AMITY OIL NL

CUTTLEFISH-1
VIC/P40

WELL COMPLETION REPORT

Prepared by

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Report No. AYO 231

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1. INTRODUCTION

Cuttlefish-1 well was drilled in Permit VIC/P40 between the 23rd October, 1999 and 1st November, 1999. The well was located 13 kilometres offshore of the Victorian coast and 11 kilometres north of the Sweetlips oilfield within the Gippsland Basin (Figure 1).

The Cuttlefish Prospect was defined from a reasonable density seismic grid of various vintages ranging from 1972 to 1992. Direct well control was provided by the nearby Emperor-1, Sweetlips-1 and Albatross-1 wells. The prospect at Top Latrobe Group was interpreted as a simple anticline, with minimal fault impact and was prognosed to contain up to 62 mmbbls recoverable oil.

A substantially larger prospect was interpreted within the Latrobe Group, reliant on cross-fault seal against the east-west oriented inversion fault on the northern side of the Cuttlefish prospect. This had a prognosed upside potential of 1.2 TCF gas or 873 mmbbls oil recoverable. Both Emperor-1 and Sweetlips-1 wells to the south were substantially gas fields with thin oil legs.

The presence of oil in the Lakes Entrance Field 12 kilometres to the north and the apparently full to spill point Sweetlips gas/oil field to the south, plus the multiple accumulations within the Latrobe Group at Emperor-1 suggested that there was good potential for an oil accumulation at the Top Latrobe Group closure and the potential for a significant gas/condensate/oil accumulation within the intra-Latrobe sequence. Reservoir development was not considered a high risk.

The prospect was risk-rated primarily on the effectiveness of the cross-fault seal for the larger intra-Latrobe prospect and on migration pathways and structural timing considerations for both Top and intra-Latrobe. These risks were deemed acceptable prior to drilling.

Formation tops were intersected near prognosis, although uniformly slightly lower than indicated on the well proposal. This was not unexpected, as the depth conversion from seismic was based on very variable seismic data and the lack of direct well control gave rise to several interpretations of depth. A safe compromise depth was chosen to avoid drilling through the relatively thin Lakes Entrance Group seal unit prior to setting casing. In the event, this proved a reasonable safeguard, as the Lakes Entrance section was approximately one third thinner than interpreted.

The reservoirs within the Latrobe displayed the good reservoir characteristics as anticipated, but proved to be under-saturated and logging indicated two minor gas columns within the Upper Latrobe section only.

Cuttlefish-1 was plugged and abandoned as a dry hole with gas shows.

2. WELL HISTORY

2.1 PERMIT AND LOCATION DATA

(i)	Well Name and Number	:	Cuttlefish-1	
(ii)	Name and Address of Operator	:	Amity Oil NL 2nd Floor, 18 Richardson Street West Perth Western Australia 6005	
(iii)	Post Drilling Name and Interests of Tenement holders	:	Amity Oil NL	10.00%
			Latrobe Oil & Gas Pty Ltd	10.00%
			Pan Pacific Petroleum (South Aust.) Pty Ltd	10.00%
			Tri-C Resources, Inc.	70.00%
(iv)	Exploration Permit	:	VIC/P40	
(v)	Basin	:	Offshore Gippsland Basin, Victoria	
(vi)	Location	:	Shotpoint 2150 on Seismic Line G92A-3083 Latitude: 37° 59' 40.799" South Longitude: 148°03' 2.297"East	
(vii)	Elevations :		RT 25.9 metres above mean sea level Water Depth 47.7 metres RT to Seabed 73.6 metres	
(viii)	Date Spudded	:	23rd October, 1999	
(ix)	Date Total Depth Reached	:	28th October, 1999	
(x)	Date Rig Released	:	1st November, 1999	
(xi)	Drilling Time	:	7 days	
(xii)	Total Depth	:	1226 metres RT	
(xiii)	Status	:	P & A	

2.2 CONTRACTORS

DRILLING MANAGEMENT	:	Kelly Down Consultants
DRILLING RIG - Sedco 702	:	Sedco Forex
SITE SURVEY/RIG POSITIONING	:	Racal Survey Australia
	:	Derek Evans (QA)
CEMENTING	:	Halliburton Australia &
	:	Dowel Schlumberger
DRILLING FLUIDS/ENGINEERING	:	Baroid Australia
DRILLING TOOLS	:	Tasman Oil Tools & Anadril
CASING SERVICES	:	Weatherford Oilfield Services
CASING CUTTING	:	Weatherford Oilfield Services
SUBSEA WELLHEAD SERVICES	:	Dril-Quip
ROV SERVICES	:	Son-Sub International
MUD LOGGING	:	Geoservices Overseas SA
ELECTRIC LOGGING	:	Schlumberger
TESTING EQUIPMENT	:	Schlumberger
COMMUNICATIONS	:	Tamboritha
WEATHER FORECASTING	:	Weathernews
HELICOPTERS	:	Lloyd Helicopters
		Sikorsky S76
SUPPLY/STANDBY VESSELS	:	Swire Pacific Offshore
		'Pacific Challenger'
		'Pacific Shogun'
ROAD TRANSPORT SERVICES	:	Toll Energy
FUEL	:	Shell Company of Australia

2.3 DRILLING SUMMARY

2.3.1 Logistics

Swire Pacific Offshore were contracted to provide 2 - 9000 bhp anchor handling supply vessels ("Pacific Challenger" and "Pacific Shogun"). One vessel was kept at the rig at all times as a safety standby vessel while the other was kept at the supply base in the event of an emergency load-out.

Both Welshpool and Geelong ports were used as supply bases to load-out material and equipment and to provide bulk fuel and water. Although Welshpool was closer to the rig than Geelong

(approximately 8 hours sailing each way compared to 18 hours), there were limitations to its use due to tidal effects (restricting times of entry to and from the port) and restrictions on the wharf for craneage and fuel supply.

Crew change was from Essendon airport with one Sikorsky S76 helicopter provided by Lloyd Helicopters. Back-up for SAR was provided from the Lloyd fleet under other contracts in Victoria. Flying time from Essendon to the rig directly was approximately 69 minutes with a payload of 1050 kg (11 passengers). Sale airport was used as an alternate.

2.3.2 Mobilisation

The Sedco-Forex semi-submersible rig "Sedco 702" was mobilised from the previous operator at 2330 hours EST on 19th October, 1999. The rig was towed by the supply vessels "Pacific Challenger" and "Pacific Shogun" at drilling draft over a distance of 28 kilometres, at an average speed of 2.13 knots. The rig arrived on location at 0730 hours EST on 20th October, 1999.

2.3.3 Pre-Spud

All anchors were run and pre-tensioned to 350 kips 1945 hours on 20th October, 1999 and the rig handed over to Sedco for 48 hours to carry out chain inspection work. While pre-tensioning, No. 2 anchor chain parted at a kenter link. It was later recovered and re-connected.

The well location was moved approximately 40metres based on an anomaly observed on the site survey data that may have caused problems in the top hole.

The rig's final position was surveyed at 1.79 metres northeast from the intended (revised) position on a bearing of 35.7°. Rig heading was 251°.

A Temporary Guide Base was not run. Water depth was recorded at 47.7metres.

2.3.4 914mm (36") Hole Section

The rig was handed back by Sedco at 1945 hours on 22nd October and the well spudded at 0515 hours EST on 23rd October, 1999. A 914mm (36") hole was drilled from the seabed at 47.7 metres to 118 metres using a 762mm (26") bit with a 914mm (36") hole-opener, with returns to the seabed. High viscosity gel sweeps were pumped to aid in hole cleaning. At casing point, the hole was swept clean and displaced with 50 bbls of high viscosity gel mud. A wiper trip was made to 90 metres and the bit run back to bottom - 0.5 metre of fill was found. The hole was again swept clean and displaced to high viscosity mud and the bha pulled to run casing.

4 joints of 762mm (30") were run, consisting of a shoe joint (swaged to 20"), two intermediate joints and a housing extension on the Dril-Quip Conductor Housing run with the Permanent Guide Base (PGB). The casing was cemented at 118 metres through a cement stinger with good cement returns to the seabed. The PGB slope indicator reading was 0.25° after cementing.

2.3.5 445mm (17½") Hole Section

A 445mm (17½") Bottom Hole Assembly with a mill tooth bit (IADC 1-1-1) was made up and run in the hole. Cement was tagged at 112 metres and drilled out to the shoe at 118 metres. The 445mm (17½") hole was drilled to 755 metres without incident, pumping 20bbl hi-vis pills every 20 metres and on each connection with returns to the seabed. Surveys were taken every 100 metres with the Anderdrift tool. At TD, the hole was swept clean and 50 bbls hi-vis mud spotted on bottom. A Totco survey was dropped as a check against the Anderdrift tool. A wiper trip was

made to the previous casing shoe. Intermittent tight spots were encountered between 745 metres and 570 metres requiring back-reaming with the top drive. While running back to bottom, the hole was reamed from 716 metres to TD. The hole was displaced with spud mud and the string pulled to run casing.

Fifty six joints of 340mm (13 3/8") casing were run with the Dril-Quip 476mm (18¾") SS-10 high pressure housing. The casing was landed and cemented at 749.33 metres. The wiper plug was bumped with 2000 psi. Returns were observed with the ROV at the seabed while circulating the casing prior to cementing.

The 476mm (18¾") BOPs were function tested on both pods at surface, run on the 508mm (20") ID Marine Riser, installed and pressure tested in accordance with the specifications in the Drilling Programme. The BOP had been pressure tested to full working pressure prior to running.

2.3.6 311mm (12 1/4") Hole Section

The 445mm (17½") bit and BHA were laid out and a 311mm (12 1/4") PDC bit made up and run in the hole to 674 metres. The casing was washed down to the top plug at 733 metres. The shoe track and rathole were drilled out and the hole displaced to a KCL/PHPA mud system at 1.13sg. 3 metres of new hole was drilled and a Formation Integrity Test carried out to a value of 1.46sg mud weight equivalent. The 311mm (12 1/4") hole was drilled to 1226 metres (TD) without incident. Each stand was back-reamed on connections and flow checks made of drilling breaks. Inclinational surveys were taken every 100 metres with the Anderdrift tool. The hole was conditioned and a wiper trip made to the previous casing shoe. The hole was back-reamed from 954 metres to 749 metres. The string was run back to bottom with no drag, the hole conditioned and the string pulled to run electric logs.

One logging run was made - PEX/DSI/NGT. Then programmed second run with the FMS tool was cancelled.

After the logging run a decision was made to plug and abandon the well. The wellhead was cut and recovered at 77.18 metres.

A seabed survey was conducted with the ROV and confirmed the seabed clear of debris. Anchors were pulled and the rig released at 1900 hours EST on 1st November, 1999.

2.3.7 Comments And Recommendations

PDC bit

A 311mm (12 1/4") Smith S91HPX PDC bit was used to drill out the casing shoe track. The S91 is a 4 bladed bit with 19mm cutters. There was considerable torque generated while drilling on the plugs and float collar. The Halliburton float equipment was 'PDC drillable'. The bit drilled the section (471m) at an average ROP of 23m/hour at a controlled drilling rate. On pulling the bit at TD a large piece of float equipment debris consisting of rubber and aluminium about 50mm in diameter was found jammed inside the nose of the bit. This may have contributed to premature bit failure on a longer run. There was damage to the cutters which could not have been caused by the formation drilled.

Based on this experience, it is recommended, particularly on wells with shallow casing strings, to drill out the shoe track and 'BHA length' with a mill tooth bit before running an aggressive PDC

bits. This could increase bit life. The saving on offshore wells is considerable when the cost of a trip is considered

2.4 DRILLING DATA

2.4.1 Time Analysis - Well Timing (Eastern Standard Time)

Rig On Hire	2330hrs 19th October, 1999
On Location	0730hrs, 20th October, 1999
Anchored, Off Hire	1930hrs, 20th October, 1999
On Hire	1930hrs, 22nd October, 1999
Well Spudded	0515hrs, 23rd October, 1999
Rig Released	1900hrs - 1st November, 199
Total Time on Location	12 days 19.50 hours (307.50 hours)
Time on Well	10 days 19.50 hours (259.50 hours)

Note: Time on well based on actual time rig on contract.

The rig was off hire for 48 hours and carried out anchor chain inspection work while the well permitting was finalised.

Summary - Overall Time Breakdown

Code	Operation	Hours	%
1-12,20 28,23,24, 26-28	Drilling Operations	228.25	74.23
13,14,22	Evaluation	7.5	2.44
15-19	Hole Problems	6.75	2.20
21	Rig Repair	3.5	1.14
25	Abandonment	13.5	4.39
29	Other	48	15.61
	TOTAL (hours - %)	**307.50**	100

Time analysis by activity

CODE	ACTIVITY	HOURS	% OF TOTAL TIME
1	Move Rig	8	2.60
2	Run Anchors	12	3.90
3	Drilling	53.25	17.32
4	Trip, Pick up/Lay down drillpipe	28.25	9.19
5	Wiper Trip	4.5	1.46
6	Deviation Surveys	1.5	0.49
7	Circulating and Conditioning Mud	9.25	3.01
8	Handle BHA	16.5	5.37
9	Casing and Cement	21.25	6.91
10	Install Wellhead Equipment	0	0
11	Run/Pull BOPs/Test	30.25	9.84
12	Leak-off Tests	0.75	0.24

CODE	ACTIVITY	HOURS	% OF TOTAL TIME
13	Coring	0	0
14	Electric Logging	7.5	2.44
15	Ream/Wash	6.75	2.20
16	Fish/Stuck Pipe	0	0
17	Loss Circulation	0	0
18	Kick Control	0	0
19	Side-track	0	0
20	Other	11	3.58
21	Repair	3.5	1.14
22	Well Test	0	0
23	WO Weather	16.75	5.45
24	Wait - Other	0	0
25	Plug and Abandonment	13.5	4.39
26	Rig Service	0.5	0.16
27	Slip/Cut Drilling Line	0	0
28	Pull Anchors	14.5	4.72
29	Other - Anchor Chain Maintenance	48	15.61
	Total (hours - %)	**307.50**	100

2.4.2 BIT SUMMARY

Bit No.	Size (mm)	Make	Type	IADC Code	Serial No.	Jets 32nds	Depth Out (m)	Drilled (m)	Hrs	ROP m/hr	WOB 1000 kg	RPM	Press (kPa)	Pump (lt/m)	MW (SG)	Ver. Dev (deg)	Cutting Str.				B	G (mm)	POH
																	ICS	OCS	DC	LOC			
1	660 (26")	Smith	DSCJ	1.1.1	66330	3x24,14	118	45	2.5	18	6	60-90	12030	4288	SW	0.5	1	1	NO	-	E	1	TD
2	445 (17.5")	Smith	MSDSSH	1.1.5	LR228	3x24,22	755	637	30.25	22.3	10	80-130	15856	4542	SW	0.5	3	2	WT	A	E	1	TD
3	311 (12.25")	Smith	S91HPX	S123	JR7821	7 x 16	1226	421	20.5	23	5-10	70-130	13443	4350	1.15	0.5	5	3	BT	N	X	BT	TD

Note: A 914mm (36") hole-opener was run with Bit No 1.

2.4.3 BOTTOM HOLE ASSEMBLY AND DEVIATION SURVEYS

BHA No.	Hole Size (mm)	BHA Description	Depth out (m)	Deviation		
				Depth	Angle deg	Type
1.	914 (36")	660mm (26") Rock Bit, 240mm (9½") Pony Drill Collar, 914mm (36") Hole-opener, Float sub, 3 x 240mm (9½") Drill Collars Cross-over, 3 x 209mm (8 1/4") Drill Collars Cross-over, 9 x 127mm (5") HWDP. BHA Length - 148.94m BHA Weight - 24.56 tn (54120 lb)	118	115	0.5	Totco
2	445 (17½")	445mm (17½") Rock Bit, Float sub, 2 x 240mm (9½") Drill Collars, 445mm (17½") Integral Blade Stabiliser, 1 x 240mm (9½") Drill Collar, Cross-over, 203mm (8") Anderdrift Inclination Tool 7 x 209mm (8 1/4") Drill Collars, 203mm (8") Daily Jars, 1 x 209mm (8 1/4") Drill Collar, Cross-over, 15 x 127mm (5") HWDP. BHA Length - 259.27m BHA Weight - 40.7 tn (89,700lb) Weight Below Jars - 17.40tn (38,350lb)	755	259 346 433 520 607 693 719	0.5 0.5 0.5 0.5 0.5 0.5 0.5	Anderdrift Anderdrift Anderdrift Anderdrift Anderdrift Anderdrift Totco
3	311 (12¼")	311mm (12¼") PDC Bit, Float sub, 311mm (12¼") NB Integral Blade Stab. 203mm (8") Anderdrift Inclination Tool 311mm (12¼") Integral Blade Stabiliser, 203mm (") Monel Drill Collar, 311mm (12¼") NB Integral Blade Stab. 12 x 209mm (8 1/4") DC, 203mm (8") Dailey Jars, 1 x 209mm (8 1/4") Drill Collar, Cross-over, 15 x 127mm (5") HWDP. BHA Length - 288.15m BHA Weight - 43.15 tn (95,110 lb) Weight Below Jars - 10.07 tn (22,200 lb)	1226	777 896 1012 1128 1226	0.5 0.5 0.5 0.5 0.25	Anderdrift Anderdrift Anderdrift Anderdrift Totco

2.4.4 CASING AND CEMENTING SUMMARY

2.4.4.1 STRUCTURAL CASING

WELL NAME :	Cuttlefish -1		**DATE RUN :**			23 October, 1999	
ELEVATIONS :	**R.T. :**	73.6m	**M.S.L. :**	47.7m		**T.D. :**	118m
HOLE SIZE :	914mm (36")		**RT TO TOP OF HOUSING :**				70.86m

CASING AND EQUIPMENT RECORD AS RUN FROM BOTTOM TO TOP

Size O.D. (mm)	Weight (lb/ft)/ Grade	Thread Type	No. of Joints	Length (m)	From (m)	To (m)	Remarks
762 (30") x 508 (20")	235 lb/ft X52 x 92 lb/ft K55	Dril-Quip SF60	1	11.10	118.00	106.90	Shoe Joint Swaged to 20"
762 (30")	235lb/ft X52	Dril-Quip SF60	2	23.72	106.90	83.18	Intermed Joint
762 (30")	310lb/ft X52	Dril-Quip SF60	1	12.32	83.18	70.86	Housing Joint
			Tally Total :	47.14	Casing Landed at :		118.00m

WELLHEAD HOUSING :	Dril-Quip 762mm (30") SS-10, Sub-sea wellhead				
CENTRALISERS AT :	Nil				
Commence RIH:	12:00	**On bottom:**	13:45	**Hours:**	1.75

CEMENTING DETAILS

DRILLING FLUID PRIOR TO	Sea water with gel sweeps.
PRE-FLUSH, SPACER DETAILS :	20 bbls sea water

CEMENT	NO. SX	MIX WATER (gals/sx)	EXCESS	SLURRY WEIGHT (SG)	ADDITIVE	AMOUNT	ADDED TO
Class 'G'	799	5.0	150%	1.9	$CaCl_2$ NF-5	1% BWOC 5 gal	Mix water
Start mix:	14:23	**Finish mix:**	15:23	**Hours:**	0.90		

DISPLACEMENT

EST. TOP OF CEMENT	Seabed	**DISPLACED WITH**	Cementing Unit		
DISPLACEMENT FLUID	Sea Water	**DISPLACEMENT RATE**	2.6 bpm		
BUMP PLUG WITH (psi)	N/A	**DISPLACEMENT VOL**	10 bbls		
START/FINISH DISPLACEMENT		15:23/15:28	**TIME**	5 mins	
REMARKS	Cemented through 1 joint (5") drill pipe stinger to leave 6m cement above float shoe. Tagged cement at 112m				

2.4.4.2 SURFACE CASING

WELL NAME:	Cuttlefish -1		**DATE RUN:**		26 October, 1999	
ELEVATIONS:	**R.T. :**	73.6m	**M.S.L.:**	47.7m	**T.D:**	755m
HOLE SIZE:	445mm (17 1/2")		**RT TO TOP OF HOUSING:**		70.00m	

CASING AND EQUIPMENT RECORD AS RUN FROM BOTTOM TO TOP

Size O.D. (mm)	Weight/ Grade	Thread Type	No. of Joints	Length (m)	From (m)	To (m)	Remarks
340 (13 3/8")	68 lb/ft K55	BTC	1	12.50	749.33	736.83	Shoe Joint
340 (13 3/8")	68 lb/ft K55	BTC	1	12.04	736.83	724.79	
340 (13 3/8")	68 lb/ft K55	BTC	1	11.50	724.79	713.29	Float collar
340 (13 3/8")	68 lb/ft K55	BTC	53	631.61	713.29	81.68	
508 (20") x 340 (13 3/8")	68 lb/ft L80	Dril-Quip HD90 pin x BTC	1	4.08	81.68	77.60	Cross-over swedge
		Dril-Quip HD-90 box	1	6.50	77.60	71.10	Housing extension joint
			1	1.10	71.10	70.00	18 ¾" Housing
			Tally Total :	679.33	Casing Landed at :		749.33

WELLHEAD HOUSING :	Dril-Quip 476mm (18 ¾") SS-10, Sub-sea wellhead				
CENTRALISERS AT :	On joints - 1,2,3,4,6,8,10				
Commence RIH:	18:15	**On bottom:**	**01:00**	**Hours:**	6.75

CEMENTING DETAILS

DRILLING FLUID PRIOR TO	Sea water with gel sweeps.
PRE-FLUSH, SPACER DETAILS :	Circulated volume of casing with sea water

CEMENT	NO. SX	MIX WATER (gals/sx)	EXCESS	SLURRY WEIGHT (SG)	ADDITIVE	AMOUNT	ADDED TO
Class 'G' Lead	1141	11.03	50%	1.54	Gel Halad-322 NF-5	2.5% bwow 65 gal 15 gal	Fresh water
Class 'G' Tail	550	5.11	50%	1.9	NF-5	5 gal	Fresh water
Start mix:	02:51	**Finish mix:**	04:15	**Hours:**	1.50		

DISPLACEMENT

EST. TOP OF CEMENT	Seabed	**DISPLACED WITH**	Cementing Unit		
DISPLACEMENT FLUID	Sea Water	**DISPLACEMENT RATE**	10 bpm		
BUMP PLUG WITH (psi)	2000	**DISPLACEMENT VOL**	316 bbls		
START/FINISH DISPLACEMENT		04:31/05:15	**TIME**	44 mins	
REMARKS	Good circulation throughout				

2.4.5 DRILLING FLUIDS SUMMARY

Refer to Appendix 4 - 'Drilling Fluids Recap' for details.

Depth (m)	Mud Wt (SG)	Viscosity (sec/qt)	Plastic Vis (cp)	Yield Point (lb/100ft²)	Gels (lb/100ft²)	Filtrate (cc)	Solids (% by vol)	Sand (% by vol)	pH	Chlorides (mg/ltr)	KCl (% by wt)
914mm (36") / 660mm (26") Hole Sections Mud Type ; Seawater with hi-vis gel sweeps											
118	1.04	194	21	47	31/59				9.2		
445mm (17½") Hole Section Mud Type ; Seawater with hi-vis gel sweeps											
755	1.04	132	16	65	22/29				11.6		
311mm (12¼") Hole Section Mud Type: KCL/PHPA											
798	1.12	45	12	24	6/7	5.8	2.9	0.25	9.5	36,000	4
1226	1.15	49	18	32	7/9	5.4	4.6	0.75	8.5	33,000	3.2

2.4.6 FORMATION INTEGRITY TEST DATA

A Formation Integrity Test to a value of 1.46 sg was conducted below the 340mm (13 3/8") casing shoe after drilling 3m of new hole. The results are shown in Figure 4.

2.4.7 WEATHER DATA

Weather forecasting and storm warning/monitoring services were provided by Weathernews during the rig move and operations. Weather conditions were generally good with only 16.75 hours lost time 'waiting on weather' at the end of the operation.

Average weather conditions

Date	Temp ^oC	Bar (kPa)	Visib (km)	Weather State	Wind			Wave		Swell			Rig Response		
					Direction (deg)	Speed (Kn)	Gust (Kn)	Wave Ht (m)	Period (Sec)	Sig Ht (m)	Period (Sec)	Dir (deg)	Heave (m)	Pitch (Deg)	Roll (Deg)
20-10-99	14	1012	19	Fine	310	15		0.8	2	1	6	160	-	0.2	0.3
21-10-99	21	1009	10	Rain	225	20		0.8	2	0.5	6	210	-	0.2	0.3
22-10-99	17	1015	20	Fine	250	20		1	3	0.8	6	220	-	0.2	0.3
23-10-99	15	1023	20	Cloudy	50	15	28	1	3	1	13	150	0.5	0.2	0.3
24-10-99	15	1018	20	Rain	120	28	35	2.5	5	1	12	145	0.3	0.2	0.5
25-10-99	19	1010	20	Fine	50	5	15	0.2	1	3	10	120	0.8	0.2	0.5
26-10-99	20	1014	20	Cloudy	295	15	30	1	2	1.8	9	240	0.3	0.2	0.2
27-10-99	19	1015	20	Fine	350	10	15	0.3	1	0.5	10	350	0.3	0.2	0.2
28-10-99	19	1016	20	Fine	40	10	-	0.2	1	0.5	10	210	0.2	0.2	0.2
29-10-99	21	1016	20	Fine	70	15	-	0.3	1	0.3	10	90	0.2	0.2	0.2
30-10-99	17	1009	16	Cloudy	350	10	-	0.2	1	0.5	10	100	0.2	0.2	0.2
31-10-99	15	1007	16	Gale	260	35	45	2	4	3	9	230	0.5	0.5	0.4
1-11-99	16	1007	16	Cloudy	230	23	29	1.5	4	3	8	230	0.3	0.5	0.4

2.4.8 Perforating Record

No perforations were carried out on the Cuttlefish-1 well.

2.4.9 Fishing

No fishing was necessary in Cuttlefish-1.

2.5 FORMATION SAMPLING

2.5.1 Ditch Cuttings

Samplings of ditch cuttings commenced at 760 mRT, with samples collected at 5 metre intervals to 1226 metres RT. Two sets of 100 grams washed and dried cutting samples were collected and forwarded to the Victorian Department of Natural Resources and Environment Core Repository.

2.5.2 Coring

No cores were cut in Cuttlefish-1 well.

2.5.3 Sidewall Coring

No sidewall cores were taken in Cuttlefish-1 well.

2.6 LOGGING AND SURVEYS

2.6.1 Mudlogging

The mudlogging unit was provided by Geoservices and was operational from 760 metres RT to total depth. Continuous 24 hours per day monitoring of drilling operations included measurement and recording of:

- depth
- rate of penetration
- total gas levels
- gas chromatograph analysis
- pump stroke rate
- mud pit levels
- hook load/weight on bit

The final mud log, at a scale of 1:500 was annotated with:

- depth (metres)
- deviation surveys
- dates
- times
- lithology
- casing depths
- drilling parameters and bit information
- mud properties
- rate of penetration
- cuttings gas
- hydrocarbon shows
- drill stem test intervals
- formation integrity tests

Gas detectors and chromatographs were calibrated with standard check gas blends each trip. The gas detectors were calibrated in order to produce a chart deflection of 50 units by 1% methane. Calcium carbide checks were run on a regular basis.

The mudlogging services, including lagging, collection and description of drill cuttings, as well as microscopic and fluoroscopic examination of drill cuttings for hydrocarbon shows. The mud log forms Enclosure 2a. Accompanying drilling log is included as Enclosure 2b.

2.6.2 Wireline Logging

Wireline logging was carried out by Schlumberger. One logging run was carried out on this well. The planned Velocity Logging run and the MDT run were cancelled due to lack of significant in-place hydrocarbon reserves.

LOG	VERTICAL SCALE	DEPTH RANGE	RUN NO.
PEX-HALS-DSI-NGS	1:200,500	751 to 1217 mRT	1
GR	1:200,500	100 to 1193 mRT	1

Petrophysical Log Analysis (refer Appendix 6 and enclosure 3).

2.6.3 Deviation Surveys

The following surveys were carried out on the Cuttlefish-1 well.

Depth metres KB	Deviation°
115	0.50
255	0.50
346	0.50
433	0.50
520	0.50
607	0.50
693	0.50
719	0.50
896	0.50
1012	0.50
1128	1.00
1223	0.25

2.6.4. Temperature Surveys

No temperature surveys were run on the Cuttlefish-1 well. Maximum recorded temperatures from log runs were 58.8°C at 1226mKB. Using ambient surface temperature of 15°C, this gives a temperature gradient of 3.60°C per 100 metres

2.6.5 Velocity Survey

No velocity survey was run in Cuttlefish-1.

2.7 TESTING

2.7.1 Drill Stem Tests

There were no Drill Stem Tests carried out on Cuttlefish-1 well.

2.7.2 Formation Integrity Test

One formation integrity test (F.I.T.) was performed at 758 metres RT. Mud weight 9.30ppg equivalent mud weight 12.14 ppg

2.8 ABANDONMENT OF WELL

Abandonment cement plugs were set as follows:

Plug No.	From/to (m)	Cement quantity	Comments
1	1110 - 990	278 sx class G	Open hole
2	990 - 800	382 sx class G	Open hole
3	795 - 650	347 sx class G	Across shoe. Tagged at 677m
4	150 - 100	116 sx class G	Inside casing

The wellhead was cut at 77.18mrt and recovered.

The ROV conducted a seabed survey to confirm that the seabed was free of debris. The survey was recorded on video tape.

See Figure 5 Abandonment Diagram.

3. GEOLOGY

3.1 REGIONAL GEOLOGY AND TECTONIC SETTING

VIC/P40 is located in the Gippsland Basin, offshore Victoria.

The Gippsland Basin is a Late Mesozoic to Tertiary basin located mainly offshore in the northeastern part of the Bass Strait. To the north, basin sediments unconformably onlap the Paleozoic rocks of the Tasman Fold Belt. The basin is separated from the Bass Basin to the southwest by the Bassian Rise. The eastern margin is marked by a north-northeast trending structured high at the base of the continental slope.

The Gippsland Basin is estimated to contain up to 14,000 metres of sediments in an east-southeast trending deopcentre.

Deposition commenced in the Early Cretaceous and was related to the breakup of Gondwana. This complex breakup developed a rift complex extending along the southern and eastern margins of Australia. The Strzelecki Group, and the equivalent Otway Group in the Bass and Otway Basins, were deposited in this developing rift complex(Figure 6). The Strzelecki sediments comprise interbedded fluvial volcanoclastic sandstones, siltstones and minor coals. Further drifting episodes during the Early Cretaceous formed a series of horsts and grabens. In excess of 4000 metres of Strzelecki sediments are estimated within the Central Deep.

At the end of the Early Cretaceous a major tectonic event occurred, resulting in vertical faulting and flower structures within the central area. Block faulting along the southern edge of the basin created the Southern Terrace and Southern Platform. Intense wrenching and faulting led to the development of wrench-related anticlines in the Central Deep, (e.g. Barracouta structure), and also gave rise to the Northern Terrace. Major fault systems such as the Rosedale, Foster and Darriman are all related to reactivation of deep-seated faults bounding basement blocks.

During the mid-Cretaceous another tectonic episode resulted in significant erosion at the Top Strzelecki. This crustal extension related episode is associated with final separation of Australia

and Antarctica. Rifting was associated with a period of uplift and erosion and instigated major northwest- to southeast normal faulting. The Gippsland Basin effectively separated from the Bass and Otway Basins at this time.

The Golden Beach Group sediments were deposited on the North and South Terraces and within the Central Deep. These sediments comprise predominantly sandstones and shales with minor siltstones deposited in an active evolving rift setting Golden Bead sediments towards the east of the Basin.

In the early Campanian, uplift of the area occurred, coincident with the opening of the Tasman Sea. This tectonic episode is marked by an unconformity at the top of the Golden Beach and by extensive volcanism. Several wells on the northern margin of the Gippsland Basin, (e.g. Kipper-1, Basher-1 etc), have penetrated volcanics interbedded with alluvial sediments. Active fault controlled subsidence occurred between the Foster Fault System to the south and the Wellington Fault System to the north. High deposition rates persisted until the Eocene, giving rise to the interbedded sandstone shale and coal sequence of the Latrobe Group. In Late Eocene, the Tasman Sea began to encroach from a southeasterly direction. Sedimentation rates declined and the shoreline transgressed to the west and northwest, depositing the thin glauconitic shales of the Gurnard Formation over a wide area. At the end of the Eocene, there was another significant tectonic event related to the cessation of spreading of the Tasman Sea and to extensive transpressional reactivations caused by southeast-northwest compression. This led to reactivation of many existing fault zones, with reversal in many instances. Numerous northwest-southeast trending anticlinal structures were formed, with many of the hydrocarbon bearing structures being initiated. Regional uplift led to the development of numerous submarine channels, particularly along the eastern seaward margin of the basin. This channelling continued into the early Oligocene.

During the Oligocene to Miocene, the area was subject to continued thermal subsidence, with relatively minor structural activation episodes. The thick Seaspray Group was deposited during this time and consists of the very fine grained shales and marls of the Lakes Entrance Formation and the massive limestone and thin sand sequence of the Gippsland Limestone Formation. The structural movements and considerable eustatic sea level fluctuations resulted in significant channelling continuing through into the Miocene. Some of these channels are major and extensive and significant to the entrapment of hydrocarbons.

A further reactivation of the earlier compressional tectonic events occurred during Miocene to Phoecene, resulting in rejuvenation of existing structures, initiation of new anticlinal features and tilting of the basin margin.

3.2 SUMMARY OF PREVIOUS WORK

Petroleum Exploration Permit VIC/P40 is located in the offshore Gippsland Basin, approximately 12 kilometres south of the township of Lakes Entrance, Victoria. The permit includes 17 graticular blocks, or parts thereof, and covers an area of 736 square kilometres. The Commonwealth/State water line forms the northern boundary. Water depths across the permit range from 20 metres to 60 metres.

By Australian standards, petroleum exploration in the Gippsland Basin is relatively mature, with the majority of the readily recognised plays at Top Latrobe and the fault-dependent intra-Latrobe closures and stratigraphic truncations having already been tested. In VIC/P40, the existing well and seismic data are by no means adequate in terms of density of coverage or quality. Except for a few lines extending from the G92A Regional Seismic Survey, no active exploration has been undertaken in the area since 1988.

Petroleum exploration in the area began with a shallow water marine seismic survey recorded by

ARCO Ltd in 1963. A second marine seismic survey was recorded in 1967 by BOC of Australia Ltd, over the Golden Beach structure to the west and was followed by a third, operated by Endeavour Oil in 1969, over the Albatross area. Between 1979 and 1992, several surveys were recorded by various operators. The net result is a seismic coverage varying in density from a less than 1 kilometre-grid in the south, to an approximately 1.5 kilometre by 2 kilometre grid in the north.

To date, only three exploration wells have been drilled within VIC/P40:

Albatross-1 was drilled in 1970 to test an interpreted wedge-out of the Latrobe Group reservoir section onto the Northern Platform. This stratigraphic trap relies on both the overlying Lakes Entrance Formation and the underlying upper section of the Strzelecki Group to provide effective seals. The well intersected a total of 60 metres of Lakes Entrance Formation, consisting primarily of mudstones. A 19 metre section of Gurnard Formation overlies 35 metres of the Latrobe Group, consisting of muddy sandstones interbedded with clean, friable, porous sandstones and occasional very thin coal seams. The Golden Beach Group is absent and the contact between the Latrobe Group and the underlying Strzelecki Group is marked by an angular unconformity.

The sands of the Latrobe Group were interpreted to contain a low gas saturated fluid (<31%).

West Seahorse-1 was drilled in 1981 to test an asymmetric anticline formed by inversion against a reverse-movement fault. The well was a non-commercial oil discovery where movable hydrocarbon was intersected in two thin reservoir sections in the upper part of the Latrobe Group. Subsequent production tests over the interval 1411-1416 metres, produced 1800 BOPD. West Seahorse-1 reached TD at 2487 metres in early Latrobe Group.

West Seahorse-2 was drilled in 1982 as an appraisal well, following the West Seahorse-1 oil discovery and was located 1 kilometre west. The upper oil bearing sand section in West Seahorse-1 appears to have shaled-out westward and only 100ml of oil was recovered in West Seahorse-2. The second oil sand unit of West Seahorse-1 was intersected below the oil/water contact. West Seahorse-2 reached TD within the Latrobe Group.

Of more direct significance to the Cuttlefish Prospect are the Emperor-1 and Sweetlips-1 wells, immediately adjacent to the southern edge of VIC/P40.

Emperor-1 was drilled in 1970 to test the western closure of a fault independent rollover on the southern side of a major inverted fault system. The well intersected multiple stacked pay within the Latrobe Group and was evaluated to have 15mmbbls oil and 22BCF gas in place. Subsequent mapping indicated the potential for lateral hydrocarbon displacement, with migration pathways leading around the western edge of the Marlin Channel and updip towards Cuttlefish.

Sweetlips-1 was drilled in 1989 to test a larger lobe in the eastern half of the multicrested fault independent rollover previously evaluated at Emperor-1. At this location, a single accumulation was intersected at top of the Latrobe Group, indicating a different growth history and migration pathway than at Emperor-1. Sweetlips is estimated to contain upwards of 9mmbbls oil and 75BCF gas.

The Sweetlips structure is apparently full to spill point at Top Latrobe and recent mapping indicates likely spillage, again in a northwesterly direction around the western edge of the Marlin Channel and towards Cuttlefish.

3.3 CUTTLEFISH-1 STRATIGRAPHY

For detailed descriptions of the lithology refer to the Composite Well Log, Mudlog and wellsite lithology sample descriptions in Enclosures 1, 2a and Appendix 3 respectively. Petrophysical log analysis is included in Appendix 6 and the Complex Lithology is included as Enclosure 3.

The general stratigraphy of the offshore Gippsland Basin is shown in Figure 6 and the predicted and actual stratigraphic section of Cuttlefish-1 is shown in Figure 7.

The picks for the tops of formation are based on observed geological changes during drilling of the well modified by interpretation of the electric logs. On-site geological picks for the Top Lakes Entrance, Top Gurnard and Top Latrobe Coarse Clastics agree well with the logs. There is some latitude with respect to the picks for Top Golden Beach and Top Strzelecki. In Emperor-1 and Sweetlips-1 wells to the south, Golden Beach is absent. Logs at Cuttlefish-1 indicate alternative stratigraphic interpretations to those interpreted by the well-site geologist. The log interpretation and correlation to adjacent wells have been selected as the preferred tops of formation

For selection of formation top depth prior to drilling, a minus 50 metre bulk shift was applied to the seismic depth conversions to tie to the control wells of Emperor-1, Sweetlips-1 and Albatross-1. Drilling has shown that the original uncorrected depth conversion and the Pre Stack Depth Migration, (PSDM),seismic data were much closer to actual intersected depth.

GIPPSLAND LIMESTONE 73.6 mRT to 792 mRT

Only thirty seven metres of the Gippsland Limestone was drilled with returns in Cuttlefish-1 well. The section penetrated was typical lower Gippsland Limestone lithology comprising slightly glauconitic calcareous claystone with numerous fossils and shell fragments and occasional dolomitic bands. No logs were run over this section.

LAKES ENTRANCE FORMATION 792 mRT to 839 mRT

The top of this unit was picked from a small change in ROP and a change in lithology. Subsequently logs confirmed this pick by a sharp decrease in resistivity.

The Lakes Entrance section was encountered approximately 41 metres low to prognosis. This discrepancy is attributed to the depth conversion process referred to above. The original depth conversions from seismic velocities and PSDM put the top Lakes Entrance at 774 metres sub-sea.

The penetrated section of Lakes Entrance was 47 metres, as against 60 metres prognosed. This is attributed to the low frequency, low amplitude nature of the Top Lakes Entrance seismic pick across the Cuttlefish area.

The Lakes Entrance Formation stratigraphy encountered in Cuttlefish-1 was typical of the formation. It comprised grey calcareous claystone of a marly texture and was soft and dispersive. The sealing capacity of this unit for top-seal was very good.

GURNARD FORMATION 839 mRT to 847 mRT

The top of the Latrobe Group was picked on a lithology change from claystone to siltstone. On logs, this is confirmed by an increase in resistivity and gamma and by an increase in sonic velocity. There was no attempt to differentiate the depth to Top Gurnard pre-drill. A thin section of less than 10 metres was prognosed, based on the thicknesses encountered at the nearby control wells.

The Gurnard Formation is represented at Cuttlefish-1 well by a yellow-grey to brown argillaceous siltstone, with abundant glauconite pellets. The formation is soft to dispersive and massive to

amorphous. There is little chance of this unit forming a thief zone as has been experienced elsewhere along the northern shelf.

LATROBE GROUP 847 mRT to 988 mRT

The Top Latrobe Group was picked from an increase in ROP and from a change to coal and then good quality sandstone. Logs show a decrease in gamma and resistivity and a decrease in sonic velocity. The Top Latrobe came in approximately 45 metres low to prognosis. Again the minus 50 metre bulk shift was applied to the depth prognosis, as mentioned above. The uncorrected depth prognosis would have been less than 5 metres out.

The Latrobe Group intersected at the Cuttlefish-1 well comprised interbedded sandstones, claystones and siltstones, with occasional thin coal beds.

The upper section between 847 mRT and 926 mRT is comprised of moderately blocky high quality reservoir sands, with thin siltstone bands separated by relatively thick homogenous claystones and occasional coal bands. The claystones display excellent vertical seal capacity. Thin tuffaceous bands were described in the upper section.

From 926 mRT to 988 mRT the Latrobe section becomes much siltier, with fewer and thinner sands and a higher percentage of claystone.

This subdivision of the Latrobe may reflect the Eocene and Paleocene components of the Latrobe. At the Emperor-1 well to the south, there is 61 metres of Eocene and 228 metres of Paleocene age Latrobe, with a thin 23 metres section of Cretaceous age Latrobe Group.

There is some considerable erosion of the Top Latrobe at Emperor-1 location but there is no apparent erosion at Top Latrobe in the Cuttlefish area, which would account for the thicker Eocene aged section at Cuttlefish.. The Lower Latrobe, incorporating the Paleocene and the Cretaceous aged section onlaps onto the Strzelecki Group towards the north. The Lower Latrobe section at Cuttlefish-1 is interpreted to be the upper part of the Paleocene Latrobe.

The base of the Tertiary-aged Latrobe Group is picked from logs by a marked decrease in resistivity and sonic velocity, and by a distinct change in both sand-shale ratio and quality of sand. There is a marked increase in gamma in all sands below this point.

INDETERMINATE (GOLDEN BEACH GROUP ?) 988 mRT to 1045 mRT

The wellsite geologist described the section from 988 mRT to 1045 mRT as having characteristics of Golden Beach Group. The Golden Beach Group was described as absent at the Emperor-1 well to the south and it is difficult to see how there would be a 57 metre thick section of this at the Cuttlefish location. There was a 23 metre section of Cretaceous Age Latrobe described at Emperor-1 well. From seismic, however, especially from the PSDM data, there does seem to be a distinct possibility that this section has an unconformity at the base. Without age dating it is not possible to quantify this observation, but there is a possibility that this 57 metres belongs to either Golden Beach; or may represent a Cretaceous aged section of the Lower Latrobe Group; or may be a weathered Strzelecki Group section similar to that intersected at Baleen-1 to the east.

STRZELECKI GROUP 1045 mRT to 1226 mRT

Log interpretation indicates quite distinctly that there is a marked lithological boundary at 988 mRT, with a relatively uniform section of dirty sands and claystones to T.D. There is also a significant absence of coals below this depth. On logs there is a marked decrease in resistivity and sonic velocity, and a distinct change in both sand-shale ratio and quality of sand. There is also a marked increase in gamma in all sands below this point.

At 1045 mRT there is another distinctive log break. This could represent the base of the weathered zone of the top Strzelecki Group, similar to that encountered at Baleen-1 to the east where an approximately 150m weathered section was encountered, or could be the base of the Cretaceous section of Latrobe/Golden Beach.

Lithologically, the sands within the Strzelecki are fine to very fine grained and tight, with a kaolinitic matrix and common glauconite and chlorite inclusions. Siltstones are argillaceous and soft, with carbonaceous laminations. Claystones are waxy, firm and blocky.

3.4 CONTRIBUTIONS TO GEOLOGICAL KNOWLEDGE

3.4.1 Trap

The Cuttlefish prospect was defined as a small fault independent four-way dip closure at Top Latrobe Group, with a much larger cross-fault seal dependent structural-stratigraphic closure within the intra-Latrobe Group. The multi-episodic movements of the east-west bounding fault were considered one of the major risks with regards to the age of the current mapped closure and, therefore, the likelihood of being in place prior to migration of hydrocarbons.

There is a moderate grid of seismic data across the Cuttlefish-1 location (Fig 1). This seismic comprises various vintages from 1972 to 1992 and was reprocessed prior to drilling to attempt to minimise the misties between vintages. This achieved a reasonable success, although the very variable frequency content still meant some misties remained. This had little effect on the intra-Latrobe play, but was quite important with respect to the low vertical amplitude four-way dip closure at Top Latrobe.

The Top Latrobe four-way dip closure was mapped with an optimistic 20 metres of vertical relief. Taking into account the potential vintage mistie problems referred to above, only 5 to 7 metres of this were considered definitive, with the remainder based on mapping the average of the misties.

The intra-Latrobe play was considered to be the main upside in making the Cuttlefish prospect an economic target. The vintage misties referred to above had little effect on this feature. Of prime importance in the intra-Latrobe trap was the potential of cross-fault seal integrity, especially with respect to the east-west bounding fault immediately to the north of the Cuttlefish-1 location. This was primarily based on the potential for volcanics within the fault plane and, to a lesser extent, on the potential impermeability of the Strzelecki Group.

At Albatross-1, there were sections of the Strzelecki which were described as tight. The cross-fault Strzelecki section adjacent to Cuttlefish-1 is much younger than that intersected at Albatross-1, so any comparisons of permeability, (seal potential), were not quantitative.

Within the intra-Latrobe prospect closure as mapped, the seismic showed some amplitude anomalies which were hoped to be representative of hydrocarbons. Post-drill, it seems likely that the amplitude anomalies are lithological only and probably related to the tuffaceous nature of some sections within the Latrobe Group at this location.

The results of the well indicate that there was the minimum independent four-way dip closure at Top Latrobe and that there was no cross-fault seal for the intra-Latrobe play.

3.4.2 Reservoir

Primary reservoir at Cuttlefish-1 was excellent. The sands within the upper section of the Latrobe Group displayed porosities around 30% and permeabilities interpreted to be in the 100s of millidarcies. From 926 mRT downwards the intra-Latrobe sands were of much poorer quality. Refer to Complex Log Interpretation, Enclosure 3 and Appendix 6.

3.4.3 Seal

Seal for the Cuttlefish structure is supplied by the basal Lakes Entrance shale and marl sequence which forms the regional seal for the majority of hydrocarbon discoveries within the Gippsland Basin. This seal was well developed, although slightly thinner than prognosed in Cuttlefish-1.

Intra-formational coals and carbonaceous shales form the vertical seal for the intra-Latrobe sands. Accumulations within these sands, however, were dependent on cross-fault sealing. This was dependent on intra-fault plane volcanics and/or the impermeable nature of the Strzelecki Group. Neither of these seals was present.

3.4.4. Source

The sediments of the older Latrobe Group Coal measures provide the major hydrocarbon source for the oil and gas fields around the central deep in the Gippsland Basin. Within VIC/P40, the Latrobe Group is relatively shallow and sub-mature for oil generation. Migration of oil and gas from the mature Lower Latrobe coals and carbonaceous shales to the south of the Cuttlefish-1 location was proposed, as well as some contribution from the Strzelecki Formation which is potentially in the oil window on the northern platform in the south of VIC/P40.

The presence of oil and gas at the Emperor-1 and Sweetlips-1 wells to the south and the presence of oil at the Lakes Entrance field to the north indicated that the Cuttlefish structure was well placed to receive migrating hydrocarbons. The presence of the northwestern end of the Marlin Channel cutting down through the Latrobe Group into the Strzelecki Group immediately south of Cuttlefish Prospect did cause some concern as a potential migration barrier. Migration pathway mapping indicated, however, that should this barrier exist then diverted hydrocarbons would migrate northwest along the channel edge before being re-focussed in a northeasterly direction once more and passing through the Cuttlefish structure. There was a high likelihood that Cuttlefish would have mostly gas with some oil, as evidenced in the wells to the south. The lateness of final structuring and the lack of cross-fault seal may account for the small gas accumulations only that were interpreted from the log evaluations.

3.4.5 Hydrocarbons and Shows

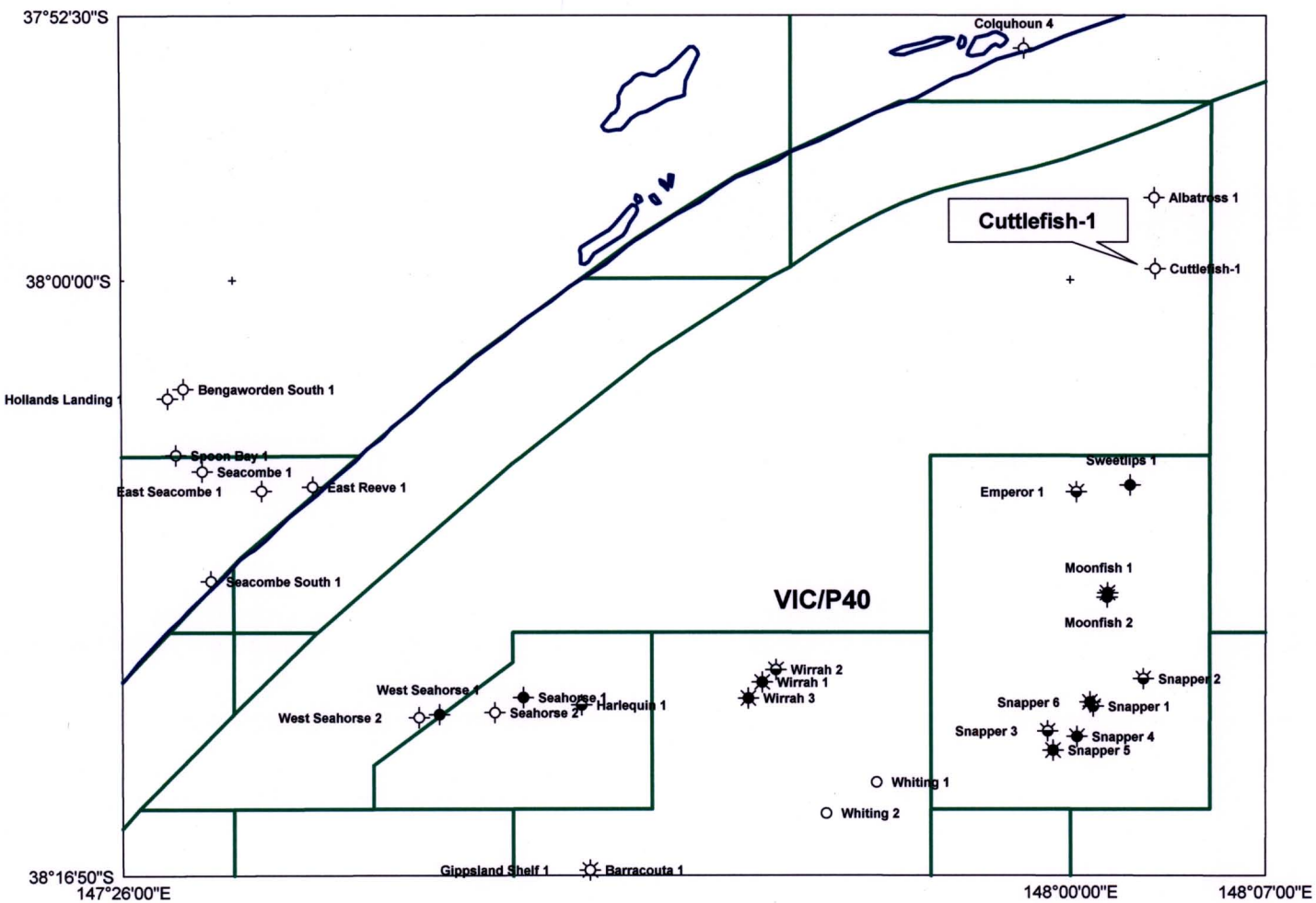
There were no oil shows within Cuttlefish-1 in any part of the section. Minor gas accumulations were interpreted within sands in the upper Latrobe section but none of these displayed hydrocarbon saturations above 40%. The complex lithology log, (Enclosure 3), shows the interpretation of the Lakes Entrance to Strzelecki section.

3.5 CONCLUSIONS

The lack of hydrocarbons within the intra Latrobe is attributed to lack of cross-fault seal. The thickness of the small gas accumulations identified in the Upper Latrobe section correspond to the minimum vertical closure defined from pre-drill interpretation. The absence of any oil indications is attributed to late final structuring or to migration shadow during oil generation and migration. Later readjustment and re-establishment of four-way dip closure allowed the capture of migrating gas. This late final structuring may reflect the low saturations interpreted within the well.

Cuttlefish-1 well tested a bonafide closure at Top Latrobe, which recorded a gas charged sequence within the upper 50 metres of section. Log evaluation indicated low saturations of gas within the excellent reservoir quality sands of the upper Latrobe section.

The well was plugged and abandoned as a dry hole.

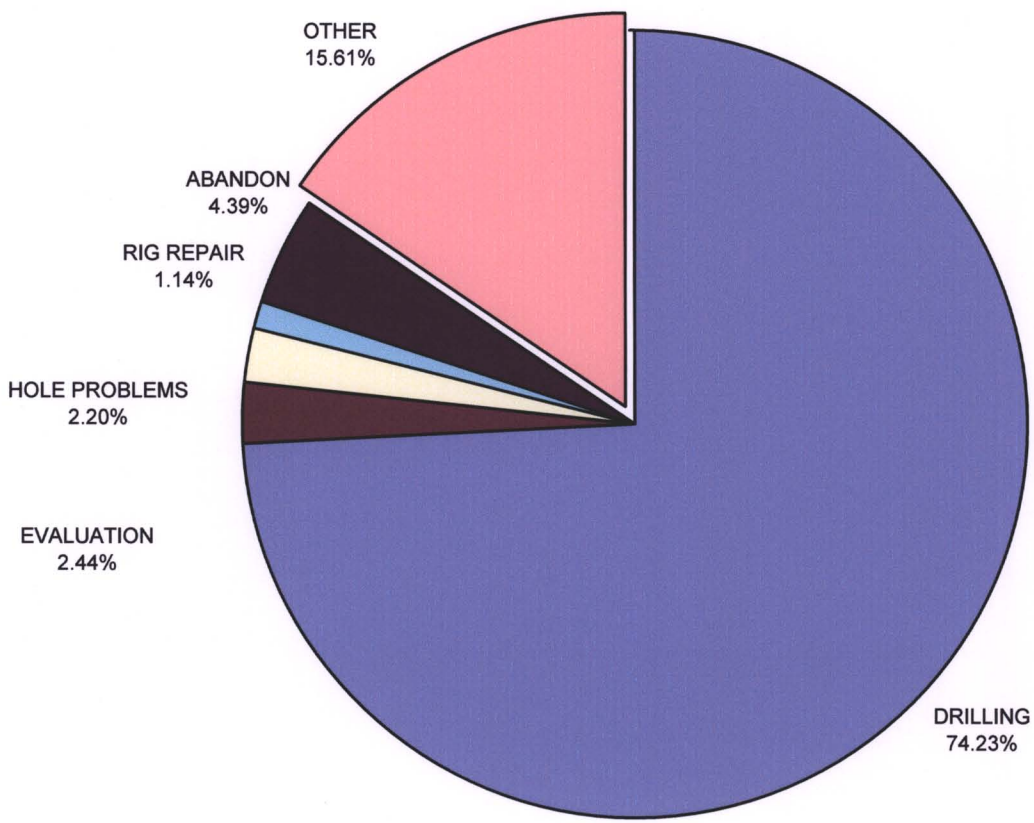


AMITY OIL NL

VIC /P40
Cuttlefish-1
Location Map

PE907474_01

Figure 1.



PE907474_02

Figure 2.

AMITY OIL NL

CUTTLEFISH-1 (VIC/P40)

TIME/DEPTH CURVE

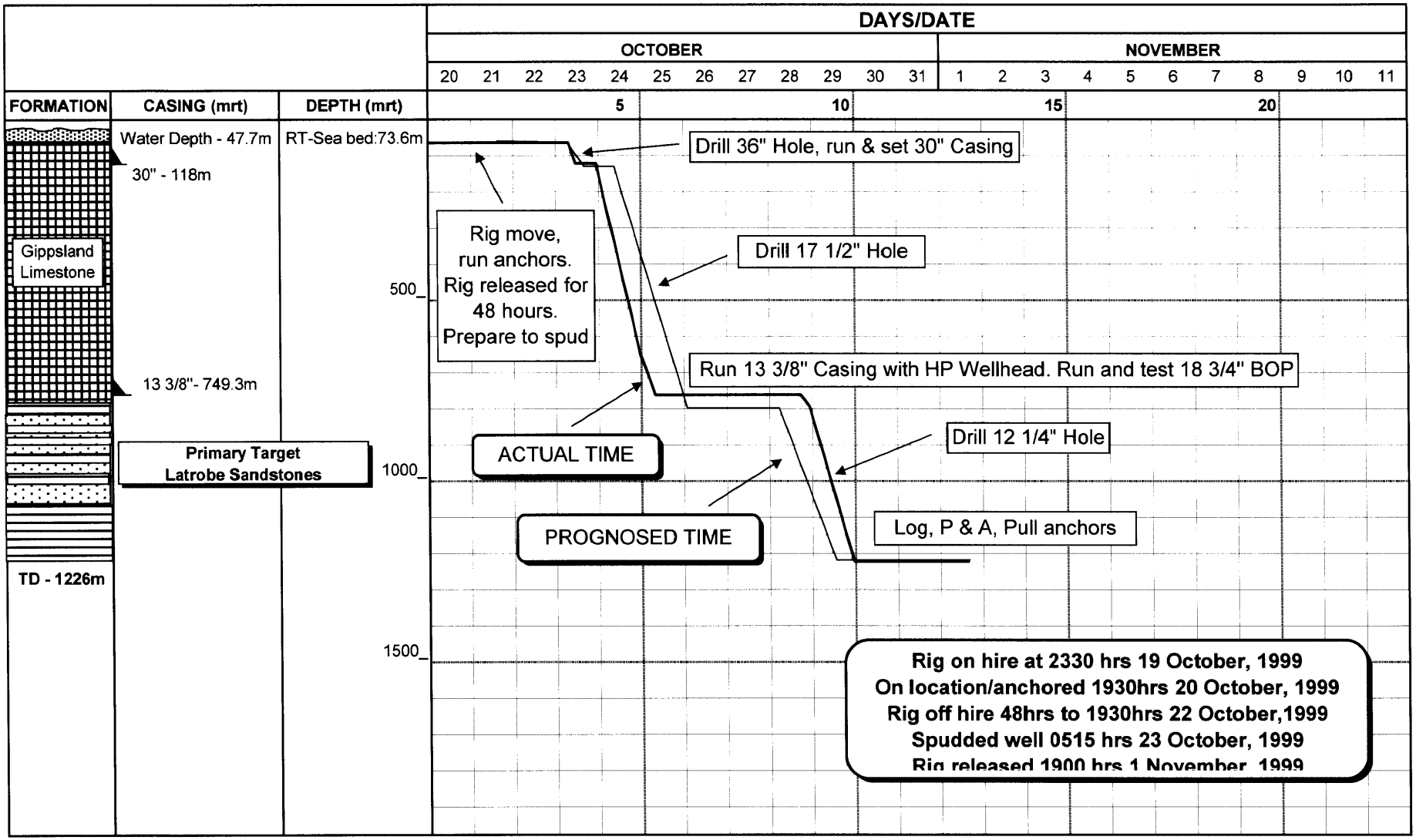


Figure 3

CASING SEAT PRESSURE TEST -13 3/8"SHOE

Well: Cuttlefish No.1 **Rig:** Sedco 702 **Date** 27 Oct. 99

Test (FIT/LOT): **FIT**

Mud Properties		Well Depth (m)	758	Vol pumped (bbls)	2.3
Weight (ppg)	9.4	Well TVD (m)	758	Vol lost (bbls)	0
PV (cp)	13	Casing size	13 3/8	Leak-off pressure(psi)	351
YP(lb/100sq.ft)	25	Shoe Depth (m)	749	Pump rate(bbls/min)	0.25
FL (cc)	6	Min.Burst (psi)	3,450	FIT/LOT-sg (EMW)*	12.14

*FIT/LOT(EMW ppg) = $\frac{\text{Leak-off pressure (psi)}}{\text{Shoe Depth (m) x 0.171}}$ + Mud weight

Time	Vol (bbls)	Ps (psi)
1	1	32
1.3	1.1	32
1.6	1.2	32
1.9	1.3	32
2.2	1.4	40
2.5	1.5	52
2.8	1.6	63
3.1	1.7	74
3.4	1.8	101
3.7	1.9	140
4	2	193
4.3	2.1	241
4.6	2.2	299
4.9	2.3	351

Ps = Surface pressure

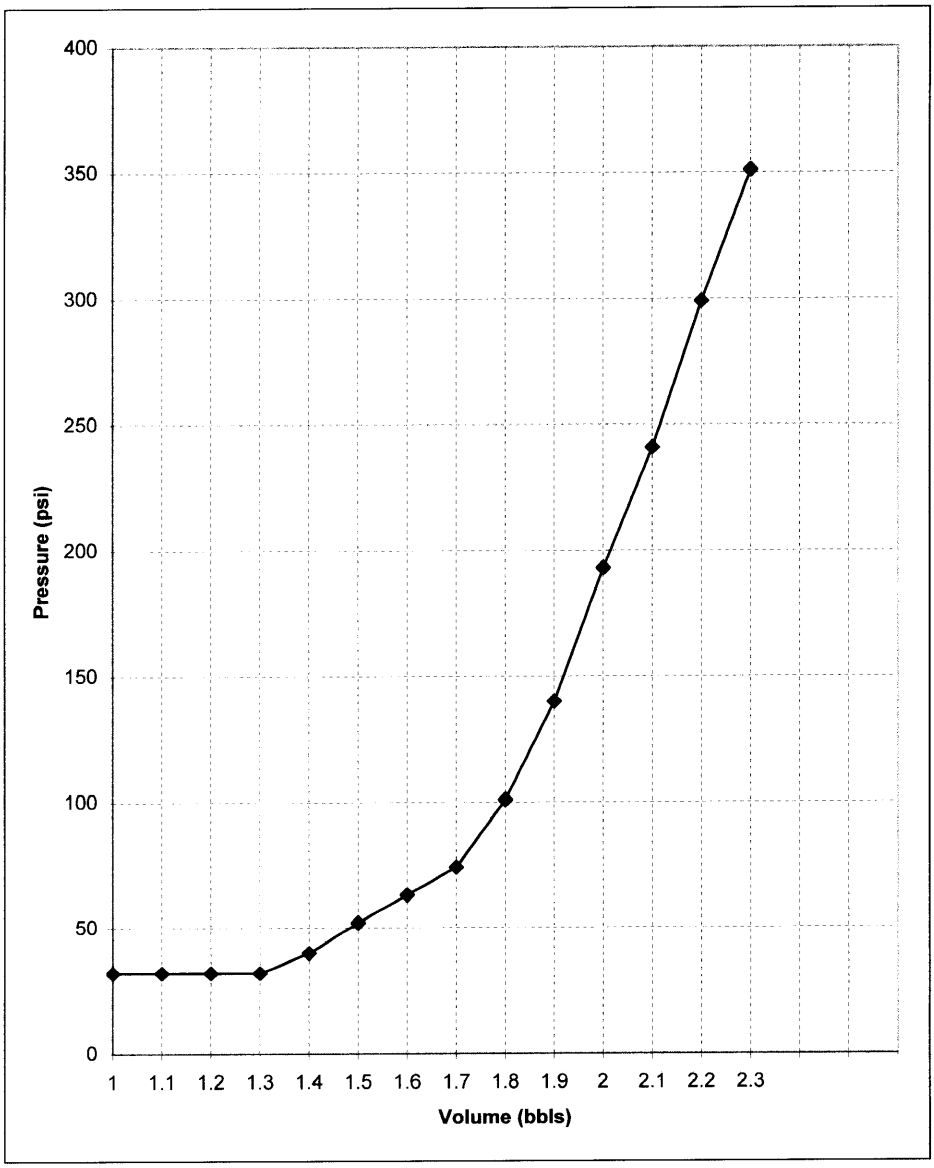
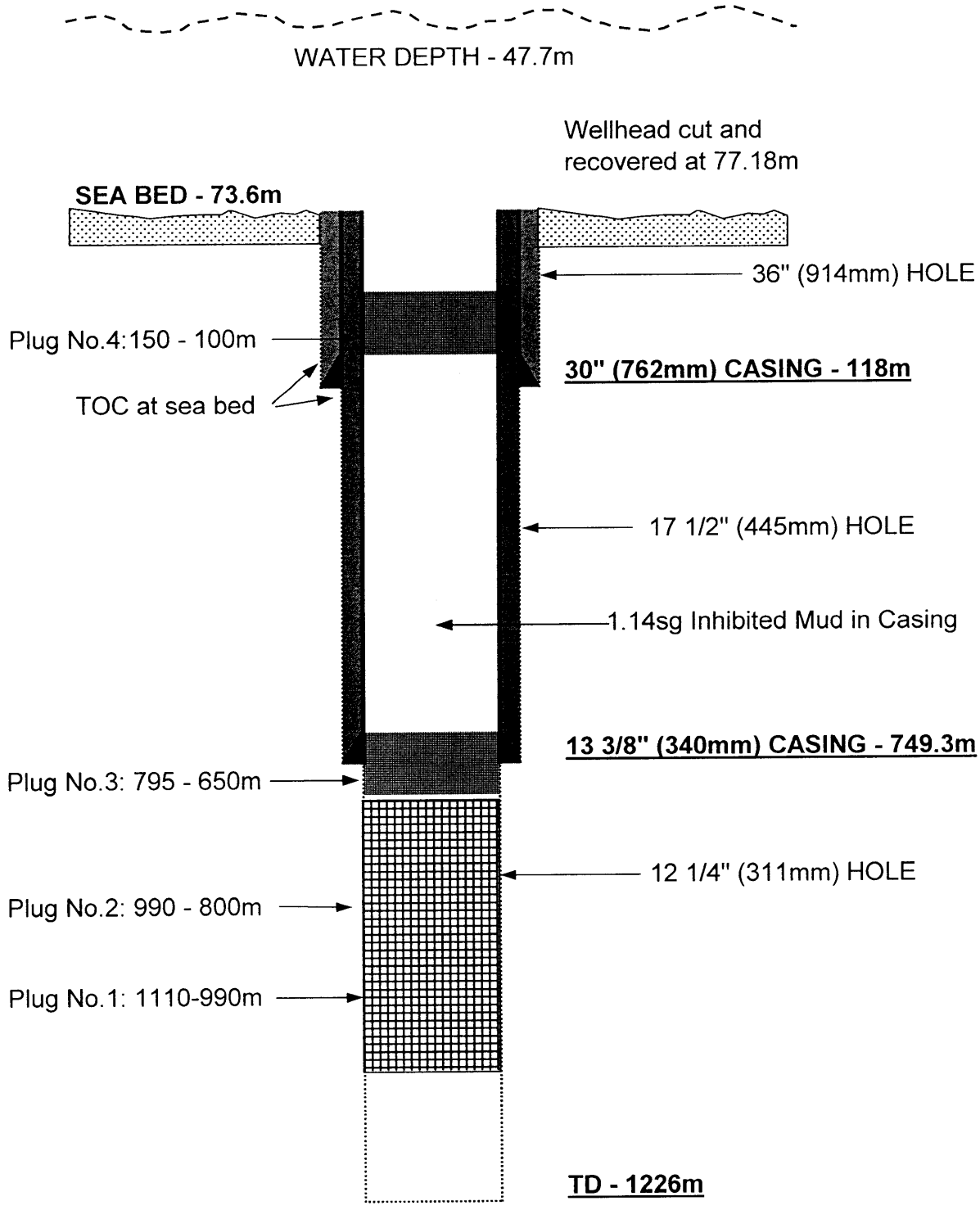


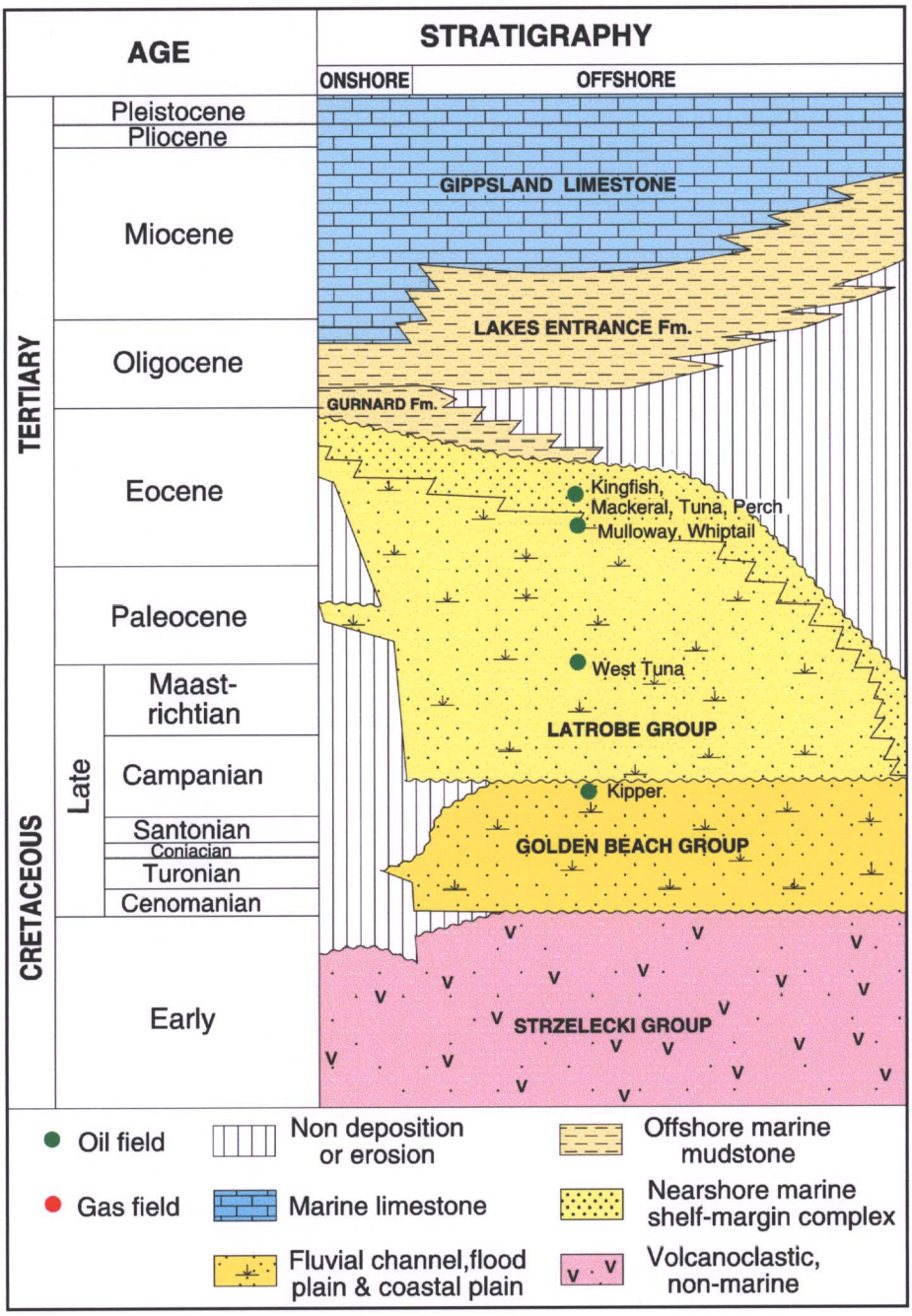
Figure 4.



VIC/P40
CUTTLEFISH-1
WELL ABANDONMENT DIAGRAM

Figure 5

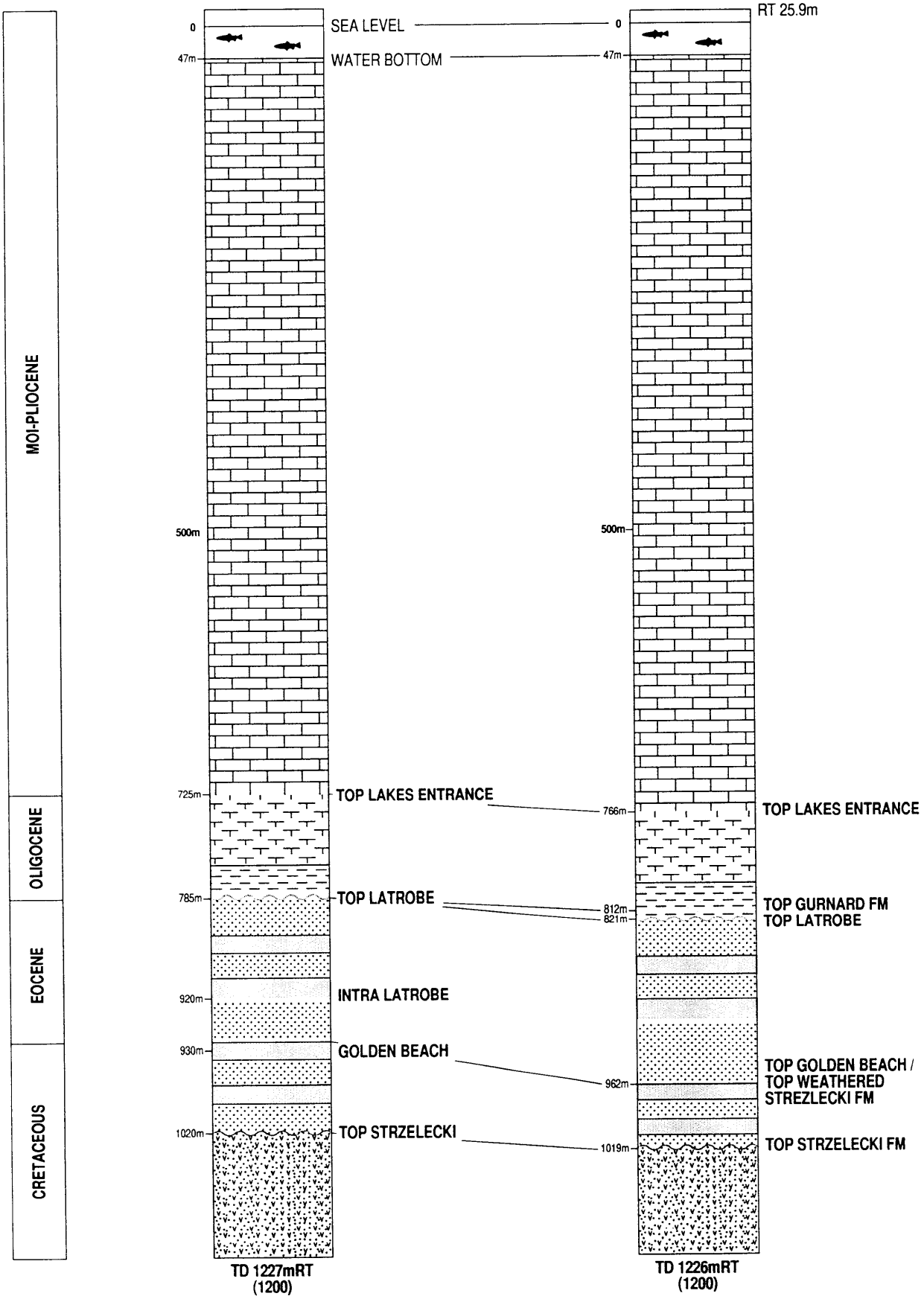
REGIONAL STRATIGRAPHIC COLUMN



PE907474_03

Figure 6

CUTTLEFISH 1
PREDICTED and ACTUAL STRATIGRAPHIC SECTION



AGP99_11 Fri 03 Dec 99 (02:14PM)

FIGURE 7

APPENDIX 1

WELL INDEX SHEET

WELL INDEX SHEET

COMPANY:	Amity Oil NL	TYPE:	Wildcat	
SPUDDED:	23.10.1999	WELL:	Cuttlefish-1	
COMPLETED:	02.11.1999	BASIN:	Gippsland	
T.D:	1226 metres RT	LICENCE:	VIC/P40	ELEVATION RT 25.9metres amsl
		LATITUDE	37° 59' 40.799" South	WATER DEPTH 47.7 metres
STATUS:	P&A	LONGITUDE:	148°03' 02.279"East	

Formation/Marker	Thickness (m)	Depths (m) R.T..	Depths (m) Sub Sea	Seismic TWT Datum MSL	Lithologic Summary	Remarks/ Shows
EARLY MIOCENE GIPPSLAND LMST	718.4	73.6	47.7	-	Calcareous claystones and marls	Nil
LAKES ENTRANCE FORMATION	46	792	766.1	-	grey soft claystones	Nil
GURNARD FORMATION	8	839	812.1	-	Siltstones and claystones	Nil
LATROBE GROUP	141	847	821.1	-	interbedded sandstones and siltstones with thin claystones and coals	Minor gas shows in Upper Latrobe
INDETERMINATE (Golden Beach)	57	988	962.1		Interbedded sandstones and claystones	Nil
STRZELECKI FORMATION	+181	1045	1019.1	-	pink, lithic siltstones	Nil

LOGS	RUN 1 PEX-HALS-DSI-NGS	751 – 1217 mRT
	RUN 1 GR	100 – 1193 mRT

TESTS: No Testing was undertaken in this well

SIDEWALL CORES		CUTTINGS SAMPLES	STORED VDNRE STORE
NIL		760 to 1226 metres RT	

PLUGS	Plug No 1	1110 –990 mRT	278 sx Class G
	Plug No 2	9900 – 800 mRT	382 sx Class G
	Plug No 3	795 – 650 mRT	347 sx Class G
	Plug No 4	150 –100 mRT	116 sx Class G

Cuttlefish-1 was plugged and abandoned on 1 November, 1999.

LICENCE	VIC/P40
WELL NAME:	CUTTLEFISH-1
OPERATOR:	Amity Oil NL

APPENDIX 2

DAILY REPORTS

APPENDIX 2a

DAILY DRILLING REPORTS

AMITY OIL NL
DAILY DRILLING REPORT

WELL:	CUTTLEFISH #1	**DATE:**	19-Oct-99
PERMIT:	VIC / P40	**REPORT #**	1
RIG:	SEDCO 702	**D.F.S.**	

DEPTH 2400 Hrs:		STATUS @ 2400 Hrs:	Rig under tow				
TVD:		FORMATION:					
24 HR PROGRESS:		LAST CASING:		@		SHOE L.O.T.:	
HOLE SIZE:		**WD (MSL):**		RT - SEABED/MSL:		MAASP:	
SURVEYS:							

MUD PROPERTIES		ADDITIVES
DENSITY(SG)		
VISCOSITY(Secs)		
pH		
PV/YP(cp/lb/100ft2)		
GELS 10/10		
WL API(cc/30min)		
WL HTHP(cc/30min)		
CAKE(mm)		
SOLIDS %		
SAND %		
CHLORIDES(mg/l)		
KCL %		
MBT(lb/bbl)		
TEMP °C		
HOLE VOL(m3/bbl)		
SURF VOL(m3/bbl)		
LOSSES(m3/bbl/hr)		
MUD Co		
MUD TYPE		

SOLIDS CONTROL			
	lpm	uf	hrs
DESILTER			
DESANDER			
MUD CLEANER			
CENTRIFUGE			
	1	2	3
SHAKERS			
SCREENS			
PUMPS	1	2	3
TYPE			
STROKE(in)			
LINER(in)			
SPM			
LPM			
AV-DP(m/min)			
AV-DC(m/min)			
SPP(kPa/psi)			
SCR @ 40			
SCR @ 50			

FORMATION DATA	
DEPTH	
TRIP GAS (%)	
CONN. GAS (%)	
B'GRD GAS (%)	
PORE PRESS (SG)	
ECD (SG)	
LITHOLOGY	

DRILLS / BOPS	
LAST BOP DRILL	
LAST FIRE DRILL	
LAST MOB DRILL	
LAST ABN. RIG DRILL	
LAST BOP TEST	
BOP TEST DUE	

BIT DATA		
BIT No.		
SIZE(mm/in)		
TYPE		
IADC CODE		
SERIAL No.		
NOZZLES(32in)		
DEPTH IN (m)		
DEPTH OUT (m)		
DRILLED (m cum/dly)		
HOURS (cum/dly)		
GRADE		
AVGE ROP (m/hr)		
WOB (mt)		
RPM		
JET VEL (m/sec)		
HHP @ BIT		
BHA No.		

BHA Profile :

WEATHER / RIG RESPONSE		
WIND SPEED(kts)	15	
DIRECTION(°)	240	
TEMPERATURE(°C)	13 - 15	
BAR. PRESSURE(kPa)	1013	
BAR. RISE / FALL(kPa)	rise	
VISIBILITY(NM)	12	
WEATHER STATE	Fine	
SWELL / PER / DIR(m/sec/°)	205 / .5 / 7	
WAVES / PER / DIR(m/sec/°)	240 / 1.2 / 2	
HEAVE(m)	N/A	
PITCH(°)	.2 / 7	
ROLL(°)	.4 / 7	
ANCHOR TENSION-MIN(MT)		
ANCHOR TENSION-MAX(MT)		
RISER TENSION(MT)		
VARIABLE DECK LOAD(MT)	2025	

BHA WEIGHT | STRING WT

	HRS	CUM
1. MOVE RIG	0.5	0.5
2. RUN ANCHORS		
3. DRILLING		
4. TRIP		
5. WIPER TRIP		
6. SURVEY		
7. CIRC./COND		
8. HANDLE BHA		
9. CASE/CEMENT		
10. WELLHEAD		
11. BOPS		
12. LOT		
13. CORING		
14. LOGGING		
15. REAM/WASH		
16. FISH/STUCK		
17. LOSS CIRC		
18. KICK CONTROL		
19. SIDETRACK		
20. OTHER		
21. REP. SURF		
22. WELL TEST		
23. WO WEATHER		
24. WAIT - OTHER		
25. ABDN./SUSPEND		
26. RIG SERVICE		
27. SLIP/CUT LINE		
28. PULL ANCHORS		
29.		
TOTAL (HRS)	0.5	0.5

DOWNHOLE TOOLS	SERIAL No.	ROT/REAM HRS
DRILLING JAR		
DRILLING JAR		
SHOCK SUB		
PDM		

DRILLING DATA	
DRAG - UP (mt)	
DRAG - DOWN (mt)	
TORQUE-On Bottom (amps)	
TORQUE-Off Bottom (amps)	

AMITY OIL NL

DAILY DRILLING REPORT

WELL:	CUTTLEFISH #1	DATE:	19-Oct-99
PERMIT:	VIC / P40	REPORT #	1
RIG:	SEDCO 702	D.F.S.	0

FROM	TO	HOURS	
23:30	0:00	0.50	Last anchor racked at 23:30. Rig under tow to Cuttlefish # 1.
			Position @ 24:00 hrs:
			Latitude: 38deg 01'
			Longitude: 148 deg 23.8'.
			Distance travelled: 0.9 mles.
			Distance to go: 16.6 miles.

OPERATIONS TO 0600 HRS: Continue under tow.

PROGRAMME NEXT 24 HRS: Run anchors, rig to perform chain inspection.

BULK	GEL(sx)	BARITE(sx)	CEMENT(sx)	DRILLWATER(mt)	POT WATER(mt)	DIESEL FUEL(lt)	HELI FUEL(lt)
Rig/Challenger/Shogun	612	1893	964	932	182 / 118 / 60	227/253/249	

PERSONNEL ON RIG		TRANSPORTATION			COSTS	
OPERATOR	1 + 1		NAME	LOCATION	DAILY WELL	TBA
DRILLING CONT.	36	WORKBOAT	P.CHALLENGER	ON TOW	CUMULATIVE WELL	
SERVICE COMPS	12	WORKBOAT	P. SHOGUN	ON TOW		
OTHER	16	STANDBY BOAT				
CATERING	9	HELICOPTER				
TOTAL	75	HELICOPTER				
SUPERVISOR(S)	Len Kronstal		ENGINEER		OIM	J.J. Dibon

AMITY OIL NL
DAILY DRILLING REPORT

WELL:	CUTTLEFISH #1	DATE:	20-Oct-99
PERMIT:	VIC / P40	REPORT #	2
RIG:	SEDCO 702	D.F.S.	

DEPTH 2400 Hrs:		STATUS @ 2400 Hrs:	Chain Inspection				
TVD:		FORMATION:					
24 HR PROGRESS:		LAST CASING:		@		SHOE L.O.T.:	
HOLE SIZE:		WD (MSL):		RT - SEABED/MSL:		MAASP:	
SURVEYS:							

MUD PROPERTIES		ADDITIVES
DENSITY(SG)		
VISCOSITY(Secs)		
pH		
PV/YP(cp/lb/100ft2)		
GELS 10/10		
WL API(cc/30min)		
WL HTHP(cc/30min)		
CAKE(mm)		
SOLIDS %		
SAND %		
CHLORIDES(mg/l)		
KCL %		
MBT(lb/bbl)		
TEMP °C		
HOLE VOL(m3/bbl)		
SURF VOL(m3/bbl)		
LOSSES(m3/bbl/hr)		
MUD Co		
MUD TYPE		

SOLIDS CONTROL			
	lpm	uf	hrs
DESILTER			
DESANDER			
MUD CLEANER			
CENTRIFUGE			
	1	2	3
SHAKERS			
SCREENS			

PUMPS	1	2	3
TYPE			
STROKE(in)			
LINER(in)			
SPM			
LPM			
AV-DP(m/min)			
AV-DC(m/min)			
SPP(kPa/psi)			
SCR @ 40			
SCR @ 50			

FORMATION DATA	
DEPTH	
TRIP GAS (%)	
CONN. GAS (%)	
B'GRD GAS (%)	
PORE PRESS (SG)	
ECD (SG)	
LITHOLOGY	

DRILLS / BOPS	
LAST BOP DRILL	
LAST FIRE DRILL	6-Oct
LAST MOB DRILL	28-Sep
LAST ABN. RIG DRILL	10-Oct
LAST BOP TEST	
BOP TEST DUE	

BIT DATA		
BIT No.		
SIZE(mm/in)		
TYPE		
IADC CODE		
SERIAL No.		
NOZZLES(32in)		
DEPTH IN (m)		
DEPTH OUT (m)		
DRILLED (m cum/dly)		
HOURS (cum/dly)		
GRADE		
AVGE ROP (m/hr)		
WOB (mt)		
RPM		
JET VEL (m/sec)		
HHP @ BIT		
BHA No.		BHA WEIGHT

BHA Profile :

WEATHER / RIG RESPONSE		
WIND SPEED(kts)	15	
DIRECTION(°)	310	
TEMPERATURE(°C)	12 - 14	
BAR. PRESSURE(kPa)	1012	
BAR. RISE / FALL(kPa)	falling / 1	
VISIBILITY(NM)	12	
WEATHER STATE	Fine	
SWELL / PER / DIR(m/sec/°)	1 / 6 / 160	
WAVES / PER / DIR(m/sec/°)	0.8 / 2/ 310	
HEAVE(m)	N/A	
PITCH(°)	.2 / 6	
ROLL(°)	.3 / 6	
ANCHOR TENSION-MIN(MT)	75	
ANCHOR TENSION-MAX(MT)	260	
RISER TENSION(MT)		
VARIABLE DECK LOAD(MT)	1851	
		STRING WT

DOWNHOLE TOOLS	SERIAL No.	ROT/REAM HRS
DRILLING JAR		
DRILLING JAR		
SHOCK SUB		
PDM		

DRILLING DATA	
DRAG - UP (mt)	
DRAG - DOWN (mt)	
TORQUE-On Bottom (amps)	
TORQUE-Off Bottom (amps)	

	HRS	CUM
1. MOVE RIG	7.5	8
2. RUN ANCHORS	12	12
3. DRILLING		
4. TRIP		
5. WIPER TRIP		
6. SURVEY		
7. CIRC./COND		
8. HANDLE BHA		
9. CASE/CEMENT		
10. WELLHEAD		
11. BOPS		
12. LOT		
13. CORING		
14. LOGGING		
15. REAM/WASH		
16. FISH/STUCK		
17. LOSS CIRC		
18. KICK CONTROL		
19. SIDETRACK		
20. OTHER		
21. REP. SURF		
22. WELL TEST		
23. WO WEATHER		
24. WAIT - OTHER		
25. ABDN./SUSPEND		
26. RIG SERVICE		
27. SLIP/CUT LINE		
28. PULL ANCHORS		
29.ANCHOR INSP.	4.5	4.5
TOTAL (HRS)	24	24.5

AMITY OIL NL

DAILY DRILLING REPORT

WELL:	CUTTLEFISH #1	DATE:	20-Oct-99
PERMIT:	VIC / P40	REPORT #	2
RIG:	SEDCO 702	D.F.S.	0

FROM	TO	HOURS	
0:00	7:30	7.50	Rig on tow to Cuttlefish Location.
7:30	19:30	12.00	Anchor Handling: #7 start @ 7:00, on bottom @ 07:30
			#3 start @ 8:14, finished @ 9:12 *NOTE* while under tow, and anchor handling,
			#2 start @ 9:20, finished @ 11:00 layed out HWDP and DP, picked up DP and HWDP
			#6 start @ 9:36, finished @ 10:57
			#5 start @ 11:20, finished @ 12:21
			#1 start @ 11:44, finished @ 18:00
			NOTE @ 13:05 Pacific Shogun developed engine failure due to broken oil pipes, back in operation @ 16:20
			NOTE @ 13:35, while pretensioning #2 anchor, to 350 kips, anchor chain parted.
			#8 start @ 14:49, finished @ 15:46
			Pretension #3 and #7 to 350 kips, finished @ 18:00
			Pretension #4 and #8 to 300 kips, finished @ 18:24
			Pretension #5 and #1 to 300 kips, finished @ 18:51
			Move rig over location, finished @ 20:40hrs.
19:30	0:00	4.50	Anchor Maintenance. @ 21:40 #6 up on roller, @ 21:40, start inspecting and measuring chain.
		24.00	

OPERATIONS TO 0600 HRS: Continue chain inspection
Pacific Shogun assisting.

PROGRAMME NEXT 24 HRS: Continue Chain inspection.

BULK	GEL(sx)	BARITE(sx)	CEMENT(sx)	DRILLWATER(mt)	POT WATER(mt)	DIESEL FUEL(lt)	HELI FUEL(lt)
Rig/Challenger/Shogun	612	1893	964	960	143 / 113 / 55	218 / 237 / 235	

PERSONNEL ON RIG		TRANSPORTATION			COSTS	A$
OPERATOR	1		NAME	LOCATION	DAILY WELL	697,835.00
DRILLING CONT.	35	WORKBOAT	P.CHALLENGER	to Geelong	CUMULATIVE WELL	697,835.00
SERVICE COMPS	12	WORKBOAT	P. SHOGUN	rig		
OTHER	16	STANDBY BOAT				
CATERING	9	HELICOPTER	1			
TOTAL	73	HELICOPTER				

SUPERVISOR(S)	Len Kronstal	ENGINEER			OIM	J.J. Dibon

AMITY OIL NL
DAILY DRILLING REPORT

WELL:	CUTTLEFISH #1	DATE:	21-Oct-99
PERMIT:	VIC / P40	REPORT #	3
RIG:	SEDCO 702	D.F.S.	

DEPTH 2400 Hrs:		STATUS @ 2400 Hrs:	Chain Inspection		
TVD:		FORMATION:			
24 HR PROGRESS:		LAST CASING:		@	SHOE L.O.T.:
HOLE SIZE:		WD (MSL):		RT - SEABED/MSL:	MAASP:
SURVEYS:					

MUD PROPERTIES		ADDITIVES
DENSITY(SG)		
VISCOSITY(Secs)		
pH		
PV/YP(cp/lb/100ft2)		
GELS 10/10		
WL API(cc/30min)		
WL HTHP(cc/30min)		
CAKE(mm)		
SOLIDS %		
SAND %		
CHLORIDES(mg/l)		
KCL %		
MBT(lb/bbl)		
TEMP °C		
HOLE VOL(m3/bbl)		
SURF VOL(m3/bbl)		
LOSSES(m3/bbl/hr)		
MUD Co		
MUD TYPE		

SOLIDS CONTROL	lpm	uf	hrs
DESILTER			
DESANDER			
MUD CLEANER			
CENTRIFUGE			
	1	2	3
SHAKERS			
SCREENS			
PUMPS	1	2	3
TYPE			
STROKE(in)			
LINER(in)			
SPM			
LPM			
AV-DP(m/min)			
AV-DC(m/min)			
SPP(kPa/psi)			
SCR @ 40			
SCR @ 50			

FORMATION DATA	
DEPTH	
TRIP GAS (%)	
CONN. GAS (%)	
B'GRD GAS (%)	
PORE PRESS (SG)	
ECD (SG)	
LITHOLOGY	

DRILLS / BOPS	
LAST BOP DRILL	
LAST FIRE DRILL	6-Oct
LAST MOB DRILL	28-Sep
LAST ABN. RIG DRILL	10-Oct
LAST BOP TEST	
BOP TEST DUE	

BIT DATA		
BIT No.		
SIZE(mm/in)		
TYPE		
IADC CODE		
SERIAL No.		
NOZZLES(32in)		
DEPTH IN (m)		
DEPTH OUT (m)		
DRILLED (m cum/dly)		
HOURS (cum/dly)		
GRADE		
AVGE ROP (m/hr)		
WOB (mt)		
RPM		
JET VEL (m/sec)		
HHP @ BIT		
BHA No.		BHA WEIGHT

BHA Profile :

WEATHER / RIG RESPONSE		
WIND SPEED(kts)	20	
DIRECTION(°)	225	
TEMPERATURE(°C)	13-21	
BAR. PRESSURE(kPa)	1009	
BAR. RISE / FALL(kPa)	falling / 3	
VISIBILITY(NM)	6	
WEATHER STATE	rain	
SWELL / PER / DIR(m/sec/°)	.5 / 6 / 210	
WAVES / PER / DIR(m/sec/°)	.8 / 2 / 225	
HEAVE(m)	N/A	
PITCH(°)	.2 / 6	
ROLL(°)	.3 / 6	
ANCHOR TENSION-MIN(MT)	50	
ANCHOR TENSION-MAX(MT)	235	
RISER TENSION(MT)		
VARIABLE DECK LOAD(MT)	1905	
		STRING WT

	HRS	CUM
1. MOVE RIG		8
2. RUN ANCHORS		12
3. DRILLING		
4. TRIP		
5. WIPER TRIP		
6. SURVEY		
7. CIRC./COND		
8. HANDLE BHA		
9. CASE/CEMENT		
10. WELLHEAD		
11. BOPS		
12. LOT		
13. CORING		
14. LOGGING		
15. REAM/WASH		
16. FISH/STUCK		
17. LOSS CIRC		
18. KICK CONTROL		
19. SIDETRACK		
20. OTHER		
21. REP. SURF		
22. WELL TEST		
23. WO WEATHER		
24. WAIT - OTHER		
25. ABDN./SUSPEND		
26. RIG SERVICE		
27. SLIP/CUT LINE		
28. PULL ANCHORS		
29.ANCHOR INSP.	24	28.5
TOTAL (HRS)	24	48.5

DOWNHOLE TOOLS	SERIAL No.	ROT/REAM HRS
DRILLING JAR		
DRILLING JAR		
SHOCK SUB		
PDM		

DRILLING DATA	
DRAG - UP (mt)	
DRAG - DOWN (mt)	
TORQUE-On Bottom (amps)	
TORQUE-Off Bottom (amps)	

AMITY OIL NL

DAILY DRILLING REPORT

WELL:	CUTTLEFISH #1	DATE:	21-Oct-99
PERMIT:	VIC / P40	REPORT #	3
RIG:	SEDCO 702	D.F.S.	0

FROM	TO	HOURS	
0:00	24:00	24.00	Continue Anchor Chain inspection.
			Recovered broken anchor chain, reterminated at 23:00 hrs.
			Rig doing maintenance work.
		24.00	

OPERATIONS TO 0600 HRS: Continue chain inspection
Pacific Shogun assisting.

PROGRAMME NEXT 24 HRS: Continue Chain inspection. Offload Pacific Challenger when it arrives.

BULK	GEL(sx)	BARITE(sx)	CEMENT(sx)	DRILLWATER(mt)	POT WATER(mt)	DIESEL FUEL(lt)	HELI FUEL(lt)
Rig/Challenger/Shogun	382	1893	964	909	155 / 113 / 55	207 / 237 / 224	

PERSONNEL ON RIG		TRANSPORTATION			COSTS	A$
OPERATOR	1		NAME	LOCATION	DAILY WELL	82,675.00
DRILLING CONT.	34	WORKBOAT	P.CHALLENGER	Geelong	CUMULATIVE WELL	781,610.00
SERVICE COMPS	12	WORKBOAT	P. SHOGUN	rig		
OTHER	15	STANDBY BOAT				
CATERING	9	HELICOPTER	1			
TOTAL	71	HELICOPTER				
SUPERVISOR(S)	Len Kronstal		ENGINEER		OIM	J.J. Dibon

AMITY OIL NL
DAILY DRILLING REPORT

WELL:	CUTTLEFISH #1	DATE:	22-Oct-99
PERMIT:	VIC / P40	REPORT #	4
RIG:	SEDCO 702	D.F.S.	

DEPTH 2400 Hrs:		STATUS @ 2400 Hrs:	Pretensioning anchors		
TVD:		FORMATION:			
24 HR PROGRESS:		LAST CASING:	@	SHOE L.O.T.:	
HOLE SIZE:		WD (MSL):	RT - SEABED/MSL:	MAASP:	
SURVEYS:					

MUD PROPERTIES		ADDITIVES
DENSITY(SG)	1.04	
VISCOSITY(Secs)	194	
pH	9.2	
PV/YP(cp/lb/100ft2)	21 / 47	
GELS 10/10	31 / 59	
WL API(cc/30min)		
WL HTHP(cc/30min)		
CAKE(mm)		
SOLIDS %		
SAND %		
CHLORIDES(mg/l)		
KCL %		
MBT(lb/bbl)		
TEMP °C		
HOLE VOL(m3/bbl)		
SURF VOL(m3/bbl)		
LOSSES(m3/bbl/hr)		
MUD Co		
MUD TYPE		

SOLIDS CONTROL			
	lpm	uf	hrs
DESILTER			
DESANDER			
MUD CLEANER			
CENTRIFUGE			
	1	2	3
SHAKERS			
SCREENS			

PUMPS	1	2	3
TYPE			
STROKE(in)			
LINER(in)			
SPM			
LPM			
AV-DP(m/min)			
AV-DC(m/min)			
SPP(kPa/psi)			
SCR @ 40			
SCR @ 50			

FORMATION DATA	
DEPTH	
TRIP GAS (%)	
CONN. GAS (%)	
B'GRD GAS (%)	
PORE PRESS (SG)	
ECD (SG)	
LITHOLOGY	

DRILLS / BOPS	
LAST BOP DRILL	
LAST FIRE DRILL	6-Oct
LAST MOB DRILL	28-Sep
LAST ABN. RIG DRILL	22-Oct
LAST BOP TEST	
BOP TEST DUE	

BIT DATA		
BIT No.		
SIZE(mm/in)		
TYPE		
IADC CODE		
SERIAL No.		
NOZZLES(32in)		
DEPTH IN (m)		
DEPTH OUT (m)		
DRILLED (m cum/dly)		
HOURS (cum/dly)		
GRADE		
AVGE ROP (m/hr)		
WOB (mt)		
RPM		
JET VEL (m/sec)		
HHP @ BIT		
BHA No.		BHA WEIGHT

BHA Profile :

WEATHER / RIG RESPONSE		
WIND SPEED(kts)	20	
DIRECTION(°)	250	
TEMPERATURE(°C)	14 - 17	
BAR. PRESSURE(kPa)	1015	
BAR. RISE / FALL(kPa)	rising / 6	
VISIBILITY(NM)	12	
WEATHER STATE	fine	
SWELL / PER / DIR(m/sec/°)	.8 / 6 / 220	
WAVES / PER / DIR(m/sec/°)	1 / 3 /250	
HEAVE(m)	N/A	
PITCH(°)	.2 / 6	
ROLL(°)	.3 / 6	
ANCHOR TENSION-MIN(MT)	40	
ANCHOR TENSION-MAX(MT)	290	
RISER TENSION(MT)		
VARIABLE DECK LOAD(MT)	1898	
STRING WT		

	HRS	CUM
1. MOVE RIG		8
2. RUN ANCHORS		12
3. DRILLING		
4. TRIP		
5. WIPER TRIP		
6. SURVEY		
7. CIRC./COND		
8. HANDLE BHA	2	2
9. CASE/CEMENT	2.5	2.5
10. WELLHEAD		
11. BOPS		
12. LOT		
13. CORING		
14. LOGGING		
15. REAM/WASH		
16. FISH/STUCK		
17. LOSS CIRC		
18. KICK CONTROL		
19. SIDETRACK		
20. OTHER		
21. REP. SURF		
24. WAIT - OTHER		
25. ABDN./SUSPEND		
26. RIG SERVICE		
27. SLIP/CUT LINE		
28. PULL ANCHORS		
29.ANCHOR INSP.	19.5	48
TOTAL (HRS)	24	72.5

DOWNHOLE TOOLS	SERIAL No.	ROT/REAM HRS
DRILLING JAR		
DRILLING JAR		
SHOCK SUB		
PDM		

DRILLING DATA	
DRAG - UP (mt)	
DRAG - DOWN (mt)	
TORQUE-On Bottom (amps)	
TORQUE-Off Bottom (amps)	

AMITY OIL NL

DAILY DRILLING REPORT

WELL:	CUTTLEFISH #1	DATE:	22-Oct-99
PERMIT:	VIC / P40	REPORT #	4
RIG:	SEDCO 702	D.F.S.	0

FROM	TO	HOURS	
0:00	19:30	19.50	Measure anchor chains, complete P.M.S. on Draworks, Pressure test lower and upper IBOPs and mud
			hose on top drive system.
			NOTE completed measuring anchor chains at 23:30 hrs. Meanwhile the following was performed.
19:30	21:30	2.00	Hold JSA and lay out 8 1/4" drill collars with high hours from derrick.
21:30	22:15	0.75	M/U cementing stand and rack in derrick, M/U 30" running tooland rack back in derrick.
22:15	22:45	0.50	Move PGB across moonpool & secure. Rig up to run 30" casing.
22:45	24:00	1.25	P/U 20" shoe X/O to 30", check for debris & correct operation, run 30" casing through guide base.
			RIG ON HIRE FROM 1930 HRS
			HELD WINCH - OFF DRILL AND ABANDON RIG DRILL .
		24.00	

OPERATIONS TO 0600 HRS: Continue to run casing , land on guide base, move to side of moonpool and secure. Make up 36" BHA.
RIH, Tag seabed @ 76.73m (95' airgap, 75' draft) @ 05:20hrs. Spud in and drill 36" hole.(89m @ 06:00)

Pacific Challenger at rigside @ 00:45. Finish pretensioning anchors @ 01:50. Rig over location at 02:00 hrs.

PROGRAMME NEXT 24 HRS: Drill 36" hole, run casing, cement, make up 17 1/2" BHA.

BULK	GEL(sx)	BARITE(sx)	CEMENT(sx)	DRILLWATER(mt)	POT WATER(mt)	DIESEL FUEL(lt)	HELI FUEL(lt)
Rig/Challenger/Shogun	365	1893	964	795 / 263 / 0	155 / 200 / 50	202 / 214 / 212	

PERSONNEL ON RIG		TRANSPORTATION			COSTS	A$
OPERATOR	3		NAME	LOCATION	DAILY WELL	130,154.00
DRILLING CONT.	33	WORKBOAT	P.CHALLENGER	rig	CUMULATIVE WELL	916,994.00
SERVICE COMPS	15	WORKBOAT	P. SHOGUN	rig		
OTHER	15	STANDBY BOAT				
CATERING	9	HELICOPTER	1			
TOTAL	75	HELICOPTER				
SUPERVISOR(S)	Wally Westman, Len Kronstal				OIM	J.J. Dibon

AMITY OIL NL
DAILY DRILLING REPORT

WELL:	CUTTLEFISH #1	DATE:	23-Oct-99
PERMIT:	VIC / P40	REPORT #	5
RIG:	SEDCO 702	D.F.S.	1

DEPTH 2400 Hrs:	118	STATUS @ 2400 Hrs:	Clean out shoe track.				
TVD:	118	FORMATION:					
24 HR PROGRESS:	45	LAST CASING:	30	@	118M	SHOE L.O.T.:	
HOLE SIZE:	36	WD (MSL):	47.7	RT - SEABED/MSL:	73.6	MAASP:	
SURVEYS:	1/2 DEGREE @ 115m.						

MUD PROPERTIES		ADDITIVES
DENSITY(SG)	1.04	Aquagel 297
VISCOSITY(Secs)	213	CaCl 13
pH	9	NaOH 3
PV/YP(cp/lb/100ft2)	25 / 104	Lime 5
GELS 10/10	84 / 128	
WL API(cc/30min)		
WL HTHP(cc/30min)		
CAKE(mm)		
SOLIDS %		
SAND %		
CHLORIDES(mg/l)		
KCL %		
MBT(lb/bbl)		
TEMP °C		
HOLE VOL(m3/bbl)		
SURF VOL(m3/bbl)		
LOSSES(m3/bbl/hr)		
MUD Co		
MUD TYPE		

SOLIDS CONTROL			
	lpm	uf	hrs
DESILTER	RETURNS	TO	SEABED
DESANDER			
MUD CLEANER			
CENTRIFUGE			
	1	2	3
SHAKERS			
SCREENS			
PUMPS	1	2	3
TYPE	A1700	A1700	A1700
STROKE(in)	12	12	12
LINER(in)	6	6	6
SPM	85	85	85
LPM	4288		
AV-DP(m/min)	12		
AV-DC(m/min)	39		
SPP(kPa/psi)	1745		
SCR @ 40			
SCR @ 50			

FORMATION DATA	
DEPTH	
TRIP GAS (%)	
CONN. GAS (%)	
B'GRD GAS (%)	
PORE PRESS (SG)	
ECD (SG)	
LITHOLOGY	

DRILLS / BOPS	
LAST BOP DRILL	
LAST FIRE DRILL	6-Oct
LAST MOB DRILL	28-Sep
LAST ABN. RIG DRILL	22-Oct
LAST BOP TEST	
BOP TEST DUE	

BIT DATA		
BIT No.	1	2
SIZE(mm/in)	26	17 1/2
TYPE	DSCJ	MSDSSHQC
IADC CODE	1.1.1	1.1.5
SERIAL No.	66330	LR228
NOZZLES(32in)	24,24,24,14	24,24,24,22
DEPTH IN (m)	73.6	118
DEPTH OUT (m)	118	
DRILLED (m cum/dly)	45	
HOURS (cum/dly)	2.5	
GRADE	1.1.NO.A.E.1.NO.TD	
AVGE ROP (m/hr)	18.0	
WOB (mt)	0-6	
RPM	60 / 90	70
JET VEL (m/sec)		73
HHP @ BIT		327
BHA No.	2	BHA WEIGHT

WEATHER / RIG RESPONSE		
WIND SPEED(kts)	15-28	
DIRECTION(°)	50	
TEMP.	12-15	
BAR. PRESSURE(kPa)	1023	
BAR. RISE / FALL(kPa)	rising / 8	
VISIBILITY(NM)	12	
WEATHER STATE	Cloudy	
SWELL / PER / DIR(m/sec/°)	1 / 13 /150	
WAVES / PER / DIR(m/sec/°)	1 / 3 /50	
HEAVE(m)	.5 / 13	
PITCH(°)	.2 / 6	
ROLL(°)	.5 / 7	
ANCHOR TENSION-MIN(MT)	220	
ANCHOR TENSION-MAX(MT)	250	
RISER TENSION(MT)		
VARIABLE DECK LOAD(MT)	2157	
160000	STRING WT	160000

BHA Profile : 17 1/2" BIT, FLOAT SUB, 2 X 9 1/2" DC, STAB,9 1/2" DC, X/O, ANDERDRIFT, 7 X 8 1/4" DC. JARS 1 X 8 1/4" DC, X/O, 15 X HWDP.

DOWNHOLE TOOLS	SERIAL No.	ROT/REAM HRS
DRILLING JAR	1588-1150	1.25
DRILLING JAR		
SHOCK SUB		
PDM		
ANDERDRIFT	AOB854	1.25

DRILLING DATA	
DRAG - UP (mt)	
DRAG - DOWN (mt)	
TORQUE-On Bottom (amps)	
TORQUE-Off Bottom (amps)	

	HRS	CUM
1. MOVE RIG		8
2. RUN ANCHORS		12
3. DRILLING	2.5	2.5
4. TRIP	3.25	3.25
5. WIPER TRIP	0.5	0.5
6. SURVEY	0.75	0.75
7. CIRC./COND	1	1
8. HANDLE BHA	8.25	10.25
9. CASE/CEMENT	5.5	8
10. WELLHEAD		
11. BOPS		
12. LOT		
13. CORING		
14. LOGGING		
15. REAM/WASH	1.25	1.25
16. FISH/STUCK		
17. LOSS CIRC		
18. KICK CONTROL		
19. SIDETRACK		
20. OTHER	1	1
21. REP. SURF		
22. WELL TEST		
23. WO WEATHER		
24. WAIT - OTHER		
25. ABDN./SUSPEND		
26. RIG SERVICE		
27. SLIP/CUT LINE		
28. PULL ANCHORS		
29.Anchor Maintence		48
TOTAL (HRS)	24	96.5

AMITY OIL NL

DAILY DRILLING REPORT

WELL: CUTTLEFISH #1
PERMIT: VIC / P40
RIG: SEDCO 702

DATE: 23-Oct-99
REPORT # 5
D.F.S. 1

FROM	TO	HOURS	
0:00	2:00	2.00	Continue to pick up 30" casing, run through PGB. Retreive R/T, secure PGB in moonpool.
2:00	5:15	3.25	P/U and M/U 36" BHA, 9 1/2 & 8 1/4" DCs.RIH to seabed @ 73.6m.
5:15	7:45	2.50	**Spud Cuttlefish #1 at 05:15.** Drill to 118m.
7:45	8:00	0.25	Sweep 50 bbl Hi-Visible, spot 50 bbl Hi-Visible.
8:00	8:30	0.50	Drop totco survey
8:30	8:45	0.25	Wiper trip to 90m.
8:45	9:00	0.25	Recover survey. (1/2 deg.)
9:00	9:15	0.25	RIH, 1/2m fill.
9:15	9:45	0.50	Sweep hole and displace to mud.
9:45	11:00	1.25	POOH to 36" hole opener.
11:00	12:00	1.00	Lay out 26" bit, pony DC, X/O, and hole opener.
12:00	13:15	1.25	Move PGB across moonpool, M/U cement stinger, and stab into 30" casing.M/U running tool to 30" housing.
13:15	13:45	0.50	Continue to run 30" csg. On 5" HWDP. Stab into 36" hole. (observe by ROV.) RIH to 118m.
13:45	14:15	0.50	R/U cement hose and break circ. Observe good returns (ROV), circ casing contents.
14:15	14:30	0.25	Pump 20 bbl spacer, and pressure test surface lines to 2000 psi.
14:30	15:30	1.00	Mix and pump 799 sx.15.9 ppg class "G" cement, and displace from HWDP.
15:30	16:30	1.00	Break off cement hose, Release running tool, POOH, L/D running tool. Bullseye 1/4 degree aft.
16:30	17:30	1.00	Hold emergency winch off drill. Skid rig 50' aft upwind. Skid back.
17:30	19:00	1.50	Make up 8 1/4 DC & Jars, and rack back in derrick. (2 stds).
19:00	19:30	0.50	P/U and M/U 13 3/8 csg cement head and rack back in derrick.
19:30	22:00	2.50	M/U 17 1/2" BHA, attach guide ropes in moonpool & RIH. Stab into 30" housing (observe by ROV) RIH to 92m.
22:00	22:15	0.25	Wash down from 92m. Tag cement at 112m.
22:15	23:30	1.25	Drill cement from 112m through shoe at 118m. Work through several times.
23:30	24:00	0.50	Rack back stand of HWDP and pick up remaining stand of DCs. Unable to pass 112m, rack back DCs,
			pick up stand of HWDP and work down from 112 to 118m.
		24.00	

OPERATIONS TO 0600 HRS: Drill 17 1/2" hole , Depth at 06:00--256m. RPM 120, WOB 5klbs, 1130 GPM, 1950 psi, ROP +- 40 m/hr.

PROGRAMME NEXT 24 HRS: Drill 17 1/2" hole.

BULK	GEL(sx)	BARITE(sx)	CEMENT(sx)	DRILLWATER(mt)	POT WATER(mt)	DIESEL FUEL(lt)	HELI FUEL(lt)
Rig/Challenger/Shogun	808	1893	1463 / 1300	918 / 0 / 0	179 / 194 / 50	234 / 194 / 162	

PERSONNEL ON RIG		TRANSPORTATION			COSTS	A$
OPERATOR	3		NAME	LOCATION	DAILY WELL	396,785.00
DRILLING CONT.	34	WORKBOAT	P.CHALLENGER	Rig	CUMULATIVE WELL	1,313,779.00
SERVICE COMPS	16	WORKBOAT	P. SHOGUN	Welshpool		
OTHER	14	STANDBY BOAT				
CATERING	9	HELICOPTER	1			
TOTAL	76	HELICOPTER				
SUPERVISOR(S)	Wally Westman, Len Kronstal				OIM	J.J. Dibon

AMITY OIL NL
DAILY DRILLING REPORT

WELL:	CUTTLEFISH #1	DATE:	24-Oct-99
PERMIT:	VIC / P40	REPORT #	6
RIG:	SEDCO 702	D.F.S.	2

DEPTH 2400 Hrs:	637	STATUS @ 2400 Hrs:	Drilling 17 1/2 " hole @ 637m.				
TVD:	637	FORMATION:	Lakes Entrance				
24 HR PROGRESS:	519	LAST CASING:	30	@	118M	SHOE L.O.T.:	
HOLE SIZE:	17 1/2	WD (MSL):	47.7	RT - SEABED/MSL:	73.6	MAASP:	
SURVEYS:	1/2 deg @ 259m, 1/2 deg @ 346m, 1/2 deg @ 433m, 1/2 deg @ 520m, 1/2 deg @ 607m.						

MUD PROPERTIES		ADDITIVES
DENSITY(SG)	1.04	Aquagel 258
VISCOSITY(Secs)	132	NaOH 6
pH	11.6	Lime 12
PV/YP(cp/lb/100ft2)	16/65	
GELS 10/10	22/29	
WL API(cc/30min)		
WL HTHP(cc/30min)		
CAKE(mm)		
SOLIDS %		
SAND %		
CHLORIDES(mg/l)		
KCL %		
MBT(lb/bbl)		
TEMP °C		
HOLE VOL(m3/bbl)		
SURF VOL(m3/bbl)		
LOSSES(m3/bbl/hr)		
MUD Co		
MUD TYPE		

SOLIDS CONTROL			
	lpm	uf	hrs
DESILTER	RETURNS	TO	SEABED
DESANDER			
MUD CLEANER			
CENTRIFUGE			
	1	2	3
SHAKERS			
SCREENS			
PUMPS	1	2	3
TYPE	A1700	A1700	A1700
STROKE(in)	12	12	12
LINER(in)	6	6	6
SPM	85	85	85
LPM	4542		
AV-DP(m/min)	12		
AV-DC(m/min)	39		
SPP(kPa/psi)	2250		
SCR @ 40			
SCR @ 50			

FORMATION DATA	
DEPTH	
TRIP GAS (%)	
CONN. GAS (%)	
B'GRD GAS (%)	
PORE PRESS (SG)	
ECD (SG)	
LITHOLOGY	

DRILLS / BOPS	
LAST BOP DRILL	
LAST FIRE DRILL	6-Oct
LAST MOB DRILL	28-Sep
LAST ABN. RIG DRILL	22-Oct
LAST BOP TEST	
BOP TEST DUE	

BIT DATA		
BIT No.	2	
SIZE(mm/in)	17 1/2	
TYPE	MSDSSHQC	
IADC CODE	1.1.5	
SERIAL No.	LR228	
NOZZLES(32in)	24,24,24,22	
DEPTH IN (m)	118	
DEPTH OUT (m)		
DRILLED (m cum/dly)	519	
HOURS (cum/dly)	23.25	
GRADE		
AVGE ROP (m/hr)	22.3	
WOB (mt)	10-12.5	
RPM	80-130	
JET VEL (m/sec)	73	
HHP @ BIT	327	
BHA No.	2	BHA WEIGHT

WEATHER / RIG RESPONSE		
WIND SPEED(kts)	28-35	
DIRECTION(°)	120	
TEMP.	13-15	
BAR. PRESSURE(kPa)	1018	
BAR. RISE / FALL(kPa)	falling / 5	
VISIBILITY(NM)	12	
WEATHER STATE	rain	
SWELL / PER / DIR(m/sec/°)	1 / 12 / 145	
WAVES / PER / DIR(m/sec/°)	2.5 / 5 / 120	
HEAVE(m)	.3 / 12	
PITCH(°)	.2 / 5	
ROLL(°)	.5 / 7	
ANCHOR TENSION-MIN(MT)	40	
ANCHOR TENSION-MAX(MT)	250	
RISER TENSION(MT)		
VARIABLE DECK LOAD(MT)	2200	
160000	STRING WT	205000

BHA Profile : 17 1/2" BIT, FLOAT SUB, 2 X 9 1/2" DC, STAB,9 1/2" DC, X/O, ANDERDRIFT, 7 X 8 1/4" DC. JARS 1 X 8 1/4" DC, X/O, 15 X HWDP.

1. MOVE RIG		8
2. RUN ANCHORS		12
3. DRILLING	23.25	25.75
4. TRIP	0.75	4
5. WIPER TRIP		0.5
6. SURVEY		0.75
7. CIRC./COND		1
8. HANDLE BHA		10.25
9. CASE/CEMENT		8
10. WELLHEAD		
11. BOPS		
12. LOT		
13. CORING		
14. LOGGING		
15. REAM/WASH		1.25
16. FISH/STUCK		
17. LOSS CIRC		
18. KICK CONTROL		
19. SIDETRACK		
20. OTHER		1
21. REP. SURF		
22. WELL TEST		
23. WO WEATHER		
24. WAIT - OTHER		
25. ABDN./SUSPEND		
26. RIG SERVICE		
27. SLIP/CUT LINE		
28. PULL ANCHORS		
29.ANCHOR INSP.		48
TOTAL (HRS)	24	120.5

DOWNHOLE TOOLS	SERIAL No.	ROT/REAM HRS
DRILLING JAR	1588-1150	24.5
DRILLING JAR		
SHOCK SUB		
PDM		
ANDERDRIFT	AOB854	24.5

DRILLING DATA	
DRAG - UP (mt)	2.5
DRAG - DOWN (mt)	2.5
TORQUE-On Bottom (amps)	3-6k ft/lbs torque
TORQUE-Off Bottom (amps)	1-2 k ft/lbs torque

AMITY OIL NL

DAILY DRILLING REPORT

WELL: CUTTLEFISH #1
PERMIT: VIC / P40
RIG: SEDCO 702

DATE: 24-Oct-99
REPORT # 6
D.F.S. 2

FROM	TO	HOURS	
0:00	1:15	1.25	Drill 17 1/2" hole from 118m to 147m.Pump 20 bbl sweeps every 1/2 stand. Spot 25 bbl Hi-Vis on connections.
1:15	2:00	0.75	POOH from 147m to 93m, rack back 2 stds of HWDP, P/U one std 8 1/4" DC, RIH w/HWdp to 147m.
2:00	24:00	22.00	Drill 17 1/2" hole from 147m to 637m. Pump 20 bbl sweeps every 1/2 stand. Spot 20 bbl Hi-Vis on connections.
			Take Anderdrift surveys every 100m.
		24.00	

OPERATIONS TO 0600 HRS: Drill 17 1/2" hole. WOB 30 klbs, 1230 GPM, SPP 2600, 130 RPM.
06:00 depth : 745m.

PROGRAMME NEXT 24 HRS: Wiper trip, POOH, run 13 3/8 casing, cement, start running BOP.

BULK	GEL(sx)	BARITE(sx)	CEMENT(sx)	DRILLWATER(mt)	POT WATER(mt)	DIESEL FUEL(lt)	HELI FUEL(lt)
Rig/Challenger/Shogun	550	1893	1463 / 1300	827 / 0 / 0	179 / 190 / 50	219 / 194 / 162	

PERSONNEL ON RIG		TRANSPORTATION	NAME	LOCATION	COSTS	A$
OPERATOR	3				DAILY WELL	204,984.00
DRILLING CONT.	34	WORKBOAT	P.CHALLENGER	Rig	CUMULATIVE WELL	1,518,763.00
SERVICE COMPS	16	WORKBOAT	P. SHOGUN	Welshpool		
OTHER	14	STANDBY BOAT				
CATERING	9	HELICOPTER				
TOTAL	76	HELICOPTER				
SUPERVISOR(S)	Wally Westman, Len Kronstal				OIM	J.J. Dibon

AMITY OIL NL
DAILY DRILLING REPORT

WELL:	CUTTLEFISH #1	DATE:	25-Oct-99
PERMIT:	VIC / P40	REPORT #	7
RIG:	SEDCO 702	D.F.S.	3

DEPTH 2400 Hrs:	755	STATUS @ 2400 Hrs:	Running Casing				
TVD:	755	FORMATION:	Lakes Entrance				
24 HR PROGRESS:	118	LAST CASING:	30	@	118M	SHOE L.O.T.:	
HOLE SIZE:	17 1/2	WD (MSL):	47.7	RT - SEABED/MSL:	73.6	MAASP:	
SURVEYS:	1/2 deg @693m, 1/2 deg @ 719m(totco).						

MUD PROPERTIES		ADDITIVES
DENSITY(SG)	1.04	Aquagel 56
VISCOSITY(Secs)	153	NaOH 3
pH	11.0	Lime 5
PV/YP(cp/lb/100ft2)	18/88	
GELS 10/10	53/71	
WL API(cc/30min)		
WL HTHP(cc/30min)		
CAKE(mm)		
SOLIDS %		
SAND %		
CHLORIDES(mg/l)		
KCL %		
MBT(lb/bbl)		
TEMP °C		
HOLE VOL(m3/bbl)		
SURF VOL(m3/bbl)		
LOSSES(m3/bbl/hr)		
MUD Co		
MUD TYPE		

SOLIDS CONTROL			
	lpm	uf	hrs
DESILTER	RETURNS	TO	SEABED
DESANDER			
MUD CLEANER			
CENTRIFUGE			
	1	2	3
SHAKERS			
SCREENS			
PUMPS	1	2	3
TYPE	A1700	A1700	A1700
STROKE(in)	12	12	12
LINER(in)	6	6	6
SPM	85	85	85
LPM	4542		
AV-DP(m/min)	12		
AV-DC(m/min)	39		
SPP(kPa/psi)	2300		
SCR @ 40			
SCR @ 50			

FORMATION DATA	
DEPTH	
TRIP GAS (%)	
CONN. GAS (%)	
B'GRD GAS (%)	
PORE PRESS (SG)	
ECD (SG)	
LITHOLOGY	

DRILLS / BOPS	
LAST BOP DRILL	
LAST FIRE DRILL	6-Oct
LAST MOB DRILL	28-Sep
LAST ABN. RIG DRILL	22-Oct
LAST BOP TEST	
BOP TEST DUE	

BIT DATA		
BIT No.	2	
SIZE(mm/in)	17 1/2	
TYPE	MSDSSHQC	
IADC CODE	1.1.5	
SERIAL No.	LR228	
NOZZLES(32in)	24,24,24,22	
DEPTH IN (m)	118	
DEPTH OUT (m)	755	
DRILLED (m cum/dly)	637 / 118	
HOURS (cum/dly)	30.25 / 7	
GRADE	3.2.WT.A.E.1.NO.TD	
AVGE ROP (m/hr)	22.3	
WOB (mt)	10-12.5	
RPM	80-130	
JET VEL (m/sec)	73	
HHP @ BIT	327	
BHA No.	2	BHA WEIGHT

WEATHER / RIG RESPONSE		
WIND SPEED(kts)	5 - 15	
DIRECTION(°)	50	
TEMP.	15 - 19	
BAR. PRESSURE(kPa)	1010	
BAR. RISE / FALL(kPa)	falling / 8	
VISIBILITY(NM)	12	
WEATHER STATE	fine	
SWELL / PER / DIR(m/sec/°)	3 / 10 / 120	
WAVES / PER / DIR(m/sec/°)	.2 / 1 / 50	
HEAVE(m)	.8 / 10	
PITCH(°)	.2 / 5	
ROLL(°)	.5 / 7	
ANCHOR TENSION-MIN(MT)	210	
ANCHOR TENSION-MAX(MT)	260	
RISER TENSION(MT)		
VARIABLE DECK LOAD(MT)	2095	
160000	STRING WT	220000

BHA Profile : 17 1/2" BIT, FLOAT SUB, 2 X 9 1/2" DC, STAB,9 1/2" DC, X/O, ANDERDRIFT, 7 X 8 1/4" DC. JARS 1 X 8 1/4" DC, X/O, 15 X HWDP.

DOWNHOLE TOOLS	SERIAL No.	ROT/REAM HRS
DRILLING JAR	1588-1150	31.5
DRILLING JAR		
SHOCK SUB		
PDM		
ANDERDRIFT	AOB854	31.5

DRILLING DATA	
DRAG - UP (mt)	2.5
DRAG - DOWN (mt)	2.5
TORQUE-On Bottom (amps)	4-7k ft/lbs torque
TORQUE-Off Bottom (amps)	1-2 k ft/lbs torque

	HRS	CUM
1. MOVE RIG		8
2. RUN ANCHORS		12
3. DRILLING	7	32.75
4. TRIP	4.5	8.5
5. WIPER TRIP	2.25	2.75
6. SURVEY	0.5	1.25
7. CIRC./COND	2.25	3.25
8. HANDLE BHA		10.25
9. CASE/CEMENT	6.25	14.25
10. WELLHEAD		
11. BOPS		
12. LOT		
13. CORING		
14. LOGGING		
15. REAM/WASH	0.75	2
16. FISH/STUCK		
17. LOSS CIRC		
18. KICK CONTROL		
19. SIDETRACK		
20. OTHER		1
21. REP. SURF		
22. WELL TEST		
23. WO WEATHER		
24. WAIT - OTHER		
25. ABDN./SUSPEND		
26. RIG SERVICE	0.5	0.5
27. SLIP/CUT LINE		
28. PULL ANCHORS		
29. ANCHOR INSP.		48
TOTAL (HRS)	24	144.5

AMITY OIL NL

DAILY DRILLING REPORT

WELL:	CUTTLEFISH #1	DATE:	25-Oct-99
PERMIT:	VIC / P40	REPORT #	7
RIG:	SEDCO 702	D.F.S.	3

FROM	TO	HOURS	
0:00	7:00	7.00	Drill 17 1/2" hole from 637m to 755m. Take Anderdrift surveys every 100m. Pump 20 bbl Hi-Vis every 1/2 stand.
			Spot 20 bbl Hi-Vis every connection.
0:00	7:30	0.50	Sweep 50 bbl sweep and spot 50 bbl Hi-vis on bottom.
7:30	7:45	0.25	Drop totco survey.
7:45	10:00	2.25	POOH from 755m. Intermittant tight spots from 745m to 570m. Work through tight spots. M/U TDS to rotate
			through tight spots at 716m, 677m, and 574-570m. Con't POOH to 20" shoe @ 118m.
10:00	10:15	0.25	Retreive totco survey---1/2 deg.
10:15	10:45	0.50	Service TDS, Pipe Spinner and Draworks.
10:45	12:00	1.25	M/U TDS and work through shoe @ 118m. RIH to 716m. Held up at same.
12:00	12:45	0.75	Work through tight spot @ 716m & wash and ream to bottom @ 755m.
12:45	13:15	0.50	Pump 50 bbl Hi-Visc pill and sweep out of hole.
13:15	14:00	0.75	Displace hole to 8.7ppg spud mud. Pump 1 1/2 times hole volume.
14:00	16:15	2.25	POOH , observe tight spots between 755m and 716m, work back through same. Continue POOH, no excess
			drag observed between 716m & 20" shoe. Observe bit through 30" housing with ROV.
16:15	16:45	0.50	M/U TDS & Jet PGB and Slope Indicator. (Visibility poor for ROV).
16:45	17:45	1.00	Continue to POOH., rack back 17 1/2" BHA, break off bit, clear floor.
17:45	18:15	0.50	R / U to run casing.
18:15	23:30	5.25	Hold JSA and P/U shoe joint. Check for debris, M/U intermediate and float joints. Confirm proper operation.
			Run 13 /38 casing to seabed. Stab into 30" housing,(observed by ROV) Continue to run casing.
23:30	24:00	0.50	Hold JSA, Pick up and make up X/O joint and 18 3/4 wellhead housing.
		24.00	

OPERATIONS TO 0600 HRS: Land casing into 30" housing,(test w/ 50klbs overpull). Rig up to and circulate casing, hold JSA and pressure test lines. Cement casing, Bump plug with 2000 psi. bleed off pressure back to cement unit.

PROGRAMME NEXT 24 HRS: Run and pressure test BOP stack. M/U 12 1/4" BHA and RIH.

BULK	GEL(sx)	BARITE(sx)	CEMENT(sx)	DRILLWATER(mt)	POT WATER(mt)	DIESEL FUEL(lt)	HELI FUEL(lt)
Rig/Challenger/Shogun	550	1893	2819	710 / 0 / 0	167 / 185 / 50	194 / 187 / 162	

PERSONNEL ON RIG		TRANSPORTATION			COSTS	A$
OPERATOR	3		NAME	LOCATION	DAILY WELL	336,034.00
DRILLING CONT.	34	WORKBOAT	P.CHALLENGER	Rig	CUMULATIVE WELL	1,854,797.00
SERVICE COMPS	16	WORKBOAT	P. SHOGUN	Welshpool		
OTHER	14	STANDBY BOAT				
CATERING	9	HELICOPTER				
TOTAL	76	HELICOPTER				
SUPERVISOR(S)	Wally Westman, Len Kronstal				OIM	J.J. Dibon

AMITY OIL NL
DAILY DRILLING REPORT

WELL:	CUTTLEFISH #1	DATE:	26-Oct-99
PERMIT:	VIC / P40	REPORT #	8
RIG:	SEDCO 702	D.F.S.	4

DEPTH 2400 Hrs:	755	STATUS @ 2400 Hrs:	Picking up Diverter				
TVD:	755	FORMATION:	Lakes Entrance				
24 HR PROGRESS:	0	LAST CASING:	13 3/8	@	749.33	SHOE L.O.T.:	
HOLE SIZE:	17 1/2	WD (MSL):	47.7	RT - SEABED/MSL:	73.6	MAASP:	
SURVEYS:							

MUD PROPERTIES		ADDITIVES
DENSITY(SG)	1.12	Baracide 1
VISCOSITY(Secs)	63	Dextrid LT 20
pH	8.5	EZ Mud DP 5
PV/YP(cp/lb/100ft2)	13 / 25	KCl (1000) 9
GELS 10/10	6 / 7	Pac - R 11
WL API(cc/30min)	6.0	XCD Poly 11
WL HTHP(cc/30min)	22.6	Barite (100) 93
CAKE(mm)	1 / 2	NaOH 1
SOLIDS %	2.7	KOH 2
SAND %	.25	Soda ash 1
CHLORIDES(mg/l)	34000	
KCL %	12	
MBT(lb/bbl)	0.6	
TEMP °C		
HOLE VOL(m3/bbl)	338	
SURF VOL(m3/bbl)	1370	
LOSSES(m3/bbl/hr)		
MUD Co		
MUD TYPE	Kcl-PHPA	

SOLIDS CONTROL	lpm	uf	hrs
DESILTER			
DESANDER			
MUD CLEANER			
CENTRIFUGE			
	1	2	3
SHAKERS	Thule	Thule	Thule
SCREENS	120/52	120/52	52/52
PUMPS	1	2	3
TYPE	A1700	A1700	A1700
STROKE(in)	12	12	12
LINER(in)	6	6	6
SPM			
LPM			
AV-DP(m/min)			
AV-DC(m/min)			
SPP(kPa/psi)			
SCR @ 40			
SCR @ 50			

FORMATION DATA	
DEPTH	
TRIP GAS (%)	
CONN. GAS (%)	
B'GRD GAS (%)	
PORE PRESS (SG)	
ECD (SG)	
LITHOLOGY	

DRILLS / BOPS	
LAST BOP DRILL	
LAST FIRE DRILL	6-Oct
LAST MOB DRILL	28-Sep
LAST ABN. RIG DRILL	22-Oct
LAST BOP TEST	
BOP TEST DUE	

BIT DATA		
BIT No.		
SIZE(mm/in)		
TYPE		
IADC CODE		
SERIAL No.		
NOZZLES(32in)		
DEPTH IN (m)		
DEPTH OUT (m)		
DRILLED (m cum/dly)		
HOURS (cum/dly)		
GRADE		
AVGE ROP (m/hr)		
WOB (mt)		
RPM		
JET VEL (m/sec)		
HHP @ BIT		
BHA No.		BHA WEIGHT

BHA Profile :

WEATHER / RIG RESPONSE		
WIND SPEED(kts)	15 - 30	
DIRECTION(°)	295	
TEMP.	15 - 20	
BAR. PRESSURE(kPa)	1014	
BAR. RISE / FALL(kPa)	rising / 4	
VISIBILITY(NM)	12	
WEATHER STATE	cloudy	
SWELL / PER / DIR(m/sec/°)	1.8 / 9 /240	
WAVES / PER / DIR(m/sec/°)	1 / 2 / 295	
HEAVE(m)	.3 / 9	
PITCH(°)	.2 / 5	
ROLL(°)	.2 / 6	
ANCHOR TENSION-MIN(MT)	210	
ANCHOR TENSION-MAX(MT)	260	
RISER TENSION(MT)		
VARIABLE DECK LOAD(MT)	1932	
STRING WT		

	HRS	CUM
1. MOVE RIG		8
2. RUN ANCHORS		12
3. DRILLING		32.75
4. TRIP		8.5
5. WIPER TRIP		2.75
6. SURVEY		1.25
7. CIRC./COND		3.25
8. HANDLE BHA		10.25
9. CASE/CEMENT	7	21.25
10. WELLHEAD		
11. BOPS	13.5	13.5
12. LOT		
13. CORING		
14. LOGGING		
15. REAM/WASH		2
16. FISH/STUCK		
17. LOSS CIRC		
18. KICK CONTROL		
19. SIDETRACK		
20. OTHER		1
21. REP. SURF	3.5	3.5
22. WELL TEST		
23. WO WEATHER		
24. WAIT - OTHER		
25. ABDN./SUSPEND		
26. RIG SERVICE		0.5
27. SLIP/CUT LINE		
28. PULL ANCHORS		
29.ANCHOR INSP		48
TOTAL (HRS)	24	168.5

DOWNHOLE TOOLS	SERIAL No.	ROT/REAM HRS
DRILLING JAR	1588-1150	31.5
DRILLING JAR		
SHOCK SUB		
PDM		
ANDERDRIFT	AOB854	31.5

DRILLING DATA	
DRAG - UP (mt)	2.5
DRAG - DOWN (mt)	2.5
TORQUE-On Bottom (amps)	4-7k ft/lbs torque
TORQUE-Off Bottom (amps)	1-2 k ft/lbs torque

AMITY OIL NL

DAILY DRILLING REPORT

WELL:	CUTTLEFISH #1	DATE:	26-Oct-99
PERMIT:	VIC / P40	REPORT #	8
RIG:	SEDCO 702	D.F.S.	4

FROM	TO	HOURS	
0:00	1:00	1.00	P/U 18 3/4" wellhead, back out running tool, make up releasing plug assy. and re-install.
1:00	1:30	0.50	RIH W/ landing string, land in 30" housing, pull 50klbs overpull to check latch.
1:30	1:45	0.25	Rig up cement hose, hold JSA before cementing.
1:45	2:30	0.75	Pump casing volume of sea water. ROV confirmed returns at sea bed.
2:30	2:45	0.25	Break circ. With Dowell, press test lines to 3500 psi, drop ball, shear bottom plug.
2:45	4:30	1.75	Conduct cement job as per program, (1141 sx G cmt + additives @ 12.8ppg F/B 550 sx G cmt @ 15.8ppg)
			drop dart, shear top plug (plus 20 bbl) with Dowell.
4:30	5:15	0.75	Displace with rig pumps, bump plug with 2klbs, bleed off pressure , floats holding OK.
5:15	5:30	0.25	Rig down cementing hose, back out running tool.
5:30	7:00	1.50	POOH with landing string- lay out running tool, equalizer sub, pup jt., and cement head.
7:00	7:30	0.50	Change bails and elevators for running BOP. Make up stand for lowering BOPs.
7:30	7:45	0.25	Hold JSA for moving BOPs over moonpool.
7:45	8:30	0.75	Shift BOP and LMRP package over moonpool.
8:30	12:00	3.50	Install drillpipe through BOP & commence function testing on Blue Pod.
12:00	15:30	3.50	Trouble shoot lower outer kill V/V on BOPs, V/V would not open.
15:30	17:00	1.50	Continue with function test of BOPs on both blue and yellow pods.
17:00	18:00	1.00	M/U Jnt. Riser to BOPs, Install Beacon Jnt & guide lines.
18:00	18:45	0.75	Hold JSA, Run BOPs through splash zone, run 35 and 10' pup joints.
18:45	19:15	0.50	R/U and pressure Choke and Kill lines to 250psi and 5000 psi. Good Test.
19:15	20:30	1.25	P/U and M/U Slip Joint and Landing Joint.
20:30	21:00	0.50	Hold JSA & install Riser Rucker tensioners.
21:00	21:30	0.50	Hold JSA & install C & K goosenecks in moonpool.
21:30	22:00	0.50	R/U and pressure Choke and Kill lines to 250psi and 5000 psi. prior to landing. Good Test.
22:00	22:30	0.50	Install Umbilical storm loops in moonpool.
22:30	23:00	0.50	Stab BOPs over guide posts & latch BOPs with 50klbs down, check with 50klbs overpull.
23:00	23:45	0.75	Unpin slip joint, stroke out inner barrel & lay out landing joint.
23:45	24:00	0.25	Hold JSA & pick up Diverter.
		24.00	

OPERATIONS TO 0600 HRS: Install diverter, make up BOP test string, test BOP.

