APPENDIX IA

DRILLING SUMMARY DETAILS

SCARBOROUGH-1

DATE	SHIFT	DEPTH	HOLE SIZE	BIT NO.	SERIAL NO.	BIT TYPE	RPM	W.O.B. kg.	REMARKS
9/9	D	8.1	7 7/8						Sandstone Cement
10/9	D	35.8	101	1	10127	L/Y St			
	N	62.2			10127				Sandstone and Shale
11/9	D	84.0			10127				Ream 5 5/8 to 24m
	N	90.5	5 5/8	2	SMITH F4				Ream 5 5/8" to 84m
12/9	D	-							Case & Cem 5" A/B to 89.6m
	N								WOC, Test BOP
13/9	D	105.00	101	3	L10340	L/Y S2			Test BOP, Drill P & FC
									Leak off test 160psi
	N	138.70			L10340	L/Y S2			Sandstone, Shale
14/9	D	176.3			L10340	L/Y S2	860	1-1.5	Shale
	N	205.6			L10340	L/Y S2			Shale Mud 8.6, 37
15/9	D	250.4					800	1-2	Shale
	N	285.6					750	1-1.5	Shale Mud 8.6/38
16/9	D	311.2	5	4	L10341	L/Y S2	700	1-15	Shale Press 350,
									Bit change @ 305.6
	N	334.4							Shale
17/9	D	352.0					650	1.5	Shale
	N	374.0					550	1-2	Mud 8.5/43
18/9	D	395.0					400	1-2	
	N	417.4					400	1-2	Mud 84/48

SCARBOROUGH-1 (cont)

DATE	SHIFT	DEPTH	HOLE SIZE	BIT NO.	SERIAL NO.	BIT TYPE	RPM	W.O.B. kg.	REMARKS
19/9	D	443.2					550	1-1.5	
	N	461.4							
20/9	D	463.0		4	L10341	71 3/4			Soft Shale Ream over core
									V/Size Wrong type of bit
				5	138/2	AUS S/F			Bit change @ 463m
20/9	N	472.0	101	5	138/2	AUS S/F	600		Soft Shale
21/9	D	490.6					600		Soft Shale
	N	507.8					800	5/1	Soft Shale 300psi Mud 8.4/43
22/9	D	529.4				AUS S/F	2		Clay Shale
	N	546.2							
23/9	D	566.9							Shale
	N	579.2					450	1-2	Shale Mud 8.4/40
		583.0							RS on L10339 off L99459
24/9	D	584.0		6	138/3	AUS S/F			Shale Bit broken, Fish
	N	600.4					450	2	Shale
25/9	D	620.2					450	2	Shale 380psi
	N	638.0							
26/9	D	656.7					500	3-4	Shale
	N	656.9		7	49 hr				
		667.2			L10128	L/Y8St			Sandstone, Shale
27/9	D	670.2							Sandstone, Shale FW in flow
									Water 600 Stick
		670.2				L/Y8St	560	2	Bit change @ 667.2 7hrs
	N	685.6					400		Sandstone, Shale Rod rattle
28/9	D	691.4							Shale POH for Logging
	N								S/B Logging
29/9	D								Plug back cement, PIH
30/9									Rig Shift

APPENDIX IB

DRILLING SUMMARY

SCARBOROUGH-1

DATE	HOUR	
9 September	0600	Drill with 7 7/8 Roller Bit for surface casing
	1130	Cement Casing
	1230	W.O.C.
10 September	0600	Unload drill pipe and put water tank on truck
	0930	Drill cement out of casing
	1130	Drill 8.10 - 35.80m
	1800	Drill
	0445	P.O.O.H. Core Stuck in Barrel
11 September	0600	R.I.H.
	0630	Drill
	0900	P.O.O.H.
	0930	R.I.H.
	1000	Drill
	1430	P.O.O.H. for casing
	1530	Make up B.H.A. for reaming
	1615	Ream 8.10 to 24m
	1800	Reamed hole 24.00 to 84.00 (5 5/8" hole)
	0400	Drilled 5 5/8" :84.00 - 90.50m
12 September	0600	Run casing and cement
	1030	W.O.C.
	1800	Wait on cement
	2030	Nipple up B.O.P. Test B.O.P.
13 September	0600	Test B.O.P.
	1100	Drill out cement plug & float collar
	1230	Condition & Circ.
	1300	Drill
	1500	Leak of test 160 P.S.I.
	1530	Drill
	1800	Drill
14 September	0600	Drill
	1800	Drill
	2015	Survey
	2045	Drill
15 September	0600	Drill
	1800	Drill
	1830	Repair broken fitting - kill line
	1900	Drill
	0130	Replace broken water swivel
	0215	Drill

