

N.E.B. COPY

GENCO Pressure Control Limited

(403) 250-3800

CALGARY, AB.

SUBSURFACE PRESSURE MEASUREMENTS

Basic Data:

Company <u>Ranger Oil Limited</u>	Genronics Electronic Gauge
Address <u>1600, 321 - 6 Avenue S.W.</u>	c/w Memory Recorder
<u>Calgary, Alberta</u>	S/N: <u>GSB-20881</u>
Well Name <u>Ranger ^{North} Port Liard</u>	Field & Pool <u>TIGHT HOLE</u>
Well Identifier <u>P-66-A</u>	Type of Test <u>Static Gradient</u>
Status <u>Gas</u>	Date of Test <u>Mar 02, 1998</u>
DWG Tubing Pressure _____ kPa	DWG Casing Pressure _____ kPa
Tubing _____ mm @ _____ m KB	Casing _____ mm @ _____ m KB
Producing Interval _____	Producing Through _____
Elevation _____ m CF, _____ m KB	MPP Interval _____ m CF
Datum Depth of Well _____ m CF	Run Depth <u>3276.4</u> m CF
Temperature at Run Depth <u>150.4</u> °C	Pool Datum _____ m (subsea)
Pressure at Run Depth <u>26770</u> kPaG	Gradient at Run Depth <u>0.85</u> kPa/m
MPP Pressure _____ kPaG	Datum Depth Pressure _____ kPaG
Final Buildup Pressure _____ kPaG	Date on Bottom <u>Mar 2, 1998 @ 09:58</u>
Date off Bottom <u>Mar 2, 1998 @ 14:45</u>	Shut in Date _____

Summary:

Genronic Strain Recorder. Recorder Ran
Within Specification.

*Note: Tight Hole.

Please Find Enclosed Verification
Numbers of Top Gauge As Per Conversation
With Tim Metz On March 5, 1998.

Preparation Data:

Tested By <u>GENCO</u>	Computed By <u>T. Metz</u>	Report Date <u>Mar 06, 1998</u>
------------------------	----------------------------	---------------------------------

**MICROFILMED
SUR MICROFILM:**

TOP GAUGE

GENCO PRESSURE CONTROL LIMITED

(403) 250-3800

Calgary, AB.

STATIC GRADIENT SURVEY

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

Top Gauge

Depth (meters)	Pressure (kPaG)	Gradient (kPa/m)	Temp (°C)	Gradient (°C/m)
At Surface: 1998/03/02 03:22:30 (Running In)				
000	21733	-----	14.3	-----
500	22804	2.14	46.9	0.065
1000	23734	1.86	74.8	0.056
1500	24621	1.77	98.7	0.048
2000	25282	1.32	114.0	0.031
2200	25510	1.14	120.2	0.031
2400	25738	1.14	125.6	0.027
2600	25965	1.13	130.5	0.025
2800	26217	1.26	135.5	0.025
3000	26459	1.21	140.3	0.024
3050	26518	1.17	142.8	0.050
3100	26581	1.26	145.9	0.062
3150	26637	1.13	148.4	0.050
3200	26705	1.36	149.1	0.014
3276	26770	0.85	150.4	0.017

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

(403) 250-3800

GENCO Pressure Control Limited

SUBSURFACE PRESSURE MEASUREMENTS

CALGARY, AB.

Basic Data:

Company Ranger Oil Limited

Address 1600, 321 - 6 Avenue S.W.

Calgary, Alberta

Gentronics Electronic Gauge

c/w Memory Recorder

S/N: **GSB-20880**

Well Name Ranger Fort Liard

Field & Pool TIGHT HOLE

Well Identifier P-66-A

Type of Test Static Gradient

Status Gas

Date of Test Mar 02, 1998

DWG Tubing Pressure _____ kPa

DWG Casing Pressure _____ kPa

Tubing _____ mm @ _____ m KB

Casing _____ mm @ _____ m KB

Producing Interval _____

Producing Through _____

Elevation _____ m CF, _____ m KB

MPP Interval _____ m CF

Datum Depth of Well _____ m CF

Run Depth 3276.4 m CF

Temperature at Run Depth 150.9 °C

Pool Datum _____ m (subsea)

Pressure at Run Depth 26749.6 kPaG

Gradient at Run Depth 1.38 kPa/m

MPP Pressure _____ kPaG

Datum Depth Pressure _____ kPaG

Final Buildup Pressure _____ kPaG

Date on Bottom Mar 2, 1998 @ 09:58

Date off Bottom Mar 2, 1998 @ 14:45

Shut in Date _____

Summary:

**Gentronic Strain Recorder. Recorder Ran
Within Specification.**

***Note: Tight Hole.**

Preparation Data:

Tested By GENCO Computed By L. Champagne Report Date Mar 05, 1998

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
1998/03/02	06:04:50	0.0000	7.5	9.9	1 :	Begin Data Acquisition
	06:13:50	0.1500	21729.6	12.9	14 :	@ surface
	06:42:50	0.6333	22749.3	47.5	71 :	@ 500.0 mCF
	07:01:50	0.9500	23693.7	74.3	135 :	@ 1000.0 mCF
	07:19:50	1.2500	24592.4	98.3	188 :	@ 1500.0 mCF
	07:36:50	1.5333	25257.1	115.2	235 :	@ 2000.0 mCF
	07:51:50	1.7833	25483.1	120.4	255 :	@ 2200.0 mCF
	08:05:50	2.0167	25713.5	125.7	274 :	@ 2400.0 mCF
	08:18:50	2.2333	25944.2	130.7	292 :	@ 2600.0 mCF
	08:31:50	2.4500	26177.3	135.6	305 :	@ 2800.0 mCF
	08:43:50	2.6500	26411.1	140.4	327 :	@ 3000.0 mCF
	08:50:50	2.7667	26486.2	142.0	334 :	@ 3050.0 mCF
	09:04:50	3.0000	26545.8	144.8	348 :	@ 3100.0 mCF
	09:20:50	3.2667	26602.6	148.3	364 :	@ 3150.0 mCF
	09:31:50	3.4500	26659.5	149.4	375 :	@ 3200.0 mCF
	09:38:50	3.5667	26713.2	150.3	382 :	@ 3250.0 mCF
	09:58:50	3.9000	26746.2	150.9	402 :	Recorder On Bottom
	10:53:50	4.8167	26749.6	150.9	457 :	@ 3276.4 mCF
					:	Gradient Pressure
	14:45:00	8.6694	27193.1	154.3	694 :	Recorder Off Bottom
	15:59:40	9.9139	96.4	21.1	899 :	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.

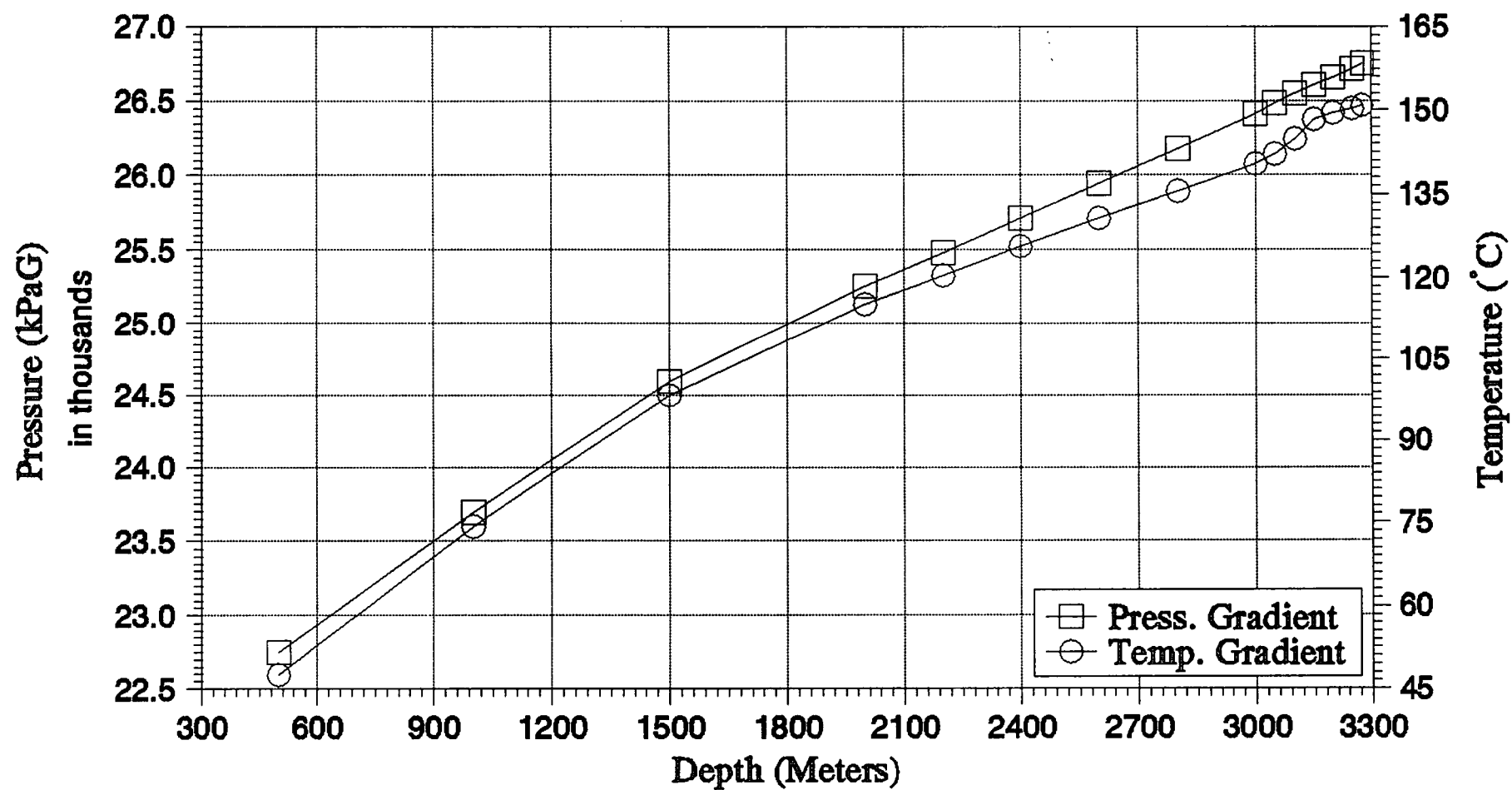
STATIC GRADIENT SURVEYCompany: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Depth (meters)	Pressure (kPaG)	Gradient (kPa/m)	Temp (°C)	Gradient (°C/m)
At Surface: 1998/03/02 06:13:50 (Running In)				
000	21730	-----	12.9	-----
500	22749	2.04	47.5	0.069
1000	23694	1.89	74.3	0.054
1500	24592	1.80	98.3	0.048
2000	25257	1.33	115.2	0.034
2200	25483	1.13	120.4	0.026
2400	25714	1.15	125.7	0.027
2600	25944	1.15	130.7	0.025
2800	26177	1.17	135.6	0.025
3000	26411	1.17	140.4	0.024
3050	26486	1.50	142.0	0.032
3100	26546	1.19	144.8	0.056
3150	26603	1.14	148.3	0.070
3200	26660	1.14	149.4	0.022
3250	26713	1.07	150.3	0.018
3276	26750	1.38	150.9	0.023

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

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



GENCO PRESSURE CONTROL LTD (403)250-3800
Start Aquisition: 1998/03/02 06:04:50
End Aquisition: 1998/03/02 15:59:40

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:

1998/03/02	06:04:50	0.0000	7.5	7.5	9.9	9.9	0:
	06:05:20	0.0083	6341.8	6334.3	9.8	-0.1	4:
	06:07:50	0.0500	21727.6	15385.8	11.0	1.1	8:
	06:11:50	0.1167	21729.7	2.1	12.6	1.6	12:
	06:15:50	0.1833	21731.3	1.6	13.3	0.8	16:
	06:19:50	0.2500	21724.7	-6.6	13.7	0.3	20:
	06:23:50	0.3167	21714.1	-10.6	15.1	1.4	24:
	06:27:10	0.3722	21872.4	158.2	18.5	3.4	28:
	06:27:50	0.3833	21945.0	72.7	19.8	1.3	32:
	06:28:30	0.3944	22033.6	88.6	20.9	1.1	36:
	06:29:10	0.4056	22144.4	110.8	22.3	1.4	40:
	06:29:50	0.4167	22243.3	98.9	24.1	1.8	44:
	06:30:30	0.4278	22350.8	107.5	25.6	1.5	48:
	06:31:10	0.4389	22450.8	100.0	27.1	1.5	52:
	06:31:50	0.4500	22547.3	96.5	28.9	1.8	56:
	06:32:30	0.4611	22646.3	99.1	30.4	1.5	60:
	06:35:50	0.5167	22750.4	104.1	38.5	8.1	64:
	06:39:50	0.5833	22751.8	1.3	44.6	6.1	68:
	06:43:50	0.6500	22751.6	-0.1	48.3	3.8	72:
	06:44:30	0.6611	22812.2	60.5	48.7	0.4	76:
	06:45:10	0.6722	22887.2	75.1	49.3	0.6	80:
	06:45:50	0.6833	22959.4	72.2	49.8	0.5	84:
	06:46:30	0.6944	23029.6	70.1	50.6	0.7	88:
	06:47:10	0.7056	23099.8	70.3	51.3	0.7	92:
	06:47:50	0.7167	23170.1	70.3	52.2	0.9	96:
	06:48:30	0.7278	23240.5	70.3	53.5	1.3	100:
	06:49:10	0.7389	23309.1	68.6	54.6	1.1	104:
	06:49:50	0.7500	23376.9	67.8	55.6	1.0	108:
	06:50:30	0.7611	23445.0	68.1	56.8	1.2	112:
	06:51:10	0.7722	23507.6	62.6	58.1	1.3	116:
	06:51:50	0.7833	23579.7	72.1	59.4	1.3	120:
	06:52:30	0.7944	23650.9	71.2	60.9	1.4	124:
	06:54:50	0.8333	23669.4	18.5	65.8	4.9	128:
	06:58:50	0.9000	23686.5	17.1	71.6	5.8	132:
	07:02:50	0.9667	23703.8	17.3	75.1	3.5	136:
	07:03:30	0.9778	23793.2	89.4	75.4	0.3	140:
	07:04:10	0.9889	23873.5	80.3	75.8	0.3	144:
	07:04:50	1.0000	23956.4	82.9	76.7	0.9	148:
	07:05:30	1.0111	24037.7	81.4	77.2	0.5	152:
	07:06:10	1.0222	24120.3	82.5	78.0	0.8	156:
	07:06:50	1.0333	24200.6	80.3	78.8	0.8	160:
	07:07:30	1.0444	24282.3	81.7	79.9	1.2	164:
	07:08:10	1.0556	24362.9	80.6	81.3	1.3	168:

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.
 Reporting on an interval of 1 in 4 data points.

