

RANGER OIL LIMITED

EXISTING DOWNHOLE WELL PROFILE

Location: **Ranger Fort Liard P-66A**

Date: **4-Sep-98**

KB (m) **459.89** GL (m) **449.49** KB to CF: **10.35** KB to THF: **8.60**

	No. Joints	Size OD mm	Weight kg/m	Thread Collar	Grade	Landed @ mKB	Top @ mKB
Conductor Casing:	22	508.00	139.87	BT & C	K-55	262.66	Surface
Cement: Stage 1	80t 0:1:0 'G' + CaCl ₂ w/Lost circulation on displacement.						
Surface Casing:	79	339.70	101.20	BT & C	K-55	1008.00	Surface
Stage 1	92t 0:1:0 'G' + .2% D-13 + .5% D-69						
Intermediate Casing	51	244.50	79.62	BT & C	L-80	3115.00	2452.00
	180	244.50	69.94	BT & C	L-80	2452.00	Surface
Cement: Stage 1	17t 0:1:0 'G' + .35% D66 + 1.25% D160 + .5% D65 + .5% D28						
Stage 2	68t 0:1:0 'G' + .3% B71 + .5% D65 w/continuous returns. Est. Cement top @ 800m.						
Production Liner:	42	177.80	38.70	LT & C	L80	3499.00	2909.00
Cement: Stage 1	14.7t 0:1:0 'G' + 35% Silica + .5% D65 + .3% D28 + .2% D121 + 100t D135 + 1960t D600						
	+ 76t D47 displaced @ .6m ³ /min w/continuous returns throughout.						
Production Tubing:	215	88.90	13.84	NS-CT	L-80	3071.00	Surface

Perforations:	Upper Nihanni (gross interval)	3115.00	to	3172.00
	Middle Nihanni (gross interval)	3234.00	to	3302.00
	Lower Nihanni (w/TTG, net interval)	3324.00	to	3334.00
	Lower Nihanni (w/TTG, net interval)	3349.00	to	3356.00

FINAL TUBING STRING (Bottom Up)			Top
Item	Description	Length (m)	mKB
1	1 - 73mm x .10m Otis wireline re-entry guide w/EUE thread.	0.10	3082.44
2	1 - 73mm x .49m Otis 'RN' EUE nipple w/55.58 profile & 51.05mm No-Go.	0.59	3081.85
3	1 - 73mm x 3.04m L-80 EUE pup jt @ 9.67kg/m	3.04	3078.81
4	1 - 73mm x 1.24m L-80 EUE perforated nipple @ 9.67kg/m	1.24	3077.57
5	1 - 73mm x .31m Otis 'R' nipple w/55.58mm profile. EUE pin x NSCT box	0.31	3077.26
6	1 - 73mm x 2.99m L-80 NS-CT pup jt @ 9.67kg/m	2.99	3074.27
7	1 - 73mm x .30m INCOLOY 925 NSCT Otis 'X' nipple w/58.75mm profile.	0.30	3073.97
8	1 - 73mm x 1.06m INCOLOY 925 NSCT pup jt @ 9.67kg/m down.	1.06	3072.91
9	1 - 73mm x 177.8mm x 1.65 m INCOLOY 925 Halliburton 'BWB' perm packer	1.65	3071.26
10	1 - 73mm x .17m Otis mule shoe re-entry guide	0.17	3071.09
11	2 - 73mm x .43m (.86m total) Otis VTR Seal unit	0.43	3070.66
12	1 - 177.8mmx88.9mmx.46m Halliburton J-Slot latching head w/NSCT tread.	0.46	3070.20
13	1 - 88.9mm L-80 NSCT tubing jt @ 13.69kg/m	9.50	3060.70
14	1 - 88.9mm Otis 'XN' nipple w/69.85mm profile & 66.93mm No-Go.	0.31	3060.39
15	1 - 88.9mm x 3.03m L-80 NSCT pup jt @ 13.69kg/m	3.09	3057.30
16	166 - 88.9mm L-80 NSCT tubing jts @ 13.69kg/m	1559.17	1498.13
17	1 - 88.9mm Otis 'X' nipple w/71.45mm profile. (Landed 1500m @ 12.7")	0.39	1497.74
18	1 - 88.9mm x 3.03m L-80 NSCT pup jt @ 13.69kg/m	3.03	1494.71
19	157 - 88.9mm L-80 NSCT tubing jts @ 13.69kg/m	1474.63	20.08
20	1 - 88.9mm x 1.73m L-80 NSCT pup jt @ 13.69kg/m	1.73	18.35
21	1 - 88.9mm L-80 NSCT tubing jt @ 13.69kg/m	9.50	8.85
22	1 - 88.9mm Tubing Hanger	0.25	8.60
Total String Length (m)		3073.94	
KB to Tubing Hanger Flange		8.60	
Packer Setting Depth (mKB)		3082.54	

Tubing Weight	41718	daN	Wt. on Packer	9000	daN	Wt. on Hanger	32718	daN
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Wellhead	Make:	Rector	W.P.	35MPa	Type:	Flanged
Dual Master Valve	Make:	Rector	W.P.	35MPa	Type:	Flanged
	Size:	79.375mm	Trim	A487		
Casing Valves	Make:	Rector	W.P.	35MPa	Type:	Flanged
	Size:	79.375mm	Trim	A487		
Choke	Make:	N/A				

Surf. Casing Status:

Well Status: Temporary well suspension effective Sept. 2, 1998.

The tubing is suspended w/an Otis 'XN' plug landed in the 'XN' nipple @ 3060.39. The tubing was filled w/inhibited water, topped w/methanol & pressure tested to 28MPa. Installed a backpressure valve in the dognut. Secured.

The 88.9/244.5/177.8mm annulus is filled w/inhibited water, topped w/diesel and pressure tested to 21MPa.