PROGRAMME NEXT 24 HRS: Finish BOP pod function and depletion test, make up 12 1/4" BHA, drill cement, LOT, drill 12 1/4" hole.

BULK	GEL(sx)	BARITE(sx)	CEMENT(sx)	DRILLWATER(mt)	POT WATER(mt)	DIESEL FUEL(lt)	HELI FUEL(lt)
Rig/Challenger/Shogun	550	1800	1165	550 / 0 / 0	173 / 180 / 50	268 / 95 / 162	

PERSONNEL ON RIG		TRANSPORTATION			COSTS	A$
OPERATOR	3		NAME	LOCATION	DAILY WELL	1,077,683.00
DRILLING CONT.	34	WORKBOAT	P.CHALLENGER	Rig	CUMULATIVE WELL	2,876,940.00
SERVICE COMPS	17	WORKBOAT	P. SHOGUN	En-route Rig		
OTHER	13	STANDBY BOAT				
CATERING	9	HELICOPTER	1			
TOTAL	76	HELICOPTER				
SUPERVISOR(S)	Wally Westman, Len Kronstal				OIM	J.J. Dibon

AMITY OIL NL
DAILY DRILLING REPORT

WELL:	CUTTLEFISH #1	**DATE:**	27-Oct-99
PERMIT:	VIC / P40	**REPORT #**	9
RIG:	SEDCO 702	**D.F.S.**	5

DEPTH 2400 Hrs:	798	STATUS @ 2400 Hrs:	Drilling 12 1/4" Hole				
TVD:	798	FORMATION:	Lakes Entrance @ 790				
24 HR PROGRESS:	43	LAST CASING:	13 3/8	@	749.33	SHOE L.O.T.:	EMW 12.1
HOLE SIZE:	12 1/4	**WD (MSL):**	47.7	RT - SEABED/MSL:	73.6	MAASP:	351
SURVEYS:	1/2 deg. At 777m.						

MUD PROPERTIES		ADDITIVES
DENSITY(SG)	1.12	Baracide 1
VISCOSITY(Secs)	45	Baracor 3
pH	9.5	Dextrid LT 5
PV/YP(cp/lb/100ft2)	12/24	EZ Mud DP 5
GELS 10/10	6 / 7	KCl (1000) 2
WL API(cc/30min)	5.8	Pac - R 5
WL HTHP(cc/30min)	19.6	XCD Poly 4
CAKE(mm)	1 / 3	Barite (100) 90
SOLIDS %	2.9	KOH 2
SAND %	.25	
CHLORIDES(mg/l)	36000	
KCL %	4	
MBT(lb/bbl)	0.6	
TEMP °C	31	
HOLE VOL(m3/bbl)	391	
SURF VOL(m3/bbl)	1048	
LOSSES(m3/bbl/hr)		
MUD Co	Baroid	
MUD TYPE	Kcl-PHPA	

SOLIDS CONTROL			
	lpm	uf	hrs
DESILTER			
DESANDER			
MUD CLEANER			
CENTRIFUGE			
	1	2	3
SHAKERS	Thule	Thule	Thule
SCREENS	120/52	120/52	52/52
PUMPS	1	2	3
TYPE	A1700	A1700	A1700
STROKE(in)	12	12	12
LINER(in)	6	6	6
SPM	90	90	90
LPM	4350		
AV-DP(m/min)	65		
AV-DC(m/min)	108		
SPP(kPa/psi)	1950		
SCR @ 40	100	100	
SCR @ 50	150	150	

FORMATION DATA	
DEPTH	
TRIP GAS (%)	
CONN. GAS (%)	
B'GRD GAS (u)	5@755,8@783,11@792
PORE PRESS (SG)	8.5
ECD (SG)	9.53
LITHOLOGY	Calcareous Claystone

DRILLS / BOPS	
LAST BOP DRILL	
LAST FIRE DRILL	6-Oct
LAST MOB DRILL	28-Sep
LAST ABN. RIG DRILL	22-Oct
LAST BOP TEST	27-Oct
BOP TEST DUE	10-Nov

BIT DATA		
BIT No.	3	
SIZE(mm/in)	12 1/4	
TYPE	S91BHSVPX	
IADC CODE		
SERIAL No.	JR7821	
NOZZLES(32in)	7 X 16	
DEPTH IN (m)	755	
DEPTH OUT (m)		
DRILLED (m cum/dly)	43	
HOURS (cum/dly)	3.75	
GRADE		
AVGE ROP (m/hr)	11.4	
WOB (mt)	5-10	
RPM	70 / 130	
JET VEL (m/sec)	84	
HHP @ BIT	446	

WEATHER / RIG RESPONSE		
WIND SPEED(kts)	10 - 15	
DIRECTION(°)	350	
TEMP.	15 - 19	
BAR. PRESSURE(kPa)	1015	
BAR. RISE / FALL(kPa)	rising / 1	
VISIBILITY(NM)	12	
WEATHER STATE	Fine	
SWELL / PER / DIR(m/sec/°)	.5 / 10 /210	
WAVES / PER / DIR(m/sec/°)	.3 / 1 / 350	
HEAVE(m)	.2 / 10	
PITCH(°)	.2 / 4	
ROLL(°)	.2 / 6	
ANCHOR TENSION-MIN(MT)	190	
ANCHOR TENSION-MAX(MT)	250	
RISER TENSION(MT)	284	
VARIABLE DECK LOAD(MT)	1962	

BHA No.	3	BHA WEIGHT	100000	STRING WT	215000

BHA Profile : Bit, NBStab, Anderdrift, Stab., Monel, Stab., 12 X 8 1/4" DC., Jars, 1 X 8 1/4" DC., X/O.,15 HWDP

	HRS	CUM
1. MOVE RIG		8
2. RUN ANCHORS		12
3. DRILLING	3.75	36.5
4. TRIP	2	10.5
5. WIPER TRIP		2.75
6. SURVEY		1.25
7. CIRC./COND	1.25	4.5
8. HANDLE BHA	3.25	13.5
9. CASE/CEMENT		21.25
10. WELLHEAD		
11. BOPS	9	22.5
12. LOT	0.75	0.75
13. CORING		
14. LOGGING		
15. REAM/WASH	4	6
16. FISH/STUCK		
17. LOSS CIRC		
18. KICK CONTROL		
19. SIDETRACK		
20. OTHER		1
21. REP. SURF		3.5
22. WELL TEST		
23. WO WEATHER		
24. WAIT - OTHER		
25. ABDN./SUSPEND		
26. RIG SERVICE		0.5
27. SLIP/CUT LINE		
28. PULL ANCHORS		
29.ANCHOR INSP		48
TOTAL (HRS)	24	192.5

DOWNHOLE TOOLS	SERIAL No.	ROT/REAM HRS
DRILLING JAR	1588-1150	39.25
12 1/4 NBStab	207000068	7.75
12 1/4 Stabilizer	207000028	7.75
12 1/4 Stabilizer	207000031	7.75
ANDERDRIFT	AOB854	39.25

DRILLING DATA	
DRAG - UP (mt)	2.5
DRAG - DOWN (mt)	2.5
TORQUE-On Bottom (amps)	4-7k ft/lbs torque
TORQUE-Off Bottom (amps)	1-2 k ft/lbs torque

AMITY OIL NL

DAILY DRILLING REPORT

WELL:	CUTTLEFISH #1	DATE:	27-Oct-99
PERMIT:	VIC / P40	REPORT #	9
RIG:	SEDCO 702	D.F.S.	5

FROM	TO	HOURS	
0:00	1:15	1.25	Install Diverter - Connect Junction Box- remove R/Tool
1:15	1:45	0.50	Change out elevators and bails.
1:45	2:30	0.75	M/U and RIH with BOP test string.
2:30	2:45	0.25	Hook up cement hose, circulate through system.
2:45	3:45	1.00	Press. Test surface lines to 5000 psi. Test #1 pumped 2 bbl/1000 psi All Stop. Reset test plug with 12000 lb.
3:45	5:30	1.75	#1 Retest, 1/2 bbl / 250 psi, 1 bbl/ 3500psi. Continue to test BOPs as per program.
5:30	7:45	2.25	Function test Yellow Pod, Blue Pod from office. Conduct depletion test.
7:45	8:30	0.75	POH with test string, L/O same.
8:30	9:15	0.75	Run Flex Joint wear bushing.
9:15	9:45	0.50	Lay out pump in sub from top of 5" drillpipe stand. Move 9 1/2" DC stand from Stb. To Port.
9:45	14:00	4.25	M/U 12 1/4" BHA and RIH to 674m.
14:00	14:15	0.25	Wash from 674m to 722m.
14:15	14:30	0.25	Change out hydraulic hose on top drive.
14:30	14:45	0.25	Continue to wash down from 722m. Tag plug @ 733m.
14:45	16:15	1.50	Drill thru plugs and float. *NOTE* Plug debris jamming stabs, causing Hi Torq. Work string & pump gel sweeps
16:15	18:45	2.50	Continue to drill cmt from float through shoe and rat hole to 755m.
18:45	19:00	0.25	Displace hole to 9.4 ppg mud.
19:00	19:30	0.50	Drill 3m new hole to 758m.
19:30	20:00	0.50	Circ. Hole clean.
20:00	20:45	0.75	Space out and perform FIT. To EMW of 12.1ppg.--351 psi w/ 9.4ppg mud. No Leak Off.
20:45	24:00	3.25	Drill 12 1/4" hole from 758 to 798m. Back ream each standprior to connections. Take Anderdrift survey each 100m.
		24.00	

OPERATIONS TO 0600 HRS: Drill 12 1/4" hole. Flow check @ 851m. ---TOP OF LATROBE 839m.
06:00 depth 952m.

PROGRAMME NEXT 24 HRS: Drill 12 1/4" hole.

BULK	GEL(sx)	BARITE(sx)	CEMENT(sx)	DRILLWATER(mt)	POT WATER(mt)	DIESEL FUEL(lt)	HELI FUEL(lt)
Rig/Challenger/Shogun	550	1710	1165	502 / 0 / 150	188 / 180 / 255	260 / 95 / 202	

PERSONNEL ON RIG		TRANSPORTATION			COSTS	A$
OPERATOR	5		NAME	LOCATION	DAILY WELL	205,758.00
DRILLING CONT.	34	WORKBOAT	P.CHALLENGER	Geelong	CUMULATIVE WELL	3,082,698.00
SERVICE COMPS	20	WORKBOAT	P. SHOGUN	rig		
OTHER	14	STANDBY BOAT				
CATERING	9	HELICOPTER	1			
TOTAL	82	HELICOPTER				
SUPERVISOR(S)	Wally Westman, Len Kronstal				OIM	J.J. Dibon

AMITY OIL NL
DAILY DRILLING REPORT

WELL:	CUTTLEFISH #1	DATE:	28-Oct-99
PERMIT:	VIC / P40	REPORT #	10
RIG:	SEDCO 702	D.F.S.	6

DEPTH 2400 Hrs:	1226	STATUS @ 2400 Hrs:	POH to log				
TVD:	1226	FORMATION:	L. E. @ 790, Gurnard@839, C.Clastics@845, G. Beach@1065,Strz. gp@1075				
24 HR PROGRESS:	428	LAST CASING:	13 3/8	@	749.33	SHOE L.O.T.:	EMW 12.1
HOLE SIZE:	12 1/4	WD (MSL):	47.7	RT - SEABED/MSL:	73.6	MAASP:	351
SURVEYS:	1/2 deg @ 896m, 1/2 deg. At 1012m.1/2 deg @ 1128m, 1/4deg @ 1226m. (totco)						

MUD PROPERTIES		ADDITIVES
DENSITY(SG)	1.15	Baracor 6
VISCOSITY(Secs)	49	EZ Mud DP 20
pH	8.5	Soda Ash 2
PV/YP(cp/lb/100ft2)	18 / 32	XCD Poly 3
GELS 10/10	7 / 9	Barite (100) 210
WL API(cc/30min)	5.4	KOH 3
WL HTHP(cc/30min)	18.4	
CAKE(mm)	1 / 2	
SOLIDS %	4.6	
SAND %	.75	
CHLORIDES(mg/l)	33000	
KCL %	3.2	
MBT(lb/bbl)	1.0	
TEMP °C	45	
HOLE VOL(m3/bbl)	642	
SURF VOL(m3/bbl)	588	
LOSSES(m3/bbl/hr)		
MUD Co	Baroid	
MUD TYPE	Kcl-PHPA	

SOLIDS CONTROL			
	lpm	uf	hrs
DESILTER			
DESANDER			
MUD CLEANER			
CENTRIFUGE			
	1	2	3
SHAKERS	Thule	Thule	Thule
SCREENS	120/52	120/52	52/52
PUMPS	1	2	3
TYPE	A1700	A1700	A1700
STROKE(in)	12	12	12
LINER(in)	6	6	6
SPM	90	90	90
LPM	4350		
AV-DP(m/min)	65		
AV-DC(m/min)	108		
SPP(kPa/psi)	1950		
SCR @ 40	200	200	
SCR @ 50	275	275	

FORMATION DATA	
DEPTH	
TRIP GAS (%)	225 @ 1226
CONN. GAS (%)	
B'GRD GAS (u)	8@800, 20@845,8@1075
PORE PRESS (SG)	8.5
ECD (SG)	9.6
LITHOLOGY	Calcareous Claystone

DRILLS / BOPS	
LAST BOP DRILL	28-Oct
LAST FIRE DRILL	6-Oct
LAST MOB DRILL	28-Sep
LAST ABN. RIG DRILL	22-Oct
LAST BOP TEST	27-Oct
BOP TEST DUE	10-Nov

BIT DATA		
BIT No.	3	
SIZE(mm/in)	12 1/4	
TYPE	S91BHSVPX	
IADC CODE		
SERIAL No.	JR7821	
NOZZLES(32in)	7 X 16	
DEPTH IN (m)	755	
DEPTH OUT (m)	1226	
DRILLED (m cum/dly)	471 /428	
HOURS (cum/dly)	20.5	
GRADE	5.3.BT.N.X.I.BT.TD	
AVGE ROP (m/hr)	23.0	
WOB (mt)	5-10	
RPM	70 / 130	
JET VEL (m/sec)	84	
HHP @ BIT	446	
BHA No.	3	BHA WEIGHT

BHA Profile : Bit, NBStab, Anderdrift, Stab., Monel, Stab., 12 X 8 1/4" DC., Jars, 1 X 8 1/4" DC., X/O.,15 HWDP

WEATHER / RIG RESPONSE		
WIND SPEED(kts)	10	
DIRECTION(°)	40	
TEMP.	15 - 19	
BAR. PRESSURE(kPa)	1016	
BAR. RISE / FALL(kPa)	rising / 1	
VISIBILITY(NM)	12	
WEATHER STATE	Fine	
SWELL / PER / DIR(m/sec/°)	.5 / 10 / 210	
WAVES / PER / DIR(m/sec/°)	.2 / 1 / 40	
HEAVE(m)	.2 / 10	
PITCH(°)	.2 / 4	
ROLL(°)	.2 / 6	
ANCHOR TENSION-MIN(MT)	190	
ANCHOR TENSION-MAX(MT)	270	
RISER TENSION(MT)	284	
VARIABLE DECK LOAD(MT)	1809	
100000	STRING WT	240000

	HRS	CUM
1. MOVE RIG		8
2. RUN ANCHORS		12
3. DRILLING	16.75	53.25
4. TRIP	2.75	13.25
5. WIPER TRIP	1.75	4.5
6. SURVEY		1.25
7. CIRC./COND	1.25	5.75
8. HANDLE BHA		13.5
9. CASE/CEMENT		21.25
10. WELLHEAD		
11. BOPS		22.5
12. LOT		0.75
13. CORING		
14. LOGGING		
15. REAM/WASH	0.75	6.75
16. FISH/STUCK		
17. LOSS CIRC		
18. KICK CONTROL		
19. SIDETRACK		
20. OTHER	0.75	1.75
21. REP. SURF		3.5
22. WELL TEST		
23. WO WEATHER		
24. WAIT - OTHER		
25. ABDN./SUSPEND		
26. RIG SERVICE		0.5
27. SLIP/CUT LINE		
28. PULL ANCHORS		
29.ANCHOR INSP.		48
TOTAL (HRS)	24	216.5

DOWNHOLE TOOLS	SERIAL No.	ROT/REAM HRS
DRILLING JAR	1588-1150	56.75
12 1/4 NBStab	207000068	25.25
12 1/4 Stabilizer	207000028	25.25
12 1/4 Stabilizer	207000031	25.25
ANDERDRIFT	AOB854	56.75

DRILLING DATA	
DRAG - UP (mt)	2.5
DRAG - DOWN (mt)	2.5
TORQUE-On Bottom (amps)	4-18k ft/lbs torque
TORQUE-Off Bottom (amps)	2-3 k ft/lbs torque

AMITY OIL NL

DAILY DRILLING REPORT

WELL: CUTTLEFISH #1
PERMIT: VIC / P40
RIG: SEDCO 702

DATE: 28-Oct-99
REPORT # 10
D.F.S. 6

FROM	TO	HOURS	
0:00	16:45	16.75	Drill 12 1/4" hole from 798m to 1226m.Flow check drilling breaks at 851m, 905m and 970m.
16:45	17:15	0.50	Circulate bottoms up, hold pit drill.
17:15	17:30	0.25	Flow check. OK.
17:30	18:30	1.00	Pump Slug and POOH to 954m.
18:30	19:15	0.75	Unable to pass 954m. M/U top drive and back ream out to 13 3/8 shoe @ 749.
19:15	19:30	0.25	Flow check. OK. (held trip drill)
19:30	20:15	0.75	RIH. No excess drag observed to TD @ 1226. No fill observed.
20:15	21:00	0.75	Circulate untill hole clean. Max gas 4.5 %
21:00	21:15	0.25	Flow check. Drop totco survey.
21:15	22:15	1.00	Pump Slug and POOH to 13 3/8 casing shoe. No excess drag observed.
22:15	24:00	1.75	Flow check & continue to POOH. Flow check prior to pulling BHA through BOPs.
		24.00	

OPERATIONS TO 0600 HRS: Continue POOH. Rig up Schlumberger and log. Log # 1 -PEX-DSI-NGT.
Loggers depth 1220m. Changing tools for log #2 at 06:00 hrs.

PROGRAMME NEXT 24 HRS: Continue logging, RIH, lay down BHA.

BULK	GEL(sx)	BARITE(sx)	CEMENT(sx)	DRILLWATER(mt)	POT WATER(mt)	DIESEL FUEL(lt)	HELI FUEL(lt)
Rig/Challenger/Shogun	550	1500	1165	491 / 0 / 150	167 / 180 / 250	239 / 95 / 200	

PERSONNEL ON RIG		TRANSPORTATION			COSTS	A$
OPERATOR	5		NAME	LOCATION	DAILY WELL	295,941.00
DRILLING CONT.	34	WORKBOAT	P.CHALLENGER	Geelong	CUMULATIVE WELL	3,378,639.00
SERVICE COMPS	20	WORKBOAT	P. SHOGUN	Rig		
OTHER	15	STANDBY BOAT				
CATERING	9	HELICOPTER	2			
TOTAL	83	HELICOPTER				
SUPERVISOR(S)	Wally Westman, Len Kronstal				OIM	J.J. Dibon

AMITY OIL NL

DAILY DRILLING REPORT

WELL:	CUTTLEFISH #1	**DATE:**	29-Oct-99
PERMIT:	VIC / P40	**REPORT #**	11
RIG:	SEDCO 702	**D.F.S.**	7

DEPTH 2400 Hrs:	PB650	STATUS @ 2400 Hrs:	Laying down drill collars while waiting on cement.				
TVD:	650	FORMATION:	L. E. @ 790, Gurnard@839, C.Clastics@845, G. Beach@1065,Strz. gp@1075				
24 HR PROGRESS:		LAST CASING:	13 3/8	@	749.33	SHOE L.O.T.:	EMW 12.1
HOLE SIZE:	12 1/4	WD (MSL):	47.7	RT - SEABED/MSL:	73.6	MAASP:	351
SURVEYS:	1/2 deg @ 896m, 1/2 deg. At 1012m.1/2 deg @ 1128m, 1/4deg @ 1226m. (totco)						

MUD PROPERTIES		ADDITIVES
DENSITY(SG)	1.15	Baracor 2
VISCOSITY(Secs)	50	Baracide 1
pH	8.5	Barite (100) 27
PV/YP(cp/lb/100ft2)	18 / 33	CaCl 6
GELS 10/10	7 / 10	kOH 2
WL API(cc/30min)	5.8	
WL HTHP(cc/30min)		
CAKE(mm)	1	
SOLIDS %	4.5	
SAND %	.65	
CHLORIDES(mg/l)	33000	
KCL %	3.1	
MBT(lb/bbl)	1.0	
TEMP °C	45	
HOLE VOL(m3/bbl)	642	
SURF VOL(m3/bbl)	588	
LOSSES(m3/bbl/hr)		
MUD Co	Baroid	
MUD TYPE	Kcl-PHPA	

SOLIDS CONTROL	lpm	uf	hrs
DESILTER			
DESANDER			
MUD CLEANER			
CENTRIFUGE			
	1	2	3
SHAKERS	Thule	Thule	Thule
SCREENS	120/52	120/52	52/52
PUMPS	1	2	3
TYPE	A1700	A1700	A1700
STROKE(in)	12	12	12
LINER(in)	6	6	6
SPM			
LPM			
AV-DP(m/min)			
AV-DC(m/min)			
SPP(kPa/psi)			
SCR @ 40			
SCR @ 50			

FORMATION DATA	
DEPTH	
TRIP GAS (%)	
CONN. GAS (%)	
B'GRD GAS (u)	
PORE PRESS (SG)	
ECD (SG)	
LITHOLOGY	

DRILLS / BOPS	
LAST BOP DRILL	28-Oct
LAST FIRE DRILL	6-Oct
LAST MOB DRILL	28-Sep
LAST ABN. RIG DRILL	22-Oct
LAST BOP TEST	27-Oct
BOP TEST DUE	10-Nov

BIT DATA		
BIT No.		
SIZE(mm/in)		
TYPE		
IADC CODE		
SERIAL No.		
NOZZLES(32in)		
DEPTH IN (m)		
DEPTH OUT (m)		
DRILLED (m cum/dly)		
HOURS (cum/dly)		
GRADE		
AVGE ROP (m/hr)		
WOB (mt)		
RPM		
JET VEL (m/sec)		
HHP @ BIT		
BHA No.		BHA WEIGHT

BHA Profile :

WEATHER / RIG RESPONSE		
WIND SPEED(kts)	15-18	
DIRECTION(°)	70	
TEMP.	16-21	
BAR. PRESSURE(kPa)	1016	
BAR. RISE / FALL(kPa)	steady	
VISIBILITY(NM)	12	
WEATHER STATE	Fine	
SWELL / PER / DIR(m/sec/°)	.3 / 10 /90	
WAVES / PER / DIR(m/sec/°)	.3 / 1 / 70	
HEAVE	.2 / 10	
PITCH(°)	.2 / 4	
ROLL(°)	.2 / 6	
ANCHOR TENSION-MIN(MT)	190	
ANCHOR TENSION-MAX(MT)	270	
RISER TENSION	286	
VARIABLE DECK LOAD(MT)	1639	
		STRING WT

	HRS	CUM
1. MOVE RIG		8
2. RUN ANCHORS		12
3. DRILLING		53.25
4. TRIP	8.25	21.5
5. WIPER TRIP		4.5
6. SURVEY	0.25	1.5
7. CIRC./COND	1.25	7
8. HANDLE BHA		13.5
9. CASE/CEMENT		21.25
10. WELLHEAD		
11. BOPS		22.5
12. LOT		0.75
13. CORING		
14. LOGGING	7.5	7.5
15. REAM/WASH		6.75
16. FISH/STUCK		
17. LOSS CIRC		
18. KICK CONTROL		
19. SIDETRACK		
20. OTHER		1.75
21. REP. SURF		3.5
22. WELL TEST		
23. WO WEATHER		
24. WAIT - OTHER		
25. ABDN./SUSPEND	6.75	6.75
26. RIG SERVICE		0.5
27. SLIP/CUT LINE		
28. PULL ANCHORS		
29.ANCHOR INSP.		48
TOTAL (HRS)	24	240.5

DOWNHOLE TOOLS	SERIAL No.	ROT/REAM HRS
DRILLING JAR		
12 1/4 NBStab		
12 1/4 Stabilizer		
12 1/4 Stabilizer		
ANDERDRIFT		

DRILLING DATA	
DRAG - UP (mt)	2.5
DRAG - DOWN (mt)	2.5
TORQUE-On Bottom (amps)	4-18k ft/lbs torque
TORQUE-Off Bottom (amps)	2-3 k ft/lbs torque

AMITY OIL NL

DAILY DRILLING REPORT

WELL:	CUTTLEFISH #1	DATE:	29-Oct-99
PERMIT:	VIC / P40	REPORT #	11
RIG:	SEDCO 702	D.F.S.	7

FROM	TO	HOURS	
0:00	0:15	0.25	POOH from 93m to 28m with 8 1/4" drill collars.
0:15	0:30	0.25	Retreive totco survey.
0:30	1:15	0.75	POOH w/ BHA, Lay out bit , NBS, and Anderdrift.
1:15	1:45	0.50	Rig up Schlum. Wireline. Hold JHA.
1:45	6:30	4.75	Pick up Platform express tools, Run LOG #1. PEX - DSI - NGT.
6:30	8:15	1.75	Prepare tools, P/U LOG #2-FMS. RIH to 100m. Log cancelled-POOH-Lay down tools.
8:15	8:45	0.50	Rig down Schlum. Wireline.
8:45	10:45	2.00	M/U Stinger RIH w/ 5" drillpipe to 1226m.
10:45	11:45	1.00	Circulate and condition mud. Max gas units from bottoms up 3%.
11:45	12:00	0.25	POOH from 1226m to 1151m.
12:00	12:15	0.25	Spot 20 bbl hi-vis pill from 1151m.
12:15	13:45	1.50	Hold JSA, rig up cementing lines, pressure test to 2klbs, set Plug # 1 from 1110m to 990m. 278 sx. @ 15.8ppg
13:45	14:15	0.50	POOH from 1110m to 990m.
14:15	15:00	0.75	Set Plug # 2 from 990m to 800m. With 382 sx @ 15.8 ppg.
15:00	16:00	1.00	POOH from 990m to 795m.
16:00	16:45	0.75	Circulate B/U with inhibited mud, flush choke and kill lines.
16:45	18:00	1.25	Set Plug # 3 from 795m to 650m. With 347 sx @ 15.8 ppg.
18:00	18:45	0.75	POOH from 800m to 505m
18:45	19:00	0.25	Circulate bottoms up, flush choke and kill lines.
19:00	20:45	1.75	POOH from 505 laying down drill pipe.
20:45	24:00	3.25	Hold JSA, lay down excess 9 1/2 - 8 1/4 drill collars from derrick.
		24.00	

OPERATIONS TO 0600 HRS:	Finish laying out excess drill collars while waiting for surface cement samples to set up.
	Samples set at 02:00hrs. RIH with drillpipe, tag cement at 677m. POOH laying down drillpipe.
	Spot Hi-Vis from 191m to 150m, pooh to 150m, circ. To seawater, set plug #4 from 150m to 100m. 116sx@15.8
PROGRAMME NEXT 24 HRS:	POOH laying down D.P.Flush BOP, retreive wear bushings, unlatch BOP N/D riser and BOP.
	Cut casing.

BULK	GEL(sx)	BARITE(sx)	CEMENT(sx)	DRILLWATER(mt)	POT WATER(mt)	DIESEL FUEL(lt)	HELI FUEL(lt)
Rig/Challenger/Shogun	550	1473	150	419 / 640 / 150	161 / 225 /250	226 / 624 / 200	

PERSONNEL ON RIG		TRANSPORTATION			COSTS	A$
OPERATOR	3		NAME	LOCATION	DAILY WELL	268,973.00
DRILLING CONT.	34	WORKBOAT	P.CHALLENGER	Rig	CUMULATIVE WELL	3,647,612.00
SERVICE COMPS	18	WORKBOAT	P. SHOGUN	Geelong		
OTHER	15	STANDBY BOAT				
CATERING	9	HELICOPTER	1			
TOTAL	79	HELICOPTER				
SUPERVISOR(S)	Wally Westman, Len Kronstal				OIM	J J. Dibon

AMITY OIL NL
DAILY DRILLING REPORT

WELL:	CUTTLEFISH #1	DATE:	30-Oct-99
PERMIT:	VIC / P40	REPORT #	12
RIG:	SEDCO 702	D.F.S.	8

DEPTH 2400 Hrs:		STATUS @ 2400 Hrs:	Pulling Anchors with Pacific Challenger.				
TVD:		FORMATION:					
24 HR PROGRESS:		LAST CASING:		@		SHOE L.O.T.:	
HOLE SIZE:		WD (MSL):	47.7	RT - SEABED/MSL:	73.6	MAASP:	
SURVEYS:							

MUD PROPERTIES		ADDITIVES
DENSITY(SG)		
VISCOSITY(Secs)		
pH		
PV/YP(cp/lb/100ft2)		
GELS 10/10		
WL API(cc/30min)		
WL HTHP(cc/30min)		
CAKE(mm)		
SOLIDS %		
SAND %		
CHLORIDES(mg/l)		
KCL %		
MBT(lb/bbl)		
TEMP °C		
HOLE VOL(m3/bbl)		
SURF VOL(m3/bbl)		
LOSSES(m3/bbl/hr)		
MUD Co		
MUD TYPE		

SOLIDS CONTROL	lpm	uf	hrs
DESILTER			
DESANDER			
MUD CLEANER			
CENTRIFUGE			
	1	2	3
SHAKERS	Thule	Thule	Thule
SCREENS	120/52	120/52	52/52
PUMPS	1	2	3
TYPE	A1700	A1700	A1700
STROKE(in)	12	12	12
LINER(in)	6	6	6
SPM			
LPM			
AV-DP(m/min)			
AV-DC(m/min)			
SPP(kPa/psi)			
SCR @ 40			
SCR @ 50			

FORMATION DATA	
DEPTH	
TRIP GAS (%)	
CONN. GAS (%)	
B'GRD GAS (u)	
PORE PRESS (SG)	
ECD (SG)	
LITHOLOGY	

DRILLS / BOPS	
LAST BOP DRILL	
LAST FIRE DRILL	6-Oct
LAST MOB DRILL	28-Sep
LAST ABN. RIG DRILL	22-Oct
LAST BOP TEST	
BOP TEST DUE	

BIT DATA		
BIT No.		
SIZE(mm/in)		
TYPE		
IADC CODE		
SERIAL No.		
NOZZLES(32in)		
DEPTH IN (m)		
DEPTH OUT (m)		
DRILLED (m cum/dly)		
HOURS (cum/dly)		
GRADE		
AVGE ROP (m/hr)		
WOB (mt)		
RPM		
JET VEL (m/sec)		
HHP @ BIT		
BHA No.		BHA WEIGHT

BHA Profile :

WEATHER / RIG RESPONSE		
WIND SPEED(kts)	10	
DIRECTION(°)	350	
TEMP.	15-17	
BAR. PRESSURE(kPa)	1007	
BAR. RISE / FALL(kPa)	falling	
VISIBILITY(NM)	10	
WEATHER STATE	cloudy	
SWELL / PER / DIR(m/sec/°)	.5 / 10 / 100	
WAVES / PER / DIR(m/sec/°)	.2 / 1 / 350	
HEAVE	.2 / 10	
PITCH(°)	.2 / 4	
ROLL(°)	.2 / 4	
ANCHOR TENSION-MIN(MT)	70	
ANCHOR TENSION-MAX(MT)	270	
RISER TENSION	0	
VARIABLE DECK LOAD(MT)	1542	
		STRING WT

	HRS	CUM
1. MOVE RIG		8
2. RUN ANCHORS		12
3. DRILLING		53.25
4. TRIP	6.75	28.25
5. WIPER TRIP		4.5
6. SURVEY		1.5
7. CIRC./COND	2.25	9.25
8. HANDLE BHA		13.5
9. CASE/CEMENT		21.25
10. WELLHEAD		
11. BOPS	7.75	30.25
12. LOT		0.75
13. CORING		
14. LOGGING		7.5
15. REAM/WASH		6.75
16. FISH/STUCK		
17. LOSS CIRC		
18. KICK CONTROL		
19. SIDETRACK		
20. OTHER		1.75
21. REP. SURF		3.5
22. WELL TEST		
23. WO WEATHER		
24. WAIT - OTHER		
25. ABDN./SUSPEND	6.75	13.5
26. RIG SERVICE		0.5
27. SLIP/CUT LINE		
28. PULL ANCHORS	0.5	0.5
29.ANCHOR INSP.		48
TOTAL (HRS)	24	264.5

DOWNHOLE TOOLS	SERIAL No.	ROT/REAM HRS
DRILLING JAR		

DRILLING DATA	
DRAG - UP (mt)	
DRAG - DOWN (mt)	
TORQUE-On Bottom (amps)	
TORQUE-Off Bottom (amps)	

AMITY OIL NL

DAILY DRILLING REPORT

WELL:	CUTTLEFISH #1	DATE:	30-Oct-99
PERMIT:	VIC / P40	REPORT #	12
RIG:	SEDCO 702	D.F.S.	8

FROM	TO	HOURS	
0:00	1:15	1.25	Continue to lay down 8 1/4" drill collars and jars.
1:15	2:30	1.25	M/U cement stinger-RIH with 5" drillpipe to 612m. Break circ. & wash down from 612m. Tag cement @ 677m.
2:30	4:30	2.00	POOH from 677m to 191m , laying down drillpipe.
4:30	4:45	0.25	Break circ. And spot Hi-Vis pill at 191m.
4:45	5:00	0.25	POOH from 191m to 150m , laying down drillpipe.
5:00	5:30	0.50	Displace the hole to sea water.
5:30	5:45	0.25	Set cement plug #4 from 150m to 100m with 116sx class G cement @ 15.8 ppg.
5:45	6:00	0.25	POOH from 150m to 85m.
6:00	6:15	0.25	Reverse circulate @ 85m. --No contamination.
6:15	7:30	1.25	Pump through choke and kill lines, BOPs, function BOPs, Jet BOPs, circ. Riser Bottoms up.
7:30	8:00	0.50	POOH, laying down drillpipe.
8:00	8:30	0.50	RIH and retreive flex joint wear bushing.
8:30	9:15	0.75	RIH and retreive wellhead wear bushing.
9:15	10:30	1.25	Rig up to pull diverter--Hold JSA.
10:30	11:15	0.75	Pull Diverter and lay down same.
11:15	12:45	1.50	M/U landing joint, prepare to and disconnect BOPs from wellhead, hold JSA, R/D Rucker lines.
12:45	15:45	3.00	Hold JSA, Lay out slip joint, pull BOP.
15:45	17:00	1.25	BOP on beams, jet BOP with drill water, rack LMRP and BOP.
17:00	19:30	2.50	Make up MOST casing cutting tool.and RIH.
19:30	23:00	3.50	Cut casing.
23:00	23:15	0.25	Engage MOST tool and pull free.
23:15	23:30	0.25	PGB on Beams. Disengage MOST tool. Meanwhile, loading bulks to Pacific Challenger.
23:30	24:00	0.50	23:30hrs, pass #1 penant to Pacific Challenger.
		24.00	

OPERATIONS TO 0600 HRS: Continue pulling secondary Anchors, meanwhile break down the MOST tool, recover wellhead.

PROGRAMME NEXT 24 HRS: Continue pulling anchors, load Shogun when it arrives, release rig.

BULK	GEL(sx)	BARITE(sx)	CEMENT(sx)	DRILLWATER(mt)	POT WATER(mt)	DIESEL FUEL(lt)	HELI FUEL(lt)
Rig/Challenger/Shogun	0 / 600 / 0	0 / 1500 / 0	0	386 / 623 / 150	179 / 220 / 250	217 / 620 / 200	

PERSONNEL ON RIG		TRANSPORTATION			COSTS	A$
OPERATOR	2		NAME	LOCATION	DAILY WELL	289,995.00
DRILLING CONT.	34	WORKBOAT	P.CHALLENGER	Rig	CUMULATIVE WELL	3,937,067.00
SERVICE COMPS	11	WORKBOAT	P. SHOGUN	Geelong		
OTHER	15	STANDBY BOAT				
CATERING	9	HELICOPTER	1			
TOTAL	71	HELICOPTER				
SUPERVISOR(S)	Wally Westman, Len Kronstal				OIM	J.J. Dibon

AMITY OIL NL

DAILY DRILLING REPORT

WELL:	CUTTLEFISH #1	DATE:	31-Oct-99
PERMIT:	VIC / P40	REPORT #	13
RIG:	SEDCO 702	D.F.S.	9

DEPTH 2400 Hrs:		STATUS @ 2400 Hrs:	Wait on Weather to pull primary anchors.				
TVD:		FORMATION:					
24 HR PROGRESS:		LAST CASING:		@		SHOE L.O.T.:	
HOLE SIZE:		WD (MSL):	47.7	RT - SEABED/MSL:	73.6	MAASP:	
SURVEYS:							

MUD PROPERTIES		ADDITIVES
DENSITY(SG)		
VISCOSITY(Secs)		
pH		
PV/YP(cp/lb/100ft2)		
GELS 10/10		
WL API(cc/30min)		
WL HTHP(cc/30min)		
CAKE(mm)		
SOLIDS %		
SAND %		
CHLORIDES(mg/l)		
KCL %		
MBT(lb/bbl)		
TEMP °C		
HOLE VOL(m3/bbl)		
SURF VOL(m3/bbl)		
LOSSES(m3/bbl/hr)		
MUD Co		
MUD TYPE		

SOLIDS CONTROL	lpm	uf	hrs
DESILTER			
DESANDER			
MUD CLEANER			
CENTRIFUGE			
	1	2	3
SHAKERS	Thule	Thule	Thule
SCREENS			
PUMPS	1	2	3
TYPE	A1700	A1700	A1700
STROKE(in)	12	12	12
LINER(in)	6	6	6
SPM			
LPM			
AV-DP(m/min)			
AV-DC(m/min)			
SPP(kPa/psi)			
SCR @ 40			
SCR @ 50			

FORMATION DATA	
DEPTH	
TRIP GAS (%)	
CONN. GAS (%)	
B'GRD GAS (u)	
PORE PRESS (SG)	
ECD (SG)	
LITHOLOGY	

DRILLS / BOPS	
LAST BOP DRILL	
LAST FIRE DRILL	6-Oct
LAST MOB DRILL	28-Sep
LAST ABN. RIG DRILL	22-Oct
LAST BOP TEST	
BOP TEST DUE	

BIT DATA		
BIT No.		
SIZE(mm/in)		
TYPE		
IADC CODE		
SERIAL No.		
NOZZLES(32in)		
DEPTH IN (m)		
DEPTH OUT (m)		
DRILLED (m cum/dly)		
HOURS (cum/dly)		
GRADE		
AVGE ROP (m/hr)		
WOB (mt)		
RPM		
JET VEL (m/sec)		
HHP @ BIT		
BHA No.		BHA WEIGHT

BHA Profile :

WEATHER / RIG RESPONSE		
WIND SPEED(kts)	35-45	
DIRECTION(°)	260°	
TEMP.	14-15	
BAR. PRESSURE(kPa)	1007	
BAR. RISE / FALL(kPa)	0	
VISIBILITY(NM)	12	
WEATHER STATE	Gale	
SWELL / PER / DIR(m/sec/°)	3/9/230	
WAVES / PER / DIR(m/sec/°)	2/4/260	
HEAVE	.5/9	
PITCH(°)	.5/7	
ROLL(°)	.4/6	
ANCHOR TENSION-MIN(MT)	210	
ANCHOR TENSION-MAX(MT)	320	
RISER TENSION	0	
VARIABLE DECK LOAD(MT)	1407	
		STRING WT

	HRS	CUM
1. MOVE RIG		8
2. RUN ANCHORS		12
3. DRILLING		53.25
4. TRIP		28.25
5. WIPER TRIP		4.5
6. SURVEY		1.5
7. CIRC./COND		9.25
8. HANDLE BHA	3	16.5
9. CASE/CEMENT		21.25
10. WELLHEAD		
11. BOPS		30.25
12. LOT		0.75
13. CORING		
14. LOGGING		7.5
15. REAM/WASH		6.75
16. FISH/STUCK		
17. LOSS CIRC		
18. KICK CONTROL		
19. SIDETRACK		
20. OTHER	6.5	8.25
21. REP. SURF		3.5
22. WELL TEST		
23. WO WEATHER	8.5	8.5
24. WAIT - OTHER		
25. ABDN./SUSPEND		13.5
26. RIG SERVICE		0.5
27. SLIP/CUT LINE		
28. PULL ANCHORS	6	6.5
29.ANCHOR INSP.		48
TOTAL (HRS)	24	288.5

DOWNHOLE TOOLS	SERIAL No.	ROT/REAM HRS

DRILLING DATA	
DRAG - UP (mt)	
DRAG - DOWN (mt)	
TORQUE-On Bottom (amps)	
TORQUE-Off Bottom (amps)	

AMITY OIL NL
DAILY DRILLING REPORT

WELL:	CUTTLEFISH #1	DATE:	31-Oct-99
PERMIT:	VIC / P40	REPORT #	13
RIG:	SEDCO 702	D.F.S.	9

FROM	TO	HOURS	
0:00	6:00	6.00	Pacific Challenger pull breast anchors. Send to anchor.
6:00	9:00	3.00	L/d remaining Drill collars and HWDP. (Cutting string).
9:00	11:30	2.50	Remove roof over Geoservices shack and cut shack free. Complete rig down.
11:30	13:00	1.50	Rig down Tamboritha communications equipment.
13:00	15:30	2.50	Secure deckload.
			Shogun arrived at rig at 14:30 hrs. Seas too rough to offload.
15:30	24:00	8.50	Boats standing off due to high wind and sea.
			Continue with preparation of rig for ocean tow.
		24.00	

OPERATIONS TO 0600 HRS: Wind and sea moderating. Waiting for daylight to attempt offloading P.Shogun and proceeding with anchor handling.

PROGRAMME NEXT 24 HRS: Offload P.Shogun. Pull anchors. Load Shogun. Tow rig.

BULK	GEL(sx)	BARITE(sx)	CEMENT(sx)	DRILLWATER(mt)	POT WATER(mt)	DIESEL FUEL(lt)	HELI FUEL(lt)
Rig/Challenger/Shogun	0	0	0	400/623/230	167/215/150	213/611/333.8	0

PERSONNEL ON RIG		TRANSPORTATION	NAME	LOCATION	COSTS	A$
OPERATOR	2				DAILY WELL	205,660.00
DRILLING CONT.	33	WORKBOAT	P.CHALLENGER	Rig	CUMULATIVE WELL	4,143,267.00
SERVICE COMPS	0	WORKBOAT	P. SHOGUN	Rig		
OTHER	18	STANDBY BOAT				
CATERING	9	HELICOPTER	1			
TOTAL	62	HELICOPTER				
SUPERVISOR(S)	Wally Westman, Len Kronstal				OIM	J.J. Dibon

AMITY OIL NL

DAILY DRILLING REPORT

WELL:	CUTTLEFISH #1	DATE:	1-Nov-99
PERMIT:	VIC / P40	REPORT #	14
RIG:	SEDCO 702	D.F.S.	10

DEPTH 2400 Hrs:		STATUS @ 2400 Hrs:	Loading Pacific Challenger with Sedco Equiment				
TVD:		FORMATION:					
24 HR PROGRESS:		LAST CASING:		@		SHOE L.O.T.:	
HOLE SIZE:		WD (MSL):	47.7	RT - SEABED/MSL:	73.6	MAASP:	
SURVEYS:							

MUD PROPERTIES		ADDITIVES
DENSITY(SG)		
VISCOSITY(Secs)		
pH		
PV/YP(cp/lb/100ft2)		
GELS 10/10		
WL API(cc/30min)		
WL HTHP(cc/30min)		
CAKE(mm)		
SOLIDS %		
SAND %		
CHLORIDES(mg/l)		
KCL %		
MBT(lb/bbl)		
TEMP °C		
HOLE VOL(m3/bbl)		
SURF VOL(m3/bbl)		
LOSSES(m3/bbl/hr)		
MUD Co		
MUD TYPE		

SOLIDS CONTROL	lpm	uf	hrs
DESILTER			
DESANDER			
MUD CLEANER			
CENTRIFUGE			
	1	2	3
SHAKERS	Thule	Thule	Thule
SCREENS			
PUMPS	1	2	3
TYPE	A1700	A1700	A1700
STROKE(in)	12	12	12
LINER(in)	6	6	6
SPM			
LPM			
AV-DP(m/min)			
AV-DC(m/min)			
SPP(kPa/psi)			
SCR @ 40			
SCR @ 50			

FORMATION DATA	
DEPTH	
TRIP GAS (%)	
CONN. GAS (%)	
B'GRD GAS (u)	
PORE PRESS (SG)	
ECD (SG)	
LITHOLOGY	

DRILLS / BOPS	
LAST BOP DRILL	
LAST FIRE DRILL	6-Oct
LAST MOB DRILL	28-Sep
LAST ABN. RIG DRILL	22-Oct
LAST BOP TEST	
BOP TEST DUE	

BIT DATA		
BIT No.		
SIZE(mm/in)		
TYPE		
IADC CODE		
SERIAL No.		
NOZZLES(32in)		
DEPTH IN (m)		
DEPTH OUT (m)		
DRILLED (m cum/dly)		
HOURS (cum/dly)		
GRADE		
AVGE ROP (m/hr)		
WOB (mt)		
RPM		
JET VEL (m/sec)		
HHP @ BIT		
BHA No.		BHA WEIGHT

BHA Profile :

WEATHER / RIG RESPONSE		
WIND SPEED(kts)	35-45	
DIRECTION(°)	230°	
TEMP.	14-15	
BAR. PRESSURE(kPa)	1007	
BAR. RISE / FALL(kPa)	0	
VISIBILITY(NM)	12	
WEATHER STATE	Gale	
SWELL / PER / DIR(m/sec/°)	3/9/230	
WAVES / PER / DIR(m/sec/°)	2/4/260	
HEAVE	.5/9	
PITCH(°)	.5/7	
ROLL(°)	.4/6	
ANCHOR TENSION-MIN(MT)	210	
ANCHOR TENSION-MAX(MT)	320	
RISER TENSION	0	
VARIABLE DECK LOAD(MT)	1407	
		STRING WT

	HRS	CUM
1. MOVE RIG		8
2. RUN ANCHORS		12
3. DRILLING		53.25
4. TRIP		28.25
5. WIPER TRIP		4.5
6. SURVEY		1.5
7. CIRC./COND		9.25
8. HANDLE BHA		16.5
9. CASE/CEMENT		21.25
10. WELLHEAD		
11. BOPS		30.25
12. LOT		0.75
13. CORING		
14. LOGGING		7.5
15. REAM/WASH		6.75
16. FISH/STUCK		
17. LOSS CIRC		
18. KICK CONTROL		
19. SIDETRACK		
20. OTHER	7.75	16
21. REP. SURF		3.5
22. WELL TEST		
23. WO WEATHER	8.25	16.75
24. WAIT - OTHER		
25. ABDN./SUSPEND		13.5
26. RIG SERVICE		0.5
27. SLIP/CUT LINE		
28. PULL ANCHORS	8	14.5
29.ANCHOR INS?.		48
TOTAL (HRS)	24	312.5

DOWNHOLE TOOLS	SERIAL No.	ROT/REAM HRS

DRILLING DATA	
DRAG - UP (mt)	
DRAG - DOWN (mt)	
TORQUE-On Bottom (amps)	
TORQUE-Off Bottom (amps)	

AMITY OIL NL

DAILY DRILLING REPORT

WELL:	CUTTLEFISH #1	DATE:	1-Nov-99
PERMIT:	VIC / P40	REPORT #	14
RIG:	SEDCO 702	D.F.S.	10

FROM	TO	HOURS	
0:00	8:15	8.25	Wait on weather
8:15	9:15	1.00	Unload Pacific Shogun. Seas marginal but moderating.
9:15	11:00	1.75	Bring Pacific Challenger captain on board for pre-move meeting.
11:00	12:30	1.50	Shogun designated as tow boat. Transfer tow mate from Challenger to Shogun.
12:30	16:30	4.00	Boats prepare to handle anchors. Shogun lift No.3 anchor. Challenger lift No.7 anchor.
16:30	19:00	2.50	Rig extra pennant on fishplate. Shogun take tow bridle and goes on static tow.
19:00	20:30	1.50	Shogun holds towline taut. Challenger retrieves No.2 anchor.
20:30	23:00	2.50	Back load Amity equipment to Challenger.
23:00	0:00	1.00	Backload Sedco tubulars to Challenger.
			AGREED RIG RELEASE TIME: 1900 HRS 1st NOVEMBER, 1999
		24.00	

OPERATIONS TO 0600 HRS: Continued to back-load Sedco tubulars to the Pacific Challenger.

Rig picked up last anchor

PROGRAMME NEXT 24 HRS:

BULK	GEL(sx)	BARITE(sx)	CEMENT(sx)	DRILLWATER(mt)	POT WATER(mt)	DIESEL FUEL(lt)	HELI FUEL(lt)
Rig/Challenger/Shogun	0	0	0	429/470/230	149/210/140	196/599/324	0

PERSONNEL ON RIG		TRANSPORTATION			COSTS	A$
OPERATOR	2		NAME	LOCATION	DAILY WELL	353,675.00
DRILLING CONT.	33	WORKBOAT	P.CHALLENGER	Rig	CUMULATIVE WELL	4,496,942.00
SERVICE COMPS	0	WORKBOAT	P. SHOGUN	Rig		
OTHER	18	STANDBY BOAT				
CATERING	9	HELICOPTER				
TOTAL	62	HELICOPTER				
SUPERVISOR(S)	Wally Westman, Len Kronstal				OIM	J.J. Dibon

AMITY OIL NL

DAILY DRILLING REPORT

WELL:	CUTTLEFISH #1	**DATE:**	2-Nov-99
PERMIT:	VIC / P40	**REPORT #**	15
RIG:	SEDCO 702	**D.F.S.**	11

DEPTH 2400 Hrs:		STATUS @ 2400 Hrs:	Rig Under Tow.		
TVD:		FORMATION:			
24 HR PROGRESS:		LAST CASING:		@	SHOE L.O.T.:
HOLE SIZE:		**WD (MSL):**		RT - SEABED/MSL:	MAASP:
SURVEYS:					

MUD PROPERTIES		ADDITIVES
DENSITY(SG)		
VISCOSITY(Secs)		
pH		
PV/YP(cp/lb/100ft2)		
GELS 10/10		
WL API(cc/30min)		
WL HTHP(cc/30min)		
CAKE(mm)		
SOLIDS %		
SAND %		
CHLORIDES(mg/l)		
KCL %		
MBT(lb/bbl)		
TEMP °C		
HOLE VOL(m3/bbl)		
SURF VOL(m3/bbl)		
LOSSES(m3/bbl/hr)		
MUD Co		
MUD TYPE		

SOLIDS CONTROL			
	lpm	uf	hrs
DESILTER			
DESANDER			
MUD CLEANER			
CENTRIFUGE			
	1	2	3
SHAKERS	Thule	Thule	Thule
SCREENS			
PUMPS	1	2	3
TYPE	A1700	A1700	A1700
STROKE(in)	12	12	12
LINER(in)	6	6	6
SPM			
LPM			
AV-DP(m/min)			
AV-DC(m/min)			
SPP(kPa/psi)			
SCR @ 40			
SCR @ 50			

FORMATION DATA	
DEPTH	
TRIP GAS (%)	
CONN. GAS (%)	
B'GRD GAS (u)	
PORE PRESS (SG)	
ECD (SG)	
LITHOLOGY	

DRILLS / BOPS	
LAST BOP DRILL	
LAST FIRE DRILL	6-Oct
LAST MOB DRILL	28-Sep
LAST ABN. RIG DRILL	22-Oct
LAST BOP TEST	
BOP TEST DUE	

BIT DATA		
BIT No.		
SIZE(mm/in)		
TYPE		
IADC CODE		
SERIAL No.		
NOZZLES(32in)		
DEPTH IN (m)		
DEPTH OUT (m)		
DRILLED (m cum/dly)		
HOURS (cum/dly)		
GRADE		
AVGE ROP (m/hr)		
WOB (mt)		
RPM		
JET VEL (m/sec)		
HHP @ BIT		

WEATHER / RIG RESPONSE		
WIND SPEED(kts)	35-45	
DIRECTION(°)	260°	
TEMP.	14-15	
BAR. PRESSURE(kPa)	1007	
BAR. RISE / FALL(kPa)	0	
VISIBILITY(NM)	12	
WEATHER STATE	Gale	
SWELL / PER / DIR(m/sec/°)	3/9/230	
WAVES / PER / DIR(m/sec/°)	2/4/260	
HEAVE	.5/9	
PITCH(°)	.5/7	
ROLL(°)	.4/6	
ANCHOR TENSION-MIN(MT)	210	
ANCHOR TENSION-MAX(MT)	320	
RISER TENSION	0	
VARIABLE DECK LOAD(MT)	1407	

BHA No. | BHA WEIGHT | STRING WT

BHA Profile :

DOWNHOLE TOOLS	SERIAL No.	ROT/REAM HRS

DRILLING DATA	
DRAG - UP (mt)	
DRAG - DOWN (mt)	
TORQUE-On Bottom (amps)	
TORQUE-Off Bottom (amps)	

	HRS	CUM
1. MOVE RIG		8
2. RUN ANCHORS		12
3. DRILLING		53.25
4. TRIP		28.25
5. WIPER TRIP		4.5
6. SURVEY		1.5
7. CIRC./COND		9.25
8. HANDLE BHA		16.5
9. CASE/CEMENT		21.25
10. WELLHEAD		
11. BOPS		30.25
12. LOT		0.75
13. CORING		
14. LOGGING		7.5
15. REAM/WASH		6.75
16. FISH/STUCK		
17. LOSS CIRC		
18. KICK CONTROL		
19. SIDETRACK		
20. OTHER	2.5	18.5
21. REP. SURF		3.5
22. WELL TEST		
23. WO WEATHER		16.75
24. WAIT - OTHER		
25. ABDN./SUSPEND		13.5
26. RIG SERVICE		0.5
27. SLIP/CUT LINE		
28. PULL ANCHORS		14.5
29.ANCHOR INSP.		48
TOTAL (HRS)	2.5	315

AMITY OIL NL

DAILY DRILLING REPORT

WELL:	CUTTLEFISH #1	DATE:	2-Nov-99
PERMIT:	VIC / P40	REPORT #	15
RIG:	SEDCO 702	D.F.S.	11

FROM	TO	HOURS	
0:00	1:30	1.50	Load Pacific Challenger with Sedco Tubulars.
1:30	2:30	1.00	Rig picks up last anchor.
		2.50	

OPERATIONS TO 0600 HRS:

PROGRAMME NEXT 24 HRS:

BULK	GEL(sx)	BARITE(sx)	CEMENT(sx)	DRILLWATER(mt)	POT WATER(mt)	DIESEL FUEL(lt)	HELI FUEL(lt)
Rig/Challenger/Shogun	0	0	0	429 / 470 / 230	149 / 210 / 140	196 / 599 / 324	0

PERSONNEL ON RIG		TRANSPORTATION	NAME	LOCATION	COSTS	
OPERATOR	2		NAME	LOCATION	DAILY WELL	
DRILLING CONT.	33	WORKBOAT	P.CHALLENGER	Rig	CUMULATIVE WELL	As Report No.14
SERVICE COMPS	0	WORKBOAT	P. SHOGUN	Rig		
OTHER	18	STANDBY BOAT				
CATERING	9	HELICOPTER	0			
TOTAL	62	HELICOPTER				
SUPERVISOR(S)	Wally Westman, Len Kronstal				OIM	J.J. Dibon

APPENDIX 2b

DAILY GEOLOGICAL REPORTS

AMITY OIL
GEOLOGICAL REPORT

WELL: **Cuttlefish 1**				DATE : 24th October, 1999	
REPORT NUMBER: 1	DAYS FROM SPUD: 1			6am OPS: Drill ahead 256m.	
REPORT PERIOD: 00:00hrs, 23/10	To: 24:00 hrs, 23/10				
MEASURED DEPTH: 118m	PROGRESS (MD): 45m			FORMATION: Seaspray Gp	

GENERAL DATA:	BASIN: Gippsland	HOLE SIZE:	HOLE T.D.:	CASING SIZE:	SHOE DEPTH:
	PERMIT: Vic/P40	36"	118m	30"	118m
	MUDLINE: 73.6m	17½"		13-3/8"	
	RT to MSL: 25.9m	12¼"			

FORMATION TOPS:	Seaspray Group: 73.6mMDRT -47.7mSS
OPERATIONS:	M/U 30" conductor in moonpool.. Spud in at 0515 hours and drill ahead to 118m. Drop Totco and wiper trip to 90m. Displace hole to gel mud and POOH. Run 30/20" conductor and cement same. POOH and L/D running tool. Hold emergency winch off drill for rig. RIH with 17½". Tag cement at 112m. Drill cement to 118m. **6:00 Update:** Drill ahead 17½" from 118 to 256m.

DEPTH INTERVAL	LITHOLOGY
73.6 - 118m	Returns to the seafloor.

GAS DATA:	Total Gas (Units)	C1 (ppm)	C2 (ppm)	C3 (ppm)	iC4 (ppm)	nC4 (ppm)	C5 (ppm)

SURVEY DATA:	M.Depth (m)	T.V.Depth (m)	Inclination (deg)	Azimuth (deg)	N/S (m)	E/W (m)	Vertical Section (m)
	115	115	½°				

MUD DATA:	Weight	Funnel Visc. (sec)	Fluid Loss (api)	Chlorides (mg/l)	pH	Remarks
	8.6	213	N/A	N/A	9.0	Spud mud

COMMENTS:	
24 HOUR FORWARD PROGRAM:	Drill 17½" hole to 13 3/8" casing point.
AMITY GEOSTAFF:	Wellsite Geologist – Greg Clota

AMITY OIL
GEOLOGICAL REPORT

WELL: **Cuttlefish 1**				DATE : 25th October, 1999	
REPORT NUMBER: 2	DAYS FROM SPUD: 2			6am OPS: Drilling 17½" hole	
REPORT PERIOD: 00:00hrs, 24/10	To: 24:00 hrs, 24/10				
MEASURED DEPTH: 637m	PROGRESS (MD): 519m			FORMATION: Seaspray Gp	
GENERAL DATA:	BASIN: Gippsland	HOLE SIZE:	HOLE T.D.:	CASING SIZE:	SHOE DEPTH:
	PERMIT: Vic/P40	36"	118m	30"	118m
	MUDLINE: 73.6m	17½"		13-3/8"	
	RT to MSL: 25.9m	12¼"			
FORMATION TOPS:	Seaspray Group: 73.6mMDRT -47.7mSS				
OPERATIONS:	Drill ahead 17½" hole from 118m to 637m. Take Anderdrift surveys every 100m.				
	6:00 Update: Drill ahead 17½" from 637 to 745m.				

DEPTH INTERVAL	LITHOLOGY
118 - 637m	Returns to the seafloor.

GAS DATA:	Total Gas (Units)	C1 (ppm)	C2 (ppm)	C3 (ppm)	iC4 (ppm)	nC4 (ppm)	C5 (ppm)

SURVEY DATA:	M.Depth (m)	T.V.Depth (m)	Inclination (deg)	Azimuth (deg)	N/S (m)	E/W (m)	Vertical Section (m)
	259	259	½°				
	346	346	½°				
	433	433	½°				
	520	520	½°				
	607	607	½°				

MUD DATA:	Weight	Funnel Visc. (sec)	Fluid Loss (api)	Chlorides (mg/l)	pH	Remarks
	8.6	132	N/A	N/A	11.6	Flocculated Gel

COMMENTS:	
24 HOUR FORWARD PROGRAM:	Drill 17½" hole to 13 3/8" casing point. Run and cement casing. Run BOP/Riser.
AMITY GEOSTAFF:	Wellsite Geologist – Greg Clota

AMITY OIL
GEOLOGICAL REPORT

WELL: **Cuttlefish 1**				DATE : 26th October, 1999	
REPORT NUMBER: 3	DAYS FROM SPUD: 3			6am OPS: R/D Cement head	
REPORT PERIOD: 00:00hrs, 25/10	To: 24:00 hrs, 25/10				
MEASURED DEPTH: 637m	PROGRESS (MD): m			FORMATION: Seaspray Gp	
GENERAL DATA:	BASIN: Gippsland	HOLE SIZE:	HOLE T.D.:	CASING SIZE:	SHOE DEPTH:
	PERMIT: Vic/P40	36"	118m	30"	118m
	MUDLINE: 73.6m	17½"	755m	13-3/8"	749.3m
	RT to MSL: 25.9m	12¼"			

FORMATION TOPS:	Seaspray Group: 73.6mMDRT -47.7mSS
OPERATIONS:	Drill 17½" to casing point at 755m. Circulate hole and pump Hi-Vis sweep. Drop Totco. POOH to 118m. Work tight spots at 716m, 677m and 574-570m. Retrieve Totco. RIH. Work tight spot at 716m and wash to 755m. Circlate hole and displace to floccuated gel mud. POOH working tight spots 755-716m. Jet PGB. R/U and run 13 3/8" casing. **6:00 Update:** Land 13 3/8" casing (shoe set @ 749.3m). Circulate casing and cement same.

DEPTH INTERVAL	LITHOLOGY
637 - 755m	Returns to the seafloor.

GAS DATA:	Total Gas (Units)	C1 (ppm)	C2 (ppm)	C3 (ppm)	iC4 (ppm)	nC4 (ppm)	C5 (ppm)

SURVEY DATA:	M.Depth (m)	T.V.Depth (m)	Inclination (deg)	Azimuth (deg)	N/S (m)	E/W (m)	Vertical Section (m)
	693	693	½°				
	719	719	½°				

MUD DATA:	Weight	Funnel Visc. (sec)	Fluid Loss (api)	Chlorides (mg/l)	pH	Remarks
	8.6	153	N/A	N/A	11.0	Flocculated Gel

COMMENTS:	Survey at 719m was Totco which agreed with Anderdrift surveys
24 HOUR FORWARD PROGRAM:	Run and pressure test BOP. M/U 12¼" BHA and RIH. Drill ahead.
AMITY GEOSTAFF:	Wellsite Geologist – Greg Clota

AMITY OIL
GEOLOGICAL REPORT

WELL: **Cuttlefish 1**				DATE : 27th October, 1999	
REPORT NUMBER: 4	DAYS FROM SPUD: 4			6am OPS: Testing BOP.	
REPORT PERIOD: 00:00hrs, 26/10	To: 24:00 hrs, 26/10				
MEASURED DEPTH: 755m	PROGRESS (MD): 0m			FORMATION: Seaspray Gp	
GENERAL DATA:	BASIN: Gippsland	HOLE SIZE:	HOLE T.D.:	CASING SIZE:	SHOE DEPTH:
	PERMIT: Vic/P40	36"	118m	30"	118m
	MUDLINE: 73.6m	17½"	755m	13-3/8"	749.3m
	RT to MSL: 25.9m	12¼"			
FORMATION TOPS:	Seaspray Group: 73.6mMDRT -47.7mSS				
OPERATIONS:	M/U 18 ¾" wellhead jnt. RIH with 13 3/8" casing on landing string and in 30" housing and latch. R/U cement head and cement 13 3/8" casing with shoe set at 749.3m. Plug bumped with 2000psi. POOH landing string. R/U to run BOP. Function test BOP in moonpool. Trouble shoot lower outer kill valve (would not open). Pressure test choke and kill lines. Run BOP and latch. **6:00 Update:** Install diverter. RIH with test plug and test BOP				
DEPTH INTERVAL	LITHOLOGY				
755m	No new formation drilled.				

GAS DATA:	Total Gas (Units)	C1 (ppm)	C2 (ppm)	C3 (ppm)	iC4 (ppm)	nC4 (ppm)	C5 (ppm)

SURVEY DATA:	M.Depth (m)	T.V.Depth (m)	Inclination (deg)	Azimuth (deg)	N/S (m)	E/W (m)	Vertical Section (m)
	719	719	½°				

MUD DATA:	Weight	Funnel Visc. (sec)	Fluid Loss (api)	Chlorides (mg/l)	pH	Remarks
	9.3	63	6.0	34000	8.5	KCl/PHPA/POLYMER

COMMENTS:	
24 HOUR FORWARD PROGRAM:	Finish BOP test. M/U 12 ¼" BHA. RIH drill out and perform LOT. Drill ahead 12 ¼" hole.
AMITY GEOSTAFF:	Wellsite Geologist – Greg Clota

AMITY OIL
GEOLOGICAL REPORT

WELL: **Cuttlefish 1**				DATE : 28th October, 1999	
REPORT NUMBER: 5	DAYS FROM SPUD: 5			6am OPS: Drilling 12 ¼" hole.	
REPORT PERIOD: 00:00hrs, 27/10	To: 24:00 hrs, 27/10				
MEASURED DEPTH: 798m	PROGRESS (MD): 43m			FORMATION: Seaspray Gp	

GENERAL DATA:	BASIN: Gippsland	HOLE SIZE:	HOLE T.D.:	CASING SIZE:	SHOE DEPTH:
	PERMIT: Vic/P40	36"	118m	30"	118m
	MUDLINE: 73.6m	17½"	755m	13-3/8"	749.3m
	RT to MSL: 25.9m	12¼"			

FORMATION TOPS:	Seaspray Group: 73.6mMDRT -47.7mSS Lakes Entrance Fm: 790mMDRT –764.1mSS (39.1m ↓)
OPERATIONS:	Install diverter. RIH with test plug and test BOP. POOH test plug. Run wear bushing. M/U 12 ¼" Geodiamond S91HPX PDC bit and BHA. RIH. Tag TOC at 733m. Drill out float and shoe track to 749m. Clean rat hole to 755m. Displace seawater to KCl/PHPA/Polymer mud. Drill ahead 755-758m. Circulate and condition mud. Perform PIT – EMW 12.14ppg (Jug test). Drill ahead 758-798m. **6:00 Update:** Drill ahead 12 ¼" hole 798-952m Top Latrobe 839mMDRT –813.1mSS (28.1m↓)

DEPTH INTERVAL	LITHOLOGY
755-790m	CLAYSTONE, medium light to light grey, moderate to locally very calcareous grades to calcareous claystone, trace pelletal glauconite, common fossil fragments, trace discoidal forams, trace coralline fragments, trace spicules, trace light brown cryptocrystalline dolomitic inclusions, trace disseminated/acicular pyrite, soft, occasionally hard recrystallized calcite laminae, massive. (ROP 1-33m/hr, av 20m/hr)
790-798m	CLAYSTONE, medium grey to medium dark grey, slightly calcareous, slightly silty in part, common fossil fragments, locally hard cryptocrystalline calcareous laminae with acicular pyrite inclusions, trace nodular pyrite, trace pelletal/microglauconite, soft to slightly dispersive, hard in part, massive to amorphous. (ROP 13-43m/hr, av 25m/hr)

GAS DATA:	Total Gas (Units)	C1 (ppm)	C2 (ppm)	C3 (ppm)	iC4 (ppm)	nC4 (ppm)	C5 (ppm)
755-798m	5 (BG)	950	-	-	-	-	-
792-793m	11 (Peak)	1475	-	-	-	-	-

SURVEY DATA:	M.Depth (m)	T.V.Depth (m)	Inclination (deg)	Azimuth (deg)	N/S (m)	E/W (m)	Vertical Section (m)
	777	777	½°				

MUD DATA:	Weight	Funnel Visc. (sec)	Fluid Loss (api)	Chlorides (mg/l)	pH	Remarks
	9.3	45	5.8	36000	9.5	KCl/PHPA/POLYMER

COMMENTS:	Lakes Entrance Fm picked on Claystone and ROP change.
24 HOUR FORWARD PROGRAM:	Drill ahead 12 ¼" hole.
AMITY GEOSTAFF:	Wellsite Geologist – Greg Clota

AMITY OIL
GEOLOGICAL REPORT

WELL: **Cuttlefish 1**				DATE : 29th October, 1999	
REPORT NUMBER: 6	DAYS FROM SPUD: 6			6am OPS: Running E-logs.	
REPORT PERIOD: 00:00hrs, 28/10	To: 24:00 hrs, 28/10				
MEASURED DEPTH: 1226m	PROGRESS (MD): 428m			FORMATION: Strzelecki Gp	
GENERAL DATA:	BASIN: Gippsland	HOLE SIZE:	HOLE T.D.:	CASING SIZE:	SHOE DEPTH:
	PERMIT: Vic/P40	36"	118m	30"	118m
	MUDLINE: 73.6m	17½"	755m	13-3/8"	749.3m
	RT to MSL: 25.9m	12¼"	1226m		

FORMATION TOPS:	Seaspray Group: 73.6mMDRT -47.7mSS Lakes Entrance Fm: 792mMDRT –766.1mSS (41.1m ↓) Gurnard: 839mMDRT –813.1mSS (28.1m↓) Coarse Clastics: 847mMDRT –821.1mSS Golden Beach: 988mMDRT –962.1mSS (32.1m↓)? Strzelecki Gp: 1108mMDRT –1082.1mSS (62.1m↓)
OPERATIONS:	Drill ahead 12 ¼" hole 798-1226m. Perform Wiper Trip to casing shoe. POOH **6:00 Update:** Continue POOH. R/U loggers Run #1 PEX(HALS)-DSI-NGT. R/D Run#1

DEPTH INTERVAL	LITHOLOGY
798-839m	CLAYSTONE, light grey, light to medium grey, locally very calcareous grades to calcareous claystone, trace pelletal glauconite, trace nodular pyrite, occasionally light orange brown dolomitic inclusions, marly texture, soft to slightly dispersive, massive to amorphous. (ROP 11-42m/hr Av 35m/hr)
839-845m	SILTSTONE, dark yellow brown, brown grey, very argillaceous grades to silty claystone, locally common limonitic staining, common to abundant pelletal glauconite, trace very coarse milky quartz float, trace nodular pyrite, occasionally very coarse limonitic stained quartz, soft to dispersive, massive to amorphous.
845-1065m	CLAYSTONE, as above. (ROP 17-34m/hr Av 25m/hr) SANDSTONE, clear to translucent, frosted, fine to predominantly medium to very, angular to subangular, poor sorting, locally common argillaceous/silty matrix, trace pelletal glauconite, common nodular pyrite, common very coarse fractured milky quartz, disaggregated, good to very good porosity, no fluorescence. SILTSTONE, moderate brown, brown grey, very argillaceous, locally grades to silty claystone, slightly arenaceous in part, common muscovite, trace disseminated pyrite, common carbonaceous fragments, mottled texture, soft to dispersive, massive to amorphous. COAL, brown black, lignitic, argillaceous, dull lustre, earthy, brittle, blocky.
1065-1075m	(ROP 7-130m/hr Av 40m/hr) SANDSTONE, light grey, clear to translucent, very fine to fine, subangular, good sorting, occasionally weak calcareous cement, trace kaolinitic/silty matrix, trace coarse quartz float, occasionally dark rock fragments, trace glauconite, friable to predominantly disaggregated, poor to fair porosity, no fluorescence. SILTSTONE, predominantly as above, becomes brown grey, slightly arenaceous. (ROP 11-40m/hr Av 25m/hr)

1075-1226m	SANDSTONE, light grey, light grey green, occasionally clear to translucent, very fine to fine, moderate calcareous cement, common kaolinitic/silty matrix, common red lithic fragments, common glauconite/chlorite, firm, occasionally hard aggregates, tight, no fluorescence. SILTSTONE, Moderate brown, dark yellow brown, very argillaceous, locally carbonaceous laminae grades to carbonaceous shale in part, micromicaceous, mottled texture in part, soft, massive to occasionally subfissile. CLAYSTONE, brown grey, medium light grey, micromicaceous, trace carbonaceous specks, waxy texture, homogeneous, firm, blocky. (ROP 2-60m/hr Av 25m/hr)						
GAS DATA:	Total Gas (Units)	C1 (ppm)	C2 (ppm)	C3 (ppm)	iC4 (ppm)	nC4 (ppm)	C5 (ppm)
798-845m	8 (BG)	1500	-	-	-	-	-
845-1075m	20(BG)	5000	15	Trace	-	-	-
850m	140(Peak)	23050	89	1	-	-	-
901m	185(Peak)	24784	155	5	-	-	-
1075-1226m	8(BG)	1900	1900	Trace	-	-	-
1226	225	41501	167	8	-	-	-
SURVEY DATA:	M.Depth (m)	T.V.Depth (m)	Inclination (deg)	Azimuth (deg)	N/S (m)	E/W (m)	Vertical Section (m)
	896	896	1/2°				
	1012	1012	1/2°				
	1128	1128	1°				
	1223 Totco	1223 Totco	1/4°				
MUD DATA:	Weight	Funnel Visc. (sec)	Fluid Loss (api)	Chlorides (mg/l)	pH	Remarks	
	9.6	49	5.3	33500	8.8	KCl/PHPA/POLYMER	
COMMENTS:	Gas peaks associated with coals at 850m and 901m.						
24 HOUR FORWARD PROGRAM:	Cont logging.						
AMITY GEOSTAFF:	Wellsite Geologist – Greg Clota						

AMITY OIL
GEOLOGICAL REPORT

WELL: **Cuttlefish 1**				DATE : 30th October, 1999	
REPORT NUMBER: 7	DAYS FROM SPUD: 7			6am OPS: L/D drillpipe	
REPORT PERIOD: 00:00hrs, 29/10	To: 24:00 hrs, 29/10				
MEASURED DEPTH: 1226m	PROGRESS (MD): 0m			FORMATION: Strzelecki Gp	

GENERAL DATA:	BASIN: Gippsland	HOLE SIZE:	HOLE T.D.:	CASING SIZE:	SHOE DEPTH:
	PERMIT: Vic/P40	36"	118m	30"	118m
	MUDLINE: 73.6m	17½"	755m	13-3/8"	749.3m
	RT to MSL: 25.9m	12¼"	1226m		

FORMATION TOPS:	Seaspray Group: 73.6mMDRT -47.7mSS Lakes Entrance Fm: 792mMDRT –766.1mSS (41.1m ↓) Gurnard: 839mMDRT –813.1mSS (28.1m↓) Coarse Clastics: 847mMDRT –821.1mSS Golden Beach: 988mMDRT –962.1mSS (32.1m↓)? Strzelecki Gp: 1108mMDRT –1082.1mSS (62.1m↓)
OPERATIONS:	Continue POOH. R/U loggers Run #1 PEX(HALS)-DSI-NGT. R/U Run #2 FMS-GR. RIH to 100m. Cancel further logging. POOH Run #2 and R/D loggers. M/U cement stinger and RIH. Circulate hole at 1226m. Pull back to 1151m . Pump Plug #1 1110-990m. Pull back for Plug #2 990-795m. Pull back to 795m and circulate hole clean. Pull back and pump Plug #3 800-650m. Pull back to 505m and circulate hole clean. **6:00 Update:** POOH laying down excess drill pipe. RIH and tag Plug #3 at 677m. POOH and pump Plug #4 150-100m.

DEPTH INTERVAL	LITHOLOGY
1226m	

GAS DATA:	Total Gas (Units)	C1 (ppm)	C2 (ppm)	C3 (ppm)	iC4 (ppm)	nC4 (ppm)	C5 (ppm)
1226m	38	7522	22	-	-	-	-

SURVEY DATA:	M.Depth (m)	T.V.Depth (m)	Inclination (deg)	Azimuth (deg)	N/S (m)	E/W (m)	Vertical Section (m)

MUD DATA:	Weight	Funnel Visc. (sec)	Fluid Loss (api)	Chlorides (mg/l)	pH	Remarks
	9.6	50	5.8	33000	8.5	KCl/PHPA/POLYMER

COMMENTS:	
24 HOUR FORWARD PROGRAM:	Complete laying down drillpipe and BHA. Retrieve wear bushing. Pull BOP. Cut wellhead. Pull anchors.
AMITY GEOSTAFF:	Wellsite Geologist – Greg Clota

APPENDIX 3

WELLSITE LITHOLOGY SAMPLE DESCRIPTION

APPENDIX 3
WELLSITE LITHOLOGY SAMPLE DESCRIPTION

Depth	%	Lithology/Show Descriptions	Comments
		Returns to Mudline from 76m to 755m	
755.0 – 760.0	100	CLAYSTONE, medium dark grey, moderately to locally very calcareous, slightly silty in part, trace pelletal glauconite, trace disseminated pyrite, trace light brown cryptocrystalline dolomitic inclusions, trace forams, trace spicules, soft, massive to amorphous.	
760.0 – 765.0	100	CLAYSTONE, predominantly as above, trace light brown shelly/fossil fragments, trace hard cryptocrystalline calcite with acicular pyrite.	
765.0 – 770.0	100	CLAYSTONE, medium light to light grey, moderate to locally very calcareous grades to calcareous claystone, trace pelletal glauconite, common fossil fragments, trace discoidal forams, trace coralline fragments, trace spicules, trace light brown cryptocrystalline dolomitic inclusions, trace disseminated/acicular pyrite, soft, occasionally hard recrystallized calcite laminae, massive.	
770.0 – 775.0	100	CLAYSTONE, medium to medium dark grey, slightly to moderately calcareous, slightly silty in part, trace Fe stained medium quartz, trace acicular pyrite, locally common cryptocrystalline calcite laminae, trace light brown hard dolomitic inclusions, common fossil fragments, soft, massive.	
775.0 – 780.0	100	CLAYSTONE, medium dark to olive grey, moderately calcareous, trace pelletal glauconite, trace nodular pyrite, trace fossil fragments, soft to slightly dispersive, massive to amorphous.	
780.0 – 785.0	100	CLAYSTONE, predominantly as above, becomes light to medium grey in part, trace light orange brown dolomitic inclusions.	
785.0 – 790.0	100	CLAYSTONE, medium to medium dark grey, brown grey, slightly to moderate calcareous, occasionally light grey moderately calcareous laminae grades to calcareous claystone, trace pelletal glauconite, trace fossil fragments, trace nodular pyrite, occasionally light grey fine grained calcarenite inclusions, trace light orange brown dolomitic inclusions, soft, occasionally hard dolomitic fragments, massive.	

790.0 – 795.0	100	CLAYSTONE, medium grey to medium dark grey, slightly calcareous, slightly silty in part, common fossil fragments, locally hard cryptocrystalline calcareous laminae with acicular pyrite inclusions, trace nodular pyrite, trace pelletal/microglauconite, soft to slightly dispersive, hard in part, massive to amorphous.	Lakes Entrance Fm 790m
795.0 – 800.0	100	CLAYSTONE, light to medium grey, brown grey in part, slightly to moderate calcareous, trace glauconite, trace disseminated pyrite, marly texture in part, soft to slightly dispersive, massive to amorphous.	
800.0 – 805.0	100	CLAYSTONE, as above.	
805.0 – 810.0	100	CLAYSTONE, light grey, light to medium grey, locally very calcareous grades to calcareous claystone, trace pelletal glauconite, trace nodular pyrite, occasionally light orange brown dolomitic inclusions, marly texture, soft to slightly dispersive, massive to amorphous.	
810.0 – 815.0	100	CLAYSTONE, predominantly as above, common cryptocrystalline dolomitic inclusions.	
815.0 – 820.0	100	CLAYSTONE, light to medium grey, brown grey in part, slightly to locally moderately calcareous, trace nodular pyrite, trace glauconite, trace fibrous calcite inclusions, occasionally light orange brown dolomitic inclusions, trace fossil fragments, marly texture, soft, massive to blocky in part.	
820.0 – 825.0	100	CLAYSTONE, predominantly as above, trace pyritized forams.	
825.0 – 830.0	100	CLAYSTONE, as above.	
830.0 – 835.0	100	CLAYSTONE, medium to medium dark grey, olive grey, slightly to moderately calcareous, slightly silty, trace pelletal glauconite, trace spherical forams, trace dolomitic fossil fragments, soft to firm, massive.	
835.0 – 840.0	80	SILTSTONE, dark yellow brown, brown grey, very argillaceous grades to silty claystone, locally common limonitic staining, common to abundant pelletal glauconite, trace very coarse milky quartz float, trace nodular pyrite, occasionally very coarse limonitic stained quartz, soft to dispersive, massive to amorphous.	Top Latrobe *Gurnard* 839m
	20	CLAYSTONE, as above.	
840.0 – 845.0	90	SILTSTONE, predominantly as above, trace dark brown hard cryptocrystalline dolocalacreous inclusions.	
	10	CLAYSTONE, as above.	

845.0 – 850.0	10	SANDSTONE, clear to translucent, frosted, medium to coarse, subangular to subrounded, poor sorting, trace pyrite cement, predominantly clean, common nodular pyrite, trace Fe stained quartz, disaggregated, good porosity, no fluorescence.	Top Coarse Clastics 845m
	10	SILTSTONE, as above.	
	50	CARBONACEOUS SHALE, micromicaceous, trace lithic fragments, common coaly laminae/inclusions grades to coal in part, common disseminated pyrite, firm to moderately hard, subfissile to fissile.	
	30	COAL, brown black, argillaceous, lignitic, dull lustre, earthy texture, brittle, blocky.	
850.0 – 855.0	85	SANDSTONE, moderate brown, clear to translucent in part, medium to coarse, occasionally very coarse, angular to subangular, poor sorting, predominantly clean, common brown carbonaceous material adhering to quartz grains, trace very coarse milky quartz float, trace nodular pyrite, rare quartz overgrowths, disaggregated, very good porosity, no fluorescence.	
	10	SILTSTONE, predominantly as above, becomes moderate brown, common lithic fragments, mottled texture in part, firm to slightly disseminated, massive to amorphous.	
	5	COAL, as above.	
855.0 – 860.0	100	SANDSTONE, clear to translucent, moderate brown in part, coarse to very coarse, angular to subangular, poor sorting, trace kaolinitic matrix/inclusions, trace very coarse nodular pyrite, trace pelletal glauconite, disaggregated, very good porosity, no fluorescence.	
860.0 – 865.0	100	SANDSTONE, clear to translucent, frosted, medium to predominantly very coarse to granular, angular to subangular, poor sorting, trace kaolinitic matrix, trace nodular pyrite, trace very coarse smoky quartz, trace coal fragments, disaggregated, very good to excellent porosity, no fluorescence.	
865.0 – 870.0	100	SANDSTONE, as above.	
870.0 – 875.0	100	SANDSTONE, predominantly as above, becomes coarse to very coarse, trace kaolinitic matrix, good porosity, no fluorescence.	
875.0 – 880.0	100	SANDSTONE, as above.	
880.0 – 885.0	100	SANDSTONE, clear to translucent, frosted, fine to predominantly coarse to very coarse, angular to subrounded, poor sorting, locally trace argillaceous/silty matrix, trace muscovite, common very coarse fractured milky quartz, trace pelletal glauconite, trace quartz overgrowths, disaggregated, good to very good porosity, no fluorescence.	
885.0 – 890.0	100	SANDSTONE, predominantly as above, trace coal fragments.	
890.0 – 895.0	100	SANDSTONE, as above.	

895.0 – 900.0	70	SANDSTONE, clear to translucent, frosted, fine to predominantly medium to very, angular to subangular, poor sorting, locally common argillaceous/silty matrix, trace pelletal glauconite, common nodular pyrite, common very coarse fractured milky quartz, disaggregated, good to very good porosity, no
	20	fluorescence.
		SILTSTONE, moderate brown, brown grey, very argillaceous, locally grades to silty claystone, slightly arenaceous in part, common muscovite, trace disseminated pyrite, common carbonaceous fragments,
	10	mottled texture, soft to dispersive, massive to amorphous.
		COAL, brown black, lignitic, argillaceous, dull lustre, earthy, brittle, blocky.
900.0 – 905.0	60	SANDSTONE, clear to translucent, frosted, coarse to very coarse, granular in part, angular to subangular, moderate sorting, clean, trace nodular pyrite, trace coal fragments, disaggregated, very good porosity, no
	40	fluorescence.
		CLAYSTONE, light to medium light grey, slightly silty, trace disseminated pyrite and pyrite microlaminae, trace lithic fragments, soft to sticky, dispersive in part, massive to amorphous.
905.0 – 910.0	60	SANDSTONE, as above.
	40	CLAYSTONE, as above.
910.0 – 915.0	30	SANDSTONE, clear to translucent, frosted, medium to coarse, angular to subangular, poor sorting, common kaolinitic matrix, trace nodular pyrite, common coarse milky quartz, poor porosity, no fluorescence.
	40	CLAYSTONE, as above.
	30	VOLCANICS (Tuffaceous), pale blue, light blue green, occasionally green grey, predominantly blue green chloritic groundmass, with acicular laths, locally common weathered feldspar laths, rare phenocrysts, soft to sticky, plastic, massive.
915.0 – 920.0	30	SANDSTONE, as above.
	40	CLAYSTONE, as above.
	30	VOLCANICS, as above.

920.0 – 925.0	70	SANDSTONE, clear to translucent, frosted, m to predominantly coarse, angular to subangular, poor to moderate sorting, common kaolinitic/silty matrix, trace nodular pyrite, occasionally very coarse milky quartz, disaggregated, good porosity, no fluorescence.
	20	SILTSTONE, moderate brown, brown grey, very argillaceous, locally grades to silty claystone, slightly arenaceous in part, common muscovite, trace disseminated pyrite, common carbonaceous fragments, mottled texture, soft to dispersive, massive to
	10	amorphous. COAL, brown black, lignitic, argillaceous, dull lustre, earthy, brittle, blocky.
925.0 – 930.0	70	SANDSTONE, as above.
	20	SILTSTONE, as above.
	10	COAL, as above.
930.0 – 935.0	40	SANDSTONE, clear to translucent, frosted, medium to coarse in part, subangular to subrounded, moderate sorted, trace kaolinitic matrix, trace nodular pyrite, trace coarse milky quartz, disaggregated, good porosity, no
	50	fluorescence. SILTSTONE, brown grey, moderate brown, very argillaceous, micromicaceous, slightly arenaceous, trace lithic fragments, trace carbonaceous fragments, soft to
	10	dispersive, massive to amorphous. COAL, brown black, very argillaceous, lignitic, trace disseminated pyrite, dull lustre, brittle, blocky.
935.0 – 940.0	40	SANDSTONE, as above.
	50	SILTSTONE, as above.
	10	COAL, as above.
940.0 – 945.0	20	SANDSTONE, predominantly as above, becomes medium grained.
	70	SILTSTONE, predominantly as above, mottled texture in part, becomes firm.
	10	COAL, predominantly as above, becomes very argillaceous grades to carbonaceous shale in part.
945.0 – 950.0	20	SANDSTONE, as above.
	70	SILTSTONE, as above.
	10	COAL, as above.
950.0 – 955.0	70	SANDSTONE, clear to translucent, frosted, medium to coarse, occasionally very coarse, angular to subrounded, poor to moderate sorting, trace carbonaceous material attached to quartz grains, predominantly clean, trace nodular pyrite, trace very coarse milky quartz float, disaggregated, good porosity, no fluorescence.
	30	SILTSTONE, dusky brown, brown grey, very argillaceous locally grades to silty claystone, micromicaceous, common disseminated pyrite, slightly arenaceous in part, soft to firm, massive.
955.0 – 960.0	70	SANDSTONE, as above.
	30	SILTSTONE, as above.

960.0 – 965.0	90	SANDSTONE, predominantly as above, becomes
	10	medium, locally common very coarse fractured milky quartz, good porosity, no fluorescence.
965.0 – 970.0	70	SANDSTONE, clear to translucent, frosted, medium to coarse, occasionally very coarse, subangular to subrounded, poor to moderate sorting, abundant silty/argillaceous matrix, common fine muscovite, trace reworked volcanic clasts, disaggregated to friable, poor
	25	porosity, no fluorescence.
	5	SILTSTONE, as above.
		COAL, as above.
970.0 – 975.0	80	SANDSTONE, predominantly as above, becomes clean, trace silty/argillaceous matrix, fair to good porosity, no fluorescence.
	15	SILTSTONE, as above.
	5	COAL, as above.
975.0 – 980.0	10	SANDSTONE, clear to translucent, frosted, coarse to very coarse, angular to subangular, moderate sorting, clean, common very coarse fractured milky quartz, trace quartz overgrowths, disaggregated, good porosity, no fluorescence.
	80	SILTSTONE, brown grey, dusky brown, very argillaceous, micromicaceous, trace lithic fragments, common carbonaceous fragments, trace disseminated pyrite, mottled texture in part, soft to slightly dispersive, massive to amorphous.
	10	COAL, predominantly as above, locally becomes very argillaceous grades to carbonaceous shale.
980.0 – 985.0	70	SANDSTONE, predominantly as above, locally trace reworked volcanic clasts.
	20	SILTSTONE, as above.
	10	COAL, brown black, lignitic, very argillaceous grades to carbonaceous shale in part, trace disseminated pyrite, dull lustre, earthy, brittle, blocky to subfissile.
985.0 – 990.0	10	SANDSTONE, as above.
	20	SILTSTONE, as above.
	65	CLAYSTONE, light to medium light grey, slightly silty in part, trace carbonaceous fragments, trace muscovite, homogeneous, soft to sticky, slightly dispersive, massive to amorphous.
	5	COAL, as above.
990.0 – 995.0	30	SILTSTONE, as above.
	60	CLAYSTONE, predominantly as above, slightly arenaceous in part, trace dark rock fragments, occasionally remnant welded texture in groundmass
	10	possibly tuffaceous.
		COAL, as above.

995.0 – 1000.0	60	SANDSTONE, clear to translucent, frosted, medium to coarse, subangular to subrounded, poor sorting, common argillaceous/silty matrix, trace reworked volcanic clasts, common nodular pyrite, trace coal fragments, common very coarse fractured milky quartz, disaggregated to friable in part, fair to good porosity, no fluorescence.
	40	CLAYSTONE (weathered tuff?), very light to light grey, slightly arenaceous, trace dark rock fragments, trace lithic fragments, occasionally altered feldspar inclusions, soft, plastic, massive to amorphous.
1000.0 – 1005.0	40	SANDSTONE, predominantly as above, becomes medium, occasionally coarse to very coarse.
	50	CLAYSTONE, as above.
	10	COAL, brown black, lignitic, very argillaceous grades to carbonaceous shale in part, trace disseminated pyrite, dull lustre, earthy, brittle, blocky to subfissile.
1005.0 – 1010.0	90	SANDSTONE, light grey, medium light grey, fine to occasionally medium, subangular to subrounded, moderate sorting, abundant calcareous cement, common kaolinitic matrix, trace coarse quartz float, trace altered feldspar, trace coaly fragments, common nodular pyrite, trace pelletal glauconite, trace rock fragments, trace Fe stained quartz, friable to disaggregated, poor porosity, no fluorescence.
	10	SILTSTONE, brown grey, moderate brown, very argillaceous, slightly arenaceous in part, trace coal fragments, micromicaceous, trace lithic fragments, firm, massive.
1010.0 – 1015.0	90	SANDSTONE, predominantly as above, becomes fine.
	10	SILTSTONE, as above.
1015.0 – 1020.0	40	SANDSTONE, clear to translucent, frosted, light grey, fine to medium, subangular to subrounded, moderate sorting, locally common calcareous cement, trace kaolinitic matrix in part, common glauconite, trace coal fragments, trace lithic fragments, trace altered feldspar, firm, disaggregated, poor porosity, no fluorescence.
	20	SILTSTONE, as above.
	40	CLAYSTONE, very light to light grey, slightly calcareous, slightly arenaceous in part, micromicaceous, trace carbonaceous specks, soft, plastic, massive to blocky.
1020.0 – 1025.0	80	SANDSTONE, predominantly as above, becomes fine, common calcareous cement.
	20	CLAYSTONE, as above.

1025.0 – 1030.0	70	SANDSTONE, light to very light grey, occasionally clear to translucent, fine, subangular, moderate to good sorting, strong calcareous cement, common kaolinitic matrix, common glauconite, trace altered feldspar, trace rock fragments, friable, poor porosity, no fluorescence.
	20	SILTSTONE, moderate brown, brown grey, very argillaceous, micromicaceous, locally carbonaceous laminae, trace lithic fragments, soft to plastic, massive.
	10	COAL, brown black, lignitic, argillaceous in part grades to carbonaceous shale, dull lustre, earthy, brittle, blocky.
1030.0 – 1035.0	10	SANDSTONE, predominantly as above, occasionally very coarse fractured quartz float, common coarse euhedral pyrite.
	30	SILTSTONE, as above.
	50	CLAYSTONE, as above.
	10	COAL, as above.
1035.0 – 1040.0	40	SANDSTONE, clear to translucent, light grey, fine to predominantly medium, subangular to subrounded, moderate sorting, wk calcareous cement, common kaolinitic matrix, trace glauconite, trace rock fragments, trace coarse quartz float, friable to disaggregated, poor to fair porosity, no fluorescence.
	50	CLAYSTONE, as above.
	10	COAL, as above.
1040.0 – 1045.0	70	SANDSTONE, Predominantly as above, common calcareous cement.
	20	CLAYSTONE, as above.
	10	COAL, as above.
1045.0 – 1050.0	50	SANDSTONE, clear to translucent, light grey, fine to predominantly medium, subangular to subrounded, moderate sorting, wk calcareous cement, common kaolinitic inclusions/matrix, common pelletal glauconite, common rock fragments, occasionally reworked volcanic clasts, friable to disaggregated, fair
	20	porosity, no fluorescence. SILTSTONE, moderate brown, brown grey, very argillaceous grades to silty claystone, trace lithic
	30	fragments, common carbonaceous specks and laminae, soft, massive. CLAYSTONE, light grey to medium light grey, slightly silty, locally arenaceous, micromicaceous, trace carbonaceous specks and laminae, waxy texture, firm, massive to blocky.
1050.0 – 1055.0	50	SANDSTONE, as above.
	20	SILTSTONE, as above.
	30	CLAYSTONE, as above.
1055.0 – 1060.0	60	SANDSTONE, predominantly as above, becomes medium to coarse in part.
	10	SILTSTONE, as above.
	30	CLAYSTONE, as above.

1060.0 – 1065.0	20	SILTSTONE, as above.	
	80	CLAYSTONE, light to medium light grey, pale yellow brown, slightly arenaceous in part, common kaolinitic inclusions, trace lithic fragments, trace microglauconite, micromicaceous, soft to plastic, massive.	
1065.0 – 1070.0	90	SANDSTONE, light grey, clear to translucent, very fine to fine, subangular, good sorting, occasionally weak calcareous cement, trace kaolinitic/silty matrix, trace coarse quartz float, occasionally dark rock fragments, trace glauconite, friable to predominantly disaggregated, poor to fair porosity, no fluorescence.	Golden Beach 1065m
	10	SILTSTONE, predominantly as above, becomes brown grey, slightly arenaceous.	
1070.0 – 1075.0	100	SANDSTONE, predominantly as above, common dark rock fragments, slightly calcareous cement.	
1075.0 – 1080.0	30	SANDSTONE, as above.	Strzeleck i Gp 1075m
	70	CLAYSTONE, brown grey to medium grey, light olive grey, arenaceous in part, predominantly waxy, smooth, homogeneous, firm, blocky.	
1080.0 – 1085.0	30	SANDSTONE, as above.	
	70	CLAYSTONE, as above.	
1085.0 – 1090.0	10	SANDSTONE, as above.	
	90	CLAYSTONE, as above.	
1090.0 – 1095.0	30	SANDSTONE, light grey, light green grey, very fine becomes very silty, subangular, good sorting, moderate calcareous cement, common kaolinitic matrix, common microglauconite, trace reddish rock fragments, trace altered feldspar, friable, tight to very poor porosity, no	
	50	fluorescence. SILTSTONE, brown grey, moderate brown, very argillaceous, arenaceous in part, micromicaceous,	
	20	common lithic fragments, trace carbonaceous specks, soft to firm, massive to blocky. CLAYSTONE, as above.	
1095.0 – 1100.0	40	SANDSTONE, as above.	
	30	SILTSTONE, as above.	
	30	CLAYSTONE, as above.	
1100.0 – 1105.0	20	SANDSTONE, predominantly as above, locally	
	60	common cal cement. SILTSTONE, as above.	
	20	CLAYSTONE, as above.	
1105.0 – 1110.0	30	SANDSTONE, predominantly as above, becomes fine to medium.	
	60	SILTSTONE, predominantly as above, common carbonaceous/coaly laminae.	
	10	CLAYSTONE, as above.	

1110.0 – 1115.0	40	SANDSTONE, clear to translucent, frosted, fine to medium, occasionally coarse, angular to subangular, moderate sorting, trace kaolinitic matrix/inclusions, trace nodular pyrite, common rock fragments, friable to predominantly disaggregated, fair to good porosity, no
	10	fluorescence.
	50	SILTSTONE, Moderate brown, dark yellow brown, very argillaceous, locally carbonaceous laminae grades to carbonaceous shale in part, micromicaceous, mottled texture in part, soft, massive to occasionally subfissile.
		CLAYSTONE, brown grey to medium dark grey, slightly silty, trace carbonaceous specks, trace lithic fragments, slightly micromicaceous, soft, plastic, massive to blocky.
1115.0 – 1120.0	10	SILTSTONE, as above.
	90	CLAYSTONE, as above.
1120.0 – 1125.0	10	SILTSTONE, as above.
	90	CLAYSTONE, as above.
1125.0 – 1130.0	10	SANDSTONE, very light grey to light grey, very fine to fine, subangular, good sorting, weak siliceous cement, abundant argillaceous matrix, trace biotic, trace nodular pyrite, locally common carbonaceous/coaly fragments, friable, tight, no fluorescence.
	90	CLAYSTONE, brown grey, dark yellow brown, slightly to locally moderate silty, trace carbonaceous specks, trace arenaceous inclusions, micromicaceous, soft to slightly dispersive, massive to amorphous.
1130.0 – 1135.0	10	SANDSTONE, as above.
	90	CLAYSTONE, as above.
1135.0 – 1140.0	10	SANDSTONE, predominantly as above, strong siliceous cement.
	20	SILTSTONE, moderate brown, very argillaceous, common carbonaceous laminae, trace biotite/muscovite, trace lithic fragments, mottled texture in part, soft, massive.
	70	CLAYSTONE, predominantly as above, becomes medium light grey.
1140.0 – 1145.0	85	SANDSTONE, as above.
	10	SILTSTONE, as above.
	5	COAL, brown black, lignitic, argillaceous in part grades to carbonaceous shale, dull lustre, earthy, brittle, blocky.
1145.0 – 1150.0	10	SANDSTONE, clear to translucent, frosted, fine,
	10	subangular, good sorting, clean, disaggregated, common
	80	smoky quartz, trace rock fragments, disaggregated, fair porosity, no fluorescence.
		SILTSTONE, as above.
		CLAYSTONE, as above.

1150.0 – 1155.0	30	SANDSTONE, clear to translucent, light grey, very fine to fine, subangular, good sorting, slightly calcareous cement, common argillaceous/silty matrix, common glauconite/chlorite, common reworked volcanic clasts, trace biotite, trace altered feldspar, friable to occasionally moderately hard, tight, no fluorescence.
	20	SILTSTONE, as above.
	50	CLAYSTONE, as above.
1155.0 – 1160.0	30	SANDSTONE, as above.
	20	SILTSTONE, as above.
	50	CLAYSTONE, as above.
1160.0 – 1165.0	10	SANDSTONE, predominantly as above, becomes disaggregated, tight to very poor porosity.
	10	SILTSTONE, as above.
	80	CLAYSTONE, medium light grey, brown grey, slightly to locally moderate silty, trace very fine quartz sand, trace carbonaceous specks, micromicaceous, soft, blocky.
1165.0 – 1170.0	10	SANDSTONE, as above.
	90	CLAYSTONE, as above.
1170.0 – 1175.0	60	SANDSTONE, light grey, light grey green, occasionally clear to translucent, very fine to fine, moderate calcareous cement, common kaolinitic/silty matrix, common red lithic fragments, common glauconite/chlorite, firm, occasionally hard aggregates,
	40	tight, no fluorescence. CLAYSTONE, brown grey, medium light grey, micromicaceous, trace carbonaceous specks, waxy texture, homogeneous, firm, blocky.
1175.0 – 1180.0	70	SANDSTONE, predominantly as above, becomes very glauconitic/chloritic.
	30	CLAYSTONE, as above.
1180.0 – 1185.0	10	SANDSTONE, clear to translucent, light grey, fine to occasionally medium, subangular, moderate sorting, common kaolinitic matrix, trace nodular pyrite, common reworked volcanic clasts, trace dark grey rock fragments, friable to disaggregated, fair porosity, no
	90	fluorescence. CLAYSTONE, as above.
1185.0 – 1190.0	30	SILTSTONE, moderate brown, grey brown, very argillaceous, common carbonaceous fragments, common lithic fragments, micromicaceous, soft to firm, massive.
	60	CLAYSTONE, as above.
	10	COAL, brown black, lignitic, common disseminated pyrite, argillaceous in part, dull to subvitreous lustre in part, brittle, blocky.

1190.0 – 1195.0	30	SANDSTONE, light grey, light green grey, fine, subangular, good sorting, moderate calcareous cement, common chlorite/glauconite matrix, common kaolinitic inclusions, trace orange brown dolomitic inclusions, friable to disaggregated, poor porosity, no fluorescence.
	50	SILTSTONE, as above.
	20	CLAYSTONE, as above.
1195.0 – 1200.0	60	SANDSTONE, as above.
	40	SILTSTONE, as above.
1200.0 – 1205.0	30	SANDSTONE, clear to translucent, light grey, fine, subangular, good sorting, moderate calcareous cement, trace kaolinitic inclusions, trace biotite, common rock fragments, friable to disaggregated, fair porosity, no
	50	fluorescence. CLAYSTONE, brown grey, medium dark grey, slightly silty in part, micromicaceous, trace carbonaceous specks, trace lithic, trace glauconite, trace carbonaceous,
	20	soft to firm, massive to blocky. SILTSTONE, moderate brown, dark brown, slightly argillaceous, common carbonaceous fragments, micromicaceous, trace lithic fragments, firm, massive.
1205.0 – 1210.0	80	CLAYSTONE, as above.
	20	SILTSTONE, as above.
1210.0 – 1215.0	30	SANDSTONE, clear to translucent, light grey, very fine to fine, subangular, good sorting, abundant argillaceous matrix, common chlorite/glauconite, trace very coarse limonite stained quartz, disaggregated, fair to good
	50	porosity, no fluorescence.
	20	SILTSTONE, as above. CLAYSTONE, medium dark grey, common disseminated pyrite, trace carbonaceous specks, homogeneous, waxy texture, soft, massive to blocky.
1215.0 – 1220.0	90	SANDSTONE, light to medium grey, green grey, occasionally clear to translucent, fine, subangular, good sorting, wk calcareous cement, abundant disseminated pyrite, common dark green rock fragments, common lithic fragments, firm, tight, no fluorescence.
	10	CLAYSTONE, as above.
1220.0 – 1226.0	60	SILTSTONE, m dark brown, moderate brown, very argillaceous, common carbonaceous specks, common lithic fragments, trace arenaceous inclusions, trace glauconite, occasionally arenaceous, soft, massive.
	40	CLAYSTONE, as above.
		Reached a Total Depth of 1226m at 16:45 hours on 28th October, 1999

APPENDIX 4

MUD LOGGING FINAL WELL REPORT

Amity Oil NL

CUTTLEFISH 1

FINAL WELL REPORT

Prepared By

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CONTENTS

Section 1

General Well Summary

Revision	Date	Issued by	Approved by	Remarks
1	10/07/99	Geoservices Unit 093	Base Mudlogging Coordinator	

WELL DATA

Operator	: Amity Oil NL
Rig	: SEDCO 702
Well name	: Cuttlefish 1
Country	: Australia
Location	: Gippsland Basin
Well Type	: Exploration
Field	: Cuttlefish

Local co-ordinates	Longitude = 148° 03' 02.279" E	Latitude = 37° 59' 40.790" S
AMG co-ordinates	X = 592 251.06 m E	Y = 5 794241.44 m S

Profile	: Vertical
Reference depth	: Rotary Table (RT)
Elevation RT A.M.S.L.	: 25.9 m
Seawater depth	: 47.7 m
Proposed total depth (MDRT)	: 1227.4 m MDRT
Actual total depth	: 1226.0 m
True vertical depth	: 1226.0 m
Hole Spudded on	: 23 October 1999
TD reached on	: 28 October 1999

Drilling Contractor

Drilling Contractor	: Trans-ocean Sedco Forex
Rig name	: SEDCO 702
Rig type	: Semi-Submersible

Drilling Phases

Diameter (inch)	From (m)	To (m)	Mud Type
36"	73 m	118 m	Seawater with hi-vis sweeps
17½"	118 m	755 m	Seawater with hi-vis sweeps
12¼"	755 m	1226 m	KCl / PHPA Mud

Cased Hole

Casing Diameter (inch)	Casing Type	Shoe Depth (m)	Top (m)
30"	SF60	118.00 m	70.86 m
$13^3/_8$"	JAP	749.33 m	69.86 m

MUD LOGGING

Logging Unit Number : U93

Engineers: Stan Willson
Mark Smith

Mudloggers: Adam Walsh
Andrew Philps

Cuttings Collection

Sample Type	Number of sets	Weight per set	Sampling interval	From (m)	To (m)
Washed and dried	4	200 grams	5 metres	755	1226 TD
Lightly washed, Air dried	1	500 grams	10 metres	755	1226 TD

Cuttings Distribution

Company	Washed and dried (paper envelopes)	Air dried (cloth bags)
Amity Oil NL	1 set	
Minerals and Petroleum, Natural Resources and Environment, Victoria	1 set	
Australian Geological Survey Organisation	1 set	
Destructive analysis	1 set	
Biostratigraphy and Geochemistry		1 set

WELL SUMMARY

Cuttlefish 1 was designed as a vertical well to a depth of 1227 m MD in 12¼" hole. The primary objectives were the sandstone reservoirs at the top of the LaTrobe Group expected at 812 m MD. Cuttlefish 1 was proposed to be drilled in 11 days (dry hole). The operator for this project was Amity Oil NL.

Sweetlips 1 is the closest offset well located 10 km to the west. No significant drilling hazards or abnormal formation pressures were seen in this location nor are expected in this well.

Cuttlefish 1 was drilled using the semi-submersible rig Sedco Forex 702 in 47 metres of water. The 36" top hole section was drilled and cased to 118 m. 17½" hole was drilled to 755 m and $13^3/_8$" casing was set at 749 m before installing a riser and BOPs. The final 12¼" hole section was drilled using a KCl / PHPA mud system to TD at 1226 m MD in a single bit run. TD for this well was reached in 6 drilling days and the rig spent a total of 12 days on location.

Gas levels in this well were very low and the maximum recorded gas was only 225 units while circulating up trip gas at TD. Formation gas composition was very dry with only rare C2 and trace C3 measured. No CO_2 was or H2S were detected in this well.

Cuttlefish 1 was drilled with a maximum MW of 9.6 ppg at TD. High formation gas peaks were not a problem with the low MW in this well. No connection gas was reported and no losses of fluid to the formation occurred while drilling or tripping. Minor tight hole was experienced while tripping but this was cured with backreaming. No wiper trips were considered necessary while drilling, only prior to casing or logging.

The final status for this well was plugged and abandoned. The rig was released from the location on 1 November 1999.

CEMENTING DETAILS

Cuttlefish 1 was cased with 30" casing from the seabed to 118 m and 13 3/8" casing from the hanger at 77.6 m to 749.3 m. The well was plugged and abandoned with 3 cement plugs, pumped from 1190 m, 990 m, 800 m and 150 m. The top of the casing plug was tagged at 677 m below RT.

SLURRY DETAILS	CEMENT TYPE	DRY CMT VOLUME	CMT ADDITIVES	MIX WATER	SLURRY VOL.	SLURRY DENSITY	CEMENT to/from
30" csg	Class G	799 sx	13 sx CaCl2 5 gal NF-5	95 bbls seawater	142.5 bbls	16.0 ppg	73 m to 118 m
13 3/8" csg Lead	Class G	1171 sx	56 sx pre-hydrated Gel 73 gal Halad 322 LXP 18 gal NF-5	290 bbls fresh water	386 bbls	12.8 ppg	599 m to 73 m
13 3/8" csg Tail	Class G	550 sx	5 gal NF-5	69 bbls fresh water	117 bbls	15.8 ppg	749 m to 599 m
Cement Plug #1	Class G	278 sx	15 gal SR1001 2.5gal NF-5	33.2 bbls fresh water	43 bbls	15.8 ppg	1190-m to 990 m
Cement Plug #2	Class G	382 sx	15 gal SR1001 2.5gal NF-5	45.6 bbls	57 bbls	15.8 ppg	990 m to 825 m
Cement Plug #3	Class G	347 sx		41.4 bbls	55 bbls	15.8 ppg	800 m to 650 m
Cement Plug #4	Class G	116 sx	1 sx CaCl2	13.8 bbls	19 bbls	15.8 ppg	150 m to 100 m

WELL DIARY

22 October 1999 Set and pretension anchors. Inspect anchor chains. Service DRW. Pressure test IBOPS and TDS mudhose. Lay out old DCs from derrick. Make up cement stand and running tool and rack back in derrick. Move PGB across to moonpool. Rig up equipment to run 30" casing. Stab 30" casing into PGB.

23 October 1999 Continue stabbing 30" casing into PGB. Retrieve RT and move PGB to forward. Pick up and make up 36" BHA. RIH to seabed at 76.73 m. Spud well at 05:15 hrs. Drill 36" hole from seabed to 118 m. Sweep hole with 50 bbl hi-vis pill and spot 50 bbls hi-vis mud on bottom. Drop survey and POOH to 90 m. Recover survey and RIH back to bottom with 0.5 m fill. Sweep hole and displace to mud. POOH and lay out 36" BHA. Move PGB across moonpool. Make up cement stinger and stab into 30" casing. Pick up RT and connect to housing. Fill casing with seawater. RIH casing on 5" HWDP. Stab casing into 36" hole, observe with ROV. RIH casing to bottom and land shoe at 118 m. Make up cement stand. Rig up hose and break circulation. Observe good returns with ROV. Hold JHA and perform cement job. Break off cement hose and release RT. POOH and lay out RT. Hold emergency winch-off drill. Skid rig 50 ft aft and skid back again. Make up 8¼" DCs and jars. Pick up and make up 13 $^{3}/_{8}$" casing cement head and rack back. Make up 17½" BHA. Attach guide wires in moonpool. RIH with 17½" BHA and stab into 30" housing, observed by ROV. Continue to RIH to 92 m. Wash down and tag TOC at 112 m. Drill out cement and shoe to 118 m and work pipe. Rack back stand of HWDP and pick up stand DCs - unable to pass 112 m. Rack stand of DCs and pick up stand of HWDP. Work down from 112 m to 118 m.

24 October 1999 Continue drilling 17½" hole from 118 m to 147 m. Pump 20 bbl sweeps every half stand and spot 25 bbl pills every connection. POOH from 147 m to 93 m. Rack 2 stands HWDP and pick up 1 stand 8¼" DCs. RIH to 147 m and drill ahead from 147 m to 636 m, sweeping hole as above.

25 October 1999 Continue drilling 17½" hole from 636 m to 755 m, pumping 20 bbl sweeps every half stand and spotting hi-vis pills every connection. At TD, sweep 50 bbl hi-vis pill and spot 50 bbl on bottom. Drop Totco survey and POOH. Tight spots from 745 m to 570 m. Retrieve survey. Service pipe spinner, TDS and DRW. Work pipe back down through shoe and RIH to bottom - held up at 716 m. Work tight spot and wash and ream to 755 m. Sweep 50 bbl hi-vis pill. Displace hole to 8.7 ppg spud mud. POOH with tight spots from 755 m to 716 m. Work pipe back through this section. POOH, observe bit out of 30" housing with ROV. Jet PGB. POOH to surface and break out bit. Rack 17½" BHA. Clear floor of excess equipment and rig up to run 13 $^{3}/_{8}$" casing. Hold JSA. Pick up shoe joint and check for debris. Make up and check float and shoe. RIH casing, filling every 5 joints. Stab into 30" housing, observed by ROV. RIH casing as per tally. Connect X/O joint and hold JSA.

26 October 1999 Pick up 18 $^{3}/_{4}$" wellhead housing. Break out RT. Make up and reinstall release plug assembly. Continue to RIH 13 $^{3}/_{8}$" casing with landing string and land casing on 30" housing. Check latch with 50 klbs overpull. Hold JHA and rig up cement hose. Circulate casing volume and check returns at seabed with ROV. Break circulation with Dowell unit and pressure test lines to 3500 psi. Drop ball, shear bottom plug and perform casing cement job as per Amity program. Drop dart and shear top plug. Displace cement with rig pumps. Bump plug and check for backflow. Rig down cement hose and break out casing RT. POOH with casing landing string and lay out RT and cement head. Change bails and elevators for running BOPs. Make up stand for lowering BOPs. Hold JHA and move BOPs and LMRP to moonpool. Insert DP into BOP and function test BOPs on blue pod and yellow pod. Fix lower outer kill valve. Make up joint of riser to BOPs and install beacon joint and guide lines. Hold JSA. Run BOPs through splash zone. Pressure test choke & kill lines OK. Make up slip joint and landing joint. Hold JSA and install rucker tensioners and choke & kill goosenecks in moonpool. Pressure test choke & kill lines again. Install umbilical storm loops in moonpool. Stab BOPs onto guide posts and land out taking 50 klbs overpull. Unpin slip joint inner barrel and lay out landing joint. Hold JSA and pick up diverter.

27 October 1999 Install diverter. Connect junction box. Remove RT. Change out elevators and bails. Make up and RIH with BOP test string. Connect cement hose and circulate through system. Pressure test surface

lines to 5000 psi. Test BOPs. Space out string on MPRs. Function test BOPs on yellow and blue pods. Do depletion test. POOH test string and lay out test tool. Run FJWB. Move tubulars in derrick and make up 12¼" BHA. RIH to 674 m and wash down to 722 m. Change out hydraulic hose on TDS. Continue to wash down to 733 m and tag plug. Drill out plugs and float - debris from plugs jamming stabilisers, causing high torque. Work string and pump gel sweeps to clear. Continue drilling cement from float at 734 m to shoe at 749 m. Wash rathole down to 755 m. Displace hole to 9.4 ppg mud. Drill new 12¼" hole from 755 m to 758 m. Circulate bottoms up. Space out string and close MPRs. Perform jug test - 351 psi, EMW = 12.14 ppg. Run back to bottom and drill ahead from 758 m to 798 m.

28 October 1999

Drill 12¼" hole from 798 m to 1226 m. Flowcheck drillbreaks at 851 m, 908 m and 970 m OK. Backream each stand before connections. Take deviation survey every 100 m. At 1226 m, circulate until shakers are clean. Flowcheck, pump slug and POOH to 954 m. Unable to pass 954 m due to tight hole. Connect TDS and backream OOH to shoe at 749 m. Flowcheck and hold kick drill. RIH to TD. Hole good with no excess drag and no fill. Circulate bottoms up - 225.4 units trip gas at 1226 m. Flowcheck and drop Totco survey. Pump slug and POOH to shoe. Flowcheck and continue POOH. Flowcheck at BOPs. Rack back BHA.

29 October 1999

Continue POOH and rack back BHA. Lay out bit, stabilisers etc. Hold JHA and rig up wireline equipment. Pick up tools and make run #1. POOH tools, prepare and RIH run #2 - cancel 2nd run and POOH tools. Rig down wireline equipment. Make up cement stinger and RIH with 5" DP to 1226 m TD. Circulate and condition mud - 38 units trip gas. POOH from 1226 m to 1151 m. Spot 50 bbls hi-vis pill. Hold JHA and rig up cement hose. Pressure test to 2000 psi. Pump cement plug #1 from 1150 m to 1050 m. POOH to 990 m and pump cement plug #2 from 990 m to 825 m. POOH to 795 m and circulate bottoms up with inhibited mud. Flush choke & kill lines. Pump cement plug #3 from 800 m to 505 m. Circulate bottoms up and flush choke & kill lines. POOH from 505 m, laying out excess DP. Hold JHA and lay out excess DCs from derrick. Shut down Geoservices logging unit.

845-1065 m	**SANDSTONE WITH INTERBEDDED SILTSTONE, CLAYSTONE, VOLCANICS AND COAL**
SANDSTONE	**845-1005 m**, clear to translucent, frosted, medium to coarse grained, locally common very coarse, angular to sub-rounded, dominantly sub-angular, trace to abundant silty/kaolinitic matrix, trace nodular pyrite, locally common fine muscovute, rare quartz overgrowths, trace smoky and milky quartz, trace reworked volcanic clasts, trace coal fragments, disaggregated to friable, very good to poor porosity, no fluorescence.
SANDSTONE	**1005-1065 m**, light grey to medium light grey, clear to translucent, fine to medium grained, sub-angular to sub-rounded, moderately sorted, abundant to weak calcareous cement, common kaolinitic matrix, trace coarse quartz float, trace altered feldspar, trace coal fragments, locally common nodular pyrite, trace pelletal glauconite, trace to common rock fragments, trace volcanic clasts, trace Fe stained quartz, friable to disaggregated, poor to fair porosity, no fluorescence.
SILTSTONE	Brown grey, moderate brown, dusky brown, very argillaceous, slightly arenaceous, micrmicaceous in part, trace disseminated pyrite, trace lithic fragments, trace carbonaceous fragments, soft to dispersive, massive to amorphous.
COAL	Black brown, lignitic, very argillaceous grading to Carbonaceous Shale, trace disseminated pyrite, dull, earthy, brittle, blocky to sub-fissile in part.
CLAYSTONE	Very light to medium light grey, slightly arenaceous, slightly calcareous, micromicaceous in part, trace disseminated pyrite, locally occasional altered feldspar inclusions, trace lithic fragments, trace carbonaceous specks, soft, plastic, massive to amorphous.
VOLCANICS	(Tuffaceous), pale blue, light blue green, occasionally green grey, predominantly blue green chloritic groundmass, with acicular laths, locally common weathered feldspar laths, rare phenocrysts, soft to sticky, plastic, massive.

1065-1075 m	**CLAYSTONE WITH INTERBEDDED SANDSTONE AND TRACE SILTSTONE**
SANDSTONE	Light grey, clear to translucent, very fine to fine grained, good sorting, sub-angular, occasionally weak calcareous cement, trace kasolinitic/silty matrix, trace quartz float, occasionally dark rock fragments, trace glauconite, friable to disaggregated,poor to fair porosity, no fluorescence.
CLAYSTONE	Medium light grey, brown grey, slightly to locally moderately silty, trace very fine quartz, trace carbonaceous, micromicaceous, soft, blocky.
SILTSTONE	Moderate brown, very argillaceous, common carbonaceous laminae, trace biotite/muscovite, trace lithic fragments, mottled texture in part, soft, massive

1075-1226 m TMD	**CLAYSTONE WITH INTERBEDDED SANDSTONE, SILTSTONE AND TRACE COAL**
CLAYSTONE	Brown grey, medium dark grey, dark yellow brown, slightly to locally moderately silty, trace carbonaceous specks, trace arenaceous inclusions, trace lithic fragments, micromicaceous, soft to slightly dispersive, massive to amorphous.

SANDSTONE	Light grey, light green-grey, clear to translucent, very fine to fine grained, occasionally medium to coarse grained, predominantly good sorting, sub-angular, moderate calcarous cement, weak siliceous cement in part, common to abundant kaolinite/argillaceous matrix, common glauconite/chlorite , trace carbonaceous specks, trace coaly fragments, trace altered feldspar, trace rock and volcanic fragments, trace nodular pyrite, trace biotite, generally friable to disaggregated, in part moderately hard to hard, poor to tight porosity, no fluorescence.
SILTSTONE	Moderate brown, dark yellow brown, brown grey, very argillaceous, trace to common lithic fragments, trace biotite/muscovite, locally carbonaceous laminae, micromicaceous, soft to firm in part, massive to occasionally sub-fissile.
COAL	Brown black, lignitic, argillaceous in part gradees to Carbonaceous Shale, dull, earthy, brittle, blocky.

FLUORESCENCE REPORT

There was no fluorescence to report in cuttings samples in Cuttlefish 1.

GAS REPORT

Gas levels while drilling Cuttlefish 1 remained between 1 and 100 units (200 to 20000 ppm C1 equivalent) of C1 (methane) and only trace C2 (ethane) throughout the entire well. Only 2 gas peaks were greater than 100 units. A peak of 140.9 units at the top of the Gurnard Fm at 850 m and a peak of 184.9 units at 901 m, both corresponding to coals, were the highest readings for the well. Only traces of C3 (propane) were recorded and no heavier compounds were present during this well.

Upon encountering the reservoir sandstone at the top of the Latrobe Formation, background gas levels rose from 10 units to over 100 units but soon settled back down to 25 units. The expected appearance of heavier alkane components did not occur and only 155 ppm C2 and 5 ppm C3 were the maximum amounts. Gas in the LaTrobe sandstones was low in quantity and dry in composition.

Gas levels gradually decreased from this point onwards to TD where background gas was around 2 units of C1 only. There was no fluorescence seen in this well. A trip gas peak of 225.4 units was recorded after a wiper trip at TD and this was the highest gas reading for the well.

No H2S or CO2 was recorded while drilling Cuttlefish 1.

This gas data indicates Cuttlefish 1 to be a non-productive well.

A summary of highest gas peaks and trip gas peaks appears below

HIGH GAS PEAKS

Depth	MW ppg	TG units	C1 ppm	C2	C3	iC4	nC4	iC5	nC5
783 m		7.8	1295						
792 m		10.7	1475						
801 m		12.4	2375						
830 m		14.5	3284	3					
850 m		140.9	23051	89	1				
885 m		55.1	7416	51					
901 m		184.9	24784	155	5				
928 m		57.2	8940	25					
948 m		58.2	9111	32					
980 m		86.5	12504	38					

TRIP GAS PEAKS

Depth (m MD)	Type	MW (ppg)	Tot. Gas (units)
1226	Circ btms up at TD	9.6	225.4
1226	Circ before P & A	9.5	38.2

OVERPRESSURE SUMMARY

The following techniques were utilized as indicators of abnormal formation pressures during the drilling of Cuttlefish 1.

D-EXPONENT: This is a normalized rate of penetration which takes into account variables such as weight on bit, rotation, and mud weight. It is designed to quantitatively predict pore pressures in shaley formations. It may also be used as an indicator in Siltstones, silty Shales and calcareous Claystones since the fundamental principle that underbalanced bottom hole conditions result in faster drilling applies to all these formations. A shift in the normal trend (representing a normal compaction trend) to the left (representing relative undercompaction) may indicate overpressure or increased porosity due to lithological changes.

GAS: Overpressure may be indicated by increases in the background gas, trip gas, and connection gas readings. Similar changes may however also occur as a result of formation porosity changes which are unrelated to pore pressures.

CUTTINGS: Small splintery cuttings indicate overpressured formations. Long propeller-shaped cavings are usually caused by overpressure or by the hydration of reactive or swelling clays.

HOLE CONDITIONS: As mentioned above, cavings resulting from overpressure may be introduced into the hole. Subsequently, increased overpull and drag on the drill collars and stabilizers during connections and trips may occur. Increasing torque trends show deteriorating hole condition for similar reasons. Encountering hole fill on running back to bottom may also be indicative of overpressure.

TEMPERATURE: Changes in downhole temperature can be measured at the surface by means of a temperature sensor positioned in the flow line. The primary factor that enables this measurement to be of use in overpressure studies, is thermal conductivity. In an undercompacted sequence, the presence of an abnormally high percentage of pore fluids causes heat to be trapped. Hence the area immediately above the overpressured unit is a zone of heat starvation. Changes in thermal gradient can therefore be used to map a transition from normally pressured to overpressured environments. Limitations of this technique include riser cooling by seawater, surface mud additions, circulation breaks, changes in ROP, hole size and flow rate, all of which may mask or distort surface mud temperature readings.

The use of all these methods in conjunction with each other will give the most reliable indication of any abnormal formation pressures. However, in non-shaley formations such as the limestones which make up top hole sections and the sandstones which occur in the base of wells in this basin, the D Exponent cannot be quantitative it must be ignored.

Background gas levels in this well were low and generally reflected lithology type. Gas levels only peaked above 100 units in isolated coals and sands. No background level trends due to formation pressures could be discerned. Trip gas was related to drilled gas and connection gas was not recorded. A table of trip gas peaks appears on the preceding page.

No splintery or unusually shaped cuttings were observed in the cuttings samples during this well.

Some tight hole conditions were experienced in this well. Overpull and drag while tripping was recorded from 745 m to 570 m in 17½" hole and from 954 m to 749 m in 12¼" hole. These zones corresponded to reactive claystones. There was no fill after trips. High torque while drilling was due to lithological factors, eg. abrasive sands.

Mud temperatures showed a normal gradient in this well. Temperatures in the suction pit grdually increased from 22°C to 30°C while mud temperatures coming out of the hole at the shakers increased normally from 30°C to 49°C.

From these observations, there is no evidence of abnormal formation pressures in Cuttlefish 1

Revision	Date	Issued by	Approved by	Remarks
1	10/07/99	Geoservices Unit 093	Base Mudlogging Coordinator	

CUTTLEFISH 1 BIT RECORD

Run #	Bit #	Bit Name	Serial #	Size "	Nozzles x32	Depth In m	Run m	Time hrs	ROP m/hr	WOB klbs	SPP psi	RPM (total)	GPM gpm	Grading
1	1	Smith DSCJ	66330	26	3x24,1x14	76.3	45	2.5	30.0	5	1150	84	1075	1-1-NO-A-E-I-NO-TD with 36" hole opener
2	2	Smith MSDSSHQC	LR2228	17½	4 x 22	118	637	23.1	27.6	20	2300	123	1200	3-2-WT-A-E-I-NO-TD
3	3	Geo S91BHSVPX	JR8721	12¼	7 x 16	755	471	15.3	30.8	15	1500	120	860	5-3-BT-N-X-I-BT-TD

FIELD ELECTRIC LOG REPORT

GENERAL INFORMATION

WELL:	**CUTTLEFISH 1**	**REPORT NUMBER 1**
(FINAL)LOCATION:	**LAT:** 37° 59' 40.799" N.	
	LONG: 148° 03' 02.279" E.	**ELEVATION:** 0m above sea level
SEISMIC LINE:	Line G92A-3083 SP 2150	**DF TO GROUND LEVEL:** 25.9m
PERMIT:	VIC/P40	**LOGGING COMPANY:** Schlumberger
AREA:	Gippsland Basin	**LOGGING ENGINEER:** D.Pastor/D.Wong
COUNTRY:	Australia	**GEOLOGIST(S):** Greg Clota

LOGGING SUITE NUMBER 1

DATE LOGGED: 29/10/99
HOLE SIZE: 12.25" (311mm)
CASING SHOE: 749.3m (driller), 751m (logger)

DRILLERS DEPTH: 1226m DF
LOGGERS DEPTH: 1220m DF

LABEL	TYPE OF LOG	FROM	TO	RPT. SECT. / SUMRY.	Time SinceLast Circ / BHT
Run 1	PEX-HALS-DSI-NGS	1217m	100m	1180 to 1080m	6.66 hours /58.8° C. Circulated for 1.0 hour

MUD DATA

MUD TYPE:	KCl/PHPA/Polymer	**SAMPLE SOURCE:**	Flowline
MUD WEIGHT:	1.15SG	**Rm @ Measured Temp.**	0.139 Ohmm @ 17.7° C
FUNNEL VISCOSITY:	49 sec.	**Rmf @ Meas. Temp.**	0.129 Ohmm @ 17.5° C
pH:	8.5	**Rmc @ Measured Temp.**	0.157 Ohmm @ 17.9° C
FLUID LOSS	5.4 cm^3	**Rm @ BHT.**	0.068 Ohmm @ 88° C
CHLORIDES:	33000 ppm	**COMMENTS:**	

CIRCULATION HISTORY & DIARY OF OPERATIONS

From	To	Activity (Downtime/Lost time in bold typeface)
28th Oct		
2000	2100	Circulate on bottom after wiper trip. POOH to log.
0115	0120	Hold JSA prior to rigging up loggers.
0120	0220	P/U top sheave and rig up loggers for Run 1 PEX(HALS)-DSI-NGT.
0220	0230	RIH and compensate at 100m.
0230	0245	RIH to 770m.
0245	0255	Log into casing for casing shoe check. All tools OK.
0255	0315	RIH from casing shoe and log down to 1200m.
0315	0330	Log up repeat section. 1180 - 1080m. Stretch correction +0.3/Tide –0.5 = Net correction –0.2m)
0330	0340	RIH and tag bottom. Log up main pass. Loggers depth 1220m. Cartridge temp. 57.6°C.

CIRCULATION HISTORY & DIARY OF OPERATIONS (cont)

From	To	Activity (Downtime/Lost time in bold typeface)
0340	0430	Log up main pass at 1800ft/hr.
0430	0440	Run #1 PEX(HALS)-DSI-NGS at casing shoe 751m. Make ascii data and PDS files for transmission to Amity Oil office.
0440	0530	Drop back to 770m and log up GR to 100m.
0530	0715	R/D Run #1 and change bridle.
0715	0750	R/U Run #2 FMS-GR.
0750	0815	RIH to 100m and compensate.
0815	0915	Log cancelled. POOH and and R/D Loggers.

TOTAL LOGGING TIME: 7.9 HOURS

TOTAL LOST TIME / DOWNTIME: Nil

HOLE PROBLEMS

Wiper trip prior to logging tight hole was experienced at 954m. When POOH no hole problems were experienced.

Run #1 PEX(HALS)-DSI-NGS tagged fill on bottom at 1220m. There were no other hole problems.

COMMENTS

Overall a well planned and executed logging job. There were no tool problems and all data acquired as per client request.