16 September	0600	Drill
	1300	P.O.O.H. Bit change & R.I.H.
	1430	Drill
	1800	Drill
17 September	0600	C. M. & C.
	0700	Drill
	0930	Repair Rig
	1030	Drill
	1800	Drill
18 September	0600	Drill
	1800	Drill
	2045	Repair pipe fitting - B.O.P. kill line
	2130	Drill
	0315	Adjust Clutch (Cat twin disc)
	0330	Drill
19 September	0600	Drill
	1730	C.M.&C.
	1800	Drill
	1900	Bolt seal retaining ring back onto chuck
	1930	Drill
	2230	Run survey
	2315	Seal ring of chuck loose again, bolt on
	2345	Drill
20 September	0600	Drill
	0730	Ream over core, bit cutting core under size Wrong type of bit
	1100	P.O.O.H. Bit change
	1130	R.I.H. to shoe
	1130	Rig repair
	1630	R.I.H.
	1800	Rig repairs
	2200	Condition & Circulate
	2300	Drill
21 September	0600	Drill
	1800	Drill
22 September	0600	Drill
	1800	Drill
	1900	Repair fitting on kill line B.O.P.
	1945	Drill

23 September	0600	Drill
	1000	Lubricate Rig (Service Motor)
	1030	Drill
	1800	Drill
	0500	Replace beam pump gear box
24 September	0600	Replace Gear Box on F.M.G. Pump
	0830	Drill
	1130	P.O.O.H. Bit Broken and Reamer
	1230	Fishing for Bit
	1600	R.I.H. (Bit change)
	1730	Drill
	1800	Drill
25 September	0600	Drill
	1800	Drill
	2430	Repairs to Rig
	0100	Drill
26 September	0600	Drill
	1800	Trip - Change Bit
	2200	Circulate and condition hole
	2300	Drill
27 September	0600	Try to drill ahead
	0700	Free stuck drill rods
	0830	Pull and check rod line for leaking rods
	1230	R.I.H.
	1400	Drill ahead
	1600	Cut inner tube out of barrel
	1800	Drill - slow drilling - rod rattle in hole
28 September	0600	Drill ahead
	1115	Run survey at T.D.
	1200	C & C hole
	1230	P.O.O.H. to log
	1445	Rig up logger and run wireline logs
	1800	Rig on standby for logging with now crew
29 September	0600	Repair Rig
	0800	R.I.H.
	1030	C & C Hole
	1100	Cement job - plug back
	1200	P.O.O.H. Lay down singles
	1600	Rig down
30 September	0600	Rig Shift

APPENDIX II

Mud/Consumable Summaries

SCARBOROUGH-1

DATE	SHIFT	DEPTH	HOLE SIZE	BIT NO.	SERIAL NO.	BIT TYPE	RPM	W.O.B. kg.	RAPID TROL 1kg	CEMENT	POLYMER LITRE	SODA ASH 1KG	TORQ TRIM LITRE
9/9	D	8.1	7 7/8						6	6			
10/9	D	35.8	101	1	10127	L/Y St			8		25		
	N	62.2			10127				12				
11/9	D	84.0			10127				5				
	N	90.5	5 5/8	2	SMITH F4								
12/9	D	-							24			25	
	N										25		250
13/9	D	105.00	101	3	L10340	L/Y S2			5				
									24				
	N	138.70			L10340	L/Y S2			10				
14/9	D	176.3			L10340	L/Y S2	860	1-1.5	30				
	N	205.6			L10340	L/Y S2			9			1	200
15/9	D	250.4					800	1-2					
	N	285.6					750	1-1.5	24				
16/9	D	311.2	5	4	L10341	L/Y S2	700	1-15	17			1	
									18				
	N	334.4							7				
17/9	D	352.0					650	1.5	6				
	N	374.0					550	1-2	4				
18/9	D	395.0					400	1-2					
	N	417.4					400	1-2	12			1	

