APPENDIX 1A

DRILLING SUMMARY

LADY PENRHYN-1

DATE	SHIFT	DEPTH	HOLE SIZE	BIT NO.	SERIAL NO.	BIT TYPE	RPM	W.O.B. kg.	REMARKS
16/10	D	10.1	7⁷/8		Hughes	J3			Sand and Clay
17/10	D								Cement casing 7", WOC
	N	20.7		2	138/2	Aus 4.33 step	450	1000	Mud Wt 8.3, Vis 39
18/10	D	48.5			138/2		650	1000	Shales
	N	61.2			138/2	"	480	3000	"
19/10	D	81.5			138/2	"	600	200	"
		-			Hughes	J33	-	-	Ream 5-5/8"
	N	-			"	"	60	4500	Ream 5-5/8" 36.5 - 81.5
20/10	D								Case N80 to 80.1m, Cem, WOC
	N	-							Set BOP etc, DOC
21/10	D	103.5		2			600	200	Shale
	N	116.0		"			600	4000	Shale, + 1B Sands
22/10	D	139.4		"			400	2000	
	N	151.4		"			400	4500	
23/10	D	166.7		"			"	2000	
	N	187.1		"			650	"	
24/10	D	216.0		"			750	1500	Shale
	N	229.4		"			700	1500	Shale
25/10	D	233.4		"					BOC 223.3m in 129hrs
	D	248.4		3	139/2	Aus Step			
	N	268.6		"	"		650	2000	Shale
26/10	D	290.7		"	"				Shale
	N	304.3		"					" Press 300 BOC 71.2m 38hr
	N	306.9		4	4450	E/W	750	2000	" Press 300 BOC 2.6m 1½hr

DATE	SHIFT	DEPTH	HOLE SIZE	BIT NO.	SERIAL NO.	BIT TYPE	RPM	W.O.B. kg.	REMARKS
27/10	D	324.0		5	10460	L/Y Step			Shale
	N	348.5		"	"		650	1500	Shale Press 400
28/10	D	373.2		"			500	1500	Shale Mud W 8.4, Vis 39
	N	401.6		"			600	1-2kg	Shale
29/10	D	430.8		"			500	1500	Shale Mud W 8.5, Vis 39
	N	457.4		"			"	"	
30/10	D	473.6		"			"	"	Mudstone
		488.8		"					Mudstone
31/10	D	503.2		5		7 Step	500	1500	Mudstone Mud Wt 8.4, Vis 39
	N	519.2		"			"	"	"
1/11	D	525.8		"			"	"	Mudstone BOC 218.9m 108hr
	D	531.6		6	12770	L/Y 4 Step	"	"	"
	N	546.0		"			"	"	"
2/11	D	563.2		"			420	1500	"
	N	583.4		"			"	"	"
3/11	D	598.0		"			400	1500	Shale Mud Wt 8.4, Vis 39
	N	619.0		"			450	1500	Shale
4/11	D	646.4		"			400	2000	Bl shale
	N	668.0		"			400	1500	
5/11	D	684.0		"			500	2500	Sandstone
	N	696.2		"			"	"	" BOC 170.4m 96hr
6/11	D	709.5		7	10695	L/Y 4 St	"	3000	Quartz and sandstone
	N	727.6		"	"	"	"	2000	Quartz and sandstone, bl sh
7/11	D	745.0		"	"	"	"	"	Shale BOC 49.2, 32hr
	N	-							Wireline logs 3½hr
8/11	D	-							Logging (9h), Plug back (3h)
	N	-							-
9/11	D								Plug back (1hr),
									Rig down (11 hr)
	N	-							
10/11	D								Rig shift (12 hr)
	N	-							