Geoservices **SAMPLE MANIFEST**

RIG: Sedco 702 **WELL:** Cuttlefish #1 **DATE:** 30th of October, 1999

Sample Type	No. of Boxes (Large)	Box No. (Small)	Depth (m) From	Depth (m) To	Interval (m)	Company
Washed & Dried Ditch Cuttings	2	2	760	1226TD	5	Amity Oil NL Level 2,18 Richardson St West Perth, W.A.
		2	760	1226TD	5	Natural Resources & Environment Victoria
Samplex Trays	1	-	760	1226	5	Amity Oil NL
Mud Samples		2	3 x Mud Samples + 1 Cement mud sample			Amity Oil NL Forward to ACS laboratories
Printer charts		-				Amity Oil NL
MDT Water Samples						
TOTAL No. of Boxes	**3**	-				

NOTE: Small boxes packaged in large boxes for transportation
Amity mud samples (2x box) inside Amity washed & dried cuttings box (1 large box)
Well printer charts packed inside Amity washed & dried cuttings box (1large box)

Geoservices

Wellsite Geologist

Depth m	TVD Depth m	ROP m/h	WOB klbs	SPP psi	TORQUE lb*ft	RPM rpm	FLWpmps gpm
75.00	76.01	0.00	0.0	0	0	0	0
76.00	76.00	14.61	4.0	152	1855	70	1005
77.00	77.00	68.65	4.7	154	1866	70	1005
78.00	78.00	73.77	4.8	148	1946	70	1005
79.00	79.00	72.15	5.2	148	2484	70	1005
80.00	80.00	38.52	4.7	186	4372	70	1100
81.00	81.00	17.39	3.4	230	3568	70	1100
82.00	82.00	13.11	3.8	548	2820	71	1145
83.00	83.00	12.86	4.8	550	4268	70	1145
84.00	84.00	34.64	2.5	574	2208	72	1145
85.00	85.00	41.55	1.9	851	1713	83	1145
86.00	86.00	47.44	2.1	1162	1703	89	1204
87.00	87.00	60.18	2.8	1161	1662	89	1204
88.00	88.00	35.47	3.1	1161	1996	89	1204
89.00	89.00	26.63	4.0	1142	1457	89	1204
90.00	90.00	37.57	5.5	1142	1882	88	1204
91.00	91.00	34.55	5.0	1082	2373	88	1154
92.00	92.00	31.98	3.4	1083	2086	88	1154
93.00	93.00	39.96	3.4	1081	2416	88	1153
94.00	94.00	45.15	4.2	1082	3063	88	1154
95.00	95.00	42.74	4.9	1081	3943	88	1152
96.00	96.00	39.16	4.7	1081	3469	88	1153
97.00	97.00	17.41	5.3	1082	3551	88	1153
98.00	98.00	31.22	4.7	1082	3015	88	1153
99.00	99.00	37.14	5.6	1084	2947	88	1154
100.00	100.00	28.22	4.8	1079	2791	88	1154
101.00	101.00	32.74	4.1	1083	2797	88	1153
102.00	102.00	19.07	5.1	1070	3238	88	1155
103.00	103.00	27.10	5.9	1071	3617	88	1154
104.00	104.00	32.10	6.1	1071	3278	88	1152
105.00	105.00	35.32	4.9	1072	2889	88	1153
106.00	106.00	34.13	5.1	1069	2916	88	1153
107.00	107.00	43.53	6.0	1065	2835	88	1154
108.00	108.00	15.88	6.9	1071	2849	88	1153
109.00	109.00	25.09	5.3	1078	2312	88	1153
110.00	110.00	29.99	4.6	1051	2423	88	1152
111.00	111.00	23.34	4.0	1051	2399	88	1151
112.00	112.00	39.38	5.3	1046	2590	88	1152
113.00	113.00	29.32	5.2	1047	2151	88	1152
114.00	114.00	32.56	5.2	1051	1948	88	1152
115.00	115.00	45.80	5.5	1050	2274	88	1152
116.00	116.00	48.32	6.2	1051	2312	88	1151
117.00	117.00	23.90	5.6	1051	2308	88	1151
118.00	118.00	20.09	5.1	1049	2032	88	1150
119.00	119.00	29.62	9.0	642	1645	70	786
120.00	120.00	31.87	11.0	637	2014	70	786
121.00	121.00	28.99	12.3	636	2163	70	786
122.00	122.00	12.95	13.1	630	1592	69	779
123.00	123.00	44.16	2.2	577	1698	67	704
124.00	124.00	32.93	1.7	622	1552	69	737
125.00	125.00	18.63	3.7	738	1663	69	782
126.00	126.00	23.42	2.3	724	1488	69	790
127.00	127.00	29.96	2.2	715	1350	69	790
128.00	128.00	32.63	2.6	708	1563	69	789
129.00	129.00	39.48	3.5	722	1669	69	791
130.00	130.00	31.76	3.9	716	1581	69	790
131.00	131.00	50.37	5.0	708	1931	69	789
132.00	132.00	45.41	4.4	707	1934	69	790
133.00	133.00	28.93	3.3	719	1469	69	790
134.00	134.00	43.91	4.3	712	1288	69	789
135.00	135.00	35.42	3.7	700	1323	69	790
136.00	136.00	31.31	1.4	729	1184	69	791
137.00	137.00	49.70	1.7	715	1470	69	792
138.00	138.00	49.21	1.9	700	1114	69	790
139.00	139.00	32.41	2.7	737	1072	69	805
140.00	140.00	40.70	2.6	753	1231	70	816
141.00	141.00	51.60	3.0	738	1393	69	816
142.00	142.00	56.81	2.9	746	1577	69	815
143.00	143.00	42.84	2.7	743	1230	69	816

144.00	144.00	43.52	3.1	743	1179	69	816
145.00	145.00	45.92	2.5	738	1113	70	816
146.00	146.00	34.35	1.8	745	1072	69	815
147.00	147.00	50.56	1.7	743	1025	70	816
148.00	148.00	38.73	2.2	740	1039	70	815
149.00	149.00	25.44	3.3	754	1107	89	828
150.00	150.00	65.56	0.5	1524	1101	99	1088
151.00	151.00	72.24	0.5	1517	1263	100	1086
152.00	152.00	78.22	0.3	1558	1436	99	1095
153.00	153.00	38.89	0.4	1557	1106	100	1102
154.00	154.00	56.05	0.5	1549	1278	100	1102
155.00	155.00	87.02	0.4	1552	1299	100	1102
156.00	156.00	80.74	0.3	1544	1281	104	1101
157.00	157.00	72.98	0.5	1552	1385	111	1100
158.00	158.00	74.24	0.8	1550	1240	115	1101
159.00	159.00	90.92	1.1	1548	1506	118	1100
160.00	160.00	95.61	1.0	1548	1351	120	1101
161.00	161.00	84.08	1.1	1549	1404	118	1101
162.00	162.00	44.16	1.1	1544	1279	119	1100
163.00	163.00	52.13	1.2	1553	1246	121	1100
164.00	164.00	49.06	1.8	1592	1319	120	1101
165.00	165.00	55.04	1.5	1531	1440	120	1101
166.00	166.00	49.45	1.7	1511	1339	120	1096
167.00	167.00	45.78	2.2	1507	1394	121	1096
168.00	168.00	58.75	2.2	1516	1428	121	1096
169.00	169.00	68.78	1.3	1508	1279	119	1095
170.00	170.00	65.70	1.3	1511	1350	119	1096
171.00	171.00	69.68	1.3	1514	1339	120	1096
172.00	172.00	131.11	4.0	1506	1606	121	1095
173.00	173.00	216.84	6.5	1508	2029	120	1095
174.00	174.00	242.28	8.1	1514	2472	121	1096
175.00	175.00	225.83	9.3	1508	2535	121	1093
176.00	176.00	58.61	9.1	1559	2261	118	1099
177.00	177.00	56.95	4.5	1673	1914	115	1090
178.00	178.00	152.74	5.6	1817	2060	120	1109
179.00	179.00	169.64	7.9	1831	2729	121	1134
180.00	180.00	154.98	7.9	1832	2712	119	1153
181.00	181.00	160.18	7.4	1831	2505	119	1160
182.00	182.00	186.06	6.7	1826	2071	119	1157
183.00	183.00	213.39	7.9	1826	2659	119	1158
184.00	184.00	132.92	8.0	1831	2866	120	1156
185.00	185.00	115.62	6.8	1777	2610	120	1156
186.00	186.00	136.18	6.0	1774	2208	121	1149
187.00	187.00	166.12	9.1	1780	2834	120	1143
188.00	188.00	110.84	7.9	1774	2704	120	1142
189.00	189.00	107.37	7.9	1780	2631	118	1142
190.00	190.00	98.78	7.8	1876	2375	117	1145
191.00	191.00	67.44	6.7	1787	2041	117	1147
192.00	192.00	117.66	6.3	1753	2298	118	1142
193.00	193.00	121.97	8.2	1758	2574	120	1141
194.00	194.00	48.34	10.5	1742	2590	120	1140
195.00	195.00	90.73	10.8	1752	2840	121	1140
196.00	196.00	93.00	7.1	1750	2385	120	1138
197.00	197.00	108.59	5.1	1733	2306	120	1138
198.00	198.00	130.44	6.2	1742	2520	120	1138
199.00	199.00	155.45	8.6	1745	3243	120	1140
200.00	200.00	179.69	10.7	1746	3435	120	1138
201.00	201.00	73.04	12.4	1743	4076	119	1138
202.00	202.00	96.62	9.4	1740	3957	118	1138
203.00	203.00	107.80	11.1	1736	4051	117	1138
204.00	204.00	77.96	7.5	1745	3791	116	1123
205.00	205.00	25.40	3.5	1762	4309	116	1095
206.00	206.00	50.04	0.9	1770	4009	115	1095
207.00	207.00	36.09	2.2	1764	4090	114	1094
208.00	208.00	47.58	0.7	1760	3772	115	1094
209.00	209.00	67.10	3.1	1766	3775	112	1096
210.00	210.00	20.83	3.8	1760	4029	112	1095
211.00	211.00	44.19	1.6	1760	3998	115	1094
212.00	212.00	48.68	1.1	1751	3863	112	1093
213.00	213.00	26.11	6.8	1759	3744	116	1094
214.00	214.00	27.01	3.3	1759	3551	121	1093
215.00	215.00	42.20	4.4	1754	3226	118	1093

216.00	216.00	49.01	6.4	1753	3216	117	1093
217.00	217.00	30.56	6.9	1757	2965	120	1093
218.00	218.00	33.20	4.9	1751	2601	121	1093
219.00	219.00	30.06	3.0	1786	2659	120	1094
220.00	220.00	47.63	3.7	1724	2107	121	1095
221.00	221.00	26.05	7.4	1717	1895	120	1090
222.00	222.00	40.52	6.5	1710	2067	122	1090
223.00	223.00	62.50	6.9	1715	2394	123	1089
224.00	224.00	50.93	8.5	1715	2581	123	1090
225.00	225.00	28.53	9.5	1708	2528	119	1089
226.00	226.00	28.42	5.5	1716	2096	121	1090
227.00	227.00	39.52	4.3	1722	1742	123	1090
228.00	228.00	49.83	6.1	1709	2349	122	1090
229.00	229.00	33.83	5.5	1709	2029	122	1089
230.00	230.00	84.15	3.6	1745	1422	121	1090
231.00	230.99	42.37	8.1	1954	2592	119	1125
232.00	231.99	79.75	6.0	1988	3459	123	1134
233.00	232.99	70.34	9.0	1993	3663	125	1134
234.00	233.99	52.38	8.0	1994	3845	124	1134
235.00	234.99	50.34	6.7	1988	3283	124	1134
236.00	235.99	50.14	5.8	1990	2767	125	1135
237.00	236.99	48.67	5.3	1993	2810	125	1135
238.00	237.99	47.07	7.4	1992	2875	121	1134
239.00	238.99	55.90	6.2	1994	3086	122	1134
240.00	239.99	49.56	7.1	1983	3185	125	1135
241.00	240.99	25.01	9.3	1991	2800	121	1133
242.00	241.99	62.87	7.1	1993	3301	124	1134
243.00	242.99	75.31	8.0	1999	3628	124	1133
244.00	243.99	66.78	9.3	1985	3450	126	1132
245.00	244.99	33.90	9.7	1961	3047	124	1131
246.00	245.99	37.98	5.9	1951	2686	124	1130
247.00	246.99	49.17	7.5	1947	2551	124	1131
248.00	247.99	41.95	7.6	1952	2799	125	1130
249.00	248.99	37.00	7.0	1953	2569	125	1130
250.00	249.99	31.17	6.9	1948	2539	122	1130
251.00	250.99	40.53	5.8	1948	2621	121	1130
252.00	251.99	42.11	6.6	1945	2622	122	1129
253.00	252.99	43.22	6.7	1942	2707	126	1130
254.00	253.99	41.06	6.6	1942	2701	125	1129
255.00	254.99	38.92	6.2	1951	2741	125	1129
256.00	255.99	45.14	7.4	1959	2680	126	1129
257.00	256.99	22.54	7.1	1943	2342	126	1129
258.00	257.99	60.89	7.6	1942	2260	122	1125
259.00	258.99	40.33	8.7	1934	2224	121	1123
260.00	259.99	43.05	9.0	1931	2675	120	1121
261.00	260.99	32.84	9.1	1916	2742	120	1116
262.00	261.99	18.95	9.2	1918	2839	120	1117
263.00	262.99	45.61	9.3	1915	3010	120	1116
264.00	263.99	49.76	10.2	1918	2989	120	1117
265.00	264.99	38.93	10.1	1916	3476	120	1116
266.00	265.99	32.55	9.5	1920	2626	120	1116
267.00	266.99	34.16	9.6	1916	2451	120	1117
268.00	267.99	58.44	12.0	1917	2924	120	1115
269.00	268.99	50.34	14.0	1917	3026	121	1117
270.00	269.99	40.48	15.0	1913	3343	120	1116
271.00	270.99	13.96	14.7	1918	2992	119	1116
272.00	271.99	22.56	12.3	1913	2899	119	1115
273.00	272.99	30.14	11.0	1918	2662	120	1116
274.00	273.99	21.58	10.3	1956	2596	120	1119
275.00	274.99	31.89	8.8	1906	2734	120	1117
276.00	275.99	16.70	9.7	1894	2434	119	1114
277.00	276.99	11.51	9.3	1890	2137	120	1114
278.00	277.99	12.03	10.5	1888	2244	119	1113
279.00	278.99	24.47	9.0	1888	1883	119	1114
280.00	279.99	18.23	9.9	1884	2776	118	1113
281.00	280.99	26.47	7.7	1889	2439	119	1114
282.00	281.99	20.89	8.5	1884	2519	118	1113
283.00	282.99	23.78	9.0	1885	2469	121	1113
284.00	283.99	28.57	10.1	1886	2919	119	1113
285.00	284.99	30.20	9.3	1885	2796	119	1113
286.00	285.99	26.34	10.1	1890	2802	120	1112
287.00	286.99	28.91	9.7	1892	2850	121	1112

288.00	287.99	26.98	9.9	1835	2861	121	1112
289.00	288.99	34.10	13.0	1993	2709	121	1142
290.00	289.99	26.23	16.5	2164	3399	121	1167
291.00	290.99	43.93	16.5	2195	2998	121	1197
292.00	291.99	19.82	16.9	2191	2697	121	1195
293.00	292.99	26.26	16.7	2202	2800	121	1195
294.00	293.99	17.40	18.0	2191	2922	121	1195
295.00	294.99	42.89	15.9	2198	3057	121	1195
296.00	295.99	42.13	16.9	2200	3065	121	1195
297.00	296.99	40.30	18.5	2196	3133	120	1194
298.00	297.99	32.65	17.6	2190	3289	120	1194
299.00	298.99	40.76	15.4	2195	3261	121	1195
300.00	299.99	31.79	15.1	2195	2806	121	1194
301.00	300.99	26.17	17.1	2194	2438	121	1194
302.00	301.99	30.73	15.7	2236	2733	120	1197
303.00	302.99	53.63	15.3	2175	2429	121	1192
304.00	303.99	17.93	19.6	2163	2429	119	1191
305.00	304.99	26.34	17.2	2157	2977	121	1191
306.00	305.99	36.63	16.7	2166	3074	121	1191
307.00	306.99	36.64	17.8	2164	2584	121	1190
308.00	307.99	13.94	19.4	2162	2974	120	1190
309.00	308.99	26.09	17.9	2171	2565	120	1190
310.00	309.99	14.68	20.1	2156	2744	120	1190
311.00	310.99	22.74	18.8	2155	2762	121	1190
312.00	311.99	46.75	19.9	2156	3151	120	1190
313.00	312.99	44.60	22.0	2156	3873	120	1190
314.00	313.99	54.00	21.9	2153	4592	120	1189
315.00	314.99	23.89	24.1	2161	4418	120	1188
316.00	315.99	26.88	24.5	2159	3741	125	1189
317.00	316.99	31.38	24.1	2166	4480	129	1188
318.00	317.99	35.43	26.4	2177	3828	129	1187
319.00	318.99	49.05	25.5	2179	3761	129	1188
320.00	319.99	33.76	24.2	2203	4109	129	1191
321.00	320.99	41.44	23.4	2219	3713	130	1202
322.00	321.99	25.09	23.2	2230	3508	130	1202
323.00	322.99	73.08	23.4	2215	4022	129	1201
324.00	323.99	58.90	24.8	2218	4477	128	1202
325.00	324.99	61.37	25.3	2221	4775	128	1201
326.00	325.99	48.46	25.0	2226	4221	128	1202
327.00	326.99	23.89	25.1	2218	3761	128	1201
328.00	327.99	52.14	23.4	2225	4028	130	1201
329.00	328.99	31.57	23.8	2220	4365	130	1201
330.00	329.99	44.97	22.5	2221	4183	130	1201
331.00	330.99	50.51	23.4	2225	4240	130	1201
332.00	331.99	19.49	27.3	2218	3322	128	1201
333.00	332.99	35.85	22.9	2255	3746	130	1202
334.00	333.99	35.16	24.6	2203	3639	130	1202
335.00	334.99	21.21	26.5	2207	3428	129	1199
336.00	335.99	35.21	25.6	2194	3817	130	1199
337.00	336.99	40.31	23.5	2197	4573	130	1199
338.00	337.99	44.26	24.3	2202	4266	129	1199
339.00	338.99	35.80	23.6	2202	4135	130	1199
340.00	339.99	38.36	24.8	2198	4308	130	1199
341.00	340.99	39.75	23.5	2197	4503	130	1198
342.00	341.99	42.68	22.4	2202	4153	130	1200
343.00	342.99	38.52	22.7	2205	3704	131	1198
344.00	343.99	21.22	24.8	2194	3635	130	1197
345.00	344.99	23.95	26.8	2218	3811	131	1189
346.00	345.99	39.68	24.7	2261	4202	130	1205
347.00	346.99	37.10	26.4	2248	4898	130	1205
348.00	347.99	24.43	25.5	2248	3889	130	1204
349.00	348.99	31.89	20.5	2254	4316	130	1205
350.00	349.99	31.70	19.8	2252	4036	131	1204
351.00	350.99	32.45	20.5	2245	4059	131	1204
352.00	351.99	47.81	20.6	2244	5347	130	1204
353.00	352.99	24.97	21.2	2251	5101	131	1203
354.00	353.99	24.09	19.9	2245	4548	131	1204
355.00	354.99	43.67	21.2	2260	4585	131	1204
356.00	355.99	52.84	25.0	2249	4657	131	1203
357.00	356.99	55.10	23.9	2243	4431	131	1203
358.00	357.99	47.62	25.8	2247	4463	131	1203
359.00	358.99	56.91	22.4	2253	4702	131	1204

360.00	359.99	50.36	24.1	2247	4699	131	1204
361.00	360.99	60.12	21.8	2315	4497	131	1202
362.00	361.99	71.51	22.7	2336	4522	131	1210
363.00	362.99	43.77	22.2	2243	4187	130	1206
364.00	363.99	54.73	22.4	2232	4576	130	1201
365.00	364.99	59.17	22.5	2225	4067	131	1201
366.00	365.99	60.09	22.4	2229	4096	131	1202
367.00	366.99	45.03	23.9	2228	4279	130	1202
368.00	367.99	75.36	21.8	2233	4246	131	1202
369.00	368.99	48.51	25.3	2229	3932	131	1201
370.00	369.99	58.59	23.7	2232	4312	131	1200
371.00	370.99	39.13	22.9	2225	3955	131	1201
372.00	371.99	33.42	22.8	2233	4162	131	1201
373.00	372.99	63.53	22.0	2214	4448	132	1201
374.00	373.99	58.36	22.6	2192	5412	132	1202
375.00	374.99	76.28	22.2	2250	4939	132	1201
376.00	375.99	64.57	23.1	2272	4381	130	1203
377.00	376.99	52.04	22.4	2282	4571	130	1207
378.00	377.99	55.42	19.7	2272	4579	131	1207
379.00	378.99	52.84	18.6	2279	4441	132	1209
380.00	379.99	95.14	18.9	2257	4266	132	1206
381.00	380.99	101.28	23.4	2246	3924	131	1203
382.00	381.99	20.81	25.8	2249	3819	129	1202
383.00	382.99	49.27	23.5	2249	4860	132	1201
384.00	383.99	61.88	22.3	2255	5000	132	1203
385.00	384.99	66.26	22.5	2259	4570	131	1202
386.00	385.99	76.04	24.8	2248	4891	131	1203
387.00	386.99	63.57	23.8	2259	4796	132	1202
388.00	387.99	18.45	25.3	2257	3849	129	1202
389.00	388.99	23.53	23.1	2248	3979	126	1202
390.00	389.99	29.17	19.4	2246	4063	132	1200
391.00	390.99	81.49	20.0	2350	4134	132	1205
392.00	391.99	42.13	24.4	2237	4232	130	1205
393.00	392.99	61.47	22.4	2229	4464	130	1200
394.00	393.99	67.05	23.3	2232	5043	132	1200
395.00	394.99	67.05	23.3	2232	5043	132	1200
396.00	395.99	58.56	22.7	2232	4827	131	1201
397.00	396.99	34.00	21.2	2232	3588	131	1200
398.00	397.99	22.62	22.8	2222	4138	131	1199
399.00	398.99	34.00	21.2	2232	3588	131	1200
400.00	399.99	22.62	22.8	2222	4138	132	1199
401.00	400.99	22.62	22.8	2222	4138	132	1199
402.00	401.99	51.13	10.8	2197	2579	133	1184
403.00	402.99	41.96	11.7	2197	2510	132	1182
404.00	403.99	32.93	13.9	2187	2731	132	1182
405.00	404.99	26.13	15.7	2185	2681	132	1182
406.00	405.99	82.78	19.0	2182	4328	132	1183
407.00	406.99	82.78	19.0	2182	4328	132	1183
408.00	407.99	39.36	18.5	2174	3982	132	1181
409.00	408.99	44.98	19.0	2242	4298	132	1187
410.00	409.99	33.01	18.2	2287	4000	132	1213
411.00	410.99	33.01	18.2	2287	4000	132	1213
412.00	411.99	41.15	16.6	2294	3503	132	1211
413.00	412.99	86.78	18.9	2300	4048	132	1211
414.00	413.99	62.86	17.2	2293	3567	132	1211
415.00	414.99	62.86	17.2	2293	3567	132	1211
416.00	415.99	33.95	18.8	2283	3694	132	1212
417.00	416.99	54.24	17.9	2284	3812	132	1211
418.00	417.99	32.36	20.5	2290	3879	132	1211
419.00	418.99	55.71	19.3	2283	3456	132	1210
420.00	419.99	41.47	20.4	2296	3670	132	1211
421.00	420.99	22.20	18.0	2328	3459	132	1214
422.00	421.99	42.19	17.1	2283	3501	132	1207
423.00	422.99	42.92	18.8	2278	4385	132	1211
424.00	423.99	38.04	19.1	2276	3720	132	1208
425.00	424.99	25.00	18.4	2277	3296	132	1209
426.00	425.99	48.95	17.2	2266	3373	132	1210
427.00	426.99	24.68	17.8	2278	3327	132	1209
428.00	427.99	39.15	17.4	2275	3412	132	1210
429.00	428.99	19.29	16.2	2281	3160	132	1208
430.00	429.99	16.11	15.0	2276	2881	132	1208
431.00	430.99	22.23	15.1	2279	2586	132	1209

432.00	431.99	56.63	15.7	2275	2891	132	1211
433.00	432.99	26.53	16.0	2278	3202	131	1201
434.00	433.99	35.35	15.2	2289	3158	131	1201
435.00	434.99	50.85	16.9	2288	3323	130	1201
436.00	435.99	60.01	18.3	2285	3665	131	1203
437.00	436.99	20.72	18.5	2293	3600	131	1203
438.00	437.99	32.77	16.3	2296	3367	131	1203
439.00	438.99	36.80	19.0	2291	3789	131	1202
440.00	439.99	41.48	19.0	2284	3782	131	1203
441.00	440.99	25.63	18.4	2289	3893	131	1202
442.00	441.99	41.07	16.2	2288	3748	131	1202
443.00	442.99	24.15	16.9	2290	3523	131	1202
444.00	443.99	42.48	18.5	2285	3631	131	1202
445.00	444.99	28.91	17.5	2287	3550	131	1202
446.00	445.99	27.69	17.7	2292	3571	131	1202
447.00	446.99	31.08	16.3	2294	3377	131	1202
448.00	447.99	31.64	16.2	2289	3382	131	1201
449.00	448.99	26.94	17.9	2290	3812	131	1201
450.00	449.99	21.85	17.3	2279	3666	131	1201
451.00	450.99	28.59	15.1	2284	3334	131	1202
452.00	451.99	32.95	16.0	2273	3412	131	1200
453.00	452.99	19.83	18.8	2281	2976	131	1202
454.00	453.99	22.78	16.8	2284	3220	131	1201
455.00	454.99	30.84	15.9	2317	3570	131	1205
456.00	455.99	9.08	18.1	2264	2562	131	1199
457.00	456.99	20.51	17.2	2264	3240	131	1199
458.00	457.99	33.54	16.2	2271	2911	131	1199
459.00	458.99	31.19	17.0	2258	2954	131	1198
460.00	459.99	8.83	17.5	2257	2697	131	1199
461.00	460.99	11.27	16.7	2251	2312	131	1199
462.00	461.99	14.56	15.1	2258	2483	131	1198
463.00	462.99	25.43	18.9	2257	2855	130	1196
464.00	463.99	31.28	26.1	2233	4033	91	1186
465.00	464.99	20.41	29.2	2233	4782	66	1186
466.00	465.99	29.13	24.9	2226	4414	67	1186
467.00	466.99	18.59	22.8	2229	3673	119	1185
468.00	467.99	18.87	23.9	2226	3542	132	1185
469.00	468.99	14.24	22.6	2236	3468	132	1190
470.00	469.99	12.45	23.3	2245	3164	132	1189
471.00	470.99	35.01	23.0	2242	3507	131	1188
472.00	471.99	15.66	25.3	2261	3481	108	1193
473.00	472.99	15.71	25.3	2258	3468	80	1194
474.00	473.99	16.22	24.5	2262	3406	81	1195
475.00	474.99	16.33	24.2	2261	3610	80	1194
476.00	475.99	23.06	23.3	2256	3890	83	1194
477.00	476.99	21.57	23.4	2265	3759	117	1194
478.00	477.99	16.87	25.4	2258	3657	120	1195
479.00	478.99	26.18	25.5	2297	3742	123	1197
480.00	479.99	20.50	25.0	2242	3987	129	1193
481.00	480.99	23.88	24.5	2243	4115	130	1193
482.00	481.99	29.98	25.6	2241	3967	131	1192
483.00	482.99	27.23	26.4	2248	4183	130	1192
484.00	483.99	20.97	25.4	2242	3907	130	1193
485.00	484.99	26.59	25.3	2243	3963	131	1193
486.00	485.99	21.84	24.3	2242	3875	131	1192
487.00	486.99	13.54	24.3	2244	3457	131	1193
488.00	487.98	6.50	25.2	2242	3308	110	1192
489.00	488.98	8.65	21.7	2244	3036	101	1193
490.00	489.98	23.95	18.8	2242	3189	101	1193
491.00	490.98	47.84	22.3	2253	3103	126	1193
492.00	491.98	54.55	22.2	2216	3528	126	1179
493.00	492.98	54.65	23.4	2219	4040	126	1174
494.00	493.98	25.40	23.7	2213	4156	126	1175
495.00	494.98	40.15	23.7	2219	4143	126	1175
496.00	495.98	41.89	23.3	2225	4210	126	1174
497.00	496.98	35.02	23.9	2222	4405	126	1175
498.00	497.98	44.70	24.7	2215	4585	126	1175
499.00	498.98	23.50	26.1	2219	4577	126	1175
500.00	499.98	30.28	24.5	2221	4382	126	1175
501.00	500.98	52.48	25.8	2225	4824	126	1174
502.00	501.98	25.60	26.6	2231	4683	126	1175
503.00	502.98	21.56	28.4	2225	4761	126	1174

504.00	503.98	39.41	26.5	2232	4796	126	1174
505.00	504.98	19.66	27.5	2222	4159	126	1174
506.00	505.98	20.28	27.8	2220	4340	126	1174
507.00	506.98	27.44	26.5	2222	4531	126	1174
508.00	507.98	25.28	27.9	2195	4153	126	1174
509.00	508.98	25.42	26.8	2284	4434	126	1178
510.00	509.98	22.02	25.7	2205	4326	126	1174
511.00	510.98	19.51	24.4	2200	4059	126	1172
512.00	511.98	18.01	24.0	2196	3719	126	1172
513.00	512.98	18.77	24.0	2250	3668	127	1184
514.00	513.98	22.53	23.9	2248	3621	127	1188
515.00	514.98	25.10	22.9	2249	3474	126	1187
516.00	515.98	10.31	30.3	2254	4482	71	1187
517.00	516.98	24.74	29.7	2255	4986	67	1187
518.00	517.98	26.35	27.6	2260	4292	67	1187
519.00	518.98	23.79	30.3	2262	4831	67	1187
520.00	519.98	19.60	27.5	2256	4655	67	1187
521.00	520.98	28.19	27.2	2246	4345	67	1186
522.00	521.98	32.42	29.8	2250	4940	68	1186
523.00	522.98	49.02	26.0	2184	4423	116	1158
524.00	523.98	39.04	25.8	2181	4375	130	1157
525.00	524.98	49.22	24.5	2180	4362	130	1156
526.00	525.98	23.96	28.2	2262	4994	130	1174
527.00	526.98	29.37	27.1	2261	4489	130	1180
528.00	527.98	26.79	27.8	2262	4524	130	1180
529.00	528.98	37.94	28.0	2266	4700	130	1180
530.00	529.98	33.61	27.1	2265	4479	130	1180
531.00	530.98	19.54	28.0	2265	4349	130	1180
532.00	531.98	19.53	25.7	2264	4146	130	1179
533.00	532.98	26.04	26.9	2263	4233	130	1179
534.00	533.98	15.32	27.0	2263	4133	130	1179
535.00	534.98	43.11	25.5	2258	4743	130	1179
536.00	535.98	14.19	30.0	2285	4186	130	1180
537.00	536.98	14.33	27.3	2243	3982	130	1178
538.00	537.98	25.65	26.7	2241	3897	130	1177
539.00	538.98	18.27	27.8	2234	4037	130	1177
540.00	539.98	43.97	27.3	2238	4407	130	1177
541.00	540.98	14.64	28.8	2237	4152	130	1176
542.00	541.98	14.80	28.4	2234	3993	130	1176
543.00	542.98	19.16	30.1	2233	3895	130	1175
544.00	543.98	16.62	31.1	2229	3810	128	1175
545.00	544.98	21.84	29.8	2225	4519	130	1175
546.00	545.98	24.65	28.4	2228	4547	130	1176
547.00	546.98	39.69	29.0	2234	4472	130	1175
548.00	547.98	32.66	29.8	2233	4538	130	1176
549.00	548.98	19.82	29.6	2235	4580	130	1176
550.00	549.98	17.11	27.6	2231	4204	130	1176
551.00	550.98	22.82	27.1	2206	3991	130	1166
552.00	551.98	25.01	31.9	2160	4937	129	1145
553.00	552.98	32.49	32.0	2158	4950	129	1144
554.00	553.98	25.89	31.3	2151	4949	129	1145
555.00	554.98	33.31	30.2	2155	5013	129	1146
556.00	555.98	25.23	30.4	2154	4734	129	1143
557.00	556.98	17.62	30.8	2226	4604	129	1161
558.00	557.98	17.88	27.0	2242	4361	129	1167
559.00	558.98	21.81	27.5	2234	4423	129	1167
560.00	559.98	32.63	27.9	2239	4358	129	1166
561.00	560.98	27.77	32.0	2233	4891	129	1166
562.00	561.98	24.46	32.9	2232	4877	129	1166
563.00	562.98	18.60	32.9	2234	4874	129	1166
564.00	563.98	62.12	34.0	2236	5100	129	1165
565.00	564.98	44.74	34.8	2228	5945	129	1166
566.00	565.98	32.69	35.5	2236	5507	130	1176
567.00	566.98	38.88	33.8	2261	5174	131	1185
568.00	567.98	38.25	36.0	2221	5655	129	1173
569.00	568.98	27.65	35.2	2223	5365	129	1165
570.00	569.98	26.56	34.0	2226	5149	129	1165
571.00	570.98	53.32	33.0	2226	5288	129	1165
572.00	571.98	31.47	36.0	2225	5082	129	1165
573.00	572.98	16.19	35.0	2228	4973	129	1165
574.00	573.98	24.71	32.0	2230	5080	129	1165
575.00	574.98	23.10	31.3	2225	4858	129	1165

576.00	575.98	29.57	30.8	2224	4807	129	1165
577.00	576.98	35.55	30.4	2226	4730	129	1165
578.00	577.98	77.96	32.5	2230	5128	129	1166
579.00	578.98	25.35	34.0	2229	5325	129	1165
580.00	579.98	23.15	33.9	2227	5219	129	1165
581.00	580.98	42.99	33.6	2243	5324	131	1163
582.00	581.98	33.11	33.1	2239	4891	130	1162
583.00	582.98	15.78	32.6	2237	4962	130	1161
584.00	583.98	27.09	30.6	2229	5013	130	1160
585.00	584.98	12.80	31.5	2226	4942	130	1160
586.00	585.98	62.81	29.3	2226	4888	130	1160
587.00	586.98	29.80	30.5	2224	4943	130	1159
588.00	587.98	35.11	29.5	2229	4820	130	1160
589.00	588.98	43.12	31.3	2232	4877	130	1160
590.00	589.98	26.69	31.0	2227	4832	130	1159
591.00	590.98	34.49	30.6	2229	5011	130	1160
592.00	591.98	26.38	31.3	2231	4972	130	1160
593.00	592.98	35.03	31.5	2232	4964	130	1159
594.00	593.98	33.84	32.0	2230	4998	130	1160
595.00	594.98	39.06	31.4	2230	5091	130	1159
596.00	595.98	20.97	31.4	2232	4652	117	1160
597.00	596.98	38.99	31.3	2228	5170	115	1160
598.00	597.98	28.47	31.9	2234	4992	128	1160
599.00	598.98	32.61	32.1	2233	4922	130	1159
600.00	599.98	31.01	31.0	2293	4881	130	1164
601.00	600.98	40.74	31.0	2228	4955	130	1159
602.00	601.98	37.57	31.3	2224	4971	130	1159
603.00	602.98	20.03	33.4	2224	4870	129	1159
604.00	603.98	24.89	29.8	2225	4450	130	1158
605.00	604.98	22.29	32.8	2230	4770	130	1159
606.00	605.98	16.70	32.4	2221	4723	128	1159
607.00	606.98	18.88	32.5	2224	5045	120	1159
608.00	607.98	16.11	32.6	2238	4737	118	1161
609.00	608.98	19.92	34.9	2308	4805	111	1170
610.00	609.98	18.71	32.6	2298	4601	106	1170
611.00	610.98	40.87	34.5	2298	4637	106	1171
612.00	611.98	20.10	35.8	2293	4836	106	1170
613.00	612.98	9.06	33.3	2295	5069	115	1170
614.00	613.98	19.48	30.5	2282	4873	131	1168
615.00	614.98	38.50	31.2	2283	4948	132	1166
616.00	615.98	17.31	32.2	2303	5183	131	1173
617.00	616.98	21.86	29.8	2292	4932	131	1170
618.00	617.98	17.89	30.0	2285	4590	132	1168
619.00	618.98	15.79	31.4	2283	4579	130	1168
620.00	619.98	20.99	31.0	2271	4804	131	1166
621.00	620.98	23.95	31.6	2278	5071	131	1166
622.00	621.98	25.72	30.8	2312	4954	131	1171
623.00	622.98	21.35	30.8	2324	4893	131	1175
624.00	623.98	14.46	31.2	2282	4861	131	1170
625.00	624.98	18.14	29.4	2268	4489	131	1170
626.00	625.98	18.53	29.0	2283	4657	132	1171
627.00	626.98	22.22	29.2	2283	4543	132	1170
628.00	627.98	27.32	30.8	2285	4791	132	1171
629.00	628.98	13.60	29.3	2286	4484	131	1171
630.00	629.98	35.81	28.3	2274	4692	132	1170
631.00	630.98	28.67	28.4	2284	4573	132	1169
632.00	631.98	31.40	31.7	2278	4672	131	1169
633.00	632.98	7.80	34.1	2280	4635	131	1169
634.00	633.98	11.12	30.8	2285	4674	132	1169
635.00	634.98	29.48	28.5	2271	4641	131	1167
636.00	635.98	25.02	33.2	2276	5056	132	1168
637.00	636.98	18.69	31.4	2288	4818	132	1169
638.00	637.98	13.09	26.3	2374	4409	132	1187
639.00	638.98	46.15	23.3	2377	4380	132	1187
640.00	639.98	13.78	26.0	2375	4469	132	1187
641.00	640.98	19.71	26.8	2371	4449	132	1186
642.00	641.98	16.95	26.5	2370	4435	132	1187
643.00	642.98	14.78	28.1	2366	4660	132	1186
644.00	643.98	14.21	27.0	2371	4459	132	1186
645.00	644.98	16.52	26.8	2373	4790	132	1186
646.00	645.98	30.24	27.8	2371	4605	132	1186
647.00	646.98	17.55	29.2	2366	4669	132	1186

648.00	647.98	13.77	27.4	2374	4527	132	1186
649.00	648.98	33.75	28.2	2361	4889	132	1186
650.00	649.98	15.20	29.5	2371	4898	132	1186
651.00	650.98	16.78	26.9	2365	4524	132	1186
652.00	651.98	17.62	27.0	2366	4423	132	1186
653.00	652.98	16.02	24.9	2406	4286	132	1189
654.00	653.98	21.61	26.4	2356	4508	132	1185
655.00	654.98	23.15	27.3	2358	4731	132	1185
656.00	655.98	27.16	27.8	2363	4812	132	1185
657.00	656.98	21.75	28.8	2354	4605	132	1185
658.00	657.98	12.08	26.5	2357	4352	132	1185
659.00	658.98	19.23	27.1	2354	4249	132	1185
660.00	659.98	16.21	26.2	2357	4139	132	1185
661.00	660.98	24.70	27.0	2361	4503	132	1185
662.00	661.98	26.42	27.1	2354	4674	132	1185
663.00	662.98	28.26	27.2	2361	4723	132	1185
664.00	663.98	20.14	28.3	2394	4584	132	1190
665.00	664.98	13.07	29.2	2453	4981	132	1198
666.00	665.98	34.37	30.2	2478	5016	132	1204
667.00	666.98	34.20	27.8	2475	5083	132	1203
668.00	667.98	38.71	26.1	2463	4482	132	1203
669.00	668.98	48.16	29.3	2460	5023	132	1203
670.00	669.98	22.11	31.1	2466	5194	132	1203
671.00	670.98	36.44	29.8	2471	5064	132	1203
672.00	671.98	16.04	31.5	2514	4506	132	1213
673.00	672.98	19.65	30.4	2586	4627	132	1234
674.00	673.98	23.01	31.2	2595	4917	132	1234
675.00	674.98	16.40	31.8	2584	4828	132	1234
676.00	675.98	18.16	31.5	2592	4473	132	1234
677.00	676.98	12.56	33.4	2570	3661	131	1232
678.00	677.98	24.48	30.1	2562	5006	132	1232
679.00	678.98	30.49	31.2	2565	4856	132	1232
680.00	679.98	21.39	30.1	2578	4961	132	1232
681.00	680.98	40.59	30.1	2612	4858	132	1236
682.00	681.98	23.42	28.1	2550	4684	132	1232
683.00	682.98	16.44	25.5	2552	4320	132	1231
684.00	683.98	48.07	24.7	2561	4367	132	1231
685.00	684.98	44.06	27.8	2553	4635	132	1231
686.00	685.98	29.46	28.6	2551	4724	132	1231
687.00	686.98	29.46	29.5	2552	4836	132	1231
688.00	687.98	32.98	28.3	2628	4755	132	1234
689.00	688.98	25.21	29.3	2551	4634	132	1232
690.00	689.98	17.28	26.4	2552	4234	132	1231
691.00	690.98	32.25	25.5	2551	4229	132	1232
692.00	691.98	27.77	26.7	2561	4333	132	1231
693.00	692.98	44.42	27.6	2585	4151	132	1233
694.00	693.98	10.53	32.8	2605	4700	133	1234
695.00	694.98	18.12	32.7	2596	3767	134	1233
696.00	695.98	19.27	31.9	2580	4851	133	1232
697.00	696.98	28.41	30.0	2573	4843	133	1230
698.00	697.98	23.57	31.4	2573	4554	133	1230
699.00	698.98	11.70	32.4	2568	4199	134	1230
700.00	699.98	21.99	32.8	2576	4965	133	1230
701.00	700.98	13.31	31.5	2579	4680	133	1231
702.00	701.98	28.15	29.1	2581	5101	133	1231
703.00	702.98	34.94	31.6	2582	4864	133	1231
704.00	703.98	30.67	31.0	2587	5323	133	1231
705.00	704.98	24.00	32.1	2584	5166	133	1232
706.00	705.98	38.48	30.2	2585	5059	133	1231
707.00	706.98	35.64	31.7	2581	5066	133	1230
708.00	707.98	10.94	31.8	2584	4268	133	1231
709.00	708.98	17.63	31.3	2601	4795	133	1231
710.00	709.98	22.28	30.3	2582	4905	133	1232
711.00	710.98	19.13	28.9	2580	4034	134	1229
712.00	711.98	30.36	30.8	2576	4183	134	1230
713.00	712.98	16.33	31.4	2569	4382	134	1230
714.00	713.98	32.04	31.4	2584	4360	134	1229
715.00	714.98	15.16	32.2	2576	4142	133	1230
716.00	715.98	19.32	31.3	2569	4643	133	1230
717.00	716.98	13.51	32.4	2575	3963	133	1230
718.00	717.98	12.93	32.9	2568	4430	133	1229
719.00	718.98	19.33	32.2	2563	4996	133	1228

720.00	719.98	18.06	30.9	2557	5138	133	1229
721.00	720.98	56.28	29.2	2558	4603	133	1229
722.00	721.98	65.23	30.1	2620	4785	133	1232
723.00	722.98	78.62	30.2	2635	4351	133	1229
724.00	723.98	43.68	29.5	2568	4884	133	1227
725.00	724.98	44.42	29.8	2578	5196	133	1234
726.00	725.98	43.56	28.5	2700	4381	133	1243
727.00	726.98	35.64	27.2	2701	4673	134	1251
728.00	727.98	24.80	28.1	2683	4278	134	1250
729.00	728.98	35.16	26.5	2639	4795	134	1237
730.00	729.98	27.45	28.3	2635	4469	134	1238
731.00	730.98	22.23	29.3	2619	4257	134	1235
732.00	731.98	11.35	31.4	2606	4613	134	1230
733.00	732.98	33.10	31.0	2601	5245	134	1229
734.00	733.98	16.57	28.2	2608	5190	133	1230
735.00	734.98	51.81	27.3	2598	4934	134	1230
736.00	735.98	26.96	29.8	2593	5225	133	1230
737.00	736.98	7.35	29.4	2628	3280	133	1231
738.00	737.98	22.60	27.3	2586	5158	134	1231
739.00	738.98	22.37	27.5	2587	4844	134	1229
740.00	739.98	17.19	27.7	2586	4643	134	1230
741.00	740.98	20.76	28.0	2582	4539	134	1228
742.00	741.98	26.28	28.0	2580	4635	134	1230
743.00	742.98	17.63	27.5	2591	4334	134	1229
744.00	743.98	9.47	29.2	2594	4646	133	1230
745.00	744.97	13.83	29.5	2589	4137	132	1229
746.00	745.97	33.76	29.3	2600	4736	134	1228
747.00	746.97	20.76	29.3	2590	4725	134	1229
748.00	747.97	18.85	29.7	2593	4513	134	1229
749.00	748.97	18.22	28.5	2589	4125	134	1229
750.00	749.97	6.52	29.8	2587	3194	132	1229
751.00	750.97	14.54	28.3	2578	3681	129	1229
752.00	751.97	12.94	28.0	2583	3951	132	1229
753.00	752.97	28.28	27.9	2586	4625	133	1215
754.00	753.97	30.14	27.8	2586	4869	133	1215
755.00	754.97	23.66	28.6	2587	4786	133	1215
756.00	755.97	7.66	9.4	1255	1576	73	923
757.00	756.97	7.01	17.6	1344	2911	47	953
758.00	757.97	33.12	20.1	1512	4641	57	1021
759.00	758.97	9.24	15.3	1607	2938	63	1050
760.00	759.97	17.73	12.3	1792	2498	72	1104
761.00	760.97	20.98	13.1	1865	3571	72	1118
762.00	761.97	24.05	12.1	1974	3002	72	1164
763.00	762.97	24.33	13.5	1981	3142	72	1165
764.00	763.97	35.08	13.8	1985	3707	72	1164
765.00	764.97	29.99	14.5	1985	3264	72	1165
766.00	765.97	34.81	14.5	1991	3253	72	1164
767.00	766.97	29.68	12.6	1986	3501	72	1164
768.00	767.97	23.89	12.5	1998	2922	72	1165
769.00	768.97	16.18	13.9	2002	3086	72	1165
770.00	769.97	30.95	14.3	2004	3761	72	1166
771.00	770.97	1.35	20.1	1934	1804	69	1154
772.00	771.97	24.03	18.7	1712	2963	80	1137
773.00	772.97	27.16	16.5	1684	2733	93	1135
774.00	773.97	14.98	16.8	1848	2303	125	1188
775.00	774.97	21.29	17.4	1882	2355	125	1206
776.00	775.97	20.24	16.8	1883	2510	125	1207
777.00	776.97	18.85	18.6	1890	2685	125	1207
778.00	777.97	23.88	11.9	1913	1796	118	1237
779.00	778.97	21.10	15.7	1796	2149	127	1174
780.00	779.97	17.15	14.0	1840	1871	127	1190
781.00	780.97	19.98	16.0	1783	2206	127	1182
782.00	781.97	22.33	19.2	1778	2577	127	1180
783.00	782.97	35.29	18.9	1758	3000	127	1168
784.00	783.97	11.24	19.2	1792	2775	127	1168
785.00	784.97	27.10	19.6	1854	2879	128	1174
786.00	785.97	21.74	18.3	1895	3106	132	1178
787.00	786.97	15.36	18.4	1927	2798	132	1177
788.00	787.97	18.02	17.8	1934	2888	132	1171
789.00	788.97	13.09	18.0	1967	2542	133	1173
790.00	789.97	17.72	17.0	1993	2703	133	1175
791.00	790.97	34.96	15.7	2014	2531	132	1178

792.00	791.97	25.84	13.1	2026	2253	133	1178
793.00	792.97	24.29	11.9	1997	2071	133	1177
794.00	793.97	22.26	11.6	1861	1973	133	1163
795.00	794.97	22.28	10.6	1888	2029	133	1168
796.00	795.97	13.86	11.5	1907	1868	133	1175
797.00	796.97	17.27	14.4	1934	2082	132	1176
798.00	797.97	25.38	13.2	1946	2069	132	1176
799.00	798.97	47.36	12.8	1955	2462	133	1179
800.00	799.97	43.20	13.4	1949	2469	133	1179
801.00	800.97	27.27	13.0	1942	2305	133	1178
802.00	801.97	16.30	13.4	1926	1980	133	1177
803.00	802.97	28.10	13.1	1898	2210	133	1174
804.00	803.97	22.19	12.7	1901	2243	133	1174
805.00	804.97	23.74	12.2	1917	2119	133	1176
806.00	805.97	18.24	13.8	1950	2107	133	1177
807.00	806.97	11.32	8.5	1958	1254	127	1175
808.00	807.97	35.09	12.0	1753	2366	129	1132
809.00	808.97	41.54	14.8	1696	2605	132	1126
810.00	809.97	31.59	16.8	1727	2538	132	1134
811.00	810.97	34.81	14.9	1843	2444	132	1168
812.00	811.97	35.90	14.6	1884	2443	132	1183
813.00	812.97	26.03	13.2	1897	2252	132	1184
814.00	813.97	24.59	14.7	1916	2303	132	1186
815.00	814.97	31.03	15.1	1912	2438	132	1186
816.00	815.97	36.77	16.1	1913	2574	132	1186
817.00	816.97	42.26	16.3	1905	2640	132	1185
818.00	817.97	39.30	16.3	1902	2594	132	1185
819.00	818.97	52.95	16.2	1904	2759	132	1184
820.00	819.97	47.41	14.9	1907	2577	132	1184
821.00	820.97	27.99	15.8	1905	2473	132	1184
822.00	821.97	25.61	15.1	1912	2292	132	1183
823.00	822.97	36.29	15.7	1922	2587	132	1184
824.00	823.97	33.08	13.6	1905	2295	132	1182
825.00	824.97	29.64	14.6	1914	2233	132	1183
826.00	825.97	45.12	14.9	1909	2726	132	1182
827.00	826.97	51.98	15.9	1907	2722	132	1182
828.00	827.97	52.92	16.4	1901	2839	133	1185
829.00	828.97	41.22	15.5	1887	2460	133	1183
830.00	829.97	37.18	14.4	1882	2432	132	1180
831.00	830.97	38.50	14.0	1880	2503	132	1180
832.00	831.97	42.93	16.5	1882	2617	132	1181
833.00	832.97	33.52	14.7	1888	2408	132	1181
834.00	833.97	38.52	14.3	1891	2640	132	1183
835.00	834.97	25.94	16.4	1894	2647	132	1182
836.00	835.97	19.95	14.0	1907	1996	131	1170
837.00	836.97	34.08	11.3	1646	2267	129	1119
838.00	837.97	20.86	16.7	1748	2380	131	1165
839.00	838.97	26.84	18.7	1800	3259	131	1179
840.00	839.97	17.95	16.6	1849	2587	131	1182
841.00	840.97	22.61	16.2	1908	2728	131	1187
842.00	841.97	19.49	16.5	1955	2409	131	1190
843.00	842.97	22.58	16.8	1960	2454	131	1190
844.00	843.97	18.56	17.9	1935	2835	131	1183
845.00	844.97	31.53	17.5	1937	3694	131	1182
846.00	845.97	56.87	14.9	1934	4296	131	1183
847.00	846.97	53.57	14.2	1945	3553	131	1183
848.00	847.97	41.43	14.5	1919	3011	131	1181
849.00	848.97	54.32	12.7	1914	3778	131	1181
850.00	849.97	44.12	14.1	1894	3366	131	1178
851.00	850.97	59.45	13.7	1888	3103	131	1177
852.00	851.97	54.90	6.0	1901	1950	130	1170
853.00	852.97	90.70	10.2	1813	3372	130	1170
854.00	853.97	140.86	8.7	1780	5138	132	1163
855.00	854.97	119.53	5.1	1788	3220	133	1160
856.00	855.97	48.87	7.8	1793	2524	120	1162
857.00	856.97	44.72	14.1	1802	3633	128	1162
858.00	857.97	41.96	15.8	1810	3205	125	1162
859.00	858.97	50.93	16.3	1847	3621	130	1164
860.00	859.97	49.79	18.0	1753	3741	130	1163
861.00	860.97	33.36	16.1	1481	3202	130	1055
862.00	861.97	90.72	15.3	1488	4951	130	1036
863.00	862.97	109.85	12.6	1494	4870	129	1036

864.00	863.97	117.78	7.6	1492	3714	125	1036
865.00	864.97	74.58	4.3	1499	2459	118	1032
866.00	865.97	65.16	1.7	1595	1341	117	1013
867.00	866.97	39.38	0.1	1776	1204	117	1087
868.00	867.97	39.08	1.2	1818	1546	117	1129
869.00	868.97	58.05	1.4	1895	1814	117	1162
870.00	869.97	45.33	0.6	1889	1572	117	1164
871.00	870.97	43.80	0.2	1565	1679	116	1075
872.00	871.97	44.19	0.1	1550	1500	117	1027
873.00	872.97	38.07	0.1	1564	1577	117	1029
874.00	873.97	25.62	4.6	1589	2021	117	1030
875.00	874.97	43.15	7.8	1615	2643	116	1033
876.00	875.97	85.79	1.4	1632	2669	117	1038
877.00	876.97	39.94	0.1	1666	1617	118	1043
878.00	877.97	40.13	0.1	1757	1744	117	1066
879.00	878.97	26.42	2.0	1835	1816	117	1097
880.00	879.97	47.57	3.3	1839	2697	116	1101
881.00	880.97	57.65	0.8	1851	2372	117	1101
882.00	881.97	33.28	3.0	1864	2392	119	1103
883.00	882.97	38.86	7.6	1860	2955	122	1102
884.00	883.97	80.72	3.7	1870	2422	122	1102
885.00	884.97	22.03	5.4	1875	2488	122	1103
886.00	885.97	23.67	6.3	1891	2403	115	1047
887.00	886.97	52.63	9.6	1898	3495	122	1105
888.00	887.97	27.97	7.8	1887	2751	123	1105
889.00	888.97	28.04	11.1	1868	3329	122	1103
890.00	889.97	52.22	11.9	1844	3580	130	1100
891.00	890.97	28.19	9.6	1850	3064	131	1104
892.00	891.97	27.55	8.7	1828	3336	131	1104
893.00	892.97	33.04	11.0	1802	3799	131	1101
894.00	893.97	32.26	12.7	1782	3577	131	1100
895.00	894.97	53.63	8.0	1738	2839	124	1086
896.00	895.97	115.31	5.9	1654	2741	129	1067
897.00	896.97	50.53	11.2	1638	4401	130	1062
898.00	897.97	46.77	11.7	1639	3931	130	1062
899.00	898.97	50.97	11.6	1664	4736	131	1063
900.00	899.97	73.31	9.1	1762	4090	131	1086
901.00	900.97	45.56	8.1	1812	3708	131	1108
902.00	901.97	86.53	5.8	1874	3261	131	1130
903.00	902.97	59.08	9.6	1883	4280	131	1135
904.00	903.97	42.32	9.9	1889	4554	131	1136
905.00	904.97	66.97	7.7	1885	4037	131	1137
906.00	905.97	99.80	8.2	1881	3606	132	1138
907.00	906.97	117.16	4.2	1890	3857	134	1137
908.00	907.97	113.67	4.4	1892	3377	135	1137
909.00	908.97	28.69	9.2	1681	2899	133	1093
910.00	909.97	33.14	12.3	1597	3239	132	1073
911.00	910.97	16.94	10.9	1504	2396	132	1041
912.00	911.97	31.28	12.4	1682	3200	132	1091
913.00	912.97	15.90	10.8	1714	2634	132	1110
914.00	913.97	21.07	10.3	1454	2693	133	1021
915.00	914.97	25.69	10.9	1429	2714	132	1000
916.00	915.97	45.40	12.2	1406	3246	132	1000
917.00	916.97	44.92	9.7	1397	3135	132	999
918.00	917.97	41.10	8.9	1535	2740	132	1031
919.00	918.97	54.69	8.9	1561	2894	132	1068
920.00	919.97	47.56	10.5	1553	3165	132	1068
921.00	920.97	44.82	11.5	1562	3727	132	1068
922.00	921.97	29.61	13.6	1564	4409	131	1069
923.00	922.97	14.65	16.6	1576	3886	132	1072
924.00	923.97	30.22	14.8	1676	3621	132	1093
925.00	924.97	34.27	14.7	1671	4405	132	1092
926.00	925.97	41.75	14.8	1613	4342	132	1093
927.00	926.97	48.26	15.8	1607	5043	132	1091
928.00	927.97	71.32	13.8	1632	5267	132	1092
929.00	928.97	71.32	13.8	1632	5267	132	1092
930.00	929.97	59.76	12.2	1636	4746	132	1094
931.00	930.97	65.03	13.4	1276	5660	132	1027
932.00	931.97	76.49	15.8	1210	5989	132	924
933.00	932.97	60.20	14.9	1203	5904	132	913
934.00	933.97	59.63	13.0	1302	5542	132	927
935.00	934.97	64.83	13.8	1420	5953	131	977

936.00	935.97	65.94	16.0	1434	5969	132	1002
937.00	936.97	61.29	12.8	1418	5343	132	1003
938.00	937.97	61.29	12.8	1418	5343	132	1003
939.00	938.97	54.36	15.3	1400	5347	132	1003
940.00	939.97	51.46	15.6	1393	5481	132	1001
941.00	940.97	58.91	17.1	1399	6028	132	1001
942.00	941.97	75.41	16.6	1400	5584	132	1003
943.00	942.97	94.88	17.1	1409	6328	132	1003
944.00	943.97	31.40	11.0	1434	3864	132	1004
945.00	944.97	31.40	11.0	1434	3864	132	1004
946.00	945.97	29.24	8.0	1435	2945	133	1004
947.00	946.97	25.95	7.6	1436	2873	133	1005
948.00	947.97	34.55	10.8	1443	3913	132	1005
949.00	948.97	30.51	10.7	1442	3509	132	1005
950.00	949.97	43.73	13.7	1441	4829	132	1005
951.00	950.97	44.67	9.7	1450	4131	132	1005
952.00	951.97	44.67	9.7	1450	4131	132	1005
953.00	952.97	40.86	10.1	1470	4665	132	1015
954.00	953.97	47.87	10.9	1497	4371	132	1016
955.00	954.97	44.78	11.1	1488	4228	131	1012
956.00	955.97	52.98	10.6	1457	4352	130	1008
957.00	956.97	48.77	9.9	1435	4681	129	1003
958.00	957.97	48.86	8.7	1443	3768	129	999
959.00	958.97	67.68	5.2	1448	3259	129	1000
960.00	959.97	23.88	9.0	1459	2898	130	1000
961.00	960.97	39.79	8.7	1415	3370	131	998
962.00	961.97	33.48	10.8	1396	4298	131	996
963.00	962.97	53.62	12.7	1398	4896	130	997
964.00	963.97	55.58	8.9	1400	3433	130	997
965.00	964.97	33.87	6.7	1320	2764	131	970
966.00	965.97	67.19	6.9	1275	3368	131	936
967.00	966.97	32.71	6.1	1293	2821	131	938
968.00	967.97	72.06	7.6	1445	3772	131	976
969.00	968.97	122.00	5.2	1459	3725	131	1006
970.00	969.97	130.53	5.5	1469	4546	131	1006
971.00	970.97	69.71	5.2	1511	3508	131	1008
972.00	971.97	87.47	4.7	1523	4977	131	1005
973.00	972.97	44.57	5.8	1480	3181	131	1003
974.00	973.97	44.95	9.6	1433	4546	130	1001
975.00	974.97	21.52	7.2	1387	2564	131	991
976.00	975.97	21.09	6.4	1229	2781	130	921
977.00	976.97	28.88	9.0	1218	3575	130	913
978.00	977.97	37.50	7.9	1237	3396	130	913
979.00	978.97	29.65	8.9	1244	3387	130	914
980.00	979.97	39.56	10.3	1252	4482	130	914
981.00	980.97	43.13	9.4	1269	4217	130	915
982.00	981.97	49.31	5.4	1315	4908	131	829
983.00	982.97	65.88	5.8	1311	5219	131	839
984.00	983.97	69.86	5.4	1180	5220	130	840
985.00	984.97	60.99	4.5	1172	4522	131	833
986.00	985.97	34.95	5.6	1164	3204	131	833
987.00	986.97	24.03	6.0	1186	2894	131	837
988.00	987.97	19.25	6.4	1243	2483	132	872
989.00	988.97	26.87	6.5	1207	2712	132	866
990.00	989.97	21.75	7.5	1203	2841	132	864
991.00	990.97	35.89	9.7	1199	3285	131	863
992.00	991.97	42.29	12.5	1194	4219	131	864
993.00	992.97	47.73	13.6	1186	3917	131	862
994.00	993.97	63.66	13.3	1170	4580	131	862
995.00	994.97	58.77	10.9	1155	4524	131	862
996.00	995.97	40.76	8.2	1123	3632	131	862
997.00	996.97	42.58	7.6	1122	3895	131	861
998.00	997.97	60.71	7.8	1124	3744	131	861
999.00	998.97	45.57	9.2	1122	3755	131	861
1000.00	999.97	38.80	12.8	1124	4303	131	863
1001.00	1000.97	42.77	12.9	1132	4647	131	861
1002.00	1001.96	28.36	14.0	1138	4200	131	862
1003.00	1002.96	30.18	14.1	1142	3872	131	862
1004.00	1003.96	32.81	14.9	1153	4154	121	862
1005.00	1004.96	33.83	15.1	1157	4476	131	863
1006.00	1005.96	45.62	14.2	1158	4074	131	863
1007.00	1006.96	51.14	14.0	1156	4128	131	864

1008.00	1007.96	53.10	13.6	1157	4618	131	864
1009.00	1008.96	5.41	15.3	1174	3455	131	864
1010.00	1009.96	23.22	14.6	1227	4705	128	865
1011.00	1010.96	22.32	11.4	1238	3785	128	864
1012.00	1011.96	28.07	12.0	1230	3910	126	846
1013.00	1012.96	26.21	15.2	1240	4328	126	850
1014.00	1013.96	48.85	16.8	1243	6288	129	854
1015.00	1014.96	50.88	15.6	1244	6683	129	853
1016.00	1015.96	58.58	16.9	1255	6175	131	853
1017.00	1016.96	65.80	17.4	1253	5879	131	854
1018.00	1017.96	60.70	17.3	1266	5822	132	854
1019.00	1018.96	40.20	16.2	1269	5241	132	854
1020.00	1019.96	37.72	13.1	1269	4263	135	854
1021.00	1020.96	34.00	12.6	1273	4564	136	855
1022.00	1021.96	37.29	12.1	1276	4442	135	855
1023.00	1022.96	40.64	15.1	1278	4370	136	855
1024.00	1023.96	52.66	16.8	1281	5028	136	855
1025.00	1024.96	52.91	15.6	1289	5672	135	855
1026.00	1025.96	70.25	12.7	1291	5679	135	856
1027.00	1026.96	7.08	19.2	1284	4355	112	856
1028.00	1027.96	51.81	15.4	1296	5976	102	856
1029.00	1028.96	42.29	14.5	1298	6727	100	857
1030.00	1029.96	53.15	13.0	1285	5907	117	856
1031.00	1030.96	48.55	13.5	1288	6260	132	855
1032.00	1031.96	45.73	15.2	1296	6841	132	855
1033.00	1032.96	46.43	15.6	1301	6588	132	855
1034.00	1033.96	43.77	14.4	1294	7112	132	855
1035.00	1034.96	43.99	14.7	1296	6459	132	855
1036.00	1035.96	39.40	13.1	1306	5456	132	855
1037.00	1036.96	36.50	13.1	1307	5216	132	855
1038.00	1037.96	37.56	12.3	1314	5111	132	856
1039.00	1038.96	38.40	13.8	1313	7080	132	856
1040.00	1039.96	35.25	13.4	1339	4394	126	853
1041.00	1040.96	20.53	12.9	1344	4178	128	858
1042.00	1041.96	7.99	18.8	1316	4842	118	855
1043.00	1042.96	61.46	18.1	1316	8116	104	855
1044.00	1043.96	51.61	15.0	1319	5776	103	857
1045.00	1044.96	41.01	13.6	1322	6346	103	856
1046.00	1045.96	35.50	11.0	1322	5864	103	856
1047.00	1046.96	35.05	12.4	1319	6569	103	856
1048.00	1047.96	36.97	11.6	1322	6006	103	856
1049.00	1048.96	33.35	8.3	1320	5542	116	856
1050.00	1049.96	40.09	8.8	1333	5359	121	855
1051.00	1050.96	50.01	11.7	1337	6492	103	856
1052.00	1051.96	46.64	12.1	1334	6137	103	857
1053.00	1052.96	55.71	13.4	1348	6505	103	856
1054.00	1053.96	48.90	14.4	1343	7245	102	857
1055.00	1054.96	49.64	14.8	1349	8441	102	856
1056.00	1055.96	36.07	16.0	1348	6250	103	857
1057.00	1056.96	50.33	12.3	1337	6440	109	856
1058.00	1057.96	48.93	9.6	1349	6644	129	856
1059.00	1058.96	44.18	8.4	1352	7254	133	857
1060.00	1059.96	42.72	8.1	1349	6960	133	855
1061.00	1060.96	44.05	8.5	1343	7446	133	856
1062.00	1061.96	43.79	9.1	1341	7997	133	856
1063.00	1062.96	45.79	8.7	1350	8281	131	856
1064.00	1063.96	52.20	15.5	1353	10039	113	857
1065.00	1064.96	50.32	15.3	1358	7883	104	857
1066.00	1065.96	53.82	13.8	1359	6352	104	857
1067.00	1066.96	62.25	12.3	1360	5898	105	859
1068.00	1067.96	59.38	9.7	1356	5898	112	856
1069.00	1068.96	55.55	7.6	1378	5172	125	856
1070.00	1069.96	46.32	8.2	1383	5013	124	855
1071.00	1070.96	56.19	10.7	1379	6893	128	856
1072.00	1071.96	67.46	9.0	1381	5573	130	854
1073.00	1072.96	78.36	8.1	1365	5661	131	854
1074.00	1073.96	60.71	9.3	1341	6132	131	854
1075.00	1074.96	41.29	11.5	1359	6592	133	851
1076.00	1075.96	16.97	15.9	1350	5870	112	854
1077.00	1076.96	35.27	20.0	1354	7323	104	853
1078.00	1077.96	64.94	19.1	1355	7297	105	854
1079.00	1078.96	71.64	19.2	1358	7207	115	855

1080.00	1079.96	57.86	20.3	1359	8080	130	854
1081.00	1080.96	42.56	19.2	1352	7630	133	854
1082.00	1081.96	54.67	18.3	1357	7759	133	853
1083.00	1082.96	54.98	19.5	1359	7811	133	855
1084.00	1083.96	48.18	19.2	1358	7700	133	853
1085.00	1084.96	45.42	21.1	1357	7786	133	855
1086.00	1085.96	27.28	20.8	1360	6416	132	854
1087.00	1086.96	42.74	18.3	1359	7622	107	855
1088.00	1087.96	47.45	19.2	1365	8120	120	855
1089.00	1088.96	47.13	17.4	1362	6870	127	854
1090.00	1089.96	60.04	17.6	1361	8540	128	855
1091.00	1090.96	56.59	18.6	1363	7365	131	855
1092.00	1091.96	52.45	19.0	1361	6911	131	854
1093.00	1092.96	60.32	17.6	1356	7293	131	855
1094.00	1093.96	58.43	17.9	1359	7249	131	854
1095.00	1094.96	18.50	22.0	1358	5541	116	855
1096.00	1095.96	15.58	21.5	1358	5293	114	855
1097.00	1096.96	46.37	17.7	1359	6800	109	855
1098.00	1097.96	49.16	15.2	1411	5868	120	856
1099.00	1098.96	59.18	15.4	1512	5141	121	857
1100.00	1099.96	45.06	16.1	1415	6996	131	859
1101.00	1100.96	56.15	17.4	1400	6942	116	858
1102.00	1101.96	60.09	16.4	1400	7356	121	858
1103.00	1102.96	22.59	21.5	1399	5954	120	857
1104.00	1103.96	14.56	20.2	1393	4974	117	857
1105.00	1104.96	46.64	19.1	1397	6695	112	857
1106.00	1105.96	49.33	21.4	1395	6858	129	857
1107.00	1106.96	78.04	19.0	1402	7198	123	857
1108.00	1107.96	53.93	16.7	1411	6384	124	857
1109.00	1108.96	39.34	17.0	1408	6848	130	857
1110.00	1109.96	31.02	18.1	1406	5943	130	858
1111.00	1110.96	28.45	17.4	1405	5276	130	858
1112.00	1111.96	34.32	19.6	1411	7087	121	858
1113.00	1112.96	37.22	21.4	1419	6297	105	859
1114.00	1113.96	33.36	22.0	1418	6563	105	859
1115.00	1114.96	33.05	21.4	1417	6350	105	858
1116.00	1115.96	33.58	18.6	1423	6737	105	859
1117.00	1116.96	39.40	23.3	1415	9071	104	859
1118.00	1117.96	35.93	20.1	1418	8149	104	858
1119.00	1118.96	26.78	20.2	1416	7630	105	859
1120.00	1119.96	44.85	21.7	1429	8005	105	860
1121.00	1120.95	61.63	21.9	1432	7562	104	859
1122.00	1121.95	44.19	22.5	1428	7756	104	859
1123.00	1122.95	36.68	20.3	1434	6663	105	860
1124.00	1123.95	37.83	20.4	1438	7062	104	859
1125.00	1124.95	46.84	22.9	1435	7910	105	860
1126.00	1125.95	52.26	24.1	1435	6808	118	859
1127.00	1126.95	55.20	22.6	1421	6711	125	860
1128.00	1127.95	33.90	21.2	1422	6580	111	858
1129.00	1128.96	60.49	20.0	1465	6382	112	874
1130.00	1129.96	51.16	17.4	1471	5514	112	874
1131.00	1130.96	50.17	15.2	1474	5321	112	873
1132.00	1131.96	22.14	22.1	1498	5313	109	882
1133.00	1132.96	9.74	23.0	1479	4403	105	873
1134.00	1133.96	54.41	19.8	1482	6671	99	873
1135.00	1134.96	43.98	21.5	1494	6922	100	873
1136.00	1135.96	51.27	19.9	1502	6648	104	874
1137.00	1136.96	37.03	19.7	1497	6890	106	873
1138.00	1137.96	40.46	20.2	1495	6961	108	874
1139.00	1138.96	6.79	24.7	1482	4262	107	873
1140.00	1139.96	32.06	20.8	1484	7548	96	872
1141.00	1140.96	33.38	21.3	1492	6997	100	873
1142.00	1141.96	34.80	21.8	1486	7444	104	874
1143.00	1142.96	36.98	22.8	1490	7908	103	873
1144.00	1143.96	42.26	22.6	1495	7215	104	874
1145.00	1144.96	36.64	23.3	1497	7610	104	874
1146.00	1145.96	29.47	24.1	1499	7349	104	873
1147.00	1146.96	33.79	23.1	1503	7069	104	874
1148.00	1147.96	43.30	22.5	1512	6801	104	874
1149.00	1148.96	30.88	23.1	1510	6743	104	874
1150.00	1149.96	30.15	21.7	1514	5807	104	874
1151.00	1150.96	23.72	21.1	1515	5427	104	875

1152.00	1151.96	23.48	20.7	1515	5267	104	874
1153.00	1152.96	33.56	18.3	1517	5253	104	874
1154.00	1153.96	2.49	23.6	1497	3732	104	873
1155.00	1154.96	19.94	22.6	1502	4794	105	873
1156.00	1155.96	22.98	21.0	1512	5025	104	873
1157.00	1156.96	30.58	19.0	1538	5851	91	874
1158.00	1157.96	36.79	21.9	1550	6531	91	876
1159.00	1158.96	32.90	23.1	1547	6847	91	876
1160.00	1159.96	35.43	22.2	1545	6719	97	875
1161.00	1160.96	34.37	23.7	1547	7082	99	876
1162.00	1161.96	39.65	22.7	1545	6379	99	876
1163.00	1162.96	30.51	23.3	1548	7268	99	876
1164.00	1163.96	44.15	23.2	1552	6369	99	876
1165.00	1164.96	39.59	24.4	1553	6973	99	877
1166.00	1165.96	37.22	24.1	1551	7504	98	877
1167.00	1166.96	42.57	24.5	1555	7251	98	876
1168.00	1167.96	36.10	24.2	1554	6901	98	877
1169.00	1168.96	41.76	25.7	1579	6612	98	878
1170.00	1169.96	39.17	25.5	1634	7219	98	897
1171.00	1170.96	11.52	29.0	1629	5268	103	900
1172.00	1171.96	23.70	23.9	1630	5880	103	900
1173.00	1172.96	38.13	20.6	1631	5825	101	900
1174.00	1173.96	22.97	26.0	1631	5940	100	900
1175.00	1174.96	32.27	22.7	1632	6513	100	900
1176.00	1175.96	22.45	26.5	1626	6849	101	900
1177.00	1176.96	39.88	24.2	1634	8296	98	900
1178.00	1177.96	33.58	27.1	1635	8039	98	901
1179.00	1178.96	34.52	24.2	1638	7840	98	901
1180.00	1179.96	41.93	24.2	1638	7901	98	901
1181.00	1180.96	27.19	23.6	1642	7264	99	902
1182.00	1181.96	41.18	25.2	1640	7714	98	902
1183.00	1182.96	33.93	24.6	1646	7100	98	902
1184.00	1183.96	39.33	26.2	1649	8067	98	902
1185.00	1184.96	31.89	23.8	1650	7816	98	902
1186.00	1185.96	22.15	22.9	1768	7329	98	934
1187.00	1186.96	39.80	22.5	1882	7756	100	968
1188.00	1187.96	26.92	22.1	1871	7002	102	965
1189.00	1188.96	45.03	22.2	1872	10207	103	964
1190.00	1189.96	52.90	20.6	1871	9339	102	966
1191.00	1190.96	56.73	23.8	1870	9610	102	964
1192.00	1191.96	32.57	21.1	1869	8147	103	966
1193.00	1192.96	18.23	21.1	1862	6696	105	964
1194.00	1193.96	15.18	20.7	1862	5708	108	964
1195.00	1194.96	36.31	19.5	1872	7286	104	966
1196.00	1195.96	47.32	20.9	1879	8088	103	966
1197.00	1196.96	20.88	21.2	1876	5794	107	966
1198.00	1197.96	43.71	19.4	1885	7080	103	966
1199.00	1198.96	50.86	20.2	1883	8774	103	968
1200.00	1199.96	34.45	20.5	1891	7865	103	967
1201.00	1200.96	18.79	21.6	1881	6415	106	966
1202.00	1201.96	41.45	19.1	1884	7827	103	967
1203.00	1202.96	36.21	16.5	1887	6669	103	967
1204.00	1203.96	41.59	15.7	1892	6662	103	967
1205.00	1204.96	37.44	18.4	1893	7432	103	967
1206.00	1205.96	44.82	21.9	1898	7791	103	966
1207.00	1206.96	42.17	20.0	1903	8032	102	967
1208.00	1207.96	37.85	19.0	1902	7939	102	968
1209.00	1208.96	41.68	22.2	1900	8353	103	969
1210.00	1209.96	43.83	20.6	1906	7907	103	967
1211.00	1210.96	54.34	22.5	1904	10359	103	969
1212.00	1211.96	44.70	21.1	1910	10670	102	968
1213.00	1212.96	24.66	20.4	1905	8578	103	968
1214.00	1213.96	25.51	17.1	1858	8781	98	926
1215.00	1214.96	52.27	15.9	1762	9013	95	860
1216.00	1215.96	40.54	15.8	1530	8363	99	840
1217.00	1216.96	17.00	17.2	1505	6875	100	838
1218.00	1217.96	28.35	16.5	1506	8371	100	838
1219.00	1218.96	42.70	21.4	1506	11212	99	838
1220.00	1219.96	34.02	21.9	1503	9846	99	837
1221.00	1220.96	44.22	21.7	1506	10942	99	838
1222.00	1221.96	44.19	20.2	1507	9798	98	838
1223.00	1222.96	38.58	21.0	1514	10060	99	838

1224.00	1223.96	29.66	23.9	1514	8978	99	839
1225.00	1224.96	45.01	20.7	1513	8152	100	838
1226.00	1225.96	43.09	23.2	1519	9718	99	838

Depth m	C1 ppm	C2 ppm	C3 ppm	iC4 ppm	nC4 ppm	iC5 ppm	nC5 ppm
75.00	0	0	0	0	0	0	0
76.00	0	0	0	0	0	0	0
77.00	0	0	0	0	0	0	0
7[illegible].00	0	0	0	0	0	0	0
79.00	0	0	0	0	0	0	0
[illegible]0.00	0	0	0	0	0	0	0
[illegible]1.00	0	0	0	0	0	0	0
[illegible]2.00	0	0	0	0	0	0	0
[illegible]3.00	0	0	0	0	0	0	0
[illegible]4.00	0	0	0	0	0	0	0
[illegible]5.00	0	0	0	0	0	0	0
[illegible]6.00	0	0	0	0	0	0	0
[illegible]7.00	0	0	0	0	0	0	0
[illegible][illegible].00	0	0	0	0	0	0	0
[illegible]9.00	0	0	0	0	0	0	0
90.00	0	0	0	0	0	0	0
91.00	0	0	0	0	0	0	0
92.00	0	0	0	0	0	0	0
93.00	0	0	0	0	0	0	0
94.00	0	0	0	0	0	0	0
95.00	0	0	0	0	0	0	0
96.00	0	0	0	0	0	0	0
97.00	0	0	0	0	0	0	0
9[illegible].00	0	0	0	0	0	0	0
99.00	0	0	0	0	0	0	0
100.00	0	0	0	0	0	0	0
101.00	0	0	0	0	0	0	0
102.00	0	0	0	0	0	0	0
103.00	0	0	0	0	0	0	0
104.00	0	0	0	0	0	0	0
105.00	0	0	0	0	0	0	0
106.00	0	0	0	0	0	0	0
107.00	0	0	0	0	0	0	0
10[illegible].00	0	0	0	0	0	0	0
109.00	0	0	0	0	0	0	0
110.00	0	0	0	0	0	0	0
111.00	0	0	0	0	0	0	0
112.00	0	0	0	0	0	0	0
113.00	0	0	0	0	0	0	0
114.00	0	0	0	0	0	0	0
115.00	0	0	0	0	0	0	0
116.00	0	0	0	0	0	0	0
117.00	0	0	0	0	0	0	0
11[illegible].00	0	0	0	0	0	0	0
119.00	0	0	0	0	0	0	0
120.00	0	0	0	0	0	0	0
121.00	0	0	0	0	0	0	0
122.00	0	0	0	0	0	0	0
123.00	0	0	0	0	0	0	0
124.00	0	0	0	0	0	0	0
125.00	0	0	0	0	0	0	0
126.00	0	0	0	0	0	0	0
127.00	0	0	0	0	0	0	0
12[illegible].00	0	0	0	0	0	0	0
129.00	0	0	0	0	0	0	0
130.00	0	0	0	0	0	0	0
131.00	0	0	0	0	0	0	0
132.00	0	0	0	0	0	0	0
133.00	0	0	0	0	0	0	0
134.00	0	0	0	0	0	0	0
135.00	0	0	0	0	0	0	0
136.00	0	0	0	0	0	0	0
137.00	0	0	0	0	0	0	0
13[illegible].00	0	0	0	0	0	0	0
139.00	0	0	0	0	0	0	0
140.00	0	0	0	0	0	0	0
141.00	0	0	0	0	0	0	0
142.00	0	0	0	0	0	0	0
143.00	0	0	0	0	0	0	0

144.00	0	0	0	0	0	0	0
145.00	0	0	0	0	0	0	0
146.00	0	0	0	0	0	0	0
147.00	0	0	0	0	0	0	0
14[illegible].00	0	0	0	0	0	0	0
149.00	0	0	0	0	0	1	0
150.00	1	1	1	1	1	0	0
151.00	1	1	1	1	1	0	0
152.00	1	0	1	0	1	0	0
153.00	1	0	1	0	1	0	0
154.00	1	1	1	1	1	1	1
155.00	1	1	1	1	1	1	1
156.00	1	1	1	1	1	1	1
157.00	1	1	1	1	1	1	1
15[illegible].00	1	1	1	1	1	1	1
159.00	1	1	1	1	1	1	1
160.00	1	1	0	0	1	0	0
161.00	1	1	0	0	1	0	0
162.00	1	1	0	0	1	0	0
163.00	1	1	1	1	1	1	1
164.00	1	1	1	1	1	1	1
165.00	1	1	1	1	1	0	0
166.00	1	0	1	0	1	0	0
167.00	1	0	1	0	1	0	0
16[illegible].00	1	0	1	0	1	0	0
169.00	1	0	1	0	1	0	0
170.00	1	0	1	0	1	0	0
171.00	1	0	1	0	1	0	0
172.00	1	0	1	0	1	0	0
173.00	1	1	1	0	1	0	0
174.00	1	1	0	0	1	0	0
175.00	1	1	0	0	1	0	0
176.00	1	1	1	0	1	0	0
177.00	1	0	1	0	1	0	0
17[illegible].00	1	0	1	0	1	0	0
179.00	1	0	1	0	1	0	0
1[illegible]0.00	1	1	1	0	1	0	0
1[illegible]1.00	1	1	1	0	1	0	0
1[illegible]2.00	1	1	1	0	1	0	0
1[illegible]3.00	1	1	1	0	1	0	0
1[illegible]4.00	1	1	1	1	1	0	1
1[illegible]5.00	1	0	0	1	1	0	1
1[illegible]6.00	1	0	0	1	1	0	1
1[illegible]7.00	1	0	0	1	1	0	1
1[illegible][illegible].00	1	0	0	1	1	0	1
1[illegible]9.00	1	0	0	1	1	0	1
190.00	1	1	1	1	1	0	1
191.00	1	1	1	0	1	0	0
192.00	1	1	1	0	1	0	0
193.00	1	1	1	0	1	0	0
194.00	1	1	1	0	1	0	0
195.00	1	1	1	0	1	0	1
196.00	1	1	1	0	1	0	1
197.00	1	1	1	0	1	0	1
19[illegible].00	1	1	1	0	1	0	1
199.00	1	1	1	0	1	0	1
200.00	1	1	1	0	1	0	1
201.00	1	1	1	1	1	0	1
202.00	1	1	1	1	1	0	0
203.00	1	1	1	1	1	0	0
204.00	1	1	1	1	1	0	0
205.00	1	0	1	0	1	0	0
206.00	1	0	1	0	1	0	0
207.00	1	1	1	1	1	1	1
20[illegible].00	1	1	1	1	1	1	1
209.00	1	1	1	1	1	1	1
210.00	1	1	1	1	1	1	1
211.00	1	1	1	1	1	0	0
212.00	1	1	1	1	1	1	1
213.00	1	1	1	1	1	1	1
214.00	1	1	1	1	1	1	1
215.00	1	1	1	1	1	0	0

216.00	1	1	1	1	1	0	0
217.00	1	0	1	0	1	0	0
21ℰ.00	1	1	1	1	1	0	0
219.00	1	1	1	1	1	0	0
220.00	1	1	1	1	1	0	0
221.00	1	1	1	1	1	0	0
222.00	1	1	1	1	1	0	0
223.00	1	1	1	1	1	0	0
224.00	1	1	1	1	1	0	0
225.00	1	1	1	1	1	1	0
226.00	1	1	1	1	1	1	1
227.00	1	1	1	1	1	0	0
22ℰ.00	1	1	1	1	1	0	0
229.00	1	1	1	1	1	0	1
230.00	1	1	1	1	1	0	1
231.00	1	1	1	1	1	1	1
232.00	1	0	1	1	1	1	1
233.00	1	0	1	1	1	1	1
234.00	1	1	1	1	1	1	1
235.00	1	1	1	1	1	1	1
236.00	1	1	1	1	1	1	1
237.00	1	1	1	1	1	1	1
23ℰ.00	1	0	0	0	1	0	0
239.00	1	0	0	0	1	0	0
240.00	1	1	1	0	1	0	0
241.00	1	1	1	0	1	0	0
242.00	1	1	1	0	1	0	0
243.00	1	1	1	0	1	0	0
244.00	1	1	1	0	1	0	0
245.00	1	1	1	0	1	0	0
246.00	1	1	1	1	1	0	1
247.00	1	1	1	1	1	0	1
24ℰ.00	1	1	1	1	1	1	1
249.00	1	1	1	1	1	1	1
250.00	1	1	1	1	1	1	1
251.00	1	1	1	0	1	0	0
252.00	1	1	1	1	1	1	1
253.00	1	1	1	1	1	1	1
254.00	1	1	1	1	1	1	1
255.00	1	1	1	0	1	0	0
256.00	1	1	1	0	1	0	0
257.00	1	1	1	1	1	0	1
25ℰ.00	1	1	1	1	1	1	1
259.00	0	0	0	0	0	0	0
260.00	0	0	0	0	0	0	0
261.00	0	0	0	0	0	0	0
262.00	0	0	0	0	0	0	0
263.00	0	0	0	0	0	1	0
264.00	0	0	0	0	0	1	0
265.00	0	0	0	0	0	1	0
266.00	1	0	0	1	1	1	0
267.00	0	0	0	1	1	1	0
26ℰ.00	0	0	0	1	1	1	0
269.00	1	0	1	1	1	1	0
270.00	0	0	0	1	1	1	0
271.00	0	0	0	1	1	1	0
272.00	1	0	1	1	1	1	0
273.00	0	0	0	1	1	1	0
274.00	0	0	0	1	1	1	0
275.00	0	0	0	1	1	1	0
276.00	0	0	0	1	1	1	0
277.00	0	0	0	1	1	1	0
27ℰ.00	0	0	0	1	1	1	0
279.00	0	0	0	1	1	1	0
2ℰ0.00	0	0	0	1	1	1	1
2ℰ1.00	0	0	0	1	1	1	1
2ℰ2.00	0	0	0	1	1	1	1
2ℰ3.00	0	0	0	1	1	1	1
2ℰ4.00	0	0	0	1	1	1	1
2ℰ5.00	1	1	1	1	1	1	1
2ℰ6.00	1	1	1	1	1	1	1
2ℰ7.00	1	1	1	1	1	1	1

288.00	1	1	1	1	1	1	1
289.00	1	1	1	1	1	1	1
290.00	1	1	1	1	1	1	1
291.00	1	1	1	1	1	1	1
292.00	1	1	1	1	1	1	1
293.00	1	1	1	1	1	1	1
294.00	1	1	1	1	1	1	1
295.00	1	1	1	1	1	1	1
296.00	1	1	1	1	1	1	1
297.00	1	1	1	1	1	1	1
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299.00	1	1	1	1	1	1	1
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301.00	1	1	1	1	1	1	1
302.00	1	1	1	1	1	1	1
303.00	1	1	1	1	1	1	1
304.00	1	1	1	1	1	1	1
305.00	1	1	1	1	1	1	1
306.00	1	1	1	1	1	1	1
307.00	1	1	1	1	1	1	1
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309.00	1	1	1	1	1	1	1
310.00	1	1	1	1	1	1	1
311.00	1	1	1	1	1	1	1
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319.00	1	1	1	1	1	1	1
320.00	1	1	1	1	1	1	1
321.00	1	1	1	1	1	1	1
322.00	1	1	1	1	1	1	1
323.00	1	1	1	1	1	1	1
324.00	1	1	1	1	1	1	1
325.00	1	1	1	1	1	1	1
326.00	1	1	1	1	1	1	1
327.00	1	1	1	1	1	1	1
328.00	1	1	1	1	1	1	1
329.00	1	1	1	1	1	1	1
330.00	1	1	1	1	1	1	1
331.00	1	1	1	1	1	1	1
332.00	1	1	1	1	1	1	1
333.00	1	1	1	1	1	1	1
334.00	1	1	1	1	1	1	1
335.00	1	1	1	1	1	1	1
336.00	1	1	1	1	1	1	1
337.00	1	1	1	1	1	1	1
338.00	1	1	1	1	1	1	1
339.00	1	1	1	1	1	1	1
340.00	1	1	1	1	1	1	1
341.00	1	1	1	1	1	1	1
342.00	1	1	1	1	1	1	1
343.00	1	1	1	1	1	1	1
344.00	1	1	1	1	1	1	1
345.00	1	1	1	1	1	1	1
346.00	1	1	1	1	1	1	1
347.00	1	1	1	1	1	1	1
348.00	1	1	1	1	1	1	1
349.00	1	1	1	1	1	1	1
350.00	1	1	1	1	1	1	1
351.00	1	1	1	1	1	1	1
352.00	1	1	1	1	1	1	1
353.00	1	1	1	1	1	1	1
354.00	1	1	1	1	1	1	1
355.00	0	1	0	0	0	1	0
356.00	0	0	0	0	0	0	0
357.00	0	0	0	0	0	0	0
358.00	0	0	0	1	0	0	0
359.00	0	0	0	0	0	0	0

360.00	0	0	0	0	0	0	0
361.00	0	0	0	0	0	0	0
362.00	0	0	0	0	0	0	0
363.00	0	0	0	0	0	0	0
364.00	0	0	0	0	0	0	0
365.00	0	0	0	0	0	0	0
366.00	0	0	0	0	0	0	0
367.00	0	0	0	0	0	0	0
36ε.00	0	0	0	0	0	0	0
369.00	0	0	0	0	0	0	0
370.00	1	0	1	0	1	0	0
371.00	1	1	1	1	1	1	1
372.00	1	1	1	1	1	1	1
373.00	1	1	1	1	1	1	1
374.00	1	1	1	1	1	1	1
375.00	1	1	1	1	1	1	1
376.00	1	1	1	1	1	1	1
377.00	1	1	1	1	1	1	1
37ε.00	1	1	1	1	1	1	1
379.00	1	1	1	1	1	1	1
3ε0.00	1	1	1	1	1	1	1
3ε1.00	1	1	1	1	1	1	1
3ε2.00	1	1	1	1	1	1	1
3ε3.00	1	1	1	1	1	1	1
3ε4.00	1	1	1	1	1	1	1
3ε5.00	0	0	0	0	0	0	0
3ε6.00	1	1	0	0	0	0	0
3ε7.00	0	0	0	0	0	0	0
3εε.00	0	0	0	0	0	0	0
3ε9.00	0	0	0	0	0	0	0
390.00	0	0	0	0	0	0	0
391.00	0	0	0	0	0	0	0
392.00	0	0	0	0	0	0	0
393.00	0	0	0	0	0	0	0
394.00	0	0	0	0	0	0	0
395.00	0	0	0	0	0	0	0
396.00	0	0	0	0	0	0	0
397.00	0	0	0	0	0	0	0
39ε.00	0	0	0	0	0	0	0
399.00	0	0	0	0	0	0	0
400.00	0	0	0	0	0	0	0
401.00	0	0	0	1	1	1	1
402.00	1	1	1	1	1	1	1
403.00	1	1	1	1	1	1	1
404.00	1	1	1	1	1	1	1
405.00	1	1	1	1	1	1	1
406.00	1	1	1	1	1	1	1
407.00	1	1	1	1	1	1	1
40ε.00	1	1	1	1	1	1	1
409.00	1	1	1	1	1	1	1
410.00	1	1	1	1	1	1	1
411.00	1	1	1	1	1	1	1
412.00	1	1	1	1	1	1	1
413.00	1	1	1	1	1	1	1
414.00	1	1	1	1	1	1	1
415.00	1	1	1	1	1	1	1
416.00	1	1	1	1	1	1	1
417.00	1	1	1	1	1	1	1
41ε.00	1	1	1	1	1	1	1
419.00	1	1	1	1	1	1	1
420.00	1	1	1	1	1	1	1
421.00	1	1	1	1	1	1	1
422.00	1	1	1	1	1	1	1
423.00	1	1	1	1	1	1	1
424.00	1	1	1	1	1	1	1
425.00	1	1	1	1	1	1	1
426.00	1	1	1	1	1	1	1
427.00	1	1	1	1	1	1	1
42ε.00	1	1	1	1	1	1	1
429.00	1	1	1	1	1	1	1
430.00	1	1	1	1	1	1	1
431.00	1	1	1	1	1	1	1

432.00	1	1	1	1	1	1	1
433.00	1	1	1	1	1	1	1
434.00	1	1	1	1	1	1	1
435.00	1	1	1	1	1	1	1
436.00	1	1	1	1	1	1	1
437.00	1	1	1	1	1	1	1
43£.00	1	1	1	1	1	1	1
439.00	1	1	1	1	1	1	1
440.00	1	1	1	1	1	1	1
441.00	1	1	1	1	1	1	1
442.00	1	1	1	1	1	1	1
443.00	1	1	1	1	1	1	1
444.00	1	1	1	1	1	1	1
445.00	1	1	1	1	1	1	1
446.00	1	1	1	1	1	1	1
447.00	1	1	1	1	1	1	1
44£.00	1	1	1	1	1	1	1
449.00	1	1	1	1	1	1	1
450.00	1	1	1	1	1	1	1
451.00	1	1	1	1	1	1	1
452.00	1	1	1	1	1	1	1
453.00	1	1	1	1	1	1	1
454.00	1	1	1	1	1	1	1
455.00	1	1	1	1	1	1	1
456.00	1	1	1	1	1	1	1
457.00	1	1	1	1	1	1	1
45£.00	1	1	1	1	1	1	1
459.00	1	1	1	1	1	1	1
460.00	1	1	1	1	1	1	1
461.00	1	1	1	1	1	1	1
462.00	1	1	1	1	1	1	1
463.00	1	1	1	1	1	1	1
464.00	1	1	1	1	1	1	1
465.00	1	1	1	1	1	1	1
466.00	1	1	1	1	1	1	1
467.00	1	1	1	1	1	1	1
46£.00	1	1	1	1	1	1	1
469.00	1	1	1	1	1	1	1
470.00	1	1	1	1	1	1	1
471.00	1	1	1	1	1	1	1
472.00	1	1	1	1	1	1	1
473.00	1	1	1	1	1	1	1
474.00	1	1	1	1	1	1	1
475.00	1	1	1	1	1	1	1
476.00	1	1	1	1	1	1	1
477.00	1	1	1	1	1	1	1
47£.00	1	1	1	1	1	1	1
479.00	1	1	1	1	1	1	1
4£0.00	1	1	1	1	1	1	1
4£1.00	1	1	1	1	1	1	1
4£2.00	1	1	1	1	1	1	1
4£3.00	1	1	1	1	1	1	1
4£4.00	1	1	1	1	1	1	1
4£5.00	1	1	1	1	1	1	1
4£6.00	1	1	1	1	1	1	1
4£7.00	1	1	1	1	1	1	1
4££.00	1	1	1	1	1	1	1
4£9.00	1	1	1	1	1	1	1
490.00	1	1	1	1	1	1	1
491.00	1	1	1	1	1	1	1
492.00	1	1	1	1	1	1	1
493.00	1	1	1	1	1	1	1
494.00	1	1	1	1	1	1	1
495.00	1	1	1	1	1	1	1
496.00	1	1	1	1	1	1	1
497.00	1	1	1	1	1	1	1
49£.00	1	1	1	1	1	1	1
499.00	1	1	1	1	1	1	1
500.00	1	1	1	1	1	1	1
501.00	1	1	1	1	1	1	1
502.00	1	1	1	1	1	1	1
503.00	1	1	1	1	1	1	1

504.00	1	1	1	1	1	1	1
505.00	1	1	1	1	1	1	1
506.00	1	1	1	1	1	1	1
507.00	1	1	1	1	1	1	1
508.00	1	1	1	1	1	1	1
509.00	1	1	1	1	1	1	1
510.00	1	1	1	1	1	1	1
511.00	1	1	1	1	1	1	1
512.00	1	1	1	1	1	1	1
513.00	1	1	1	1	1	1	1
514.00	1	1	1	1	1	1	1
515.00	1	1	1	1	1	1	1
516.00	1	1	1	1	1	1	1
517.00	1	1	1	1	1	1	1
518.00	1	1	1	1	1	1	1
519.00	1	1	1	1	1	1	1
520.00	1	1	1	1	1	1	1
521.00	1	1	1	1	1	1	1
522.00	1	1	1	1	1	1	1
523.00	1	1	1	1	1	1	1
524.00	1	1	1	1	1	1	1
525.00	1	1	1	1	1	1	1
526.00	1	1	1	1	1	1	1
527.00	1	1	1	1	1	1	1
528.00	1	1	1	1	1	1	1
529.00	1	1	1	1	1	1	1
530.00	1	1	1	1	1	1	1
531.00	1	1	1	1	1	1	1
532.00	1	1	1	1	1	1	1
533.00	1	1	1	1	1	1	1
534.00	1	1	1	1	1	1	1
535.00	1	1	1	1	1	1	1
536.00	1	1	1	1	1	1	1
537.00	1	1	1	1	1	1	1
538.00	1	1	1	1	1	1	1
539.00	1	1	1	1	1	1	1
540.00	1	1	1	1	1	1	1
541.00	1	1	1	1	1	1	1
542.00	1	1	1	1	1	1	1
543.00	1	1	1	1	1	1	1
544.00	1	1	1	1	1	1	1
545.00	1	1	1	1	1	1	1
546.00	1	1	1	1	1	1	1
547.00	1	1	1	1	1	1	1
548.00	1	1	1	1	1	1	1
549.00	1	1	1	1	1	1	1
550.00	1	1	1	1	1	1	1
551.00	1	1	1	1	1	1	1
552.00	1	1	1	1	1	1	1
553.00	1	1	1	1	1	1	1
554.00	1	1	1	1	1	1	1
555.00	1	1	1	1	1	1	1
556.00	1	1	1	1	1	1	1
557.00	1	1	1	1	1	1	1
558.00	1	1	1	1	1	1	1
559.00	1	1	1	1	1	1	1
560.00	1	1	1	1	1	1	1
561.00	1	1	1	1	1	1	1
562.00	1	1	1	1	1	1	1
563.00	0	0	1	1	1	1	1
564.00	0	0	1	1	1	1	1
565.00	0	0	1	1	1	1	1
566.00	0	0	1	1	1	1	1
567.00	0	0	1	1	1	1	1
568.00	0	0	0	0	0	1	1
569.00	0	0	0	0	0	1	1
570.00	0	0	0	0	0	1	1
571.00	0	0	0	0	0	0	0
572.00	0	0	0	0	0	0	0
573.00	0	0	0	0	0	1	0
574.00	1	1	1	1	1	1	1
575.00	1	1	1	1	1	1	1

576.00	1	1	1	1	1	1	1
577.00	1	1	1	1	1	1	1
57£.00	1	1	1	1	1	1	1
579.00	1	1	1	1	1	1	1
5£0.00	1	1	1	1	1	1	1
5£1.00	1	1	1	1	1	1	1
5£2.00	1	1	1	1	1	1	1
5£3.00	1	1	1	1	1	1	1
5£4.00	1	1	1	1	1	1	1
5£5.00	1	1	1	1	1	1	1
5£6.00	1	1	1	1	1	1	1
5£7.00	1	1	1	1	1	1	1
5££.00	1	1	1	1	1	1	1
5£9.00	1	1	1	1	1	1	1
590.00	1	1	1	1	1	1	1
591.00	1	1	1	1	1	1	1
592.00	1	1	1	1	1	1	1
593.00	1	1	1	1	1	1	1
594.00	1	1	1	1	1	1	1
595.00	1	1	1	1	1	1	1
596.00	1	1	1	1	1	1	1
597.00	1	1	1	1	1	1	1
59£.00	1	1	1	1	1	1	1
599.00	1	1	1	1	1	1	1
600.00	1	1	1	1	1	1	1
601.00	1	1	1	1	1	1	1
602.00	1	1	1	1	1	1	1
603.00	1	1	1	1	1	1	1
604.00	1	1	1	1	1	1	1
605.00	1	1	1	1	1	1	1
606.00	1	1	1	1	1	1	1
607.00	1	1	1	1	1	1	1
60£.00	1	1	1	1	1	1	1
609.00	1	1	1	1	1	1	1
610.00	1	1	1	1	1	1	1
611.00	1	1	1	1	1	1	1
612.00	1	1	1	1	1	1	1
613.00	1	1	1	1	1	1	1
614.00	1	1	1	1	1	1	1
615.00	1	1	1	1	1	1	1
616.00	1	1	1	1	1	1	1
617.00	1	1	1	1	1	1	1
61£.00	1	1	1	1	1	1	1
619.00	1	1	1	1	1	1	1
620.00	1	1	1	1	1	1	1
621.00	1	1	1	1	1	1	1
622.00	1	1	1	1	1	1	1
623.00	1	1	1	1	1	1	1
624.00	1	1	1	1	1	1	1
625.00	1	1	1	1	1	1	1
626.00	1	1	1	1	1	1	1
627.00	1	1	1	1	1	1	1
62£.00	1	1	1	1	1	1	1
629.00	1	1	1	1	1	1	1
630.00	1	1	1	1	1	1	1
631.00	1	1	1	1	1	1	1
632.00	1	1	1	1	1	1	1
633.00	1	1	1	1	1	1	1
634.00	1	1	1	1	1	1	1
635.00	1	1	1	1	1	1	1
636.00	1	1	1	1	1	1	1
637.00	1	1	1	1	1	1	1
63£.00	1	1	1	1	1	1	1
639.00	1	1	1	1	1	1	1
640.00	1	1	1	1	1	1	1
641.00	1	1	1	1	1	1	1
642.00	1	1	1	1	1	1	1
643.00	1	1	1	1	1	1	1
644.00	1	1	1	1	1	1	1
645.00	1	1	1	1	1	1	1
646.00	1	1	1	1	1	1	1
647.00	1	1	1	1	1	1	1

64[illegible].00	1	1	1	1	1	1	1
649.00	1	1	1	1	1	1	1
650.00	1	1	1	1	1	1	1
651.00	0	0	0	0	0	0	0
652.00	0	0	0	0	0	0	0
653.00	0	0	0	0	0	0	0
654.00	0	0	0	0	0	0	0
655.00	0	0	0	0	0	0	0
656.00	0	0	0	0	0	0	0
657.00	0	0	0	0	0	0	0
65[illegible].00	0	0	0	0	0	0	0
659.00	0	0	0	0	0	0	0
660.00	0	0	0	0	0	0	0
661.00	0	0	0	0	0	0	0
662.00	0	0	0	0	0	0	0
663.00	0	0	0	0	0	0	0
664.00	0	0	0	0	0	0	0
665.00	0	0	0	0	0	0	0
666.00	0	0	0	0	0	0	0
667.00	0	0	0	0	0	0	0
66[illegible].00	0	0	0	0	0	0	0
669.00	0	0	0	0	0	0	0
670.00	0	0	0	0	0	0	0
671.00	0	0	0	0	0	0	0
672.00	0	0	0	0	0	0	0
673.00	0	0	0	0	0	0	0
674.00	0	0	0	0	0	0	0
675.00	0	0	0	0	0	0	0
676.00	0	0	0	0	0	0	0
677.00	0	0	0	0	0	0	0
67[illegible].00	0	0	0	0	0	0	0
679.00	0	0	0	0	0	0	0
6[illegible]0.00	0	0	0	0	0	0	0
6[illegible]1.00	0	0	0	0	0	0	0
6[illegible]2.00	0	0	0	0	0	0	0
6[illegible]3.00	0	0	0	0	0	0	0
6[illegible]4.00	0	0	0	0	0	0	0
6[illegible]5.00	0	0	0	0	0	0	0
6[illegible]6.00	0	0	0	0	0	0	0
6[illegible]7.00	0	0	0	0	0	0	0
6[illegible][illegible].00	0	0	0	0	0	0	0
6[illegible]9.00	0	0	0	0	0	0	0
690.00	0	0	0	0	0	0	0
691.00	0	0	0	0	0	0	0
692.00	0	0	0	0	0	0	0
693.00	0	0	0	0	0	0	0
694.00	0	0	0	0	0	0	0
695.00	0	0	0	0	0	0	0
696.00	0	0	0	0	0	0	0
697.00	0	0	0	0	0	0	0
69[illegible].00	0	0	0	0	0	0	0
699.00	0	0	0	0	0	0	0
700.00	0	0	0	0	0	0	0
701.00	0	0	0	0	0	0	0
702.00	0	0	0	0	0	0	0
703.00	0	0	0	0	0	0	0
704.00	0	0	0	0	0	0	0
705.00	0	0	0	0	0	0	0
706.00	0	0	0	0	0	0	0
707.00	0	0	0	0	0	0	0
70[illegible].00	0	0	0	0	0	0	0
709.00	0	0	0	0	0	0	0
710.00	0	0	0	0	0	0	0
711.00	0	0	0	0	0	0	0
712.00	0	0	0	0	0	0	0
713.00	0	0	0	0	0	0	0
714.00	0	0	0	0	0	0	0
715.00	0	0	0	0	0	0	0
716.00	0	0	0	0	0	0	0
717.00	0	0	0	0	0	0	0
71[illegible].00	0	0	0	0	0	0	0
719.00	0	0	0	0	0	0	0

720.00	0	0	0	0	0	0	0
721.00	0	0	0	0	0	0	0
722.00	0	0	0	0	0	0	0
723.00	0	0	0	0	0	0	0
724.00	0	0	0	0	0	0	0
725.00	0	0	0	0	0	0	0
726.00	0	0	0	0	0	0	0
727.00	0	0	0	0	0	0	0
72[illegible].00	0	0	0	0	0	0	0
729.00	0	0	0	0	0	0	0
730.00	0	0	0	0	0	0	0
731.00	0	0	0	0	0	0	0
732.00	0	0	0	0	0	0	0
733.00	0	0	0	0	0	0	0
734.00	0	0	0	0	0	0	0
735.00	0	0	0	0	0	0	0
736.00	0	0	0	0	0	0	0
737.00	0	0	0	0	0	0	0
73[illegible].00	0	0	0	0	0	0	0
739.00	0	0	0	0	0	0	0
740.00	0	0	0	0	0	0	0
741.00	0	0	0	0	0	0	0
742.00	0	0	0	0	0	0	0
743.00	0	0	0	0	0	0	0
744.00	0	0	0	0	0	0	0
745.00	0	0	0	0	0	0	0
746.00	0	0	0	0	0	0	0
747.00	0	0	0	0	0	0	0
74[illegible].00	0	0	0	0	0	0	0
749.00	0	0	0	0	0	0	0
750.00	0	0	0	0	0	0	0
751.00	0	0	0	0	0	0	0
753.00	0	0	0	0	0	0	0
754.00	0	0	0	0	0	0	0
755.00	0	0	0	0	0	0	0
756.00	151	0	0	0	0	0	0
757.00	113	0	0	0	0	0	0
75[illegible].00	[illegible]0	0	0	0	0	0	0
759.00	[illegible]5	0	0	0	0	0	0
760.00	213	0	0	0	0	0	0
761.00	414	0	0	0	0	0	0
762.00	539	0	0	0	0	0	0
763.00	615	0	0	0	0	0	0
764.00	5[illegible]9	0	0	0	0	0	0
765.00	640	0	0	0	0	0	0
766.00	740	0	0	0	0	0	0
767.00	790	0	0	0	0	0	0
76[illegible].00	765	0	0	0	0	0	0
769.00	690	0	0	0	0	0	0
770.00	577	0	0	0	0	0	0
771.00	665	0	0	0	0	0	0
772.00	401	0	0	0	0	0	0
773.00	77[illegible]	0	0	0	0	0	0
774.00	971	0	0	0	0	0	0
775.00	971	0	0	0	0	0	0
776.00	737	0	0	0	0	0	0
777.00	391	0	0	0	0	0	0
77[illegible].00	391	0	0	0	0	0	0
779.00	242	0	0	0	0	0	0
7[illegible]0.00	313	0	0	0	0	0	0
7[illegible]1.00	452	0	0	0	0	0	0
7[illegible]2.00	452	0	0	0	0	0	0
7[illegible]3.00	1295	0	0	0	0	0	0
7[illegible]4.00	1295	0	0	0	0	0	0
7[illegible]5.00	95[illegible]	0	0	0	0	0	0
7[illegible]6.00	95[illegible]	0	0	0	0	0	0
7[illegible]7.00	1099	0	0	0	0	0	0
7[illegible][illegible].00	1099	0	0	0	0	0	0
7[illegible]9.00	1099	0	0	0	0	0	0
790.00	1099	0	0	0	0	0	0
791.00	976	0	0	0	0	0	0
792.00	131[illegible]	0	0	0	0	0	0

793.00	1475	0	0	0	0	0	0
794.00	1475	0	0	0	0	0	0
795.00	1529	0	0	0	0	0	0
796.00	1529	0	0	0	0	0	0
797.00	1360	0	0	0	0	0	0
79£.00	1207	0	0	0	0	0	0
799.00	1207	0	0	0	0	0	0
£00.00	1207	0	0	0	0	0	0
£01.00	2375	0	0	0	0	0	0
£02.00	2375	0	0	0	0	0	0
£03.00	1490	0	0	0	0	0	0
£04.00	1542	0	0	0	0	0	0
£05.00	154£	0	0	0	0	0	0
£06.00	154£	0	0	0	0	0	0
£07.00	154£	0	0	0	0	0	0
£0£.00	921	0	0	0	0	0	0
£09.00	£77	0	0	0	0	0	0
£10.00	£77	0	0	0	0	0	0
£11.00	1970	0	0	0	0	0	0
£12.00	1970	0	0	0	0	0	0
£13.00	20£0	0	0	0	0	0	0
£14.00	20£0	0	0	0	0	0	0
£15.00	20£0	0	0	0	0	0	0
£16.00	1630	0	0	0	0	0	0
£17.00	1931	0	0	0	0	0	0
£1£.00	1931	0	0	0	0	0	0
£19.00	1931	0	0	0	0	0	0
£20.00	2502	1	0	0	0	0	0
£21.00	2502	1	0	0	0	0	0
£22.00	2502	1	0	0	0	0	0
£23.00	2021	0	0	0	0	0	0
£24.00	2219	1	0	0	0	0	0
£25.00	2219	1	0	0	0	0	0
£26.00	2219	1	0	0	0	0	0
£27.00	2222	1	0	0	0	0	0
£2£.00	2222	1	0	0	0	0	0
£29.00	2222	1	0	0	0	0	0
£30.00	32£4	3	0	0	0	0	0
£31.00	32£4	3	0	0	0	0	0
£32.00	32£4	3	0	0	0	0	0
£33.00	2672	2	0	0	0	0	0
£34.00	2672	2	0	0	0	0	0
£35.00	2672	2	0	0	0	0	0
£36.00	2113	2	0	0	0	0	0
£37.00	1049	0	0	0	0	0	0
£3£.00	1049	0	0	0	0	0	0
£39.00	1733	0	0	0	0	0	0
£40.00	1£49	0	0	0	0	0	0
£41.00	1£49	0	0	0	0	0	0
£42.00	2031	1	0	0	0	0	0
£43.00	2152	1	0	0	0	0	0
£44.00	2152	1	0	0	0	0	0
£45.00	153£	0	0	0	0	0	0
£46.00	153£	0	0	0	0	0	0
£47.00	153£	0	0	0	0	0	0
£4£.00	9694	27	0	0	0	0	0
£49.00	9694	27	0	0	0	0	0
£50.00	9694	27	0	0	0	0	0
£51.00	23051	£9	1	0	0	0	0
£52.00	23051	£9	1	0	0	0	0
£53.00	10019	37	0	0	0	0	0
£54.00	10019	37	0	0	0	0	0
£55.00	10019	37	0	0	0	0	0
£56.00	10019	37	0	0	0	0	0
£57.00	£9£0	31	0	0	0	0	0
£5£.00	£9£0	31	0	0	0	0	0
£59.00	£9£0	31	0	0	0	0	0
£60.00	2499	4	0	0	0	0	0
£61.00	2499	4	0	0	0	0	0
£62.00	2499	4	0	0	0	0	0
£63.00	2499	4	0	0	0	0	0
£64.00	2499	4	0	0	0	0	0

£65.00	51£2	19	0	0	0	0	0
£66.00	2390	4	0	0	0	0	0
£67.00	4190	12	0	0	0	0	0
£6£.00	4190	12	0	0	0	0	0
£69.00	4962	1£	0	0	0	0	0
£70.00	4962	1£	0	0	0	0	0
£71.00	4962	1£	0	0	0	0	0
£72.00	4962	1£	0	0	0	0	0
£73.00	44££	17	0	0	0	0	0
£74.00	44££	17	0	0	0	0	0
£75.00	44££	22	0	0	0	0	0
£76.00	4344	22	0	0	0	0	0
£77.00	4344	22	0	0	0	0	0
£7£.00	5197	27	0	0	0	0	0
£79.00	5197	27	0	0	0	0	0
££0.00	5197	27	0	0	0	0	0
££1.00	3£90	15	0	0	0	0	0
££2.00	3£90	15	0	0	0	0	0
££3.00	7416	51	0	0	0	0	0
££4.00	7416	51	0	0	0	0	0
££5.00	7416	51	0	0	0	0	0
££6.00	636£	44	0	0	0	0	0
££7.00	636£	44	0	0	0	0	0
£££.00	3413	13	0	0	0	0	0
££9.00	3413	13	0	0	0	0	0
£90.00	3654	16	0	0	0	0	0
£91.00	3654	16	0	0	0	0	0
£92.00	4639	21	0	0	0	0	0
£93.00	4639	21	0	0	0	0	0
£94.00	4639	21	0	0	0	0	0
£95.00	6273	31	0	0	0	0	0
£96.00	6273	31	0	0	0	0	0
£97.00	23£3	£	0	0	0	0	0
£9£.00	23£3	£	0	0	0	0	0
£99.00	23£3	£	0	0	0	0	0
900.00	23£3	£	0	0	0	0	0
901.00	247£4	155	5	0	0	0	0
902.00	247£4	155	5	0	0	0	0
903.00	247£4	155	5	0	0	0	0
904.00	247£4	155	5	0	0	0	0
905.00	23233	143	5	0	0	0	0
906.00	23233	143	5	0	0	0	0
907.00	23233	143	5	0	0	0	0
90£.00	23233	143	5	0	0	0	0
909.00	23233	143	5	0	0	0	0
910.00	5617	24	0	0	0	0	0
911.00	5617	24	0	0	0	0	0
912.00	5533	19	0	0	0	0	0
913.00	3231	£	0	0	0	0	0
914.00	2907	7	0	0	0	0	0
915.00	4403	17	0	0	0	0	0
916.00	4403	17	0	0	0	0	0
917.00	4944	17	0	0	0	0	0
91£.00	4944	16	0	0	0	0	0
919.00	4944	16	0	0	0	0	0
920.00	4766	15	0	0	0	0	0
921.00	4766	15	0	0	0	0	0
922.00	4766	15	0	0	0	0	0
923.00	4361	12	0	0	0	0	0
924.00	3£42	12	0	0	0	0	0
925.00	4234	14	0	0	0	0	0
926.00	4234	14	0	0	0	0	0
927.00	7££0	25	0	0	0	0	0
92£.00	7££0	25	0	0	0	0	0
929.00	7££0	25	0	0	0	0	0
930.00	7££0	25	0	0	0	0	0
931.00	£940	25	0	0	0	0	0
932.00	£940	25	0	0	0	0	0
933.00	£940	25	0	0	0	0	0
934.00	£940	25	0	0	0	0	0
935.00	£940	25	0	0	0	0	0
936.00	6776	17	0	0	0	0	0

937.00	6776	17	0	0	0	0	0
93£.00	6776	17	0	0	0	0	0
939.00	6776	17	0	0	0	0	0
940.00	£032	22	0	0	0	0	0
941.00	£032	22	0	0	0	0	0
942.00	£032	22	0	0	0	0	0
943.00	£032	22	0	0	0	0	0
944.00	£032	22	0	0	0	0	0
945.00	9111	32	0	0	0	0	0
946.00	9111	32	0	0	0	0	0
947.00	9111	32	0	0	0	0	0
94£.00	9111	32	0	0	0	0	0
949.00	9111	32	0	0	0	0	0
950.00	9111	32	0	0	0	0	0
951.00	442£	12	0	0	0	0	0
952.00	442£	12	0	0	0	0	0
953.00	442£	12	0	0	0	0	0
954.00	442£	12	0	0	0	0	0
955.00	442£	12	0	0	0	0	0
956.00	7601	26	0	0	0	0	0
957.00	7601	26	0	0	0	0	0
95£.00	7601	26	0	0	0	0	0
959.00	6132	17	0	0	0	0	0
960.00	6132	17	0	0	0	0	0
961.00	6132	17	0	0	0	0	0
962.00	5332	12	0	0	0	0	0
963.00	3576	7	0	0	0	0	0
964.00	3576	7	0	0	0	0	0
965.00	3576	7	0	0	0	0	0
966.00	3576	7	0	0	0	0	0
967.00	4696	9	0	0	0	0	0
96£.00	4696	9	0	0	0	0	0
969.00	4696	9	0	0	0	0	0
970.00	4696	9	0	0	0	0	0
971.00	5254	11	0	0	0	0	0
972.00	5254	11	0	0	0	0	0
973.00	4095	9	0	0	0	0	0
974.00	4095	9	0	0	0	0	0
975.00	2527	3	0	0	0	0	0
976.00	407£	7	0	0	0	0	0
977.00	2527	3	0	0	0	0	0
97£.00	55£9	14	0	0	0	0	0
979.00	12504	3£	0	0	0	0	0
9£0.00	12504	3£	0	0	0	0	0
9£1.00	12504	3£	0	0	0	0	0
9£2.00	12504	3£	0	0	0	0	0
9£3.00	1166£	35	0	0	0	0	0
9£4.00	1166£	35	0	0	0	0	0
9£5.00	££6£	26	0	0	0	0	0
9£6.00	££6£	26	0	0	0	0	0
9£7.00	10£6£	33	0	0	0	0	0
9££.00	10£6£	33	0	0	0	0	0
9£9.00	£117	27	0	0	0	0	0
990.00	£117	23	0	0	0	0	0
991.00	629£	13	0	0	0	0	0
992.00	629£	13	0	0	0	0	0
993.00	6470	15	0	0	0	0	0
994.00	6470	15	0	0	0	0	0
995.00	6470	15	0	0	0	0	0
996.00	9331	22	0	0	0	0	0
997.00	9331	22	0	0	0	0	0
99£.00	9331	22	0	0	0	0	0
999.00	9331	22	0	0	0	0	0
1000.00	9331	22	0	0	0	0	0
1001.00	9331	22	0	0	0	0	0
1002.00	£315	22	0	0	0	0	0
1003.00	£315	22	0	0	0	0	0
1004.00	6£73	17	0	0	0	0	0
1005.00	6£73	17	0	0	0	0	0
1006.00	6£73	17	0	0	0	0	0
1007.00	7935	1£	0	0	0	0	0
100£.00	7935	1£	0	0	0	0	0

1009.00	7935	1[illegible]	0	0	0	0	0
1010.00	5395	13	0	0	0	0	0
1011.00	4[illegible]44	13	0	0	0	0	0
1012.00	4[illegible]44	11	0	0	0	0	0
1013.00	6210	15	0	0	0	0	0
1014.00	6210	15	0	0	0	0	0
1015.00	6210	15	0	0	0	0	0
1016.00	6210	15	0	0	0	0	0
1017.00	6210	15	0	0	0	0	0
101[illegible].00	7967	1[illegible]	0	0	0	0	0
1019.00	7967	1[illegible]	0	0	0	0	0
1020.00	7967	1[illegible]	0	0	0	0	0
1021.00	7967	1[illegible]	0	0	0	0	0
1022.00	7466	17	0	0	0	0	0
1023.00	7466	17	0	0	0	0	0
1024.00	653[illegible]	13	0	0	0	0	0
1025.00	7422	14	0	0	0	0	0
1026.00	7422	14	0	0	0	0	0
1027.00	3499	3	0	0	0	0	0
102[illegible].00	6425	12	0	0	0	0	0
1029.00	7[illegible]25	15	0	0	0	0	0
1030.00	[illegible]56[illegible]	17	0	0	0	0	0
1031.00	7[illegible]35	15	0	0	0	0	0
1032.00	7[illegible]35	15	0	0	0	0	0
1033.00	6657	12	0	0	0	0	0
1034.00	6421	12	0	0	0	0	0
1035.00	59[illegible]9	11	0	0	0	0	0
1036.00	5495	10	0	0	0	0	0
1037.00	5495	10	0	0	0	0	0
103[illegible].00	5455	9	0	0	0	0	0
1039.00	5250	9	0	0	0	0	0
1040.00	36[illegible]5	6	0	0	0	0	0
1041.00	5643	9	0	0	0	0	0
1042.00	5643	9	0	0	0	0	0
1043.00	7931	14	0	0	0	0	0
1044.00	7931	14	0	0	0	0	0
1045.00	7931	14	0	0	0	0	0
1046.00	7931	14	0	0	0	0	0
1047.00	7931	14	0	0	0	0	0
104[illegible].00	7931	14	0	0	0	0	0
1049.00	5746	10	0	0	0	0	0
1050.00	5746	10	0	0	0	0	0
1051.00	6005	11	0	0	0	0	0
1052.00	6005	11	0	0	0	0	0
1053.00	6005	11	0	0	0	0	0
1054.00	670[illegible]	13	0	0	0	0	0
1055.00	670[illegible]	13	0	0	0	0	0
1056.00	6005	11	0	0	0	0	0
1057.00	670[illegible]	13	0	0	0	0	0
105[illegible].00	6005	11	0	0	0	0	0
1059.00	4[illegible]4[illegible]	9	0	0	0	0	0
1060.00	4[illegible]4[illegible]	9	0	0	0	0	0
1061.00	3939	5	0	0	0	0	0
1062.00	3939	5	0	0	0	0	0
1063.00	3939	5	0	0	0	0	0
1064.00	3939	5	0	0	0	0	0
1065.00	3425	3	0	0	0	0	0
1066.00	3425	3	0	0	0	0	0
1067.00	3939	5	0	0	0	0	0
106[illegible].00	3939	5	0	0	0	0	0
1069.00	2539	2	0	0	0	0	0
1070.00	2250	1	0	0	0	0	0
1071.00	2250	1	0	0	0	0	0
1072.00	2250	1	0	0	0	0	0
1073.00	2[illegible]50	1	0	0	0	0	0
1074.00	2[illegible]26	3	0	0	0	0	0
1075.00	2[illegible]26	3	0	0	0	0	0
1076.00	1911	1	0	0	0	0	0
1077.00	25[illegible]5	2	0	0	0	0	0
107[illegible].00	3411	4	0	0	0	0	0
1079.00	3411	4	0	0	0	0	0
10[illegible]0.00	4665	[illegible]	0	0	0	0	0

10£1.00	4665	£	0	0	0	0	0
10£2.00	4665	£	0	0	0	0	0
10£3.00	4665	£	0	0	0	0	0
10£4.00	4665	£	0	0	0	0	0
10£5.00	4665	£	0	0	0	0	0
10£6.00	4401	7	0	0	0	0	0
10£7.00	4401	7	0	0	0	0	0
10££.00	4401	7	0	0	0	0	0
10£9.00	4401	7	0	0	0	0	0
1090.00	445£	7	0	0	0	0	0
1091.00	445£	7	0	0	0	0	0
1092.00	445£	7	0	0	0	0	0
1093.00	445£	7	0	0	0	0	0
1094.00	445£	7	0	0	0	0	0
1095.00	4321	7	0	0	0	0	0
1096.00	2£25	3	0	0	0	0	0
1097.00	2511	3	0	0	0	0	0
109£.00	2511	3	0	0	0	0	0
1099.00	2511	3	0	0	0	0	0
1100.00	3534	4	0	0	0	0	0
1101.00	3534	4	0	0	0	0	0
1102.00	3534	4	0	0	0	0	0
1103.00	3534	4	0	0	0	0	0
1104.00	3534	4	0	0	0	0	0
1105.00	2753	3	0	0	0	0	0
1106.00	2753	3	0	0	0	0	0
1107.00	2753	3	0	0	0	0	0
110£.00	2753	3	0	0	0	0	0
1109.00	2753	3	0	0	0	0	0
1110.00	2721	3	0	0	0	0	0
1111.00	2721	3	0	0	0	0	0
1112.00	2721	3	0	0	0	0	0
1113.00	2721	3	0	0	0	0	0
1114.00	2450	3	0	0	0	0	0
1115.00	2670	3	0	0	0	0	0
1116.00	2670	3	0	0	0	0	0
1117.00	2670	3	0	0	0	0	0
111£.00	2456	3	0	0	0	0	0
1119.00	2456	3	0	0	0	0	0
1120.00	2456	3	0	0	0	0	0
1121.00	2456	3	0	0	0	0	0
1122.00	2314	2	0	0	0	0	0
1123.00	2314	2	0	0	0	0	0
1124.00	2314	2	0	0	0	0	0
1125.00	19£1	1	0	0	0	0	0
1126.00	19£1	1	0	0	0	0	0
1127.00	1923	1	0	0	0	0	0
112£.00	1923	1	0	0	0	0	0
1129.00	1923	1	0	0	0	0	0
1130.00	1923	1	0	0	0	0	0
1131.00	1923	1	0	0	0	0	0
1132.00	1379	1	0	0	0	0	0
1133.00	1379	1	0	0	0	0	0
1134.00	2023	2	0	0	0	0	0
1135.00	2495	4	0	0	0	0	0
1136.00	2495	4	0	0	0	0	0
1137.00	2495	4	0	0	0	0	0
113£.00	2533	4	0	0	0	0	0
1139.00	2033	2	0	0	0	0	0
1140.00	1260	1	0	0	0	0	0
1141.00	1660	1	0	0	0	0	0
1142.00	1660	1	0	0	0	0	0
1143.00	1797	1	0	0	0	0	0
1144.00	1797	1	0	0	0	0	0
1145.00	1797	1	0	0	0	0	0
1146.00	1906	1	0	0	0	0	0
1147.00	20£5	1	0	0	0	0	0
114£.00	20£5	1	0	0	0	0	0
1149.00	20£5	1	0	0	0	0	0
1150.00	16£9	1	0	0	0	0	0
1151.00	16£9	1	0	0	0	0	0
1152.00	1430	0	0	0	0	0	0

1153.00	1430	0	0	0	0	0	0
1154.00	1402	0	0	0	0	0	0
1155.00	907	0	0	0	0	0	0
1156.00	907	0	0	0	0	0	0
1157.00	797	0	0	0	0	0	0
115[illegible].00	797	0	0	0	0	0	0
1159.00	762	0	0	0	0	0	0
1160.00	[illegible]74	0	0	0	0	0	0
1161.00	1093	0	0	0	0	0	0
1162.00	1093	0	0	0	0	0	0
1163.00	1093	0	0	0	0	0	0
1164.00	1093	0	0	0	0	0	0
1165.00	1142	0	0	0	0	0	0
1166.00	1145	0	0	0	0	0	0
1167.00	1045	0	0	0	0	0	0
116[illegible].00	745	0	0	0	0	0	0
1169.00	643	0	0	0	0	0	0
1170.00	643	0	0	0	0	0	0
1171.00	559	0	0	0	0	0	0
1172.00	471	0	0	0	0	0	0
1173.00	471	0	0	0	0	0	0
1174.00	422	0	0	0	0	0	0
1175.00	513	0	0	0	0	0	0
1176.00	513	0	0	0	0	0	0
1177.00	444	0	0	0	0	0	0
117[illegible].00	444	0	0	0	0	0	0
1179.00	474	0	0	0	0	0	0
11[illegible]0.00	504	0	0	0	0	0	0
11[illegible]1.00	544	0	0	0	0	0	0
11[illegible]2.00	5[illegible]5	0	0	0	0	0	0
11[illegible]3.00	535	0	0	0	0	0	0
11[illegible]4.00	627	0	0	0	0	0	0
11[illegible]5.00	747	0	0	0	0	0	0
11[illegible]6.00	1012	0	0	0	0	0	0
11[illegible]7.00	950	0	0	0	0	0	0
11[illegible][illegible].00	950	0	0	0	0	0	0
11[illegible]9.00	950	0	0	0	0	0	0
1190.00	1107	0	0	0	0	0	0
1191.00	1107	1	0	0	0	0	0
1192.00	1107	1	0	0	0	0	0
1193.00	607	1	0	0	0	0	0
1194.00	4[illegible]0	0	0	0	0	0	0
1195.00	445	0	0	0	0	0	0
1196.00	470	0	0	0	0	0	0
1197.00	540	0	0	0	0	0	0
119[illegible].00	57[illegible]	0	0	0	0	0	0
1199.00	593	0	0	0	0	0	0
1200.00	4[illegible]2	0	0	0	0	0	0
1201.00	5[illegible]5	0	0	0	0	0	0
1202.00	623	0	0	0	0	0	0
1203.00	710	0	0	0	0	0	0
1204.00	653	0	0	0	0	0	0
1205.00	596	0	0	0	0	0	0
1206.00	573	0	0	0	0	0	0
1207.00	516	0	0	0	0	0	0
120[illegible].00	406	0	0	0	0	0	0
1209.00	406	0	0	0	0	0	0
1210.00	406	0	0	0	0	0	0
1211.00	465	0	0	0	0	0	0
1212.00	4[illegible]5	0	0	0	0	0	0
1213.00	506	0	0	0	0	0	0
1214.00	506	0	0	0	0	0	0
1215.00	506	0	0	0	0	0	0
1216.00	477	0	0	0	0	0	0
1217.00	453	0	0	0	0	0	0
121[illegible].00	453	0	0	0	0	0	0
1219.00	47[illegible]	0	0	0	0	0	0
1220.00	412	0	0	0	0	0	0
1221.00	412	0	0	0	0	0	0
1222.00	399	0	0	0	0	0	0
1223.00	399	0	0	0	0	0	0
1224.00	415	0	0	0	0	0	0

1225.00	455	0	0	0	0	0	0
1226.00	537	0	0	0	0	0	0

CO MPANY :
WELL : CUTTLEFISH 1
LOCATION : X= 592251
Y= 5794241

TD : 1218 Rmf @ 90 : 0.12
BHT : 162 Rw @ 75 : 0.97
TEMP GRAD : 8.46 ppm NaCl : 5500
MUD WT : 9.60 ppm Cl : 33000

DEPTH	Vsh	Dmtx	Rt	Di	PHI RES	PHI Sc	PHI Dc	PHI Nc	PHI NDc	PHI SNc	PHI SDc	PHI CpxL	PHI DWM	PHI Sec	PHI Eff	INDONESIAN Sxo	INDONESIAN Sw
731.00	15.3	2.648	0.0	1	31.1		21.1							0.1	31.1	100.0	100.0
732.00	20.9	2.648	0.0	1	28.1		19.2							0.1	28.1	100.0	100.0
733.00	24.1	2.648	0.0	1	26.4		26.4							0.1	26.4	100.0	100.0
734.00	18.3	2.648	0.0	1	29.5	0.1	27.3				0.1			0.1	29.5	100.0	100.0
735.00	15.9	2.648	0.0	1	30.8	0.1	13.3				0.1			0.1	30.8	100.0	100.0
736.00	20.5	2.648	0.0	1	28.3	0.1	22.9				0.1			0.1	28.3	100.0	100.0
737.00	16.7	2.648	0.0	1	30.3	0.1	30.3				0.1			0.1	30.3	100.0	100.0
738.00	11.6	2.648	0.0	1	33.2	0.1	26.7				0.1			0.1	33.2	100.0	100.0
739.00	15.6	2.648	0.0	1	31.0	0.1	0.1				0.1			0.1	31.0	100.0	100.0
740.00	12.3	2.648	0.0	1	32.8	0.1	31.2				0.1			0.1	32.8	100.0	100.0
741.00	11.4	2.648	0.0	1	33.3	0.1	33.3				0.1			0.1	33.3	100.0	100.0
742.00	23.6	2.648	0.0	1	26.6	0.1	26.6				0.1			0.1	26.6	100.0	100.0
743.00	15.1	2.648	0.0	1	31.2	0.1	31.2				0.1			0.1	31.2	100.0	100.0
744.00	21.2	2.648	0.0	1	27.9	0.1	18.3				0.1			0.1	27.9	100.0	100.0
745.00	19.9	2.648	0.0	1	28.6	0.1	26.2				0.1			0.1	28.6	100.0	100.0
746.00	16.4	2.648	0.0	1	30.5	0.1	23.0				0.1			0.1	30.5	100.0	100.0
747.00	19.0	2.648	0.0	1	29.1	0.1	24.4				0.1			0.1	29.1	100.0	100.0
748.00	4.7	2.648	0.0	1	37.1	0.1	19.5				0.1			0.1	37.1	100.0	100.0
749.00	12.7	2.648	0.0	1	32.5	0.1	11.5				0.1			0.1	32.5	100.0	100.0
750.00	3.8	2.648	0.0	1	37.7	0.1	15.6				0.1			0.1	37.7	100.0	100.0
751.00	24.6	2.659	0.0	0	26.1	26.1	0.1				26.1			0.1	26.1	100.0	100.0
752.00	44.7	2.710	2.5	1	16.4	16.4	9.9				16.4			0.1	16.4	90.6	90.6
753.00	60.6	2.650	3.9	1	9.8	0.1	8.0				0.1			0.1	8.0	100.0	61.7
754.00	90.1	2.710	3.7	1	1.2	1.2	1.2				1.2			0.1	1.2	100.0	62.8
755.00	69.5	2.648	2.4	1	6.7	3.8	6.7				6.2			0.1	6.2	100.0	90.3
756.00	96.2	2.710	2.3	1	0.2	0.2	0.2				0.2			0.1	0.2	100.0	100.0
757.00	84.4	2.710	2.7	1	2.4	2.4	2.1				2.4			0.1	2.4	100.0	94.3
758.00	66.7	2.710	2.5	1	7.6	7.6	6.7				7.6			0.1	7.6	100.0	99.8
759.00	31.7	2.656	3.8	1	11.0	20.7	0.1				18.8			0.1	20.7	96.1	96.1
760.00	64.8	2.651	2.2	1	8.3	8.3	0.1				8.3			0.1	8.3	100.0	100.0
761.00	55.4	2.788	3.5	1	9.9	11.8	0.1				11.8			0.1	11.8	92.1	92.1
762.00	83.8	2.652	2.2	1	2.5	2.5	0.1				2.5			0.1	2.5	100.0	99.8
763.00	45.4	2.663	3.1	2	10.9	16.1	0.1				16.1			0.1	16.1	98.1	98.1
764.00	65.9	2.653	2.3	1	7.9	7.9	0.1				7.9			0.1	7.9	100.0	100.0
765.00	57.1	2.765	2.1	1	11.2	11.2	5.0				11.2			0.1	11.2	100.0	100.0
766.00	64.9	2.650	2.9	2	7.6	8.2	0.1				8.2			0.1	8.2	96.5	96.3
767.00	58.6	2.802	2.6	1	10.6	10.6	1.9				10.6			0.1	10.6	100.0	99.9
768.00	62.1	2.651	2.1	1	9.2	9.2	0.1				9.2			0.1	9.2	100.0	100.0
769.00	46.7	2.870	3.0	2	12.8	15.5	6.6				15.5			0.1	15.5	99.7	99.7
770.00	66.5	2.656	2.7	1	7.7	7.7	0.1				7.7			0.1	7.7	100.0	98.2
771.00	29.9	2.870	4.7	1	12.3	23.4	13.2				23.4			0.1	23.4	86.0	86.0

772.00	48.8	2.870	2.6	1	13.2	14.6	8.4
773.00	27.0	2.660	4.0	1	15.5	20.9	11.3
774.00	66.1	2.653	1.9	1	7.8	7.8	0.1
775.00	56.5	2.781	2.2	1	11.4	11.4	3.2
776.00	54.0	2.792	3.7	2	9.6	12.4	2.1
777.00	71.6	2.652	2.5	1	6.0	6.0	0.1
778.00	67.4	2.651	2.7	1	7.1	7.4	0.1
779.00	53.4	2.869	3.2	1	10.4	12.6	2.4
780.00	75.2	2.656	2.2	2	4.9	4.9	0.1
781.00	70.5	2.652	2.6	2	6.3	6.3	0.1
782.00	80.8	2.654	2.0	1	3.3	3.3	0.1
783.00	54.7	2.778	2.7	2	12.1	12.1	4.1
784.00	61.5	2.652	3.4	2	7.6	9.5	0.1
785.00	69.8	2.652	2.6	1	6.6	6.6	0.1
786.00	24.9	2.709	5.1	1	9.9	19.9	5.0
787.00	66.8	2.653	2.1	1	7.6	7.6	0.1
788.00	54.1	2.870	2.8	1	12.4	12.4	4.2
789.00	32.8	2.870	4.4	2	12.1	22.0	10.7
790.00	40.6	2.648	2.5	1	13.1	18.2	0.6
791.00	33.3	2.870	5.5	0	8.7	21.7	10.1
792.00	37.8	2.868	4.4	3	11.8	19.5	9.9
793.00	67.9	2.653	1.9	1	7.2	7.2	0.1
794.00	55.1	2.821	2.0	1	12.0	12.0	4.3
795.00	71.1	2.651	1.6	1	6.2	6.2	0.1
796.00	69.2	2.651	1.7	1	6.8	6.8	0.1
797.00	64.5	2.651	1.6	1	8.4	8.4	0.1
798.00	48.2	2.773	2.3	1	13.7	14.9	4.9
799.00	46.2	2.860	2.0	1	15.7	15.7	7.8
800.00	73.8	2.651	1.6	1	5.3	5.3	0.1
801.00	82.0	2.651	1.5	1	3.0	3.0	0.1
802.00	66.3	2.652	1.6	1	7.7	7.7	0.1
803.00	55.1	2.816	1.6	1	12.0	12.0	5.0
804.00	50.4	2.870	2.0	1	13.9	13.9	5.4
805.00	65.3	2.651	1.7	1	8.1	8.1	0.1
806.00	47.5	2.825	2.2	1	14.4	15.1	6.7
807.00	72.8	2.653	1.6	1	5.6	5.6	0.1
808.00	43.9	2.870	1.9	1	16.4	16.8	8.5
809.00	60.7	2.652	1.5	1	9.8	9.8	0.8
810.00	67.9	2.651	1.7	1	7.2	7.2	0.1
811.00	65.3	2.650	1.6	1	8.1	8.1	0.1
812.00	61.1	2.653	2.6	2	9.1	9.6	0.1
813.00	71.8	2.651	2.0	2	5.9	5.9	0.1
814.00	64.3	2.650	2.1	1	8.4	8.4	0.1
815.00	53.3	2.814	2.3	2	12.7	12.7	1.7
816.00	51.3	2.870	2.8	2	11.7	13.5	2.8
817.00	54.9	2.790	2.0	1	12.1	12.1	1.4
818.00	62.8	2.652	2.5	1	8.6	9.0	0.1
819.00	70.2	2.651	1.8	1	6.4	6.4	0.1
820.00	55.6	2.870	2.1	1	11.8	11.8	2.3

14.6	0.1	14.6	100.0	100.0	
20.9	0.1	20.9	98.7	98.7	
7.8	0.1	7.8	100.0	100.0	
11.4	0.1	11.4	100.0	100.0	
12.4	0.1	12.4	88.4	88.4	
6.0	0.1	6.0	100.0	99.1	
7.4	0.1	7.4	99.9	98.2	
12.6	0.1	12.6	96.4	96.4	
4.9	0.1	4.9	100.0	99.9	
6.3	0.1	6.3	100.0	98.7	
3.3	0.1	3.3	100.0	100.0	
12.1	0.1	12.1	100.0	99.9	
9.5	0.1	9.5	88.3	88.3	
6.6	0.1	6.6	100.0	98.9	
20.2	0.1	20.2	94.3	94.3	
7.6	0.1	7.6	100.0	100.0	
12.4	0.1	12.4	100.0	99.6	
22.0	0.1	22.0	88.7	88.7	
18.2	0.1	18.2	100.0	100.0	
21.7	0.1	21.7	73.9	73.9	
19.5	0.1	19.5	84.7	84.7	
7.2	0.1	7.2	100.0	100.0	
12.0	0.1	12.0	100.0	100.0	
6.2	0.1	6.2	100.0	100.0	
6.8	0.1	6.8	100.0	100.0	
8.4	0.1	8.4	100.0	100.0	
14.9	0.1	14.9	100.0	100.0	
15.7	0.1	15.7	100.0	100.0	
5.3	0.1	5.3	100.0	100.0	
3.0	0.1	3.0	100.0	100.0	
7.7	0.1	7.7	100.0	100.0	
12.0	0.1	12.0	100.0	100.0	
13.9	0.1	13.9	100.0	100.0	
8.1	0.1	8.1	100.0	100.0	
15.1	0.1	15.1	100.0	100.0	
5.6	0.1	5.6	100.0	100.0	
16.8	0.1	16.8	100.0	100.0	
9.8	0.1	9.8	100.0	100.0	
7.2	0.1	7.2	100.0	100.0	
8.1	0.1	8.1	100.0	100.0	
9.6	0.1	9.6	100.0	99.6	
5.9	0.1	5.9	100.0	100.0	
8.4	0.1	8.4	100.0	100.0	
12.7	0.1	12.7	100.0	100.0	
13.5	0.1	13.5	99.8	99.8	
12.1	0.1	12.1	100.0	100.0	
9.0	0.1	9.0	100.0	99.7	
6.4	0.1	6.4	100.0	100.0	
11.8	0.1	11.8	100.0	100.0	