DATA - 1

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. #
	07:08:50	1.0667	24449.8	86.9	82.7	1.4	172:
	07:09:30	1.0778	24524.0	74.3	84.3	1.6	176:
	07:11:50	1.1167	24591.3	67.3	89.5	5.2	180:
	07:15:50	1.1833	24599.6	8.3	95.0	5.5	184:
	07:19:50	1.2500	24592.4	-7.2	98.3	3.3	188:
	07:21:20	1.2750	24652.8	60.3	99.1	0.8	192:
	07:22:00	1.2861	24722.3	69.6	99.5	0.4	196:
	07:22:40	1.2972	24797.7	75.4	100.3	0.8	200:
	07:23:20	1.3083	24873.5	75.8	100.9	0.6	204:
	07:24:50	1.3333	24983.7	110.3	103.1	2.2	208:
	07:25:30	1.3444	25050.1	66.3	104.0	0.9	212:
	07:26:10	1.3556	25100.3	50.2	104.8	0.8	216:
	07:26:50	1.3667	25154.8	54.5	105.8	0.9	220:
	07:27:30	1.3778	25202.0	47.2	106.8	1.0	224:
	07:29:50	1.4167	25252.3	50.3	110.1	3.3	228:
	07:33:50	1.4833	25255.7	3.4	113.7	3.6	232:
	07:37:50	1.5500	25257.8	2.1	115.6	1.9	236:
	07:39:20	1.5750	25292.3	34.5	116.3	0.7	240:
	07:40:50	1.6000	25417.6	125.4	116.9	0.7	244:
	07:44:50	1.6667	25480.0	62.3	118.8	1.9	248:
	07:48:50	1.7333	25483.6	3.6	119.7	0.9	252:
	07:52:50	1.8000	25556.8	73.2	120.4	0.7	256:
	07:53:30	1.8111	25611.5	54.7	120.6	0.2	260:
	07:55:50	1.8500	25703.2	91.7	122.2	1.6	264:
	07:59:50	1.9167	25709.6	6.3	124.2	2.0	268:
	08:03:50	1.9833	25712.0	2.4	125.2	1.1	272:
	08:07:00	2.0361	25781.7	69.7	125.9	0.7	276:
	08:07:40	2.0472	25837.5	55.8	126.1	0.2	280:
	08:10:50	2.1000	25932.8	95.3	128.0	1.9	284:
	08:14:50	2.1667	25938.4	5.6	129.7	1.7	288:
	08:18:50	2.2333	25944.2	5.8	130.7	1.0	292:
	08:22:50	2.3000	26165.7	221.5	132.1	1.4	296:
	08:26:50	2.3667	26173.7	7.9	134.4	2.3	300:
	08:30:50	2.4333	26178.9	5.2	135.2	0.8	304:
	08:33:10	2.4722	26204.2	25.3	135.9	0.7	308:
	08:33:50	2.4833	26260.8	56.5	136.2	0.2	312:
	08:34:30	2.4944	26320.4	59.6	136.3	0.1	316:
	08:36:50	2.5333	26401.6	81.2	137.8	1.5	320:
	08:40:50	2.6000	26408.4	6.8	139.5	1.7	324:
	08:44:50	2.6667	26410.8	2.4	140.6	1.1	328:
	08:48:50	2.7333	26483.5	72.7	141.7	1.1	332:
	08:52:50	2.8000	26486.4	2.8	142.4	0.7	336:
	08:56:50	2.8667	26480.1	-6.3	142.8	0.4	340:
	09:00:50	2.9333	26542.7	62.6	144.1	1.3	344:

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.
 Reporting on an interval of 1 in 4 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. #
	09:04:50	3.0000	26545.8	3.1	144.8	0.7	348:
	09:08:50	3.0667	26545.6	-0.2	145.6	0.8	352:
	09:12:50	3.1333	26598.6	53.0	146.2	0.7	356:
	09:16:50	3.2000	26602.2	3.6	147.6	1.4	360:
	09:20:50	3.2667	26602.6	0.4	148.3	0.7	364:
	09:24:50	3.3333	26659.9	57.3	148.8	0.6	368:
	09:28:50	3.4000	26662.9	3.0	149.2	0.3	372:
	09:32:50	3.4667	26658.9	-4.1	149.6	0.4	376:
	09:36:50	3.5333	26712.9	54.0	150.3	0.7	380:
	09:40:50	3.6000	26713.2	0.3	150.3	0.1	384:
	09:44:50	3.6667	26721.2	8.0	150.9	0.6	388:
	09:48:50	3.7333	26747.8	26.5	151.0	0.1	392:
	09:52:50	3.8000	26747.3	-0.5	150.9	-0.1	396:
	09:56:50	3.8667	26745.1	-2.2	150.9	0.1	400:
	10:00:50	3.9333	26746.2	1.1	150.9	0.0	404:
	10:04:50	4.0000	26746.3	0.1	150.9	0.0	408:
	10:08:50	4.0667	26746.8	0.5	150.9	0.0	412:
	10:12:50	4.1333	26747.1	0.3	150.9	0.0	416:
	10:16:50	4.2000	26747.4	0.3	150.9	0.0	420:
	10:20:50	4.2667	26747.8	0.3	150.9	0.0	424:
	10:24:50	4.3333	26747.9	0.1	150.9	0.0	428:
	10:28:50	4.4000	26748.2	0.3	150.9	0.0	432:
	10:32:50	4.4667	26748.4	0.2	150.9	0.0	436:
	10:36:50	4.5333	26748.6	0.3	150.9	0.0	440:
	10:40:50	4.6000	26748.8	0.1	150.9	0.0	444:
	10:44:50	4.6667	26749.0	0.2	150.9	0.0	448:
	10:48:50	4.7333	26749.3	0.3	150.9	0.0	452:
	10:52:50	4.8000	26749.6	0.3	150.9	0.0	456:
	10:56:50	4.8667	26749.8	0.1	150.9	0.0	460:
	11:00:50	4.9333	26750.1	0.3	150.9	0.0	464:
	11:04:50	5.0000	26750.2	0.1	150.9	0.0	468:
	11:08:50	5.0667	26750.6	0.3	150.9	0.0	472:
	11:12:50	5.1333	26750.7	0.1	150.9	0.0	476:
	11:16:50	5.2000	26750.9	0.1	150.9	0.0	480:
	11:20:50	5.2667	26751.2	0.3	150.9	0.0	484:
	11:24:50	5.3333	26751.3	0.1	150.9	0.0	488:
	11:28:50	5.4000	26751.5	0.1	150.9	0.0	492:
	11:32:50	5.4667	26751.8	0.3	150.9	0.0	496:
	11:36:50	5.5333	26752.0	0.1	150.9	0.0	500:
	11:40:50	5.6000	26752.1	0.1	150.9	0.0	504:
	11:44:50	5.6667	26752.3	0.2	150.9	0.0	508:
	11:48:50	5.7333	26752.4	0.1	150.9	-0.1	512:
	11:52:50	5.8000	26752.6	0.1	150.9	0.0	516:
	11:56:50	5.8667	26752.6	0.0	150.9	0.0	520:

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.
 Reporting on an interval of 1 in 4 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. #
	12:00:50	5.9333	26752.7	0.1	150.9	0.0	524:
	12:04:50	6.0000	26752.9	0.2	150.9	0.0	528:
	12:08:50	6.0667	26752.9	0.0	150.9	0.0	532:
	12:12:50	6.1333	26753.1	0.1	150.9	0.0	536:
	12:16:50	6.2000	26753.2	0.1	150.9	0.0	540:
	12:20:50	6.2667	26753.3	0.1	150.9	0.0	544:
	12:24:50	6.3333	26753.5	0.2	150.9	0.0	548:
	12:28:50	6.4000	26753.5	0.0	150.9	0.0	552:
	12:32:50	6.4667	26753.5	0.0	150.9	0.0	556:
	12:36:50	6.5333	26753.7	0.1	150.9	0.0	560:
	12:40:50	6.6000	26753.7	0.0	150.9	0.0	564:
	12:44:50	6.6667	26753.7	0.0	150.9	0.0	568:
	12:48:50	6.7333	26753.7	0.0	150.8	-0.1	572:
	12:52:50	6.8000	26753.8	0.1	150.8	0.0	576:
	12:56:50	6.8667	26754.0	0.1	150.8	0.0	580:
	13:00:50	6.9333	26754.2	0.2	150.8	0.0	584:
	13:04:50	7.0000	26754.2	0.0	150.8	0.0	588:
	13:08:50	7.0667	26754.3	0.1	150.8	0.0	592:
	13:12:50	7.1333	26754.4	0.1	150.8	0.0	596:
	13:16:50	7.2000	26754.6	0.2	150.8	0.0	600:
	13:20:50	7.2667	26754.8	0.1	150.8	0.0	604:
	13:24:50	7.3333	26754.9	0.1	150.8	0.0	608:
	13:28:50	7.4000	26755.5	0.6	150.8	-0.1	612:
	13:32:50	7.4667	26756.0	0.5	150.8	0.0	616:
	13:36:50	7.5333	26756.8	0.8	150.8	0.0	620:
	13:40:50	7.6000	26759.5	2.7	150.8	0.1	624:
	13:44:50	7.6667	26755.9	-3.6	150.8	-0.1	628:
	13:48:50	7.7333	26761.3	5.4	150.3	-0.4	632:
	13:50:20	7.7583	26770.1	8.8	150.3	0.0	636:
	13:51:50	7.7833	26912.5	142.4	150.3	0.0	640:
	13:55:50	7.8500	26988.8	76.3	151.5	1.2	644:
	13:59:50	7.9167	26993.0	4.2	151.7	0.2	648:
	14:03:50	7.9833	26993.4	0.3	151.7	0.0	652:
	14:07:50	8.0500	27036.4	43.0	151.8	0.1	656:
	14:11:50	8.1167	27043.4	7.0	152.9	1.2	660:
	14:15:50	8.1833	27043.1	-0.3	153.1	0.1	664:
	14:19:50	8.2500	27044.4	1.4	153.1	0.0	668:
	14:23:50	8.3167	27072.6	28.2	153.1	0.0	672:
	14:27:50	8.3833	27102.5	29.9	153.4	0.4	676:
	14:31:50	8.4500	27133.0	30.5	153.6	0.2	680:
	14:35:50	8.5167	27176.2	43.2	153.8	0.2	684:
	14:39:50	8.5833	27166.5	-9.7	154.0	0.2	688:
	14:43:50	8.6500	27166.6	0.1	154.3	0.3	692:
	14:45:20	8.6750	27116.4	-50.3	154.3	0.0	696:

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.
 Reporting on an interval of 1 in 4 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. #
	14:46:50	8.7000	26721.4	-394.9	153.8	-0.5	700:
	14:50:50	8.7667	26715.3	-6.1	151.7	-2.1	704:
	14:54:50	8.8333	26521.3	-194.1	151.0	-0.7	708:
	14:58:50	8.9000	26338.9	-182.4	147.2	-3.8	712:
	15:02:50	8.9667	26110.2	-228.6	142.6	-4.6	716:
	15:06:50	9.0333	25887.9	-222.4	137.3	-5.3	720:
	15:10:50	9.1000	25651.2	-236.7	131.8	-5.4	724:
	15:11:30	9.1111	25596.8	-54.4	130.8	-1.0	728:
	15:12:10	9.1222	25538.5	-58.3	129.8	-1.1	732:
	15:12:50	9.1333	25482.0	-56.5	128.8	-0.9	736:
	15:13:30	9.1444	25425.0	-57.0	127.8	-1.0	740:
	15:14:10	9.1556	25367.1	-57.9	126.8	-1.1	744:
	15:14:50	9.1667	25314.5	-52.6	125.7	-1.1	748:
	15:15:30	9.1778	25248.5	-66.0	124.7	-1.0	752:
	15:16:10	9.1889	25186.3	-62.2	123.6	-1.1	756:
	15:16:50	9.2000	25129.4	-57.0	122.6	-1.1	760:
	15:17:30	9.2111	25061.6	-67.8	121.4	-1.2	764:
	15:18:10	9.2222	24984.4	-77.2	120.3	-1.1	768:
	15:18:50	9.2333	24891.8	-92.6	119.1	-1.2	772:
	15:19:30	9.2444	24787.0	-104.7	117.9	-1.2	776:
	15:20:10	9.2556	24680.8	-106.2	116.9	-1.0	780:
	15:20:50	9.2667	24566.5	-114.3	115.6	-1.3	784:
	15:21:30	9.2778	24454.4	-112.1	114.2	-1.4	788:
	15:22:10	9.2889	24341.3	-113.1	112.3	-1.8	792:
	15:22:50	9.3000	24228.5	-112.7	111.0	-1.3	796:
	15:23:30	9.3111	24109.2	-119.3	109.2	-1.8	800:
	15:24:10	9.3222	24001.5	-107.7	107.1	-2.2	804:
	15:24:50	9.3333	23887.5	-114.0	104.8	-2.3	808:
	15:25:30	9.3444	23776.5	-111.0	102.7	-2.1	812:
	15:26:10	9.3556	23661.6	-114.9	100.4	-2.2	816:
	15:26:50	9.3667	23542.1	-119.4	98.3	-2.2	820:
	15:27:30	9.3778	23409.1	-133.0	96.0	-2.3	824:
	15:28:10	9.3889	23273.8	-135.3	94.0	-2.0	828:
	15:28:50	9.4000	23128.6	-145.2	91.8	-2.2	832:
	15:29:30	9.4111	22973.6	-155.0	89.8	-2.1	836:
	15:30:10	9.4222	22821.1	-152.5	87.6	-2.2	840:
	15:30:50	9.4333	22659.0	-162.0	85.0	-2.6	844:
	15:31:30	9.4444	22502.8	-156.2	82.2	-2.8	848:
	15:32:10	9.4556	22353.4	-149.5	79.4	-2.8	852:
	15:32:50	9.4667	22212.1	-141.3	76.4	-2.9	856:
	15:33:30	9.4778	22064.1	-148.0	73.3	-3.2	860:
	15:34:10	9.4889	21956.3	-107.8	70.3	-2.9	864:
	15:34:50	9.5000	21854.0	-102.4	67.2	-3.1	868:
	15:35:30	9.5111	21783.8	-70.2	64.4	-2.8	872:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 4 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. #
	15:38:50	9.5667	21703.2	-80.6	51.4	-12.9	876:
	15:42:50	9.6333	21693.6	-9.6	41.1	-10.3	880:
	15:46:50	9.7000	21675.7	-17.9	34.3	-6.8	884:
	15:50:50	9.7667	21673.2	-2.4	29.9	-4.4	888:
	15:54:50	9.8333	21668.8	-4.5	27.1	-2.8	892:
	15:59:00	9.9028	21355.1	-313.7	22.0	-5.1	896:
1998/03/02	15:59:40	9.9139	96.4	-21258.7	21.1	-0.9	899:

End Data Acquisition:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 4 data points.

DATA - 6

(403) 250-3800

GENCO Pressure Control Limited

CALGARY, AB.

SUBSURFACE PRESSURE MEASUREMENTS**Basic Data:**Company Ranger Oil LimitedAddress 1600, 321 - 6 Avenue S.W.Calgary, Alberta

Gentronics Electronic Gauge

c/w Memory Recorder

S/N:

GSB-20880

Well Name Ranger Fort LiardField & Pool TIGHT HOLEWell Identifier P-66-AType of Test Static GradientStatus GasDate of Test Mar 02, 1998

DWG Tubing Pressure _____ kPa

DWG Casing Pressure _____ kPa

Tubing _____ mm @ _____ m KB

Casing _____ mm @ _____ m KB

Producing Interval _____

Producing Through _____

Elevation _____ m CF, _____ m KB

MPP Interval _____ m CF

Datum Depth of Well _____ m CF

Run Depth 3276.4 m CFTemperature at Run Depth 150.9 °C

Pool Datum _____ m (subsea)

Pressure at Run Depth 26749.6 kPaGGradient at Run Depth 1.38 kPa/m

MPP Pressure _____ kPaG

Datum Depth Pressure _____ kPaG

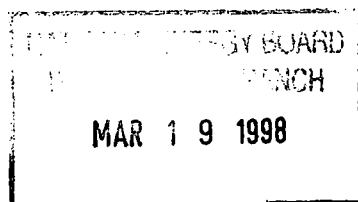
Final Buildup Pressure _____ kPaG

Date on Bottom Mar 2, 1998 @ 09:58Date off Bottom Mar 2, 1998 @ 14:45

Shut in Date _____

Summary:Gentronic Strain Recorder. Recorder Ran
Within Specification.

*Note: Tight Hole.

Preparation Data:Tested By GENCO Computed By L. Champagne Report Date Mar 05, 1998

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)	Ft. #	Remarks
1998/03/02	06:04:50	0.0000	7.5	9.9	1 :	Begin Data Acquisition
	06:13:50	0.1500	21729.6	12.9	14 :	@ surface
	06:42:50	0.6333	22749.3	47.5	71 :	@ 500.0 mCF
	07:01:50	0.9500	23693.7	74.3	135 :	@ 1000.0 mCF
	07:19:50	1.2500	24592.4	98.3	188 :	@ 1500.0 mCF
	07:36:50	1.5333	25257.1	115.2	235 :	@ 2000.0 mCF
	07:51:50	1.7833	25483.1	120.4	255 :	@ 2200.0 mCF
	08:05:50	2.0167	25713.5	125.7	274 :	@ 2400.0 mCF
	08:18:50	2.2333	25944.2	130.7	292 :	@ 2600.0 mCF
	08:31:50	2.4500	26177.3	135.6	305 :	@ 2800.0 mCF
	08:43:50	2.6500	26411.1	140.4	327 :	@ 3000.0 mCF
	08:50:50	2.7667	26486.2	142.0	334 :	@ 3050.0 mCF
	09:04:50	3.0000	26545.8	144.8	348 :	@ 3100.0 mCF
	09:20:50	3.2667	26602.6	148.3	364 :	@ 3150.0 mCF
	09:31:50	3.4500	26659.5	149.4	375 :	@ 3200.0 mCF
	09:38:50	3.5667	26713.2	150.3	382 :	@ 3250.0 mCF
	09:58:50	3.9000	26746.2	150.9	402 :	Recorder On Bottom
	10:53:50	4.8167	26749.6	150.9	457 :	@ 3276.4 mCF
					:	Gradient Pressure
	14:45:00	8.6694	27193.1	154.3	694 :	Recorder Off Bottom
	15:59:40	9.9139	96.4	21.1	899 :	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

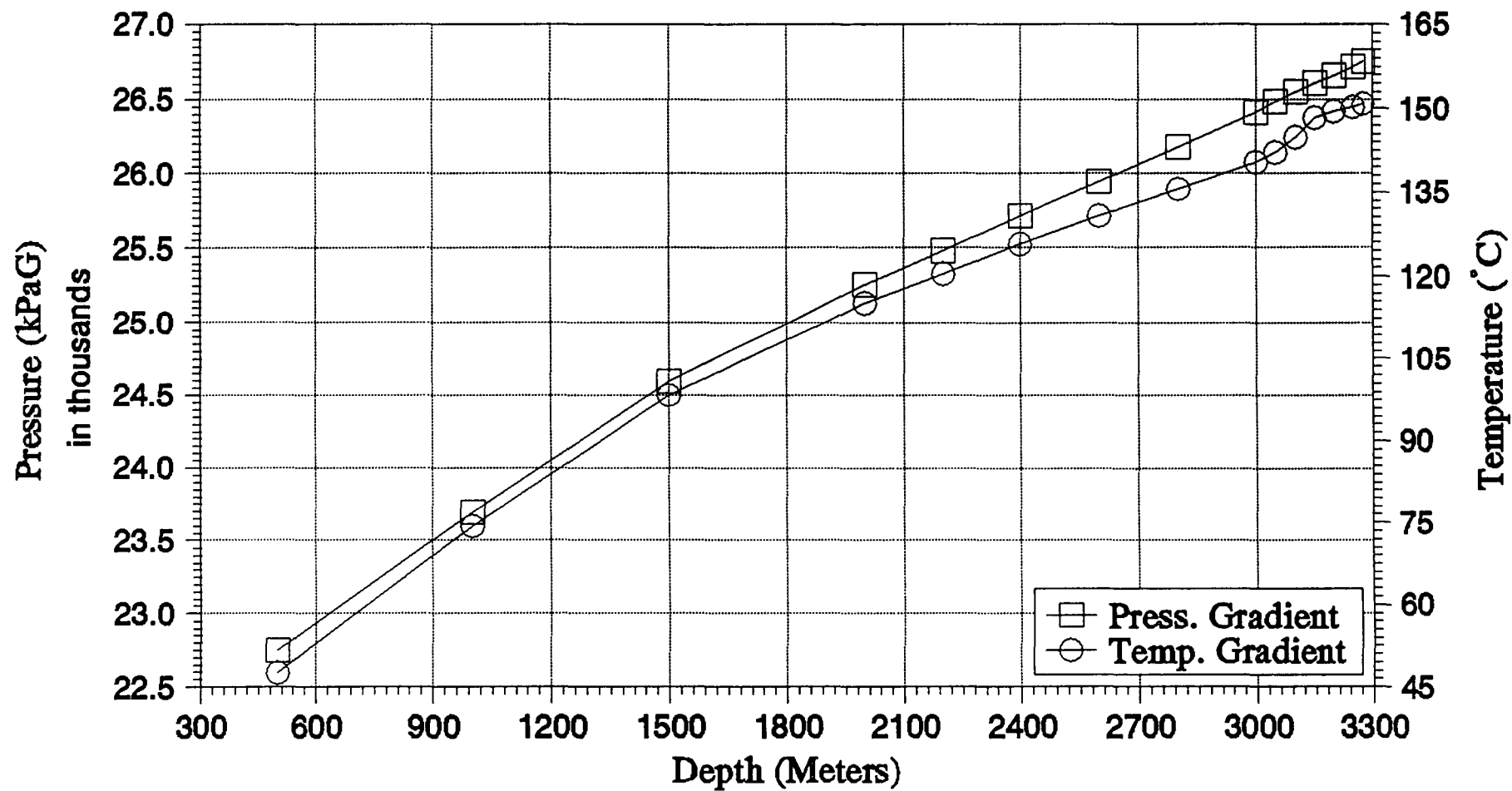
LSD: **P-66-A**

Bottom Gauge

Depth (meters)	Pressure (kPaG)	Gradient (kPa/m)	Temp (°C)	Gradient (°C/m)
At Surface: 1998/03/02 06:13:50 (Running In)				
000	21730	-----	12.9	-----
500	22749	2.04	47.5	0.069
1000	23694	1.89	74.3	0.054
1500	24592	1.80	98.3	0.048
2000	25257	1.33	115.2	0.034
2200	25483	1.13	120.4	0.026
2400	25714	1.15	125.7	0.027
2600	25944	1.15	130.7	0.025
2800	26177	1.17	135.6	0.025
3000	26411	1.17	140.4	0.024
3050	26486	1.50	142.0	0.032
3100	26546	1.19	144.8	0.056
3150	26603	1.14	148.3	0.070
3200	26660	1.14	149.4	0.022
3250	26713	1.07	150.3	0.018
3276	26750	1.38	150.9	0.023

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

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



GENCO PRESSURE CONTROL LTD (403)250-3800
Start Aquisition: 1998/03/02 06:04:50
End Aquisition: 1998/03/02 15:59:40