SCARBOROUGH-1 (cont)

DATE	SHIFT	DEPTH	HOLE SIZE	BIT NO.	SERIAL NO.	BIT TYPE	RPM	W.O.B. kg.	RAPID TROL 1kg	MILPOLYMER 25 LITRE	SODA ASH 25KG	CEMENT
19/9	D	443.2					550	1-1.5	13			
	N	461.4							14			
20/9	D	463.0		4	L10341	$71^3/4$			13			
				5	138/2	AUS S/F						
20/9	N	472.0	101	5	138/2	AUS S/F	600		14			
21/9	D	490.6					600		6			
	N	507.8					800	5/1	15			
22/9	D	529.4				AUS S/F	2		6	1		
	N	546.2										
23/9	D	566.9							19		1	
	N	579.2					450	1-2	12			
		583.0		6					6			
24/9	D	584.0			138/3	AUS S/F			11			
	N	600.4					450	2	20			
25/9	D	620.2					450	2	17			
	N	638.0							15			
26/9	D	656.7					500	3-4	8			
	N	656.9		7	49 hr							
		667.2			L10128	L/Y8St						
27/9	D	670.2										
		670.2				L/Y8St	560	2				
	N	685.6					400		31			
28/9	D	691.4										
	N											
29/9	D											7
30/9												

APPENDIX III

GEOCHEMICAL ANALYSES

by

AMDEL

DEPTH (m)	SAMPLE	T MAX	S1	S2	S3	S1+S2	PI	S2/S3	PC	TOC	HI	OI
140	254	440	0.25	0.77	2.83	1.02	0.25	0.27	0.08	0.69	112	410
150	255	437	0.17	0.83	0.08	1.00	0.17	10.37	0.08	0.63	132	13
160	256	438	0.15	0.48	0.01	0.63	0.24	48.00	0.05	0.46	104	2
170	257	438	0.33	0.93	0.09	1.26	0.26	10.33	0.10	0.76	122	12
180	258	437	0.44	1.65	0.10	2.09	0.21	16.50	0.17	0.92	179	11
190	259	433	0.52	1.19	0.22	1.71	0.31	5.40	0.14	0.77	155	29
200	260	441	0.37	0.86	0.36	1.23	0.30	2.38	0.10	0.62	139	58
210	261	441	0.28	0.56	0.92	0.84	0.33	0.60	0.07	0.52	108	177
220	262									0.16		
230	263	437	1.39	3.77	0.69	5.16	0.27	5.46	0.43	1.70	222	41
240	264									0.15		
250	265	449	1.40	1.97	0.35	3.37	0.42	5.62	0.28	1.04	189	34
260	266	444	1.10	1.87	0.32	2.97	0.37	5.84	0.24	0.86	217	37
270	267									0.26		
280	268	445	3.13	6.90	0.55	10.03	0.31	12.54	0.83	2.70	256	20
285	269	445	3.39	6.51	0.47	9.90	0.34	13.85	0.82	2.60	250	18
290	270	387	1.53	1.26	0.47	2.79	0.55	2.68	0.23	0.70	180	67
295	271	437	2.78	2.75	0.43	5.53	0.50	6.39	0.46	1.45	190	30
300	272	437	3.31	5.03	0.51	8.34	0.40	9.86	0.69	2.10	240	24
310	273	435	3.12	9.43	0.52	12.55	0.25	18.13	1.04	3.50	269	15
320	274	439	4.41	17.41	0.97	21.82	0.20	17.94	1.81	6.90	252	14
330	275	441	2.92	9.43	0.56	12.35	0.24	16.83	1.02	4.35	217	13
340	276	440	2.56	6.24	0.64	8.80	0.29	9.75	0.73	3.60	173	18
350	277	439	2.22	6.92	0.55	9.14	0.24	12.58	0.76	3.05	227	18
360	278	448	3.51	13.21	1.01	16.72	0.21	13.07	1.39	5.75	230	18
370	279	447	2.42	5.75	0.64	8.17	0.30	8.98	0.68	3.00	192	21
380	280	443	3.76	6.26	0.61	10.02	0.38	10.26	0.83	2.95	212	21

