081	27280.0	0.1	158.2	0.0	11237:
	13:32:00	88.9497	27280.3	0.3	158.2	0.0	11254:
	13:40:30	89.0914	27280.3	0.0	158.2	0.0	11271:
	13:49:00	89.2331	27280.4	0.1	158.2	0.0	11288:
	13:57:30	89.3747	27280.6	0.2	158.2	0.0	11305:
	14:06:00	89.5164	27280.6	0.0	158.2	0.0	11322:
	14:14:30	89.6581	27280.8	0.2	158.2	0.0	11339:
	14:23:00	89.7997	27280.9	0.1	158.2	0.0	11356:
	14:31:30	89.9414	27280.9	0.1	158.2	0.0	11373:
	14:40:00	90.0831	27281.2	0.2	158.2	0.0	11390:
	14:48:30	90.2247	27281.3	0.1	158.2	0.0	11407:
	14:57:00	90.3664	27281.4	0.1	158.2	0.0	11424:
	15:05:30	90.5081	27281.6	0.2	158.2	0.0	11441:
	15:14:00	90.6497	27281.6	0.1	158.2	0.0	11458:
	15:22:30	90.7914	27281.6	0.0	158.2	0.0	11475:
	15:31:00	90.9331	27281.6	0.0	158.2	0.0	11492:
	15:39:30	91.0747	27281.8	0.2	158.2	0.0	11509:
	15:48:00	91.2164	27281.9	0.1	158.2	0.0	11526:
	15:56:30	91.3581	27282.0	0.1	158.2	0.0	11543:
	16:05:00	91.4997	27282.1	0.1	158.2	0.0	11560:
	16:13:30	91.6414	27282.3	0.2	158.2	0.0	11577:
	16:22:00	91.7831	27282.5	0.1	158.2	0.0	11594:
	16:30:30	91.9247	27282.4	-0.1	158.2	0.0	11611:
	16:39:00	92.0664	27282.6	0.2	158.2	0.0	11628:
	16:47:30	92.2081	27282.7	0.1	158.2	0.0	11645:
	16:56:00	92.3497	27282.6	-0.1	158.2	0.0	11662:
	17:04:30	92.4914	27282.8	0.2	158.2	0.0	11679:
	17:13:00	92.6331	27282.8	0.0	158.2	0.0	11696:
	17:21:30	92.7747	27282.9	0.1	158.2	0.0	11713:
	17:30:00	92.9164	27283.1	0.1	158.2	0.0	11730:
	17:38:30	93.0581	27283.2	0.1	158.2	0.0	11747:
	17:47:00	93.1997	27283.4	0.2	158.2	0.0	11764:
	17:55:30	93.3414	27283.3	-0.1	158.2	0.0	11781:
	18:04:00	93.4831	27283.4	0.1	158.2	0.0	11798:
	18:12:30	93.6247	27283.6	0.2	158.2	0.0	11815:
	18:21:00	93.7664	27283.6	0.1	158.2	0.0	11832:
	18:29:30	93.9081	27283.6	0.0	158.2	0.0	11849:
	18:38:00	94.0497	27283.8	0.2	158.2	0.0	11866:
	18:46:30	94.1914	27284.0	0.1	158.2	0.0	11883:
	18:55:00	94.3331	27284.0	0.1	158.2	0.0	11900:
	19:03:30	94.4747	27284.1	0.1	158.2	0.0	11917:
	19:12:00	94.6164	27284.1	0.0	158.2	0.0	11934:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	19:20:30	94.7581	27284.3	0.1	158.2	0.0	11951:
	19:29:00	94.8997	27284.3	0.1	158.2	0.0	11968:
	19:37:30	95.0414	27284.5	0.1	158.2	0.0	11985:
	19:46:00	95.1831	27284.7	0.2	158.2	0.0	12002:
	19:54:30	95.3247	27284.8	0.1	158.2	0.0	12019:
	20:03:00	95.4664	27284.9	0.1	158.2	0.0	12036:
	20:11:30	95.6081	27285.0	0.1	158.2	0.0	12053:
	20:20:00	95.7497	27285.1	0.1	158.2	0.0	12070:
	20:28:30	95.8914	27285.1	0.1	158.2	0.0	12087:
	20:37:00	96.0331	27285.2	0.1	158.2	0.0	12104:
	20:45:30	96.1747	27285.3	0.1	158.2	0.0	12121:
	20:54:00	96.3164	27285.5	0.2	158.2	0.0	12138:
	21:02:30	96.4581	27285.5	0.0	158.2	0.0	12155:
	21:11:00	96.5997	27285.5	0.0	158.2	0.0	12172:
	21:19:30	96.7414	27285.7	0.2	158.2	0.0	12189:
	21:28:00	96.8831	27285.8	0.1	158.2	0.0	12206:
	21:36:30	97.0247	27285.8	0.0	158.2	0.0	12223:
	21:45:00	97.1664	27285.9	0.1	158.2	0.0	12240:
	21:53:30	97.3081	27286.0	0.1	158.2	0.0	12257:
	22:02:00	97.4497	27286.0	0.0	158.2	0.0	12274:
	22:10:30	97.5914	27286.3	0.3	158.2	0.0	12291:
	22:19:00	97.7331	27286.4	0.1	158.2	0.0	12308:
	22:27:30	97.8747	27286.5	0.1	158.2	0.0	12325:
	22:36:00	98.0164	27286.5	0.1	158.2	0.0	12342:
	22:44:30	98.1581	27286.6	0.1	158.2	0.0	12359:
	22:53:00	98.2997	27286.7	0.1	158.2	0.0	12376:
	23:01:30	98.4414	27286.7	0.1	158.2	0.0	12393:
	23:10:00	98.5831	27286.8	0.1	158.2	0.0	12410:
	23:18:30	98.7247	27286.8	0.0	158.2	0.0	12427:
	23:27:00	98.8664	27286.9	0.1	158.2	0.0	12444:
	23:35:30	99.0081	27287.0	0.1	158.2	0.0	12461:
	23:44:00	99.1497	27287.1	0.1	158.2	0.0	12478:
	23:52:30	99.2914	27287.4	0.2	158.2	0.0	12495:
1998/07/20	00:01:00	99.4331	27287.4	0.0	158.2	0.0	12512:
	00:09:30	99.5747	27287.4	0.0	158.2	0.0	12529:
	00:18:00	99.7164	27287.5	0.1	158.2	0.0	12546:
	00:26:30	99.8581	27287.8	0.3	158.2	0.0	12563:
	00:35:00	99.9997	27287.8	0.0	158.2	0.0	12580:
	00:43:30	100.1414	27287.8	0.0	158.2	0.0	12597:
	00:52:00	100.2831	27287.8	0.0	158.2	0.0	12614:
	01:00:30	100.4247	27288.0	0.2	158.2	0.0	12631:
	01:09:00	100.5664	27288.1	0.1	158.2	0.0	12648:
	01:17:30	100.7081	27288.2	0.1	158.2	0.0	12665:
	01:26:00	100.8497	27288.3	0.1	158.2	0.0	12682:

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.
 Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: P-66-A

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	01:34:30	100.9914	27288.3	0.1	158.2	0.0	12699:
	01:43:00	101.1331	27288.4	0.1	158.2	0.0	12716:
	01:51:30	101.2747	27288.5	0.1	158.2	0.0	12733:
	02:00:00	101.4164	27288.6	0.1	158.2	0.0	12750:
	02:08:30	101.5581	27288.7	0.1	158.2	0.0	12767:
	02:17:00	101.6997	27288.9	0.2	158.2	0.0	12784:
	02:25:30	101.8414	27288.9	0.0	158.2	0.0	12801:
	02:34:00	101.9831	27288.9	0.0	158.2	0.0	12818:
	02:42:30	102.1247	27289.0	0.1	158.2	0.0	12835:
	02:51:00	102.2664	27289.1	0.1	158.2	0.0	12852:
	02:59:30	102.4081	27289.2	0.1	158.2	0.0	12869:
	03:08:00	102.5497	27289.2	0.0	158.2	0.0	12886:
	03:16:30	102.6914	27289.4	0.2	158.2	0.0	12903:
	03:25:00	102.8331	27289.5	0.1	158.2	0.0	12920:
	03:33:30	102.9747	27289.6	0.1	158.2	0.0	12937:
	03:42:00	103.1164	27289.7	0.1	158.2	0.0	12954:
	03:50:30	103.2581	27289.8	0.1	158.2	0.0	12971:
	03:59:00	103.3997	27289.8	0.0	158.2	0.0	12988:
	04:07:30	103.5414	27289.8	0.1	158.2	0.0	13005:
	04:16:00	103.6831	27290.0	0.1	158.2	0.0	13022:
	04:24:30	103.8247	27290.0	0.1	158.2	0.0	13039:
	04:33:00	103.9664	27290.1	0.1	158.2	0.0	13056:
	04:41:30	104.1081	27290.2	0.1	158.2	0.0	13073:
	04:50:00	104.2497	27290.2	0.0	158.2	0.0	13090:
	04:58:30	104.3914	27290.4	0.2	158.2	0.0	13107:
	05:07:00	104.5331	27290.5	0.1	158.2	0.0	13124:
	05:15:30	104.6747	27290.6	0.1	158.2	0.0	13141:
	05:24:00	104.8164	27290.5	-0.1	158.2	0.0	13158:
	05:32:30	104.9581	27290.5	0.0	158.2	0.0	13175:
	05:41:00	105.0997	27290.8	0.3	158.2	0.0	13192:
	05:49:30	105.2414	27290.9	0.1	158.2	0.0	13209:
	05:58:00	105.3831	27291.1	0.2	158.2	0.0	13226:
	06:06:30	105.5247	27291.0	-0.1	158.2	0.0	13243:
	06:15:00	105.6664	27291.1	0.1	158.2	0.0	13260:
	06:23:30	105.8081	27291.1	0.1	158.2	0.0	13277:
	06:32:00	105.9497	27291.5	0.3	158.2	0.0	13294:
	06:40:30	106.0914	27291.5	0.0	158.2	0.0	13311:
	06:49:00	106.2331	27291.5	0.0	158.2	0.0	13328:
	06:57:30	106.3747	27291.6	0.1	158.2	0.0	13345:
	07:06:00	106.5164	27291.7	0.1	158.2	0.0	13362:
	07:14:30	106.6581	27291.8	0.1	158.2	0.0	13379:
	07:23:00	106.7997	27291.8	0.1	158.2	0.0	13396:
	07:31:30	106.9414	27291.8	0.0	158.2	0.0	13413:
	07:40:00	107.0831	27292.0	0.1	158.2	0.0	13430:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt(hrs)	P (kPaG)	dP	T(°C)	dT	Pt. #
	07:48:30	107.2247	27292.0	0.0	158.2	0.0	13447:
	07:57:00	107.3664	27292.1	0.1	158.2	0.0	13464:
	08:05:30	107.5081	27292.1	0.0	158.2	0.0	13481:
	08:14:00	107.6497	27292.3	0.1	158.2	0.0	13498:
	08:22:30	107.7914	27292.3	0.0	158.2	0.0	13515:
	08:31:00	107.9331	27292.4	0.1	158.2	0.0	13532:
	08:39:30	108.0747	27292.5	0.1	158.2	0.0	13549:
	08:48:00	108.2164	27292.5	0.0	158.2	0.0	13566:
	08:56:30	108.3581	27292.6	0.1	158.2	0.0	13583:
	09:05:00	108.4997	27292.7	0.1	158.2	0.0	13600:
	09:13:30	108.6414	27292.8	0.1	158.2	0.0	13617:
	09:22:00	108.7831	27292.9	0.1	158.2	0.0	13634:
	09:30:30	108.9247	27293.0	0.1	158.2	0.0	13651:
	09:39:00	109.0664	27293.0	0.0	158.2	0.0	13668:
	09:47:30	109.2081	27293.0	0.0	158.2	0.0	13685:
	09:56:00	109.3497	27293.4	0.3	158.2	0.0	13702:
	10:04:30	109.4914	27293.4	0.0	158.2	0.0	13719:
	10:13:00	109.6331	27293.4	0.1	158.2	0.0	13736:
	10:21:30	109.7747	27293.5	0.1	158.2	0.0	13753:
	10:30:00	109.9164	27293.5	0.0	158.2	0.0	13770:
	10:38:30	110.0581	27293.7	0.2	158.2	0.0	13787:
	10:47:00	110.1997	27293.7	0.0	158.2	0.0	13804:
	10:55:30	110.3414	27293.8	0.1	158.2	0.0	13821:
	11:04:00	110.4831	27293.8	0.0	158.2	0.0	13838:
	11:12:30	110.6247	27294.0	0.1	158.2	0.0	13855:
	11:21:00	110.7664	27294.0	0.0	158.2	0.0	13872:
	11:29:30	110.9081	27294.2	0.2	158.2	0.0	13889:
	11:38:00	111.0497	27294.3	0.1	158.2	0.0	13906:
	11:46:30	111.1914	27294.3	0.0	158.2	0.0	13923:
	11:55:00	111.3331	27294.3	0.0	158.2	0.0	13940:
	12:03:30	111.4747	27294.5	0.2	158.2	0.0	13957:
	12:12:00	111.6164	27294.5	0.0	158.2	0.0	13974:
	12:20:30	111.7581	27294.5	0.1	158.2	0.0	13991:
	12:29:00	111.8997	27294.7	0.1	158.2	0.0	14008:
	12:37:30	112.0414	27294.7	0.0	158.2	0.0	14025:
	12:46:00	112.1831	27294.7	0.0	158.2	0.0	14042:
	12:54:30	112.3247	27294.9	0.2	158.2	0.0	14059:
	13:03:00	112.4664	27294.9	0.1	158.2	0.0	14076:
	13:11:30	112.6081	27294.9	0.0	158.2	0.0	14093:
	13:20:00	112.7497	27295.1	0.2	158.2	0.0	14110:
	13:28:30	112.8914	27295.1	-0.1	158.2	0.0	14127:
	13:37:00	113.0331	27295.2	0.1	158.2	0.0	14144:
	13:45:30	113.1747	27295.2	0.0	158.2	0.0	14161:
	13:54:00	113.3164	27295.4	0.2	158.2	0.0	14178:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	14:02:30	113.4581	27295.5	0.1	158.2	0.0	14195:
	14:11:00	113.5997	27295.6	0.1	158.2	0.0	14212:
	14:19:30	113.7414	27295.6	0.0	158.2	0.0	14229:
	14:28:00	113.8831	27295.7	0.1	158.2	0.0	14246:
	14:36:30	114.0247	27295.8	0.1	158.2	0.0	14263:
	14:45:00	114.1664	27295.8	0.1	158.2	0.0	14280:
	14:53:30	114.3081	27295.9	0.1	158.2	0.0	14297:
	15:02:00	114.4497	27295.9	0.0	158.2	0.0	14314:
	15:10:30	114.5914	27296.0	0.1	158.2	0.0	14331:
	15:19:00	114.7331	27296.1	0.1	158.2	0.0	14348:
	15:27:30	114.8747	27296.0	-0.1	158.2	0.0	14365:
	15:36:00	115.0164	27296.2	0.1	158.2	0.0	14382:
	15:44:30	115.1581	27296.3	0.1	158.2	0.0	14399:
	15:53:00	115.2997	27296.3	0.0	158.2	0.0	14416:
	16:01:30	115.4414	27296.5	0.1	158.2	0.0	14433:
	16:10:00	115.5831	27296.5	0.0	158.2	0.0	14450:
	16:18:30	115.7247	27296.6	0.1	158.2	0.0	14467:
	16:27:00	115.8664	27296.7	0.1	158.2	0.0	14484:
	16:35:30	116.0081	27296.7	0.0	158.2	0.0	14501:
	16:44:00	116.1497	27296.8	0.1	158.2	0.0	14518:
	16:52:30	116.2914	27296.9	0.1	158.2	0.0	14535:
	17:01:00	116.4331	27296.9	0.1	158.2	0.0	14552:
	17:09:30	116.5747	27296.9	0.0	158.2	0.0	14569:
	17:18:00	116.7164	27296.9	0.0	158.2	0.0	14586:
	17:26:30	116.8581	27296.9	0.0	158.2	0.0	14603:
	17:35:00	116.9997	27297.2	0.3	158.2	0.0	14620:
	17:43:30	117.1414	27297.4	0.1	158.2	0.0	14637:
	17:52:00	117.2831	27297.4	0.1	158.2	0.0	14654:
	18:00:30	117.4247	27297.4	0.0	158.2	0.0	14671:
	18:09:00	117.5664	27297.5	0.1	158.2	0.0	14688:
	18:17:30	117.7081	27297.6	0.1	158.2	0.0	14705:
	18:26:00	117.8497	27297.6	-0.1	158.2	0.0	14722:
	18:34:30	117.9914	27297.8	0.3	158.2	0.0	14739:
	18:43:00	118.1331	27297.9	0.1	158.2	0.0	14756:
	18:51:30	118.2747	27298.0	0.1	158.2	0.0	14773:
	19:00:00	118.4164	27298.0	0.0	158.2	0.0	14790:
	19:08:30	118.5581	27298.2	0.1	158.2	0.0	14807:
	19:17:00	118.6997	27298.2	0.0	158.2	0.0	14824:
	19:25:30	118.8414	27298.3	0.1	158.2	0.0	14841:
	19:34:00	118.9831	27298.3	0.0	158.2	0.0	14858:
	19:42:30	119.1247	27298.3	-0.1	158.2	0.0	14875:
	19:51:00	119.2664	27297.6	-0.6	158.2	0.0	14892:
	19:59:30	119.4081	27297.9	0.3	158.2	0.0	14909:
	20:08:00	119.5497	27298.0	0.1	158.2	0.0	14926:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	20:16:30	119.6914	27298.1	0.1	158.2	0.0	14943:
	20:25:00	119.8331	27298.2	0.1	158.2	0.0	14960:
	20:33:30	119.9747	27298.3	0.1	158.2	0.0	14977:
	20:42:00	120.1164	27298.4	0.1	158.2	0.0	14994:
	20:50:30	120.2581	27298.4	0.0	158.2	0.0	15011:
	20:59:00	120.3997	27298.5	0.1	158.2	0.0	15028:
	21:07:30	120.5414	27298.9	0.3	158.2	0.0	15045:
	21:16:00	120.6831	27298.9	0.1	158.2	0.0	15062:
	21:24:30	120.8247	27298.9	0.0	158.2	0.0	15079:
	21:33:00	120.9664	27298.9	0.0	158.2	0.0	15096:
	21:41:30	121.1081	27295.6	-3.3	158.2	0.0	15113:
	21:50:00	121.2497	27290.7	-5.0	158.2	0.0	15130:
	21:58:30	121.3914	27290.4	-0.3	158.1	-0.1	15147:
	22:07:00	121.5331	27290.1	-0.3	158.1	0.0	15164:
	22:15:30	121.6747	27290.3	0.2	158.1	0.0	15181:
	22:24:00	121.8164	27290.3	-0.1	158.1	0.0	15198:
	22:32:30	121.9581	27288.8	-1.4	158.1	0.0	15215:
	22:41:00	122.0997	27288.7	-0.1	158.1	0.0	15232:
	22:49:30	122.2414	27288.9	0.2	158.1	0.0	15249:
	22:58:00	122.3831	27289.1	0.1	158.1	0.0	15266:
	23:06:30	122.5247	27116.7	-172.4	157.8	-0.3	15283:
	23:15:00	122.6664	26993.6	-123.1	157.7	-0.1	15300:
	23:23:30	122.8081	26960.9	-32.7	157.3	-0.3	15317:
	23:32:00	122.9497	26958.6	-2.3	157.3	-0.1	15334:
	23:40:30	123.0914	26750.7	-207.9	156.8	-0.4	15351:
	23:49:00	123.2331	26676.7	-74.1	156.1	-0.8	15368:
	23:57:30	123.3747	26610.9	-65.8	155.1	-1.0	15385:
1998/07/21	00:06:00	123.5164	26561.5	-49.4	153.0	-2.1	15402:
	00:14:30	123.6581	26442.5	-118.9	150.8	-2.2	15419:
	00:23:00	123.7997	26348.9	-93.6	149.2	-1.6	15436:
	00:31:30	123.9414	26256.0	-92.9	147.3	-1.9	15453:
	00:40:00	124.0831	26155.9	-100.1	145.3	-2.0	15470:
	00:48:30	124.2247	26059.0	-96.9	142.9	-2.4	15487:
	00:57:00	124.3664	25958.3	-100.7	139.7	-3.2	15504:
	01:05:30	124.5081	25843.5	-114.7	136.1	-3.6	15521:
	01:14:00	124.6497	25722.7	-120.8	132.8	-3.3	15538:
	01:22:30	124.7914	25600.5	-122.2	129.6	-3.3	15555:
	01:31:00	124.9331	25475.8	-124.7	126.3	-3.2	15572:
	01:39:30	125.0747	25345.2	-130.5	122.8	-3.5	15589:
	01:48:00	125.2164	25207.6	-137.6	119.5	-3.3	15606:
	01:56:30	125.3581	25072.6	-135.0	116.4	-3.1	15623:
	02:05:00	125.4997	24864.5	-208.1	112.3	-4.2	15640:
	02:13:30	125.6414	24529.7	-334.8	106.1	-6.2	15657:
	02:22:00	125.7831	24209.4	-320.3	98.8	-7.3	15674:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	02:30:30	125.9247	23934.2	-275.2	92.2	-6.6	15691:
	02:39:00	126.0664	23665.8	-268.5	84.9	-7.3	15708:
	02:47:30	126.2081	23385.9	-279.9	77.0	-7.9	15725:
	02:56:00	126.3497	23092.6	-293.3	68.1	-8.9	15742:
	03:04:30	126.4914	22781.1	-311.4	58.1	-10.0	15759:
	03:13:00	126.6331	22456.8	-324.3	48.5	-9.6	15776:
	03:21:30	126.7747	22113.8	-343.0	40.3	-8.2	15793:
	03:30:00	126.9164	21803.2	-310.6	33.0	-7.3	15810:
	03:38:30	127.0581	21800.7	-2.6	29.0	-3.9	15827:
	03:47:00	127.1997	21798.9	-1.8	27.7	-1.4	15844:
	03:55:30	127.3414	21797.5	-1.4	27.2	-0.4	15861:
	04:04:00	127.4831	21796.2	-1.3	27.1	-0.2	15878:
	04:12:30	127.6247	21794.9	-1.2	27.0	-0.1	15895:
	04:21:00	127.7664	21793.5	-1.4	27.0	-0.0	15912:
	04:29:30	127.9081	21792.2	-1.2	27.0	-0.0	15929:
	04:38:00	128.0497	21790.8	-1.4	26.9	-0.0	15946:
	04:46:30	128.1914	21789.1	-1.7	26.9	-0.0	15963:
	04:55:00	128.3331	21787.4	-1.7	26.9	0.0	15980:
	05:03:30	128.4747	21344.1	-443.3	24.4	-2.5	15997:
	05:12:30	128.6247	45.4	-21298.7	14.4	-10.0	16014:
1998/07/21	05:20:00	128.7497	0.0	-45.4	10.5	-3.9	16029:

End Data Acquisition:

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.
 Reporting on an interval of 1 in 17 data points.

N.E.B. COPY

RANGER OIL LIMITED

RANGER FORT LIARD

P-66-A

STATIC GRADIENT & FLOW / BUILD-UP

1. GENTRONIC METZLINE QUARTZ - BOTTOM DATA
2. GENTRONIC METZLINE QUARTZ - STATIC GRADIENT PLOT
3. GENTRONIC METZLINE QUARTZ - BOTTOM PLOTS
4. GENTRONIC METZLINE QUARTZ - TOP PLOTS
5. COMPARISON PLOT
6. GENTRONIC METZLINE QUARTZ - BOTTOM TRANSIENT DATA

Test Date: July 21 - 23, 1998

Report By: Pat Mulgrew

**MICROFILMED
SUR MICROFILM:**

MICROFILMED
SUR MICROFILM:

(403) 250-3800

GENCO Pressure Control Limited

CALGARY, AB.

SUBSURFACE PRESSURE MEASUREMENTS

Basic Data:

Company <u>Ranger Oil Limited</u>	Gentronics Electronic Gauge
Address <u>#1600, 321 - 6Th. Ave. S.W.</u>	c/w Memory Recorder
<u>Calgary, AB.</u>	S/N: <u>GMQ-9812</u>
<u>T2P 3H3</u>	
Well Name <u>Ranger Fort Liard</u>	Field & Pool <u>Liard / Nihanni</u>
Well Identifier <u>P-66-A</u>	Type of Test <u>St. Grad. & Flow / B.U.</u>
Status <u>Shut in Gas</u>	Date of Test <u>Jul 21 - 23, 1998</u>
DWG Tubing Pressure <u>N/A</u> kPa	DWG Casing Pressure <u>N/A</u> kPa
Tubing <u>88.9</u> mm @ <u>3082.4</u> m KB	Casing <u>177.8</u> mm @ <u>3499.0</u> m KB
Producing Interval <u>3115 - 3334 m KB</u>	Producing Through <u>Tubing</u>
Elevation <u>449.54</u> m CF, <u>459.89</u> m KB	MPP Interval <u>3214.2</u> m CF
Datum Depth of Well _____ m CF	Run Depth <u>3347</u> m CF
Temperature at Run Depth <u>157.8</u> °C	Pool Datum _____ m (subsea)
Pressure at Run Depth <u>27287</u> kPaG	Gradient at Run Depth <u>8.71</u> kPa/m
MPP Pressure <u>26656</u> kPaG	Datum Depth Pressure _____ kPaG
Final Buildup Pressure <u>27251</u> kPaG	Date on Bottom <u>July 21, 1998</u>
Date off Bottom <u>July 23, 1998</u>	Shut in Date <u>July 22, 1998</u>

Summary:

Tandem LMR Quartz Recorders ran within Specifications.

First 2 - 3 Hours of run data not available. High Temp batteries failed to power up until sufficient temperature was attained.

Preparation Data:

Tested By <u>GENCO</u>	Computed By <u>P. Mulgrew</u>	Report Date <u>Jul 30, 1998</u>
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BOTTOM GAUGE

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

OPERATIONS SUMMARY

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: **P-66-A**

Bottom Gauge

Date	Time	dt(hrs)	P(kpaG)	T(°C)	Pt. #	Remarks
1998/07/21	15:50:04	0.0000	24404.8	79.3	1 :	Begin Data Acquisition
	15:50:04	0.0000	24404.8	79.3	3 :	@ 1500 mCF
	16:04:38	0.2428	25138.0	100.4	627 :	@ 2000 mCF
	16:23:40	0.5600	25730.9	118.6	741 :	@ 2500 mCF
	16:39:01	0.8158	26283.9	135.1	833 :	@ 3000 mCF
	16:49:38	0.9928	26432.0	146.6	897 :	@ 3080 mCF
	17:00:30	1.1739	26490.3	149.7	962 :	@ 3090 mCF
	17:11:00	1.3489	26502.4	150.4	1025 :	@ 3100 mCF
	17:22:49	1.5458	26515.9	151.1	1096 :	@ 3110 mCF
	17:32:29	1.7069	26529.9	151.4	1154 :	@ 3120 mCF
	17:43:38	1.8928	26549.4	151.6	1221 :	@ 3130 mCF
	17:52:10	2.0350	26562.1	151.2	1272 :	@ 3140 mCF
	18:02:50	2.2128	26570.4	151.3	1336 :	@ 3150 mCF
	18:13:38	2.3928	26578.3	152.6	1401 :	@ 3160 mCF
	18:24:08	2.5678	26594.6	153.3	1464 :	@ 3170 mCF
	18:34:49	2.7458	26610.3	153.7	1528 :	@ 3180 mCF
	18:44:22	2.9050	26624.1	153.9	1585 :	@ 3190 mCF
	18:57:19	3.1208	26637.2	154.1	1663 :	@ 3200 mCF
	19:07:38	3.2928	26650.0	154.2	1725 :	@ 3210 mCF
	19:18:52	3.4800	26662.8	154.4	1792 :	@ 3220 mCF
	19:29:40	3.6600	26675.6	154.7	1857 :	@ 3230 mCF
	19:40:31	3.8408	26688.4	154.9	1922 :	@ 3240 mCF
	19:51:41	4.0269	26702.7	155.2	1989 :	@ 3250 mCF

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

OPERATIONS SUMMARY

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: **P-66-A**

Bottom Gauge

Date	Time	dt(hrs)	P(kPaG)	T(°C)	Pt. #	Remarks
1998/07/21	20:02:29	4.2069	26715.7	155.4	2054:	@ 3260 mCF
	20:13:31	4.3908	26728.8	155.7	2120:	@ 3270 mCF
	20:24:59	4.5819	26742.4	155.9	2189:	@ 3280 mCF
	20:35:50	4.7628	26802.6	155.8	2254:	@ 3290 mCF
	20:46:31	4.9408	26880.6	156.4	2318:	@ 3300 mCF
	20:57:52	5.1300	26968.0	156.9	2386:	@ 3310 mCF
	21:08:50	5.3128	27054.3	157.2	2452:	@ 3320 mCF
	21:20:22	5.5050	27138.8	157.4	2521:	@ 3330 mCF
	21:31:31	5.6908	27225.6	157.7	2588:	@ 3340 mCF
	21:41:29	5.8569	27286.6	157.8	2648:	@ 3347 mCF (run depth)
	21:57:59	6.1319	27270.3	158.0	2747:	Well Open to Flow
1998/07/22	08:06:01	16.2658	26872.8	158.2	6395:	Well Shut in.
1998/07/23	06:41:50	38.8628	27251.0	158.2	14530:	Recorders Off Bottom
	11:30:41	43.6769	21539.5	29.5	16263 :	Recorders in Lubricator BOP Closed
	11:39:41	43.8269	15.8	20.8	16312 :	End Data Acquisition

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

STATIC GRADIENT SURVEY

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: **P-66-A**

Bottom Gauge

Depth (meters)	Pressure (kPaG)	Gradient (kPa/m)	Temp (°C)	Gradient (°C/m)
At Surface: 1998/07/21 15:50:04 (Running In)				
1500	24405	-----	79.3	-----
2000	25138	1.47	100.4	0.042
2500	25731	1.19	118.6	0.036
3000	26284	1.11	135.1	0.033
3080	26432	1.85	146.6	0.144
3090	26490	5.83	149.7	0.310
3100	26502	1.21	150.4	0.070
3110	26516	1.35	151.1	0.070
3120	26530	1.40	151.4	0.030
3130	26549	1.95	151.6	0.020
3140	26562	1.27	151.2	-----
3150	26570	0.83	151.3	0.010
3160	26578	0.79	152.6	0.130
3170	26595	1.63	153.3	0.070
3180	26610	1.57	153.7	0.040
3190	26624	1.38	153.9	0.020
3200	26637	1.31	154.1	0.020
3210	26650	1.28	154.2	0.010
3220	26663	1.28	154.4	0.020
3230	26676	1.28	154.7	0.030

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

STATIC GRADIENT SURVEY

Company: **Ranger Oil Limited**
Ranger Fort Liard

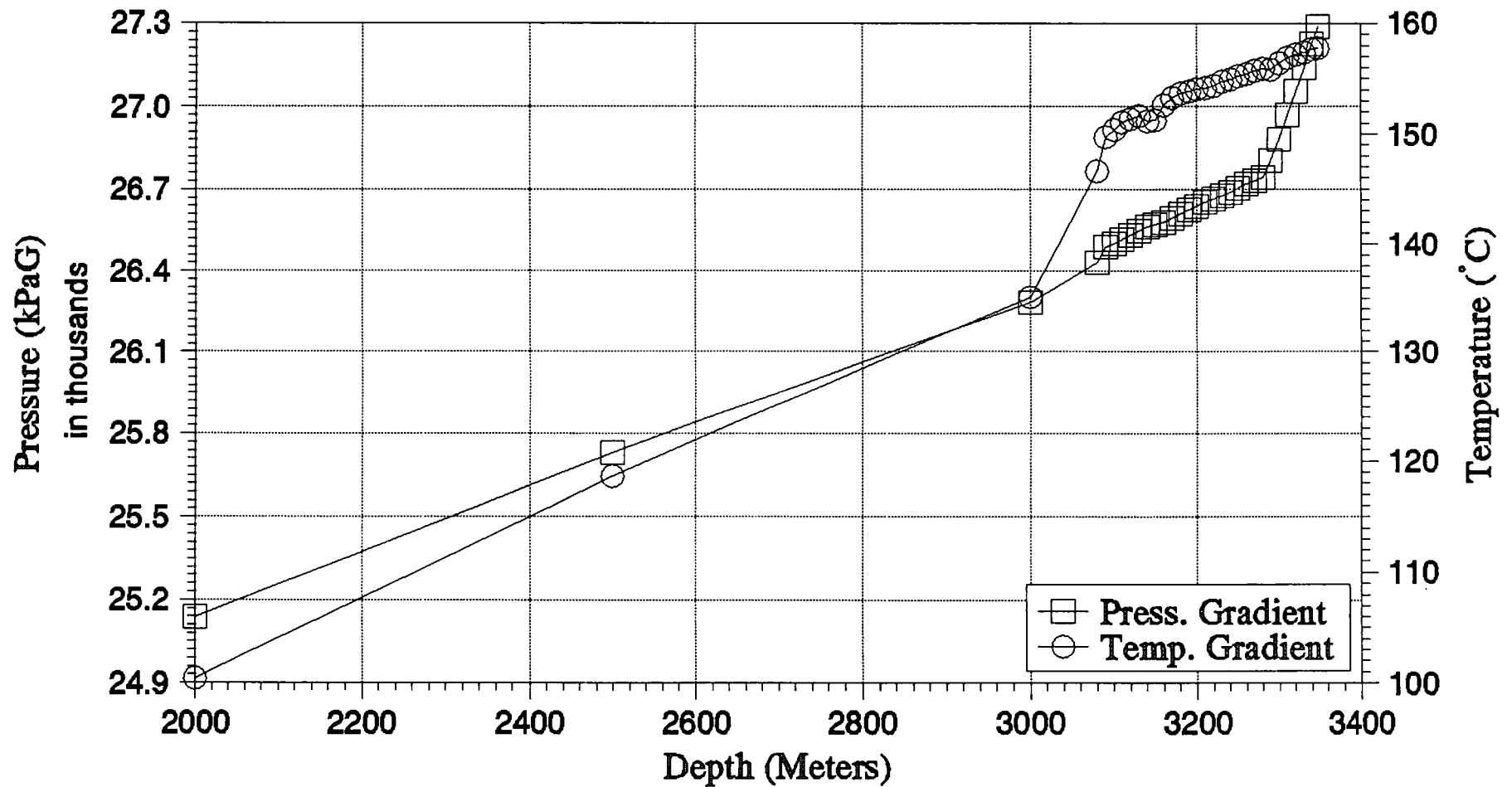
LSD: **P-66-A**

Bottom Gauge

Depth (meters)	Pressure (kPaG)	Gradient (kPa/m)	Temp (°C)	Gradient (°C/m)
At Surface: 1998/07/21 15:50:04 (Running In)				
3240	26688	1.28	154.9	0.020
3250	26703	1.43	155.2	0.030
3260	26716	1.30	155.4	0.020
3270	26729	1.31	155.7	0.030
3280	26742	1.36	155.9	0.020
3290	26803	6.02	155.8	-----
3300	26881	7.80	156.4	0.060
3310	26968	8.74	156.9	0.050
3320	27054	8.63	157.2	0.030
3330	27139	8.45	157.4	0.020
3340	27226	8.68	157.7	0.030
3347	27287	8.71	157.8	0.014

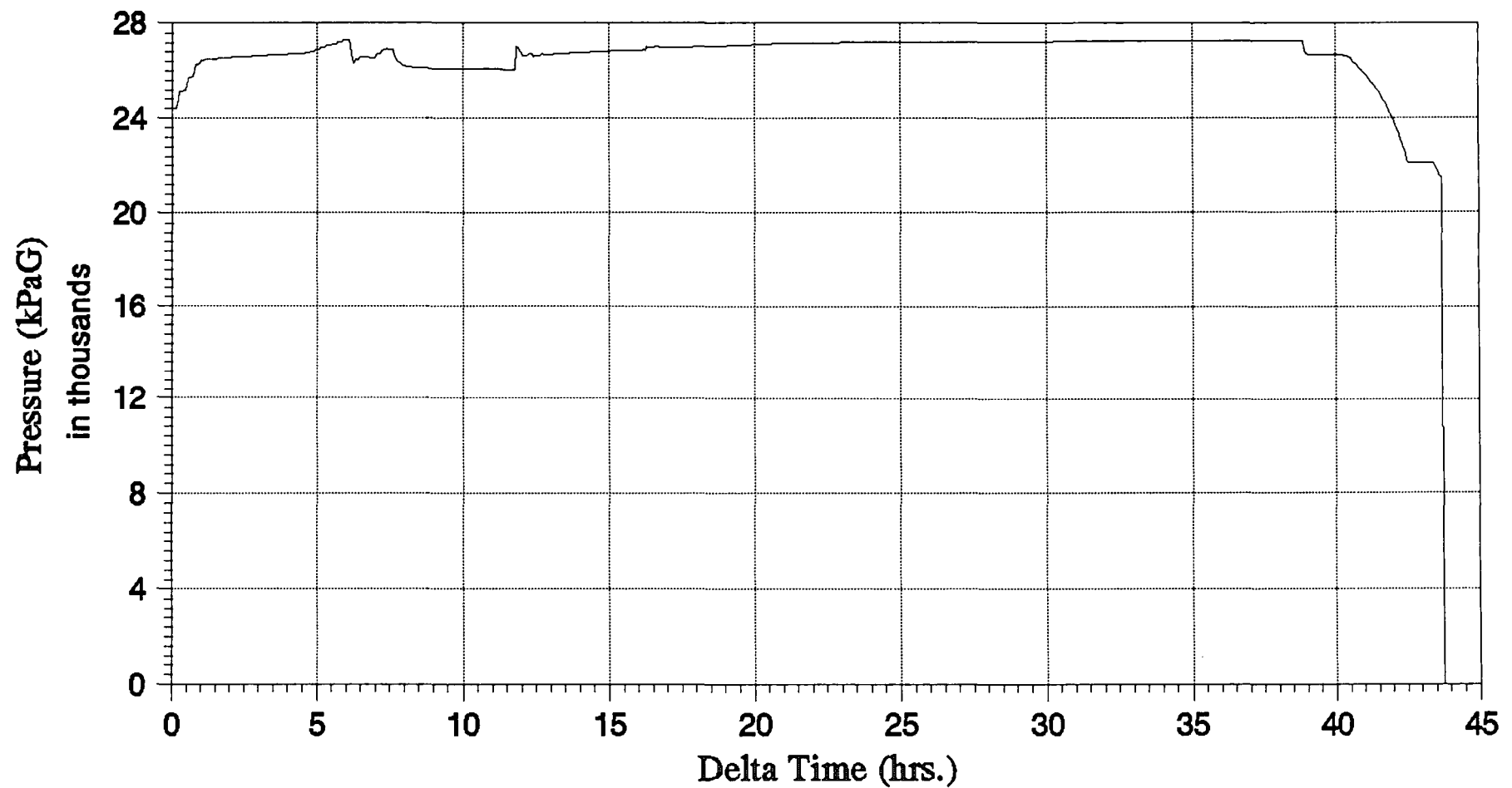
Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.