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:							
1998/03/02	06:04:50	0.0000	7.5	7.5	9.9	9.9	0:
	06:05:20	0.0083	6341.8	6334.3	9.8	-0.1	4:
	06:07:50	0.0500	21727.6	15385.8	11.0	1.1	8:
	06:11:50	0.1167	21729.7	2.1	12.6	1.6	12:
	06:15:50	0.1833	21731.3	1.6	13.3	0.8	16:
	06:19:50	0.2500	21724.7	-6.6	13.7	0.3	20:
	06:23:50	0.3167	21714.1	-10.6	15.1	1.4	24:
	06:27:10	0.3722	21872.4	158.2	18.5	3.4	28:
	06:27:50	0.3833	21945.0	72.7	19.8	1.3	32:
	06:28:30	0.3944	22033.6	88.6	20.9	1.1	36:
	06:29:10	0.4056	22144.4	110.8	22.3	1.4	40:
	06:29:50	0.4167	22243.3	98.9	24.1	1.8	44:
	06:30:30	0.4278	22350.8	107.5	25.6	1.5	48:
	06:31:10	0.4389	22450.8	100.0	27.1	1.5	52:
	06:31:50	0.4500	22547.3	96.5	28.9	1.8	56:
	06:32:30	0.4611	22646.3	99.1	30.4	1.5	60:
	06:35:50	0.5167	22750.4	104.1	38.5	8.1	64:
	06:39:50	0.5833	22751.8	1.3	44.6	6.1	68:
	06:43:50	0.6500	22751.6	-0.1	48.3	3.8	72:
	06:44:30	0.6611	22812.2	60.5	48.7	0.4	76:
	06:45:10	0.6722	22887.2	75.1	49.3	0.6	80:
	06:45:50	0.6833	22959.4	72.2	49.8	0.5	84:
	06:46:30	0.6944	23029.6	70.1	50.6	0.7	88:
	06:47:10	0.7056	23099.8	70.3	51.3	0.7	92:
	06:47:50	0.7167	23170.1	70.3	52.2	0.9	96:
	06:48:30	0.7278	23240.5	70.3	53.5	1.3	100:
	06:49:10	0.7389	23309.1	68.6	54.6	1.1	104:
	06:49:50	0.7500	23376.9	67.8	55.6	1.0	108:
	06:50:30	0.7611	23445.0	68.1	56.8	1.2	112:
	06:51:10	0.7722	23507.6	62.6	58.1	1.3	116:
	06:51:50	0.7833	23579.7	72.1	59.4	1.3	120:
	06:52:30	0.7944	23650.9	71.2	60.9	1.4	124:
	06:54:50	0.8333	23669.4	18.5	65.8	4.9	128:
	06:58:50	0.9000	23686.5	17.1	71.6	5.8	132:
	07:02:50	0.9667	23703.8	17.3	75.1	3.5	136:
	07:03:30	0.9778	23793.2	89.4	75.4	0.3	140:
	07:04:10	0.9889	23873.5	80.3	75.8	0.3	144:
	07:04:50	1.0000	23956.4	82.9	76.7	0.9	148:
	07:05:30	1.0111	24037.7	81.4	77.2	0.5	152:
	07:06:10	1.0222	24120.3	82.5	78.0	0.8	156:
	07:06:50	1.0333	24200.6	80.3	78.8	0.8	160:
	07:07:30	1.0444	24282.3	81.7	79.9	1.2	164:
	07:08:10	1.0556	24362.9	80.6	81.3	1.3	168:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 4 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. #
	07:08:50	1.0667	24449.8	86.9	82.7	1.4	172:
	07:09:30	1.0778	24524.0	74.3	84.3	1.6	176:
	07:11:50	1.1167	24591.3	67.3	89.5	5.2	180:
	07:15:50	1.1833	24599.6	8.3	95.0	5.5	184:
	07:19:50	1.2500	24592.4	-7.2	98.3	3.3	188:
	07:21:20	1.2750	24652.8	60.3	99.1	0.8	192:
	07:22:00	1.2861	24722.3	69.6	99.5	0.4	196:
	07:22:40	1.2972	24797.7	75.4	100.3	0.8	200:
	07:23:20	1.3083	24873.5	75.8	100.9	0.6	204:
	07:24:50	1.3333	24983.7	110.3	103.1	2.2	208:
	07:25:30	1.3444	25050.1	66.3	104.0	0.9	212:
	07:26:10	1.3556	25100.3	50.2	104.8	0.8	216:
	07:26:50	1.3667	25154.8	54.5	105.8	0.9	220:
	07:27:30	1.3778	25202.0	47.2	106.8	1.0	224:
	07:29:50	1.4167	25252.3	50.3	110.1	3.3	228:
	07:33:50	1.4833	25255.7	3.4	113.7	3.6	232:
	07:37:50	1.5500	25257.8	2.1	115.6	1.9	236:
	07:39:20	1.5750	25292.3	34.5	116.3	0.7	240:
	07:40:50	1.6000	25417.6	125.4	116.9	0.7	244:
	07:44:50	1.6667	25480.0	62.3	118.8	1.9	248:
	07:48:50	1.7333	25483.6	3.6	119.7	0.9	252:
	07:52:50	1.8000	25556.8	73.2	120.4	0.7	256:
	07:53:30	1.8111	25611.5	54.7	120.6	0.2	260:
	07:55:50	1.8500	25703.2	91.7	122.2	1.6	264:
	07:59:50	1.9167	25709.6	6.3	124.2	2.0	268:
	08:03:50	1.9833	25712.0	2.4	125.2	1.1	272:
	08:07:00	2.0361	25781.7	69.7	125.9	0.7	276:
	08:07:40	2.0472	25837.5	55.8	126.1	0.2	280:
	08:10:50	2.1000	25932.8	95.3	128.0	1.9	284:
	08:14:50	2.1667	25938.4	5.6	129.7	1.7	288:
	08:18:50	2.2333	25944.2	5.8	130.7	1.0	292:
	08:22:50	2.3000	26165.7	221.5	132.1	1.4	296:
	08:26:50	2.3667	26173.7	7.9	134.4	2.3	300:
	08:30:50	2.4333	26178.9	5.2	135.2	0.8	304:
	08:33:10	2.4722	26204.2	25.3	135.9	0.7	308:
	08:33:50	2.4833	26260.8	56.5	136.2	0.2	312:
	08:34:30	2.4944	26320.4	59.6	136.3	0.1	316:
	08:36:50	2.5333	26401.6	81.2	137.8	1.5	320:
	08:40:50	2.6000	26408.4	6.8	139.5	1.7	324:
	08:44:50	2.6667	26410.8	2.4	140.6	1.1	328:
	08:48:50	2.7333	26483.5	72.7	141.7	1.1	332:
	08:52:50	2.8000	26486.4	2.8	142.4	0.7	336:
	08:56:50	2.8667	26480.1	-6.3	142.8	0.4	340:
	09:00:50	2.9333	26542.7	62.6	144.1	1.3	344:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 4 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. #
	09:04:50	3.0000	26545.8	3.1	144.8	0.7	348:
	09:08:50	3.0667	26545.6	-0.2	145.6	0.8	352:
	09:12:50	3.1333	26598.6	53.0	146.2	0.7	356:
	09:16:50	3.2000	26602.2	3.6	147.6	1.4	360:
	09:20:50	3.2667	26602.6	0.4	148.3	0.7	364:
	09:24:50	3.3333	26659.9	57.3	148.8	0.6	368:
	09:28:50	3.4000	26662.9	3.0	149.2	0.3	372:
	09:32:50	3.4667	26658.9	-4.1	149.6	0.4	376:
	09:36:50	3.5333	26712.9	54.0	150.3	0.7	380:
	09:40:50	3.6000	26713.2	0.3	150.3	0.1	384:
	09:44:50	3.6667	26721.2	8.0	150.9	0.6	388:
	09:48:50	3.7333	26747.8	26.5	151.0	0.1	392:
	09:52:50	3.8000	26747.3	-0.5	150.9	-0.1	396:
	09:56:50	3.8667	26745.1	-2.2	150.9	0.1	400:
	10:00:50	3.9333	26746.2	1.1	150.9	0.0	404:
	10:04:50	4.0000	26746.3	0.1	150.9	0.0	408:
	10:08:50	4.0667	26746.8	0.5	150.9	0.0	412:
	10:12:50	4.1333	26747.1	0.3	150.9	0.0	416:
	10:16:50	4.2000	26747.4	0.3	150.9	0.0	420:
	10:20:50	4.2667	26747.8	0.3	150.9	0.0	424:
	10:24:50	4.3333	26747.9	0.1	150.9	0.0	428:
	10:28:50	4.4000	26748.2	0.3	150.9	0.0	432:
	10:32:50	4.4667	26748.4	0.2	150.9	0.0	436:
	10:36:50	4.5333	26748.6	0.3	150.9	0.0	440:
	10:40:50	4.6000	26748.8	0.1	150.9	0.0	444:
	10:44:50	4.6667	26749.0	0.2	150.9	0.0	448:
	10:48:50	4.7333	26749.3	0.3	150.9	0.0	452:
	10:52:50	4.8000	26749.6	0.3	150.9	0.0	456:
	10:56:50	4.8667	26749.8	0.1	150.9	0.0	460:
	11:00:50	4.9333	26750.1	0.3	150.9	0.0	464:
	11:04:50	5.0000	26750.2	0.1	150.9	0.0	468:
	11:08:50	5.0667	26750.6	0.3	150.9	0.0	472:
	11:12:50	5.1333	26750.7	0.1	150.9	0.0	476:
	11:16:50	5.2000	26750.9	0.1	150.9	0.0	480:
	11:20:50	5.2667	26751.2	0.3	150.9	0.0	484:
	11:24:50	5.3333	26751.3	0.1	150.9	0.0	488:
	11:28:50	5.4000	26751.5	0.1	150.9	0.0	492:
	11:32:50	5.4667	26751.8	0.3	150.9	0.0	496:
	11:36:50	5.5333	26752.0	0.1	150.9	0.0	500:
	11:40:50	5.6000	26752.1	0.1	150.9	0.0	504:
	11:44:50	5.6667	26752.3	0.2	150.9	0.0	508:
	11:48:50	5.7333	26752.4	0.1	150.9	-0.1	512:
	11:52:50	5.8000	26752.6	0.1	150.9	0.0	516:
	11:56:50	5.8667	26752.6	0.0	150.9	0.0	520:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 4 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. #
	12:00:50	5.9333	26752.7	0.1	150.9	0.0	524:
	12:04:50	6.0000	26752.9	0.2	150.9	0.0	528:
	12:08:50	6.0667	26752.9	0.0	150.9	0.0	532:
	12:12:50	6.1333	26753.1	0.1	150.9	0.0	536:
	12:16:50	6.2000	26753.2	0.1	150.9	0.0	540:
	12:20:50	6.2667	26753.3	0.1	150.9	0.0	544:
	12:24:50	6.3333	26753.5	0.2	150.9	0.0	548:
	12:28:50	6.4000	26753.5	0.0	150.9	0.0	552:
	12:32:50	6.4667	26753.5	0.0	150.9	0.0	556:
	12:36:50	6.5333	26753.7	0.1	150.9	0.0	560:
	12:40:50	6.6000	26753.7	0.0	150.9	0.0	564:
	12:44:50	6.6667	26753.7	0.0	150.9	0.0	568:
	12:48:50	6.7333	26753.7	0.0	150.8	-0.1	572:
	12:52:50	6.8000	26753.8	0.1	150.8	0.0	576:
	12:56:50	6.8667	26754.0	0.1	150.8	0.0	580:
	13:00:50	6.9333	26754.2	0.2	150.8	0.0	584:
	13:04:50	7.0000	26754.2	0.0	150.8	0.0	588:
	13:08:50	7.0667	26754.3	0.1	150.8	0.0	592:
	13:12:50	7.1333	26754.4	0.1	150.8	0.0	596:
	13:16:50	7.2000	26754.6	0.2	150.8	0.0	600:
	13:20:50	7.2667	26754.8	0.1	150.8	0.0	604:
	13:24:50	7.3333	26754.9	0.1	150.8	0.0	608:
	13:28:50	7.4000	26755.5	0.6	150.8	-0.1	612:
	13:32:50	7.4667	26756.0	0.5	150.8	0.0	616:
	13:36:50	7.5333	26756.8	0.8	150.8	0.0	620:
	13:40:50	7.6000	26759.5	2.7	150.8	0.1	624:
	13:44:50	7.6667	26755.9	-3.6	150.8	-0.1	628:
	13:48:50	7.7333	26761.3	5.4	150.3	-0.4	632:
	13:50:20	7.7583	26770.1	8.8	150.3	0.0	636:
	13:51:50	7.7833	26912.5	142.4	150.3	0.0	640:
	13:55:50	7.8500	26988.8	76.3	151.5	1.2	644:
	13:59:50	7.9167	26993.0	4.2	151.7	0.2	648:
	14:03:50	7.9833	26993.4	0.3	151.7	0.0	652:
	14:07:50	8.0500	27036.4	43.0	151.8	0.1	656:
	14:11:50	8.1167	27043.4	7.0	152.9	1.2	660:
	14:15:50	8.1833	27043.1	-0.3	153.1	0.1	664:
	14:19:50	8.2500	27044.4	1.4	153.1	0.0	668:
	14:23:50	8.3167	27072.6	28.2	153.1	0.0	672:
	14:27:50	8.3833	27102.5	29.9	153.4	0.4	676:
	14:31:50	8.4500	27133.0	30.5	153.6	0.2	680:
	14:35:50	8.5167	27176.2	43.2	153.8	0.2	684:
	14:39:50	8.5833	27166.5	-9.7	154.0	0.2	688:
	14:43:50	8.6500	27166.6	0.1	154.3	0.3	692:
	14:45:20	8.6750	27116.4	-50.3	154.3	0.0	696:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 4 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. #
	14:46:50	8.7000	26721.4	-394.9	153.8	-0.5	700:
	14:50:50	8.7667	26715.3	-6.1	151.7	-2.1	704:
	14:54:50	8.8333	26521.3	-194.1	151.0	-0.7	708:
	14:58:50	8.9000	26338.9	-182.4	147.2	-3.8	712:
	15:02:50	8.9667	26110.2	-228.6	142.6	-4.6	716:
	15:06:50	9.0333	25887.9	-222.4	137.3	-5.3	720:
	15:10:50	9.1000	25651.2	-236.7	131.8	-5.4	724:
	15:11:30	9.1111	25596.8	-54.4	130.8	-1.0	728:
	15:12:10	9.1222	25538.5	-58.3	129.8	-1.1	732:
	15:12:50	9.1333	25482.0	-56.5	128.8	-0.9	736:
	15:13:30	9.1444	25425.0	-57.0	127.8	-1.0	740:
	15:14:10	9.1556	25367.1	-57.9	126.8	-1.1	744:
	15:14:50	9.1667	25314.5	-52.6	125.7	-1.1	748:
	15:15:30	9.1778	25248.5	-66.0	124.7	-1.0	752:
	15:16:10	9.1889	25186.3	-62.2	123.6	-1.1	756:
	15:16:50	9.2000	25129.4	-57.0	122.6	-1.1	760:
	15:17:30	9.2111	25061.6	-67.8	121.4	-1.2	764:
	15:18:10	9.2222	24984.4	-77.2	120.3	-1.1	768:
	15:18:50	9.2333	24891.8	-92.6	119.1	-1.2	772:
	15:19:30	9.2444	24787.0	-104.7	117.9	-1.2	776:
	15:20:10	9.2556	24680.8	-106.2	116.9	-1.0	780:
	15:20:50	9.2667	24566.5	-114.3	115.6	-1.3	784:
	15:21:30	9.2778	24454.4	-112.1	114.2	-1.4	788:
	15:22:10	9.2889	24341.3	-113.1	112.3	-1.8	792:
	15:22:50	9.3000	24228.5	-112.7	111.0	-1.3	796:
	15:23:30	9.3111	24109.2	-119.3	109.2	-1.8	800:
	15:24:10	9.3222	24001.5	-107.7	107.1	-2.2	804:
	15:24:50	9.3333	23887.5	-114.0	104.8	-2.3	808:
	15:25:30	9.3444	23776.5	-111.0	102.7	-2.1	812:
	15:26:10	9.3556	23661.6	-114.9	100.4	-2.2	816:
	15:26:50	9.3667	23542.1	-119.4	98.3	-2.2	820:
	15:27:30	9.3778	23409.1	-133.0	96.0	-2.3	824:
	15:28:10	9.3889	23273.8	-135.3	94.0	-2.0	828:
	15:28:50	9.4000	23128.6	-145.2	91.8	-2.2	832:
	15:29:30	9.4111	22973.6	-155.0	89.8	-2.1	836:
	15:30:10	9.4222	22821.1	-152.5	87.6	-2.2	840:
	15:30:50	9.4333	22659.0	-162.0	85.0	-2.6	844:
	15:31:30	9.4444	22502.8	-156.2	82.2	-2.8	848:
	15:32:10	9.4556	22353.4	-149.5	79.4	-2.8	852:
	15:32:50	9.4667	22212.1	-141.3	76.4	-2.9	856:
	15:33:30	9.4778	22064.1	-148.0	73.3	-3.2	860:
	15:34:10	9.4889	21956.3	-107.8	70.3	-2.9	864:
	15:34:50	9.5000	21854.0	-102.4	67.2	-3.1	868:
	15:35:30	9.5111	21783.8	-70.2	64.4	-2.8	872:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 4 data points.