APPENDIX IB

DRILLING SUMMARY

LADY PENRHYN

DATE	HOUR	
16 October	0600	Rigging up
	1200	W.O. water
	1300	Mix Mud
	1415	Drill
	1800	Stand down
17 October	0600	Circulate and condition hole
	0645	P.O.O.H. to run 7" casing
	0700	Run casing and cement.
	0815	W.O.C.
	1800	W.O.C.
	2030	Prepare to run 101 Barrel R.I.H. to 8m
	2115	D. O. C.
	2200	Drill ahead
18 October	0600	Drill
	1800	Drill 48.50 - 60.60m
	0330	Maintenance-Beam Pump fluctuating
	0400	Retube lose core
	0430	Drill 60.6 - 61.2m
	0500	P.O.O.H. to remove core in barrel
	0515	R.I.H. with heavy-weight D.P.
	0545	Tag bottom and circulate
19 October	0600	Drill
	1515	Ream open hole (5 5/8)
	1800	Ream to 81.50m
	0245	Circulate and condition hole
	0300	P.O.O.H. to run 5" casing
	0415	Run 5" casing
20 October	0600	Case and cement
	0730	W.O.C.
	1800	W.O.C.
	1930	Nipple up B.O.P.
	2300	Test B.O.P. Not pressuring up: remove stack Replace seal and repair
	0400	Pressure test B.O.P. Test to 1000 PSI on Hydril, choke manifold and taps kill line and kelly tap all O.K.
	0430	R.I.H. with core barrel
	0515	Tag cement at 72.9m Drill out cement

21 October	0600	Drill out cement plug and float collar
	1000	Drill
	1200	Leak off test (275 P.S.I.) @ 84.50m
	1230	Drill
	1800	Drill
	0130	Retube
	2215	P.O.O.H. remove core R.I.H.
	0215	Drill ahead
	0045	Retube
	0015	Drill ahead
22 October	0600	Drill
	0700	Repair Rig
	0800	Drill
	1745	Trip
	1800	P.O.O.H. remove core from barrel R.I.H.
	1915	Wash over core: Drill ahead
	2130	Retube - stuck tube
	2145	P.O.O.H. Remove tube. R.I.H. with tube in.
	2315	Pull tube, run survey at 140m-1°.
	2345	Drill
	0115	Breakdown hydraulic head oil pump
	0200	Drill
23 October	0600	Drill
	0845	Repair Rig
	1000	Drill
	1800	Drill
24 October	0600	Drill
	1115	Survey (unsuccessful).
	1130	Drill
	1230	Survey
	1300	Drill
	1800	Drill
	2345	Tube won't seat
	2400	Trip - Rod's silted with mud
	0100	Mud work - drop mud pits
	0300	Condition & circulate hole
	0400	Drill - Difficulty in recovering core
25 October	0600	Drill
	0900	Trip - bit change
	1030	Drill
	1800	Drill
	1930	Survey
	2000	Drill

26 October	0600	Drill
	1800	Drill
	0100	Repairs to rig
	0130	Trips - broken wire line - change bit
	0430	Circulate and condition hole
	0445	Drill
27 October	0600	Trip
	0800	Drill
	1800	Drill ahead
28 October	0600	Drill
	1600	Trip
	1800	(R.I.H.) Trip
	1830	Repairs to Rig
	1900	Trip
	1915	Drill ahead
29 October	0600	Drill
	1800	Drill
	2100	Survey (failed)
	2130	Drill
30 October	0600	Drill
	1800	Drill
	2300	Survey
	2330	Drill
31 October	0600	Drill
	1000	Survey
	1030	Drill
	1800	Drill ahead
1 November	0600	Drill
	1130	Trip
	1345	Drill
	1800	Drill
	0500	Service Rig Motors
2 November	0600	Drill
	1130	Survey - not developed
	1200	Drill
	1800	Drill ahead
3 November	0600	Drill
	1100	Survey
	1130	Drill
	1800	Drill

4 November	0600	Drill
	1800	Drill ahead
5 November	0600	Drill
	1200	Repair Rig
	1300	Drill
	1800	Drill ahead
	0430	Pull out of hole
6 November	0600	Trip - bit change
	0800	C. & C.
	0845	Drill
	1800	Drill ahead
7 November	0600	Drill - T.D.
	1645	C & C.
	1730	Trip
	1800	Trip out of hole - set up, to run logs
	2030	Running wire line logs - stand by
	2400	Rig on stand-by, no crew
8 November	0600	Rig on stand by - logging
	1445	Plug back (1st plug)
9 November	0600	Plug back (2nd plug 120m)
	0700	Rig down - shift