Ranger Oil Limited
P-66-A
Gentronics Quartz Static Gradient Survey



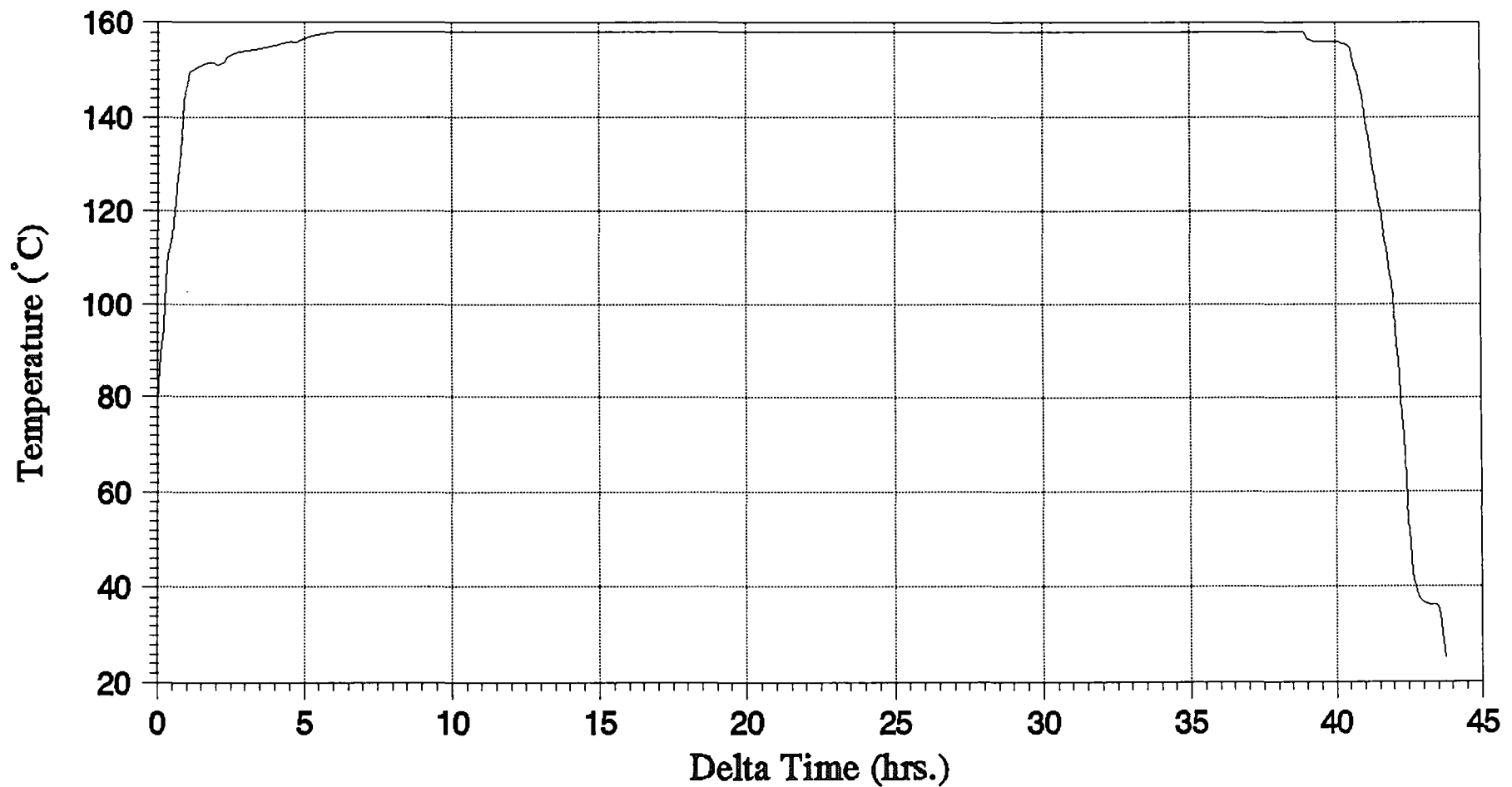
GENCO PRESSURE CONTROL LTD (403)250-3800
Start Aquisition: 1998/07/21 15:50:04
End Aquisition: 1998/07/23 11:39:41

Ranger Oil Limited
P-66-A
Gentronics Quartz Bottom Gauge Pressures



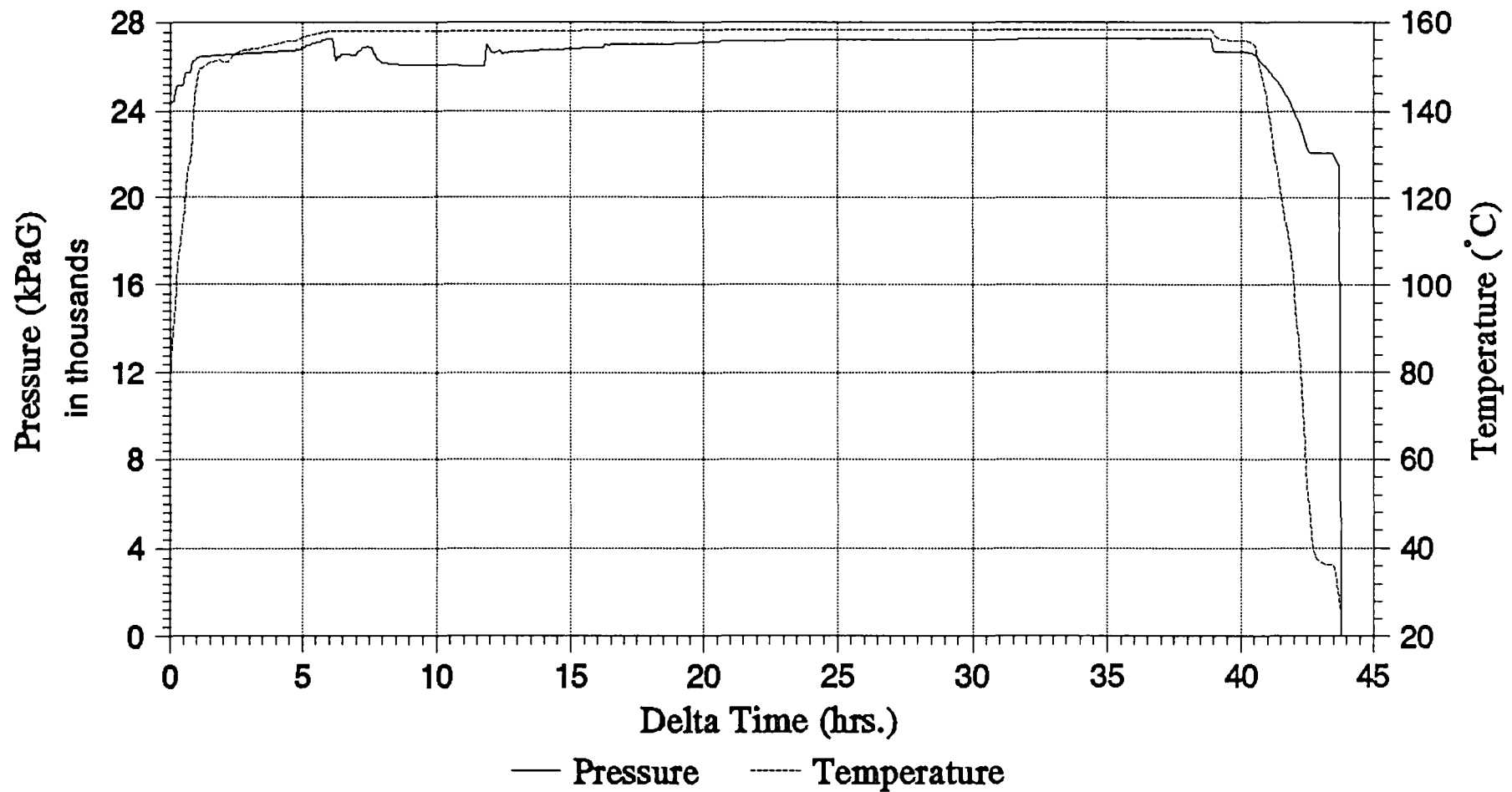
GENCO PRESSURE CONTROL LTD (403)250-3800
Start Aquisition: 1998/07/21 15:50:04
End Aquisition: 1998/07/23 11:39:41

Ranger Oil Limited
P-66-A
Gentronics Quartz Bottom Gauge Temp.



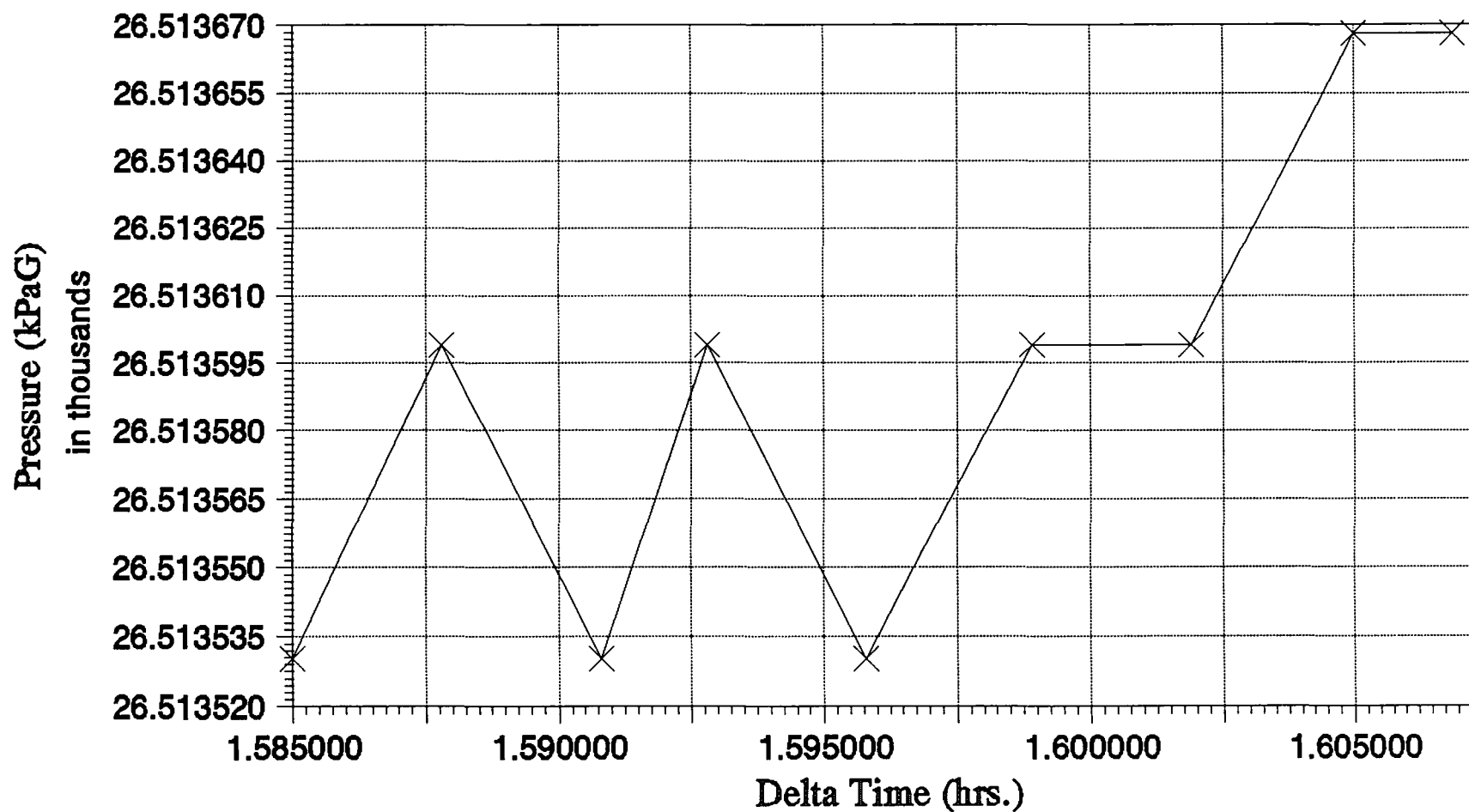
GENCO PRESSURE CONTROL LTD (403)250-3800
Start Aquisition: 1998/07/21 15:50:04
End Aquisition: 1998/07/23 11:39:41

Ranger Oil Limited
P-66-A
Gentronics Quartz Bottom Pressure/Temp



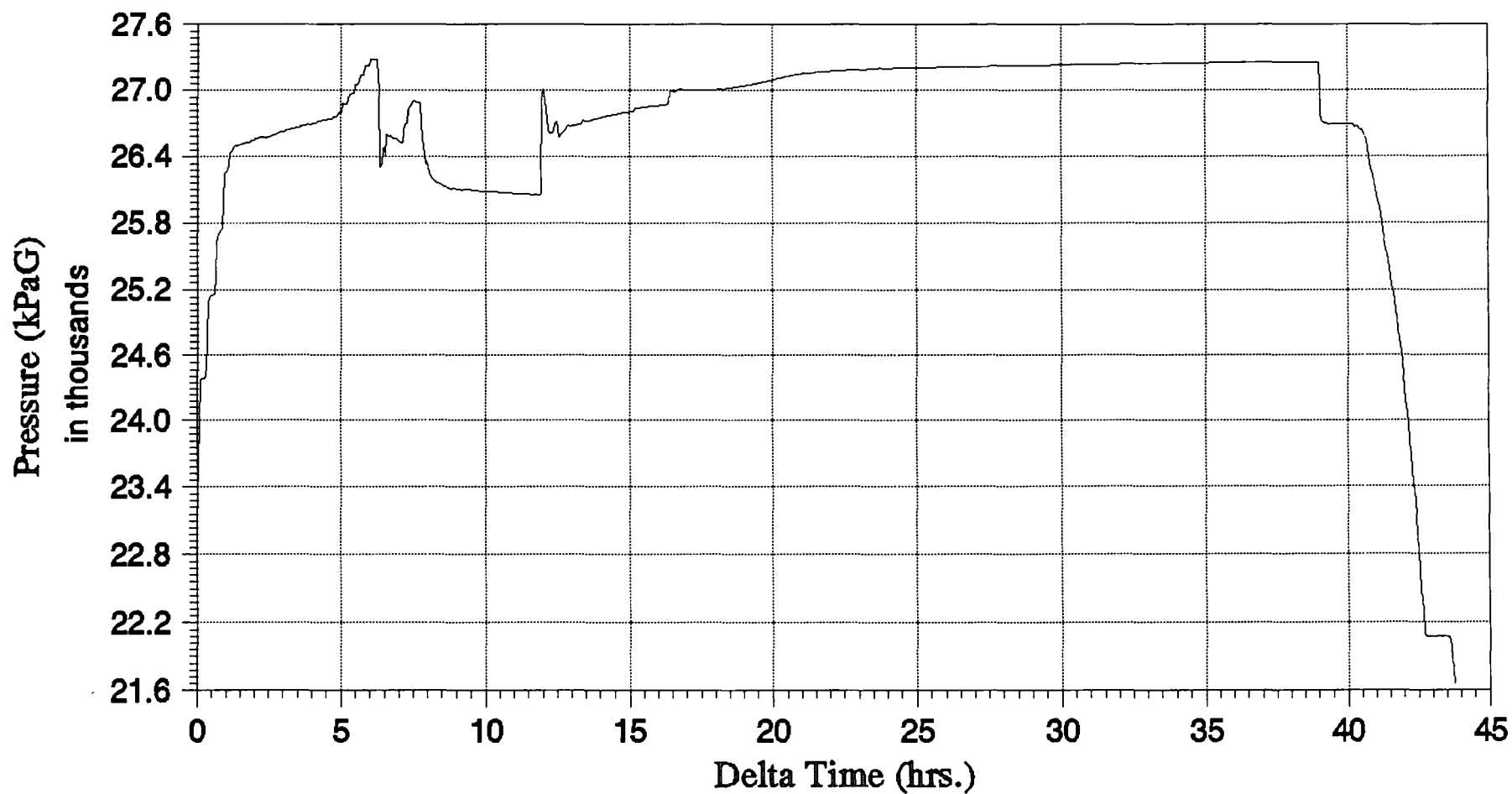
GENCO PRESSURE CONTROL LTD (403)250-3800
Start Acquisition: 1998/07/21 15:50:04
End Acquisition: 1998/07/23 11:39:41