DEPTH (m)	SAMPLE	T MAX	S1	S2	S3	S1+S2	PI	S2/S3	PC	TOC	HI	OI
390	281	443	3.39	6.30	0.58	9.69	0.35	10.86	0.80	3.05	207	19
400	282	449	2.22	3.40	0.46	5.62	0.40	7.39	0.46	1.75	194	26
410	283	448	2.23	3.81	0.50	6.04	0.37	7.62	0.50	2.10	181	24
420	284	439	3.81	4.55	0.49	8.36	0.46	9.28	0.69	2.30	198	21
430	285	442	2.61	6.23	0.49	8.84	0.30	12.71	0.73	3.90	160	13
440	286	445	3.15	6.49	0.39	9.64	0.33	16.64	0.80	3.70	175	11
450	287	430	2.68	3.71	0.48	6.39	0.42	7.72	0.53	2.25	165	21
455	288									0.15		
460	289									0.30		
480	290	426	0.24	0.42	0.31	0.66	0.36	1.35	0.05	0.45	93	69
500	291									0.08		
520	292									0.05		
540	293									0.17		
560	294									0.28		
570	295	465	2.46	6.63	0.51	9.09	0.27	13.00	0.75	5.40	123	9
580	296									0.15		
600	297	443	0.62	0.75	0.00	1.37	0.46	0.00	0.11	1.05	71	0
610	298	405	0.26	0.41	0.00	0.67	0.39	0.00	0.05	1.05	39	0
620	299									0.08		
670	300									0.37		
675	083									0.31		
680	084									0.33		
685	085	316	0.14	0.29	0.06	0.43	0.33	4.83	0.03	0.49	59	12
690	086	463	0.05	0.13	0.01	0.18	0.28	13.00	0.01	0.54	24	2

APPENDIX IV

Reservoir Analyses

Amdel

RESERVOIR ANALYSIS

Depth	POROSITY		HORIZ PERMEABILITY		VERT PERMEABILITY		BULK VOL		BULK DRY DENSITY		APPARENT GRAIN	
	Ambient	Ovebuden	Amb	O/B	Amb	O/B	Amb	O/B	Amb	O/B	Amb	O/B
621	2.7	2.6	0.006	0.003	0.012		18.76	18.74	2.63	2.63	2.70	2.70
626	10.5		405		384		21.00		2.37		2.65	
630	7.7	7.5	4.53	4.42	1.97		19.91	19.87	2.45	2.45	2.65	2.65
635	6.3		0.770		1.12		20.25		2.48		2.65	
636	5.3		0.105		0.167		16.66		2.52		2.66	
639	4.3		2.34		1.14		16.60		2.54		2.65	
640	4.9		0.020		0.018		19.49		2.53		2.66	
642	5.5		0.019		0.016		18.37		2.51		2.66	
644	2.4		0.009		0.010		19.93		2.59		2.66	
646	3.3		0.022		0.026		23.69		2.55		2.64	
648	3.5		0.029		0.019		18.07		2.57		2.67	
650	2.5		0.026		0.027		21.49		2.58		2.64	
659	0.5		0.007		0.007		19.37		2.62		2.63	2.63

SCARBOROUGH - 1

C_{12+} BULK COMPOSITION OF EXTRACTED ORGANIC MATTER

POG No.	DEPTH m.	EOM (ppm)	C_{12+} Composition			Alkane Ratios				
			Sats %	Arom %	Res + Asph %	TMTD/Pr	Np/Pr	Pr/Ph	Pr/n-C_{17}	Ph/n-C_{18}
1367695	621	351	36.6	3.80	57.60					
1369142	626	111	44.72	2.48	52.80	0.08	0.38	0.96	0.65	0.68
1367696	630	131	33.70	5.50	61.80					
1369143	635	59	47.73	1.14	51.13	0.06	0.45	0.85	0.60	0.51
1369138	646	21	8.82	8.82	82.35	0.03	0.60	1.58	0.68	0.51
1369135	650	13	25.00	25.00	50.00	0.01	0.44	1.72	0.99	0.71
1367687	659	17	50.00	14.29	35.71	0.13	0.33	1.24	0.67	0.37