821.00	64.6	2.651	1.9	1	8.4	8.4	0.1	8.4	0.1	8.4	100.0	100.0
822.00	62.5	2.650	1.7	1	9.1	9.1	0.1	9.1	0.1	9.1	100.0	100.0
823.00	40.0	2.659	3.1	1	11.5	18.5	0.7	18.5	0.1	18.5	98.3	98.3
824.00	51.9	2.870	2.3	1	12.7	13.3	3.1	13.3	0.1	13.3	100.0	100.0
825.00	52.6	2.829	1.8	1	13.0	13.0	3.6	13.0	0.1	13.0	100.0	100.0
826.00	63.1	2.652	2.0	1	8.9	8.9	0.1	8.9	0.1	8.9	100.0	100.0
827.00	56.2	2.773	2.0	1	11.5	11.5	0.1	11.5	0.1	11.5	100.0	100.0
828.00	56.9	2.770	2.1	1	11.2	11.2	0.1	11.2	0.1	11.2	100.0	100.0
829.00	64.2	2.649	1.8	1	8.5	8.5	0.1	8.5	0.1	8.5	100.0	100.0
830.00	53.1	2.793	1.8	1	12.8	12.8	4.1	12.8	0.1	12.8	100.0	100.0
831.00	59.3	2.794	2.1	1	10.3	10.3	0.1	10.3	0.1	10.3	100.0	100.0
832.00	49.5	2.821	2.2	1	14.0	14.3	4.5	14.3	0.1	14.3	100.0	100.0
833.00	54.0	2.754	2.0	1	12.4	12.4	2.6	12.4	0.1	12.4	100.0	100.0
834.00	53.4	2.720	1.9	1	12.7	12.7	1.1	12.7	0.1	12.7	100.0	100.0
835.00	47.3	2.830	2.4	1	13.8	15.2	2.4	15.2	0.1	15.2	100.0	100.0
836.00	51.9	2.870	2.1	1	13.3	13.3	5.7	13.3	0.1	13.3	100.0	100.0
837.00	52.8	2.810	2.8	1	11.7	12.9	0.1	12.9	0.1	12.9	99.7	99.7
838.00	61.5	2.652	2.7	1	9.0	9.5	0.1	9.5	0.1	9.5	100.0	98.5
839.00	61.8	2.653	2.9	1	7.8	9.4	0.1	9.4	0.1	9.4	97.1	97.1
840.00	57.0	2.656	4.1	0	5.8	7.6	0.1	8.3	0.1	8.3	86.9	86.9
841.00	53.0	2.654	4.3	0	6.0	11.0	0.1	11.3	0.1	11.3	79.4	79.4
842.00	60.2	2.648	5.2	0	4.4	2.6	0.1	2.6	0.1	2.6	83.9	83.9
843.00	79.4	2.653	4.1	0	2.8	0.1	0.1	0.1	0.1	2.8	73.5	73.5
844.00	83.3	2.653	3.7	1	2.6	0.1	0.1	0.1	0.1	2.6	79.8	75.5
845.00	70.9	2.651	4.5	1	4.4	3.2	0.1	3.3	0.1	3.3	81.1	75.1
846.00	63.4	2.651	5.8	1	6.1	0.7	0.1	0.3	0.1	0.3	100.0	100.0
847.00	99.0	2.652	3.4	1	0.1	0.1	0.1	0.1	0.1	0.1	100.0	100.0
848.00	19.2	2.656	0.8	1	29.0	29.0	29.0	29.0	0.1	29.0	100.0	100.0
849.00	55.0	2.585	8.7	1	5.3	12.0	12.0	12.0	0.1	12.0	55.0	55.0
850.00	39.5	2.573	9.4	1	7.5	18.8	18.8	18.8	0.1	18.8	54.0	54.0
851.00	23.5	2.495	10.9	1	13.8	26.7	26.7	26.7	0.1	26.7	55.2	50.7
852.00	58.1	2.645	8.9	1	6.4	10.8	10.8	10.8	0.1	10.8	66.0	53.8
853.00	15.4	2.648	8.0	1	22.2	30.0	22.8	27.6	0.1	27.6	85.1	64.9
854.00	25.3	2.648	9.6	1	17.1	25.7	18.4	25.7	0.1	25.7	72.9	54.0
855.00	18.4	2.648	5.8	1	27.6	29.4	29.4	29.4	0.1	29.4	100.0	69.2
856.00	7.9	2.649	5.1	1	35.3	35.3	32.2	35.3	0.1	35.3	100.0	72.3
857.00	7.0	2.649	7.2	1	31.3	34.3	30.2	31.7	0.1	31.7	100.0	68.6
858.00	83.5	2.653	9.4	1	2.6	2.6	2.6	2.6	0.1	2.6	99.8	49.9
859.00	94.9	2.648	7.2	1	0.4	0.4	0.1	0.4	0.1	0.4	100.0	100.0
860.00	83.3	2.648	6.8	1	2.7	2.7	0.1	2.7	0.1	2.7	100.0	92.0
861.00	87.7	2.648	7.3	1	1.7	1.7	0.1	1.7	0.1	1.7	100.0	86.4
862.00	76.8	2.648	11.0	1	4.4	4.4	3.4	4.4	0.1	4.4	100.0	71.3
863.00	60.3	2.648	10.0	1	9.5	9.0	3.8	9.7	0.1	9.7	100.0	71.9
864.00	29.2	2.648	9.9	1	22.3	23.7	18.4	23.7	0.1	23.7	100.0	62.3
865.00	13.2	2.648	10.7	1	27.4	32.3	25.9	31.4	0.1	31.4	95.4	55.6
866.00	15.3	2.648	11.0	1	27.2	31.1	24.5	30.4	0.1	30.4	100.0	55.4
867.00	13.8	2.648	9.8	1	29.5	31.9	28.1	31.9	0.1	31.9	100.0	56.7
868.00	8.0	2.669	7.4	1	33.3	35.2	29.0	35.2	0.1	35.2	100.0	62.5
869.00	8.3	2.648	7.5	1	31.2	35.0	25.3	34.3	0.1	34.3	96.4	63.5

870.00	26.5	2.466	10.8	1	25.1	25.1	18.2
871.00	17.8	2.648	6.8	1	27.6	29.7	25.3
872.00	14.6	2.648	7.8	1	31.5	31.5	30.0
873.00	10.4	2.555	7.9	1	27.7	33.8	22.6
874.00	7.9	2.655	5.1	1	33.4	35.3	27.4
875.00	27.5	2.648	4.2	1	24.6	24.6	24.6
876.00	79.6	2.648	10.6	1	3.6	3.6	3.6
877.00	13.2	2.649	7.7	1	32.3	32.3	29.9
878.00	12.9	2.659	8.8	1	30.4	32.4	28.4
879.00	6.7	2.661	9.2	1	28.4	35.7	25.1
880.00	8.5	2.651	10.5	1	22.2	29.7	18.0
881.00	35.3	2.402	11.0	1	18.7	20.8	7.0
882.00	21.0	2.663	9.6	1	26.1	28.0	22.3
883.00	16.9	2.648	9.0	1	21.2	30.2	19.8
884.00	34.6	2.542	17.2	1	13.6	21.1	21.1
885.00	20.0	2.642	15.7	1	17.3	28.5	28.5
886.00	30.1	2.648	15.8	1	13.0	13.2	14.9
887.00	31.0	2.652	20.0	1	10.6	15.4	10.3
888.00	53.3	2.648	22.2	1	8.6	9.5	5.7
889.00	14.7	2.660	6.4	1	27.5	31.4	26.4
890.00	62.7	2.648	19.4	1	4.6	2.5	1.4
891.00	61.1	2.648	18.9	1	4.7	1.3	0.6
892.00	56.7	2.651	10.9	1	11.3	11.3	11.3
893.00	79.6	2.648	11.8	1	3.6	0.9	3.6
894.00	78.6	2.648	12.3	1	2.8	0.1	0.1
895.00	92.8	2.648	10.6	1	0.7	0.7	0.1
896.00	91.5	2.648	9.9	1	0.9	0.9	0.9
897.00	13.8	2.648	10.4	1	21.8	31.9	31.9
898.00	32.5	2.648	8.2	1	15.5	22.1	22.1
899.00	55.9	2.648	12.2	1	7.4	11.7	11.7
900.00	0.1	2.648	11.8	1	10.3	39.9	39.9
901.00	0.4	1.717	15.9	1	16.8	23.0	39.7
902.00	9.4	2.414	14.0	1	17.3	34.4	34.4
903.00	3.1	2.603	8.2	1	26.6	35.6	38.1
904.00	27.3	2.648	7.4	1	17.5	24.7	24.7
905.00	48.6	2.648	17.6	1	6.0	1.4	4.2
906.00	27.5	2.648	13.0	1	13.8	24.6	9.9
907.00	22.5	2.648	12.0	1	15.3	27.2	16.6
908.00	4.2	2.654	7.2	1	31.9	37.5	27.6
909.00	12.6	2.668	7.3	1	26.0	32.6	26.2
910.00	13.0	2.728	6.4	1	26.5	32.4	25.8
911.00	22.0	2.649	5.0	1	12.8	27.5	26.3
912.00	19.6	2.649	5.3	2	12.6	28.7	23.8
913.00	25.9	2.648	4.5	2	12.6	25.4	25.3
914.00	18.0	2.662	4.2	2	13.9	29.6	26.2
915.00	27.3	2.649	3.9	1	13.4	24.7	23.9
916.00	39.3	2.648	4.7	1	9.7	18.8	9.4
917.00	40.7	2.675	5.1	1	9.3	18.2	16.4
918.00	40.0	2.659	5.4	2	9.0	18.5	12.0

24.0	0.1	24.0	100.0	60.7	
29.7	0.1	29.7	100.0	70.2	
31.5	0.1	31.5	100.0	64.1	
32.0	0.1	32.0	92.9	65.0	
34.9	0.1	34.9	100.0	76.6	
24.6	0.1	24.6	100.0	99.6	
3.6	0.1	3.6	100.0	73.0	
32.3	0.1	32.3	100.0	63.8	
32.4	0.1	32.4	100.0	59.5	
32.1	0.1	32.1	92.2	61.9	
26.8	0.1	26.8	86.5	68.5	
17.4	0.1	17.4	100.0	68.3	
28.0	0.1	28.0	100.0	60.1	
29.0	0.1	29.0	81.0	62.6	
21.1	0.1	21.1	80.4	48.7	
28.5	0.1	28.5	68.3	46.6	
15.1	0.1	15.1	97.9	66.8	
16.3	0.1	16.3	74.8	56.0	
10.5	0.1	10.5	100.0	50.5	
31.2	0.1	31.2	97.6	70.4	
2.7	0.1	2.7	100.0	65.7	
1.2	0.1	1.2	100.0	72.2	
11.3	0.1	11.3	100.0	67.5	
1.2	0.1	1.2	100.0	75.1	
0.1	0.1	2.8	100.0	70.1	
0.7	0.1	0.7	100.0	100.0	
0.9	0.1	0.9	100.0	100.0	
31.9	0.1	31.9	74.3	55.7	
22.1	0.1	22.1	89.4	72.9	
11.7	0.1	11.7	94.5	69.7	
39.9	0.1	39.9	46.0	46.0	
14.2	0.1	0.1	100.0	100.0	
34.4	0.1	34.4	51.6	46.1	
33.5	0.1	33.5	80.0	64.8	
24.7	0.1	24.7	86.2	73.6	
1.8	0.1	1.8	100.0	100.0	
23.5	0.1	23.5	70.4	57.8	
25.5	0.1	25.5	69.3	58.7	
35.5	0.1	35.5	92.0	64.5	
32.1	0.1	32.1	88.6	66.8	
32.4	0.1	32.4	77.3	70.0	
27.5	0.1	27.5	93.1	93.1	
28.7	0.1	28.7	86.1	86.1	
25.4	0.1	25.4	99.0	99.0	
29.6	0.1	29.6	97.5	97.5	
24.7	0.1	24.7	100.0	100.0	
18.8	0.1	18.8	100.0	100.0	
18.2	0.1	18.2	99.9	99.9	
18.5	0.1	18.5	99.4	99.4	

919.00	46.3	2.666	3.6	1	9.6	15.7	14.5
920.00	46.9	2.776	2.9	1	13.9	15.4	15.4
921.00	40.2	2.870	2.8	1	14.3	18.4	18.4
922.00	30.6	2.677	4.8	2	12.1	23.0	20.0
923.00	8.3	2.678	2.6	1	25.1	35.0	12.2
924.00	24.1	2.674	15.4	1	10.7	9.7	2.1
925.00	20.3	2.655	3.4	0	9.4	27.6	0.1
926.00	52.3	2.648	5.6	1	9.3	11.4	12.3
927.00	77.8	2.648	7.3	1	4.0	3.4	0.1
928.00	60.5	2.649	10.5	1	4.7	9.9	9.9
929.00	69.2	2.648	8.1	1	5.4	2.3	6.8
930.00	43.5	2.648	9.7	1	9.4	14.7	6.4
931.00	36.8	2.516	5.9	1	15.4	20.0	20.0
932.00	52.8	2.654	10.3	1	6.9	7.9	4.7
933.00	40.4	2.648	7.8	1	10.2	18.1	15.6
934.00	74.5	2.648	9.7	1	5.1	0.1	3.6
935.00	75.9	2.648	9.3	1	4.3	0.1	1.3
936.00	44.0	2.371	10.1	1	6.9	14.1	16.7
937.00	58.9	2.648	11.7	1	5.7	8.5	5.5
938.00	31.4	2.648	5.6	1	16.7	19.8	19.8
939.00	53.9	2.648	12.2	1	5.9	3.2	5.5
940.00	79.1	2.648	7.8	1	3.8	3.8	3.8
941.00	68.8	2.648	9.3	1	5.9	0.1	2.8
942.00	76.9	2.648	8.9	1	4.4	0.1	0.1
943.00	51.4	2.648	7.2	1	10.2	6.0	6.7
944.00	42.6	2.648	8.7	1	11.6	15.2	9.2
945.00	48.5	2.658	8.8	1	10.6	12.2	11.0
946.00	60.3	2.634	13.5	1	4.9	0.5	3.5
947.00	44.3	2.456	7.3	1	9.6	16.6	3.8
948.00	46.1	2.648	8.5	1	9.8	12.1	15.8
949.00	76.6	2.648	10.1	1	3.4	0.1	4.5
950.00	66.5	2.648	8.4	1	6.2	5.0	6.8
951.00	85.3	2.648	8.6	1	2.2	2.2	0.1
952.00	36.8	2.666	6.9	1	12.5	19.1	16.0
953.00	65.0	2.648	12.5	1	4.6	8.2	8.2
954.00	15.3	2.669	5.4	1	24.6	31.1	25.8
955.00	2.8	2.689	4.0	1	38.2	38.2	35.8
956.00	52.8	2.648	12.4	1	6.7	4.8	11.4
957.00	29.2	2.648	10.6	1	12.2	21.0	14.1
958.00	74.3	2.648	10.2	1	4.3	0.1	1.3
959.00	64.1	2.648	8.1	1	5.9	8.1	4.4
960.00	14.0	2.648	4.5	1	27.2	31.8	23.5
961.00	96.2	2.648	10.0	1	0.2	0.1	0.1
962.00	79.4	2.648	6.8	1	3.7	2.2	2.7
963.00	64.8	2.648	8.9	1	5.1	5.6	4.9
964.00	76.6	2.664	9.1	1	3.4	4.5	3.1
965.00	35.7	2.531	5.0	1	17.3	20.6	13.3
966.00	67.4	2.648	7.4	1	6.6	7.4	5.9
967.00	56.0	2.648	6.5	1	11.2	11.6	11.6

15.7	0.1	15.7	100.0	100.0
15.4	0.1	15.4	100.0	100.0
18.4	0.1	18.4	100.0	100.0
23.0	0.1	23.0	99.1	99.1
35.0	0.1	35.0	100.0	100.0
11.0	0.1	11.0	100.0	99.8
23.4	0.1	27.6	100.0	100.0
13.1	0.1	13.1	100.0	100.0
3.5	0.1	3.5	100.0	100.0
9.9	0.1	9.9	77.4	77.4
4.1	0.1	4.1	100.0	100.0
15.0	0.1	15.0	83.4	78.0
20.0	0.1	20.0	100.0	95.1
9.0	0.1	9.0	98.1	93.9
18.3	0.1	18.3	80.2	80.2
0.1	0.1	3.6	100.0	97.6
0.1	0.1	1.3	100.0	100.0
14.7	0.1	14.7	76.1	76.1
9.6	0.1	9.6	87.0	74.7
20.7	0.1	20.7	100.0	99.0
4.1	0.1	4.1	100.0	99.9
3.8	0.1	3.8	100.0	99.8
0.1	0.1	2.8	100.0	100.0
0.1	0.1	4.4	100.0	97.4
7.2	0.1	7.2	100.0	100.0
15.8	0.1	15.8	99.1	82.7
13.8	0.1	13.8	100.0	84.3
0.5	0.1	0.5	100.0	100.0
12.6	0.1	12.6	99.8	99.8
14.8	0.1	14.8	91.8	84.4
0.2	0.1	0.2	100.0	100.0
6.3	0.1	6.3	100.0	98.9
2.2	0.1	2.2	100.0	98.7
20.0	0.1	20.0	84.0	84.0
8.2	0.1	8.2	87.1	71.1
30.8	0.1	30.8	89.3	79.3
38.2	0.1	35.8	100.0	100.0
6.8	0.1	6.8	100.0	92.8
20.7	0.1	20.7	71.1	68.5
0.1	0.1	1.3	100.0	99.8
8.5	0.1	8.5	100.0	95.7
31.8	0.1	31.8	94.8	88.5
0.1	0.1	0.2	100.0	100.0
2.5	0.1	2.5	100.0	100.0
6.6	0.1	6.6	100.0	98.4
4.5	0.1	4.5	100.0	96.5
20.6	0.1	20.6	100.0	99.4
7.4	0.1	7.4	100.0	99.6
11.6	0.1	11.6	100.0	99.6

968.00	93.5	2.648	9.7	1	0.6	0.1	0.6
969.00	43.3	2.648	6.5	1	12.5	17.0	13.7
970.00	12.4	2.661	4.7	1	29.3	32.7	28.8
971.00	8.1	2.689	5.3	1	34.5	35.2	32.1
972.00	58.0	2.648	8.3	1	8.8	9.2	7.6
973.00	27.3	2.648	8.2	1	16.3	20.7	12.2
974.00	45.0	2.665	5.8	1	13.6	14.9	12.4
975.00	82.4	2.648	9.6	1	2.5	2.9	2.7
976.00	74.4	2.648	6.7	1	4.2	5.1	5.1
977.00	62.9	2.649	7.3	0	3.6	9.0	9.0
978.00	59.7	2.648	7.5	0	3.8	10.2	10.2
979.00	28.1	2.656	7.0	1	14.3	24.3	23.7
980.00	46.1	2.641	8.2	0	5.0	15.8	15.8
981.00	24.2	1.564	8.5	0	5.3	21.2	26.3
982.00	56.1	2.395	7.0	1	8.2	6.0	0.1
983.00	19.4	2.648	6.4	1	20.9	28.9	18.9
984.00	24.9	2.652	9.1	1	16.1	20.2	16.8
985.00	39.1	2.653	9.8	1	10.5	14.1	7.8
986.00	46.2	2.653	9.0	1	9.8	13.0	8.2
987.00	61.9	2.648	7.4	1	6.2	9.3	8.7
988.00	47.1	2.632	4.0	1	9.6	15.3	15.3
989.00	69.8	2.648	3.4	1	6.4	6.6	6.6
990.00	75.2	2.648	2.9	1	4.7	4.9	4.9
991.00	68.4	2.648	3.1	2	6.4	7.0	4.8
992.00	68.8	2.648	2.8	2	6.2	6.9	6.9
993.00	56.3	2.650	3.1	3	8.3	11.5	11.5
994.00	37.9	2.664	3.1	2	11.2	19.5	16.7
995.00	26.4	2.654	3.0	1	10.9	25.2	14.2
996.00	36.2	2.669	2.6	0	11.0	20.3	20.3
997.00	36.2	2.672	2.6	1	11.5	20.3	16.6
998.00	26.8	2.705	5.5	12	13.2	25.0	14.6
999.00	61.5	2.653	3.0	2	7.3	9.5	9.5
1000.00	39.0	2.650	3.4	1	9.9	19.0	16.5
1001.00	66.0	2.679	2.2	0	6.0	7.8	5.2
1002.00	57.7	2.710	2.9	0	6.8	10.9	10.9
1003.00	85.0	2.651	2.7	0	2.3	2.3	0.1
1004.00	65.4	2.672	3.2	1	5.4	8.1	5.1
1005.00	69.3	2.648	2.9	1	5.6	6.8	6.8
1006.00	66.9	2.651	2.9	1	5.3	7.5	3.2
1007.00	63.7	2.648	2.5	0	6.0	8.7	8.7
1008.00	44.4	2.714	3.3	0	8.2	16.5	12.2
1009.00	33.9	2.729	3.0	0	10.6	21.4	17.2
1010.00	5.9	2.738	16.9	0	3.5	15.2	7.0
1011.00	34.4	2.703	2.6	0	10.9	18.4	15.0
1012.00	30.3	2.657	3.0	0	9.4	21.5	9.7
1013.00	31.6	2.704	3.0	0	11.2	19.8	16.3
1014.00	40.2	2.703	2.9	0	9.4	18.4	12.7
1015.00	66.0	2.648	2.1	0	6.0	7.9	5.8
1016.00	68.3	2.666	3.0	0	4.6	4.8	3.9

0.1	0.1	0.1	100.0	100.0	
17.0	0.1	17.0	100.0	94.9	
32.7	0.1	32.7	98.6	83.6	
35.2	0.1	35.2	100.0	72.5	
10.5	0.1	10.5	100.0	94.0	
20.2	0.1	20.2	97.5	84.7	
16.3	0.1	16.3	100.0	99.3	
2.9	0.1	2.9	100.0	95.7	
5.1	0.1	5.1	100.0	100.0	
9.0	0.1	9.0	99.1	99.1	
10.2	0.1	10.2	97.4	97.4	
24.3	0.1	24.3	74.8	74.8	
15.8	0.1	15.8	81.8	81.8	
16.0	0.1	0.1	100.0	100.0	
2.5	0.1	2.5	100.0	100.0	
27.0	0.1	27.0	88.8	78.1	
20.7	0.1	20.7	91.5	78.0	
14.8	0.1	14.8	90.2	84.6	
14.0	0.1	14.0	96.4	84.3	
9.3	0.1	9.3	100.0	98.6	
15.3	0.1	15.3	100.0	100.0	
6.6	0.1	6.6	100.0	100.0	
4.9	0.1	4.9	100.0	100.0	
7.0	0.1	7.0	100.0	100.0	
6.9	0.1	6.9	100.0	100.0	
11.5	0.1	11.5	100.0	100.0	
19.5	0.1	19.5	100.0	100.0	
25.2	0.1	25.2	100.0	100.0	
20.3	0.1	20.3	100.0	100.0	
20.3	0.1	20.3	100.0	100.0	
25.0	0.1	25.0	89.3	89.3	
9.5	0.1	9.5	100.0	100.0	
19.0	0.1	19.0	100.0	100.0	
7.8	0.1	7.8	100.0	100.0	
10.9	0.1	10.9	100.0	100.0	
2.3	0.1	2.3	100.0	100.0	
8.1	0.1	8.1	100.0	100.0	
6.8	0.1	6.8	100.0	100.0	
7.5	0.1	7.5	100.0	100.0	
8.7	0.1	8.7	100.0	100.0	
16.5	0.1	16.5	100.0	100.0	
21.4	0.1	21.4	100.0	100.0	
19.4	0.1	19.4	89.1	89.1	
20.5	0.1	20.5	100.0	100.0	
20.6	0.1	20.6	100.0	100.0	
21.7	0.1	21.7	100.0	100.0	
18.4	0.1	18.4	100.0	100.0	
7.9	0.1	7.9	100.0	100.0	
5.9	0.1	5.9	100.0	100.0	

1017.00	57.7	2.697	2.9	0	6.9	10.5	7.9	10.9	0.1	10.9	100.0	100.0
1018.00	43.9	2.712	2.9	0	9.0	16.4	12.6	16.7	0.1	16.7	100.0	100.0
1019.00	62.0	2.648	2.5	0	5.7	9.3	7.2	9.3	0.1	9.3	100.0	100.0
1020.00	67.8	2.651	2.4	0	5.3	7.1	3.0	7.2	0.1	7.2	100.0	100.0
1021.00	69.8	2.668	2.4	0	5.1	6.6	4.6	6.6	0.1	6.6	100.0	100.0
1022.00	69.9	2.657	2.2	0	5.1	6.5	5.2	6.5	0.1	6.5	100.0	100.0
1023.00	48.1	2.709	2.6	0	9.1	13.4	10.1	14.9	0.1	14.9	100.0	100.0
1024.00	43.2	2.723	2.7	0	9.6	16.7	12.1	17.1	0.1	17.1	100.0	100.0
1025.00	41.0	2.703	2.6	0	10.5	18.1	14.9	18.1	0.1	18.1	100.0	100.0
1026.00	30.7	2.682	3.3	0	10.9	21.5	12.9	21.8	0.1	21.8	100.0	100.0
1027.00	29.9	2.733	2.4	0	12.8	17.6	16.5	20.8	0.1	20.8	100.0	100.0
1028.00	14.9	2.659	3.8	0	10.5	26.3	9.3	23.8	0.1	23.8	100.0	100.0
1029.00	39.4	2.692	3.2	0	9.6	18.8	15.8	18.8	0.1	18.8	100.0	100.0
1030.00	59.2	2.690	2.0	0	8.7	10.4	8.7	10.4	0.1	10.4	100.0	100.0
1031.00	60.3	2.668	2.3	0	7.2	9.9	7.7	9.9	0.1	9.9	100.0	100.0
1032.00	79.1	2.659	3.2	1	3.8	3.8	3.8	3.8	0.1	3.8	100.0	100.0
1033.00	79.7	2.655	2.9	1	3.6	3.6	3.6	3.6	0.1	3.6	100.0	100.0
1034.00	74.9	2.649	3.4	0	3.7	5.0	5.0	5.0	0.1	5.0	100.0	100.0
1035.00	74.5	2.648	2.8	0	3.8	1.3	1.8	1.4	0.1	1.4	100.0	100.0
1036.00	73.6	2.663	2.7	0	4.1	2.6	1.1	2.8	0.1	2.8	100.0	100.0
1037.00	57.3	2.694	3.1	1	7.7	10.2	6.4	11.1	0.1	11.1	100.0	100.0
1038.00	54.9	2.686	3.4	1	10.5	8.9	7.5	10.9	0.1	10.9	100.0	100.0
1039.00	41.3	2.648	2.8	0	8.9	13.8	9.2	14.7	0.1	14.7	100.0	100.0
1040.00	24.1	2.688	4.5	0	9.9	22.2	10.5	22.0	0.1	22.0	100.0	100.0
1041.00	27.5	2.695	3.5	0	11.4	23.3	20.2	24.1	0.1	24.1	100.0	100.0
1042.00	17.4	2.648	5.3	0	8.9	11.3	15.5	13.6	0.1	13.6	100.0	100.0
1043.00	19.6	2.870	6.9	0	7.3	20.1	16.7	26.7	0.1	26.7	89.3	89.3
1044.00	15.6	2.695	3.7	0	11.3	27.5	18.6	26.8	0.1	26.8	100.0	100.0
1045.00	46.5	2.648	3.0	1	11.9	15.6	15.6	15.6	0.1	15.6	100.0	100.0
1046.00	27.4	2.648	3.3	1	13.7	24.7	24.7	24.7	0.1	24.7	100.0	100.0
1047.00	74.2	2.651	2.0	0	4.6	5.2	1.2	5.2	0.1	5.2	100.0	100.0
1048.00	49.9	2.708	2.1	1	11.2	14.1	8.8	14.1	0.1	14.1	100.0	100.0
1049.00	51.6	2.688	2.2	1	9.1	13.4	11.1	13.4	0.1	13.4	100.0	100.0
1050.00	46.4	2.648	2.5	1	9.6	15.6	8.4	15.6	0.1	15.6	100.0	100.0
1051.00	41.3	2.648	2.8	1	10.6	17.9	9.1	17.9	0.1	17.9	100.0	100.0
1052.00	65.9	2.649	2.2	1	7.0	7.9	7.9	7.9	0.1	7.9	100.0	100.0
1053.00	54.2	2.648	1.4	1	10.8	12.3	12.3	12.3	0.1	12.3	100.0	100.0
1054.00	57.3	2.667	2.6	1	8.2	11.1	8.5	11.1	0.1	11.1	100.0	100.0
1055.00	75.6	2.650	3.0	1	4.8	4.8	4.8	4.8	0.1	4.8	100.0	100.0
1056.00	64.8	2.648	2.5	0	2.9	2.3	2.9	2.6	0.1	2.6	100.0	100.0
1057.00	57.1	2.648	2.7	0	6.4	10.6	2.7	11.1	0.1	11.1	100.0	100.0
1058.00	63.3	2.651	3.5	1	5.8	8.6	1.9	8.8	0.1	8.8	100.0	100.0
1059.00	78.9	2.649	3.5	1	3.8	0.7	0.1	0.3	0.1	0.3	100.0	100.0
1060.00	82.5	2.650	3.8	0	2.2	0.1	0.1	0.1	0.1	2.2	100.0	100.0
1061.00	77.3	2.656	3.4	0	3.4	0.1	0.1	0.1	0.1	3.4	100.0	100.0
1062.00	87.2	2.650	3.7	1	1.8	0.1	0.1	0.1	0.1	1.8	100.0	100.0
1063.00	94.5	2.870	5.3	1	0.5	0.1	0.1	0.1	0.1	0.5	100.0	100.0
1064.00	88.6	2.648	3.9	1	1.5	1.5	1.4	1.5	0.1	1.5	100.0	100.0
1065.00	81.8	2.650	4.1	1	3.0	3.0	3.0	3.0	0.1	3.0	100.0	100.0

1066.00	63.9	2.648	3.3	1	6.2	8.6	8.6	8.6	0.1	8.6	100.0	100.0
1067.00	41.7	2.649	4.3	1	9.9	17.7	16.4	17.7	0.1	17.7	98.9	98.9
1068.00	29.1	2.662	4.1	1	10.5	23.8	20.0	23.6	0.1	23.6	97.1	97.1
1069.00	20.1	2.715	4.7	1	13.9	27.8	22.1	28.0	0.1	28.0	85.1	85.1
1070.00	28.9	2.729	4.9	1	12.1	21.5	18.3	23.9	0.1	23.9	86.6	86.6
1071.00	20.6	2.651	6.0	1	11.8	12.8	17.5	15.3	0.1	15.3	100.0	100.0
1072.00	25.0	2.675	3.8	1	12.4	25.9	22.0	25.9	0.1	25.9	98.1	98.1
1073.00	20.9	2.694	3.4	1	13.6	26.4	24.2	27.1	0.1	27.1	99.8	99.8
1074.00	23.7	2.710	3.8	1	12.7	26.6	21.6	26.6	0.1	26.6	97.0	97.0
1075.00	14.8	2.715	4.0	1	15.4	27.6	20.4	27.4	0.1	27.4	99.5	99.5
1076.00	7.7	2.752	6.6	0	7.7	23.7	13.2	26.8	0.1	26.8	98.9	98.9
1077.00	17.1	2.699	3.2	0	13.0	21.5	19.5	23.4	0.1	23.4	100.0	100.0
1078.00	14.6	2.648	3.9	1	10.2	25.5	17.2	23.9	0.1	23.9	100.0	100.0
1079.00	51.2	2.679	2.6	1	8.9	13.6	12.8	13.6	0.1	13.6	100.0	100.0
1080.00	61.0	2.654	2.0	1	9.1	9.7	9.7	9.7	0.1	9.7	100.0	100.0
1081.00	63.8	2.656	3.7	1	5.8	8.6	7.5	8.6	0.1	8.6	100.0	100.0
1082.00	67.0	2.648	3.2	1	5.9	7.5	7.5	7.5	0.1	7.5	100.0	100.0
1083.00	64.5	2.660	3.0	0	5.6	8.4	7.0	8.4	0.1	8.4	100.0	100.0
1084.00	61.9	2.663	2.6	0	5.8	9.3	7.3	9.3	0.1	9.3	100.0	100.0
1085.00	66.8	2.665	2.9	0	4.8	7.6	4.6	7.6	0.1	7.6	100.0	100.0
1086.00	39.1	2.655	4.6	1	9.0	14.5	8.5	15.4	0.1	15.4	99.9	99.9
1087.00	66.3	2.648	2.7	0	5.1	7.8	7.8	7.8	0.1	7.8	100.0	100.0
1088.00	65.6	2.648	2.6	0	5.3	8.0	6.8	8.0	0.1	8.0	100.0	100.0
1089.00	52.9	2.683	2.8	0	7.7	12.9	11.0	12.9	0.1	12.9	100.0	100.0
1090.00	71.3	2.652	2.1	1	6.1	6.1	6.1	6.1	0.1	6.1	100.0	100.0
1091.00	55.2	2.656	2.1	1	8.7	11.9	11.8	11.9	0.1	11.9	100.0	100.0
1092.00	42.0	2.683	3.4	1	10.2	17.6	13.4	17.6	0.1	17.6	100.0	100.0
1093.00	45.5	2.648	2.7	0	8.4	16.0	10.7	16.0	0.1	16.0	100.0	100.0
1094.00	33.6	2.659	2.6	0	9.7	19.3	13.5	20.3	0.1	20.3	100.0	100.0
1095.00	15.3	2.870	3.9	0	9.3	24.8	17.8	30.1	0.1	30.1	99.9	99.9
1096.00	19.9	2.759	3.8	0	11.2	21.3	19.1	25.6	0.1	25.6	100.0	100.0
1097.00	15.9	2.733	3.5	0	11.0	28.3	14.3	27.1	0.1	27.1	100.0	100.0
1098.00	22.1	2.697	3.9	0	10.5	18.7	15.5	20.6	0.1	20.6	100.0	100.0
1099.00	18.8	2.722	3.6	0	11.8	28.3	20.4	28.3	0.1	28.3	98.9	98.9
1100.00	12.3	2.870	6.0	0	8.3	23.4	21.0	29.6	0.1	29.6	89.8	89.8
1101.00	16.3	2.722	4.2	0	10.6	25.0	16.4	25.1	0.1	25.1	99.9	99.9
1102.00	15.5	2.766	5.2	0	9.1	24.8	19.2	27.7	0.1	27.7	98.2	98.2
1103.00	21.3	2.788	4.5	0	8.9	23.2	17.4	26.5	0.1	26.5	99.5	99.5
1104.00	2.8	2.753	7.6	0	5.4	29.9	15.3	31.4	0.1	31.4	80.4	80.4
1105.00	17.1	2.863	3.5	0	10.8	21.7	22.9	28.6	0.1	28.6	100.0	100.0
1106.00	14.7	2.718	3.2	0	11.9	24.0	18.9	25.1	0.1	25.1	100.0	100.0
1107.00	26.8	2.658	3.0	0	10.3	24.2	16.6	23.4	0.1	23.4	100.0	100.0
1108.00	51.1	2.656	2.7	1	9.2	13.6	13.6	13.6	0.1	13.6	100.0	100.0
1109.00	64.5	2.648	2.9	0	5.5	8.4	7.9	8.4	0.1	8.4	100.0	100.0
1110.00	63.0	2.648	2.9	1	5.9	8.9	6.8	8.9	0.1	8.9	100.0	100.0
1111.00	67.8	2.658	2.9	0	4.6	7.2	5.9	7.2	0.1	7.2	100.0	100.0
1112.00	68.7	2.664	2.8	0	4.7	6.9	5.1	6.9	0.1	6.9	100.0	100.0
1113.00	56.1	2.679	3.0	0	7.5	11.5	10.1	11.5	0.1	11.5	100.0	100.0
1114.00	67.7	2.648	2.5	0	5.3	7.3	7.3	7.3	0.1	7.3	100.0	100.0

1115.00	60.2	2.648	2.4	0	6.7	10.0	9.6
1116.00	82.9	2.648	2.8	0	2.5	2.8	2.8
1117.00	89.5	2.669	2.7	0	1.3	1.3	0.3
1118.00	82.8	2.664	3.5	0	2.2	2.8	1.7
1119.00	74.3	2.661	3.8	0	3.1	5.1	3.6
1120.00	55.8	2.648	3.0	0	6.4	11.7	6.0
1121.00	73.4	2.652	3.1	1	5.4	5.4	5.4
1122.00	83.1	2.648	3.0	1	2.5	2.7	2.7
1123.00	69.8	2.656	2.7	0	4.6	6.6	5.7
1124.00	65.5	2.657	2.7	0	5.4	8.0	7.0
1125.00	54.6	2.701	2.9	0	7.4	12.2	9.5
1126.00	40.8	2.706	2.9	0	9.6	18.1	15.5
1127.00	42.7	2.648	2.9	1	9.6	17.3	14.5
1128.00	42.2	2.648	3.8	2	8.7	17.5	13.6
1129.00	44.2	2.694	3.5	1	9.4	16.6	14.6
1130.00	30.1	2.711	3.1	1	11.2	23.3	17.8
1131.00	38.9	2.721	3.0	0	9.9	19.0	15.6
1132.00	33.3	2.711	2.9	0	10.8	17.7	15.9
1133.00	21.9	2.655	3.0	0	10.6	27.5	14.7
1134.00	47.0	2.654	2.9	0	7.3	15.4	15.4
1135.00	54.1	2.701	3.5	1	7.5	12.4	9.6
1136.00	36.7	2.706	3.1	1	10.7	20.1	17.0
1137.00	57.0	2.688	1.9	0	8.1	11.2	10.0
1138.00	48.3	2.648	2.8	0	7.6	14.8	10.8
1139.00	51.1	2.689	2.3	0	9.0	13.6	11.6
1140.00	54.3	2.684	2.3	0	9.0	12.3	10.6
1141.00	70.2	2.648	2.3	0	5.0	6.4	6.4
1142.00	71.4	2.648	2.6	1	5.2	6.1	6.1
1143.00	69.3	2.648	3.0	1	5.6	6.7	6.7
1144.00	67.6	2.648	2.5	0	5.0	7.3	7.0
1145.00	85.4	2.648	2.5	0	2.2	2.2	2.2
1146.00	68.5	2.662	2.9	0	4.6	7.0	5.2
1147.00	70.5	2.650	3.1	0	4.1	6.3	6.3
1148.00	66.2	2.648	2.9	0	5.1	7.8	7.1
1149.00	72.7	2.658	2.6	0	4.2	5.6	4.4
1150.00	59.2	2.673	2.9	1	6.5	10.4	7.8
1151.00	63.8	2.666	3.1	0	5.1	8.6	5.5
1152.00	45.5	2.648	2.4	0	8.8	16.0	9.9
1153.00	37.4	2.657	3.5	0	7.9	11.8	12.4
1154.00	6.0	2.870	10.7	0	5.7	21.3	15.7
1155.00	20.5	2.648	5.7	0	7.5	19.2	11.2
1156.00	23.6	2.721	3.5	0	10.4	23.2	18.0
1157.00	28.8	2.665	3.1	0	11.3	13.7	15.1
1158.00	36.4	2.679	2.2	0	11.9	20.2	13.8
1159.00	39.1	2.717	2.7	0	10.6	15.8	12.3
1160.00	64.1	2.650	1.8	1	7.2	8.6	8.6
1161.00	47.9	2.426	2.7	1	8.1	15.0	2.3
1162.00	59.0	2.652	3.0	2	7.1	10.4	10.4
1163.00	63.6	2.660	2.2	0	6.1	8.7	7.2

10.0	0.1	10.0	100.0	100.0	
2.8	0.1	2.8	100.0	100.0	
1.3	0.1	1.3	100.0	100.0	
2.8	0.1	2.8	100.0	100.0	
5.1	0.1	5.1	100.0	100.0	
11.7	0.1	11.7	100.0	100.0	
5.4	0.1	5.4	100.0	100.0	
2.7	0.1	2.7	100.0	100.0	
6.6	0.1	6.6	100.0	100.0	
8.0	0.1	8.0	100.0	100.0	
12.2	0.1	12.2	100.0	100.0	
18.1	0.1	18.1	100.0	100.0	
17.3	0.1	17.3	100.0	100.0	
17.5	0.1	17.5	99.6	99.6	
16.6	0.1	16.6	99.9	99.9	
23.3	0.1	23.3	99.9	99.9	
19.0	0.1	19.0	100.0	100.0	
20.3	0.1	20.3	100.0	100.0	
25.4	0.1	25.4	100.0	100.0	
15.4	0.1	15.4	100.0	100.0	
12.4	0.1	12.4	100.0	100.0	
20.1	0.1	20.1	100.0	100.0	
11.2	0.1	11.2	100.0	100.0	
14.8	0.1	14.8	100.0	100.0	
13.6	0.1	13.6	100.0	100.0	
12.3	0.1	12.3	100.0	100.0	
6.4	0.1	6.4	100.0	100.0	
6.1	0.1	6.1	100.0	100.0	
6.7	0.1	6.7	100.0	100.0	
7.3	0.1	7.3	100.0	100.0	
2.2	0.1	2.2	100.0	100.0	
7.0	0.1	7.0	100.0	100.0	
6.3	0.1	6.3	100.0	100.0	
7.8	0.1	7.8	100.0	100.0	
5.6	0.1	5.6	100.0	100.0	
10.4	0.1	10.4	100.0	100.0	
8.6	0.1	8.6	100.0	100.0	
16.0	0.1	16.0	100.0	100.0	
13.8	0.1	13.8	100.0	100.0	
27.4	0.1	27.4	71.3	71.3	
19.1	0.1	19.1	99.9	99.9	
24.7	0.1	24.7	99.9	99.9	
16.2	0.1	16.2	100.0	100.0	
20.2	0.1	20.2	100.0	100.0	
18.3	0.1	18.3	100.0	100.0	
8.6	0.1	8.6	100.0	100.0	
11.3	0.1	11.3	100.0	100.0	
10.4	0.1	10.4	100.0	100.0	
8.7	0.1	8.7	100.0	100.0	

1164.00	72.2	2.649	1.5	1	5.8	5.8	5.8	5.8	0.1	5.8	100.0	100.0
1165.00	47.2	2.675	3.0	0	7.2	15.3	12.6	15.3	0.1	15.3	100.0	100.0
1166.00	54.0	2.661	2.8	0	6.8	12.4	11.0	12.4	0.1	12.4	100.0	100.0
1167.00	54.6	2.675	3.2	0	6.1	12.2	9.4	12.2	0.1	12.2	100.0	100.0
1168.00	45.0	2.689	3.3	0	8.0	16.2	10.4	16.2	0.1	16.2	100.0	100.0
1169.00	28.3	2.737	3.1	0	11.4	21.0	17.4	23.6	0.1	23.6	100.0	100.0
1170.00	26.5	2.741	3.8	0	10.2	20.7	15.1	22.6	0.1	22.6	99.8	99.8
1171.00	10.4	2.870	8.6	0	6.2	21.4	17.6	27.7	0.1	27.7	73.7	73.7
1172.00	36.4	2.648	2.5	0	9.7	19.3	11.4	19.1	0.1	19.1	100.0	100.0
1173.00	25.2	2.693	3.9	0	9.3	19.3	15.1	21.0	0.1	21.0	100.0	100.0
1174.00	19.8	2.762	5.5	0	7.5	22.1	14.1	24.3	0.1	24.3	97.5	97.5
1175.00	18.1	2.862	6.2	0	6.3	18.7	20.2	25.9	0.1	25.9	88.3	88.3
1176.00	17.3	2.870	7.0	0	6.6	20.6	19.3	27.4	0.1	27.4	75.2	75.2
1177.00	20.5	2.870	6.2	0	7.0	20.7	20.1	27.5	0.1	27.5	77.4	77.4
1178.00	22.4	2.870	6.0	0	7.0	20.3	20.4	27.3	0.1	27.3	76.8	76.8
1179.00	23.1	2.870	5.9	0	7.9	20.2	20.6	26.9	0.1	26.9	78.5	78.5
1180.00	31.1	2.735	4.7	0	8.8	20.9	16.6	22.8	0.1	22.8	84.3	84.3
1181.00	43.8	2.648	2.8	0	8.3	16.8	8.3	16.8	0.1	16.8	100.0	100.0
1182.00	43.6	2.668	2.3	1	9.8	16.9	15.0	16.9	0.1	16.9	100.0	100.0
1183.00	35.9	2.739	5.0	0	8.1	16.1	13.1	19.3	0.1	19.3	88.3	88.3
1184.00	44.8	2.722	2.9	1	9.8	16.3	12.3	16.3	0.1	16.3	100.0	100.0
1185.00	58.2	2.657	2.6	0	6.4	10.7	9.9	10.7	0.1	10.7	100.0	100.0
1186.00	61.1	2.648	2.8	0	6.0	9.6	9.6	9.6	0.1	9.6	100.0	100.0
1187.00	75.4	2.648	3.3	0	3.2	4.8	4.8	4.8	0.1	4.8	100.0	100.0
1188.00	90.0	2.652	4.1	0	1.2	0.1	1.2	0.1	0.1	1.2	99.9	99.9
1189.00	89.1	2.649	2.7	0	1.4	1.4	0.1	1.4	0.1	1.4	100.0	100.0
1190.00	89.4	2.658	3.1	0	1.3	1.3	0.8	1.3	0.1	1.3	100.0	100.0
1191.00	47.7	2.648	2.8	1	8.5	15.1	15.1	15.1	0.1	15.1	100.0	100.0
1192.00	35.5	2.702	2.6	0	10.5	18.0	12.8	19.9	0.1	19.9	100.0	100.0
1193.00	19.0	2.785	3.3	0	10.6	21.7	16.4	26.4	0.1	26.4	100.0	100.0
1194.00	33.3	2.714	4.2	0	6.7	9.1	8.3	11.9	0.1	11.9	100.0	100.0

APPENDIX 5

DRILLING FLUID RECAP

AMITY OIL N.L.
DRILLING FLUID RECAP
CUTTLEFISH-1
BASS STRAIT, VICTORIA

Prepared by: Tony Kowalski, Innes Macleod

Date : October, 1999

Table Of Contents

1. WELL SUMMARY

1.1 Well Data

Well Name	:	Cuttlefish-1
Operator	:	Amity Oil N.L.
Well Type	:	Vertical
Bottom Hole Temperature	:	58° C
Location	:	Bass Strait, Victoria
Contractor / Rig	:	Sedco 702
Start Date (Abandonment)	:	20 October, 1999
Spud Date	:	23 October, 1999
RKB to Seabed	:	73.6 m
RKB to MSL	:	25.9 m
Total Depth	:	1,226 m
Date TD Reached	:	28 October, 1999
Total Days Drilling	:	5 days
Date Released	:	30 October, 1999
Total Days on Well	:	7 days

1.2 Formation Tops

Formation	MD (m)	TVD (m)	Inclination (deg)
Gippsland Limestone	73.6	73.6	0.5
Lakes Entrance	792.0	792.0	0.5
Latrobe	839.0	839.0	05
Golden Beach	988.0	988.0	0.5
Strzelecki	1108.0	11108.0	0.5
Total Depth	1226.0	1226.0	1.0

1.3 Casing Program

30"	Structural Casing	@	118.0 m
13 3/8"	Surface Casing	@	749.3 m

1.4 Personnel

Drilling Supervisors	:	Wally Westman Len Kronstal
Baroid Field Service Reps.	:	Tony Kowalski Innes Macleod

2. COST SUMMARY

2.1 Drilling Fluid Costs

	Drilling Fluid	Hole Size	MD From	MD To	Cost (AUS$)
1.	SW/AQUAGEL Hi-vis Sweeps	36"	73.6 m	118.0 m	5,422.62
2.	SW/AQUAGEL Hi-vis Sweeps	17 1/2"	118.0 m	755 m	16,187.34
3.	KCl/EZ-MUD/Polymer	12 1/4"	755 m	1,226 m	30,819.67
Mud Materials Used For Drilling				**Total AUS$**	**52,429.63**
Mud Materials Not Used For Drilling:				**AUS$**	
Used for Cementing					**1,049.31**
Used for P & A					**1,178.44**
Total Materials				**AUS$**	**54,657.38**

2.2 Engineering Costs

Service Representatives	From (date)	To (date)	Days
Tony Kowalski	22/10/99	30/11/99	9
Innes Macleod	23/10/99	29/11/99	7
Total Days			**16**
Service Cost @	**AUS$650 per day**	**Total (AUS$)**	**10,400.00**

3. PERFORMANCE SUMMARY

3.1 Comments

Cuttlefish-1 was drilled with no hole or mud related problems and no problems were encountered while logging. All casing strings were run without incident to programmed depth. Wireline logs were held up 6 m from bottom but the calliper log indicated almost perfect gauge hole.

The total drilling fluid cost was well within the programmed limit. Note that mud salvaged from the rig's previous well (Cultus Petroleum N.L.' Baleen-2) was utilised on this well. The salvaged drilling fluid consisted of 284 bbls of Hi-Vis SW Flocculated Gel and 443 bbls of NaCl/EZ-MUD/Polymer.

3.2 Performance Indicators

	Program	Actual	Achieved (± 10 %)
Interval 1 36" Hole			
73.6 m - 118 m (44.4 m drilled)			
• Volume Consumed, bbl	500	478	Yes
• Dilution Rate, bbl/m	0	0	Yes
• Consumption Rate, bbl/m	11.11	10.77	Yes
• Mud Cost/bbl, AUS$	$15.32	$11.34	Yes
• Mud Cost/m, AUS$	$170.23	$122.13	Yes
• Interval Mud Cost, AUS$	$7,660.23	$5,422.62	Yes
Interval 2 17 1/2" Hole			
118 m - 755 m (637 m drilled)			
• Volume Consumed, bbl	3,535	2208	Yes
• Dilution Rate, bbl/m	0	0	Yes
• Consumption Rate, bbl/m	5.20	3.47	Yes
• Mud Cost/bbl, AUS$	$5.36	$7.33	No
• Mud Cost/m, AUS$	$27.87	$25.41	Yes
• Interval Mud Cost, AUS$	$18,952.19	$16,187.34	Yes
Interval 3 12 1/4" Hole			
755 m - 1,226 m (471 m drilled)			
• Volume Consumed, bbl	1,307	1,314	Yes
• Dilution Rate, bbl/m	0.8	0.37	Yes
• Consumption Rate, bbl/m	3.03	2.79	Yes
• Mud Cost/bbl, AUS$	$37.51	$23.45	Yes
• Mud Cost/m, AUS$	$113.49	$65.43	Yes
• Interval Mud Cost, AUS$	$49,028.74	$30,819.67	Yes
Total Drilling Fluid Cost, AUS$	$75,641.17	$52,429.63	Yes

Explanation of Non-Conformance

- **Interval 2.** Cost/bbl was higher than programmed due to lower than programmed volume used, the use of caustic soda, which was not in the programmed cost and a bentonite content of 25 ppb as compared to the programmed 20 ppb.

4. INTERVAL - 1

4.1 SUMMARY

36" Hole From 73.6 m To 118 m In 1 Day

Drilling Fluid Seawater with Hi-Vis Sweeps

Formations Gippsland Limestone

Properties	Programmed		Actual (Typical)		
	Min	Max	Min	Max	Conformance
Density, ppg				8.7	Yes
Funnel Viscosity, sec/qt	100		163	213	Yes

Explanation of Non-Conformance

- All mud properties conformed to programmed specifications.

Maintenance

- The hi-vis mud for sweeps was built with pre-hydrated AQUAGEL at 35 ppb, and after yielding was diluted to 25 ppb with seawater. Caustic soda and lime were added to flocculate the Gel to produce the programmed funnel viscosity.
- The mud used for displacing the hole prior to running casing was built at 35 ppb pre-hydrated AQUAGEL. No lime was added to this mud.

4.2 EVALUATION

Comments

- This interval was drilled quickly and successfully with no hole or mud related problems. The 30" casing was run right to bottom. Interval cost was lower than that programmed.

Problems, Causes, Remedial Action Taken or Recommended

Hole Conditions

1) Problem None
   Cause
   Action

Drilling Fluid

1) Problem None
   Cause
   Action

Solids Control and Mud Mixing Equipment

1) Problem None
   Cause
   Action

4.3 RECOMMENDATIONS FOR IMPROVEMENT

Hole Conditions

- No recommendations.

Drilling Fluid

- No recommendations.

Solids Control and Mud Mixing Equipment.

- No recommendations.

5. INTERVAL - 2

5.1 SUMMARY

17 1/2" Hole From 118 m To 755 m In 1 Day

Drilling Fluid Seawater with Hi-Vis Sweeps

Formations Gippsland Limestone

Properties	Programmed		Actual (Typical)		
	Min	Max	Min	Max	Conformance
Density, ppg			8.7	8.7	Yes
Funnel Viscosity, sec/qt	100		124	153	Yes

Explanation of Non-Conformance

- All mud properties conformed to programmed specifications.

Maintenance

- The hi-vis mud for sweeps was built with pre-hydrated AQUAGEL at approximately 35 ppb diluted to 25 ppb with seawater. Caustic soda and lime were added to flocculate the Gel to produce the programmed funnel viscosity.
- The mud used (925 bbls) for displacing the hole prior to running casing was built at 35 ppb pre-hydrated AQUAGEL. No lime was added to this mud.

5.2 EVALUATION

Comments

- This interval was drilled quickly and successfully with no hole or mud related problems. The 13 3/8" casing was run to programmed depth without problem. The interval mud cost was also lower than programmed.

Problems, Causes, Remedial Action Taken or Recommended

Hole Conditions

1) Problem None
   Cause
   Action

Drilling Fluid

1) Problem None
   Cause
   Action

Solids Control and Mud Mixing Equipment

1) Problem None
   Cause
   Action

5.3 RECOMMENDATIONS FOR IMPROVEMENT

Hole Conditions

- No recommendations.

Drilling Fluid

- No recommendations.

Solids Control and Mud Mixing Equipment.

- No recommendations.

6. INTERVAL - 3

6.1 SUMMARY

12 1/4" Hole From 755 m To 1,226 m In 2 Days

Drilling Fluid KCl/EZ-MUD/Polymer

Formations Lakes Entrance / Golden Beach / Latrobe/Strzelecki

Properties	Programmed		Actual (Typical)		
	Min	Max	Min	Max	Conformance
Mud Weight, ppg	8.6	10.0	9.3	9.6	Yes
6 rpm, lb/100 ft^2	8	12	8	9	Yes
API Filtrate		8.0	5.3	6.0	Yes
HPHT @ 250 F, ml		25.0	18.0	22.6	Yes
KCl Content, %	3.0	6.0	3.4	4.1	Yes
pH	8.5	9.5	8.5	9.5	Yes
Excess PHPA, ppb	1.0		0.3	1.5	No
LGS, % v/v		8.0	0.2	2.0	Yes
Sulphite Residual, mg/l			10	40	

Explanation of Non-Conformance

- The excess PHPA content was low initially to avoid mud losses over the shakers due to unsheared PHPA. The PHPA concentration was increased to 1.5 ppb after displacing to mud.

Maintenance

- 662 bbls of drilling fluid was initially formulated with 4.2% Ag grade KCl, 1.5 ppb DEXTRID,0.73 ppb of PAC-R, 0.75 ppb of XCD-POLYMER and 0.34 ppb of EZ-MUD DP. The initial mud weight was 9.4 ppg. This volume was blended in with 443 bbls of 7.4% NaCl/EZ-MUD/Polymer fluid salvaged from the previous Cultus well.
- There were no noticeable detrimental effects in blending the two mud systems.
- The 13 3/8" casing shoe and three meters of new hole were drilled with seawater and the hole displaced to mud. A leak off test was then performed to 12.1 ppg EMW.
- Shortly after drilling began, an additional 0.9 ppb EZ MUD was added to the active system and a constant mud formulation was maintained to provide full inhibition and cuttings integrity.
- Regular additions of caustic potash were made to maintain pH levels.
- BARACOR 129 m was added to maintain excess sulfites in the active system.
- Occasional additional XCD-Polymer treatments were required to maintain a minimum 6 rpm reading of 8.

Solids Control Equipment

- The three Thule VSM 100 shale shakers were dressed with a combination of 52 and 120 mesh screens for the displacement of PHPA mud into the hole to avoid excessive losses of unsheared mud.
- The 3 Brandt scalper shakers were not utilised at the request of the geologist. As a result, the Thule shakers became overloaded and it was not possible to downsize the screens any further than 52/120 mesh on all 3 shakers. The 52 mesh screens allowed large quantities of cuttings to drop into the shaker beds which resulted in some whole mud losses over the front of the shaker beds.
- The sandtraps were not utilised during this interval to minimise mud usage.

6.2 EVALUATION

Comments

- .The interval was drilled in just 20.25 hrs and without problem. Cuttings integrity was excellent and the calliper log indicated almost gauge hole. Interval drilling fluid cost was $18,000 less than programmed.

Problems, Causes, Remedial Action Taken or Recommended

Hole Conditions

1) Problem No problems.
   Cause
   Action

Drilling Fluid

1) Problem No problems.
   Cause
   Action

Solids Control and Mud Mixing Equipment

1) Problem Mud losses over front of Thule shaker beds.
   Cause Overloaded and coarse screens.
   Action Cleaned out shaker beds on connections.

6.3 RECOMMENDATIONS FOR IMPROVEMENT

Hole Conditions

- None.

Drilling Fluid

- None.

Solids Control and Mud Mixing Equipment.

- Try to utilise Brandt scalper shakers on any future wells.

APPENDIX A - DEVIATION DATA

Depth (m)	Inclination (deg)
115.0	0.5
259.0	0.5
346.0	0.5
453.0	0.5
520.0	0.5
693.0	0.5
719.0	0.5
777.0	0.5
896.0	0.5
1012.0	0.5

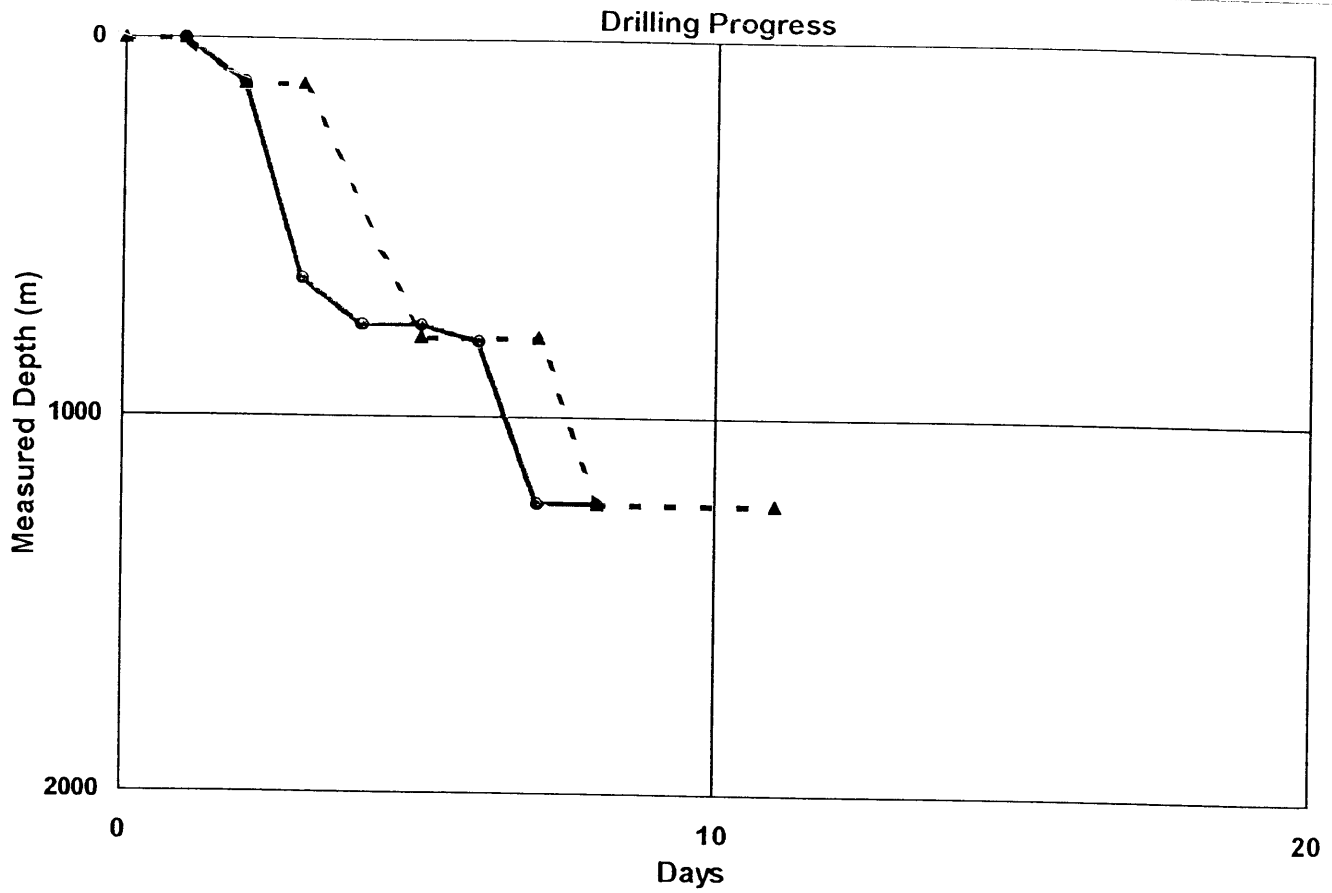
APPENDX B - CALIPER DATA

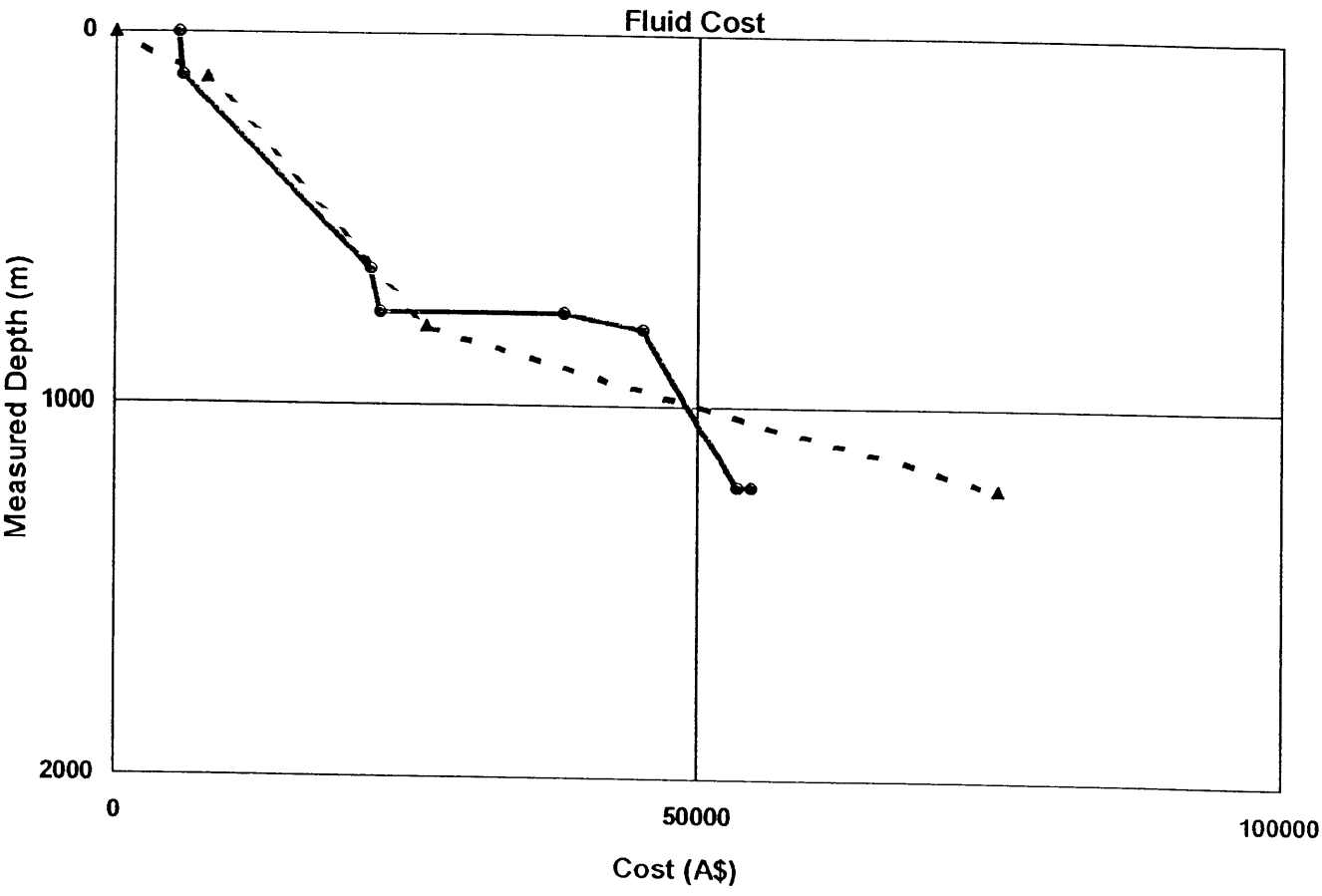
Depth (m)	Calliper (ins.)
775	12.25
800	12.1
825	12.1
850	12.25
875	12.1
900	12.2
925	12.2
950	12.1
975	12.1
1000	12.2
1025	12.2
1050	12.1
1075	12.1
1100	12.2
1125	12.25
1150	12.25
1175	12.2
1200	
1266	TD

GRAPHS

DRILLING FLUID PERFORMANCE

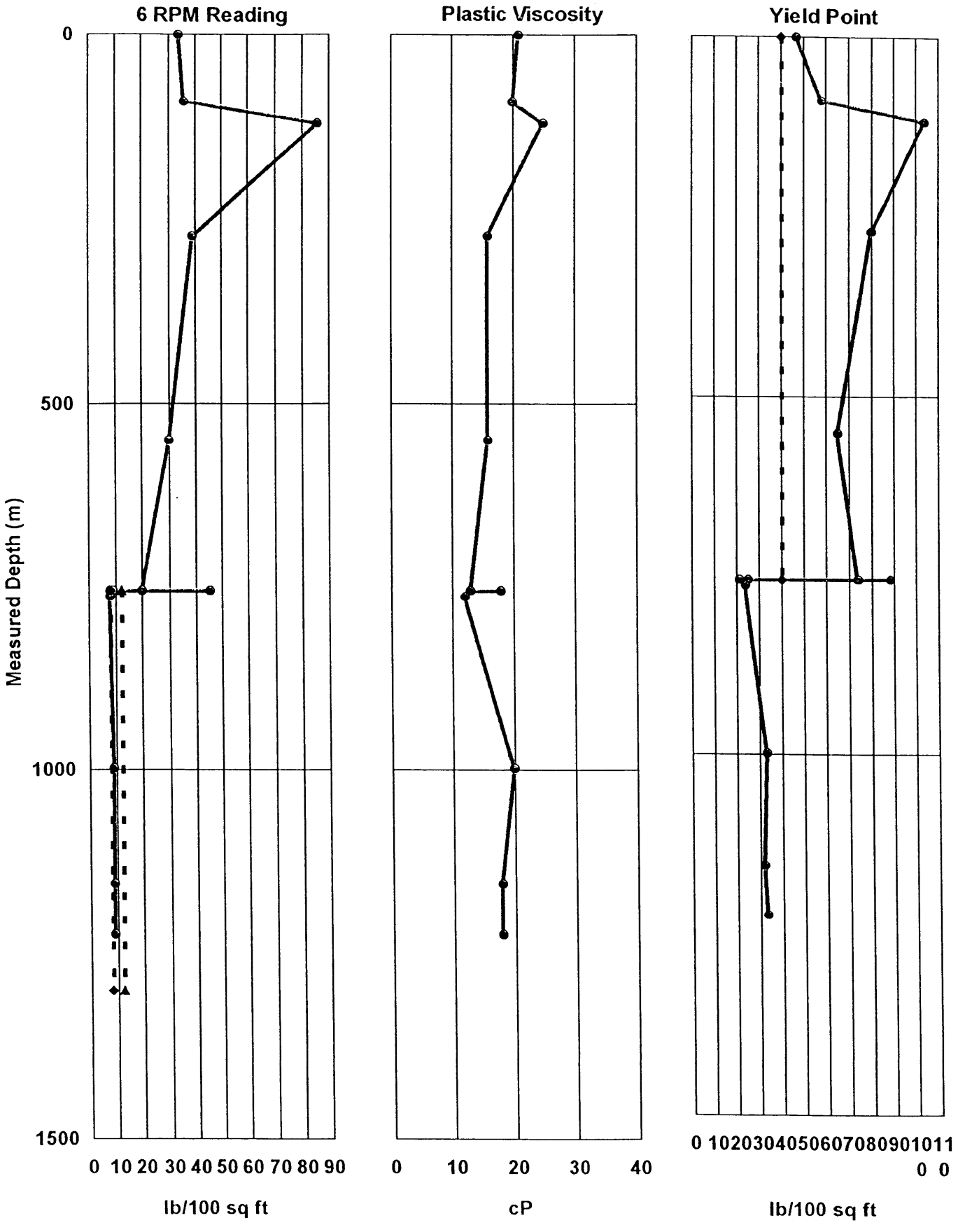
Operator : Amity Oil N.L.
Well : Cuttlefish-1





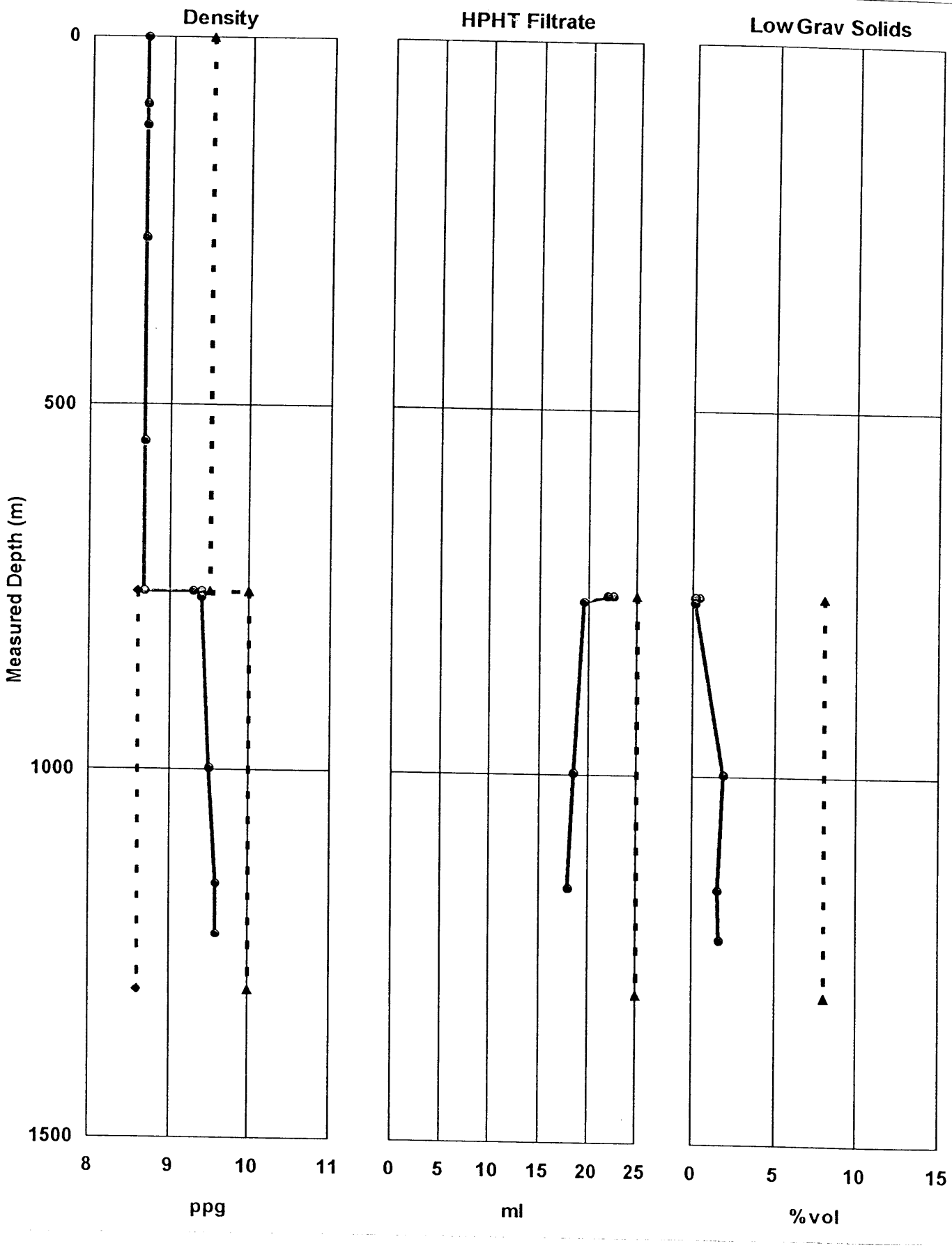
DRILLING FLUID PROPERTIES (Page - 1)

Operator : Amity Oil N.L.
Well : Cuttlefish-1



DRILLING FLUID PROPERTIES (Page - 2)

Operator : Amity Oil N.L.
Well : Cuttlefish-1



POST WELL AUDIT

Postwell Audit

Amity Oil N.L.

Cuttlefish-1

Drilling Contractor	Sedco Forex
Rig	702
Prepared by	INNES MACLEOD
Date	10/11/99
Internal Well Number	M0300357

Contents

Company:	Amity Oil N.L.	Country:	AUSTRALIA
Well Name:	Cuttlefish-1	Geo Area:	BASS STRAIT
Contractor:	Sedco Forex	Field:	VIC/P40
Rig:	702	Region:	Victoria

Well Summary

Well data	Spud date	: 23/10/99
	TD date	: 28/10/99
	Days on well	: 7
	Drilling days	: 5
	Water depth (RKB to seabed)	: 48 (74) meters
	Total measured depth	: 1,226 meters
	True vertical depth	: 1,226 meters
	Distance Drilled	: 1,152 meters
	Maximum deviation	: 1.00°
	BHT	: 58 Deg C
	Total mud cost	: $A 52,429.63
	Mud cost per meters	: $A 45.49
	Total cost	: $A 54,657.38
	Baroid Engineers	: TONY KOWALSKI : INNES MACLEOD

Casing Program	Casing size in.	Shoe depth meters
	30	118
	13 3/8	749

Mud type	Interval meters	Hole size in.	Mud cost, $A
Gel/Seawater	74 To 118	26 / 36 HO	5,422.62
Gel/Seawater	118 To 755	17.5	16,187.34
KCl/Polymer	755 To 1226	12.25	30,819.67

Company:	Amity Oil N.L.	Country:	AUSTRALIA
Well Name:	Cuttlefish-1	Geo Area:	BASS STRAIT
Contractor:	Sedco Forex	Field:	VIC/P40
Rig:	702	Region:	Victoria

Total Material Consumption

Material	Unit size	Quantity	Total cost ($A)
AQUAGEL	100 LB. BAG	802	20,707.64
BARACIDE	25 KG. CAN	2	1,043.78
BARACOR 129	25 KG. CAN	9	664.74
barite	100 LB. BULK	393.000	5,851.77
caustic soda	25 KG. PAIL	13	679.12
DEXTRID LT	25 KG. BAG	25	1,604.75
EZ MUD DP	50 LB. SACK	30	4,192.80
lime	20 KG. BAG	22	275.44
PAC-R	25 KG. BAG	16	2,870.40
potassium chloride	1000 KG. TON	11.000	5,903.81
potassium hydroxide	20 KG. PAIL	6	320.40
soda ash	25 KG. BAG	3	53.52
XCD Polymer	25 KG. BAG	18	8,261.46
Miscellaneous Items			
Cementing			944.13
P & A			1,283.62

Total mud cost	$A 52,429.63
Total miscellaneous cost	$A 2,227.75
Total cost	$A 54,657.38
Programmed mud cost	$A 75,641.16
Variance	$A -23,211.53

Company:	Amity Oil N.L.	Country:	AUSTRALIA
Well Name:	Cuttlefish-1	Geo Area:	BASS STRAIT
Contractor:	Sedco Forex	Field:	VIC/P40
Rig:	702	Region:	Victoria

Interval Summary

Interval # 01

Bit Size	26 / 36 in.
Mud type(s)	Gel/Seawater
Top of interval	73.6 meters
Bottom of interval	118.0 meters
Maximum density	8.70 ppg
Interval start date	22/10/99
Interval end date	23/10/99
Interval days	2
Drilling days	1
Interval TD date	23/10/99
Rotating hours	2.50
Average penetration rate	17.8 meters
Maximum flowline temperature	0° Deg C
Casing size	30 in.
Major lithology	Limestone
Maximum deviation	0.50°
Interval mud cost	$A 5,422.62
Mud cost per (bbl)	$A 11.34
Mud cost per meters	$A 122.16
Total Interval Cost	$A 5,650.51

Company:	Amity Oil N.L.	Country:	AUSTRALIA
Well Name:	Cuttlefish-1	Geo Area:	BASS STRAIT
Contractor:	Sedco Forex	Field:	VIC/P40
Rig:	702	Region:	Victoria

Interval Summary

Interval # 02

Bit Size	17.5 in.
Mud type(s)	Gel/Seawater
Top of interval	118.0 meters
Bottom of interval	755.0 meters
Maximum density	8.70 ppg
Interval start date	24/10/99
Interval end date	25/10/99
Interval days	2
Drilling days	2
Interval TD date	25/10/99
Rotating hours	30.25
Average penetration rate	21.1 meters
Maximum flowline temperature	0° Deg C
Casing size	30 in.
Major lithology	Limestone
Maximum deviation	0.50°
Interval mud cost	$A 16,187.34
Mud cost per (bbl)	$A 7.33
Mud cost per meters	$A 25.41
Total Interval Cost	$A 16,903.58

Company:	Amity Oil N.L.	Country:	AUSTRALIA
Well Name:	Cuttlefish-1	Geo Area:	BASS STRAIT
Contractor:	Sedco Forex	Field:	VIC/P40
Rig:	702	Region:	Victoria

Interval Summary

Interval # 03

Bit Size	12.25 in.
Mud type(s)	KCl/Polymer
Top of interval	755.0 meters
Bottom of interval	1,226.0 meters
Maximum density	9.60 ppg
Interval start date	26/10/99
Interval end date	29/10/99
Interval days	4
Drilling days	2
Interval TD date	28/10/99
Rotating hours	20.50
Average penetration rate	23.0 meters
Bottomhole static temperature	58° Deg C
Maximum flowline temperature	45° Deg C
Casing size	13 3/8 in.
Major lithology	Claystone/Sandstone
Maximum deviation	1.00°
Interval mud cost	$A 30,819.67
Mud cost per (bbl)	$A 23.45
Mud cost per meters	$A 65.43
Total interval Cost	$A 32,103.29

Company:	Amity Oil N.L.	Country:	AUSTRALIA
Well Name:	Cuttlefish-1	Geo Area:	BASS STRAIT
Contractor:	Sedco Forex	Field:	VIC/P40
Rig:	702	Region:	Victoria

Interval Material Consumption

Interval #01 26 / 36 HO in. Hole Section

Top of Interval 74 meters
Bottom of Interval 118 meters

Material	Unit size	Quantity	Total cost ($A)
AQUAGEL	100 LB. BAG	205	5,293.10
caustic soda	25 KG. PAIL	2	104.48
lime	20 KG. BAG	2	25.04
Miscellaneous Items			
Cementing			227.89

Interval mud cost	$A 5,422.62
Interval miscellaneous cost	$A 227.89
Total interval cost	$A 5,650.51
Programmed mud cost	$A 7,660.23
Variance	$A -2,237.61

Company:	Amity Oil N.L.	Country:	AUSTRALIA
Well Name:	Cuttlefish-1	Geo Area:	BASS STRAIT
Contractor:	Sedco Forex	Field:	VIC/P40
Rig:	702	Region:	Victoria

Interval Material Consumption

Interval #02 17.5 in. Hole Section

Top of Interval 118 meters
Bottom of Interval 755 meters

Material	Unit size	Quantity	Total cost ($A)
AQUAGEL	100 LB. BAG	597	15,414.54
caustic soda	25 KG. PAIL	10	522.40
lime	20 KG. BAG	20	250.40
Miscellaneous Items			
Cementing			716.24

Interval mud cost	$A 16,187.34
Interval miscellaneous cost	$A 716.24
Total interval cost	$A 16,903.58
Programmed mud cost	$A 18,952.19
Variance	$A -2,764.85

Company:	Amity Oil N.L.	Country:	AUSTRALIA
Well Name:	Cuttlefish-1	Geo Area:	BASS STRAIT
Contractor:	Sedco Forex	Field:	VIC/P40
Rig:	702	Region:	Victoria

Interval Material Consumption

Interval #03 12.25 in. Hole Section

Top of Interval 755 meters
Bottom of Interval 1,226 meters

Material	Unit size	Quantity	Total cost ($A)
BARACIDE	25 KG. CAN	2	1,043.78
BARACOR 129	25 KG. CAN	9	664.74
barite	100 LB. BULK	393.000	5,851.77
caustic soda	25 KG. PAIL	1	52.24
DEXTRID LT	25 KG. BAG	25	1,604.75
EZ MUD DP	50 LB. SACK	30	4,192.80
PAC-R	25 KG. BAG	16	2,870.40
potassium chloride	1000 KG. TON	11.000	5,903.81
potassium hydroxide	20 KG. PAIL	6	320.40
soda ash	25 KG. BAG	3	53.52
XCD Polymer	25 KG. BAG	18	8,261.46
Miscellaneous Items			
P & a			1,283.62

Interval mud cost	$A 30,819.67
Interval miscellaneous cost	$A 1,283.62
Total interval cost	$A 32,103.29
Programmed mud cost	$A 49,028.74
Variance	$A -18,209.07

Company: Amity Oil N.L.
Well Name: Cuttlefish-1
Contractor: Sedco Forex
Rig: 702

Country: AUSTRALIA
Geo Area: BASS STRAIT
Field: VIC/P40
Region: Victoria

Daily Mud Volume Record

HOLE SIZE:26 / 36 H in.

MUD TYPE:Gel/Seawater

DATE	INITIAL VOLUME bbl	MUD RECEIVED bbl	OIL ADDED bbl	WATER ADDED bbl	BARITE ADDED bbl	CHEMICALS ADDED bbl	DAILY TOTAL bbl	CUMLATIVE TOTAL bbl	MUD LOST SURFACE bbl	MUD LOST DOWNHOLE bbl	TOTAL DAILY LOSSES bbl	CUMLATIVE LOSSES bbl	MUD RETURNED bbl	FINAL VOLUME bbl	HOLE VOLUME bbl	ACTIVE PITS bbl	RESERVE PITS bbl
22/10/99	0	284	0	171	0	23	478	478	0	0	0	0	0	478	0	0	478
23/10/99	478	0	0	0	0	0	0	478	478	0	478	478	0	-0	113	-113	0

Company:	Amity Oil N.L.	Country:	AUSTRALIA
Well Name:	Cuttlefish-1	Geo Area:	BASS STRAIT
Contractor:	Sedco Forex	Field:	VIC/P40
Rig:	702	Region:	Victoria

Daily Mud Volume Record

HOLE SIZE:17.5 in. **MUD TYPE:Gel/Seawater**

DATE	INITIAL VOLUME bbl	MUD RECEIVED bbl	OIL ADDED bbl	WATER ADDED bbl	BARITE ADDED bbl	CHEMICALS ADDED bbl	DAILY TOTAL bbl	CUMLATIVE TOTAL bbl	MUD LOST SURFACE bbl	MUD LOST DOWNHOLE bbl	TOTAL DAILY LOSSES bbl	CUMLATIVE LOSSES bbl	MUD RETURNED bbl	FINAL VOLUME bbl	HOLE VOLUME bbl	ACTIVE PITS bbl	RESERVE PITS bbl
24/10/99	-0	0	0	2,445	0	68	2,513	2,513	842	0	842	842	0	1,671	583	-583	1,671
25/10/99	1,671	0	0	0	0	0	0	2,513	1,366	0	1,366	2,208	0	305	696	-696	305

Company:	Amity Oil N.L.	Country:	AUSTRALIA
Well Name:	Cuttlefish-1	Geo Area:	BASS STRAIT
Contractor:	Sedco Forex	Field:	VIC/P40
Rig:	702	Region:	Victoria

Daily Mud Volume Record

HOLE SIZE:12.25 in.

MUD TYPE:KCl/Polymer

DATE	INITIAL VOLUME bbl	MUD RECEIVED bbl	OIL ADDED bbl	WATER ADDED bbl	BARITE ADDED bbl	CHEMICALS ADDED bbl	DAILY TOTAL bbl	CUMLATIVE TOTAL bbl	MUD LOST SURFACE bbl	MUD LOST DOWNHOLE bbl	TOTAL DAILY LOSSES bbl	CUMLATIVE LOSSES bbl	MUD RETURNED bbl	FINAL VOLUME bbl	HOLE VOLUME bbl	ACTIVE PITS bbl	RESERVE PITS bbl
26/10/99	305	443	0	590	6	26	1,065	1,065	0	0	0	0	0	1,370	420	-420	1,370
27/10/99	1,370	0	0	221	6	5	232	1,297	163	0	163	163	0	1,439	391	592	456
28/10/99	1,439	0	0	0	14	3	17	1,314	226	0	226	389	0	1,230	642	378	210
29/10/99	1,230	0	0	0	2	1	3	1,317	38	0	38	427	0	1,329	642	542	145

Company: Amity Oil N.L.
Well Name: Cuttlefish-1
Contractor: Sedco Forex
Rig: 702

Country: AUSTRALIA
Geo Area: BASS STRAIT
Field: VIC/P40
Region: Victoria

Mud Property Recap:Water-Based Mud

DATE	DEPTH	F/L TEMP	DENSITY	FUN VIS	RHEOLOGY @ 120°F				pH	FILTRATION				FILTRATE ANALYSIS					SAND	RETORT ANALYSIS				MBT	RHEOMETER DIAL READINGS		
					PV	YP	GELS			API	HTHP	Cake	Temp	Pm	Pf	Mf	Cl	Total Hardness		Corr Solids	LGS	Oil	Water				
	meters	Deg C	ppg	sec/qt	cP	lbs/100 ft2				ml/30 mi	ml/30 min	32nd in	Deg C	ml	ml	ml	mg/L	mg/L	% by vol	% by vol	% by vol	% by vol	% by vol	me/ml mud	600/300	200/100	6/3
22/10/99			8.7	194	21.0	47.0	31.0/ 59.0		9.20																89 / 68	61 / 50	34 / 28
23/10/99	118		8.7	163	20.0	56.0	35.0/ 51.0		10.00																98 / 78	69 / 59	36 / 30
24/10/99	637		8.7	147	16.0	80.0	25.0/ 32.0		11.20																112/ 96	88 / 78	39 / 22
25/10/99	755		8.7	124	13.0	74.0	17.0/ 29.0		10.80																100/ 87	81 / 72	20 / 16
26/10/99	755		9.3	63	13.0	25.0	6.0/ 7.0		8.50	6.0	22.60	1/ 2	121	0.15	0.01	0.09	34,000	300.0	.25	2.72	0.45		95.30	0.60	51 / 38	31 / 22	8 / 6
27/10/99	798		9.4	56	13.0	21.0	6.0/ 8.0		9.00	5.7	22.00	1/ 3	121	0.17	0.03	0.10	36,000	180.0	0.25	2.91	0.20		95.00	0.60	47 / 34	29 / 21	9 / 6
28/10/99	1226	42	9.5	61	20.0	33.0	7.0/ 10.0		8.70	5.7	18.60	1/ 2	121	0.07	0.02	0.08	34,500	400.0	0.65	4.22	1.95		93.80	7.00	73 / 53	45 / 32	9 / 7
29/10/99	1226		9.6	50	18.0	33.0	7.0/ 10.0		8.50	5.8		1/ 0		0.09	0.01	0.08	33,000	340.0	0.65	4.52	1.68		93.80	1.00	69 / 51	41 / 32	9 / 7

Company:	Amity Oil N.L.	Country:	AUSTRALIA
Well Name:	Cuttlefish-1	Geo Area:	BASS STRAIT
Contractor:	Sedco Forex	Field:	VIC/P40
Rig:	702	Region:	Victoria

Daily Operations Log

DATE	DEPTH meters	OPERATION
22/10/99	0	**PREPARE TO SPUD** Run anchors and pre-tension. Pick up tubulars. Make up 30" casing. Prepare to spud.
23/10/99	118	**DRILL CEMENT** Picked up 30" csg and stabbed into PGB fwd. Made up BHA with 26" bit and 36" hole opener and ran to seabed at 76.73 m. Spudded Cuttlefish-1 at 05:15 hrs on Oct 23. Drilled with seawater and 20-30 bbl hi-vis sweeps to 118 m. Swept hole with 50 bbls hi-vis and spot 50. Surveyed and pulled to 90 m. Ran back-hole OK-0.5 m fill. Pumped 50 bbl sweep and displaced 150% OH volume with undiluted gel. Pulled out of hole and ran and cemented 30" csg. Made up 17-1/2" BHA and RIH. Drill cmt.
24/10/99	637	**DRILL 17 1/2" HOLE** Finished drilling out cement in 30" casing. Commenced drilling 17 1/2" hole with seawater and hi-vis sweeps with returns to seabed. Drilled to 147 m and pulled up to 93 m and racked back 2 stands of HWDP and ran 8 1/4" drill collars. Ran back in and continued drilling to 637 m at report time.
25/10/99	755	**RUN 13 3/8" CASING** Continued drilling 17 1/2" hole with seawater and hi-vis sweeps to 755 m. Dropped survey, made wiper trip to 30" casing shoe. Hole tight pulling out 745-570 m. Worked and rotated through 716, 672 and 540-570 m. Recovered survey. Worked through 30" shoe and ran back in hole, working tight spots. Circulated sweep, and then displaced hole to hi-vis gel mud. Pulled out of hole and rigged to and ran 13 3/8" casing.
26/10/99	755	Ran and cemented 13 3/8" casing at 749.3 m. Tested, ran and latched BOP and riser.
27/10/99	798	**DRILL 12 1/4" HOLE** Pressure test/function test BOP'S. Made up BHA and 12 1/4" bit and ran in hole. Tagged TOC at 733 m. Pumped 2 x 54 bbls flocc gel sweeps while drilling out float collar. While drilling shoe pumped 42 bbls hi-vis gel followed by seawater and then displaced hole with KCl/EZ-MUD/Polymer fluid Drilled 3 m new hole to 758 m, circulated, and carried out a LOT to an EMW of 12.1 ppg. Drilled from 758 m to 798 m at report time.

Company:	Amity Oil N.L.	Country:	AUSTRALIA
Well Name:	Cuttlefish-1	Geo Area:	BASS STRAIT
Contractor:	Sedco Forex	Field:	VIC/P40
Rig:	702	Region:	Victoria

Daily Operations Log

DATE	DEPTH meters	OPERATION
28/10/99	1,226	**POOH**

Continued drilling 12 1/4" hole and flow checking as required. Drilled to a TD of 1226 m, circulated and made a wiper trip to the 13 3/8" csg shoe - hole tight @ 959 m (backream to shoe). RIH ì and circ. hole clean. Drop Totco survey and ì POOH.

29/10/99	1,226	**PLUG & ABANDON**

Finished pulling out of hole and rigged up to log. Ran wireline logs and then rigged down same. Ran in to 1226 m with cement stinger on 5 " drill pipe. Ciruclated hole clean and pulled up to and set cement plug #1A from 1110-990 m and plug #1B from 990-825 & circ. Pulled up and circulated inhibited mud and set cement plug #3 from 800-650 m. Pulled up to 505 m and circulated and pulled out of hole to lay out tubulars while WOC.

Company:	Amity Oil N.L.	Country:	AUSTRALIA
Well Name:	Cuttlefish-1	Geo Area:	BASS STRAIT
Contractor:	Sedco Forex	Field:	VIC/P40
Rig:	702	Region:	Victoria

Daily Operations Log

DATE	DEPTH meters	OPERATION
28/10/99	1,226	**POOH** Continued drilling 12 1/4" hole and flow checking as required. Drilled to a TD of 1226 m, circulated and made a wiper trip to the 13 3/8" csg shoe - hole tight @ 959 m (backream to shoe). RIH ì and circ. hole clean. Drop Totco survey and ì POOH.
29/10/99	1,226	**PLUG & ABANDON** Finished pulling out of hole and rigged up to log. Ran wireline logs and then rigged down same. Ran in to 1226 m with cement stinger on 5 " drill pipe. Ciruclated hole clean and pulled up to and set cement plug #1A from 1110-990 m and plug #1B from 990-825 & circ. Pulled up and circulated inhibited mud and set cement plug #3 from 800-650 m. Pulled up to 505 m and circulated and pulled out of hole to lay out tubulars while WOC.

DAILY MUD REPORTS

Baroid Australia Pty Ltd
DRILLING MUD REPORT

REPORT NUMBER: 1

Date	Depth
22/10/99	0.0 m [MD]
Spud Date	Present Activity
23/10/99	PREPARE TO SPUD

OPERATOR	CONTRACTOR	RIG NUMBER
Amity Oil N.L.	Sedco Forex	702
REPORT FOR	REPORT FOR	REGION
Wally Westman / Len Kronstal	R. Rickard / C. Sinton	Victoria

WELL NAME AND NUMBER	FIELD OR BLOCK	GEOGRAPHIC AREA	COUNTRY
Cuttlefish-1	VIC/P40	Bass Strait	Austral

BIT DATA	in. DRILLING STRING m			CASING	CIRCULATION DATA			
Size in.	Pipe OD	ID	Len.		Pump Make/Model	Oilwell A1700PT		
Type	Pipe OD	ID	Len.	in. m	Size 6 X 12	Eff. 97.00	V/st	0.102
No. Jets	Pipe OD	ID	Len.	Set @	spm 0	bbl/min	0.0	
Jets 32nd inch	Collar OD	ID	Len.	Set @	Pump Make/Model	Oilwell A1700PT		
	Collar OD	ID	Len.	Set @	Size 6 X 12	Eff. 97.00	V/st	0.102
	in. OPEN HOLE m			Set @	spm 0	bbl/min	0.0	
Tot Noz Area	Size		Len.	Set @	Pump Make/Model	Oilwell A1700PT		
TFA	Size		Len.	Set @	Size 6 X 12	Eff. 97.00	V/st	0.102
	Size		Len.	Set @	spm 0	bbl/min	0.0	
	Size		Len.	Set @	Tot. Vol./min 0	gpm	0.0	bbl
	Size		Len.	Set @	BU Time 0	TC Time	0	

MUD PROPERTIES	Primary	2	3	Program Targets *=Excep P 2 3	Essential Program Properties
Source	Pits, Uncr				
Time	22:30				
FL Temp Deg F	32				
Depth m	0.0				< 755.0
Weight ppg	8.7				
FV @ 63 Deg F sec/qt	194				100 >
PV @ 61 Deg F cP	21				
YP lbs/100 ft2	47				40 >
Gels lbs/100 ft2	31/59				
API Filt. ml/30 min	0.0				
HTHP @ 32 Deg F ml/30 min	0.0				
Cake API/HTHP 32nd in	0/0				
Corr.Solids % by vol	0.0				
Oil/Water % by vol	0.0/0.0				
Sand % by vol					
MBT	0.0				
pH STRIP	9.2				
Alk. Mud (Pm)	0.00				
Alk. Filtr. (Pf/Mf)	0.00/0.00				
Chlorides mg/l	0				
Hard. Ca mg/l	0				
Low Gravity Solids ppb	0.00				
KCL Content % wt soln					
Excess sulfite ppb					
PHPA Concentration ppb					

MUD TREATMENTS

Mud salvaged from Cultus' Baleen-2 well:
Hi-Vis SW/Gel 284 bbls
NaCl/EZ-MUD/Polymer 443 bbls
Topped up hi-vis s/w gel mud volume and mix an additional 170 bbls of prehydrated gel.
Current mud status:
Pit #1 460 bbls Hi-Vis S/W Gel
Pit #2 399 bbls Prehydrated FW Gel
Pit #3 443 bbls NaCl/EZ-MUD/Polymer
Toal volume = 1302 bbls.
Caustic and lime still to be added to Pit #1 prior to spud.

RIG ACTIVITY

Run anchors and pre-tension.
Pick up tubulars.
Make up 30" casing.
Prepare to spud.

MATERIALS USED

Product	Used	Cost	Product	Used	Cost
AQUAGEL - 100 LB. BAG	205	5293.10			
caustic soda - 25 KG. PAIL	2	104.48			
lime - 20 KG. BAG	2	25.04			

SOLIDS EQUIPMENT

Device	Make	Sz/Scrn	HR
Shkr #1	Brandt	20	
Shkr #2	Brandt	10	
Shkr #3	Brandt	20	
Shkr #4	Thule	120/52	
Shkr #5	Thule	120/52	
Shkr #6	Thule	52/52	
dSndr		3 x 12	
dSlt #1		16 x 4	

MUD MANAGEMENT

MUD VOLUME bbl

Hole	Pits
0	0

Active Volume 0

Reserve	Total
478	478

Low Grav, vol % 0.0
ppb 0.00
High Grav, vol % 0.0
ppb 0.00
ASG
Drill Cuttings 0
Dilution Rate 0.00
Slds Control Eff 0.00

MUD TYPE: SEAWATER/HI VIS SWEEPS

MUD CONSUMPTION

ADDITIONS	bbl
Oil	0
Brine Water	0
Drill Water	108
Sea Water	63
Whole Mud	284
Barite	0
Chemicals	23
LOSSES	bbl
Dumped	0
Lost	0
VOL GAIN/LOSS	478

RHEOLOGY AND HYDRAULICS

600 rpm	89
300 rpm	68
200 rpm	61
100 rpm	50
6 rpm	34
3 rpm	28
Pressure Units:	psig
Press Drop. DP	0
Press Drop, BIT	0
Press Drop, ANN	0
Actual Circ. Press	0
AV, DP ft/min	0
AV, DC ft/min	0
AV, Riser ft/min	

FRACTURE GRADIENT

Water Depth	47.7
Calc. F. Grad	0.0
Leak Off Test	0.0
ECD ppg	
Csg. Shoe	0.0
TD	0.0
Max. Diff. Press	0

DEVIATION INFO

MD	0.0	m
TVD	0.0	m
Angle	0.00	
Direction		
Horiz. Displ	0.0	m

TIME

DRLG	0.00
CIRC	0.00
TRIPS	0.00
SERV. RIG	0.00
SURVEY	0.00
FISHING	0.00
LOGGING	0.00
RUN CSG	0.00
CORE	0.00
BACK REAM	0.00
REAMING	0.00
TESTING	0.00
OTHER	24.00
AVERAGE ROP	0.00

BAROID REPRESENTATIVE	OFFICE/HOME	Chelteham, Vic	TELEPHONE	(03) 9581 7555	DAILY COST	CUMULATIVE COST
Tony Kowalski / Innes Macleod	WAREHOUSE	Barry Beach	TELEPHONE	(03) 5688 1445	$A 5422.62	$A 5422.62

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

Baroid Australia Pty Ltd
DRILLING MUD REPORT
(Cost Modified)

REPORT NUMBER: 2

Date	Depth
23/10/99	118.0 m [MD]
Spud Date	Present Activity
23/10/99	DRILL CEMENT

OPERATOR	CONTRACTOR	RIG NUMBER
Amity Oil N.L.	Sedco Forex	702
REPORT FOR	REPORT FOR	REGION
Wally Westman / Len Kronstal	R. Rickard / C. Sinton	Victoria

WELL NAME AND NUMBER	FIELD OR BLOCK	GEOGRAPHIC AREA	COUNTRY
Cuttlefish-1	VIC/P40	Bass Strait	Austral

BIT DATA	DRILLING STRING	CASING	CIRCULATION DATA
Size 26 / 36 in.	Pipe OD ID Len.		Pump Make/Model Oilwell A1700PT
Type REED DSJCSTCBV	Pipe OD ID Len.	in. m	Size 6 X 12 Eff. 97.00 V/st 0.102
No. Jets	Pipe OD ID Len.	30 Set @ 118.0	spm 85 bbl/min 8.7
Jets 32nd inch	Collar OD 8.25 ID 2.875 Len. 22.5	Set @	Pump Make/Model Oilwell A1700PT
14 24 24	Collar OD 9.5 ID 3.189 Len. 38.9	Set @	Size 6 X 12 Eff. 97.00 V/st 0.102
24	in. OPEN HOLE m	Set @	spm 85 bbl/min 8.7
Tot Noz Area	Size Len.	Set @	Pump Make/Model Oilwell A1700PT
TFA	Size Len.	Set @	Size 6 X 12 Eff. 97.00 V/st 0.102
	Size Len.	Set @	spm 95 bbl/min 9.7
	Size Len.	Set @	Tot. Vol./min 1133 gpm 27.0 bbl
	Size Len.	Set @	BU Time 0 TC Time -4

MUD PROPERTIES

	Primary	2	3	Program Targets *=Excep	Essential Program Properties
Source	Pits, Uncr	Pits, Uncr		P 2 3	
Time	06:15	08:30			
FL Temp Deg F	32	32			
Depth m	89.0	118.0			< 755.0
Weight ppg	8.7	8.7			
FV @ 63 Deg F sec/qt	163	213			100 >
PV @ 61 Deg F cP	20	25			
YP lbs/100 ft2	58	104			40 >
Gels lbs/100 ft2	35/51	84/128			
API Filt. ml/30 min	0.0	0.0			
HTHP @ 32 Deg F ml/30 min	0.0	0.0			
Cake API/HTHP 32nd in	0/0	0/0			
Corr.Solids % by vol	0.0	0.0			
Oil/Water % by vol	0.0/0.0	0.0/0.0			
Sand % by vol					
MBT	0.0	0.0			
pH STRIP	10.0	9.0			
Alk. Mud (Pm)	0.00	0.00			
Alk. Filtr. (Pf/Mf)	0.00/0.00	0.00/0.00			
Chlorides mg/l	0	0			
Hard. Ca mg/l	0	0			
Low Gravity Solids ppb	0.00	0.00			
KCL Content % wt soln					
Excess sulfite ppb					
PHPA Concentration ppb					

MUD TREATMENTS

Used a total of 478 bbls mud in 36" hole interval-248 bbls of SW lime flocculated gel for sweeps (mainly mud salvaged from last well) and 270 bbls of undiluted gel for spotting prior to POOH to run 30" casing.
13 sacks calcium chloride used on cmt job.
Topped up flocculated gel in Pit #1
Mixed an additional 825 bbls of prehydrated gel for use in next interval. Volume and cost considered next interval.

RIG ACTIVITY

Picked up 30" csg and stabbed into PGB fwd. Made up BHA with 26" bit and 36" hole opener and ran to seabed at 76.73 m.
Spudded Cuttlefish-1 at 05:15 hrs on Oct 23. Drilled with seawater and 20-30 bbl hi-vis sweeps to 118 m.
Swept hole with 50 bbls hi-vis and spot 50. Surveyed and pulled to 90 m. Ran back-hole OK-0.5 m fill. Pumped 50 bbl sweep and displaced 150% OH volume with undiluted gel. Pulled out of hole and ran and cemented 30" csg. Made up 17-1/2" BHA and RIH. Drill cmt.

MATERIALS USED

NO INVENTORY USED ON THIS REPORT

SOLIDS EQUIPMENT

Device	Make	Sz/Scrn	HR
Shkr #1	Brandt	20	
Shkr #2	Brandt	10	
Shkr #3	Brandt	20	
Shkr #4	Thule	120/52	
Shkr #5	Thule	120/52	
Shkr #6	Thule	52/52	
dSndr		3 X 12	
dSlt #1		16 X 4	

MUD MANAGEMENT

MUD VOLUME bbl

Hole	Pits
113	-113

Active Volume -0

Reserve	Total
	-0

Low Grav, vol %	0.0
ppb	0.00
High Grav, vol %	0.0
ppb	0.00
ASG	
Drill Cuttings	183
Dilution Rate	0.00
Slds Control Eff	0.00

MUD TYPE: SEAWATER/HI VIS SWEEPS

MUD CONSUMPTION

ADDITIONS	bbl
Oil	0
Brine Water	0
Drill Water	0
Sea Water	0
Whole Mud	0
Barite	0
Chemicals	0
LOSSES	bbl
Dumped	0
Lost	478
VOL GAIN/LOSS	-478

RHEOLOGY AND HYDRAULICS

600 rpm	98 154
300 rpm	78 129
200 rpm	69 123
100 rpm	59 116
6 rpm	36 86
3 rpm	30 79
Pressure Units:	psig
Press Drop. DP	285
Press Drop, BIT	469
Press Drop, ANN	2
Actual Circ. Press	1200
AV, DP ft/min	0
AV, DC ft/min	0
AV, Riser ft/min	

FRACTURE GRADIENT

Water Depth	47.7
Calc. F. Grad	0.0
Leak Off Test	0.0
ECD ppg	
Csg. Shoe	8.8
TD	8.8
Max. Diff. Press	0

DEVIATION INFO

MD	118.0 m
TVD	118.0 m
Angle	0.50
Direction	
Horiz. Displ	0.0 m

TIME

DRLG	2.50
CIRC	0.75
TRIPS	10.00
SERV. RIG	0.00
SURVEY	0.75
FISHING	0.00
LOGGING	0.00
RUN CSG	8.00
CORE	0.00
BACK REAM	0.00
REAMING	0.00
TESTING	0.00
OTHER	2.00
AVERAGE ROP	17.76

BAROID REPRESENTATIVE	OFFICE/HOME	Chelteham, Vic	TELEPHONE	(03) 9581 7555	DAILY COST	CUMULATIVE COST
Tony Kowalski / Innes Macleod	WAREHOUSE	Barry Beach	TELEPHONE	(03) 5688 1445	$A 0.00	$A 5422.62

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

Baroid Australia Pty Ltd
DRILLING MUD REPORT
(Cost Modified)

REPORT NUMBER: 3

Date	Depth
24/10/99	637.0 m [MD]
Spud Date	Present Activity
23/10/99	DRILL 17 1/2" HOLE

OPERATOR	CONTRACTOR	RIG NUMBER
Amity Oil N.L.	Sedco Forex	702
REPORT FOR	REPORT FOR	REGION
Wally Westman / Len Kronstal	R. Rickard / C. Sinton	Victoria

WELL NAME AND NUMBER	FIELD OR BLOCK	GEOGRAPHIC AREA	COUNTRY
Cuttlefish-1	VIC/P40	Bass Strait	Austral

BIT DATA

Size 17.5 in.		
Type SMITH MSDSSHQC		
No. Jets		
Jets 32nd inch		
22	24	24
24		
Tot Noz Area		
TFA		

DRILLING STRING in. m

Pipe OD	5	ID	4.276	Len.	377.6
Pipe OD	5	ID	3.000	Len.	138.3
Pipe OD		ID		Len.	
Collar OD	8.25	ID	2.875	Len.	88.5
Collar OD	9.5	ID	3.189	Len.	32.6

OPEN HOLE in. m

Size	17.5	Len.	519.0
Size		Len.	
Size		Len.	
Size		Len.	
Size		Len.	

CASING

in.	m		
30	Set @	118.0	
	Set @		
	Set @		
	Set @		
	Set @		
	Set @		
	Set @		
	Set @		

CIRCULATION DATA

Pump Make/Model	Oilwell A1700PT				
Size 6 X 12	Eff. 97.00	V/st	0.102		
spm 93	bbl/min	9.5			
Pump Make/Model	Oilwell A1700PT				
Size 6 X 12	Eff. 97.00	V/st	0.102		
spm 93	bbl/min	9.5			
Pump Make/Model	Oilwell A1700PT				
Size 6 X 12	Eff. 97.00	V/st	0.102		
spm 93	bbl/min	9.5			
Tot. Vol./min	1193	gpm	28.4	bbl	
BU Time 19	TC Time	0			

MUD PROPERTIES

		Primary	2	3	Program Targets *=Excep	P	2	3	Essential Program Properties
Source		Pits, Uncr	Pits, Uncr						
Time		06:30	19:00						
FL Temp	Deg F	32	32						
Depth	m	271.0	550.0						< 755.0
Weight	ppg	8.7	8.7						
FV @ 63 Deg F	sec/qt	147	132						100 >
PV @ 61 Deg F	cP	16	16						
YP	lbs/100 ft2	80	65						40 >
Gels	lbs/100 ft2	25/32	22/29						
API Filt.	ml/30 min	0.0	0.0						
HTHP @ 32 Deg F	ml/30 min	0.0	0.0						
Cake API/HTHP	32nd in	0/0	0/0						
Corr.Solids % by vol		0.0	0.0						
Oil/Water % by vol		0.0/0.0	0.0/0.0						
Sand % by vol									
MBT		0.0	0.0						
pH STRIP		11.2	11.6						
Alk. Mud (Pm)		0.00	0.00						
Alk. Filtr. (Pf/Mf)		0.00/0.00	0.00/0.00						
Chlorides mg/l		0	0						
Hard. Ca mg/l		0	0						
Low Gravity Solids	ppb	0.00	0.00						
KCL Content	% wt soln								
Excess sulfite	ppb								
PHPA Concentration	ppb								

MUD TREATMENTS

Pumped 20 bbl hi-vis SW lime flocculated gel sweeps every 1/2 stand and occasionally spotting 25 bbls on bottom on connections. Topped up SW lime flocculated gel in pit #1 with prehydrated gel diluted with seawater and added lime and caustic soda as required. Mixed additional FW prehydrated to keep pit #2 topped up. Additional FW prehydrated gel also in pit #4

RIG ACTIVITY

Finished drilling out cement in 30" casing. Commenced drilling 17 1/2" hole with seawater and hi-vis sweeps with returns to seabed.
Drilled to 147 m and pulled up to 93 m and racked back 2 stands of HWDP and ran 8 1/4" drill collars.
Ran back in and continued drilling to 637 m at report time.

MATERIALS USED

Product	Used	Cost	Product	Used	Cost
AQUAGEL - 100 LB. BAG	597	15414.54			
caustic soda - 25 KG. PAIL	10	522.40			
lime - 20 KG. BAG	20	250.40			

SOLIDS EQUIPMENT

Device	Make	Sz/Scrn	HR
Shkr #1	Brandt	20	
Shkr #2	Brandt	10	
Shkr #3	Brandt	20	
Shkr #4	Thule	120/52	
Shkr #5	Thule	120/52	
Shkr #6	Thule	52/52	
dSndr		3 x 12	
dSlt #1		16 x 4	

MUD MANAGEMENT

MUD VOLUME bbl

Hole	Pits
583	-583

Active Volume: 0

Reserve	Total
1671	1671

Low Grav, vol %	0.0
ppb	0.00
High Grav, vol %	0.0
ppb	0.00
ASG	
Drill Cuttings	507
Dilution Rate	0.00
Slds Control Eff	0.00

MUD TYPE: SEAWATER/HI VIS SWEEPS

MUD CONSUMPTION

ADDITIONS	bbl
Oil	0
Brine Water	0
Drill Water	1937
Sea Water	508
Whole Mud	0
Barite	0
Chemicals	68
LOSSES	bbl
Dumped	0
Lost	842
VOL GAIN/LOSS	1671

RHEOLOGY AND HYDRAULICS

600 rpm	112	97
300 rpm	96	81
200 rpm	88	70
100 rpm	78	59
6 rpm	39	30
3 rpm	22	19
Pressure Units:		psig
Press Drop. DP		1794
Press Drop, BIT		393
Press Drop, ANN		63
Actual Circ. Press		2250
AV, DP	ft/min	39
AV, DC	ft/min	135
AV, Riser	ft/min	

FRACTURE GRADIENT

Water Depth		47.7
Calc. F. Grad		0.0
Leak Off Test		0.0
ECD	ppg	
Csg. Shoe		8.8
TD		9.3
Max. Diff. Press		0

DEVIATION INFO

MD	637.0	m
TVD	637.0	m
Angle	0.50	
Direction		
Horiz. Displ	0.0	m

TIME

DRLG	23.25
CIRC	0.00
TRIPS	0.75
SERV. RIG	0.00
SURVEY	0.00
FISHING	0.00
LOGGING	0.00
RUN CSG	0.00
CORE	0.00
BACK REAM	0.00
REAMING	0.00
TESTING	0.00
OTHER	0.00
AVERAGE ROP	22.28

BAROID REPRESENTATIVE	OFFICE/HOME		TELEPHONE		DAILY COST	CUMULATIVE COST
Tony Kowalski / Innes Macleod	WAREHOUSE	Barry Beach	TELEPHONE	(03) 5688 1445	$A 16187.34	$A 21609.96

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

Baroid Australia Pty Ltd
DRILLING MUD REPORT
(Cost Modified)

REPORT NUMBER: 4

Date	Depth
25/10/99	755.0 m [MD]
Spud Date	Present Activity
23/10/99	RUN 13 3/8" CASING

OPERATOR	CONTRACTOR	RIG NUMBER
Amity Oil N.L.	Sedco Forex	702
REPORT FOR	REPORT FOR	REGION
Wally Westman / Len Kronstal	R. Rickard / C. Sinton	Victoria

WELL NAME AND NUMBER	FIELD OR BLOCK	GEOGRAPHIC AREA	COUNTRY
Cuttlefish-1	VIC/P40	Bass Strait	Austral

BIT DATA

Size 17.5 in.		
Type SMITH MSDSSHQC		
No. Jets		
Jets 32nd inch		
22	24	24
24		
Tot Noz Area		
TFA		

DRILLING STRING (in. / m)

Pipe OD	5	ID	4.276	Len.	495.6	
Pipe OD	5	ID	3.000	Len.	138.3	
Pipe OD		ID		Len.		
Collar OD	8.25	ID	2.875	Len.	88.5	
Collar OD	9.5	ID	3.189	Len.	32.6	

OPEN HOLE (in. / m)

Size	17.5	Len.	637.0
Size		Len.	
Size		Len.	
Size		Len.	
Size		Len.	

CASING

in.		m	
30	Set @	118.0	
	Set @		
	Set @		
	Set @		
	Set @		
	Set @		
	Set @		
	Set @		

CIRCULATION DATA

Pump Make/Model	Oilwell A1700PT		
Size 6 X 12	Eff. 97.00	V/st	0.102
spm 96	bbl/min	9.8	
Pump Make/Model	Oilwell A1700PT		
Size 6 X 12	Eff. 97.00	V/st	0.102
spm 96	bbl/min	9.8	
Pump Make/Model	Oilwell A1700PT		
Size 6 X 12	Eff. 97.00	V/st	0.102
spm 96	bbl/min	9.8	
Tot. Vol./min	1231 gpm	29.3	bbl
BU Time 22	TC Time	0	

MUD PROPERTIES

		Primary	2	3	Program Targets *=Excep P 2 3	Essential Program Properties
Source		Pits, Uncr	Pits, Uncr			
Time		08:15	12:30			
FL Temp	Deg F	32	32			
Depth	m	755.0	755.0			< 755.0
Weight	ppg	8.7	8.7			
FV @ 72 Deg F	sec/qt	124	153			100 >
PV @ 70 Deg F	cP	13	18			
YP	lbs/100 ft2	74	88			40 >
Gels	lbs/100 ft2	17/29	53/71			
API Filt.	ml/30 min	0.0	0.0			
HTHP @ 32 Deg F	ml/30 min	0.0	0.0			
Cake API/HTHP	32nd in	0/0	0/0			
Corr.Solids % by vol		0.0	0.0			
Oil/Water % by vol		0.0/0.0	0.0/0.0			
Sand % by vol						
MBT		0.0	0.0			
pH STRIP		10.8	11.0			
Alk. Mud (Pm)		0.00	0.00			
Alk. Filtr. (Pf/Mf)		0.00/0.00	0.00/0.00			
Chlorides mg/l		0	0			
Hard. Ca mg/l		0	0			
Low Gravity Solids	ppb	0.00	0.00			
6 rpm		20	45			
KCl Content	ppb					
PHPA Concentration	ppb					

MUD TREATMENTS

56 sacks Gold Seal gel used in mix water for 13 3/8" casing cement job:non-drilling cost. While drilling, continued to pump 20 bbl hi-vis SW lime flocculated sweeps every 1/2 stand and spotting 25 bbls on connections. Circulated 50 bbls and spotted 50 bbls prior to wiper trip.
Circulated 50 bbls when back near bottom and then displaced 150% hole volume with 805 bbls undiluted FW prehydrated gel along with 120 bbls of flocced gel.

RIG ACTIVITY

Continued drilling 17 1/2" hole with seawater and hi-vis sweeps to 755 m. Dropped survey, made wiper trip to 30" casing shoe. Hole tight pulling out 745-570 m. Worked and rotated through 716, 672 and 540-570 m. Recovered survey. Worked through 30" shoe and ran back in hole, working tight spots. Circulated sweep, and then displaced hole to hi-vis gel mud. Pulled out of hole and rigged to and ran 13 3/8" casing.

MATERIALS USED

NO INVENTORY USED ON THIS REPORT

SOLIDS EQUIPMENT

Device	Make	Sz/Scrn	HR
Shkr #1	Brandt	20	
Shkr #2	Brandt	10	
Shkr #3	Brandt	20	
Shkr #4	Thule	120/52	
Shkr #5	Thule	120/52	
Shkr #6	Thule	52/52	
dSndr		3 x 12	
dSlt #1		16 x 4	

MUD MANAGEMENT

MUD VOLUME bbl

Hole	Pits
696	-696
Active Volume	
-0	
Reserve	Total
305	305

Low Grav, vol %	0.0
ppb	0.00
High Grav, vol %	0.0
ppb	0.00
ASG	
Drill Cuttings	115
Dilution Rate	0.00
Slds Control Eff	0.00

MUD TYPE
SEAWATER/HI VIS SWEEPS

MUD CONSUMPTION

ADDITIONS	bbl
Oil	0
Brine Water	0
Drill Water	260
Sea Water	140
Whole Mud	0
Barite	0
Chemicals	1
LOSSES	bbl
Dumped	125
Lost	1642
VOL GAIN/LOSS	-1366

RHEOLOGY AND HYDRAULICS

600 rpm	100 124
300 rpm	87 106
200 rpm	81 92
100 rpm	72 83
6 rpm	20 45
3 rpm	16 36
Pressure Units:	psig
Press Drop. DP	1937
Press Drop, BIT	419
Press Drop, ANN	69
Actual Circ. Press	2600
AV, DP ft/min	40
AV, DC ft/min	140
AV, Riser ft/min	

FRACTURE GRADIENT

Water Depth	47.7
Calc. F. Grad	0.0
Leak Off Test	0.0
ECD ppg	
Csg. Shoe	8.8
TD	9.2
Max. Diff. Press	0

DEVIATION INFO

MD	755.0 m
TVD	0.0 m
Angle	0.50
Direction	
Horiz. Displ	0.0 m

TIME

DRLG	7.00
CIRC	2.25
TRIPS	6.75
SERV. RIG	0.00
SURVEY	0.50
FISHING	0.00
LOGGING	0.00
RUN CSG	5.50
CORE	0.00
BACK REAM	0.00
REAMING	0.75
TESTING	0.00
OTHER	1.25
AVERAGE ROP	16.86

BAROID REPRESENTATIVE	OFFICE/HOME	Chelteham, Vic	TELEPHONE	(03) 9581 7555	DAILY COST	CUMULATIVE COST
Tony Kowalski / Innes Macleod	WAREHOUSE	Barry Beach	TELEPHONE	(03) 5688 1445	$A 0.00	$A 21609.96

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

Baroid Australia Pty Ltd
DRILLING MUD REPORT
(Cost Modified)

REPORT NUMBER: 5

Date	Depth
26/10/99	755.0 m [MD]
Spud Date	Present Activity
23/10/99	

OPERATOR	CONTRACTOR	RIG NUMBER
Amity Oil N.L.	Sedco Forex	702
REPORT FOR	REPORT FOR	REGION
Wally Westman / Len Kronstal	R. Rickard / C. Sinton	Victoria

WELL NAME AND NUMBER	FIELD OR BLOCK	GEOGRAPHIC AREA	COUNTRY
Cuttlefish-1	VIC/P40	Bass Strait	Austral

BIT DATA

Size in.	
Type	
No. Jets	
Jets 32nd inch	
Tot Noz Area	
TFA	

DRILLING STRING in. m

Pipe OD	ID	Len.	
Pipe OD	ID	Len.	
Pipe OD	ID	Len.	
Collar OD	ID	Len.	
Collar OD	ID	Len.	

OPEN HOLE in. m

Size	17.5	Len.	5.7
Size		Len.	
Size		Len.	
Size		Len.	
Size		Len.	

CASING

in.		m
20.0	Riser	73.6
30	Set @	118.0
13 3/8	Set @	749.3
	Set @	
	Set @	
	Set @	
	Set @	
	Set @	
	Set @	

CIRCULATION DATA

Pump Make/Model	Oilwell A1700PT		
Size 6 X 12	Eff. 97.00	V/st	0.102
spm 0	bbl/min 0.0		
Pump Make/Model	Oilwell A1700PT		
Size 6 X 12	Eff. 97.00	V/st	0.102
spm 0	bbl/min 0.0		
Pump Make/Model	Oilwell A1700PT		
Size 6 X 12	Eff. 97.00	V/st	0.102
spm 0	bbl/min 0.0		
Tot. Vol./min 0	gpm 0.0	bbl	
BU Time 0	TC Time 0		

MUD PROPERTIES

		Primary	2	3	Program Targets *=Excep	Essential Program Properties
Source		Pits, Uncr			P 2 3	< 755.0
Time		22:00				
FL Temp	Deg F	32				
Depth	m	755.0				
Weight	ppg	9.3			*	100 >
FV @ 64 Deg F	sec/qt	63				
PV @ 120 Deg F	cP	13			*	40 >
YP	lbs/100 ft2	25				
Gels	lbs/100 ft2	6/7				
API Filt.	ml/30 min	6.0				
HTHP @ 250 Deg F	ml/30 min	22.6				
Cake API/HTHP	32nd in	1/2				
Corr.Solids % by vol		2.7				
Oil/Water % by vol		0.0/95.3				
Sand % by vol		.25				
MBT		0.6				
pH STRIP		8.5				
Alk. Mud (Pm)		0.15				
Alk. Filtr. (Pf/Mf)		0.01/0.09				
Chlorides mg/l		34000				
Hard. Ca mg/l		300				
Low Gravity Solids ppb		4.10				
6 rpm		8				
KCl Content	ppb	12				
PHPA Concentration ppb		.3				

MUD TREATMENTS

Dumped gel cement mix water from pit #4 and dumped and cleaned pit #2 -62 bbls dumped flocc gel accounted for yesterday.
305 bbls flocced gel retained in pit #1.
Mixed 492 bbls of 8% KCl/Polymer mud and blended in with 443 bbls of NaCl/Polymer mud salvaged from Cultus well.
Ran mud check on above fluid, fine tuned and weighed up to 9.5 ppg.
Fill degas/desand pits (219 bbls) and mix an additional 130 bbls KCl/EZ-MUD/Polymer fluid
Charged 1 bag KCl-arrived ripped open.

RIG ACTIVITY

Ran and cemented 13 3/8" casing at 749.3 m. Tested, ran and latched BOP and riser.

MATERIALS USED

Product	Used	Cost	Product	Used	Cost
BARACIDE - 25 KG. CAN	1	521.89	soda ash - 25 KG. BAG	1	17.84
DEXTRID LT - 25 KG. BAG	20	1283.80			
EZ MUD DP - 50 LB. SACK	5	698.80			
KCl (Ag) - 1000 KG. BULK	9.000	4830.39			
PAC-R - 25 KG. BAG	11	1973.40			
XCD Polymer - 25 KG. BAG	11	5048.67			
barite - 100 LB. BULK	93.000	1384.77			
caustic soda - 25 KG. PAIL	1	52.24			
potassium hydroxide - 20 KG.	2	106.80			

SOLIDS EQUIPMENT

Device	Make	Sz/Scrn	HR
Shkr #1	Brandt	20	
Shkr #2	Brandt	10	
Shkr #3	Brandt	20	
Shkr #4	Thule	120/52	
Shkr #5	Thule	120/52	
Shkr #6	Thule	52/52	
dSndr		3 x 12	
dSlt #1		16 x 4	

MUD MANAGEMENT

MUD VOLUME bbl

Hole	Pits
420	-420
Active Volume	
-0	
Reserve	Total
1370	1370

Low Grav, vol %	0.5
ppb	4.10
High Grav, vol %	2.3
ppb	33.81
ASG	4.10
Drill Cuttings	0
Dilution Rate	0.00
Slds Control Eff	0.00

MUD TYPE: KCL/EZ-MUD/POLYMER

MUD CONSUMPTION

ADDITIONS	bbl
Oil	0
Brine Water	0
Drill Water	590
Sea Water	0
Whole Mud	443
Barite	6
Chemicals	26
LOSSES	bbl
Dumped	0
Lost	0
VOL GAIN/LOSS	1065

RHEOLOGY AND HYDRAULICS

600 rpm	51
300 rpm	38
200 rpm	31
100 rpm	22
6 rpm	8
3 rpm	6
Pressure Units:	psig
Press Drop. DP	0
Press Drop, BIT	0
Press Drop, ANN	0
Actual Circ. Press	0
AV, DP ft/min	0
AV, DC ft/min	0
AV, Riser ft/min	

FRACTURE GRADIENT

Water Depth	47.7
Calc. F. Grad	0.0
Leak Off Test	0.0
ECD ppg	
Csg. Shoe	0.0
TD	0.0
Max. Diff. Press	0

DEVIATION INFO

MD	755.0 m
TVD	0.0 m
Angle	0.50
Direction	
Horiz. Displ	0.0 m

TIME

DRLG	0.00
CIRC	0.00
TRIPS	0.00
SERV. RIG	0.00
SURVEY	0.00
FISHING	0.00
LOGGING	0.00
RUN CSG	7.00
CORE	0.00
BACK REAM	0.00
REAMING	0.00
TESTING	0.00
OTHER	17.00
AVERAGE ROP	0.00

BAROID REPRESENTATIVE	OFFICE/HOME	Cheltenham, Vic	TELEPHONE	(03) 9581 7555	DAILY COST	CUMULATIVE COST
Tony Kowalski / Innes Macleod	WAREHOUSE	Barry Beach	TELEPHONE	(03) 5688 1445	$A 15918.60	$A 37528.56

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

Baroid Australia Pty Ltd
DRILLING MUD REPORT
(Cost Modified)

REPORT NUMBER: 6

Date	Depth
27/10/99	798.0 m [MD]
Spud Date	Present Activity
23/10/99	DRILL 12 1/4" HOLE

OPERATOR	CONTRACTOR	RIG NUMBER
Amity Oil N.L.	Sedco Forex	702
REPORT FOR	REPORT FOR	REGION
Wally Westman / Len Kronstal	R. Rickard / C. Sinton	Victoria

WELL NAME AND NUMBER	FIELD OR BLOCK	GEOGRAPHIC AREA	COUNTRY
Cuttlefish-1	VIC/P40	Bass Strait	Austral

BIT DATA	in. DRILLING STRING m				CASING			CIRCULATION DATA				
Size 12.25 in.	Pipe OD 5	ID 4.276	Len. 509.8		in.		m	Pump Make/Model	Oilwell A1700PT			
Type GEOD S91BHSVPX	Pipe OD 5	ID 3.000	Len. 138.3		20.0	Riser	73.6	Size 6 X 12	Eff. 97.00	V/st	0.102	
No. Jets	Pipe OD	ID	Len.		30	Set @	118.0	spm 92	bbl/min 9.4			
Jets sq-in	Collar OD 8.25	ID 2.875	Len. 149.9		13 3/8	Set @	749.3	Pump Make/Model	Oilwell A1700PT			
	Collar OD	ID	Len.			Set @		Size 6 X 12	Eff. 97.00	V/st	0.102	
	in. OPEN HOLE m					Set @		spm 92	bbl/min 9.4			
Tot Noz Area 1.374	Size 12.25	Len. 48.7				Set @		Pump Make/Model	Oilwell A1700PT			
TFA	Size	Len.				Set @		Size 6 X 12	Eff. 97.00	V/st	0.102	
	Size	Len.				Set @		spm 97	bbl/min 9.9			
	Size	Len.				Set @		Tot. Vol./min 1201	gpm 28.6	bbl		
	Size	Len.				Set @		BU Time 12	TC Time 34			

MUD PROPERTIES		Primary	2	3
Source		Pits, Uncr	Pits, Circ	
Time		10:30	21:00	
FL Temp	Deg F	32	88	
Depth	m	755.0	763.0	
Weight	ppg	9.4	9.4	
FV @ 77 Deg F	sec/qt	56	45	
PV @ 120 Deg F	cP	13	12	
YP	lbs/100 ft2	21	24	
Gels	lbs/100 ft2	6/8	6/7	
API Filt.	ml/30 min	5.7	5.8	
HTHP @ 250 Deg F	ml/30 min	22.0	19.6	
Cake API/HTHP	32nd in	1/3	1/3	
Corr.Solids % by vol		2.9	2.9	
Oil/Water % by vol		0.0/95.0	0.0/95.0	
Sand % by vol		0.25	.25	
MBT		0.6	0.6	
pH STRIP		9.0	9.5	
Alk. Mud (Pm)		0.17	0.19	
Alk. Filtr. (Pf/Mf)		0.03/0.10	0.05/0.10	
Chlorides mg/l		36000	36000	
Hard. Ca mg/l		180	240	
Low Gravity Solids	ppb	1.82	1.82	
PHPA Concentration	ppb	0.6	0.6	
KCl Content	% wt soln	4.1	4.0	
Excess sulfite	ppm	Nil	40	

Program Targets *=Excep	P	2	3	Essential Program Properties
				< 755.0
	*			100 >
	*			40 >

MUD TREATMENTS

Mixed 235 bbls of reserve unweighted KCl/EZ-MUD/Polymer fluid to have adequate surface volume in anticipation of possible downhole losses in the Latrobe.
Pumped 2 x 54 bbl flocc gel sweeps while drilling float collar and 1 x 42 bbls sweep prior to displacing hole to mud. Added BARACOR-129 and EZ-MUD DP to active to maintain programmed concentrations.

RIG ACTIVITY

Pressure test/function test BOP'S.
Made up BHA and 12 1/4" bit and ran in hole. Tagged TOC at 733 m. Pumped 2 x 54 bbls flocc gel sweeps while drilling out float collar. While drilling shoe pumped 42 bbls hi-vis gel followed by seawater and then displaced hole with KCl/EZ-MUD/Polymer fluid Drilled 3 m new hole to 758 m, circulated, and carried out a LOT to an EMW of 12.1 ppg. Drilled from 758 m to 798 m at report time.

MATERIALS USED

Product	Used	Cost	Product	Used	Cost
BARACIDE - 25 KG. CAN	1	521.89			
BARACOR 129 - 25 KG. CAN	3	221.58			
DEXTRID LT - 25 KG. BAG	5	320.95			
EZ MUD DP - 50 LB. SACK	5	698.80			
KCl (Ag) - 1000 KG. BULK	2.000	1073.42			
PAC-R - 25 KG. BAG	5	897.00			
XCD Polymer - 25 KG. BAG	4	1835.88			
barite - 100 LB. BULK	90.000	1340.10			
potassium hydroxide - 20 KG.	1	53.40			

SOLIDS EQUIPMENT

Device	Make	Sz/Scrn	HR
Shkr #1	Brandt	20	
Shkr #2	Brandt	10	
Shkr #3	Brandt	20	
Shkr #4	Thule	120/52	09
Shkr #5	Thule	120/52	10
Shkr #6	Thule	52/52	10
dSndr	Pioneer	3 x 12	
dSlt #1		16 x 4	

MUD MANAGEMENT

MUD VOLUME bbl	
Hole	Pits
391	592
Active Volume	
983	
Reserve	Total
456	1439
Low Grav, vol %	0.2
ppb	1.82
High Grav, vol %	2.7
ppb	39.69
ASG	4.24
Drill Cuttings	21
Dilution Rate	6.37
Slds Control Eff	0.00

MUD TYPE: KCL/EZ MUD/POLYMER

MUD CONSUMPTION	bbl
ADDITIONS	
Oil	0
Brine Water	0
Drill Water	221
Sea Water	0
Whole Mud	0
Barite	6
Chemicals	5
LOSSES	bbl
Dumped	150
Lost	13
VOL GAIN/LOSS	69

RHEOLOGY AND HYDRAULICS

600 rpm	47	48
300 rpm	34	36
200 rpm	29	29
100 rpm	21	21
6 rpm	9	8
3 rpm	6	5
Pressure Units:		psig
Press Drop. DP		2263
Press Drop, BIT		657
Press Drop, ANN		40
Actual Circ. Press		1950
AV, DP	ft/min	90
AV, DC	ft/min	359
AV, Riser	ft/min	90

FRACTURE GRADIENT

Water Depth		47.7
Calc. F. Grad		0.0
Leak Off Test		12.1
ECD	ppg	
Csg. Shoe		9.7
TD		9.7
Max. Diff. Press		0

DEVIATION INFO

MD	798.0	m
TVD	0.0	m
Angle	0.50	
Direction		
Horiz. Displ	0.0	m

TIME

DRLG	3.75
CIRC	1.25
TRIPS	5.25
SERV. RIG	0.00
SURVEY	0.00
FISHING	0.00
LOGGING	0.00
RUN CSG	0.00
CORE	0.00
BACK REAM	0.00
REAMING	0.00
TESTING	0.00
OTHER	13.75
AVERAGE ROP	11.47

BAROID REPRESENTATIVE	OFFICE/HOME	Chelteham, Vic	TELEPHONE	(03) 9581 7555	DAILY COST	CUMULATIVE COST
Tony Kowalski / Innes Macleod	WAREHOUSE	Barry Beach	TELEPHONE	(03) 5688 1445	$A 6963.02	$A 44491.58

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

Baroid Australia Pty Ltd
DRILLING MUD REPORT
(Cost Modified)

REPORT NUMBER: 7

Date	Depth
28/10/99	1226.0m [MD]
Spud Date	Present Activity
23/10/99	POOH

OPERATOR	CONTRACTOR	RIG NUMBER
Amity Oil N.L.	Sedco Forex	702
REPORT FOR	REPORT FOR	REGION
Wally Westman / Len Kronstal	R. Rickard / C. Sinton	Victoria

WELL NAME AND NUMBER	FIELD OR BLOCK	GEOGRAPHIC AREA	COUNTRY
Cuttlefish-1	VIC/P40	Bass Strait	Austral

BIT DATA	in. DRILLING STRING m			CASING			CIRCULATION DATA			
Size 12.25 in.	Pipe OD	ID	Len.	in.		m	Pump Make/Model	Oilwell A1700PT		
Type GEOD S91BHSVPX	Pipe OD	ID	Len.	20.0	Riser	73.6	Size 6 X 12	Eff. 97.00	V/st	0.102
No. Jets	Pipe OD	ID	Len.	30	Set @	118.0	spm 67	bbl/min 6.8		
Jets sq-in	Collar OD	ID	Len.	13 3/8	Set @	749.3	Pump Make/Model	Oilwell A1700PT		
	Collar OD	ID	Len.		Set @		Size 6 X 12	Eff. 97.00	V/st	0.102
	in. OPEN HOLE m				Set @		spm 67	bbl/min 6.8		
Tot Noz Area 1.374	Size 12.25	Len. 476.7			Set @		Pump Make/Model	Oilwell A1700PT		
TFA	Size	Len.			Set @		Size 6 X 12	Eff. 97.00	V/st	0.102
	Size	Len.			Set @		spm 67	bbl/min 6.8		
	Size	Len.			Set @		Tot. Vol./min 859	gpm 20.5	bbl	
	Size	Len.			Set @		BU Time 0	TC Time 18		

MUD PROPERTIES		Primary	2	3	Program Targets *=Excep			Essential Program Properties	
Source		Pits, Circ	Pits, Circ	Flowline					
Time		07:30	13:45	21:00					
FL Temp	Deg F	108	111	113					
Depth	m	999.0	1155.0	1226.0	P	2	3	755.0	1250.0
Weight	ppg	9.5	9.6	9.6				8.6	10.0
FV @ 104 Deg F	sec/qt	61	49	49					
PV @ 120 Deg F	cP	20	18	18					
YP	lbs/100 ft2	33	32	32					
Gels	lbs/100 ft2	7/10	7/9	7/9					
API Filt.	ml/30 min	5.7	5.3	5.4				<	8.0
HTHP @ 250 Deg F	ml/30 min	18.6	18.0	18.4				<	25.0
Cake API/HTHP	32nd in	1/2	1/2	1/2					
Corr.Solids % by vol		4.2	4.5	4.6					
Oil/Water % by vol		0.0/93.8	0.0/93.6	0.0/93.5					
Sand % by vol		0.65	0.75	.75					
MBT		7.0	0.9	1.0					
pH STRIP		8.7	8.8	8.5				8.5	9.5
Alk. Mud (Pm)		0.07	0.11	0.10					
Alk. Filtr. (Pf/Mf)		0.02/0.08	0.03/0.10	0.01/0.09					
Chlorides mg/l		34500	33500	33000					
Hard. Ca mg/l		400	340	320					
Low Gravity Solids	ppb	17.75	15.02	17.11				<	73.00
PHPA Concentration	ppb	1.4	1.5	1.5					
KCl Content	% wt soln	3.5	3.4	3.2					
Excess sulfite	ppm	20	30	10					

MUD TREATMENTS

Continued to add EZ-MUD to bring system up required concentration and maintained other properties as required.
Could not utilize Brandt scalper shakers which caused overloading of Thule shakers and not being able to downsize screens any finer than as below. Shaker beds filled with cuttings resulting in some whole mud losses over front of shaker beds. Added XCD Polymer, caustic potash and BARACOR-129 to maintain programmed properties.