DATA - 5

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. #
	15:38:50	9.5667	21703.2	-80.6	51.4	-12.9	876:
	15:42:50	9.6333	21693.6	-9.6	41.1	-10.3	880:
	15:46:50	9.7000	21675.7	-17.9	34.3	-6.8	884:
	15:50:50	9.7667	21673.2	-2.4	29.9	-4.4	888:
	15:54:50	9.8333	21668.8	-4.5	27.1	-2.8	892:
	15:59:00	9.9028	21355.1	-313.7	22.0	-5.1	896:
1998/03/02	15:59:40	9.9139	96.4	-21258.7	21.1	-0.9	899:

End Data Acquisition:

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.
 Reporting on an interval of 1 in 4 data points.

(403) 250-3800

GENCO Pressure Control Limited

CALGARY, AB.

SUBSURFACE PRESSURE MEASUREMENTS

Basic Data:

Company Ranger Oil Limited

Address 1600, 321 - 6 Avenue S.W.

Calgary, Alberta

Gentronics Electronic Gauge

c/w Memory Recorder

S/N:

GSB-20880

Well Name Ranger Fort Liard

Field & Pool TIGHT HOLE

Well Identifier P-66-A

Type of Test Static Gradient

Status Gas

Date of Test Mar 02, 1998

DWG Tubing Pressure _____ kPa

DWG Casing Pressure _____ kPa

Tubing _____ mm @ _____ m KB

Casing _____ mm @ _____ m KB

Producing Interval _____

Producing Through _____

Elevation _____ m CF, _____ m KB

MPP Interval _____ m CF

Datum Depth of Well _____ m CF

Run Depth 3276.4 m CF

Temperature at Run Depth 150.9 °C

Pool Datum _____ m (subsea)

Pressure at Run Depth 26749.6 kPaG

Gradient at Run Depth 1.38 kPa/m

MPP Pressure _____ kPaG

Datum Depth Pressure _____ kPaG

Final Buildup Pressure _____ kPaG

Date on Bottom Mar 2, 1998 @ 09:58

Date off Bottom Mar 2, 1998 @ 14:45

Shut in Date _____

Summary:

Gentronic Strain Recorder. Recorder Ran
Within Specification.

*Note: Tight Hole.

Preparation Data:

Tested By GENCO Computed By L. Champagne Report Date Mar 05, 1998

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
1998/03/02	06:04:50	0.0000	7.5	9.9	1 :	Begin Data Acquisition
	06:13:50	0.1500	21729.6	12.9	14 :	@ surface
	06:42:50	0.6333	22749.3	47.5	71 :	@ 500.0 mCF
	07:01:50	0.9500	23693.7	74.3	135 :	@ 1000.0 mCF
	07:19:50	1.2500	24592.4	98.3	188 :	@ 1500.0 mCF
	07:36:50	1.5333	25257.1	115.2	235 :	@ 2000.0 mCF
	07:51:50	1.7833	25483.1	120.4	255 :	@ 2200.0 mCF
	08:05:50	2.0167	25713.5	125.7	274 :	@ 2400.0 mCF
	08:18:50	2.2333	25944.2	130.7	292 :	@ 2600.0 mCF
	08:31:50	2.4500	26177.3	135.6	305 :	@ 2800.0 mCF
	08:43:50	2.6500	26411.1	140.4	327 :	@ 3000.0 mCF
	08:50:50	2.7667	26486.2	142.0	334 :	@ 3050.0 mCF
	09:04:50	3.0000	26545.8	144.8	348 :	@ 3100.0 mCF
	09:20:50	3.2667	26602.6	148.3	364 :	@ 3150.0 mCF
	09:31:50	3.4500	26659.5	149.4	375 :	@ 3200.0 mCF
	09:38:50	3.5667	26713.2	150.3	382 :	@ 3250.0 mCF
	09:58:50	3.9000	26746.2	150.9	402 :	Recorder On Bottom
	10:53:50	4.8167	26749.6	150.9	457 :	@ 3276.4 mCF
					:	Gradient Pressure
	14:45:00	8.6694	27193.1	154.3	694 :	Recorder Off Bottom
	15:59:40	9.9139	96.4	21.1	899 :	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

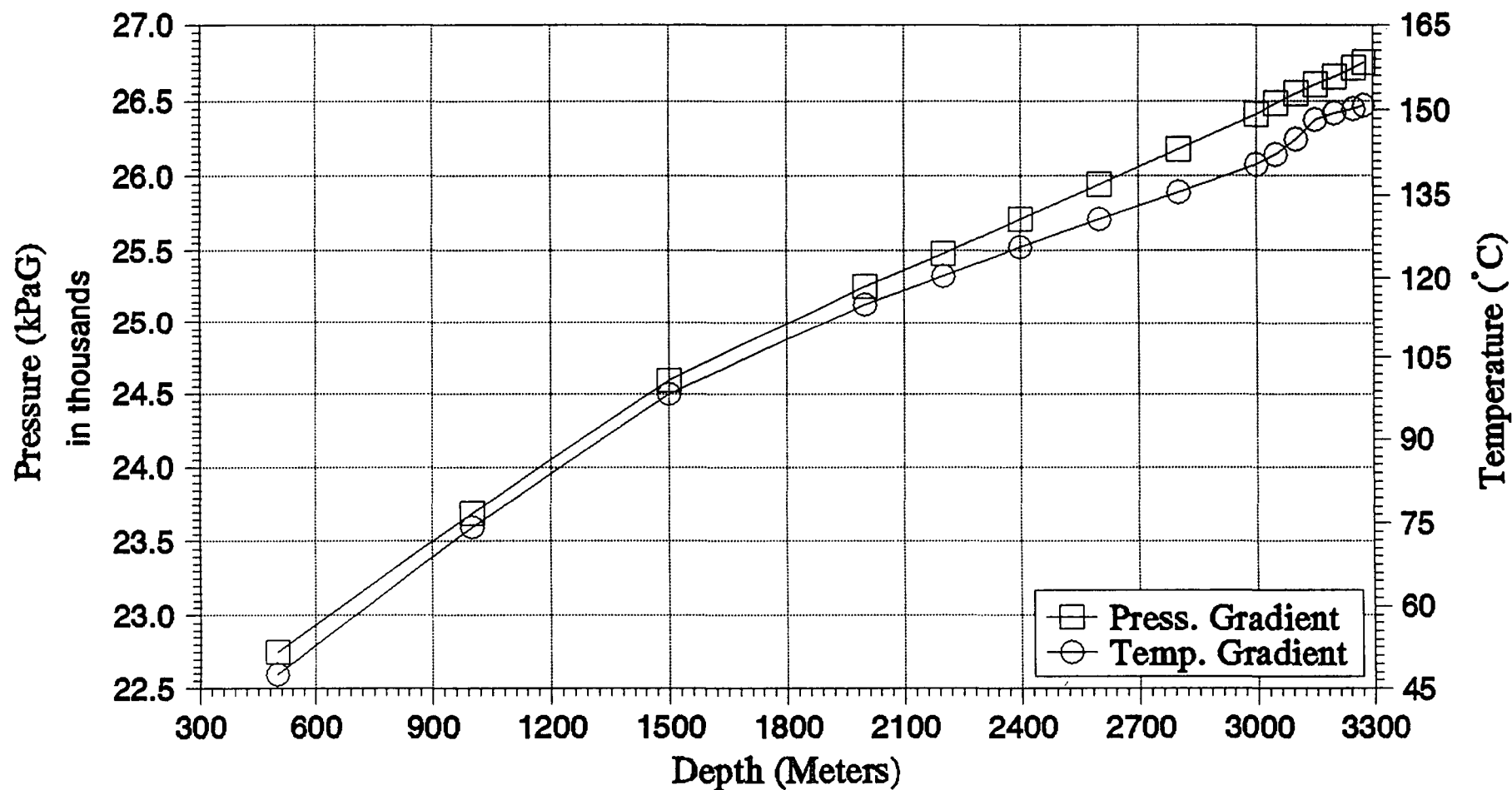
Company: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Depth (meters)	Pressure (kPaG)	Gradient (kPa/m)	Temp (°C)	Gradient (°C/m)
At Surface: 1998/03/02 06:13:50 (Running In)				
000	21730	-----	12.9	-----
500	22749	2.04	47.5	0.069
1000	23694	1.89	74.3	0.054
1500	24592	1.80	98.3	0.048
2000	25257	1.33	115.2	0.034
2200	25483	1.13	120.4	0.026
2400	25714	1.15	125.7	0.027
2600	25944	1.15	130.7	0.025
2800	26177	1.17	135.6	0.025
3000	26411	1.17	140.4	0.024
3050	26486	1.50	142.0	0.032
3100	26546	1.19	144.8	0.056
3150	26603	1.14	148.3	0.070
3200	26660	1.14	149.4	0.022
3250	26713	1.07	150.3	0.018
3276	26750	1.38	150.9	0.023

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

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



GENCO PRESSURE CONTROL LTD (403)250-3800
Start Aquisition: 1998/03/02 06:04:50
End Aquisition: 1998/03/02 15:59:40