Ranger Oil Limited
P-66-A
Bottom Gauge Apparent Resolution



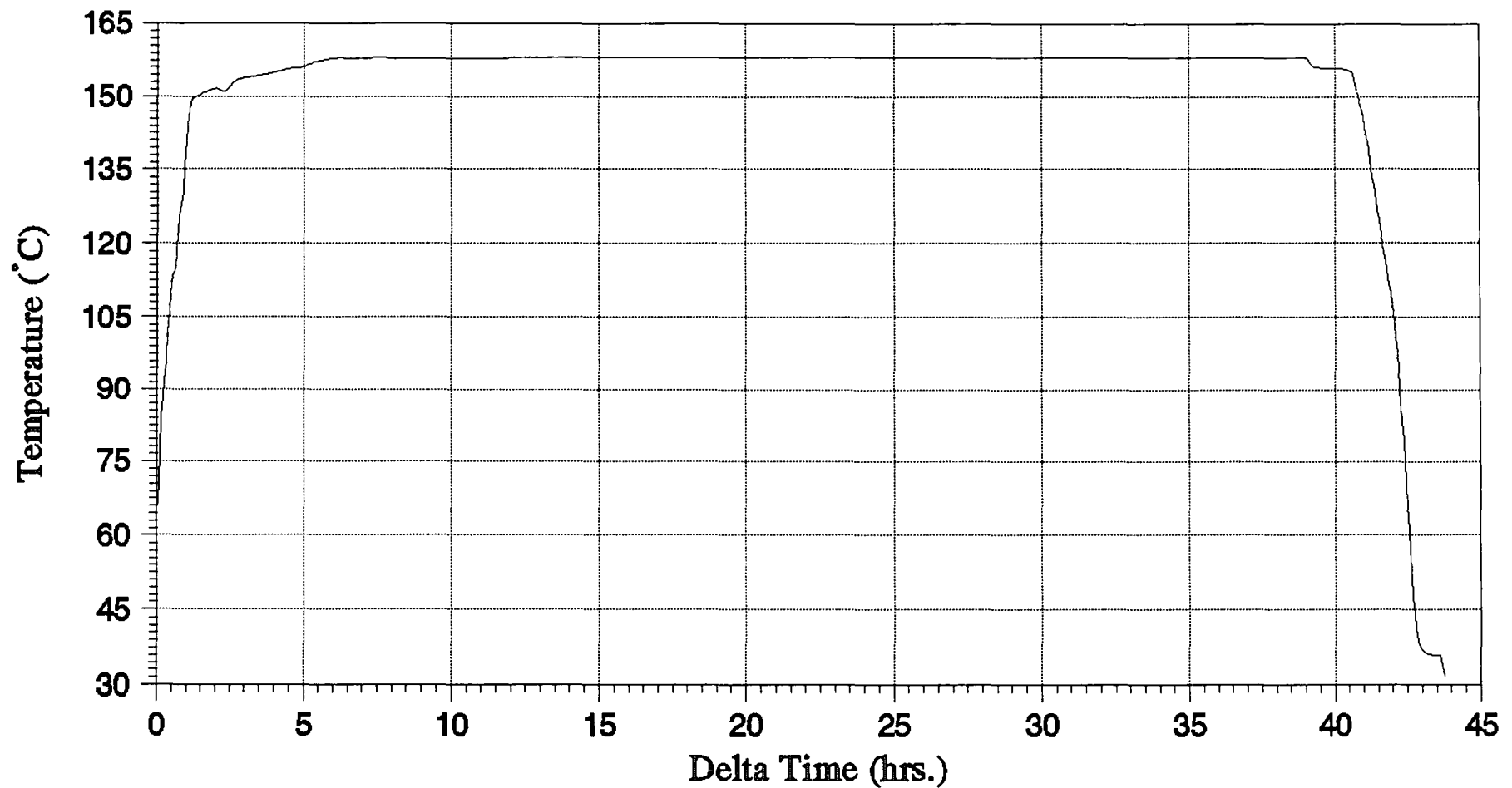
GENCO PRESSURE CONTROL LTD (403)250-3800
Start Aquisition: 1998/07/21 15:50:04
End Aquisition: 1998/07/23 11:39:41

Ranger Oil Limited
P-66-A
Gentronics Quartz Top Gauge Pressures



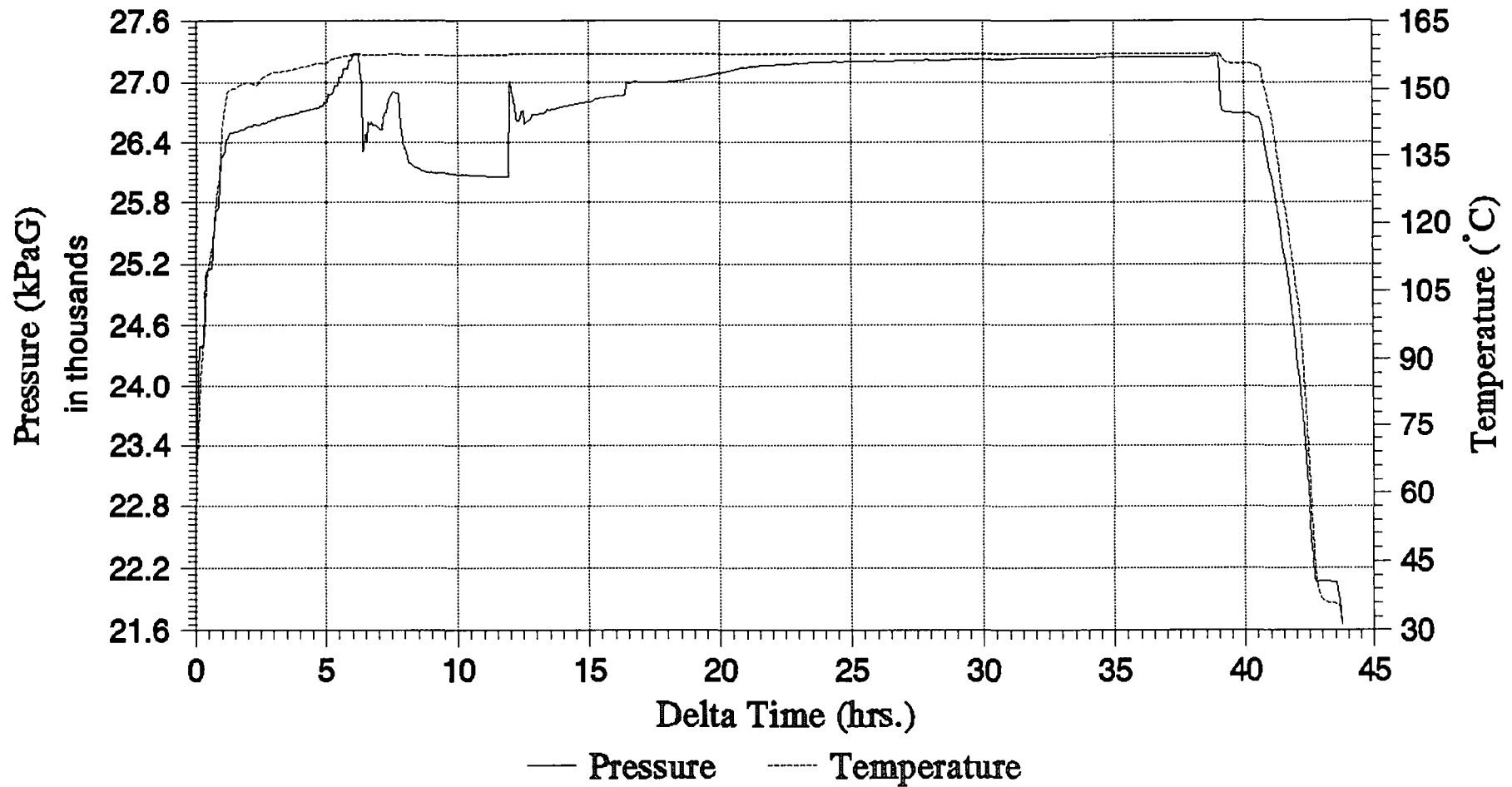
GENCO PRESSURE CONTROL LTD (403)250-3800
Start Aquisition: 1998/07/21 15:50:04
End Aquisition: 1998/07/23 11:39:41

Ranger Oil Limited
P-66-A
Gentronics Quartz Top Gauge Temp.



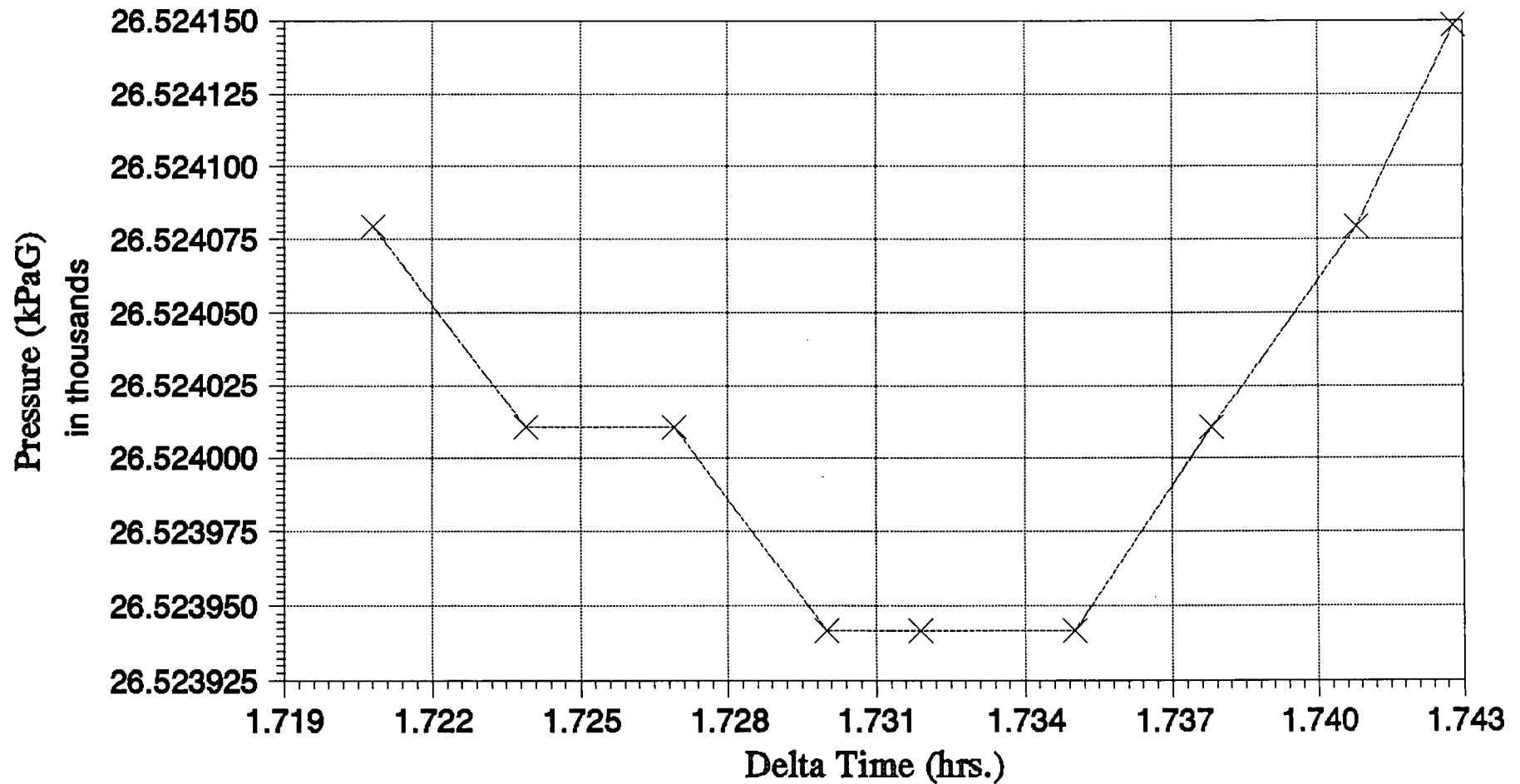
GENCO PRESSURE CONTROL LTD (403)250-3800
Start Aquisition: 1998/07/21 15:50:04
End Aquisition: 1998/07/23 11:39:41

Ranger Oil Limited
P-66-A
Gentronic Quartz Top Pressure/Temp



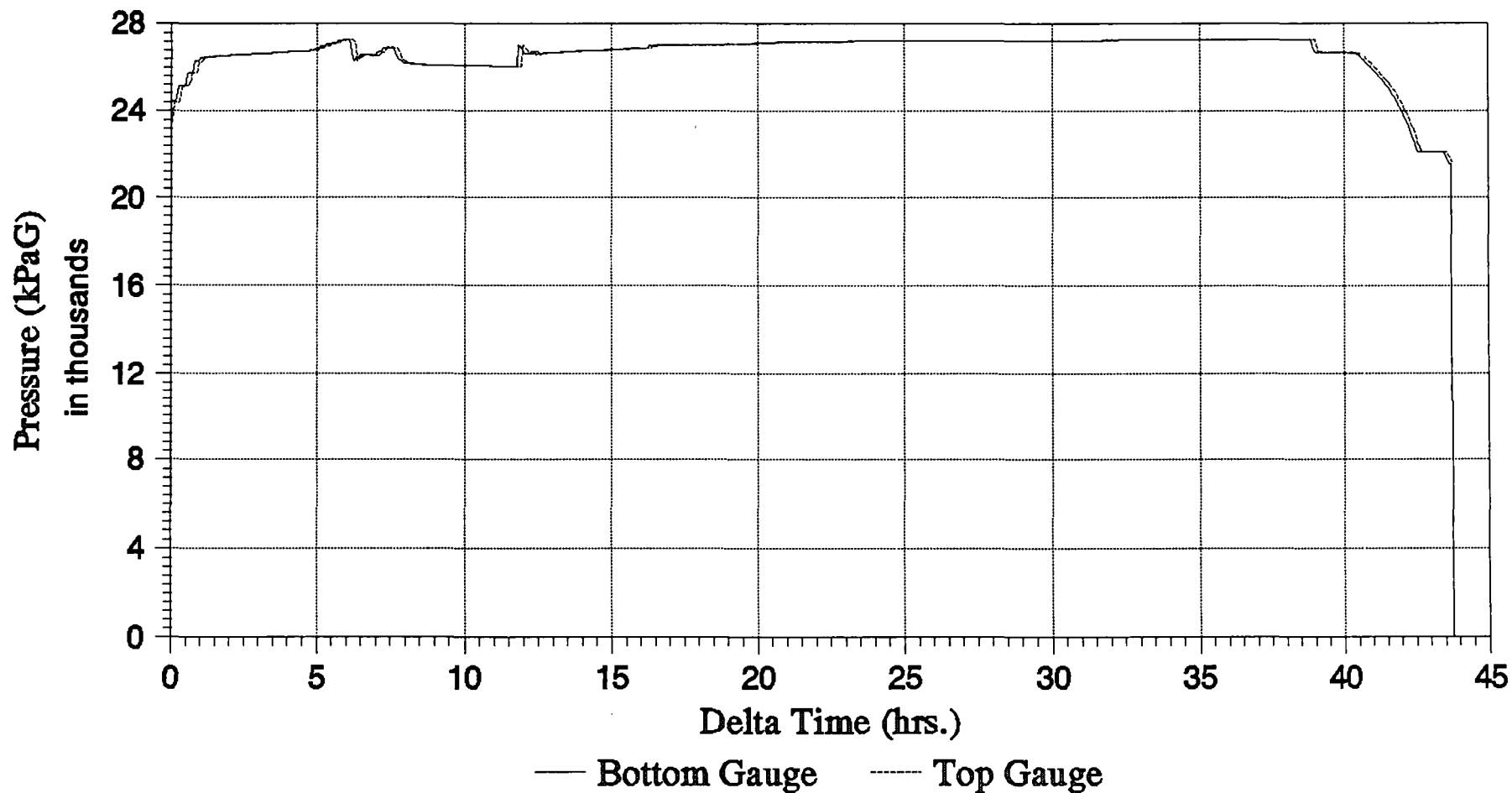
GENCO PRESSURE CONTROL LTD (403)250-3800
Start Aquisition: 1998/07/21 15:50:04
End Aquisition: 1998/07/23 11:39:41

Ranger Oil Limited
P-66-A
Top Gauge Apparent Resolution



GENCO PRESSURE CONTROL LTD (403)250-3800
Start Aquisition: 1998/07/21 15:50:04
End Aquisition: 1998/07/23 11:39:41

Ranger Oil Limited
P-66-A
Gentronics Quartz Gauge Press. Tracking



GENCO PRESSURE CONTROL LTD (403)250-3800
Start Aquisition: 1998/07/21 15:50:04
End Aquisition: 1998/07/23 11:39:41

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
Begin Data Acquisition:							
1998/07/21	15:50:04	0.0000	24404.8	24404.8	79.3	79.3	0:
	15:50:18	0.0039	24404.8	0.0	79.9	0.6	17:
	15:50:36	0.0089	24404.8	0.1	80.5	0.6	34:
	15:50:50	0.0128	24404.9	0.1	81.1	0.6	51:
	15:51:08	0.0178	24405.0	0.1	81.6	0.6	68:
	15:51:26	0.0228	24405.2	0.3	82.2	0.6	85:
	15:51:44	0.0278	24405.2	0.0	82.7	0.6	102:
	15:51:59	0.0319	24405.4	0.1	83.2	0.5	119:
	15:52:17	0.0369	24405.7	0.3	83.7	0.5	136:
	15:52:35	0.0419	24405.7	0.1	84.2	0.5	153:
	15:52:53	0.0469	24405.9	0.1	84.7	0.4	170:
	15:53:07	0.0508	24406.1	0.3	85.1	0.4	187:
	15:53:25	0.0558	24406.4	0.3	85.6	0.4	204:
	15:53:43	0.0608	24406.6	0.1	85.9	0.4	221:
	15:53:58	0.0650	24406.8	0.2	86.4	0.4	238:
	15:54:16	0.0700	24407.0	0.3	86.8	0.4	255:
	15:54:34	0.0750	24407.2	0.2	87.2	0.4	272:
	15:54:52	0.0800	24407.7	0.4	87.5	0.3	289:
	15:55:06	0.0839	24408.1	0.4	87.8	0.3	306:
	15:55:24	0.0889	24408.2	0.1	88.2	0.4	323:
	15:55:42	0.0939	24408.7	0.5	88.6	0.3	340:
	15:55:56	0.0978	24408.8	0.1	88.8	0.3	357:
	15:56:14	0.1028	24409.0	0.3	89.2	0.3	374:
	15:56:32	0.1078	24409.5	0.4	89.4	0.3	391:
	15:56:50	0.1128	24409.7	0.2	89.8	0.3	408:
	15:57:05	0.1169	24410.1	0.4	90.1	0.3	425:
	15:57:23	0.1219	24410.3	0.2	90.3	0.2	442:
	15:57:41	0.1269	24410.7	0.4	90.6	0.3	459:
	15:57:59	0.1319	24410.7	0.0	90.8	0.3	476:
	15:58:13	0.1358	24410.8	0.1	91.1	0.2	493:
	15:58:31	0.1408	24410.8	0.1	91.3	0.3	510:
	15:58:49	0.1458	24439.2	28.3	91.6	0.2	527:
	15:59:04	0.1500	24482.2	43.0	91.8	0.2	544:
	15:59:22	0.1550	24525.0	42.8	92.1	0.3	561:
	15:59:40	0.1600	24567.0	42.0	92.3	0.3	578:
	15:59:58	0.1650	24608.0	41.0	92.7	0.3	595:
	16:02:11	0.2019	24895.1	287.0	95.7	3.1	612:
	16:05:00	0.2489	25136.6	241.5	101.1	5.3	629:
	16:07:49	0.2958	25141.8	5.2	105.7	4.6	646:
	16:10:38	0.3428	25147.1	5.3	109.0	3.3	663:
	16:13:31	0.3908	25153.9	6.8	111.3	2.3	680:
	16:16:20	0.4378	25157.4	3.5	112.9	1.6	697:
	16:19:10	0.4850	25219.5	62.1	114.1	1.1	714:

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.
 Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: Ranger Oil Limited
Ranger Fort Liard