APPENDIX II

MUD/CONSUMABLE SUMMARIES

LADY PENRHYN-1

DATE	SHIFT	DEPTH	HOLE SIZE	BIT NO.	SERIAL NO.	BIT TYPE	RPM	W.O.B. kg.	REMARKS
16/10	D	10.1	7 7/8		HUGHES	J3			Liquid Poly 1x25l
17/10	D								Cement 4
	N	20.7	2		138/2	AUS4.33	450	1000	Rapid Trol 30x1kg, Soda Ash 1
18/10	D	48.5			138/2		650	1000	Rapid Trol 10x1kg
	N	61.2			138/2	AUS4.33	480	3000	Rapid Trol 8x1kg
19/10	D	81.5			138/2	AUS4.33	600	200	Liquid Poly 25 lts
	-				HUGHES	J33			
	N				HUGHES	J33	60	4500	
20/10	D								Rapid Trol 10x1kg Cement 12
	N								
21/10	D	103.5	22.0	2			600	200	Rapid Trol20x1kg ToraTrim2001
	N	116.0		2			600	4000	Rapid Trol 5x1kg
22/10	D	139.4		2			400	2000	Rapid Trol 6x1kg
	N	151.4		2			400	4500	
23/10	D	166.7		2			400	2000	Rapid Trol 3x1kg
	N	187.1		2			650	2000	Rapid Trol 4x1kg
24/10	D	216.0	28.9	2			750	1500	Rapid Trol 3x1kg
	N	229.4		2			700	1500	Rapid Trol 20x1kg
25/10	D	233.4		2					Rapid Trol 14x1kg
	D	248.4		3	139/2	AUSSTEP			
	N	268.6		3	139/2		650	2000	
26/10	D	290.7	22.1	3	139/2				Rapid Trol 4x1kg
	N	304.3		3					Rapid Trol 4x1kg
	N	306.9		4	4450	E/W	750	2000	
27/10	D	324.0		5	10460	L/YSTOP			Rapid Trol 10x1kg
	N	348.5		5	10460		650	1500	Rapid Trol 6x1kg
28/10	D	373.2		5			500	1500	Rapid Trol 7x1kg
	N	401.6		5			600	1-2	

LADY PENRHYN-1

DATE	SHIFT	DEPTH	HOLE SIZE	BIT NO.	SERIAL NO.	BIT TYPE	RPM	W.O.B. kg.	REMARKS
29/10	D	430.8		5			500	1500	Rapid Trol 9x1kg
	N	457.4		5			500	1500	
30/10	D	473.6		5			500	1500	Rapid Trol 15x1kg
		488.8		5					Rapid Trol 17x1kg
31/10	D	503.2		5		7step	500	1500	Rapid Trol 15x1kg
	N	519.2		5			500	1500	Rapid Trol 8x1kg
1/11	D	525.8		5			500	1500	Rapid Trol 7x1kg
	D	531.6		6	12770	L/Y	500	1500	
	N	546.0		6		4step	500	1500	
2/11	D	563.2		6			420	1500	Rapid Trol 9x1kg
	N	583.4		6			420	1500	Rapid Trol 2x1kg
3/11	D	598.0		6			400	1500	Rapid Trol 3x1kg
	N	619.0		6			450	1500	
4/11	D	646.4		6			400	2000	Rapid Trol 24x1kg, Poly 25lts
	N	668.0		6			400	1500	Rapid Trol 10x1kg
5/11	D	684.0		6			500	2500	Rapid Trol 3x1kg
	N	696.2		6			500	2500	Rapid Trol 12x1kg
6/11	D	709.5		7	10695		500	3000	Rapid Trol 3x1kg
	N	727.6		7	10695		500	2000	Rapid Trol 8x1kg
7/11	D	745.0		7	10695		500	2000	
	N	-							
8/11	D	-							
	N	-							Cement 12 bags
9/11	D								
	N								Cement 12 bags
10/11	D								
	N								