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:							
1998/03/02	06:04:50	0.0000	7.5	7.5	9.9	9.9	0:
	06:05:20	0.0083	6341.8	6334.3	9.8	-0.1	4:
	06:07:50	0.0500	21727.6	15385.8	11.0	1.1	8:
	06:11:50	0.1167	21729.7	2.1	12.6	1.6	12:
	06:15:50	0.1833	21731.3	1.6	13.3	0.8	16:
	06:19:50	0.2500	21724.7	-6.6	13.7	0.3	20:
	06:23:50	0.3167	21714.1	-10.6	15.1	1.4	24:
	06:27:10	0.3722	21872.4	158.2	18.5	3.4	28:
	06:27:50	0.3833	21945.0	72.7	19.8	1.3	32:
	06:28:30	0.3944	22033.6	88.6	20.9	1.1	36:
	06:29:10	0.4056	22144.4	110.8	22.3	1.4	40:
	06:29:50	0.4167	22243.3	98.9	24.1	1.8	44:
	06:30:30	0.4278	22350.8	107.5	25.6	1.5	48:
	06:31:10	0.4389	22450.8	100.0	27.1	1.5	52:
	06:31:50	0.4500	22547.3	96.5	28.9	1.8	56:
	06:32:30	0.4611	22646.3	99.1	30.4	1.5	60:
	06:35:50	0.5167	22750.4	104.1	38.5	8.1	64:
	06:39:50	0.5833	22751.8	1.3	44.6	6.1	68:
	06:43:50	0.6500	22751.6	-0.1	48.3	3.8	72:
	06:44:30	0.6611	22812.2	60.5	48.7	0.4	76:
	06:45:10	0.6722	22887.2	75.1	49.3	0.6	80:
	06:45:50	0.6833	22959.4	72.2	49.8	0.5	84:
	06:46:30	0.6944	23029.6	70.1	50.6	0.7	88:
	06:47:10	0.7056	23099.8	70.3	51.3	0.7	92:
	06:47:50	0.7167	23170.1	70.3	52.2	0.9	96:
	06:48:30	0.7278	23240.5	70.3	53.5	1.3	100:
	06:49:10	0.7389	23309.1	68.6	54.6	1.1	104:
	06:49:50	0.7500	23376.9	67.8	55.6	1.0	108:
	06:50:30	0.7611	23445.0	68.1	56.8	1.2	112:
	06:51:10	0.7722	23507.6	62.6	58.1	1.3	116:
	06:51:50	0.7833	23579.7	72.1	59.4	1.3	120:
	06:52:30	0.7944	23650.9	71.2	60.9	1.4	124:
	06:54:50	0.8333	23669.4	18.5	65.8	4.9	128:
	06:58:50	0.9000	23686.5	17.1	71.6	5.8	132:
	07:02:50	0.9667	23703.8	17.3	75.1	3.5	136:
	07:03:30	0.9778	23793.2	89.4	75.4	0.3	140:
	07:04:10	0.9889	23873.5	80.3	75.8	0.3	144:
	07:04:50	1.0000	23956.4	82.9	76.7	0.9	148:
	07:05:30	1.0111	24037.7	81.4	77.2	0.5	152:
	07:06:10	1.0222	24120.3	82.5	78.0	0.8	156:
	07:06:50	1.0333	24200.6	80.3	78.8	0.8	160:
	07:07:30	1.0444	24282.3	81.7	79.9	1.2	164:
	07:08:10	1.0556	24362.9	80.6	81.3	1.3	168:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 4 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. #
	07:08:50	1.0667	24449.8	86.9	82.7	1.4	172:
	07:09:30	1.0778	24524.0	74.3	84.3	1.6	176:
	07:11:50	1.1167	24591.3	67.3	89.5	5.2	180:
	07:15:50	1.1833	24599.6	8.3	95.0	5.5	184:
	07:19:50	1.2500	24592.4	-7.2	98.3	3.3	188:
	07:21:20	1.2750	24652.8	60.3	99.1	0.8	192:
	07:22:00	1.2861	24722.3	69.6	99.5	0.4	196:
	07:22:40	1.2972	24797.7	75.4	100.3	0.8	200:
	07:23:20	1.3083	24873.5	75.8	100.9	0.6	204:
	07:24:50	1.3333	24983.7	110.3	103.1	2.2	208:
	07:25:30	1.3444	25050.1	66.3	104.0	0.9	212:
	07:26:10	1.3556	25100.3	50.2	104.8	0.8	216:
	07:26:50	1.3667	25154.8	54.5	105.8	0.9	220:
	07:27:30	1.3778	25202.0	47.2	106.8	1.0	224:
	07:29:50	1.4167	25252.3	50.3	110.1	3.3	228:
	07:33:50	1.4833	25255.7	3.4	113.7	3.6	232:
	07:37:50	1.5500	25257.8	2.1	115.6	1.9	236:
	07:39:20	1.5750	25292.3	34.5	116.3	0.7	240:
	07:40:50	1.6000	25417.6	125.4	116.9	0.7	244:
	07:44:50	1.6667	25480.0	62.3	118.8	1.9	248:
	07:48:50	1.7333	25483.6	3.6	119.7	0.9	252:
	07:52:50	1.8000	25556.8	73.2	120.4	0.7	256:
	07:53:30	1.8111	25611.5	54.7	120.6	0.2	260:
	07:55:50	1.8500	25703.2	91.7	122.2	1.6	264:
	07:59:50	1.9167	25709.6	6.3	124.2	2.0	268:
	08:03:50	1.9833	25712.0	2.4	125.2	1.1	272:
	08:07:00	2.0361	25781.7	69.7	125.9	0.7	276:
	08:07:40	2.0472	25837.5	55.8	126.1	0.2	280:
	08:10:50	2.1000	25932.8	95.3	128.0	1.9	284:
	08:14:50	2.1667	25938.4	5.6	129.7	1.7	288:
	08:18:50	2.2333	25944.2	5.8	130.7	1.0	292:
	08:22:50	2.3000	26165.7	221.5	132.1	1.4	296:
	08:26:50	2.3667	26173.7	7.9	134.4	2.3	300:
	08:30:50	2.4333	26178.9	5.2	135.2	0.8	304:
	08:33:10	2.4722	26204.2	25.3	135.9	0.7	308:
	08:33:50	2.4833	26260.8	56.5	136.2	0.2	312:
	08:34:30	2.4944	26320.4	59.6	136.3	0.1	316:
	08:36:50	2.5333	26401.6	81.2	137.8	1.5	320:
	08:40:50	2.6000	26408.4	6.8	139.5	1.7	324:
	08:44:50	2.6667	26410.8	2.4	140.6	1.1	328:
	08:48:50	2.7333	26483.5	72.7	141.7	1.1	332:
	08:52:50	2.8000	26486.4	2.8	142.4	0.7	336:
	08:56:50	2.8667	26480.1	-6.3	142.8	0.4	340:
	09:00:50	2.9333	26542.7	62.6	144.1	1.3	344:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 4 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. #
	09:04:50	3.0000	26545.8	3.1	144.8	0.7	348:
	09:08:50	3.0667	26545.6	-0.2	145.6	0.8	352:
	09:12:50	3.1333	26598.6	53.0	146.2	0.7	356:
	09:16:50	3.2000	26602.2	3.6	147.6	1.4	360:
	09:20:50	3.2667	26602.6	0.4	148.3	0.7	364:
	09:24:50	3.3333	26659.9	57.3	148.8	0.6	368:
	09:28:50	3.4000	26662.9	3.0	149.2	0.3	372:
	09:32:50	3.4667	26658.9	-4.1	149.6	0.4	376:
	09:36:50	3.5333	26712.9	54.0	150.3	0.7	380:
	09:40:50	3.6000	26713.2	0.3	150.3	0.1	384:
	09:44:50	3.6667	26721.2	8.0	150.9	0.6	388:
	09:48:50	3.7333	26747.8	26.5	151.0	0.1	392:
	09:52:50	3.8000	26747.3	-0.5	150.9	-0.1	396:
	09:56:50	3.8667	26745.1	-2.2	150.9	0.1	400:
	10:00:50	3.9333	26746.2	1.1	150.9	0.0	404:
	10:04:50	4.0000	26746.3	0.1	150.9	0.0	408:
	10:08:50	4.0667	26746.8	0.5	150.9	0.0	412:
	10:12:50	4.1333	26747.1	0.3	150.9	0.0	416:
	10:16:50	4.2000	26747.4	0.3	150.9	0.0	420:
	10:20:50	4.2667	26747.8	0.3	150.9	0.0	424:
	10:24:50	4.3333	26747.9	0.1	150.9	0.0	428:
	10:28:50	4.4000	26748.2	0.3	150.9	0.0	432:
	10:32:50	4.4667	26748.4	0.2	150.9	0.0	436:
	10:36:50	4.5333	26748.6	0.3	150.9	0.0	440:
	10:40:50	4.6000	26748.8	0.1	150.9	0.0	444:
	10:44:50	4.6667	26749.0	0.2	150.9	0.0	448:
	10:48:50	4.7333	26749.3	0.3	150.9	0.0	452:
	10:52:50	4.8000	26749.6	0.3	150.9	0.0	456:
	10:56:50	4.8667	26749.8	0.1	150.9	0.0	460:
	11:00:50	4.9333	26750.1	0.3	150.9	0.0	464:
	11:04:50	5.0000	26750.2	0.1	150.9	0.0	468:
	11:08:50	5.0667	26750.6	0.3	150.9	0.0	472:
	11:12:50	5.1333	26750.7	0.1	150.9	0.0	476:
	11:16:50	5.2000	26750.9	0.1	150.9	0.0	480:
	11:20:50	5.2667	26751.2	0.3	150.9	0.0	484:
	11:24:50	5.3333	26751.3	0.1	150.9	0.0	488:
	11:28:50	5.4000	26751.5	0.1	150.9	0.0	492:
	11:32:50	5.4667	26751.8	0.3	150.9	0.0	496:
	11:36:50	5.5333	26752.0	0.1	150.9	0.0	500:
	11:40:50	5.6000	26752.1	0.1	150.9	0.0	504:
	11:44:50	5.6667	26752.3	0.2	150.9	0.0	508:
	11:48:50	5.7333	26752.4	0.1	150.9	-0.1	512:
	11:52:50	5.8000	26752.6	0.1	150.9	0.0	516:
	11:56:50	5.8667	26752.6	0.0	150.9	0.0	520:

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.
 Reporting on an interval of 1 in 4 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. #
	12:00:50	5.9333	26752.7	0.1	150.9	0.0	524:
	12:04:50	6.0000	26752.9	0.2	150.9	0.0	528:
	12:08:50	6.0667	26752.9	0.0	150.9	0.0	532:
	12:12:50	6.1333	26753.1	0.1	150.9	0.0	536:
	12:16:50	6.2000	26753.2	0.1	150.9	0.0	540:
	12:20:50	6.2667	26753.3	0.1	150.9	0.0	544:
	12:24:50	6.3333	26753.5	0.2	150.9	0.0	548:
	12:28:50	6.4000	26753.5	0.0	150.9	0.0	552:
	12:32:50	6.4667	26753.5	0.0	150.9	0.0	556:
	12:36:50	6.5333	26753.7	0.1	150.9	0.0	560:
	12:40:50	6.6000	26753.7	0.0	150.9	0.0	564:
	12:44:50	6.6667	26753.7	0.0	150.9	0.0	568:
	12:48:50	6.7333	26753.7	0.0	150.8	-0.1	572:
	12:52:50	6.8000	26753.8	0.1	150.8	0.0	576:
	12:56:50	6.8667	26754.0	0.1	150.8	0.0	580:
	13:00:50	6.9333	26754.2	0.2	150.8	0.0	584:
	13:04:50	7.0000	26754.2	0.0	150.8	0.0	588:
	13:08:50	7.0667	26754.3	0.1	150.8	0.0	592:
	13:12:50	7.1333	26754.4	0.1	150.8	0.0	596:
	13:16:50	7.2000	26754.6	0.2	150.8	0.0	600:
	13:20:50	7.2667	26754.8	0.1	150.8	0.0	604:
	13:24:50	7.3333	26754.9	0.1	150.8	0.0	608:
	13:28:50	7.4000	26755.5	0.6	150.8	-0.1	612:
	13:32:50	7.4667	26756.0	0.5	150.8	0.0	616:
	13:36:50	7.5333	26756.8	0.8	150.8	0.0	620:
	13:40:50	7.6000	26759.5	2.7	150.8	0.1	624:
	13:44:50	7.6667	26755.9	-3.6	150.8	-0.1	628:
	13:48:50	7.7333	26761.3	5.4	150.3	-0.4	632:
	13:50:20	7.7583	26770.1	8.8	150.3	0.0	636:
	13:51:50	7.7833	26912.5	142.4	150.3	0.0	640:
	13:55:50	7.8500	26988.8	76.3	151.5	1.2	644:
	13:59:50	7.9167	26993.0	4.2	151.7	0.2	648:
	14:03:50	7.9833	26993.4	0.3	151.7	0.0	652:
	14:07:50	8.0500	27036.4	43.0	151.8	0.1	656:
	14:11:50	8.1167	27043.4	7.0	152.9	1.2	660:
	14:15:50	8.1833	27043.1	-0.3	153.1	0.1	664:
	14:19:50	8.2500	27044.4	1.4	153.1	0.0	668:
	14:23:50	8.3167	27072.6	28.2	153.1	0.0	672:
	14:27:50	8.3833	27102.5	29.9	153.4	0.4	676:
	14:31:50	8.4500	27133.0	30.5	153.6	0.2	680:
	14:35:50	8.5167	27176.2	43.2	153.8	0.2	684:
	14:39:50	8.5833	27166.5	-9.7	154.0	0.2	688:
	14:43:50	8.6500	27166.6	0.1	154.3	0.3	692:
	14:45:20	8.6750	27116.4	-50.3	154.3	0.0	696:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 4 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. #
	14:46:50	8.7000	26721.4	-394.9	153.8	-0.5	700:
	14:50:50	8.7667	26715.3	-6.1	151.7	-2.1	704:
	14:54:50	8.8333	26521.3	-194.1	151.0	-0.7	708:
	14:58:50	8.9000	26338.9	-182.4	147.2	-3.8	712:
	15:02:50	8.9667	26110.2	-228.6	142.6	-4.6	716:
	15:06:50	9.0333	25887.9	-222.4	137.3	-5.3	720:
	15:10:50	9.1000	25651.2	-236.7	131.8	-5.4	724:
	15:11:30	9.1111	25596.8	-54.4	130.8	-1.0	728:
	15:12:10	9.1222	25538.5	-58.3	129.8	-1.1	732:
	15:12:50	9.1333	25482.0	-56.5	128.8	-0.9	736:
	15:13:30	9.1444	25425.0	-57.0	127.8	-1.0	740:
	15:14:10	9.1556	25367.1	-57.9	126.8	-1.1	744:
	15:14:50	9.1667	25314.5	-52.6	125.7	-1.1	748:
	15:15:30	9.1778	25248.5	-66.0	124.7	-1.0	752:
	15:16:10	9.1889	25186.3	-62.2	123.6	-1.1	756:
	15:16:50	9.2000	25129.4	-57.0	122.6	-1.1	760:
	15:17:30	9.2111	25061.6	-67.8	121.4	-1.2	764:
	15:18:10	9.2222	24984.4	-77.2	120.3	-1.1	768:
	15:18:50	9.2333	24891.8	-92.6	119.1	-1.2	772:
	15:19:30	9.2444	24787.0	-104.7	117.9	-1.2	776:
	15:20:10	9.2556	24680.8	-106.2	116.9	-1.0	780:
	15:20:50	9.2667	24566.5	-114.3	115.6	-1.3	784:
	15:21:30	9.2778	24454.4	-112.1	114.2	-1.4	788:
	15:22:10	9.2889	24341.3	-113.1	112.3	-1.8	792:
	15:22:50	9.3000	24228.5	-112.7	111.0	-1.3	796:
	15:23:30	9.3111	24109.2	-119.3	109.2	-1.8	800:
	15:24:10	9.3222	24001.5	-107.7	107.1	-2.2	804:
	15:24:50	9.3333	23887.5	-114.0	104.8	-2.3	808:
	15:25:30	9.3444	23776.5	-111.0	102.7	-2.1	812:
	15:26:10	9.3556	23661.6	-114.9	100.4	-2.2	816:
	15:26:50	9.3667	23542.1	-119.4	98.3	-2.2	820:
	15:27:30	9.3778	23409.1	-133.0	96.0	-2.3	824:
	15:28:10	9.3889	23273.8	-135.3	94.0	-2.0	828:
	15:28:50	9.4000	23128.6	-145.2	91.8	-2.2	832:
	15:29:30	9.4111	22973.6	-155.0	89.8	-2.1	836:
	15:30:10	9.4222	22821.1	-152.5	87.6	-2.2	840:
	15:30:50	9.4333	22659.0	-162.0	85.0	-2.6	844:
	15:31:30	9.4444	22502.8	-156.2	82.2	-2.8	848:
	15:32:10	9.4556	22353.4	-149.5	79.4	-2.8	852:
	15:32:50	9.4667	22212.1	-141.3	76.4	-2.9	856:
	15:33:30	9.4778	22064.1	-148.0	73.3	-3.2	860:
	15:34:10	9.4889	21956.3	-107.8	70.3	-2.9	864:
	15:34:50	9.5000	21854.0	-102.4	67.2	-3.1	868:
	15:35:30	9.5111	21783.8	-70.2	64.4	-2.8	872:

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.
 Reporting on an interval of 1 in 4 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. #
	15:38:50	9.5667	21703.2	-80.6	51.4	-12.9	876:
	15:42:50	9.6333	21693.6	-9.6	41.1	-10.3	880:
	15:46:50	9.7000	21675.7	-17.9	34.3	-6.8	884:
	15:50:50	9.7667	21673.2	-2.4	29.9	-4.4	888:
	15:54:50	9.8333	21668.8	-4.5	27.1	-2.8	892:
	15:59:00	9.9028	21355.1	-313.7	22.0	-5.1	896:
1998/03/02	15:59:40	9.9139	96.4	-21258.7	21.1	-0.9	899:

End Data Acquisition:

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.
 Reporting on an interval of 1 in 4 data points.