RIG ACTIVITY

Continued drilling 12 1/4" hole and flow checking as required.
Drilled to a TD of 1226 m, circulated and made a wiper trip to the 13 3/8" csg shoe - hole tight @ 959 m (backream to shoe). RIH and circ. hole clean. Drop Totco survey and POOH.

MATERIALS USED

Product	Used	Cost	Product	Used	Cost
BARACOR 129 - 25 KG. CAN	6	443.16			
EZ MUD DP - 50 LB. SACK	20	2795.20			
XCD Polymer - 25 KG. BAG	3	1376.91			
barite - 100 LB. BULK	210.000	3126.90			
potassium hydroxide - 20 KG.	3	160.20			
soda ash - 25 KG. BAG	2	35.68			

SOLIDS EQUIPMENT

Device	Make	Sz/Scrn	HR
Shkr #1	Brandt	20	
Shkr #2	Brandt	10	
Shkr #3	Brandt	20	
Shkr #4	Thule	120/52	21
Shkr #5	Thule	120/52	21
Shkr #6	Thule	52/52	21
dSndr	Pioneer	3 x 12	
dSlt #1		16 x 4	

MUD MANAGEMENT

MUD VOLUME bbl

Hole	Pits
642	378
Active Volume	
1020	
Reserve	Total
210	1230

Low Grav, vol %	2.0
ppb	17.75
High Grav, vol %	2.3
ppb	33.81
ASG	3.57
Drill Cuttings	205
Dilution Rate	0.00
Slds Control Eff	0.00

MUD TYPE: KCL/EZ MUD/POLYMER

MUD CONSUMPTION

ADDITIONS	bbl
Oil	0
Brine Water	0
Drill Water	0
Sea Water	0
Whole Mud	0
Barite	14
Chemicals	3
LOSSES	bbl
Dumped	0
Lost	226
VOL GAIN/LOSS	-209

RHEOLOGY AND HYDRAULICS

600 rpm	73	68	68
300 rpm	53	50	50
200 rpm	45	42	41
100 rpm	32	31	29
6 rpm	9	9	9
3 rpm	7	7	7

Pressure Units:	psig
Press Drop. DP	0
Press Drop, BIT	0
Press Drop, ANN	0
Actual Circ. Press	1500
AV, DP ft/min	0
AV, DC ft/min	140
AV, Riser ft/min	65

FRACTURE GRADIENT

Water Depth	47.7
Calc. F. Grad	0.0
Leak Off Test	12.1
ECD ppg	
Csg. Shoe	9.9
TD	9.9
Max. Diff. Press	0

DEVIATION INFO

MD	1226.0 m
TVD	0.0 m
Angle	1.00
Direction	
Horiz. Displ	0.0 m

TIME

DRLG	16.75
CIRC	1.25
TRIPS	4.50
SERV. RIG	0.00
SURVEY	0.00
FISHING	0.00
LOGGING	0.00
RUN CSG	0.00
CORE	0.00
BACK REAM	0.75
REAMING	0.00
TESTING	0.00
OTHER	0.75
AVERAGE ROP	25.55

BAROID REPRESENTATIVE	OFFICE/HOME	Cheltenham, Vic	TELEPHONE	(03) 9581 7555	DAILY COST	CUMULATIVE COST
Tony Kowalski / Innes Macleod	WAREHOUSE	Barry Beach	TELEPHONE	(03) 5688 1445	$A 7938.05	$A 52429.63

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

Baroid Australia Pty Ltd
DRILLING MUD REPORT
(Cost Modified)

REPORT NUMBER: 8

Date	Depth
29/10/99	1226.0m [MD]
Spud Date	Present Activity
23/10/99	PLUG & ABANDON

OPERATOR	CONTRACTOR	RIG NUMBER
Amity Oil N.L.	Sedco Forex	702
REPORT FOR	REPORT FOR	REGION
Wally Westman / Len Kronstal	R. Rickard / C. Sinton	Victoria

WELL NAME AND NUMBER	FIELD OR BLOCK	GEOGRAPHIC AREA	COUNTRY
Cuttlefish-1	VIC/P40	Bass Strait	Austral

BIT DATA

Size in.	
Type	
No. Jets	
Jets sq-in	
Tot Noz Area 0.000	
TFA	

DRILLING STRING m

Pipe OD	ID	Len.	
Pipe OD	ID	Len.	
Pipe OD	ID	Len.	
Collar OD	ID	Len.	
Collar OD	ID	Len.	

OPEN HOLE in. m

Size	12.25	Len.	476.7
Size		Len.	
Size		Len.	
Size		Len.	
Size		Len.	

CASING

in.		m
20.0	Riser	73.6
30	Set @	118.0
13 3/8	Set @	749.3
	Set @	
	Set @	
	Set @	
	Set @	
	Set @	
	Set @	

CIRCULATION DATA

Pump Make/Model	Oilwell A1700PT		
Size 6 X 12	Eff. 97.00	V/st	0.102
spm 0	bbl/min 0.0		
Pump Make/Model	Oilwell A1700PT		
Size 6 X 12	Eff. 97.00	V/st	0.102
spm 0	bbl/min 0.0		
Pump Make/Model	Oilwell A1700PT		
Size 6 X 12	Eff. 97.00	V/st	0.102
spm 0	bbl/min 0.0		
Tot. Vol./min 0	gpm 0.0	bbl	
BU Time 0	TC Time 0		

MUD PROPERTIES

		Primary	2	3	Program Targets *=Excep P 2 3	Essential Program Properties
Source		Pits, Uncr				755.0 1250.0
Time		08:00				8.6 10.0
FL Temp	Deg F	32				
Depth	m	1226.0				
Weight	ppg	9.6				
FV @ 72 Deg F	sec/qt	50				
PV @ 120 Deg F	cP	18				
YP	lbs/100 ft2	33				
Gels	lbs/100 ft2	7/10				
API Filt.	ml/30 min	5.8				< 8.0
HTHP @ 32 Deg F	ml/30 min	0.0				< 25.0
Cake API/HTHP	32nd in	1/0				
Corr.Solids % by vol		4.5				
Oil/Water % by vol		0.0/93.6				
Sand % by vol		0.65				
MBT		1.0				
pH STRIP		8.5				8.5 9.5
Alk. Mud (Pm)		0.09				
Alk. Filtr. (Pf/Mf)		0.01/0.06				
Chlorides mg/l		33000				
Hard. Ca mg/l		340				
Low Gravity Solids	ppb	15.29				< 73.00
PHPA Concentration	ppb	1.5				
KCl Content	% wt soln	3.1				
Excess sulfite	ppm	10				

MUD TREATMENTS

Used air pump to transfer as much mud "dead" volume as possible from reserve pits #3 and #4 into active pit-dumped remainder.
Weighed up hi-vis gel for use as spots prior to setting cement plugs. PV = 17
YP = 101
6 RPM= 49
6 sacks calcium chloride used on cement jobs-inventory adjustment.
Inhibited mud to be left in casing when plugging well.

RIG ACTIVITY

Finished pulling out of hole and rigged up to log.
Ran wireline logs and then rigged down same.
Ran in to 1226 m with cement stinger on 5 " drill pipe. Ciruclated hole clean and pulled up to and set cement plug #1A from 1110-990 m and plug #1B from 990-825 & circ.
Pulled up and circulated inhibited mud and set cement plug #3 from 800-650 m.
Pulled up to 505 m and circulated and pulled out of hole to lay out tubulars while WOC.

MATERIALS USED

NO INVENTORY USED ON THIS REPORT

SOLIDS EQUIPMENT

Device	Make	Sz/Scrn	HR
Shkr #1	Brandt	20	
Shkr #2	Brandt	10	
Shkr #3	Brandt	20	
Shkr #4	Thule	120/52	3
Shkr #5	Thule	120/52	3
Shkr #6	Thule	52/52	2
dSndr	Pioneer	3 x 12	
dSlt #1		16 x 4	

MUD MANAGEMENT

MUD VOLUME bbl

Hole	Pits
642	542
Active Volume	
1184	
Reserve	Total
145	1329

Low Grav, vol %	1.7
ppb	15.29
High Grav, vol %	2.8
ppb	41.16
ASG	3.71
Drill Cuttings	0
Dilution Rate	0.00
Slds Control Eff	0.00

MUD TYPE: KCL/EZ MUD/POLYMER

MUD CONSUMPTION

ADDITIONS	bbl
Oil	0
Brine Water	0
Drill Water	0
Sea Water	0
Whole Mud	0
Barite	2
Chemicals	1
LOSSES	bbl
Dumped	38
Lost	0
VOL GAIN/LOSS	-35

RHEOLOGY AND HYDRAULICS

600 rpm	69
300 rpm	51
200 rpm	41
100 rpm	32
6 rpm	9
3 rpm	7
Pressure Units:	psig
Press Drop. DP	0
Press Drop, BIT	0
Press Drop, ANN	0
Actual Circ. Press	0
AV, DP ft/min	0
AV, DC ft/min	0
AV, Riser ft/min	

FRACTURE GRADIENT

Water Depth	47.7
Calc. F. Grad	0.0
Leak Off Test	12.1
ECD ppg	
Csg. Shoe	0.0
TD	0.0
Max. Diff. Press	0

DEVIATION INFO

MD	1226.0 m
TVD	1225.9 m
Angle	1.00
Direction	
Horiz. Displ	0.0 m

TIME

DRLG	0.00
CIRC	0.00
TRIPS	1.00
SERV. RIG	0.00
SURVEY	0.25
FISHING	0.00
LOGGING	7.50
RUN CSG	0.00
CORE	0.00
BACK REAM	0.00
REAMING	0.00
TESTING	0.00
OTHER	15.25
AVERAGE ROP	0.00

BAROID REPRESENTATIVE	OFFICE/HOME	Chelteham, Vic	TELEPHONE	(03) 9581 7555	DAILY COST	CUMULATIVE COST
Tony Kowalski / Innes Macleod	WAREHOUSE	Barry Beach	TELEPHONE	(03) 5688 1445	$A 0.00	$A 52429.63

NOTE: ALL COSTS ARE REPORTED IN AUSTRALIA'S DOLLAR

APPENDIX 6

PETROPHYSICAL LOG ANALYSIS

LOG ANALYSIS REPORT BY PETROLOG REVISION 6.40
File name: Cuttlefish-1.PRO 01/11/1999 08:30:58
Software Licensed to CROCKER DATA PROCESSING PTY LTD

Company	: AMITY OIL NL	
Well Name	: CUTTLEFISH 1	
Field	: CUTTLEFISH	
Country	: AUSTRALIA	
State	: VICTORIA	
Field Location	: VIC/P40	
Latitude	: 037 59' 40.799" S	DMS
Longitude	: 148 03' 03.279" E	DMS
Permanent Datum	: MSL	
Elevation of PD	: .00 M	

Software by Crocker Data Processing Pty Ltd

Hole depth M	Temperature C	Gradient Deg C / 100 M
1223.0	58.00	2.5620
.0	26.67	

Log data

Column Position	Logs Available	Logs Used
1	DEPT	DEPT
2	DT4P	DT
3	HLLD	LLD
4	HLLS	LLS
5	HART	
6	CFTC	
7	CNTC	
8	GR	GR
9	HCAL	CALI
10	HDRA	DRHO
11	NPHI	NPHI
12	NPOR	
13	PEFZ	PEF
14	RHOZ	RHOB
15	RXOZ	MSFL
16	TNPH	
17	CGR	
18		

AMITY OIL NL 01-11-1999

Caliper recorded in : Inches
Mud weight units : g/cc
Density log units : g/cc
DRHO log units : g/cc
Sonic log units : Us/ft
Neutron log units : LS POR
Density tool type : FDC
RHO (H,MA,f) units : g/cc
Dens. X-plots units : g/cc
GRV units : Mbbl

CUTTLEFISH 1 Complex Lithology Results
AMITY OIL NL 01-11-1999

COMPLEX LITHOLOGY RESULTS

Mineral table

Zone no.			1	2	3
Formation Name					
Top depth			748.894	837.911	1079.946
Bottom depth			837.759	1079.794	1199.998
USER Log type					
Salt	RHOB	min	-INF	-INF	-INF
Salt	RHOB	max	2.150	2.150	2.150
Salt	PHIN	min	-INF	-INF	-INF
Salt	PHIN	max	.020	.020	.020
Salt	GR	min	-INF	-INF	-INF
Salt	GR	max	30.000	30.000	30.000
Salt	t	min	65.000	65.000	65.000
Salt	t	max	70.000	70.000	70.000
Salt	RT	min	100.000	100.000	100.000
Salt	RT	max	+INF	+INF	+INF
Salt	USER	min	+INF	+INF	+INF
Salt	USER	max	+INF	+INF	+INF
Trona	RHOB	min	2.050	2.050	2.050
Trona	RHOB	max	2.150	2.150	2.150
Trona	PHIN	min	.350	.350	.350
Trona	PHIN	max	+INF	+INF	+INF
Trona	GR	min	-INF	-INF	-INF
Trona	GR	max	20.000	20.000	20.000
Trona	t	min	62.000	62.000	62.000
Trona	t	max	68.000	68.000	68.000
Trona	RT	min	100.000	100.000	100.000
Trona	RT	max	+INF	+INF	+INF
Trona	USER	min	+INF	+INF	+INF
Trona	USER	max	+INF	+INF	+INF
Anhydr	RHOB	min	2.920	2.920	2.920
Anhydr	RHOB	max	+INF	+INF	+INF
Anhydr	PHIN	min	-INF	-INF	-INF
Anhydr	PHIN	max	.020	.020	.020

Anhydr	GR	min	-INF	-INF	-INF
Anhydr	GR	max	20.000	20.000	20.000
Anhydr	t	min	48.000	48.000	48.000
Anhydr	t	max	52.000	52.000	52.000
Anhydr	RT	min	100.000	100.000	100.000
Anhydr	RT	max	+INF	+INF	+INF
Anhydr	USER	min	+INF	+INF	+INF
Anhydr	USER	max	+INF	+INF	+INF
Gypsum	RHOB	min	2.300	2.300	2.300
Gypsum	RHOB	max	2.400	2.400	2.400
Gypsum	PHIN	min	.450	.450	.450
Gypsum	PHIN	max	+INF	+INF	+INF
Gypsum	GR	min	-INF	-INF	-INF
Gypsum	GR	max	20.000	20.000	20.000
Gypsum	t	min	50.000	50.000	50.000
Gypsum	t	max	55.000	55.000	55.000
Gypsum	RT	min	100.000	100.000	100.000
Gypsum	RT	max	+INF	+INF	+INF
Gypsum	USER	min	+INF	+INF	+INF
Gypsum	USER	max	+INF	+INF	+INF
Coal	RHOB	min	-INF	-INF	-INF
Coal	RHOB	max	2.000	2.050	2.000
Coal	PHIN	min	.500	.370	.500
Coal	PHIN	max	+INF	+INF	+INF
Coal	GR	min	-INF	-INF	-INF
Coal	GR	max	+INF	+INF	+INF
Coal	t	min	100.000	100.000	100.000
Coal	t	max	+INF	+INF	+INF
Coal	RT	min	20.000	2.000	20.000
Coal	RT	max	+INF	+INF	+INF
Coal	USER	min	+INF	+INF	+INF
Coal	USER	max	+INF	+INF	+INF

Permeability equation used

a) SWirrcutoff <1.0

Koil = Kcoef * PHIE ** Kexp / SW**2

Computed if SW<=SWirrcutoff

	Kcoef	Kexp
Coates	62500	6.0
Timur	8581	4.4

b) SWirrcutoff >=1

Koil = Kcoef * 10**(PHIE * Kexp)

Lithology models

1.	Sand-Dolomite	2.62 to	2.89
2.	Sand-Limestone	2.62 to	2.75
3.	Sand	2.63 to	2.69
4.	Limestone	2.67 to	2.75
5.	Dolomite	2.75 to	2.89
6.	Limestone-Dolomite	2.68 to	2.89

CPX flag values
1. VCL greater than 0.95
2. VN greater than 0.75
3. VS greater than 0.75
4. Bad hole condition
5. Matrix density greater than Lithological model
6. Matrix density less than Lithological model
7. Porosity derived from Sonic Log
8. Porosity derived from or limited by PHIMAX
9. Porosity derived from Density Log
$. Pay zone

Water saturation equations
1. Indonesia
2. Simandoux
3. Fertl & Hammock
4. Laminar
5. Bussian
6. User defined
7. Single Sonic

VGRTYPE :Vclay from GR Equations used
0. Not Used
IGR=(GR-GRmin)/(GRmax-GRmin)
1. Linear VGR=IGR
2. Asymmetric (S shaped)
Defined by 2 sets of intermediate points
through which the S bend passes through.
GR1, VGR1 and GR2, VGR2.
Steiber equation: VGR= IGR/(A + (A-1.0)*IGR)
3. Steiber 1 A = 2.0
4. Steiber 2 A = 3.0
5. Steiber 3 A = 4.0
6. Steiber 50%
A is computed to give VGR= 0.5 when GR = GR50%)
7. Larinov Old Rocks: VGR= (2**(2*IGR)-1.0)/3.0
8. Larinov Tertiary : VGR= 0.083*(2.0*(3.7058*IGR)-1.0)
9. Clavier : VGR= 1.7-SQRT(3.38-(IGR+0.7)**2.0)

Cementation factor m
1. Linear m = m
2. Shell formula m = 1.87 + 0.019/PHI
3. Borai formula m = 2.2 -0.035/(PHI+0.042)

CUTTLEFISH 1 Complex Lithology Results
AMITY OIL NL 01-11-1999
Neutron RT Determination
Logging Company Mud type log type Flags by priority

0. Schlumberger
1. HLS
2. Dresser
3. BPB
4. Sperry MWD
5. Baker MWD
6. Anadril MWD

0. NaCl
1. KCl %
2. Oil-base
3. Barite

0. CNL CORR
1. TNPH
2. SNP
3. N
4. HLS DSN2
5. CNL PRE 86
6. APLU
7. FPLU
8. CDN 6.5"
9. CDN 8.0"
10. ADN 6.75
11. ATLAS 2435 CN
12. ATLAS 2420 CN
13. ATLAS SNP
14. BPB
15. HLS G

1. Dual Laterolog - RXO
20. PHASOR-SFL
21. PHASOR-RXO
2. Dual Induction - LL8
3. ILD-SFL-RXO
10. DIL-SFL
11. DIL-LL3
8. ILD & 16 inch Normal
17. LLD-LLS
18. ID PHASOR
4. ILD
5. LLD
6. LL3 or LL7
7. Dual Laterolog
13. LLS
19. IM PHASOR
14. ILM
15. LL8
9. 64 inch Normal Log
12. SFL
22. ERT (external RT)
16. RXO
0. No RT logs

Formation Water
0=NaCl
1=NaHCO3

Zone no.	1	2	3
Formation Name			
Top depth	748.894	837.911	1079.946
Bottom depth	837.759	1079.794	1199.998
Logging Company	0	0	0
Mud type	0	0	0
Formation Water Type	0	0	0
Neutron Log Type	0	0	0

CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

Zone no.	1	2	3
Formation			
1. Top depth	748.894	837.911	1079.946
2. Bottom depth	837.759	1079.794	1199.998
3. No logs			
4. No logs	.000	.000	.000
5. RM	.139	.139	.139
6. Temp. RM	18.000	18.000	18.000
7. RMF	.129	.129	.129
8. Temp. RMF	18.000	18.000	18.000
9. RMC	.157	.157	.157
10. Temp. RMC	18.000	18.000	18.000
11. Bit size	12.250	12.250	12.250
12. Mud wt	1.150	1.150	1.150
13. SSP	.000	.000	.000
14. RW (SP)	.073	.069	.065

15. Temperature	46.992	51.232	55.873
16. RW @ FT	.203	.602	.376
17. RW@75F(23.9C	.306	.965	.641
18. RW salinity	20002.660	5821.571	9000.002
19. RMF @ FT	.074	.070	.066
20. KPPM (RMF)	.062	.062	.062
21. RM @ FT	.080	.076	.071
22. RHO H	.800	.800	.800
23. RHO F	1.040	1.039	1.038
24. t F	188.983	188.983	188.983
25. RHOMA	2.650	2.650	2.650
26. PHIN min	-.035	-.035	-.035
27. t MA	55.500	55.500	55.500
28. t MA min	48.000	48.000	48.000
29. Sonic option	.000	.000	.000
30. Compact/Ovrt	1.000	1.000	1.000
31. CAL cut off	16.000	16.000	16.000
32. RUGO.cut off	1.000	1.000	1.000
33. DRHO cut off	.150	.150	.150
34. Bad Hole	.000	.000	.000
35. No clay			
36. Vclay Flag	.000	.000	.000
37. Vclay type	.000	.000	.000
38. Vclay inp1	.200	.200	.200
39. Vclay out1	.150	.150	.150
40. Vclay inp2	.800	.800	.800
41. Vclay out2	.800	.800	.800
42. Vclay 50%	.500	.500	.500
43. VclayGR type	1.000	1.000	1.000
44. GR clean	20.144	19.437	30.335
45. GR clay	72.168	112.567	114.438
46. GR1	37.016	37.072	45.195
47. VGR1	.100	.100	.100
48. GR2	68.769	98.152	101.482
49. VGR2	.800	.800	.800
50. GR50%	70.000	70.000	70.000
51. R clay	3.350	15.252	4.245
52. R limit	1000.000	1000.000	1000.000
53. Rclay1 flag	.000	.000	.000
54. Rclay1	1.000	1.000	1.000
55. Vcl @ Rclay1	.150	.150	.150
56. RHOB clay	2.199	2.251	2.359
57. RHO Dry Clay	2.700	2.700	2.700
58. RHOB silt	2.680	2.680	2.680
59. PHIN clay	.390	.384	.333
60. t clay	134.114	122.426	105.924
61. M clay	.473	.549	.629
62. N clay	.526	.508	.505
63. PHIN 2.2	.235	.235	.235
64. t 2.2	90.000	90.000	90.000
65. a	.620	.620	.620
66. A1	1.000	1.000	1.000
67. m	2.150	2.150	2.150
68. m1	2.150	2.150	2.150

69.	m Function	1.000	1.000	1.000
70.	n	2.000	2.000	2.000
71.	n1	2.000	2.000	2.000
72.	B from BQV	9.081	7.180	7.898
73.	A(QV)	.0003050	.0003050	.0003050
74.	B(QV)	-3.450	-3.450	-3.450
75.	Lithomod	1.000	1.000	1.000
76.	SXO limit	.200	.200	.200
77.	PHI max	.464	.373	.464
78.	PHI min c.o.	.0010000	.0010000	.0010000
79.	EXPX	1.500	1.500	1.500
80.	Clay cut off	.300	.300	.300
81.	Por. cut off	.050	.050	.050
82.	SW cut off	.500	.500	.500
83.	GrossRockVol	.000	.000	.000
84.	Oil Exp.Fact	1.200	1.200	1.200
85.	FormGeom.Fac	1.000	1.000	1.000
86.	RecoveryFact	.200	.200	.200
87.	SWB max	1.000	1.000	1.000
88.	RWB	.346	1.398	.257
89.	SWB cut off	.300	.300	.300
90.	RWF	.302	.422	.376
91.	RMFF	.074	.070	.066
92.	PHIN silt	.100	.100	.100
93.	PHISILT	.100	.100	.100
94.	PHI Sand	.300	.300	.300
95.	Sw Eq. CPX	1.000	1.000	1.000
96.	Sw Eq. SSS	1.000	1.000	1.000
97.	Glauconite	.000	.000	.000
98.	SWirr.cutoff	.300	.300	.300
99.	Perm Expon.	6.000	6.000	6.000
100.	PERM K coef	62500.000	62500.000	62500.000
101.	RHOMA 1	2.650	2.650	2.650
102.	RHOMA 2	2.710	2.710	2.710
103.	RHOMA 3	2.850	2.850	2.850
104.	UMA 1	4.800	4.800	4.800
105.	UMA 2	13.760	13.760	13.760
106.	UMA 3	8.970	8.970	8.970
93.	PHINmat1	.200	.200	.200
94.	PHIDmat1	.240	.240	.240
95.	PHINmat2	.350	.350	.350
96.	PHIDmat2	.200	.200	.200
97.	PHINmat3	.050	.050	.050
98.	PHIDmat3	.000	.000	.000
99.	PHINmat4	.200	.200	.200
100.	PHIDmat4	-.100	-.100	-.100

Zone No. 1 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
748.89	29	1.7	41.5		.2			74.4	94.3		16.3	GR	2.650	94.3	74.4	35.2	2.678	.00	.00	
749.05	31	1.7	52.0		.2			77.7	95.1		21.1	GR	2.650	95.1	77.7	32.5	2.687	.00	.00	8

749.20	32	1.7		53.4	2.541	.2		94.4	98.8		23.2	GR	3.452	98.8	94.4	25.7	3.306	.00	.00	5					
749.35	31	1.7		51.1	2.523	.2		95.1	99.0		20.6	GR	3.377	99.0	95.1	26.1	3.262	.00	.00	5					
749.50	27	1.7		41.7	2.356	.3		94.8	98.9		13.4	GR	3.021	98.9	94.8	28.0	2.994	.00	.00	5					
749.66	25	1.7		35.8	2.266	.3		96.4	99.3		10.2	GR	2.841	99.3	96.4	28.3	2.839	.00	.00						
749.81	24	1.7		32.5	2.394	.3		113.1	100.0		8.4	GR	2.912	100.0	100.0	24.5	2.905	.00	.00	5					
749.96	25	1.7		35.4	2.391	.3		106.6	100.0		9.5	GR	2.955	100.0	100.0	25.7	2.942	.00	.00	5					
750.11	25	1.7		34.0	2.340	.3		105.7	100.0		10.1	GR	2.885	100.0	100.0	25.8	2.879	.00	.00						
750.27	27	1.7		39.5	2.334	.3	.0	96.2	99.2	26.2	12.6	GR	2.965	99.2	96.2	27.8	2.947	.00	.00	5					
750.42	29	1.7		40.7	2.400	.2	.0	100.5	100.0	46.4	17.0	GR	3.061	100.0	100.0	25.5	3.020	.00	.00	5					
750.57	30	1.7		43.8	2.545	.2	.0	105.9	100.0	51.2	19.3	GR	3.279	100.0	100.0	23.5	3.189	.00	.00	5					
750.72	31	1.7		44.1	2.618	.2	.0	110.6	100.0	52.5	20.9	GR	3.378	100.0	100.0	22.0	3.259	.00	.00	5					
750.87	34	1.7		46.2	2.642	.5	.0	110.6	100.0	53.6	27.2	GR	3.495	100.0	100.0	20.4	3.309	.00	.00	5					
751.03	38	1.7		45.1	2.541	.5	.0	108.4	100.0	51.5	33.5	GR	3.399	100.0	100.0	19.3	3.203	.00	.00	5					
751.18	43	1.7		41.5	2.434	.8	.0	111.1	100.0	51.1	43.3	GR	3.246	100.0	100.0	16.3	3.060	.00	.00	5					
751.33	43	1.7		36.2	2.329	.8	.0	114.4	100.0	50.8	44.3	GR	2.959	100.0	100.0	15.3	2.898	.00	.00	5					
751.48	42	1.7		37.5	2.226	.9	.0	101.9	100.0	47.4	42.2	GR	2.829	100.0	100.0	18.8	2.827	.00	.00						
751.64	44	1.7		41.7	2.169	.9	.0	91.7	98.3	44.1	45.4	MN	2.844	98.3	91.7	21.2	2.835	.00	.00						
751.79	45	1.7		41.5	2.120	.9	.0	86.8	97.2	45.2	41.9	SD	2.771	97.2	86.8	23.7	2.793	.00	.00						
751.94	48	1.7		37.6	2.107	.9	.0	86.8	97.2	42.1	29.6	SD	2.697	97.2	86.8	26.7	2.730	.00	.00						
752.09	48	1.7		32.2	2.146	1.1	.0	98.6	99.7	45.1	35.4	DN	2.652	99.7	98.6	21.4	2.697	.00	.00						
752.25	47	1.7		35.7	2.158	1.5		105.6	100.0	44.5	51.3	GR	2.650	100.0	100.0	15.7	2.740	.00	.00	4	78				
752.40	48	1.7		42.5	2.058	3.8		108.7	100.0	41.0	54.4	GR	2.650	100.0	100.0	14.3	2.745	.00	.00	4	78				
752.55	53	1.7		45.7	1.873	6.6		118.3	100.0	36.2	63.8	GR	2.650	100.0	100.0	10.1	2.761	.00	.00	4	78				
752.70	54	1.7		39.5	1.805	10.1		112.8	100.0	32.1	58.4	S	2.650	100.0	100.0	12.4	2.752	.00	.00	4	78				
752.86	52	1.7		37.6	1.892	8.9		110.8	100.0	30.8	56.5	S	2.650	100.0	100.0	13.3	2.749	.00	.00	4	78				
753.01	50	1.7		39.0	2.000	7.1		111.7	100.0	33.2	57.4	GR	2.650	100.0	100.0	12.9	2.750	.00	.00	4	78				
753.16	51	1.7		46.1	2.003	11.1		113.8	100.0	45.0	59.4	GR	2.650	100.0	100.0	12.0	2.754	.00	.00	4	78				
753.31	50	1.7		45.8	1.894	9.3		112.5	100.0	43.7	58.1	GR	2.650	100.0	100.0	12.6	2.751	.00	.00	4	78				
753.47	51	1.7		45.6	1.830	7.5		113.2	100.0	44.8	58.8	GR	2.650	100.0	100.0	12.3	2.752	.00	.00	4	78				
753.62	60	1.7		45.0	1.790	10.3		130.1	100.0	60.1	76.2	GR	2.650	100.0	100.0	5.4	2.783	.00	.00	4	78				
753.77	61	1.7		48.4	1.809	9.8		132.1	100.0	60.6	78.5	GR	2.650	100.0	100.0	4.6	2.787	.00	.00	4	78				
753.92	60	1.7		47.1	1.761	12.9		130.7	100.0	58.8	76.9	GR	2.650	100.0	100.0	5.1	2.784	.00	.00	4	78				
754.08	56	1.7		47.8	1.734	12.6		122.6	100.0	56.9	68.1	GR	2.650	100.0	100.0	8.4	2.769	.00	.00	4	78				
754.23	50	1.7		44.3	1.850	7.3		111.2	100.0	30.3	55.6	S	2.650	100.0	100.0	13.4	2.747	.00	.00	4	7				
754.38	48	1.7		41.0	2.100	6.8		108.3	100.0	32.1	54.0	GR	2.650	100.0	100.0	14.5	2.744	.00	.00	4	78				
754.53	44	1.7		33.3	2.311	6.6		100.5	100.0	34.0	46.0	GR	2.650	100.0	100.0	18.3	2.730	.00	.00	4	7				
754.68	45	1.7		32.7	2.329	6.6		101.2	100.0	38.6	46.9	GR	2.650	100.0	100.0	17.9	2.732	.00	.00	4	78				
754.84	48	1.7		40.6	2.126	7.0		108.2	100.0	45.0	53.9	GR	2.650	100.0	100.0	14.5	2.744	.00	.00	4	78				
754.99	52	1.7		45.1	1.826	8.6		116.2	100.0	44.5	61.8	GR	2.650	100.0	100.0	11.0	2.758	.00	.00	4	78				
755.14	58	1.7		44.4	1.601	13.0		126.7	100.0	46.3	72.4	GR	2.650	100.0	100.0	6.7	2.776	.00	.00	4	78				
755.29	57	1.7		42.7	1.601	13.0		125.0	100.0	43.2	70.6	GR	2.650	100.0	100.0	7.4	2.773	.00	.00	4	78				
755.45	60	1.7		42.5	1.773	12.1		130.4	100.0	44.0	76.6	GR	2.650	100.0	100.0	5.3	2.784	.00	.00	4	78				
755.60	56	1.7		46.3	1.942	6.7		123.2	100.0	66.7	68.7	GR	2.650	100.0	100.0	8.1	2.770	.00	.00	4	78				
755.75	61	1.7		51.2	1.926	9.0		131.6	100.0	71.4	77.9	GR	2.650	100.0	100.0	4.8	2.786	.00	.00	4	78				
755.90	60	1.7		55.2	1.723	12.4		130.4	100.0	69.4	76.5	GR	2.650	100.0	100.0	5.3	2.783	.00	.00	4	78				
756.06	61	1.7		52.9	1.554	13.1		131.7	100.0	58.5	78.1	GR	2.650	100.0	100.0	4.8	2.786	.00	.00	4	78				
756.21	58	1.7		47.5	1.610	9.8		126.6	100.0	61.7	72.2	GR	2.650	100.0	100.0	6.8	2.776	.00	.00	4	78				
756.36	63	2.5	.3	42.0	1.838	10.2		112.6	321.2	59.2	83.0	GR	2.650	100.0	100.0	3.3	2.795	.00	.00	4	78				
756.51	64	2.5	.4	47.2	2.021	9.4		113.9	259.5	59.0	85.0	GR	2.650	100.0	100.0	2.7	2.798	.00	.00	4	78				
756.67	63	2.4	.4	48.7	2.074	9.7		114.8	245.8	57.9	82.4	GR	2.650	100.0	100.0	3.4	2.794	.00	.00	4	78				
756.82	61	2.3	.4	50.6	2.062	12.2		115.6	240.3	56.0	79.0	GR	2.650	100.0	100.0	4.5	2.788	.00	.00	4	78				
756.97	59	2.2	.2	49.2	1.970	9.9		113.4	327.8	55.6	74.8	GR	2.650	100.0	100.0	5.9	2.780	.00	.00	4	78				
757.12	58	2.2	.1	49.8	1.856	8.8		112.1	395.3	56.3	72.6	GR	2.650	100.0	100.0	6.7	2.777	.00	.00	4	78				
757.28	59	2.3	.2	48.6	1.859	7.6		111.9	369.0	58.0	74.8	GR	2.650	100.0	100.0	5.9	2.781	.00	.00	4	78				

Zone No. 1 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
757.43	56	2.4	.4	48.2	2.008	6.8		105.4	211.2	58.6	69.7	GR	2.650	100.0	100.0	7.7	2.772	.00	.00	4 78
757.58	58	2.3	.8	46.7	2.137	6.9		110.2	162.5	60.0	72.9	GR	2.650	100.0	100.0	6.6	2.777	.00	.00	4 78
757.73	57	2.2	.6	48.6	2.124	6.7		112.8	179.4	63.1	71.7	GR	2.650	100.0	100.0	7.0	2.775	.00	.00	4 78
757.89	57	2.0	.5	48.1	2.058	6.5		117.0	197.8	61.1	70.3	GR	2.650	100.0	100.0	7.5	2.773	.00	.00	4 78
758.04	54	1.8	.4	48.8	2.019	5.7		115.9	194.7	47.7	64.9	GR	2.650	100.0	100.0	9.6	2.763	.00	.00	4 78
758.19	48	2.1	.5	42.4	2.084	4.6		98.6	155.8	39.9	53.7	GR	2.650	99.7	98.6	14.6	2.744	.00	.00	4 78
758.34	42	2.6	.7	38.9	2.212	2.1		78.7	108.5	36.9	42.8	GR	2.650	95.3	78.7	20.1	2.725	.00	.00	4 78
758.49	38	3.4	2.3	31.8	2.358	.6		70.0	58.2	33.3	34.8	GR	2.650	70.0	70.0	21.7	2.711	.00	.00	4 7
758.65	37	3.6	3.1	29.4	2.434	.6	.0	96.2	74.3	33.7	32.3	GR	2.936	96.2	96.2	13.9	2.898	.00	.00	5
758.80	39	3.5	3.6	27.5	2.451	.6	.0	106.2	76.6	34.1	35.6	GR	2.922	100.0	100.0	11.4	2.886	.00	.00	5
758.95	41	3.3	3.4	27.0	2.441	.3	.0	112.3	83.9	32.8	39.2	GR	2.901	100.0	100.0	9.9	2.870	.00	.00	5
759.10	43	3.0	2.8	26.9	2.407	-.1	.0	117.8	96.5	52.5	44.5	GR	2.847	100.0	100.0	8.4	2.838	.00	.00	
759.26	49	2.6	2.1	30.4	2.347	-.2	.0	114.0	105.0	53.7	55.1	GR	2.847	100.0	100.0	7.9	2.835	.00	.00	
759.41	53	2.0	1.5	34.3	2.276	-.2	.0	115.3	109.6	57.9	62.5	GR	2.831	100.0	100.0	9.0	2.827	.00	.00	
759.56	60	1.7	1.2	35.4	2.203	.0	.0	131.3	135.9	59.5	75.8	GR	2.650	100.0	100.0	5.5	2.780	.00	.00	8
759.71	63	1.7	1.3	35.2	2.164	-.1	.0	108.8	96.5	60.0	61.7	DN	2.652	100.0	100.0	12.9	2.744	.00	.00	
759.87	64	1.8	1.5	37.9	2.153	-.1	.0	125.8	120.9	61.3	75.1	DN	2.650	100.0	100.0	5.7	2.772	.00	.00	8
760.02	61	1.8	1.3	40.7	2.154	-.1	.0	130.2	132.7	61.2	77.8	GR	2.650	100.0	100.0	4.8	2.809	.00	.00	8
760.17	58	1.6	1.2	41.2	2.157	-.2	.0	133.6	133.5	60.3	72.9	GR	2.650	100.0	100.0	6.5	2.819	.00	.00	8
760.32	52	1.6	1.2	35.1	2.197	-.2	.0	97.0	68.9	31.8	11.9	MN	2.763	97.0	97.0	29.0	2.770	.00	.00	
760.48	45	2.0	2.0	28.8	2.291	-.1	11.1	102.2	61.1	10.3	.0	MN	2.763	100.0	100.0	27.4	2.763	.00	.00	
760.63	41	2.7	3.5	21.6	2.396	-.1	.0	122.8	67.4	17.7	6.3	MN	2.747	100.0	100.0	18.5	2.753	.00	.00	
760.78	43	3.3	3.6	25.0	2.440	-.1	.0	123.1	95.5	33.4	43.9	GR	2.851	100.0	100.0	6.9	2.841	.00	.00	
760.93	53	3.0	2.3	32.1	2.400	-.1	.0	101.8	89.4	33.9	47.9	MN	2.984	100.0	100.0	10.7	2.905	.00	.00	5
761.09	59	2.4	1.7	42.2	2.303	-.2	.0	109.1	114.1	55.5	75.0	GR	2.650	100.0	100.0	5.8	2.955	.00	.00	8
761.24	63	2.1	1.5	40.9	2.225	-.1	.0	121.3	131.9	56.4	81.5	GR	2.650	100.0	100.0	3.7	2.871	.00	.00	8
761.39	67	2.0	1.6	37.7	2.183	-.2	.0	127.2	134.5	57.3	85.4	DN	2.650	100.0	100.0	2.6	2.794	.00	.00	8
761.54	69	2.0	1.7	34.0	2.170	-.2	.0	100.8	83.8	57.5	56.4	DN	2.653	100.0	100.0	14.1	2.733	.00	.00	
761.70	74	1.9	1.5	33.1	2.162	-.2	.0	99.5	81.7	59.0	47.4	DN	2.653	99.5	99.5	17.1	2.714	.00	.00	
761.85	73	1.8	1.3	38.6	2.160	-.2	.0	132.1	141.1	57.8	82.2	DN	2.650	100.0	100.0	3.5	2.787	.00	.00	8
762.00	72	1.8	1.3	40.8	2.165	-.2	.0	138.6	160.9	59.1	93.2	SD	2.650	100.0	100.0	.8	2.820	.00	.00	8
762.15	69	1.8	1.2	42.5	2.156	-.2	.0	134.0	154.8	57.5	86.8	SD	2.650	100.0	100.0	2.2	2.835	.00	.00	8
762.30	68	1.9	1.2	37.8	2.155	-.2	.0	123.5	137.1	55.7	75.5	DN	2.650	100.0	100.0	5.6	2.773	.00	.00	8
762.46	66	2.0	1.3	36.3	2.173	-.2	.0	117.7	125.1	53.1	72.6	DN	2.650	100.0	100.0	6.7	2.767	.00	.00	8
762.61	59	2.1	1.8	32.1	2.220	-.2	.0	111.4	100.4	52.0	63.5	DN	2.655	100.0	100.0	9.0	2.749	.00	.00	
762.76	52	2.3	2.0	30.9	2.270	-.1	.0	118.2	104.5	49.4	61.5	GR	2.697	100.0	100.0	7.3	2.774	.00	.00	
762.91	49	2.3	2.1	29.5	2.306	-.1	.0	121.9	106.2	49.5	55.1	GR	2.733	100.0	100.0	7.8	2.786	.00	.00	
763.07	50	2.3	2.0	30.9	2.320	-.1	.0	120.4	106.5	51.0	58.1	GR	2.805	100.0	100.0	7.5	2.817	.00	.00	
763.22	51	2.3	2.0	29.0	2.321	-.1	.0	131.0	118.3	52.4	59.4	GR	2.736	100.0	100.0	5.7	2.792	.00	.00	
763.37	51	2.2	2.0	31.6	2.315	-.1	.0	121.0	104.4	52.1	58.6	GR	2.820	100.0	100.0	7.9	2.823	.00	.00	
763.52	52	2.1	2.0	29.9	2.307	-.1	.0	131.1	116.6	55.5	60.9	GR	2.736	100.0	100.0	6.0	2.793	.00	.00	
763.68	55	2.1	1.9	32.0	2.291	-.1	.0	128.3	117.6	56.9	67.3	GR	2.769	100.0	100.0	5.5	2.808	.00	.00	
763.83	60	2.0	1.7	32.8	2.254	-.2	.0	130.9	128.5	57.8	76.9	GR	2.650	100.0	100.0	3.6	2.787	.00	.00	
763.98	62	1.8	1.2	37.3	2.205	-.2	.0	130.7	143.4	62.6	80.6	GR	2.650	100.0	100.0	4.0	2.807	.00	.00	8
764.13	63	1.7	1.0	39.6	2.166	-.3	.0	136.3	159.9	62.7	81.7	GR	2.650	100.0	100.0	3.6	2.805	.00	.00	8
764.29	65	1.7	1.0	40.6	2.148	-.3	.0	139.7	172.4	64.3	85.8	GR	2.650	100.0	100.0	2.5	2.803	.00	.00	8
764.44	68	1.7	1.2	38.2	2.148	-.2	.0	131.5	138.6	65.3	75.5	DN	2.650	100.0	100.0	5.6	2.772	.00	.00	8
764.59	67	1.6	1.2	37.7	2.139	-.2	.0	108.5	100.5	63.8	68.5	DN	2.647	100.0	100.0	12.5	2.758	.00	.00	

764.74	64	1.6	1.0	38.1	2.134	-.2	.0	108.5	106.0	64.1	69.1	DN	2.646	100.0	100.0	12.7	2.759	.00	.00	
764.90	59	1.6	.9	41.9	2.130	-.2	.0	98.5	95.8	50.5	60.0	SD	2.786	98.5	98.5	17.4	2.807	.00	.00	
765.05	56	1.7	1.0	42.0	2.153	-.3	.0	100.2	105.4	52.2	69.3	GR	2.840	100.0	100.0	13.5	2.827	.00	.00	
765.20	55	2.1	1.2	38.5	2.206	-.1	.0	100.9	104.3	51.0	66.4	GR	2.821	100.0	100.0	11.3	2.823	.00	.00	
765.35	50	2.6	1.9	32.6	2.280	-.1	.0	103.6	97.1	50.6	56.8	GR	2.783	100.0	100.0	9.8	2.808	.00	.00	
765.51	51	2.7	2.4	28.6	2.346	-.1	.0	122.1	110.8	50.7	58.4	GR	2.782	100.0	100.0	5.5	2.809	.00	.00	
765.66	51	2.4	2.2	30.6	2.360	-.1	.0	124.1	108.3	53.5	60.0	GR	2.888	100.0	100.0	6.2	2.849	.00	.00	
765.81	57	2.1	1.9	35.9	2.329	-.1	.0	120.9	113.3	52.9	71.2	GR	2.650	100.0	100.0	5.6	2.895	.00	.00	

Zone No. 1 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
765.96	61	2.1	1.7	38.0	2.274	-.2	.0	119.7	117.8	56.1	78.4	GR	2.650	100.0	100.0	4.7	2.875	.00	.00	8
766.11	63	2.2	1.6	37.0	2.237	-.2	.0	121.5	130.8	56.1	83.1	GR	2.650	100.0	100.0	3.2	2.829	.00	.00	8
766.27	61	2.2	1.6	35.5	2.217	-.2	.0	118.4	125.0	55.3	79.3	GR	2.650	100.0	100.0	4.4	2.793	.00	.00	8
766.42	58	2.2	1.6	36.9	2.211	-.2	.0	113.8	113.5	55.1	73.1	GR	2.650	100.0	100.0	6.5	2.806	.00	.00	8
766.57	59	2.2	1.7	37.5	2.211	-.2	.0	113.1	112.2	54.5	74.4	GR	2.650	100.0	100.0	6.0	2.815	.00	.00	8
766.72	60	2.3	1.8	35.9	2.211	-.1	.0	113.9	114.5	57.6	77.5	GR	2.650	100.0	100.0	5.0	2.793	.00	.00	8
766.88	60	2.1	1.4	36.2	2.213	-.1	.0	118.3	129.6	57.9	77.2	GR	2.650	100.0	100.0	5.0	2.799	.00	.00	8
767.03	57	2.0	1.4	37.8	2.197	-.1	.0	115.5	119.9	59.6	71.1	GR	2.650	100.0	100.0	7.2	2.807	.00	.00	8
767.18	55	1.8	1.2	42.0	2.177	-.1	.0	99.7	93.8	60.8	67.1	GR	2.888	99.7	99.7	13.5	2.845	.00	.00	
767.33	58	1.7	1.1	41.4	2.157	-.1	.0	128.7	140.1	60.4	73.2	GR	2.650	100.0	100.0	6.5	2.821	.00	.00	8
767.49	58	1.6	1.0	39.8	2.148	-.2	.0	131.4	145.5	60.4	73.2	GR	2.650	100.0	100.0	6.4	2.793	.00	.00	8
767.64	59	1.7	1.0	39.0	2.148	-.4	.0	131.7	147.1	63.4	75.2	GR	2.650	100.0	100.0	5.7	2.782	.00	.00	8
767.79	59	1.7	1.1	38.6	2.155	-.2	.0	130.7	138.0	61.4	74.8	GR	2.650	100.0	100.0	5.9	2.782	.00	.00	8
767.94	60	1.7	1.1	38.3	2.158	-.2	.0	132.0	143.3	63.7	76.7	GR	2.650	100.0	100.0	5.2	2.782	.00	.00	8
768.10	60	1.7	1.1	38.8	2.157	-.2	.0	132.3	141.8	62.8	76.0	GR	2.650	100.0	100.0	5.5	2.786	.00	.00	8
768.25	59	1.6	1.1	38.7	2.145	-.2	.0	132.9	142.2	61.7	74.6	GR	2.650	100.0	100.0	5.9	2.776	.00	.00	8
768.40	57	1.6	1.0	39.0	2.146	-.2	.0	128.9	139.3	60.5	71.2	GR	2.650	100.0	100.0	7.2	2.781	.00	.00	8
768.55	56	1.8	1.1	36.8	2.167	-.2	.0	109.4	109.4	56.1	69.5	GR	2.667	100.0	100.0	10.7	2.768	.00	.00	
768.71	54	2.0	1.5	33.7	2.213	-.1	.0	111.9	106.0	53.4	64.2	GR	2.678	100.0	100.0	9.6	2.765	.00	.00	
768.86	53	2.2	1.8	31.6	2.253	-.1	.0	115.4	106.2	52.3	62.5	GR	2.689	100.0	100.0	7.9	2.770	.00	.00	
769.01	51	2.3	1.8	33.2	2.268	-.1	.0	109.5	97.4	52.8	58.4	GR	2.775	100.0	100.0	9.8	2.805	.00	.00	
769.16	55	2.2	1.7	33.4	2.253	-.1	.0	116.9	111.4	53.3	67.4	GR	2.727	100.0	100.0	7.0	2.795	.00	.00	
769.32	61	2.0	1.6	34.5	2.229	-.1	.0	122.0	123.4	52.8	78.6	GR	2.650	100.0	100.0	4.5	2.790	.00	.00	
769.47	64	2.0	1.5	33.6	2.206	-.1	.0	113.8	106.0	57.6	67.7	DN	2.655	100.0	100.0	8.7	2.758	.00	.00	
769.62	65	1.9	1.4	37.5	2.185	-.2	.0	130.8	141.9	57.7	84.8	DN	2.650	100.0	100.0	2.7	2.793	.00	.00	8
769.77	63	2.0	1.3	36.8	2.172	-.2	.0	121.3	129.7	55.6	74.9	DN	2.650	100.0	100.0	5.8	2.772	.00	.00	8
769.92	62	2.1	1.3	37.3	2.164	-.2	.0	116.3	128.6	56.1	75.2	DN	2.650	100.0	100.0	5.7	2.772	.00	.00	8
770.08	62	2.2	1.2	34.6	2.162	-.2	.0	94.1	97.8	57.8	57.7	DN	2.652	97.8	94.1	14.1	2.736	.00	.00	
770.23	64	2.1	1.2	33.8	2.159	-.2	.0	94.8	93.9	55.5	51.1	DN	2.652	94.8	94.8	16.2	2.722	.00	.00	
770.38	64	2.0	1.2	34.1	2.164	-.2	.0	97.7	97.0	54.5	55.0	DN	2.653	97.7	97.7	14.8	2.730	.00	.00	
770.53	58	2.2	1.5	37.8	2.178	-.2	.0	111.9	118.8	54.1	73.1	GR	2.650	100.0	100.0	6.5	2.791	.00	.00	8
770.69	50	2.6	1.6	37.7	2.210	-.1	.0	81.2	71.6	39.9	39.2	MN	2.812	81.2	81.2	20.4	2.817	.00	.00	
770.84	42	3.2	2.1	32.0	2.258	-.1	.0	86.6	79.2	41.3	42.9	GR	2.744	86.6	86.6	14.8	2.780	.00	.00	
770.99	41	3.7	3.1	25.7	2.321	-.1	.0	99.8	82.6	38.1	39.6	GR	2.698	99.8	99.8	10.8	2.745	.00	.00	
771.14	42	3.6	3.9	25.5	2.359	-.1	.0	108.1	80.5	42.1	41.1	GR	2.737	100.0	100.0	9.3	2.776	.00	.00	
771.30	46	2.4	2.4	29.5	2.350	-.1	.0	119.7	94.3	54.7	49.8	GR	2.823	100.0	100.0	9.1	2.825	.00	.00	
771.45	51	1.9	1.9	32.1	2.286	-.1	.0	124.7	100.6	54.0	58.7	GR	2.775	100.0	100.0	8.7	2.806	.00	.00	
771.60	55	1.6	1.3	36.2	2.209	-.2	.0	121.7	110.3	53.4	67.5	GR	2.734	100.0	100.0	9.7	2.796	.00	.00	
771.75	58	1.7	1.4	35.4	2.168	.3	.0	111.7	96.7	49.9	64.7	DN	2.652	100.0	100.0	11.8	2.751	.00	.00	
771.91	56	1.8	1.3	35.9	2.177	-.1	.0	110.0	106.2	50.2	68.8	GR	2.664	100.0	100.0	10.3	2.765	.00	.00	

772.06	49	2.2	1.8	32.3	2.230	.0	.0	107.1	91.9	49.7	56.2	GR	2.690	100.0	100.0	11.1	2.761	.00	.00	
772.21	44	2.4	2.0	31.0	2.290	.2	.0	106.5	88.1	50.3	45.7	GR	2.764	100.0	100.0	12.5	2.793	.00	.00	
772.36	44	2.5	2.4	28.8	2.330	.3	.0	115.6	91.2	49.9	45.9	GR	2.771	100.0	100.0	10.3	2.797	.00	.00	
772.52	44	2.2	2.3	32.5	2.327	.3	.0	110.3	81.9	47.6	45.7	GR	2.864	100.0	100.0	12.8	2.846	.00	.00	
772.67	46	1.7	1.4	35.8	2.280	.2	.0	115.7	95.7	45.5	50.3	GR	2.880	100.0	100.0	13.9	2.852	.00	.00	
772.82	42	1.7	1.2	34.0	2.230	.3	.0	111.8	94.3	43.2	41.7	GR	2.754	100.0	100.0	17.1	2.784	.00	.00	
772.97	40	2.5	1.4	25.9	2.251	.3	.0	106.4	100.5	37.1	35.6	DN	2.655	100.0	100.0	15.0	2.698	.00	.00	
773.13	35	6.1	4.3	17.9	2.361	.3	.0	95.1	81.4	31.0	26.3	DN	2.653	95.1	95.1	10.7	2.687	.00	.00	
773.28	38	9.4	9.1	15.5	2.454	.1	.0	109.1	94.8	36.4	33.9	GR	2.672	100.0	100.0	3.5	2.713	.00	.00	
773.43	44	5.0	4.7	21.3	2.449	-.1	.0	120.3	109.2	62.3	45.2	GR	2.765	100.0	100.0	3.5	2.796	.00	.00	
773.58	52	2.7	2.5	28.4	2.360	-.1	.0	127.1	114.6	60.8	60.6	GR	2.804	100.0	100.0	4.4	2.819	.00	.00	
773.73	56	1.9	1.9	36.0	2.273	-.1	.0	119.9	100.0	60.0	68.5	GR	2.900	100.0	100.0	7.9	2.848	.00	.00	5
773.89	58	1.6	1.3	35.8	2.223	-.1	.0	133.3	126.9	60.8	73.2	GR	2.650	100.0	100.0	6.4	2.802	.00	.00	8
774.04	64	1.5	1.1	37.2	2.195	-.2	.0	146.9	154.7	60.1	83.4	GR	2.650	100.0	100.0	3.1	2.797	.00	.00	8
774.19	64	1.5	1.2	35.6	2.175	-.1	.0	121.7	112.1	62.2	68.6	DN	2.653	100.0	100.0	10.3	2.759	.00	.00	
774.34	62	1.5	1.2	38.2	2.159	-.1	.0	141.2	145.9	62.0	79.6	DN	2.650	100.0	100.0	4.3	2.781	.00	.00	8

Zone No. 1 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
774.50	61	1.6	1.2	39.6	2.148	-.1	.0	139.2	141.5	61.8	79.4	GR	2.650	100.0	100.0	4.3	2.791	.00	.00	8
774.65	60	1.6	1.3	38.9	2.148	-.1	.0	137.2	135.9	59.7	76.8	GR	2.650	100.0	100.0	5.2	2.781	.00	.00	8
774.80	59	1.6	1.4	39.7	2.160	-.1	.0	133.2	126.4	58.7	74.4	GR	2.650	100.0	100.0	6.0	2.802	.00	.00	8
774.95	56	1.7	1.4	39.9	2.180	.0	.0	108.1	95.6	57.7	69.6	GR	2.815	100.0	100.0	11.6	2.821	.00	.00	
775.11	56	1.8	1.5	38.0	2.211	.0	.0	110.9	100.2	57.0	69.8	GR	2.817	100.0	100.0	9.8	2.822	.00	.00	
775.26	59	1.9	1.6	36.1	2.238	.0	.0	121.9	115.8	56.0	75.0	GR	2.650	100.0	100.0	5.8	2.820	.00	.00	8
775.41	59	2.0	1.6	34.6	2.257	.0	.0	124.2	122.1	54.7	75.0	GR	2.650	100.0	100.0	5.1	2.814	.00	.00	
775.56	60	2.0	1.7	38.3	2.249	.0	.0	120.2	116.3	53.4	76.3	GR	2.650	100.0	100.0	5.3	2.857	.00	.00	8
775.72	56	2.2	1.8	35.9	2.237	.0	.0	107.8	97.8	52.2	68.4	GR	2.796	100.0	100.0	8.5	2.816	.00	.00	
775.87	54	2.5	2.2	34.7	2.228	.0	.0	98.6	83.9	45.5	61.7	MN	2.735	98.6	98.6	10.3	2.791	.00	.00	
776.02	55	2.8	2.5	29.3	2.240	.0	.0	100.6	83.5	45.0	53.3	DN	2.655	100.0	100.0	10.6	2.727	.00	.00	
776.17	59	3.2	2.8	29.7	2.260	.0	.0	102.6	93.0	45.8	63.8	DN	2.655	100.0	100.0	6.4	2.750	.00	.00	
776.33	61	3.2	2.7	29.0	2.271	.0	.0	105.4	97.8	48.4	63.3	DN	2.654	100.0	100.0	5.8	2.749	.00	.00	
776.48	59	2.7	2.4	32.8	2.261	.0	.0	111.1	104.4	51.4	74.0	GR	2.650	100.0	100.0	4.4	2.794	.00	.00	
776.63	60	2.3	2.0	35.1	2.229	.0	.0	111.8	106.8	53.6	75.7	GR	2.650	100.0	100.0	5.5	2.797	.00	.00	8
776.78	61	2.1	1.7	39.3	2.194	.0	.0	119.5	118.6	55.4	77.9	GR	2.650	100.0	100.0	4.8	2.825	.00	.00	8
776.94	64	2.0	1.6	39.7	2.168	.0	.0	127.0	133.1	57.1	84.9	GR	2.650	100.0	100.0	2.7	2.809	.00	.00	8
777.09	66	2.0	1.6	42.4	2.161	.0	.0	128.9	137.4	57.5	87.8	SD	2.650	100.0	100.0	2.0	2.837	.00	.00	8
777.24	68	2.0	1.6	41.7	2.158	.0	.0	127.6	135.9	57.5	87.0	SD	2.650	100.0	100.0	2.2	2.826	.00	.00	8
777.39	67	2.1	1.6	42.4	2.156	.0	.0	117.4	113.4	53.2	73.7	SD	2.650	100.0	100.0	6.3	2.833	.00	.00	8
777.54	64	2.1	1.7	39.6	2.150	.0	.0	123.8	126.9	57.0	83.7	SD	2.650	100.0	100.0	3.0	2.792	.00	.00	8
777.70	62	2.1	1.8	40.3	2.151	.0	.0	121.8	121.7	56.1	81.2	GR	2.650	100.0	100.0	3.8	2.801	.00	.00	8
777.85	62	2.1	1.7	37.7	2.152	.0	.0	113.1	104.6	52.4	70.2	SD	2.650	100.0	100.0	7.6	2.768	.00	.00	8
778.00	63	2.1	1.8	39.8	2.160	.0	.0	116.4	110.3	53.2	74.6	SD	2.650	100.0	100.0	5.9	2.804	.00	.00	8
778.15	59	2.2	1.9	36.7	2.179	.0	.0	114.4	108.1	52.8	74.5	GR	2.650	100.0	100.0	6.0	2.777	.00	.00	8
778.31	54	2.5	2.3	33.5	2.218	.0	.0	102.5	87.1	48.6	64.7	GR	2.680	100.0	100.0	9.2	2.767	.00	.00	
778.46	51	2.8	2.8	27.3	2.280	.0	.0	111.9	92.4	44.4	55.8	DN	2.654	100.0	100.0	7.4	2.733	.00	.00	
778.61	49	3.1	3.2	25.9	2.337	.0	.0	122.2	102.9	45.8	55.2	GR	2.690	100.0	100.0	5.0	2.762	.00	.00	
778.76	52	2.9	2.7	27.8	2.343	.0	.0	124.0	113.5	48.4	60.5	GR	2.739	100.0	100.0	4.1	2.794	.00	.00	
778.92	53	2.6	2.3	31.4	2.304	.0	.0	113.8	102.4	51.6	62.5	GR	2.784	100.0	100.0	6.6	2.811	.00	.00	
779.07	56	2.4	2.0	33.1	2.247	.0	.0	112.8	104.0	54.6	69.1	GR	2.700	100.0	100.0	6.4	2.786	.00	.00	
779.22	57	2.1	1.8	36.2	2.219	.0	.0	113.2	105.5	57.0	71.5	GR	2.650	100.0	100.0	7.0	2.805	.00	.00	8

779.37	60	2.0	1.6	38.7	2.206	.0	.0	119.9	117.3	58.0	75.9	GR	2.650	100.0	100.0	5.5	2.827	.00	.00		8	
779.53	62	1.9	1.3	41.0	2.197	.0	.0	129.1	138.7	58.5	81.1	GR	2.650	100.0	100.0	3.8	2.850	.00	.00		8	
779.68	66	1.8	1.2	41.1	2.179	-.1	.0	136.5	155.2	58.7	87.7	GR	2.650	100.0	100.0	2.0	2.836	.00	.00		8	
779.83	67	1.7	1.1	41.0	2.158	-.1	.0	139.6	163.3	57.4	86.7	SD	2.650	100.0	100.0	2.3	2.817	.00	.00		8	
779.98	68	1.7	1.3	38.2	2.149	.0	.0	129.7	133.9	56.6	75.9	DN	2.650	100.0	100.0	5.5	2.773	.00	.00		8	
780.14	60	1.9	1.4	36.8	2.170	.0	.0	122.0	126.7	54.9	74.5	DN	2.650	100.0	100.0	6.0	2.771	.00	.00		8	
780.29	57	2.2	1.6	33.6	2.216	.0	.0	113.4	110.3	54.5	70.7	GR	2.650	100.0	100.0	7.1	2.767	.00	.00			
780.44	52	2.3	1.7	33.7	2.255	.0	.0	108.7	100.0	56.0	60.7	GR	2.762	100.0	100.0	9.6	2.801	.00	.00			
780.59	57	2.2	1.7	31.0	2.262	.0	.0	124.4	125.2	56.3	70.6	GR	2.650	100.0	100.0	4.6	2.769	.00	.00			
780.75	61	2.1	1.6	31.2	2.243	.0	.0	120.5	117.3	56.5	66.7	DN	2.656	100.0	100.0	6.6	2.756	.00	.00			
780.90	64	2.0	1.5	32.4	2.221	.0	.0	116.2	111.0	59.3	66.4	DN	2.655	100.0	100.0	8.1	2.755	.00	.00			
781.05	65	2.0	1.5	36.5	2.197	.0	.0	126.8	132.8	60.5	82.9	DN	2.650	100.0	100.0	3.3	2.789	.00	.00		8	
781.20	66	2.0	1.4	37.2	2.180	.0	.0	126.3	134.7	60.8	81.1	DN	2.650	100.0	100.0	3.8	2.785	.00	.00		8	
781.35	69	1.9	1.4	39.0	2.159	-.1	.0	129.0	140.8	60.6	84.6	DN	2.650	100.0	100.0	2.8	2.791	.00	.00		8	
781.51	70	1.9	1.3	37.9	2.148	-.2	.0	121.7	125.8	60.4	73.5	DN	2.650	100.0	100.0	6.3	2.768	.00	.00		8	
781.66	71	1.9	1.4	39.5	2.139	-.1	.0	128.3	135.7	61.2	80.2	DN	2.650	100.0	100.0	4.1	2.782	.00	.00		8	
781.81	70	1.9	1.3	39.9	2.141	.0	.0	130.6	144.2	59.9	83.8	DN	2.650	100.0	100.0	3.0	2.789	.00	.00		8	
781.96	72	1.9	1.3	40.8	2.144	-.1	.0	134.1	154.3	59.4	90.0	SD	2.650	100.0	100.0	1.5	2.803	.00	.00		8	
782.12	68	1.9	1.3	43.1	2.144	-.1	.0	133.1	150.9	58.6	87.4	SD	2.650	100.0	100.0	2.1	2.833	.00	.00		8	
782.27	67	1.9	1.3	43.9	2.142	.0	.0	128.4	142.5	57.0	82.2	SD	2.650	100.0	100.0	3.5	2.841	.00	.00		8	
782.42	60	2.0	1.4	43.4	2.147	.0	.0	121.7	126.4	56.7	76.3	GR	2.650	100.0	100.0	5.3	2.839	.00	.00		8	
782.57	57	2.0	1.5	44.0	2.155	.0	.0	116.2	114.6	58.4	71.2	GR	2.650	100.0	100.0	7.2	2.854	.00	.00		8	
782.73	54	2.0	1.5	42.7	2.172	.0	.0	92.0	81.2	57.3	65.6	GR	2.906	92.0	92.0	14.5	2.851	.00	.00	5		
782.88	55	2.0	1.6	41.2	2.184	.0	.0	96.0	86.1	57.0	67.4	GR	2.876	96.0	96.0	12.8	2.842	.00	.00			

Zone No. 1 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
783.03	55	2.0	1.6	38.4	2.193	.0	.0	101.7	92.4	56.9	67.5	GR	2.782	100.0	100.0	11.2	2.811	.00	.00	
783.18	55	2.1	1.7	37.3	2.193	.0	.0	102.9	91.1	54.8	67.3	GR	2.741	100.0	100.0	10.7	2.797	.00	.00	
783.34	56	2.2	1.8	36.8	2.196	.0	.0	102.6	93.2	53.2	69.8	GR	2.718	100.0	100.0	9.5	2.793	.00	.00	
783.49	60	2.4	1.9	33.8	2.202	.0	.0	102.2	94.0	51.1	67.8	DN	2.655	100.0	100.0	8.9	2.758	.00	.00	
783.64	59	2.5	2.0	32.7	2.202	.0	.0	97.6	87.4	51.2	60.3	DN	2.655	97.6	97.6	11.0	2.742	.00	.00	
783.79	59	2.6	2.0	33.5	2.192	.0	.0	94.7	84.1	51.4	61.8	DN	2.655	94.7	94.7	11.2	2.745	.00	.00	
783.95	59	2.6	2.1	34.1	2.174	.0	.0	90.1	76.9	52.9	58.9	DN	2.653	90.1	90.1	13.1	2.738	.00	.00	
784.10	59	2.5	2.2	35.9	2.157	.0	.0	88.9	75.0	53.6	64.0	DN	2.651	88.9	88.9	12.7	2.749	.00	.00	
784.25	61	2.4	2.1	34.8	2.146	.0	.0	85.5	67.8	52.5	52.2	DN	2.651	85.5	85.5	16.7	2.724	.00	.00	
784.40	61	2.4	2.2	34.7	2.143	.0	.0	85.3	65.4	54.4	50.3	DN	2.651	85.3	85.3	17.4	2.720	.00	.00	
784.56	66	2.4	2.1	34.2	2.145	.0	.0	85.9	65.5	56.2	48.3	DN	2.651	85.9	85.9	17.8	2.716	.00	.00	
784.71	65	2.3	2.0	33.4	2.153	.0	.0	89.0	67.9	57.3	46.0	DN	2.652	89.0	89.0	18.0	2.711	.00	.00	
784.86	65	2.1	1.8	34.0	2.162	.0	.0	94.9	77.2	57.7	53.6	DN	2.652	94.9	94.9	15.3	2.727	.00	.00	
785.01	64	2.0	1.6	37.1	2.171	-.1	.0	120.7	119.9	55.3	76.9	DN	2.650	100.0	100.0	5.2	2.776	.00	.00	8
785.16	64	2.0	1.5	40.2	2.178	-.1	.0	119.0	116.9	51.5	72.6	MN	2.650	100.0	100.0	6.7	2.823	.00	.00	8
785.32	62	2.1	1.5	40.8	2.199	-.1	.0	93.0	81.7	46.8	59.0	MN	2.882	93.0	93.0	15.2	2.848	.00	.00	
785.47	58	2.6	2.0	33.4	2.235	.0	.0	95.2	81.4	41.6	50.4	MN	2.731	95.2	95.2	13.4	2.780	.00	.00	
785.62	49	3.5	2.9	28.7	2.290	.0	.0	92.7	74.7	35.2	39.9	MN	2.714	92.7	92.7	13.0	2.761	.00	.00	
785.77	43	4.5	4.1	23.5	2.349	.0	.0	103.0	85.9	33.1	43.6	MN	2.685	100.0	100.0	7.5	2.738	.00	.00	
785.93	39	4.7	4.7	22.9	2.401	.0	.0	104.8	79.9	33.1	35.3	GR	2.744	100.0	100.0	8.8	2.776	.00	.00	
786.08	37	5.0	5.4	20.3	2.430	.0	.0	115.5	86.8	33.1	32.9	GR	2.728	100.0	100.0	7.3	2.763	.00	.00	
786.23	36	5.5	5.8	18.7	2.447	.0	.0	119.7	90.4	33.1	30.1	GR	2.721	100.0	100.0	6.9	2.755	.00	.00	
786.38	42	5.4	5.8	20.5	2.449	.0	.0	119.0	99.6	35.8	42.1	GR	2.747	100.0	100.0	3.9	2.784	.00	.00	
786.54	50	4.2	4.0	26.1	2.429	.0	.0	111.5	102.2	51.4	56.5	GR	2.873	100.0	100.0	3.4	2.847	.00	.00	

786.69	58	3.2	3.0	29.4	2.366	.0	.0	122.0	123.8	56.2	72.8	GR	2.650	100.0	100.0	.7	2.837	.00	.00		
786.84	62	2.3	2.1	32.9	2.284	.0	.0	127.2	127.7	59.3	80.3	GR	2.650	100.0	100.0	1.7	2.814	.00	.00		
786.99	63	1.7	1.4	35.3	2.203	-.1	.0	131.5	129.4	59.2	77.7	DN	2.650	100.0	100.0	4.9	2.778	.00	.00		8
787.15	63	1.3	1.0	40.6	2.146	-.1	.0	155.8	162.9	59.5	83.2	GR	2.650	100.0	100.0	3.2	2.801	.00	.00		8
787.30	60	1.2	.9	45.9	2.112	-.1	.0	157.2	162.9	60.1	76.2	GR	2.650	100.0	100.0	5.4	2.843	.00	.00		8
787.45	54	1.3	.9	43.1	2.125	.2	.0	107.0	99.6	59.9	65.5	GR	2.818	100.0	100.0	16.0	2.818	.00	.00		8
787.60	49	1.7	1.2	38.6	2.157	-.1	.0	100.9	88.9	52.9	56.3	GR	2.733	100.0	100.0	16.3	2.784	.00	.00		
787.76	50	1.8	1.1	34.9	2.204	-.1	.0	109.8	109.4	49.4	58.0	GR	2.704	100.0	100.0	12.4	2.773	.00	.00		
787.91	56	1.9	1.3	34.3	2.217	.0	.0	112.8	113.2	46.5	63.6	MN	2.700	100.0	100.0	9.9	2.778	.00	.00		
788.06	55	2.4	1.5	31.6	2.242	-.1	.0	102.6	97.5	40.5	48.8	MN	2.702	100.0	100.0	12.9	2.761	.00	.00		
788.21	51	3.9	3.7	26.2	2.273	-.1	.0	91.2	71.8	38.4	46.2	DN	2.655	91.2	91.2	10.6	2.711	.00	.00		
788.37	46	4.5	4.2	23.8	2.322	-.1	.0	99.3	85.1	36.3	48.9	GR	2.654	99.3	99.3	6.8	2.719	.00	.00		
788.52	41	4.4	4.3	21.9	2.350	-.1	.0	106.2	85.6	38.7	40.8	GR	2.668	100.0	100.0	7.8	2.716	.00	.00		
788.67	39	4.3	4.1	25.2	2.362	-.1	.0	98.1	74.5	39.6	36.3	GR	2.741	98.1	98.1	10.7	2.774	.00	.00		
788.82	39	3.8	3.7	27.7	2.358	-.1	.0	95.4	71.0	42.2	36.8	GR	2.794	95.4	95.4	12.4	2.806	.00	.00		
788.97	42	3.2	3.1	31.2	2.342	-.1	.0	94.2	71.3	44.0	41.7	GR	2.853	94.2	94.2	13.2	2.841	.00	.00		
789.13	47	2.8	2.5	29.4	2.322	-.1	.0	109.5	93.0	42.6	51.5	GR	2.767	100.0	100.0	8.8	2.799	.00	.00		
789.28	45	2.8	2.5	28.9	2.307	-.1	.0	109.2	90.5	43.1	48.2	GR	2.730	100.0	100.0	9.9	2.778	.00	.00		
789.43	46	2.7	2.4	29.2	2.296	-.1	.0	110.5	90.6	44.7	49.4	GR	2.717	100.0	100.0	9.9	2.773	.00	.00		
789.58	43	2.4	2.1	31.7	2.297	-.1	.0	104.8	83.3	43.9	44.2	GR	2.796	100.0	100.0	13.4	2.809	.00	.00		
789.74	46	2.3	2.1	30.6	2.303	-.1	.0	112.8	92.1	47.2	49.2	GR	2.773	100.0	100.0	10.8	2.800	.00	.00		
789.89	47	2.0	1.8	30.4	2.309	-.1	.0	123.4	103.6	46.2	50.8	GR	2.776	100.0	100.0	10.0	2.802	.00	.00		
790.04	48	2.0	1.6	29.3	2.316	-.1	.0	130.1	119.2	48.2	52.9	GR	2.750	100.0	100.0	8.3	2.792	.00	.00		
790.19	50	1.9	1.5	30.2	2.302	-.1	.0	133.0	122.6	51.0	56.9	GR	2.746	100.0	100.0	7.8	2.793	.00	.00		
790.35	53	1.9	1.3	33.7	2.286	-.1	.0	122.4	121.8	48.0	62.9	GR	2.831	100.0	100.0	8.2	2.828	.00	.00		
790.50	53	1.9	1.4	35.1	2.232	-.2	.0	102.3	87.5	40.1	44.4	MN	2.780	100.0	100.0	16.6	2.800	.00	.00		
790.65	52	2.5	1.5	31.8	2.218	-.1	.0	97.6	92.7	41.8	49.6	MN	2.682	97.6	97.6	13.6	2.743	.00	.00		
790.80	47	3.9	3.4	25.4	2.251	-.1	.0	84.2	63.5	39.0	32.1	DN	2.655	84.2	84.2	15.9	2.694	.00	.00		
790.96	43	5.5	5.2	21.1	2.332	-.1	.0	91.0	71.0	38.2	35.9	DN	2.653	91.0	91.0	9.8	2.698	.00	.00		
791.11	44	5.3	4.7	23.5	2.376	-.1	.0	100.5	88.4	37.0	45.7	GR	2.705	100.0	100.0	5.9	2.762	.00	.00		
791.26	47	3.9	3.4	25.9	2.355	-.1	.0	108.8	99.9	40.6	52.4	GR	2.719	100.0	100.0	5.5	2.778	.00	.00		
791.41	50	3.2	2.7	29.6	2.303	-.1	.0	104.7	94.6	42.2	56.8	GR	2.726	100.0	100.0	7.3	2.785	.00	.00		

Zone No. 1 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
791.57	47	3.1	2.8	29.0	2.275	-.1	.0	100.1	84.1	42.5	51.8	GR	2.687	100.0	100.0	9.7	2.752	.00	.00	
791.72	45	3.4	3.0	27.7	2.281	-.1	.0	96.8	79.5	44.0	47.4	GR	2.681	96.8	96.8	10.5	2.739	.00	.00	
791.87	44	3.5	3.3	28.0	2.299	-.1	.0	97.1	77.6	46.1	45.9	GR	2.704	97.1	97.1	10.4	2.759	.00	.00	
792.02	46	2.9	2.6	29.0	2.298	-.1	.0	106.8	88.7	51.8	49.6	GR	2.714	100.0	100.0	9.6	2.772	.00	.00	
792.18	49	2.3	2.1	31.1	2.276	-.1	.0	114.2	97.1	53.3	55.7	GR	2.724	100.0	100.0	9.2	2.782	.00	.00	
792.33	51	2.0	1.7	35.4	2.238	-.1	.0	106.9	92.4	58.5	58.9	GR	2.786	100.0	100.0	11.6	2.809	.00	.00	
792.48	52	1.8	1.4	37.4	2.202	-.1	.0	106.6	93.6	60.2	60.9	GR	2.776	100.0	100.0	12.8	2.806	.00	.00	
792.63	55	1.6	1.1	43.3	2.168	-.3	.0	102.2	94.0	62.7	66.5	GR	2.927	100.0	100.0	14.5	2.855	.00	.00	5
792.78	60	1.5	1.0	42.3	2.139	-.2	.0	139.3	153.6	63.4	75.8	GR	2.650	100.0	100.0	5.5	2.818	.00	.00	8
792.94	62	1.5	.8	41.5	2.121	-.1	.0	143.1	178.5	63.9	81.2	GR	2.650	100.0	100.0	3.8	2.794	.00	.00	8
793.09	65	1.6	.8	39.3	2.126	.0	.0	134.7	167.1	64.2	73.6	DN	2.650	100.0	100.0	6.3	2.768	.00	.00	8
793.24	62	1.6	.8	40.8	2.122	.0	.0	140.5	183.4	63.7	81.0	GR	2.650	100.0	100.0	3.8	2.785	.00	.00	8
793.39	60	1.6	.8	41.6	2.117	-.1	.0	136.2	168.3	63.1	77.0	GR	2.650	100.0	100.0	5.1	2.791	.00	.00	8
793.55	58	1.7	.9	41.4	2.113	-.1	.0	128.8	153.0	62.2	72.9	GR	2.650	100.0	100.0	6.5	2.785	.00	.00	8
793.70	60	1.8	1.0	39.5	2.144	-.1	.0	128.6	150.3	62.1	77.1	GR	2.650	100.0	100.0	5.1	2.786	.00	.00	8
793.85	57	1.9	1.2	38.2	2.177	-.1	.0	119.8	125.5	60.7	70.8	GR	2.650	100.0	100.0	7.3	2.796	.00	.00	8

794.00	56	1.9	1.4	36.4	2.200	-.1	.0	110.2	107.0	60.7	68.8	GR	2.717	100.0	100.0	9.6	2.792	.00	.00				
794.16	53	1.9	1.3	39.4	2.204	-.1	.0	102.6	96.7	62.0	63.8	GR	2.852	100.0	100.0	12.8	2.834	.00	.00				
794.31	56	1.8	1.2	40.2	2.205	-.1	.0	104.8	102.6	62.9	68.0	GR	2.888	100.0	100.0	11.6	2.845	.00	.00				
794.46	59	1.8	1.1	43.9	2.193	-.1	.0	126.7	140.5	63.0	74.7	GR	2.650	100.0	100.0	5.9	2.883	.00	.00			8	
794.61	64	1.7	1.0	42.5	2.182	-.2	.0	136.6	162.6	63.3	83.4	GR	2.650	100.0	100.0	3.1	2.856	.00	.00			8	
794.77	66	1.6	1.0	43.5	2.168	-.3	.0	142.6	175.7	62.7	87.9	GR	2.650	100.0	100.0	1.9	2.858	.00	.00			8	
794.92	66	1.6	.9	41.0	2.168	-.2	.0	144.9	183.4	62.5	88.4	GR	2.650	100.0	100.0	1.8	2.825	.00	.00			8	
795.07	65	1.7	.9	41.1	2.176	-.2	.0	140.7	177.6	62.5	86.7	GR	2.650	100.0	100.0	2.3	2.833	.00	.00			8	
795.22	67	1.7	1.0	44.0	2.183	-.2	.0	140.7	177.1	65.7	89.3	GR	2.650	100.0	100.0	1.6	2.876	.00	.00			8	
795.38	65	1.7	1.0	45.3	2.182	-.2	.0	140.5	173.6	65.2	86.4	GR	2.650	100.0	100.0	2.3	2.893	.00	.00			8	
795.53	65	1.5	.9	46.3	2.166	.0	.0	145.6	180.4	64.5	86.7	GR	2.650	100.0	100.0	2.3	2.892	.00	.00			8	
795.68	66	1.5	.8	41.6	2.161	-.2	.0	147.4	187.5	63.9	87.2	GR	2.650	100.0	100.0	2.1	2.827	.00	.00			8	
795.83	66	1.6	.9	38.6	2.161	-.2	.0	142.2	169.2	63.3	82.7	DN	2.650	100.0	100.0	3.4	2.788	.00	.00			8	
795.99	65	1.7	1.1	36.0	2.182	-.1	.0	130.6	139.9	63.2	74.1	DN	2.650	100.0	100.0	6.1	2.770	.00	.00			8	
796.14	60	1.8	1.2	36.1	2.197	-.1	.0	129.4	136.7	61.6	76.6	GR	2.650	100.0	100.0	5.2	2.784	.00	.00			8	
796.29	56	1.7	1.2	38.0	2.198	-.2	.0	112.6	109.8	62.4	69.8	GR	2.780	100.0	100.0	10.1	2.811	.00	.00				
796.44	59	1.7	1.0	39.9	2.186	-.2	.0	131.9	147.9	62.9	75.1	GR	2.650	100.0	100.0	5.7	2.826	.00	.00			8	
796.59	62	1.6	1.0	40.6	2.169	-.2	.0	138.0	158.5	64.1	79.6	GR	2.650	100.0	100.0	4.3	2.821	.00	.00			8	
796.75	63	1.6	.9	40.0	2.160	-.1	.0	142.2	171.0	65.6	82.3	GR	2.650	100.0	100.0	3.5	2.806	.00	.00			8	
796.90	61	1.5	.9	39.5	2.150	-.2	.0	140.6	162.6	65.3	78.9	GR	2.650	100.0	100.0	4.5	2.791	.00	.00			8	
797.05	62	1.5	.9	38.7	2.144	-.2	.0	140.0	163.2	65.0	76.7	DN	2.650	100.0	100.0	5.2	2.775	.00	.00			8	
797.20	64	1.5	.9	39.1	2.144	.0	.0	142.5	168.6	63.1	79.5	DN	2.650	100.0	100.0	4.3	2.781	.00	.00			8	
797.36	65	1.6	1.0	38.2	2.151	-.2	.0	137.3	152.6	60.9	76.4	DN	2.650	100.0	100.0	5.3	2.774	.00	.00			8	
797.51	63	1.7	1.1	37.1	2.164	-.1	.0	129.7	138.4	56.7	74.1	DN	2.650	100.0	100.0	6.1	2.770	.00	.00			8	
797.66	60	1.9	1.3	35.8	2.184	-.1	.0	123.3	126.9	54.0	73.6	DN	2.650	100.0	100.0	6.3	2.770	.00	.00			8	
797.81	53	2.0	1.4	36.2	2.208	-.1	.0	106.1	101.1	47.8	64.1	GR	2.742	100.0	100.0	10.9	2.796	.00	.00				
797.97	53	2.1	1.5	36.7	2.233	-.1	.0	103.2	97.5	48.7	62.3	GR	2.818	100.0	100.0	11.2	2.822	.00	.00				
798.12	49	2.3	1.6	33.9	2.253	-.1	.0	103.5	96.8	48.4	55.7	GR	2.772	100.0	100.0	11.5	2.802	.00	.00				
798.27	47	2.5	1.8	31.1	2.283	-.1	.0	108.0	100.3	48.4	52.2	GR	2.745	100.0	100.0	10.4	2.788	.00	.00				
798.42	44	2.5	2.1	29.9	2.313	-.1	.0	110.9	92.5	48.3	45.9	GR	2.773	100.0	100.0	11.3	2.798	.00	.00				
798.58	45	2.2	1.8	31.7	2.331	-.1	.0	114.6	98.6	45.5	48.6	GR	2.853	100.0	100.0	11.2	2.839	.00	.00				
798.73	48	2.1	1.8	35.8	2.320	-.1	.0	108.4	90.9	49.3	53.7	GR	2.959	100.0	100.0	12.0	2.886	.00	.00		5		
798.88	50	2.0	1.3	38.5	2.284	-.1	.0	105.8	99.0	51.1	57.8	GR	2.982	100.0	100.0	12.6	2.890	.00	.00		5		
799.03	51	1.9	1.1	41.1	2.233	-.1	.0	99.3	97.5	55.1	59.0	GR	2.962	99.3	99.3	14.5	2.881	.00	.00		5		
799.19	50	1.8	1.1	34.7	2.203	-.1	.0	109.4	110.5	58.3	56.8	GR	2.701	100.0	100.0	12.8	2.770	.00	.00				
799.34	51	2.0	1.3	30.0	2.222	-.1	.0	112.4	104.3	60.3	50.8	DN	2.655	100.0	100.0	12.5	2.721	.00	.00				
799.49	53	2.1	2.0	27.9	2.272	-.1	.0	126.1	107.1	61.2	56.7	DN	2.655	100.0	100.0	7.7	2.734	.00	.00				
799.64	58	2.0	1.6	33.3	2.284	-.1	.0	130.5	132.1	65.0	73.7	GR	2.650	100.0	100.0	4.3	2.820	.00	.00				
799.80	65	1.7	1.0	39.4	2.227	-.2	.0	140.0	172.9	65.4	86.9	GR	2.650	100.0	100.0	2.2	2.854	.00	.00			8	
799.95	68	1.5	.8	41.2	2.148	-.2	.0	147.9	196.8	66.9	91.2	GR	2.650	100.0	100.0	1.2	2.812	.00	.00			8	

Zone No. 1 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
800.10	67	1.6	.8	43.0	2.104	-.2	.0	146.2	194.7	66.6	89.3	DN	2.650	100.0	100.0	1.6	2.799	.00	.00	8
800.25	63	1.6	.9	42.3	2.113	-.2	.0	140.4	173.3	68.9	81.5	GR	2.650	100.0	100.0	3.7	2.797	.00	.00	8
800.40	63	1.5	.9	42.5	2.128	-.2	.0	143.7	176.4	68.4	82.9	GR	2.650	100.0	100.0	3.3	2.812	.00	.00	8
800.56	64	1.5	.8	42.4	2.135	.0	.0	147.3	186.6	69.7	85.2	GR	2.650	100.0	100.0	2.6	2.816	.00	.00	8
800.71	68	1.5	.8	42.9	2.119	-.1	.0	151.1	203.2	70.5	91.5	GR	2.650	100.0	100.0	1.2	2.810	.00	.00	8
800.86	70	1.5	.8	43.4	2.104	-.3	.0	151.1	204.8	70.5	91.8	DN	2.650	100.0	100.0	1.1	2.804	.00	.00	8
801.01	72	1.5	.8	46.0	2.088	-.3	.0			71.2	100.0	GR	2.650	100.0	100.0	.0	2.827	.00	.00	1
801.17	72	1.5	.8	45.6	2.080	-.1	.0			69.6	96.4	DN	2.650	100.0	100.0	1.5	2.815	.00	.00	1

801.32	70	1.5	.8	45.7	2.079	-.2	.0			67.7	96.4	GR	2.650	100.0	100.0	1.5	2.815	.00	.00	1					
801.47	62	1.5	.8	41.7	2.085	-.2	.0	138.4	161.5	67.8	73.6	DN	2.650	100.0	100.0	6.3	2.767	.00	.00						8
801.62	60	1.5	.8	40.0	2.104	-.2	.0	104.7	110.3	66.7	70.0	DN	2.638	100.0	100.0	13.9	2.760	.00	.00						8
801.78	59	1.6	.9	39.2	2.134	-.2	.0	133.0	151.1	66.5	74.3	GR	2.650	100.0	100.0	6.0	2.773	.00	.00						8
801.93	62	1.6	1.0	38.3	2.161	-.2	.0	138.5	163.7	66.9	80.5	GR	2.650	100.0	100.0	4.0	2.785	.00	.00						8
802.08	64	1.5	.9	39.3	2.171	-.3	.0	144.7	173.7	67.2	83.9	GR	2.650	100.0	100.0	3.0	2.805	.00	.00						8
802.23	66	1.4	.8	38.6	2.167	-.3	.0	150.3	187.9	67.1	84.8	DN	2.650	100.0	100.0	2.7	2.792	.00	.00						8
802.39	64	1.4	.8	40.4	2.148	-.2	.0	153.1	189.0	67.3	84.0	GR	2.650	100.0	100.0	3.0	2.800	.00	.00						8
802.54	62	1.3	.8	42.6	2.129	-.2	.0	151.6	180.6	67.2	80.7	GR	2.650	100.0	100.0	3.9	2.814	.00	.00						8
802.69	62	1.4	.8	43.3	2.120	-.2	.0	149.0	177.4	63.5	80.6	GR	2.650	100.0	100.0	4.0	2.816	.00	.00						8
802.84	61	1.5	.9	43.8	2.143	-.1	.0	140.5	161.5	60.0	78.9	GR	2.650	100.0	100.0	4.5	2.840	.00	.00						8
803.00	56	1.6	1.0	39.8	2.183	-.1	.0	111.4	112.6	53.7	69.4	GR	2.817	100.0	100.0	11.5	2.822	.00	.00						
803.15	48	1.9	1.3	37.2	2.232	-.1	.0	103.1	93.7	51.6	54.0	GR	2.833	100.0	100.0	14.4	2.828	.00	.00						
803.30	46	2.5	1.6	33.1	2.288	-.1	.0	100.8	96.1	52.3	50.1	GR	2.815	100.0	100.0	12.3	2.820	.00	.00						
803.45	45	3.2	2.5	33.9	2.329	-.1	.0	89.2	76.4	52.7	47.3	GR	2.907	89.2	89.2	13.0	2.868	.00	.00		5				
803.61	50	2.6	1.7	33.9	2.328	-.1	.0	103.2	103.0	53.4	56.8	GR	2.924	100.0	100.0	9.8	2.867	.00	.00		5				
803.76	52	2.0	1.3	36.1	2.282	-.2	.0	111.6	112.6	54.6	61.7	GR	2.912	100.0	100.0	10.1	2.857	.00	.00		5				
803.91	54	1.8	1.1	36.2	2.249	-.1	.0	116.5	122.7	58.0	65.6	GR	2.840	100.0	100.0	9.5	2.830	.00	.00						
804.06	52	2.0	1.3	36.4	2.251	-.2	.0	109.1	108.2	58.9	62.1	GR	2.851	100.0	100.0	10.8	2.834	.00	.00						
804.21	51	2.3	1.7	34.9	2.278	-.1	.0	105.8	99.9	59.8	60.1	GR	2.854	100.0	100.0	10.1	2.836	.00	.00						
804.37	55	2.2	1.7	36.7	2.280	-.1	.0	109.8	102.1	60.4	67.3	GR	2.942	100.0	100.0	8.5	2.862	.00	.00		5				
804.52	59	1.8	1.2	41.2	2.243	-.2	.0	126.3	130.4	62.0	73.8	GR	2.650	100.0	100.0	6.2	2.891	.00	.00						8
804.67	61	1.5	.9	41.7	2.194	-.1	.0	141.3	163.0	62.8	78.5	GR	2.650	100.0	100.0	4.6	2.856	.00	.00						8
804.82	60	1.6	1.0	40.4	2.183	-.2	.0	136.9	154.9	63.4	76.3	GR	2.650	100.0	100.0	5.3	2.830	.00	.00						8
804.98	62	1.7	1.0	38.3	2.202	-.2	.0	136.5	160.6	63.7	80.6	GR	2.650	100.0	100.0	4.0	2.818	.00	.00						8
805.13	63	1.6	.9	42.1	2.212	-.2	.0	140.6	168.2	64.5	81.6	GR	2.650	100.0	100.0	3.7	2.876	.00	.00						8
805.28	67	1.5	.8	46.4	2.181	-.2	.0	150.2	195.3	65.4	89.7	GR	2.650	100.0	100.0	1.5	2.906	.00	.00						8
805.43	68	1.4	.8	48.0	2.145	-.3	.0	154.7	203.2	64.7	91.1	GR	2.650	100.0	100.0	1.2	2.898	.00	.00						8
805.59	68	1.4	.8	45.6	2.115	-.2	.0	155.3	200.5	62.4	91.5	GR	2.650	100.0	100.0	1.1	2.841	.00	.00						8
805.74	62	1.5	.8	41.5	2.124	-.2	.0	143.7	172.1	57.1	78.8	SD	2.650	100.0	100.0	4.5	2.796	.00	.00						8
805.89	55	1.7	1.0	37.3	2.174	-.1	.0	111.0	113.3	54.9	67.1	GR	2.699	100.0	100.0	11.4	2.781	.00	.00						
806.04	50	2.2	1.6	32.9	2.259	-.1	.0	109.7	103.8	54.5	57.3	GR	2.747	100.0	100.0	10.2	2.793	.00	.00						
806.20	49	2.5	2.2	30.8	2.331	-.1	.0	114.2	100.2	56.1	55.3	GR	2.826	100.0	100.0	8.3	2.826	.00	.00						
806.35	50	2.3	1.7	31.7	2.350	-.1	.0	118.1	112.4	57.6	57.3	GR	2.899	100.0	100.0	8.0	2.855	.00	.00		5				
806.50	53	1.9	1.2	36.4	2.305	-.1	.0	118.1	119.3	60.2	62.9	GR	2.981	100.0	100.0	9.5	2.881	.00	.00		5				
806.65	60	1.6	.9	40.8	2.232	-.2	.0	135.3	157.4	61.3	76.5	GR	2.650	100.0	100.0	5.3	2.876	.00	.00						8
806.81	64	1.5	.9	41.9	2.172	-.4	.0	145.0	176.7	62.9	84.1	GR	2.650	100.0	100.0	2.9	2.841	.00	.00						8
806.96	67	1.5	.9	40.7	2.142	-.2	.0	148.1	185.9	60.6	89.0	DN	2.650	100.0	100.0	1.7	2.800	.00	.00						8
807.11	66	1.6	1.0	37.9	2.140	-.2	.0	130.1	140.7	59.3	70.1	DN	2.650	100.0	100.0	7.6	2.761	.00	.00						8
807.26	65	1.7	1.1	36.4	2.162	-.1	.0	110.0	113.3	58.6	69.1	DN	2.651	100.0	100.0	11.0	2.760	.00	.00						
807.42	60	2.0	1.4	35.4	2.217	-.1	.0	121.0	131.6	53.6	77.2	GR	2.650	100.0	100.0	5.0	2.792	.00	.00						8
807.57	52	2.2	1.7	31.5	2.271	-.1	.0	119.9	111.2	54.1	61.3	GR	2.713	100.0	100.0	7.6	2.784	.00	.00						
807.72	50	2.1	1.7	32.7	2.295	-.1	.0	117.0	104.7	57.3	56.8	GR	2.815	100.0	100.0	9.6	2.821	.00	.00						
807.87	48	1.9	1.4	34.8	2.280	-.1	.0	112.4	102.2	58.2	53.4	GR	2.851	100.0	100.0	12.3	2.837	.00	.00						
808.02	50	1.8	1.2	37.3	2.257	-.1	.0	109.3	103.2	59.0	57.1	GR	2.887	100.0	100.0	12.8	2.851	.00	.00						
808.18	51	1.8	1.2	37.6	2.238	-.1	.0	109.4	104.0	60.4	58.9	GR	2.860	100.0	100.0	12.8	2.839	.00	.00						
808.33	54	1.7	1.1	39.4	2.224	-.1	.0	110.7	108.1	62.2	65.2	GR	2.901	100.0	100.0	11.8	2.851	.00	.00		5				
808.48	58	1.6	1.0	42.1	2.206	-.2	.0	132.3	144.7	62.1	72.7	GR	2.650	100.0	100.0	6.6	2.871	.00	.00						8

Zone No. 1 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS

808.63	59	1.5	.9	41.6	2.183	-.2	.0	138.4	157.0	63.4	75.6	GR	2.650	100.0	100.0	5.6	2.846	.00	.00			8	
808.79	62	1.5	.9	38.1	2.157	-.2	.0	142.6	167.6	66.1	78.2	DN	2.650	100.0	100.0	4.7	2.778	.00	.00			8	
808.94	59	1.5	.8	36.5	2.138	-.2	.0	110.6	112.6	66.0	60.5	DN	2.649	100.0	100.0	14.8	2.742	.00	.00				
809.09	61	1.5	.8	39.2	2.143	-.3	.0	142.1	167.7	64.7	77.6	GR	2.650	100.0	100.0	4.9	2.781	.00	.00			8	
809.24	61	1.5	.9	41.4	2.162	-.2	.0	142.5	165.7	63.8	78.8	GR	2.650	100.0	100.0	4.5	2.826	.00	.00			8	
809.40	59	1.5	1.0	42.5	2.181	-.3	.0	137.3	149.8	62.7	75.1	GR	2.650	100.0	100.0	5.8	2.855	.00	.00			8	
809.55	56	1.6	1.0	37.7	2.198	-.2	.0	117.2	117.8	62.2	69.2	GR	2.767	100.0	100.0	10.2	2.807	.00	.00				
809.70	55	1.7	1.1	35.7	2.224	-.2	.0	119.2	121.5	61.5	66.4	GR	2.755	100.0	100.0	9.4	2.802	.00	.00				
809.85	57	1.7	1.1	37.0	2.242	-.2	.0	125.5	134.7	61.9	71.6	GR	2.650	100.0	100.0	7.0	2.834	.00	.00			8	
810.01	64	1.6	1.0	40.1	2.237	-.2	.0	140.4	171.0	63.4	85.1	GR	2.650	100.0	100.0	2.7	2.872	.00	.00			8	
810.16	67	1.6	.9	41.7	2.220	-.2	.0	146.9	187.1	64.1	91.0	GR	2.650	100.0	100.0	1.3	2.879	.00	.00			8	
810.31	66	1.5	.8	39.0	2.194	-.3	.0	148.4	190.0	64.5	88.5	GR	2.650	100.0	100.0	1.8	2.820	.00	.00			8	
810.46	62	1.5	.8	41.6	2.168	-.4	.0	144.2	176.1	64.0	80.1	GR	2.650	100.0	100.0	4.1	2.834	.00	.00			8	
810.62	62	1.5	.8	40.2	2.158	-.3	.0	145.7	179.8	63.7	81.3	GR	2.650	100.0	100.0	3.8	2.807	.00	.00			8	
810.77	64	1.5	.9	39.6	2.172	-.3	.0	145.1	174.6	63.3	83.8	GR	2.650	100.0	100.0	3.0	2.810	.00	.00			8	
810.92	64	1.6	1.0	37.4	2.206	-.3	.0	143.3	170.3	63.1	84.8	GR	2.650	100.0	100.0	2.8	2.809	.00	.00			8	
811.07	61	1.6	1.1	39.6	2.216	-.4	.0	138.2	153.3	62.8	79.3	GR	2.650	100.0	100.0	4.4	2.847	.00	.00			8	
811.23	62	1.6	1.0	42.0	2.212	-.3	.0	140.3	162.9	61.2	80.1	GR	2.650	100.0	100.0	4.1	2.876	.00	.00			8	
811.38	60	1.5	1.0	41.2	2.200	-.2	.0	138.4	156.2	56.9	77.1	GR	2.650	100.0	100.0	5.1	2.855	.00	.00			8	
811.53	59	1.7	1.1	39.7	2.222	-.2	.0	131.9	143.2	55.9	74.9	GR	2.650	100.0	100.0	5.8	2.854	.00	.00			8	
811.68	57	2.0	1.5	33.2	2.263	-.1	.0	125.7	126.4	55.6	70.5	GR	2.650	100.0	100.0	5.8	2.801	.00	.00				
811.83	55	2.2	1.9	34.0	2.298	-.1	.0	116.7	108.3	55.2	67.6	GR	2.880	100.0	100.0	6.6	2.842	.00	.00				
811.99	60	2.0	1.5	36.7	2.300	-.1	.0	124.5	128.5	55.8	76.4	GR	2.650	100.0	100.0	4.7	2.880	.00	.00				
812.14	60	1.7	1.2	38.3	2.273	-.2	.0	132.5	138.0	56.7	77.5	GR	2.650	100.0	100.0	5.0	2.879	.00	.00			8	
812.29	61	1.7	1.2	36.1	2.264	-.2	.0	133.2	139.8	57.9	77.8	GR	2.650	100.0	100.0	4.8	2.841	.00	.00				
812.44	57	1.8	1.4	32.6	2.278	-.1	.0	133.4	134.6	58.7	70.8	GR	2.650	100.0	100.0	5.1	2.806	.00	.00				
812.60	59	1.9	1.4	31.9	2.296	-.1	.0	140.2	146.9	59.7	73.8	GR	2.650	100.0	100.0	3.2	2.811	.00	.00				
812.75	61	1.7	1.3	32.9	2.288	-.1	.0	145.5	160.9	60.6	78.3	GR	2.650	100.0	100.0	2.4	2.817	.00	.00				
812.90	65	1.6	1.1	35.0	2.266	-.1	.0	149.4	175.4	61.8	86.0	GR	2.650	100.0	100.0	1.3	2.827	.00	.00				
813.05	67	1.5	1.0	40.4	2.246	-.2	.0	148.0	179.4	61.8	90.7	GR	2.650	100.0	100.0	1.3	2.883	.00	.00			8	
813.21	70	1.5	.9	41.7	2.220	-.2	.0			60.7	96.3	GR	2.650	100.0	100.0	1.3	2.878	.00	.00	1			
813.36	72	1.5	.9	41.1	2.203	-.2	.0			60.1	99.7	GR	2.650	100.0	100.0	.1	2.856	.00	.00	1			
813.51	69	1.6	1.0	39.2	2.207	-.2	.0	146.4	181.2	58.9	93.5	GR	2.650	100.0	100.0	.8	2.834	.00	.00			8	
813.66	62	1.7	1.1	37.7	2.240	-.2	.0	134.8	150.5	60.4	80.6	GR	2.650	100.0	100.0	4.0	2.843	.00	.00			8	
813.82	59	1.7	1.2	37.3	2.264	-.2	.0	129.6	134.6	60.6	74.9	GR	2.650	100.0	100.0	5.9	2.858	.00	.00			8	
813.97	61	1.7	1.2	36.7	2.271	-.2	.0	134.6	143.2	61.2	78.4	GR	2.650	100.0	100.0	4.7	2.854	.00	.00			8	
814.12	66	1.5	1.1	38.8	2.251	-.2	.0	146.6	166.0	61.0	87.9	GR	2.650	100.0	100.0	2.0	2.865	.00	.00			8	
814.27	67	1.5	1.0	41.3	2.228	-.2	.0	150.5	174.5	60.3	90.7	GR	2.650	100.0	100.0	1.3	2.879	.00	.00			8	
814.43	68	1.5	1.0	43.9	2.209	-.2	.0	151.5	178.0	59.4	91.4	GR	2.650	100.0	100.0	1.2	2.897	.00	.00			8	
814.58	64	1.6	1.1	41.4	2.212	-.2	.0	142.7	160.8	59.3	84.8	GR	2.650	100.0	100.0	2.8	2.867	.00	.00			8	
814.73	62	1.7	1.2	37.8	2.230	-.2	.0	133.6	142.8	58.3	79.8	GR	2.650	100.0	100.0	4.2	2.835	.00	.00			8	
814.88	55	1.8	1.3	35.6	2.251	-.2	.0	119.0	114.6	57.8	66.4	GR	2.819	100.0	100.0	8.8	2.823	.00	.00				
815.04	56	1.8	1.3	37.8	2.264	-.2	.0	117.0	111.4	58.6	68.0	GR	2.952	100.0	100.0	9.2	2.864	.00	.00		5		
815.19	54	1.7	1.3	40.0	2.268	-.1	.0	113.1	104.3	58.6	65.4	GR	3.036	100.0	100.0	11.1	2.897	.00	.00		5		
815.34	58	1.7	1.2	40.7	2.267	-.1	.0	129.3	130.3	58.1	73.6	GR	2.650	100.0	100.0	6.3	2.904	.00	.00			8	
815.49	61	1.7	1.3	38.7	2.264	-.1	.0	133.6	139.4	52.5	78.9	GR	2.650	100.0	100.0	4.5	2.875	.00	.00			8	
815.64	62	1.8	1.3	38.1	2.264	-.1	.0	131.9	139.3	53.5	81.1	GR	2.650	100.0	100.0	3.8	2.868	.00	.00			8	
815.80	58	2.0	1.6	35.7	2.273	-.1	.0	120.6	117.3	54.5	72.6	GR	2.650	100.0	100.0	6.2	2.843	.00	.00				
815.95	55	2.1	1.7	35.4	2.287	-.1	.0	114.3	105.9	54.1	67.5	GR	2.908	100.0	100.0	7.7	2.851	.00	.00		5		
816.10	52	2.1	1.7	32.9	2.294	-.2	.0	119.8	108.3	54.3	60.5	GR	2.818	100.0	100.0	8.4	2.822	.00	.00				
816.25	52	1.9	1.5	34.2	2.286	-.2	.0	118.6	107.8	55.3	60.5	GR	2.851	100.0	100.0	9.4	2.835	.00	.00				
816.41	52	1.9	1.5	32.3	2.275	-.3	.0	125.3	113.8	56.7	60.6	GR	2.755	100.0	100.0	8.4	2.799	.00	.00				
816.56	54	1.9	1.4	34.4	2.269	-.2	.0	122.6	117.5	57.7	65.9	GR	2.819	100.0	100.0	7.9	2.823	.00	.00				
816.71	54	1.8	1.3	35.9	2.270	-.2	.0	119.5	116.1	59.5	65.9	GR	2.883	100.0	100.0	8.8	2.844	.00	.00				

816.86	55	1.7	1.1	37.6	2.259	-.2	.0	120.0	120.0	60.3	67.9	GR	2.929	100.0	100.0	9.2	2.857	.00	.00	5	
817.02	56	1.6	1.1	36.3	2.239	-.2	.0	125.5	128.7	60.3	69.7	GR	2.820	100.0	100.0	8.3	2.823	.00	.00		

Zone No. 1 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
817.17	62	1.5	1.0	35.8	2.215	-.2	.0	142.6	163.8	59.0	81.4	GR	2.650	100.0	100.0	3.7	2.796	.00	.00	8
817.32	65	1.6	1.0	38.6	2.216	-.3	.0	144.5	173.8	56.2	85.9	GR	2.650	100.0	100.0	2.5	2.833	.00	.00	8
817.47	64	1.7	1.1	39.6	2.233	-.2	.0	138.2	161.9	54.3	84.7	GR	2.650	100.0	100.0	2.8	2.862	.00	.00	8
817.63	62	1.9	1.3	39.4	2.260	-.1	.0	127.8	140.3	54.0	81.0	GR	2.650	100.0	100.0	3.8	2.882	.00	.00	8
817.78	59	2.0	1.4	34.9	2.275	-.1	.0	123.5	129.9	53.5	73.8	GR	2.650	100.0	100.0	5.3	2.834	.00	.00	
817.93	60	2.0	1.4	34.6	2.285	-.2	.0	128.4	136.1	53.0	76.0	GR	2.650	100.0	100.0	4.2	2.839	.00	.00	
818.08	63	2.0	1.5	33.4	2.288	-.2	.0	137.7	153.2	54.4	81.7	GR	2.650	100.0	100.0	1.4	2.825	.00	.00	
818.24	64	2.1	1.6	36.2	2.291	-.2	.0	130.2	142.9	58.0	84.6	GR	2.650	100.0	100.0	1.9	2.866	.00	.00	
818.39	65	2.0	1.5	35.3	2.283	-.2	.0	135.4	154.7	59.4	86.8	GR	2.650	100.0	100.0	.8	2.846	.00	.00	
818.54	64	1.8	1.3	37.5	2.268	-.2	.0	132.1	148.8	61.4	84.4	GR	2.650	100.0	100.0	2.9	2.863	.00	.00	8
818.69	69	1.6	1.0	36.9	2.238	-.1	.0	100.0	100.0	63.0	94.7	GR	2.650	100.0	100.0	.0	2.829	.00	.00	
818.85	67	1.5	.9	37.2	2.202	-.2	.0	151.8	184.2	63.5	89.6	DN	2.650	100.0	100.0	1.6	2.803	.00	.00	8
819.00	67	1.4	.9	36.5	2.170	-.2	.0	141.4	152.9	65.1	73.0	DN	2.650	100.0	100.0	6.5	2.768	.00	.00	8
819.15	63	1.4	.9	39.4	2.154	-.3	.0	148.9	168.1	64.0	81.8	GR	2.650	100.0	100.0	3.6	2.793	.00	.00	8
819.30	70	1.5	1.0	40.0	2.171	-.2	.0			61.9	95.1	GR	2.650	100.0	100.0	1.8	2.815	.00	.00	1
819.45	69	1.6	1.1	39.3	2.201	-.2	.0	145.4	177.0	60.0	94.5	GR	2.650	100.0	100.0	.6	2.830	.00	.00	8
819.61	71	1.7	1.2	37.4	2.243	-.3	.0			59.4	96.2	N	2.650	100.0	100.0	1.3	2.840	.00	.00	1
819.76	61	1.8	1.1	37.7	2.260	-.3	.0	130.9	147.6	59.9	78.8	GR	2.650	100.0	100.0	4.5	2.859	.00	.00	8
819.91	58	1.7	1.1	39.0	2.260	-.2	.0	130.1	140.4	60.9	73.6	GR	2.650	100.0	100.0	6.3	2.877	.00	.00	8
820.06	58	1.6	1.0	41.4	2.245	-.3	.0	130.8	144.3	63.0	72.4	GR	2.650	100.0	100.0	6.7	2.895	.00	.00	8
820.22	64	1.5	.9	42.8	2.233	-.3	.0	144.0	171.2	63.8	83.6	GR	2.650	100.0	100.0	3.1	2.903	.00	.00	8
820.37	69	1.5	.9	41.0	2.224	-.3	.0	151.6	189.5	64.1	94.1	GR	2.650	100.0	100.0	.7	2.872	.00	.00	8
820.52	74	1.5	.9	39.6	2.201	-.2	.0			63.3	100.0	N	2.650	100.0	100.0	.0	2.835	.00	.00	1
820.67	71	1.5	.9	37.4	2.184	-.2	.0	147.5	172.2	63.2	84.0	DN	2.650	100.0	100.0	3.0	2.791	.00	.00	8
820.83	67	1.5	1.0	38.3	2.180	-.2	.0	149.1	176.0	63.0	88.6	DN	2.650	100.0	100.0	1.8	2.800	.00	.00	8
820.98	66	1.5	1.0	37.6	2.197	.0	.0	147.7	174.3	62.8	87.2	GR	2.650	100.0	100.0	2.1	2.804	.00	.00	8
821.13	67	1.5	1.0	38.6	2.211	-.2	.0	149.0	179.2	62.9	89.4	GR	2.650	100.0	100.0	1.6	2.829	.00	.00	8
821.28	67	1.5	.9	37.5	2.206	-.2	.0	148.7	185.3	63.1	89.7	GR	2.650	100.0	100.0	1.5	2.811	.00	.00	8
821.44	69	1.5	.9	39.4	2.186	-.2	.0	150.1	195.9	63.0	93.9	GR	2.650	100.0	100.0	.7	2.820	.00	.00	8
821.59	71	1.5	.9	41.4	2.165	-.2	.0			63.4	98.1	GR	2.650	100.0	100.0	.7	2.828	.00	.00	1
821.74	73	1.5	.9	40.9	2.170	-.1	.0			65.1	100.0	GR	2.650	100.0	100.0	.0	2.825	.00	.00	1
821.89	69	1.4	.9	39.5	2.189	-.3	.0	155.9	186.0	63.9	93.0	GR	2.650	100.0	100.0	.9	2.823	.00	.00	8
822.05	67	1.4	.9	41.0	2.202	-.3	.0	156.5	181.5	60.7	89.8	GR	2.650	100.0	100.0	1.5	2.853	.00	.00	8
822.20	69	1.4	1.0	42.7	2.201	-.2	.0	156.5	182.9	58.3	93.9	GR	2.650	100.0	100.0	.7	2.875	.00	.00	8
822.35	69	1.5	1.0	42.2	2.199	-.2	.0	149.5	173.0	55.8	88.3	MN	2.650	100.0	100.0	1.9	2.867	.00	.00	8
822.50	64	1.8	1.2	39.2	2.222	-.1	.0	134.6	149.5	53.4	83.5	GR	2.650	100.0	100.0	3.1	2.847	.00	.00	8
822.66	55	2.2	1.5	35.4	2.259	-.1	.0	110.4	110.0	52.3	67.5	GR	2.832	100.0	100.0	8.1	2.827	.00	.00	
822.81	52	2.5	2.0	33.4	2.301	-.1	.0	108.5	99.0	49.5	61.9	GR	2.855	100.0	100.0	8.2	2.836	.00	.00	
822.96	51	2.4	2.2	30.5	2.323	-.1	.0	119.3	105.4	51.3	58.7	GR	2.799	100.0	100.0	7.1	2.816	.00	.00	
823.11	53	2.2	1.9	30.7	2.327	-.2	.0	127.9	119.7	53.0	63.1	GR	2.814	100.0	100.0	5.6	2.822	.00	.00	
823.26	52	2.0	1.7	32.8	2.317	-.2	.0	125.4	112.1	55.5	62.2	GR	2.869	100.0	100.0	7.4	2.841	.00	.00	
823.42	56	1.8	1.2	37.0	2.306	-.3	.0	122.5	122.7	58.0	68.2	GR	3.033	100.0	100.0	7.9	2.889	.00	.00	5
823.57	57	1.6	1.1	39.6	2.292	-.1	.0	130.8	132.6	57.8	71.1	GR	2.650	100.0	100.0	7.2	2.912	.00	.00	8
823.72	62	1.6	1.1	39.5	2.276	-.2	.0	139.8	153.0	56.0	79.9	GR	2.650	100.0	100.0	4.2	2.897	.00	.00	8
823.87	61	1.7	1.3	38.0	2.272	-.2	.0	134.9	138.0	56.9	78.6	GR	2.650	100.0	100.0	4.6	2.874	.00	.00	8
824.03	62	1.8	1.5	34.2	2.276	-.2	.0	138.7	143.7	56.9	80.5	GR	2.650	100.0	100.0	2.6	2.826	.00	.00	

824.18	59	1.8	1.6	34.4	2.278	-.2	.0	131.1	123.4	58.2	74.2	GR	2.650	100.0	100.0	4.9	2.830	.00	.00						
824.33	57	1.7	1.5	35.2	2.273	-.2	.0	129.6	121.2	58.9	71.7	GR	2.650	100.0	100.0	6.3	2.836	.00	.00						
824.48	55	1.6	1.2	38.5	2.262	-.2	.0	121.4	112.5	60.1	66.6	GR	2.967	100.0	100.0	10.0	2.871	.00	.00		5				
824.64	56	1.5	1.1	39.9	2.253	-.2	.0	123.0	116.7	60.6	68.6	GR	3.011	100.0	100.0	10.2	2.882	.00	.00		5				
824.79	58	1.4	1.0	39.1	2.240	-.2	.0	138.6	140.5	63.1	72.1	GR	2.650	100.0	100.0	6.8	2.861	.00	.00					8	
824.94	62	1.5	1.1	38.7	2.240	-.2	.0	146.5	156.3	62.9	81.4	GR	2.650	100.0	100.0	3.7	2.855	.00	.00					8	
825.09	67	1.5	1.1	40.0	2.240	-.3	.0	152.2	172.4	62.0	90.4	GR	2.650	100.0	100.0	1.4	2.873	.00	.00					8	
825.25	70	1.5	1.0	39.6	2.232	-.2	.0			62.4	95.9	GR	2.650	100.0	100.0	1.4	2.861	.00	.00	1					
825.40	71	1.5	1.1	39.4	2.228	-.2	.0			62.1	98.2	GR	2.650	100.0	100.0	.6	2.854	.00	.00	1					
825.55	70	1.6	1.2	38.5	2.227	-.2	.0			62.2	96.4	GR	2.650	100.0	100.0	1.2	2.841	.00	.00	1					

Zone No. 1 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M		FLAGS			
825.70	71	1.6	1.2	38.1	2.233	-.3	.0			61.9	97.8	GR	2.650	100.0	100.0	.7	2.842	.00	.00	1				
825.86	70	1.6	1.2	39.3	2.219	-.2	.0			60.8	95.0	GR	2.650	100.0	100.0	1.7	2.846	.00	.00	1				
826.01	73	1.6	1.1	39.9	2.211	-.2	.0			58.3	98.7	MN	2.650	100.0	100.0	.4	2.848	.00	.00	1				
826.16	69	1.6	1.1	42.0	2.215	-.1	.0	147.9	173.1	56.7	92.7	MN	2.650	100.0	100.0	.9	2.877	.00	.00					8	
826.31	68	1.6	1.2	40.5	2.234	-.2	.0	146.0	165.7	56.0	91.3	GR	2.650	100.0	100.0	1.2	2.874	.00	.00					8	
826.47	62	1.8	1.4	38.2	2.258	-.2	.0	133.3	137.8	55.9	81.2	GR	2.650	100.0	100.0	3.8	2.865	.00	.00					8	
826.62	63	1.9	1.5	36.0	2.284	-.3	.0	133.9	142.6	56.3	82.7	GR	2.650	100.0	100.0	2.5	2.857	.00	.00						
826.77	67	1.8	1.3	34.6	2.291	-.3	.0			57.3	89.8	N	2.650	100.0	100.0	3.1	2.845	.00	.00	2					
826.92	71	1.7	1.2	36.8	2.275	-.2	.0			58.6	94.7	N	2.650	100.0	100.0	1.7	2.859	.00	.00	2					
827.07	68	1.5	1.1	39.9	2.253	-.1	.0	148.9	171.7	59.9	92.4	GR	2.650	100.0	100.0	1.0	2.882	.00	.00					8	
827.23	69	1.5	1.1	42.5	2.238	-.2	.0	150.6	173.5	60.4	93.5	GR	2.650	100.0	100.0	.8	2.903	.00	.00					8	
827.38	69	1.5	1.0	40.8	2.210	-.2	.0	149.1	181.7	60.3	93.8	GR	2.650	100.0	100.0	.7	2.858	.00	.00					8	
827.53	71	1.6	.9	39.8	2.198	-.2	.0			60.5	97.9	GR	2.650	100.0	100.0	.7	2.835	.00	.00	1					
827.68	69	1.8	1.0	39.4	2.209	-.3	.0	139.1	184.3	59.3	94.2	GR	2.650	100.0	100.0	.6	2.838	.00	.00					8	
827.84	68	1.8	1.1	38.2	2.255	-.1	.0	138.8	174.6	59.3	92.9	GR	2.650	100.0	100.0	.8	2.862	.00	.00						
827.99	70	1.7	1.2	36.7	2.262	-.1	.0			59.2	94.5	N	2.650	100.0	100.0	1.8	2.847	.00	.00	2					
828.14	71	1.6	1.1	37.6	2.243	-.2	.0			60.0	96.7	N	2.650	100.0	100.0	1.1	2.844	.00	.00	1					
828.29	75	1.7	1.3	39.4	2.226	-.2	.0			60.7	100.0	N	2.650	100.0	100.0	.0	2.853	.00	.00	1					
828.45	75	1.8	1.4	39.9	2.235	-.2	.0			61.4	100.0	N	2.650	100.0	100.0	.0	2.868	.00	.00	1					
828.60	76	1.7	1.3	40.1	2.247	-.2	.0			62.2	100.0	N	2.650	100.0	100.0	.0	2.880	.00	.00	1					
828.75	77	1.5	1.1	40.2	2.236	-.2	.0			62.8	100.0	N	2.650	100.0	100.0	.0	2.873	.00	.00	1					
828.90	80	1.5	1.0	40.4	2.223	-.1	.0			62.9	100.0	N	2.650	100.0	100.0	.0	2.863	.00	.00	1					
829.06	78	1.5	.9	41.5	2.209	-.2	.0			63.2	100.0	N	2.650	100.0	100.0	.0	2.866	.00	.00	1					
829.21	73	1.5	.9	41.3	2.207	-.2	.0			63.2	100.0	GR	2.650	100.0	100.0	.0	2.862	.00	.00	1					
829.36	73	1.5	.9	44.2	2.205	-.2	.0			63.2	100.0	GR	2.650	100.0	100.0	.0	2.897	.00	.00	1					
829.51	70	1.5	1.0	42.6	2.207	-.2	.0			62.8	95.9	GR	2.650	100.0	100.0	1.5	2.879	.00	.00	1					
829.67	72	1.5	1.0	42.4	2.212	-.3	.0			63.0	100.0	GR	2.650	100.0	100.0	.0	2.880	.00	.00	1					
829.82	69	1.5	1.0	38.8	2.214	-.2	.0	152.6	184.0	63.1	94.7	GR	2.650	100.0	100.0	.6	2.834	.00	.00					8	
829.97	71	1.5	1.0	38.9	2.213	-.2	.0			63.4	98.3	GR	2.650	100.0	100.0	.6	2.835	.00	.00	1					
830.12	70	1.5	1.0	39.0	2.208	-.2	.0	152.9	185.5	63.2	94.9	GR	2.650	100.0	100.0	.5	2.832	.00	.00					8	
830.28	70	1.5	1.0	38.6	2.201	-.3	.0			61.8	95.6	GR	2.650	100.0	100.0	1.5	2.821	.00	.00	1					
830.43	72	1.4	.9	40.0	2.191	-.2	.0			60.0	99.3	GR	2.650	100.0	100.0	.2	2.832	.00	.00	1					
830.58	73	1.5	1.0	41.4	2.187	-.2	.0			59.6	99.8	SD	2.650	100.0	100.0	.1	2.847	.00	.00	1					
830.73	77	1.7	1.1	42.3	2.206	-.2	.0			58.6	98.0	MN	2.650	100.0	100.0	.7	2.874	.00	.00	1					
830.88	76	1.7	1.2	40.0	2.232	-.2	.0			58.7	99.7	S	2.650	100.0	100.0	.1	2.867	.00	.00	1					
831.04	77	1.7	1.3	37.9	2.245	-.3	.0			59.0	97.5	N	2.650	100.0	100.0	.8	2.849	.00	.00	1					
831.19	74	1.6	1.1	38.6	2.232	-.2	.0			59.9	99.0	N	2.650	100.0	100.0	.3	2.847	.00	.00	1					
831.34	74	1.6	1.1	39.5	2.210	-.2	.0			59.7	100.0	N	2.650	100.0	100.0	.0	2.841	.00	.00	1					

831.49	72	1.6	1.0	41.1	2.198	-.3	.0			58.3	96.9	MN	2.650	100.0	100.0	1.1	2.851	.00	.00	1		
831.65	71	1.6	1.1	43.5	2.198	-.2	.0	145.3	172.1	57.5	93.0	MN	2.650	100.0	100.0	.9	2.884	.00	.00			8
831.80	69	1.7	1.2	42.1	2.216	-.2	.0	141.0	159.4	55.5	88.8	MN	2.650	100.0	100.0	1.7	2.879	.00	.00			8
831.95	69	1.8	1.3	40.7	2.244	-.3	.0	139.0	158.5	55.3	91.5	MN	2.650	100.0	100.0	1.1	2.885	.00	.00			8
832.10	70	1.8	1.3	35.7	2.273	-.2	.0			56.2	92.3	N	2.650	100.0	100.0	2.4	2.843	.00	.00	2		
832.26	68	1.8	1.3	36.0	2.294	-.2	.0	100.0	100.0	58.6	91.3	GR	2.650	100.0	100.0	.0	2.866	.00	.00			
832.41	66	1.8	1.3	36.7	2.302	-.2	.0	143.0	166.5	59.1	87.4	GR	2.650	100.0	100.0	.8	2.882	.00	.00			
832.56	66	1.7	1.3	37.9	2.293	-.2	.0	143.4	161.6	59.7	88.9	GR	2.650	100.0	100.0	1.1	2.890	.00	.00			
832.71	70	1.6	1.1	37.6	2.261	-.2	.0			60.3	96.7	GR	2.650	100.0	100.0	1.1	2.859	.00	.00	1		
832.87	74	1.6	1.1	40.0	2.229	-.1	.0			60.0	100.0	S	2.650	100.0	100.0	.0	2.864	.00	.00	1		
833.02	77	1.6	1.0	40.7	2.209	-.2	.0			59.6	100.0	S	2.650	100.0	100.0	.0	2.855	.00	.00	1		
833.17	76	1.6	.9	43.1	2.215	-.1	.0			60.1	100.0	S	2.650	100.0	100.0	.0	2.892	.00	.00	1		
833.32	73	1.6	1.0	41.4	2.223	-.3	.0			59.8	100.0	S	2.650	100.0	100.0	.0	2.877	.00	.00	1		
833.48	69	1.6	1.1	40.1	2.251	-.2	.0	145.5	174.2	60.2	94.0	GR	2.650	100.0	100.0	.7	2.884	.00	.00			8
833.63	69	1.6	1.3	38.8	2.280	-.1	.0	148.9	166.8	61.9	93.6	GR	2.650	100.0	100.0	.2	2.890	.00	.00			
833.78	70	1.6	1.2	38.7	2.292	-.2	.0			63.1	96.1	GR	2.650	100.0	100.0	1.3	2.900	.00	.00	1		
833.93	74	1.5	1.0	38.6	2.253	-.3	.0			63.2	99.0	N	2.650	100.0	100.0	.3	2.865	.00	.00	1		
834.09	78	1.5	.9	37.3	2.197	-.2	.0	150.1	187.1	62.9	88.3	DN	2.650	100.0	100.0	1.8	2.800	.00	.00			8

Zone No. 1 CUTTLEFISH 1 Complex Lithology Results
AMITY OIL NL 01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
834.24	78	1.4	.9	38.3	2.166	-.3	.0	148.2	175.0	59.7	83.1	DN	2.650	100.0	100.0	3.2	2.789	.00	.00	8
834.39	76	1.5	1.0	38.6	2.184	-.1	.0	149.7	181.8	58.9	91.4	DN	2.650	100.0	100.0	1.2	2.806	.00	.00	8
834.54	71	1.6	1.1	39.6	2.227	-.2	.0			57.4	97.4	MN	2.650	100.0	100.0	.9	2.857	.00	.00 1	
834.69	72	1.8	1.2	37.4	2.275	-.2	.0			57.2	96.2	N	2.650	100.0	100.0	1.2	2.868	.00	.00 1	
834.85	70	1.9	1.3	38.7	2.311	-.2	.0			57.5	96.5	GR	2.650	100.0	100.0	1.1	2.916	.00	.00 1	
835.00	71	1.9	1.4	38.3	2.319	-.2	.0			58.5	98.3	GR	2.650	100.0	100.0	.6	2.919	.00	.00 1	
835.15	73	1.8	1.3	42.4	2.300	-.1	.0			59.1	100.0	S	2.650	100.0	100.0	.0	2.955	.00	.00 1	
835.30	80	1.7	1.3	42.0	2.267	-.1	.0			59.4	100.0	S	2.650	100.0	100.0	.0	2.921	.00	.00 1	
835.46	84	1.6	1.0	42.3	2.240	.0	.0			61.4	100.0	S	2.650	100.0	100.0	.0	2.903	.00	.00 1	
835.61	85	1.6	1.0	40.4	2.230	-.3	.0			62.2	100.0	N	2.650	100.0	100.0	.0	2.869	.00	.00 1	
835.76	84	1.6	1.0	41.6	2.229	-.1	.0			59.6	100.0	S	2.650	100.0	100.0	.0	2.884	.00	.00 1	
835.91	78	1.6	1.1	39.4	2.222	-.4	.0			58.5	99.3	S	2.650	100.0	100.0	.2	2.850	.00	.00 1	
836.07	75	1.7	1.2	38.1	2.228	-.2	.0	141.5	163.2	55.1	90.9	MN	2.650	100.0	100.0	1.3	2.838	.00	.00	8
836.22	67	1.9	1.4	36.0	2.257	-.2	.0	131.8	146.5	52.1	85.0	MN	2.650	100.0	100.0	2.4	2.834	.00	.00	
836.37	67	2.2	1.8	34.9	2.293	-.1	.0	132.8	145.6	51.2	86.4	MN	2.650	100.0	100.0	.5	2.849	.00	.00	
836.52	68	2.3	1.8	35.0	2.322	-.2	.0			52.8	90.5	N	2.650	100.0	100.0	2.9	2.876	.00	.00 2	
836.68	76	2.4	1.8	33.7	2.327	-.2	.0			53.7	87.5	N	2.650	100.0	100.0	3.7	2.863	.00	.00 2	
836.83	78	2.3	1.7	37.0	2.335	-.3	.0			52.9	90.8	S	2.650	100.0	100.0	2.8	2.914	.00	.00 3	
836.98	79	2.2	1.6	35.7	2.329	-.2	.0			52.4	89.9	S	2.650	100.0	100.0	3.1	2.892	.00	.00 3	
837.13	81	2.1	1.5	35.4	2.321	-.1	.0			51.8	89.0	S	2.650	100.0	100.0	3.3	2.881	.00	.00 3	
837.29	85	2.2	1.5	34.1	2.313	-.1	.0	100.0	100.0	50.9	87.5	MN	2.650	100.0	100.0	.0	2.857	.00	.00	
837.44	89	2.3	1.7	35.3	2.313	-.1	.0	130.5	149.5	50.7	86.4	MN	2.650	100.0	100.0	.3	2.872	.00	.00	
837.59	87	2.2	1.6	38.1	2.315	-.1	.0	128.2	145.2	51.7	88.2	MN	2.650	100.0	100.0	1.0	2.912	.00	.00	
837.74	87	2.2	1.6	38.6	2.315	-.2	.0			55.1	94.1	S	2.650	100.0	100.0	1.9	2.917	.00	.00 3	

Hydrocarbon Volume Report

Formation Name

FROM	M	748.741
TO	M	837.759
INTERVAL	M	89.018
PHIE Cut Off		.050
SW Cut Off		.500
Vclay Cut Off		.300
Net Pay Interval	M	.000
Gross Interval	M	2.896
Net Pay/Gross		.000
Net Pay/Total Interval		.000
Average PHIE	%	.000
Average SW	%	.000
Average Vclay	%	.000
Integrated PHI	M	.000
Weighed Sum PHI*(1-SW)	M	.000
Average Sum PHI*(1-SW)	M	.000

Zone No. 2 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
837.90	86	2.2	1.5	39.7	2.312	-.1	.0	241.5	191.1	54.9	71.7	GR	2.650	100.0	100.0	5.6	2.931	.00	.00	8
838.05	92	2.1	1.5	40.5	2.294	.0	.0	254.2	224.6	54.1	78.3	GR	2.650	100.0	100.0	3.8	2.926	.00	.00	8
838.20	91	1.9	1.3	38.7	2.272	.0	.0	265.4	237.4	54.3	77.1	GR	2.650	100.0	100.0	4.1	2.883	.00	.00	8
838.35	91	1.9	1.2	36.2	2.257	-.1	.0	266.2	237.6	54.0	76.4	GR	2.650	100.0	100.0	4.3	2.837	.00	.00	8
838.50	89	2.0	1.4	34.8	2.270	-.1	.0	255.1	213.1	55.3	74.7	GR	2.650	100.0	100.0	4.7	2.828	.00	.00	8
838.66	89	2.2	1.7	35.2	2.296	-.1	.0	243.2	192.5	54.1	74.3	GR	2.650	100.0	100.0	4.9	2.856	.00	.00	8
838.81	91	2.3	1.7	36.4	2.303	-.1	.0	245.4	206.4	52.6	76.9	GR	2.650	100.0	100.0	4.1	2.880	.00	.00	8
838.96	90	2.3	1.9	37.3	2.307	-.1	.0	242.4	192.1	52.9	76.0	GR	2.650	100.0	100.0	4.4	2.894	.00	.00	8
839.11	93	2.4	1.8	38.2	2.310	-.1	.0	243.8	210.2	51.7	79.3	GR	2.650	100.0	100.0	3.5	2.909	.00	.00	8
839.27	95	2.6	2.3	38.6	2.334	-.1	.0	234.7	195.1	45.7	81.7	GR	2.650	100.0	100.0	2.9	2.935	.00	.00	8
839.42	98	2.9	2.9	37.0	2.361	.0	.0	226.7	189.9	44.8	84.1	GR	2.650	100.0	100.0	2.2	2.938	.00	.00	
839.57	94	3.4	3.9	35.5	2.385	-.1	.0	216.1	167.1	41.4	80.5	GR	2.650	100.0	100.0	2.2	2.938	.00	.00	
839.72	92	3.6	3.9	35.4	2.397	-.1	.0	206.8	157.5	40.9	78.1	GR	2.650	100.0	100.0	2.7	2.947	.00	.00	
839.88	89	3.7	4.2	35.6	2.396	-.1	.0	197.8	135.7	40.4	74.9	GR	2.650	100.0	100.0	3.9	2.949	.00	.00	
840.03	87	3.6	3.9	35.8	2.390	-.1	.0	192.6	128.3	40.6	72.8	GR	2.650	100.0	100.0	4.8	2.947	.00	.00	
840.18	85	3.7	4.0	31.9	2.391	-.1	.0	207.9	147.4	40.8	70.4	GR	2.650	100.0	100.0	3.6	2.895	.00	.00	
840.33	80	3.6	4.0	30.5	2.396	-.1	.0	209.7	136.8	43.1	65.3	GR	2.915	100.0	100.0	4.6	2.880	.00	.00	5
840.49	82	3.6	3.8	29.1	2.407	-.1	.0	228.9	174.3	42.5	67.5	GR	2.880	100.0	100.0	2.7	2.869	.00	.00	
840.64	84	3.7	3.9	30.8	2.415	-.1	.0	215.8	160.3	41.4	69.8	GR	2.990	100.0	100.0	3.0	2.900	.00	.00	5
840.79	87	3.8	4.0	32.3	2.427	-.1	.0	215.2	171.5	41.4	72.9	GR	2.650	100.0	100.0	2.3	2.932	.00	.00	
840.94	85	3.8	4.4	33.8	2.427	-.1	.0	200.9	136.0	41.7	70.3	GR	2.650	100.0	100.0	3.9	2.952	.00	.00	
841.10	83	3.8	4.4	34.8	2.425	-.1	.0	185.9	111.3	41.7	67.9	GR	3.193	100.0	100.0	6.0	2.963	.00	.00	5
841.25	81	3.7	4.0	33.9	2.420	-.1	.0	187.4	115.8	40.6	66.1	GR	3.126	100.0	100.0	6.1	2.947	.00	.00	5
841.40	82	3.6	4.0	32.5	2.423	-.1	.0	201.3	129.3	39.6	67.2	GR	3.084	100.0	100.0	5.0	2.931	.00	.00	5
841.55	83	3.6	3.9	30.6	2.428	-.1	.0	218.0	154.1	35.1	67.8	GR	3.013	100.0	100.0	3.5	2.910	.00	.00	5
841.71	86	4.0	4.9	30.3	2.443	-.1	.0	223.9	179.4	36.6	71.9	GR	2.650	100.0	100.0	1.3	2.919	.00	.00	
841.86	88	4.5	5.4	31.0	2.458	-.1	.0	213.8	183.5	36.9	73.8	GR	2.650	100.0	100.0	.7	2.941	.00	.00	
842.01	93	4.6	5.3	32.0	2.472	-.1	.0			37.9	78.1	S	2.650	100.0	100.0	5.6	2.968	.00	.00	3