APPENDIX III

GEOCHEMICAL ANALYSES

by

AMDEL

DEPTH (m)	T MAX	S1	S2	S3	S1+S2	PI	S2/S3	PC	TOC	HI	OI
30	438	1.09	13.20	0.12	14.29	0.08	110.00	1.19	2.65	498	5
40	438	1.17	13.81	0.23	14.98	0.08	60.04	1.24	2.70	511	8
50	437	1.15	18.55	0.22	19.70	0.06	84.31	1.64	3.25	571	7
60	437	0.95	12.51	0.22	13.46	0.07	56.86	1.12	2.65	472	8
70	437	1.00	14.81	0.26	15.81	0.06	56.96	1.31	2.95	502	9
80	438	1.08	22.79	0.29	23.87	0.05	78.58	1.98	4.20	543	7
90	436	0.59	7.02	0.18	7.61	0.08	39.00	0.63	1.87	375	10
100	434	0.43	3.82	0.18	4.36	0.10	21.77	0.36	0.99	396	10
110	436	0.30	2.43	0.39	2.73	0.11	6.23	0.22	1.24	196	31
120	437	0.29	2.49	1.12	2.78	0.10	2.22	0.23	1.58	158	71
130	437	0.39	2.29	0.77	2.68	0.15	2.97	0.22	1.12	204	69
140	436	0.63	7.46	0.52	8.09	0.08	14.34	0.67	2.20	339	24
150	432	0.08	1.28	0.25	1.36	0.06	5.12	0.11	0.76	168	33
160	433	0.41	3.53	0.21	3.84	0.10	16.80	0.32	1.35	261	16
170	436	0.40	4.24	0.52	4.64	0.09	8.15	0.38	1.67	254	31
180	435	0.36	1.77	0.11	2.13	0.17	16.09	0.17	1.21	146	9
190	436	0.34	1.73	0.10	2.07	0.17	17.30	0.17	0.99	175	10
200	436	0.24	1.05	0.07	1.29	0.19	15.00	0.10	0.78	135	9
210	437	0.46	1.58	0.10	2.04	0.23	15.80	0.17	1.01	156	10
220	404	0.35	0.50	0.20	0.85	0.42	2.50	0.07	0.55	91	36
230	440	0.49	1.47	0.24	1.96	0.25	6.12	0.16	0.96	153	25
240	436	0.62	1.55	0.23	2.17	0.29	6.73	0.18	1.06	146	22
250	434	0.50	1.26	0.09	1.76	0.28	14.00	0.14	0.90	140	10
260	436	0.52	1.45	0.22	1.97	0.27	6.59	0.16	0.92	158	24
270	442	1.30	5.19	0.21	6.49	0.20	24.71	0.54	2.00	259	11
280	443	1.74	3.44	0.32	5.18	0.34	10.75	0.43	1.31	263	24
290	444	2.88	6.05	0.52	8.93	0.32	11.63	0.74	2.15	281	24
300	442	2.50	5.42	0.35	7.82	0.32	15.48	0.66	2.45	221	14
310	374	1.35	1.49	0.39	2.84	0.48	3.82	0.23	0.73	204	53

DEPTH (m)	T MAX	S1	S2	S3	S1+S2	PI	S2/S3	PC	TOC	HI	OI
320									0.35		
330									0.34		
340	434	1.58	8.61	0.41	10.19	0.16	21.00	0.84	3.10	270	13
350	445	2.49	14.69	0.45	17.18	0.14	32.64	1.43	5.15	285	9
360	444	2.22	13.61	0.43	15.83	0.14	31.65	1.31	4.84	281	9
370	445	3.96	15.16	0.80	19.12	0.21	16.95	1.59	6.30	241	13
380	448	4.61	7.29	0.44	11.90	0.39	16.56	0.99	3.05	239	14
390	447	4.80	10.37	0.24	15.17	0.32	43.20	1.26	4.20	247	6
400	448	4.30	6.80	0.36	11.10	0.39	18.88	0.92	3.05	223	12
410	443	4.36	5.95	0.33	10.31	0.42	18.03	0.85	2.60	229	13
420	444	3.98	5.83	0.35	9.81	0.41	16.65	0.81	2.55	228	14
430	439	4.79	8.41	0.31	13.20	0.36	27.12	1.10	3.30	255	9
440	448	2.10	8.20	0.40	10.30	0.20	20.50	0.85	4.85	169	8
450	453	2.66	9.09	0.47	11.75	0.23	19.34	0.97	4.60	198	10
460	407	3.00	3.67	0.75	6.67	0.45	4.89	0.55	1.63	222	45
470									0.28		
480									0.28		
490									0.23		
500									0.24		
510									0.15		
520									0.11		
530									0.13		
540									0.15		
550									0.08		
560									0.05		
570									0.17		
580									0.19		
590									0.32		
600	482	0.30	1.50	0.19	1.80	0.17	7.89	0.15	0.44	341	43