(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 - 6 Avenue S.W.</u>	c/w Memory Recorder
<u>Calgary, Alberta</u>	S/N: <u>GSB-20880</u>
Well Name <u>Ranger Fort Liard</u>	Field & Pool <u>TIGHT HOLE</u>
Well Identifier <u>P-66-A</u>	Type of Test <u>Static Gradient</u>
Status <u>Gas</u>	Date of Test <u>Mar 02, 1998</u>
DWG Tubing Pressure _____ kPa	DWG Casing Pressure _____ kPa
Tubing _____ mm @ _____ m KB	Casing _____ mm @ _____ m KB
Producing Interval _____	Producing Through _____
Elevation _____ m CF, _____ m KB	MPP Interval _____ m CF
Datum Depth of Well _____ m CF	Run Depth <u>3276.4</u> m CF
Temperature at Run Depth <u>150.9</u> °C	Pool Datum _____ m (subsea)
Pressure at Run Depth <u>26749.6</u> kPaG	Gradient at Run Depth <u>1.38</u> kPa/m
MPP Pressure _____ kPaG	Datum Depth Pressure _____ kPaG
Final Buildup Pressure _____ kPaG	Date on Bottom <u>Mar 2, 1998 @ 09:58</u>
Date off Bottom <u>Mar 2, 1998 @ 14:45</u>	Shut in Date _____

Summary:

Gentronic Strain Recorder. Recorder Ran
Within Specification.

*Note: Tight Hole.

Preparation Data:

Tested By <u>GENCO</u>	Computed By <u>L. Champagne</u>	Report Date <u>Mar 05, 1998</u>
------------------------	---------------------------------	---------------------------------

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
1998/03/02	06:04:50	0.0000	7.5	9.9	1 :	Begin Data Acquisition
	06:13:50	0.1500	21729.6	12.9	14 :	@ surface
	06:42:50	0.6333	22749.3	47.5	71 :	@ 500.0 mCF
	07:01:50	0.9500	23693.7	74.3	135 :	@ 1000.0 mCF
	07:19:50	1.2500	24592.4	98.3	188 :	@ 1500.0 mCF
	07:36:50	1.5333	25257.1	115.2	235 :	@ 2000.0 mCF
	07:51:50	1.7833	25483.1	120.4	255 :	@ 2200.0 mCF
	08:05:50	2.0167	25713.5	125.7	274 :	@ 2400.0 mCF
	08:18:50	2.2333	25944.2	130.7	292 :	@ 2600.0 mCF
	08:31:50	2.4500	26177.3	135.6	305 :	@ 2800.0 mCF
	08:43:50	2.6500	26411.1	140.4	327 :	@ 3000.0 mCF
	08:50:50	2.7667	26486.2	142.0	334 :	@ 3050.0 mCF
	09:04:50	3.0000	26545.8	144.8	348 :	@ 3100.0 mCF
	09:20:50	3.2667	26602.6	148.3	364 :	@ 3150.0 mCF
	09:31:50	3.4500	26659.5	149.4	375 :	@ 3200.0 mCF
	09:38:50	3.5667	26713.2	150.3	382 :	@ 3250.0 mCF
	09:58:50	3.9000	26746.2	150.9	402 :	Recorder On Bottom
	10:53:50	4.8167	26749.6	150.9	457 :	@ 3276.4 mCF
					:	Gradient Pressure
	14:45:00	8.6694	27193.1	154.3	694 :	Recorder Off Bottom
	15:59:40	9.9139	96.4	21.1	899 :	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.

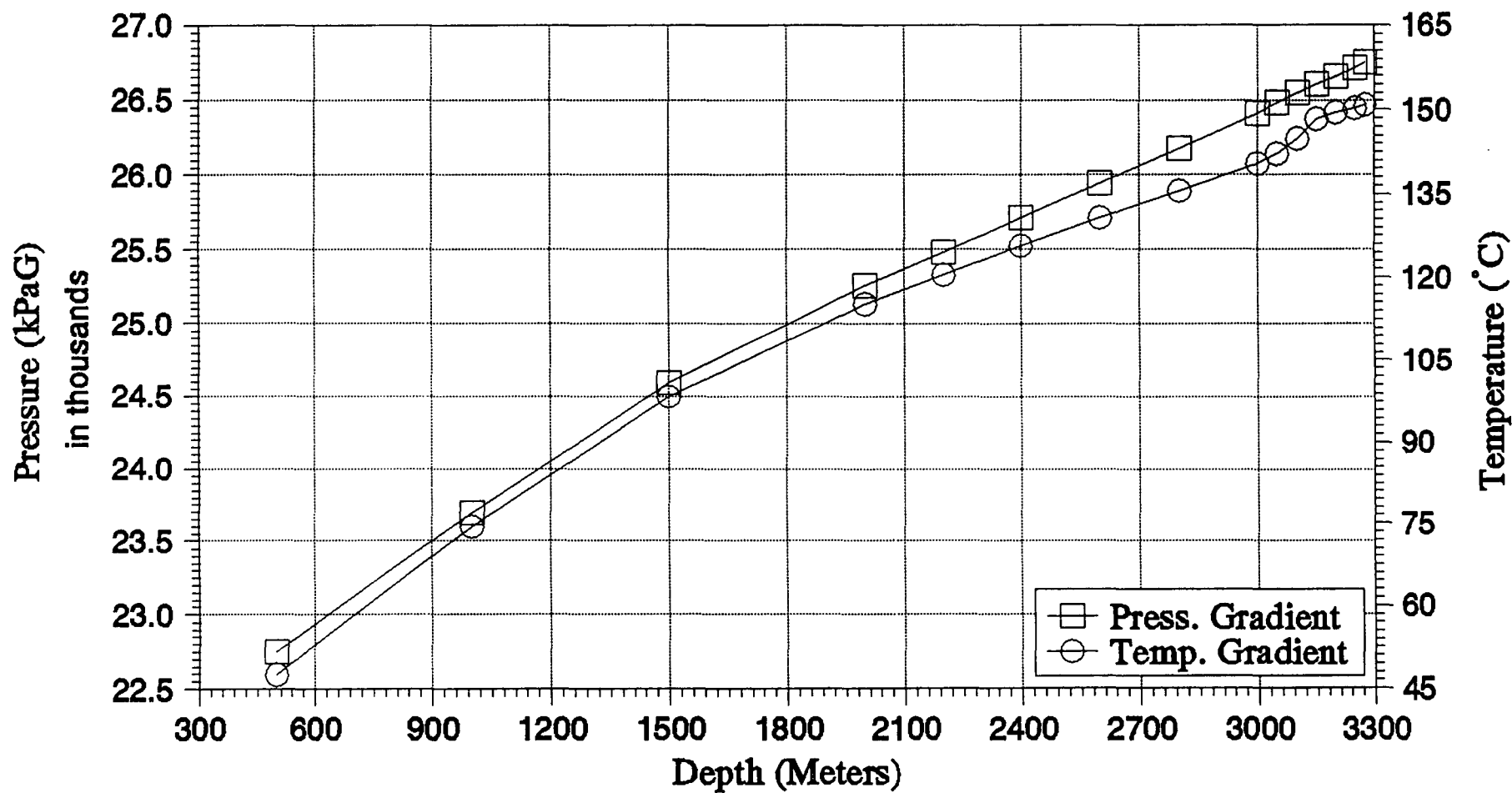
STATIC GRADIENT SURVEYCompany: **Ranger Oil Limited**
Ranger Fort LiardLSD: **P-66-A**

Bottom Gauge

Depth (meters)	Pressure (kPaG)	Gradient (kPa/m)	Temp (°C)	Gradient (°C/m)
At Surface: 1998/03/02 06:13:50 (Running In)				
000	21730	-----	12.9	-----
500	22749	2.04	47.5	0.069
1000	23694	1.89	74.3	0.054
1500	24592	1.80	98.3	0.048
2000	25257	1.33	115.2	0.034
2200	25483	1.13	120.4	0.026
2400	25714	1.15	125.7	0.027
2600	25944	1.15	130.7	0.025
2800	26177	1.17	135.6	0.025
3000	26411	1.17	140.4	0.024
3050	26486	1.50	142.0	0.032
3100	26546	1.19	144.8	0.056
3150	26603	1.14	148.3	0.070
3200	26660	1.14	149.4	0.022
3250	26713	1.07	150.3	0.018
3276	26750	1.38	150.9	0.023

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

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



GENCO PRESSURE CONTROL LTD (403)250-3800
Start Aquisition: 1998/03/02 06:04:50
End Aquisition: 1998/03/02 15:59:40

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:							
1998/03/02	06:04:50	0.0000	7.5	7.5	9.9	9.9	0:
	06:05:20	0.0083	6341.8	6334.3	9.8	-0.1	4:
	06:07:50	0.0500	21727.6	15385.8	11.0	1.1	8:
	06:11:50	0.1167	21729.7	2.1	12.6	1.6	12:
	06:15:50	0.1833	21731.3	1.6	13.3	0.8	16:
	06:19:50	0.2500	21724.7	-6.6	13.7	0.3	20:
	06:23:50	0.3167	21714.1	-10.6	15.1	1.4	24:
	06:27:10	0.3722	21872.4	158.2	18.5	3.4	28:
	06:27:50	0.3833	21945.0	72.7	19.8	1.3	32:
	06:28:30	0.3944	22033.6	88.6	20.9	1.1	36:
	06:29:10	0.4056	22144.4	110.8	22.3	1.4	40:
	06:29:50	0.4167	22243.3	98.9	24.1	1.8	44:
	06:30:30	0.4278	22350.8	107.5	25.6	1.5	48:
	06:31:10	0.4389	22450.8	100.0	27.1	1.5	52:
	06:31:50	0.4500	22547.3	96.5	28.9	1.8	56:
	06:32:30	0.4611	22646.3	99.1	30.4	1.5	60:
	06:35:50	0.5167	22750.4	104.1	38.5	8.1	64:
	06:39:50	0.5833	22751.8	1.3	44.6	6.1	68:
	06:43:50	0.6500	22751.6	-0.1	48.3	3.8	72:
	06:44:30	0.6611	22812.2	60.5	48.7	0.4	76:
	06:45:10	0.6722	22887.2	75.1	49.3	0.6	80:
	06:45:50	0.6833	22959.4	72.2	49.8	0.5	84:
	06:46:30	0.6944	23029.6	70.1	50.6	0.7	88:
	06:47:10	0.7056	23099.8	70.3	51.3	0.7	92:
	06:47:50	0.7167	23170.1	70.3	52.2	0.9	96:
	06:48:30	0.7278	23240.5	70.3	53.5	1.3	100:
	06:49:10	0.7389	23309.1	68.6	54.6	1.1	104:
	06:49:50	0.7500	23376.9	67.8	55.6	1.0	108:
	06:50:30	0.7611	23445.0	68.1	56.8	1.2	112:
	06:51:10	0.7722	23507.6	62.6	58.1	1.3	116:
	06:51:50	0.7833	23579.7	72.1	59.4	1.3	120:
	06:52:30	0.7944	23650.9	71.2	60.9	1.4	124:
	06:54:50	0.8333	23669.4	18.5	65.8	4.9	128:
	06:58:50	0.9000	23686.5	17.1	71.6	5.8	132:
	07:02:50	0.9667	23703.8	17.3	75.1	3.5	136:
	07:03:30	0.9778	23793.2	89.4	75.4	0.3	140:
	07:04:10	0.9889	23873.5	80.3	75.8	0.3	144:
	07:04:50	1.0000	23956.4	82.9	76.7	0.9	148:
	07:05:30	1.0111	24037.7	81.4	77.2	0.5	152:
	07:06:10	1.0222	24120.3	82.5	78.0	0.8	156:
	07:06:50	1.0333	24200.6	80.3	78.8	0.8	160:
	07:07:30	1.0444	24282.3	81.7	79.9	1.2	164:
	07:08:10	1.0556	24362.9	80.6	81.3	1.3	168:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 4 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. #
	07:08:50	1.0667	24449.8	86.9	82.7	1.4	172:
	07:09:30	1.0778	24524.0	74.3	84.3	1.6	176:
	07:11:50	1.1167	24591.3	67.3	89.5	5.2	180:
	07:15:50	1.1833	24599.6	8.3	95.0	5.5	184:
	07:19:50	1.2500	24592.4	-7.2	98.3	3.3	188:
	07:21:20	1.2750	24652.8	60.3	99.1	0.8	192:
	07:22:00	1.2861	24722.3	69.6	99.5	0.4	196:
	07:22:40	1.2972	24797.7	75.4	100.3	0.8	200:
	07:23:20	1.3083	24873.5	75.8	100.9	0.6	204:
	07:24:50	1.3333	24983.7	110.3	103.1	2.2	208:
	07:25:30	1.3444	25050.1	66.3	104.0	0.9	212:
	07:26:10	1.3556	25100.3	50.2	104.8	0.8	216:
	07:26:50	1.3667	25154.8	54.5	105.8	0.9	220:
	07:27:30	1.3778	25202.0	47.2	106.8	1.0	224:
	07:29:50	1.4167	25252.3	50.3	110.1	3.3	228:
	07:33:50	1.4833	25255.7	3.4	113.7	3.6	232:
	07:37:50	1.5500	25257.8	2.1	115.6	1.9	236:
	07:39:20	1.5750	25292.3	34.5	116.3	0.7	240:
	07:40:50	1.6000	25417.6	125.4	116.9	0.7	244:
	07:44:50	1.6667	25480.0	62.3	118.8	1.9	248:
	07:48:50	1.7333	25483.6	3.6	119.7	0.9	252:
	07:52:50	1.8000	25556.8	73.2	120.4	0.7	256:
	07:53:30	1.8111	25611.5	54.7	120.6	0.2	260:
	07:55:50	1.8500	25703.2	91.7	122.2	1.6	264:
	07:59:50	1.9167	25709.6	6.3	124.2	2.0	268:
	08:03:50	1.9833	25712.0	2.4	125.2	1.1	272:
	08:07:00	2.0361	25781.7	69.7	125.9	0.7	276:
	08:07:40	2.0472	25837.5	55.8	126.1	0.2	280:
	08:10:50	2.1000	25932.8	95.3	128.0	1.9	284:
	08:14:50	2.1667	25938.4	5.6	129.7	1.7	288:
	08:18:50	2.2333	25944.2	5.8	130.7	1.0	292:
	08:22:50	2.3000	26165.7	221.5	132.1	1.4	296:
	08:26:50	2.3667	26173.7	7.9	134.4	2.3	300:
	08:30:50	2.4333	26178.9	5.2	135.2	0.8	304:
	08:33:10	2.4722	26204.2	25.3	135.9	0.7	308:
	08:33:50	2.4833	26260.8	56.5	136.2	0.2	312:
	08:34:30	2.4944	26320.4	59.6	136.3	0.1	316:
	08:36:50	2.5333	26401.6	81.2	137.8	1.5	320:
	08:40:50	2.6000	26408.4	6.8	139.5	1.7	324:
	08:44:50	2.6667	26410.8	2.4	140.6	1.1	328:
	08:48:50	2.7333	26483.5	72.7	141.7	1.1	332:
	08:52:50	2.8000	26486.4	2.8	142.4	0.7	336:
	08:56:50	2.8667	26480.1	-6.3	142.8	0.4	340:
	09:00:50	2.9333	26542.7	62.6	144.1	1.3	344:

Absolute pressures are converted to gauge pressures
assuming a barometric pressure of 90 kPa.
Reporting on an interval of 1 in 4 data points.

DATA - 2

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. #
	09:04:50	3.0000	26545.8	3.1	144.8	0.7	348:
	09:08:50	3.0667	26545.6	-0.2	145.6	0.8	352:
	09:12:50	3.1333	26598.6	53.0	146.2	0.7	356:
	09:16:50	3.2000	26602.2	3.6	147.6	1.4	360:
	09:20:50	3.2667	26602.6	0.4	148.3	0.7	364:
	09:24:50	3.3333	26659.9	57.3	148.8	0.6	368:
	09:28:50	3.4000	26662.9	3.0	149.2	0.3	372:
	09:32:50	3.4667	26658.9	-4.1	149.6	0.4	376:
	09:36:50	3.5333	26712.9	54.0	150.3	0.7	380:
	09:40:50	3.6000	26713.2	0.3	150.3	0.1	384:
	09:44:50	3.6667	26721.2	8.0	150.9	0.6	388:
	09:48:50	3.7333	26747.8	26.5	151.0	0.1	392:
	09:52:50	3.8000	26747.3	-0.5	150.9	-0.1	396:
	09:56:50	3.8667	26745.1	-2.2	150.9	0.1	400:
	10:00:50	3.9333	26746.2	1.1	150.9	0.0	404:
	10:04:50	4.0000	26746.3	0.1	150.9	0.0	408:
	10:08:50	4.0667	26746.8	0.5	150.9	0.0	412:
	10:12:50	4.1333	26747.1	0.3	150.9	0.0	416:
	10:16:50	4.2000	26747.4	0.3	150.9	0.0	420:
	10:20:50	4.2667	26747.8	0.3	150.9	0.0	424:
	10:24:50	4.3333	26747.9	0.1	150.9	0.0	428:
	10:28:50	4.4000	26748.2	0.3	150.9	0.0	432:
	10:32:50	4.4667	26748.4	0.2	150.9	0.0	436:
	10:36:50	4.5333	26748.6	0.3	150.9	0.0	440:
	10:40:50	4.6000	26748.8	0.1	150.9	0.0	444:
	10:44:50	4.6667	26749.0	0.2	150.9	0.0	448:
	10:48:50	4.7333	26749.3	0.3	150.9	0.0	452:
	10:52:50	4.8000	26749.6	0.3	150.9	0.0	456:
	10:56:50	4.8667	26749.8	0.1	150.9	0.0	460:
	11:00:50	4.9333	26750.1	0.3	150.9	0.0	464:
	11:04:50	5.0000	26750.2	0.1	150.9	0.0	468:
	11:08:50	5.0667	26750.6	0.3	150.9	0.0	472:
	11:12:50	5.1333	26750.7	0.1	150.9	0.0	476:
	11:16:50	5.2000	26750.9	0.1	150.9	0.0	480:
	11:20:50	5.2667	26751.2	0.3	150.9	0.0	484:
	11:24:50	5.3333	26751.3	0.1	150.9	0.0	488:
	11:28:50	5.4000	26751.5	0.1	150.9	0.0	492:
	11:32:50	5.4667	26751.8	0.3	150.9	0.0	496:
	11:36:50	5.5333	26752.0	0.1	150.9	0.0	500:
	11:40:50	5.6000	26752.1	0.1	150.9	0.0	504:
	11:44:50	5.6667	26752.3	0.2	150.9	0.0	508:
	11:48:50	5.7333	26752.4	0.1	150.9	-0.1	512:
	11:52:50	5.8000	26752.6	0.1	150.9	0.0	516:
	11:56:50	5.8667	26752.6	0.0	150.9	0.0	520:

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.
 Reporting on an interval of 1 in 4 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. #
	12:00:50	5.9333	26752.7	0.1	150.9	0.0	524:
	12:04:50	6.0000	26752.9	0.2	150.9	0.0	528:
	12:08:50	6.0667	26752.9	0.0	150.9	0.0	532:
	12:12:50	6.1333	26753.1	0.1	150.9	0.0	536:
	12:16:50	6.2000	26753.2	0.1	150.9	0.0	540:
	12:20:50	6.2667	26753.3	0.1	150.9	0.0	544:
	12:24:50	6.3333	26753.5	0.2	150.9	0.0	548:
	12:28:50	6.4000	26753.5	0.0	150.9	0.0	552:
	12:32:50	6.4667	26753.5	0.0	150.9	0.0	556:
	12:36:50	6.5333	26753.7	0.1	150.9	0.0	560:
	12:40:50	6.6000	26753.7	0.0	150.9	0.0	564:
	12:44:50	6.6667	26753.7	0.0	150.9	0.0	568:
	12:48:50	6.7333	26753.7	0.0	150.8	-0.1	572:
	12:52:50	6.8000	26753.8	0.1	150.8	0.0	576:
	12:56:50	6.8667	26754.0	0.1	150.8	0.0	580:
	13:00:50	6.9333	26754.2	0.2	150.8	0.0	584:
	13:04:50	7.0000	26754.2	0.0	150.8	0.0	588:
	13:08:50	7.0667	26754.3	0.1	150.8	0.0	592:
	13:12:50	7.1333	26754.4	0.1	150.8	0.0	596:
	13:16:50	7.2000	26754.6	0.2	150.8	0.0	600:
	13:20:50	7.2667	26754.8	0.1	150.8	0.0	604:
	13:24:50	7.3333	26754.9	0.1	150.8	0.0	608:
	13:28:50	7.4000	26755.5	0.6	150.8	-0.1	612:
	13:32:50	7.4667	26756.0	0.5	150.8	0.0	616:
	13:36:50	7.5333	26756.8	0.8	150.8	0.0	620:
	13:40:50	7.6000	26759.5	2.7	150.8	0.1	624:
	13:44:50	7.6667	26755.9	-3.6	150.8	-0.1	628:
	13:48:50	7.7333	26761.3	5.4	150.3	-0.4	632:
	13:50:20	7.7583	26770.1	8.8	150.3	0.0	636:
	13:51:50	7.7833	26912.5	142.4	150.3	0.0	640:
	13:55:50	7.8500	26988.8	76.3	151.5	1.2	644:
	13:59:50	7.9167	26993.0	4.2	151.7	0.2	648:
	14:03:50	7.9833	26993.4	0.3	151.7	0.0	652:
	14:07:50	8.0500	27036.4	43.0	151.8	0.1	656:
	14:11:50	8.1167	27043.4	7.0	152.9	1.2	660:
	14:15:50	8.1833	27043.1	-0.3	153.1	0.1	664:
	14:19:50	8.2500	27044.4	1.4	153.1	0.0	668:
	14:23:50	8.3167	27072.6	28.2	153.1	0.0	672:
	14:27:50	8.3833	27102.5	29.9	153.4	0.4	676:
	14:31:50	8.4500	27133.0	30.5	153.6	0.2	680:
	14:35:50	8.5167	27176.2	43.2	153.8	0.2	684:
	14:39:50	8.5833	27166.5	-9.7	154.0	0.2	688:
	14:43:50	8.6500	27166.6	0.1	154.3	0.3	692:
	14:45:20	8.6750	27116.4	-50.3	154.3	0.0	696:

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.
 Reporting on an interval of 1 in 4 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. #
	14:46:50	8.7000	26721.4	-394.9	153.8	-0.5	700:
	14:50:50	8.7667	26715.3	-6.1	151.7	-2.1	704:
	14:54:50	8.8333	26521.3	-194.1	151.0	-0.7	708:
	14:58:50	8.9000	26338.9	-182.4	147.2	-3.8	712:
	15:02:50	8.9667	26110.2	-228.6	142.6	-4.6	716:
	15:06:50	9.0333	25887.9	-222.4	137.3	-5.3	720:
	15:10:50	9.1000	25651.2	-236.7	131.8	-5.4	724:
	15:11:30	9.1111	25596.8	-54.4	130.8	-1.0	728:
	15:12:10	9.1222	25538.5	-58.3	129.8	-1.1	732:
	15:12:50	9.1333	25482.0	-56.5	128.8	-0.9	736:
	15:13:30	9.1444	25425.0	-57.0	127.8	-1.0	740:
	15:14:10	9.1556	25367.1	-57.9	126.8	-1.1	744:
	15:14:50	9.1667	25314.5	-52.6	125.7	-1.1	748:
	15:15:30	9.1778	25248.5	-66.0	124.7	-1.0	752:
	15:16:10	9.1889	25186.3	-62.2	123.6	-1.1	756:
	15:16:50	9.2000	25129.4	-57.0	122.6	-1.1	760:
	15:17:30	9.2111	25061.6	-67.8	121.4	-1.2	764:
	15:18:10	9.2222	24984.4	-77.2	120.3	-1.1	768:
	15:18:50	9.2333	24891.8	-92.6	119.1	-1.2	772:
	15:19:30	9.2444	24787.0	-104.7	117.9	-1.2	776:
	15:20:10	9.2556	24680.8	-106.2	116.9	-1.0	780:
	15:20:50	9.2667	24566.5	-114.3	115.6	-1.3	784:
	15:21:30	9.2778	24454.4	-112.1	114.2	-1.4	788:
	15:22:10	9.2889	24341.3	-113.1	112.3	-1.8	792:
	15:22:50	9.3000	24228.5	-112.7	111.0	-1.3	796:
	15:23:30	9.3111	24109.2	-119.3	109.2	-1.8	800:
	15:24:10	9.3222	24001.5	-107.7	107.1	-2.2	804:
	15:24:50	9.3333	23887.5	-114.0	104.8	-2.3	808:
	15:25:30	9.3444	23776.5	-111.0	102.7	-2.1	812:
	15:26:10	9.3556	23661.6	-114.9	100.4	-2.2	816:
	15:26:50	9.3667	23542.1	-119.4	98.3	-2.2	820:
	15:27:30	9.3778	23409.1	-133.0	96.0	-2.3	824:
	15:28:10	9.3889	23273.8	-135.3	94.0	-2.0	828:
	15:28:50	9.4000	23128.6	-145.2	91.8	-2.2	832:
	15:29:30	9.4111	22973.6	-155.0	89.8	-2.1	836:
	15:30:10	9.4222	22821.1	-152.5	87.6	-2.2	840:
	15:30:50	9.4333	22659.0	-162.0	85.0	-2.6	844:
	15:31:30	9.4444	22502.8	-156.2	82.2	-2.8	848:
	15:32:10	9.4556	22353.4	-149.5	79.4	-2.8	852:
	15:32:50	9.4667	22212.1	-141.3	76.4	-2.9	856:
	15:33:30	9.4778	22064.1	-148.0	73.3	-3.2	860:
	15:34:10	9.4889	21956.3	-107.8	70.3	-2.9	864:
	15:34:50	9.5000	21854.0	-102.4	67.2	-3.1	868:
	15:35:30	9.5111	21783.8	-70.2	64.4	-2.8	872:

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.
 Reporting on an interval of 1 in 4 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. #
	15:38:50	9.5667	21703.2	-80.6	51.4	-12.9	876:
	15:42:50	9.6333	21693.6	-9.6	41.1	-10.3	880:
	15:46:50	9.7000	21675.7	-17.9	34.3	-6.8	884:
	15:50:50	9.7667	21673.2	-2.4	29.9	-4.4	888:
	15:54:50	9.8333	21668.8	-4.5	27.1	-2.8	892:
	15:59:00	9.9028	21355.1	-313.7	22.0	-5.1	896:
1998/03/02	15:59:40	9.9139	96.4	-21258.7	21.1	-0.9	899:

End Data Acquisition:

Absolute pressures are converted to gauge pressures
 assuming a barometric pressure of 90 kPa.
 Reporting on an interval of 1 in 4 data points.