842.16	93	4.2	4.9	32.3	2.471	-.1	.0	100.0	100.0	39.7	79.2	GR	2.650	100.0	100.0	.0	2.971	.00	.00				
842.31	93	4.0	4.4	32.5	2.460	-.1	.0	100.0	100.0	42.1	78.8	GR	2.650	100.0	100.0	.0	2.964	.00	.00				
842.47	93	3.6	3.6	32.1	2.442	-.1	.0	100.0	100.0	43.7	78.6	GR	2.650	100.0	100.0	.0	2.942	.00	.00				
842.62	97	3.7	3.7	34.1	2.429	-.1	.0	100.0	100.0	44.3	83.8	GR	2.650	100.0	100.0	.0	2.958	.00	.00				
842.77	107	3.7	3.7	36.1	2.420	-.1	.0			44.2	89.3	S	2.650	100.0	100.0	3.1	2.978	.00	.00	3			
842.92	114	3.7	4.1	42.6	2.421	-.1	.0			42.9	87.1	S	2.650	100.0	100.0	4.1	3.064	.00	.00	3			
843.08	115	3.6	3.9	44.1	2.418	-.1	.0			43.3	87.8	S	2.650	100.0	100.0	4.0	3.080	.00	.00	3			
843.23	116	3.5	3.8	45.2	2.416	-.1	.0			43.8	88.7	S	2.650	100.0	100.0	3.7	3.093	.00	.00	3			
843.38	119	3.3	3.6	43.5	2.403	-.1	.0			42.3	85.9	S	2.650	100.0	100.0	4.6	3.060	.00	.00	3			
843.53	120	3.1	3.3	46.2	2.383	-.1	.0	218.1	183.3	43.5	86.4	MN	2.650	100.0	100.0	1.9	3.076	.00	.00				8
843.69	118	3.1	2.9	46.2	2.364	-.1	.0	221.9	208.6	45.1	90.1	MN	2.650	100.0	100.0	1.2	3.059	.00	.00				8
843.84	119	3.2	2.9	41.3	2.356	-.2	.0			45.1	91.1	S	2.650	100.0	100.0	2.9	2.990	.00	.00	3			
843.99	119	3.2	2.8	38.1	2.354	-.2	.0			48.1	96.4	S	2.650	100.0	100.0	1.1	2.946	.00	.00	1			
844.14	115	3.3	3.1	34.5	2.356	-.1	.0			44.7	90.2	S	2.650	100.0	100.0	2.9	2.900	.00	.00	3			
844.30	107	3.5	3.5	35.8	2.360	.0	.0			43.0	87.2	S	2.650	100.0	100.0	3.8	2.921	.00	.00	3			
844.45	101	4.0	4.1	34.0	2.372	.0	.0			42.3	85.9	S	2.650	100.0	100.0	4.0	2.907	.00	.00	3			
844.60	102	4.2	4.6	35.2	2.376	.0	.0			42.4	86.2	S	2.650	100.0	100.0	4.0	2.926	.00	.00	3			
844.75	104	3.9	3.5	35.1	2.370	.0	.0			42.7	86.7	S	2.650	100.0	100.0	3.9	2.920	.00	.00	3			
844.91	105	3.7	3.3	35.8	2.354	-.1	.0			43.2	87.5	S	2.650	100.0	100.0	3.7	2.916	.00	.00	3			
845.06	105	3.8	3.3	34.6	2.350	.0	.0			45.4	90.9	N	2.650	100.0	100.0	2.7	2.895	.00	.00	2			
845.21	107	4.1	3.9	32.5	2.350	-.1	.0			48.1	86.1	N	2.650	100.0	100.0	3.9	2.867	.00	.00	2			
845.36	104	3.9	2.7	31.8	2.336	-.1	.0			45.3	84.3	N	2.650	100.0	100.0	4.4	2.845	.00	.00	2			
845.52	103	3.4	1.9	36.5	2.313	-.2	.0	211.7	261.3	48.9	89.7	GR	2.650	100.0	100.0	1.1	2.890	.00	.00				
845.67	102	3.3	1.9	41.1	2.292	-.1	.0	213.4	243.4	46.0	87.0	MN	2.650	100.0	100.0	1.7	2.931	.00	.00				8
845.82	99	3.7	2.2	40.8	2.324	-.1	.0	194.9	196.9	43.1	80.3	MN	2.650	100.0	100.0	3.3	2.955	.00	.00				8
845.97	96	4.6	2.8	38.9	2.366	-.1	.0	164.3	135.4	38.5	70.1	MN	2.650	100.0	100.0	6.1	2.967	.00	.00				8
846.12	98	4.3	2.1	39.2	2.385	-.1	.0	140.0	101.0	34.0	55.6	MN	3.150	100.0	100.0	12.6	2.987	.00	.00		5		
846.28	113	3.8	1.8	40.2	2.370	-.1	.0	154.6	121.3	37.1	64.4	MN	3.220	100.0	100.0	10.4	2.987	.00	.00		5		

Zone No. 2 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS			
846.43	118	4.5	2.4	40.6	2.377	-.1	.0	142.7	107.8	37.2	65.7	MN	3.269	100.0	100.0	10.0	2.999	.00	.00		5		
846.58	117	5.2	3.3	41.0	2.422	-.1	.0	139.1	102.2	36.4	68.9	MN	3.460	100.0	100.0	8.5	3.044	.00	.00		5		
846.73	112	4.4	3.0	45.9	2.437	-.1	.0	175.8	154.0	38.9	77.2	MN	2.650	100.0	100.0	4.1	3.120	.00	.00				8
846.89	139	3.7	2.0	49.4	2.403	-.1	.0	196.9	215.7	42.3	82.7	MN	2.650	100.0	100.0	2.7	3.134	.00	.00				8
847.04	154	2.3	1.5	47.4	2.419	-.1	.0			54.5	100.0	S	2.650	100.0	100.0	.0	3.122	.00	.00	1			
847.19	145	1.6	.9	38.5	2.504	-.1	.0			57.7	100.0	N	2.650	100.0	100.0	.0	3.083	.00	.00	1			
847.34	109	1.1	.7	38.0	2.689	-.1	.0			63.1	96.2	GR	2.650	100.0	100.0	1.0	3.245	.00	.00	1			
847.50	81	.9	.5	46.7	2.773	-.2	.0	281.6	191.6	66.3	66.1	GR	7.912	100.0	100.0	12.6	3.435	.00	.00		5	8	
847.65	67	.8	.4	55.1	2.708	-.2	.0	267.1	172.5	70.8	50.7	GR	6.385	100.0	100.0	18.4	3.479	.00	.00		5	8	
847.80	49	.7	.4	58.5	2.420	-.2	.0	252.7	131.6	73.0	31.9	GR	4.690	100.0	100.0	25.4	3.261	.00	.00		5	8	
847.95	46	.6	.4	61.6	2.131	-.2	.0	258.2	129.8	72.7	28.4	GR	3.651	100.0	100.0	26.7	3.770	.00	.00		5	8	
848.11	44	.8	.5	66.0	1.915	-.2	.0	224.1	106.5	71.6	26.4	GR	2.929	100.0	100.0	27.5	3.230	.00	.00		5	8	
848.26	48	1.7	.8	64.5	1.729	-.1	.0	121.7	66.9	67.8	30.4	DN	2.689	100.0	100.0	35.3	2.763	.00	.00				8
848.41	Coal																						
848.56	Coal																						
848.72	Coal																						
848.87	Coal																						
849.02	Coal																						
849.17	Coal																						
849.33	Coal																						

849.48	Coal																			
849.63	Coal																			
849.78	Coal																			
849.93	Coal																			
850.09	Coal																			
850.24	Coal																			
850.39	Coal																			
850.54	Coal																			
850.70	Coal																			
850.85	Coal																			
851.00	Coal																			
851.15	Coal																			
851.31	Coal																			
851.46	Coal																			
851.61	Coal																			
851.76	Coal																			
851.92	Coal																			
852.07	Coal																			
852.22	Coal																			
852.37	Coal																			
852.53	Coal																			
852.68	66	7.4	1.8	33.5	1.926	-.2	.1	64.8	45.3	37.2	.0	DN	2.584	64.8	64.8	37.3	2.624	.00	.00	6 8
852.83	51	6.8	1.4	29.3	2.093	-.2	.0	73.9	54.5	38.7	.0	DN	2.646	73.9	73.9	34.4	2.646	.00	.00	
852.98	42	6.1	1.1	25.0	2.194	-.1	.0	96.5	78.8	39.1	6.1	DN	2.655	96.5	96.5	27.0	2.663	.00	.00	
853.14	34	5.9	1.1	23.4	2.225	-.1	.0	106.5	87.6	39.2	7.7	DN	2.655	100.0	100.0	24.7	2.666	.00	.00	
853.29	27	5.5	1.0	23.2	2.215	-.2	.0	106.4	85.5	39.3	3.2	DN	2.655	100.0	100.0	26.5	2.659	.00	.00	
853.44	28	5.4	.9	24.2	2.190	-.1	.0	100.9	82.4	40.6	.7	DN	2.655	100.0	100.0	28.6	2.656	.00	.00	
853.59	29	6.1	1.0	24.9	2.186	-.2	.0	94.3	82.1	41.1	2.8	DN	2.655	94.3	94.3	28.3	2.659	.00	.00	
853.74	38	7.2	1.1	25.5	2.199	-.1	.0	91.0	85.0	41.7	10.7	DN	2.655	91.0	91.0	25.6	2.670	.00	.00	
853.90	46	7.9	1.3	27.3	2.212	-.2	.0	92.4	88.7	44.1	25.2	DN	2.655	92.4	92.4	21.1	2.690	.00	.00	
854.05	56	7.5	1.5	31.5	2.203	-.2	.0	93.8	90.2	46.3	38.7	GR	2.670	93.8	93.8	18.7	2.726	.00	.00	
854.20	55	7.3	1.5	32.3	2.171	-.2	.0	89.6	83.8	48.1	38.1	GR	2.656	89.6	89.6	20.4	2.711	.00	.00	
854.35	53	6.5	1.2	34.2	2.130	-.2	.0	86.3	83.5	51.4	36.2	DN	2.650	86.3	86.3	23.4	2.706	.00	.00	
854.51	51	5.6	.8	33.9	2.086	-.2	.0	83.5	81.0	52.2	20.0	DN	2.649	83.5	83.5	29.8	2.681	.00	.00	8
854.66	51	5.1	.8	35.8	2.050	-.2	.0	86.9	82.9	52.8	18.6	DN	2.647	86.9	86.9	30.4	2.678	.00	.00	8
854.81	50	4.9	.7	34.6	2.030	-.2	.0	82.6	73.3	53.6	5.4	DN	2.648	82.6	82.6	35.3	2.657	.00	.00	8

Zone No. 2 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
854.96	46	4.8	.7	36.9	2.024	-.2	.0	88.1	84.6	51.7	15.8	DN	2.646	88.1	88.1	31.4	2.673	.00	.00	8
855.12	39	4.8	.6	35.9	2.031	-.2	.0	86.3	89.6	53.5	12.8	DN	2.647	89.6	86.3	32.5	2.668	.00	.00	8
855.27	36	4.9	.6	33.8	2.046	-.2	.0	82.5	84.2	52.1	6.1	DN	2.648	84.2	82.5	35.0	2.658	.00	.00	8
855.42	33	5.2	.6	28.9	2.059	-.2	.0	81.2	80.6	51.4	.0	DN	2.624	81.2	81.2	35.6	2.624	.00	.00	
855.57	32	5.1	.6	26.2	2.072	-.2	.0	85.5	82.0	51.5	.0	DN	2.611	85.5	85.5	34.3	2.631	.00	.00	6
855.73	30	4.7	.6	27.7	2.079	-.2	.0	88.8	88.0	53.3	.0	DN	2.626	88.8	88.8	34.5	2.626	.00	.00	
855.88	32	4.4	.5	28.2	2.086	-.2	.0	92.3	93.7	51.2	.0	DN	2.634	93.7	92.3	34.3	2.634	.00	.00	
856.03	32	4.3	.5	30.7	2.089	-.2	.0	92.4	93.5	50.7	3.4	DN	2.651	93.5	92.4	34.0	2.656	.00	.00	
856.18	34	3.9	.5	29.6	2.092	-.2	.0	97.0	88.4	48.6	.0	DN	2.648	97.0	97.0	34.5	2.648	.00	.00	
856.34	29	3.5	.6	30.1	2.091	-.2	.0	102.3	87.8	44.7	.6	DN	2.651	100.0	100.0	34.6	2.652	.00	.00	
856.49	26	3.6	.6	27.5	2.092	-.2	.0	103.2	88.9	43.3	.0	DN	2.632	100.0	100.0	33.9	2.632	.00	.00	
856.64	25	4.8	.6	27.1	2.096	-.2	.0	90.6	87.6	41.0	.0	DN	2.630	90.6	90.6	33.6	2.630	.00	.00	

856.79	26	5.8	.6	26.1	2.110	-.1	.0	84.6	88.0	36.3	.0	DN	2.630	88.0	84.6	32.7	2.630	.00	.00		
856.95	30	6.3	.7	26.2	2.126	-.1	.0	82.9	86.9	37.4	.0	DN	2.639	86.9	82.9	32.1	2.639	.00	.00		
857.10	34	5.5	.7	26.5	2.133	-.1	.0	88.6	84.4	45.6	.0	DN	2.645	88.6	88.6	31.9	2.645	.00	.00		
857.25	40	4.2	.7	29.2	2.113	-.1	.0	97.2	81.1	51.3	2.4	DN	2.652	97.2	97.2	32.8	2.656	.00	.00		
857.40	50	3.8	.5	40.1	2.052	-.1	.0	108.2	118.8	63.6	32.3	GR	2.670	100.0	100.0	25.2	2.720	.00	.00		8
857.55	Coal																				
857.71	Coal																				
857.86	Coal																				
858.01	Coal																				
858.16	Coal																				
858.32	Coal																				
858.47	134	5.3	1.1	45.2	2.086	-.1	.0	164.9	286.7	58.5	82.9	DN	2.650	100.0	100.0	2.6	2.815	.00	.00		8
858.62	132	5.7	1.4	44.4	2.182	-.1	.0			56.9	100.0	SD	2.650	100.0	100.0	.0	2.881	.00	.00	1	
858.77	131	5.7	1.6	40.3	2.243	-.1	.0			56.3	100.0	N	2.650	100.0	100.0	.0	2.878	.00	.00	1	
858.93	132	5.5	1.5	39.7	2.264	-.1	.0			55.4	100.0	N	2.650	100.0	100.0	.0	2.889	.00	.00	1	
859.08	133	5.3	1.5	39.6	2.274	-.2	.0			54.3	100.0	N	2.650	100.0	100.0	.0	2.896	.00	.00	1	
859.23	131	5.3	1.6	41.8	2.283	-.1	.0			53.1	100.0	S	2.650	100.0	100.0	.0	2.933	.00	.00	1	
859.38	128	5.2	1.7	43.6	2.290	-.1	.0			53.5	100.0	S	2.650	100.0	100.0	.0	2.962	.00	.00	1	
859.54	127	5.1	1.7	43.9	2.297	-.2	.0			53.7	100.0	S	2.650	100.0	100.0	.0	2.971	.00	.00	1	
859.69	123	5.0	1.1	45.9	2.302	-.2	.0			53.0	100.0	S	2.650	100.0	100.0	.0	3.002	.00	.00	1	
859.84	124	4.9	1.1	47.2	2.303	-.2	.0			52.4	100.0	S	2.650	100.0	100.0	.0	3.018	.00	.00	1	
859.99	119	5.0	1.1	45.6	2.292	-.2	.0			51.4	100.0	S	2.650	100.0	100.0	.0	2.989	.00	.00	1	
860.15	120	5.0	1.5	43.1	2.276	-.1	.0			51.1	100.0	S	2.650	100.0	100.0	.0	2.944	.00	.00	1	
860.30	118	5.1	1.6	42.2	2.268	-.1	.0			51.1	100.0	S	2.650	100.0	100.0	.0	2.925	.00	.00	1	
860.45	125	5.2	1.6	43.2	2.276	-.2	.0			51.4	100.0	S	2.650	100.0	100.0	.0	2.945	.00	.00	1	
860.60	123	5.4	1.7	42.5	2.291	-.2	.0			53.4	100.0	S	2.650	100.0	100.0	.0	2.948	.00	.00	1	
860.76	122	5.4	1.7	41.0	2.297	-.2	.0			53.6	100.0	S	2.650	100.0	100.0	.0	2.934	.00	.00	1	
860.91	121	5.4	1.6	39.4	2.293	-.1	.0			54.0	100.0	N	2.650	100.0	100.0	.0	2.910	.00	.00	1	
861.06	126	5.4	1.6	41.6	2.289	-.2	.0			53.5	100.0	S	2.650	100.0	100.0	.0	2.935	.00	.00	1	
861.21	130	5.5	1.5	39.0	2.291	-.1	.0			53.2	100.0	N	2.650	100.0	100.0	.0	2.903	.00	.00	1	
861.36	132	5.5	1.5	39.7	2.281	-.1	.0			53.1	100.0	N	2.650	100.0	100.0	.0	2.904	.00	.00	1	
861.52	136	5.6	1.7	36.6	2.256	-.2	.0	166.5	281.2	53.6	91.2	DN	2.650	100.0	100.0	1.0	2.840	.00	.00		8
861.67	133	5.9	1.6	40.1	2.236	-.2	.0			52.8	100.0	N	2.650	100.0	100.0	.0	2.871	.00	.00	1	
861.82	126	6.6	1.7	40.4	2.232	-.1	.0			51.4	99.5	SD	2.650	100.0	100.0	.2	2.870	.00	.00	1	
861.97	113	7.9	1.3	39.7	2.256	-.1	.0	140.0	318.1	48.3	92.3	MN	2.650	100.0	100.0	.8	2.882	.00	.00		8
862.13	106	9.3	1.7	35.6	2.289	-.1	.0	131.5	297.5	46.5	92.0	MN	2.650	100.0	100.0	.4	2.856	.00	.00		
862.28	106	9.8	2.0	28.4	2.331	-.1	.0	134.7	239.7	43.9	71.3	DN	2.650	100.0	100.0	2.5	2.793	.00	.00		
862.43	105	8.8	2.7	27.3	2.349	-.1	.0	150.1	232.2	41.0	70.8	DN	2.650	100.0	100.0	1.6	2.793	.00	.00		
862.58	104	7.4	1.9	26.7	2.355	-.2	.0	172.9	305.2	40.1	69.2	DN	2.639	100.0	100.0	1.0	2.789	.00	.00		
862.74	100	7.3	1.8	28.0	2.348	-.2	.0	166.7	314.7	40.6	74.8	DN	2.650	100.0	100.0	.7	2.803	.00	.00		
862.89	98	7.5	1.6	27.8	2.345	-.2	.0	162.0	310.7	41.7	72.6	DN	2.650	100.0	100.0	1.4	2.797	.00	.00		
863.04	91	7.8	1.2	29.3	2.323	-.2	.0	148.5	301.1	41.9	73.4	DN	2.650	100.0	100.0	2.4	2.798	.00	.00		
863.19	83	7.8	.9	31.5	2.292	-.2	.0	130.1	243.2	42.4	68.8	GR	2.685	100.0	100.0	5.7	2.803	.00	.00		
863.35	75	8.2	.9	31.4	2.269	-.2	.0	113.4	190.6	43.4	59.6	GR	2.681	100.0	100.0	9.5	2.781	.00	.00		

Zone No. 2 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
863.50	63	8.2	.9	27.9	2.259	-.2	.0	107.6	152.1	43.9	44.4	DN	2.655	100.0	100.0	13.4	2.724	.00	.00	
863.65	58	7.6	.9	27.0	2.256	-.2	.0	109.0	143.5	43.7	38.1	DN	2.655	100.0	100.0	15.1	2.709	.00	.00	
863.80	54	7.5	.8	26.0	2.247	-.2	.0	105.5	131.3	43.4	29.9	DN	2.655	100.0	100.0	17.8	2.697	.00	.00	
863.96	57	7.8	.8	28.4	2.235	-.2	.0	102.1	142.8	43.6	39.3	DN	2.655	100.0	100.0	16.1	2.711	.00	.00	

864.11	57	7.9	.7	26.1	2.223	-.2	.0	94.6	118.8	43.3	22.2	DN	2.655	98.9	94.6	21.2	2.686	.00	.00
864.26	59	8.1	.8	27.3	2.217	-.2	.0	92.7	120.5	42.7	26.6	DN	2.655	98.5	92.7	20.5	2.692	.00	.00
864.41	58	9.1	.8	26.0	2.221	-.2	.0	87.3	111.0	43.8	20.9	DN	2.655	97.3	87.3	21.7	2.684	.00	.00
864.57	55	9.6	.9	27.7	2.222	-.2	.0	86.8	118.1	44.1	30.6	DN	2.655	97.2	86.8	19.2	2.698	.00	.00
864.72	47	9.2	.8	27.7	2.215	-.2	.0	86.8	117.8	44.5	28.3	DN	2.655	97.2	86.8	20.2	2.695	.00	.00
864.87	42	8.9	.8	29.3	2.195	-.2	.0	81.9	106.8	44.9	23.8	GR	2.667	96.1	81.9	22.9	2.698	.00	.00
865.02	38	8.6	.8	29.1	2.180	-.2	.0	80.7	101.5	44.4	19.7	GR	2.662	95.8	80.7	24.7	2.689	.00	.00
865.17	36	8.2	.7	28.3	2.174	-.2	.0	81.7	101.0	43.5	17.7	GR	2.655	96.0	81.7	25.4	2.680	.00	.00
865.33	36	7.5	.7	27.6	2.173	-.2	.0	84.9	104.2	43.0	13.6	DN	2.654	96.8	84.9	26.4	2.674	.00	.00
865.48	34	7.5	.6	26.3	2.179	-.2	.0	84.7	102.4	43.1	8.6	DN	2.655	96.7	84.7	27.3	2.667	.00	.00
865.63	34	7.8	.7	26.2	2.183	-.2	.0	84.0	103.5	43.2	9.4	DN	2.655	96.6	84.0	26.9	2.668	.00	.00
865.78	37	8.4	.7	26.1	2.189	-.2	.0	82.2	102.0	43.3	10.8	DN	2.655	96.2	82.2	26.2	2.670	.00	.00
865.94	40	8.9	.7	27.2	2.193	-.2	.0	81.9	107.6	43.5	18.0	DN	2.655	96.1	81.9	24.1	2.680	.00	.00
866.09	42	9.4	.8	27.1	2.196	-.2	.0	80.3	105.9	44.1	18.4	DN	2.655	95.7	80.3	23.8	2.681	.00	.00
866.24	43	9.7	.8	27.0	2.199	-.2	.0	79.7	103.9	44.4	18.8	DN	2.655	95.6	79.7	23.5	2.681	.00	.00
866.39	41	9.9	.8	24.7	2.193	-.2	.0	75.2	90.7	44.9	4.0	DN	2.655	90.7	75.2	27.6	2.660	.00	.00
866.55	41	9.4	.8	25.1	2.164	-.2	.0	72.3	84.0	45.2	.0	DN	2.650	84.0	72.3	30.2	2.650	.00	.00
866.70	40	8.7	.7	26.0	2.125	-.2	.0	70.2	85.7	48.3	.0	DN	2.637	85.7	70.2	32.1	2.637	.00	.00
866.85	41	8.6	.7	27.6	2.114	-.1	.0	68.6	84.5	49.0	.0	DN	2.644	84.5	68.6	33.0	2.644	.00	.00
867.00	39	9.6	.7	27.9	2.137	-.1	.0	67.8	88.5	49.3	3.6	DN	2.653	88.5	67.8	31.1	2.658	.00	.00
867.16	38	10.6	.7	27.9	2.162	-.2	.0	69.2	94.7	48.1	11.7	DN	2.654	92.9	69.2	27.6	2.671	.00	.00
867.31	37	10.1	.7	28.3	2.162	-.2	.0	71.1	100.0	48.6	14.1	DN	2.654	93.4	71.1	27.0	2.674	.00	.00
867.46	35	8.5	.6	29.1	2.153	-.2	.0	76.3	105.9	48.8	15.2	DN	2.653	94.7	76.3	27.2	2.675	.00	.00
867.61	33	8.0	.6	28.4	2.153	-.2	.0	78.1	105.9	48.4	11.6	DN	2.653	95.2	78.1	28.1	2.670	.00	.00
867.77	33	7.9	.6	27.9	2.160	-.2	.0	79.8	106.1	48.2	11.0	DN	2.654	95.6	79.8	27.9	2.670	.00	.00
867.92	32	7.7	.6	26.2	2.166	-.2	.0	80.6	102.1	46.9	3.7	DN	2.654	95.8	80.6	29.3	2.660	.00	.00
868.07	33	7.6	.6	25.6	2.170	-.2	.0	81.6	101.7	48.9	1.8	DN	2.655	96.0	81.6	29.5	2.657	.00	.00
868.22	30	7.7	.6	25.0	2.179	-.2	.0	82.1	101.0	48.6	1.3	DN	2.655	96.1	82.1	29.1	2.657	.00	.00
868.38	30	7.7	.6	24.1	2.187	-.2	.0	83.4	100.0	48.4	.0	DN	2.654	96.4	83.4	28.9	2.654	.00	.00
868.53	31	7.2	.6	24.7	2.191	-.2	.0	87.9	103.4	47.0	3.3	DN	2.655	97.5	87.9	27.9	2.659	.00	.00
868.68	32	6.6	.6	25.6	2.185	-.2	.0	91.8	108.9	46.0	6.9	DN	2.655	98.3	91.8	27.3	2.664	.00	.00
868.83	32	7.1	.6	25.4	2.190	-.2	.0	89.2	108.5	47.5	7.0	DN	2.655	97.8	89.2	27.0	2.665	.00	.00
868.98	33	7.9	.6	23.7	2.210	-.2	.0	88.4	108.0	48.7	4.7	DN	2.655	97.6	88.4	26.3	2.662	.00	.00
869.14	35	8.3	.7	22.9	2.232	-.2	.0	91.8	110.2	49.1	7.4	DN	2.655	98.3	91.8	24.3	2.665	.00	.00
869.29	39	7.7	.7	23.3	2.237	-.2	.0	97.6	119.3	49.9	11.4	DN	2.655	99.5	97.6	23.0	2.671	.00	.00
869.44	43	7.9	.7	24.1	2.222	-.2	.0	92.4	113.7	49.5	10.7	DN	2.655	98.4	92.4	24.1	2.670	.00	.00
869.59	47	9.0	.6	24.4	2.199	-.2	.0	80.6	105.6	48.9	5.1	DN	2.655	95.8	80.6	26.9	2.662	.00	.00
869.75	50	11.3	.6	25.6	2.175	-.2	.0	67.5	99.6	49.0	3.2	DN	2.655	92.4	67.5	28.9	2.659	.00	.00
869.90	53	11.4	.6	26.9	2.153	-.2	.0	64.4	98.0	49.4	3.2	DN	2.654	91.6	64.4	30.2	2.658	.00	.00
870.05	54	11.0	.6	29.9	2.143	-.2	.0	66.1	105.0	49.3	16.8	DN	2.653	92.1	66.1	27.4	2.677	.00	.00
870.20	49	11.0	.6	31.9	2.143	-.2	.0	67.3	110.9	49.8	27.6	DN	2.652	92.4	67.3	24.7	2.693	.00	.00
870.36	45	10.8	.7	30.2	2.150	-.2	.0	68.1	97.4	49.5	20.9	DN	2.653	92.6	68.1	25.9	2.684	.00	.00
870.51	37	8.6	.8	27.0	2.160	-.2	.0	75.6	84.3	49.6	5.8	DN	2.654	84.3	75.6	29.2	2.662	.00	.00
870.66	35	7.0	.8	25.1	2.167	-.2	.0	84.2	82.5	50.3	.0	DN	2.651	84.2	84.2	30.1	2.651	.00	.00
870.81	34	6.2	.7	26.0	2.166	-.2	.0	89.7	94.6	51.0	2.5	DN	2.654	94.6	89.7	29.6	2.658	.00	.00
870.97	42	6.6	.7	27.3	2.169	-.2	.0	88.9	101.1	51.1	10.6	DN	2.654	97.7	88.9	27.4	2.669	.00	.00
871.12	49	7.7	.7	28.8	2.176	-.2	.0	85.2	104.0	49.6	21.1	DN	2.654	96.8	85.2	24.4	2.684	.00	.00
871.27	53	9.1	.8	31.5	2.176	-.2	.0	80.6	114.5	50.1	35.9	GR	2.655	95.8	80.6	20.6	2.706	.00	.00
871.42	52	10.1	.7	32.9	2.155	-.2	.0	72.7	112.6	52.8	35.0	GR	2.656	93.8	72.7	22.3	2.707	.00	.00
871.58	48	9.9	.6	33.6	2.129	-.2	.0	68.9	113.6	56.2	30.7	GR	2.654	92.8	68.9	24.9	2.700	.00	.00
871.73	45	9.2	.5	30.5	2.109	-.2	.0	66.1	99.4	54.5	8.7	DN	2.651	92.0	66.1	31.5	2.665	.00	.00
871.88	42	8.5	.5	29.8	2.108	-.2	.0	68.1	99.7	48.9	4.2	DN	2.652	92.6	68.1	32.7	2.658	.00	.00

AMITY OIL NL 01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
872.03	40	7.9	.5	29.4	2.108	-.2	.0	70.0	99.8	49.6	1.9	DN	2.652	93.1	70.0	33.3	2.655	.00	.00	
872.19	38	7.8	.5	30.0	2.110	-.2	.0	71.7	102.4	47.5	6.0	DN	2.652	93.6	71.7	32.1	2.661	.00	.00	
872.34	40	8.1	.5	30.0	2.119	-.2	.0	71.9	101.9	49.3	9.0	DN	2.652	93.6	71.9	30.8	2.666	.00	.00	
872.49	44	8.8	.6	28.6	2.146	-.2	.0	73.4	100.6	52.3	10.5	DN	2.653	94.0	73.4	28.8	2.668	.00	.00	
872.64	46	9.3	.7	26.3	2.179	-.2	.0	76.2	96.6	53.9	8.6	DN	2.655	94.7	76.2	27.3	2.667	.00	.00	
872.79	43	9.0	.8	25.2	2.198	-.2	.0	80.8	97.5	53.1	8.5	DN	2.655	95.8	80.8	26.2	2.667	.00	.00	
872.95	37	9.1	.8	26.3	2.193	-.2	.0	80.5	97.0	52.3	13.3	DN	2.655	95.8	80.5	25.3	2.674	.00	.00	
873.10	31	8.2	.7	28.2	2.170	-.2	.0	79.6	96.9	51.3	12.9	GR	2.659	95.5	79.6	27.0	2.677	.00	.00	
873.25	30	8.3	.7	27.9	2.153	-.2	.0	76.3	92.4	49.6	8.7	DN	2.654	92.4	76.3	28.9	2.666	.00	.00	
873.40	31	8.2	.7	25.9	2.158	-.2	.0	75.9	87.5	48.8	.0	DN	2.653	87.5	75.9	30.7	2.653	.00	.00	
873.56	31	8.4	.7	25.9	2.179	-.2	.0	79.9	93.6	48.0	6.3	DN	2.655	93.6	79.9	27.9	2.664	.00	.00	
873.71	30	7.1	.7	25.3	2.194	-.2	.0	90.3	102.7	47.9	8.1	DN	2.655	98.0	90.3	26.5	2.666	.00	.00	
873.86	30	5.8	.6	25.8	2.199	-.2	.0	101.9	113.4	48.1	11.5	GR	2.656	100.0	100.0	25.4	2.672	.00	.00	
874.01	32	5.2	.6	25.1	2.185	-.2	.0	102.4	106.6	48.5	3.6	DN	2.655	100.0	100.0	28.2	2.660	.00	.00	
874.17	42	5.7	.6	27.9	2.154	-.2	.0	92.4	104.2	49.2	9.0	DN	2.654	98.4	92.4	28.7	2.667	.00	.00	
874.32	51	7.5	.6	29.8	2.118	-.1	.0	74.6	91.8	50.8	7.6	DN	2.652	91.8	74.6	31.2	2.663	.00	.00	
874.47	61	9.9	.8	31.8	2.116	-.1	.0	66.0	86.5	51.4	18.1	DN	2.651	86.5	66.0	28.7	2.679	.00	.00	
874.62	54	8.7	.8	32.1	2.138	-.2	.0	74.8	94.8	52.8	27.4	DN	2.652	94.3	74.8	25.0	2.693	.00	.00	
874.78	49	5.6	.7	29.9	2.150	-.2	.0	94.6	100.7	53.2	19.1	DN	2.653	98.9	94.6	26.4	2.681	.00	.00	
874.93	46	3.9	.5	29.0	2.135	-.2	.0	107.1	103.5	55.9	8.8	DN	2.653	100.0	100.0	29.9	2.666	.00	.00	
875.08	65	4.3	.6	29.1	2.125	-.2	.0	100.0	91.6	57.3	6.1	DN	2.652	100.0	100.0	31.2	2.662	.00	.00	
875.23	84	6.2	.9	35.7	2.126	-.2	.0	91.0	101.0	60.1	43.4	DN	2.648	98.1	91.0	21.1	2.721	.00	.00	8
875.39	105	10.7	1.8	38.8	2.122	-.2	.0	77.6	92.1	60.8	59.1	DN	2.642	92.1	77.6	15.3	2.758	.00	.00	8
875.54	113	12.1	2.0	40.0	2.118	-.2	.0	76.5	95.1	62.6	64.6	DN	2.638	94.8	76.5	13.2	2.772	.00	.00	8
875.69	116	10.5	2.2	38.2	2.121	-.2	.0	76.3	78.8	63.2	55.5	DN	2.644	78.8	76.3	16.6	2.750	.00	.00	8
875.84	115	10.0	2.3	38.6	2.142	-.1	.0	83.9	88.6	62.7	64.4	DN	2.643	88.6	83.9	13.3	2.772	.00	.00	8
876.00	115	10.0	2.3	39.2	2.161	-.2	.0	114.8	166.8	61.9	74.2	DN	2.650	100.0	100.0	4.9	2.796	.00	.00	8
876.15	115	10.1	2.0	39.8	2.170	-.1	.0	118.6	207.4	60.4	80.8	DN	2.650	100.0	100.0	3.1	2.812	.00	.00	8
876.30	110	11.2	2.0	38.8	2.175	-.1	.0	110.1	189.5	58.0	76.6	DN	2.650	100.0	100.0	4.2	2.802	.00	.00	8
876.45	100	11.9	2.2	37.5	2.173	-.1	.0	80.1	99.3	57.5	68.9	DN	2.647	95.7	80.1	11.6	2.783	.00	.00	8
876.60	80	10.7	1.3	34.3	2.162	-.1	.0	74.0	95.9	55.6	47.5	DN	2.651	94.2	74.0	18.6	2.731	.00	.00	
876.76	56	8.7	.8	32.2	2.142	-.2	.0	75.8	100.0	54.5	29.3	DN	2.652	94.6	75.8	24.3	2.696	.00	.00	
876.91	45	7.5	.6	28.1	2.121	-.2	.0	73.9	92.1	54.1	.0	DN	2.652	92.1	73.9	32.9	2.652	.00	.00	
877.06	34	7.1	.5	27.2	2.114	-.2	.0	76.0	95.7	52.5	.0	DN	2.641	94.7	76.0	32.9	2.641	.00	.00	
877.21	32	7.0	.5	27.9	2.116	-.2	.0	76.1	95.3	53.0	.0	DN	2.648	94.7	76.1	33.0	2.648	.00	.00	
877.37	34	7.5	.5	26.8	2.117	-.2	.0	74.4	94.3	52.5	.0	DN	2.639	94.3	74.4	32.6	2.639	.00	.00	
877.52	33	8.0	.6	28.3	2.114	-.2	.0	70.5	89.8	52.1	.0	DN	2.650	89.8	70.5	33.2	2.650	.00	.00	
877.67	33	8.2	.6	27.1	2.111	-.2	.0	70.4	89.8	51.6	.0	DN	2.638	89.8	70.4	32.9	2.638	.00	.00	
877.82	34	8.3	.6	29.5	2.126	.0	.0	72.2	95.2	50.4	8.5	DN	2.652	93.7	72.2	30.5	2.665	.00	.00	
877.98	38	8.3	.6	28.2	2.146	-.2	.0	75.1	97.8	49.7	8.1	DN	2.653	94.4	75.1	29.4	2.665	.00	.00	
878.13	40	9.0	.7	27.0	2.167	-.2	.0	75.5	97.7	50.0	8.4	DN	2.654	94.5	75.5	28.0	2.666	.00	.00	
878.28	37	8.8	.7	25.3	2.176	-.2	.0	76.7	96.3	49.4	1.8	DN	2.655	94.8	76.7	29.2	2.657	.00	.00	
878.43	38	8.8	.7	24.6	2.186	-.2	.0	78.4	97.4	48.6	1.4	DN	2.655	95.3	78.4	28.6	2.657	.00	.00	
878.59	35	8.5	.6	24.1	2.194	-.2	.0	81.2	103.1	46.8	1.4	DN	2.655	95.9	81.2	28.2	2.657	.00	.00	
878.74	34	8.4	.6	23.5	2.199	-.2	.0	82.3	102.9	45.7	.0	DN	2.654	96.2	82.3	28.2	2.654	.00	.00	
878.89	32	8.5	.7	22.9	2.208	-.2	.0	83.5	99.3	42.3	.0	DN	2.654	96.5	83.5	27.6	2.654	.00	.00	
879.04	31	9.6	.9	20.4	2.244	-.1	.0	86.5	98.0	41.3	.0	DN	2.651	97.1	86.5	25.3	2.651	.00	.00	
879.20	34	11.8	1.4	17.1	2.301	-.1	.0	91.5	91.6	39.6	.0	DN	2.653	91.6	91.5	21.8	2.653	.00	.00	
879.35	36	11.8	1.9	15.9	2.343	-.1	.0	106.2	94.1	34.4	5.5	DN	2.655	100.0	100.0	17.9	2.663	.00	.00	
879.50	39	9.1	1.5	16.5	2.336	-.1	.0	118.7	102.8	33.5	6.7	DN	2.655	100.0	100.0	18.1	2.665	.00	.00	

879.65	37	8.6	1.5	16.3	2.312	-.1	.0	111.0	90.8	34.0	.0	DN	2.652	100.0	100.0	21.1	2.652	.00	.00		
879.81	35	9.1	1.3	15.7	2.311	-.1	.0	109.2	98.8	35.1	.0	DN	2.647	100.0	100.0	20.9	2.647	.00	.00		
879.96	33	10.3	1.3	14.3	2.330	-.1	.0	109.6	104.9	33.7	.0	DN	2.644	100.0	100.0	19.6	2.644	.00	.00		
880.11	32	11.1	1.4	13.6	2.350	-.1	.0	112.5	108.3	36.3	.0	DN	2.648	100.0	100.0	18.5	2.648	.00	.00		
880.26	32	12.4	2.0	12.8	2.356	-.1	.0	109.8	94.5	38.5	.0	DN	2.644	100.0	100.0	18.0	2.644	.00	.00		
880.41	38	12.0	2.2	15.2	2.352	-.2	.0	108.6	88.7	43.9	4.4	DN	2.655	100.0	100.0	17.7	2.661	.00	.00		

Zone No. 2 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
880.57	51	11.0	1.5	21.0	2.333	-.1	.0	113.4	135.0	42.1	30.5	DN	2.655	100.0	100.0	12.3	2.698	.00	.00	
880.72	62	11.3	1.1	26.6	2.303	.1	.0	103.2	163.4	44.9	46.1	GR	2.669	100.0	100.0	10.7	2.742	.00	.00	
880.87	67	11.4	1.0	27.8	2.269	-.2	.0	94.4	157.0	46.5	46.9	DN	2.655	98.8	94.4	12.2	2.730	.00	.00	
881.02	63	10.8	.9	27.0	2.250	-.2	.0	89.4	134.6	48.0	35.9	DN	2.655	97.8	89.4	16.1	2.705	.00	.00	
881.18	58	10.6	.9	26.7	2.232	-.1	.0	84.5	120.6	48.5	28.1	DN	2.655	96.7	84.5	19.2	2.694	.00	.00	
881.33	56	11.3	.7	27.9	2.221	-.2	.0	80.1	128.7	48.7	31.4	DN	2.655	95.7	80.1	19.0	2.699	.00	.00	
881.48	55	13.2	.8	28.6	2.215	-.2	.0	73.4	125.0	48.3	33.5	DN	2.655	94.0	73.4	18.9	2.702	.00	.00	
881.63	53	12.6	.8	27.1	2.225	-.2	.0	76.2	119.9	48.7	28.1	DN	2.655	94.7	76.2	19.6	2.694	.00	.00	
881.79	51	10.6	.8	26.0	2.229	-.1	.0	83.3	117.2	49.3	23.6	DN	2.655	96.4	83.3	20.5	2.688	.00	.00	
881.94	48	9.3	.7	24.8	2.215	-.1	.0	83.6	109.8	47.1	11.9	DN	2.655	96.5	83.6	24.3	2.672	.00	.00	
882.09	47	9.1	.7	24.2	2.205	-.1	.0	81.2	104.2	45.6	5.7	DN	2.655	95.9	81.2	26.4	2.663	.00	.00	
882.24	45	9.1	.7	23.9	2.213	-.1	.0	83.2	104.8	44.8	6.6	DN	2.655	96.4	83.2	25.7	2.664	.00	.00	
882.40	45	8.8	.8	21.7	2.244	-.2	.0	91.2	108.7	44.2	5.0	DN	2.655	98.2	91.2	24.2	2.662	.00	.00	
882.55	49	10.3	1.0	21.1	2.278	-.2	.0	94.3	113.0	45.1	12.6	DN	2.655	98.8	94.3	20.2	2.673	.00	.00	
882.70	51	12.8	1.3	21.8	2.304	-.1	.0	94.3	124.1	45.0	25.4	DN	2.656	98.8	94.3	15.4	2.691	.00	.00	
882.85	49	12.0	1.6	23.3	2.296	-.2	.0	96.0	114.4	44.1	30.8	DN	2.656	99.2	96.0	14.6	2.698	.00	.00	
883.01	42	7.1	1.1	22.7	2.263	-.2	.0	109.7	103.9	43.2	16.6	DN	2.655	100.0	100.0	20.1	2.678	.00	.00	
883.16	41	5.3	.9	18.4	2.230	-.1	.0	116.6	94.9	45.4	.0	DN	2.629	100.0	100.0	25.1	2.629	.00	.00	
883.31	47	5.8	.8	18.8	2.232	-.2	.0	112.0	99.6	51.0	.0	DN	2.634	100.0	100.0	25.2	2.634	.00	.00	
883.46	53	8.1	.7	23.5	2.218	-.1	.0	88.9	107.4	57.4	6.0	DN	2.655	97.7	88.9	25.6	2.663	.00	.00	
883.62	57	12.8	.8	35.7	2.112	.3	.0	61.6	101.9	60.9	38.6	DN	2.648	90.8	61.6	22.9	2.709	.00	.00	8
883.77	Coal																			
883.92	Coal																			
884.07	Coal																			
884.22	Coal																			
884.38	60	15.0	1.4	36.2	1.869	-.2	.0	45.6	51.4	50.3	.0	DN	2.570	51.4	45.6	37.3	2.630	.06	.03	6 8 $
884.53	61	13.9	1.2	31.6	1.982	-.2	.0	47.3	55.7	47.8	.0	DN	2.603	55.7	47.3	37.3	2.623	.11	.06	6 8 $
884.68	61	14.9	1.2	35.1	2.045	-.2	.0	49.1	61.1	44.8	12.8	DN	2.648	61.1	49.1	32.5	2.669	.16	.09	8 $
884.83	58	16.3	1.5	36.0	2.059	-.2	.0	49.7	60.9	42.6	22.8	DN	2.647	60.9	49.7	28.8	2.684	.21	.11	8 $
884.99	47	12.8	1.6	33.3	2.049	-.2	.0	50.5	49.2	43.6	4.2	DN	2.649	50.5	50.5	35.8	2.656	.21	.11	8
885.14	39	8.5	1.2	26.5	2.063	-.1	.0	65.2	58.6	42.8	.0	DN	2.608	65.2	65.2	34.7	2.628	.21	.11	6
885.29	33	7.1	1.0	25.1	2.097	-.2	.0	75.7	69.5	42.5	.0	DN	2.615	75.7	75.7	32.9	2.635	.21	.11	6
885.44	33	6.7	.9	26.8	2.123	-.2	.0	79.2	75.8	41.9	.0	DN	2.642	79.2	79.2	32.4	2.642	.21	.11	
885.60	37	6.3	.8	27.1	2.135	-.2	.0	82.6	78.0	38.7	.0	DN	2.650	82.6	82.6	32.0	2.650	.21	.11	
885.75	41	6.7	.9	24.4	2.165	-.2	.0	86.4	80.1	36.2	.0	DN	2.645	86.4	86.4	29.9	2.645	.21	.11	
885.90	53	8.7	1.4	22.5	2.230	-.1	.0	88.3	78.0	29.8	4.3	DN	2.655	88.3	88.3	25.2	2.661	.21	.11	
886.05	60	14.4	2.6	22.7	2.316	-.1	.0	94.2	99.9	29.3	34.1	DN	2.655	98.8	94.2	12.5	2.703	.21	.11	
886.21	69	20.3	5.3	23.3	2.380	-.1	.0	92.3	90.9	26.9	38.3	MN	2.702	92.3	92.3	9.0	2.763	.21	.11	
886.36	68	21.8	7.4	22.3	2.410	.0	.0	107.4	124.9	28.4	49.5	MN	2.690	100.0	100.0	3.8	2.775	.21	.11	
886.51	67	22.7	10.6	21.3	2.411	.0	.0	110.6	119.2	30.1	50.8	GR	2.669	100.0	100.0	2.8	2.762	.21	.11	
886.66	62	23.3	8.1	21.3	2.398	-.1	.0	100.5	104.3	27.7	45.3	MN	2.673	100.0	100.0	5.2	2.750	.21	.11	
886.82	62	21.9	4.7	22.7	2.383	.0	.0	95.9	119.6	29.2	45.2	GR	2.682	99.2	95.9	6.3	2.757	.21	.11	

886.97	59	17.5	3.3	21.5	2.363	.0	.0	103.4	128.4	31.7	42.0	GR	2.656	100.0	100.0	7.6	2.722	.21	.11		
887.12	59	11.9	2.5	20.7	2.346	-.1	.0	115.3	117.1	33.7	33.1	DN	2.654	100.0	100.0	10.8	2.701	.21	.11		
887.27	64	10.1	2.2	22.6	2.337	-.1	.0	123.1	133.2	35.4	40.5	DN	2.654	100.0	100.0	9.5	2.714	.21	.11		
887.43	79	11.0	2.5	25.8	2.349	.3	.0	134.1	209.9	35.9	62.9	DN	2.646	100.0	100.0	3.0	2.772	.21	.11		
887.58	90	15.0	3.5	29.7	2.352	.0	.0	105.9	160.2	36.9	67.5	MN	2.754	100.0	100.0	3.6	2.830	.21	.11		
887.73	96	17.5	4.5	31.4	2.349	.0	.0	88.6	110.6	36.4	64.3	MN	2.829	97.6	88.6	6.0	2.851	.21	.11		
887.88	92	16.8	3.8	30.5	2.331	.0	.0	89.4	114.8	36.2	61.2	MN	2.757	97.8	89.4	6.8	2.823	.21	.11		
888.03	82	16.8	1.9	30.4	2.332	.0	.0	95.4	197.7	39.2	67.3	GR	2.731	99.1	95.4	4.5	2.822	.21	.11		
888.19	71	16.5	1.6	29.8	2.323	-.1	.0	87.4	157.8	40.8	55.2	GR	2.731	97.3	87.4	8.5	2.806	.21	.11		
888.34	61	13.2	1.1	30.6	2.293	-.1	.0	84.8	138.9	43.4	44.1	GR	2.732	96.7	84.8	13.4	2.791	.21	.11		
888.49	47	9.5	.9	29.4	2.228	-.2	.0	85.9	115.0	44.4	29.4	GR	2.681	97.0	85.9	19.9	2.718	.21	.11		
888.64	38	7.0	.7	28.6	2.177	-.2	.0	89.6	106.2	45.6	19.9	GR	2.656	97.8	89.6	24.6	2.684	.21	.11		
888.80	34	5.4	.7	26.1	2.157	-.2	.0	93.4	90.9	45.5	.4	DN	2.654	93.4	93.4	30.7	2.655	.21	.11		
888.95	37	4.9	.7	25.2	2.165	-.2	.0	100.1	90.6	44.8	.0	DN	2.651	100.0	100.0	30.1	2.651	.21	.11		

Zone No. 2 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS	
889.10	47	4.9	.8	26.0	2.191	-.2	.0	108.1	98.9	41.4	10.9	DN	2.655	100.0	100.0	26.0	2.670	.21	.11		
889.25	70	6.4	1.2	28.0	2.232	.0	.0	110.9	111.4	40.5	35.8	DN	2.655	100.0	100.0	17.3	2.705	.21	.11		
889.41	89	9.0	1.9	30.3	2.285	-.1	.0	109.2	126.2	36.2	53.7	MN	2.693	100.0	100.0	10.4	2.780	.21	.11		
889.56	98	14.6	3.8	31.0	2.328	-.1	.0	89.8	96.4	34.9	55.4	MN	2.779	96.4	89.8	9.1	2.826	.21	.11		
889.71	94	16.8	3.7	29.5	2.357	-.1	.0	99.3	149.6	36.2	65.6	MN	2.763	99.9	99.3	4.1	2.831	.21	.11		
889.86	91	16.4	4.7	29.4	2.364	-.1	.0	103.1	144.2	36.3	67.3	MN	2.772	100.0	100.0	3.3	2.836	.21	.11		
890.02	96	14.8	4.4	31.3	2.359	-.1	.0	99.5	123.6	36.7	66.8	MN	2.846	99.9	99.5	5.0	2.858	.21	.11		
890.17	102	13.4	3.6	32.1	2.344	-.2	.0	96.5	110.9	36.2	62.0	MN	2.845	99.3	96.5	7.4	2.856	.21	.11		
890.32	109	12.5	2.6	32.3	2.348	-.1	.0	105.7	156.1	37.9	69.0	MN	2.863	100.0	100.0	5.1	2.862	.21	.11		
890.47	114	12.6	2.7	30.0	2.369	-.1	.0	122.4	230.9	38.3	75.2	MN	2.650	100.0	100.0	1.4	2.849	.21	.11		
890.63	113	12.8	3.2	30.0	2.393	-.1	.0	100.0	100.0	38.3	78.6	MN	2.650	100.0	100.0	.0	2.870	.21	.11		
890.78	108	13.3	4.1	28.1	2.398	-.1	.0	100.0	100.0	36.7	74.5	MN	2.650	100.0	100.0	.0	2.848	.21	.11		
890.93	97	13.9	4.6	25.5	2.383	-.1	.0	133.4	217.3	34.6	66.1	MN	2.671	100.0	100.0	.6	2.797	.21	.11		
891.08	89	14.9	4.8	22.7	2.375	-.1	.0	123.5	152.3	34.7	53.9	DN	2.646	100.0	100.0	3.6	2.749	.21	.11		
891.24	79	16.4	5.8	21.1	2.375	-.2	.0	114.0	113.1	34.2	45.1	DN	2.650	100.0	100.0	5.9	2.726	.21	.11		
891.39	70	15.0	4.0	21.1	2.370	-.1	.0	116.2	126.0	33.2	43.4	DN	2.651	100.0	100.0	6.7	2.721	.21	.11		
891.54	61	8.7	1.6	22.3	2.323	-.2	.0	124.6	132.3	34.1	34.3	DN	2.655	100.0	100.0	12.0	2.703	.21	.11		
891.69	60	5.7	.9	24.3	2.245	-.2	.0	117.5	112.3	37.6	19.9	DN	2.655	100.0	100.0	20.4	2.683	.21	.11		
891.84	69	5.7	.7	27.3	2.215	-.1	.0	109.7	120.9	47.6	26.0	DN	2.655	100.0	100.0	20.8	2.691	.21	.11		
892.00	88	8.0	1.0	33.9	2.216	.1	.0	102.6	153.9	50.8	63.3	DN	2.654	100.0	100.0	11.3	2.771	.21	.11		
892.15	100	12.2	2.3	41.1	2.172	.0	.0	109.8	205.8	51.2	84.0	SD	2.650	100.0	100.0	2.4	2.831	.21	.11		8
892.30	104	11.0	3.1	49.4	2.065	-.1	.0	75.9	68.4	51.5	58.0	SD	2.959	75.9	75.9	15.7	2.858	.21	.11	5	8
892.45	Coal																				
892.61	Coal																				
892.76	121	8.6	2.3	38.8	2.126	-.2	.0	84.3	76.7	46.5	55.7	SD	2.662	84.3	84.3	16.5	2.762	.21	.11		8
892.91	116	8.6	1.9	37.0	2.206	-.2	.0	96.9	113.7	44.7	69.3	SD	2.690	99.4	96.9	10.9	2.804	.21	.11		
893.06	114	9.2	1.8	38.0	2.262	-.1	.0	121.3	198.5	44.0	76.4	MN	2.650	100.0	100.0	4.3	2.865	.21	.11		8
893.22	112	9.5	2.0	35.6	2.280	-.1	.0	118.1	178.8	42.5	74.8	MN	2.650	100.0	100.0	4.7	2.848	.21	.11		8
893.37	113	9.6	2.4	36.2	2.299	-.1	.0	116.5	159.8	41.6	73.8	MN	2.650	100.0	100.0	5.0	2.873	.21	.11		8
893.52	116	9.9	2.6	33.2	2.312	-.1	.0	121.9	182.7	41.9	78.7	MN	2.650	100.0	100.0	3.1	2.843	.21	.11		
893.67	114	10.7	2.9	32.1	2.335	.0	.0	129.4	232.6	41.9	82.9	MN	2.650	100.0	100.0	.7	2.849	.21	.11		
893.83	116	10.8	3.8	31.5	2.338	.0	.0			42.2	83.6	N	2.650	100.0	100.0	4.6	2.842	.21	.11	2	
893.98	113	9.7	4.0	33.8	2.323	-.2	.0	127.5	167.7	42.5	82.5	MN	2.650	100.0	100.0	1.9	2.862	.21	.11		
894.13	116	8.6	3.1	36.1	2.296	-.2	.0	128.6	165.3	43.5	80.8	MN	2.650	100.0	100.0	3.1	2.869	.21	.11		8

894.28	117	8.1	2.7	37.7	2.287	-.2	.0	134.1	187.4	44.6	83.0	MN	2.650	100.0	100.0	2.6	2.882	.21	.11			8			
894.44	119	8.4	2.7	40.9	2.300	-.2	.0	133.1	196.8	45.2	85.2	MN	2.650	100.0	100.0	2.1	2.935	.21	.11			8			
894.59	123	8.7	2.7	41.0	2.313	-.2	.0	133.4	221.6	46.4	91.5	MN	2.650	100.0	100.0	.9	2.948	.21	.11			8			
894.74	128	8.6	2.5	42.9	2.322	-.2	.0			48.0	96.2	S	2.650	100.0	100.0	1.3	2.980	.21	.11	1					
894.89	129	8.3	2.4	41.7	2.322	-.1	.0			48.6	97.2	S	2.650	100.0	100.0	.9	2.966	.21	.11	1					
895.05	130	7.9	2.2	41.5	2.316	-.2	.0			52.4	100.0	S	2.650	100.0	100.0	.0	2.958	.21	.11	1					
895.20	128	7.7	2.1	40.7	2.298	-.1	.0			53.8	100.0	N	2.650	100.0	100.0	.0	2.931	.21	.11	1					
895.35	130	7.7	2.1	40.7	2.268	-.1	.0			55.0	100.0	N	2.650	100.0	100.0	.0	2.905	.21	.11	1					
895.50	127	8.0	2.2	42.8	2.200	-.2	.0			58.2	100.0	DN	2.650	100.0	100.0	.0	2.875	.21	.11	1					
895.65	126	7.9	2.3	43.8	2.121	-.2	.0	137.6	218.7	60.2	86.5	DN	2.650	100.0	100.0	1.8	2.823	.21	.11			8			
895.81	126	7.5	2.1	45.4	2.067	.4	.0	134.9	186.3	62.7	77.3	DN	2.650	100.0	100.0	4.0	2.803	.21	.11			8			
895.96	128	7.2	1.1	45.6	2.076	.9	.0	141.3	282.8	62.8	82.0	DN	2.650	100.0	100.0	2.9	2.814	.21	.11			8			
896.11	122	7.9	1.2	45.8	2.124	.2	.0			62.0	98.9	DN	2.650	100.0	100.0	.4	2.852	.21	.11	1					
896.26	113	8.5	1.4	46.7	2.149	-.1	.0			59.4	100.0	GR	2.650	100.0	100.0	.0	2.884	.21	.11	1					
896.42	94	9.5	3.5	44.8	2.108	-.1	.0	122.0	154.2	55.1	80.0	GR	2.650	100.0	100.0	3.3	2.826	.21	.11			8			
896.57	Coal																								
896.72	54	8.5	1.6	31.6	1.997	-.2	.0	60.6	46.9	52.2	.0	DN	2.612	60.6	60.6	37.3	2.632	.21	.11			6	8		
896.87	40	7.7	1.2	28.6	2.030	-.2	.0	64.4	56.4	48.4	.0	DN	2.606	64.4	64.4	36.8	2.626	.21	.11			6			
897.03	39	8.0	1.2	27.6	2.073	-.2	.0	67.3	60.6	47.9	.0	DN	2.622	67.3	67.3	34.7	2.622	.21	.11						
897.18	40	8.8	1.3	30.0	2.090	-.2	.0	64.1	56.0	48.0	.0	DN	2.651	64.1	64.1	34.8	2.651	.21	.11						
897.33	42	9.3	1.7	30.6	2.091	-.2	.0	63.1	51.6	49.0	3.5	DN	2.651	63.1	63.1	33.9	2.656	.21	.11						
897.48	39	8.0	1.5	31.0	2.096	-.2	.0	69.0	56.7	51.9	6.9	DN	2.651	69.0	69.0	32.7	2.662	.21	.11						

Zone No. 2 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS			
897.64	37	5.3	1.0	27.9	2.100	-.2	.0	85.1	68.6	55.6	.0	DN	2.639	85.1	85.1	33.7	2.639	.21	.11				
897.79	42	4.3	.8	32.2	2.088	-.1	.0	93.7	77.0	58.9	11.1	DN	2.650	93.7	93.7	32.2	2.667	.21	.11				
897.94	Coal																						
898.09	Coal																						
898.25	Coal																						
898.40	Coal																						
898.55	Coal																						
898.70	95	8.9	2.6	35.2	2.135	.0		127.1	185.2	60.1	81.6	GR	2.650	100.0	100.0	2.9	2.822	.21	.11	4	78		
898.86	95	9.9	2.7	32.4	2.221	-.1	.0	91.1	88.6	63.5	56.9	DN	2.655	91.1	91.1	12.6	2.755	.21	.11				
899.01	87	9.4	2.5	42.4	2.195	-.2	.0	116.8	151.4	70.6	72.7	GR	2.650	100.0	100.0	5.3	2.866	.21	.11			8	
899.16	Coal																						
899.31	Coal																						
899.46	Coal																						
899.62	Coal																						
899.77	Coal																						
899.92	Coal																						
900.07	Coal																						
900.23	Coal																						
900.38	Coal																						
900.53	Coal																						
900.68	Coal																						
900.84	Coal																						
900.99	Coal																						
901.14	Coal																						
901.29	36	6.8	1.0	34.5	1.839	-.2	.0	67.5	61.5	56.7	.0	DN	2.532	67.5	67.5	37.3	2.632	.21	.11			6	8
901.45	40	6.2	.8	35.8	2.008	-.2	.0	72.8	68.9	55.8	4.5	DN	2.647	72.8	72.8	35.6	2.654	.21	.11			8	

901.60	40	6.2	.9	38.1	2.069	-.2	.0	80.2	80.4	61.0	22.1	GR	2.679	80.4	80.2	29.0	2.708	.21	.11	8
901.75	Coal																			
901.90	Coal																			
902.06	Coal																			
902.21	Coal																			
902.36	Coal																			
902.51	Coal																			
902.67	32	7.8	1.4	35.0	1.861	-.1	.0	63.1	50.9	48.4	.0	DN	2.552	63.1	63.1	37.3	2.632	.21	.11	6 8
902.82	28	7.2	1.2	33.4	1.902	-.2	.0	65.8	54.5	44.2	.0	DN	2.566	65.8	65.8	37.3	2.626	.21	.11	6 8
902.97	26	6.7	1.0	32.0	1.956	-.2	.0	68.0	59.3	42.3	.0	DN	2.590	68.0	68.0	37.3	2.630	.21	.11	6 8
903.12	28	6.0	.9	29.0	2.018	-.1	.0	72.2	65.0	42.0	.0	DN	2.602	72.2	72.2	37.3	2.622	.21	.11	6 8
903.27	34	5.4	.7	25.0	2.085	-.1	.0	85.8	78.5	44.1	.0	DN	2.608	85.8	85.8	33.3	2.628	.21	.11	6
903.43	44	6.2	1.0	23.3	2.136	-.1	.0	87.4	75.7	45.2	.0	DN	2.622	87.4	87.4	30.7	2.622	.21	.11	
903.58	56	8.4	1.5	25.0	2.159	-.1	.0	75.9	61.6	46.1	.0	DN	2.647	75.9	75.9	30.3	2.647	.21	.11	
903.73	62	9.5	2.7	27.4	2.154	-.2	.0	70.9	46.8	49.2	6.1	DN	2.654	70.9	70.9	29.4	2.663	.21	.11	
903.88	58	6.6	1.6	29.6	2.135	-.2	.0	83.0	60.8	49.3	12.1	DN	2.653	83.0	83.0	29.1	2.670	.21	.11	
904.04	53	5.5	1.2	32.6	2.103	-.2	.0	86.1	68.0	47.0	18.4	DN	2.650	86.1	86.1	29.4	2.679	.21	.11	
904.19	52	6.0	1.1	34.1	2.063	-.1	.0	77.5	66.4	44.0	13.3	DN	2.649	77.5	77.5	32.4	2.670	.21	.11	8
904.34	56	8.2	1.5	32.2	2.053	-.1	.0	62.0	49.7	42.1	.0	DN	2.649	62.0	62.0	37.0	2.649	.21	.11	
904.49	63	10.3	2.0	26.5	2.101	-.1	.0	62.4	48.4	33.2	.0	DN	2.629	62.4	62.4	33.2	2.629	.21	.11	
904.65	69	13.0	3.0	23.1	2.199	-.1	.0	66.4	47.1	33.1	.0	DN	2.651	66.4	66.4	28.1	2.651	.21	.11	
904.80	73	14.6	3.9	23.8	2.294	-.1	.0	87.2	74.0	31.2	33.3	DN	2.656	87.2	87.2	14.0	2.702	.21	.11	
904.95	77	14.1	5.0	24.2	2.360	-.1	.0	105.2	89.5	28.5	40.4	MN	2.695	100.0	100.0	9.4	2.759	.21	.11	
905.10	83	13.9	5.2	23.7	2.396	.0	.0	124.3	128.5	29.3	49.6	MN	2.702	100.0	100.0	5.0	2.783	.21	.11	
905.26	83	14.7	5.9	23.0	2.413	-.1	.0	128.1	134.7	28.4	49.5	MN	2.706	100.0	100.0	4.1	2.788	.21	.11	
905.41	83	15.5	7.2	23.4	2.414	-.1	.0	127.0	134.8	29.4	53.0	MN	2.708	100.0	100.0	3.1	2.795	.21	.11	
905.56	80	15.0	5.2	25.1	2.410	-.1	.0	131.5	204.1	32.6	63.1	MN	2.719	100.0	100.0	.9	2.815	.21	.11	
905.71	78	14.3	4.0	25.2	2.406	-.1	.0	133.1	225.5	35.3	62.8	GR	2.715	100.0	100.0	1.1	2.813	.21	.11	
905.87	68	13.7	3.5	23.4	2.400	-.1	.0	129.8	175.0	39.2	51.7	GR	2.695	100.0	100.0	4.0	2.782	.21	.11	
906.02	53	9.9	1.8	21.3	2.373	-.2	.0	134.9	155.7	42.0	36.2	GR	2.674	100.0	100.0	9.1	2.727	.21	.11	

Zone No. 2 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
906.17	43	7.0	1.1	21.5	2.325	-.2	.0	133.5	140.2	41.1	25.2	GR	2.666	100.0	100.0	14.5	2.698	.21	.11	
906.32	39	5.2	.8	22.3	2.272	-.2	.0	131.2	129.5	41.9	17.0	DN	2.655	100.0	100.0	19.5	2.679	.21	.11	
906.48	46	4.9	.8	24.4	2.240	-.1	.0	124.2	119.8	42.7	18.5	DN	2.655	100.0	100.0	21.1	2.681	.21	.11	
906.63	52	6.0	.9	24.4	2.251	-.1	.0	116.6	116.3	40.3	22.2	DN	2.655	100.0	100.0	19.5	2.686	.21	.11	
906.78	57	8.1	1.5	25.7	2.284	-.1	.0	114.5	124.8	39.4	39.9	GR	2.656	100.0	100.0	13.0	2.713	.21	.11	
906.93	53	10.4	2.1	26.5	2.304	-.1	.0	101.7	102.4	41.9	36.3	GR	2.689	100.0	100.0	13.7	2.742	.21	.11	
907.08	44	8.6	1.6	26.9	2.272	-.1	.0	99.3	92.0	39.6	26.4	GR	2.686	99.3	99.3	18.2	2.719	.21	.11	
907.24	36	7.0	1.2	24.0	2.226	-.1	.0	99.0	87.8	41.3	11.5	DN	2.655	99.0	99.0	23.7	2.671	.21	.11	
907.39	31	6.9	1.1	22.6	2.212	-.2	.0	94.0	79.8	42.9	.0	DN	2.653	94.0	94.0	27.4	2.653	.21	.11	
907.54	29	7.0	1.1	21.9	2.237	-.2	.0	99.6	88.0	44.8	3.6	DN	2.655	99.6	99.6	25.0	2.660	.21	.11	
907.69	26	6.5	1.0	23.3	2.250	-.2	.0	105.6	96.8	47.5	7.3	GR	2.667	100.0	100.0	23.8	2.677	.21	.11	
907.85	27	6.1	.7	24.6	2.226	-.2	.0	103.7	105.1	47.8	8.2	GR	2.665	100.0	100.0	24.9	2.676	.21	.11	
908.00	28	5.9	.7	25.7	2.198	-.2	.0	99.7	105.8	48.3	9.2	GR	2.659	99.9	99.7	26.1	2.671	.21	.11	
908.15	32	6.2	.7	25.8	2.189	-.2	.0	96.1	102.6	48.2	9.3	DN	2.655	99.2	96.1	26.5	2.668	.21	.11	
908.30	32	5.9	.8	26.2	2.198	-.2	.0	100.9	101.3	47.5	14.0	GR	2.656	100.0	100.0	24.8	2.676	.21	.11	
908.46	33	5.8	.8	25.4	2.196	-.2	.0	100.4	94.9	47.3	9.3	DN	2.655	100.0	100.0	26.0	2.668	.21	.11	
908.61	32	5.7	.8	25.7	2.197	-.2	.0	102.7	96.4	45.6	11.4	DN	2.655	100.0	100.0	25.5	2.671	.21	.11	
908.76	34	5.7	.8	26.1	2.195	-.2	.0	102.2	97.1	45.5	12.8	DN	2.655	100.0	100.0	25.3	2.673	.21	.11	

908.91	37	5.7	.9	27.5	2.188	-.2	.0	101.3	94.8	45.3	18.1	DN	2.655	100.0	100.0	24.4	2.680	.21	.11				
909.07	39	6.1	.8	27.6	2.192	-.2	.0	99.5	104.2	43.0	20.0	DN	2.655	99.9	99.5	23.7	2.683	.21	.11				
909.22	40	6.6	.9	26.0	2.216	.2	.0	101.0	103.2	41.5	19.6	DN	2.655	100.0	100.0	22.2	2.683	.21	.11				
909.37	39	5.4	.8	24.4	2.248	-.1	.0	122.1	124.8	42.4	20.9	GR	2.656	100.0	100.0	20.0	2.685	.21	.11				
909.52	34	4.6	.9	23.5	2.250	-.2	.0	131.2	110.5	44.4	15.8	GR	2.657	100.0	100.0	21.2	2.678	.21	.11				
909.68	30	4.6	.8	21.8	2.234	-.1	.0	121.2	99.0	46.1	2.0	DN	2.655	100.0	100.0	25.6	2.658	.21	.11				
909.83	30	5.2	.9	24.3	2.230	-.1	.0	115.5	99.6	48.3	11.2	GR	2.660	100.0	100.0	23.7	2.676	.21	.11				
909.98	37	5.3	1.1	29.8	2.233	-.1	.0	110.2	91.9	50.7	18.5	GR	2.703	100.0	100.0	23.2	2.728	.21	.11				
910.13	48	5.1	1.3	42.7	2.218	-.1	.0	93.0	70.7	53.0	30.2	GR	2.901	93.0	93.0	26.0	2.889	.21	.11	5	8		
910.29	50	4.8	1.8	54.3	2.170	-.1	.0	97.2	62.7	53.4	32.8	GR	3.766	97.2	97.2	25.1	3.008	.21	.11	5	8		
910.44	50	4.1	2.1	62.5	2.131	-.2	.0	104.8	58.0	53.3	32.6	GR	3.621	100.0	100.0	25.1	3.768	.21	.11	5	8		
910.59	48	3.8	2.2	61.4	2.118	-.2	.0	107.1	55.0	52.9	30.2	GR	3.594	100.0	100.0	26.1	3.738	.21	.11	5	8		
910.74	49	3.8	2.6	55.2	2.132	-.1	.0	108.6	51.3	52.7	31.7	GR	3.632	100.0	100.0	25.5	2.994	.21	.11	5	8		
910.89	50	3.8	2.7	58.8	2.136	-.1	.0	108.7	51.1	52.9	32.3	GR	3.643	100.0	100.0	25.2	3.054	.21	.11	5	8		
911.05	48	3.8	2.8	59.9	2.132	-.1	.0	107.3	49.5	52.7	30.7	GR	3.640	100.0	100.0	25.9	3.069	.21	.11	5	8		
911.20	47	3.9	2.9	61.6	2.127	-.1	.0	106.0	47.7	52.7	29.3	GR	3.631	100.0	100.0	26.4	3.759	.21	.11	5	8		
911.35	45	3.9	3.0	56.6	2.136	-.1	.0	103.9	45.7	53.0	27.9	GR	3.670	100.0	100.0	26.9	3.019	.21	.11	5	8		
911.50	45	4.0	3.2	53.6	2.150	-.1	.0	103.0	44.2	53.1	27.7	GR	3.046	100.0	100.0	27.0	2.983	.21	.11	5	8		
911.66	46	4.0	3.2	53.0	2.163	-.1	.0	103.7	44.7	53.4	28.9	GR	3.051	100.0	100.0	26.5	2.985	.21	.11	5	8		
911.81	45	4.0	3.0	50.5	2.173	-.1	.0	103.4	45.6	53.1	27.7	GR	3.001	100.0	100.0	27.0	2.954	.21	.11	5	8		
911.96	46	3.9	2.9	49.4	2.186	-.1	.0	104.4	47.1	53.1	28.1	GR	2.993	100.0	100.0	26.8	2.948	.21	.11	5	8		
912.11	46	3.9	2.9	53.0	2.187	-.1	.0	104.8	46.9	53.1	28.7	GR	3.074	100.0	100.0	26.6	3.001	.21	.11	5	8		
912.27	46	3.8	2.9	56.2	2.171	-.2	.0	106.1	47.3	52.8	29.0	GR	3.785	100.0	100.0	26.5	3.038	.21	.11	5	8		
912.42	50	3.8	3.1	57.7	2.152	-.1	.0	108.9	47.6	52.8	32.3	GR	3.701	100.0	100.0	25.2	3.049	.21	.11	5	8		
912.57	51	3.7	3.0	59.7	2.147	-.1	.0	110.8	49.5	51.6	33.7	GR	3.677	100.0	100.0	24.7	3.076	.21	.11	5	8		
912.72	52	3.7	2.8	56.6	2.152	-.1	.0	112.3	51.6	51.8	34.6	GR	3.690	100.0	100.0	24.4	3.031	.21	.11	5	8		
912.88	50	3.5	2.4	57.1	2.143	.0	.0	113.3	54.3	52.5	33.1	GR	3.666	100.0	100.0	24.9	3.033	.21	.11	5	8		
913.03	54	3.4	2.6	51.3	2.129	.0	.0	117.3	54.4	53.4	36.6	GR	2.998	100.0	100.0	23.7	2.935	.21	.11	5	8		
913.18	55	3.4	2.6	51.5	2.117	-.1	.0	118.9	56.1	53.1	38.5	GR	2.993	100.0	100.0	23.0	2.929	.21	.11	5	8		
913.33	57	3.4	2.8	52.2	2.123	-.1	.0	120.1	55.4	53.7	40.1	GR	3.533	100.0	100.0	22.3	2.943	.21	.11	5	8		
913.49	52	3.4	2.6	58.1	2.134	-.1	.0	117.6	53.5	54.2	35.1	GR	3.617	100.0	100.0	24.2	3.041	.21	.11	5	8		
913.64	47	3.2	2.4	59.0	2.145	-.1	.0	116.1	52.3	53.6	29.6	GR	3.692	100.0	100.0	26.3	3.064	.21	.11	5	8		
913.79	43	3.2	2.3	56.1	2.160	-.1	.0	114.5	50.8	53.2	25.3	GR	3.764	100.0	100.0	27.9	3.030	.21	.11	5	8		
913.94	43	3.1	2.4	50.7	2.164	-.1	.0	114.9	49.7	52.8	25.3	GR	2.991	100.0	100.0	27.8	2.950	.21	.11	5	8		
914.10	45	3.1	2.6	50.2	2.158	-.1	.0	117.9	49.1	53.0	27.6	GR	2.981	100.0	100.0	27.0	2.940	.21	.11	5	8		
914.25	46	3.1	2.7	52.8	2.161	-.1	.0	118.3	48.4	53.0	28.0	GR	3.041	100.0	100.0	26.8	2.979	.21	.11	5	8		
914.40	46	3.1	2.2	55.6	2.164	-.1	.0	118.4	54.5	54.7	28.7	GR	3.762	100.0	100.0	26.6	3.024	.21	.11	5	8		
914.55	47	3.2	2.2	59.8	2.189	-.2	.0	116.3	55.2	55.5	29.5	GR	3.847	100.0	100.0	26.3	3.107	.21	.11	5	8		

Zone No. 2 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS			
914.70	49	3.2	2.1	55.5	2.182	-.2	.0	117.9	57.8	55.7	32.1	GR	3.816	100.0	100.0	25.3	3.035	.21	.11	5	8		
914.86	52	3.1	2.4	51.6	2.168	-.2	.0	121.4	55.8	53.0	34.5	GR	3.043	100.0	100.0	24.4	2.967	.21	.11	5	8		
915.01	54	3.0	2.3	46.9	2.147	.1	.0	125.6	59.2	52.5	37.5	GR	2.911	100.0	100.0	23.3	2.884	.21	.11	5	8		
915.16	58	2.7	2.0	47.5	2.160	-.1	.0	137.1	66.2	54.6	41.3	GR	2.948	100.0	100.0	21.9	2.902	.21	.11	5	8		
915.31	59	2.6	2.0	46.7	2.200	-.1	.0	139.5	66.7	53.3	42.3	GR	2.981	100.0	100.0	21.5	2.926	.21	.11	5	8		
915.47	61	2.8	2.2	45.1	2.245	-.1	.0	137.2	66.7	52.7	44.6	GR	3.007	100.0	100.0	20.7	2.943	.21	.11	5	8		
915.62	65	3.3	2.7	45.2	2.295	-.1	.0	129.2	63.7	51.2	48.9	GR	3.105	100.0	100.0	19.0	2.987	.21	.11	5			
915.77	67	3.7	2.7	43.3	2.353	-.1	.0	134.1	72.2	49.3	51.2	GR	3.174	100.0	100.0	16.3	3.014	.21	.11	5			
915.92	68	3.7	2.7	44.9	2.349	-.1	.0	131.5	71.6	48.8	52.7	GR	3.217	100.0	100.0	16.5	3.030	.21	.11	5			
916.08	68	3.7	2.8	44.6	2.311	-.1	.0	128.5	67.0	48.9	52.1	GR	3.134	100.0	100.0	17.4	2.993	.21	.11	5			

916.23	68	3.7	3.0	49.4	2.286	-.1	.0	125.8	63.6	48.6	52.0	GR	4.249	100.0	100.0	17.9	3.032	.21	.11	5	8
916.38	67	3.9	3.1	50.9	2.329	-.1	.0	120.3	60.7	49.9	50.9	GR	4.464	100.0	100.0	18.3	3.088	.21	.11	5	8
916.53	64	4.1	3.3	53.5	2.352	-.1	.0	115.3	56.1	48.5	47.4	GR	4.546	100.0	100.0	19.6	3.139	.21	.11	5	8
916.69	65	4.0	3.2	50.4	2.312	-.1	.0	117.8	58.9	47.4	49.2	GR	4.367	100.0	100.0	18.9	3.066	.21	.11	5	8
916.84	66	4.0	2.9	46.0	2.255	-.2	.0	118.7	61.7	48.3	49.8	GR	3.060	100.0	100.0	18.7	2.963	.21	.11	5	8
916.99	70	4.0	2.8	41.5	2.220	-.2	.0	123.1	68.0	48.4	54.4	GR	2.894	100.0	100.0	17.0	2.876	.21	.11	5	8
917.14	67	3.9	2.8	41.1	2.232	-.1	.0	121.3	64.6	48.6	50.6	GR	2.900	100.0	100.0	18.3	2.880	.21	.11	5	
917.30	66	3.9	2.8	41.6	2.252	-.1	.0	121.8	64.9	48.8	50.2	GR	2.947	100.0	100.0	18.1	2.904	.21	.11	5	
917.45	62	4.0	2.9	41.0	2.278	-.1	.0	121.6	62.0	48.6	45.3	GR	2.965	100.0	100.0	18.9	2.918	.21	.11	5	
917.60	61	4.1	2.9	42.8	2.294	-.1	.0	117.5	60.7	47.9	44.9	GR	3.031	100.0	100.0	19.4	2.955	.21	.11	5	
917.75	63	4.1	3.4	43.5	2.307	-.1	.0	118.6	58.4	49.0	47.2	GR	3.078	100.0	100.0	18.7	2.976	.21	.11	5	
917.91	67	4.0	3.3	43.8	2.298	-.1	.0	121.9	61.7	48.8	51.2	GR	3.085	100.0	100.0	17.6	2.971	.21	.11	5	
918.06	70	4.0	3.0	40.3	2.283	-.1	.0	130.9	70.9	48.9	54.4	GR	2.974	100.0	100.0	15.4	2.913	.21	.11	5	
918.21	69	3.9	2.7	40.0	2.268	-.1	.0	129.0	72.5	48.5	52.8	GR	2.937	100.0	100.0	16.2	2.897	.21	.11	5	
918.36	71	4.0	2.5	40.5	2.271	-.1	.0	129.3	77.4	50.5	54.9	GR	2.959	100.0	100.0	15.6	2.905	.21	.11	5	
918.51	75	4.0	2.6	41.6	2.271	-.1	.0	131.4	80.6	49.8	59.9	GR	3.008	100.0	100.0	14.4	2.920	.21	.11	5	
918.67	77	3.8	2.4	41.2	2.262	-.1	.0	135.1	86.1	52.6	62.2	GR	2.982	100.0	100.0	13.7	2.907	.21	.11	5	
918.82	79	3.6	2.4	40.2	2.243	-.1	.0	140.7	87.7	51.9	63.6	GR	2.905	100.0	100.0	13.2	2.877	.21	.11	5	
918.97	76	3.4	2.3	38.7	2.224	-.1	.0	144.1	87.4	51.7	61.1	GR	2.811	100.0	100.0	13.9	2.841	.21	.11		
919.12	76	3.2	2.1	40.1	2.200	-.1	.0	143.5	87.3	51.8	60.7	GR	2.811	100.0	100.0	14.7	2.841	.21	.11		8
919.28	74	3.2	1.9	40.7	2.177	-.1	.0	142.3	87.4	52.6	58.6	GR	2.786	100.0	100.0	15.5	2.829	.21	.11		8
919.43	72	3.2	1.8	40.8	2.157	-.1	.0	140.4	87.9	52.6	56.8	GR	2.757	100.0	100.0	16.1	2.814	.21	.11		8
919.58	73	3.1	1.8	41.5	2.142	-.1	.0	143.4	90.0	54.2	57.5	GR	2.750	100.0	100.0	15.8	2.811	.21	.11		8
919.73	73	2.8	1.7	39.7	2.123	-.2	.0	148.9	92.4	55.7	57.4	GR	2.671	100.0	100.0	15.9	2.771	.21	.11		8
919.89	77	2.7	1.4	41.6	2.104	-.2	.0	156.2	107.2	56.5	61.4	GR	2.672	100.0	100.0	14.4	2.781	.21	.11		8
920.04	77	2.8	1.4	39.6	2.089	-.1	.0	144.7	93.5	56.0	52.6	DN	2.640	100.0	100.0	17.7	2.743	.21	.11		8
920.19	80	2.9	1.5	40.8	2.089	-.1	.0	148.6	101.8	55.5	59.1	DN	2.636	100.0	100.0	15.3	2.758	.21	.11		8
920.34	78	2.9	1.6	41.5	2.105	-.2	.0	152.9	103.4	54.7	62.5	GR	2.666	100.0	100.0	14.0	2.780	.21	.11		8
920.50	76	2.9	1.7	41.5	2.128	-.2	.0	151.3	98.0	52.0	61.1	GR	2.710	100.0	100.0	14.5	2.799	.21	.11		8
920.65	76	2.9	1.7	42.1	2.144	-.2	.0	149.6	96.8	55.6	60.5	GR	2.767	100.0	100.0	14.7	2.820	.21	.11		8
920.80	76	3.0	1.8	41.1	2.149	-.2	.0	148.7	94.4	59.6	60.6	GR	2.743	100.0	100.0	14.7	2.812	.21	.11		8
920.95	71	2.8	1.7	42.1	2.152	-.2	.0	146.7	88.6	61.4	55.6	GR	2.789	100.0	100.0	16.6	2.826	.21	.11		8
921.11	65	2.4	1.5	44.9	2.146	-.1	.0	151.3	85.9	62.8	48.8	GR	2.869	100.0	100.0	19.1	2.858	.21	.11		8
921.26	53	2.0	1.1	49.7	2.132	.0	.0	153.1	82.3	64.2	35.8	GR	2.959	100.0	100.0	24.0	2.913	.21	.11	5	8
921.41	46	1.8	.9	51.7	2.103	-.2	.0	156.4	83.2	62.0	28.6	GR	2.959	100.0	100.0	26.6	2.922	.21	.11	5	8
921.56	41	1.8	.9	47.0	2.084	-.3	.0	149.5	77.2	53.1	22.6	GR	2.838	100.0	100.0	28.9	2.839	.21	.11		8
921.72	49	2.1	1.2	42.7	2.102	.0	.0	145.9	75.1	52.4	32.1	GR	2.767	100.0	100.0	25.3	2.794	.21	.11		8
921.87	54	2.8	2.0	37.5	2.160	-.1	.0	133.0	64.9	51.7	37.3	GR	2.721	100.0	100.0	22.9	2.772	.21	.11		
922.02	59	3.7	3.0	39.1	2.220	-.1	.0	122.1	58.1	51.1	42.4	GR	2.831	100.0	100.0	20.4	2.844	.21	.11		
922.17	52	3.7	2.2	41.6	2.251	-.1	.0	116.5	60.6	49.8	35.2	GR	2.926	100.0	100.0	23.2	2.903	.21	.11	5	
922.32	48	2.6	1.3	46.4	2.267	.8	.0	129.8	72.2	50.3	30.4	GR	3.027	100.0	100.0	26.0	2.978	.21	.11	5	8
922.48	40	2.0	1.0	44.8	2.321	1.0	.0	149.1	79.2	53.4	22.1	GR	3.045	100.0	100.0	27.3	3.005	.21	.11	5	
922.63	36	2.0	1.1	43.2	2.446	.2	.0	163.3	80.4	52.4	17.3	GR	3.143	100.0	100.0	25.8	3.094	.21	.11	5	
922.78	34	2.2	1.4	45.3	2.535	.1	.0	158.0	73.2	52.1	16.0	GR	3.265	100.0	100.0	25.5	3.200	.21	.11	5	
922.93	32	2.2	1.1	48.4	2.508	-.2	.0	149.1	75.6	50.3	13.8	GR	3.273	100.0	100.0	27.9	3.216	.21	.11	5	
923.09	33	2.0	.9	53.7	2.378	.1	.0	136.4	71.3	49.2	14.7	GR	3.217	100.0	100.0	31.8	3.165	.21	.11	5	8

Zone No. 2 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
923.24	35	2.2	1.1	52.2	2.310	-.2	.0	131.6	68.5	49.7	16.9	GR	3.132	100.0	100.0	31.0	3.088	.21	.11	5 8
923.39	39	3.5	1.8	50.0	2.346	-.2	.0	107.4	55.8	33.3	20.9	GR	3.151	100.0	100.0	29.3	3.092	.21	.11	5

923.54	42	6.7	3.6	37.9	2.449	-.1	.0	101.4	53.8	33.0	24.0	GR	3.081	100.0	100.0	21.2	3.027	.21	.11		5		
923.70	47	11.0	7.2	31.6	2.523	-.1	.0	98.6	51.5	33.0	29.2	GR	3.071	98.6	98.6	15.2	3.008	.21	.11		5		
923.85	50	12.4	6.5	29.1	2.556	-.1	.0	104.8	65.7	21.7	33.3	GR	3.078	100.0	100.0	12.1	3.003	.21	.11		5		
924.00	51	11.4	3.4	32.2	2.541	-.1	.0	98.8	79.8	21.8	33.6	GR	3.124	98.8	98.8	13.9	3.033	.21	.11		5		
924.15	51	10.2	3.1	36.0	2.507	-.1	.0	93.0	72.8	22.1	33.5	GR	3.154	93.0	93.0	16.3	3.054	.21	.11		5		
924.31	49	10.7	3.9	37.2	2.492	-.1	.0	86.7	60.1	23.6	31.4	GR	3.147	86.7	86.7	17.8	3.055	.21	.11		5		
924.46	51	12.5	8.6	34.4	2.510	-.1	.0	86.4	44.2	20.9	31.4	MN	3.118	86.4	86.4	16.2	3.035	.21	.11		5		
924.61	50	11.5	17.5	30.1	2.560	-.1	.0	105.2	38.3	26.5	33.0	GR	3.104	100.0	100.0	12.7	3.021	.21	.11		5		
924.76	50	5.6	13.1	32.5	2.595	-.1	.0	144.3	41.4	32.1	32.5	GR	3.201	100.0	100.0	13.8	3.086	.21	.11		5		
924.92	49	3.5	6.1	35.9	2.612	-.1	.0	168.6	54.6	35.3	31.2	GR	3.283	100.0	100.0	15.5	3.147	.21	.11		5		
925.07	45	2.7	3.7	41.5	2.620	-.1	.0	170.0	57.8	40.9	27.1	GR	3.369	100.0	100.0	19.1	3.228	.21	.11		5		
925.22	42	2.3	2.6	41.4	2.646	-.1	.0	184.6	68.4	44.2	24.3	GR	3.379	100.0	100.0	19.6	3.250	.21	.11		5		
925.37	40	1.8	1.8	47.3	2.636	-.1	.0	187.0	70.8	43.3	22.4	GR	3.450	100.0	100.0	22.7	3.317	.21	.11		5		
925.53	45	1.6	1.5	46.7	2.510	-.1	.0	188.7	75.9	45.2	27.2	GR	3.322	100.0	100.0	22.8	3.195	.21	.11		5		
925.68	55	1.8	1.6	41.6	2.324	-.1	.0	177.5	80.0	40.0	37.9	GR	3.030	100.0	100.0	20.7	2.966	.21	.11		5		
925.83	67	2.7	1.8	33.6	2.188	-.2	.0	156.2	86.6	40.3	49.0	SD	2.662	100.0	100.0	16.8	2.743	.21	.11				
925.98	82	4.0	2.0	27.5	2.213	.0	.0	130.5	74.3	40.7	26.7	DN	2.655	100.0	100.0	20.7	2.692	.21	.11				
926.13	92	5.0	2.2	27.4	2.285	.0	.0	151.9	117.0	41.0	50.2	DN	2.656	100.0	100.0	10.4	2.739	.21	.11				
926.29	98	5.3	2.4	27.5	2.343	.0	.0	189.1	233.8	42.1	70.1	DN	2.650	100.0	100.0	2.1	2.791	.21	.11				
926.44	105	5.4	2.2	29.5	2.345	-.1	.0			42.5	78.8	N	2.650	100.0	100.0	5.7	2.821	.21	.11	2			
926.59	108	5.4	2.1	30.9	2.342	-.1	.0			44.4	82.1	N	2.650	100.0	100.0	4.9	2.837	.21	.11	2			
926.74	111	5.4	2.0	32.3	2.340	-.1	.0			45.5	85.6	N	2.650	100.0	100.0	4.1	2.856	.21	.11	2			
926.90	113	5.4	2.1	32.1	2.332	-.2	.0			46.1	85.1	N	2.650	100.0	100.0	4.2	2.846	.21	.11	2			
927.05	112	5.5	2.3	31.4	2.332	-.1	.0			47.8	83.3	N	2.650	100.0	100.0	4.7	2.835	.21	.11	2			
927.20	112	5.7	2.4	28.9	2.333	.0	.0	180.0	235.5	48.6	74.4	DN	2.650	100.0	100.0	1.7	2.801	.21	.11				
927.35	109	5.9	2.5	29.1	2.341	-.1	.0			53.0	77.8	N	2.650	100.0	100.0	5.9	2.811	.21	.11	2			
927.51	109	6.0	2.4	33.4	2.340	-.1	.0			55.2	88.1	N	2.650	100.0	100.0	3.4	2.870	.21	.11	2			
927.66	102	6.1	2.3	41.9	2.256	-.2	.0	158.3	230.7	54.8	88.8	GR	2.650	100.0	100.0	1.4	2.911	.21	.11			8	
927.81	Coal																						
927.96	Coal																						
928.12	Coal																						
928.27	Coal																						
928.42	114	5.9	2.2	38.2	2.121	-.3	.0	101.5	77.8	50.3	55.7	DN	2.644	100.0	100.0	16.5	2.750	.21	.11			8	
928.57	120	6.0	2.2	40.4	2.192	-.3	.0	152.3	189.2	48.5	79.1	SD	2.650	100.0	100.0	3.6	2.837	.21	.11			8	
928.73	122	5.9	2.1	40.1	2.156	-.3	.0	111.8	97.5	47.6	67.0	SD	2.700	100.0	100.0	12.3	2.804	.21	.11			8	
928.88	113	6.0	2.1	37.3	2.126	-.3	.0	94.3	68.9	43.7	45.5	SD	2.666	94.3	94.3	20.3	2.742	.21	.11			8	
929.03	100	6.3	2.2	30.9	2.164	-.2	.0	93.3	62.4	40.6	29.0	DN	2.653	93.3	93.3	23.1	2.695	.21	.11				
929.18	94	7.5	2.6	28.4	2.226	-.2	.0	100.8	73.2	39.1	36.3	DN	2.655	100.0	100.0	17.5	2.706	.21	.11				
929.34	94	8.1	2.8	30.0	2.271	-.2	.0	117.8	112.3	38.2	59.9	MN	2.656	100.0	100.0	8.8	2.764	.21	.11				
929.49	94	8.3	2.7	30.1	2.290	-.2	.0	119.1	116.9	37.1	58.5	MN	2.684	100.0	100.0	8.6	2.782	.21	.11				
929.64	91	8.4	3.0	30.5	2.318	-.2	.0	129.1	140.1	37.6	64.5	MN	2.710	100.0	100.0	5.8	2.811	.21	.11				
929.79	87	8.5	3.1	28.6	2.347	-.2	.0	145.9	185.6	37.0	67.6	MN	2.697	100.0	100.0	3.0	2.810	.21	.11				
929.94	78	8.2	2.9	28.2	2.367	-.1	.0	147.4	174.6	37.4	63.0	GR	2.743	100.0	100.0	3.9	2.822	.21	.11				
930.10	64	6.2	1.8	25.8	2.347	-.2	.0	156.5	158.4	42.0	47.9	GR	2.693	100.0	100.0	8.1	2.770	.21	.11				
930.25	60	3.6	1.1	25.5	2.307	-.2	.0	184.5	169.9	45.3	43.8	GR	2.663	100.0	100.0	10.8	2.731	.21	.11				
930.40	65	3.3	1.0	26.1	2.254	-.2	.0	162.1	126.7	47.7	32.5	DN	2.655	100.0	100.0	16.7	2.701	.21	.11				
930.55	76	4.2	1.2	29.1	2.217	-.1	.0	131.7	103.2	48.2	36.6	DN	2.655	100.0	100.0	18.0	2.706	.21	.11				
930.71	79	6.1	1.8	33.5	2.165	-.1	.0	98.1	77.3	47.8	43.8	DN	2.652	98.1	98.1	19.3	2.722	.21	.11				
930.86	70	5.6	1.4	35.6	2.094	-.2	.0	89.3	69.6	46.8	32.1	DN	2.648	89.3	89.3	25.3	2.699	.21	.11			8	
931.01	65	4.4	1.2	34.6	2.032	-.2	.0	87.3	58.1	45.6	6.1	DN	2.648	87.3	87.3	35.0	2.658	.21	.11			8	
931.16	71	4.6	1.2	35.0	2.038	-.2	.0	87.0	59.2	44.9	9.8	DN	2.648	87.0	87.0	33.6	2.664	.21	.11			8	
931.32	81	5.5	1.5	36.9	2.119	-.2	.0	96.8	79.7	43.6	43.4	SD	2.659	96.8	96.8	21.1	2.731	.21	.11			8	
931.47	88	6.9	1.8	38.7	2.215	-.2	.0	103.4	105.4	43.4	66.0	MN	2.783	100.0	100.0	12.4	2.834	.21	.11				
931.62	86	7.2	2.1	34.2	2.289	-.2	.0	132.2	161.9	42.9	71.4	GR	2.650	100.0	100.0	5.7	2.838	.21	.11			8	

Zone No. 2 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
931.77	83	7.5	2.8	28.6	2.329	-.1	.0	151.4	186.4	42.0	68.6	GR	2.664	100.0	100.0	3.2	2.794	.21	.11	
931.93	82	8.0	3.4	27.4	2.348	-.1	.0	156.7	192.3	39.2	67.5	GR	2.662	100.0	100.0	2.3	2.793	.21	.11	
932.08	85	8.1	3.0	26.5	2.346	-.1	.0	153.2	186.0	35.6	63.6	MN	2.656	100.0	100.0	3.3	2.779	.21	.11	
932.23	81	8.7	3.1	23.8	2.339	-.1	.0	136.5	127.5	33.7	48.1	DN	2.653	100.0	100.0	7.5	2.734	.21	.11	
932.38	76	10.4	3.7	18.1	2.358	-.1	.0	126.0	88.5	35.4	22.7	DN	2.654	100.0	100.0	12.7	2.687	.21	.11	
932.54	68	12.0	6.4	19.7	2.379	-.1	.0	133.0	97.3	36.2	38.5	DN	2.651	100.0	100.0	7.3	2.709	.21	.11	
932.69	67	10.6	4.9	24.6	2.347	-.1	.0	126.9	110.4	36.9	51.2	GR	2.664	100.0	100.0	6.5	2.752	.21	.11	
932.84	65	7.4	3.3	28.0	2.274	-.1	.0	119.1	89.3	37.7	48.9	GR	2.658	100.0	100.0	11.4	2.738	.21	.11	
932.99	69	6.0	2.5	30.9	2.223	-.1	.0	115.1	84.1	40.7	48.6	DN	2.655	100.0	100.0	14.6	2.734	.21	.11	
933.15	75	5.8	2.3	33.1	2.225	-.1	.0	121.6	99.6	40.9	60.1	GR	2.660	100.0	100.0	11.7	2.767	.21	.11	
933.30	89	6.4	2.4	35.5	2.231	-.1	.0	117.6	106.0	42.5	67.2	MN	2.697	100.0	100.0	10.1	2.805	.21	.11	
933.45	95	6.8	2.3	34.8	2.217	-.1	.0	108.4	96.8	41.7	61.2	SD	2.680	100.0	100.0	12.2	2.783	.21	.11	
933.60	104	7.0	2.0	34.7	2.191	-.1	.0	96.5	81.4	40.3	49.5	SD	2.680	96.5	96.5	16.9	2.759	.21	.11	
933.75	106	7.1	1.7	34.4	2.205	-.1	.0	103.2	105.1	41.8	58.5	SD	2.667	100.0	100.0	13.5	2.769	.21	.11	
933.91	109	7.1	1.7	35.3	2.240	-.1	.0	110.7	121.4	41.2	63.1	MN	2.719	100.0	100.0	11.0	2.810	.21	.11	
934.06	108	7.1	1.8	35.5	2.273	-.1	.0	134.5	181.4	42.3	72.9	MN	2.650	100.0	100.0	5.3	2.841	.21	.11	8
934.21	111	6.8	1.5	32.8	2.283	-.2	.0	144.5	231.2	43.5	79.1	DN	2.650	100.0	100.0	3.4	2.812	.21	.11	
934.36	112	6.4	1.3	33.5	2.271	-.2	.0	148.3	244.2	44.4	79.2	DN	2.650	100.0	100.0	3.5	2.812	.21	.11	8
934.52	114	6.2	1.4	35.2	2.275	-.2	.0	152.2	255.9	44.5	82.3	MN	2.650	100.0	100.0	2.8	2.839	.21	.11	8
934.67	112	6.4	1.7	37.1	2.287	-.2	.0	150.1	231.8	44.4	82.5	MN	2.650	100.0	100.0	2.7	2.874	.21	.11	8
934.82	111	6.7	2.2	36.4	2.295	-.2	.0	146.0	200.6	43.6	81.1	MN	2.650	100.0	100.0	3.1	2.873	.21	.11	8
934.97	110	6.8	2.1	35.6	2.291	-.2	.0	140.9	183.4	42.5	76.7	MN	2.650	100.0	100.0	4.2	2.858	.21	.11	8
935.13	111	7.3	2.4	35.4	2.289	-.1	.0	137.1	174.2	42.8	77.6	MN	2.650	100.0	100.0	3.9	2.853	.21	.11	8
935.28	107	7.9	3.5	32.5	2.291	-.1	.0	136.3	160.0	42.7	79.3	MN	2.650	100.0	100.0	3.0	2.816	.21	.11	
935.43	98	8.3	5.0	32.0	2.310	-.1	.0	144.8	176.1	51.3	84.1	GR	2.650	100.0	100.0	.7	2.825	.21	.11	
935.58	92	7.6	4.0	37.0	2.290	-.1	.0	134.4	137.4	51.8	77.8	GR	2.650	100.0	100.0	3.9	2.875	.21	.11	8
935.74	84	7.3	3.0	47.5	2.156	-.1	.0	101.7	84.4	48.0	68.3	SD	3.316	100.0	100.0	11.8	2.899	.21	.11	5 8
935.89	Coal																			
936.04	Coal																			
936.19	Coal																			
936.35	79	9.1	2.0	35.0	1.995	-.2	.0	58.4	42.2	39.9	.0	DN	2.639	58.4	58.4	37.3	2.639	.21	.11	8
936.50	83	9.6	1.6	32.6	2.150	-.1	.0	70.1	65.3	35.2	20.9	SD	2.677	70.1	70.1	26.8	2.703	.21	.11	
936.65	85	9.1	1.7	30.9	2.213	.1	.0	89.5	93.2	37.1	43.7	SD	2.659	93.2	89.5	16.5	2.726	.21	.11	
936.80	91	8.8	2.2	30.4	2.247	.1	.0	102.9	105.9	38.3	54.5	DN	2.655	100.0	100.0	11.6	2.749	.21	.11	
936.96	91	8.8	3.3	29.7	2.292	-.1	.0	122.8	126.9	41.2	65.2	DN	2.655	100.0	100.0	6.2	2.777	.21	.11	
937.11	89	8.8	4.0	30.3	2.329	-.1	.0	138.0	164.7	42.6	74.9	GR	2.650	100.0	100.0	2.4	2.818	.21	.11	
937.26	84	7.6	3.9	33.7	2.330	-.1	.0	127.2	113.7	40.9	68.9	GR	2.875	100.0	100.0	6.3	2.866	.21	.11	
937.41	80	6.7	2.9	39.6	2.270	-.2	.0	108.0	85.5	42.3	64.6	GR	2.951	100.0	100.0	12.0	2.893	.21	.11	5
937.56	76	5.8	2.7	40.0	2.181	-.2	.0	101.9	68.8	42.3	54.1	SD	2.781	100.0	100.0	17.1	2.823	.21	.11	8
937.72	67	5.2	1.6	36.0	2.119	-.1	.0	92.3	65.7	40.3	31.3	SD	2.675	92.3	92.3	25.6	2.719	.21	.11	8
937.87	59	4.6	1.4	30.5	2.148	-.2	.0	104.1	72.2	38.4	21.7	DN	2.653	100.0	100.0	25.9	2.685	.21	.11	
938.02	59	4.2	1.2	28.1	2.203	-.2	.0	124.5	91.4	37.1	26.6	DN	2.655	100.0	100.0	21.3	2.692	.21	.11	
938.17	69	4.9	1.8	27.5	2.263	-.2	.0	140.4	107.9	34.5	43.1	DN	2.655	100.0	100.0	13.5	2.720	.21	.11	
938.33	74	7.0	3.2	24.7	2.302	-.1	.0	130.2	91.8	31.1	40.0	MN	2.657	100.0	100.0	11.9	2.713	.21	.11	
938.48	79	11.5	6.8	23.8	2.344	-.1	.0	114.9	76.3	29.5	41.9	MN	2.674	100.0	100.0	9.3	2.739	.21	.11	
938.63	80	12.5	7.1	22.1	2.369	.0	.0	129.0	104.9	29.9	48.5	DN	2.649	100.0	100.0	5.4	2.735	.21	.11	
938.78	82	11.5	5.8	23.6	2.361	.0	.0	126.9	106.8	30.7	49.4	MN	2.666	100.0	100.0	6.1	2.751	.21	.11	
938.94	86	10.1	4.7	24.6	2.339	.0	.0	128.8	113.3	33.1	52.4	DN	2.652	100.0	100.0	6.4	2.745	.21	.11	

939.09	84	8.2	3.3	27.6	2.308	-.1	.0	123.5	104.9	34.1	51.0	MN	2.678	100.0	100.0	9.3	2.761	.21	.11						
939.24	88	6.1	2.0	31.8	2.266	-.2	.0	127.7	119.1	38.1	57.1	MN	2.691	100.0	100.0	10.6	2.784	.21	.11						
939.39	96	5.7	1.9	34.9	2.213	-.2	.0	119.9	109.4	42.8	64.1	SD	2.667	100.0	100.0	11.5	2.781	.21	.11						
939.55	112	5.9	1.7	35.6	2.172	-.1	.0	105.1	93.4	46.8	57.9	DN	2.650	100.0	100.0	15.4	2.757	.21	.11						
939.70	119	6.2	1.8	32.8	2.170	-.2	.0	97.8	77.1	53.3	41.6	DN	2.652	97.8	97.8	19.5	2.717	.21	.11						
939.85	118	5.9	1.5	34.5	2.181	-.2	.0	106.9	101.4	56.8	55.3	DN	2.651	100.0	100.0	15.4	2.750	.21	.11						
940.00	114	5.8	1.5	39.6	2.151	-.2	.0	150.1	199.1	55.6	73.5	DN	2.650	100.0	100.0	5.1	2.794	.21	.11	8					
940.16	Coal																								

Zone No. 2 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
940.31	Coal																			
940.46	Coal																			
940.61	Coal																			
940.77	90	6.2	2.0	32.9	2.126	-.1	.0	82.8	53.4	35.6	16.4	SD	2.671	82.8	82.8	29.2	2.693	.21	.11	
940.92	100	6.6	1.9	32.3	2.277	-.1	.0	113.7	98.5	34.9	45.8	MN	2.747	100.0	100.0	14.3	2.801	.21	.11	
941.07	104	7.2	2.0	29.7	2.319	-.1	.0	138.0	157.5	36.3	60.2	MN	2.704	100.0	100.0	6.8	2.800	.21	.11	
941.22	105	7.3	2.1	29.5	2.303	-.1	.0	129.1	134.1	35.7	55.4	MN	2.694	100.0	100.0	8.8	2.784	.21	.11	
941.37	107	7.1	1.9	29.0	2.304	-.1	.0	134.4	148.9	36.0	57.2	MN	2.681	100.0	100.0	8.0	2.777	.21	.11	
941.53	108	6.9	1.9	30.9	2.312	-.1	.0	142.5	178.8	38.5	66.9	MN	2.703	100.0	100.0	5.4	2.811	.21	.11	
941.68	111	6.8	1.9	32.1	2.321	-.1	.0	143.7	189.6	39.6	71.9	MN	2.650	100.0	100.0	4.6	2.836	.21	.11	
941.83	110	6.8	1.9	34.1	2.331	-.1	.0	142.9	193.7	40.6	75.9	MN	2.650	100.0	100.0	4.1	2.872	.21	.11	
941.98	111	6.8	1.8	33.0	2.333	-.1	.0	158.8	281.1	42.2	83.2	MN	2.650	100.0	100.0	1.0	2.858	.21	.11	
942.14	110	6.9	1.8	34.0	2.331	-.1	.0	152.1	259.4	42.4	83.0	MN	2.650	100.0	100.0	1.7	2.871	.21	.11	
942.29	114	7.0	1.8	33.4	2.308	-.1	.0	157.0	302.3	44.4	87.8	MN	2.650	100.0	100.0	.3	2.842	.21	.11	
942.44	112	7.1	1.8	36.5	2.282	-.2	.0	140.4	211.6	43.9	79.9	MN	2.650	100.0	100.0	3.4	2.862	.21	.11	8
942.59	106	7.6	2.3	34.2	2.280	-.2	.0	101.0	84.6	35.1	45.8	MN	2.801	100.0	100.0	15.3	2.829	.21	.11	
942.75	91	7.0	2.3	30.6	2.298	-.1	.0	117.9	98.3	33.6	45.6	MN	2.737	100.0	100.0	12.8	2.795	.21	.11	
942.90	81	5.9	1.9	25.9	2.315	-.2	.0	152.1	145.9	33.1	49.6	MN	2.661	100.0	100.0	8.8	2.744	.21	.11	
943.05	83	5.5	1.5	26.4	2.317	-.2	.0	163.6	185.0	35.8	55.6	DN	2.654	100.0	100.0	7.0	2.753	.21	.11	
943.20	94	5.9	1.7	27.5	2.316	-.1	.0	157.8	181.8	35.9	59.7	MN	2.658	100.0	100.0	6.2	2.767	.21	.11	
943.36	108	6.8	2.1	31.5	2.321	-.1	.0	116.1	95.4	31.7	41.4	MN	2.802	100.0	100.0	14.4	2.827	.21	.11	
943.51	114	7.2	2.0	33.4	2.318	-.1	.0	113.6	106.7	34.6	51.0	MN	2.839	100.0	100.0	12.3	2.851	.21	.11	
943.66	108	7.8	2.0	33.1	2.323	-.1	.0	127.5	162.1	38.9	68.9	MN	2.825	100.0	100.0	6.0	2.851	.21	.11	
943.81	92	8.4	2.3	28.6	2.328	-.1	.0	144.5	217.0	40.1	71.4	DN	2.650	100.0	100.0	2.7	2.794	.21	.11	
943.97	74	7.1	1.9	24.9	2.325	-.2	.0	143.8	153.3	39.2	49.2	DN	2.654	100.0	100.0	8.1	2.737	.21	.11	
944.12	66	5.0	1.2	24.6	2.295	-.2	.0	150.9	138.3	38.3	37.5	DN	2.656	100.0	100.0	13.0	2.708	.21	.11	
944.27	62	4.3	1.0	23.8	2.267	-.2	.0	144.4	117.6	37.9	24.0	DN	2.655	100.0	100.0	18.0	2.689	.21	.11	
944.42	64	4.9	1.3	24.7	2.270	-.1	.0	138.1	113.2	38.7	29.8	DN	2.655	100.0	100.0	16.4	2.697	.21	.11	
944.58	65	6.4	2.0	23.8	2.292	-.1	.0	130.0	102.1	37.8	32.4	DN	2.656	100.0	100.0	14.4	2.701	.21	.11	
944.73	68	6.2	1.7	26.4	2.299	-.2	.0	141.1	140.9	38.6	49.3	DN	2.655	100.0	100.0	9.7	2.737	.21	.11	
944.88	75	6.1	1.6	28.0	2.285	-.2	.0	138.4	145.3	39.4	53.4	DN	2.656	100.0	100.0	9.6	2.747	.21	.11	
945.03	80	6.8	1.7	33.5	2.259	-.1	.0	117.9	124.0	39.2	59.5	MN	2.710	100.0	100.0	10.7	2.801	.21	.11	
945.18	76	7.1	2.6	36.2	2.175	-.2	.0	78.9	48.2	33.6	17.5	MN	2.748	78.9	78.9	28.5	2.768	.21	.11	
945.34	69	5.6	2.0	35.2	2.085	-.2	.0	76.6	43.8	34.8	2.9	MN	2.687	76.6	76.6	35.8	2.691	.21	.11	
945.49	69	5.1	1.6	29.0	2.055	-.1	1.9	81.7	50.0	34.0	.0	DN	2.623	81.7	81.7	35.9	2.623	.21	.11	
945.64	75	6.0	1.8	25.7	2.154	-.2	.0	88.3	54.5	35.7	.0	DN	2.650	88.3	88.3	30.8	2.650	.21	.11	
945.79	85	8.5	3.0	25.6	2.275	-.1	.0	108.5	81.2	33.2	36.8	DN	2.655	100.0	100.0	14.4	2.707	.21	.11	
945.95	90	10.7	4.9	28.4	2.334	-.1	.0	113.9	95.3	33.8	53.5	MN	2.713	100.0	100.0	7.9	2.796	.21	.11	
946.10	96	10.2	3.1	31.8	2.308	-.1	.0	103.0	100.1	36.0	56.0	MN	2.765	100.0	100.0	9.8	2.820	.21	.11	
946.25	101	9.4	2.5	32.1	2.266	-.1	.0	99.3	96.2	37.0	52.4	MN	2.707	99.3	99.3	12.1	2.788	.21	.11	

946.40	103	9.3	2.4	32.2	2.259	-.1	.0	100.0	100.0	37.9	54.9	MN	2.697	100.0	100.0	11.7	2.784	.21	.11				
946.56	100	8.8	2.8	29.6	2.287	-.1	.0	119.5	126.6	38.2	62.5	MN	2.657	100.0	100.0	7.2	2.771	.21	.11				
946.71	93	8.2	3.2	29.7	2.319	-.1	.0	138.0	157.4	38.4	68.2	MN	2.680	100.0	100.0	4.2	2.801	.21	.11				
946.86	82	7.2	3.2	26.0	2.325	-.1	.0	146.8	133.3	38.6	55.8	DN	2.653	100.0	100.0	6.5	2.753	.21	.11				
947.01	73	5.5	2.3	26.7	2.303	-.2	.0	153.5	129.6	44.2	51.8	DN	2.655	100.0	100.0	8.9	2.743	.21	.11				
947.17	67	4.5	1.7	27.3	2.232	-.2	.0	130.1	87.4	47.3	31.6	DN	2.655	100.0	100.0	18.3	2.699	.21	.11				
947.32	78	4.6	1.7	33.0	2.115	-.2	.0	97.7	60.4	50.9	24.2	DN	2.650	97.7	97.7	27.3	2.688	.21	.11				
947.47	Coal																						
947.62	Coal																						
947.78	98	7.1	2.0	43.4	2.076	-.2	.0	91.7	79.1	49.5	54.0	SD	2.701	91.7	91.7	17.2	2.783	.21	.11			8	
947.93	81	6.7	2.1	34.0	2.122	-.1	.0	82.5	57.5	39.9	30.8	SD	2.654	82.5	82.5	25.3	2.700	.21	.11				
948.08	71	6.1	2.1	25.9	2.163	-.2	.0	89.1	51.7	35.7	1.0	DN	2.654	89.1	89.1	30.2	2.656	.21	.11				
948.23	72	6.0	2.1	25.6	2.226	-.2	.0	108.6	70.1	36.1	20.3	DN	2.655	100.0	100.0	21.5	2.683	.21	.11				
948.39	82	6.4	2.8	28.0	2.274	-.1	.0	128.8	98.1	36.2	49.8	DN	2.655	100.0	100.0	11.2	2.738	.21	.11				
948.54	98	6.2	2.5	30.0	2.287	-.1	.0	140.7	129.9	38.0	61.7	MN	2.669	100.0	100.0	7.6	2.777	.21	.11				
948.69	105	6.2	2.5	31.3	2.259	-.1	.0	130.3	115.4	39.5	62.3	MN	2.658	100.0	100.0	9.0	2.771	.21	.11				

Zone No. 2 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS			
948.84	109	7.0	3.0	32.9	2.224	-.1	.0	110.1	86.8	40.8	59.7	SD	2.656	100.0	100.0	11.8	2.763	.21	.11				
948.99	111	7.8	3.1	33.5	2.193	-.1	.0	94.9	70.7	42.7	53.2	DN	2.653	94.9	94.9	15.3	2.745	.21	.11				
949.15	116	6.9	2.2	35.1	2.199	-.2	.0	105.3	96.3	43.7	63.6	SD	2.653	100.0	100.0	12.3	2.772	.21	.11				
949.30	121	6.2	2.0	38.0	2.219	-.1	.0	143.4	169.5	44.7	72.2	SD	2.650	100.0	100.0	5.5	2.829	.21	.11			8	
949.45	132	5.8	2.0	39.8	2.248	-.1	.0	153.1	192.7	45.1	77.5	MN	2.650	100.0	100.0	4.0	2.877	.21	.11			8	
949.60	130	5.7	2.1	39.2	2.257	-.1	.0	156.0	190.3	44.8	78.3	MN	2.650	100.0	100.0	3.8	2.876	.21	.11			8	
949.76	125	5.7	1.9	36.7	2.251	-.1	.0	151.8	180.3	43.6	74.1	MN	2.650	100.0	100.0	4.9	2.837	.21	.11			8	
949.91	109	6.1	1.9	34.3	2.247	-.2	.0	124.9	122.9	41.1	64.9	MN	2.699	100.0	100.0	9.8	2.803	.21	.11				
950.06	94	6.6	2.1	29.3	2.255	-.1	.0	120.4	105.5	40.8	50.5	DN	2.655	100.0	100.0	12.2	2.739	.21	.11				
950.21	89	6.4	2.0	27.3	2.281	-.1	.0	131.5	117.0	40.2	48.2	DN	2.656	100.0	100.0	11.1	2.734	.21	.11				
950.37	96	6.1	2.0	30.8	2.286	.0	.0	147.4	169.1	41.0	69.2	DN	2.655	100.0	100.0	5.5	2.787	.21	.11				
950.52	107	5.9	1.8	35.4	2.272	-.1	.0	129.8	135.9	41.0	67.6	MN	2.790	100.0	100.0	8.8	2.839	.21	.11				
950.67	118	6.2	1.9	35.9	2.255	-.1	.0	143.5	172.9	42.8	71.9	MN	2.650	100.0	100.0	5.6	2.831	.21	.11			8	
950.82	118	6.4	1.9	34.9	2.266	.0	.0	152.0	236.1	45.8	85.5	DN	2.650	100.0	100.0	2.1	2.827	.21	.11			8	
950.98	121	6.7	2.1	31.3	2.295	.0	.0	148.8	196.3	49.0	75.2	DN	2.650	100.0	100.0	3.6	2.802	.21	.11				
951.13	124	6.6	2.2	32.3	2.312	-.1	.0			48.5	85.6	N	2.650	100.0	100.0	4.2	2.831	.21	.11	2			
951.28	119	6.8	2.2	35.9	2.281	-.2	.0			48.9	94.1	N	2.650	100.0	100.0	1.8	2.853	.21	.11	2			
951.43	108	7.4	2.3	39.4	2.242	-.1	.0	141.7	215.0	47.3	86.1	MN	2.650	100.0	100.0	1.9	2.866	.21	.11			8	
951.59	92	7.7	2.8	37.0	2.216	-.1	.0	99.8	85.7	42.4	63.3	MN	2.728	99.8	99.8	12.5	2.812	.21	.11				
951.74	82	6.9	3.0	31.2	2.226	-.1	.0	108.6	80.3	42.4	51.3	DN	2.655	100.0	100.0	13.8	2.741	.21	.11				
951.89	74	5.7	2.2	27.2	2.241	-.2	.0	119.9	82.0	37.8	34.0	DN	2.655	100.0	100.0	17.1	2.703	.21	.11				
952.04	71	5.3	1.7	28.2	2.246	-.1	.0	127.6	103.3	38.9	41.6	DN	2.655	100.0	100.0	15.0	2.716	.21	.11				
952.20	72	5.8	1.8	29.2	2.236	-.2	.0	119.1	96.7	41.3	43.5	DN	2.655	100.0	100.0	15.1	2.721	.21	.11				
952.35	71	5.9	2.0	29.1	2.216	-.1	.0	110.8	81.2	44.6	36.3	DN	2.655	100.0	100.0	18.1	2.706	.21	.11				
952.50	73	4.7	1.5	27.6	2.193	-.2	.0	113.8	75.2	46.6	20.3	DN	2.655	100.0	100.0	23.5	2.683	.21	.11				
952.65	82	4.5	1.1	29.0	2.178	-.1	.0	112.9	85.4	48.5	23.1	DN	2.654	100.0	100.0	23.7	2.687	.21	.11				
952.80	97	5.6	1.5	33.9	2.174	.0	.0	106.0	93.8	46.5	49.2	DN	2.652	100.0	100.0	17.4	2.735	.21	.11				
952.96	102	9.3	2.7	38.4	2.167	-.1	.0	84.8	77.6	45.2	61.1	SD	2.691	84.8	84.8	14.5	2.790	.21	.11			8	
953.11	99	12.2	6.9	37.2	2.173	.0	.0	77.5	54.4	46.4	66.9	SD	2.649	77.5	77.5	12.3	2.779	.21	.11			8	
953.26	83	11.6	4.8	34.7	2.186	-.1	.0	77.5	58.5	44.5	57.5	DN	2.652	77.5	77.5	14.6	2.756	.21	.11				
953.41	72	7.3	1.7	30.2	2.198	-.1	.0	95.0	81.9	43.4	36.7	DN	2.655	95.0	95.0	19.1	2.707	.21	.11				
953.57	60	5.4	1.1	29.9	2.198	-.2	.0	109.6	99.7	43.7	34.9	DN	2.655	100.0	100.0	19.6	2.704	.21	.11				

953.72	60	4.7	.9	27.9	2.199	-.1	.0	116.3	101.6	43.4	24.2	DN	2.655	100.0	100.0	22.2	2.689	.21	.11		
953.87	57	4.9	.9	25.7	2.202	-.1	.0	112.5	95.6	42.2	13.0	DN	2.655	100.0	100.0	24.8	2.673	.21	.11		
954.02	52	5.3	.9	21.8	2.183	-.1	.0	103.4	87.1	42.6	.0	DN	2.634	100.0	100.0	28.3	2.634	.21	.11		
954.18	47	5.4	.8	20.6	2.149	-.1	.0	98.8	88.8	44.3	.0	DN	2.608	98.8	98.8	29.3	2.628	.21	.11	6	
954.33	42	4.6	.5	24.9	2.085	.1	.0	93.2	100.4	45.5	.0	DN	2.607	98.6	93.2	33.3	2.627	.21	.11	6	
954.48	41	3.4	.2	30.8	2.003	1.1		122.8	174.0	46.6	23.0	GR	2.650	100.0	100.0	25.2	2.698	.21	.11	4	78
954.63	38	2.8	.2	31.5	1.992	3.6		131.0	174.0	46.9	20.1	GR	2.650	100.0	100.0	26.7	2.692	.21	.11	4	78
954.79	38	2.8	.3	29.7	2.043	4.6		131.9	149.9	48.0	19.9	GR	2.650	100.0	100.0	26.7	2.692	.21	.11	4	78
954.94	36	2.9	.4	29.4	2.093	1.0		126.8	125.6	45.4	17.8	GR	2.650	100.0	100.0	27.8	2.688	.21	.11	4	78
955.09	43	3.4	.4	29.4	2.111	2.0		125.9	145.0	47.6	25.4	GR	2.650	100.0	100.0	24.0	2.704	.21	.11	4	78
955.24	43	3.8	.4	30.3	2.086	-.1		118.2	140.2	44.6	25.2	GR	2.650	100.0	100.0	24.1	2.703	.21	.11	4	78
955.40	46	3.8	.5	28.6	2.125	-.1	.0	105.5	99.4	45.2	3.6	DN	2.653	100.0	100.0	31.8	2.658	.21	.11		
955.55	57	3.8	.6	30.2	2.172	.3	.0	122.1	117.5	51.0	28.3	DN	2.654	100.0	100.0	22.8	2.694	.21	.11		
955.70	79	5.2	1.0	32.4	2.218	-.2	.0	123.9	143.5	49.7	55.6	DN	2.655	100.0	100.0	13.2	2.752	.21	.11		
955.85	92	8.4	1.8	35.9	2.239	-.1	.0	127.9	207.4	46.1	78.2	GR	2.650	100.0	100.0	3.8	2.817	.21	.11		8
956.01	91	12.3	3.4	34.8	2.238	-.1	.0	68.8	51.9	33.0	29.0	MN	2.776	68.8	68.8	22.2	2.801	.21	.11		
956.16	80	13.9	4.8	30.1	2.246	-.1	.0	74.8	55.0	33.7	36.9	MN	2.689	74.8	74.8	17.1	2.744	.21	.11		
956.31	73	13.9	6.5	25.4	2.264	-.1	.0	81.3	50.4	34.9	31.9	DN	2.655	81.3	81.3	16.2	2.700	.21	.11		
956.46	70	11.9	4.2	23.4	2.289	-.1	.0	93.9	66.7	33.9	29.1	DN	2.656	93.9	93.9	15.4	2.696	.21	.11		
956.61	71	10.0	2.9	24.4	2.295	-.1	.0	106.4	90.2	36.0	36.9	DN	2.656	100.0	100.0	13.1	2.707	.21	.11		
956.77	71	9.6	2.6	24.9	2.296	-.1	.0	109.6	98.0	37.0	39.7	DN	2.656	100.0	100.0	12.3	2.711	.21	.11		
956.92	71	9.5	2.8	25.3	2.300	-.1	.0	112.6	102.1	36.8	43.4	DN	2.656	100.0	100.0	11.2	2.721	.21	.11		
957.07	65	7.7	2.0	24.4	2.304	-.2	.0	125.2	117.3	36.4	39.9	DN	2.656	100.0	100.0	11.8	2.712	.21	.11		
957.22	59	5.7	1.4	23.5	2.294	-.2	.0	138.1	120.9	35.6	31.3	DN	2.656	100.0	100.0	14.6	2.699	.21	.11		

Zone No. 2 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
957.38	56	4.9	1.2	22.8	2.285	-.2	.0	142.9	115.8	32.4	24.2	DN	2.655	100.0	100.0	16.9	2.689	.21	.11	
957.53	58	5.4	1.5	21.9	2.290	-.2	.0	137.9	103.9	32.6	21.3	DN	2.655	100.0	100.0	17.3	2.685	.21	.11	
957.68	66	6.7	2.3	23.4	2.314	-.2	.0	138.0	110.7	33.4	37.4	DN	2.655	100.0	100.0	11.8	2.708	.21	.11	
957.83	84	8.2	2.7	28.1	2.323	-.2	.0	133.9	143.5	35.7	59.4	MN	2.679	100.0	100.0	6.3	2.782	.21	.11	
957.99	111	8.1	2.5	33.9	2.309	-.1	.0	108.7	100.8	36.3	55.9	MN	2.835	100.0	100.0	11.1	2.850	.21	.11	
958.14	124	7.2	2.1	37.9	2.285	-.1	.0	134.3	171.5	42.5	73.9	MN	2.650	100.0	100.0	5.0	2.884	.21	.11	8
958.29	127	7.0	2.2	39.5	2.272	-.1	.0	139.4	181.1	44.1	77.4	MN	2.650	100.0	100.0	4.0	2.894	.21	.11	8
958.44	129	7.6	2.8	37.3	2.273	-.1	.0	133.3	158.5	43.4	76.4	MN	2.650	100.0	100.0	4.3	2.865	.21	.11	8
958.60	121	7.8	3.3	36.3	2.275	-.1	.0	133.1	151.9	43.7	78.6	MN	2.650	100.0	100.0	3.7	2.854	.21	.11	8
958.75	117	7.4	3.6	32.0	2.287	-.1	.0	138.6	147.0	43.2	76.5	DN	2.650	100.0	100.0	3.8	2.805	.21	.11	
958.90	104	6.6	2.9	32.2	2.299	-.1	.0	152.5	187.9	42.5	79.8	MN	2.650	100.0	100.0	2.5	2.819	.21	.11	
959.05	101	6.3	2.4	31.5	2.311	-.1	.0	162.0	217.9	41.8	79.4	MN	2.650	100.0	100.0	2.0	2.819	.21	.11	
959.21	89	5.8	1.8	32.4	2.297	-.2	.0	153.4	197.4	41.8	74.8	GR	2.650	100.0	100.0	4.3	2.819	.21	.11	
959.36	72	5.1	1.1	28.4	2.275	-.2	.0	145.8	160.3	42.7	52.4	DN	2.655	100.0	100.0	10.5	2.744	.21	.11	
959.51	56	4.6	1.0	24.6	2.249	-.2	.0	132.0	113.2	43.8	22.1	DN	2.655	100.0	100.0	19.6	2.686	.21	.11	
959.66	49	4.7	.9	21.9	2.239	-.2	.0	122.9	98.0	45.2	4.2	DN	2.655	100.0	100.0	24.7	2.661	.21	.11	
959.82	45	4.1	.8	22.5	2.224	-.1	.0	125.0	95.2	47.0	2.1	DN	2.655	100.0	100.0	26.2	2.658	.21	.11	
959.97	50	3.4	.7	23.2	2.215	.0	.0	134.8	101.2	47.1	3.4	DN	2.655	100.0	100.0	26.4	2.660	.21	.11	
960.12	63	3.6	.9	23.5	2.228	-.2	.0	137.7	101.5	46.6	9.3	DN	2.655	100.0	100.0	24.1	2.668	.21	.11	
960.27	80	4.7	1.2	26.1	2.259	-.2	.0	139.3	116.5	45.5	34.5	DN	2.655	100.0	100.0	15.9	2.703	.21	.11	
960.42	101	5.6	1.8	31.0	2.278	-.2	.0	149.3	164.5	43.9	67.7	DN	2.656	100.0	100.0	6.4	2.783	.21	.11	
960.58	113	6.1	2.6	36.9	2.278	-.2	.0	152.6	179.7	44.1	80.1	MN	2.650	100.0	100.0	3.3	2.863	.21	.11	8
960.73	126	6.9	3.5	37.1	2.275	-.1	.0	141.8	150.0	44.0	79.0	MN	2.650	100.0	100.0	3.6	2.864	.21	.11	8
960.88	131	7.7	5.1	35.6	2.287	-.1	.0	133.2	119.7	42.9	77.3	MN	2.650	100.0	100.0	4.0	2.854	.21	.11	8

961.03	134	7.9	5.1	31.8	2.308	.1	.0	139.9	138.9	41.6	77.9	MN	2.650	100.0	100.0	2.7	2.821	.21	.11			
961.19	131	8.0	4.4	30.9	2.318	-.1	.0	144.9	161.9	41.0	77.5	MN	2.650	100.0	100.0	2.1	2.816	.21	.11			
961.34	121	7.6	3.3	29.3	2.317	-.1	.0	146.6	168.5	41.5	71.3	DN	2.650	100.0	100.0	3.3	2.793	.21	.11			
961.49	119	6.7	2.3	31.3	2.305	-.1	.0	154.1	210.5	41.6	77.6	MN	2.650	100.0	100.0	2.6	2.810	.21	.11			
961.64	114	5.8	1.9	31.2	2.296	-.2	.0	160.0	206.6	41.6	74.7	DN	2.650	100.0	100.0	3.7	2.801	.21	.11			
961.80	116	5.3	1.7	31.9	2.292	-.2	.0	167.2	224.4	42.3	77.4	DN	2.650	100.0	100.0	3.3	2.808	.21	.11			
961.95	116	5.3	1.7	30.7	2.287	-.2	.0	159.4	185.7	42.0	69.3	DN	2.655	100.0	100.0	5.5	2.787	.21	.11			
962.10	120	5.3	1.6	32.6	2.278	-.2	.0	155.8	192.2	41.7	73.1	MN	2.650	100.0	100.0	5.2	2.806	.21	.11		8	
962.25	125	5.5	1.7	33.1	2.270	-.2	.0	143.0	156.3	40.8	68.1	MN	2.692	100.0	100.0	7.4	2.805	.21	.11			
962.41	122	6.1	2.1	35.6	2.273	-.1	.0	125.8	121.6	40.8	66.7	MN	2.802	100.0	100.0	9.2	2.842	.21	.11			
962.56	116	7.3	3.0	35.0	2.279	-.1	.0	118.3	107.3	40.5	66.9	MN	2.791	100.0	100.0	8.6	2.839	.21	.11			
962.71	110	7.5	3.0	34.9	2.280	-.1	.0	108.3	87.9	38.1	57.4	MN	2.806	100.0	100.0	11.8	2.838	.21	.11			
962.86	107	7.1	2.8	31.9	2.290	-.1	.0	130.4	125.6	39.0	64.9	MN	2.703	100.0	100.0	7.2	2.806	.21	.11			
963.02	103	6.9	3.1	31.6	2.312	-.1	.0	135.4	123.1	37.9	63.9	MN	2.742	100.0	100.0	6.9	2.821	.21	.11			
963.17	101	7.1	3.2	30.5	2.338	-.2	.0	149.7	160.1	38.0	68.9	MN	2.746	100.0	100.0	3.9	2.829	.21	.11			
963.32	103	7.3	3.6	29.9	2.355	-.1	.0	157.2	186.1	38.5	74.0	MN	2.650	100.0	100.0	2.0	2.835	.21	.11			
963.47	111	7.3	4.1	29.4	2.355	-.1	.0	161.9	197.8	39.0	76.0	MN	2.650	100.0	100.0	1.0	2.828	.21	.11			
963.63	117	7.3	4.4	32.9	2.342	-.1	.0	147.0	154.3	40.6	78.2	MN	2.650	100.0	100.0	2.5	2.865	.21	.11			
963.78	118	7.2	3.9	33.1	2.315	-.1	.0	140.6	143.4	41.2	76.6	MN	2.650	100.0	100.0	3.7	2.844	.21	.11			
963.93	116	7.3	3.4	33.8	2.296	-.1	.0	135.6	143.3	42.0	76.2	MN	2.650	100.0	100.0	4.3	2.838	.21	.11		8	
964.08	113	7.0	2.8	33.2	2.291	-.1	.0	147.7	196.2	43.7	82.9	MN	2.650	100.0	100.0	2.1	2.825	.21	.11			
964.23	105	6.5	2.1	32.9	2.291	-.2	.0	153.9	224.2	45.5	82.4	DN	2.650	100.0	100.0	2.2	2.820	.21	.11			
964.39	89	5.4	1.4	31.1	2.279	-.2	.0	152.0	191.9	45.8	68.4	DN	2.656	100.0	100.0	6.2	2.785	.21	.11			
964.54	75	4.7	1.0	25.7	2.251	-.2	.0	133.5	116.7	46.9	29.2	DN	2.655	100.0	100.0	17.7	2.696	.21	.11			
964.69	65	4.2	.9	24.1	2.227	-.2	.0	128.3	99.4	47.0	12.4	DN	2.655	100.0	100.0	23.4	2.672	.21	.11			
964.84	66	3.9	.8	24.4	2.223	-.2	.0	131.3	103.9	46.7	12.8	DN	2.655	100.0	100.0	23.6	2.673	.21	.11			
965.00	74	4.0	1.0	27.1	2.233	-.1	.0	139.3	114.7	45.6	30.8	DN	2.655	100.0	100.0	18.4	2.698	.21	.11			
965.15	89	4.3	1.2	32.4	2.242	-.1	.0	149.5	157.6	44.7	63.7	DN	2.655	100.0	100.0	9.7	2.772	.21	.11			
965.30	97	5.0	1.8	35.4	2.236	-.1	.0	160.5	180.0	43.6	72.5	MN	2.650	100.0	100.0	5.4	2.808	.21	.11		8	
965.45	101	5.5	1.7	34.4	2.239	-.2	.0	122.5	110.5	39.5	56.7	MN	2.711	100.0	100.0	12.7	2.797	.21	.11			
965.61	105	5.8	1.8	31.2	2.254	-.2	.0	129.9	126.6	38.8	58.5	MN	2.662	100.0	100.0	10.4	2.765	.21	.11			
965.76	107	5.8	1.7	31.5	2.273	-.1	.0	138.9	150.3	39.2	63.2	MN	2.676	100.0	100.0	8.2	2.786	.21	.11			

Zone No. 2 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
965.91	109	5.8	1.7	33.2	2.279	-.2	.0	142.0	164.9	40.7	69.1	MN	2.705	100.0	100.0	6.8	2.814	.21	.11	
966.06	103	6.0	1.8	33.4	2.285	-.2	.0	146.4	183.3	41.5	72.9	MN	2.650	100.0	100.0	5.3	2.822	.21	.11	8
966.22	97	6.0	1.7	30.8	2.286	-.1	.0	148.5	184.1	41.9	69.0	DN	2.655	100.0	100.0	5.6	2.787	.21	.11	
966.37	92	5.3	1.2	29.1	2.272	-.2	.0	142.9	160.4	41.8	54.9	DN	2.655	100.0	100.0	10.0	2.751	.21	.11	
966.52	94	4.8	1.1	28.5	2.245	-.2	.0	134.1	129.1	42.9	43.0	DN	2.655	100.0	100.0	14.7	2.720	.21	.11	
966.67	97	5.0	1.1	29.2	2.231	-.2	.0	127.0	119.6	45.0	41.8	DN	2.655	100.0	100.0	15.8	2.717	.21	.11	
966.83	100	5.3	1.3	30.6	2.228	-.1	.0	123.9	117.6	46.4	49.0	DN	2.655	100.0	100.0	14.2	2.735	.21	.11	
966.98	96	5.3	1.2	31.1	2.217	-.1	.0	119.8	119.3	48.0	47.7	DN	2.655	100.0	100.0	15.2	2.732	.21	.11	
967.13	86	4.5	.9	28.9	2.188	-.1	.0	115.4	100.9	51.0	25.7	DN	2.655	100.0	100.0	22.5	2.691	.21	.11	
967.28	82	3.6	.8	28.3	2.161	-.1	.0	118.3	93.4	52.6	13.8	DN	2.654	100.0	100.0	27.1	2.674	.21	.11	
967.44	93	3.7	.9	31.4	2.142	-.1	.0	115.4	91.4	53.7	24.4	DN	2.652	100.0	100.0	25.6	2.688	.21	.11	
967.59	111	4.7	1.5	38.9	2.128	.0	.0	119.6	106.6	51.2	61.7	DN	2.642	100.0	100.0	14.3	2.765	.21	.11	8
967.74	125	7.2	2.4	42.2	2.127	.0	.0	103.4	96.2	50.3	69.3	SD	2.700	100.0	100.0	11.4	2.807	.21	.11	8
967.89	131	7.9	2.7	36.9	2.163	.6	.0	92.5	79.2	47.4	62.1	DN	2.648	92.5	92.5	14.1	2.767	.21	.11	8
968.04	130	7.7	2.6	38.6	2.204	.0	.0	129.7	149.7	45.9	72.9	SD	2.650	100.0	100.0	5.3	2.823	.21	.11	8
968.20	128	7.7	3.3	37.9	2.239	.0	.0	138.5	177.7	46.9	84.9	MN	2.650	100.0	100.0	2.2	2.844	.21	.11	8