LSD: P-66-A

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	16:21:59	0.5319	25555.1	335.6	116.2	2.1	731:
	16:24:52	0.5800	25724.1	169.0	120.6	4.4	748:
	16:27:41	0.6269	25732.8	8.7	124.2	3.7	765:
	16:30:30	0.6739	25745.8	13.0	126.8	2.6	782:
	16:33:19	0.7208	25757.4	11.6	128.3	1.6	799:
	16:36:08	0.7678	26004.2	246.8	130.1	1.8	816:
	16:39:01	0.8158	26283.9	279.7	135.1	4.9	833:
	16:41:50	0.8628	26276.3	-7.6	139.9	4.9	850:
	16:44:40	0.9100	26302.6	26.3	143.2	3.3	867:
	16:47:29	0.9569	26328.5	25.9	145.3	2.1	884:
	16:50:22	1.0050	26427.5	99.0	147.1	1.7	901:
	16:53:11	1.0519	26436.0	8.5	148.7	1.6	918:
	16:56:00	1.0989	26456.0	20.1	149.6	0.9	935:
	16:58:49	1.1458	26476.2	20.2	149.6	0.1	952:
	17:01:38	1.1928	26485.8	9.6	149.8	0.2	969:
	17:04:31	1.2408	26484.8	-1.0	150.1	0.3	986:
	17:07:20	1.2878	26486.8	2.0	150.3	0.2	1003:
	17:10:10	1.3350	26489.0	2.1	150.4	0.1	1020:
	17:12:59	1.3819	26497.9	9.0	150.6	0.2	1037:
	17:15:52	1.4300	26498.9	1.0	150.8	0.3	1054:
	17:18:41	1.4769	26501.2	2.3	150.9	0.1	1071:
	17:21:30	1.5239	26502.8	1.6	151.1	0.1	1088:
	17:24:19	1.5708	26513.9	11.1	151.2	0.1	1105:
	17:27:08	1.6178	26513.9	0.1	151.3	0.1	1122:
	17:30:01	1.6658	26515.3	1.3	151.4	0.1	1139:
	17:32:50	1.7128	26530.3	15.0	151.4	0.1	1156:
	17:35:40	1.7600	26530.4	0.1	151.6	0.1	1173:
	17:38:29	1.8069	26531.5	1.0	151.6	0.1	1190:
	17:41:22	1.8550	26532.2	0.8	151.6	0.0	1207:
	17:44:11	1.9019	26550.8	18.5	151.6	-0.1	1224:
	17:47:00	1.9489	26551.2	0.4	151.3	-0.2	1241:
	17:49:49	1.9958	26549.6	-1.6	151.2	-0.1	1258:
	17:52:38	2.0428	26561.9	12.3	151.2	-0.1	1275:
	17:55:31	2.0908	26558.3	-3.6	151.2	0.0	1292:
	17:58:20	2.1378	26557.5	-0.8	151.2	0.1	1309:
	18:01:10	2.1850	26557.3	-0.1	151.3	0.1	1326:
	18:03:59	2.2319	26561.7	4.3	151.5	0.2	1343:
	18:06:52	2.2800	26558.3	-3.3	151.9	0.4	1360:
	18:09:41	2.3269	26561.2	2.9	152.3	0.3	1377:
	18:12:30	2.3739	26564.5	3.2	152.6	0.3	1394:
	18:15:19	2.4208	26576.0	11.5	152.8	0.2	1411:
	18:18:08	2.4678	26577.4	1.4	153.1	0.3	1428:
	18:21:01	2.5158	26579.8	2.3	153.2	0.2	1445:
	18:23:50	2.5628	26581.7	1.9	153.3	0.1	1462:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	18:26:40	2.6100	26594.3	12.6	153.5	0.2	1479:
	18:29:29	2.6569	26595.2	1.0	153.6	0.1	1496:
	18:32:22	2.7050	26596.2	1.0	153.7	0.1	1513:
	18:35:11	2.7519	26610.1	13.9	153.7	0.1	1530:
	18:38:00	2.7989	26610.1	0.0	153.8	0.1	1547:
	18:40:49	2.8458	26610.7	0.6	153.8	0.1	1564:
	18:43:38	2.8928	26611.1	0.4	153.9	0.1	1581:
	18:46:31	2.9408	26624.1	13.0	153.9	0.1	1598:
	18:49:20	2.9878	26624.3	0.1	153.9	0.0	1615:
	18:52:10	3.0350	26624.4	0.1	154.0	0.1	1632:
	18:54:59	3.0819	26624.5	0.1	154.1	0.1	1649:
	18:57:52	3.1300	26637.2	12.8	154.1	0.0	1666:
	19:00:41	3.1769	26636.7	-0.5	154.1	0.1	1683:
	19:03:30	3.2239	26636.7	-0.1	154.2	0.1	1700:
	19:06:19	3.2708	26637.1	0.4	154.2	0.1	1717:
	19:09:08	3.3178	26649.1	12.0	154.3	0.1	1734:
	19:12:01	3.3658	26648.8	-0.3	154.3	0.1	1751:
	19:14:50	3.4128	26649.2	0.4	154.4	0.1	1768:
	19:17:40	3.4600	26649.7	0.5	154.4	0.1	1785:
	19:20:29	3.5069	26662.0	12.3	154.5	0.1	1802:
	19:23:22	3.5550	26662.3	0.2	154.6	0.1	1819:
	19:26:11	3.6019	26662.7	0.5	154.6	0.1	1836:
	19:29:00	3.6489	26663.1	0.3	154.6	0.0	1853:
	19:31:49	3.6958	26674.9	11.8	154.7	0.1	1870:
	19:34:38	3.7428	26674.9	0.1	154.8	0.1	1887:
	19:37:31	3.7908	26675.5	0.6	154.8	0.1	1904:
	19:40:20	3.8378	26683.4	7.9	154.9	0.1	1921:
	19:43:10	3.8850	26687.4	3.9	154.9	0.1	1938:
	19:45:59	3.9319	26687.7	0.3	155.1	0.1	1955:
	19:48:52	3.9800	26688.6	0.9	155.1	0.1	1972:
	19:51:41	4.0269	26702.7	14.1	155.2	0.1	1989:
	19:54:30	4.0739	26700.7	-2.0	155.3	0.1	2006:
	19:57:19	4.1208	26701.2	0.6	155.3	0.1	2023:
	20:00:08	4.1678	26702.0	0.8	155.4	0.1	2040:
	20:03:01	4.2158	26715.3	13.3	155.4	0.1	2057:
	20:05:50	4.2628	26714.1	-1.2	155.6	0.1	2074:
	20:08:40	4.3100	26714.7	0.6	155.6	0.1	2091:
	20:11:29	4.3569	26715.4	0.7	155.7	0.1	2108:
	20:14:22	4.4050	26728.0	12.6	155.7	0.1	2125:
	20:17:11	4.4519	26727.6	-0.4	155.8	0.1	2142:
	20:20:00	4.4989	26728.2	0.6	155.9	0.1	2159:
	20:22:49	4.5458	26729.0	0.8	155.9	0.1	2176:
	20:25:38	4.5928	26743.8	14.8	155.9	0.0	2193:
	20:28:31	4.6408	26745.9	2.1	155.9	-0.1	2210:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	20:31:20	4.6878	26745.8	-0.1	155.8	-0.1	2227:
	20:34:10	4.7350	26745.3	-0.4	155.8	0.0	2244:
	20:36:59	4.7819	26795.1	49.7	155.9	0.1	2261:
	20:39:52	4.8300	26792.4	-2.6	156.1	0.2	2278:
	20:42:41	4.8769	26794.2	1.7	156.3	0.2	2295:
	20:45:30	4.9239	26796.1	1.9	156.4	0.1	2312:
	20:48:19	4.9708	26878.6	82.5	156.6	0.2	2329:
	20:51:08	5.0178	26879.7	1.2	156.7	0.1	2346:
	20:54:01	5.0658	26881.3	1.6	156.8	0.1	2363:
	20:56:50	5.1128	26882.4	1.1	156.8	0.1	2380:
	20:59:40	5.1600	26966.4	84.0	156.9	0.1	2397:
	21:02:29	5.2069	26967.3	0.9	157.1	0.1	2414:
	21:05:22	5.2550	26968.5	1.2	157.1	0.1	2431:
	21:08:11	5.3019	26969.2	0.8	157.2	0.1	2448:
	21:11:00	5.3489	27052.6	83.4	157.3	0.1	2465:
	21:13:49	5.3958	27053.4	0.8	157.3	0.1	2482:
	21:16:38	5.4428	27054.2	0.8	157.4	0.1	2499:
	21:19:31	5.4908	27054.9	0.7	157.4	0.0	2516:
	21:22:20	5.5378	27137.3	82.4	157.5	0.1	2533:
	21:25:10	5.5850	27137.9	0.6	157.6	0.1	2550:
	21:27:59	5.6319	27138.6	0.7	157.6	0.1	2567:
	21:30:52	5.6800	27155.7	17.0	157.6	0.0	2584:
	21:33:41	5.7269	27224.4	68.7	157.7	0.1	2601:
	21:36:30	5.7739	27225.0	0.6	157.8	0.1	2618:
	21:39:19	5.8208	27225.6	0.7	157.8	0.0	2635:
	21:42:08	5.8678	27284.9	59.2	157.8	0.1	2652:
	21:45:01	5.9158	27284.2	-0.7	157.9	0.1	2669:
	21:47:50	5.9628	27284.6	0.4	157.9	0.1	2686:
	21:50:40	6.0100	27284.9	0.3	157.9	0.0	2703:
	21:53:29	6.0569	27285.1	0.3	158.0	0.1	2720:
	21:56:22	6.1050	27285.3	0.1	158.0	0.0	2737:
	21:59:11	6.1519	27061.0	-224.3	158.0	0.0	2754:
	22:02:00	6.1989	26624.0	-437.0	158.0	0.0	2771:
	22:04:49	6.2458	26297.3	-326.7	158.0	0.0	2788:
	22:07:38	6.2928	26376.2	78.9	158.0	0.0	2805:
	22:10:31	6.3408	26481.2	105.0	158.1	0.1	2822:
	22:13:20	6.3878	26436.0	-45.2	158.1	0.0	2839:
	22:16:10	6.4350	26565.0	129.0	158.1	0.0	2856:
	22:18:59	6.4819	26591.1	26.1	158.1	0.0	2873:
	22:21:52	6.5300	26579.7	-11.4	158.1	0.0	2890:
	22:24:41	6.5769	26603.6	23.9	158.1	0.0	2907:
	22:27:30	6.6239	26577.7	-25.9	158.1	0.0	2924:
	22:30:19	6.6708	26567.4	-10.3	158.1	0.0	2941:
	22:33:08	6.7178	26567.1	-0.3	158.1	0.0	2958:

Absolute pressures are converted to gauge pressures
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Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: P-66-A

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	22:36:01	6.7658	26560.6	-6.6	158.1	0.0	2975:
	22:38:50	6.8128	26553.7	-6.9	158.1	0.0	2992:
	22:41:40	6.8600	26543.1	-10.5	158.1	0.0	3009:
	22:44:29	6.9069	26534.9	-8.2	158.1	0.0	3026:
	22:47:22	6.9550	26527.7	-7.2	158.1	0.0	3043:
	22:50:11	7.0019	26525.1	-2.6	158.1	0.0	3060:
	22:53:00	7.0489	26667.6	142.5	158.1	0.0	3077:
	22:55:49	7.0958	26691.1	23.4	158.1	0.0	3094:
	22:58:38	7.1428	26691.8	0.7	158.1	0.0	3111:
	23:01:31	7.1908	26739.5	47.7	158.1	0.0	3128:
	23:04:20	7.2378	26861.7	122.2	158.1	0.0	3145:
	23:07:10	7.2850	26867.3	5.7	158.1	0.0	3162:
	23:09:59	7.3319	26890.1	22.8	158.1	0.0	3179:
	23:12:52	7.3800	26898.5	8.4	158.1	0.0	3196:
	23:15:41	7.4269	26908.9	10.4	158.1	0.0	3213:
	23:18:30	7.4739	26893.0	-15.9	158.1	0.0	3230:
	23:21:19	7.5208	26889.0	-3.9	158.1	0.0	3247:
	23:24:08	7.5678	26890.6	1.6	158.1	0.0	3264:
	23:27:01	7.6158	26887.8	-2.8	158.1	0.0	3281:
	23:29:50	7.6628	26634.3	-253.5	158.1	0.0	3298:
	23:32:40	7.7100	26574.1	-60.2	158.1	0.0	3315:
	23:35:29	7.7569	26368.9	-205.1	158.1	0.0	3332:
	23:38:22	7.8050	26347.6	-21.4	158.1	0.0	3349:
	23:41:11	7.8519	26340.9	-6.7	158.1	0.0	3366:
	23:44:00	7.8989	26273.0	-67.8	158.1	0.0	3383:
	23:46:49	7.9458	26233.0	-40.0	158.1	0.0	3400:
	23:49:38	7.9928	26197.9	-35.2	158.1	0.0	3417:
	23:52:31	8.0408	26190.2	-7.7	158.1	0.0	3434:
	23:55:20	8.0878	26183.1	-7.1	158.1	0.0	3451:
	23:58:10	8.1350	26173.7	-9.3	158.1	0.0	3468:
1998/07/22	00:00:59	8.1819	26162.9	-10.8	158.1	0.0	3485:
	00:03:52	8.2300	26155.9	-7.0	158.1	0.0	3502:
	00:06:41	8.2769	26150.9	-5.0	158.1	0.0	3519:
	00:09:30	8.3239	26140.9	-10.0	158.1	0.0	3536:
	00:12:19	8.3708	26136.5	-4.4	158.1	0.0	3553:
	00:15:08	8.4178	26131.3	-5.2	158.1	0.0	3570:
	00:18:01	8.4658	26122.8	-8.5	158.1	0.0	3587:
	00:20:50	8.5128	26120.2	-2.6	158.1	0.0	3604:
	00:23:40	8.5600	26113.2	-7.0	158.1	0.0	3621:
	00:26:29	8.6069	26111.7	-1.5	158.1	0.0	3638:
	00:29:22	8.6550	26108.0	-3.7	158.1	0.0	3655:
	00:32:11	8.7019	26107.8	-0.2	158.1	0.0	3672:
	00:35:00	8.7489	26104.2	-3.6	158.1	0.0	3689:
	00:37:49	8.7958	26102.9	-1.3	158.1	0.0	3706:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: Ranger Oil Limited
Ranger Fort Liard

LSD: P-66-A

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	00:40:38	8.8428	26103.8	0.9	158.1	0.0	3723:
	00:43:31	8.8908	26100.2	-3.6	158.1	0.0	3740:
	00:46:20	8.9378	26097.3	-2.8	158.1	0.0	3757:
	00:49:10	8.9850	26096.5	-0.9	158.1	0.0	3774:
	00:51:59	9.0319	26094.6	-1.9	158.1	0.0	3791:
	00:54:52	9.0800	26096.1	1.5	158.1	0.0	3808:
	00:57:41	9.1269	26094.8	-1.3	158.1	0.0	3825:
	01:00:30	9.1739	26099.2	4.4	158.1	0.0	3842:
	01:03:19	9.2208	26096.5	-2.8	158.1	0.0	3859:
	01:06:08	9.2678	26095.1	-1.3	158.1	0.0	3876:
	01:09:01	9.3158	26094.1	-1.0	158.1	0.0	3893:
	01:11:50	9.3628	26095.5	1.4	158.1	0.0	3910:
	01:14:40	9.4100	26092.7	-2.8	158.1	0.0	3927:
	01:17:29	9.4569	26091.6	-1.1	158.1	0.0	3944:
	01:20:22	9.5050	26087.6	-3.9	158.1	0.0	3961:
	01:23:11	9.5519	26086.7	-1.0	158.1	0.0	3978:
	01:26:00	9.5989	26090.6	3.9	158.1	0.0	3995:
	01:28:49	9.6458	26087.1	-3.5	158.1	0.0	4012:
	01:31:38	9.6928	26085.8	-1.3	158.1	0.0	4029:
	01:34:31	9.7408	26084.2	-1.6	158.1	0.0	4046:
	01:37:20	9.7878	26083.1	-1.0	158.1	0.0	4063:
	01:40:10	9.8350	26081.2	-1.9	158.1	0.0	4080:
	01:42:59	9.8819	26079.1	-2.1	158.1	0.0	4097:
	01:45:52	9.9300	26083.9	4.8	158.1	0.0	4114:
	01:48:41	9.9769	26078.1	-5.8	158.1	0.0	4131:
	01:51:30	10.0239	26079.3	1.2	158.1	0.0	4148:
	01:54:19	10.0708	26079.0	-0.3	158.1	0.0	4165:
	01:57:08	10.1178	26077.1	-1.9	158.1	0.0	4182:
	02:00:01	10.1658	26075.4	-1.7	158.1	0.0	4199:
	02:02:50	10.2128	26076.0	0.6	158.1	0.0	4216:
	02:05:40	10.2600	26075.5	-0.6	158.1	0.0	4233:
	02:08:29	10.3069	26074.0	-1.5	158.1	0.0	4250:
	02:11:22	10.3550	26074.4	0.4	158.1	0.0	4267:
	02:14:11	10.4019	26070.5	-3.9	158.1	0.0	4284:
	02:17:00	10.4489	26070.5	-0.1	158.1	0.0	4301:
	02:19:49	10.4958	26069.9	-0.6	158.1	0.0	4318:
	02:22:38	10.5428	26067.1	-2.8	158.1	0.0	4335:
	02:25:31	10.5908	26067.2	0.1	158.1	0.0	4352:
	02:28:20	10.6378	26069.0	1.8	158.1	0.0	4369:
	02:31:10	10.6850	26067.7	-1.3	158.1	0.0	4386:
	02:33:59	10.7319	26066.7	-1.0	158.1	0.0	4403:
	02:36:52	10.7800	26065.4	-1.3	158.1	0.0	4420:
	02:39:41	10.8269	26063.8	-1.6	158.1	0.0	4437:
	02:42:30	10.8739	26063.6	-0.2	158.1	0.0	4454:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	02:45:19	10.9208	26063.4	-0.2	158.1	0.0	4471:
	02:48:08	10.9678	26063.2	-0.1	158.1	0.0	4488:
	02:51:01	11.0158	26061.2	-2.0	158.1	0.0	4505:
	02:53:50	11.0628	26060.9	-0.3	158.1	0.0	4522:
	02:56:40	11.1100	26062.5	1.5	158.1	0.0	4539:
	02:59:29	11.1569	26058.0	-4.4	158.1	0.0	4556:
	03:02:22	11.2050	26059.5	1.4	158.1	0.0	4573:
	03:05:11	11.2519	26057.7	-1.8	158.1	0.0	4590:
	03:08:00	11.2989	26056.5	-1.2	158.1	0.0	4607:
	03:10:49	11.3458	26058.1	1.7	158.1	0.0	4624:
	03:13:38	11.3928	26058.2	0.1	158.1	0.0	4641:
	03:16:31	11.4408	26056.0	-2.2	158.1	0.0	4658:
	03:19:20	11.4878	26054.9	-1.0	158.1	0.0	4675:
	03:22:10	11.5350	26054.6	-0.3	158.1	0.0	4692:
	03:24:59	11.5819	26054.0	-0.6	158.1	0.0	4709:
	03:27:52	11.6300	26051.6	-2.4	158.1	0.0	4726:
	03:30:41	11.6769	26055.3	3.7	158.1	0.0	4743:
	03:33:30	11.7239	26055.4	0.1	158.1	0.0	4760:
	03:36:19	11.7708	26052.0	-3.4	158.1	0.0	4777:
	03:39:08	11.8178	26775.8	723.8	158.1	0.0	4794:
	03:42:01	11.8658	27021.9	246.1	158.1	0.1	4811:
	03:44:50	11.9128	26927.9	-94.0	158.1	0.0	4828:
	03:47:40	11.9600	26829.3	-98.7	158.1	0.0	4845:
	03:50:29	12.0069	26753.8	-75.4	158.1	0.0	4862:
	03:53:22	12.0550	26654.1	-99.8	158.1	0.0	4879:
	03:56:11	12.1019	26608.9	-45.2	158.1	0.0	4896:
	03:59:00	12.1489	26620.1	11.2	158.1	0.0	4913:
	04:01:49	12.1958	26614.7	-5.4	158.1	0.0	4930:
	04:04:38	12.2428	26675.8	61.0	158.1	0.0	4947:
	04:07:31	12.2908	26703.8	28.1	158.1	0.0	4964:
	04:10:20	12.3378	26711.0	7.2	158.1	0.0	4981:
	04:13:10	12.3850	26627.5	-83.5	158.1	0.0	4998:
	04:15:59	12.4319	26582.7	-44.8	158.1	0.0	5015:
	04:18:52	12.4800	26600.8	18.1	158.1	0.0	5032:
	04:21:41	12.5269	26611.0	10.3	158.1	0.0	5049:
	04:24:30	12.5739	26620.1	9.0	158.1	0.0	5066:
	04:27:19	12.6208	26628.1	8.1	158.1	0.0	5083:
	04:30:08	12.6678	26670.0	41.9	158.1	0.0	5100:
	04:33:01	12.7158	26673.6	3.6	158.1	0.0	5117:
	04:35:50	12.7628	26677.6	4.0	158.1	0.0	5134:
	04:38:40	12.8100	26672.9	-4.6	158.1	0.0	5151:
	04:41:29	12.8569	26670.9	-2.1	158.1	0.0	5168:
	04:44:22	12.9050	26675.1	4.2	158.1	0.0	5185:
	04:47:11	12.9519	26679.4	4.3	158.1	0.0	5202:

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.
 Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	04:50:00	12.9989	26680.9	1.5	158.1	0.0	5219:
	04:52:49	13.0458	26684.4	3.4	158.1	0.0	5236:
	04:55:38	13.0928	26688.9	4.6	158.1	0.0	5253:
	04:58:31	13.1408	26691.4	2.5	158.1	0.0	5270:
	05:01:20	13.1878	26694.4	3.0	158.1	0.0	5287:
	05:04:10	13.2350	26722.2	27.8	158.1	0.0	5304:
	05:06:59	13.2819	26725.1	3.0	158.1	0.0	5321:
	05:09:52	13.3300	26720.3	-4.8	158.1	0.0	5338:
	05:12:41	13.3769	26719.9	-0.4	158.1	0.0	5355:
	05:15:30	13.4239	26720.4	0.5	158.1	0.0	5372:
	05:18:19	13.4708	26723.1	2.7	158.1	0.0	5389:
	05:21:08	13.5178	26726.4	3.3	158.1	0.0	5406:
	05:24:01	13.5658	26729.9	3.5	158.1	0.0	5423:
	05:26:50	13.6128	26734.0	4.1	158.1	0.0	5440:
	05:29:40	13.6600	26736.2	2.2	158.1	0.0	5457:
	05:32:29	13.7069	26739.8	3.7	158.1	0.0	5474:
	05:35:22	13.7550	26743.8	4.0	158.1	0.0	5491:
	05:38:11	13.8019	26746.6	2.8	158.1	0.0	5508:
	05:41:00	13.8489	26750.5	3.9	158.1	0.0	5525:
	05:43:49	13.8958	26753.6	3.1	158.1	0.0	5542:
	05:46:38	13.9428	26755.3	1.7	158.1	0.0	5559:
	05:49:31	13.9908	26757.8	2.6	158.1	0.0	5576:
	05:52:20	14.0378	26761.3	3.4	158.1	0.0	5593:
	05:55:10	14.0850	26763.5	2.3	158.1	0.0	5610:
	05:57:59	14.1319	26768.2	4.7	158.1	0.0	5627:
	06:00:52	14.1800	26769.0	0.8	158.1	0.0	5644:
	06:03:41	14.2269	26771.3	2.3	158.1	0.0	5661:
	06:06:30	14.2739	26774.2	2.9	158.1	0.0	5678:
	06:09:19	14.3208	26776.4	2.1	158.1	0.0	5695:
	06:12:08	14.3678	26779.8	3.4	158.1	0.0	5712:
	06:15:01	14.4158	26781.1	1.3	158.1	0.0	5729:
	06:17:50	14.4628	26783.7	2.6	158.1	0.0	5746:
	06:20:40	14.5100	26786.5	2.8	158.1	0.0	5763:
	06:23:29	14.5569	26788.0	1.4	158.1	0.0	5780:
	06:26:22	14.6050	26791.1	3.2	158.1	0.0	5797:
	06:29:11	14.6519	26793.1	1.9	158.1	0.0	5814:
	06:32:00	14.6989	26796.0	3.0	158.1	0.0	5831:
	06:34:49	14.7458	26798.2	2.2	158.1	0.0	5848:
	06:37:38	14.7928	26796.0	-2.2	158.1	0.0	5865:
	06:40:31	14.8408	26801.8	5.8	158.1	0.0	5882:
	06:43:20	14.8878	26803.9	2.1	158.1	0.0	5899:
	06:46:10	14.9350	26805.4	1.4	158.1	0.0	5916:
	06:48:59	14.9819	26807.7	2.3	158.1	0.0	5933:
	06:51:52	15.0300	26809.0	1.3	158.1	0.0	5950:

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.
 Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	06:54:41	15.0769	26828.9	19.9	158.1	0.0	5967:
	06:57:30	15.1239	26837.0	8.1	158.1	0.0	5984:
	07:00:19	15.1708	26837.1	0.1	158.1	0.0	6001:
	07:03:08	15.2178	26839.5	2.3	158.1	0.0	6018:
	07:06:01	15.2658	26840.5	1.0	158.1	0.0	6035:
	07:08:50	15.3128	26842.1	1.6	158.1	0.0	6052:
	07:11:40	15.3600	26843.7	1.6	158.1	0.0	6069:
	07:14:29	15.4069	26844.8	1.1	158.1	0.0	6086:
	07:17:22	15.4550	26846.5	1.7	158.2	0.1	6103:
	07:20:11	15.5019	26849.7	3.2	158.2	0.0	6120:
	07:23:00	15.5489	26849.8	0.1	158.2	0.0	6137:
	07:25:49	15.5958	26851.2	1.4	158.2	0.0	6154:
	07:28:38	15.6428	26853.7	2.5	158.2	0.0	6171:
	07:31:31	15.6908	26854.3	0.6	158.2	0.0	6188:
	07:34:20	15.7378	26856.9	2.6	158.2	0.0	6205:
	07:37:10	15.7850	26857.0	0.1	158.2	0.0	6222:
	07:39:59	15.8319	26859.2	2.1	158.2	0.0	6239:
	07:42:52	15.8800	26859.7	0.6	158.2	0.0	6256:
	07:45:41	15.9269	26863.4	3.7	158.2	0.0	6273:
	07:48:30	15.9739	26862.3	-1.1	158.2	0.0	6290:
	07:51:19	16.0208	26864.3	2.0	158.2	0.0	6307:
	07:54:08	16.0678	26865.2	1.0	158.2	0.0	6324:
	07:57:01	16.1158	26867.1	1.9	158.2	0.0	6341:
	07:59:50	16.1628	26868.6	1.5	158.2	0.0	6358:
	08:02:40	16.2100	26870.5	1.9	158.2	0.0	6375:
	08:05:29	16.2569	26872.7	2.2	158.2	0.0	6392:
	08:08:22	16.3050	27010.9	138.2	158.2	0.0	6409:
	08:11:11	16.3519	26989.7	-21.2	158.2	0.0	6426:
	08:14:00	16.3989	26984.8	-4.9	158.2	0.0	6443:
	08:16:49	16.4458	26987.9	3.1	158.2	0.0	6460:
	08:19:38	16.4928	26993.7	5.8	158.2	0.0	6477:
	08:22:31	16.5408	26999.8	6.1	158.2	0.0	6494:
	08:25:20	16.5878	27008.2	8.5	158.2	0.0	6511:
	08:28:10	16.6350	27008.9	0.7	158.2	0.0	6528:
	08:30:59	16.6819	27006.7	-2.2	158.2	0.0	6545:
	08:33:52	16.7300	27004.5	-2.3	158.2	0.0	6562:
	08:36:41	16.7769	27003.9	-0.6	158.2	0.0	6579:
	08:39:30	16.8239	27002.7	-1.2	158.2	0.0	6596:
	08:42:19	16.8708	27002.5	-0.3	158.2	0.0	6613:
	08:45:08	16.9178	27002.5	0.1	158.2	0.0	6630:
	08:48:01	16.9658	27003.6	1.0	158.2	0.0	6647:
	08:50:50	17.0128	27004.4	0.8	158.2	0.0	6664:
	08:53:40	17.0600	27004.5	0.1	158.2	0.0	6681:
	08:56:29	17.1069	27003.8	-0.8	158.2	0.0	6698:

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.
 Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt(hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	08:59:22	17.1550	27002.9	-0.8	158.2	0.0	6715:
	09:02:11	17.2019	27002.2	-0.8	158.2	0.0	6732:
	09:05:00	17.2489	27001.4	-0.8	158.2	0.0	6749:
	09:07:49	17.2958	27000.8	-0.6	158.2	0.0	6766:
	09:10:38	17.3428	27000.4	-0.4	158.2	0.0	6783:
	09:13:31	17.3908	27000.2	-0.2	158.2	0.0	6800:
	09:16:20	17.4378	27000.1	-0.1	158.2	0.0	6817:
	09:19:10	17.4850	26999.6	-0.6	158.2	0.0	6834:
	09:21:59	17.5319	27000.2	0.7	158.2	0.0	6851:
	09:24:52	17.5800	27000.3	0.1	158.2	0.0	6868:
	09:27:41	17.6269	27000.8	0.5	158.2	0.0	6885:
	09:30:30	17.6739	27001.4	0.6	158.2	0.0	6902:
	09:33:19	17.7208	27002.1	0.8	158.2	0.0	6919:
	09:36:08	17.7678	26996.7	-5.4	158.2	0.0	6936:
	09:39:01	17.8158	27003.9	7.2	158.2	0.0	6953:
	09:41:50	17.8628	27004.7	0.8	158.2	0.0	6970:
	09:44:40	17.9100	27006.0	1.2	158.2	0.0	6987:
	09:47:29	17.9569	27007.1	1.1	158.2	0.0	7004:
	09:50:22	18.0050	27008.4	1.3	158.2	0.0	7021:
	09:53:11	18.0519	27009.6	1.2	158.2	0.0	7038:
	09:56:00	18.0989	27010.9	1.3	158.2	0.0	7055:
	09:58:49	18.1458	27012.2	1.3	158.2	0.0	7072:
	10:01:38	18.1928	27013.8	1.6	158.2	0.0	7089:
	10:04:31	18.2408	27015.5	1.7	158.2	0.0	7106:
	10:07:20	18.2878	27017.2	1.7	158.2	0.0	7123:
	10:10:10	18.3350	27018.9	1.7	158.2	0.0	7140:
	10:12:59	18.3819	27020.6	1.7	158.2	0.0	7157:
	10:15:52	18.4300	27022.6	2.0	158.2	0.0	7174:
	10:18:41	18.4769	27024.5	1.9	158.2	0.0	7191:
	10:21:30	18.5239	27026.5	2.0	158.2	0.0	7208:
	10:24:19	18.5708	27028.4	1.9	158.2	0.0	7225:
	10:27:08	18.6178	27030.6	2.1	158.2	0.0	7242:
	10:30:01	18.6658	27032.7	2.1	158.2	0.0	7259:
	10:32:50	18.7128	27034.9	2.1	158.2	0.0	7276:
	10:35:40	18.7600	27036.9	2.1	158.2	0.0	7293:
	10:38:29	18.8069	27038.9	2.0	158.2	0.0	7310:
	10:41:22	18.8550	27041.1	2.1	158.2	0.0	7327:
	10:44:11	18.9019	27043.3	2.2	158.2	0.0	7344:
	10:47:00	18.9489	27045.3	2.1	158.2	0.0	7361:
	10:49:49	18.9958	27047.6	2.3	158.2	0.0	7378:
	10:52:38	19.0428	27049.8	2.2	158.2	0.0	7395:
	10:55:31	19.0908	27052.2	2.4	158.2	0.0	7412:
	10:58:20	19.1378	27054.4	2.1	158.2	0.0	7429:
	11:01:10	19.1850	27056.8	2.4	158.2	0.0	7446:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: **P-66-A**

Bottom Gauge

Date	Time	dt(hrs)	P(kPaG)	dP	T(°C)	dT	Pt. #
	11:03:59	19.2319	27059.1	2.3	158.2	0.0	7463:
	11:06:52	19.2800	27061.5	2.4	158.2	0.0	7480:
	11:09:41	19.3269	27064.2	2.7	158.2	0.0	7497:
	11:12:30	19.3739	27066.4	2.2	158.2	0.0	7514:
	11:15:19	19.4208	27068.9	2.4	158.2	0.0	7531:
	11:18:08	19.4678	27071.2	2.3	158.2	0.0	7548:
	11:21:01	19.5158	27073.7	2.6	158.2	0.0	7565:
	11:23:50	19.5628	27076.3	2.6	158.2	0.0	7582:
	11:26:40	19.6100	27078.9	2.6	158.2	0.0	7599:
	11:29:29	19.6569	27081.5	2.6	158.2	0.0	7616:
	11:32:22	19.7050	27084.0	2.6	158.2	0.0	7633:
	11:35:11	19.7519	27086.8	2.8	158.2	0.0	7650:
	11:38:00	19.7989	27089.6	2.8	158.2	0.0	7667:
	11:40:49	19.8458	27092.4	2.8	158.2	0.0	7684:
	11:43:38	19.8928	27095.2	2.8	158.2	0.0	7701:
	11:46:31	19.9408	27098.0	2.8	158.2	0.0	7718:
	11:49:20	19.9878	27101.0	3.0	158.2	0.0	7735:
	11:52:10	20.0350	27104.0	3.0	158.2	0.0	7752:
	11:54:59	20.0819	27106.8	2.8	158.2	0.0	7769:
	11:57:52	20.1300	27109.9	3.1	158.2	0.0	7786:
	12:00:41	20.1769	27113.0	3.0	158.2	0.0	7803:
	12:03:30	20.2239	27116.0	3.0	158.2	0.0	7820:
	12:06:19	20.2708	27119.2	3.2	158.2	0.0	7837:
	12:09:08	20.3178	27122.3	3.1	158.2	0.0	7854:
	12:12:01	20.3658	27125.4	3.1	158.2	0.0	7871:
	12:14:50	20.4128	27128.4	3.0	158.2	0.0	7888:
	12:17:40	20.4600	27131.4	3.0	158.2	0.0	7905:
	12:20:29	20.5069	27134.2	2.8	158.2	0.0	7922:
	12:23:22	20.5550	27137.0	2.8	158.2	0.0	7939:
	12:26:11	20.6019	27139.7	2.6	158.2	0.0	7956:
	12:29:00	20.6489	27141.9	2.3	158.2	0.0	7973:
	12:31:49	20.6958	27144.2	2.3	158.2	0.0	7990:
	12:34:38	20.7428	27146.1	1.9	158.2	0.0	8007:
	12:37:31	20.7908	27147.9	1.8	158.2	0.0	8024:
	12:40:20	20.8378	27149.5	1.6	158.2	0.0	8041:
	12:43:10	20.8850	27150.9	1.4	158.2	0.0	8058:
	12:45:59	20.9319	27152.1	1.2	158.2	0.0	8075:
	12:48:52	20.9800	27153.2	1.1	158.2	0.0	8092:
	12:51:41	21.0269	27154.5	1.2	158.2	0.0	8109:
	12:54:30	21.0739	27155.4	0.9	158.2	0.0	8126:
	12:57:19	21.1208	27156.6	1.2	158.2	0.0	8143:
	13:00:08	21.1678	27157.6	1.0	158.2	0.0	8160:
	13:03:01	21.2158	27158.7	1.1	158.2	0.0	8177:
	13:05:50	21.2628	27159.6	0.9	158.2	0.0	8194:

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.
 Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: **P-66-A**

Bottom Gauge

Date	Time	dt(hrs)	P(kPaG)	dP	T(°C)	dT	Pt. #
	13:08:40	21.3100	27160.6	1.0	158.2	0.0	8211:
	13:11:29	21.3569	27161.5	1.0	158.2	0.0	8228:
	13:14:22	21.4050	27162.4	0.9	158.2	0.0	8245:
	13:17:11	21.4519	27163.3	0.9	158.2	0.0	8262:
	13:20:00	21.4989	27164.1	0.8	158.2	0.0	8279:
	13:22:49	21.5458	27165.0	0.9	158.2	0.0	8296:
	13:25:38	21.5928	27165.8	0.8	158.2	0.0	8313:
	13:28:31	21.6408	27166.8	1.0	158.2	0.0	8330:
	13:31:20	21.6878	27167.7	0.9	158.2	0.0	8347:
	13:34:10	21.7350	27168.4	0.7	158.2	0.0	8364:
	13:36:59	21.7819	27169.2	0.8	158.2	0.0	8381:
	13:39:52	21.8300	27169.9	0.7	158.2	0.0	8398:
	13:42:41	21.8769	27170.8	0.9	158.2	0.0	8415:
	13:45:30	21.9239	27171.6	0.8	158.2	0.0	8432:
	13:48:19	21.9708	27172.4	0.8	158.2	0.0	8449:
	13:51:08	22.0178	27173.2	0.8	158.2	0.0	8466:
	13:54:01	22.0658	27173.9	0.8	158.2	0.0	8483:
	13:56:50	22.1128	27174.8	0.8	158.2	0.0	8500:
	13:59:40	22.1600	27175.5	0.7	158.2	0.0	8517:
	14:02:29	22.2069	27176.1	0.6	158.2	0.0	8534:
	14:05:22	22.2550	27177.0	0.9	158.2	0.0	8551:
	14:08:11	22.3019	27177.7	0.8	158.2	0.0	8568:
	14:11:00	22.3489	27178.7	1.0	158.2	0.0	8585:
	14:13:49	22.3958	27179.2	0.5	158.2	0.0	8602:
	14:16:38	22.4428	27180.0	0.8	158.2	0.0	8619:
	14:19:31	22.4908	27180.7	0.7	158.2	0.0	8636:
	14:22:20	22.5378	27181.3	0.6	158.2	0.0	8653:
	14:25:10	22.5850	27182.0	0.7	158.2	0.0	8670:
	14:27:59	22.6319	27182.7	0.7	158.2	0.0	8687:
	14:30:52	22.6800	27183.5	0.8	158.2	0.0	8704:
	14:33:41	22.7269	27184.1	0.6	158.2	0.0	8721:
	14:36:30	22.7739	27184.8	0.7	158.2	0.0	8738:
	14:39:19	22.8208	27185.3	0.6	158.2	0.0	8755:
	14:42:08	22.8678	27185.9	0.6	158.2	0.0	8772:
	14:45:01	22.9158	27186.3	0.5	158.2	0.0	8789:
	14:47:50	22.9628	27187.2	0.8	158.2	0.0	8806:
	14:50:40	23.0100	27187.8	0.6	158.2	0.0	8823:
	14:53:29	23.0569	27188.2	0.4	158.2	0.0	8840:
	14:56:22	23.1050	27188.9	0.7	158.2	0.0	8857:
	14:59:11	23.1519	27189.7	0.8	158.2	0.0	8874:
	15:02:00	23.1989	27191.4	1.7	158.2	0.0	8891:
	15:04:49	23.2458	27193.2	1.9	158.2	0.0	8908:
	15:07:38	23.2928	27195.7	2.4	158.2	0.0	8925:
	15:10:31	23.3408	27196.1	0.4	158.2	0.0	8942:

Absolute pressures are converted to gauge pressures
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 Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: **P-66-A**

Bottom Gauge

Date	Time	dt(hrs)	P (kPaG)	dP	T(°C)	dT	Pt. #
	15:13:20	23.3878	27194.3	-1.7	158.2	0.0	8959:
	15:16:10	23.4350	27195.5	1.2	158.2	0.0	8976:
	15:18:59	23.4819	27196.7	1.2	158.2	0.0	8993:
	15:21:52	23.5300	27199.0	2.3	158.2	0.0	9010:
	15:24:41	23.5769	27201.4	2.4	158.2	0.0	9027:
	15:27:30	23.6239	27199.2	-2.2	158.2	0.0	9044:
	15:30:19	23.6708	27198.1	-1.2	158.2	0.0	9061:
	15:33:08	23.7178	27197.7	-0.4	158.2	0.0	9078:
	15:36:01	23.7658	27197.7	0.0	158.2	0.0	9095:
	15:38:50	23.8128	27197.7	0.0	158.2	0.0	9112:
	15:41:40	23.8600	27197.9	0.2	158.2	0.0	9129:
	15:44:29	23.9069	27198.1	0.2	158.2	0.0	9146:
	15:47:22	23.9550	27198.3	0.2	158.2	0.0	9163:
	15:50:11	24.0019	27198.7	0.4	158.2	0.0	9180:
	15:53:00	24.0489	27199.9	1.2	158.2	0.0	9197:
	15:55:49	24.0958	27202.5	2.6	158.2	0.0	9214:
	15:58:38	24.1428	27203.8	1.3	158.2	0.0	9231:
	16:01:31	24.1908	27205.1	1.3	158.2	0.0	9248:
	16:04:20	24.2378	27206.4	1.3	158.2	0.0	9265:
	16:07:10	24.2850	27203.7	-2.8	158.2	0.0	9282:
	16:09:59	24.3319	27203.7	0.1	158.2	0.0	9299:
	16:12:52	24.3800	27203.3	-0.4	158.2	0.0	9316:
	16:15:41	24.4269	27203.3	0.0	158.2	0.0	9333:
	16:18:30	24.4739	27203.3	0.0	158.2	0.0	9350:
	16:21:19	24.5208	27203.4	0.1	158.2	0.0	9367:
	16:24:08	24.5678	27203.5	0.1	158.2	0.0	9384:
	16:27:01	24.6158	27203.6	0.1	158.2	0.0	9401:
	16:29:50	24.6628	27204.0	0.4	158.2	0.0	9418:
	16:32:40	24.7100	27204.0	0.0	158.2	0.0	9435:
	16:35:29	24.7569	27204.4	0.4	158.2	0.0	9452:
	16:38:22	24.8050	27204.6	0.2	158.2	0.0	9469:
	16:41:11	24.8519	27204.9	0.3	158.2	0.0	9486:
	16:44:00	24.8989	27204.9	0.0	158.2	0.0	9503:
	16:46:49	24.9458	27205.2	0.3	158.2	0.0	9520:
	16:49:38	24.9928	27205.6	0.3	158.2	0.0	9537:
	16:52:31	25.0408	27205.8	0.2	158.2	0.0	9554:
	16:55:20	25.0878	27206.3	0.5	158.2	0.0	9571:
	16:58:10	25.1350	27206.5	0.2	158.2	0.0	9588:
	17:00:59	25.1819	27206.8	0.3	158.2	0.0	9605:
	17:03:52	25.2300	27207.0	0.3	158.2	0.0	9622:
	17:06:41	25.2769	27207.3	0.3	158.2	0.0	9639:
	17:09:30	25.3239	27207.6	0.3	158.2	0.0	9656:
	17:12:19	25.3708	27207.9	0.3	158.2	0.0	9673:
	17:15:08	25.4178	27208.1	0.2	158.2	0.0	9690:

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.
 Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: **P-66-A**

Bottom Gauge

Date	Time	dt(hrs)	P(kPaG)	dP	T(°C)	dT	Pt. #
	17:18:01	25.4658	27208.6	0.5	158.2	0.0	9707:
	17:20:50	25.5128	27208.8	0.2	158.2	0.0	9724:
	17:23:40	25.5600	27209.2	0.4	158.2	0.0	9741:
	17:26:29	25.6069	27210.1	0.9	158.2	0.0	9758:
	17:29:22	25.6550	27211.0	0.9	158.2	0.0	9775:
	17:32:11	25.7019	27212.6	1.6	158.2	0.0	9792:
	17:35:00	25.7489	27215.4	2.8	158.2	0.0	9809:
	17:37:49	25.7958	27214.4	-1.0	158.2	0.0	9826:
	17:40:38	25.8428	27212.7	-1.7	158.2	0.0	9843:
	17:43:31	25.8908	27211.9	-0.8	158.2	0.0	9860:
	17:46:20	25.9378	27211.6	-0.3	158.2	0.0	9877:
	17:49:10	25.9850	27211.7	0.1	158.2	0.0	9894:
	17:51:59	26.0319	27211.7	0.0	158.2	0.0	9911:
	17:54:52	26.0800	27211.9	0.2	158.2	0.0	9928:
	17:57:41	26.1269	27212.0	0.1	158.2	0.0	9945:
	18:00:30	26.1739	27212.2	0.2	158.2	0.0	9962:
	18:03:19	26.2208	27212.5	0.3	158.2	0.0	9979:
	18:06:08	26.2678	27212.7	0.1	158.2	0.0	9996:
	18:09:01	26.3158	27213.0	0.3	158.2	0.0	10013:
	18:11:50	26.3628	27213.2	0.1	158.2	0.0	10030:
	18:14:40	26.4100	27213.4	0.3	158.2	0.0	10047:
	18:17:29	26.4569	27213.6	0.1	158.2	0.0	10064:
	18:20:22	26.5050	27213.9	0.3	158.2	0.0	10081:
	18:23:11	26.5519	27214.2	0.3	158.2	0.0	10098:
	18:26:00	26.5989	27214.4	0.2	158.2	0.0	10115:
	18:28:49	26.6458	27214.8	0.4	158.2	0.0	10132:
	18:31:38	26.6928	27215.0	0.2	158.2	0.0	10149:
	18:34:31	26.7408	27215.2	0.1	158.2	0.0	10166:
	18:37:20	26.7878	27215.9	0.8	158.2	0.0	10183:
	18:40:10	26.8350	27215.6	-0.3	158.2	0.0	10200:
	18:42:59	26.8819	27215.9	0.3	158.2	0.0	10217:
	18:45:52	26.9300	27216.1	0.2	158.2	0.0	10234:
	18:48:41	26.9769	27216.5	0.3	158.2	0.0	10251:
	18:51:30	27.0239	27216.8	0.3	158.2	0.0	10268:
	18:54:19	27.0708	27217.0	0.2	158.2	0.0	10285:
	18:57:08	27.1178	27217.2	0.3	158.2	0.0	10302:
	19:00:01	27.1658	27217.5	0.3	158.2	0.0	10319:
	19:02:50	27.2128	27217.9	0.4	158.2	0.0	10336:
	19:05:40	27.2600	27218.1	0.1	158.2	0.0	10353:
	19:08:29	27.3069	27218.4	0.3	158.2	0.0	10370:
	19:11:22	27.3550	27218.6	0.2	158.2	0.0	10387:
	19:14:11	27.4019	27219.0	0.3	158.2	0.0	10404:
	19:17:00	27.4489	27219.4	0.5	158.2	0.0	10421:
	19:19:49	27.4958	27219.5	0.1	158.2	0.0	10438:

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 Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	19:22:38	27.5428	27219.9	0.3	158.2	0.0	10455:
	19:25:31	27.5908	27220.5	0.6	158.2	0.0	10472:
	19:28:20	27.6378	27221.9	1.4	158.2	0.0	10489:
	19:31:10	27.6850	27226.0	4.1	158.2	0.0	10506:
	19:33:59	27.7319	27226.2	0.2	158.2	0.0	10523:
	19:36:52	27.7800	27223.7	-2.5	158.2	0.0	10540:
	19:39:41	27.8269	27222.5	-1.2	158.2	0.0	10557:
	19:42:30	27.8739	27221.9	-0.6	158.2	0.0	10574:
	19:45:19	27.9208	27221.7	-0.2	158.2	0.0	10591:
	19:48:08	27.9678	27221.7	0.0	158.2	0.0	10608:
	19:51:01	28.0158	27221.8	0.1	158.2	0.0	10625:
	19:53:50	28.0628	27221.8	0.0	158.2	0.0	10642:
	19:56:40	28.1100	27221.9	0.1	158.2	0.0	10659:
	19:59:29	28.1569	27222.1	0.1	158.2	0.0	10676:
	20:02:22	28.2050	27222.3	0.2	158.2	0.0	10693:
	20:05:11	28.2519	27222.5	0.3	158.2	0.0	10710:
	20:08:00	28.2989	27222.8	0.3	158.2	0.0	10727:
	20:10:49	28.3458	27222.9	0.1	158.2	0.0	10744:
	20:13:38	28.3928	27223.1	0.2	158.2	0.0	10761:
	20:16:31	28.4408	27223.3	0.2	158.2	0.0	10778:
	20:19:20	28.4878	27223.6	0.3	158.2	0.0	10795:
	20:22:10	28.5350	27223.7	0.1	158.2	0.0	10812:
	20:24:59	28.5819	27224.0	0.3	158.2	0.0	10829:
	20:27:52	28.6300	27224.2	0.2	158.2	0.0	10846:
	20:30:41	28.6769	27224.4	0.2	158.2	0.0	10863:
	20:33:30	28.7239	27224.7	0.3	158.2	0.0	10880:
	20:36:19	28.7708	27225.0	0.3	158.2	0.0	10897:
	20:39:08	28.8178	27225.2	0.2	158.2	0.0	10914:
	20:42:01	28.8658	27225.4	0.2	158.2	0.0	10931:
	20:44:50	28.9128	27225.5	0.1	158.2	0.0	10948:
	20:47:40	28.9600	27225.8	0.3	158.2	0.0	10965:
	20:50:29	29.0069	27225.9	0.1	158.2	0.0	10982:
	20:53:22	29.0550	27226.2	0.3	158.2	0.0	10999:
	20:56:11	29.1019	27226.5	0.3	158.2	0.0	11016:
	20:59:00	29.1489	27226.7	0.2	158.2	0.0	11033:
	21:01:49	29.1958	27226.8	0.1	158.2	0.0	11050:
	21:04:38	29.2428	27227.1	0.3	158.2	0.0	11067:
	21:07:31	29.2908	27227.3	0.2	158.2	0.0	11084:
	21:10:20	29.3378	27227.5	0.2	158.2	0.0	11101:
	21:13:10	29.3850	27227.8	0.3	158.2	0.0	11118:
	21:15:59	29.4319	27227.9	0.1	158.2	0.0	11135:
	21:18:52	29.4800	27228.1	0.2	158.2	0.0	11152:
	21:21:41	29.5269	27228.3	0.2	158.2	0.0	11169:
	21:24:30	29.5739	27228.7	0.3	158.2	0.0	11186:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	21:27:19	29.6208	27228.8	0.1	158.2	0.0	11203:
	21:30:08	29.6678	27229.1	0.3	158.2	0.0	11220:
	21:33:01	29.7158	27229.3	0.2	158.2	0.0	11237:
	21:35:50	29.7628	27229.4	0.1	158.2	0.0	11254:
	21:38:40	29.8100	27229.7	0.3	158.2	0.0	11271:
	21:41:29	29.8569	27229.9	0.1	158.2	0.0	11288:
	21:44:22	29.9050	27230.1	0.3	158.2	0.0	11305:
	21:47:11	29.9519	27230.3	0.1	158.2	0.0	11322:
	21:50:00	29.9989	27230.5	0.2	158.2	0.0	11339:
	21:52:49	30.0458	27230.8	0.3	158.2	0.0	11356:
	21:55:38	30.0928	27231.0	0.1	158.2	0.0	11373:
	21:58:31	30.1408	27231.2	0.2	158.2	0.0	11390:
	22:01:20	30.1878	27231.3	0.1	158.2	0.0	11407:
	22:04:10	30.2350	27231.5	0.2	158.2	0.0	11424:
	22:06:59	30.2819	27231.8	0.3	158.2	0.0	11441:
	22:09:52	30.3300	27231.9	0.1	158.2	0.0	11458:
	22:12:41	30.3769	27232.1	0.2	158.2	0.0	11475:
	22:15:30	30.4239	27232.4	0.3	158.2	0.0	11492:
	22:18:19	30.4708	27232.5	0.1	158.2	0.0	11509:
	22:21:08	30.5178	27232.7	0.2	158.2	0.0	11526:
	22:24:01	30.5658	27232.8	0.1	158.2	0.0	11543:
	22:26:50	30.6128	27233.1	0.3	158.2	0.0	11560:
	22:29:40	30.6600	27233.3	0.2	158.2	0.0	11577:
	22:32:29	30.7069	27233.5	0.2	158.2	0.0	11594:
	22:35:22	30.7550	27233.6	0.1	158.2	0.0	11611:
	22:38:11	30.8019	27233.9	0.3	158.2	0.0	11628:
	22:41:00	30.8489	27234.1	0.1	158.2	0.0	11645:
	22:43:49	30.8958	27234.3	0.2	158.2	0.0	11662:
	22:46:38	30.9428	27234.4	0.1	158.2	0.0	11679:
	22:49:31	30.9908	27234.6	0.2	158.2	0.0	11696:
	22:52:20	31.0378	27234.8	0.2	158.2	0.0	11713:
	22:55:10	31.0850	27235.0	0.1	158.2	0.0	11730:
	22:57:59	31.1319	27235.2	0.2	158.2	0.0	11747:
	23:00:52	31.1800	27235.3	0.1	158.2	0.0	11764:
	23:03:41	31.2269	27235.5	0.2	158.2	0.0	11781:
	23:06:30	31.2739	27235.6	0.1	158.2	0.0	11798:
	23:09:19	31.3208	27235.8	0.1	158.2	0.0	11815:
	23:12:08	31.3678	27236.0	0.2	158.2	0.0	11832:
	23:15:01	31.4158	27236.2	0.2	158.2	0.0	11849:
	23:17:50	31.4628	27236.4	0.2	158.2	0.0	11866:
	23:20:40	31.5100	27236.5	0.1	158.2	0.0	11883:
	23:23:29	31.5569	27236.6	0.1	158.2	0.0	11900:
	23:26:22	31.6050	27236.8	0.2	158.2	0.0	11917:
	23:29:11	31.6519	27237.0	0.2	158.2	0.0	11934:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: Ranger Oil Limited
Ranger Fort Liard