DEPTH (m)	T MAX	S1	S2	S3	S1+S2	PI	S2/S3	PC	TOC	HI	OI
610									0.34		
620									0.17		
630									0.24		
640	464	1.18	3.63	0.22	4.81	0.25	16.50	0.40	2.31	157	10
650	468	0.91	2.85	0.15	3.76	0.24	19.00	0.31	1.60	178	9
660	475	0.57	2.45	0.14	3.02	0.19	17.50	0.25	1.98	124	7
665									0.28		
670									0.15		
715	451	0.05	1.16	0.03	1.21	0.04	38.66	0.10	0.42	276	7
720	469	0.04	0.88	0.03	0.92	0.04	29.33	0.07	0.40	220	7
725	478	0.13	0.89	0.06	1.02	0.13	14.83	0.08	0.55	162	11
730	475	0.14	0.83	0.06	0.97	0.15	13.83	0.08	0.73	114	8
735	468	0.10	0.76	0.10	0.86	0.12	7.60	0.07	0.60	127	17
740	478	0.14	0.77	0.00	0.91	0.16	0.00	0.07	0.72	107	0
745	470	0.22	0.79	0.06	1.01	0.22	13.16	0.08	0.84	94	7

APPENDIX IV

RESERVOIR ANALYSES

Amdel

RESERVOIR ANALYSIS

Depth	POROSITY Ambient	POROSITY Ovebuden 7900kPa	HORIZ PERMEABILITY Amb	HORIZ PERMEABILITY O/B	VERT PERMEABILITY Amb	VERT PERMEABILITY O/B	BULK VOL Amb	BULK VOL O/B	BULK DRY DENSITY Amb	BULK DRY DENSITY O/B	APPARENT GRAIN Amb	APPARENT GRAIN O/B
142.24	5.8		0.090		0.010		15.04		2.54		2.69	
160.85	1.2		0.008		0.011		12.24		2.57		2.61	
163.55	4.2		0.088		0.009		17.28		2.54		2.65	
166.00	3.1		0.011		0.008		11.70		2.57		2.65	
170.90	0.8		0.106		0.009		19.20		2.62		2.64	
174.32	1.0		0.008		0.007		19.12		2.62		2.65	
670	0.6	0.3	0.057	< 0.001			13.98	13.93	2.64	2.65	2.66	2.66
673	2.4		0.018		0.023		22.59		2.58		2.65	
676	1.5		0.014		0.019		24.04		2.57		2.61	
681	2.5		0.020		0.019		23.00		2.58		2.65	
682	3.0	2.8	0.017	0.006	0.020		18.91	18.88	2.60	2.60	2.68	2.68
700	4.5		0.024		0.014		23.10		2.53		2.65	

TABLE 1: C_{12} + BULK COMPOSITION OF EXTRACTED ORGANIC MATTER

POG No.	Depth	EOM (ppm)	C_{12} Composition			Alkane Ratios				
			Sats %	Arom %	Res + Asph %	TMTD/Pr	Np/Pr	Pr/Ph	Pr/n-C_{17}	Ph/n
1367693	670m	68	------35.7-----		64.3	-	0.86	1.5	0.82	0.61
1369144	673m	178	73.29	0.36	26.35	0.33	0.71	0.96	0.51	0.50
1369136	676m	131	66.37	8.07	25.56	0.36	0.81	0.79	0.59	0.66
1369139	681m	131	62.15	2.80	35.05	0.33	0.87	0.78	0.53	0.60
1367694	682m	167	73.0	11.5	15.5	0.72	0.91	0.89	0.48	0.52
1369137	700m	270	75.47	4.44	20.09	-	-	0.75	0.92	0.92