968.35	124	7.5	3.0	39.7	2.242	.0	.0	139.2	173.5	46.4	82.2	MN	2.650	100.0	100.0	2.8	2.871	.21	.11	8
968.50	120	7.4	2.4	40.2	2.236	.0	.0	130.9	152.3	44.1	71.6	MN	2.650	100.0	100.0	5.7	2.872	.21	.11	8
968.65	111	7.1	1.9	39.1	2.230	-.1	.0	105.4	111.5	43.7	69.3	MN	2.834	100.0	100.0	11.1	2.852	.21	.11	
968.81	102	6.8	1.6	36.9	2.230	-.2	.0	107.6	114.9	41.8	63.0	MN	2.756	100.0	100.0	12.2	2.822	.21	.11	
968.96	86	6.2	1.5	30.5	2.246	-.2	.0	122.0	125.4	42.1	54.4	DN	2.655	100.0	100.0	11.8	2.749	.21	.11	
969.11	70	6.0	1.3	26.3	2.264	-.2	.0	124.8	119.4	42.5	37.1	DN	2.655	100.0	100.0	15.0	2.707	.21	.11	
969.26	61	5.9	1.1	24.7	2.264	-.2	.0	123.6	117.7	45.4	27.7	DN	2.655	100.0	100.0	17.3	2.694	.21	.11	
969.42	53	5.5	.9	25.4	2.241	-.2	.0	118.7	118.2	47.0	24.1	DN	2.655	100.0	100.0	19.6	2.689	.21	.11	
969.57	47	4.9	.7	26.1	2.210	-.1	.0	115.5	111.1	48.5	17.9	DN	2.655	100.0	100.0	23.1	2.680	.21	.11	
969.72	46	4.4	.7	24.6	2.188	-.1	.0	110.6	99.1	50.2	1.8	DN	2.655	100.0	100.0	28.5	2.657	.21	.11	
969.87	47	4.4	.6	23.5	2.174	-.1	.0	109.6	98.1	50.1	.0	DN	2.642	100.0	100.0	29.2	2.642	.21	.11	
970.03	52	4.5	.6	22.0	2.143	-.1	.0	105.3	94.5	48.3	.0	DN	2.616	100.0	100.0	30.0	2.616	.21	.11	
970.18	51	4.5	.5	22.3	2.127	-.2	.0	101.8	101.6	46.9	.0	DN	2.609	100.0	100.0	30.7	2.629	.21	.11	6
970.33	49	4.7	.6	21.5	2.146	-.1	.0	104.1	103.6	45.4	.0	DN	2.614	100.0	100.0	29.7	2.634	.21	.11	6
970.48	44	4.5	.6	21.0	2.190	.7	.0	114.3	110.5	44.7	.0	DN	2.631	100.0	100.0	27.7	2.631	.21	.11	
970.64	44	4.2	.7	22.5	2.215	.1	.0	120.5	101.9	45.5	.0	DN	2.654	100.0	100.0	27.2	2.654	.21	.11	
970.79	44	4.1	.7	23.0	2.191	-.2	.0	116.9	100.0	46.7	.0	DN	2.647	100.0	100.0	28.3	2.647	.21	.11	
970.94	46	4.4	.6	24.0	2.143	-.1		114.1	121.8	49.3	28.1	GR	2.650	100.0	100.0	22.7	2.709	.21	.11	4 78
971.09	48	4.3	.5	25.7	2.091	1.3		117.9	144.7	49.7	30.5	GR	2.650	100.0	100.0	21.6	2.714	.21	.11	4 78
971.25	50	3.8	.3	27.1	2.046	4.4		128.8	178.9	50.0	32.9	GR	2.650	100.0	100.0	20.5	2.720	.21	.11	4 78
971.40	53	3.1	.3	27.4	2.063	4.7		146.8	191.3	47.4	35.7	GR	2.650	100.0	100.0	19.2	2.725	.21	.11	4 78
971.55	60	2.9	.4	24.8	2.120	4.5		163.8	195.6	46.5	43.4	GR	2.650	100.0	100.0	15.9	2.742	.21	.11	4 78
971.70	74	3.6	.7	24.9	2.210	2.2		167.5	206.8	45.1	58.4	GR	2.650	100.0	100.0	10.0	2.773	.21	.11	4 78
971.85	90	5.3	1.1	27.4	2.263	-.1		156.2	232.6	39.9	73.8	N	2.650	100.0	100.0	5.0	2.806	.21	.11	4 78
972.01	97	8.1	1.6	27.2	2.288	-.2	.0	119.7	137.9	37.5	49.7	DN	2.656	100.0	100.0	10.3	2.738	.21	.11	
972.16	90	8.6	1.7	25.6	2.300	-.2	.0	118.7	133.4	35.9	45.0	DN	2.656	100.0	100.0	10.8	2.725	.21	.11	
972.31	76	8.1	1.6	21.5	2.317	-.2	.0	123.9	120.3	34.0	28.0	DN	2.655	100.0	100.0	14.0	2.694	.21	.11	
972.46	66	8.0	1.5	19.3	2.340	-.2	.0	134.1	127.0	33.9	23.5	DN	2.655	100.0	100.0	13.6	2.688	.21	.11	
972.62	62	8.1	1.5	16.7	2.352	-.2	.0	135.9	116.7	34.1	12.5	DN	2.655	100.0	100.0	15.6	2.673	.21	.11	
972.77	67	8.3	1.6	18.2	2.351	-.2	.0	136.1	126.5	33.7	20.8	DN	2.654	100.0	100.0	13.6	2.685	.21	.11	
972.92	68	8.4	1.5	20.5	2.350	-.2	.0	138.9	151.6	34.0	33.2	DN	2.654	100.0	100.0	10.6	2.702	.21	.11	
973.07	64	7.1	1.3	22.8	2.344	-.2	.0	152.6	192.2	34.0	43.9	DN	2.653	100.0	100.0	8.2	2.723	.21	.11	
973.23	58	6.5	1.2	22.0	2.334	-.2	.0	150.4	164.2	35.9	36.5	DN	2.654	100.0	100.0	10.7	2.706	.21	.11	
973.38	56	6.4	1.3	20.3	2.329	-.2	.0	145.0	137.0	37.1	25.3	DN	2.655	100.0	100.0	13.8	2.691	.21	.11	
973.53	55	6.4	1.4	20.4	2.329	-.2	.0	145.1	131.7	37.3	25.9	DN	2.655	100.0	100.0	13.7	2.692	.21	.11	
973.68	56	5.4	1.3	21.2	2.318	-.2	.0	152.5	131.1	37.5	26.6	DN	2.655	100.0	100.0	14.3	2.692	.21	.11	
973.84	61	4.5	1.0	22.3	2.292	-.2	.0	153.1	127.8	36.9	23.7	DN	2.656	100.0	100.0	16.6	2.688	.21	.11	
973.99	81	4.5	1.1	24.9	2.273	-.2	.0	145.7	124.6	36.5	31.8	DN	2.655	100.0	100.0	15.7	2.700	.21	.11	
974.14	115	5.7	1.5	28.9	2.281	-.2	.0	142.7	157.2	38.0	57.0	DN	2.656	100.0	100.0	8.9	2.756	.21	.11	
974.29	141	7.5	2.2	33.8	2.310	-.1	.0	119.1	124.3	37.8	62.0	MN	2.830	100.0	100.0	9.0	2.850	.21	.11	

Zone No. 2   CUTTLEFISH 1   Complex Lithology Results
AMITY OIL NL   01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
974.45	148	7.3	2.1	35.3	2.329	-.2	.0	138.7	196.7	41.7	79.1	MN	2.650	100.0	100.0	3.6	2.886	.21	.11	8
974.60	143	6.7	2.0	36.6	2.338	-.1	.0	153.1	254.9	44.0	88.2	MN	2.650	100.0	100.0	1.1	2.911	.21	.11	
974.75	137	6.9	2.7	39.9	2.326	-.1	.0	148.8	208.9	45.0	88.4	MN	2.650	100.0	100.0	1.5	2.946	.21	.11	8
974.90	130	7.3	3.3	37.5	2.311	-.2	.0	145.6	199.5	45.9	91.5	MN	2.650	100.0	100.0	.9	2.900	.21	.11	8
975.06	115	7.6	3.0	34.5	2.288	-.2	.0	147.2	228.8	46.7	90.8	DN	2.650	100.0	100.0	.3	2.841	.21	.11	
975.21	96	6.5	1.6	29.0	2.266	-.2	.0	126.6	130.3	47.0	52.6	DN	2.655	100.0	100.0	10.9	2.745	.21	.11	
975.36	74	4.7	1.0	29.8	2.233	-.2	.0	132.7	136.2	46.9	46.3	DN	2.655	100.0	100.0	14.5	2.728	.21	.11	
975.51	70	3.6	.7	28.5	2.200	-.1	.0	133.7	117.9	48.7	28.0	DN	2.655	100.0	100.0	21.2	2.694	.21	.11	

975.66	76	3.3	.7	29.8	2.182	-.2	.0	134.6	114.4	48.5	28.9	DN	2.654	100.0	100.0	22.0	2.695	.21	.11						
975.82	93	3.7	1.0	31.9	2.201	-.1	.0	137.6	119.4	51.1	47.1	DN	2.654	100.0	100.0	16.3	2.730	.21	.11						
975.97	110	4.7	1.9	37.2	2.240	-.1	.0	179.8	258.1	51.3	89.5	DN	2.650	100.0	100.0	1.3	2.835	.21	.11		8				
976.12	122	6.9	5.4	41.5	2.274	-.1	.0			54.9	100.0	N	2.650	100.0	100.0	.0	2.922	.21	.11	1					
976.27	125	6.7	5.9	47.4	2.278	-.1	.0			59.2	100.0	GR	2.650	100.0	100.0	.0	3.000	.21	.11	1					
976.43	117	5.7	4.9	53.8	2.191	-.1	.0			61.0	100.0	GR	2.650	100.0	100.0	.0	3.015	.21	.11	1					
976.58	Coal																								
976.73	Coal																								
976.88	Coal																								
977.04	Coal																								
977.19	Coal																								
977.34	121	5.3	1.9	41.6	2.170	-.2	.0	162.9	208.2	50.4	80.4	SD	2.650	100.0	100.0	3.2	2.835	.21	.11		8				
977.49	125	5.1	1.8	41.1	2.240	-.2	.0	174.3	282.2	49.5	93.9	MN	2.650	100.0	100.0	.6	2.887	.21	.11		8				
977.65	120	5.5	2.4	38.8	2.260	-.1	.0			49.0	96.2	MN	2.650	100.0	100.0	1.3	2.874	.21	.11	1					
977.80	111	6.2	4.3	36.9	2.223	-.1	.0	149.9	136.6	46.4	79.4	SD	2.650	100.0	100.0	3.5	2.817	.21	.11		8				
977.95	99	6.7	6.4	33.1	2.188	-.1	.0	99.6	46.9	43.3	49.3	DN	2.653	99.6	99.6	16.5	2.736	.21	.11						
978.10	95	6.9	6.7	31.4	2.188	-.1	.0	96.4	42.0	42.1	39.9	DN	2.654	96.4	96.4	18.9	2.712	.21	.11						
978.26	88	7.2	6.5	29.7	2.232	-.1	.0	106.7	51.6	40.1	45.2	DN	2.655	100.0	100.0	14.9	2.726	.21	.11						
978.41	83	7.4	5.9	29.9	2.261	-.1	.0	117.5	69.7	40.5	56.1	DN	2.655	100.0	100.0	10.4	2.754	.21	.11						
978.56	74	6.6	3.5	29.0	2.246	-.1	.0	115.7	74.2	43.0	45.7	DN	2.655	100.0	100.0	13.9	2.727	.21	.11						
978.71	70	6.6	3.3	29.8	2.201	-.2	.0	100.2	59.2	45.3	35.3	DN	2.655	100.0	100.0	19.3	2.705	.21	.11						
978.87	67	6.3	2.5	32.1	2.170	-.2	.0	95.7	63.6	45.7	37.8	DN	2.653	95.7	95.7	20.5	2.708	.21	.11						
979.02	67	5.1	1.6	31.8	2.170	-.2	.0	106.8	77.8	44.9	36.4	DN	2.653	100.0	100.0	20.8	2.706	.21	.11						
979.17	67	4.0	1.1	30.4	2.193	-.2	.0	127.2	101.1	48.1	36.1	DN	2.654	100.0	100.0	19.6	2.706	.21	.11						
979.32	72	4.5	1.3	30.2	2.216	-.2	.0	128.1	105.7	53.2	42.7	DN	2.655	100.0	100.0	16.5	2.719	.21	.11						
979.47	83	6.2	2.4	32.8	2.228	-.1	.0	118.7	101.7	55.4	60.8	DN	2.655	100.0	100.0	11.3	2.765	.21	.11						
979.63	95	7.8	5.2	40.9	2.218	-.1	.0	135.2	128.4	59.7	80.6	GR	2.650	100.0	100.0	3.2	2.866	.21	.11		8				
979.78	100	7.0	5.2	44.3	2.156	-.1	.0	146.0	145.3	67.4	86.2	GR	2.650	100.0	100.0	1.9	2.858	.21	.11		8				
979.93	Coal																								
980.08	Coal																								
980.24	Coal																								
980.39	Coal																								
980.54	Coal																								
980.69	Coal																								
980.85	Coal																								
981.00	Coal																								
981.15	Coal																								
981.30	Coal																								
981.46	Coal																								
981.61	100	6.3	2.4	36.9	2.144	-.2	.0	86.6	55.8	39.4	34.6	SD	2.699	86.6	86.6	24.1	2.751	.21	.11						
981.76	100	5.6	2.1	33.4	2.297	-.2	.0	130.5	108.7	36.4	54.5	MN	2.798	100.0	100.0	11.5	2.833	.21	.11						
981.91	99	5.3	1.9	31.0	2.344	-.2	.0	153.4	146.5	34.9	58.0	MN	2.809	100.0	100.0	8.0	2.841	.21	.11						
982.07	91	5.5	1.9	28.5	2.348	-.2	.0	166.4	172.2	34.3	57.8	MN	2.731	100.0	100.0	6.2	2.810	.21	.11						
982.22	83	5.7	1.7	26.7	2.329	-.2	.0	171.5	210.2	36.0	60.8	DN	2.651	100.0	100.0	4.9	2.767	.21	.11						
982.37	71	5.6	1.4	24.9	2.318	-.2	.0	157.7	166.0	36.6	47.2	DN	2.654	100.0	100.0	9.0	2.731	.21	.11						
982.52	61	5.4	1.2	24.1	2.308	-.2	.0	152.4	153.8	36.9	39.8	DN	2.655	100.0	100.0	11.5	2.712	.21	.11						
982.68	59	5.0	1.1	24.0	2.291	-.2	.0	147.7	139.5	37.8	33.5	DN	2.656	100.0	100.0	14.1	2.702	.21	.11						
982.83	56	4.7	1.0	24.7	2.281	-.2	.0	147.9	136.6	38.8	33.6	DN	2.655	100.0	100.0	14.7	2.702	.21	.11						

Zone No. 2 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS

982.98	58	5.0	1.1	24.9	2.278	-.2	.0	142.5	135.0	39.3	33.8	DN	2.655	100.0	100.0	14.9	2.703	.21	.11				
983.13	58	5.4	1.1	24.9	2.285	-.2	.0	140.3	141.0	38.9	35.9	DN	2.655	100.0	100.0	14.0	2.705	.21	.11				
983.28	58	4.9	1.0	24.6	2.279	-.2	.0	142.7	138.5	38.1	32.4	DN	2.655	100.0	100.0	15.2	2.701	.21	.11				
983.44	59	4.2	.8	26.7	2.269	-.2	.0	154.1	160.4	36.9	40.8	DN	2.655	100.0	100.0	13.7	2.714	.21	.11				
983.59	60	4.5	.9	26.7	2.269	-.2	.0	147.2	150.8	36.0	40.4	DN	2.655	100.0	100.0	13.8	2.714	.21	.11				
983.74	64	5.7	1.2	26.1	2.281	-.2	.0	136.9	140.6	35.3	41.9	DN	2.655	100.0	100.0	12.7	2.717	.21	.11				
983.89	63	7.5	1.8	22.9	2.291	-.2	.0	119.0	101.8	31.9	27.1	DN	2.656	100.0	100.0	15.7	2.693	.21	.11				
984.05	64	7.2	1.4	23.1	2.296	-.2	.0	124.3	119.2	31.3	29.9	DN	2.656	100.0	100.0	14.7	2.697	.21	.11				
984.20	65	6.4	1.5	23.7	2.303	-.2	.0	136.0	130.0	32.4	35.8	DN	2.656	100.0	100.0	12.8	2.705	.21	.11				
984.35	69	6.0	1.5	24.4	2.324	-.2	.0	149.4	145.7	30.2	40.6	MN	2.670	100.0	100.0	10.8	2.730	.21	.11				
984.50	76	6.4	1.9	23.1	2.346	-.2	.0	162.6	166.9	31.9	46.3	DN	2.652	100.0	100.0	7.5	2.729	.21	.11				
984.66	77	7.4	2.0	23.0	2.365	-.2	.0	167.1	207.1	31.5	52.1	DN	2.649	100.0	100.0	4.8	2.744	.21	.11				
984.81	80	8.0	2.3	23.3	2.374	-.2	.0	166.1	215.3	31.4	54.3	MN	2.657	100.0	100.0	3.8	2.758	.21	.11				
984.96	78	7.8	2.3	24.0	2.384	-.2	.0	176.2	263.3	32.6	59.8	MN	2.661	100.0	100.0	2.0	2.777	.21	.11				
985.11	78	7.4	2.3	24.1	2.385	-.2	.0	168.9	202.2	30.8	53.1	MN	2.689	100.0	100.0	4.3	2.779	.21	.11				
985.27	78	7.2	2.2	22.6	2.383	-.2	.0	185.0	255.8	31.8	55.8	DN	2.643	100.0	100.0	2.6	2.754	.21	.11				
985.42	82	6.9	2.0	22.8	2.377	-.2	.0	184.2	244.8	33.4	55.0	DN	2.645	100.0	100.0	3.2	2.752	.21	.11				
985.57	86	6.9	2.0	24.2	2.373	-.2	.0	186.3	286.9	33.9	61.8	DN	2.641	100.0	100.0	1.7	2.770	.21	.11				
985.72	87	7.0	2.0	27.3	2.367	-.2	.0	161.7	210.1	34.0	60.3	MN	2.715	100.0	100.0	4.1	2.808	.21	.11				
985.88	87	7.3	2.1	27.1	2.359	-.2	.0	151.1	174.0	32.9	55.1	MN	2.710	100.0	100.0	5.9	2.798	.21	.11				
986.03	84	6.8	2.1	26.9	2.350	-.2	.0	161.4	197.7	34.5	59.9	MN	2.684	100.0	100.0	4.6	2.787	.21	.11				
986.18	83	6.0	1.8	27.3	2.342	-.2	.0	160.0	172.2	33.4	54.2	MN	2.698	100.0	100.0	6.9	2.786	.21	.11				
986.33	83	5.5	1.8	27.8	2.339	-.2	.0	154.4	143.1	31.9	47.4	MN	2.721	100.0	100.0	9.5	2.791	.21	.11				
986.49	81	5.8	1.7	28.9	2.344	-.2	.0	173.0	232.2	40.0	66.1	GR	2.703	100.0	100.0	3.7	2.810	.21	.11				
986.64	83	6.2	2.0	28.1	2.348	-.2	.0	174.9	245.8	43.2	68.3	GR	2.681	100.0	100.0	2.4	2.803	.21	.11				
986.79	88	6.1	2.0	29.2	2.348	-.2	.0	173.5	257.8	50.0	73.5	GR	2.650	100.0	100.0	1.8	2.819	.21	.11				
986.94	100	5.7	2.3	34.2	2.317	-.2	.0	169.4	244.8	51.8	86.4	GR	2.650	100.0	100.0	1.0	2.861	.21	.11				
987.09	100	5.6	2.8	39.6	2.218	-.1	.0	164.0	198.2	53.1	86.9	GR	2.650	100.0	100.0	1.8	2.849	.21	.11				8
987.25	90	5.9	4.6	41.8	2.069	-.1	.0	103.8	56.7	57.6	58.3	DN	2.632	100.0	100.0	15.6	2.756	.21	.11				8
987.40	Coal																						
987.55	Coal																						
987.70	Coal																						
987.86	Coal																						
988.01	87	3.0	2.1	35.7	1.921	-.1	.0	101.3	41.4	56.6	.0	DN	2.600	100.0	100.0	37.3	2.620	.21	.11			6	8
988.16	97	2.7	1.6	31.1	2.059	-.2	.0	110.5	49.0	57.7	.0	DN	2.642	100.0	100.0	36.4	2.642	.21	.11				
988.31	99	2.8	1.4	31.7	2.195	-.2	.0	156.1	96.1	57.3	44.1	DN	2.654	100.0	100.0	17.4	2.723	.21	.11				
988.47	97	2.9	1.4	38.1	2.248	-.2	.0	225.4	260.4	57.4	83.2	GR	2.650	100.0	100.0	2.6	2.855	.21	.11				8
988.62	92	3.0	1.5	42.0	2.192	.1	.0	214.7	227.5	56.7	78.2	GR	2.650	100.0	100.0	3.8	2.858	.21	.11				8
988.77	96	3.2	1.7	44.7	2.100	.1	.0	211.6	233.0	56.1	82.6	GR	2.650	100.0	100.0	2.7	2.819	.21	.11				8
988.92	Coal																						
989.08	114	2.4	1.7	39.1	2.094	.2	.0	155.4	83.3	51.9	51.4	DN	2.642	100.0	100.0	18.1	2.740	.21	.11				8
989.23	115	2.2	1.8	39.0	2.185	-.2	.0	257.7	217.9	50.9	81.3	DN	2.650	100.0	100.0	3.0	2.813	.21	.11				8
989.38	118	2.2	2.1	38.0	2.267	-.1	.0			49.9	99.2	N	2.650	100.0	100.0	.3	2.869	.21	.11	1			
989.53	111	2.2	2.1	36.8	2.284	-.2	.0			48.8	96.2	N	2.650	100.0	100.0	1.2	2.867	.21	.11	1			
989.69	107	2.3	2.1	32.5	2.291	-.2	.0	258.6	218.7	48.7	80.9	DN	2.650	100.0	100.0	2.5	2.817	.21	.11				
989.84	108	2.3	2.0	32.7	2.286	-.2	.0	253.0	212.3	48.8	80.3	DN	2.650	100.0	100.0	2.9	2.815	.21	.11				
989.99	112	2.3	1.9	33.9	2.272	-.2	.0	252.8	217.8	48.9	82.1	DN	2.650	100.0	100.0	2.8	2.819	.21	.11				8
990.14	110	2.2	1.5	38.1	2.253	-.2	.0			49.8	97.5	GR	2.650	100.0	100.0	.8	2.859	.21	.11	1			
990.30	108	2.2	1.4	36.7	2.242	-.1	.0	258.8	279.6	52.0	87.2	DN	2.650	100.0	100.0	1.7	2.830	.21	.11				8
990.45	102	2.3	1.5	36.5	2.243	-.2	.0	255.8	276.3	53.0	87.2	DN	2.650	100.0	100.0	1.7	2.830	.21	.11				8
990.60	103	2.3	1.8	34.1	2.258	-.1	.0	244.2	209.6	52.7	78.5	DN	2.650	100.0	100.0	3.7	2.809	.21	.11				8
990.75	106	2.3	1.9	34.6	2.283	.0	.0	263.0	266.5	51.8	89.4	DN	2.650	100.0	100.0	.9	2.837	.21	.11				
990.90	105	2.3	1.7	35.5	2.304	-.1	.0	266.7	304.3	51.1	91.7	GR	2.650	100.0	100.0	.1	2.868	.21	.11				
991.06	105	2.4	1.8	35.9	2.326	-.1	.0	100.0	100.0	50.3	91.6	GR	2.650	100.0	100.0	.0	2.893	.21	.11				

991.21	101	2.4	1.8	36.4	2.330	-.1	.0	256.4	265.9	50.0	88.0	GR	2.650	100.0	100.0	1.3	2.903	.21	.11		
991.36	103	2.2	2.1	38.4	2.324	-.1	.0	263.0	244.6	48.6	89.8	GR	2.650	100.0	100.0	1.2	2.923	.21	.11		8

Zone No. 2 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
991.51	104	2.1	2.0	39.8	2.305	-.1	.0	272.0	257.0	48.7	90.9	GR	2.650	100.0	100.0	1.0	2.926	.21	.11	8
991.67	106	2.0	1.9	38.8	2.286	-.1	.0	278.0	269.1	47.9	93.0	GR	2.650	100.0	100.0	.7	2.896	.21	.11	8
991.82	105	2.0	1.9	38.1	2.277	-.1	.0	278.8	268.5	49.6	92.2	GR	2.650	100.0	100.0	.8	2.880	.21	.11	8
991.97	105	2.0	1.9	37.8	2.267	.0	.0	280.6	267.8	48.5	91.7	GR	2.650	100.0	100.0	.9	2.867	.21	.11	8
992.12	103	1.9	1.7	38.6	2.260	-.1	.0	283.4	258.2	46.9	88.0	MN	2.650	100.0	100.0	1.6	2.871	.21	.11	8
992.28	101	1.8	1.7	34.2	2.261	-.1	.0	278.5	221.3	45.8	80.2	DN	2.650	100.0	100.0	3.3	2.814	.21	.11	8
992.43	99	1.9	1.8	33.0	2.277	-.1	.0	268.9	204.1	45.8	78.5	DN	2.650	100.0	100.0	3.7	2.810	.21	.11	8
992.58	95	2.0	2.0	30.5	2.294	-.1	.0	263.6	185.0	45.7	70.6	DN	2.650	100.0	100.0	4.7	2.791	.21	.11	
992.73	93	2.2	2.2	32.5	2.282	-.1	.0	250.8	186.5	45.5	77.8	DN	2.650	100.0	100.0	3.7	2.808	.21	.11	
992.89	90	2.2	2.1	34.2	2.256	-.1	.0	248.0	180.5	45.5	75.8	GR	2.650	100.0	100.0	4.4	2.809	.21	.11	8
993.04	96	2.1	2.0	36.0	2.233	.0	.0	254.7	185.6	44.8	76.3	SD	2.650	100.0	100.0	4.3	2.814	.21	.11	8
993.19	98	1.9	1.8	34.8	2.243	.0	.0	264.9	191.4	43.9	75.3	MN	2.650	100.0	100.0	4.6	2.805	.21	.11	8
993.34	97	1.9	1.8	32.4	2.263	.0	.0	260.1	174.1	43.0	70.9	DN	2.650	100.0	100.0	5.9	2.791	.21	.11	8
993.50	92	1.9	1.9	30.0	2.271	-.1	.0	242.5	138.2	41.5	60.1	DN	2.655	100.0	100.0	8.8	2.764	.21	.11	
993.65	89	2.1	1.9	29.7	2.263	-.1	.0	222.8	122.8	41.5	55.5	DN	2.655	100.0	100.0	10.4	2.752	.21	.11	
993.80	85	2.2	2.1	30.0	2.253	-.1	.0	207.6	110.3	40.8	53.9	DN	2.655	100.0	100.0	11.4	2.748	.21	.11	
993.95	81	2.3	2.1	31.6	2.250	-.1	.0	207.2	119.6	40.2	61.7	DN	2.655	100.0	100.0	9.7	2.767	.21	.11	
994.11	80	2.3	2.2	30.6	2.251	-.1	.0	205.5	111.4	40.2	56.8	DN	2.655	100.0	100.0	10.8	2.755	.21	.11	
994.26	80	2.3	2.1	29.2	2.252	-.1	.0	203.2	102.0	40.2	48.9	DN	2.655	100.0	100.0	12.7	2.735	.21	.11	
994.41	79	2.2	2.1	30.0	2.257	-.1	.0	211.9	114.3	40.1	55.3	DN	2.655	100.0	100.0	10.8	2.751	.21	.11	
994.56	80	2.3	2.2	32.4	2.269	-.1	.0	219.8	131.3	40.2	65.0	GR	2.687	100.0	100.0	8.2	2.795	.21	.11	
994.71	77	2.5	2.4	34.1	2.290	-.1	.0	201.6	111.8	39.8	61.5	GR	2.796	100.0	100.0	9.7	2.837	.21	.11	
994.87	75	2.7	2.8	32.2	2.318	-.1	.0	204.8	113.4	39.1	59.5	GR	2.793	100.0	100.0	8.7	2.835	.21	.11	
995.02	73	3.0	3.1	30.5	2.335	-.1	.0	207.2	117.5	39.8	57.9	GR	2.773	100.0	100.0	7.8	2.826	.21	.11	
995.17	74	3.0	2.6	30.8	2.316	-.1	.0	202.1	124.4	40.8	58.7	GR	2.737	100.0	100.0	8.0	2.812	.21	.11	
995.32	76	2.9	2.4	32.0	2.284	-.1	.0	193.5	119.4	41.6	60.4	GR	2.708	100.0	100.0	8.9	2.803	.21	.11	
995.48	75	2.8	2.8	34.7	2.258	-.1	.0	177.9	94.4	42.3	60.1	GR	2.747	100.0	100.0	11.2	2.816	.21	.11	
995.63	78	2.7	2.9	35.6	2.234	-.1	.0	175.1	89.4	43.0	62.6	GR	2.720	100.0	100.0	11.5	2.809	.21	.11	
995.78	79	2.6	2.9	35.3	2.206	-.1	.0	174.6	86.9	43.5	63.9	GR	2.667	100.0	100.0	12.0	2.781	.21	.11	
995.93	80	2.6	2.7	32.1	2.192	-.1	.0	161.7	69.8	44.8	45.3	DN	2.654	100.0	100.0	17.3	2.726	.21	.11	
996.09	81	2.6	3.0	31.1	2.214	-.1	.0	170.6	73.0	44.2	46.8	DN	2.655	100.0	100.0	15.6	2.730	.21	.11	
996.24	81	2.6	2.8	31.6	2.249	-.1	.0	195.0	104.2	44.3	61.4	DN	2.655	100.0	100.0	9.8	2.767	.21	.11	
996.39	78	2.5	2.6	32.0	2.272	-.1	.0	208.3	117.9	44.3	63.3	GR	2.686	100.0	100.0	8.5	2.792	.21	.11	
996.54	78	2.5	2.9	32.5	2.286	-.1	.0	210.8	115.1	44.7	63.3	GR	2.721	100.0	100.0	8.2	2.812	.21	.11	
996.70	78	2.4	2.7	31.8	2.292	-.1	.0	223.8	125.0	44.9	63.1	GR	2.708	100.0	100.0	7.7	2.807	.21	.11	
996.85	81	2.2	2.4	32.4	2.279	-.1	.0	227.9	131.3	45.3	65.9	GR	2.697	100.0	100.0	7.5	2.804	.21	.11	
997.00	81	2.1	2.2	32.5	2.260	-.1	.0	223.8	129.1	44.6	65.6	GR	2.675	100.0	100.0	8.4	2.789	.21	.11	
997.15	82	2.1	2.1	35.2	2.242	-.1	.0	212.3	121.1	45.1	67.6	GR	2.705	100.0	100.0	9.4	2.810	.21	.11	
997.31	81	2.1	2.1	37.5	2.239	-.1	.0	199.1	107.1	43.6	66.1	GR	2.795	100.0	100.0	11.2	2.839	.21	.11	
997.46	84	2.1	2.1	37.7	2.246	-.1	.0	193.2	98.5	41.0	61.7	MN	2.826	100.0	100.0	12.6	2.848	.21	.11	
997.61	85	2.2	2.2	34.4	2.257	-.1	.0	207.5	114.7	40.4	63.5	MN	2.725	100.0	100.0	9.9	2.813	.21	.11	
997.76	80	2.3	2.3	30.8	2.287	-.1	.0	231.8	145.7	40.3	65.4	GR	2.672	100.0	100.0	6.7	2.788	.21	.11	
997.92	74	2.6	2.6	31.1	2.330	-.1	.0	219.9	125.9	41.1	58.8	GR	2.780	100.0	100.0	8.0	2.829	.21	.11	
998.07	74	2.6	2.6	33.5	2.375	-.1	.0	210.9	117.0	41.7	58.8	GR	2.963	100.0	100.0	8.8	2.902	.21	.11	5
998.22	77	2.5	2.6	34.2	2.365	-.1	.0	214.2	121.5	42.2	62.1	GR	2.976	100.0	100.0	8.3	2.904	.21	.11	5
998.37	81	2.4	2.3	33.5	2.320	-.1	.0	220.6	136.6	42.1	66.0	GR	2.838	100.0	100.0	7.3	2.854	.21	.11	

998.52	84	2.5	2.3	31.9	2.264	-.1	.0	213.3	137.0	41.9	68.2	DN	2.655	100.0	100.0	7.2	2.784	.21	.11		
998.68	92	2.4	2.0	33.9	2.237	-.1	.0	201.8	128.5	42.6	69.4	SD	2.659	100.0	100.0	8.6	2.789	.21	.11		
998.83	95	2.3	1.9	34.3	2.222	-.1	.0	195.0	116.0	42.6	65.6	SD	2.663	100.0	100.0	10.5	2.781	.21	.11		
998.98	97	2.2	1.9	34.0	2.213	-.1	.0	191.8	108.3	43.9	62.9	DN	2.654	100.0	100.0	11.6	2.770	.21	.11		
999.13	91	2.3	2.1	32.8	2.217	-.1	.0	187.9	98.7	45.4	57.2	DN	2.655	100.0	100.0	12.8	2.756	.21	.11		
999.29	86	2.4	2.3	30.4	2.221	-.1	.0	178.0	83.7	45.9	45.6	DN	2.655	100.0	100.0	15.5	2.727	.21	.11		
999.44	80	2.6	2.4	29.4	2.221	-.1	.0	171.0	77.6	45.8	39.7	DN	2.655	100.0	100.0	16.9	2.712	.21	.11		
999.59	75	2.6	2.4	31.1	2.213	-.1	.0	169.2	80.3	45.2	46.5	DN	2.655	100.0	100.0	15.7	2.729	.21	.11		
999.74	75	2.6	2.3	32.8	2.216	-.1	.0	177.3	93.0	44.1	56.9	DN	2.655	100.0	100.0	13.0	2.755	.21	.11		
999.90	78	2.6	2.4	32.4	2.231	-.1	.0	185.7	100.6	43.4	60.1	DN	2.655	100.0	100.0	11.2	2.763	.21	.11		

Zone No. 2 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS	
1000.05	82	2.7	2.7	30.0	2.261	-.1	.0	193.7	104.2	44.5	56.6	DN	2.655	100.0	100.0	10.2	2.755	.21	.11		
1000.20	83	2.8	3.0	29.7	2.295	-.1	.0	219.8	139.0	42.7	66.3	DN	2.654	100.0	100.0	5.7	2.780	.21	.11		
1000.35	86	2.6	2.8	32.9	2.316	-.1	.0	225.7	146.9	43.8	71.8	GR	2.650	100.0	100.0	5.2	2.842	.21	.11		
1000.51	89	2.2	2.4	34.0	2.319	.0	.0	247.7	167.7	44.1	75.2	GR	2.650	100.0	100.0	4.6	2.861	.21	.11		
1000.66	94	1.9	2.2	33.9	2.313	.0	.0	276.5	203.0	44.2	80.0	GR	2.650	100.0	100.0	3.0	2.854	.21	.11		
1000.81	93	1.9	2.2	33.1	2.320	.0	.0	279.9	208.4	44.8	78.8	GR	2.650	100.0	100.0	2.8	2.849	.21	.11		
1000.96	97	2.0	2.2	33.6	2.329	-.1	.0	287.2	239.1	44.7	83.3	GR	2.650	100.0	100.0	1.4	2.863	.21	.11		
1001.12	99	2.0	2.2	33.7	2.328	-.1	.0	293.2	257.0	45.8	85.4	GR	2.650	100.0	100.0	.8	2.864	.21	.11		
1001.27	98	1.9	2.2	31.2	2.314	-.1	.0	299.3	251.4	47.2	80.8	DN	2.650	100.0	100.0	1.3	2.817	.21	.11		
1001.42	88	2.0	2.4	35.4	2.293	-.1	.0	255.0	160.6	46.6	73.6	GR	2.650	100.0	100.0	5.1	2.857	.21	.11		8
1001.57	82	2.6	3.1	37.0	2.255	-.1	.0	185.7	93.3	47.1	67.3	GR	2.812	100.0	100.0	10.1	2.845	.21	.11		
1001.73	81	3.3	3.9	39.6	2.207	-.1	.0	148.2	70.3	47.2	65.7	GR	2.801	100.0	100.0	12.8	2.840	.21	.11		8
1001.88	87	3.3	3.8	37.6	2.169	-.1	.0	148.1	72.5	46.6	66.6	SD	2.654	100.0	100.0	12.4	2.781	.21	.11		8
1002.03	92	2.5	3.1	35.5	2.193	.0	.0	173.5	81.2	46.0	64.6	DN	2.651	100.0	100.0	12.4	2.773	.21	.11		
1002.18	98	2.3	2.9	33.4	2.248	.0	.0	235.8	136.6	46.2	71.3	DN	2.650	100.0	100.0	5.8	2.791	.21	.11		8
1002.33	100	2.3	3.0	31.2	2.304	-.1	.0	264.8	185.9	45.8	77.5	DN	2.650	100.0	100.0	2.6	2.808	.21	.11		
1002.49	102	2.3	2.7	34.3	2.319	-.1	.0	100.0	100.0	45.6	89.2	GR	2.650	100.0	100.0	.1	2.865	.21	.11		
1002.64	105	2.3	2.5	35.7	2.318	-.1	.0	264.0	233.8	44.7	88.9	MN	2.650	100.0	100.0	.9	2.883	.21	.11		
1002.79	107	2.3	2.5	36.6	2.323	.0	.0	255.9	213.5	44.3	87.4	MN	2.650	100.0	100.0	1.7	2.899	.21	.11		8
1002.94	107	2.4	2.6	33.6	2.331	.0	.0			43.8	88.6	N	2.650	100.0	100.0	3.3	2.866	.21	.11	2	
1003.10	103	2.6	2.9	33.5	2.339	.0	.0	100.0	100.0	43.2	87.3	MN	2.650	100.0	100.0	.0	2.871	.21	.11		
1003.25	104	2.8	3.0	33.2	2.341	.0	.0			43.2	87.6	N	2.650	100.0	100.0	3.6	2.869	.21	.11	2	
1003.40	103	2.9	3.0	32.4	2.340	-.1	.0			43.7	85.8	N	2.650	100.0	100.0	4.0	2.857	.21	.11	2	
1003.55	101	2.9	3.0	32.3	2.341	-.1	.0			43.5	85.6	N	2.650	100.0	100.0	4.1	2.857	.21	.11	2	
1003.71	98	2.9	2.9	31.6	2.335	-.1	.0			43.5	83.8	N	2.650	100.0	100.0	4.5	2.841	.21	.11	2	
1003.86	95	2.8	2.9	30.9	2.330	.0	.0	256.5	241.4	43.4	81.3	GR	2.650	100.0	100.0	.6	2.827	.21	.11		
1004.01	94	2.7	2.9	30.5	2.332	.0	.0	259.7	238.0	43.5	80.3	GR	2.650	100.0	100.0	.7	2.824	.21	.11		
1004.16	92	2.7	3.0	30.3	2.344	.0	.0	260.5	223.3	45.0	77.8	GR	2.650	100.0	100.0	1.2	2.832	.21	.11		
1004.32	93	2.7	3.0	32.7	2.350	.0	.0	245.6	194.7	45.2	78.5	GR	2.650	100.0	100.0	2.1	2.869	.21	.11		
1004.47	92	2.6	2.5	34.6	2.330	.0	.0	233.7	177.7	45.0	77.9	GR	2.650	100.0	100.0	3.7	2.878	.21	.11		
1004.62	95	2.2	1.8	37.4	2.290	.0	.0	257.6	221.1	44.6	81.1	GR	2.650	100.0	100.0	3.1	2.881	.21	.11		8
1004.77	96	2.0	1.5	35.3	2.255	-.1	.0	265.1	228.9	44.4	79.1	MN	2.650	100.0	100.0	3.6	2.823	.21	.11		8
1004.93	97	2.1	1.8	33.0	2.256	.0	.0	243.0	175.2	43.8	71.5	DN	2.650	100.0	100.0	5.7	2.792	.21	.11		8
1005.08	93	2.6	2.5	30.4	2.285	-.1	.0	224.4	146.5	42.3	67.1	DN	2.655	100.0	100.0	6.1	2.782	.21	.11		
1005.23	93	2.7	2.8	31.4	2.313	.0	.0	244.4	196.6	41.4	78.2	MN	2.650	100.0	100.0	2.3	2.819	.21	.11		
1005.38	95	2.7	2.8	31.9	2.330	.0	.0	248.2	199.8	40.9	78.3	MN	2.650	100.0	100.0	2.2	2.842	.21	.11		
1005.54	96	2.7	3.0	31.2	2.342	-.1	.0	247.9	191.9	39.7	75.9	MN	2.650	100.0	100.0	2.3	2.842	.21	.11		
1005.69	95	2.7	3.0	30.5	2.355	-.1	.0	258.9	220.2	39.4	77.2	MN	2.650	100.0	100.0	1.3	2.844	.21	.11		

1005.84	92	2.7	2.9	30.1	2.357	.0	.0	264.5	229.0	39.2	76.9	MN	2.650	100.0	100.0	1.1	2.840	.21	.11		
1005.99	93	2.6	2.7	30.0	2.351	.0	.0	275.7	258.0	42.0	79.2	GR	2.650	100.0	100.0	.4	2.833	.21	.11		
1006.14	92	2.6	2.7	30.3	2.335	-.1	.0	263.5	226.3	42.1	77.7	GR	2.650	100.0	100.0	1.4	2.823	.21	.11		
1006.30	92	2.6	2.7	30.9	2.317	-.1	.0	253.8	207.0	42.7	77.7	GR	2.650	100.0	100.0	2.1	2.815	.21	.11		
1006.45	87	2.5	2.6	32.2	2.296	-.1	.0	228.3	152.2	41.8	72.2	GR	2.650	100.0	100.0	5.1	2.816	.21	.11		
1006.60	80	2.5	2.6	32.9	2.277	-.1	.0	210.3	120.1	43.8	64.7	GR	2.707	100.0	100.0	8.1	2.808	.21	.11		
1006.75	82	2.5	2.5	32.0	2.267	-.1	.0	215.8	129.4	42.8	67.7	GR	2.665	100.0	100.0	7.3	2.788	.21	.11		
1006.91	88	2.4	2.5	33.6	2.261	-.1	.0	231.5	155.5	44.6	73.7	GR	2.650	100.0	100.0	5.0	2.805	.21	.11		8
1007.06	94	2.4	2.5	34.0	2.259	-.1	.0	236.7	166.7	43.4	76.3	MN	2.650	100.0	100.0	4.3	2.809	.21	.11		8
1007.21	90	2.4	2.6	34.4	2.255	-.1	.0	228.8	145.6	42.4	71.2	MN	2.650	100.0	100.0	5.8	2.811	.21	.11		8
1007.36	90	2.4	2.5	31.6	2.255	-.1	.0	210.0	116.4	41.3	63.4	DN	2.655	100.0	100.0	8.9	2.772	.21	.11		
1007.52	89	2.3	2.4	31.0	2.262	-.1	.0	217.3	119.2	39.7	62.2	DN	2.655	100.0	100.0	8.8	2.769	.21	.11		
1007.67	90	2.3	2.6	31.9	2.278	-.1	.0	217.7	117.4	38.8	61.9	MN	2.696	100.0	100.0	8.6	2.796	.21	.11		
1007.82	87	2.5	3.1	33.3	2.301	-.1	.0	205.8	105.6	38.0	61.7	MN	2.789	100.0	100.0	8.9	2.835	.21	.11		
1007.97	82	3.0	3.6	34.4	2.319	-.1	.0	188.8	98.7	38.0	63.6	MN	2.875	100.0	100.0	8.7	2.866	.21	.11		
1008.13	77	3.2	3.7	33.2	2.325	-.1	.0	188.5	100.3	37.6	62.1	GR	2.841	100.0	100.0	8.3	2.854	.21	.11		
1008.28	77	3.0	3.3	31.9	2.320	-.1	.0	202.3	113.0	38.4	62.1	GR	2.780	100.0	100.0	7.6	2.832	.21	.11		
1008.43	82	2.5	3.0	31.6	2.307	-.1	.0	227.8	132.6	38.6	65.9	MN	2.722	100.0	100.0	6.2	2.817	.21	.11		

Zone No. 2 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
1008.58	84	2.2	2.7	31.6	2.296	-.1	.0	239.3	138.1	39.2	66.7	MN	2.699	100.0	100.0	6.3	2.807	.21	.11	
1008.74	82	2.3	2.8	34.7	2.288	-.1	.0	203.2	97.4	38.2	59.3	MN	2.813	100.0	100.0	10.8	2.842	.21	.11	
1008.89	74	2.5	3.0	35.3	2.285	-.1	.0	185.7	86.5	37.7	56.7	MN	2.831	100.0	100.0	12.1	2.848	.21	.11	
1009.04	75	2.7	3.2	34.7	2.292	-.1	.0	176.3	79.5	36.1	51.6	MN	2.829	100.0	100.0	13.4	2.846	.21	.11	
1009.19	75	2.8	3.3	31.2	2.314	-.1	.0	209.0	111.1	37.6	59.7	GR	2.745	100.0	100.0	8.0	2.817	.21	.11	
1009.35	78	3.0	3.9	27.4	2.358	-.1	.0	178.3	60.4	23.7	20.0	MN	2.786	100.0	100.0	18.4	2.802	.21	.11	
1009.50	74	3.7	4.9	22.8	2.424	-.1	.0	230.7	102.1	24.5	37.0	MN	2.749	100.0	100.0	8.3	2.794	.21	.11	
1009.65	71	5.3	8.1	17.6	2.501	-.1	.0	201.0	59.1	11.4	7.3	MN	2.781	100.0	100.0	13.9	2.787	.21	.11	
1009.80	64	8.4	13.9	12.7	2.566	-.1	.0	274.4	103.2	10.8	18.6	MN	2.749	100.0	100.0	5.3	2.773	.21	.11	
1009.95	59	15.3	45.0	10.4	2.616	-.1	.0	100.0	100.0	10.8	27.8	MN	2.756	100.0	100.0	.0	2.784	.21	.11	
1010.11	61	12.5	29.1	11.9	2.623	-.1	.0	100.0	100.0	16.5	36.7	N	2.838	100.0	100.0	.0	2.813	.21	.11	
1010.26	64	7.3	10.8	17.1	2.593	-.1	.0	100.0	100.0	25.0	47.6	GR	2.903	100.0	100.0	.0	2.864	.21	.11	5
1010.41	69	4.3	6.1	21.7	2.521	-.1	.0	280.6	207.5	30.9	52.8	GR	2.862	100.0	100.0	1.0	2.867	.21	.11	
1010.56	71	3.2	4.1	25.6	2.440	-.1	.0	258.6	157.9	32.8	55.3	GR	2.828	100.0	100.0	3.9	2.850	.21	.11	
1010.72	75	2.7	3.5	27.2	2.371	-.1	.0	261.1	156.7	33.7	59.3	GR	2.726	100.0	100.0	4.3	2.811	.21	.11	
1010.87	75	2.4	3.1	28.8	2.329	-.1	.0	232.2	111.4	33.6	51.8	MN	2.719	100.0	100.0	8.8	2.796	.21	.11	
1011.02	76	2.2	3.0	29.7	2.311	-.1	.0	221.1	93.6	33.1	46.4	MN	2.731	100.0	100.0	11.7	2.794	.21	.11	
1011.17	74	2.2	3.0	29.4	2.313	-.1	.0	208.6	80.7	30.8	37.9	MN	2.745	100.0	100.0	14.4	2.791	.21	.11	
1011.33	71	2.5	3.4	26.2	2.336	-.1	.0	216.2	83.9	28.2	33.9	MN	2.713	100.0	100.0	13.2	2.766	.21	.11	
1011.48	67	3.3	4.4	22.3	2.384	-.1	.0	244.4	117.3	27.6	42.4	MN	2.683	100.0	100.0	7.1	2.751	.21	.11	
1011.63	66	3.9	5.4	23.0	2.430	-.1	.0	253.2	146.9	30.7	49.8	GR	2.734	100.0	100.0	3.8	2.803	.21	.11	
1011.78	70	3.7	5.2	28.0	2.441	-.1	.0	213.6	109.2	32.8	53.8	GR	2.911	100.0	100.0	6.1	2.885	.21	.11	5
1011.94	73	2.8	3.8	32.3	2.412	-.1	.0	211.9	103.4	34.4	57.3	GR	3.000	100.0	100.0	8.1	2.919	.21	.11	5
1012.09	74	2.5	3.2	34.7	2.369	-.1	.0	206.2	98.3	36.2	58.3	GR	2.988	100.0	100.0	9.7	2.913	.21	.11	5
1012.24	74	2.5	3.1	32.6	2.338	-.1	.0	207.9	101.0	34.9	55.9	MN	2.854	100.0	100.0	9.9	2.858	.21	.11	
1012.39	75	2.7	3.2	32.0	2.321	-.1	.0	208.1	107.0	36.3	59.1	MN	2.793	100.0	100.0	8.7	2.835	.21	.11	
1012.55	75	2.7	3.2	32.9	2.311	-.1	.0	192.1	92.3	35.8	54.9	MN	2.807	100.0	100.0	10.8	2.838	.21	.11	
1012.70	75	2.8	3.2	36.1	2.303	-.1	.0	159.1	64.7	33.2	41.1	MN	2.886	100.0	100.0	17.4	2.875	.21	.11	
1012.85	71	2.8	3.1	36.9	2.295	-.1	.0	155.6	63.8	33.5	40.5	MN	2.890	100.0	100.0	18.2	2.878	.21	.11	5
1013.00	74	2.8	3.0	32.4	2.303	-.1	.0	177.5	78.1	33.3	43.7	MN	2.795	100.0	100.0	14.5	2.825	.21	.11	

1013.16	70	3.2	4.1	27.9	2.339	-.1	.0	211.5	105.6	33.1	52.3	MN	2.710	100.0	100.0	7.9	2.793	.21	.11		
1013.31	73	3.8	5.9	25.7	2.394	-.1	.0	233.2	132.2	33.1	57.0	GR	2.731	100.0	100.0	3.8	2.810	.21	.11		
1013.46	73	4.0	6.3	26.5	2.419	-.1	.0	224.5	124.4	33.6	57.8	GR	2.813	100.0	100.0	3.9	2.844	.21	.11		
1013.61	75	3.4	4.2	30.5	2.397	-.1	.0	206.6	115.0	34.2	59.9	GR	2.911	100.0	100.0	6.3	2.881	.21	.11	5	
1013.76	76	3.0	3.5	31.1	2.351	-.1	.0	204.3	108.4	34.6	57.6	MN	2.827	100.0	100.0	8.1	2.848	.21	.11		
1013.92	78	2.7	3.3	30.8	2.327	-.1	.0	221.9	126.4	37.1	62.6	GR	2.750	100.0	100.0	6.5	2.822	.21	.11		
1014.07	79	2.6	3.2	27.2	2.326	-.1	.0	253.4	153.7	37.9	62.5	DN	2.651	100.0	100.0	4.7	2.771	.21	.11		
1014.22	86	2.4	3.1	26.3	2.329	-.1	.0	258.7	147.7	41.2	58.9	DN	2.652	100.0	100.0	5.4	2.761	.21	.11		
1014.37	85	2.3	2.8	28.4	2.313	-.1	.0	255.9	157.9	42.1	65.2	DN	2.652	100.0	100.0	4.8	2.777	.21	.11		
1014.53	89	2.2	2.5	29.9	2.292	-.1	.0	244.6	149.0	42.7	66.3	DN	2.655	100.0	100.0	5.9	2.780	.21	.11		
1014.68	89	2.2	2.6	30.9	2.283	-.2	.0	243.4	144.6	43.7	68.6	DN	2.655	100.0	100.0	5.9	2.785	.21	.11		
1014.83	91	2.1	2.6	32.1	2.299	.0	.0	264.4	182.3	43.4	77.0	GR	2.650	100.0	100.0	3.4	2.817	.21	.11		
1014.98	92	2.0	2.4	32.3	2.311	.1	.0	278.0	202.7	43.2	78.4	GR	2.650	100.0	100.0	2.8	2.831	.21	.11		
1015.14	94	1.9	2.2	36.7	2.311	.1	.0	273.4	192.7	42.9	80.1	GR	2.650	100.0	100.0	3.3	2.890	.21	.11		8
1015.29	92	1.9	2.1	37.3	2.303	.0	.0	272.7	188.5	44.8	78.1	GR	2.650	100.0	100.0	3.8	2.891	.21	.11		8
1015.44	91	1.9	2.2	39.9	2.307	.0	.0	205.6	100.3	39.2	63.1	MN	3.046	100.0	100.0	11.9	2.929	.21	.11	5	
1015.59	92	2.1	2.3	38.4	2.320	.0	.0	197.8	96.8	37.3	58.5	MN	3.005	100.0	100.0	12.4	2.920	.21	.11	5	
1015.75	94	2.4	2.8	35.3	2.331	-.1	.0	202.3	102.1	36.7	59.9	MN	2.930	100.0	100.0	10.2	2.888	.21	.11	5	
1015.90	97	2.7	3.0	31.8	2.341	-.1	.0	215.5	124.1	36.3	62.2	MN	2.827	100.0	100.0	7.2	2.849	.21	.11		
1016.05	93	2.9	3.2	30.3	2.336	-.1	.0	220.0	133.2	36.3	62.6	MN	2.755	100.0	100.0	6.1	2.824	.21	.11		
1016.20	94	2.9	3.2	31.5	2.337	-.1	.0	212.9	127.1	36.8	63.6	MN	2.802	100.0	100.0	6.5	2.841	.21	.11		
1016.36	91	2.9	3.2	31.7	2.333	-.1	.0	215.9	130.9	37.4	65.5	MN	2.797	100.0	100.0	6.1	2.841	.21	.11		
1016.51	97	2.8	3.1	30.9	2.333	-.1	.0	226.8	140.8	37.3	65.5	MN	2.760	100.0	100.0	5.5	2.829	.21	.11		
1016.66	96	2.7	3.0	30.1	2.331	-.1	.0	232.8	144.7	36.9	64.3	MN	2.728	100.0	100.0	5.4	2.817	.21	.11		
1016.81	96	2.6	2.9	31.3	2.326	-.1	.0	219.3	126.0	36.7	61.7	MN	2.772	100.0	100.0	7.2	2.829	.21	.11		
1016.97	90	2.7	2.9	31.0	2.323	-.1	.0	220.2	127.8	36.7	61.7	MN	2.752	100.0	100.0	7.0	2.822	.21	.11		

Zone No. 2 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
1017.12	84	3.0	3.3	29.4	2.330	-.1	.0	224.4	134.9	36.2	61.8	MN	2.708	100.0	100.0	5.7	2.806	.21	.11	
1017.27	82	3.1	3.7	28.9	2.338	-.1	.0	232.8	149.6	36.8	65.5	MN	2.696	100.0	100.0	4.1	2.805	.21	.11	
1017.42	83	2.9	3.6	29.3	2.338	-.1	.0	233.8	143.2	36.5	64.3	MN	2.710	100.0	100.0	4.6	2.811	.21	.11	
1017.57	84	2.6	3.0	31.9	2.315	-.1	.0	208.3	110.1	36.6	59.2	MN	2.776	100.0	100.0	8.7	2.828	.21	.11	
1017.73	84	2.6	2.9	30.2	2.301	-.1	.0	215.5	115.3	36.4	57.4	MN	2.700	100.0	100.0	8.5	2.792	.21	.11	
1017.88	81	2.7	2.9	28.4	2.301	-.1	.0	218.7	117.9	35.9	56.3	MN	2.671	100.0	100.0	8.2	2.767	.21	.11	
1018.03	81	2.7	3.2	28.1	2.315	-.1	.0	227.0	124.9	35.6	58.0	MN	2.675	100.0	100.0	7.0	2.775	.21	.11	
1018.18	85	2.7	3.1	27.3	2.326	-.1	.0	227.7	118.5	33.7	52.6	MN	2.686	100.0	100.0	8.0	2.772	.21	.11	
1018.34	87	2.6	3.1	29.8	2.329	-.1	.0	223.1	118.8	35.0	56.8	MN	2.738	100.0	100.0	7.8	2.811	.21	.11	
1018.49	88	2.6	3.0	28.6	2.324	-.1	.0	231.3	127.6	35.1	56.9	MN	2.698	100.0	100.0	7.2	2.790	.21	.11	
1018.64	87	2.7	3.1	31.9	2.314	-.1	.0	205.1	105.3	36.3	57.8	MN	2.777	100.0	100.0	9.2	2.827	.21	.11	
1018.79	84	2.6	3.2	31.4	2.305	-.1	.0	216.2	114.8	37.5	61.5	MN	2.727	100.0	100.0	7.7	2.812	.21	.11	
1018.95	89	2.4	3.1	34.2	2.301	-.1	.0	213.0	110.4	39.3	66.3	MN	2.820	100.0	100.0	8.0	2.848	.21	.11	
1019.10	94	2.2	2.7	33.3	2.309	-.1	.0	242.8	149.4	40.6	73.3	MN	2.650	100.0	100.0	5.0	2.842	.21	.11	
1019.25	99	2.1	2.5	34.1	2.327	.0	.0	258.9	183.0	41.4	78.4	MN	2.650	100.0	100.0	3.4	2.869	.21	.11	
1019.40	98	2.2	2.6	36.0	2.345	-.1	.0	252.3	182.1	41.6	80.5	MN	2.650	100.0	100.0	3.2	2.910	.21	.11	8
1019.56	96	2.3	2.7	33.7	2.359	-.1	.0	266.0	214.3	40.8	81.0	MN	2.650	100.0	100.0	1.6	2.891	.21	.11	
1019.71	96	2.4	2.8	33.6	2.359	-.1	.0	254.3	189.0	40.0	78.0	MN	2.650	100.0	100.0	2.6	2.890	.21	.11	
1019.86	96	2.4	2.7	30.5	2.358	-.1	.0	279.1	233.9	39.3	77.0	MN	2.650	100.0	100.0	1.3	2.846	.21	.11	
1020.01	94	2.2	2.5	32.8	2.349	-.1	.0	249.5	160.7	38.2	70.3	MN	2.650	100.0	100.0	4.9	2.869	.21	.11	
1020.17	87	2.1	2.3	30.2	2.343	-.1	.0	275.4	187.3	37.4	67.7	MN	2.751	100.0	100.0	4.1	2.829	.21	.11	
1020.32	87	2.3	2.6	29.8	2.343	-.1	.0	263.6	172.7	36.9	66.3	MN	2.737	100.0	100.0	4.3	2.823	.21	.11	

1020.47	88	2.7	3.1	29.5	2.347	-.1	.0	250.9	171.3	36.9	67.1	MN	2.730	100.0	100.0	3.7	2.822	.21	.11		
1020.62	92	2.8	3.2	30.6	2.347	-.1	.0	238.4	167.3	38.3	71.4	MN	2.650	100.0	100.0	3.4	2.838	.21	.11		
1020.78	92	2.5	2.7	31.1	2.337	-.1	.0	248.4	173.7	38.7	71.3	MN	2.650	100.0	100.0	3.9	2.835	.21	.11		
1020.93	95	2.2	2.4	30.4	2.323	-.1	.0	263.3	185.7	39.2	71.6	MN	2.650	100.0	100.0	3.7	2.815	.21	.11		
1021.08	96	2.2	2.4	31.7	2.315	-.1	.0	250.6	164.1	39.6	71.0	MN	2.650	100.0	100.0	4.8	2.825	.21	.11		
1021.23	94	2.3	2.5	32.2	2.318	.0	.0	245.2	163.4	39.8	72.1	MN	2.650	100.0	100.0	4.7	2.835	.21	.11		
1021.38	93	2.5	2.7	31.9	2.329	.0	.0	258.4	206.7	41.1	79.0	MN	2.650	100.0	100.0	2.0	2.841	.21	.11		
1021.54	90	2.6	2.9	30.6	2.339	-.1	.0	254.9	201.1	40.8	75.9	GR	2.650	100.0	100.0	2.1	2.832	.21	.11		
1021.69	96	2.7	3.0	32.0	2.340	-.1	.0	242.4	180.4	39.9	76.0	MN	2.650	100.0	100.0	2.8	2.852	.21	.11		
1021.84	96	2.3	2.7	33.9	2.326	-.1	.0	232.6	143.9	39.6	71.5	MN	2.650	100.0	100.0	5.6	2.866	.21	.11		
1021.99	96	2.1	2.5	36.5	2.308	.0	.0	219.6	116.6	39.7	67.4	MN	2.932	100.0	100.0	8.7	2.884	.21	.11	5	
1022.15	93	2.0	2.3	34.5	2.298	-.1	.0	228.0	124.9	39.4	66.0	MN	2.826	100.0	100.0	8.3	2.850	.21	.11		
1022.30	89	2.2	2.5	32.2	2.309	.0	.0	234.0	134.1	38.3	64.8	MN	2.760	100.0	100.0	7.0	2.828	.21	.11		
1022.45	87	2.4	2.6	30.6	2.321	-.1	.0	235.4	138.5	36.8	61.8	MN	2.734	100.0	100.0	6.8	2.816	.21	.11		
1022.60	84	2.5	2.7	31.0	2.327	-.1	.0	226.0	127.6	36.2	60.4	MN	2.765	100.0	100.0	7.4	2.825	.21	.11		
1022.76	86	2.5	2.6	32.4	2.327	-.1	.0	212.5	115.7	36.1	59.0	MN	2.821	100.0	100.0	8.9	2.846	.21	.11		
1022.91	84	2.5	2.7	33.5	2.333	-.1	.0	205.9	107.1	35.7	57.8	MN	2.871	100.0	100.0	9.8	2.865	.21	.11		
1023.06	83	2.5	2.7	34.9	2.341	-.1	.0	188.6	90.3	33.9	51.2	MN	2.923	100.0	100.0	12.6	2.891	.21	.11	5	
1023.21	76	2.9	3.1	34.2	2.348	-.1	.0	181.1	86.7	33.5	50.9	MN	2.918	100.0	100.0	12.3	2.889	.21	.11	5	
1023.37	79	3.0	3.4	34.8	2.351	-.1	.0	173.9	81.1	33.3	50.6	MN	2.938	100.0	100.0	12.6	2.899	.21	.11	5	
1023.52	78	2.9	3.2	32.4	2.346	-.1	.0	188.3	91.9	33.4	51.6	MN	2.863	100.0	100.0	11.1	2.862	.21	.11		
1023.67	81	2.7	3.0	32.1	2.341	-.1	.0	198.3	98.2	33.9	52.8	MN	2.844	100.0	100.0	10.5	2.854	.21	.11		
1023.82	78	2.7	2.9	31.0	2.335	-.1	.0	203.2	99.3	33.3	50.4	MN	2.800	100.0	100.0	10.7	2.832	.21	.11		
1023.98	80	2.6	2.9	31.0	2.332	-.1	.0	214.1	114.7	35.1	56.8	MN	2.784	100.0	100.0	8.6	2.830	.21	.11		
1024.13	82	2.5	2.8	30.2	2.327	-.1	.0	238.4	146.9	37.0	63.9	MN	2.724	100.0	100.0	5.6	2.815	.21	.11		
1024.28	84	2.4	2.7	29.4	2.320	-.1	.0	244.9	148.3	36.8	62.6	MN	2.693	100.0	100.0	5.9	2.797	.21	.11		
1024.43	81	2.4	2.7	29.3	2.309	-.1	.0	248.2	155.2	38.1	65.7	GR	2.665	100.0	100.0	5.2	2.786	.21	.11		
1024.59	76	2.4	2.7	29.4	2.300	-.1	.0	232.0	131.8	38.0	60.8	GR	2.674	100.0	100.0	7.2	2.780	.21	.11		
1024.74	78	2.5	2.7	30.2	2.294	-.1	.0	225.8	131.1	39.4	62.7	GR	2.678	100.0	100.0	7.1	2.786	.21	.11		
1024.89	77	2.5	2.7	31.2	2.291	-.1	.0	217.8	123.4	39.4	61.9	GR	2.696	100.0	100.0	7.8	2.797	.21	.11		
1025.04	80	2.4	2.6	31.7	2.277	-.1	.0	202.6	100.4	36.8	54.0	MN	2.708	100.0	100.0	11.0	2.792	.21	.11		
1025.19	80	2.3	2.7	32.0	2.259	-.1	.0	186.5	79.0	34.9	42.7	MN	2.719	100.0	100.0	15.5	2.781	.21	.11		
1025.35	84	2.3	2.6	30.3	2.249	-.1	.0	184.2	75.7	33.7	37.3	MN	2.694	100.0	100.0	16.9	2.749	.21	.11		
1025.50	83	2.5	2.7	28.9	2.265	.0	.0	188.5	80.8	33.2	39.3	MN	2.684	100.0	100.0	15.1	2.742	.21	.11		

Zone No. 2 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
1025.65	78	3.0	3.1	28.4	2.306	-.1	.0	197.4	98.8	33.5	47.9	MN	2.696	100.0	100.0	10.7	2.772	.21	.11	
1025.80	74	3.4	3.5	27.9	2.345	-.1	.0	210.4	125.2	33.7	55.3	MN	2.711	100.0	100.0	6.7	2.798	.21	.11	
1025.96	73	3.3	3.3	27.5	2.359	-.1	.0	227.4	143.4	34.3	57.4	GR	2.718	100.0	100.0	5.4	2.804	.21	.11	
1026.11	75	2.7	2.9	26.9	2.343	-.1	.0	252.4	161.5	36.4	59.9	GR	2.675	100.0	100.0	4.8	2.781	.21	.11	
1026.26	75	2.4	2.7	28.8	2.318	-.1	.0	241.5	139.3	37.9	59.6	GR	2.686	100.0	100.0	6.6	2.786	.21	.11	
1026.41	75	2.3	2.6	30.2	2.304	-.1	.0	231.1	126.9	37.7	59.4	GR	2.699	100.0	100.0	7.8	2.795	.21	.11	
1026.57	74	2.3	2.6	31.6	2.303	-.1	.0	220.0	115.5	37.7	58.2	GR	2.741	100.0	100.0	9.0	2.813	.21	.11	
1026.72	76	2.3	2.6	31.8	2.309	-.1	.0	222.5	118.7	36.8	59.3	MN	2.759	100.0	100.0	8.6	2.821	.21	.11	
1026.87	74	2.2	2.5	33.6	2.312	-.1	.0	190.3	80.6	32.6	42.1	MN	2.839	100.0	100.0	15.5	2.849	.21	.11	
1027.02	73	2.3	2.5	33.7	2.326	-.1	.0	178.8	69.1	29.0	30.2	MN	2.863	100.0	100.0	19.3	2.862	.21	.11	
1027.18	68	2.7	3.0	29.7	2.366	-.1	.0	181.7	70.4	25.3	25.9	MN	2.834	100.0	100.0	17.7	2.842	.21	.11	
1027.33	66	4.5	4.7	20.7	2.438	-.1	.0	179.3	63.6	15.3	7.6	MN	2.769	100.0	100.0	16.9	2.777	.21	.11	
1027.48	63	8.4	10.5	14.8	2.517	-.1	.0	268.8	173.8	18.0	33.7	MN	2.703	100.0	100.0	2.1	2.760	.21	.11	
1027.63	59	11.7	22.3	15.4	2.565	-.1	.0	100.0	100.0	21.1	42.0	GR	2.792	100.0	100.0	.0	2.813	.21	.11	

1027.79	60	6.6	9.1	21.2	2.559	-.1	.0	217.7	123.2	23.1	43.3	GR	2.914	100.0	100.0	3.6	2.894	.21	.11	5					
1027.94	63	3.8	4.6	25.9	2.497	-.1	.0	223.1	116.5	31.4	46.3	GR	2.942	100.0	100.0	6.6	2.905	.21	.11	5					
1028.09	68	2.8	3.3	29.2	2.419	-.1	.0	226.4	116.5	34.4	51.8	GR	2.903	100.0	100.0	7.9	2.881	.21	.11	5					
1028.24	72	2.6	3.1	30.0	2.359	-.1	.0	226.1	118.6	34.6	56.2	GR	2.809	100.0	100.0	7.7	2.840	.21	.11						
1028.40	72	2.7	3.3	31.3	2.328	-.1	.0	205.8	100.7	34.9	55.1	MN	2.789	100.0	100.0	9.4	2.830	.21	.11						
1028.55	73	2.8	3.3	35.1	2.308	-.1	.0	181.4	86.8	36.9	57.4	GR	2.871	100.0	100.0	11.3	2.866	.21	.11						
1028.70	73	2.8	3.2	37.2	2.291	-.1	.0	170.9	80.4	39.1	57.3	GR	2.904	100.0	100.0	12.8	2.879	.21	.11	5					
1028.85	76	2.8	3.1	35.8	2.281	-.1	.0	179.5	90.1	42.4	60.9	GR	2.838	100.0	100.0	11.1	2.852	.21	.11						
1029.00	79	2.7	3.1	34.2	2.268	-.1	.0	190.0	98.6	44.9	63.5	GR	2.743	100.0	100.0	9.6	2.819	.21	.11						
1029.16	79	2.7	3.3	36.1	2.238	-.1	.0	176.7	84.1	46.1	63.5	GR	2.746	100.0	100.0	11.4	2.819	.21	.11						
1029.31	80	2.7	3.0	38.6	2.187	.0	.0	162.1	78.5	46.8	64.7	GR	2.719	100.0	100.0	13.2	2.809	.21	.11					8	
1029.46	81	2.6	3.0	38.9	2.158	-.1	.0	164.7	76.4	46.5	63.4	SD	2.683	100.0	100.0	13.6	2.789	.21	.11					8	
1029.61	85	2.3	2.5	36.6	2.172	.0	.0	174.7	84.0	46.2	63.5	DN	2.649	100.0	100.0	13.6	2.770	.21	.11					8	
1029.77	88	2.0	2.3	35.8	2.240	.0	.0	257.0	160.8	45.6	73.4	GR	2.650	100.0	100.0	5.1	2.817	.21	.11					8	
1029.92	91	1.8	2.1	34.1	2.295	.0	.0	274.2	184.3	44.8	76.5	GR	2.650	100.0	100.0	4.3	2.841	.21	.11					8	
1030.07	88	1.7	2.0	35.4	2.317	.0	.0	275.1	175.3	44.8	74.0	GR	2.650	100.0	100.0	4.9	2.878	.21	.11					8	
1030.22	86	1.7	2.0	35.6	2.307	.0	.0	277.1	166.8	43.3	71.9	GR	2.650	100.0	100.0	5.5	2.872	.21	.11					8	
1030.38	83	1.7	2.3	39.2	2.302	.0	.0	228.4	110.5	42.2	68.3	GR	3.035	100.0	100.0	9.9	2.916	.21	.11	5					
1030.53	86	1.9	2.4	38.8	2.305	.0	.0	260.2	152.3	41.4	71.4	GR	2.650	100.0	100.0	5.7	2.913	.21	.11					8	
1030.68	85	2.1	2.3	39.4	2.308	-.1	.0	208.5	112.9	40.6	69.1	MN	3.064	100.0	100.0	9.6	2.923	.21	.11	5					
1030.83	90	2.1	2.1	35.1	2.308	-.1	.0	244.3	161.2	40.5	71.3	MN	2.650	100.0	100.0	5.7	2.866	.21	.11					8	
1030.99	90	2.1	2.1	34.2	2.308	-.1	.0	252.9	175.1	41.2	74.7	MN	2.650	100.0	100.0	4.7	2.854	.21	.11					8	
1031.14	93	2.2	2.3	32.8	2.307	.0	.0	263.2	205.4	43.0	79.4	GR	2.650	100.0	100.0	2.7	2.833	.21	.11						
1031.29	92	2.6	2.7	35.9	2.269	-.1	.0	230.1	169.1	45.1	78.2	GR	2.650	100.0	100.0	3.8	2.843	.21	.11					8	
1031.44	92	2.7	2.2	38.7	2.213	-.1	.0	217.3	162.7	45.2	72.9	SD	2.650	100.0	100.0	5.3	2.833	.21	.11					8	
1031.60	93	2.4	1.5	39.5	2.148	.1	.0	158.1	95.5	45.0	55.5	SD	2.707	100.0	100.0	16.6	2.790	.21	.11					8	
1031.75	94	2.1	1.1	37.4	2.136	.2	.0	158.0	94.8	43.0	45.5	SD	2.679	100.0	100.0	20.3	2.751	.21	.11					8	
1031.90	99	2.2	1.2	33.6	2.192	.5	.0	176.4	113.0	41.4	53.7	DN	2.653	100.0	100.0	15.2	2.747	.21	.11						
1032.05	101	2.4	1.4	32.3	2.285	.1	.0	230.2	204.2	41.2	72.4	MN	2.650	100.0	100.0	5.4	2.808	.21	.11						
1032.21	99	2.5	1.8	29.6	2.354	-.2	.0			44.4	79.0	N	2.650	100.0	100.0	5.6	2.830	.21	.11	2					
1032.36	101	2.5	1.8	30.8	2.370	.1	.0			48.3	81.8	N	2.650	100.0	100.0	4.9	2.860	.21	.11	2					
1032.51	99	2.5	2.1	34.8	2.338	-.2	.0	252.8	249.4	47.8	85.0	GR	2.650	100.0	100.0	1.3	2.887	.21	.11						
1032.66	100	2.6	2.4	37.0	2.285	-.1	.0	240.4	210.6	47.5	86.1	GR	2.650	100.0	100.0	1.9	2.871	.21	.11					8	
1032.81	99	2.5	1.8	38.5	2.213	-.1	.0	228.1	181.9	45.4	73.5	SD	2.650	100.0	100.0	5.1	2.830	.21	.11					8	
1032.97	101	2.4	2.1	34.9	2.187	.2	.0	171.7	90.9	43.3	58.9	DN	2.651	100.0	100.0	14.2	2.759	.21	.11						
1033.12	101	2.3	2.5	32.1	2.234	.0	.0	197.0	100.9	41.3	59.6	DN	2.655	100.0	100.0	11.1	2.762	.21	.11						
1033.27	102	2.4	8.3	29.7	2.327	.0	.0	259.8	106.2	38.9	71.6	MN	2.650	100.0	100.0	3.2	2.808	.21	.11						
1033.42	102	2.5	4.6	30.1	2.379	-.1	.0			40.1	80.3	N	2.650	100.0	100.0	5.2	2.859	.21	.11	2					
1033.58	103	2.6	3.3	30.1	2.380	-.1	.0			42.1	80.3	N	2.650	100.0	100.0	5.2	2.860	.21	.11	2					
1033.73	104	2.8	3.0	30.9	2.356	.0	.0			48.2	82.1	N	2.650	100.0	100.0	4.9	2.850	.21	.11	2					
1033.88	101	3.0	3.2	35.4	2.303	-.1	.0	225.9	192.7	52.0	87.8	GR	2.650	100.0	100.0	1.4	2.865	.21	.11						
1034.03	98	2.9	2.8	42.1	2.216	-.1	.0	227.8	191.2	51.9	84.9	GR	2.650	100.0	100.0	2.2	2.879	.21	.11					8	

Zone No. 2 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS		
1034.19	92	2.8	2.3	47.7	2.102	-.2	.0	159.1	88.6	50.6	64.4	SD	3.022	100.0	100.0	13.3	2.862	.21	.11	5	8	
1034.34	Coal																					
1034.49	Coal																					
1034.64	97	2.4	3.2	36.1	2.111	.8	.0	135.4	46.4	41.0	31.8	SD	2.668	100.0	100.0	25.4	2.713	.21	.11		8	
1034.80	96	2.3	2.8	33.0	2.235	.1	.0	188.7	85.0	38.7	53.6	MN	2.688	100.0	100.0	13.3	2.774	.21	.11			
1034.95	99	2.5	3.1	29.8	2.330	.2	.0	240.0	133.3	36.2	61.3	MN	2.726	100.0	100.0	6.2	2.812	.21	.11			

1035.10	98	2.6	3.2	29.5	2.369	.0	.0	248.8	157.0	35.3	64.3	MN	2.798	100.0	100.0	4.5	2.841	.21	.11	
1035.25	99	2.6	3.1	31.2	2.375	.1	.0	228.7	127.3	34.4	60.5	MN	2.884	100.0	100.0	6.9	2.870	.21	.11	
1035.41	100	2.5	2.8	34.0	2.373	.0	.0	221.6	126.2	36.1	65.1	MN	2.999	100.0	100.0	7.1	2.908	.21	.11	5
1035.56	100	2.4	2.8	32.1	2.367	.0	.0	235.9	142.2	36.2	65.5	MN	2.905	100.0	100.0	5.9	2.876	.21	.11	5
1035.71	99	2.5	2.7	31.9	2.359	.0	.0	234.6	141.5	36.3	64.9	MN	2.874	100.0	100.0	6.1	2.866	.21	.11	
1035.86	98	2.5	2.8	30.9	2.359	.1	.0	243.6	156.1	36.4	65.9	MN	2.829	100.0	100.0	5.0	2.852	.21	.11	
1036.02	98	2.5	2.9	32.1	2.361	.0	.0	232.5	140.1	36.5	66.0	MN	2.891	100.0	100.0	5.8	2.872	.21	.11	5
1036.17	95	2.5	2.9	31.1	2.362	.0	.0	243.3	153.9	36.4	66.5	MN	2.848	100.0	100.0	4.9	2.858	.21	.11	
1036.32	89	2.5	2.8	32.1	2.359	.0	.0	243.3	161.0	37.7	70.2	MN	2.650	100.0	100.0	4.4	2.869	.21	.11	
1036.47	90	2.5	2.6	31.3	2.356	.0	.0	249.1	177.6	37.9	70.8	MN	2.650	100.0	100.0	3.8	2.855	.21	.11	
1036.62	93	2.6	2.6	32.3	2.354	.1	.0	224.6	137.0	36.4	64.3	MN	2.879	100.0	100.0	6.6	2.868	.21	.11	
1036.78	92	2.6	2.7	33.2	2.353	.0	.0	216.2	125.8	36.3	63.1	MN	2.909	100.0	100.0	7.6	2.878	.21	.11	5
1036.93	90	2.5	2.7	32.1	2.353	.0	.0	224.0	132.2	36.0	62.8	MN	2.867	100.0	100.0	7.0	2.864	.21	.11	
1037.08	88	2.5	2.7	31.3	2.355	.1	.0	234.1	145.2	36.1	64.1	MN	2.839	100.0	100.0	6.0	2.854	.21	.11	
1037.23	86	2.6	2.8	27.6	2.357	.0	.0	274.7	213.0	36.2	67.0	MN	2.686	100.0	100.0	2.3	2.804	.21	.11	
1037.39	84	2.7	2.9	27.9	2.355	.0	.0	261.1	191.1	35.8	65.2	MN	2.699	100.0	100.0	3.1	2.807	.21	.11	
1037.54	85	2.7	2.9	28.2	2.346	.0	.0	238.2	143.0	34.2	57.3	MN	2.716	100.0	100.0	6.2	2.803	.21	.11	
1037.69	88	2.6	2.4	29.0	2.341	.0	.0	231.0	139.3	34.1	55.8	MN	2.737	100.0	100.0	7.4	2.809	.21	.11	
1037.84	89	2.6	1.8	30.8	2.343	.0	.0	224.4	162.8	35.4	59.8	MN	2.794	100.0	100.0	7.3	2.836	.21	.11	
1038.00	88	2.7	1.7	33.1	2.339	-.1	.0	192.5	123.9	33.8	51.6	MN	2.869	100.0	100.0	11.5	2.865	.21	.11	
1038.15	86	2.8	1.8	34.5	2.349	-.1	.0	182.0	114.2	33.6	51.4	MN	2.930	100.0	100.0	12.3	2.894	.21	.11	5
1038.30	86	3.0	2.5	34.1	2.360	.3	.0	181.7	101.6	33.5	53.1	MN	2.941	100.0	100.0	11.3	2.898	.21	.11	5
1038.45	86	3.3	3.4	31.8	2.371	.0	.0	201.0	120.3	35.0	62.0	MN	2.900	100.0	100.0	6.8	2.876	.21	.11	5
1038.61	80	3.4	4.2	31.7	2.371	.0	.0	191.5	97.2	33.8	57.4	MN	2.892	100.0	100.0	8.3	2.874	.21	.11	5
1038.76	82	3.0	3.6	30.8	2.363	.0	.0	205.1	107.1	33.6	56.2	MN	2.842	100.0	100.0	8.2	2.853	.21	.11	
1038.91	80	2.7	3.1	31.6	2.357	.0	.0	209.3	109.1	34.1	56.5	MN	2.859	100.0	100.0	8.7	2.861	.21	.11	
1039.06	80	2.6	2.9	30.1	2.351	.0	.0	212.1	101.2	32.0	48.5	MN	2.807	100.0	100.0	10.6	2.834	.21	.11	
1039.22	79	2.7	3.0	29.9	2.353	-.1	.0	194.2	83.3	29.1	38.1	MN	2.815	100.0	100.0	13.9	2.834	.21	.11	
1039.37	78	3.2	3.2	28.3	2.365	-.1	.0	178.7	75.5	26.1	29.6	MN	2.804	100.0	100.0	15.6	2.822	.21	.11	
1039.52	76	4.2	3.8	26.2	2.389	-.1	.0	177.9	87.5	26.3	35.9	MN	2.783	100.0	100.0	11.7	2.813	.21	.11	
1039.67	73	5.5	5.0	25.1	2.426	-.1	.0	181.8	105.3	26.8	44.5	MN	2.799	100.0	100.0	7.4	2.830	.21	.11	
1039.83	70	5.3	5.6	26.1	2.445	-.1	.0	183.6	104.0	27.3	48.4	MN	2.859	100.0	100.0	6.6	2.862	.21	.11	
1039.98	70	4.2	4.4	28.2	2.432	-.1	.0	198.5	117.7	32.2	54.5	GR	2.900	100.0	100.0	6.2	2.880	.21	.11	5
1040.13	69	3.2	3.5	29.3	2.387	-.1	.0	208.9	112.5	33.3	53.0	GR	2.844	100.0	100.0	7.9	2.854	.21	.11	
1040.28	72	2.9	3.0	29.5	2.345	-.1	.0	216.6	120.6	34.0	55.4	MN	2.764	100.0	100.0	7.9	2.820	.21	.11	
1040.43	77	2.9	3.1	31.8	2.320	-.1	.0	192.1	97.5	35.1	54.1	MN	2.792	100.0	100.0	10.3	2.831	.21	.11	
1040.59	77	3.0	3.2	35.2	2.303	-.1	.0	164.7	76.1	35.2	49.5	MN	2.863	100.0	100.0	14.1	2.862	.21	.11	
1040.74	73	3.0	3.4	34.9	2.284	-.1	.0	161.7	69.9	35.3	47.1	MN	2.824	100.0	100.0	15.2	2.841	.21	.11	
1040.89	70	2.9	3.2	35.2	2.260	-.1	.0	153.6	64.2	35.1	41.7	MN	2.799	100.0	100.0	17.7	2.825	.21	.11	
1041.04	73	3.0	3.1	31.4	2.244	-.1	.0	161.4	70.2	35.0	41.0	MN	2.697	100.0	100.0	16.3	2.759	.21	.11	
1041.20	74	3.1	3.0	31.5	2.243	-.1	.0	152.7	66.1	33.7	35.4	MN	2.706	100.0	100.0	18.1	2.760	.21	.11	
1041.35	72	3.2	3.4	29.4	2.256	-.1	.0	158.7	65.6	32.7	35.0	MN	2.691	100.0	100.0	17.0	2.742	.21	.11	
1041.50	71	3.1	4.0	31.7	2.280	-.1	.0	158.5	59.7	32.1	35.5	MN	2.756	100.0	100.0	17.3	2.795	.21	.11	
1041.65	70	3.0	4.3	32.9	2.298	-.1	.0	146.5	46.9	27.8	20.8	MN	2.817	100.0	100.0	22.6	2.826	.21	.11	
1041.81	71	3.3	4.1	33.0	2.314	-.1	.0	135.1	43.2	24.4	10.7	MN	2.839	100.0	100.0	25.7	2.842	.21	.11	
1041.96	67	4.0	4.3	29.7	2.330	-.1	.0	126.7	42.7	21.3	3.7	MN	2.808	100.0	100.0	25.9	2.810	.21	.11	
1042.11	64	6.1	7.1	24.0	2.381	-.1	2.8	121.7	38.7	13.9	.0	MN	2.774	100.0	100.0	22.7	2.774	.21	.11	
1042.26	57	9.4	16.0	20.3	2.455	-.1	.0	122.0	32.4	12.8	2.3	MN	2.784	100.0	100.0	18.1	2.786	.21	.11	
1042.42	56	11.6	19.1	19.1	2.512	-.1	.0	135.9	41.5	13.2	14.4	MN	2.813	100.0	100.0	12.4	2.821	.21	.11	
1042.57	60	10.8	9.9	20.8	2.517	-.1	.0	131.9	54.2	13.6	15.6	MN	2.847	100.0	100.0	13.1	2.850	.21	.11	

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
1042.72	65	8.9	7.2	22.0	2.487	-.1	.0	154.0	83.3	20.0	31.9	MN	2.827	100.0	100.0	8.8	2.841	.21	.11	
1042.87	67	7.4	7.1	23.0	2.465	-.1	.0	147.9	63.6	18.7	23.3	MN	2.825	100.0	100.0	12.7	2.835	.21	.11	
1043.03	67	6.0	7.2	23.8	2.455	-.1	.0	185.2	94.9	24.9	42.9	MN	2.814	100.0	100.0	6.7	2.837	.21	.11	
1043.18	71	4.7	5.5	24.5	2.432	-.1	.0	218.2	138.6	28.7	52.6	MN	2.777	100.0	100.0	4.0	2.826	.21	.11	
1043.33	71	4.0	4.5	25.9	2.394	-.1	.0	215.4	127.0	30.6	52.6	MN	2.751	100.0	100.0	5.5	2.813	.21	.11	
1043.48	71	3.6	4.0	27.1	2.367	-.1	.0	217.2	127.9	33.3	55.4	GR	2.727	100.0	100.0	5.7	2.805	.21	.11	
1043.64	66	3.4	4.2	27.9	2.350	-.1	.0	203.8	100.4	33.8	50.5	GR	2.736	100.0	100.0	8.4	2.803	.21	.11	
1043.79	63	3.2	4.2	30.2	2.343	-.1	.0	186.3	81.4	34.0	47.2	GR	2.798	100.0	100.0	11.2	2.829	.21	.11	
1043.94	65	3.1	4.1	32.8	2.333	-.1	.0	175.5	76.1	33.7	49.4	GR	2.849	100.0	100.0	12.2	2.855	.21	.11	
1044.09	65	3.2	4.1	33.5	2.334	-.1	.0	169.1	71.6	33.1	47.6	MN	2.871	100.0	100.0	13.2	2.866	.21	.11	
1044.24	69	3.3	4.1	32.3	2.333	-.1	.0	174.3	77.3	33.4	49.5	MN	2.837	100.0	100.0	11.9	2.850	.21	.11	
1044.40	68	3.3	4.1	31.9	2.330	-.1	.0	178.9	82.6	34.7	52.2	GR	2.817	100.0	100.0	10.8	2.841	.21	.11	
1044.55	74	3.2	3.8	33.8	2.311	-.1	.0	175.9	84.8	36.5	57.0	MN	2.835	100.0	100.0	10.7	2.851	.21	.11	
1044.70	75	3.1	3.5	34.8	2.255	-.1	.0	160.7	74.6	38.2	53.9	MN	2.760	100.0	100.0	13.4	2.815	.21	.11	
1044.85	79	2.6	2.1	36.9	2.196	-.1	.0	149.7	73.5	38.9	44.8	MN	2.740	100.0	100.0	19.1	2.794	.21	.11	
1045.01	83	2.2	1.5	36.3	2.182	.2	.0	160.0	84.8	39.1	43.0	SD	2.709	100.0	100.0	19.8	2.774	.21	.11	
1045.16	87	2.0	1.2	36.0	2.247	.7	.0	193.6	121.0	38.6	53.2	MN	2.783	100.0	100.0	14.5	2.825	.21	.11	
1045.31	89	1.9	1.3	34.8	2.313	-.3	.0	260.6	209.8	40.5	72.4	MN	2.650	100.0	100.0	5.4	2.865	.21	.11	8
1045.46	86	1.8	1.5	32.2	2.343	-.1	.0	281.4	217.6	43.7	71.5	GR	2.650	100.0	100.0	4.4	2.857	.21	.11	
1045.62	84	1.9	1.8	31.7	2.327	-.1	.0	277.0	193.3	50.9	69.8	GR	2.768	100.0	100.0	4.7	2.836	.21	.11	
1045.77	82	2.1	1.9	33.8	2.306	-.1	.0	235.5	149.4	51.0	66.7	GR	2.813	100.0	100.0	7.5	2.846	.21	.11	
1045.92	74	2.4	1.9	49.2	2.211	-.1	.0	163.5	88.1	50.8	58.9	GR	3.823	100.0	100.0	15.3	2.966	.21	.11	5 8
1046.07	Coal																			
1046.23	Coal																			
1046.38	Coal																			
1046.53	87	1.8	2.3	31.0	2.133	.1	.0	159.5	53.2	42.4	19.3	DN	2.652	100.0	100.0	27.4	2.681	.21	.11	
1046.68	95	1.7	1.9	31.6	2.289	.3	.0	273.9	172.8	40.3	70.1	MN	2.650	100.0	100.0	5.6	2.801	.21	.11	
1046.84	96	1.8	2.0	32.6	2.349	.1	.0	305.5	260.3	41.0	80.8	MN	2.650	100.0	100.0	1.3	2.867	.21	.11	
1046.99	99	1.9	2.2	33.8	2.355	.1	.0	300.9	250.4	41.5	83.0	MN	2.650	100.0	100.0	1.1	2.889	.21	.11	
1047.14	96	1.8	2.0	32.7	2.355	.1	.0	319.9	281.4	41.5	82.6	GR	2.650	100.0	100.0	.6	2.873	.21	.11	
1047.29	94	1.6	1.9	30.9	2.348	.1	.0	337.5	297.9	41.8	80.0	GR	2.650	100.0	100.0	.7	2.842	.21	.11	
1047.45	91	1.7	1.8	30.7	2.343	.1	.0	326.8	275.4	41.9	77.3	GR	2.650	100.0	100.0	1.6	2.835	.21	.11	
1047.60	89	1.7	1.8	33.2	2.343	.1	.0	289.1	205.8	41.0	74.6	GR	2.650	100.0	100.0	3.8	2.870	.21	.11	
1047.75	87	1.8	1.9	34.9	2.348	.1	.0	268.4	175.6	40.4	72.6	GR	2.650	100.0	100.0	5.3	2.897	.21	.11	
1047.90	85	1.8	1.9	34.8	2.354	.1	.0	265.4	167.9	40.6	70.1	GR	2.650	100.0	100.0	6.0	2.901	.21	.11	
1048.05	85	1.7	1.8	33.8	2.352	.1	.0	274.8	178.4	42.1	70.1	GR	2.650	100.0	100.0	5.5	2.886	.21	.11	
1048.21	86	1.7	1.8	35.1	2.344	.1	.0	273.7	178.9	41.1	71.9	GR	2.650	100.0	100.0	5.5	2.897	.21	.11	8
1048.36	88	1.7	1.7	33.7	2.333	.1	.0	283.3	194.8	41.8	73.6	GR	2.650	100.0	100.0	4.7	2.868	.21	.11	
1048.51	90	1.7	1.7	32.3	2.320	.1	.0	298.0	221.4	42.3	76.0	GR	2.650	100.0	100.0	3.4	2.838	.21	.11	
1048.66	90	1.7	1.7	30.7	2.313	.1	.0	305.7	245.8	42.9	76.0	GR	2.650	100.0	100.0	2.6	2.809	.21	.11	
1048.82	89	2.0	1.9	31.9	2.299	-.1	.0	268.4	195.2	43.4	74.5	GR	2.650	100.0	100.0	4.1	2.814	.21	.11	
1048.97	85	2.1	2.3	32.2	2.296	-.1	.0	246.1	156.5	41.9	70.6	GR	2.650	100.0	100.0	5.6	2.816	.21	.11	
1049.12	88	2.1	3.2	32.7	2.293	.2	.0	252.2	137.6	41.1	73.2	MN	2.650	100.0	100.0	5.1	2.819	.21	.11	
1049.27	92	1.9	3.5	33.5	2.304	.0	.0	247.4	111.8	39.3	67.0	MN	2.794	100.0	100.0	7.2	2.840	.21	.11	
1049.43	93	1.8	2.6	33.5	2.309	.0	.0	256.4	135.0	39.5	68.7	MN	2.806	100.0	100.0	6.5	2.845	.21	.11	
1049.58	88	1.8	2.1	33.0	2.323	.0	.0	277.6	180.5	40.2	73.5	GR	2.650	100.0	100.0	4.5	2.849	.21	.11	
1049.73	83	1.9	2.2	30.1	2.336	.0	.0	289.3	200.2	41.3	68.6	GR	2.723	100.0	100.0	3.7	2.822	.21	.11	
1049.88	83	2.1	2.3	30.3	2.350	-.1	.0	279.3	191.0	42.0	68.4	GR	2.774	100.0	100.0	3.8	2.837	.21	.11	
1050.04	83	2.0	2.0	31.7	2.345	-.1	.0	266.0	180.0	43.1	68.2	GR	2.825	100.0	100.0	5.0	2.851	.21	.11	
1050.19	80	1.7	1.5	34.1	2.321	-.2	.0	253.6	159.3	44.0	65.3	GR	2.869	100.0	100.0	7.9	2.864	.21	.11	
1050.34	80	1.7	1.5	34.4	2.305	-.2	.0	226.6	118.3	35.5	51.8	MN	2.845	100.0	100.0	12.9	2.854	.21	.11	
1050.49	80	1.8	1.6	32.4	2.302	-.1	.0	230.5	122.7	35.3	51.8	MN	2.782	100.0	100.0	11.8	2.824	.21	.11	

1050.65	81	2.0	1.7	29.7	2.312	-.1	.0	256.8	160.2	36.2	58.7	MN	2.700	100.0	100.0	7.5	2.795	.21	.11		
1050.80	79	2.2	2.0	27.9	2.325	-.1	.0	268.4	183.1	36.2	61.9	MN	2.670	100.0	100.0	5.2	2.781	.21	.11		
1050.95	79	2.3	2.1	28.9	2.350	.0	.0	270.7	201.4	37.6	64.5	GR	2.723	100.0	100.0	4.1	2.816	.21	.11		
1051.10	81	2.2	2.2	32.4	2.364	-.1	.0	246.5	157.4	39.4	66.2	GR	2.912	100.0	100.0	5.9	2.878	.21	.11	5	

Zone No. 2 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
1051.26	85	1.9	2.0	35.1	2.364	-.1	.0	261.0	163.7	42.5	70.0	GR	2.650	100.0	100.0	5.9	2.914	.21	.11	
1051.41	88	1.6	1.6	35.9	2.338	-.1	.0	288.4	191.9	48.3	73.3	GR	2.650	100.0	100.0	5.1	2.903	.21	.11	8
1051.56	88	1.5	1.4	35.2	2.315	-.1	.0	295.1	206.6	50.8	73.6	GR	2.650	100.0	100.0	5.1	2.873	.21	.11	8
1051.71	89	1.6	1.5	36.8	2.284	-.1	.0	283.7	204.1	52.2	74.2	GR	2.650	100.0	100.0	4.9	2.867	.21	.11	8
1051.86	90	1.7	1.7	37.3	2.247	-.1	.0	277.6	196.2	53.2	75.5	GR	2.650	100.0	100.0	4.5	2.842	.21	.11	8
1052.02	94	1.8	1.7	36.4	2.197	.1	.0	266.1	175.6	53.4	70.5	DN	2.650	100.0	100.0	6.0	2.788	.21	.11	8
1052.17	95	1.6	1.7	34.1	2.175	.7	.0	198.0	88.8	52.3	50.6	DN	2.652	100.0	100.0	17.0	2.739	.21	.11	
1052.32	96	1.3	1.4	36.7	2.179	1.1	.0	233.7	119.7	51.0	66.7	DN	2.649	100.0	100.0	12.4	2.778	.21	.11	8
1052.47	92	1.2	1.2	40.3	2.180	.2	.0	346.2	248.1	50.0	78.1	GR	2.650	100.0	100.0	3.8	2.826	.21	.11	8
1052.63	91	1.1	1.0	40.7	2.178	.0	.0	351.2	254.3	48.3	75.0	SD	2.650	100.0	100.0	4.7	2.829	.21	.11	8
1052.78	87	1.2	1.1	36.8	2.195	.0	.0	323.6	232.6	50.6	72.4	DN	2.650	100.0	100.0	5.4	2.792	.21	.11	8
1052.93	86	1.3	1.3	35.4	2.223	-.1	.0	312.5	208.2	49.3	71.4	GR	2.650	100.0	100.0	5.7	2.797	.21	.11	8
1053.08	89	1.2	1.2	38.2	2.234	-.1	.0	338.9	230.3	47.9	75.2	GR	2.650	100.0	100.0	4.6	2.844	.21	.11	8
1053.24	94	1.1	1.0	37.8	2.213	.1	.0	347.8	263.1	46.3	76.6	SD	2.650	100.0	100.0	4.2	2.821	.21	.11	8
1053.39	94	1.3	1.1	33.3	2.210	-.2	.0	247.6	134.8	44.4	58.0	DN	2.654	100.0	100.0	13.0	2.757	.21	.11	
1053.54	93	1.8	1.5	28.9	2.243	-.1	.0	216.9	110.2	43.0	44.1	DN	2.655	100.0	100.0	14.5	2.723	.21	.11	
1053.69	93	2.1	1.7	30.1	2.296	-.2	.0	259.2	195.7	42.6	68.8	DN	2.654	100.0	100.0	5.0	2.786	.21	.11	
1053.85	94	2.1	1.8	33.2	2.325	.2	.0	272.0	238.9	43.2	79.6	GR	2.650	100.0	100.0	2.6	2.854	.21	.11	
1054.00	89	2.1	1.8	35.6	2.306	-.1	.0	250.1	189.4	46.4	75.1	GR	2.650	100.0	100.0	4.6	2.870	.21	.11	8
1054.15	87	2.2	1.5	34.8	2.256	-.2	.0	244.2	197.6	47.0	72.7	GR	2.650	100.0	100.0	5.3	2.816	.21	.11	8
1054.30	84	2.1	1.2	34.1	2.222	.0	.0	206.2	150.5	47.8	66.4	DN	2.654	100.0	100.0	10.2	2.778	.21	.11	
1054.46	86	2.1	1.2	32.7	2.238	.1	.0	215.0	154.3	47.8	63.8	DN	2.655	100.0	100.0	9.9	2.772	.21	.11	
1054.61	88	2.1	1.7	33.0	2.259	-.1	.0	246.1	186.8	45.6	72.5	DN	2.650	100.0	100.0	5.4	2.795	.21	.11	8
1054.76	93	2.2	1.8	32.6	2.254	.2	.0	219.5	148.8	44.7	68.4	DN	2.655	100.0	100.0	7.7	2.784	.21	.11	
1054.91	97	2.3	.8	31.7	2.217	.1	.0	185.0	152.5	44.1	51.4	DN	2.655	100.0	100.0	14.3	2.741	.21	.11	
1055.07	100	2.3	.6	31.4	2.241	.7	.0	201.2	202.2	42.9	57.9	DN	2.655	100.0	100.0	11.1	2.758	.21	.11	
1055.22	98	2.1	.6	32.1	2.282	.1				41.4	84.4	S	2.650	100.0	100.0	4.6	2.828	.21	.11	34
1055.37	100	2.0	1.5	34.1	2.341	.4				39.3	80.5	S	2.650	100.0	100.0	5.7	2.820	.21	.11	34
1055.52	95	1.9	2.6	33.2	2.358	.1	.0	296.5	218.2	40.5	79.8	MN	2.650	100.0	100.0	1.8	2.883	.21	.11	
1055.67	97	2.0	6.6	31.4	2.376	.0	.0			40.1	82.0	S	2.650	100.0	100.0	4.9	2.875	.21	.11	3
1055.83	96	2.2	7.1	30.7	2.374	.3	.0	292.1	143.1	38.4	76.0	MN	2.650	100.0	100.0	1.3	2.863	.21	.11	
1055.98	94	2.3	8.1	31.4	2.365	-.1	.0	223.8	62.7	32.6	52.1	MN	2.868	100.0	100.0	9.9	2.865	.21	.11	
1056.13	93	2.3	5.2	31.6	2.353	.1	.0	204.3	63.6	30.5	42.2	MN	2.853	100.0	100.0	13.6	2.857	.21	.11	
1056.28	89	2.6	4.1	27.1	2.367	.1	.0	239.4	105.9	31.0	49.0	MN	2.746	100.0	100.0	8.0	2.806	.21	.11	
1056.44	86	3.5	4.5	23.8	2.401	-.1	.0	279.7	227.6	32.4	61.6	MN	2.672	100.0	100.0	.7	2.789	.21	.11	
1056.59	84	3.8	4.9	23.9	2.437	-.1	.0	100.0	100.0	31.6	63.9	MN	2.765	100.0	100.0	.0	2.823	.21	.11	
1056.74	85	3.3	4.2	26.0	2.437	-.1	.0	100.0	100.0	33.8	70.4	MN	2.650	100.0	100.0	.0	2.853	.21	.11	
1056.89	88	2.6	3.3	29.3	2.414	-.1	.0	283.7	241.1	37.9	73.9	GR	2.650	100.0	100.0	.5	2.878	.21	.11	
1057.05	90	2.4	2.9	30.0	2.391	.0	.0	276.9	208.1	36.5	71.8	MN	2.650	100.0	100.0	2.1	2.869	.21	.11	
1057.20	87	2.2	2.7	31.4	2.384	.0	.0	264.8	171.7	36.3	69.0	MN	2.926	100.0	100.0	4.1	2.881	.21	.11	5
1057.35	84	2.0	2.2	32.4	2.373	-.1	.0	260.2	160.6	36.2	66.5	MN	2.937	100.0	100.0	5.7	2.886	.21	.11	5
1057.50	84	1.9	1.9	34.6	2.362	-.2	.0	245.6	142.8	36.4	64.3	MN	2.993	100.0	100.0	7.9	2.907	.21	.11	5
1057.66	90	2.1	1.8	32.5	2.356	-.2	.0	251.9	171.6	36.6	65.4	MN	2.895	100.0	100.0	6.3	2.873	.21	.11	5
1057.81	90	2.5	1.9	31.2	2.371	-.2	.0	250.8	205.0	36.9	69.3	MN	2.875	100.0	100.0	3.9	2.866	.21	.11	

1057.96	93	3.0	2.4	30.0	2.385	-.1	.0	256.7	258.2	37.7	75.1	MN	2.650	100.0	100.0	1.1	2.863	.21	.11					
1058.11	94	3.0	3.0	32.8	2.390	-.1	.0	237.2	190.7	38.0	75.1	MN	2.650	100.0	100.0	2.5	2.905	.21	.11					
1058.27	97	2.9	3.3	34.1	2.386	.3	.0	222.9	152.2	37.7	72.8	MN	2.650	100.0	100.0	4.1	2.921	.21	.11					
1058.42	99	2.7	2.9	34.2	2.381	-.1	.0	228.4	155.1	37.7	71.9	MN	2.650	100.0	100.0	4.5	2.918	.21	.11					
1058.57	101	2.6	2.4	33.1	2.383	-.1	.0	242.7	183.9	37.4	71.9	MN	2.650	100.0	100.0	3.9	2.904	.21	.11					
1058.72	102	2.5	1.4	31.2	2.391	.0	.0	261.3	276.6	36.7	71.7	MN	2.650	100.0	100.0	2.8	2.884	.21	.11					
1058.88	101	2.6	1.4	29.4	2.408	.4	.0	100.0	100.0	37.0	76.2	MN	2.650	100.0	100.0	.0	2.875	.21	.11					
1059.03	100	2.6	1.5	28.6	2.419	.9	.0			37.2	76.6	N	2.650	100.0	100.0	5.8	2.873	.21	.11	2				
1059.18	100	2.6	2.5	31.4	2.407	.1	.0	264.9	223.7	36.7	73.6	MN	2.650	100.0	100.0	1.9	2.901	.21	.11					
1059.33	103	2.6	2.8	33.6	2.398	-.1	.0	239.9	162.2	36.5	70.2	MN	2.650	100.0	100.0	4.4	2.924	.21	.11					
1059.48	106	2.6	3.3	35.6	2.393	.0	.0	208.7	112.2	35.6	65.4	MN	3.118	100.0	100.0	7.6	2.947	.21	.11		5			
1059.64	105	2.8	3.8	33.1	2.392	-.1	.0	206.1	99.6	33.4	58.5	MN	2.986	100.0	100.0	8.5	2.911	.21	.11		5			

Zone No. 2 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
1059.79	108	3.1	3.6	30.4	2.380	-.1	.0	212.7	120.7	33.8	59.5	MN	2.867	100.0	100.0	6.6	2.864	.21	.11	
1059.94	106	3.4	3.8	27.0	2.382	-.1	.0	215.8	113.5	30.4	49.3	MN	2.769	100.0	100.0	7.6	2.817	.21	.11	
1060.09	102	3.6	4.2	25.1	2.405	.0	.0	236.2	140.4	29.8	51.9	MN	2.747	100.0	100.0	5.0	2.810	.21	.11	
1060.25	96	3.7	4.4	23.5	2.424	-.1	.0	268.1	197.1	29.8	55.7	MN	2.720	100.0	100.0	2.1	2.805	.21	.11	
1060.40	98	3.7	4.4	22.1	2.428	-.1	.0	290.7	242.9	29.5	56.4	MN	2.687	100.0	100.0	.8	2.788	.21	.11	
1060.55	104	3.7	4.3	23.3	2.420	.1	.0	271.6	202.7	29.9	55.7	MN	2.707	100.0	100.0	2.0	2.799	.21	.11	
1060.70	104	3.6	3.9	23.9	2.411	-.1	.0	255.9	171.0	29.6	52.9	MN	2.718	100.0	100.0	3.6	2.799	.21	.11	
1060.86	102	3.3	3.4	25.0	2.398	-.2	.0	247.0	153.5	29.9	51.2	MN	2.732	100.0	100.0	5.2	2.803	.21	.11	
1061.01	101	3.0	2.8	25.0	2.384	-.2	.0	250.7	159.1	30.1	49.9	MN	2.710	100.0	100.0	5.8	2.790	.21	.11	
1061.16	106	3.2	2.9	25.7	2.372	-.2	.0	232.8	142.4	30.6	49.5	MN	2.713	100.0	100.0	6.7	2.791	.21	.11	
1061.31	112	3.7	3.0	26.5	2.378	-.1	.0	231.1	179.9	33.1	59.1	MN	2.718	100.0	100.0	3.9	2.808	.21	.11	
1061.47	113	3.8	3.6	27.7	2.389	-.1	.0	219.7	156.3	33.2	60.5	MN	2.784	100.0	100.0	4.2	2.834	.21	.11	
1061.62	109	3.2	3.4	30.4	2.397	-.1	.0	214.1	128.6	33.2	60.1	MN	2.907	100.0	100.0	6.2	2.880	.21	.11	5
1061.77	109	2.7	2.5	30.2	2.406	-.1	.0	233.9	150.4	32.6	59.4	MN	2.918	100.0	100.0	6.2	2.884	.21	.11	5
1061.92	106	2.7	2.1	29.5	2.412	-.3	.0	236.3	163.7	31.7	57.4	MN	2.903	100.0	100.0	6.3	2.879	.21	.11	5
1062.08	109	3.2	2.2	27.6	2.410	.0	.0	230.4	168.5	30.7	54.3	MN	2.834	100.0	100.0	6.0	2.851	.21	.11	
1062.23	107	3.6	2.9	29.5	2.397	-.2	.0	185.2	102.4	28.9	44.7	MN	2.869	100.0	100.0	10.7	2.866	.21	.11	
1062.38	110	3.4	3.2	30.5	2.386	-.1	.0	175.8	84.9	28.3	40.1	MN	2.878	100.0	100.0	13.1	2.871	.21	.11	
1062.53	108	3.4	2.3	29.7	2.403	-.2	.0	189.3	113.7	28.6	44.5	MN	2.885	100.0	100.0	10.9	2.874	.21	.11	
1062.69	109	3.6	2.2	26.7	2.409	.3	.0	213.0	151.9	28.9	48.3	MN	2.811	100.0	100.0	7.4	2.837	.21	.11	
1062.84	109	3.9	1.3	24.3	2.404	-.1	.0	232.4	249.0	29.1	49.7	MN	2.728	100.0	100.0	5.2	2.799	.21	.11	
1062.99	111	4.0	1.0	22.3	2.405	-.1	.0	251.5	341.7	29.0	50.6	MN	2.682	100.0	100.0	3.6	2.770	.21	.11	
1063.14	111	3.8	1.0	21.8	2.425	-.1	.0	276.3	434.0	28.6	52.7	MN	2.690	100.0	100.0	2.1	2.782	.21	.11	
1063.29	112	3.6	1.5	22.5	2.449	.0	.0	298.3	460.2	29.3	58.2	MN	2.727	100.0	100.0	.1	2.812	.21	.11	
1063.45	107	3.5	2.1	26.8	2.435	-.1	.0	239.9	225.4	30.7	58.9	MN	2.855	100.0	100.0	3.6	2.862	.21	.11	
1063.60	110	3.5	1.9	28.3	2.401	.1	.0	221.5	199.5	32.5	59.3	MN	2.838	100.0	100.0	4.9	2.854	.21	.11	
1063.75	108	3.4	1.5	29.2	2.382	.8	.0	215.4	215.1	33.9	60.9	MN	2.824	100.0	100.0	5.3	2.849	.21	.11	
1063.90	110	3.1	1.5	29.6	2.374	.1	.0	218.5	197.2	33.9	59.6	MN	2.824	100.0	100.0	6.1	2.848	.21	.11	
1064.06	106	2.8	1.8	30.3	2.396	.1	.0	233.8	192.4	34.1	63.3	MN	2.904	100.0	100.0	5.1	2.877	.21	.11	5
1064.21	108	2.8	2.0	29.9	2.403	.1	.0	240.9	188.9	33.7	62.9	MN	2.904	100.0	100.0	4.8	2.878	.21	.11	5
1064.36	110	2.9	2.1	29.2	2.403	.1	.0	242.1	197.2	33.5	62.9	MN	2.873	100.0	100.0	4.3	2.867	.21	.11	
1064.51	109	3.1	2.2	30.0	2.387	.0	.0	215.1	154.2	33.1	58.3	MN	2.869	100.0	100.0	6.6	2.865	.21	.11	
1064.67	104	3.2	2.4	28.5	2.364	-.2	.0	216.1	148.5	33.1	55.7	MN	2.770	100.0	100.0	6.8	2.823	.21	.11	
1064.82	99	3.2	2.3	27.5	2.338	-.1	.0	213.2	145.6	33.3	53.0	MN	2.700	100.0	100.0	7.5	2.786	.21	.11	
1064.97	102	3.2	2.3	27.4	2.331	.6	.0	206.8	132.2	32.8	49.9	MN	2.699	100.0	100.0	8.7	2.779	.21	.11	
1065.12	105	3.3	2.5	27.6	2.343	.7	.0	217.5	149.7	33.8	55.6	MN	2.703	100.0	100.0	6.6	2.792	.21	.11	

1065.28	103	3.4	2.7	27.0	2.358	-.1	.0	228.0	167.6	33.7	57.9	MN	2.701	100.0	100.0	5.0	2.796	.21	.11
1065.43	101	3.3	2.7	25.7	2.364	-.1	.0	234.8	166.0	32.4	54.8	MN	2.691	100.0	100.0	5.2	2.783	.21	.11
1065.58	101	3.1	2.5	27.0	2.352	-.2	.0	225.9	143.9	32.4	52.0	MN	2.707	100.0	100.0	7.1	2.790	.21	.11
1065.73	100	2.9	2.4	26.4	2.338	-.2	.0	229.0	146.0	33.0	52.4	MN	2.683	100.0	100.0	7.3	2.770	.21	.11
1065.89	98	2.7	2.2	27.7	2.329	-.2	.0	222.6	134.4	33.2	50.9	MN	2.700	100.0	100.0	8.6	2.781	.21	.11
1066.04	92	2.6	2.1	27.7	2.324	-.2	.0	226.8	138.9	33.5	51.6	MN	2.694	100.0	100.0	8.5	2.777	.21	.11
1066.19	94	2.6	2.0	29.2	2.311	-.2	.0	211.9	125.7	33.8	49.6	MN	2.709	100.0	100.0	10.2	2.787	.21	.11
1066.34	89	2.9	2.1	28.4	2.295	-.2	.0	198.4	117.4	34.3	49.2	MN	2.683	100.0	100.0	10.7	2.762	.21	.11
1066.50	88	3.2	2.2	28.9	2.286	-.1	.0	177.1	102.9	33.7	44.9	MN	2.690	100.0	100.0	12.6	2.760	.21	.11
1066.65	85	3.4	2.2	28.9	2.278	-.1	.0	168.7	96.2	33.4	42.3	MN	2.688	100.0	100.0	13.7	2.753	.21	.11
1066.80	85	3.4	2.0	28.3	2.277	-.1	.0	169.4	105.3	33.6	43.1	MN	2.679	100.0	100.0	13.3	2.745	.21	.11
1066.95	82	3.4	2.2	29.5	2.278	-.1	.0	170.3	103.0	34.7	47.0	MN	2.688	100.0	100.0	12.4	2.762	.21	.11
1067.10	79	3.3	2.4	29.6	2.282	-.1	.0	171.3	93.5	33.6	43.3	MN	2.699	100.0	100.0	13.5	2.767	.21	.11
1067.26	74	3.1	2.7	28.6	2.274	-.1	.0	175.4	88.5	33.8	43.4	MN	2.680	100.0	100.0	13.4	2.747	.21	.11
1067.41	72	3.1	2.3	24.7	2.271	-.1	.0	173.7	86.0	33.4	30.1	DN	2.655	100.0	100.0	16.3	2.697	.21	.11
1067.56	68	3.2	2.2	25.4	2.269	-.2	.0	171.2	90.0	33.7	33.4	DN	2.655	100.0	100.0	15.6	2.702	.21	.11
1067.71	69	3.3	2.2	27.7	2.266	-.2	.0	167.5	93.4	33.3	40.5	MN	2.666	100.0	100.0	14.3	2.726	.21	.11
1067.87	72	3.4	2.7	30.1	2.263	-.2	.0	157.9	78.8	33.5	39.1	MN	2.698	100.0	100.0	15.7	2.758	.21	.11
1068.02	74	3.4	2.9	29.5	2.262	-.2	.0	158.7	75.4	33.2	38.1	MN	2.691	100.0	100.0	15.9	2.748	.21	.11
1068.17	73	3.3	2.8	28.9	2.260	-.2	.0	161.1	75.8	32.9	37.2	MN	2.684	100.0	100.0	15.9	2.738	.21	.11

Zone No. 2 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
1068.32	75	3.3	2.6	28.5	2.258	-.2	.0	160.6	78.5	32.8	36.4	MN	2.679	100.0	100.0	16.2	2.731	.21	.11	
1068.48	74	3.3	2.3	28.8	2.262	-.2	.0	160.4	83.5	32.8	36.9	MN	2.684	100.0	100.0	16.0	2.737	.21	.11	
1068.63	73	3.5	2.3	26.8	2.273	-.2	.0	169.2	96.1	32.9	40.9	MN	2.659	100.0	100.0	13.5	2.719	.21	.11	
1068.78	70	3.5	2.3	26.5	2.286	-.2	.0	175.3	105.2	33.0	43.6	MN	2.661	100.0	100.0	12.1	2.727	.21	.11	
1068.93	69	3.7	2.4	27.2	2.287	-.2	.0	170.7	100.2	33.0	43.4	MN	2.671	100.0	100.0	12.4	2.737	.21	.11	
1069.09	67	3.8	2.7	27.5	2.286	-.2	.0	166.5	95.1	33.1	43.5	MN	2.674	100.0	100.0	12.5	2.741	.21	.11	
1069.24	64	3.9	2.9	27.7	2.278	-.2	.0	159.7	87.0	33.2	42.4	MN	2.673	100.0	100.0	13.2	2.737	.21	.11	
1069.39	64	3.8	2.9	27.9	2.268	-.2	.0	155.0	79.5	32.8	38.9	MN	2.675	100.0	100.0	14.8	2.731	.21	.11	
1069.54	68	3.6	1.9	29.2	2.267	.0	.0	146.0	80.4	29.9	26.0	MN	2.708	100.0	100.0	19.3	2.748	.21	.11	
1069.70	71	3.5	1.6	29.1	2.275	-.2	.0	146.9	84.0	28.5	21.8	MN	2.722	100.0	100.0	20.5	2.753	.21	.11	
1069.85	75	3.6	1.7	26.9	2.300	.3	.0	161.4	93.8	27.6	24.6	MN	2.706	100.0	100.0	17.7	2.744	.21	.11	
1070.00	73	3.9	2.9	23.4	2.330	.0	.0	190.2	107.0	29.5	39.3	MN	2.662	100.0	100.0	10.5	2.720	.21	.11	
1070.15	69	4.2	3.9	23.7	2.350	-.1	.0	163.7	64.5	22.4	15.6	MN	2.718	100.0	100.0	17.6	2.742	.21	.11	
1070.31	67	4.3	3.8	24.3	2.355	-.2	.0	142.4	51.6	18.4	1.1	MN	2.754	100.0	100.0	23.0	2.755	.21	.11	
1070.46	69	4.2	3.1	27.2	2.339	-.1	1.6	129.7	51.6	18.1	.0	MN	2.782	100.0	100.0	25.4	2.782	.21	.11	
1070.61	67	4.4	3.1	26.7	2.325	-.1	4.0	127.7	51.8	15.8	.0	MN	2.762	100.0	100.0	25.4	2.762	.21	.11	
1070.76	68	4.6	2.8	27.1	2.321	.2	4.1	122.6	53.7	16.1	.0	MN	2.765	100.0	100.0	25.7	2.765	.21	.11	
1070.91	67	4.7	2.9	27.1	2.323	.1	2.1	120.9	52.6	18.1	.0	MN	2.767	100.0	100.0	25.7	2.767	.21	.11	
1071.07	69	4.7	3.1	27.1	2.322	-.2	.0	123.0	52.0	20.6	1.3	MN	2.765	100.0	100.0	25.3	2.766	.21	.11	
1071.22	71	4.5	3.2	28.1	2.317	-.2	.0	163.2	96.3	32.5	46.0	MN	2.704	100.0	100.0	10.7	2.777	.21	.11	
1071.37	72	3.8	3.1	28.0	2.310	-.2	.0	169.9	89.2	31.5	41.2	MN	2.705	100.0	100.0	12.5	2.769	.21	.11	
1071.52	72	3.4	2.9	28.9	2.297	-.2	.0	170.0	84.1	31.7	39.1	MN	2.708	100.0	100.0	13.9	2.770	.21	.11	
1071.68	69	3.3	2.6	28.5	2.284	-.2	.0	178.1	98.0	34.0	46.3	MN	2.681	100.0	100.0	12.1	2.754	.21	.11	
1071.83	70	3.2	2.4	28.2	2.266	-.2	.0	175.3	97.5	34.8	46.2	MN	2.660	100.0	100.0	12.7	2.734	.21	.11	
1071.98	71	3.1	2.3	28.3	2.247	-.2	.0	168.4	88.3	35.4	42.4	DN	2.655	100.0	100.0	14.7	2.719	.21	.11	
1072.13	74	2.9	2.5	28.0	2.238	-.2	.0	166.6	79.1	35.8	37.7	DN	2.655	100.0	100.0	16.4	2.708	.21	.11	
1072.29	73	2.9	2.5	30.6	2.235	-.2	.0	161.3	75.2	34.7	38.6	MN	2.684	100.0	100.0	17.2	2.741	.21	.11	
1072.44	70	2.9	2.6	31.2	2.231	-.2	.0	156.4	67.9	33.9	33.9	MN	2.695	100.0	100.0	19.0	2.745	.21	.11	

1072.59	67	2.9	2.6	31.0	2.225	-.2	.0	151.9	65.6	33.4	30.9	MN	2.693	100.0	100.0	20.1	2.737	.21	.11	
1072.74	67	3.0	2.8	27.2	2.228	-.2	.0	158.4	66.7	32.6	29.7	DN	2.655	100.0	100.0	19.0	2.697	.21	.11	
1072.90	69	3.0	2.9	26.3	2.236	-.2	.0	159.9	65.7	32.0	27.7	DN	2.655	100.0	100.0	19.1	2.694	.21	.11	
1073.05	69	3.0	2.5	26.8	2.233	-.2	.0	160.5	71.0	32.0	29.0	DN	2.655	100.0	100.0	18.9	2.696	.21	.11	
1073.20	65	2.9	2.2	29.9	2.232	-.2	.0	156.2	72.1	32.6	29.6	MN	2.688	100.0	100.0	19.9	2.728	.21	.11	
1073.35	63	2.8	2.1	29.4	2.227	-.2	.0	163.1	82.0	34.7	37.9	MN	2.663	100.0	100.0	17.3	2.717	.21	.11	
1073.51	65	2.9	2.4	30.6	2.229	-.1	.0	157.4	73.3	34.3	35.6	MN	2.685	100.0	100.0	18.4	2.736	.21	.11	
1073.66	66	3.0	2.6	31.5	2.240	-.1	.0	154.5	71.0	34.0	35.8	MN	2.703	100.0	100.0	18.1	2.758	.21	.11	
1073.81	68	3.2	2.7	33.1	2.257	-.2	.0	148.5	68.5	33.7	36.6	MN	2.754	100.0	100.0	18.3	2.794	.21	.11	
1073.96	70	3.3	2.7	30.3	2.276	-.2	.0	165.7	83.1	33.6	41.6	MN	2.707	100.0	100.0	14.5	2.772	.21	.11	
1074.12	71	3.3	2.9	27.5	2.282	-.1	.0	176.7	88.6	33.2	42.9	MN	2.672	100.0	100.0	12.8	2.737	.21	.11	
1074.27	70	3.4	2.9	27.5	2.272	-.1	.0	166.3	81.2	32.6	39.0	MN	2.672	100.0	100.0	14.5	2.728	.21	.11	
1074.42	68	3.5	2.8	28.8	2.261	-.1	.0	152.5	71.8	31.8	32.8	MN	2.690	100.0	100.0	17.3	2.737	.21	.11	
1074.57	67	3.6	2.7	29.7	2.263	-.2	.0	149.9	71.5	31.8	32.4	MN	2.703	100.0	100.0	17.7	2.752	.21	.11	
1074.72	64	3.5	2.7	28.1	2.290	-.2	.0	165.5	83.1	31.2	36.0	MN	2.698	100.0	100.0	14.9	2.753	.21	.11	
1074.88	64	3.4	2.5	28.5	2.318	-.2	.0	175.7	94.4	30.9	39.4	MN	2.729	100.0	100.0	13.2	2.783	.21	.11	
1075.03	65	3.1	2.4	30.4	2.329	-.2	.0	176.6	92.3	30.9	40.4	MN	2.789	100.0	100.0	13.9	2.819	.21	.11	
1075.18	68	2.8	2.4	30.3	2.327	-.2	.0	189.5	94.0	31.2	41.4	MN	2.782	100.0	100.0	13.5	2.816	.21	.11	
1075.33	64	2.9	3.0	25.8	2.349	-.1	.0	230.6	124.3	32.6	48.2	GR	2.693	100.0	100.0	7.9	2.772	.21	.11	
1075.49	61	4.0	4.6	17.9	2.409	-.1	.0	212.8	76.0	17.7	12.6	MN	2.696	100.0	100.0	14.0	2.709	.21	.11	
1075.64	57	7.3	9.7	14.4	2.497	-.1	.0	271.2	146.3	18.0	30.8	MN	2.686	100.0	100.0	3.3	2.735	.21	.11	
1075.79	59	9.8	16.0	16.1	2.550	-.1	.0	245.6	173.9	18.5	39.9	MN	2.766	100.0	100.0	.6	2.811	.21	.11	
1075.94	60	6.6	9.5	22.6	2.535	-.1	.0	195.1	96.2	20.7	41.5	MN	2.910	100.0	100.0	5.4	2.892	.21	.11	5
1076.10	62	4.2	5.7	27.6	2.468	-.1	.0	178.6	71.1	22.7	34.9	MN	2.926	100.0	100.0	11.8	2.903	.21	.11	5
1076.25	63	3.6	4.3	28.4	2.403	-.1	.0	184.8	79.3	26.8	38.6	MN	2.853	100.0	100.0	12.0	2.857	.21	.11	
1076.40	67	3.8	4.4	29.9	2.374	-.1	.0	172.0	76.5	29.5	42.9	MN	2.844	100.0	100.0	12.0	2.852	.21	.11	
1076.55	69	3.9	4.2	29.7	2.365	-.1	.0	163.2	70.6	28.3	36.9	MN	2.828	100.0	100.0	14.0	2.841	.21	.11	
1076.71	70	3.6	3.9	29.6	2.354	-.1	.0	167.2	70.8	28.4	35.5	MN	2.811	100.0	100.0	14.6	2.830	.21	.11	

Zone No. 2 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
1076.86	69	3.1	3.3	27.5	2.335	-.1	.0	180.5	74.8	27.4	29.6	MN	2.748	100.0	100.0	15.6	2.783	.21	.11	
1077.01	66	2.9	3.2	24.2	2.331	-.1	.0	198.8	77.5	25.6	24.2	MN	2.699	100.0	100.0	15.6	2.733	.21	.11	
1077.16	65	3.5	4.3	21.1	2.365	-.1	.0	212.2	85.2	24.7	28.9	MN	2.680	100.0	100.0	11.7	2.717	.21	.11	
1077.32	67	4.6	7.1	21.0	2.414	-.1	.0	220.0	92.5	24.4	36.2	MN	2.701	100.0	100.0	7.5	2.760	.21	.11	
1077.47	69	4.6	6.2	24.0	2.432	-.1	.0	195.2	84.2	24.4	37.2	MN	2.792	100.0	100.0	9.1	2.820	.21	.11	
1077.62	67	3.9	4.6	27.6	2.410	-.1	.0	179.9	77.6	25.9	36.9	MN	2.844	100.0	100.0	11.9	2.851	.21	.11	
1077.77	65	3.8	4.3	26.9	2.374	.0	.0	187.1	83.8	28.0	39.4	MN	2.772	100.0	100.0	11.1	2.809	.21	.11	
1077.93	63	4.0	4.9	26.1	2.353	-.1	.0	191.9	92.0	30.5	45.6	MN	2.707	100.0	100.0	8.8	2.780	.21	.11	
1078.08	66	3.5	3.8	27.0	2.335	-.1	.0	188.9	86.1	30.0	40.2	MN	2.714	100.0	100.0	11.5	2.776	.21	.11	
1078.23	68	3.0	3.1	28.9	2.314	-.1	.0	183.6	79.6	30.4	36.7	MN	2.737	100.0	100.0	14.4	2.785	.21	.11	
1078.38	73	2.6	2.6	29.2	2.299	-.1	.0	201.8	99.2	33.5	46.3	MN	2.703	100.0	100.0	11.7	2.776	.21	.11	
1078.53	75	2.6	2.7	28.0	2.298	-.1	.0	214.3	115.2	35.0	52.7	MN	2.671	100.0	100.0	9.3	2.759	.21	.11	
1078.69	77	2.9	3.1	26.9	2.312	-.1	.0	220.3	126.9	36.5	56.2	DN	2.654	100.0	100.0	7.2	2.754	.21	.11	
1078.84	79	3.0	2.6	30.3	2.325	-.1	.0	219.5	149.4	42.4	63.7	GR	2.724	100.0	100.0	5.8	2.815	.21	.11	
1078.99	86	2.2	2.1	34.3	2.323	.0	.0	240.9	163.0	44.6	71.8	GR	2.650	100.0	100.0	5.6	2.869	.21	.11	8
1079.14	91	1.6	1.4	41.3	2.297	.0	.0	293.0	222.2	48.3	76.9	GR	2.650	100.0	100.0	4.1	2.938	.21	.11	8
1079.30	95	1.3	1.1	43.2	2.262	.0	.0	333.3	273.2	51.6	80.7	GR	2.650	100.0	100.0	3.2	2.933	.21	.11	8
1079.45	93	1.2	1.0	45.5	2.230	.0	.0	343.8	274.4	52.2	78.8	GR	2.650	100.0	100.0	3.6	2.935	.21	.11	8
1079.60	92	1.2	1.0	43.4	2.219	.1	.0	341.4	268.7	51.4	77.8	GR	2.650	100.0	100.0	3.9	2.900	.21	.11	8
1079.75	92	1.2	1.1	43.4	2.212	.1	.0	336.1	262.1	48.8	77.6	GR	2.650	100.0	100.0	4.0	2.894	.21	.11	8

CUTTLEFISH 1 AMITY OIL NL Complex Lithology Results 01-11-1999

Zone No. 2

Hydrocarbon Volume Report

Formation Name

FROM	M	837.759
TO	M	1079.794
INTERVAL	M	242.035
PHIE Cut Off		.050
SW Cut Off		.500
Vclay Cut Off		.300
Net Pay Interval	M	.610
Gross Interval	M	52.273
Net Pay/Gross		.012
Net Pay/Total Interval		.003
Average PHIE	%	33.988
Average SW	%	47.921
Average Vclay	%	8.887
Integrated PHI	M	.207
Weighed Sum PHI*(1-SW)	M	.108
Average Sum PHI*(1-SW)	M	.108

Zone No. 3 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
1079.91	93	1.4	1.1	38.1	2.216	.0	.0	170.5	148.4	47.6	74.9	GR	2.650	100.0	100.0	5.8	2.828	.00	.00	8
1080.06	92	1.7	1.4	35.5	2.241	-.1	.0	149.4	127.5	45.0	73.0	GR	2.650	100.0	100.0	6.5	2.814	.00	.00	8
1080.21	92	2.3	2.2	30.3	2.297	-.1	.0	121.5	85.4	40.5	65.5	DN	2.655	100.0	100.0	10.2	2.791	.00	.00	
1080.36	92	2.6	2.8	29.0	2.352	.0	.0	128.2	99.0	35.9	73.6	GR	2.650	100.0	100.0	5.2	2.820	.00	.00	
1080.52	92	2.7	2.9	27.8	2.379	-.1	.0	130.8	106.2	33.5	73.9	GR	2.650	100.0	100.0	4.0	2.827	.00	.00	
1080.67	94	2.9	2.6	26.0	2.379	-.1	.0	129.6	110.8	32.7	68.6	DN	2.653	100.0	100.0	4.5	2.801	.00	.00	
1080.82	92	3.0	2.8	26.2	2.368	-.1	.0	123.9	100.4	32.7	66.1	DN	2.654	100.0	100.0	5.7	2.794	.00	.00	
1080.97	94	3.0	2.7	27.1	2.363	-.1	.0	122.2	102.5	32.7	69.0	DN	2.655	100.0	100.0	5.4	2.802	.00	.00	
1081.13	93	2.8	2.0	29.5	2.374	.0	.0	122.6	116.9	33.3	74.2	GR	2.650	100.0	100.0	5.0	2.846	.00	.00	
1081.28	95	2.7	2.0	29.3	2.399	-.1	.0	128.2	127.7	31.1	76.3	MN	2.650	100.0	100.0	3.8	2.866	.00	.00	
1081.43	94	2.7	2.5	29.3	2.409	.0	.0	128.8	114.3	30.8	75.2	GR	2.650	100.0	100.0	3.9	2.875	.00	.00	
1081.58	93	2.6	2.0	29.4	2.398	-.1	.0	131.6	123.6	31.8	74.5	GR	2.650	100.0	100.0	4.4	2.866	.00	.00	
1081.74	91	2.5	1.7	30.4	2.377	.0	.0	129.0	122.0	38.2	72.4	GR	2.650	100.0	100.0	5.9	2.863	.00	.00	
1081.89	95	2.5	1.6	30.9	2.363	-.1	.0	127.9	127.1	39.7	76.8	GR	2.650	100.0	100.0	5.2	2.856	.00	.00	8
1082.04	96	2.6	2.3	30.5	2.342	.0	.0	124.5	110.0	40.9	78.5	GR	2.650	100.0	100.0	4.6	2.833	.00	.00	8
1082.19	99	2.6	2.6	31.8	2.314	.0	.0	125.3	102.9	39.3	78.2	DN	2.650	100.0	100.0	4.7	2.826	.00	.00	8
1082.34	96	2.5	2.5	31.4	2.308	.0	.0	124.8	97.8	38.0	74.1	DN	2.650	100.0	100.0	6.1	2.815	.00	.00	8
1082.50	96	2.5	2.4	31.5	2.332	.0	.0	127.3	108.2	35.9	78.3	GR	2.650	100.0	100.0	4.7	2.837	.00	.00	8
1082.65	94	2.6	2.3	30.6	2.365	.1	.0	123.9	105.5	34.0	75.4	GR	2.650	100.0	100.0	5.4	2.853	.00	.00	
1082.80	94	2.7	2.4	28.2	2.378	-.1	.0	129.5	116.9	33.4	76.0	GR	2.650	100.0	100.0	3.6	2.832	.00	.00	
1082.95	94	2.8	2.8	26.1	2.374	.1	.0	131.2	105.2	33.6	67.5	DN	2.654	100.0	100.0	5.0	2.798	.00	.00	
1083.11	95	2.7	2.8	27.7	2.372	.1	.0	131.5	109.2	33.4	75.0	DN	2.650	100.0	100.0	3.7	2.819	.00	.00	