LSD: P-66-A

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	23:32:00	31.6989	27237.2	0.1	158.2	0.0	11951:
	23:34:49	31.7458	27237.3	0.1	158.2	0.0	11968:
	23:37:38	31.7928	27237.4	0.1	158.2	0.0	11985:
	23:40:31	31.8408	27237.6	0.2	158.2	0.0	12002:
	23:43:20	31.8878	27237.8	0.2	158.2	0.0	12019:
	23:46:10	31.9350	27237.9	0.1	158.2	0.0	12036:
	23:48:59	31.9819	27238.1	0.2	158.2	0.0	12053:
	23:51:52	32.0300	27238.3	0.2	158.2	0.0	12070:
	23:54:41	32.0769	27238.4	0.1	158.2	0.0	12087:
	23:57:30	32.1239	27238.6	0.2	158.2	0.0	12104:
1998/07/23	00:00:19	32.1708	27238.7	0.1	158.2	0.0	12121:
	00:03:08	32.2178	27239.0	0.2	158.2	0.0	12138:
	00:06:01	32.2658	27239.1	0.1	158.2	0.0	12155:
	00:08:50	32.3128	27239.3	0.2	158.2	0.0	12172:
	00:11:40	32.3600	27239.4	0.1	158.2	0.0	12189:
	00:14:29	32.4069	27239.6	0.1	158.2	0.0	12206:
	00:17:22	32.4550	27239.7	0.1	158.2	0.0	12223:
	00:20:11	32.5019	27239.9	0.2	158.2	0.0	12240:
	00:23:00	32.5489	27240.1	0.2	158.2	0.0	12257:
	00:25:49	32.5958	27240.3	0.1	158.2	0.0	12274:
	00:28:38	32.6428	27240.3	0.1	158.2	0.0	12291:
	00:31:31	32.6908	27240.5	0.2	158.2	0.0	12308:
	00:34:20	32.7378	27240.6	0.1	158.2	0.0	12325:
	00:37:10	32.7850	27240.8	0.2	158.2	0.0	12342:
	00:39:59	32.8319	27240.9	0.1	158.2	0.0	12359:
	00:42:52	32.8800	27241.2	0.3	158.2	0.0	12376:
	00:45:41	32.9269	27241.3	0.1	158.2	0.0	12393:
	00:48:30	32.9739	27241.4	0.1	158.2	0.0	12410:
	00:51:19	33.0208	27241.6	0.1	158.2	0.0	12427:
	00:54:08	33.0678	27241.7	0.1	158.2	0.0	12444:
	00:57:01	33.1158	27241.9	0.2	158.2	0.0	12461:
	00:59:50	33.1628	27242.1	0.1	158.2	0.0	12478:
	01:02:40	33.2100	27242.1	0.1	158.2	0.0	12495:
	01:05:29	33.2569	27242.3	0.1	158.2	0.0	12512:
	01:08:22	33.3050	27242.5	0.3	158.2	0.0	12529:
	01:11:11	33.3519	27242.5	0.0	158.2	0.0	12546:
	01:14:00	33.3989	27242.8	0.3	158.2	0.0	12563:
	01:16:49	33.4458	27243.0	0.1	158.2	0.0	12580:
	01:19:38	33.4928	27243.0	0.1	158.2	0.0	12597:
	01:22:31	33.5408	27243.2	0.2	158.2	0.0	12614:
	01:25:20	33.5878	27243.3	0.1	158.2	0.0	12631:
	01:28:10	33.6350	27243.5	0.2	158.2	0.0	12648:
	01:30:59	33.6819	27243.6	0.1	158.2	0.0	12665:
	01:33:52	33.7300	27243.7	0.1	158.2	0.0	12682:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	01:36:41	33.7769	27244.0	0.3	158.2	0.0	12699:
	01:39:30	33.8239	27244.0	0.0	158.2	0.0	12716:
	01:42:19	33.8708	27244.2	0.2	158.2	0.0	12733:
	01:45:08	33.9178	27244.3	0.1	158.2	0.0	12750:
	01:48:01	33.9658	27244.3	0.1	158.2	0.0	12767:
	01:50:50	34.0128	27244.6	0.3	158.2	0.0	12784:
	01:53:40	34.0600	27244.7	0.1	158.2	0.0	12801:
	01:56:29	34.1069	27245.0	0.2	158.2	0.0	12818:
	01:59:22	34.1550	27245.0	0.1	158.2	0.0	12835:
	02:02:11	34.2019	27245.2	0.1	158.2	0.0	12852:
	02:05:00	34.2489	27245.2	0.1	158.2	0.0	12869:
	02:07:49	34.2958	27245.4	0.2	158.2	0.0	12886:
	02:10:38	34.3428	27245.6	0.2	158.2	0.0	12903:
	02:13:31	34.3908	27245.7	0.1	158.2	0.0	12920:
	02:16:20	34.4378	27245.8	0.1	158.2	0.0	12937:
	02:19:10	34.4850	27245.9	0.1	158.2	0.0	12954:
	02:21:59	34.5319	27246.1	0.1	158.2	0.0	12971:
	02:24:52	34.5800	27246.3	0.2	158.2	0.0	12988:
	02:27:41	34.6269	27246.4	0.1	158.2	0.0	13005:
	02:30:30	34.6739	27246.4	0.0	158.2	0.0	13022:
	02:33:19	34.7208	27246.5	0.1	158.2	0.0	13039:
	02:36:08	34.7678	27246.7	0.2	158.2	0.0	13056:
	02:39:01	34.8158	27247.0	0.2	158.2	0.0	13073:
	02:41:50	34.8628	27247.0	0.1	158.2	0.0	13090:
	02:44:40	34.9100	27247.1	0.1	158.2	0.0	13107:
	02:47:29	34.9569	27247.2	0.1	158.2	0.0	13124:
	02:50:22	35.0050	27247.3	0.1	158.2	0.0	13141:
	02:53:11	35.0519	27247.4	0.1	158.2	0.0	13158:
	02:56:00	35.0989	27247.6	0.1	158.2	0.0	13175:
	02:58:49	35.1458	27247.6	0.1	158.2	0.0	13192:
	03:01:38	35.1928	27247.8	0.2	158.2	0.0	13209:
	03:04:31	35.2408	27248.1	0.2	158.2	0.0	13226:
	03:07:20	35.2878	27248.1	0.0	158.2	0.0	13243:
	03:10:10	35.3350	27248.3	0.2	158.2	0.0	13260:
	03:12:59	35.3819	27248.4	0.1	158.2	0.0	13277:
	03:15:52	35.4300	27248.5	0.1	158.2	0.0	13294:
	03:18:41	35.4769	27248.5	0.1	158.2	0.0	13311:
	03:21:30	35.5239	27248.7	0.1	158.2	0.0	13328:
	03:24:19	35.5708	27248.7	0.1	158.2	0.0	13345:
	03:27:08	35.6178	27249.0	0.2	158.2	0.0	13362:
	03:30:01	35.6658	27249.0	0.0	158.2	0.0	13379:
	03:32:50	35.7128	27249.3	0.3	158.2	0.0	13396:
	03:35:40	35.7600	27249.4	0.1	158.2	0.0	13413:
	03:38:29	35.8069	27249.4	0.1	158.2	0.0	13430:

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.
 Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	03:41:22	35.8550	27249.6	0.1	158.2	0.0	13447:
	03:44:11	35.9019	27249.6	0.1	158.2	0.0	13464:
	03:47:00	35.9489	27249.8	0.1	158.2	0.0	13481:
	03:49:49	35.9958	27249.9	0.1	158.2	0.0	13498:
	03:52:38	36.0428	27250.0	0.1	158.2	0.0	13515:
	03:55:31	36.0908	27250.1	0.1	158.2	0.0	13532:
	03:58:20	36.1378	27250.3	0.1	158.2	0.0	13549:
	04:01:10	36.1850	27250.3	0.1	158.2	0.0	13566:
	04:03:59	36.2319	27250.5	0.1	158.2	0.0	13583:
	04:06:52	36.2800	27250.6	0.1	158.2	0.0	13600:
	04:09:41	36.3269	27250.7	0.1	158.2	0.0	13617:
	04:12:30	36.3739	27250.7	0.0	158.2	0.0	13634:
	04:15:19	36.4208	27251.0	0.2	158.2	0.0	13651:
	04:18:08	36.4678	27251.0	0.1	158.2	0.0	13668:
	04:21:01	36.5158	27251.2	0.1	158.2	0.0	13685:
	04:23:50	36.5628	27251.2	0.1	158.2	0.0	13702:
	04:26:40	36.6100	27251.4	0.1	158.2	0.0	13719:
	04:29:29	36.6569	27251.4	0.1	158.2	0.0	13736:
	04:32:22	36.7050	27251.6	0.2	158.2	0.0	13753:
	04:35:11	36.7519	27251.8	0.2	158.2	0.0	13770:
	04:38:00	36.7989	27251.8	0.0	158.2	0.0	13787:
	04:40:49	36.8458	27251.9	0.1	158.2	0.0	13804:
	04:43:38	36.8928	27252.1	0.1	158.2	0.0	13821:
	04:46:31	36.9408	27252.1	0.1	158.2	0.0	13838:
	04:49:20	36.9878	27252.3	0.1	158.2	0.0	13855:
	04:52:10	37.0350	27252.4	0.1	158.2	0.0	13872:
	04:54:59	37.0819	27252.5	0.1	158.2	0.0	13889:
	04:57:52	37.1300	27252.5	0.0	158.2	0.0	13906:
	05:00:41	37.1769	27252.7	0.2	158.2	0.0	13923:
	05:03:30	37.2239	27252.8	0.1	158.2	0.0	13940:
	05:06:19	37.2708	27252.9	0.1	158.2	0.0	13957:
	05:09:08	37.3178	27253.0	0.1	158.2	0.0	13974:
	05:12:01	37.3658	27253.2	0.1	158.2	0.0	13991:
	05:14:50	37.4128	27253.2	0.0	158.2	0.0	14008:
	05:17:40	37.4600	27253.4	0.2	158.2	0.0	14025:
	05:20:29	37.5069	27253.4	0.0	158.2	0.0	14042:
	05:23:22	37.5550	27253.6	0.2	158.2	0.0	14059:
	05:26:11	37.6019	27253.6	0.1	158.2	0.0	14076:
	05:29:00	37.6489	27253.8	0.1	158.2	0.0	14093:
	05:31:49	37.6958	27253.8	0.1	158.2	0.0	14110:
	05:34:38	37.7428	27254.0	0.1	158.2	0.0	14127:
	05:37:31	37.7908	27254.1	0.1	158.2	0.0	14144:
	05:40:20	37.8378	27254.1	0.1	158.2	0.0	14161:
	05:43:10	37.8850	27254.3	0.1	158.2	0.0	14178:

Absolute pressures are converted to gauge pressures
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 Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	05:45:59	37.9319	27254.3	0.1	158.2	0.0	14195:
	05:48:52	37.9800	27254.5	0.1	158.2	0.0	14212:
	05:51:41	38.0269	27254.6	0.1	158.2	0.0	14229:
	05:54:30	38.0739	27254.7	0.1	158.2	0.0	14246:
	05:57:19	38.1208	27254.7	0.1	158.2	0.0	14263:
	06:00:08	38.1678	27254.9	0.2	158.2	0.0	14280:
	06:03:01	38.2158	27254.9	0.0	158.2	0.0	14297:
	06:05:50	38.2628	27255.1	0.1	158.2	0.0	14314:
	06:08:40	38.3100	27255.2	0.1	158.2	0.0	14331:
	06:11:29	38.3569	27255.2	0.0	158.2	0.0	14348:
	06:14:22	38.4050	27255.4	0.2	158.2	0.0	14365:
	06:17:11	38.4519	27255.5	0.1	158.2	0.0	14382:
	06:20:00	38.4989	27255.6	0.1	158.2	0.0	14399:
	06:22:49	38.5458	27255.6	0.1	158.2	0.0	14416:
	06:25:38	38.5928	27255.8	0.1	158.2	0.0	14433:
	06:28:31	38.6408	27255.8	0.1	158.2	0.0	14450:
	06:31:20	38.6878	27255.9	0.1	158.2	0.0	14467:
	06:34:10	38.7350	27256.2	0.3	158.2	0.0	14484:
	06:36:59	38.7819	27256.1	-0.1	158.2	0.0	14501:
	06:39:52	38.8300	27256.1	0.0	158.2	0.0	14518:
	06:42:41	38.8769	27158.6	-97.5	158.2	0.0	14535:
	06:45:30	38.9239	26886.1	-272.5	157.9	-0.2	14552:
	06:48:19	38.9708	26712.9	-173.2	157.5	-0.4	14569:
	06:51:08	39.0178	26690.5	-22.4	157.1	-0.4	14586:
	06:54:01	39.0658	26685.6	-5.0	156.7	-0.3	14603:
	06:56:50	39.1128	26681.8	-3.7	156.5	-0.2	14620:
	06:59:40	39.1600	26679.4	-2.5	156.3	-0.2	14637:
	07:02:29	39.2069	26677.4	-1.9	156.2	-0.1	14654:
	07:05:22	39.2550	26676.1	-1.3	156.1	-0.1	14671:
	07:08:11	39.3019	26675.3	-0.8	156.1	-0.1	14688:
	07:11:00	39.3489	26674.7	-0.6	156.1	0.0	14705:
	07:13:49	39.3958	26674.3	-0.4	156.0	-0.1	14722:
	07:16:38	39.4428	26674.1	-0.1	156.0	0.0	14739:
	07:19:31	39.4908	26673.9	-0.2	156.0	0.0	14756:
	07:22:20	39.5378	26673.6	-0.3	155.9	-0.1	14773:
	07:25:10	39.5850	26673.8	0.1	155.9	0.0	14790:
	07:27:59	39.6319	26673.6	-0.2	155.9	0.0	14807:
	07:30:52	39.6800	26673.6	0.1	155.9	0.0	14824:
	07:33:41	39.7269	26673.8	0.1	155.9	0.0	14841:
	07:36:30	39.7739	26673.7	-0.1	155.9	0.0	14858:
	07:39:19	39.8208	26673.8	0.1	155.9	0.0	14875:
	07:42:08	39.8678	26673.8	0.1	155.9	0.0	14892:
	07:45:01	39.9158	26673.9	0.1	155.9	0.0	14909:
	07:47:50	39.9628	26673.8	-0.1	155.9	0.0	14926:

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.
 Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	07:50:40	40.0100	26673.8	0.1	155.9	0.0	14943:
	07:53:29	40.0569	26673.7	-0.1	155.9	0.0	14960:
	07:56:22	40.1050	26673.6	-0.1	155.9	0.0	14977:
	07:59:11	40.1519	26649.4	-24.3	155.9	-0.1	14994:
	08:02:00	40.1989	26650.3	1.0	155.8	-0.1	15011:
	08:04:49	40.2458	26649.5	-0.8	155.7	-0.1	15028:
	08:07:38	40.2928	26629.2	-20.3	155.6	-0.1	15045:
	08:10:31	40.3408	26628.5	-0.6	155.4	-0.2	15062:
	08:13:20	40.3878	26627.6	-0.9	155.3	-0.1	15079:
	08:16:10	40.4350	26627.5	-0.1	155.3	-0.1	15096:
	08:18:59	40.4819	26572.6	-55.0	155.1	-0.2	15113:
	08:21:52	40.5300	26533.7	-38.8	154.1	-1.0	15130:
	08:24:41	40.5769	26463.1	-70.7	152.4	-1.6	15147:
	08:27:30	40.6239	26394.6	-68.5	151.6	-0.9	15164:
	08:30:19	40.6708	26331.0	-63.6	150.7	-0.9	15181:
	08:33:08	40.7178	26269.6	-61.4	149.7	-1.0	15198:
	08:36:01	40.7658	26204.2	-65.4	148.6	-1.1	15215:
	08:38:50	40.8128	26140.8	-63.4	147.4	-1.2	15232:
	08:41:40	40.8600	26078.3	-62.5	146.1	-1.3	15249:
	08:44:29	40.9069	26018.3	-60.1	144.6	-1.6	15266:
	08:47:22	40.9550	25955.7	-62.5	142.8	-1.8	15283:
	08:50:11	41.0019	25891.4	-64.3	140.9	-1.8	15300:
	08:53:00	41.0489	25822.1	-69.3	139.1	-1.9	15317:
	08:55:49	41.0958	25753.6	-68.5	137.2	-1.8	15334:
	08:58:38	41.1428	25682.6	-71.0	135.4	-1.8	15351:
	09:01:31	41.1908	25613.5	-69.2	133.6	-1.8	15368:
	09:04:20	41.2378	25542.9	-70.5	131.8	-1.8	15385:
	09:07:10	41.2850	25470.2	-72.7	129.9	-1.8	15402:
	09:09:59	41.3319	25399.0	-71.2	128.1	-1.9	15419:
	09:12:52	41.3800	25325.2	-73.8	126.1	-2.0	15436:
	09:15:41	41.4269	25246.5	-78.7	124.3	-1.8	15453:
	09:18:30	41.4739	25170.5	-76.1	122.7	-1.6	15470:
	09:21:19	41.5208	25096.3	-74.2	120.9	-1.7	15487:
	09:24:08	41.5678	25017.1	-79.2	119.2	-1.8	15504:
	09:27:01	41.6158	24928.9	-88.3	117.3	-1.9	15521:
	09:29:50	41.6628	24828.9	-100.0	115.4	-1.9	15538:
	09:32:40	41.7100	24719.5	-109.4	113.7	-1.7	15555:
	09:35:29	41.7569	24608.4	-111.0	112.1	-1.7	15572:
	09:38:22	41.8050	24498.1	-110.4	109.9	-2.1	15589:
	09:41:11	41.8519	24374.4	-123.6	107.8	-2.1	15606:
	09:44:00	41.8989	24251.0	-123.4	106.0	-1.8	15623:
	09:46:49	41.9458	24130.0	-121.0	103.6	-2.4	15640:
	09:49:38	41.9928	24004.0	-126.0	100.3	-3.3	15657:
	09:52:31	42.0408	23871.0	-133.0	96.8	-3.5	15674:

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.
 Reporting on an interval of 1 in 17 data points.

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

PRESSURE TRANSIENT TEST DATA

Company: **Ranger Oil Limited**
Ranger Fort Liard

LSD: **P-66-A**

Bottom Gauge

Date	Time	dt (hrs)	P (kPaG)	dP	T (°C)	dT	Pt. #
	09:55:20	42.0878	23733.1	-138.0	93.1	-3.7	15691:
	09:58:10	42.1350	23590.1	-143.0	89.3	-3.7	15708:
	10:00:59	42.1819	23444.7	-145.3	85.7	-3.6	15725:
	10:03:52	42.2300	23296.8	-147.9	81.6	-4.1	15742:
	10:06:41	42.2769	23141.9	-154.9	77.2	-4.4	15759:
	10:09:30	42.3239	22980.5	-161.4	72.5	-4.7	15776:
	10:12:19	42.3708	22812.9	-167.5	67.7	-4.8	15793:
	10:15:08	42.4178	22637.7	-175.2	62.8	-4.9	15810:
	10:18:01	42.4658	22457.3	-180.4	58.0	-4.8	15827:
	10:20:50	42.5128	22271.0	-186.2	53.3	-4.7	15844:
	10:23:40	42.5600	22098.7	-172.4	48.8	-4.5	15861:
	10:26:29	42.6069	22095.9	-2.8	45.2	-3.6	15878:
	10:29:22	42.6550	22094.8	-1.1	42.7	-2.6	15895:
	10:32:11	42.7019	22093.8	-1.0	40.8	-1.8	15912:
	10:35:00	42.7489	22093.3	-0.6	39.5	-1.3	15929:
	10:37:49	42.7958	22092.7	-0.6	38.6	-0.9	15946:
	10:40:38	42.8428	22092.2	-0.5	37.9	-0.7	15963:
	10:43:31	42.8908	22091.9	-0.3	37.5	-0.5	15980:
	10:46:20	42.9378	22091.6	-0.3	37.1	-0.3	15997:
	10:49:10	42.9850	22091.4	-0.3	36.9	-0.3	16014:
	10:51:59	43.0319	22091.0	-0.3	36.7	-0.2	16031:
	10:54:52	43.0800	22090.8	-0.2	36.6	-0.1	16048:
	10:57:41	43.1269	22090.5	-0.3	36.4	-0.1	16065:
	11:00:30	43.1739	22090.2	-0.3	36.4	-0.1	16082:
	11:03:19	43.2208	22089.9	-0.3	36.3	-0.1	16099:
	11:06:08	43.2678	22089.6	-0.3	36.3	-0.0	16116:
	11:09:01	43.3158	22089.4	-0.2	36.2	-0.0	16133:
	11:11:50	43.3628	22089.1	-0.3	36.2	-0.0	16150:
	11:14:40	43.4100	22091.4	2.3	36.2	-0.0	16167:
	11:17:29	43.4569	22051.8	-39.6	36.2	-0.0	16184:
	11:20:22	43.5050	21941.0	-110.8	35.8	-0.4	16201:
	11:23:11	43.5519	21842.3	-98.7	34.7	-1.0	16218:
	11:26:00	43.5989	21717.4	-124.9	33.2	-1.6	16235:
	11:28:49	43.6458	21591.2	-126.2	31.5	-1.7	16252:
	11:31:38	43.6928	21534.8	-56.4	28.8	-2.6	16269:
	11:34:49	43.7458	29.1	-21505.7	26.5	-2.3	16286:
	11:38:11	43.8019	21.4	-7.7	21.5	-5.0	16303:
1998/07/23	11:39:41	43.8269	15.8	-5.7	20.8	-0.8	16312:

End Data Acquisition:

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.
 Reporting on an interval of 1 in 17 data points.