1083.26	94	2.5	2.9	31.7	2.376	.0	.0	125.4	92.7	34.0	75.7	GR	2.650	100.0	100.0	5.6	2.878	.00	.00	8
1083.41	96	2.4	2.1	35.7	2.376	.0	.0	130.0	112.5	36.5	77.8	GR	2.650	100.0	100.0	4.9	2.934	.00	.00	8
1083.56	96	2.3	2.1	34.8	2.374	.0	.0	131.7	113.3	36.2	77.5	GR	2.650	100.0	100.0	5.0	2.919	.00	.00	8
1083.72	98	2.3	2.2	31.6	2.371	.0	.0	133.7	117.1	36.9	80.5	GR	2.650	100.0	100.0	4.0	2.873	.00	.00	8
1083.87	93	2.4	2.8	29.5	2.371	.0	.0	134.5	100.6	37.0	74.6	GR	2.650	100.0	100.0	4.9	2.844	.00	.00	
1084.02	93	2.4	2.8	28.3	2.375	-.1	.0	136.8	105.0	36.6	74.4	GR	2.650	100.0	100.0	4.2	2.831	.00	.00	
1084.17	92	2.5	3.0	28.9	2.382	.0	.0	133.7	99.2	36.1	73.8	GR	2.650	100.0	100.0	4.6	2.845	.00	.00	
1084.33	94	2.4	2.8	28.5	2.388	.0	.0	136.8	109.3	36.0	76.2	GR	2.650	100.0	100.0	3.6	2.845	.00	.00	
1084.48	96	2.5	2.5	29.1	2.394	.1	.0	135.1	115.5	35.9	77.9	GR	2.650	100.0	100.0	3.3	2.858	.00	.00	
1084.63	94	2.6	2.5	28.2	2.401	-.1	.0	135.3	117.5	35.5	75.3	GR	2.650	100.0	100.0	3.4	2.852	.00	.00	
1084.78	96	2.8	3.1	29.1	2.407	.0	.0	128.8	106.0	34.4	77.6	GR	2.650	100.0	100.0	3.1	2.870	.00	.00	
1084.94	96	2.7	3.4	28.7	2.412	.1	.0	132.4	106.2	34.1	78.6	GR	2.650	100.0	100.0	2.5	2.868	.00	.00	
1085.09	95	2.5	3.1	29.1	2.404	.1	.0	135.0	103.4	33.6	76.3	GR	2.650	100.0	100.0	3.5	2.867	.00	.00	
1085.24	91	2.3	2.8	29.1	2.389	.1	.0	137.7	100.7	33.6	72.1	GR	2.650	100.0	100.0	5.0	2.853	.00	.00	
1085.39	87	2.2	2.6	31.7	2.366	.0	.0	129.6	86.2	31.2	67.4	MN	2.837	100.0	100.0	8.3	2.870	.00	.00	
1085.55	85	2.3	2.0	33.1	2.359	.0	.0	122.6	83.8	30.0	57.6	MN	2.878	100.0	100.0	12.0	2.883	.00	.00	
1085.70	82	2.5	2.1	32.4	2.373	.1	.0	120.3	81.4	28.3	52.7	MN	2.886	100.0	100.0	12.7	2.886	.00	.00	
1085.85	80	2.9	2.1	29.1	2.394	.0	.0	122.6	99.0	27.8	58.0	MN	2.818	100.0	100.0	8.8	2.858	.00	.00	
1086.00	79	3.8	3.0	24.2	2.420	-.1	.0	124.7	109.2	27.5	58.3	GR	2.704	100.0	100.0	5.0	2.812	.00	.00	
1086.15	82	5.2	4.4	21.7	2.449	-.1	.0	116.9	115.1	29.7	62.0	GR	2.672	100.0	100.0	1.8	2.802	.00	.00	
1086.31	86	5.9	7.0	22.4	2.467	-.1	.0	110.1	99.0	32.2	66.4	GR	2.699	100.0	100.0	.4	2.828	.00	.00	
1086.46	93	4.2	5.4	25.4	2.454	.0	.0	116.9	98.9	35.8	75.1	GR	2.650	100.0	100.0	.9	2.860	.00	.00	
1086.61	97	2.9	3.5	29.7	2.407	.1	.0	124.8	99.3	38.1	78.9	GR	2.650	100.0	100.0	3.1	2.879	.00	.00	
1086.76	100	2.5	3.0	32.6	2.361	.1	.0	129.8	103.0	36.7	82.4	GR	2.650	100.0	100.0	3.4	2.877	.00	.00	8
1086.92	97	2.5	3.0	32.8	2.333	.0	.0	128.5	96.0	37.0	78.7	GR	2.650	100.0	100.0	4.6	2.855	.00	.00	8
1087.07	94	2.4	2.9	31.8	2.331	.0	.0	128.4	94.4	37.3	76.3	GR	2.650	100.0	100.0	5.4	2.841	.00	.00	8
1087.22	91	2.4	2.8	30.7	2.335	.0	.0	127.2	89.4	37.7	72.3	GR	2.650	100.0	100.0	6.8	2.828	.00	.00	8
1087.37	90	2.4	2.8	34.6	2.348	.0	.0	126.6	87.2	37.4	71.1	GR	2.650	100.0	100.0	7.2	2.894	.00	.00	8
1087.53	92	2.3	2.7	34.6	2.358	.0	.0	129.4	92.0	37.9	73.1	GR	2.650	100.0	100.0	6.5	2.902	.00	.00	8
1087.68	93	2.3	2.8	34.2	2.364	.0	.0	129.9	92.4	39.5	74.1	GR	2.650	100.0	100.0	6.1	2.903	.00	.00	8
1087.83	94	2.4	2.7	30.9	2.364	.1	.0	130.2	97.1	40.3	76.1	GR	2.650	100.0	100.0	5.4	2.856	.00	.00	
1087.98	95	2.4	2.9	29.7	2.370	.0	.0	133.4	100.9	40.8	76.8	GR	2.650	100.0	100.0	4.4	2.845	.00	.00	
1088.14	95	2.3	2.6	29.7	2.370	.0	.0	136.0	105.9	37.5	77.1	GR	2.650	100.0	100.0	4.3	2.845	.00	.00	
1088.29	97	2.3	2.5	29.2	2.373	.1	.0	139.1	115.5	37.1	79.4	GR	2.650	100.0	100.0	3.3	2.841	.00	.00	

Zone No. 3 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
1088.44	98	2.3	2.5	31.1	2.363	.1	.0	133.0	107.3	35.7	80.1	GR	2.650	100.0	100.0	4.1	2.858	.00	.00	8
1088.59	98	2.4	2.8	31.5	2.361	.0	.0	128.8	97.9	33.2	77.2	MN	2.650	100.0	100.0	5.1	2.863	.00	.00	8
1088.75	94	2.5	2.8	31.2	2.356	.0	.0	125.0	90.2	32.6	72.8	MN	2.650	100.0	100.0	6.6	2.854	.00	.00	8
1088.90	90	2.5	2.9	29.1	2.354	-.1	.0	128.1	93.6	32.7	71.3	GR	2.650	100.0	100.0	5.9	2.823	.00	.00	
1089.05	87	2.6	3.1	29.0	2.348	-.1	.0	125.9	85.9	36.0	67.0	GR	2.688	100.0	100.0	7.2	2.816	.00	.00	
1089.20	91	2.5	2.9	28.9	2.344	-.1	.0	128.7	93.9	38.2	71.9	GR	2.650	100.0	100.0	5.8	2.811	.00	.00	
1089.36	95	2.4	2.7	31.0	2.329	.0	.0	128.4	98.1	43.8	76.3	GR	2.650	100.0	100.0	5.4	2.828	.00	.00	8
1089.51	95	2.5	2.5	30.3	2.289	.0	.0	116.2	77.3	44.1	63.0	DN	2.655	100.0	100.0	11.1	2.784	.00	.00	
1089.66	96	2.3	2.3	31.3	2.239	.0	.0	112.5	66.3	44.3	52.4	DN	2.652	100.0	100.0	16.1	2.754	.00	.00	
1089.81	99	2.0	1.9	32.6	2.215	.3	.0	114.6	68.9	43.7	51.4	DN	2.650	100.0	100.0	17.7	2.751	.00	.00	
1089.96	99	1.7	1.4	34.9	2.241	.1	.0	150.6	126.0	45.6	71.6	DN	2.650	100.0	100.0	7.0	2.805	.00	.00	8
1090.12	96	1.7	1.5	34.8	2.279	.1	.0	152.6	134.0	43.9	78.0	GR	2.650	100.0	100.0	4.8	2.837	.00	.00	8
1090.27	96	1.9	1.8	33.2	2.307	.4	.0	147.7	123.1	39.8	77.5	GR	2.650	100.0	100.0	4.9	2.839	.00	.00	8
1090.42	95	2.0	2.1	32.3	2.306	.1	.0	142.1	110.9	39.1	76.6	GR	2.650	100.0	100.0	5.3	2.827	.00	.00	8

1090.57	95	2.0	2.0	31.7	2.310	.2	.0	142.1	112.3	40.4	76.3	GR	2.650	100.0	100.0	5.3	2.822	.00	.00	8
1090.73	93	1.9	2.0	32.5	2.317	.0	.0	143.4	109.2	39.9	74.1	GR	2.650	100.0	100.0	6.1	2.839	.00	.00	8
1090.88	89	1.8	2.0	33.0	2.323	.0	.0	135.9	93.0	39.2	69.7	GR	2.767	100.0	100.0	9.3	2.849	.00	.00	
1091.03	89	1.8	1.9	34.1	2.319	.0	.0	144.8	105.2	38.7	70.0	GR	2.650	100.0	100.0	7.6	2.863	.00	.00	8
1091.18	86	1.9	2.0	32.1	2.322	.0	.0	134.4	91.3	37.9	66.0	GR	2.742	100.0	100.0	9.8	2.837	.00	.00	
1091.34	83	2.2	2.3	27.8	2.332	.0	.0	133.8	93.4	37.0	62.3	GR	2.659	100.0	100.0	8.7	2.785	.00	.00	
1091.49	76	2.6	2.8	25.3	2.343	-.1	.0	131.7	85.3	33.1	53.6	DN	2.656	100.0	100.0	9.5	2.759	.00	.00	
1091.64	81	2.7	3.0	25.4	2.349	-.1	.0	129.3	85.5	33.4	56.0	DN	2.656	100.0	100.0	8.7	2.766	.00	.00	
1091.79	82	2.6	2.7	25.8	2.344	-.1	.0	129.9	87.8	34.0	56.6	DN	2.656	100.0	100.0	8.9	2.768	.00	.00	
1091.95	82	2.6	2.6	26.4	2.344	-.1	.0	128.9	90.7	35.1	59.9	DN	2.656	100.0	100.0	8.3	2.777	.00	.00	
1092.10	80	2.6	2.6	27.3	2.341	.0	.0	125.8	88.2	34.9	59.5	GR	2.670	100.0	100.0	8.8	2.786	.00	.00	
1092.25	80	2.7	2.7	29.0	2.341	.0	.0	122.2	83.4	34.1	59.6	GR	2.702	100.0	100.0	9.4	2.810	.00	.00	
1092.40	81	2.6	2.7	29.3	2.338	.0	.0	122.5	83.3	33.8	59.8	GR	2.704	100.0	100.0	9.6	2.812	.00	.00	
1092.56	79	2.6	2.8	29.1	2.341	.0	.0	123.4	80.5	33.0	57.7	GR	2.709	100.0	100.0	9.9	2.812	.00	.00	
1092.71	80	2.6	2.8	29.1	2.349	.0	.0	124.3	82.1	34.0	58.7	GR	2.720	100.0	100.0	9.4	2.819	.00	.00	
1092.86	80	2.6	2.8	29.3	2.359	.0	.0	125.8	82.5	37.4	59.1	GR	2.747	100.0	100.0	9.3	2.830	.00	.00	
1093.01	84	2.6	2.8	29.5	2.363	.0	.0	126.2	86.5	35.6	63.5	GR	2.748	100.0	100.0	8.1	2.837	.00	.00	
1093.17	82	2.4	2.5	32.0	2.348	-.1	.0	121.3	79.9	38.2	61.1	GR	2.816	100.0	100.0	10.6	2.859	.00	.00	
1093.32	80	2.2	2.1	35.8	2.315	.2	.0	115.4	74.7	37.7	59.3	GR	2.877	100.0	100.0	13.8	2.882	.00	.00	
1093.47	76	2.1	2.1	33.4	2.281	.1	.0	118.2	72.7	36.9	54.8	GR	2.740	100.0	100.0	14.7	2.819	.00	.00	
1093.62	77	2.3	2.5	30.4	2.283	-.1	.0	118.5	71.1	34.7	55.2	GR	2.677	100.0	100.0	13.3	2.780	.00	.00	
1093.77	76	2.5	3.2	29.9	2.318	-.1	.0	121.8	68.8	33.0	54.4	GR	2.706	100.0	100.0	12.0	2.803	.00	.00	
1093.93	76	2.4	3.0	32.3	2.357	-.1	.0	121.2	68.4	30.8	54.6	GR	2.853	100.0	100.0	12.5	2.871	.00	.00	
1094.08	76	2.3	3.1	31.1	2.374	-.1	.0	127.1	72.3	29.1	54.7	GR	2.847	100.0	100.0	11.4	2.868	.00	.00	
1094.23	76	2.5	3.3	28.7	2.383	.0	.0	131.4	63.5	23.9	35.0	MN	2.819	100.0	100.0	15.4	2.843	.00	.00	
1094.38	74	2.8	3.7	25.3	2.398	-.1	.0	140.0	57.2	18.9	15.1	MN	2.794	100.0	100.0	18.8	2.808	.00	.00	
1094.54	69	3.8	5.1	22.3	2.431	-.1	.0	133.4	68.0	20.2	32.8	MN	2.745	100.0	100.0	11.0	2.793	.00	.00	
1094.69	68	4.9	8.2	20.1	2.477	-.1	.0	131.0	75.6	20.9	44.5	GR	2.728	100.0	100.0	5.2	2.803	.00	.00	
1094.84	65	4.6	8.2	22.1	2.507	.0	.0	126.9	64.4	21.5	40.8	GR	2.837	100.0	100.0	7.5	2.860	.00	.00	
1094.99	65	3.5	5.5	23.3	2.483	-.1	.0	138.2	72.4	24.6	41.7	GR	2.831	100.0	100.0	8.4	2.856	.00	.00	
1095.15	64	3.2	4.2	24.9	2.430	-.1	.0	133.2	71.7	25.6	40.2	GR	2.790	100.0	100.0	10.7	2.830	.00	.00	
1095.30	65	3.2	4.0	24.2	2.380	-.1	.0	130.0	71.9	27.4	41.6	GR	2.702	100.0	100.0	10.8	2.777	.00	.00	
1095.45	67	3.2	3.9	25.8	2.367	-.1	.0	124.2	69.6	28.7	43.3	GR	2.710	100.0	100.0	11.4	2.788	.00	.00	
1095.60	67	3.3	4.0	27.4	2.365	-.1	.0	116.8	64.5	30.5	44.2	GR	2.745	100.0	100.0	12.3	2.808	.00	.00	
1095.76	70	3.3	3.9	29.7	2.370	-.1	.0	109.2	61.9	27.4	46.7	GR	2.809	100.0	100.0	12.9	2.846	.00	.00	
1095.91	69	3.4	4.0	30.2	2.359	-.1	.0	106.5	52.1	24.7	31.5	MN	2.823	100.0	100.0	17.8	2.843	.00	.00	
1096.06	68	3.5	3.7	25.8	2.358	-.1	.0	118.0	62.3	23.8	30.4	MN	2.732	100.0	100.0	15.4	2.780	.00	.00	
1096.21	64	4.7	5.2	20.7	2.391	-.1	.0	119.3	64.4	21.2	29.4	MN	2.688	100.0	100.0	12.1	2.734	.00	.00	
1096.37	61	7.3	8.9	18.2	2.466	-.1	.0	114.0	70.6	21.3	36.9	GR	2.697	100.0	100.0	6.4	2.765	.00	.00	
1096.52	60	8.1	22.5	20.1	2.534	-.1	.0	106.1	41.3	24.4	34.7	GR	2.835	100.0	100.0	7.5	2.855	.00	.00	
1096.67	59	5.3	10.4	24.5	2.537	-.1	.0	111.7	47.4	29.1	33.5	GR	2.939	100.0	100.0	10.9	2.921	.00	.00	5
1096.82	61	4.1	6.8	27.7	2.490	-.1	.0	112.7	50.8	29.7	36.4	GR	2.948	100.0	100.0	12.7	2.925	.00	.00	5

Zone No. 3 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
1096.98	65	3.2	4.4	28.0	2.439	-.1	.0	121.4	62.8	32.1	41.1	GR	2.881	100.0	100.0	12.3	2.883	.00	.00	
1097.13	70	2.7	3.5	28.7	2.404	.0	.0	126.8	69.5	32.1	46.6	GR	2.838	100.0	100.0	11.7	2.861	.00	.00	
1097.28	71	2.5	3.0	27.6	2.379	.0	.0	134.9	78.4	32.1	48.6	GR	2.763	100.0	100.0	10.9	2.824	.00	.00	
1097.43	70	2.5	2.9	29.1	2.363	.0	.0	127.5	72.9	31.4	47.1	GR	2.780	100.0	100.0	12.5	2.831	.00	.00	
1097.58	70	2.7	3.1	28.0	2.364	-.1	.0	127.4	73.2	30.4	47.6	GR	2.752	100.0	100.0	11.7	2.817	.00	.00	
1097.74	71	3.0	3.6	28.2	2.376	-.1	.0	120.9	69.4	27.6	48.0	GR	2.777	100.0	100.0	11.5	2.830	.00	.00	

1097.89	70	3.3	4.0	28.7	2.379	.0	.0	113.8	59.3	24.9	39.2	MN	2.808	100.0	100.0	14.3	2.839	.00	.00
1098.04	69	3.6	4.1	28.3	2.379	.0	.0	110.4	60.2	25.0	40.1	MN	2.799	100.0	100.0	13.8	2.835	.00	.00
1098.19	68	4.1	4.5	25.5	2.388	-.1	.0	111.7	67.8	25.4	45.0	GR	2.730	100.0	100.0	10.3	2.802	.00	.00
1098.35	65	4.6	5.3	23.1	2.405	-.1	.0	114.5	68.5	26.0	41.1	GR	2.707	100.0	100.0	9.5	2.782	.00	.00
1098.50	64	4.7	5.8	23.4	2.415	-.1	.0	113.6	64.6	27.2	40.1	GR	2.731	100.0	100.0	9.9	2.796	.00	.00
1098.65	65	4.1	4.7	26.3	2.395	-.1	.0	109.7	62.2	30.1	41.8	GR	2.771	100.0	100.0	11.8	2.820	.00	.00
1098.80	69	3.5	4.0	27.6	2.361	-.1	.0	111.5	65.3	33.2	46.2	GR	2.739	100.0	100.0	11.9	2.808	.00	.00
1098.96	69	3.3	3.5	27.3	2.331	-.1	.0	112.5	66.2	33.1	45.6	GR	2.696	100.0	100.0	12.7	2.777	.00	.00
1099.11	64	3.3	3.6	28.1	2.314	-.1	.0	108.4	60.1	32.3	40.5	GR	2.703	100.0	100.0	15.0	2.774	.00	.00
1099.26	65	3.4	3.7	27.6	2.315	-.1	.0	107.4	60.1	30.4	40.7	GR	2.696	100.0	100.0	14.7	2.768	.00	.00
1099.41	65	3.6	3.8	26.8	2.323	-.1	.0	107.9	60.9	28.5	41.1	GR	2.691	100.0	100.0	14.0	2.763	.00	.00
1099.57	69	3.8	4.2	25.0	2.338	-.1	.0	111.9	59.1	25.2	33.6	MN	2.693	100.0	100.0	14.7	2.750	.00	.00
1099.72	66	4.0	4.4	23.9	2.362	-.1	.0	116.0	60.5	23.1	29.6	MN	2.704	100.0	100.0	14.4	2.756	.00	.00
1099.87	64	4.7	5.5	21.0	2.401	-.1	.0	118.9	67.6	22.2	36.9	MN	2.684	100.0	100.0	9.9	2.748	.00	.00
1100.02	64	5.6	7.0	19.5	2.441	-.1	.0	120.6	73.0	21.8	39.6	GR	2.689	100.0	100.0	7.1	2.761	.00	.00
1100.18	65	5.9	7.3	18.7	2.463	-.1	.0	123.3	79.3	22.3	40.8	GR	2.694	100.0	100.0	5.7	2.770	.00	.00
1100.33	66	5.1	5.9	22.0	2.448	-.1	.0	117.4	73.1	24.0	42.2	GR	2.742	100.0	100.0	7.8	2.806	.00	.00
1100.48	65	4.4	4.8	27.0	2.419	-.1	.0	105.6	60.7	26.5	40.7	GR	2.825	100.0	100.0	12.1	2.850	.00	.00
1100.63	65	4.3	5.0	28.6	2.394	-.1	.0	100.5	55.5	28.8	41.8	GR	2.827	100.0	100.0	13.3	2.852	.00	.00
1100.79	66	4.4	5.2	30.4	2.389	-.1	.0	95.4	51.6	28.7	42.8	GR	2.862	95.4	95.4	14.2	2.873	.00	.00
1100.94	68	4.0	4.6	28.8	2.391	-.1	.0	103.9	58.6	28.8	44.4	GR	2.822	100.0	100.0	12.6	2.851	.00	.00
1101.09	64	3.4	4.1	30.9	2.388	-.1	.0	107.5	55.9	29.4	39.8	GR	2.872	100.0	100.0	15.3	2.878	.00	.00
1101.24	65	3.2	3.7	29.3	2.381	-.1	.0	113.9	61.4	29.4	40.8	GR	2.823	100.0	100.0	14.2	2.849	.00	.00
1101.39	64	3.6	4.5	28.2	2.382	-.1	.0	109.7	57.9	29.2	40.0	GR	2.801	100.0	100.0	13.7	2.835	.00	.00
1101.55	67	4.5	5.3	26.5	2.394	-.1	.0	104.1	59.4	28.6	44.0	GR	2.770	100.0	100.0	11.3	2.822	.00	.00
1101.70	69	4.9	6.0	25.9	2.405	-.1	.0	102.3	59.5	28.0	46.1	GR	2.766	100.0	100.0	10.0	2.823	.00	.00
1101.85	67	4.8	6.0	27.8	2.406	-.1	.0	97.8	53.8	27.4	44.0	GR	2.822	97.8	97.8	11.9	2.851	.00	.00
1102.00	66	4.5	5.5	29.6	2.398	-.1	.0	96.2	51.2	26.7	41.9	GR	2.856	96.2	96.2	13.8	2.869	.00	.00
1102.16	64	4.2	5.4	30.0	2.392	-.1	.0	99.3	44.7	22.2	26.8	MN	2.863	99.3	99.3	18.4	2.869	.00	.00
1102.31	63	4.3	5.3	26.4	2.394	-.1	.0	108.0	48.3	20.3	20.4	MN	2.803	100.0	100.0	18.1	2.820	.00	.00
1102.46	64	5.6	7.1	21.6	2.419	-.1	.0	112.1	57.5	20.2	30.7	MN	2.720	100.0	100.0	11.3	2.774	.00	.00
1102.61	63	8.3	10.9	19.4	2.453	-.1	.0	101.0	60.0	21.6	38.6	GR	2.699	100.0	100.0	6.9	2.770	.00	.00
1102.77	65	7.1	9.2	21.5	2.460	-.1	.0	101.7	59.9	23.9	40.7	GR	2.751	100.0	100.0	7.7	2.809	.00	.00
1102.92	68	4.5	6.1	26.1	2.429	-.1	.0	107.9	58.5	25.5	44.3	GR	2.815	100.0	100.0	10.4	2.847	.00	.00
1103.07	70	3.5	4.4	27.4	2.386	-.1	.0	115.2	65.0	28.7	47.6	GR	2.771	100.0	100.0	10.9	2.827	.00	.00
1103.22	69	3.4	4.5	28.5	2.367	-.1	.0	112.0	59.5	27.4	46.5	GR	2.773	100.0	100.0	12.3	2.827	.00	.00
1103.38	66	3.4	4.6	27.5	2.368	-.1	.0	114.4	57.2	25.3	39.6	MN	2.763	100.0	100.0	13.6	2.813	.00	.00
1103.53	64	3.4	5.0	26.9	2.380	-.1	.0	118.2	49.5	21.6	23.2	MN	2.792	100.0	100.0	17.8	2.814	.00	.00
1103.68	64	3.8	5.7	22.4	2.409	-.1	.0	130.7	65.5	22.0	36.9	MN	2.707	100.0	100.0	10.2	2.775	.00	.00
1103.83	62	5.4	9.2	18.4	2.457	-.1	.0	129.5	67.6	21.7	37.6	GR	2.692	100.0	100.0	6.6	2.760	.00	.00
1103.99	58	6.6	18.7	17.3	2.508	-.1	.0	131.8	52.4	25.5	32.5	GR	2.737	100.0	100.0	6.3	2.789	.00	.00
1104.14	60	5.1	9.0	19.5	2.508	-.1	.0	135.5	67.2	27.9	35.4	GR	2.782	100.0	100.0	7.1	2.822	.00	.00
1104.29	64	3.2	5.1	22.9	2.458	-.1	.0	143.7	73.3	29.0	40.1	GR	2.783	100.0	100.0	8.9	2.827	.00	.00
1104.44	67	2.8	3.7	26.9	2.389	-.1	.0	130.3	70.1	32.0	43.5	GR	2.771	100.0	100.0	11.7	2.822	.00	.00
1104.60	67	2.8	3.6	28.8	2.348	-.1	.0	120.1	62.4	32.3	43.2	GR	2.756	100.0	100.0	13.8	2.813	.00	.00
1104.75	68	2.9	3.5	29.9	2.335	-.1	.0	114.4	61.0	32.9	44.4	GR	2.762	100.0	100.0	14.4	2.818	.00	.00
1104.90	67	3.0	3.7	26.4	2.343	-.1	.0	121.7	66.6	35.7	43.4	GR	2.698	100.0	100.0	12.5	2.776	.00	.00
1105.05	66	3.3	4.4	21.5	2.378	-.1	1.0	143.0	51.5	15.0	.0	MN	2.735	100.0	100.0	21.0	2.735	.00	.00
1105.20	64	4.2	7.1	17.7	2.441	-.1	.0	157.5	59.5	15.4	14.7	MN	2.708	100.0	100.0	12.9	2.734	.00	.00
1105.36	65	5.1	13.5	16.7	2.505	-.1	.0	153.0	71.3	16.8	38.2	MN	2.705	100.0	100.0	4.1	2.777	.00	.00

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
1105.51	63	4.7	8.6	21.8	2.510	-.1	.0	127.1	62.2	29.6	39.2	GR	2.838	100.0	100.0	7.8	2.859	.00	.00	
1105.66	63	3.7	5.0	25.7	2.459	-.1	.0	122.9	63.9	30.5	38.5	GR	2.856	100.0	100.0	11.3	2.868	.00	.00	
1105.81	64	3.2	3.7	29.5	2.387	-.1	.0	113.6	60.7	31.8	39.7	GR	2.838	100.0	100.0	14.5	2.858	.00	.00	
1105.97	64	3.0	3.6	31.4	2.358	-.1	.0	111.1	57.4	27.1	40.4	GR	2.840	100.0	100.0	16.0	2.859	.00	.00	
1106.12	68	3.0	4.3	29.4	2.360	-.1	.0	114.9	57.6	28.2	44.8	GR	2.788	100.0	100.0	13.5	2.832	.00	.00	
1106.27	68	3.2	4.4	28.3	2.373	-.1	.0	116.4	59.7	31.1	44.2	GR	2.782	100.0	100.0	12.7	2.829	.00	.00	
1106.42	69	3.2	4.2	26.8	2.367	-.1	.0	121.0	65.8	32.9	46.0	GR	2.726	100.0	100.0	11.3	2.801	.00	.00	
1106.58	68	2.9	3.3	27.6	2.345	-.1	.0	121.0	69.7	32.9	45.2	GR	2.715	100.0	100.0	12.5	2.794	.00	.00	
1106.73	70	2.7	3.2	26.7	2.327	.0	.0	123.4	70.8	32.6	47.2	GR	2.680	100.0	100.0	12.2	2.765	.00	.00	
1106.88	72	2.7	3.1	28.9	2.323	-.1	.0	119.9	69.1	32.9	49.8	GR	2.704	100.0	100.0	12.6	2.793	.00	.00	
1107.03	72	2.8	3.2	29.8	2.325	-.1	.0	116.0	66.6	32.8	50.1	GR	2.728	100.0	100.0	12.9	2.808	.00	.00	
1107.19	72	3.0	3.3	29.4	2.318	-.1	.0	112.1	65.4	32.6	49.6	GR	2.707	100.0	100.0	13.0	2.796	.00	.00	
1107.34	73	3.1	3.6	29.6	2.311	-.1	.0	108.7	61.9	33.2	50.2	GR	2.703	100.0	100.0	13.2	2.793	.00	.00	
1107.49	74	2.8	3.4	28.9	2.317	-.1	.0	115.4	66.7	33.4	52.2	GR	2.692	100.0	100.0	12.2	2.787	.00	.00	
1107.64	78	2.6	3.1	28.3	2.334	-.1	.0	123.9	76.3	37.7	56.8	GR	2.689	100.0	100.0	10.2	2.795	.00	.00	
1107.80	80	2.4	2.7	29.2	2.342	-.1	.0	128.1	83.4	42.4	59.4	GR	2.707	100.0	100.0	9.5	2.814	.00	.00	
1107.95	85	2.3	2.0	30.2	2.316	.0	.0	124.9	93.1	44.2	65.4	GR	2.679	100.0	100.0	9.4	2.806	.00	.00	
1108.10	90	2.1	1.8	33.9	2.273	.0	.0	134.3	110.9	47.6	71.4	GR	2.650	100.0	100.0	7.1	2.820	.00	.00	8
1108.25	93	1.8	1.3	34.8	2.232	.0	.0	119.8	93.2	44.8	68.3	DN	2.644	100.0	100.0	13.5	2.796	.00	.00	
1108.41	95	1.7	1.3	34.6	2.236	.1	.0	123.1	92.1	41.6	68.2	DN	2.645	100.0	100.0	13.3	2.797	.00	.00	
1108.56	97	2.0	1.7	33.8	2.272	.2	.0	142.4	123.7	39.2	75.8	DN	2.650	100.0	100.0	5.5	2.818	.00	.00	8
1108.71	99	2.5	2.5	31.3	2.323	.0	.0	129.0	104.2	37.2	78.4	DN	2.650	100.0	100.0	4.7	2.827	.00	.00	8
1108.86	100	2.8	3.3	31.2	2.354	.0	.0	122.6	98.2	35.8	82.5	GR	2.650	100.0	100.0	3.4	2.852	.00	.00	8
1109.01	95	2.6	2.6	29.8	2.354	-.1	.0	125.5	102.1	36.1	76.6	GR	2.650	100.0	100.0	4.8	2.833	.00	.00	
1109.17	100	2.5	2.5	29.2	2.349	-.1	.0	129.0	104.9	36.2	75.5	DN	2.650	100.0	100.0	4.9	2.820	.00	.00	
1109.32	102	2.5	2.4	29.7	2.359	.0	.0	130.1	115.3	35.8	81.4	DN	2.650	100.0	100.0	3.3	2.836	.00	.00	
1109.47	107	2.6	2.8	30.8	2.378	.0	.0	130.6	121.1	35.5	90.8	GR	2.650	100.0	100.0	.9	2.867	.00	.00	
1109.62	98	2.5	2.2	31.5	2.384	.1	.0	129.0	116.7	34.8	80.4	GR	2.650	100.0	100.0	4.0	2.883	.00	.00	8
1109.78	93	2.5	2.2	31.2	2.375	.0	.0	127.5	106.9	33.4	75.1	GR	2.650	100.0	100.0	5.6	2.870	.00	.00	
1109.93	93	2.6	2.3	30.2	2.372	.0	.0	126.5	105.7	31.8	73.3	MN	2.650	100.0	100.0	5.7	2.855	.00	.00	
1110.08	96	2.6	3.0	30.9	2.380	.0	.0	124.5	93.4	32.0	75.5	MN	2.650	100.0	100.0	5.2	2.871	.00	.00	
1110.23	95	2.7	3.0	30.1	2.386	.0	.0	127.2	100.8	32.3	77.5	GR	2.650	100.0	100.0	4.2	2.865	.00	.00	
1110.39	94	2.6	3.0	29.5	2.383	-.1	.0	128.4	100.1	32.9	75.5	GR	2.650	100.0	100.0	4.4	2.854	.00	.00	
1110.54	97	2.6	2.8	29.4	2.373	-.1	.0	130.4	108.2	33.1	79.1	GR	2.650	100.0	100.0	3.5	2.844	.00	.00	
1110.69	98	2.6	2.9	29.3	2.370	-.1	.0	130.7	108.4	33.3	80.6	GR	2.650	100.0	100.0	3.1	2.840	.00	.00	
1110.84	101	2.7	2.9	31.3	2.374	-.1	.0	125.8	105.3	33.7	82.9	MN	2.650	100.0	100.0	3.3	2.871	.00	.00	8
1111.00	98	2.7	3.2	30.3	2.382	-.1	.0	126.0	99.8	34.0	80.0	GR	2.650	100.0	100.0	3.6	2.865	.00	.00	
1111.15	100	2.6	3.1	30.7	2.386	.0	.0	128.1	103.8	34.4	83.2	GR	2.650	100.0	100.0	2.8	2.873	.00	.00	
1111.30	99	2.6	3.2	29.8	2.388	-.1	.0	130.4	104.3	34.9	81.1	GR	2.650	100.0	100.0	2.9	2.863	.00	.00	
1111.45	96	2.6	3.1	28.9	2.391	.0	.0	133.2	105.8	35.8	78.6	GR	2.650	100.0	100.0	3.0	2.852	.00	.00	
1111.61	94	2.6	3.1	28.8	2.394	.0	.0	133.4	103.7	36.5	76.3	GR	2.650	100.0	100.0	3.6	2.853	.00	.00	
1111.76	95	2.6	3.1	29.8	2.394	.0	.0	131.1	101.2	37.0	77.1	GR	2.650	100.0	100.0	3.9	2.868	.00	.00	
1111.91	97	2.5	3.0	30.0	2.392	.0	.0	131.1	103.8	36.0	79.2	GR	2.650	100.0	100.0	3.5	2.869	.00	.00	
1112.06	99	2.5	2.9	30.1	2.387	.0	.0	131.3	107.6	36.1	81.4	GR	2.650	100.0	100.0	3.0	2.866	.00	.00	
1112.22	98	2.6	2.9	32.0	2.365	.0	.0	126.0	100.1	36.0	80.3	GR	2.650	100.0	100.0	4.1	2.873	.00	.00	8
1112.37	95	2.7	3.0	33.4	2.327	.0	.0	121.6	93.2	35.7	76.5	GR	2.650	100.0	100.0	5.3	2.859	.00	.00	8
1112.52	92	2.9	3.1	33.4	2.295	.0	.0	114.8	82.9	35.5	70.5	SD	2.650	100.0	100.0	7.4	2.832	.00	.00	8
1112.67	90	3.0	3.1	31.8	2.303	-.1	.0	112.7	82.7	35.0	70.4	GR	2.650	100.0	100.0	7.5	2.816	.00	.00	8
1112.82	93	2.9	3.0	32.1	2.335	-.1	.0	115.8	90.5	35.3	74.7	GR	2.650	100.0	100.0	5.9	2.849	.00	.00	8
1112.98	91	2.8	2.8	31.6	2.354	.1	.0	117.5	88.1	35.9	71.7	GR	2.650	100.0	100.0	7.0	2.858	.00	.00	8
1113.13	88	2.6	2.6	29.4	2.356	.0	.0	126.1	95.2	36.6	68.8	GR	2.704	100.0	100.0	6.6	2.829	.00	.00	
1113.28	89	2.5	2.6	29.1	2.352	.0	.0	128.0	96.0	37.4	69.6	GR	2.687	100.0	100.0	6.5	2.821	.00	.00	

1113.43	94	2.5	2.6	31.0	2.351	.1	.0	126.1	98.7	36.7	75.8	GR	2.650	100.0	100.0	5.5	2.846	.00	.00						8
1113.59	101	2.5	2.7	33.9	2.344	.0	.0	129.1	109.9	37.3	83.9	GR	2.650	100.0	100.0	3.0	2.881	.00	.00						8
1113.74	101	2.5	2.7	33.7	2.336	.1	.0	131.1	111.0	37.6	84.0	GR	2.650	100.0	100.0	3.0	2.871	.00	.00						8
1113.89	99	2.4	2.6	32.1	2.341	.1	.0	133.3	108.3	38.1	82.0	GR	2.650	100.0	100.0	3.5	2.854	.00	.00						8

Zone No. 3 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS					
1114.04	97	2.3	2.5	31.9	2.340	.1	.0	133.5	105.5	38.3	78.8	GR	2.650	100.0	100.0	4.5	2.850	.00	.00						8
1114.20	98	2.3	2.5	33.5	2.339	.0	.0	134.4	108.7	37.7	80.6	GR	2.650	100.0	100.0	4.0	2.871	.00	.00						8
1114.35	100	2.3	2.6	33.7	2.350	.0	.0	133.9	109.8	37.7	82.6	GR	2.650	100.0	100.0	3.4	2.883	.00	.00						8
1114.50	102	2.3	2.7	33.2	2.363	.0	.0	136.0	112.1	39.3	85.0	GR	2.650	100.0	100.0	2.7	2.888	.00	.00						8
1114.65	100	2.2	2.5	34.0	2.373	.1	.0	138.8	113.9	37.7	83.4	GR	2.650	100.0	100.0	3.2	2.908	.00	.00						8
1114.81	98	2.1	2.3	34.8	2.362	.0	.0	140.2	112.7	36.9	80.2	GR	2.650	100.0	100.0	4.1	2.908	.00	.00						8
1114.96	93	2.2	2.3	34.7	2.343	.0	.0	135.6	103.3	35.9	75.0	GR	2.650	100.0	100.0	5.8	2.891	.00	.00						8
1115.11	92	2.3	2.5	31.7	2.325	.0	.0	124.4	85.9	33.3	69.3	MN	2.717	100.0	100.0	8.6	2.834	.00	.00						
1115.26	94	2.5	2.6	30.4	2.315	.0	.0	120.1	83.3	33.4	67.8	SD	2.673	100.0	100.0	8.9	2.808	.00	.00						
1115.42	99	2.6	2.7	29.6	2.320	.0	.0	119.3	85.6	33.6	68.8	DN	2.655	100.0	100.0	8.1	2.801	.00	.00						
1115.57	102	2.7	2.9	31.7	2.341	.0	.0	121.0	92.3	33.7	74.9	MN	2.650	100.0	100.0	5.8	2.848	.00	.00						8
1115.72	102	2.7	3.0	33.2	2.363	-.1	.0	125.6	106.7	35.0	85.5	GR	2.650	100.0	100.0	2.6	2.888	.00	.00						8
1115.87	103	2.6	3.0	34.0	2.378	-.1	.0	128.3	108.5	36.9	86.9	GR	2.650	100.0	100.0	2.2	2.913	.00	.00						8
1116.03	107	2.6	3.0	32.2	2.377	.1	.0	130.0	114.9	37.4	91.6	GR	2.650	100.0	100.0	1.1	2.887	.00	.00						8
1116.18	109	2.6	3.1	32.7	2.374	.0	.0	128.9	115.0	37.0	93.0	GR	2.650	100.0	100.0	.9	2.891	.00	.00						8
1116.33	108	2.6	3.0	33.6	2.375	.1	.0	129.0	117.1	36.2	92.9	GR	2.650	100.0	100.0	.9	2.904	.00	.00						8
1116.48	106	2.6	3.1	31.8	2.389	.1	.0	128.8	111.1	36.8	89.4	GR	2.650	100.0	100.0	1.6	2.892	.00	.00						8
1116.63	105	2.7	3.2	31.8	2.405	.1	.0	128.2	109.2	37.2	88.8	GR	2.650	100.0	100.0	1.5	2.906	.00	.00						
1116.79	107	2.8	3.8	32.9	2.416	.1	.0	125.1	101.2	37.9	90.8	GR	2.650	100.0	100.0	1.3	2.930	.00	.00						
1116.94	109	2.5	2.9	35.1	2.415	.1	.0	131.0	120.2	36.7	94.1	GR	2.650	100.0	100.0	.7	2.959	.00	.00						8
1117.09	112	2.2	2.4	36.5	2.408	.4	.0			36.2	96.4	S	2.650	100.0	100.0	1.1	2.972	.00	.00	1					
1117.24	115	2.3	2.5	35.2	2.405	.1	.0			35.5	94.7	S	2.650	100.0	100.0	1.5	2.952	.00	.00		3				
1117.40	109	2.6	3.3	33.4	2.406	.0	.0			34.7	92.9	S	2.650	100.0	100.0	2.0	2.929	.00	.00		3				
1117.55	109	3.0	3.9	29.6	2.413	.0	.0	126.9	108.4	32.7	87.5	MN	2.650	100.0	100.0	.5	2.883	.00	.00						
1117.70	105	3.1	3.8	27.3	2.417	.1	.0			35.0	83.7	N	2.650	100.0	100.0	3.9	2.853	.00	.00	2					
1117.85	106	3.0	3.6	25.7	2.416	-.1	.0	133.6	118.6	35.8	78.4	DN	2.650	100.0	100.0	.8	2.830	.00	.00						
1118.01	107	3.2	3.7	25.9	2.409	-.1	.0	129.4	113.4	37.2	77.4	DN	2.650	100.0	100.0	1.3	2.827	.00	.00						
1118.16	110	3.0	3.5	28.0	2.396	-.1	.0	126.9	114.1	37.3	84.1	DN	2.650	100.0	100.0	.9	2.845	.00	.00						
1118.31	113	2.6	2.5	29.9	2.393	.0	.0			37.8	90.8	N	2.650	100.0	100.0	2.4	2.869	.00	.00	2					
1118.46	110	2.3	2.4	30.3	2.390	.0	.0			37.8	92.0	N	2.650	100.0	100.0	2.1	2.872	.00	.00	2					
1118.62	105	2.4	2.4	31.3	2.393	.1	.0	137.1	128.0	37.6	89.0	GR	2.650	100.0	100.0	1.4	2.888	.00	.00						
1118.77	102	2.9	3.5	29.7	2.390	-.1	.0	125.5	105.9	35.5	84.6	GR	2.650	100.0	100.0	1.8	2.863	.00	.00						
1118.92	103	3.5	4.0	28.7	2.398	-.1	.0	118.4	107.1	33.8	85.9	GR	2.650	100.0	100.0	.7	2.856	.00	.00						
1119.07	101	3.5	4.3	25.9	2.406	.0	.0	122.2	103.3	32.9	76.5	DN	2.650	100.0	100.0	1.6	2.824	.00	.00						
1119.23	94	3.3	3.5	29.0	2.402	.0	.0	117.7	97.6	33.4	76.2	GR	2.650	100.0	100.0	3.6	2.864	.00	.00						
1119.38	92	3.1	2.8	31.4	2.387	.0	.0	113.9	92.6	33.3	73.3	GR	2.650	100.0	100.0	6.0	2.884	.00	.00						
1119.53	96	2.8	2.7	32.2	2.378	.0	.0	119.9	101.1	36.6	78.4	GR	2.650	100.0	100.0	4.7	2.888	.00	.00						8
1119.68	99	2.7	2.8	29.8	2.395	.1	.0	128.8	113.4	36.3	81.8	GR	2.650	100.0	100.0	2.6	2.869	.00	.00						
1119.84	96	2.7	3.1	26.9	2.414	.1	.0	138.2	119.1	36.1	77.5	GR	2.650	100.0	100.0	1.7	2.845	.00	.00						
1119.99	90	2.8	3.0	25.3	2.415	-.1	.0	138.5	118.6	31.6	71.3	GR	2.650	100.0	100.0	2.5	2.823	.00	.00						
1120.14	90	2.9	3.0	26.3	2.397	-.1	.0	132.7	110.6	31.8	71.5	GR	2.650	100.0	100.0	3.4	2.822	.00	.00						
1120.29	88	2.6	2.4	27.0	2.369	-.1	.0	132.2	110.0	33.0	68.4	GR	2.663	100.0	100.0	5.3	2.806	.00	.00						
1120.44	83	2.4	1.9	27.2	2.336	-.1	.0	131.3	102.7	33.7	61.1	DN	2.656	100.0	100.0	8.6	2.780	.00	.00						
1120.60	77	2.3	1.7	25.1	2.310	-.1	.0	134.7	92.4	34.2	42.2	DN	2.655	100.0	100.0	13.7	2.727	.00	.00						

1120.75	83	2.4	1.7	24.2	2.295	-.1	.0	132.3	87.1	34.6	33.2	DN	2.655	100.0	100.0	16.2	2.705	.00	.00
1120.90	95	2.5	1.6	23.1	2.297	-.1	.0	134.3	87.5	35.6	27.9	DN	2.655	100.0	100.0	17.1	2.697	.00	.00
1121.05	105	2.4	1.5	26.9	2.301	-.1	.0	125.6	98.9	35.9	48.6	DN	2.655	100.0	100.0	13.0	2.744	.00	.00
1121.21	108	2.3	1.4	28.6	2.307	-.1	.0	126.0	107.4	35.9	59.7	DN	2.655	100.0	100.0	10.6	2.775	.00	.00
1121.36	106	2.4	1.6	30.4	2.314	-.1	.0	121.7	105.3	33.6	68.3	SD	2.669	100.0	100.0	8.8	2.807	.00	.00
1121.51	100	2.5	2.0	29.0	2.327	-.1	.0	124.1	100.1	33.7	67.7	DN	2.655	100.0	100.0	7.9	2.798	.00	.00
1121.66	102	2.5	2.5	28.7	2.342	.0	.0	128.1	100.4	33.4	70.5	DN	2.650	100.0	100.0	6.2	2.806	.00	.00
1121.82	106	2.6	2.6	29.1	2.356	.0	.0	129.5	108.1	33.3	77.3	DN	2.650	100.0	100.0	4.2	2.825	.00	.00
1121.97	109	2.7	2.8	28.8	2.375	.0	.0	128.4	111.8	32.7	79.9	MN	2.650	100.0	100.0	2.9	2.837	.00	.00
1122.12	102	2.8	3.0	29.3	2.388	.1	.0	126.6	102.7	31.7	76.9	MN	2.650	100.0	100.0	3.8	2.855	.00	.00
1122.27	98	2.7	2.8	28.8	2.391	.0	.0	130.9	111.2	31.6	77.5	MN	2.650	100.0	100.0	3.3	2.851	.00	.00
1122.43	95	2.6	2.8	27.7	2.386	.0	.0	134.1	110.7	31.2	75.4	MN	2.650	100.0	100.0	3.4	2.832	.00	.00

Zone No. 3 CUTTLEFISH 1 Complex Lithology Results
AMITY OIL NL 01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
1122.58	96	2.6	2.9	27.3	2.389	-.1	.0	136.1	110.3	30.8	74.1	MN	2.650	100.0	100.0	3.4	2.829	.00	.00	
1122.73	95	2.6	2.9	28.7	2.391	.0	.0	133.4	106.8	32.8	76.3	GR	2.650	100.0	100.0	3.5	2.850	.00	.00	
1122.88	98	2.5	2.8	28.1	2.384	.0	.0	136.7	117.9	33.1	80.4	GR	2.650	100.0	100.0	2.2	2.836	.00	.00	
1123.04	100	2.5	2.7	28.7	2.377	.0	.0	135.2	116.9	33.7	81.6	DN	2.650	100.0	100.0	2.3	2.837	.00	.00	
1123.19	100	2.6	2.9	27.4	2.384	.0	.0	136.8	114.8	33.9	77.3	DN	2.650	100.0	100.0	2.6	2.826	.00	.00	
1123.34	99	2.6	3.1	29.6	2.400	.0	.0	131.4	109.1	34.3	81.8	GR	2.650	100.0	100.0	2.3	2.871	.00	.00	
1123.49	98	2.6	3.2	30.2	2.407	-.1	.0	130.3	105.2	35.0	81.0	GR	2.650	100.0	100.0	2.8	2.886	.00	.00	
1123.65	101	2.5	2.9	29.5	2.394	.0	.0	135.1	115.8	34.8	83.5	GR	2.650	100.0	100.0	1.9	2.864	.00	.00	
1123.80	99	2.5	2.8	29.0	2.380	-.1	.0	134.9	113.8	35.2	81.4	GR	2.650	100.0	100.0	2.5	2.844	.00	.00	
1123.95	96	2.5	2.7	28.0	2.373	.0	.0	136.0	113.4	35.8	77.1	DN	2.650	100.0	100.0	3.3	2.825	.00	.00	
1124.10	98	2.5	2.7	28.1	2.370	-.1	.0	135.7	111.1	35.5	76.6	DN	2.650	100.0	100.0	3.6	2.823	.00	.00	
1124.25	97	2.5	2.6	26.8	2.366	-.1	.0	136.7	104.3	35.0	68.3	DN	2.654	100.0	100.0	5.4	2.800	.00	.00	
1124.41	98	2.5	2.7	27.2	2.363	-.1	.0	132.9	102.7	34.8	69.5	DN	2.655	100.0	100.0	5.3	2.804	.00	.00	
1124.56	93	2.7	3.0	29.0	2.362	-.1	.0	126.7	98.5	36.2	74.9	GR	2.650	100.0	100.0	4.7	2.828	.00	.00	
1124.71	90	2.7	3.0	30.4	2.369	-.1	.0	121.7	88.7	36.4	71.4	GR	2.650	100.0	100.0	6.4	2.855	.00	.00	
1124.86	92	2.7	3.0	30.3	2.373	.0	.0	123.6	91.4	36.6	73.1	GR	2.650	100.0	100.0	5.8	2.857	.00	.00	
1125.02	90	2.7	3.0	29.4	2.381	.0	.0	125.8	92.8	37.4	70.4	GR	2.650	100.0	100.0	5.9	2.850	.00	.00	
1125.17	92	2.7	3.1	28.3	2.380	.0	.0	128.3	99.8	36.8	73.9	GR	2.650	100.0	100.0	4.3	2.835	.00	.00	
1125.32	92	2.7	3.1	28.7	2.380	.0	.0	127.8	98.5	36.1	73.8	GR	2.650	100.0	100.0	4.5	2.839	.00	.00	
1125.47	93	2.7	3.0	28.5	2.373	.0	.0	129.1	101.0	35.4	74.2	GR	2.650	100.0	100.0	4.4	2.832	.00	.00	
1125.63	89	2.6	2.8	29.7	2.359	.0	.0	124.1	91.4	34.9	70.2	GR	2.650	100.0	100.0	6.5	2.836	.00	.00	
1125.78	85	2.7	2.8	29.5	2.341	-.1	.0	121.9	85.5	33.5	65.5	GR	2.696	100.0	100.0	8.1	2.817	.00	.00	
1125.93	83	2.7	2.9	30.6	2.330	.0	.0	115.6	72.8	30.6	56.0	MN	2.744	100.0	100.0	11.6	2.824	.00	.00	
1126.08	80	2.8	3.0	30.4	2.335	.0	.0	116.1	73.9	34.8	58.9	GR	2.737	100.0	100.0	10.6	2.825	.00	.00	
1126.24	80	2.7	3.1	29.9	2.347	.0	.0	119.6	75.7	32.7	58.7	GR	2.745	100.0	100.0	10.0	2.828	.00	.00	
1126.39	83	2.6	3.1	29.6	2.352	.0	.0	124.2	80.8	33.4	62.3	GR	2.731	100.0	100.0	8.7	2.829	.00	.00	
1126.54	87	2.5	3.0	29.6	2.347	-.1	.0	127.3	85.3	33.8	67.3	GR	2.701	100.0	100.0	7.4	2.824	.00	.00	
1126.69	87	2.3	2.6	30.5	2.332	.0	.0	126.4	86.7	37.3	67.6	GR	2.701	100.0	100.0	8.3	2.824	.00	.00	
1126.85	85	2.2	2.4	33.1	2.319	-.1	.0	121.8	80.3	42.4	65.3	GR	2.777	100.0	100.0	10.7	2.848	.00	.00	
1127.00	83	2.2	2.3	34.0	2.310	-.1	.0	118.0	76.1	42.2	62.2	GR	2.800	100.0	100.0	12.3	2.853	.00	.00	
1127.15	80	2.3	2.4	32.6	2.304	-.1	.0	117.2	74.4	39.6	58.6	GR	2.749	100.0	100.0	12.7	2.829	.00	.00	
1127.30	81	2.5	2.6	28.4	2.303	-.1	.0	119.6	78.2	37.3	57.4	DN	2.655	100.0	100.0	11.3	2.769	.00	.00	
1127.46	80	2.8	2.7	28.3	2.310	-.1	.0	115.4	77.8	36.8	59.0	GR	2.655	100.0	100.0	10.5	2.774	.00	.00	
1127.61	78	2.9	3.1	28.3	2.320	-.1	.0	114.5	74.0	36.2	57.0	GR	2.673	100.0	100.0	10.7	2.782	.00	.00	
1127.76	78	2.8	3.1	29.6	2.325	-.1	.0	115.0	72.5	36.5	56.1	GR	2.704	100.0	100.0	11.1	2.805	.00	.00	
1127.91	81	2.7	2.9	29.4	2.326	-.1	.0	117.7	77.7	36.2	60.7	GR	2.689	100.0	100.0	9.9	2.802	.00	.00	

1128.06	83	2.8	2.7	29.3	2.325	-.1	.0	116.9	82.2	36.5	62.6	GR	2.679	100.0	100.0	9.4	2.800	.00	.00
1128.22	81	2.9	2.7	29.2	2.325	-.1	.0	115.0	80.8	36.4	60.1	GR	2.686	100.0	100.0	10.0	2.799	.00	.00
1128.37	75	2.9	2.7	29.1	2.322	-.1	.0	113.6	75.6	36.3	53.3	GR	2.698	100.0	100.0	11.8	2.795	.00	.00
1128.52	76	2.9	2.9	29.5	2.319	-.1	.0	113.8	72.6	36.6	53.7	GR	2.701	100.0	100.0	11.9	2.798	.00	.00
1128.67	81	2.8	2.9	29.1	2.319	-.1	.0	115.8	77.0	36.5	60.4	GR	2.676	100.0	100.0	10.1	2.792	.00	.00
1128.83	83	2.7	2.9	29.0	2.326	-.1	.0	118.0	80.3	36.6	62.9	GR	2.673	100.0	100.0	9.1	2.797	.00	.00
1128.98	84	2.8	2.9	29.9	2.330	.0	.0	116.6	80.2	34.8	63.3	GR	2.696	100.0	100.0	9.2	2.813	.00	.00
1129.13	82	2.8	2.9	30.2	2.326	-.1	.0	114.4	77.0	33.4	61.4	GR	2.704	100.0	100.0	10.0	2.814	.00	.00
1129.28	80	2.9	2.9	30.9	2.315	-.1	.0	111.3	72.9	36.3	59.5	GR	2.708	100.0	100.0	11.1	2.814	.00	.00
1129.44	79	2.8	2.8	28.9	2.309	-.1	.0	113.5	75.0	35.0	58.1	GR	2.667	100.0	100.0	11.0	2.780	.00	.00
1129.59	73	2.8	2.9	28.5	2.308	-.1	.0	114.2	70.9	34.5	51.2	GR	2.681	100.0	100.0	12.7	2.775	.00	.00
1129.74	73	2.9	3.0	27.8	2.312	-.1	.0	114.6	71.3	33.9	51.2	GR	2.673	100.0	100.0	12.2	2.768	.00	.00
1129.89	72	2.9	3.0	29.1	2.320	-.1	.0	113.5	69.4	33.5	49.9	GR	2.704	100.0	100.0	12.7	2.793	.00	.00
1130.05	76	2.9	3.0	29.9	2.326	.0	.0	112.6	70.9	32.9	54.0	GR	2.720	100.0	100.0	11.8	2.810	.00	.00
1130.20	74	2.9	3.1	29.2	2.327	.0	.0	114.8	71.4	32.8	52.3	GR	2.708	100.0	100.0	11.9	2.801	.00	.00
1130.35	73	2.9	3.1	28.3	2.324	-.1	.0	115.8	71.0	29.8	50.8	GR	2.694	100.0	100.0	12.1	2.786	.00	.00
1130.50	71	2.9	3.1	28.4	2.322	-.1	.0	116.4	69.2	29.9	48.4	GR	2.699	100.0	100.0	12.8	2.786	.00	.00
1130.66	71	2.9	3.1	28.3	2.323	-.1	.0	116.5	69.2	30.6	48.7	GR	2.698	100.0	100.0	12.6	2.785	.00	.00
1130.81	76	2.9	3.2	28.2	2.326	-.1	.0	116.6	71.6	31.5	53.9	GR	2.687	100.0	100.0	11.2	2.786	.00	.00
1130.96	80	2.8	2.9	27.4	2.328	-.1	.0	119.9	79.9	31.9	58.6	GR	2.660	100.0	100.0	9.6	2.776	.00	.00

Zone No. 3 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
1131.11	82	2.6	2.8	28.0	2.336	-.1	.0	123.6	85.0	32.6	61.4	GR	2.671	100.0	100.0	8.8	2.792	.00	.00	
1131.27	81	2.5	2.6	28.2	2.338	-.1	.0	126.5	86.4	36.0	60.2	GR	2.682	100.0	100.0	9.1	2.796	.00	.00	
1131.42	84	2.5	2.7	28.9	2.340	-.1	.0	127.0	87.2	36.7	63.5	GR	2.687	100.0	100.0	8.4	2.808	.00	.00	
1131.57	84	2.5	2.8	28.9	2.337	-.1	.0	125.8	85.1	35.9	63.4	GR	2.683	100.0	100.0	8.6	2.805	.00	.00	
1131.72	83	2.5	2.8	30.4	2.334	-.1	.0	122.3	79.5	32.9	62.5	GR	2.720	100.0	100.0	9.6	2.824	.00	.00	
1131.87	79	2.5	3.0	32.1	2.332	-.1	.0	117.6	66.9	30.2	53.3	MN	2.800	100.0	100.0	13.2	2.846	.00	.00	
1132.03	76	2.7	2.9	27.6	2.348	-.1	.0	126.2	75.8	27.5	46.5	MN	2.716	100.0	100.0	12.0	2.797	.00	.00	
1132.18	71	3.9	4.0	20.1	2.400	-.1	.0	138.1	72.6	19.5	23.5	MN	2.696	100.0	100.0	13.1	2.733	.00	.00	
1132.33	64	7.3	7.3	13.4	2.478	-.1	.0	137.0	101.2	19.0	34.2	DN	2.644	100.0	100.0	4.3	2.706	.00	.00	
1132.48	63	9.4	13.6	16.9	2.537	-.1	.0	114.0	73.8	21.3	39.2	GR	2.753	100.0	100.0	3.6	2.810	.00	.00	
1132.64	66	5.0	7.1	24.2	2.525	.0	.0	114.5	63.2	25.4	42.4	GR	2.923	100.0	100.0	8.4	2.908	.00	.00	5
1132.79	70	3.3	4.2	26.8	2.462	-.1	.0	125.9	73.0	33.4	47.4	GR	2.885	100.0	100.0	9.4	2.886	.00	.00	
1132.94	71	2.7	3.4	26.8	2.387	-.1	.0	133.0	76.1	35.2	47.9	GR	2.754	100.0	100.0	10.4	2.819	.00	.00	
1133.09	69	2.5	3.3	26.0	2.341	-.1	.0	132.5	72.1	36.1	45.5	GR	2.686	100.0	100.0	11.9	2.768	.00	.00	
1133.25	70	2.6	3.7	32.2	2.311	-.1	.0	113.0	55.4	38.0	46.9	GR	2.779	100.0	100.0	15.6	2.829	.00	.00	
1133.40	74	2.7	3.9	36.9	2.288	-.1	.0	100.6	48.7	38.0	51.7	GR	2.858	100.0	100.0	17.2	2.873	.00	.00	
1133.55	81	2.8	3.4	37.9	2.266	-.1	.0	96.2	53.2	37.8	60.2	GR	2.841	96.2	96.2	15.8	2.868	.00	.00	
1133.70	84	2.7	3.0	36.7	2.246	-.1	.0	96.9	57.8	37.1	62.7	SD	2.752	96.9	96.9	15.1	2.834	.00	.00	
1133.86	85	2.7	3.0	34.4	2.238	-.1	.0	99.5	56.2	35.9	55.1	SD	2.699	99.5	99.5	16.5	2.797	.00	.00	
1134.01	86	2.6	3.2	33.0	2.256	-.1	.0	104.6	57.1	34.6	54.7	SD	2.693	100.0	100.0	15.4	2.792	.00	.00	
1134.16	88	2.5	3.1	28.8	2.297	-.1	.0	118.2	68.9	32.8	57.2	DN	2.655	100.0	100.0	11.7	2.768	.00	.00	
1134.31	90	2.6	3.1	26.7	2.345	-.1	.0	129.5	84.8	32.8	61.2	DN	2.656	100.0	100.0	8.0	2.780	.00	.00	
1134.47	92	2.7	3.1	26.1	2.377	.0	.0	133.0	102.3	32.4	68.6	DN	2.653	100.0	100.0	4.6	2.801	.00	.00	
1134.62	90	3.0	3.1	26.0	2.388	.0	.0	128.3	107.9	32.4	70.8	GR	2.650	100.0	100.0	3.6	2.810	.00	.00	
1134.77	90	3.2	3.0	27.2	2.389	.0	.0	122.7	102.9	33.4	70.5	GR	2.650	100.0	100.0	4.4	2.827	.00	.00	
1134.92	89	3.1	3.0	26.8	2.383	.0	.0	124.6	105.3	32.5	69.9	GR	2.672	100.0	100.0	4.3	2.816	.00	.00	
1135.08	91	3.0	2.9	29.5	2.374	.0	.0	118.0	94.2	33.5	71.6	GR	2.650	100.0	100.0	5.7	2.846	.00	.00	
1135.23	86	3.0	3.0	29.4	2.357	-.1	.0	117.2	86.7	32.7	65.8	GR	2.717	100.0	100.0	7.4	2.830	.00	.00	

1135.38	82	3.0	3.0	31.3	2.337	-.1	.0	109.8	73.8	32.7	61.1	GR	2.764	100.0	100.0	10.4	2.839	.00	.00	
1135.53	80	3.0	3.1	30.4	2.323	-.1	.0	110.0	72.5	33.2	58.9	GR	2.711	100.0	100.0	10.8	2.815	.00	.00	
1135.68	78	3.0	3.0	31.9	2.308	-.1	.0	105.1	67.3	33.6	56.8	GR	2.739	100.0	100.0	12.6	2.822	.00	.00	
1135.84	75	3.0	2.9	30.9	2.299	-.1	.0	107.0	67.7	33.9	53.6	GR	2.705	100.0	100.0	13.2	2.800	.00	.00	
1135.99	79	2.8	2.8	30.0	2.308	-.1	.0	112.3	73.8	36.3	57.5	GR	2.690	100.0	100.0	11.6	2.796	.00	.00	
1136.14	85	2.6	2.7	28.2	2.342	.0	.0	124.7	89.0	37.2	64.5	GR	2.673	100.0	100.0	7.8	2.801	.00	.00	
1136.29	93	2.4	2.7	28.7	2.381	.1	.0	137.0	107.8	37.5	74.9	GR	2.650	100.0	100.0	4.1	2.841	.00	.00	
1136.45	94	2.1	2.5	28.4	2.403	.1	.0	149.6	117.4	37.7	75.2	GR	2.650	100.0	100.0	3.5	2.857	.00	.00	
1136.60	94	1.9	2.2	29.7	2.398	.1	.0	153.7	117.1	37.8	75.4	GR	2.650	100.0	100.0	4.3	2.870	.00	.00	
1136.75	93	1.7	2.0	30.8	2.377	.1	.0	154.4	112.6	38.3	74.5	GR	2.650	100.0	100.0	5.5	2.867	.00	.00	
1136.90	92	1.7	2.0	32.4	2.359	.0	.0	152.4	107.7	39.0	73.0	GR	2.650	100.0	100.0	6.5	2.874	.00	.00	8
1137.06	91	1.6	1.9	34.0	2.352	.1	.0	153.6	108.1	42.0	72.6	GR	2.650	100.0	100.0	6.6	2.889	.00	.00	8
1137.21	93	1.6	1.9	36.2	2.337	.1	.0	157.4	112.0	42.0	74.1	GR	2.650	100.0	100.0	6.1	2.907	.00	.00	8
1137.36	91	1.6	1.9	36.7	2.310	.1	.0	156.9	107.4	40.9	72.4	GR	2.650	100.0	100.0	6.7	2.889	.00	.00	8
1137.51	91	1.7	2.1	34.7	2.284	.0	.0	152.9	103.7	39.4	72.3	GR	2.650	100.0	100.0	6.8	2.839	.00	.00	8
1137.67	86	1.8	2.2	32.4	2.289	.0	.0	132.4	77.4	33.7	61.1	SD	2.704	100.0	100.0	12.3	2.813	.00	.00	
1137.82	90	2.0	2.4	30.9	2.312	.0	.0	130.9	80.8	32.3	61.3	MN	2.700	100.0	100.0	10.8	2.811	.00	.00	
1137.97	87	2.4	2.8	28.7	2.347	-.1	.0	131.5	90.5	36.0	67.1	GR	2.679	100.0	100.0	7.1	2.811	.00	.00	
1138.12	84	3.0	3.4	23.1	2.391	-.1	.0	141.1	76.6	22.3	33.1	MN	2.709	100.0	100.0	12.1	2.770	.00	.00	
1138.28	75	4.8	5.7	17.5	2.446	-.1	.0	135.9	96.6	23.7	45.2	DN	2.646	100.0	100.0	4.4	2.736	.00	.00	
1138.43	73	6.7	7.0	18.1	2.488	-.1	.0	121.0	104.9	22.0	50.6	GR	2.682	100.0	100.0	1.9	2.783	.00	.00	
1138.58	75	4.9	4.8	21.3	2.470	-.1	.0	124.4	103.3	26.3	53.3	GR	2.724	100.0	100.0	3.5	2.815	.00	.00	
1138.73	81	2.9	2.9	26.3	2.413	.0	.0	132.2	99.4	29.9	59.7	GR	2.757	100.0	100.0	6.2	2.836	.00	.00	
1138.89	87	2.2	2.5	29.1	2.362	.0	.0	139.1	98.0	34.3	67.7	GR	2.708	100.0	100.0	6.6	2.829	.00	.00	
1139.04	88	2.0	2.5	30.8	2.352	.1	.0	138.1	92.6	34.8	68.6	GR	2.751	100.0	100.0	7.6	2.844	.00	.00	
1139.19	91	2.0	2.5	32.0	2.364	.0	.0	137.5	93.7	34.4	71.6	GR	2.650	100.0	100.0	7.0	2.873	.00	.00	8
1139.34	90	2.0	2.4	31.1	2.370	.1	.0	141.2	96.4	37.1	70.6	GR	2.650	100.0	100.0	7.0	2.865	.00	.00	
1139.49	90	1.8	2.3	30.1	2.366	.0	.0	149.1	102.2	37.7	70.6	GR	2.650	100.0	100.0	6.5	2.848	.00	.00	

Zone No. 3 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
1139.65	88	1.7	2.1	30.3	2.360	.0	.0	152.2	102.1	37.4	68.3	GR	2.755	100.0	100.0	7.3	2.845	.00	.00	
1139.80	88	1.7	2.0	32.2	2.357	.0	.0	144.9	98.7	37.1	68.7	GR	2.832	100.0	100.0	8.4	2.869	.00	.00	
1139.95	89	2.0	2.1	36.0	2.358	.0	.0	136.7	98.3	37.8	70.1	GR	2.650	100.0	100.0	7.6	2.922	.00	.00	8
1140.10	91	2.2	2.3	34.1	2.347	.0	.0	132.4	100.1	37.3	72.5	GR	2.650	100.0	100.0	6.7	2.887	.00	.00	8
1140.26	90	2.2	2.5	31.5	2.350	.0	.0	133.0	92.9	36.9	71.1	GR	2.650	100.0	100.0	7.2	2.853	.00	.00	8
1140.41	96	1.9	2.2	29.9	2.351	.1	.0	148.2	113.1	36.8	77.9	GR	2.650	100.0	100.0	4.6	2.832	.00	.00	
1140.56	94	1.8	2.1	31.9	2.363	.1	.0	147.8	109.4	37.5	75.9	GR	2.650	100.0	100.0	5.5	2.870	.00	.00	8
1140.71	97	1.8	2.1	33.3	2.362	.1	.0	149.4	115.2	38.4	78.8	GR	2.650	100.0	100.0	4.5	2.888	.00	.00	8
1140.87	97	1.9	2.2	34.9	2.355	.1	.0	146.8	113.8	39.2	79.3	GR	2.650	100.0	100.0	4.4	2.904	.00	.00	8
1141.02	100	2.0	2.4	35.9	2.349	.1	.0	143.7	116.2	40.8	82.9	GR	2.650	100.0	100.0	3.3	2.913	.00	.00	8
1141.17	103	2.2	2.6	37.0	2.350	.1	.0	140.9	115.5	41.8	86.4	GR	2.650	100.0	100.0	2.3	2.928	.00	.00	8
1141.32	104	2.2	2.8	33.4	2.360	.1	.0	139.0	114.2	41.3	87.7	GR	2.650	100.0	100.0	2.0	2.888	.00	.00	8
1141.48	106	2.2	2.7	33.7	2.361	.1	.0	140.5	118.4	40.9	89.8	GR	2.650	100.0	100.0	1.5	2.893	.00	.00	8
1141.63	107	2.1	1.7	34.7	2.368	.2	.0	143.9	150.9	40.7	90.7	GR	2.650	100.0	100.0	1.3	2.913	.00	.00	8
1141.78	102	2.1	1.6	37.6	2.365	.2	.0	144.1	147.7	40.3	85.8	GR	2.650	100.0	100.0	2.5	2.950	.00	.00	8
1141.93	100	2.1	1.6	35.2	2.363	.1	.0	140.5	141.0	39.5	83.2	GR	2.650	100.0	100.0	3.2	2.915	.00	.00	8
1142.09	101	2.3	2.6	33.7	2.358	.1	.0	137.0	112.1	37.0	83.6	GR	2.650	100.0	100.0	3.1	2.891	.00	.00	8
1142.24	102	2.3	2.6	32.4	2.368	.1	.0	124.8	79.0	30.1	61.0	MN	2.876	100.0	100.0	10.5	2.882	.00	.00	
1142.39	99	2.4	2.7	33.6	2.392	.1	.0	121.8	79.0	29.8	64.0	MN	2.978	100.0	100.0	9.8	2.919	.00	.00	5
1142.54	99	2.5	2.8	32.7	2.405	.1	.0	123.4	89.3	30.4	70.9	MN	2.650	100.0	100.0	7.0	2.917	.00	.00	

1142.70	98	2.7	2.8	31.8	2.398	.0	.0	121.1	92.6	30.9	72.7	MN	2.650	100.0	100.0	6.2	2.899	.00	.00	
1142.85	101	2.7	2.4	30.8	2.377	.0	.0	121.0	100.1	31.4	71.5	MN	2.650	100.0	100.0	6.4	2.866	.00	.00	
1143.00	99	2.4	2.0	32.3	2.357	.0	.0	121.8	95.3	31.8	67.9	MN	2.837	100.0	100.0	8.7	2.870	.00	.00	
1143.15	97	2.3	2.0	31.7	2.350	.0	.0	127.6	97.3	32.0	67.7	MN	2.793	100.0	100.0	8.5	2.856	.00	.00	
1143.30	98	2.2	2.3	30.2	2.362	.0	.0	137.3	114.0	33.5	80.2	MN	2.650	100.0	100.0	3.9	2.846	.00	.00	
1143.46	98	2.4	2.6	29.1	2.379	.0	.0	138.0	115.7	33.3	80.6	GR	2.650	100.0	100.0	2.8	2.845	.00	.00	
1143.61	101	2.3	2.6	28.3	2.393	.0	.0	143.9	127.5	33.6	83.5	GR	2.650	100.0	100.0	1.3	2.847	.00	.00	
1143.76	98	2.2	2.6	29.0	2.387	-.1	.0	143.1	118.6	34.0	80.9	GR	2.650	100.0	100.0	2.5	2.850	.00	.00	
1143.91	97	2.3	2.6	27.7	2.370	-.1	.0	142.6	111.8	34.6	74.5	DN	2.650	100.0	100.0	3.9	2.817	.00	.00	
1144.07	99	2.4	2.7	28.2	2.357	.0	.0	134.6	104.1	34.9	73.2	DN	2.650	100.0	100.0	4.8	2.814	.00	.00	
1144.22	101	2.6	2.7	29.8	2.363	.1	.0	130.3	111.1	34.3	83.1	DN	2.650	100.0	100.0	2.8	2.841	.00	.00	
1144.37	99	2.5	2.7	31.9	2.393	.1	.0	128.5	106.7	33.6	82.1	GR	2.650	100.0	100.0	3.5	2.897	.00	.00	8
1144.52	97	2.4	2.8	31.2	2.411	.1	.0	133.7	106.1	34.5	79.4	GR	2.650	100.0	100.0	3.7	2.902	.00	.00	
1144.68	97	2.4	2.7	30.3	2.413	.0	.0	137.3	110.0	34.6	78.9	GR	2.650	100.0	100.0	3.3	2.893	.00	.00	
1144.83	104	2.3	2.8	30.1	2.393	.0	.0	140.4	122.3	35.5	87.6	GR	2.650	100.0	100.0	1.1	2.872	.00	.00	
1144.98	110	2.3	2.7	30.9	2.382	.1	.0			35.9	93.4	N	2.650	100.0	100.0	1.8	2.873	.00	.00	2
1145.13	106	2.3	2.7	31.0	2.378	.0	.0	139.0	121.0	35.6	90.3	GR	2.650	100.0	100.0	1.1	2.870	.00	.00	
1145.29	102	2.3	1.8	30.5	2.394	.0	.0	138.9	144.9	35.9	84.8	GR	2.650	100.0	100.0	2.2	2.878	.00	.00	
1145.44	97	2.4	1.8	29.7	2.409	.0	.0	138.5	138.5	34.2	79.7	GR	2.650	100.0	100.0	2.9	2.880	.00	.00	
1145.59	97	2.4	1.8	28.5	2.408	-.1	.0	141.9	147.2	33.4	79.8	GR	2.650	100.0	100.0	2.2	2.863	.00	.00	
1145.74	96	2.5	3.2	28.1	2.394	-.1	.0	138.0	106.6	33.3	77.5	GR	2.650	100.0	100.0	2.8	2.845	.00	.00	
1145.90	97	2.4	2.9	29.8	2.389	-.1	.0	134.1	105.0	38.0	78.8	GR	2.650	100.0	100.0	3.5	2.864	.00	.00	
1146.05	100	2.5	3.1	31.0	2.397	.0	.0	132.3	104.6	40.3	83.3	GR	2.650	100.0	100.0	2.8	2.887	.00	.00	
1146.20	99	2.3	2.9	36.3	2.400	.0	.0	133.7	103.2	46.1	81.7	GR	2.650	100.0	100.0	3.6	2.963	.00	.00	8
1146.35	97	1.9	2.0	41.7	2.348	.0	.0	148.1	118.0	43.9	79.1	GR	2.650	100.0	100.0	4.4	2.988	.00	.00	8
1146.51	91	1.8	1.9	47.4	2.224	.0	.0	145.3	108.4	45.7	71.6	GR	2.650	100.0	100.0	7.0	2.955	.00	.00	8
1146.66	90	2.1	2.1	42.9	2.095	-.1	.0	95.5	52.8	44.9	50.6	SD	2.708	95.5	95.5	22.9	2.791	.00	.00	8
1146.81	91	2.8	3.5	36.3	2.088	.0	.0	83.1	33.4	37.0	14.4	SD	2.682	83.1	83.1	33.3	2.702	.00	.00	
1146.96	100	2.8	3.4	30.4	2.199	.0	.0	99.2	46.6	34.2	35.4	DN	2.652	99.2	99.2	21.7	2.709	.00	.00	
1147.11	102	2.5	3.1	27.4	2.323	.0	.0	126.5	76.0	30.8	58.3	DN	2.655	100.0	100.0	9.9	2.772	.00	.00	
1147.27	100	2.7	3.7	23.8	2.392	-.1	.0	143.6	95.8	30.3	61.3	DN	2.651	100.0	100.0	5.0	2.781	.00	.00	
1147.42	96	2.9	4.6	22.9	2.415	.0	.0	145.7	98.8	28.8	63.6	DN	2.647	100.0	100.0	3.0	2.788	.00	.00	
1147.57	95	3.0	4.8	25.0	2.419	.0	.0	137.5	102.3	29.6	75.7	DN	2.650	100.0	100.0	1.0	2.822	.00	.00	
1147.72	95	2.8	3.6	28.7	2.400	.0	.0	129.1	97.9	33.1	76.7	GR	2.650	100.0	100.0	3.3	2.857	.00	.00	
1147.88	98	2.6	3.0	30.0	2.375	.1	.0	128.3	103.1	38.8	80.6	GR	2.650	100.0	100.0	3.4	2.854	.00	.00	
1148.03	97	2.5	2.8	31.3	2.365	.1	.0	129.3	101.5	39.2	79.8	GR	2.650	100.0	100.0	4.2	2.863	.00	.00	8

Zone No. 3 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
1148.18	93	2.7	2.9	33.6	2.354	.0	.0	121.2	90.0	38.8	74.1	GR	2.650	100.0	100.0	6.1	2.885	.00	.00	8
1148.33	88	3.0	3.5	35.0	2.323	.0	.0	102.5	65.4	38.4	68.5	GR	2.859	100.0	100.0	10.6	2.878	.00	.00	
1148.49	91	3.1	3.9	33.3	2.303	.0	.0	110.7	75.9	37.8	72.2	GR	2.650	100.0	100.0	6.8	2.837	.00	.00	8
1148.64	98	2.9	3.7	30.0	2.325	.0	.0	114.4	78.2	35.8	72.3	DN	2.650	100.0	100.0	6.8	2.810	.00	.00	8
1148.79	103	2.6	3.1	30.1	2.367	.1	.0	128.7	108.1	35.4	86.0	DN	2.650	100.0	100.0	2.1	2.849	.00	.00	
1148.94	101	2.4	2.8	30.7	2.396	.1	.0	134.8	112.9	34.6	84.0	GR	2.650	100.0	100.0	2.4	2.882	.00	.00	
1149.10	103	2.3	2.7	30.3	2.399	.1	.0	140.4	121.9	34.4	86.1	GR	2.650	100.0	100.0	1.6	2.880	.00	.00	
1149.25	98	2.3	2.7	27.5	2.398	.1	.0	145.4	126.2	34.1	80.9	GR	2.650	100.0	100.0	1.5	2.839	.00	.00	
1149.40	106	2.4	2.8	28.1	2.398	.0	.0	142.5	130.9	34.4	85.5	DN	2.650	100.0	100.0	.5	2.849	.00	.00	
1149.55	104	2.5	2.9	26.4	2.398	.0	.0	143.9	121.7	34.9	76.8	DN	2.650	100.0	100.0	2.0	2.825	.00	.00	
1149.71	103	2.5	2.8	28.1	2.399	.0	.0	140.4	129.9	34.7	85.5	DN	2.650	100.0	100.0	.5	2.849	.00	.00	
1149.86	96	2.5	2.7	28.5	2.391	.0	.0	135.2	113.3	34.6	77.5	GR	2.650	100.0	100.0	3.1	2.848	.00	.00	

1150.01	93	2.5	2.6	30.3	2.382	.0	.0	128.4	102.6	33.6	74.7	GR	2.650	100.0	100.0	5.1	2.865	.00	.00
1150.16	94	2.6	2.6	30.8	2.374	.0	.0	125.9	101.5	33.5	76.0	GR	2.650	100.0	100.0	5.1	2.864	.00	.00
1150.32	94	2.6	2.6	28.8	2.372	.0	.0	129.6	108.0	35.7	75.9	GR	2.650	100.0	100.0	4.1	2.834	.00	.00
1150.47	96	2.7	2.7	27.4	2.371	.0	.0	131.3	108.6	33.9	73.3	DN	2.650	100.0	100.0	4.0	2.814	.00	.00
1150.62	97	2.8	3.0	28.3	2.376	.0	.0	128.2	109.6	36.2	78.9	GR	2.650	100.0	100.0	2.9	2.832	.00	.00
1150.77	97	2.9	3.1	29.6	2.386	.0	.0	123.5	103.8	35.9	79.6	GR	2.650	100.0	100.0	3.2	2.859	.00	.00
1150.92	96	3.0	3.2	32.1	2.397	-.1	.0	117.1	91.9	33.9	78.1	GR	2.650	100.0	100.0	4.8	2.903	.00	.00
1151.08	97	2.9	3.1	29.8	2.412	-.1	.0	124.1	105.3	33.3	79.0	GR	2.650	100.0	100.0	3.1	2.884	.00	.00
1151.23	97	2.9	3.2	29.7	2.423	-.1	.0	125.8	107.4	33.3	79.8	GR	2.650	100.0	100.0	2.6	2.893	.00	.00
1151.38	95	2.8	3.0	27.4	2.422	.0	.0	134.2	117.6	34.6	77.2	GR	2.650	100.0	100.0	2.0	2.859	.00	.00
1151.53	94	2.6	2.8	27.5	2.407	.0	.0	136.7	117.0	35.4	76.2	GR	2.650	100.0	100.0	2.6	2.848	.00	.00
1151.69	89	2.5	2.7	27.8	2.392	.0	.0	138.4	107.8	35.4	69.9	GR	2.720	100.0	100.0	4.5	2.839	.00	.00
1151.84	87	2.3	2.6	28.3	2.383	.0	.0	139.0	103.6	35.5	68.0	GR	2.730	100.0	100.0	5.6	2.838	.00	.00
1151.99	85	2.2	2.5	29.3	2.378	.0	.0	138.9	96.3	34.8	64.9	GR	2.772	100.0	100.0	7.3	2.847	.00	.00
1152.14	83	2.2	2.4	30.8	2.366	.0	.0	133.5	88.2	33.9	62.1	GR	2.809	100.0	100.0	9.2	2.857	.00	.00
1152.30	77	2.2	2.5	31.0	2.354	.0	.0	129.1	79.6	33.0	55.3	GR	2.804	100.0	100.0	11.5	2.850	.00	.00
1152.45	73	2.4	2.7	29.9	2.352	.0	.0	126.4	75.6	32.8	51.0	GR	2.776	100.0	100.0	12.2	2.833	.00	.00
1152.60	72	2.7	3.2	29.6	2.353	.1	.0	121.3	68.7	32.4	49.0	GR	2.773	100.0	100.0	12.5	2.829	.00	.00
1152.75	77	3.0	3.6	30.0	2.356	.0	.0	113.9	68.2	30.1	56.0	GR	2.776	100.0	100.0	10.7	2.838	.00	.00
1152.91	80	3.2	4.0	31.9	2.354	.0	.0	106.6	63.2	30.4	59.4	GR	2.828	100.0	100.0	10.9	2.863	.00	.00
1153.06	79	3.2	3.9	27.4	2.370	.0	.0	121.1	51.9	21.0	17.1	MN	2.798	100.0	100.0	20.0	2.813	.00	.00
1153.21	71	3.9	5.3	22.8	2.416	.0	.0	130.7	52.8	17.3	14.1	MN	2.771	100.0	100.0	17.1	2.788	.00	.00
1153.36	63	5.9	8.5	16.7	2.494	-.1	.0	145.2	63.4	13.0	17.2	MN	2.740	100.0	100.0	10.6	2.767	.00	.00
1153.52	60	12.3	19.3	13.2	2.578	-.1	.0	131.2	62.3	8.7	19.4	MN	2.767	100.0	100.0	6.4	2.792	.00	.00
1153.67	61	24.6	26.6	11.7	2.625	-.1	.0	100.0	100.0	10.2	36.2	GR	2.775	100.0	100.0	.0	2.812	.00	.00
1153.82	63	20.9	26.4	13.3	2.622	-.1	.0	96.0	83.6	12.0	38.5	GR	2.793	96.0	96.0	.3	2.834	.00	.00
1153.97	60	9.9	15.3	17.6	2.579	-.1	.0	109.8	63.1	15.7	35.4	GR	2.839	100.0	100.0	5.0	2.859	.00	.00
1154.13	59	5.0	11.3	22.1	2.514	-.1	.0	123.6	50.8	22.8	34.6	GR	2.853	100.0	100.0	9.3	2.866	.00	.00
1154.28	60	4.0	10.2	24.2	2.455	-.1	.0	123.3	45.8	23.4	34.9	GR	2.820	100.0	100.0	11.5	2.844	.00	.00
1154.43	68	3.8	10.6	25.0	2.418	-.1	.0	120.3	46.3	24.1	44.2	GR	2.766	100.0	100.0	9.7	2.821	.00	.00
1154.58	69	3.9	7.5	25.7	2.404	-.1	.0	114.7	53.5	24.9	45.8	GR	2.759	100.0	100.0	10.0	2.819	.00	.00
1154.73	69	4.0	6.3	27.1	2.404	-.1	.0	109.3	55.2	24.7	45.8	MN	2.797	100.0	100.0	10.9	2.839	.00	.00
1154.89	68	4.4	5.5	27.1	2.412	-.1	.0	104.2	58.6	24.6	44.9	GR	2.811	100.0	100.0	11.1	2.845	.00	.00
1155.04	69	4.9	6.1	27.3	2.432	-.1	.0	99.7	57.4	26.9	46.6	GR	2.849	99.7	99.7	10.4	2.867	.00	.00
1155.19	70	4.9	5.8	27.6	2.446	-.1	.0	100.0	59.7	28.4	47.7	GR	2.881	100.0	100.0	10.1	2.884	.00	.00
1155.34	68	4.4	5.5	27.3	2.442	-.1	.0	105.6	59.9	30.6	44.4	GR	2.867	100.0	100.0	10.9	2.876	.00	.00
1155.50	65	4.0	5.7	28.6	2.414	-.1	.0	105.8	52.2	29.7	40.6	GR	2.858	100.0	100.0	13.3	2.870	.00	.00
1155.65	67	3.4	5.3	28.9	2.373	-.1	.0	110.4	53.2	31.3	43.5	GR	2.798	100.0	100.0	13.3	2.837	.00	.00
1155.80	68	3.1	4.7	27.8	2.346	-.1	.0	116.4	57.5	30.3	44.9	GR	2.724	100.0	100.0	12.7	2.798	.00	.00
1155.95	71	3.0	4.0	26.2	2.343	-.1	.0	121.0	66.9	30.0	48.9	GR	2.684	100.0	100.0	11.1	2.773	.00	.00
1156.11	71	2.9	3.5	26.7	2.363	.0	.0	127.2	74.1	29.3	47.8	GR	2.711	100.0	100.0	10.7	2.797	.00	.00
1156.26	76	2.5	3.0	28.1	2.381	.0	.0	131.8	81.4	29.5	54.6	GR	2.766	100.0	100.0	9.4	2.833	.00	.00
1156.41	81	2.2	2.8	29.0	2.384	.0	.0	138.9	87.5	29.6	60.0	GR	2.787	100.0	100.0	8.4	2.847	.00	.00
1156.56	81	2.1	2.8	28.9	2.374	.0	.0	141.4	86.2	29.3	60.1	GR	2.760	100.0	100.0	8.4	2.837	.00	.00

Zone No. 3 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
1156.72	78	2.1	2.8	28.9	2.358	.0	.0	140.4	61.3	23.1	24.0	MN	2.803	100.0	100.0	19.2	2.823	.00	.00	
1156.87	73	2.4	2.8	27.5	2.354	.0	.0	136.6	64.7	23.3	25.5	MN	2.771	100.0	100.0	18.0	2.801	.00	.00	
1157.02	75	2.8	3.1	26.7	2.359	-.1	.0	129.5	62.8	22.9	25.0	MN	2.761	100.0	100.0	17.5	2.793	.00	.00	
1157.17	73	3.1	3.4	27.4	2.369	-.1	.0	120.8	63.8	24.0	33.2	MN	2.774	100.0	100.0	15.4	2.812	.00	.00	

1157.33	77	2.9	3.2	29.4	2.361	-.1	.0	118.6	74.4	31.2	55.2	GR	2.766	100.0	100.0	10.4	2.833	.00	.00	
1157.48	76	2.6	3.0	29.0	2.349	-.1	.0	125.3	76.6	33.1	54.1	GR	2.733	100.0	100.0	10.7	2.817	.00	.00	
1157.63	76	2.5	3.1	28.1	2.345	-.1	.0	127.9	77.2	33.1	54.2	GR	2.703	100.0	100.0	10.3	2.801	.00	.00	
1157.78	77	2.4	2.7	27.2	2.353	-.1	.0	133.7	86.1	33.8	55.9	GR	2.691	100.0	100.0	9.2	2.795	.00	.00	
1157.94	78	2.1	2.4	27.7	2.359	-.1	.0	142.6	93.9	33.9	56.7	GR	2.705	100.0	100.0	9.0	2.808	.00	.00	
1158.09	81	1.9	2.2	27.9	2.363	-.1	.0	149.8	102.0	35.6	60.4	GR	2.704	100.0	100.0	8.0	2.814	.00	.00	
1158.24	83	2.0	2.2	29.3	2.364	-.1	.0	145.3	98.1	35.7	62.2	GR	2.747	100.0	100.0	8.3	2.834	.00	.00	
1158.39	85	2.0	2.2	29.9	2.368	.0	.0	143.0	98.2	35.8	64.9	GR	2.773	100.0	100.0	7.8	2.847	.00	.00	
1158.54	86	1.9	2.1	30.1	2.369	.0	.0	145.5	101.5	34.2	65.7	GR	2.781	100.0	100.0	7.7	2.851	.00	.00	
1158.70	85	1.9	2.1	27.9	2.372	.0	.0	154.3	110.2	31.5	65.0	GR	2.703	100.0	100.0	6.4	2.822	.00	.00	
1158.85	83	2.0	2.2	27.1	2.381	-.1	.0	152.1	90.3	25.8	46.0	MN	2.758	100.0	100.0	11.2	2.818	.00	.00	
1159.00	81	2.5	2.6	26.9	2.388	-.1	.0	138.0	100.8	28.1	60.2	GR	2.718	100.0	100.0	6.8	2.822	.00	.00	
1159.15	78	3.1	3.0	28.1	2.395	-.1	.0	120.8	85.6	29.2	57.0	GR	2.789	100.0	100.0	8.5	2.845	.00	.00	
1159.31	81	3.0	3.1	27.2	2.388	-.1	.0	126.0	90.2	36.7	59.7	GR	2.732	100.0	100.0	7.2	2.826	.00	.00	
1159.46	83	2.2	2.9	32.1	2.350	-.1	.0	128.5	75.7	40.0	62.1	GR	2.822	100.0	100.0	10.3	2.862	.00	.00	
1159.61	84	1.3	1.8	35.9	2.293	.0	.0	146.0	80.7	40.8	64.4	GR	2.825	100.0	100.0	13.0	2.864	.00	.00	
1159.76	90	1.2	1.4	37.9	2.242	.0	.0	177.5	123.7	40.9	71.0	GR	2.650	100.0	100.0	7.2	2.847	.00	.00	8
1159.92	95	1.3	1.4	32.5	2.239	.0	.0	146.6	88.2	38.8	58.8	DN	2.650	100.0	100.0	14.9	2.772	.00	.00	
1160.07	98	1.8	2.0	29.3	2.285	.0	.0	136.1	83.6	37.5	56.1	DN	2.655	100.0	100.0	12.6	2.765	.00	.00	
1160.22	92	2.0	2.2	26.3	2.328	.0	.0	145.5	91.0	33.5	54.5	DN	2.656	100.0	100.0	10.2	2.761	.00	.00	
1160.37	89	1.9	2.2	26.2	2.352	.0	.0	152.0	103.9	33.6	61.3	DN	2.656	100.0	100.0	7.5	2.781	.00	.00	
1160.53	88	1.9	2.1	27.3	2.345	.0	.0	148.6	104.5	36.6	64.7	DN	2.656	100.0	100.0	7.3	2.790	.00	.00	
1160.68	90	2.1	2.3	28.9	2.353	.0	.0	141.5	105.4	36.7	70.4	GR	2.650	100.0	100.0	6.1	2.819	.00	.00	
1160.83	86	2.3	2.5	29.8	2.366	.0	.0	132.5	93.3	36.3	65.7	GR	2.761	100.0	100.0	7.6	2.844	.00	.00	
1160.98	87	2.5	2.7	27.6	2.384	.0	.0	135.9	103.2	35.4	66.8	GR	2.707	100.0	100.0	5.4	2.829	.00	.00	
1161.14	86	2.4	2.6	26.8	2.390	.1	.0	141.8	109.2	35.3	66.4	GR	2.697	100.0	100.0	5.0	2.822	.00	.00	
1161.29	88	2.3	2.3	26.6	2.379	.1	.0	144.5	115.6	34.8	68.5	GR	2.667	100.0	100.0	4.8	2.809	.00	.00	
1161.44	89	2.2	2.2	27.6	2.360	.1	.0	141.6	110.2	35.2	69.5	GR	2.661	100.0	100.0	5.6	2.807	.00	.00	
1161.59	89	2.2	2.1	28.1	2.346	-.1	.0	137.5	106.4	33.4	69.2	DN	2.656	100.0	100.0	6.4	2.802	.00	.00	
1161.75	89	2.2	2.2	27.7	2.336	.0	.0	134.5	98.8	36.2	64.0	DN	2.656	100.0	100.0	8.0	2.788	.00	.00	
1161.90	92	2.3	2.2	27.6	2.330	-.1	.0	132.6	94.7	36.7	61.5	DN	2.655	100.0	100.0	8.8	2.781	.00	.00	
1162.05	94	2.3	2.2	27.6	2.321	.0	.0	130.2	90.6	37.0	58.8	DN	2.655	100.0	100.0	9.9	2.773	.00	.00	
1162.20	94	2.4	2.4	29.7	2.329	.1	.0	128.4	98.8	37.0	72.0	DN	2.650	100.0	100.0	6.6	2.810	.00	.00	
1162.35	91	2.3	2.3	29.8	2.349	.1	.0	131.4	102.9	37.7	72.4	GR	2.650	100.0	100.0	6.2	2.829	.00	.00	
1162.51	93	2.1	2.2	30.8	2.367	.1	.0	136.9	106.5	37.6	74.3	GR	2.650	100.0	100.0	5.8	2.858	.00	.00	
1162.66	93	2.1	2.1	28.0	2.375	.1	.0	148.8	124.3	37.8	74.8	GR	2.650	100.0	100.0	3.9	2.826	.00	.00	
1162.81	95	2.2	2.3	28.2	2.382	.1	.0	143.6	121.6	37.8	76.3	GR	2.650	100.0	100.0	3.5	2.836	.00	.00	
1162.96	95	2.2	2.5	30.1	2.381	.1	.0	139.6	108.0	36.8	77.1	GR	2.650	100.0	100.0	4.4	2.861	.00	.00	
1163.12	100	1.8	2.0	31.6	2.357	.1	.0	153.1	126.2	37.9	83.2	GR	2.650	100.0	100.0	3.2	2.861	.00	.00	8
1163.27	99	1.5	1.7	33.0	2.320	.1	.0	166.9	134.8	39.6	82.1	GR	2.650	100.0	100.0	3.5	2.847	.00	.00	8
1163.42	98	1.4	1.5	31.9	2.301	.0	.0	166.3	126.6	44.4	74.7	DN	2.650	100.0	100.0	5.9	2.816	.00	.00	8
1163.57	100	1.4	1.6	35.5	2.295	.0	.0	172.4	141.9	43.3	83.0	GR	2.650	100.0	100.0	3.3	2.860	.00	.00	8
1163.73	112	1.1	1.1	38.6	2.275	.0	.0	196.4	189.6	42.0	92.9	SD	2.650	100.0	100.0	.9	2.884	.00	.00	8
1163.88	108	1.0	.9	38.3	2.247	.0	.0	192.8	154.7	39.1	71.7	SD	2.650	100.0	100.0	7.0	2.856	.00	.00	8
1164.03	100	1.2	1.0	33.6	2.249	-.1	.0	151.1	106.3	37.1	63.8	SD	2.666	100.0	100.0	13.6	2.795	.00	.00	
1164.18	85	1.9	1.7	28.9	2.292	-.1	.0	133.7	90.9	34.9	56.2	DN	2.655	100.0	100.0	12.2	2.765	.00	.00	
1164.34	84	2.5	2.7	28.3	2.332	-.1	.0	126.2	87.1	32.3	64.0	GR	2.663	100.0	100.0	8.4	2.793	.00	.00	
1164.49	84	2.4	2.5	27.4	2.339	-.1	.0	131.4	92.1	32.6	63.1	DN	2.656	100.0	100.0	8.0	2.786	.00	.00	
1164.64	86	2.4	2.6	27.7	2.326	-.1	.0	129.0	85.6	32.3	60.8	DN	2.655	100.0	100.0	9.2	2.779	.00	.00	
1164.79	87	2.6	2.7	27.0	2.333	-.1	.0	126.9	84.8	32.6	59.1	DN	2.656	100.0	100.0	9.1	2.774	.00	.00	
1164.95	85	2.8	3.2	28.5	2.340	-.1	.0	119.1	82.1	32.7	65.3	GR	2.673	100.0	100.0	7.8	2.803	.00	.00	
1165.10	88	3.0	3.5	28.5	2.339	-.1	.0	116.5	79.7	33.3	68.3	GR	2.660	100.0	100.0	7.1	2.802	.00	.00	

AMITY OIL NL 01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
1165.25	88	2.8	3.3	27.9	2.319	-.1	.0	116.8	73.9	35.8	59.8	DN	2.655	100.0	100.0	9.8	2.776	.00	.00	
1165.40	91	2.7	3.1	27.1	2.325	-.1	.0	120.8	77.2	36.5	57.2	DN	2.655	100.0	100.0	10.0	2.769	.00	.00	
1165.56	94	2.7	2.9	27.0	2.351	-.1	.0	125.8	91.8	36.3	64.7	DN	2.656	100.0	100.0	7.0	2.790	.00	.00	
1165.71	98	2.8	2.9	27.2	2.370	-.1	.0	129.5	104.0	36.1	71.7	DN	2.650	100.0	100.0	4.4	2.810	.00	.00	
1165.86	97	2.7	2.8	28.1	2.360	-.1	.0	129.0	102.6	35.1	73.5	DN	2.650	100.0	100.0	4.7	2.814	.00	.00	
1166.01	90	2.6	2.8	27.6	2.334	-.1	.0	124.8	85.8	32.3	62.7	DN	2.656	100.0	100.0	8.4	2.784	.00	.00	
1166.16	81	2.7	2.9	28.3	2.320	-.1	.0	119.6	78.7	32.0	60.0	GR	2.664	100.0	100.0	9.9	2.782	.00	.00	
1166.32	82	2.8	3.1	28.6	2.331	-.1	.0	118.1	77.6	31.0	60.6	MN	2.681	100.0	100.0	9.4	2.796	.00	.00	
1166.47	85	2.9	3.2	27.7	2.355	-.1	.0	122.4	86.6	32.6	64.8	GR	2.677	100.0	100.0	7.1	2.804	.00	.00	
1166.62	93	2.9	3.0	26.7	2.376	-.1	.0	129.2	104.2	31.7	70.9	DN	2.650	100.0	100.0	4.2	2.808	.00	.00	
1166.77	93	2.9	3.1	25.2	2.379	.0	.0	130.7	99.8	31.9	64.3	DN	2.653	100.0	100.0	5.3	2.790	.00	.00	
1166.93	93	3.1	3.3	27.3	2.375	-.1	.0	124.0	101.3	31.6	73.9	DN	2.650	100.0	100.0	3.7	2.816	.00	.00	
1167.08	89	3.1	3.4	27.8	2.366	-.1	.0	120.8	91.5	32.2	70.2	GR	2.650	100.0	100.0	5.3	2.815	.00	.00	
1167.23	90	3.0	3.3	28.8	2.364	-.1	.0	118.9	88.5	31.1	68.7	MN	2.700	100.0	100.0	6.1	2.827	.00	.00	
1167.38	90	3.0	3.2	28.4	2.367	-.1	.0	120.7	92.5	31.2	70.6	MN	2.650	100.0	100.0	5.5	2.825	.00	.00	
1167.54	88	2.9	3.1	28.3	2.375	-.1	.0	123.6	94.5	30.8	68.5	GR	2.706	100.0	100.0	5.6	2.831	.00	.00	
1167.69	86	2.9	3.1	28.3	2.380	-.1	.0	123.4	92.1	29.9	65.9	GR	2.732	100.0	100.0	6.3	2.835	.00	.00	
1167.84	84	3.0	3.3	27.4	2.382	-.1	.0	125.0	91.0	30.6	63.4	GR	2.709	100.0	100.0	6.3	2.824	.00	.00	
1167.99	85	3.1	3.4	26.4	2.388	-.1	.0	126.3	95.2	31.7	65.2	GR	2.690	100.0	100.0	5.2	2.815	.00	.00	
1168.15	82	3.0	3.3	25.2	2.392	-.1	.0	131.0	96.9	32.2	61.9	GR	2.679	100.0	100.0	5.4	2.801	.00	.00	
1168.30	82	2.9	3.2	27.0	2.390	-.1	.0	129.0	91.6	32.5	60.9	GR	2.722	100.0	100.0	6.6	2.824	.00	.00	
1168.45	81	2.7	2.9	26.4	2.381	-.1	.0	133.8	94.9	32.2	60.3	GR	2.697	100.0	100.0	6.8	2.809	.00	.00	
1168.60	79	2.5	2.8	27.2	2.369	-.1	.0	134.1	90.0	30.6	58.0	GR	2.703	100.0	100.0	8.1	2.809	.00	.00	
1168.76	79	2.5	2.7	26.8	2.356	-.1	.0	132.6	89.8	30.3	57.8	GR	2.682	100.0	100.0	8.5	2.792	.00	.00	
1168.91	75	2.7	2.7	27.0	2.347	-.1	.0	127.1	84.5	29.7	53.6	GR	2.687	100.0	100.0	10.0	2.786	.00	.00	
1169.06	74	2.9	3.1	26.5	2.355	-.1	.0	123.5	79.8	28.4	51.6	GR	2.693	100.0	100.0	10.0	2.788	.00	.00	
1169.21	71	3.2	4.3	24.7	2.378	-.1	.0	127.6	72.6	26.8	48.2	GR	2.693	100.0	100.0	9.3	2.781	.00	.00	
1169.37	71	3.3	5.0	25.1	2.400	-.1	.0	126.9	69.4	27.2	48.1	GR	2.728	100.0	100.0	8.9	2.806	.00	.00	
1169.52	69	3.4	5.0	24.7	2.400	-.1	.0	126.5	68.3	27.4	45.5	GR	2.724	100.0	100.0	9.4	2.801	.00	.00	
1169.67	68	3.7	4.4	26.9	2.392	-.1	.0	114.1	65.3	27.1	45.0	GR	2.773	100.0	100.0	11.2	2.825	.00	.00	
1169.82	67	3.8	4.2	26.4	2.387	-.1	.0	113.3	66.4	27.5	43.9	GR	2.756	100.0	100.0	11.4	2.814	.00	.00	
1169.97	73	3.5	3.7	26.4	2.389	-.1	.0	118.3	76.4	28.1	50.4	GR	2.741	100.0	100.0	9.4	2.816	.00	.00	
1170.13	75	3.0	3.2	25.7	2.390	-.1	.0	131.0	88.1	29.1	53.5	GR	2.710	100.0	100.0	7.9	2.807	.00	.00	
1170.28	76	2.8	3.1	27.0	2.396	.0	.0	131.5	85.2	28.7	53.9	GR	2.761	100.0	100.0	8.6	2.830	.00	.00	
1170.43	76	2.9	3.2	27.4	2.403	-.1	.0	127.5	77.1	25.0	46.9	MN	2.802	100.0	100.0	10.8	2.842	.00	.00	
1170.58	76	3.2	3.5	25.3	2.409	-.1	.0	129.9	67.0	20.8	27.9	MN	2.790	100.0	100.0	14.9	2.817	.00	.00	
1170.74	72	4.0	4.2	20.7	2.427	-.1	.0	139.5	72.4	18.2	23.0	MN	2.728	100.0	100.0	12.8	2.767	.00	.00	
1170.89	67	5.5	7.3	17.6	2.473	-.1	.0	135.3	82.9	18.4	37.9	MN	2.692	100.0	100.0	5.6	2.762	.00	.00	
1171.04	61	8.7	12.2	18.4	2.522	-.1	.0	109.4	64.8	19.2	37.0	GR	2.774	100.0	100.0	5.7	2.819	.00	.00	
1171.19	63	7.4	10.2	22.6	2.527	-.1	.0	99.9	55.6	21.6	39.2	GR	2.882	99.9	99.9	8.1	2.885	.00	.00	
1171.35	71	4.6	5.9	25.7	2.482	-.1	.0	110.4	66.9	23.6	48.5	GR	2.891	100.0	100.0	8.2	2.889	.00	.00	5
1171.50	74	3.7	3.7	25.6	2.427	-.1	.0	120.4	84.5	27.3	52.3	GR	2.781	100.0	100.0	7.7	2.838	.00	.00	
1171.65	77	3.3	3.3	25.5	2.399	-.1	.0	125.3	91.3	31.1	55.3	GR	2.713	100.0	100.0	7.1	2.812	.00	.00	
1171.80	78	2.7	2.7	25.9	2.390	-.1	.0	135.9	98.6	32.9	56.6	GR	2.706	100.0	100.0	7.2	2.810	.00	.00	
1171.96	79	2.3	2.8	27.3	2.381	-.1	.0	142.2	93.0	32.3	58.3	GR	2.725	100.0	100.0	7.8	2.821	.00	.00	
1172.11	80	2.1	2.4	28.2	2.369	-.1	.0	143.5	95.9	30.8	59.2	GR	2.729	100.0	100.0	8.4	2.824	.00	.00	
1172.26	75	2.3	2.7	28.6	2.362	-.1	.0	134.4	82.0	30.0	53.2	GR	2.750	100.0	100.0	10.5	2.824	.00	.00	
1172.41	75	2.5	2.9	27.6	2.361	-.1	.0	131.8	81.0	28.3	52.5	GR	2.717	100.0	100.0	10.0	2.808	.00	.00	
1172.57	70	2.7	3.4	25.6	2.366	-.1	.0	132.5	76.6	26.9	47.5	GR	2.698	100.0	100.0	10.3	2.784	.00	.00	
1172.72	73	3.0	3.6	25.1	2.373	-.1	.0	130.3	76.7	26.1	47.5	MN	2.696	100.0	100.0	9.8	2.782	.00	.00	

1172.87	71	3.3	4.1	24.5	2.378	-.1	.0	124.9	74.7	25.9	47.9	MN	2.690	100.0	100.0	9.3	2.778	.00	.00	
1173.02	73	3.5	4.4	24.6	2.377	-.1	.0	121.5	72.9	27.1	50.3	GR	2.685	100.0	100.0	8.8	2.778	.00	.00	
1173.18	72	3.3	4.4	24.3	2.381	-.1	.0	126.1	73.9	27.5	49.2	GR	2.688	100.0	100.0	8.8	2.779	.00	.00	
1173.33	74	3.1	4.1	26.3	2.385	-.1	.0	126.1	73.4	26.6	51.5	GR	2.727	100.0	100.0	9.1	2.811	.00	.00	
1173.48	71	3.0	3.9	25.8	2.388	-.1	.0	128.5	74.1	26.0	47.8	GR	2.729	100.0	100.0	9.7	2.806	.00	.00	
1173.63	69	3.6	4.2	24.1	2.397	-.1	.0	125.4	75.9	25.7	45.6	GR	2.707	100.0	100.0	9.1	2.790	.00	.00	

Zone No. 3 CUTTLEFISH 1 Complex Lithology Results
AMITY OIL NL 01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
1173.78	66	4.8	6.3	22.3	2.424	-.1	.0	118.2	68.7	25.6	43.0	GR	2.708	100.0	100.0	8.0	2.787	.00	.00	
1173.94	68	5.1	6.8	22.6	2.451	-.1	.0	114.8	68.8	26.2	45.2	GR	2.752	100.0	100.0	7.2	2.816	.00	.00	
1174.09	70	4.4	6.2	25.2	2.447	-.1	.0	113.6	63.6	26.9	46.8	GR	2.816	100.0	100.0	8.7	2.850	.00	.00	
1174.24	70	3.3	4.4	26.1	2.413	-.1	.0	124.5	70.1	26.9	47.1	GR	2.783	100.0	100.0	9.8	2.833	.00	.00	
1174.39	70	3.1	4.4	26.5	2.384	-.1	.0	124.4	67.2	27.4	47.3	GR	2.745	100.0	100.0	10.5	2.813	.00	.00	
1174.55	70	3.3	4.7	26.7	2.376	-.1	.0	119.9	62.7	25.8	45.3	MN	2.740	100.0	100.0	11.3	2.808	.00	.00	
1174.70	72	3.6	5.3	26.4	2.380	-.1	.0	116.4	50.6	22.3	27.5	MN	2.778	100.0	100.0	16.3	2.808	.00	.00	
1174.85	72	4.2	6.8	24.2	2.391	-.1	.0	116.4	48.5	21.3	26.8	MN	2.748	100.0	100.0	14.8	2.786	.00	.00	
1175.00	68	5.2	8.8	20.1	2.420	-.1	.0	121.7	53.4	19.5	28.4	MN	2.701	100.0	100.0	11.1	2.751	.00	.00	
1175.16	63	7.1	16.0	17.8	2.469	-.1	.0	117.2	56.0	19.7	39.4	GR	2.688	100.0	100.0	5.5	2.761	.00	.00	
1175.31	59	7.9	18.9	19.2	2.516	-.1	.0	110.4	46.7	20.7	34.3	GR	2.790	100.0	100.0	7.2	2.826	.00	.00	
1175.46	63	6.6	14.2	21.1	2.532	-.1	.0	112.0	51.3	21.1	38.7	GR	2.854	100.0	100.0	7.2	2.869	.00	.00	
1175.61	64	5.7	9.5	22.9	2.509	-.1	.0	111.6	56.3	21.9	39.9	GR	2.862	100.0	100.0	8.4	2.873	.00	.00	
1175.77	66	5.5	8.0	22.7	2.476	-.1	.0	111.8	62.5	21.8	42.7	GR	2.802	100.0	100.0	7.8	2.840	.00	.00	
1175.92	67	5.8	8.2	23.8	2.448	-.1	.0	103.3	56.7	21.6	43.0	MN	2.787	100.0	100.0	8.9	2.832	.00	.00	
1176.07	68	6.0	8.4	23.2	2.436	-.1	.0	102.7	53.5	20.9	37.1	MN	2.764	100.0	100.0	10.3	2.812	.00	.00	
1176.22	69	6.2	8.4	24.0	2.427	-.1	.0	98.2	50.0	21.2	35.7	MN	2.774	98.2	98.2	11.5	2.816	.00	.00	
1176.38	69	6.1	8.0	25.2	2.426	-.1	.0	95.1	51.1	22.3	40.2	MN	2.792	95.1	95.1	11.0	2.831	.00	.00	
1176.53	69	6.1	7.8	26.5	2.426	-.1	.0	91.3	48.8	22.5	40.2	MN	2.826	91.3	91.3	11.9	2.851	.00	.00	
1176.68	70	6.0	7.6	27.1	2.422	-.1	.0	90.7	48.5	22.9	40.8	MN	2.832	90.7	90.7	12.1	2.855	.00	.00	
1176.83	71	5.4	7.0	26.2	2.413	-.1	.0	97.3	51.3	23.0	39.5	MN	2.800	97.3	97.3	12.1	2.835	.00	.00	
1176.99	70	5.2	7.2	25.3	2.411	-.1	.0	102.0	51.8	22.7	38.3	MN	2.776	100.0	100.0	11.8	2.819	.00	.00	
1177.14	68	5.5	7.7	23.6	2.416	-.1	.0	104.3	54.6	22.2	38.7	MN	2.741	100.0	100.0	10.4	2.800	.00	.00	
1177.29	67	6.8	8.5	24.0	2.422	-.1	.0	93.4	50.4	21.7	37.2	MN	2.764	93.4	93.4	11.1	2.811	.00	.00	
1177.44	66	6.7	7.7	23.6	2.417	-.1	.0	95.5	50.6	20.8	31.7	MN	2.758	95.5	95.5	12.5	2.800	.00	.00	
1177.59	70	5.3	6.7	24.9	2.402	-.1	.0	101.6	49.6	21.5	30.1	MN	2.769	100.0	100.0	14.1	2.805	.00	.00	
1177.75	70	4.7	6.4	24.7	2.388	-.1	.0	108.3	49.9	21.8	28.5	MN	2.750	100.0	100.0	14.6	2.790	.00	.00	
1177.90	71	4.8	6.6	25.4	2.389	-.1	.0	103.7	51.6	23.3	36.2	MN	2.751	100.0	100.0	12.8	2.801	.00	.00	
1178.05	70	5.2	7.0	25.2	2.399	-.1	.0	100.9	51.3	22.9	36.9	MN	2.759	100.0	100.0	12.4	2.807	.00	.00	
1178.20	71	5.2	7.3	25.2	2.409	-.1	.0	101.5	55.5	24.1	45.4	MN	2.754	100.0	100.0	9.7	2.816	.00	.00	
1178.36	70	4.9	7.5	26.4	2.407	-.1	.0	100.7	49.6	23.6	41.1	MN	2.793	100.0	100.0	11.8	2.832	.00	.00	
1178.51	69	4.5	7.0	26.7	2.399	-.1	.0	104.4	48.1	23.0	36.1	MN	2.794	100.0	100.0	13.6	2.828	.00	.00	
1178.66	69	4.3	6.2	26.5	2.389	-.1	.0	106.4	48.2	22.5	30.7	MN	2.786	100.0	100.0	15.2	2.817	.00	.00	
1178.81	70	4.5	5.7	24.7	2.385	-.1	.0	110.0	56.0	23.2	35.1	MN	2.731	100.0	100.0	12.7	2.787	.00	.00	
1178.97	71	5.1	5.6	24.3	2.389	-.1	.0	104.5	58.8	23.2	36.5	MN	2.725	100.0	100.0	12.0	2.786	.00	.00	
1179.12	71	5.7	5.5	23.9	2.393	-.1	.0	100.0	61.9	23.3	38.3	MN	2.716	100.0	100.0	11.1	2.783	.00	.00	
1179.27	71	6.0	5.7	25.9	2.395	-.1	.0	91.7	57.0	23.9	40.3	MN	2.763	91.7	91.7	11.9	2.814	.00	.00	
1179.42	71	6.0	5.6	25.9	2.396	-.1	.0	91.3	59.7	24.6	44.3	MN	2.755	91.3	91.3	10.7	2.815	.00	.00	
1179.58	71	5.9	5.4	28.4	2.392	-.1	.0	86.1	56.7	25.8	47.6	MN	2.810	86.1	86.1	11.5	2.847	.00	.00	
1179.73	73	5.3	4.6	30.1	2.374	-.2	.0	86.5	57.2	27.0	48.1	MN	2.825	86.5	86.5	12.7	2.855	.00	.00	
1179.88	75	4.7	4.2	31.1	2.353	-.2	.0	87.9	58.8	29.0	52.4	MN	2.808	87.9	87.9	12.5	2.849	.00	.00	
1180.03	77	4.3	3.9	30.3	2.352	-.2	.0	93.9	64.4	30.3	55.4	GR	2.778	93.9	93.9	11.2	2.838	.00	.00	

1180.19	78	3.6	3.6	28.0	2.374	-.2	.0	110.5	76.5	31.2	56.9	GR	2.741	100.0	100.0	8.8	2.825	.00	.00	
1180.34	82	3.0	3.0	28.4	2.395	-.1	.0	122.4	87.8	32.6	60.9	GR	2.791	100.0	100.0	7.6	2.850	.00	.00	
1180.49	81	2.5	2.7	29.9	2.395	-.1	.0	129.2	86.6	32.7	60.1	GR	2.846	100.0	100.0	8.8	2.870	.00	.00	
1180.64	83	2.2	2.4	30.3	2.387	-.1	.0	136.3	93.0	32.3	62.7	GR	2.841	100.0	100.0	8.4	2.870	.00	.00	
1180.80	83	2.2	2.5	29.5	2.389	.0	.0	137.2	93.6	31.9	62.3	GR	2.814	100.0	100.0	8.0	2.860	.00	.00	
1180.95	84	2.5	2.7	28.3	2.405	-.1	.0	135.6	97.4	32.8	63.3	GR	2.805	100.0	100.0	6.7	2.857	.00	.00	
1181.10	86	2.7	3.1	28.8	2.415	-.1	.0	131.2	94.4	34.1	66.6	GR	2.843	100.0	100.0	5.8	2.872	.00	.00	
1181.25	86	2.5	3.0	29.9	2.402	-.2	.0	131.6	89.5	34.1	66.5	GR	2.857	100.0	100.0	6.8	2.876	.00	.00	
1181.40	89	2.1	2.3	33.3	2.363	-.1	.0	130.5	89.8	37.2	69.2	GR	2.896	100.0	100.0	8.7	2.889	.00	.00	5
1181.56	86	1.9	2.0	32.5	2.317	-.1	.0	133.7	89.8	38.1	66.2	GR	2.747	100.0	100.0	10.1	2.839	.00	.00	
1181.71	85	1.9	1.8	32.4	2.293	.0	.0	131.6	89.8	39.4	64.5	GR	2.700	100.0	100.0	11.2	2.817	.00	.00	
1181.86	83	2.0	2.1	29.0	2.300	-.1	.0	131.9	86.2	38.1	59.3	DN	2.655	100.0	100.0	11.1	2.774	.00	.00	
1182.01	85	2.1	2.1	30.0	2.308	-.1	.0	129.8	89.6	35.6	64.5	GR	2.666	100.0	100.0	9.8	2.796	.00	.00	
1182.17	86	2.2	2.2	28.9	2.311	-.1	.0	128.5	87.7	34.3	62.1	DN	2.655	100.0	100.0	9.9	2.782	.00	.00	

Zone No. 3 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
1182.32	87	2.4	2.4	30.2	2.312	.0	.0	121.0	84.9	33.3	66.4	SD	2.669	100.0	100.0	9.3	2.802	.00	.00	
1182.47	87	2.9	2.9	27.5	2.335	-.1	.0	118.6	84.1	32.0	62.4	DN	2.656	100.0	100.0	8.4	2.783	.00	.00	
1182.62	86	3.3	3.3	27.3	2.359	-.1	.0	114.7	87.4	30.4	65.3	MN	2.670	100.0	100.0	6.6	2.801	.00	.00	
1182.78	82	3.6	3.3	26.0	2.380	-.2	.0	115.7	91.6	29.1	61.2	GR	2.684	100.0	100.0	6.4	2.802	.00	.00	
1182.93	81	4.3	3.8	26.3	2.392	-.2	.0	107.6	81.2	27.0	55.8	MN	2.725	100.0	100.0	7.7	2.817	.00	.00	
1183.08	79	5.2	4.3	25.9	2.404	-.1	.0	99.9	80.0	26.6	56.8	MN	2.731	99.9	99.9	6.9	2.822	.00	.00	
1183.23	78	6.0	4.6	25.4	2.414	-.1	.0	95.2	81.2	27.5	57.1	GR	2.733	95.2	95.2	6.2	2.823	.00	.00	
1183.39	79	5.6	4.1	24.4	2.416	-.2	.0	101.6	91.6	30.0	57.8	GR	2.705	100.0	100.0	5.4	2.811	.00	.00	
1183.54	80	4.4	3.7	25.1	2.402	-.1	.0	111.0	91.9	31.5	59.5	GR	2.696	100.0	100.0	5.7	2.808	.00	.00	
1183.69	83	3.3	2.8	26.4	2.382	-.1	.0	120.1	98.9	30.1	62.3	GR	2.692	100.0	100.0	6.2	2.810	.00	.00	
1183.84	86	2.7	2.3	28.6	2.367	-.1	.0	126.2	102.5	32.3	65.7	GR	2.711	100.0	100.0	6.8	2.828	.00	.00	
1184.00	85	2.5	2.3	28.8	2.371	-.2	.0	130.7	102.8	32.9	65.5	GR	2.729	100.0	100.0	6.8	2.834	.00	.00	
1184.15	85	2.7	2.9	28.6	2.388	-.2	.0	128.5	93.9	33.2	65.4	GR	2.770	100.0	100.0	6.5	2.847	.00	.00	
1184.30	85	3.0	3.5	27.7	2.400	-.1	.0	126.0	90.6	33.1	65.6	GR	2.758	100.0	100.0	5.6	2.844	.00	.00	
1184.45	89	3.0	3.3	26.4	2.396	-.1	.0	130.1	104.3	33.1	69.6	GR	2.684	100.0	100.0	3.8	2.822	.00	.00	
1184.61	91	2.8	3.0	25.9	2.374	-.1	.0	131.4	99.8	33.1	66.4	DN	2.654	100.0	100.0	5.2	2.795	.00	.00	
1184.76	94	2.5	2.7	26.3	2.354	-.1	.0	132.5	95.1	32.8	62.3	DN	2.655	100.0	100.0	7.2	2.784	.00	.00	
1184.91	94	2.4	2.6	27.0	2.345	-.1	.0	133.3	93.5	32.8	62.8	DN	2.656	100.0	100.0	7.7	2.785	.00	.00	
1185.06	94	2.4	2.6	28.5	2.344	-.1	.0	130.2	91.3	31.1	64.4	MN	2.682	100.0	100.0	7.9	2.806	.00	.00	
1185.21	91	2.6	2.9	28.3	2.347	-.1	.0	125.7	82.2	29.7	57.6	MN	2.701	100.0	100.0	9.5	2.806	.00	.00	
1185.37	88	3.0	3.1	29.0	2.334	-.1	.0	113.4	75.0	30.3	56.9	MN	2.700	100.0	100.0	10.4	2.803	.00	.00	
1185.52	87	3.7	3.5	27.1	2.322	-.1	.0	103.2	70.7	31.0	56.2	DN	2.655	100.0	100.0	10.3	2.766	.00	.00	
1185.67	90	4.1	3.5	27.8	2.321	-.2	.0	97.5	72.2	32.9	59.6	DN	2.655	97.5	97.5	9.8	2.775	.00	.00	
1185.82	94	3.7	3.3	30.7	2.332	-.2	.0	103.0	86.9	34.0	75.1	SD	2.650	100.0	100.0	5.8	2.827	.00	.00	8
1185.98	96	2.6	2.6	35.2	2.329	-.1	.0	124.5	102.5	37.0	77.6	GR	2.650	100.0	100.0	4.9	2.885	.00	.00	8
1186.13	98	2.1	2.4	35.2	2.309	-.1	.0	141.6	109.1	38.7	79.9	GR	2.650	100.0	100.0	4.2	2.868	.00	.00	8
1186.28	100	2.1	2.5	33.4	2.285	-.1	.0	139.1	102.8	40.7	77.3	DN	2.650	100.0	100.0	5.0	2.822	.00	.00	8
1186.43	102	2.5	3.0	33.5	2.267	-.1	.0	125.1	86.0	39.4	72.3	DN	2.650	100.0	100.0	6.8	2.808	.00	.00	8
1186.59	99	2.7	3.1	37.1	2.250	-.2	.0	96.7	56.5	36.7	62.1	SD	2.776	96.7	96.7	15.4	2.842	.00	.00	
1186.74	100	2.9	3.1	35.2	2.247	-.2	.0	96.1	56.6	36.2	59.2	SD	2.717	96.1	96.1	15.4	2.815	.00	.00	
1186.89	103	3.0	3.3	33.4	2.268	-.2	.0	98.2	61.0	35.5	62.6	SD	2.692	98.2	98.2	13.1	2.808	.00	.00	
1187.04	106	3.0	3.4	27.9	2.314	-.2	.0	112.9	70.8	34.3	58.0	DN	2.655	100.0	100.0	10.5	2.771	.00	.00	
1187.20	107	2.8	2.9	27.7	2.343	-.2	.0	122.1	87.9	33.1	65.9	DN	2.656	100.0	100.0	7.3	2.793	.00	.00	
1187.35	106	2.5	2.3	26.9	2.349	-.2	.0	132.0	99.9	32.5	63.4	DN	2.656	100.0	100.0	7.4	2.786	.00	.00	

1187.50	110	2.3	2.0	25.7	2.332	-.2	.0	136.6	96.9	31.8	52.2	DN	2.656	100.0	100.0	10.5	2.755	.00	.00		
1187.65	111	2.4	1.9	25.2	2.326	-.2	.0	133.0	93.9	30.5	47.6	DN	2.656	100.0	100.0	11.7	2.742	.00	.00		
1187.81	113	3.0	2.6	25.6	2.341	-.1	.0	121.5	88.2	29.8	54.5	DN	2.656	100.0	100.0	9.5	2.762	.00	.00		
1187.96	113	3.8	3.6	27.5	2.370	-.1	.0	109.5	81.6	29.1	60.4	MN	2.704	100.0	100.0	7.6	2.814	.00	.00		
1188.11	118	3.8	3.7	29.0	2.397	-.1	.0	107.3	80.9	28.9	64.5	MN	2.807	100.0	100.0	6.9	2.859	.00	.00		
1188.26	119	3.7	3.4	30.6	2.411	-.2	.0	106.5	84.2	29.3	68.2	MN	2.913	100.0	100.0	6.7	2.894	.00	.00	5	
1188.42	120	3.7	3.4	28.8	2.416	-.1	.0	112.3	98.3	29.8	73.8	MN	2.650	100.0	100.0	3.9	2.873	.00	.00		
1188.57	120	3.6	3.9	29.7	2.419	-.1	.0	113.4	99.4	31.4	81.7	MN	2.650	100.0	100.0	2.1	2.889	.00	.00		
1188.72	119	3.0	3.8	31.0	2.422	-.1	.0			33.3	89.6	S	2.650	100.0	100.0	2.7	2.909	.00	.00	3	
1188.87	119	2.6	3.2	32.7	2.425	-.1	.0			33.8	90.8	S	2.650	100.0	100.0	2.5	2.935	.00	.00	3	
1189.02	114	2.5	2.9	32.2	2.433	-.1	.0			33.4	89.8	S	2.650	100.0	100.0	2.7	2.936	.00	.00	3	
1189.18	112	2.6	2.9	30.0	2.444	-.1	.0			33.1	89.3	S	2.650	100.0	100.0	2.7	2.915	.00	.00	3	
1189.33	113	2.9	2.9	28.5	2.452	-.1	.0			32.7	87.1	N	2.650	100.0	100.0	3.1	2.902	.00	.00	2	
1189.48	115	3.1	3.0	27.8	2.450	-.1	.0			32.0	85.1	N	2.650	100.0	100.0	3.5	2.890	.00	.00	2	
1189.63	116	3.2	3.3	27.9	2.439	-.1	.0			32.6	85.4	N	2.650	100.0	100.0	3.5	2.881	.00	.00	2	
1189.79	117	3.1	3.4	31.0	2.426	-.1	.0	120.7	102.6	31.3	81.9	MN	2.650	100.0	100.0	2.6	2.913	.00	.00		
1189.94	115	2.9	3.3	32.4	2.426	-.2	.0	118.9	90.9	30.6	76.7	MN	2.650	100.0	100.0	4.9	2.933	.00	.00		
1190.09	115	2.8	3.2	34.2	2.433	-.2	.0	121.8	99.9	31.7	82.6	MN	2.650	100.0	100.0	3.4	2.963	.00	.00		8
1190.24	110	2.8	3.1	33.4	2.447	-.1	.0	100.0	100.0	35.8	94.2	GR	2.650	100.0	100.0	.0	2.964	.00	.00		
1190.40	109	2.9	3.1	32.4	2.438	-.2	.0	100.0	100.0	38.4	93.3	GR	2.650	100.0	100.0	.0	2.943	.00	.00		
1190.55	105	2.8	2.9	33.8	2.396	-.2	.0	123.8	112.6	42.3	88.2	GR	2.650	100.0	100.0	1.9	2.926	.00	.00		8
1190.70	94	2.8	2.6	38.9	2.254	-.2	.0	118.4	97.1	39.2	74.4	SD	2.650	100.0	100.0	6.0	2.870	.00	.00		8

Zone No. 3 CUTTLEFISH 1
AMITY OIL NL

Complex Lithology Results
01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
1190.85	89	2.7	2.3	39.1	2.116	-.2	.0	83.0	45.3	40.3	37.5	SD	2.694	83.0	83.0	27.3	2.758	.00	.00	
1191.01	87	2.5	2.3	35.6	2.030	-.2	.0	84.1	38.1	39.3	7.0	SD	2.653	84.1	84.1	37.3	2.665	.00	.00	
1191.16	91	2.3	2.2	29.6	2.118	-.2	.0	103.4	45.6	35.7	5.9	DN	2.652	100.0	100.0	32.0	2.662	.00	.00	
1191.31	89	2.3	2.4	26.9	2.241	-.1	.0	121.7	60.6	31.6	30.0	DN	2.655	100.0	100.0	20.1	2.701	.00	.00	
1191.46	84	2.4	2.8	27.3	2.351	-.1	.0	134.3	87.2	29.8	59.8	MN	2.680	100.0	100.0	8.4	2.794	.00	.00	
1191.62	85	2.1	2.9	28.9	2.383	-.1	.0	142.8	91.5	29.6	64.9	MN	2.765	100.0	100.0	6.9	2.845	.00	.00	
1191.77	85	2.0	2.6	30.3	2.391	-.1	.0	140.9	88.5	29.0	62.4	MN	2.850	100.0	100.0	8.4	2.873	.00	.00	
1191.92	80	2.1	2.5	29.8	2.391	-.2	.0	140.2	88.7	28.9	59.0	GR	2.834	100.0	100.0	9.1	2.865	.00	.00	
1192.07	79	2.5	3.0	28.4	2.399	-.1	.0	133.3	86.0	28.1	57.8	GR	2.807	100.0	100.0	8.4	2.853	.00	.00	
1192.23	77	2.8	3.4	27.4	2.415	-.1	.0	131.4	83.7	28.7	55.8	GR	2.808	100.0	100.0	8.1	2.852	.00	.00	
1192.38	74	2.8	3.5	26.1	2.431	-.1	.0	135.8	81.5	24.0	49.3	MN	2.811	100.0	100.0	8.9	2.849	.00	.00	
1192.53	72	3.0	3.7	25.7	2.440	-.1	.0	134.9	81.9	25.1	49.4	GR	2.815	100.0	100.0	8.4	2.851	.00	.00	
1192.68	71	3.1	4.1	26.2	2.442	-.1	.0	129.7	75.3	25.5	48.1	GR	2.835	100.0	100.0	9.1	2.860	.00	.00	
1192.83	70	3.1	4.1	27.0	2.441	-.1	.0	128.2	66.8	21.8	39.7	MN	2.859	100.0	100.0	12.1	2.870	.00	.00	
1192.99	69	2.9	3.8	25.6	2.438	-.1	.0	137.3	77.8	23.7	45.6	GR	2.813	100.0	100.0	9.5	2.848	.00	.00	
1193.14	68	3.3	4.5	22.6	2.441	-.1	.0	142.7	73.6	20.1	34.8	MN	2.761	100.0	100.0	10.5	2.807	.00	.00	
1193.29	69	4.8	6.2	19.7	2.463	-.2	.0	136.8	61.8	15.5	19.1	MN	2.758	100.0	100.0	12.7	2.784	.00	.00	
1193.44	70	6.6	12.7	21.0	2.500	-.2	.0	111.0	50.0	16.9	34.2	MN	2.809	100.0	100.0	8.8	2.837	.00	.00	
1193.60	71	5.6	12.7	25.4	2.525	-.2	.0	106.3	39.0	15.3	28.7	MN	2.939	100.0	100.0	13.0	2.923	.00	.00	5
1193.75	72	4.3	8.9	26.2	2.522	-.1	.0	117.6	47.2	16.7	34.0	MN	2.957	100.0	100.0	12.1	2.933	.00	.00	5
1193.90	77	3.7	6.0	23.7	2.500	-.2	.0	134.1	63.7	17.6	35.5	MN	2.870	100.0	100.0	10.3	2.877	.00	.00	
1194.05	79	3.7	5.4	24.1	2.479	-.2	.0	129.8	65.4	18.8	36.1	MN	2.849	100.0	100.0	10.7	2.864	.00	.00	
1194.21	79	4.6	6.2	25.8	2.478	-.2	.0	112.3	51.7	17.3	26.8	MN	2.887	100.0	100.0	14.5	2.887	.00	.00	
1194.36	79	6.4	9.6	25.8	2.498	-.2	.0	95.4	47.8	18.9	39.5	MN	2.917	95.4	95.4	10.6	2.905	.00	.00	5
1194.51	79	6.6	10.3	26.0	2.519	-.2	.0	94.4	46.7	18.0	39.6	MN	2.954	94.4	94.4	10.4	2.927	.00	.00	5
1194.66	79	4.9	7.3	26.4	2.513	-.1	.0	106.8	64.8	21.6	55.5	MN	2.979	100.0	100.0	6.3	2.927	.00	.00	5

1194.82	3.6	5.0	24.0	2.485	-.1	.0	132.5	99.4	24.1	63.7	MN	2.826	100.0	100.0	2.4	2.868	.00	.00		
1194.97	3.3	4.7	21.7	2.447	-.2	.0	146.5	122.1	26.8	67.4	DN	2.634	100.0	100.0	.1	2.800	.00	.00		
1195.12	3.1	4.1	20.2	2.424	-.1	.0	152.1	103.3	27.2	52.2	DN	2.648	100.0	100.0	4.6	2.756	.00	.00		
1195.27	2.9	3.6	19.1	2.408	-.1	.0	158.7	95.1	28.2	41.9	DN	2.652	100.0	100.0	7.5	2.726	.00	.00		
1195.43	2.8	3.4	18.2	2.405	-.2	.0	166.3	94.0	28.4	36.1	DN	2.652	100.0	100.0	8.8	2.710	.00	.00		
1195.58	2.6	3.0	17.3	2.393	-.2	.0	175.9	92.6	29.8	27.8	DN	2.653	100.0	100.0	11.0	2.697	.00	.00		
1195.73	2.3	2.7	17.3	2.388	-.2	.0	185.2	94.1	30.9	26.3	DN	2.654	100.0	100.0	11.6	2.695	.00	.00		
1195.88	2.1	2.8	17.3	2.380	-.2	.0	190.6	88.9	31.4	23.5	DN	2.654	100.0	100.0	12.7	2.691	.00	.00		
1196.04	2.0	3.1	17.3	2.382	-.2	.0	196.1	85.4	31.3	24.3	DN	2.654	100.0	100.0	12.4	2.692	.00	.00		
1196.19	2.0	3.1		2.375	-.2	.0			31.5	85.5	S	2.650	100.0	100.0	4.6	2.852	.00	.00	3	
1196.34	2.1	3.1		2.370	-.1	.0			30.8	83.9	S	2.650	100.0	100.0	5.0	2.848	.00	.00	3	
1196.49	1.7			2.367	-.2	.0			34.4	92.3	S	2.650	100.0	100.0	2.7	2.868	.00	.00	3	
1196.64	1.7			2.373		.0			29.3	80.4	S	2.650	100.0	100.0	5.7	2.840	.00	.00	3	
1196.80	1.7			2.386		.0	169.2	100.0	26.4	73.7	S	2.650	100.0	100.0	3.1	2.824	.00	.00		9
1196.95	1.7			2.395		.0			27.2	75.5	S	2.650	100.0	100.0	6.6	2.828	.00	.00	3	
1197.10	1.7					.0	154.2	100.0	21.8	63.3	S	2.650	100.0	100.0	8.0	2.799	.00	.00		7
1197.25	1.7					.0			31.1	84.7	S	2.650	100.0	100.0	4.8	2.850	.00	.00	3	
1197.41	1.7					.0			30.5	83.2	S	2.650	100.0	100.0	5.1	2.846	.00	.00	3	
1197.56	1.7					.0			30.7	83.7	S	2.650	100.0	100.0	5.0	2.848	.00	.00	3	
1197.71	1.7					.0			32.6	88.0	S	2.650	100.0	100.0	3.9	2.858	.00	.00	3	
1197.86	1.7								33.0	88.9	S	2.650	100.0	100.0	3.7	2.860	.00	.00	34	
1198.02	1.7								32.4	87.7	S	2.650	100.0	100.0	4.0	2.857	.00	.00	34	
1198.17	1.7								30.9	84.2	S	2.650	100.0	100.0	4.9	2.849	.00	.00	34	
1198.32	1.7								28.7	79.2	S	2.650	100.0	100.0	6.0	2.837	.00	.00	34	
1198.47	1.7								27.6	76.6	S	2.650	100.0	100.0	6.5	2.831	.00	.00	34	
1198.63	1.7						150.4	100.0	26.5	73.9	S	2.650	100.0	100.0	6.2	2.824	.00	.00	4	78
1198.78	1.7						148.6	100.0	25.4	71.4	S	2.650	100.0	100.0	7.1	2.819	.00	.00	4	78
1198.93	1.7						149.2	100.0	25.7	72.2	S	2.650	100.0	100.0	6.8	2.820	.00	.00	4	78
1199.08	1.7						150.6	100.0	26.6	74.2	S	2.650	100.0	100.0	6.1	2.825	.00	.00	4	78
1199.24	1.7								28.4	78.4	S	2.650	100.0	100.0	6.1	2.835	.00	.00	34	

Zone No. 3 CUTTLEFISH 1 Complex Lithology Results
AMITY OIL NL 01-11-1999

DEPTH M	GR	RT	RXO	PHIN	RHOB	DD	SPI	SWU	SXOU	PHIS	VCL	FVCL	RHOMAU	SXO	SW	PHIE	RHOMA	POR-M	HC-M	FLAGS
1199.39		1.7								29.3	80.5	S	2.650	100.0	100.0	5.7	2.840	.00	.00	34
1199.54		1.7								30.2	82.6	S	2.650	100.0	100.0	5.3	2.845	.00	.00	34
1199.69		1.7					.0			32.7	88.2	S	2.650	100.0	100.0	3.9	2.858	.00	.00	3
1199.85		1.7					.0			31.5	85.5	S	2.650	100.0	100.0	4.6	2.852	.00	.00	3

CUTTLEFISH 1 AMITY OIL NL Complex Lithology Results 01-11-1999

Zone No. 3

Hydrocarbon Volume Report

Formation Name

FROM M	1079.794
TO M	1199.998
INTERVAL M	120.204
PHIE Cut Off	.050

SW Cut Off		.500
Vclay Cut Off		.300
Net Pay Interval	M	.000
Gross Interval	M	5.182
Net Pay/Gross		.000
Net Pay/Total Interval		.000
Average PHIE	%	.000
Average SW	%	.000
Average Vclay	%	.000
Integrated PHI	M	.000
Weighed Sum PHI*(1-SW)	M	.000
Average Sum PHI*(1-SW)	M	.000